

Chapitre III

Chapitre III Conclusion et proposition

Section 1 Conclusion

Le climat dans la zone de recherche est divisé en deux: la saison des pluies entre mai et octobre et la saison sèche entre novembre et avril. La recherche de la première année a été effectuée dans la période stable de la saison sèche, à savoir entre décembre et février. Celle de la deuxième année s'est faite deux fois, à savoir en septembre, à la fin de la saison des pluies, et en janvier~février dans la saison sèche. Dans cette section, nous traitons l'ensemble du résultat de la recherche de la première année et de la deuxième année. Nous présentons le diagramme de la recherche dans la Figure 1-6-1.

La recherche hydrologique se constitue de l'élaboration de la carte topographique, la recherche par le sondage, la recherche de l'eau à la surface de la terre et du sous-sol, et la recherche du climat. Dans la première année, nous avons élaboré la carte topographique à l'échelle de 1 / 50.000, en utilisant l'image de satellite SPOT, et avons effectué l'analyse du réseau hydrographique. Ce dernier présente une forme de l'écorce, indifféremment à l'étendue des bassins. Les affluents principaux, généralement en forme un peu oblongue, sont à peu près de longueur de 10~30km, de largeur moyenne de 4~12km, et du rapport de forme de 0,30~0,48. Dans la première année, nous avons foré quatre trous, en obtenant le coefficient de transmissibilité de $2,77 \times 10^{-4}$ ~ $3,54 \times 10^{-5}$ cm/sec par l'expérience de transmissibilité. En utilisant ces trous de sondage, nous avons mesuré trois fois le niveau de l'eau dans ces deux dernières années, et avons confirmé le changement saisonnier du niveau de l'eau souterraine à profondeur de 2,5~3,5m. Dans la saison des pluies de la deuxième année, nous avons effectué, à dix points, la recherche de la quantité de l'eau courante des rivières, et avons obtenu la superficie moyenne des bassins de 382km² et la quantité moyenne de l'eau courante de 1,13m³/s. D'après le résultat de l'analyse de la qualité de l'eau de 17 échantillons de l'eau des rivières et de 34 échantillons de l'eau souterraine pendant ces deux dernières années, la teneur des éléments de métaux lourds est très basse excepté Fe et Ni. Ainsi, il n'y a pas de valeur qui puisse provoquer le problème. La haute teneur de Fe et Ni dans l'eau est due au sol tropical (latérite) de la qualité fer-alumina qui se développe vastement dans la présente zone. Dans la première année, nous avons installé le système automatique des observations du climat dans le village de Dogo, et avons commencé les observations continues de la température, de l'humidité, de la quantité

de précipitations, de la direction et la vitesse du vent, et de la quantité de la radiation solaire. A la fin de la deuxième année, nous avons récupéré le record des observations d'un an, et avons effectué l'analyse. En examinant les données journalières d'un an, nous avons pu saisir le détail de changement saisonnier. Nous avons recueilli les données météorologiques dans les villes voisines de la zone de recherche, à savoir Bamako, Bougouni, et Dioila. Ces données existantes des observations sont conformes aux données que nous avons observées. Dans la deuxième année, nous avons synthétisé le résultat de la recherche hydrologique, et avons établi le modèle de la balance hydrologique, en effectuant l'analyse des données. Nous avons confirmé que la balance hydrologique est largement à la merci des conditions climatiques, et que son changement saisonnier est intense. En avril, à la fin de la saison sèche, la quantité de précipitations est très basse, à savoir 2% de la quantité annuelle de précipitations, mais la quantité d'évapotranspiration dans la même période correspond à 12% de celle de l'année entière. Au contraire, en août, à savoir en pleine saison des pluies, la quantité de précipitations est 26% de celle de l'année entière, mais la quantité d'évapotranspiration est très basse, à savoir 4% de celle de l'année entière.

En ce qui concerne la recherche du sol et du sédiment au lit des rivières, pendant ces deux dernières années, nous avons prélevé 550 échantillons du sol, 100 échantillons du sédiment au lit, et 20 échantillons de la roche, et les avons envoyés à l'analyse chimique. La teneur du groupe des métaux lourds dans le sol et le sédiment au lit est généralement basse. La teneur des composants nocifs tels que CN, Cd, Hg, Cr, As, Pb est également basse. La plupart des échantillons de la haute teneur des composants sont dus à la géologie, à la qualité du sol, à la minéralisation, et à la topographie. Mais une partie de ces échantillons devraient être dus aux effets négatifs artificiels sur l'environnement. La haute teneur de Zn, Ni, Cu, Co est due au groupe de roche magmatique basique, et celle d'Au et d'As, due à la minéralisation de l'or. Concernant la haute teneur de Pb, nous ne pouvons pas nier complètement la possibilité du facteur humaine tel que voiture et batterie, etc., mais en principe elle est supposée d'être due à la roche plutonique. D'après le résultat de l'analyse des roches que nous avons effectuée dans la deuxième année, il s'est avéré que la teneur de la plupart des éléments change en fonction de la qualité de roche. Dans le groupe de roche magmatique basique, la teneur de Co, Ti, Ni, Zn, Cu, Cr est haute. Dans le groupe de roche de la qualité granite, la teneur de Na, K, Al, Sr, P, Ba est élevée. Dans les groupes de roche métaphorique et de roche sédimentaire, la teneur de K est haute.

D'après les lois concernant la préservation de l'environnement, l'abattage de 11 espèces des arbres, et la capture des 22 espèces des animaux sont contrôlés. Cependant, les valeurs de critère d'environnement sur la qualité de l'eau, du sol, et de

l'air ne sont pas encore fixées.

Concernant la recherche de la flore, dans la première année, nous avons élaboré la carte de division de flore par le déchiffrement de l'image de la couleur fausse synthétique de SPOT dans la saison sèche et par la recherche sur les lieux. Dans la deuxième année, nous avons vérifié sur le terrain l'image et la carte ci-dessus. D'après la vérification sur le terrain, nous avons confirmé que le résultat du déchiffrement de l'image correspond à la situation de la végétation sur le terrain. En outre, nous avons effectué la recherche au même point dans la saison des pluies et dans la saison sèche, et avons saisi le changement saisonnier de la situation de végétation. Cette dernière change en fonction du facteur topographique. En ce qui concerne la corrélation entre la végétation et la topographie, la tendance suivante est clairement reconnue. C'est dire que les zones au bord des rivières sont riches en arbres, et la densité de végétation est élevée, et que sur les plateaux de la croûte de latérite, il y a peu de végétation, et la densité de flore est basse. Dans la deuxième année, nous avons extrait les zones typiques de végétation, en effectuant la recherche détaillée. Nous avons confirmé plus de 90 espèces des arbres, et avons décidé la biocénose végétale. Nous avons confirmé sur le terrain 11 espèces des arbres dont l'abattage est en principe interdit. Aucune espèce propre ni aucune espèce précieuse n'ont été rapportées.

D'après le résultat de la recherche de la faune, en l'état actuel, les grands animaux terrestres sauvages sont supposés d'exister rarement dans la zone de recherche. Par rapport à l'état général du Mali, la zone de recherche est riche en végétation, et beaucoup d'oiseaux et de petits animaux peuvent être observés. Aucune espèce ni aucune espèce précieuse des animaux n'ont pas été rapportées. D'après la recherche archéologique, nous avons confirmé les tombes qui ont été construites pendant la période entre VII et XI siècle autour de Dogo.

Il est caractéristique que la végétation et la balance hydrologique changent considérablement en fonction de la saison des pluies et de la saison sèche, et que le paysage change énormément entre ces deux saisons. Dans la saison sèche, il n'y a pas de précipitations. Il fait toujours beau avec la basse humidité, la quantité d'évapotranspiration augmentant considérablement. Ainsi, la plupart des rivières se dessèchent, et en même temps les plantes herbacées se flétrissent. Au contraire, dans la saison des pluies, il pleut par intermittence, en faisant généralement nuageux avec beaucoup d'humidité, et peu d'évapotranspiration. Ainsi, on reconnaît constamment l'eau courante dans les rivières d'envergure moyenne et grande. Les flaques de l'eau apparaissent partout sur les routes, etc. Les feuilles des arbres poussent dru, les plantes herbacées fleurissent, en recouvrant entièrement la terre.

La zone de recherche est la région rurale. Il n'y a pas de grande ville, ni l'équipement industriel moderne. A part la route national N°7, il y a très peu de circulation de voitures. Ainsi, il existe peu de produits industriels, de produits chimiques, et de produits nocifs. Les effets négatifs sur l'environnement naturel pourraient être négligeables. Or, l'activité des habitants se développe vastement, y compris la culture des produits agricoles, et le pâturage des animaux domestiques. En état actuel, les effets négatifs sur l'environnement sont la disparition des forêts due à la brûlure des champs et à l'abattage, l'évacuation non traitée des eaux ménagères et des excréments, le déchet des ordures quotidiennes, l'usage du pesticide, le déchet des matières chimiques, etc. Il est prévu que les effets négatifs sur l'environnement augmentent dans un futur parallèlement au développement de la technologie agricole, à l'augmentation de la population, à l'évolution de mode de vie, et à la vulgarisation des produits industriels.

Au Mali, les politiques pour la préservation de l'environnement ne viennent d'être formées que récemment. Il est très important d'obtenir dans un premier temps les données basiques concernant l'environnement, ce qui est l'objectif de la présente recherche. Il sera utile pour l'exploitation industrielle et l'évaluation de l'impact sur l'environnement dans les années à venir.

Section 2 Proposition pour l'avenir

D'après le résultat de la recherche de la première année et de la deuxième année, nous pouvons proposer les points suivant comme l'objet de la recherche dans un future. L'objectif de la recherche sera l'obtention des données d'arrière-plan, et le recueillement des documents basiques concernant la préservation de l'environnement.

Nous proposons les politiques suivantes à l'administration de l'environnement du Mali, et aux établissements concernés : la détermination de la valeur du critère de l'environnement ; l'installation des appareils de l'analyse chimique pour la qualité de l'eau et du sol qui puissent être utilisés dans la recherche environnementale ; la gestion unifiée des documents concernant l'environnement (lois, documents officiels, données de recherche, etc).

① La recherche du sol

La recherche sommaire est achvée, la tendance globale ayant été saisie. Dorénavant, il est conseillé de prélever les échantillons aux points où les effets négatifs sur l'environnement existent, à savoir aux alentours de la route national, des grands

usines, des grands villages, et d'effectuer également l'analyse chimique, en obtenant les données basiques.

② La recherche sur la qualité de l'eau

Il est conseillé d'effectuer l'analyse de haute précision de la qualité de l'eau sur les composants nocifs (Cd, Pb, Hg, As, etc.) et sur les matières organiques utilisées pour les pesticides.

Afin de saisir le changement saisonnier, il est conseillé d'effectuer dans les mêmes points le prélèvement des échantillons à l'espacement plus étroit.

Dans les trous qui ont été forés dans la première année, il est conseillé d'effectuer le contrôle continu sur la qualité basique de l'eau.

③ La recherche hydrologique

Il est conseillé d'effectuer dans les zones déterminées de l'étendue plus étroite le contrôle continu sur le niveau de l'eau souterraine, sur la quantité de l'eau courante des rivières, et sur la quantité de précipitations, et d'établir le modèle plus réel de la balance hydrologique, en effectuant l'analyse.

④ La recherche de la flore

Il est conseillé de saisir le changement saisonnier de la végétation et l'influence artificielle (l'abattage et la brûlure de champs), en utilisant l'image de satellite, et d'effectuer la vérification sur le terrain.

⑤ L'évaluation de l'impact sur l'environnement par GIS

En utilisant les données de l'image satellite pour plusieurs années, il est conseillé de saisir le changement d'environnement pendant plusieurs années, et d'évaluer l'impact sur l'environnement.

En utilisant l'indice de plantes, etc. qui est obtenu par l'analyse de l'image satellite, il est conseillé de classer l'utilisation de terre, et d'évaluer l'effet négatif sur l'environnement.

Bibliographie

Bibliographie

Arbres, arbustes et arbrisseaux nourriciers en Afrique occidentale; Michel Baumer, p.260, 1995

Arbres du domaine soudanien; Institut d'Economie Rurale, Centre Regional de la Recherche Agronomique de Sikasso, p.122, 1997

Arbres et agricultures multiétagées d'Afrique; hugues dupriez et philippe de leener, p.280, 1993

Les atlas Afrique - Atlas du Mali; Les editions J.A., p.64, 1981

Recherches archéologiques au Mali; Agence de Coopération Culturelle et Technique, p.567, 1991

Recueil des textes législatifs et réglementaires en matière de gestion des ressources forestières fauniques et halieutiques; Ministère de l'environnement, p.87, 1999

化学用語辞典「第三版」(Japanese); 化学用語辞典編集委員会 編, 技報堂出版, p.1059, 1992

河川地形 (Japanese); 高山 茂美, 共立出版株式会社, p.304, 1975

環境保全林形成のための理論と実践 (Japanese); 財団法人国際生態学センター 編, p.168, 1996

気象地形学 (Japanese); Julius Budel, 株式会社古今書院, p.392, 1985

新版地下水調査法 (Japanese); 山本 莊毅, 株式会社古今書院, p.490, 1983

水質汚濁・土壌汚染 (Japanese); 安全工学協会 編, 海文堂, p.333, 1982

水質調査法 (Japanese); 半谷 高久, 小倉 紀雄, 丸善株式会社, p.335, 2000

地域環境水文学 (Japanese); 丸山 利輔, 三野 徹 編, 朝倉書店, p.175, 1999

地下水資源・環境論—その理論と実践— (Japanese); 水収支研究グループ 編, 共立出版株式会社, p.350, 1993

地下水調査および観測指針(案) (Japanese); 建設省河川局, (財)国土開発技術研究センター, 山海堂, p.330, 1993

マリ共和国ケコロ・バオレーバニフィング地域 資源開発協力基礎調査報告書 総括報告書 (Japanese) ; 通商産業省, 2000

水環境調査の基礎 (Japanese) ; 新井 正, 古今書院, p.170,

リモートセンシングデータ解析の基礎 (Japanese) ; 長谷川 均, 古今書院, p.138, 1998

Appendices

Appendice 1 La méthode de l'analyse de la qualité de l'eau

Equipment: Water Quality Monitoring System U-21 / Horiba, Ltd.				
Component	Symbol	Unit	Measuring principle	Method range
pH	pH	pH	Glass electrode	0.0 ~ 14.0
Temperature		°C	Thermistor	0.0 ~ 55.0
Conductivity		S/m	4 AC electrode	0 ~ 99
Dissolved oxygen	DO	mg/l	Diaphragm	0.0 ~ 19.9
Turbidity		NTU	Penetration and scattering	0 ~ 800
Equipment: Portable Spectrophotometer DR/2010 / HACH company				
Component	Symbol	Unit	Measuring principle	Detection limit
Cyanide	CN	mg/l	Pyridine-Pyrazalone	
Copper (USEPA)	Cu	mg/l	Bicinchoninate	0.02
Iron, Total (USEPA)	Fe	mg/l	FerroVer	0.02
Chromium, Hexavalent (USEPA)	Cr ⁶⁺	mg/l	1, 5-Diphenylcarbohydrazide	0.01
Manganese (USEPA)	Mn	mg/l	Periodate Oxidation	0.6
Molybdenum, Molybdate	Mo	mg/l	Mercaptoacetic Acid	
Boron	B	mg/l	Carmine	
Fluoride (USEPA)	F	mg/l	SPADNS	0.02
Zinc (USEPA)	Zn	mg/l	Zincon	0.04
Chromium, Total	Cr	mg/l	Alkaline Hypobromite Oxidation	
Nickel (USEPA)	Ni	mg/l	Heptoxime	0.02
Equipment: PACK TEST-simplified water inspection / Kyoritsu Chemical Check Lab., Corp.				
Component	Symbol	Unit	Measuring principle	Method range
Chemical Oxygen Demand	COD	mg/l	Colorimetry	0 ~ 8
Arsenic	As	mg/l	Colorimetry	0.2 ~ 10

Appendice 2 Le résultat de la mesure de la qualité de l'eau et de l'analyse simple de la qualité de l'eau

No.	Term	Locality	Name	UTM/29P (km)		pH	Temperature °C	Conductivity S/m	DO mg/l	Turbidity NTU	Flow rate l/min	Water level m	CN mg/l	Cu mg/l	Fe mg/l	Cr6+ mg/l	Mn mg/l	Mo mg/l	B mg/l	F mg/l	Zn mg/l	Cl mg/l	Ni mg/l	COD mg/l	As mg/l	Remarks		
				Easting	Northing																					color	clearness	precipitation
WD01	01D	drilling	MJMB-E1	689.259	1337.255	7.3	28.6	0.24	5.5	420	12	5.77	-0.001	-0.1	0.56	0.01	-0.1	-0.2	0.1	-0.25	0.00	-0.01	0.01	2	< 0.2	light yellow	translucence	exist
	01R					6.5	30.0	28	3.8	19	2.76	0.001	0.03	0.35	0.00	0.5	0.3	0.2	-0.08	0.04	0.00	0.03	7	< 0.2	light yellow	clear	few	
	02D					7.1	28.4	35	7.9	60	6.28	0.001	0.01	0.05	0.00	0.6	0.5	1.5	-0.16	0.07	-0.03	0.00	7	< 0.2	light yellow	translucence	exist	
WD02	01D	drilling	MJMB-E2	693.308	1334.262	6.9	29.1	49	6.2	10	—	24.03	0.000	0.01	0.04	0.00	0.2	0.1	0.1	-0.04	0.10	0.00	0.01	0	< 0.2	none	clear	exist
	01R					5.9	30.9	9	4.6	220	24.03	0.001	0.00	0.78	0.01	0.2	0.0	0.8	-0.38	0.10	0.01	0.09	3	< 0.2	light greyish yellow	translucence	exist	
	02D					7.2	28.7	48	8.6	70	24.17	0.000	-0.05	-0.03	-0.01	-0.1	-0.3	0.0	0.25	0.06	0.01	0.01	5	< 0.2	light greyish yellow	translucence	exist	
WD03	01D	drilling	MJMB-E3	693.820	1326.856	7.0	25.3	15	4.1	16	50	3.65	0.000	0.00	0.51	0.00	0.2	0.1	0.1	-0.02	0.05	0.00	0.01	5	< 0.2	none	clear	exist
	01R					6.9	27.8	11	3.6	31	0.76	0.000	0.01	0.57	0.00	0.6	0.0	2.2	0.41	0.04	0.00	0.05	3	< 0.2	light reddish grey	clear	few	
	02D					7.4	26.3	13	10.3	28	4.24	0.001	0.01	0.11	0.00	0.2	0.3	0.1	0.10	0.29	0.00	0.04	5	< 0.2	light reddish grey	clear	few	
WD04	01D	drilling	Sagala	690.518	1327.180	6.6	26.3	19	4.2	7	30	5.70	0.000	0.00	0.62	0.00	0.2	0.1	0.1	-0.06	0.05	0.00	0.01	2	< 0.2	none	clear	none
WD05	01D	drilling	Kekoro	708.585	1310.489	6.9	30.5	34	7.9	44	100	—	0.001	0.01	0.03	0.00	0.1	0.1	0.0	0.58	0.90	0.01	0.01	1	< 0.2	none	clear	none
WD06	01R	drilling	MJMB-E4	713.349	1314.005	6.2	26.1	4	7.5	8	—	9.84	0.000	0.00	0.06	0.00	0.1	0.5	0.0	-0.13	0.08	0.01	0.04	2	< 0.2	light reddish grey	clear	few
	02D					6.3	31.3	12	1.4	12	—	—	—	—	—	0.001	0.03	0.05	0.00	3.1	0.6	0.0	0.18	0.04	0.01	0.02	6	< 0.2
WR01	01D	river	Beoule/branch	678.802	1287.996	7.1	25.3	8	9.0	21	0	—	0.001	0.00	0.69	0.00	0.1	-0.1	-0.1	-0.23	0.05	0.01	0.03	3	< 0.2	light yellowish grey	translucence	exist
	01R					679.004	1288.258	7.3	27.1	4	8.4	120	—	—	—	0.001	0.03	1.00	0.01	0.1	0.6	0.1	-0.49	0.12	0.02	0.99	8	< 0.2
WR02	01D	river	Banifing	655.617	1309.107	6.7	25.1	5	7.2	20	0	—	0.001	0.00	0.09	0.00	0.2	-0.9	-0.1	-0.34	0.05	-0.02	0.03	> 8	< 0.2	light yellowish grey	translucence	exist
WR03	01D	river	Beoule	683.338	1286.965	7.3	23.8	8	9.1	9	—	—	0.005	0.01	0.6	0.00	0.1	0.0	0.0	-0.26	0.02	0.01	0.02	2	0.2	none	clear	few
WR04	01D	river	Beoule	706.448	1323.536	7.8	30.6	6	7.7	5	—	—	0.000	0.00	0.37	0.00	0.1	0.3	-0.1	0.03	0.01	0.01	0.02	2	< 0.2	none	clear	few
WR05	01D	river	Bagoé/branch	746.503	1369.032	7.4	30.3	14	7.5	10	0	—	0.000	0.00	0.23	0.00	0.1	0.0	0.1	-0.44	0.11	0.01	0.01	> 8	< 0.2	none	clear	few
	01R					746.501	1369.033	7.3	27.4	10	7.3	130	—	—	—	0.001	0.02	1.44	0.02	0.0	0.6	0.9	-0.60	0.08	0.01	0.67	7	< 0.2
WR06	01R	river	Kolako	650.294	1374.135	6.4	27.6	6	3.7	110	—	—	0.002	0.02	2.98	0.00	0.2	0.4	0.0	-0.34	0.24	-0.01	1.66	7	< 0.2	light yellowish brown	translucence	exist
WR07	01R	river	La Faya	644.375	1367.501	6.6	25.4	7	6.0	78	—	—	0.001	0.02	3.60	0.00	0.3	-0.6	0.0	-0.15	0.04	-0.02	0.44	8	< 0.2	light yellowish brown	clear	few
WR08	01R	river	Bla	640.322	1323.33	6.7	28.5	5	6.8	120	—	—	0.001	0.01	1.63	0.00	0.2	0.2	0.2	-0.46	0.06	0.00	0.65	8	< 0.2	light yellow	translucence	exist
WR09	01R	river	Koba	641.573	1320.401	6.5	27.3	4	6.4	130	—	—	0.008	0.11	4.16	0.01	1.6	1.8	0.5	-0.27	0.05	0.00	0.44	8	< 0.2	light yellowish brown	clear	few
WR10	01R	river	Bani	639.408	1299.555	6.6	29.6	3	8.7	130	—	—	0.006	0.09	1.21	0.00	0.2	1.9	1.7	-0.09	0.04	0.01	1.26	8	< 0.2	light yellow	translucence	exist
WR11	01R	river	Kole	685.446	1302.190	7.5	26.5	4	8.5	100	—	—	0.000	0.00	1.60	0.01	0.1	0.6	0.3	-0.45	0.10	0.00	0.44	7	< 0.2	light yellow	translucence	exist
WR12	01R	river	Sokoni	693.831	1326.843	7.3	26.3	4	8.3	120	—	—	0.001	0.01	1.22	0.01	0.1	0.3	0.1	-0.16	0.08	-0.03	0.12	8	< 0.2	light yellow	translucence	exist
WR13	01R	river	Ndji	678.667	1343.359	7.6	24.7	3	8.9	470	—	—	0.001	-0.01	1.51	0.01	0.0	1.0	0.3	-0.72	0.10	0.01	0.11	7	0.2	light yellowish brown	translucence	exist
WR14	02D	river	Banifing	696.719	1369.170	7.7	22.5	7	9.6	30	—	—	0.000	-0.05	0.88	0.00	-0.3	-0.5	0.4	0.20	0.05	0.01	0.05	8	< 0.2	light yellowish reddish brown	translucence	exist
WR15	02D	river	Baoule	702.716	1317.410	7.9	22.4	4	9.0	40	—	—	0.001	0.01	0.24	0.00	0.1	0.6	1.1	0.00	0.11	0.01	0.00	7	< 0.2	light yellow	clear	few
WW01	01D	well	Badie	717.554	1342.638	6.8	30.9	20	8.2	2	—	—	0.001	0.01	0.04	0.00	0.1	0.1	0.1	-0.40	0.09	0.01	0.01	1	< 0.2	none	clear	none
WW02	01D	well	Kolimba	645.899	1365.878	7.3	21.5	24	7.7	8	—	—	0.000	0.01	0.09	0.00	0.1	0.2	-0.1	-0.50	0.21	0.01	0.00	1	< 0.2	none	clear	none
WW03	01D	well	Marako	619.792	1346.905	6.9	26.2	32	2.5	2	—	—	0.001	0.01	0.08	0.00	0.1	0.2	-0.2	0.31	0.07	0.00	0.01	1	< 0.2	none	clear	none
WW04	01D	well	Dialaninkoro	640.231	1323.111	6.8	29.8	31	2.7	3	—	—	0.001	0.01	0.04	0.00	0.1	0.4	-0.1	-0.20	0.00	0.00	0.01	2	< 0.2	none	clear	none
WW05	01D	well	Famana	627.713	1312.656	6.6	30.3	27	2.4	2	—	—	0.000	0.01	0.14	0.00	0.5	-0.4	0.0	-0.59	0.07	0.00	0.02	1	< 0.2	none	clear	none
WW06	01D	well	Baninda	639.789	1298.906	5.3	28.9	32	2.1	3	—	—	0.000	0.00	0.36	0.00	0.2	0.2	0.0	-0.97	0.02	0.00	0.01	1	< 0.2	none	clear	none
WW07	01D	well	Dogo	681.755	1314.951	6.8	28.3	31	3.3	4	—	—	0.000	0.04	0.01	0.00	0.1	0.2	-0.1	-0.64	0.02	0.01	0.03	1	< 0.2	none	clear	none
	01R					681.991	1314.946	6.7	30.0	22	2.9	3	—	—	0.002	0.02	0.04	0.00	0.1	0.6	0.3	0.12	0.06	0.01	0.03	3	< 0.2	none
WW08	01D	well	Birala	684.119	1302.048	6.1	26.9	45	4.9	9	—	—	0.000	0.02	0.24	0.00	0.2	0.3	0.1	-0.01	0.01	0.01	0.02	1	< 0.2	none	clear	none
WW09	01D	well	Ntiola	676.668	1338.441	6.8	29.0	21	8.1	4	—	—	0.001	0.01	0.01	0.00	0.3	0.1	0.1	-0.38	0.03	0.00	0.01	3	< 0.2	none	clear	none
WW10	01R	well	Gouani	655.135	1357.231	5.9	28.8	13	4.1	35	—	—	0.000	0.03	0.39	0.00	0.4	0.4	0.0	0.18	0.20	0.00	0.05	3	< 0.2	light yellow	translucence	none
WW11	01R	well	Diena	647.171	1350.629	6.6	29.6	22	2.3	8	—	—	0.001	0.03	0.02	0.00	0.2	0.6	-0.1	0.58	0.17	0.01	0.02	2	< 0.2	none	clear	none
WW12	01R	well	Sido	652.941	1290.278	6.8	29.2	25	3.9	1	—	—	0.001	0.03	0.04	0.01	0.2	1.0	1.4	0.20	0.07	0.01	0.00	1	< 0.2	none	clear	none
WW13	01R	well	Banko	664.525	1321.202	6.1	31.1	7	5.8	14	—	—	0.001	0.02	0.04	0.01	0.2	0.6	0.3	-0.15	0.07	0.01	0.02	5	< 0.2	none	clear	none
WW14	01R	well	Tyon	721.494																								

Appendice 3 Le résultat de l'analyse ICP de la qualité de l'eau

element	unit	WR01	WR02	WD01	WD02	WD03	WD04	WW01	WW02	WW03	WW04	WW05	WW06
Al	mg/l	0.530	0.163	1.950	2.490	0.412	0.222	0.008	0.002	0.008	0.002	0.008	0.014
Sb	mg/l	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
As	mg/l	0.0006	0.0004	0.001	0.0083	0.0092	0.0011	0.0011	0.0034	0.0225	0.0012	0.0003	0.0035
Ba	mg/l	0.0308	0.0233	0.1930	0.2410	0.2310	0.4970	0.1740	0.1080	0.0295	0.0451	0.1770	0.0461
Be	mg/l	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Bi	mg/l	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
B	mg/l	<0.01	<0.01	0.03	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	0.03
Cd	mg/l	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Ca	mg/l	4.25	2.18	18.7	30	6.08	4.59	11.5	13.1	5.03	10.9	9.52	10.5
Cr	mg/l	0.0009	<0.0005	0.0063	0.0107	0.0021	0.0012	<0.0005	<0.0005	<0.0005	0.0015	0.0024	<0.0005
Co	mg/l	0.0005	0.0002	0.0034	0.0018	0.003	0.0197	0.0001	0.0013	0.0004	<0.0001	<0.0001	0.0002
Cu	mg/l	0.0014	0.0009	0.0152	0.006	0.0119	0.0043	0.0007	0.0028	0.0054	0.0065	0.0034	0.001
Fe	mg/l	1.41	0.61	3.95	3.31	3.07	4.4	<0.03	0.16	<0.03	0.03	<0.03	0.04
Pb	mg/l	0.00068	0.00032	0.02000	0.00352	0.02190	0.00639	0.00008	0.00010	0.00029	0.00016	0.00014	<0.00005
Li	mg/l	<0.005	<0.005	0.022	0.132	<0.005	<0.005	0.11	0.054	0.412	0.113	0.031	0.155
Mg	mg/l	2.1	1.4	14.6	36.8	5.4	2	6.5	12.1	7	9.9	4.4	13.9
Mn	mg/l	0.08770	0.02200	0.63300	0.27500	0.69800	3.04000	0.00594	0.14200	0.04570	0.00115	0.00118	0.05950
Mo	mg/l	<0.00005	<0.00005	0.00036	0.00135	0.00075	<0.00005	0.00126	0.00066	0.00049	0.00134	0.00017	0.00396
Ni	mg/l	0.0007	<0.0005	0.0034	0.0049	0.0021	0.0095	0.0006	0.0021	0.0014	0.0006	<0.0005	<0.0005
P	mg/l	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0.4	<0.3	0.3	<0.3
K	mg/l	3	<2	6	12	3	<2	4	4	4	5	5	5
Se	mg/l	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Si	mg/l	4.39	7.99	26.20	20.00	5.78	9.17	35.80	46.50	42.90	34.80	36.50	23.20
Ag	mg/l	<0.00001	<0.00001	0.00138	0.00027	0.00675	0.00115	<0.00001	<0.00001	<0.00001	<0.00001	0.00001	0.00004
Na	mg/l	3	4	24	9	7	<2	13	10	16	12	10	18
Sr	mg/l	0.0373	0.0319	0.1160	0.2870	0.0781	0.0484	0.1340	0.0936	0.0652	0.1090	0.2360	0.1420
Tl	mg/l	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sn	mg/l	<0.0001	<0.0001	<0.0002	<0.0001	<0.0003	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Ti	mg/l	<0.01	<0.01	0.12	0.14	0.02	0.03	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
U	mg/l	0.00009	0.00005	0.00037	0.00026	0.00011	0.00003	0.00246	0.00039	0.00068	0.00028	0.00008	0.00014
V	mg/l	0.002	0.001	0.010	0.007	0.002	0.001	0.004	0.013	0.007	0.010	0.007	0.001
Zn	mg/l	<0.001	0.002	0.017	0.008	0.009	0.017	0.002	0.004	0.009	0.006	0.017	<0.001

Footnote: < = Less than the detection limit indicated.

Appendice 4 Le résultat de recherche de la quantité du courant des rivières

Site	WR01	WR05	WR06	WR07	WR08	WR09	WR10	WR11	WR12	WR13	WR15
River system	Baoule	Bagoé	La Faye	La Faye	Banifing	Banifing	Banifing	Baoule	Baoule	Banifing	Baoule
Location (UTM_E)(km)	679.004	746.501	650.294	644.375	640.322	641.573	639.408	685.446	693.831	678.667	702.716
Location (UTM_N)(km)	1288.258	1369.033	1374.135	1367.501	1323.330	1320.401	1299.555	1302.190	1326.843	1343.359	1317.410
Catchment area (km ²)	288.4	418.7	243.9	650.6	697.3	470.2	475.1	187.0	92.1	302.2	--
Flow rate (m ³ /s)	1.804	0.722	0.055	0.454	1.977	0.685	2.236	0.856	0.412	2.118	0.832
Max. flow speed (m/s)	0.056	0.566	0.177	0.634	0.492	0.552	0.298	0.732	0.231	0.632	0.020
Max. depth (m)	3.39	0.29	0.11	0.36	0.90	0.40	1.25	0.65	0.63	0.80	2.20
River width (m)	20.00	7.20	5.25	4.70	8.40	5.70	14.10	4.15	6.70	7.40	56.00

Appendice 5 La méthode des observations météorologiques

Component	Sensor, Method of measurement	Range	Detection limit	Measuring interval	Measuring value	Setting height	Remarks
Temperature	Platinum resistance thermometer sensor	-40~+50 °C	0.1 °C	60 min.	Instantaneous value	1.5 m	Inside a vent sleeve
Humidity	Electrical capacitance thin film sensor	0~100 %	0.1 %	60 min.	Instantaneous value	1.5 m	Inside a vent sleeve
Precipitation	Tipping measure	1 bottle 0.5 mm (15.7cc)	0.5 mm	60 min.	Integrated value	0.55 m Cylinder height	Cylinder diameter =200mm
Wind direction	Tale of vane Potentiometer	0~360 deg.	1 deg.	60 min.	Instantaneous value	2.5 m	
Wind speed	3-cups anemometer Permanent magnet generator	2~50 m/s	0.1 m/s	60 min.	Instantaneous value	2.5 m	
Insolation	Solar battery cell	0~2 kW/m ²	0.2 kW/m ²	20 min.	Instantaneous value	2.5 m	

Appendice 6 Le résultat des observations météorologiques(1/6)

Date	Temperature		Humidity		Wind		Precipitation	Insolation
	max.	min.	max.	min.	direction	speed	amount	amount
	°C	°C	%	%	degree	m/s	mm	kW/m ²
2001/2/4	38.0	15.5	34.7	6.6	12	1.0	0.0	707
2001/2/5	37.8	16.6	33.0	7.2	7	0.6	0.0	658
2001/2/6	36.0	19.8	26.8	6.6	7	0.7	0.0	679
2001/2/7	33.9	15.1	29.2	6.0	15	1.4	0.0	721
2001/2/8	35.8	13.4	32.2	6.2	11	1.3	0.0	770
2001/2/9	35.1	15.5	28.3	6.9	15	1.1	0.0	707
2001/2/10	35.5	15.6	25.2	5.6	13	1.4	0.0	770
2001/2/11	35.1	14.9	26.4	5.7	13	1.5	0.0	784
2001/2/12	32.5	19.7	14.4	5.3	15	0.8	0.0	581
2001/2/13	33.4	12.7	28.0	4.7	13	1.3	0.0	798
2001/2/14	31.0	14.6	21.9	7.1	16	1.5	0.0	777
2001/2/15	30.4	16.6	26.1	9.3	8	0.8	0.0	707
2001/2/16	32.7	12.9	37.4	7.5	13	1.3	1.0	784
2001/2/17	33.9	13.8	32.9	6.4	8	0.8	0.5	812
2001/2/18	34.9	15.3	32.8	7.0	13	1.2	0.0	735
2001/2/19	37.1	15.1	38.7	5.4	13	1.3	0.0	756
2001/2/20	35.8	17.2	27.1	5.9	16	1.1	0.0	616
2001/2/21	39.3	16.7	26.4	5.2	11	1.1	0.0	826
2001/2/22	35.2	19.1	24.7	6.7	9	1.0	0.0	525
2001/2/23	38.6	17.3	27.9	5.2	12	1.3	0.0	854
2001/2/24	40.1	16.9	26.8	5.1	8	0.8	0.0	854
2001/2/25	39.8	18.1	29.0	5.1	12	1.1	0.0	847
2001/2/26	39.2	19.6	23.9	5.1	10	1.0	0.0	798
2001/2/27	38.3	18.4	26.4	7.6	15	1.7	0.0	840
2001/2/28	37.2	20.1	24.1	7.4	13	1.2	0.0	840
2001/3/1	36.1	18.1	27.8	8.0	12	1.4	0.0	854
2001/3/2	39.1	18.2	29.6	7.7	8	0.8	0.0	819
2001/3/3	39.9	18.8	29.0	5.9	11	1.1	0.0	854
2001/3/4	41.5	17.8	30.7	4.8	11	1.1	0.0	875
2001/3/5	40.7	20.7	26.8	8.6	6	0.6	0.0	791
2001/3/6	40.8	22.0	30.0	6.5	11	1.1	0.0	784
2001/3/7	39.2	20.8	18.7	4.0	19	1.6	0.0	875
2001/3/8	38.7	17.8	23.4	3.9	10	0.9	0.0	882
2001/3/9	39.3	18.1	23.6	3.6	8	0.7	0.0	903
2001/3/10	40.2	17.6	20.8	3.2	9	0.7	0.0	910
2001/3/11	39.5	18.0	21.3	4.4	11	1.1	0.0	882
2001/3/12	37.9	18.3	23.5	5.9	11	0.7	0.0	756
2001/3/13	40.0	20.0	25.0	6.2	7	0.7	0.0	861
2001/3/14	38.8	23.8	46.9	15.0	15	1.2	0.0	742
2001/3/15	38.0	25.4	68.9	22.1	10	0.8	0.0	700
2001/3/16	37.5	26.1	61.8	18.9	9	1.1	0.0	742
2001/3/17	39.6	24.6	57.1	12.3	9	0.8	2.5	714
2001/3/18	39.7	22.6	29.2	7.9	8	0.8	0.0	833
2001/3/19	39.5	24.8	41.1	12.0	6	0.5	0.0	784
2001/3/20	40.3	22.7	30.2	5.9	10	1.0	0.0	861
2001/3/21	40.9	21.5	36.0	7.0	9	0.8	0.0	882
2001/3/22	40.6	20.4	30.9	7.0	10	0.7	0.0	875
2001/3/23	40.8	23.2	31.1	11.5	5	0.5	0.0	777
2001/3/24	38.9	26.8	55.0	15.4	10	1.0	0.0	728
2001/3/25	39.4	26.5	54.2	17.0	7	0.6	0.0	707
2001/3/26	38.8	25.2	56.8	11.7	11	0.9	0.0	784
2001/3/27	40.0	25.0	63.3	10.9	7	0.9	0.0	861
2001/3/28	40.3	26.1	50.5	6.1	9	0.9	0.0	798
2001/3/29	41.0	23.0	41.7	9.6	14	1.8	0.0	812
2001/3/30	39.5	26.4	54.9	15.1	4	0.4	0.0	742
2001/3/31	39.6	26.9	59.1	13.3	10	0.7	0.0	742
2001/4/1	39.9	24.7	51.1	5.9	10	0.9	0.0	861
2001/4/2	38.5	22.4	23.2	7.9	15	1.1	0.0	721
2001/4/3	37.9	24.2	20.8	7.1	9	0.8	0.0	784
2001/4/4	39.6	19.8	27.1	7.3	9	1.1	0.0	819
2001/4/5	39.7	23.6	47.9	10.6	8	0.7	0.0	826
2001/4/6	38.2	24.2	59.2	15.5	14	1.2	0.0	735
2001/4/7	38.3	27.0	68.2	23.0	7	0.7	0.0	574
2001/4/8	40.0	26.1	60.4	9.1	7	0.7	0.0	567
2001/4/9	41.4	22.8	33.1	6.4	10	0.9	0.0	819

Appendice 6 Le résultat des observations météorologiques(2/6)

Date	Temperature		Humidity		Wind		Precipitation	Insolation
	max. °C	min. °C	max. %	min. %	direction degree	speed m/s	amount mm	amount kW/m ²
2001/4/10	41.9	22.3	31.0	9.6	9	0.6	0.0	854
2001/4/11	41.2	25.3	46.4	12.2	9	0.9	0.0	854
2001/4/12	38.1	26.5	62.1	20.2	14	0.9	0.0	644
2001/4/13	39.9	25.5	63.7	17.0	9	0.9	0.0	833
2001/4/14	36.5	24.9	70.4	26.7	21	1.8	0.0	651
2001/4/15	41.5	25.7	70.9	7.2	9	0.8	0.0	826
2001/4/16	39.5	26.1	61.7	17.6	10	0.9	0.0	784
2001/4/17	38.5	27.2	65.1	23.2	13	1.1	0.0	784
2001/4/18	39.6	27.5	65.6	17.3	12	1.0	0.0	665
2001/4/19	35.9	21.9	90.7	29.2	12	1.2	6.5	791
2001/4/20	39.4	26.4	70.4	18.6	7	0.6	0.0	791
2001/4/21	38.2	23.9	90.8	25.5	10	0.6	1.5	637
2001/4/22	35.8	26.8	69.9	30.1	10	1.0	0.0	721
2001/4/23	38.8	26.0	69.5	15.0	10	0.8	0.0	840
2001/4/24	39.8	23.0	39.7	11.4	11	0.7	0.0	889
2001/4/25	39.8	24.7	31.7	9.7	9	0.8	0.0	882
2001/4/26	40.6	26.7	51.7	11.1	10	0.9	0.0	791
2001/4/27	40.8	26.7	50.1	11.1	8	0.6	0.0	700
2001/4/28	41.1	28.7	62.5	11.5	11	0.9	0.0	833
2001/4/29	41.4	27.8	51.7	13.4	10	0.8	0.0	868
2001/4/30	39.2	29.2	56.6	21.5	16	1.4	0.0	763
2001/5/1	30.8	22.3	92.4	46.6	10	1.0	23.0	462
2001/5/2	36.9	24.6	82.8	31.0	10	0.8	0.0	532
2001/5/3	38.5	24.6	85.3	22.8	10	0.9	0.0	854
2001/5/4	39.8	24.5	79.2	19.5	11	1.1	1.0	812
2001/5/5	37.3	23.1	91.8	25.6	9	0.7	2.5	665
2001/5/6	41.4	25.2	78.2	14.8	12	1.1	0.0	840
2001/5/7	38.7	24.2	73.0	21.5	7	0.7	0.0	805
2001/5/8	40.2	27.2	63.9	20.4	13	1.0	0.0	875
2001/5/9	36.7	27.5	60.4	33.8	10	1.0	0.0	581
2001/5/10	40.1	25.4	73.8	18.4	12	0.8	0.0	826
2001/5/11	40.1	26.2	72.0	23.6	16	1.0	6.5	728
2001/5/12	35.9	24.8	77.9	34.3	13	1.1	0.0	826
2001/5/13	38.9	26.6	83.1	24.6	11	1.0	0.0	777
2001/5/14	41.6	27.8	72.4	18.0	17	1.5	0.0	812
2001/5/15	39.2	27.9	70.0	26.6	30	4.0	2.0	861
2001/5/16	34.5	23.0	81.9	43.9	29	3.6	14.5	609
2001/5/17	39.0	26.4	79.6	27.8	30	3.3	0.0	833
2001/5/18	33.3	24.7	82.8	49.3	30	4.0	0.0	238
2001/5/19	33.3	23.6	83.7	32.1	26	3.3	0.0	511
2001/5/20	36.8	24.1	86.2	30.2	28	3.7	0.0	833
2001/5/21	36.0	23.9	77.5	29.8	34	4.0	0.0	581
2001/5/22	37.2	26.0	78.9	24.7	33	4.2	0.0	679
2001/5/23	34.2	22.0	96.8	42.1	32	4.0	13.0	798
2001/5/24	36.4	20.8	95.9	29.9	34	4.2	5.5	854
2001/5/25	32.6	26.4	77.4	50.4	32	4.2	0.0	588
2001/5/26	38.1	25.0	79.3	25.3	31	3.9	0.0	847
2001/5/27	36.4	25.5	68.6	33.7	28	3.7	0.0	819
2001/5/28	37.7	24.6	71.4	24.1	26	3.3	0.0	875
2001/5/29	38.1	22.5	94.0	28.9	32	3.8	19.5	840
2001/5/30	31.6	23.0	89.6	52.6	34	4.2	0.0	567
2001/5/31	36.7	24.2	91.6	26.6	28	3.3	0.0	868
2001/6/1	36.7	24.3	88.2	32.3	28	3.3	6.5	784
2001/6/2	35.6	24.5	81.6	35.1	30	3.7	0.0	784
2001/6/3	32.1	21.0	88.3	50.3	35	3.8	4.5	735
2001/6/4	35.6	23.4	80.8	32.7	29	3.5	0.0	826
2001/6/5	36.5	24.5	81.2	31.1	31	3.7	0.0	854
2001/6/6	33.1	23.6	82.5	40.0	27	3.5	0.5	637
2001/6/7	33.4	23.1	88.2	42.9	27	3.5	0.0	861
2001/6/8	28.0	22.5	95.5	65.3	34	3.9	1.0	350
2001/6/9	32.4	21.9	97.3	47.5	31	3.7	0.0	609
2001/6/10	35.0	21.5	93.1	36.8	37	4.9	0.0	812
2001/6/11	34.7	25.4	77.2	44.9	32	4.1	0.0	763
2001/6/12	35.8	20.8	87.8	34.0	24	2.9	0.0	777
2001/6/13	34.6	25.4	75.0	37.2	25	3.0	0.0	623

Appendice 6 Le résultat des observations météorologiques(3/6)

Date	Temperature		Humidity		Wind		Precipitation	Insolation
	max.	min.	max.	min.	direction	speed	amount	amount
	°C	°C	%	%	degree	m/s	mm	kW/m ²
2001/6/14	36.6	22.5	76.8	33.4	37	4.3	0.0	861
2001/6/15	33.0	23.3	76.6	46.1	33	4.4	0.0	679
2001/6/16	34.8	22.7	77.2	35.4	30	3.8	2.0	805
2001/6/17	35.1	21.1	95.4	36.4	35	4.4	59.0	721
2001/6/18	33.0	21.5	96.8	45.8	30	4.0	0.0	763
2001/6/19	34.8	24.4	88.8	38.7	29	3.6	0.0	861
2001/6/20	35.6	24.8	79.6	40.5	28	3.4	3.0	672
2001/6/21	32.6	22.2	97.4	50.8	35	4.3	32.0	686
2001/6/22	28.6	21.7	97.4	67.2	33	3.7	11.0	273
2001/6/23	32.5	22.9	97.5	51.8	23	2.8	0.0	749
2001/6/24	29.3	20.5	97.7	65.5	28	3.4	8.5	399
2001/6/25	31.2	21.5	98.4	55.6	27	3.6	0.0	763
2001/6/26	33.4	22.7	96.4	47.5	30	3.7	4.0	756
2001/6/27	33.7	21.3	98.0	45.3	31	4.0	4.0	868
2001/6/28	29.3	20.6	96.6	62.6	27	3.3	5.5	602
2001/6/29	32.3	23.8	95.3	49.3	27	3.3	4.0	714
2001/6/30	31.2	20.2	97.2	53.6	25	3.2	18.5	742
2001/7/1	32.7	21.0	98.3	48.7	30	3.7	29.0	742
2001/7/2	31.6	21.2	97.7	52.1	22	2.4	6.5	896
2001/7/3	30.6	22.2	95.2	57.5	27	3.2	1.5	553
2001/7/4	32.2	22.7	95.4	53.8	28	3.4	0.0	819
2001/7/5	32.3	23.1	93.3	57.8	35	4.0	0.0	840
2001/7/6	24.8	20.6	97.9	82.3	29	3.3	17.0	217
2001/7/7	31.0	21.9	97.5	55.4	27	3.2	0.0	714
2001/7/8	33.0	22.4	96.6	47.7	25	3.0	0.0	861
2001/7/9	34.0	24.1	88.9	46.5	31	4.0	0.0	847
2001/7/10	33.7	23.3	84.0	48.1	30	3.9	0.0	875
2001/7/11	27.6	21.3	97.5	67.6	30	3.6	8.5	371
2001/7/12	30.1	22.8	95.2	64.5	32	2.6	4.0	560
2001/7/13	31.7	23.2	95.3	55.2	35	4.6	0.0	728
2001/7/14	30.8	23.3	95.6	64.0	34	4.4	0.0	483
2001/7/15	32.0	22.2	92.9	58.7	37	4.4	2.0	700
2001/7/16	31.5	21.2	97.6	55.7	31	4.0	20.5	721
2001/7/17	26.2	20.7	98.4	76.6	29	3.8	26.5	392
2001/7/18	32.4	22.2	96.9	47.9	32	4.0	0.0	805
2001/7/19	31.3	22.6	96.6	56.9	33	4.4	0.0	763
2001/7/20	27.6	21.2	95.3	64.6	28	3.1	2.0	294
2001/7/21	31.4	21.2	96.5	52.3	27	3.3	0.0	728
2001/7/22	32.4	23.1	94.5	60.9	31	3.9	0.0	665
2001/7/23	30.8	21.5	98.6	58.7	30	3.2	24.0	756
2001/7/24	31.6	21.3	97.9	56.7	22	3.2	0.0	637
2001/7/25	30.6	20.6	97.4	60.5	30	3.8	2.5	742
2001/7/26	27.3	20.7	97.9	71.7	29	3.3	0.0	434
2001/7/27	28.8	21.8	98.2	62.5	32	4.1	9.0	539
2001/7/28	30.7	21.7	98.6	60.9	33	4.3	0.0	637
2001/7/29	31.8	23.3	93.0	57.2	39	4.9	0.0	763
2001/7/30	26.8	19.2	97.7	74.5	24	2.9	30.5	371
2001/7/31	28.6	22.0	98.3	65.4	27	3.3	0.0	574
2001/8/1	29.8	21.5	98.7	63.6	29	3.6	11.5	595
2001/8/2	29.4	20.4	97.3	56.9	31	3.0	6.0	714
2001/8/3	29.5	21.4	97.3	61.4	29	3.9	0.0	770
2001/8/4	30.6	22.2	94.9	57.7	35	4.6	0.0	826
2001/8/5	30.7	21.8	98.3	62.1	32	3.7	4.5	637
2001/8/6	33.3	22.0	99.1	48.9	30	3.2	0.0	805
2001/8/7	32.3	20.3	97.0	57.1	31	4.1	49.5	756
2001/8/8	29.2	20.2	97.7	58.4	27	3.3	5.5	630
2001/8/9	28.6	20.0	98.0	63.5	33	4.4	24.5	525
2001/8/10	31.5	22.1	97.1	55.9	28	3.6	0.0	644
2001/8/11	32.4	22.4	98.8	55.5	26	3.1	0.0	665
2001/8/12	32.7	22.4	96.4	57.4	36	4.1	0.0	707
2001/8/13	28.6	20.5	96.1	68.3	29	3.7	0.0	441
2001/8/14	30.0	22.1	97.1	64.2	25	3.1	0.0	504
2001/8/15	30.1	20.5	98.0	62.3	32	4.0	4.0	483
2001/8/16	32.4	20.4	97.6	58.8	30	3.7	13.5	560
2001/8/17	32.3	21.0	98.3	56.1	28	3.5	0.0	686

Appendice 6 Le résultat des observations météorologiques(4/6)

Date	Temperature		Humidity		Wind		Precipitation	Insolation
	max.	min.	max.	min.	direction	speed	amount	amount
	°C	°C	%	%	degree	m/s	mm	kW/m ²
2001/8/18	32.6	22.3	96.3	53.1	34	4.5	0.0	847
2001/8/19	32.2	21.0	97.5	56.8	33	4.2	33.0	574
2001/8/20	29.5	21.4	98.5	75.1	30	3.7	0.0	413
2001/8/21	30.5	21.9	98.5	68.4	31	3.3	0.0	588
2001/8/22	29.4	22.0	98.1	73.1	28	3.2	0.0	322
2001/8/23	31.2	21.4	98.4	64.2	26	3.3	0.0	770
2001/8/24	32.0	21.5	97.1	54.5	29	3.7	21.5	693
2001/8/25	31.2	21.6	98.8	61.6	23	2.5	6.0	756
2001/8/26	31.6	20.7	98.4	61.4	26	2.6	21.0	546
2001/8/27	32.0	21.1	98.7	55.3	31	3.6	0.0	770
2001/8/28	27.8	20.1	97.9	67.0	29	3.2	12.5	455
2001/8/29	28.0	21.1	98.8	72.4	23	2.9	24.5	525
2001/8/30	30.8	21.5	98.1	61.3	28	3.6	0.0	651
2001/8/31	32.9	19.9	98.9	47.5	33	3.9	5.0	854
2001/9/1	30.7	19.9	98.6	63.2	26	3.0	0.0	630
2001/9/2	32.5	22.1	98.4	53.5	27	3.3	0.0	700
2001/9/3	32.2	22.0	98.7	55.9	32	3.7	17.5	644
2001/9/4	31.9	21.2	98.7	70.4	22	2.0	8.0	616
2001/9/5	31.4	21.6	99.0	57.5	28	3.2	0.0	630
2001/9/6	34.1	20.1	99.2	51.2	27	3.4	16.0	756
2001/9/7	29.0	19.6	99.2	66.8	23	2.5	0.0	686
2001/9/8	32.3	21.3	98.5	60.8	25	2.8	0.0	658
2001/9/9	27.5	19.3	99.1	80.4	27	3.3	10.5	77
2001/9/10	30.3	19.0	99.5	62.4	23	2.3	0.0	658
2001/9/11	33.7	21.6	99.2	51.3	26	2.9	0.0	651
2001/9/12	34.2	21.7	99.2	54.7	28	3.3	0.0	791
2001/9/13	28.1	20.1	98.5	69.2	32	3.7	6.5	420
2001/9/14	32.6	19.8	98.7	57.9	31	3.7	11.0	693
2001/9/15	31.9	19.7	99.3	50.3	23	2.4	0.5	721
2001/9/16	31.4	21.4	98.8	54.1	23	2.6	0.5	693
2001/9/17	33.3	21.6	98.9	57.7	30	3.7	0.0	791
2001/9/18	32.0	20.1	98.4	62.3	35	4.2	1.0	728
2001/9/19	29.4	19.8	98.9	67.5	28	2.6	8.0	511
2001/9/20	29.7	19.9	99.3	59.3	21	2.3	0.0	609
2001/9/21	32.6	20.8	99.1	49.0	20	1.7	0.0	798
2001/9/22	33.5	20.4	98.4	57.4	35	4.4	4.0	714
2001/9/23	31.7	20.3	98.6	51.6	29	3.6	0.0	756
2001/9/24	31.7	20.9	97.5	52.9	24	2.7	0.0	770
2001/9/25	34.1	20.4	97.8	48.1	33	3.6	0.0	784
2001/9/26	31.6	20.8	94.2	57.3	28	3.6	0.0	763
2001/9/27	34.0	21.6	95.2	43.2	26	3.3	0.0	826
2001/9/28	30.7	21.8	97.2	58.2	26	3.1	0.0	574
2001/9/29	33.7	21.7	96.5	47.6	28	3.6	0.0	763
2001/9/30	35.3	22.0	91.5	42.1	29	3.4	0.0	798
2001/10/1	34.8	20.9	94.4	45.2	27	3.5	0.0	700
2001/10/2	34.7	20.7	89.6	40.0	29	3.6	0.0	714
2001/10/3	36.0	21.5	97.5	33.9	29	3.3	4.0	763
2001/10/4	34.7	21.1	95.8	47.0	28	3.5	0.0	791
2001/10/5	32.1	20.9	97.5	46.3	22	2.5	0.0	518
2001/10/6	36.0	20.6	98.5	30.2	24	2.8	0.0	742
2001/10/7	37.5	22.0	94.3	26.7	32	3.7	0.0	756
2001/10/8	36.9	22.4	91.7	31.7	34	3.5	0.0	721
2001/10/9	34.5	21.7	90.8	48.0	30	3.7	0.0	609
2001/10/10	35.8	21.8	91.6	36.7	27	3.3	1.0	749
2001/10/11	35.7	21.6	94.8	37.2	30	2.7	1.0	658
2001/10/12	36.0	20.4	96.8	29.6	22	2.7	0.0	700
2001/10/13	37.4	22.7	89.2	29.5	28	3.4	0.0	742
2001/10/14	36.1	22.5	89.1	32.2	29	3.4	0.0	770
2001/10/15	36.1	21.9	92.5	32.3	29	3.0	0.0	595
2001/10/16	35.8	22.8	85.5	30.4	26	3.2	0.0	763
2001/10/17	38.6	21.4	90.7	17.9	24	2.9	0.0	686
2001/10/18	37.0	19.4	91.5	30.9	20	2.2	0.0	693
2001/10/19	36.8	20.7	92.5	28.6	25	2.4	0.0	686
2001/10/20	36.1	23.0	86.5	34.1	25	2.9	0.0	602
2001/10/21	36.1	21.7	91.4	34.1	27	2.7	0.0	553

Appendice 6 Le résultat des observations météorologiques(5/6)

Date	Temperature		Humidity		Wind		Precipitation	Insolation
	max.	min.	max.	min.	direction	speed	amount	amount
	°C	°C	%	%	degree	m/s	mm	kW/m ²
2001/10/22	36.1	21.0	92.6	27.0	30	3.6	0.0	574
2001/10/23	37.7	22.4	83.4	22.7	30	3.5	0.0	714
2001/10/24	38.4	21.9	87.5	19.9	23	2.5	0.0	630
2001/10/25	36.3	21.8	79.6	30.4	34	4.0	0.0	560
2001/10/26	33.6	20.8	91.3	38.1	28	3.7	0.0	665
2001/10/27	34.8	22.5	96.4	32.7	26	2.9	5.5	560
2001/10/28	35.4	20.1	97.4	22.9	29	3.2	0.0	602
2001/10/29	37.1	17.0	95.7	13.2	17	1.8	0.0	686
2001/10/30	36.1	17.2	77.5	16.4	23	2.4	0.0	672
2001/10/31	34.0	20.1	81.6	32.9	29	3.2	0.0	462
2001/11/1	33.7	21.4	96.1	41.5	20	2.4	0.5	560
2001/11/2	36.5	18.6	92.4	14.2	21	2.4	0.0	714
2001/11/3	36.7	15.3	77.4	13.3	27	3.3	0.0	700
2001/11/4	36.4	16.4	76.2	16.2	24	2.5	0.0	581
2001/11/5	37.1	17.2	76.2	11.9	24	2.5	0.0	693
2001/11/6	37.6	17.0	71.3	12.4	24	2.4	0.0	700
2001/11/7	39.0	17.6	70.3	12.2	22	2.5	0.0	714
2001/11/8	38.6	17.1	73.5	11.0	27	2.9	0.0	721
2001/11/9	38.7	17.0	68.0	10.2	24	2.7	0.0	700
2001/11/10	37.1	18.5	68.2	12.9	25	2.8	0.0	665
2001/11/11	36.9	22.3	76.4	23.3	30	3.7	0.0	665
2001/11/12	33.6	20.8	97.8	41.9	25	3.0	24.0	413
2001/11/13	29.1	21.9	97.2	57.3	30	3.9	0.0	343
2001/11/14	36.4	19.1	98.9	15.1	20	2.3	0.0	630
2001/11/15	37.3	16.6	88.4	14.8	29	3.0	0.0	658
2001/11/16	36.7	21.3	77.9	20.7	28	3.3	0.0	658
2001/11/17	37.4	17.7	85.0	10.4	28	2.8	0.0	693
2001/11/18	36.6	14.8	74.4	8.1	28	2.9	0.0	637
2001/11/19	36.8	14.6	71.2	10.6	26	2.9	0.0	651
2001/11/20	37.3	14.1	81.6	9.2	25	2.0	0.0	637
2001/11/21	35.8	16.4	81.7	19.2	21	2.4	0.0	609
2001/11/22	34.8	18.2	80.6	31.0	28	3.2	0.0	504
2001/11/23	35.3	21.5	85.5	20.7	26	2.8	0.0	546
2001/11/24	36.5	19.5	90.3	21.4	22	2.5	0.0	567
2001/11/25	35.5	18.6	76.4	22.3	25	2.6	0.0	581
2001/11/26	36.5	17.9	75.5	12.3	29	2.6	0.0	595
2001/11/27	34.9	19.4	68.7	21.0	27	3.1	0.0	539
2001/11/28	35.7	18.5	59.7	15.8	24	2.5	0.0	525
2001/11/29	36.0	18.0	64.3	13.4	23	2.6	0.0	546
2001/11/30	34.7	16.8	53.6	12.3	20	2.0	0.0	539
2001/12/1	32.2	17.4	54.5	15.8	19	1.9	0.0	553
2001/12/2	33.7	16.3	61.5	13.1	27	2.3	0.0	616
2001/12/3	33.8	14.8	60.9	13.1	26	3.1	0.0	595
2001/12/4	35.4	14.4	69.6	12.9	32	3.6	0.0	595
2001/12/5	35.4	15.8	65.6	12.3	22	2.2	0.0	455
2001/12/6	36.3	15.4	65.2	10.5	31	3.0	0.0	651
2001/12/7	36.7	14.6	69.3	11.7	29	3.1	0.0	630
2001/12/8	35.0	15.4	63.5	12.6	25	2.5	0.0	581
2001/12/9	33.8	13.7	68.9	10.3	30	3.0	0.0	644
2001/12/10	34.3	13.0	61.6	10.1	32	3.0	0.0	644
2001/12/11	33.1	17.1	48.5	12.2	22	2.0	0.0	532
2001/12/12	26.7	18.0	49.3	16.1	30	2.2	0.0	259
2001/12/13	32.3	13.6	54.0	13.1	31	2.9	0.0	616
2001/12/14	34.7	13.4	60.0	11.4	29	2.6	0.0	588
2001/12/15	36.9	15.1	62.4	11.0	32	3.2	0.0	574
2001/12/16	37.9	16.3	60.7	11.2	32	3.0	0.0	567
2001/12/17	36.1	16.3	61.3	12.2	22	2.6	0.0	469
2001/12/18	36.3	16.6	62.2	12.1	32	3.2	0.0	560
2001/12/19	36.6	15.8	59.5	9.9	28	3.1	0.0	574
2001/12/20	35.7	16.8	57.9	12.4	28	2.7	0.0	504
2001/12/21	37.2	16.7	56.2	10.3	25	2.6	0.0	539
2001/12/22	37.1	17.4	52.0	9.8	23	1.9	0.0	525
2001/12/23	38.3	16.4	61.2	9.6	31	3.6	0.0	595
2001/12/24	37.3	16.6	54.8	9.4	24	2.3	0.0	518
2001/12/25	36.9	15.6	54.5	8.3	28	2.9	0.0	609

Appendice 6 Le résultat des observations météorologiques(6/6)

Date	Temperature		Humidity		Wind		Precipitation	Insolation
	max.	min.	max.	min.	direction	speed	amount	amount
	°C	°C	%	%	degree	m/s	mm	kW/m ²
2001/12/26	36.8	14.2	50.3	7.1	27	2.5	0.0	637
2001/12/27	37.2	14.4	51.7	7.1	29	2.3	0.0	630
2001/12/28	37.9	13.1	44.7	5.5	31	3.3	0.0	637
2001/12/29	36.6	15.2	54.0	10.5	32	2.8	0.0	581
2001/12/30	36.0	15.5	49.9	10.6	23	1.7	0.0	630
2001/12/31	38.2	16.3	52.5	9.9	26	2.3	0.0	588
2002/1/1	36.8	17.2	48.7	10.6	32	3.6	0.0	525
2002/1/2	35.2	16.6	52.2	11.4	27	2.6	0.0	553
2002/1/3	33.5	18.5	44.9	8.7	18	1.9	0.0	567
2002/1/4	34.0	14.7	42.6	8.6	32	3.5	0.0	588
2002/1/5	35.2	15.2	46.0	6.7	30	3.3	0.0	651
2002/1/6	34.5	15.1	39.4	9.3	32	3.4	0.0	441
2002/1/7	33.4	19.7	64.9	14.8	28	3.1	0.0	434
2002/1/8	34.1	20.8	86.4	18.1	31	3.7	0.0	539
2002/1/9	30.8	18.5	88.7	24.2	24	2.6	1.0	392
2002/1/10	30.0	16.3	73.7	13.0	20	2.0	0.0	504
2002/1/11	30.8	20.5	24.4	9.8	21	1.7	0.0	441
2002/1/12	28.9	20.2	24.9	10.6	23	2.2	0.0	448
2002/1/13	31.1	15.8	39.5	10.6	26	1.9	0.0	630
2002/1/14	30.6	15.3	39.8	9.9	25	2.2	0.0	602
2002/1/15	31.6	14.9	36.7	9.1	23	2.5	0.0	651
2002/1/16	33.2	14.1	44.9	10.3	26	2.5	0.0	630
2002/1/17	34.2	14.7	43.8	10.3	30	2.7	0.0	651
2002/1/18	34.7	15.3	40.7	9.6	25	2.2	0.0	665
2002/1/19	33.9	15.6	40.2	9.8	27	2.5	0.0	644
2002/1/20	32.3	18.9	24.8	10.0	26	2.3	0.0	616
2002/1/21	32.1	17.6	22.7	9.4	20	1.9	0.0	658
2002/1/22	34.4	17.4	27.3	8.1	22	2.1	0.0	679
2002/1/23	35.5	16.5	31.0	8.1	30	2.8	0.0	686
2002/1/24	35.3	16.4	40.7	8.9	34	3.2	0.0	679
2002/1/25	34.6	16.2	39.7	9.2	19	2.0	0.0	665
2002/1/26	35.4	14.9	37.8	7.5	25	2.2	0.0	679
2002/1/27	35.0	16.3	28.6	6.5	22	2.2	0.0	700
2002/1/28	34.2	13.4	31.9	6.3	25	2.4	0.0	686
2002/1/29	33.3	16.5	27.5	7.9	21	2.3	0.0	609
2002/1/30	34.1	14.6	37.6	8.9	25	2.6	0.0	686
2002/1/31	34.9	17.6	31.2	8.4	15	1.6	0.0	539
2002/2/1	34.2	15.4	36.6	7.4	18	2.0	0.0	693
2002/2/2	33.0	14.7	34.3	8.6	31	2.7	0.0	700
2002/2/3	34.4	15.2	35.0	7.9	28	2.9	0.0	700

Appendice 7 Les données des observations météorologiques (toutes les données)

(1/46)

No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation	No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation
			°C	%	mm	degree	m/s	kWh/m ²				°C	%	mm	degree	m/s	kWh/m ²
	yyyymmdd	hhmmss								yyyymmdd	hhmmss						
1	20010204	10000	18.9	26.8	0	0	0.0	0	97	20010208	10000	16.9	25.0	0	0	0.0	0
2	20010204	20000	18.0	26.4	0	0	0.0	0	98	20010208	20000	16.5	24.6	0	0	0.0	0
3	20010204	30000	17.4	27.4	0	0	0.0	0	99	20010208	30000	14.9	29.1	0	0	0.0	0
4	20010204	40000	17.0	28.7	0	0	0.0	0	100	20010208	40000	14.4	26.0	0	0	0.0	0
5	20010204	50000	16.4	30.0	0	0	0.0	0	101	20010208	50000	14.0	30.4	0	0	0.0	0
6	20010204	60000	15.9	34.3	0	0	0.0	0	102	20010208	60000	13.6	32.2	0	0	0.0	0
7	20010204	70000	15.5	34.7	0	0	0.0	0	103	20010208	70000	13.4	32.1	0	0	0.0	0
8	20010204	80000	17.8	31.8	0	0	0.0	0	104	20010208	80000	16.3	30.6	0	0	0.0	7
9	20010204	90000	22.1	17.8	0	17	2.6	14	105	20010208	90000	22.3	15.1	0	13	2.2	14
10	20010204	100000	27.3	12.1	0	4	0.4	21	106	20010208	100000	27.9	11.1	0	2	0.3	28
11	20010204	110000	32.0	9.9	0	15	2.3	35	107	20010208	110000	31.1	8.6	0	14	1.8	35
12	20010204	120000	34.4	8.3	0	2	0.2	35	108	20010208	120000	32.0	7.8	0	9	1.2	35
13	20010204	130000	35.9	7.3	0	4	0.6	35	109	20010208	130000	33.9	7.6	0	7	1.3	42
14	20010204	140000	37.1	7.1	0	8	1.1	35	110	20010208	140000	34.3	7.0	0	9	1.1	35
15	20010204	150000	37.2	6.6	0	1	0.2	28	111	20010208	150000	35.8	6.2	0	16	2.5	28
16	20010204	160000	38.0	6.6	0	3	0.4	21	112	20010208	160000	34.6	6.7	0	12	1.9	21
17	20010204	170000	37.0	7.0	0	9	1.2	7	113	20010208	170000	34.3	6.7	0	6	0.9	14
18	20010204	180000	34.2	9.4	0	0	0.0	0	114	20010208	180000	32.1	8.1	0	6	0.8	0
19	20010204	190000	28.3	14.5	0	0	0.0	0	115	20010208	190000	26.8	12.9	0	0	0.0	0
20	20010204	200000	25.5	17.7	0	0	0.0	0	116	20010208	200000	23.9	17.7	0	0	0.0	0
21	20010204	210000	24.1	18.7	0	0	0.0	0	117	20010208	210000	23.3	15.0	0	0	0.0	0
22	20010204	220000	22.9	23.7	0	0	0.0	0	118	20010208	220000	21.8	17.8	0	0	0.0	0
23	20010204	230000	22.1	25.4	0	0	0.0	0	119	20010208	230000	21.4	15.8	0	0	0.0	0
24	20010204	240000	20.8	26.5	0	0	0.0	0	120	20010208	240000	19.7	19.6	0	4	0.5	0
25	20010205	10000	20.2	28.1	0	0	0.0	0	121	20010209	10000	22.7	13.3	0	1	0.1	0
26	20010205	20000	19.4	29.0	0	0	0.0	0	122	20010209	20000	22.1	14.2	0	3	0.4	0
27	20010205	30000	18.6	29.1	0	0	0.0	0	123	20010209	30000	18.8	21.2	0	0	0.0	0
28	20010205	40000	18.4	30.4	0	0	0.0	0	124	20010209	40000	16.9	25.2	0	0	0.0	0
29	20010205	50000	18.0	28.5	0	0	0.0	0	125	20010209	50000	16.2	28.0	0	0	0.0	0
30	20010205	60000	17.3	31.9	0	0	0.0	0	126	20010209	60000	15.5	28.3	0	0	0.0	0
31	20010205	70000	16.6	33.0	0	0	0.0	0	127	20010209	70000	16.1	26.3	0	0	0.0	0
32	20010205	80000	18.7	30.3	0	0	0.0	7	128	20010209	80000	18.2	22.0	0	0	0.0	7
33	20010205	90000	24.9	16.1	0	0	0.0	14	129	20010209	90000	23.3	13.4	0	10	1.4	14
34	20010205	100000	29.8	11.7	0	3	0.4	21	130	20010209	100000	27.3	10.5	0	3	0.4	21
35	20010205	110000	33.2	9.6	10	3	0.4	28	131	20010209	110000	31.9	8.2	0	25	3.8	28
36	20010205	120000	35.1	8.6	0	6	0.9	35	132	20010209	120000	33.4	7.5	0	8	0.9	35
37	20010205	130000	36.3	7.8	0	9	1.2	35	133	20010209	130000	34.3	7.4	0	19	2.3	35
38	20010205	140000	37.7	7.2	0	3	0.4	35	134	20010209	140000	34.3	7.6	0	2	0.2	35
39	20010205	150000	36.9	7.8	0	1	0.1	14	135	20010209	150000	35.1	6.9	0	5	0.6	28
40	20010205	160000	37.8	7.4	0	6	0.7	14	136	20010209	160000	35.1	7.6	0	6	0.7	21
41	20010205	170000	36.2	7.5	0	4	0.5	7	137	20010209	170000	34.0	7.9	0	10	1.4	14
42	20010205	180000	33.5	9.8	0	10	1.2	0	138	20010209	180000	32.3	8.5	0	3	0.4	0
43	20010205	190000	28.8	13.4	0	0	0.0	0	139	20010209	190000	28.2	12.3	0	0	0.0	0
44	20010205	200000	26.3	18.2	0	0	0.0	0	140	20010209	200000	24.6	16.3	0	0	0.0	0
45	20010205	210000	25.3	21.3	0	0	0.0	0	141	20010209	210000	23.4	17.2	0	0	0.0	0
46	20010205	220000	25.2	18.7	0	0	0.0	0	142	20010209	220000	21.7	20.2	0	0	0.0	0
47	20010205	230000	23.4	21.6	0	0	0.0	0	143	20010209	230000	21.4	19.1	0	0	0.0	0
48	20010205	240000	22.7	21.4	0	0	0.0	0	144	20010209	240000	19.7	24.4	0	0	0.0	0
49	20010206	10000	22.0	24.1	0	0	0.0	0	145	20010210	10000	20.8	19.6	0	0	0.0	0
50	20010206	20000	20.7	26.8	0	0	0.0	0	146	20010210	20000	21.9	15.2	0	8	1.2	0
51	20010206	30000	19.8	24.3	0	0	0.0	0	147	20010210	30000	19.0	20.7	0	0	0.0	0
52	20010206	40000	21.3	19.2	0	0	0.0	0	148	20010210	40000	18.6	20.5	0	0	0.0	0
53	20010206	50000	21.8	18.1	0	0	0.0	0	149	20010210	50000	17.3	22.4	0	0	0.0	0
54	20010206	60000	20.6	20.2	0	0	0.0	0	150	20010210	60000	15.6	25.2	0	0	0.0	0
55	20010206	70000	19.9	21.5	0	0	0.0	0	151	20010210	70000	16.6	22.4	0	0	0.0	0
56	20010206	80000	20.2	24.1	0	0	0.0	7	152	20010210	80000	18.5	22.2	0	0	0.0	7
57	20010206	90000	25.6	13.7	0	6	0.9	14	153	20010210	90000	24.2	11.6	0	19	2.8	14
58	20010206	100000	29.3	11.2	0	2	0.3	21	154	20010210	100000	28.8	8.2	0	14	2.1	28
59	20010206	110000	32.6	8.7	0	3	0.6	28	155	20010210	110000	30.4	7.0	0	18	2.7	35
60	20010206	120000	34.0	8.4	0	7	0.9	35	156	20010210	120000	32.6	6.3	0	4	0.5	35
61	20010206	130000	35.5	7.6	0	0	0.0	35	157	20010210	130000	33.8	6.1	0	6	1.0	42
62	20010206	140000	35.1	7.4	0	5	0.7	35	158	20010210	140000	35.5	6.0	0	5	0.8	35
63	20010206	150000	36.0	6.8	0	12	1.8	28	159	20010210	150000	35.2	5.6	0	16	2.1	35
64	20010206	160000	35.6	6.6	0	3	0.4	21	160	20010210	160000	34.5	5.9	0	15	2.1	21
65	20010206	170000	34.2	6.8	0	2	0.3	7	161	20010210	170000	34.5	6.1	0	4	0.4	14
66	20010206	180000	32.4	8.2	0	0	0.0	0	162	20010210	180000	31.3	7.3	0	6	0.9	0
67	20010206	190000	27.7	13.1	0	0	0.0	0	163	20010210	190000	27.4	10.6	0	0	0.0	0
68	20010206	200000	24.3	15.8	0	0	0.0	0	164	20010210	200000	23.4	15.6	0	0	0.0	0
69	20010206	210000	23.0	15.5	0	0	0.0	0	165	20010210	210000	21.0	17.1	0	0	0.0	0
70	20010206	220000	21.7	18.4	0	0	0.0	0	166	20010210	220000	20.7	19.5	0	1	0.2	0
71	20010206	230000	20.9	19.4	0	0	0.0	0	167	20010210	230000	19.0	21.2	0	0	0.0	0
72	20010206	240000	20.4	17.6	0	0	0.0	0	168	20010210	240000	18.0	23.8	0	0	0.0	0
73	20010207	10000	20.4	16.9	0	0	0.0	0	169	20010211	10000	18.1	21.4	0	0	0.0	0
74	20010207	20000	18.1	24.1	0	0	0.0	0	170	20010211	20000	17.1	23.6	0	0	0.0	0
75	20010207	30000	17.1	25.9	0	0	0.0	0	171	20010211	30000	16.3	23.9	0	0	0.0	0
76	20010207	40000	16.5	25.5	0	0	0.0	0	172	20010211	40000	16.3	23.7	0	0	0.0	0
77	20010207	50000	15.9	27.8	0	0											

Appendice 7 Les données des observations météorologiques (toutes les données)
(2/46)

No.	Date	Time	Temperature °C	%Humidity	Precipitation mm	Wind direction degree	Wind speed m/s	Insolation kW/m ²	No.	Date	Time	Temperature °C	%Humidity	Precipitation mm	Wind direction degree	Wind speed m/s	Insolation kW/m ²
193	20010212	10000	23.5	11.1	0	2	0.3	0	289	20010216	10000	16.5	26.8	0	0	0.0	0
194	20010212	20000	22.4	12.1	0	2	0.3	0	290	20010216	20000	15.7	29.4	0	0	0.0	0
195	20010212	30000	23.1	10.8	0	4	0.5	0	291	20010216	30000	15.3	31.1	0	0	0.0	0
196	20010212	40000	23.1	10.6	0	2	0.2	0	292	20010216	40000	14.3	32.3	0	0	0.0	0
197	20010212	50000	21.8	11.6	0	3	0.3	0	293	20010216	50000	13.9	33.6	0	0	0.0	0
198	20010212	60000	20.1	14.4	0	0	0.0	0	294	20010216	60000	13.1	36.2	0	0	0.0	0
199	20010212	70000	21.2	12.4	0	5	0.8	0	295	20010216	70000	12.9	37.4	0	0	0.0	0
200	20010212	80000	21.4	12.6	0	5	0.7	0	296	20010216	80000	16.6	29.4	0	0	0.0	7
201	20010212	90000	24.1	11.2	0	25	3.2	14	297	20010216	90000	21.1	18.7	0	17	2.4	14
202	20010212	100000	26.9	9.2	0	5	0.8	21	298	20010216	100000	26.4	12.9	0	14	1.9	28
203	20010212	110000	30.1	7.1	0	1	0.2	28	299	20010216	110000	28.0	11.4	1	14	2.1	35
204	20010212	120000	30.1	6.6	0	27	3.5	28	300	20010216	120000	29.4	9.9	0	12	1.4	35
205	20010212	130000	30.0	6.9	0	3	0.5	21	301	20010216	130000	30.7	9.2	0	2	0.3	42
206	20010212	140000	30.7	6.1	0	1	0.2	21	302	20010216	140000	32.3	7.9	0	10	1.4	35
207	20010212	150000	30.9	6.2	0	4	0.6	14	303	20010216	150000	32.1	7.9	0	0	0.0	35
208	20010212	160000	32.5	5.6	0	0	0.0	21	304	20010216	160000	32.7	7.5	0	11	1.7	21
209	20010212	170000	31.8	5.3	0	2	0.8	14	305	20010216	170000	32.1	7.5	0	1	0.2	14
210	20010212	180000	29.9	6.0	0	5	0.7	0	306	20010216	180000	30.4	8.4	0	4	0.5	0
211	20010212	190000	27.6	7.0	0	1	0.1	0	307	20010216	190000	27.4	10.9	0	0	0.0	0
212	20010212	200000	25.0	8.8	0	0	0.0	0	308	20010216	200000	23.5	14.9	0	0	0.0	0
213	20010212	210000	22.1	11.1	0	0	0.0	0	309	20010216	210000	21.5	17.6	0	0	0.0	0
214	20010212	220000	20.9	12.5	0	0	0.0	0	310	20010216	220000	20.5	19.5	0	0	0.0	0
215	20010212	230000	21.2	11.6	0	0	0.0	0	311	20010216	230000	19.6	21.2	0	0	0.0	0
216	20010212	240000	19.7	13.0	0	0	0.0	0	312	20010216	240000	18.2	23.2	0	0	0.0	0
217	20010213	10000	17.9	14.6	0	0	0.0	0	313	20010217	10000	17.5	24.8	0	0	0.0	0
218	20010213	20000	17.7	15.7	0	2	0.2	0	314	20010217	20000	16.4	27.9	0	0	0.0	0
219	20010213	30000	15.6	20.1	0	0	0.0	0	315	20010217	30000	15.7	28.4	0	0	0.0	0
220	20010213	40000	15.2	20.0	0	1	0.2	0	316	20010217	40000	15.2	27.8	0	0	0.0	0
221	20010213	50000	14.1	21.6	0	0	0.0	0	317	20010217	50000	15.7	27.0	0	0	0.0	0
222	20010213	60000	13.4	25.3	0	0	0.0	0	318	20010217	60000	14.6	30.1	0	0	0.0	0
223	20010213	70000	12.7	28.0	0	0	0.0	0	319	20010217	70000	13.8	32.9	0	0	0.0	0
224	20010213	80000	14.8	28.0	0	0	0.0	7	320	20010217	80000	17.2	26.8	0	0	0.0	7
225	20010213	90000	20.8	13.3	0	5	0.7	14	321	20010217	90000	23.0	14.8	0.5	3	0.3	14
226	20010213	100000	25.3	9.1	0	2	0.3	28	322	20010217	100000	27.1	11.1	0	12	1.7	28
227	20010213	110000	28.7	6.8	0	14	1.7	35	323	20010217	110000	31.1	9.1	0	6	0.7	35
228	20010213	120000	30.8	6.1	0	11	1.6	42	324	20010217	120000	31.8	8.1	0	12	1.5	42
229	20010213	130000	31.2	5.4	0	12	1.6	42	325	20010217	130000	33.2	7.4	0	5	0.7	42
230	20010213	140000	31.4	5.3	0	5	0.6	35	326	20010217	140000	33.9	6.9	0	2	0.3	35
231	20010213	150000	33.4	4.7	0	17	2.3	28	327	20010217	150000	33.9	6.6	0	4	0.5	28
232	20010213	160000	32.4	5.0	0	10	1.6	21	328	20010217	160000	33.5	6.5	0	7	1.1	21
233	20010213	170000	31.7	5.2	0	21	2.9	14	329	20010217	170000	33.6	6.4	0	6	0.7	14
234	20010213	180000	29.9	5.8	0	12	1.6	0	330	20010217	180000	31.7	7.8	0	0	0.0	0
235	20010213	190000	26.4	8.0	0	0	0.0	0	331	20010217	190000	27.4	11.2	0	0	0.0	0
236	20010213	200000	23.3	10.9	0	0	0.0	0	332	20010217	200000	23.4	15.3	0	0	0.0	0
237	20010213	210000	23.3	9.7	0	0	0.0	0	333	20010217	210000	22.3	18.1	0	0	0.0	0
238	20010213	220000	22.3	9.7	0	0	0.0	0	334	20010217	220000	21.0	18.5	0	0	0.0	0
239	20010213	230000	21.9	9.6	0	0	0.0	0	335	20010217	230000	19.7	22.0	0	0	0.0	0
240	20010213	240000	20.9	10.4	0	0	0.0	0	336	20010217	240000	19.2	20.8	0	0	0.0	0
241	20010214	10000	19.9	11.3	0	4	0.5	0	337	20010218	10000	18.6	23.6	0	0	0.0	0
242	20010214	20000	20.2	11.8	0	17	2.4	0	338	20010218	20000	17.9	24.7	0	0	0.0	0
243	20010214	30000	19.0	13.7	0	9	1.2	0	339	20010218	30000	17.5	24.5	0	0	0.0	0
244	20010214	40000	18.2	14.5	0	0	0.0	0	340	20010218	40000	17.8	23.8	0	0	0.0	0
245	20010214	50000	16.8	16.3	0	0	0.0	0	341	20010218	50000	16.3	28.8	0	0	0.0	0
246	20010214	60000	15.6	18.7	0	0	0.0	0	342	20010218	60000	15.7	31.2	0	0	0.0	0
247	20010214	70000	14.6	21.9	0	0	0.0	0	343	20010218	70000	15.3	32.8	0	0	0.0	0
248	20010214	80000	16.1	19.9	0	0	0.0	7	344	20010218	80000	18.2	28.0	0	0	0.0	7
249	20010214	90000	19.9	14.1	0	0	0.0	14	345	20010218	90000	23.9	15.5	0	12	1.5	14
250	20010214	100000	23.3	11.4	0	18	2.7	28	346	20010218	100000	28.7	11.3	0	2	0.3	28
251	20010214	110000	25.6	9.3	0	25	3.1	35	347	20010218	110000	31.2	9.9	0	7	1.0	35
252	20010214	120000	28.2	8.7	0	3	0.4	42	348	20010218	120000	33.3	8.2	0	4	0.6	42
253	20010214	130000	28.2	8.5	0	22	2.9	42	349	20010218	130000	33.1	8.2	0	4	0.6	35
254	20010214	140000	30.5	7.7	0	12	1.5	35	350	20010218	140000	34.6	7.4	0	13	1.9	35
255	20010214	150000	30.0	7.4	0	17	2.7	28	351	20010218	150000	34.6	7.2	0	23	3.2	28
256	20010214	160000	31.0	7.1	0	1	0.2	21	352	20010218	160000	34.9	7.1	0	13	1.7	14
257	20010214	170000	29.6	7.6	0	0	0.0	14	353	20010218	170000	34.0	7.0	0	4	0.5	14
258	20010214	180000	27.7	8.2	0	11	1.6	0	354	20010218	180000	32.0	8.1	0	2	0.3	0
259	20010214	190000	25.9	9.3	0	10	1.3	0	355	20010218	190000	28.4	11.0	0	0	0.0	0
260	20010214	200000	24.7	10.7	0	0	0.0	0	356	20010218	200000	24.4	14.3	0	0	0.0	0
261	20010214	210000	23.5	11.7	0	3	0.5	0	357	20010218	210000	22.6	16.8	0	0	0.0	0
262	20010214	220000	22.3	13.0	0	0	0.0	0	358	20010218	220000	23.1	16.6	0	0	0.0	0
263	20010214	230000	21.8	13.1	0	1	0.1	0	359	20010218	230000	22.0	17.2	0	0	0.0	0
264	20010214	240000	20.3	14.5	0	0	0.0	0	360	20010218	240000	21.0	19.1	0	0	0.0	0
265	20010215	10000	19.5	15.5	0	0	0.1	0	361	20010219	10000	20.0	20.7	0	0	0.0	0
266	20010215	20000	18.0	18.4	0	0	0.0	0	362	20010219	20000	18.5	25.7	0	0	0.0	0
267	20010215	30000	17.5	19.4	0	2	0.4	0	363	20010219	30000	17.9	27.1	0	0	0.0	0
268	20010215	40000	18.0	19.2	0	0	0.0	0	364	20010219	40000	17.1	29.7	0	0	0.0	0
269	20010215	50000	17.6	20.5	0	0	0.0	0	365	20							

Appendice 7 Les données des observations météorologiques (toutes les données)

(3/46)

No.	Date	Time	Temperature °C	Humidity %	Precipitation mm	Wind direction degree	Wind speed m/s	Insolation kW/m ²	No.	Date	Time	Temperature °C	Humidity %	Precipitation mm	Wind direction degree	Wind speed m/s	Insolation kW/m ²
385	20010220	10000	19.6	23.4	0	0	0.0	0	481	20010224	10000	20.9	20.1	0	0	0.0	0
386	20010220	20000	18.9	22.0	0	0	0.0	0	482	20010224	20000	19.4	21.7	0	0	0.0	0
387	20010220	30000	19.2	20.3	0	0	0.0	0	483	20010224	30000	18.8	23.1	0	0	0.0	0
388	20010220	40000	18.2	22.7	0	0	0.0	0	484	20010224	40000	18.7	22.6	0	0	0.0	0
389	20010220	50000	17.2	26.7	0	0	0.0	0	485	20010224	50000	18.7	21.8	0	0	0.0	0
390	20010220	60000	17.3	27.1	0	0	0.0	0	486	20010224	60000	17.8	24.4	0	0	0.0	0
391	20010220	70000	17.5	27.0	0	0	0.0	0	487	20010224	70000	16.9	26.0	0	0	0.0	0
392	20010220	80000	20.4	22.0	0	0	0.0	7	488	20010224	80000	19.9	26.8	0	0	0.0	7
393	20010220	90000	24.0	14.1	0	20	2.9	14	489	20010224	90000	29.4	9.6	0	0	0.1	21
394	20010220	100000	28.3	10.4	0	1	0.1	28	490	20010224	100000	34.3	7.4	0	3	0.4	28
395	20010220	110000	31.1	7.7	0	16	2.0	21	491	20010224	110000	37.5	5.2	0	9	1.1	35
396	20010220	120000	32.0	7.0	0	21	3.4	28	492	20010224	120000	38.0	5.1	0	8	1.1	42
397	20010220	130000	34.6	6.2	0	2	0.3	35	493	20010224	130000	39.4	5.3	0	9	1.1	42
398	20010220	140000	34.8	6.4	0	5	0.7	42	494	20010224	140000	40.1	5.6	0	2	0.3	42
399	20010220	150000	35.8	6.1	0	0	0.1	21	495	20010224	150000	39.3	5.7	0	2	0.3	28
400	20010220	160000	34.7	5.9	0	4	0.5	14	496	20010224	160000	39.3	5.5	0	12	1.6	21
401	20010220	170000	33.4	6.6	0	3	0.4	7	497	20010224	170000	38.4	5.8	0	10	1.5	14
402	20010220	180000	31.9	7.1	0	2	0.2	0	498	20010224	180000	36.7	6.4	0	3	0.5	7
403	20010220	190000	28.3	10.5	0	0	0.0	0	499	20010224	190000	30.6	10.8	0	0	0.0	0
404	20010220	200000	25.2	13.6	0	0	0.0	0	500	20010224	200000	26.9	13.6	0	0	0.0	0
405	20010220	210000	22.4	15.7	0	0	0.0	0	501	20010224	210000	25.8	16.7	0	0	0.0	0
406	20010220	220000	21.5	19.0	0	0	0.0	0	502	20010224	220000	24.4	16.5	0	0	0.0	0
407	20010220	230000	19.7	20.2	0	0	0.0	0	503	20010224	230000	26.2	12.2	0	0	0.0	0
408	20010220	240000	19.5	21.7	0	0	0.0	0	504	20010224	240000	24.5	14.6	0	0	0.0	0
409	20010221	10000	18.3	22.8	0	0	0.0	0	505	20010225	10000	24.2	16.3	0	0	0.0	0
410	20010221	20000	18.1	22.7	0	0	0.0	0	506	20010225	20000	21.4	21.9	0	0	0.0	0
411	20010221	30000	18.4	20.0	0	0	0.0	0	507	20010225	30000	20.1	23.0	0	0	0.0	0
412	20010221	40000	18.0	20.6	0	0	0.0	0	508	20010225	40000	19.4	23.4	0	0	0.0	0
413	20010221	50000	18.0	22.1	0	0	0.0	0	509	20010225	50000	18.5	27.3	0	0	0.0	0
414	20010221	60000	17.5	23.9	0	0	0.0	0	510	20010225	60000	18.1	27.8	0	0	0.0	0
415	20010221	70000	16.7	26.4	0	0	0.0	0	511	20010225	70000	18.1	26.8	0	0	0.0	0
416	20010221	80000	19.3	21.8	0	0	0.0	0	512	20010225	80000	20.6	29.0	0	0	0.0	0
417	20010221	90000	26.4	10.9	0	8	1.2	21	513	20010225	90000	30.5	10.2	0	0	0.0	21
418	20010221	100000	32.4	7.5	0	9	1.0	28	514	20010225	100000	34.2	7.4	0	4	0.6	28
419	20010221	110000	35.2	5.7	0	14	1.8	35	515	20010225	110000	36.8	5.7	0	5	0.6	35
420	20010221	120000	36.5	5.7	0	6	0.9	42	516	20010225	120000	38.4	5.6	0	1	0.1	42
421	20010221	130000	37.1	5.7	0	18	3.0	42	517	20010225	130000	38.0	5.1	0	0	0.0	42
422	20010221	140000	39.0	5.4	0	7	1.1	35	518	20010225	140000	39.7	5.2	0	8	1.1	42
423	20010221	150000	39.3	5.2	0	6	0.9	35	519	20010225	150000	39.8	5.2	0	14	1.9	35
424	20010221	160000	38.8	5.5	0	3	0.3	21	520	20010225	160000	39.3	5.3	0	19	2.5	21
425	20010221	170000	37.7	5.7	0	11	1.4	14	521	20010225	170000	38.8	5.6	0	10	1.5	14
426	20010221	180000	35.8	6.2	0	5	0.6	7	522	20010225	180000	36.4	6.5	0	3	0.4	7
427	20010221	190000	31.9	8.3	0	0	0.1	0	523	20010225	190000	30.7	10.7	0	0	0.0	0
428	20010221	200000	27.6	11.5	0	0	0.0	0	524	20010225	200000	27.5	13.6	0	0	0.0	0
429	20010221	210000	26.2	13.6	0	0	0.0	0	525	20010225	210000	25.7	14.4	0	0	0.0	0
430	20010221	220000	26.0	13.5	0	0	0.0	0	526	20010225	220000	24.5	18.1	0	0	0.0	0
431	20010221	230000	24.3	14.6	0	0	0.0	0	527	20010225	230000	23.5	18.2	0	0	0.0	0
432	20010221	240000	24.4	14.1	0	0	0.0	0	528	20010225	240000	22.9	19.3	0	0	0.0	0
433	20010222	10000	22.7	16.6	0	0	0.0	0	529	20010226	10000	21.8	22.5	0	0	0.0	0
434	20010222	20000	21.4	20.4	0	0	0.0	0	530	20010226	20000	20.7	23.9	0	0	0.0	0
435	20010222	30000	20.4	20.2	0	0	0.0	0	531	20010226	30000	21.5	17.9	0	0	0.0	0
436	20010222	40000	21.0	20.0	0	0	0.0	0	532	20010226	40000	21.4	19.3	0	0	0.0	0
437	20010222	50000	20.4	19.8	0	0	0.0	0	533	20010226	50000	20.9	20.8	0	0	0.0	0
438	20010222	60000	19.5	22.9	0	0	0.0	0	534	20010226	60000	20.9	20.3	0	0	0.0	0
439	20010222	70000	19.1	24.7	0	0	0.0	0	535	20010226	70000	19.6	23.3	0	0	0.0	0
440	20010222	80000	20.5	23.0	0	0	0.0	7	536	20010226	80000	22.6	21.9	0	0	0.0	0
441	20010222	90000	24.1	17.0	0	0	0.0	7	537	20010226	90000	28.4	11.7	0	14	1.8	21
442	20010222	100000	28.1	12.7	0	7	1.1	21	538	20010226	100000	32.7	8.0	0	2	0.3	28
443	20010222	110000	31.0	10.6	0	5	0.6	21	539	20010226	110000	35.9	6.3	0	2	0.3	35
444	20010222	120000	33.4	8.1	0	8	1.2	21	540	20010226	120000	38.3	5.4	0	12	1.5	42
445	20010222	130000	33.8	7.6	0	14	2.1	21	541	20010226	130000	39.2	5.1	0	9	1.2	35
446	20010222	140000	34.5	7.1	0	5	0.6	28	542	20010226	140000	38.8	5.8	0	6	1.2	42
447	20010222	150000	34.8	7.0	0	9	1.3	14	543	20010226	150000	39.1	5.8	0	2	0.3	14
448	20010222	160000	34.9	7.3	0	1	0.1	14	544	20010226	160000	38.5	6.5	0	10	1.2	14
449	20010222	170000	35.2	6.7	0	3	0.4	7	545	20010226	170000	37.6	6.5	0	12	1.7	14
450	20010222	180000	33.8	7.5	0	11	1.6	7	546	20010226	180000	36.0	7.3	0	1	0.2	7
451	20010222	190000	28.6	11.3	0	0	0.0	0	547	20010226	190000	32.3	9.9	0	0	0.0	0
452	20010222	200000	24.5	15.0	0	0	0.0	0	548	20010226	200000	28.1	13.8	0	0	0.0	0
453	20010222	210000	23.0	17.7	0	0	0.0	0	549	20010226	210000	25.6	17.5	0	0	0.0	0
454	20010222	220000	22.3	19.6	0	0	0.0	0	550	20010226	220000	25.2	18.2	0	0	0.0	0
455	20010222	230000	21.0	20.4	0	0	0.0	0	551	20010226	230000	24.0	19.6	0	0	0.0	0
456	20010222	240000	20.4	21.5	0	0	0.0	0	552	20010226	240000	24.0	17.1	0	0	0.0	0
457	20010223	10000	20.1	22.1	0	0	0.0	0	553	20010227	10000	23.3	18.1	0	0	0.0	0
458	20010223	20000	19.3	23.9	0	0	0.0	0	554	20010227	20000	26.2	12.4	0	1	0.2	0
459	20010223	30000	19.0	25.0	0	0	0.0	0	555	20010227	30000	25.5	12.3	0	0	0.0	0
460	20010223	40000	18.3	25.2	0	0	0.0	0	556	20010227	40000	23.9	14.1	0	0	0.0	0
461	20010223	50000	18.7	24.5	0	0	0.0</										

Appendice 7 Les données des observations météorologiques (toutes les données)

(4/46)

No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation	No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation
			°C	%	mm	degree	m/s	kWh/m ²				°C	%	mm	degree	m/s	kWh/m ²
	yyyymmdd	hhmmss								yyyymmdd	hhmmss						
577	20010228	10000	28.0	12.7	0	4	0.5	0	673	20010304	10000	22.9	19.6	0	0	0.0	0
578	20010228	20000	26.1	14.1	0	1	0.1	0	674	20010304	20000	21.8	21.2	0	0	0.0	0
579	20010228	30000	24.8	15.7	0	0	0.0	0	675	20010304	30000	21.0	24.2	0	0	0.0	0
580	20010228	40000	22.3	20.0	0	1	0.1	0	676	20010304	40000	20.4	22.6	0	0	0.0	0
581	20010228	50000	21.4	21.5	0	0	0.0	0	677	20010304	50000	19.9	25.2	0	0	0.0	0
582	20010228	60000	22.3	19.4	0	5	0.8	0	678	20010304	60000	18.4	27.4	0	0	0.0	0
583	20010228	70000	20.1	23.2	0	5	0.6	0	679	20010304	70000	17.8	30.7	0	0	0.0	0
584	20010228	80000	22.9	19.2	0	3	0.4	7	680	20010304	80000	22.3	18.9	0	0	0.0	7
585	20010228	90000	25.6	16.5	0	4	0.6	21	681	20010304	90000	29.5	9.3	0	20	3.2	21
586	20010228	100000	28.1	13.9	0	24	2.8	28	682	20010304	100000	33.3	6.9	0	3	0.4	28
587	20010228	110000	30.4	12.3	0	17	2.5	35	683	20010304	110000	36.3	5.9	0	7	1.2	35
588	20010228	120000	32.9	10.4	0	11	1.4	42	684	20010304	120000	39.4	5.2	0	9	1.2	42
589	20010228	130000	34.4	9.3	0	16	2.6	42	685	20010304	130000	40.2	5.4	0	4	0.7	42
590	20010228	140000	35.7	8.1	0	15	2.1	42	686	20010304	140000	40.3	5.1	0	7	0.9	42
591	20010228	150000	36.1	7.9	0	6	0.7	28	687	20010304	150000	40.7	4.8	0	0	0.0	35
592	20010228	160000	37.2	7.4	0	9	1.1	21	688	20010304	160000	41.5	5.3	0	4	0.6	28
593	20010228	170000	35.3	7.7	0	13	2.1	7	689	20010304	170000	39.6	5.5	0	1	0.2	14
594	20010228	180000	34.8	8.2	0	8	1.2	7	690	20010304	180000	38.2	6.6	0	0	0.0	0
595	20010228	190000	30.0	12.3	0	0	0.0	0	691	20010304	190000	32.3	10.8	0	0	0.0	0
596	20010228	200000	26.1	16.8	0	0	0.0	0	692	20010304	200000	29.0	13.5	0	0	0.0	0
597	20010228	210000	24.9	18.9	0	0	0.0	0	693	20010304	210000	27.3	14.6	0	0	0.0	0
598	20010228	220000	23.0	21.9	0	0	0.0	0	694	20010304	220000	25.7	16.6	0	0	0.0	0
599	20010228	230000	22.2	21.1	0	0	0.0	0	695	20010304	230000	25.6	16.9	0	0	0.0	0
600	20010228	240000	21.6	24.1	0	0	0.0	0	696	20010304	240000	24.8	17.4	0	0	0.0	0
601	20010301	10000	21.4	22.6	0	0	0.0	0	697	20010305	10000	24.5	17.6	0	0	0.0	0
602	20010301	20000	19.8	25.9	0	0	0.0	0	698	20010305	20000	23.7	17.6	0	0	0.0	0
603	20010301	30000	19.5	26.2	0	0	0.0	0	699	20010305	30000	23.3	18.6	0	0	0.0	0
604	20010301	40000	18.5	27.8	0	0	0.0	0	700	20010305	40000	21.8	22.2	0	0	0.0	0
605	20010301	50000	19.3	24.8	0	0	0.0	0	701	20010305	50000	21.4	24.5	0	0	0.0	0
606	20010301	60000	18.1	26.2	0	0	0.0	0	702	20010305	60000	20.7	26.8	0	0	0.0	0
607	20010301	70000	18.7	25.4	0	0	0.0	0	703	20010305	70000	20.7	26.3	0	0	0.0	0
608	20010301	80000	21.8	19.4	0	3	0.5	7	704	20010305	80000	25.6	18.8	0	0	0.0	7
609	20010301	90000	25.1	14.3	0	13	1.8	21	705	20010305	90000	30.1	12.6	0	1	0.1	21
610	20010301	100000	28.6	12.4	0	7	0.9	28	706	20010305	100000	34.1	9.9	0	0	0.0	28
611	20010301	110000	30.9	10.7	0	5	0.7	35	707	20010305	110000	36.0	10.7	0	7	0.9	35
612	20010301	120000	32.6	9.8	0	15	2.8	42	708	20010305	120000	37.6	9.9	0	5	0.6	35
613	20010301	130000	33.4	9.1	0	4	0.5	42	709	20010305	130000	39.5	9.3	0	6	0.8	42
614	20010301	140000	36.0	8.3	0	0	0.0	42	710	20010305	140000	40.5	8.6	0	3	0.3	35
615	20010301	150000	35.4	8.3	0	15	2.5	35	711	20010305	150000	40.6	8.6	0	8	1.1	28
616	20010301	160000	36.1	8.0	0	16	2.4	21	712	20010305	160000	40.7	9.5	0	3	0.4	21
617	20010301	170000	35.2	8.6	0	5	0.6	14	713	20010305	170000	39.6	10.4	0	3	0.4	14
618	20010301	180000	33.9	9.7	0	0	0.0	7	714	20010305	180000	37.9	9.7	0	0	0.0	0
619	20010301	190000	30.2	12.3	0	0	0.0	0	715	20010305	190000	34.5	12.0	0	0	0.0	0
620	20010301	200000	27.3	15.1	0	0	0.0	0	716	20010305	200000	30.5	15.1	0	0	0.0	0
621	20010301	210000	25.7	17.1	0	0	0.0	0	717	20010305	210000	28.5	17.7	0	0	0.0	0
622	20010301	220000	24.4	19.0	0	0	0.0	0	718	20010305	220000	26.3	21.1	0	0	0.0	0
623	20010301	230000	23.3	20.2	0	0	0.0	0	719	20010305	230000	26.1	20.6	0	0	0.0	0
624	20010301	240000	22.5	21.1	0	0	0.0	0	720	20010305	240000	25.8	21.1	0	0	0.0	0
625	20010302	10000	21.5	23.5	0	0	0.0	0	721	20010306	10000	25.5	20.0	0	0	0.0	0
626	20010302	20000	19.9	26.1	0	0	0.0	0	722	20010306	20000	24.9	21.0	0	0	0.0	0
627	20010302	30000	20.0	24.8	0	0	0.0	0	723	20010306	30000	23.8	21.9	0	0	0.0	0
628	20010302	40000	19.9	24.6	0	0	0.0	0	724	20010306	40000	23.3	24.4	0	0	0.0	0
629	20010302	50000	19.4	25.9	0	0	0.0	0	725	20010306	50000	22.8	25.2	0	0	0.0	0
630	20010302	60000	18.3	28.0	0	0	0.0	0	726	20010306	60000	22.0	26.4	0	0	0.0	0
631	20010302	70000	18.2	29.6	0	0	0.0	0	727	20010306	70000	22.1	22.3	0	9	1.2	0
632	20010302	80000	21.3	24.2	0	0	0.0	7	728	20010306	80000	26.8	18.4	0	0	0.0	7
633	20010302	90000	26.9	15.3	0	4	0.7	14	729	20010306	90000	30.1	24.1	0	13	1.8	14
634	20010302	100000	30.3	12.1	0	4	0.6	28	730	20010306	100000	32.3	30.0	0	5	0.9	28
635	20010302	110000	34.1	9.6	0	4	0.5	35	731	20010306	110000	35.3	22.5	0	5	0.7	35
636	20010302	120000	35.5	8.6	0	9	1.2	42	732	20010306	120000	38.0	13.3	0	19	2.3	35
637	20010302	130000	36.6	8.1	0	5	0.7	42	733	20010306	130000	39.8	8.8	0	7	1.1	42
638	20010302	140000	37.5	7.7	0	2	0.3	35	734	20010306	140000	39.5	8.3	0	8	1.3	35
639	20010302	150000	39.1	7.7	0	11	1.6	35	735	20010306	150000	40.8	7.6	0	1	0.1	28
640	20010302	160000	37.9	7.8	0	1	0.1	21	736	20010306	160000	40.2	6.9	0	4	0.5	21
641	20010302	170000	37.8	8.0	0	11	1.5	14	737	20010306	170000	39.1	6.5	0	9	1.3	14
642	20010302	180000	36.1	8.9	0	9	1.2	0	738	20010306	180000	37.4	7.2	0	0	0.0	0
643	20010302	190000	31.4	12.8	0	0	0.0	0	739	20010306	190000	32.8	10.9	0	0	0.0	0
644	20010302	200000	28.2	15.6	0	0	0.0	0	740	20010306	200000	28.7	14.0	0	0	0.0	0
645	20010302	210000	26.6	17.8	0	0	0.0	0	741	20010306	210000	27.4	16.1	0	0	0.0	0
646	20010302	220000	25.6	20.8	0	0	0.0	0	742	20010306	220000	27.4	14.8	0	0	0.0	0
647	20010302	230000	24.2	20.3	0	0	0.0	0	743	20010306	230000	26.6	14.3	0	0	0.0	0
648	20010302	240000	23.1	25.0	0	0	0.0	0	744	20010306	240000	27.4	12.7	0	0	0.0	0
649	20010303	10000	22.3	22.2	0	0	0.0	0	745	20010307	10000	26.8	12.9	0	0	0.0	0
650	20010303	20000	23.9	17.7	0	0	0.0	0	746	20010307	20000	26.0	13.4	0	0	0.0	0
651	20010303	30000	21.1	22.6	0	0	0.0	0	747	20010307	30000	25.8	13.1	0	0	0.0	0
652	20010303	40000	20.9	21.9	0	0	0.0	0	748	20010307	40000	24.2	14.3				

Appendice 7 Les données des observations météorologiques (toutes les données)

(5/46)

No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation	No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation
			C	%	mm	degree	m/s	kW/m ²				C	%	mm	degree	m/s	kW/m ²
	yyyymmdd	hhmmss								yyyymmdd	hhmmss						
769	20010308	10000	24.5	10.8	0	0	0.0	0	865	20010312	10000	23.2	15.7	0	0	0.0	0
770	20010308	20000	21.5	15.5	0	0	0.0	0	866	20010312	20000	21.9	16.5	0	0	0.0	0
771	20010308	30000	21.0	15.9	0	0	0.0	0	867	20010312	30000	20.6	20.7	0	0	0.0	0
772	20010308	40000	20.0	17.3	0	0	0.0	0	868	20010312	40000	20.4	19.1	0	0	0.0	0
773	20010308	50000	19.6	18.2	0	0	0.0	0	869	20010312	50000	20.7	16.7	0	3	0.4	0
774	20010308	60000	18.3	23.4	0	0	0.0	0	870	20010312	60000	19.3	20.5	0	0	0.0	0
775	20010308	70000	17.8	22.3	0	0	0.0	0	871	20010312	70000	18.3	23.5	0	0	0.0	0
776	20010308	80000	21.6	19.8	0	0	0.0	7	872	20010312	80000	21.6	22.5	0	0	0.0	0
777	20010308	90000	28.6	9.9	0	3	0.3	21	873	20010312	90000	28.8	12.2	0	1	0.2	21
778	20010308	100000	33.0	7.1	0	8	1.1	28	874	20010312	100000	32.6	10.0	0	1	0.1	28
779	20010308	110000	35.6	5.3	0	6	0.8	35	875	20010312	110000	35.8	8.3	0	1	0.1	42
780	20010308	120000	35.6	4.8	0	13	1.8	42	876	20010312	120000	36.0	8.6	0	6	0.8	49
781	20010308	130000	38.0	4.5	0	14	1.8	42	877	20010312	130000	37.0	6.9	0	10	1.3	28
782	20010308	140000	38.7	4.2	0	3	0.5	42	878	20010312	140000	37.8	5.9	0	19	2.7	42
783	20010308	150000	37.5	4.1	0	13	1.8	35	879	20010312	150000	37.7	6.7	0	5	0.7	28
784	20010308	160000	37.7	4.2	0	1	0.1	21	880	20010312	160000	37.9	6.2	0	1	0.1	21
785	20010308	170000	37.0	3.9	0	3	0.4	14	881	20010312	170000	36.7	5.9	0	6	0.9	14
786	20010308	180000	35.2	4.8	0	1	0.2	7	882	20010312	180000	36.4	7.3	0	0	0.0	7
787	20010308	190000	31.9	6.0	0	0	0.0	0	883	20010312	190000	29.9	11.4	0	0	0.0	0
788	20010308	200000	27.0	9.1	0	0	0.0	0	884	20010312	200000	26.3	13.8	0	0	0.0	0
789	20010308	210000	24.7	11.8	0	0	0.0	0	885	20010312	210000	25.7	13.6	0	0	0.0	0
790	20010308	220000	24.1	13.2	0	0	0.0	0	886	20010312	220000	24.0	17.3	0	0	0.0	0
791	20010308	230000	23.0	12.8	0	0	0.0	0	887	20010312	230000	23.5	16.8	0	0	0.0	0
792	20010308	240000	22.2	14.7	0	0	0.0	0	888	20010312	240000	22.9	19.3	0	0	0.0	0
793	20010309	10000	21.2	13.9	0	0	0.0	0	889	20010313	10000	22.3	17.6	0	0	0.0	0
794	20010309	20000	20.4	17.0	0	0	0.0	0	890	20010313	20000	22.2	17.2	0	0	0.0	0
795	20010309	30000	19.9	16.7	0	0	0.0	0	891	20010313	30000	21.8	19.9	0	0	0.0	0
796	20010309	40000	19.0	17.0	0	0	0.0	0	892	20010313	40000	21.1	21.7	0	0	0.0	0
797	20010309	50000	18.4	19.6	0	0	0.0	0	893	20010313	50000	20.8	21.5	0	0	0.0	0
798	20010309	60000	18.2	21.5	0	0	0.0	0	894	20010313	60000	20.9	22.8	0	0	0.0	0
799	20010309	70000	18.1	23.6	0	0	0.0	0	895	20010313	70000	20.0	25.0	0	0	0.0	0
800	20010309	80000	21.0	22.8	0	0	0.0	7	896	20010313	80000	26.6	12.9	0	0	0.0	7
801	20010309	90000	27.5	10.5	0	0	0.0	21	897	20010313	90000	30.0	10.5	0	8	1.2	21
802	20010309	100000	32.6	7.6	0	2	0.5	28	898	20010313	100000	33.0	9.0	0	4	0.6	28
803	20010309	110000	36.1	5.3	0	14	2.4	35	899	20010313	110000	35.3	7.6	0	0	0.0	35
804	20010309	120000	36.4	4.1	0	4	0.7	42	900	20010313	120000	38.3	6.7	0	10	1.4	42
805	20010309	130000	37.6	3.8	0	0	0.0	42	901	20010313	130000	38.9	6.6	0	0	0.1	42
806	20010309	140000	38.2	4.3	0	3	0.4	49	902	20010313	140000	39.4	6.2	0	2	0.3	42
807	20010309	150000	39.3	3.6	0	4	0.7	35	903	20010313	150000	40.0	6.5	0	4	0.6	35
808	20010309	160000	38.5	3.8	0	1	0.1	28	904	20010313	160000	40.0	6.7	0	8	1.0	21
809	20010309	170000	38.3	4.0	0	2	0.2	14	905	20010313	170000	38.1	9.4	0	2	0.3	14
810	20010309	180000	35.7	4.7	0	0	0.0	0	906	20010313	180000	36.8	10.1	0	0	0.0	7
811	20010309	190000	30.0	8.5	0	0	0.0	0	907	20010313	190000	32.4	13.8	0	0	0.0	0
812	20010309	200000	27.0	10.5	0	0	0.0	0	908	20010313	200000	29.6	17.3	0	0	0.0	0
813	20010309	210000	25.9	11.0	0	0	0.0	0	909	20010313	210000	28.7	18.8	0	0	0.0	0
814	20010309	220000	23.8	13.0	0	0	0.0	0	910	20010313	220000	28.2	19.7	0	0	0.0	0
815	20010309	230000	23.1	12.6	0	0	0.0	0	911	20010313	230000	28.0	20.7	0	0	0.0	0
816	20010309	240000	22.3	13.5	0	0	0.0	0	912	20010313	240000	26.9	21.1	0	0	0.0	0
817	20010310	10000	21.1	15.6	0	0	0.0	0	913	20010314	10000	25.7	20.3	0	0	0.0	0
818	20010310	20000	20.4	17.1	0	0	0.0	0	914	20010314	20000	24.6	21.6	0	0	0.0	0
819	20010310	30000	19.9	16.9	0	0	0.0	0	915	20010314	30000	23.8	23.8	0	0	0.0	0
820	20010310	40000	19.2	18.1	0	0	0.0	0	916	20010314	40000	25.2	19.8	0	0	0.0	0
821	20010310	50000	18.5	18.7	0	0	0.0	0	917	20010314	50000	26.1	19.5	0	0	0.0	0
822	20010310	60000	17.8	19.6	0	0	0.0	0	918	20010314	60000	27.9	18.1	0	1	0.1	0
823	20010310	70000	17.6	20.8	0	0	0.0	0	919	20010314	70000	26.7	28.4	0	0	0.1	0
824	20010310	80000	22.1	15.7	0	0	0.0	7	920	20010314	80000	27.1	37.6	0	2	0.2	7
825	20010310	90000	28.5	9.2	0	2	0.2	21	921	20010314	90000	29.4	43.4	0	14	1.8	14
826	20010310	100000	33.8	6.3	0	2	0.3	28	922	20010314	100000	31.6	39.2	0	22	3.3	28
827	20010310	110000	36.4	5.1	0	15	2.1	42	923	20010314	110000	34.0	30.9	0	11	1.4	35
828	20010310	120000	38.4	4.2	0	7	1.1	42	924	20010314	120000	35.6	22.5	0	10	1.5	35
829	20010310	130000	37.7	4.1	0	7	1.0	42	925	20010314	130000	36.5	20.4	0	6	1.0	42
830	20010310	140000	39.3	3.4	0	1	0.2	42	926	20010314	140000	38.4	15.0	0	7	0.8	35
831	20010310	150000	40.2	3.6	0	1	0.1	35	927	20010314	150000	38.8	15.9	0	2	0.3	28
832	20010310	160000	39.4	3.2	0	7	0.9	28	928	20010314	160000	37.5	17.9	0	2	0.2	7
833	20010310	170000	38.7	3.8	0	2	0.3	14	929	20010314	170000	37.6	17.1	0	10	1.4	7
834	20010310	180000	36.9	4.4	0	0	0.0	7	930	20010314	180000	36.4	17.3	0	1	0.2	0
835	20010310	190000	30.7	7.7	0	0	0.0	0	931	20010314	190000	34.9	21.0	0	1	0.2	0
836	20010310	200000	27.1	9.4	0	0	0.0	0	932	20010314	200000	34.3	23.9	0	10	1.3	0
837	20010310	210000	25.7	11.6	0	0	0.0	0	933	20010314	210000	33.2	30.3	0	19	2.9	0
838	20010310	220000	24.2	12.5	0	0	0.0	0	934	20010314	220000	32.4	34.7	0	24	3.3	0
839	20010310	230000	23.0	13.3	0	0	0.0	0	935	20010314	230000	31.4	41.5	0	13	2.0	0
840	20010310	240000	22.1	15.2	0	0	0.0	0	936	20010314	240000	30.1	46.9	0	2	0.3	0
841	20010311	10000	21.3	15.5	0	0	0.0	0	937	20010315	10000	29.0	52.8	0	1	0.2	0
842	20010311	20000	21.6	13.9	0	0	0.0	0	938	20010315	20000	28.1	54.9	0	3	0.4	0
843	20010311	30000	21.7	12.7	0	0	0.0	0	939	20010315	30000	27.2	58.9	0	0	0.0	0
844	20010311	40000	20.4	15.6	0	0	0.0	0	940	20010315	40000	26.5	63.3	0	0</		

Appendice 7 Les données des observations météorologiques (toutes les données)
(6/46)

No.	Date	Time	Temperature °C	Humidity %	Precipitation mm	Wind direction degree	Wind speed m/s	Insolation kW/m ²	No.	Date	Time	Temperature °C	Humidity %	Precipitation mm	Wind direction degree	Wind speed m/s	Insolation kW/m ²
961	20010316	10000	30.2	37.1	0	0	0.0	0	1057	20010320	10000	25.5	28.7	0	0	0.0	0
962	20010316	20000	28.0	51.7	0	0	0.0	0	1058	20010320	20000	24.8	27.6	0	0	0.0	0
963	20010316	30000	27.2	56.3	0	0	0.0	0	1059	20010320	30000	23.5	30.2	0	0	0.0	0
964	20010316	40000	26.8	52.7	0	0	0.0	0	1060	20010320	40000	22.9	27.9	0	0	0.0	0
965	20010316	50000	26.7	54.9	0	0	0.0	0	1061	20010320	50000	24.1	20.9	0	0	0.0	0
966	20010316	60000	26.5	59.6	0	0	0.0	0	1062	20010320	60000	23.4	22.1	0	0	0.0	0
967	20010316	70000	26.1	61.8	0	0	0.0	0	1063	20010320	70000	22.7	26.3	0	0	0.0	0
968	20010316	80000	26.7	58.3	0	9	1.2	7	1064	20010320	80000	25.3	26.7	0	0	0.0	7
969	20010316	90000	29.0	52.5	0	1	0.2	7	1065	20010320	90000	31.9	11.4	0	15	1.9	14
970	20010316	100000	31.2	46.5	0	8	1.2	28	1066	20010320	100000	34.2	10.2	0	3	0.4	21
971	20010316	110000	31.9	44.4	0	8	1.4	21	1067	20010320	110000	36.2	9.5	0	3	0.4	42
972	20010316	120000	33.3	34.7	0	8	1.2	42	1068	20010320	120000	38.6	7.9	0	1	0.2	42
973	20010316	130000	35.7	30.2	0	11	1.5	42	1069	20010320	130000	39.7	7.8	0	8	1.1	42
974	20010316	140000	36.3	25.8	0	8	1.1	35	1070	20010320	140000	40.3	6.2	0	14	1.9	42
975	20010316	150000	37.0	25.4	0	13	2.2	35	1071	20010320	150000	39.4	6.4	0	8	1.0	35
976	20010316	160000	37.5	24.3	0	0	0.0	21	1072	20010320	160000	39.9	5.9	0	11	1.5	28
977	20010316	170000	36.5	24.9	0	1	0.2	14	1073	20010320	170000	39.1	6.3	0	11	1.8	14
978	20010316	180000	35.4	18.9	0	4	0.5	0	1074	20010320	180000	36.3	7.7	0	0	0.0	0
979	20010316	190000	32.6	24.9	0	0	0.0	0	1075	20010320	190000	32.6	9.8	0	0	0.0	0
980	20010316	200000	31.0	27.4	0	0	0.0	0	1076	20010320	200000	33.5	9.0	0	0	0.0	0
981	20010316	210000	30.3	34.2	0	0	0.0	0	1077	20010320	210000	33.6	10.1	0	5	0.8	0
982	20010316	220000	29.4	37.7	0	0	0.0	0	1078	20010320	220000	33.0	13.0	0	9	1.2	0
983	20010316	230000	28.5	42.0	0	0	0.0	0	1079	20010320	230000	31.7	17.5	0	2	0.3	0
984	20010316	240000	28.7	42.4	0	0	0.0	0	1080	20010320	240000	27.0	20.6	0	0	0.0	0
985	20010317	10000	28.0	44.3	0	0	0.0	0	1081	20010321	10000	25.3	22.3	0	2	0.2	0
986	20010317	20000	27.1	47.5	0	1	0.1	0	1082	20010321	20000	23.3	27.7	0	0	0.0	0
987	20010317	30000	26.0	51.8	0	0	0.0	0	1083	20010321	30000	22.4	31.4	0	0	0.0	0
988	20010317	40000	25.0	54.3	0	0	0.0	0	1084	20010321	40000	23.5	30.9	0	0	0.0	0
989	20010317	50000	24.6	57.1	0	0	0.0	0	1085	20010321	50000	23.6	30.0	0	0	0.0	0
990	20010317	60000	25.2	53.1	0	2	0.3	0	1086	20010321	60000	22.8	31.5	0	0	0.0	0
991	20010317	70000	25.2	52.9	0	0	0.0	0	1087	20010321	70000	21.5	36.0	0	0	0.0	0
992	20010317	80000	27.7	43.7	0	4	0.6	7	1088	20010321	80000	24.9	31.5	0	0	0.0	7
993	20010317	90000	31.7	33.3	2.5	8	1.1	21	1089	20010321	90000	31.5	15.7	0	0	0.0	21
994	20010317	100000	32.8	30.7	0	2	0.3	14	1090	20010321	100000	34.9	11.0	0	10	1.3	28
995	20010317	110000	35.2	25.4	0	9	1.3	21	1091	20010321	110000	37.1	10.8	0	9	1.2	35
996	20010317	120000	36.7	19.5	0	6	1.0	28	1092	20010321	120000	38.2	9.5	0	12	1.8	42
997	20010317	130000	38.8	14.1	0	3	0.3	35	1093	20010321	130000	39.8	8.2	0	2	0.3	42
998	20010317	140000	39.6	12.3	0	16	2.7	35	1094	20010321	140000	40.2	7.3	0	3	0.5	42
999	20010317	150000	37.9	13.3	0	8	0.9	14	1095	20010321	150000	40.9	7.0	0	11	1.5	35
1000	20010317	160000	37.7	13.4	0	0	0.1	7	1096	20010321	160000	39.4	7.2	0	1	0.2	28
1001	20010317	170000	37.8	12.8	0	7	0.9	14	1097	20010321	170000	38.7	7.6	0	7	1.1	14
1002	20010317	180000	36.3	14.1	0	0	0.0	0	1098	20010321	180000	37.5	8.4	0	2	0.3	7
1003	20010317	190000	33.3	17.6	0	0	0.0	0	1099	20010321	190000	33.0	12.3	0	0	0.0	0
1004	20010317	200000	30.0	23.1	0	0	0.0	0	1100	20010321	200000	29.6	14.5	0	0	0.0	0
1005	20010317	210000	29.2	22.6	0	0	0.0	0	1101	20010321	210000	27.8	16.4	0	0	0.0	0
1006	20010317	220000	28.4	23.0	0	0	0.0	0	1102	20010321	220000	27.5	16.4	0	0	0.0	0
1007	20010317	230000	27.0	25.3	0	0	0.0	0	1103	20010321	230000	25.9	19.5	0	0	0.0	0
1008	20010317	240000	27.0	22.5	0	1	0.0	0	1104	20010321	240000	26.2	19.1	0	0	0.0	0
1009	20010318	10000	28.0	18.1	0	1	0.2	0	1105	20010322	10000	24.9	21.6	0	0	0.0	0
1010	20010318	20000	25.9	22.9	0	0	0.0	0	1106	20010322	20000	24.8	21.5	0	0	0.0	0
1011	20010318	30000	24.3	25.4	0	0	0.0	0	1107	20010322	30000	23.6	24.0	0	0	0.0	0
1012	20010318	40000	23.8	25.2	0	0	0.0	0	1108	20010322	40000	22.3	26.4	0	0	0.0	0
1013	20010318	50000	23.3	27.0	0	0	0.0	0	1109	20010322	50000	21.4	28.7	0	0	0.0	0
1014	20010318	60000	23.2	27.2	0	0	0.0	0	1110	20010322	60000	20.6	30.9	0	0	0.0	0
1015	20010318	70000	22.6	29.2	0	0	0.0	0	1111	20010322	70000	20.4	29.6	0	0	0.0	0
1016	20010318	80000	25.1	28.3	0	0	0.0	7	1112	20010322	80000	24.7	22.3	0	0	0.0	7
1017	20010318	90000	29.7	14.8	0	2	0.4	14	1113	20010322	90000	30.5	11.2	0	9	1.1	21
1018	20010318	100000	34.0	12.1	0	1	0.2	28	1114	20010322	100000	34.4	7.9	0	1	0.4	28
1019	20010318	110000	37.8	8.9	0	12	1.7	35	1115	20010322	110000	37.2	7.3	0	2	0.3	42
1020	20010318	120000	39.2	7.9	0	9	1.0	42	1116	20010322	120000	39.0	7.0	0	3	0.4	42
1021	20010318	130000	39.7	9.7	0	7	0.8	42	1117	20010322	130000	40.6	7.0	0	18	2.6	42
1022	20010318	140000	39.2	10.1	0	7	1.1	35	1118	20010322	140000	39.7	7.6	0	7	0.9	42
1023	20010318	150000	39.6	10.8	0	0	0.0	35	1119	20010322	150000	40.2	7.2	0	4	0.6	35
1024	20010318	160000	39.5	11.1	0	0	0.0	21	1120	20010322	160000	39.7	7.4	0	1	0.2	21
1025	20010318	170000	38.5	11.5	0	8	1.2	7	1121	20010322	170000	40.0	7.1	0	0	0.1	14
1026	20010318	180000	36.7	12.6	0	3	0.4	7	1122	20010322	180000	38.2	9.1	0	0	0.0	7
1027	20010318	190000	34.7	14.3	0	0	0.1	0	1123	20010322	190000	32.9	12.5	0	0	0.0	0
1028	20010318	200000	34.2	15.9	0	13	1.7	0	1124	20010322	200000	29.9	14.7	0	0	0.0	0
1029	20010318	210000	33.7	17.5	0	3	0.4	0	1125	20010322	210000	28.7	16.0	0	0	0.0	0
1030	20010318	220000	33.5	16.9	0	1	0.1	0	1126	20010322	220000	27.1	19.8	0	0	0.0	0
1031	20010318	230000	31.8	20.6	0	8	1.3	0	1127	20010322	230000	26.7	19.5	0	0	0.0	0
1032	20010318	240000	30.8	23.6	0	5	0.7	0	1128	20010322	240000	26.1	20.6	0	0	0.0	0
1033	20010319	10000	30.6	25.9	0	1	0.1	0	1129	20010323	10000	25.7	22.0	0	3	0.5	0
1034	20010319	20000	30.4	27.4	0	2	0.2	0	1130	20010323	20000	24.6	23.7	0	0	0.0	0
1035	20010319	30000	27.0	32.5	0	0	0.0	0	1131	20010323	30000	23.7	24.2	0	0	0.0	0
1036	20010319	40000	26.2	35.0	0	0	0.0	0	1132	20010323	40000	23.2					

Appendice 7 Les données des observations météorologiques (toutes les données)
(7/46)

No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation	No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation
			°C	%	mm	degree	m/s	kWh/m ²				°C	%	mm	degree	m/s	kWh/m ²
	yyyymmdd	hhmmss								yyyymmdd	hhmmss						
1153	20010324	10000	30.5	35.9	0	11	1.6	0	1249	20010328	10000	26.1	18.8	0	0	0.0	0
1154	20010324	20000	29.3	43.1	0	0	0.0	0	1250	20010328	20000	27.4	12.7	0	0	0.0	0
1155	20010324	30000	29.3	44.9	0	8	1.1	0	1251	20010328	30000	27.7	12.8	0	0	0.0	0
1156	20010324	40000	27.7	50.2	0	0	0.0	0	1252	20010328	40000	26.1	16.3	0	0	0.0	0
1157	20010324	50000	27.2	52.6	0	8	1.0	0	1253	20010328	50000	26.3	24.6	0	0	0.0	0
1158	20010324	60000	27.7	50.7	0	3	0.5	0	1254	20010328	60000	26.4	39.8	0	0	0.0	0
1159	20010324	70000	26.8	55.0	0	0	0.0	0	1255	20010328	70000	26.8	48.2	0	4	0.5	0
1160	20010324	80000	27.7	52.6	0	2	0.2	7	1256	20010328	80000	27.1	50.5	0	12	1.7	7
1161	20010324	90000	29.7	47.4	0	17	2.6	21	1257	20010328	90000	30.0	43.8	0	8	1.1	21
1162	20010324	100000	30.4	43.7	0	8	1.0	7	1258	20010328	100000	31.6	37.7	0	6	0.7	21
1163	20010324	110000	33.7	35.8	0	3	0.5	35	1259	20010328	110000	35.2	20.2	0	7	1.0	35
1164	20010324	120000	35.7	29.3	0	2	0.2	42	1260	20010328	120000	38.3	11.1	0	3	0.4	42
1165	20010324	130000	36.9	26.6	0	5	0.7	42	1261	20010328	130000	39.4	11.0	0	4	0.6	42
1166	20010324	140000	38.7	21.5	0	14	1.7	42	1262	20010328	140000	39.4	10.5	0	11	1.7	42
1167	20010324	150000	38.9	19.9	0	12	1.5	35	1263	20010328	150000	39.6	6.9	0	12	1.5	35
1168	20010324	160000	38.6	18.3	0	0	0.1	21	1264	20010328	160000	40.3	6.4	0	3	0.4	21
1169	20010324	170000	38.8	15.4	0	2	0.2	14	1265	20010328	170000	39.4	6.1	0	2	0.2	14
1170	20010324	180000	37.0	19.0	0	0	0.0	0	1266	20010328	180000	37.6	7.4	0	0	0.0	0
1171	20010324	190000	34.2	23.9	0	0	0.0	0	1267	20010328	190000	32.4	10.4	0	0	0.0	0
1172	20010324	200000	31.9	28.3	0	0	0.0	0	1268	20010328	200000	29.7	12.2	0	0	0.0	0
1173	20010324	210000	32.5	27.1	0	0	0.0	0	1269	20010328	210000	28.5	13.3	0	0	0.0	0
1174	20010324	220000	33.1	26.6	0	10	1.4	0	1270	20010328	220000	27.5	15.2	0	0	0.0	0
1175	20010324	230000	33.1	26.7	0	5	0.8	0	1271	20010328	230000	27.3	15.4	0	0	0.0	0
1176	20010324	240000	32.6	29.1	0	13	1.7	0	1272	20010328	240000	26.1	14.7	0	0	0.0	0
1177	20010325	10000	31.0	32.9	0	2	0.2	0	1273	20010329	10000	25.6	14.7	0	0	0.0	0
1178	20010325	20000	29.2	39.9	0	0	0.0	0	1274	20010329	20000	25.1	16.4	0	0	0.0	0
1179	20010325	30000	28.9	43.6	0	0	0.0	0	1275	20010329	30000	24.4	19.0	0	0	0.0	0
1180	20010325	40000	28.6	45.9	0	1	0.1	0	1276	20010329	40000	23.3	19.7	0	0	0.0	0
1181	20010325	50000	28.1	48.3	0	3	0.5	0	1277	20010329	50000	23.0	19.5	0	0	0.0	0
1182	20010325	60000	26.5	53.6	0	0	0.0	0	1278	20010329	60000	25.9	17.8	0	0	0.0	0
1183	20010325	70000	26.5	54.2	0	5	0.7	0	1279	20010329	70000	26.5	24.7	0	0	0.0	0
1184	20010325	80000	28.2	50.4	0	4	0.6	7	1280	20010329	80000	27.4	37.0	0	4	0.4	7
1185	20010325	90000	29.9	45.0	0	3	0.8	7	1281	20010329	90000	29.3	41.7	0	14	2.1	14
1186	20010325	100000	32.5	38.9	0	7	1.1	35	1282	20010329	100000	32.0	34.9	0	19	2.5	28
1187	20010325	110000	33.4	37.6	0	8	1.0	28	1283	20010329	110000	34.5	27.2	0	18	2.7	35
1188	20010325	120000	36.2	31.0	0	1	0.1	42	1284	20010329	120000	36.9	19.0	0	12	2.3	42
1189	20010325	130000	34.8	31.3	0	13	1.6	14	1285	20010329	130000	39.0	12.7	0	0	0.0	42
1190	20010325	140000	35.8	27.1	0	0	0.0	14	1286	20010329	140000	39.7	10.7	0	9	1.2	35
1191	20010325	150000	38.8	19.2	0	2	0.3	28	1287	20010329	150000	40.6	9.6	0	8	1.2	28
1192	20010325	160000	39.4	17.0	0	1	0.1	28	1288	20010329	160000	41.0	9.9	0	0	0.0	21
1193	20010325	170000	38.2	17.4	0	1	0.2	14	1289	20010329	170000	40.0	10.3	0	0	0.0	7
1194	20010325	180000	37.1	17.6	0	0	0.0	0	1290	20010329	180000	38.2	11.6	0	0	0.0	0
1195	20010325	190000	33.4	23.4	0	0	0.0	0	1291	20010329	190000	34.2	15.7	0	0	0.0	0
1196	20010325	200000	32.1	24.9	0	0	0.0	0	1292	20010329	200000	31.7	18.6	0	0	0.0	0
1197	20010325	210000	33.0	20.1	0	0	0.0	0	1293	20010329	210000	32.0	18.2	0	0	0.0	0
1198	20010325	220000	31.3	25.3	0	0	0.0	0	1294	20010329	220000	29.9	22.0	0	0	0.0	0
1199	20010325	230000	30.4	29.2	0	0	0.0	0	1295	20010329	230000	32.4	21.0	0	0	0.0	0
1200	20010325	240000	28.5	34.2	0	0	0.0	0	1296	20010329	240000	32.2	23.3	0	0	0.0	0
1201	20010326	10000	28.2	37.4	0	0	0.0	0	1297	20010330	10000	31.8	25.5	0	1	0.1	0
1202	20010326	20000	27.7	42.0	0	0	0.0	0	1298	20010330	20000	31.3	30.0	0	1	0.1	0
1203	20010326	30000	29.2	41.0	0	0	0.0	0	1299	20010330	30000	30.0	38.2	0	0	0.0	0
1204	20010326	40000	28.2	46.1	0	0	0.0	0	1300	20010330	40000	29.1	45.7	0	0	0.0	0
1205	20010326	50000	26.5	47.5	0	0	0.0	0	1301	20010330	50000	28.4	50.1	0	2	0.3	0
1206	20010326	60000	25.2	52.7	0	0	0.0	0	1302	20010330	60000	26.7	54.9	0	0	0.0	0
1207	20010326	70000	26.8	56.4	0	0	0.0	0	1303	20010330	70000	26.4	52.7	0	0	0.0	0
1208	20010326	80000	27.2	56.8	0	13	2.0	7	1304	20010330	80000	29.4	43.8	0	8	1.1	7
1209	20010326	90000	29.1	52.1	0	4	0.7	14	1305	20010330	90000	30.7	40.0	0	5	0.7	14
1210	20010326	100000	31.7	44.2	0	14	1.9	21	1306	20010330	100000	32.4	34.8	0	0	0.1	21
1211	20010326	110000	32.8	38.0	0	11	1.6	35	1307	20010330	110000	34.5	23.8	0	4	0.5	21
1212	20010326	120000	34.6	29.4	0	2	0.2	28	1308	20010330	120000	37.0	20.2	0	1	0.1	42
1213	20010326	130000	36.5	22.1	0	1	0.2	35	1309	20010330	130000	38.1	17.9	0	3	0.5	35
1214	20010326	140000	37.5	14.8	0	7	1.0	42	1310	20010330	140000	39.3	15.1	0	3	0.3	42
1215	20010326	150000	38.5	15.2	0	6	1.0	35	1311	20010330	150000	39.5	15.5	0	1	0.2	28
1216	20010326	160000	38.8	13.0	0	4	0.6	28	1312	20010330	160000	39.2	15.2	0	0	0.0	21
1217	20010326	170000	38.7	11.7	0	0	0.0	14	1313	20010330	170000	38.6	15.5	0	0	0.0	14
1218	20010326	180000	36.3	15.2	0	1	0.1	0	1314	20010330	180000	37.7	16.5	0	0	0.0	0
1219	20010326	190000	34.6	17.2	0	1	0.1	0	1315	20010330	190000	35.0	22.8	0	0	0.0	0
1220	20010326	200000	33.4	21.0	0	0	0.0	0	1316	20010330	200000	32.5	27.5	0	0	0.0	0
1221	20010326	210000	33.2	24.9	0	21	2.8	0	1317	20010330	210000	31.2	28.7	0	0	0.0	0
1222	20010326	220000	31.6	29.2	0	4	0.5	0	1318	20010330	220000	30.0	31.6	0	0	0.0	0
1223	20010326	230000	30.9	31.1	0	4	0.6	0	1319	20010330	230000	30.7	32.8	0	0	0.0	0
1224	20010326	240000	30.0	43.1	0	1	0.2	0	1320	20010330	240000	29.9	31.8	0	0	0.0	0
1225	20010327	10000	29.5	46.3	0	5	0.7	0	1321	20010331	10000	28.4	33.9	0	0	0.0	0
1226	20010327	20000	28.5	49.5	0	3	0.6	0	1322	20010331	20000	26.9	35.6	0	0	0.0	0
1227	20010327	30000	27.9	52.7	0	6	0.9	0	1323	20010331	30000	27.5	31				

Appendice 7 Les données des observations météorologiques (toutes les données)
(8/46)

No.	Date	Time	Temperature °C	% Humidity	Precipitation mm	Wind direction degree	Wind speed m/s	Insolation kW/m ²	No.	Date	Time	Temperature °C	% Humidity	Precipitation mm	Wind direction degree	Wind speed m/s	Insolation kW/m ²
1345	20010401	10000	28.3	18.9	0	0	0.0	0	1441	20010405	10000	27.7	14.2	0	0	0.0	0
1346	20010401	20000	27.4	34.7	0	0	0.0	0	1442	20010405	20000	26.1	23.9	0	0	0.0	0
1347	20010401	30000	28.7	44.7	0	0	0.0	0	1443	20010405	30000	25.8	31.1	0	0	0.0	0
1348	20010401	40000	27.9	48.7	0	3	0.4	0	1444	20010405	40000	28.2	38.6	0	0	0.0	0
1349	20010401	50000	27.4	48.9	0	13	1.5	0	1445	20010405	50000	27.6	42.0	0	2	0.2	0
1350	20010401	60000	25.6	51.1	0	0	0.0	0	1446	20010405	60000	26.9	47.9	0	0	0.0	0
1351	20010401	70000	24.7	35.5	0	0	0.0	0	1447	20010405	70000	23.6	46.5	0	0	0.0	0
1352	20010401	80000	29.0	17.9	0	0	0.0	7	1448	20010405	80000	26.7	42.2	0	0	0.0	7
1353	20010401	90000	32.1	11.0	0	2	0.3	21	1449	20010405	90000	30.9	44.0	0	7	1.0	14
1354	20010401	100000	34.8	8.9	0	5	0.7	28	1450	20010405	100000	33.1	36.5	0	3	0.4	28
1355	20010401	110000	36.2	7.9	0	0	0.1	35	1451	20010405	110000	35.5	27.4	0	11	1.6	35
1356	20010401	120000	37.7	6.8	0	0	0.0	42	1452	20010405	120000	37.5	16.7	0	13	1.9	42
1357	20010401	130000	39.9	6.1	0	18	2.4	42	1453	20010405	130000	39.1	13.2	0	5	0.8	42
1358	20010401	140000	39.4	6.1	0	3	0.5	35	1454	20010405	140000	39.3	11.7	0	4	0.5	35
1359	20010401	150000	39.6	5.9	0	8	1.2	35	1455	20010405	150000	39.5	12.2	0	3	0.5	28
1360	20010401	160000	39.7	6.3	0	5	0.8	21	1456	20010405	160000	39.4	10.9	0	2	0.3	21
1361	20010401	170000	38.9	6.4	0	12	1.7	14	1457	20010405	170000	39.7	10.6	0	0	0.0	14
1362	20010401	180000	37.5	7.0	0	4	0.8	0	1458	20010405	180000	37.8	11.7	0	1	0.2	0
1363	20010401	190000	33.5	9.7	0	0	0.0	0	1459	20010405	190000	35.3	13.2	0	0	0.0	0
1364	20010401	200000	30.5	12.0	0	0	0.0	0	1460	20010405	200000	31.3	16.2	0	0	0.0	0
1365	20010401	210000	29.1	12.9	0	0	0.0	0	1461	20010405	210000	28.9	18.1	0	0	0.0	0
1366	20010401	220000	28.3	15.3	0	0	0.0	0	1462	20010405	220000	28.2	17.2	0	0	0.0	0
1367	20010401	230000	26.9	15.3	0	0	0.0	0	1463	20010405	230000	27.0	16.1	0	0	0.0	0
1368	20010401	240000	26.2	17.7	0	0	0.0	0	1464	20010405	240000	26.3	19.0	0	1	0.2	0
1369	20010402	10000	25.5	18.7	0	0	0.0	0	1465	20010406	10000	26.5	18.3	0	0	0.0	0
1370	20010402	20000	24.9	17.0	0	0	0.0	0	1466	20010406	20000	26.1	19.0	0	0	0.0	0
1371	20010402	30000	23.6	19.6	0	0	0.0	0	1467	20010406	30000	25.1	20.3	0	0	0.0	0
1372	20010402	40000	25.4	16.4	0	0	0.0	0	1468	20010406	40000	26.8	15.5	0	0	0.0	0
1373	20010402	50000	22.8	20.9	0	0	0.0	0	1469	20010406	50000	25.8	20.5	0	0	0.0	0
1374	20010402	60000	23.4	19.3	0	0	0.0	0	1470	20010406	60000	24.2	24.2	0	0	0.0	0
1375	20010402	70000	22.4	23.2	0	1	0.1	0	1471	20010406	70000	25.8	32.0	0	0	0.0	0
1376	20010402	80000	26.1	18.0	0	0	0.0	7	1472	20010406	80000	29.0	39.1	0	0	0.0	7
1377	20010402	90000	31.8	9.9	0	4	0.7	14	1473	20010406	90000	30.2	40.1	0	11	1.7	14
1378	20010402	100000	33.3	9.2	0	3	0.4	28	1474	20010406	100000	30.9	46.1	0	21	2.8	28
1379	20010402	110000	35.2	8.3	0	6	0.8	42	1475	20010406	110000	33.4	42.1	0	11	1.6	28
1380	20010402	120000	36.0	8.3	0	26	3.1	28	1476	20010406	120000	34.9	35.9	0	9	1.3	35
1381	20010402	130000	36.7	8.1	0	3	0.4	28	1477	20010406	130000	36.1	30.9	0	2	0.3	35
1382	20010402	140000	37.5	8.5	0	2	0.3	28	1478	20010406	140000	37.2	25.9	0	3	0.5	28
1383	20010402	150000	38.5	7.9	0	0	0.0	28	1479	20010406	150000	37.7	23.0	0	1	0.2	28
1384	20010402	160000	36.7	8.7	0	13	2.0	14	1480	20010406	160000	38.2	22.8	0	6	1.0	21
1385	20010402	170000	37.5	8.4	0	15	2.2	14	1481	20010406	170000	38.1	21.6	0	0	0.0	14
1386	20010402	180000	36.0	9.7	0	0	0.0	0	1482	20010406	180000	35.4	28.1	0	2	0.3	0
1387	20010402	190000	31.8	12.9	0	0	0.0	0	1483	20010406	190000	33.5	35.5	0	5	0.6	0
1388	20010402	200000	29.7	15.2	0	0	0.0	0	1484	20010406	200000	32.5	41.0	0	13	1.7	0
1389	20010402	210000	28.8	15.8	0	0	0.0	0	1485	20010406	210000	31.7	45.0	0	8	1.3	0
1390	20010402	220000	27.4	18.5	0	0	0.0	0	1486	20010406	220000	31.1	48.8	0	27	3.5	0
1391	20010402	230000	26.0	20.8	0	0	0.0	0	1487	20010406	230000	30.3	55.0	0	5	0.7	0
1392	20010402	240000	25.0	21.5	0	0	0.0	0	1488	20010406	240000	29.5	59.2	0	7	1.1	0
1393	20010403	10000	26.4	16.3	0	0	0.0	0	1489	20010407	10000	29.2	60.2	0	2	0.2	0
1394	20010403	20000	24.5	17.1	0	0	0.0	0	1490	20010407	20000	28.6	62.2	0	0	0.0	0
1395	20010403	30000	25.8	13.3	0	0	0.0	0	1491	20010407	30000	28.1	63.3	0	0	0.0	0
1396	20010403	40000	25.2	13.6	0	3	0.4	0	1492	20010407	40000	27.3	66.7	0	0	0.0	0
1397	20010403	50000	25.7	12.7	0	11	1.6	0	1493	20010407	50000	27.4	66.5	0	0	0.0	0
1398	20010403	60000	24.9	13.1	0	1	0.2	0	1494	20010407	60000	27.1	68.2	0	0	0.0	0
1399	20010403	70000	24.3	14.2	0	2	0.2	0	1495	20010407	70000	27.5	67.2	0	0	0.0	7
1400	20010403	80000	26.3	13.5	0	7	1.0	7	1496	20010407	80000	28.6	62.8	0	4	0.5	7
1401	20010403	90000	29.8	10.1	0	4	0.5	14	1497	20010407	90000	30.2	57.3	0	1	0.3	14
1402	20010403	100000	32.1	9.2	0	5	0.6	35	1498	20010407	100000	31.5	51.5	0	1	0.2	14
1403	20010403	110000	34.7	7.8	0	4	0.6	28	1499	20010407	110000	33.4	41.5	0	11	1.6	28
1404	20010403	120000	35.9	7.6	0	9	1.0	35	1500	20010407	120000	35.1	33.3	0	3	0.3	35
1405	20010403	130000	36.5	7.6	0	15	2.0	35	1501	20010407	130000	35.5	30.7	0	7	1.0	21
1406	20010403	140000	37.1	7.4	0	1	0.1	35	1502	20010407	140000	35.9	29.8	0	10	1.3	21
1407	20010403	150000	37.9	7.1	0	11	1.6	28	1503	20010407	150000	38.3	23.0	0	7	0.9	28
1408	20010403	160000	36.8	7.3	0	0	0.0	14	1504	20010407	160000	36.9	26.3	0	2	0.4	14
1409	20010403	170000	37.9	7.3	0	8	1.2	14	1505	20010407	170000	36.4	26.7	0	5	0.7	7
1410	20010403	180000	36.4	8.3	0	0	0.0	7	1506	20010407	180000	32.5	31.4	0	9	1.1	0
1411	20010403	190000	31.3	12.6	0	0	0.0	0	1507	20010407	190000	31.6	33.8	0	5	0.7	0
1412	20010403	200000	29.0	13.6	0	0	0.0	0	1508	20010407	200000	30.9	37.5	0	6	0.8	0
1413	20010403	210000	26.8	17.5	0	0	0.0	0	1509	20010407	210000	30.9	35.4	0	3	0.4	0
1414	20010403	220000	25.3	19.0	0	0	0.0	0	1510	20010407	220000	29.9	41.9	0	10	1.5	0
1415	20010403	230000	24.2	20.8	0	0	0.0	0	1511	20010407	230000	28.3	52.2	0	3	0.4	0
1416	20010403	240000	25.6	16.5	0	0	0.0	0	1512	20010407	240000	27.0	59.9	0	5	0.6	0
1417	20010404	10000	24.0	18.4	0	0	0.0	0	1513	20010408	10000	26.8	60.4	0	0	0.1	0
1418	20010404	20000	22.3	21.6	0	0	0.0	0	1514	20010408	20000	26.4	58.1	0	0	0.0	0
1419	20010404	30000	21.2	23.0	0	0	0.0	0	1515	20010408	30000	26.2	58.1	0	0	0.0	0
1420	20010404	40000	20.6	24.1	0	0	0.0	0									

Appendice 7 Les données des observations météorologiques (toutes les données)
(9/46)

No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation	No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation
			°C	%	mm	degree	m/s	kW/m ²				°C	%	mm	degree	m/s	kW/m ²
	yyyymmdd	hhmmss								yyyymmdd	hhmmss						
1537	20010409	10000	27.3	23.6	0	0	0.0	0	1633	20010413	10000	28.4	59.7	0	4	0.6	0
1538	20010409	20000	26.4	26.4	0	0	0.0	0	1634	20010413	20000	28.1	58.5	0	1	0.1	0
1539	20010409	30000	25.0	28.3	0	0	0.0	0	1635	20010413	30000	27.6	58.2	0	2	0.3	0
1540	20010409	40000	23.9	30.2	0	0	0.0	0	1636	20010413	40000	27.1	57.8	0	0	0.0	0
1541	20010409	50000	23.4	29.9	0	0	0.0	0	1637	20010413	50000	26.3	60.7	0	0	0.0	0
1542	20010409	60000	22.8	32.9	0	0	0.0	0	1638	20010413	60000	25.5	63.7	0	0	0.0	0
1543	20010409	70000	23.1	33.1	0	0	0.0	0	1639	20010413	70000	26.0	59.6	0	0	0.0	0
1544	20010409	80000	27.1	26.6	0	0	0.0	7	1640	20010413	80000	27.7	53.5	0	11	1.7	7
1545	20010409	90000	30.6	20.1	0	4	0.7	14	1641	20010413	90000	30.6	42.5	0	10	1.2	21
1546	20010409	100000	34.0	15.7	0	12	1.6	21	1642	20010413	100000	33.5	35.4	0	2	0.2	28
1547	20010409	110000	36.9	11.6	0	13	1.8	35	1643	20010413	110000	33.9	33.3	0	8	1.1	35
1548	20010409	120000	39.2	8.2	0	8	1.0	42	1644	20010413	120000	36.1	29.1	0	7	1.1	42
1549	20010409	130000	40.4	7.8	0	8	1.0	42	1645	20010413	130000	36.7	28.2	0	6	0.8	42
1550	20010409	140000	40.4	7.9	0	1	0.2	35	1646	20010413	140000	38.0	25.1	0	6	0.9	35
1551	20010409	150000	41.4	6.4	0	9	1.2	28	1647	20010413	150000	39.1	20.5	0	5	0.6	28
1552	20010409	160000	41.4	6.7	0	11	1.5	21	1648	20010413	160000	39.6	18.6	0	2	0.2	21
1553	20010409	170000	40.2	6.6	0	2	0.2	14	1649	20010413	170000	39.9	17.0	0	2	0.3	14
1554	20010409	180000	38.2	7.4	0	1	0.1	0	1650	20010413	180000	37.7	20.2	0	0	0.0	0
1555	20010409	190000	33.5	11.2	0	0	0.0	0	1651	20010413	190000	35.4	26.0	0	9	1.3	0
1556	20010409	200000	30.4	13.7	0	0	0.0	0	1652	20010413	200000	34.8	26.6	0	13	1.7	0
1557	20010409	210000	28.2	15.7	0	0	0.0	0	1653	20010413	210000	34.5	28.1	0	9	1.1	0
1558	20010409	220000	28.6	16.6	0	0	0.0	0	1654	20010413	220000	34.6	27.0	0	5	0.7	0
1559	20010409	230000	27.6	16.6	0	0	0.0	0	1655	20010413	230000	32.8	30.9	0	0	0.0	0
1560	20010409	240000	28.4	14.5	0	0	0.0	0	1656	20010413	240000	30.8	45.4	0	13	1.6	0
1561	20010410	10000	25.8	20.0	0	0	0.0	0	1657	20010414	10000	28.1	50.5	0	33	5.2	0
1562	20010410	20000	24.4	23.2	0	0	0.0	0	1658	20010414	20000	27.1	56.7	0	9	1.2	0
1563	20010410	30000	23.7	25.7	0	0	0.0	0	1659	20010414	30000	25.8	63.1	0	2	0.3	0
1564	20010410	40000	24.1	23.8	0	0	0.0	0	1660	20010414	40000	25.7	62.2	0	1	0.1	0
1565	20010410	50000	23.3	25.7	0	0	0.0	0	1661	20010414	50000	25.6	64.1	0	0	0.0	0
1566	20010410	60000	22.3	30.5	0	0	0.0	0	1662	20010414	60000	25.8	63.2	0	6	0.7	0
1567	20010410	70000	22.5	31.0	0	0	0.0	0	1663	20010414	70000	26.1	60.6	0	7	0.8	0
1568	20010410	80000	28.4	16.6	0	0	0.0	7	1664	20010414	80000	24.9	70.4	0	22	3.0	7
1569	20010410	90000	32.0	13.1	0	7	0.9	21	1665	20010414	90000	26.4	61.6	0	37	4.9	14
1570	20010410	100000	35.1	10.8	0	1	0.1	35	1666	20010414	100000	28.5	51.6	0	16	2.1	21
1571	20010410	110000	37.8	11.4	0	1	0.1	35	1667	20010414	110000	32.4	38.0	0	20	3.2	42
1572	20010410	120000	38.5	13.6	0	2	0.2	35	1668	20010414	120000	34.8	31.2	0	15	2.1	42
1573	20010410	130000	40.1	10.8	0	16	2.3	42	1669	20010414	130000	35.2	29.0	0	11	1.4	21
1574	20010410	140000	41.1	11.2	0	5	0.6	35	1670	20010414	140000	36.5	26.7	0	6	0.8	21
1575	20010410	150000	41.9	9.6	0	3	0.4	28	1671	20010414	150000	36.0	28.5	0	17	2.3	14
1576	20010410	160000	41.7	9.8	0	8	1.0	21	1672	20010414	160000	35.5	32.1	0	21	2.9	7
1577	20010410	170000	40.4	10.8	0	4	0.6	14	1673	20010414	170000	34.8	30.1	0	22	2.8	7
1578	20010410	180000	38.5	12.4	0	0	0.0	0	1674	20010414	180000	33.9	31.3	0	24	3.3	0
1579	20010410	190000	34.4	16.8	0	0	0.0	0	1675	20010414	190000	33.0	32.7	0	7	0.9	0
1580	20010410	200000	32.0	20.9	0	0	0.0	0	1676	20010414	200000	32.0	34.4	0	4	0.5	0
1581	20010410	210000	34.7	21.9	0	2	0.3	0	1677	20010414	210000	31.4	36.4	0	1	0.1	0
1582	20010410	220000	34.5	24.8	0	1	0.2	0	1678	20010414	220000	31.2	40.4	0	0	0.0	0
1583	20010410	230000	33.1	27.6	0	0	0.0	0	1679	20010414	230000	31.1	40.7	0	1	0.1	0
1584	20010410	240000	31.4	30.0	0	0	0.0	0	1680	20010414	240000	30.8	41.0	0	3	0.4	0
1585	20010411	10000	30.7	32.2	0	0	0.0	0	1681	20010415	10000	30.4	42.1	0	0	0.0	0
1586	20010411	20000	28.0	35.7	0	0	0.0	0	1682	20010415	20000	29.7	48.7	0	3	0.4	0
1587	20010411	30000	27.2	38.1	0	0	0.0	0	1683	20010415	30000	29.0	56.6	0	0	0.0	0
1588	20010411	40000	26.3	40.8	0	0	0.0	0	1684	20010415	40000	28.4	60.0	0	0	0.0	0
1589	20010411	50000	26.7	41.7	0	0	0.0	0	1685	20010415	50000	27.6	62.3	0	0	0.0	0
1590	20010411	60000	25.3	46.4	0	0	0.0	0	1686	20010415	60000	26.1	67.7	0	0	0.0	0
1591	20010411	70000	25.6	45.7	0	0	0.0	0	1687	20010415	70000	25.7	70.9	0	0	0.0	0
1592	20010411	80000	29.7	35.3	0	0	0.0	7	1688	20010415	80000	29.5	56.0	0	7	1.0	7
1593	20010411	90000	31.9	34.1	0	13	1.8	21	1689	20010415	90000	32.5	44.2	0	10	1.4	21
1594	20010411	100000	34.0	32.7	0	8	1.3	28	1690	20010415	100000	35.1	34.5	0	0	0.1	28
1595	20010411	110000	35.7	30.5	0	13	1.7	35	1691	20010415	110000	38.1	18.4	0	11	1.3	42
1596	20010411	120000	36.9	26.7	0	2	0.2	42	1692	20010415	120000	39.1	12.2	0	11	1.4	35
1597	20010411	130000	38.9	19.5	0	6	0.8	42	1693	20010415	130000	41.0	9.9	0	1	0.1	42
1598	20010411	140000	39.7	15.8	0	5	0.8	35	1694	20010415	140000	41.5	9.8	0	9	1.2	35
1599	20010411	150000	41.2	12.3	0	4	0.7	35	1695	20010415	150000	41.3	8.0	0	8	1.1	35
1600	20010411	160000	40.8	12.6	0	0	0.0	21	1696	20010415	160000	41.0	8.7	0	8	1.0	21
1601	20010411	170000	40.5	12.2	0	3	0.4	7	1697	20010415	170000	41.1	7.8	0	0	0.0	14
1602	20010411	180000	38.7	14.0	0	0	0.0	0	1698	20010415	180000	39.2	7.2	0	2	0.2	0
1603	20010411	190000	34.9	17.5	0	0	0.0	0	1699	20010415	190000	34.7	11.0	0	0	0.0	0
1604	20010411	200000	34.4	18.5	0	0	0.0	0	1700	20010415	200000	31.2	13.8	0	0	0.0	0
1605	20010411	210000	32.3	23.0	0	0	0.0	0	1701	20010415	210000	31.3	13.9	0	0	0.0	0
1606	20010411	220000	34.8	20.4	0	0	0.0	0	1702	20010415	220000	31.9	14.3	0	0	0.0	0
1607	20010411	230000	32.3	22.0	0	0	0.0	0	1703	20010415	230000	30.9	13.1	0	0	0.0	0
1608	20010411	240000	30.8	25.9	0	1	0.2	0	1704	20010415	240000	32.0	12.1	0	0	0.0	0
1609	20010412	10000	30.5	28.0	0	0	0.0	0	1705	20010416	10000	32.6	17.6	0	0	0.0	0
1610	20010412	20000	30.0	29.0	0	0	0.0	0	1706	20010416	20000	31.7	33.4	0	11	1.6	0
1611	20010412	30000	28.9	32.6	0	0	0.0	0	1707	20010416	30000	28.1	57.5				

Appendice 7 Les données des observations météorologiques (toutes les données) (10/46)

No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation	No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation
			°C	%	mm	degree	m/s	kWh/m ²				°C	%	mm	degree	m/s	kWh/m ²
	yyyymmdd	hhmmss								yyyymmdd	hhmmss						
1729	20010417	10000	29.7	49.8	0	2	0.2	0	1825	20010421	10000	29.8	45.3	0	0	0.0	0
1730	20010417	20000	29.1	53.2	0	6	1.1	0	1826	20010421	20000	29.2	51.0	0	2	0.3	0
1731	20010417	30000	29.0	56.0	0	0	0.1	0	1827	20010421	30000	29.1	48.8	0	0	0.0	0
1732	20010417	40000	28.3	59.6	0	1	0.1	0	1828	20010421	40000	28.2	55.5	0	0	0.0	0
1733	20010417	50000	27.5	63.5	0	0	0.0	0	1829	20010421	50000	27.7	57.6	0	0	0.0	0
1734	20010417	60000	27.2	65.1	0	0	0.0	0	1830	20010421	60000	23.9	82.6	0.5	1	0.2	0
1735	20010417	70000	27.6	64.3	0	1	0.2	0	1831	20010421	70000	23.9	90.8	1	3	0.5	0
1736	20010417	80000	28.9	60.8	0	22	2.9	14	1832	20010421	80000	27.7	64.1	0	5	0.8	14
1737	20010417	90000	30.4	56.1	0	11	1.6	21	1833	20010421	90000	29.3	56.9	0	20	3.1	28
1738	20010417	100000	31.2	53.0	0	2	0.4	28	1834	20010421	100000	30.9	49.5	0	6	0.8	28
1739	20010417	110000	32.9	47.0	0	18	2.5	35	1835	20010421	110000	30.7	52.2	0	3	0.4	14
1740	20010417	120000	34.9	39.9	0	5	0.7	42	1836	20010421	120000	33.1	46.6	0	2	0.3	28
1741	20010417	130000	36.2	34.1	0	10	1.3	35	1837	20010421	130000	34.2	38.2	0	2	0.2	21
1742	20010417	140000	37.4	30.3	0	6	0.9	35	1838	20010421	140000	36.6	26.9	0	0	0.0	35
1743	20010417	150000	37.9	25.8	0	15	2.1	28	1839	20010421	150000	37.8	26.7	0	0	0.1	28
1744	20010417	160000	38.0	24.4	0	13	1.7	21	1840	20010421	160000	38.2	26.1	0	3	0.4	21
1745	20010417	170000	38.5	23.2	0	7	0.9	14	1841	20010421	170000	38.1	25.5	0	4	0.5	14
1746	20010417	180000	36.6	28.6	0	0	0.0	7	1842	20010421	180000	36.6	27.8	0	0	0.0	7
1747	20010417	190000	34.9	32.2	0	10	1.3	0	1843	20010421	190000	33.7	36.0	0	0	0.0	0
1748	20010417	200000	33.8	33.9	0	0	0.0	0	1844	20010421	200000	33.3	36.1	0	0	0.0	0
1749	20010417	210000	32.8	35.8	0	0	0.0	0	1845	20010421	210000	32.0	40.9	0	0	0.0	0
1750	20010417	220000	32.2	35.7	0	0	0.0	0	1846	20010421	220000	31.9	38.1	0	1	0.1	0
1751	20010417	230000	31.4	36.4	0	3	0.4	0	1847	20010421	230000	30.6	45.0	0	2	0.3	0
1752	20010417	240000	30.6	41.6	0	0	0.0	0	1848	20010421	240000	28.7	54.0	0	0	0.0	0
1753	20010418	10000	29.7	46.3	0	0	0.0	0	1849	20010422	10000	27.7	57.8	0	0	0.0	0
1754	20010418	20000	29.3	53.8	0	1	0.1	0	1850	20010422	20000	30.3	45.6	0	17	2.4	0
1755	20010418	30000	28.8	59.2	0	1	0.1	0	1851	20010422	30000	28.5	59.7	0	4	0.6	0
1756	20010418	40000	28.3	62.0	0	3	0.4	0	1852	20010422	40000	27.8	66.2	0	7	0.9	0
1757	20010418	50000	27.9	64.0	0	2	0.3	0	1853	20010422	50000	27.4	69.9	0	1	0.1	0
1758	20010418	60000	27.5	65.6	0	2	0.2	0	1854	20010422	60000	27.0	67.4	0	5	0.7	0
1759	20010418	70000	27.8	62.4	0	1	0.3	0	1855	20010422	70000	26.8	69.3	0	3	0.3	0
1760	20010418	80000	28.5	58.6	0	11	1.5	7	1856	20010422	80000	27.3	61.2	0	0	0.0	7
1761	20010418	90000	29.9	52.6	0	6	0.8	7	1857	20010422	90000	28.9	54.0	0	3	0.4	21
1762	20010418	100000	32.2	43.8	0	10	1.4	21	1858	20010422	100000	30.8	49.1	0	6	0.8	28
1763	20010418	110000	35.1	32.5	0	8	1.0	28	1859	20010422	110000	32.1	45.7	0	15	2.1	35
1764	20010418	120000	35.5	28.3	0	10	1.3	28	1860	20010422	120000	33.8	39.3	0	11	2.0	42
1765	20010418	130000	37.4	24.2	0	16	2.3	28	1861	20010422	130000	35.3	33.9	0	12	1.7	42
1766	20010418	140000	37.8	21.7	0	10	1.3	35	1862	20010422	140000	35.5	33.1	0	0	0.0	21
1767	20010418	150000	38.7	19.2	0	2	0.3	7	1863	20010422	150000	35.8	31.1	0	8	1.2	28
1768	20010418	160000	39.6	17.3	0	0	0.0	14	1864	20010422	160000	35.2	33.2	0	3	0.4	14
1769	20010418	170000	38.2	20.3	0	1	0.1	7	1865	20010422	170000	35.7	30.1	0	5	0.8	14
1770	20010418	180000	37.9	20.5	0	0	0.0	7	1866	20010422	180000	34.5	31.6	0	0	0.0	0
1771	20010418	190000	35.2	24.2	0	0	0.0	0	1867	20010422	190000	32.8	35.3	0	0	0.0	0
1772	20010418	200000	35.5	27.0	0	7	1.0	0	1868	20010422	200000	31.9	43.1	0	0	0.0	0
1773	20010418	210000	35.1	27.3	0	9	1.1	0	1869	20010422	210000	30.3	48.3	0	0	0.0	0
1774	20010418	220000	33.4	32.3	0	15	2.1	0	1870	20010422	220000	29.2	53.7	0	0	0.0	0
1775	20010418	230000	32.2	36.6	0	3	0.5	0	1871	20010422	230000	28.2	58.2	0	0	0.0	0
1776	20010418	240000	28.5	47.9	0	25	3.2	0	1872	20010422	240000	29.4	49.9	0	0	0.0	0
1777	20010419	10000	24.9	67.8	3.5	2	0.2	0	1873	20010423	10000	29.1	51.3	0	3	0.4	0
1778	20010419	20000	24.9	66.6	1	17	2.4	0	1874	20010423	20000	27.9	57.1	0	1	0.2	0
1779	20010419	30000	23.6	83.6	1	18	2.6	0	1875	20010423	30000	27.9	57.2	0	5	0.7	0
1780	20010419	40000	23.9	79.1	0.5	13	1.8	0	1876	20010423	40000	27.4	61.0	0	1	0.1	0
1781	20010419	50000	23.2	78.4	0	4	0.5	0	1877	20010423	50000	26.8	64.1	0	1	0.1	0
1782	20010419	60000	21.9	90.7	0.5	4	0.6	0	1878	20010423	60000	26.2	67.2	0	2	0.2	0
1783	20010419	70000	22.4	85.3	0	15	2.0	0	1879	20010423	70000	26.0	69.5	0	1	0.1	0
1784	20010419	80000	23.7	79.2	0	9	1.3	7	1880	20010423	80000	28.2	59.6	0	10	1.6	7
1785	20010419	90000	25.0	75.8	0	8	1.2	14	1881	20010423	90000	30.7	46.8	0	7	0.9	21
1786	20010419	100000	28.9	58.2	0	9	1.2	28	1882	20010423	100000	33.0	37.3	0	13	1.5	28
1787	20010419	110000	31.7	45.7	0	14	1.7	42	1883	20010423	110000	34.5	32.2	0	12	1.6	35
1788	20010419	120000	33.1	35.6	0	18	2.5	21	1884	20010423	120000	36.1	27.6	0	5	0.8	35
1789	20010419	130000	33.5	37.7	0	14	2.1	35	1885	20010423	130000	37.4	24.1	0	13	1.7	42
1790	20010419	140000	33.9	32.9	0	8	1.1	28	1886	20010423	140000	38.5	19.0	0	12	1.4	35
1791	20010419	150000	35.9	29.3	0	10	1.2	35	1887	20010423	150000	38.3	16.7	0	14	1.8	21
1792	20010419	160000	35.9	29.5	0	3	0.5	21	1888	20010423	160000	38.8	15.0	0	2	0.3	21
1793	20010419	170000	35.3	29.2	0	9	1.3	14	1889	20010423	170000	38.6	15.4	0	4	0.6	14
1794	20010419	180000	33.7	33.7	0	7	1.1	0	1890	20010423	180000	37.4	16.0	0	2	0.2	7
1795	20010419	190000	32.3	38.1	0	7	1.0	0	1891	20010423	190000	34.9	18.8	0	0	0.0	0
1796	20010419	200000	31.5	40.0	0	0	0.0	0	1892	20010423	200000	32.5	23.4	0	0	0.0	0
1797	20010419	210000	30.9	43.5	0	2	0.2	0	1893	20010423	210000	30.4	27.8	0	0	0.0	0
1798	20010419	220000	30.3	47.5	0	2	0.2	0	1894	20010423	220000	29.3	29.5	0	0	0.0	0
1799	20010419	230000	29.5	52.6	0	5	0.7	0	1895	20010423	230000	28.8	29.3	0	0	0.0	0
1800	20010419	240000	29.0	56.1	0	1	0.1	0	1896	20010423	240000	27.6	31.0	0	0	0.0	0
1801	20010420	10000	28.6	57.8	0	0	0.1	0	1897	20010424	10000	26.9	32.5	0	0	0.0	0
1802	20010420	20000	28.1	61.0	0	2	0.3	0	1898	20010424	20000	25.9	36.4	0	0	0.0	0
1803	20010420	30000	27.7	63.6	0	0	0.0	0	1899								

Appendice 7 Les données des observations météorologiques (toutes les données)
(11/46)

No.	Date	Time	Temperature °C	Humidity %	Precipitation mm	Wind direction degree	Wind speed m/s	Insolation kW/m²	No.	Date	Time	Temperature °C	Humidity %	Precipitation mm	Wind direction degree	Wind speed m/s	Insolation kW/m²
1921	20010425	10000	28.0	27.4	0	0	0.0	0	2017	20010429	10000	31.9	41.6	0	1	0.1	0
1922	20010425	20000	26.8	27.1	0	0	0.0	0	2018	20010429	20000	31.3	41.5	0	4	0.5	0
1923	20010425	30000	26.1	29.1	0	0	0.0	0	2019	20010429	30000	30.7	43.6	0	11	1.6	0
1924	20010425	40000	25.6	29.9	0	0	0.0	0	2020	20010429	40000	29.8	44.2	0	6	0.8	0
1925	20010425	50000	26.2	28.9	0	0	0.0	0	2021	20010429	50000	28.8	47.7	0	5	0.7	0
1926	20010425	60000	25.8	24.7	0	0	0.0	0	2022	20010429	60000	27.8	51.3	0	1	0.1	0
1927	20010425	70000	24.7	31.7	0	0	0.0	0	2023	20010429	70000	28.3	51.2	0	1	0.2	0
1928	20010425	80000	29.3	21.7	0	5	0.7	7	2024	20010429	80000	29.8	51.7	0	14	1.9	14
1929	20010425	90000	33.3	13.8	0	0	0.0	21	2025	20010429	90000	31.6	44.8	0	4	0.5	21
1930	20010425	100000	35.8	11.1	0	4	0.6	28	2026	20010429	100000	33.8	33.6	0	17	2.3	28
1931	20010425	110000	37.5	11.2	0	5	0.7	35	2027	20010429	110000	35.7	29.7	0	8	1.1	35
1932	20010425	120000	37.8	10.0	0	3	0.4	42	2028	20010429	120000	38.1	21.9	0	6	0.9	42
1933	20010425	130000	39.1	9.9	0	0	0.0	42	2029	20010429	130000	39.9	16.7	0	2	0.4	42
1934	20010425	140000	38.6	9.9	0	17	2.3	35	2030	20010429	140000	41.4	13.4	0	4	0.6	35
1935	20010425	150000	39.6	9.7	0	8	1.0	35	2031	20010429	150000	40.9	14.8	0	3	0.4	28
1936	20010425	160000	39.8	9.9	0	6	1.1	21	2032	20010429	160000	40.8	14.6	0	4	0.5	21
1937	20010425	170000	38.8	10.3	0	0	0.0	14	2033	20010429	170000	40.9	13.5	0	11	1.4	14
1938	20010425	180000	37.7	11.1	0	5	0.6	7	2034	20010429	180000	39.0	19.9	0	1	0.1	7
1939	20010425	190000	33.8	15.7	0	0	0.0	0	2035	20010429	190000	37.5	21.2	0	11	1.7	0
1940	20010425	200000	31.2	20.0	0	0	0.0	0	2036	20010429	200000	35.7	24.0	0	0	0.0	0
1941	20010425	210000	29.8	23.2	0	0	0.0	0	2037	20010429	210000	35.1	24.3	0	0	0.0	0
1942	20010425	220000	29.3	24.9	0	0	0.0	0	2038	20010429	220000	34.7	24.7	0	2	0.3	0
1943	20010425	230000	29.5	24.2	0	1	0.2	0	2039	20010429	230000	34.0	24.9	0	2	0.3	0
1944	20010425	240000	31.7	27.4	0	0	0.0	0	2040	20010429	240000	33.1	26.1	0	12	1.6	0
1945	20010426	10000	29.2	30.6	0	0	0.0	0	2041	20010430	10000	32.0	30.5	0	0	0.1	0
1946	20010426	20000	28.2	39.7	0	0	0.0	0	2042	20010430	20000	31.5	39.8	0	4	0.5	0
1947	20010426	30000	28.3	44.7	0	0	0.0	0	2043	20010430	30000	31.3	44.2	0	3	0.6	0
1948	20010426	40000	28.4	45.5	0	0	0.0	0	2044	20010430	40000	30.4	51.2	0	8	1.2	0
1949	20010426	50000	28.6	47.1	0	0	0.0	0	2045	20010430	50000	29.9	51.0	0	20	2.9	0
1950	20010426	60000	27.3	50.6	0	0	0.0	0	2046	20010430	60000	29.3	52.8	0	7	0.8	0
1951	20010426	70000	26.7	51.7	0	6	0.8	0	2047	20010430	70000	29.2	56.6	0	5	0.7	0
1952	20010426	80000	29.0	44.0	0	0	0.0	7	2048	20010430	80000	29.9	54.4	0	12	1.6	7
1953	20010426	90000	31.2	49.1	0	6	0.8	21	2049	20010430	90000	31.3	52.1	0	11	1.4	21
1954	20010426	100000	33.2	44.4	0	5	0.7	28	2050	20010430	100000	33.2	47.0	0	19	2.7	28
1955	20010426	110000	35.9	28.8	0	5	0.9	35	2051	20010430	110000	34.7	42.0	0	21	2.7	35
1956	20010426	120000	36.5	26.8	0	3	0.4	42	2052	20010430	120000	36.2	36.3	0	12	1.9	35
1957	20010426	130000	38.6	22.5	0	17	2.5	42	2053	20010430	130000	37.2	31.2	0	6	0.7	35
1958	20010426	140000	38.3	18.2	0	10	1.3	28	2054	20010430	140000	38.4	25.7	0	10	1.3	28
1959	20010426	150000	39.4	14.8	0	13	1.7	28	2055	20010430	150000	38.6	24.1	0	11	1.3	28
1960	20010426	160000	40.0	12.4	0	1	0.2	21	2056	20010430	160000	39.2	21.5	0	11	1.5	14
1961	20010426	170000	40.6	11.1	0	0	0.0	14	2057	20010430	170000	38.5	23.4	0	8	1.1	14
1962	20010426	180000	38.6	12.3	0	1	0.1	0	2058	20010430	180000	37.1	24.3	0	0	0.1	0
1963	20010426	190000	34.9	18.2	0	0	0.0	0	2059	20010430	190000	36.0	25.1	0	1	0.1	0
1964	20010426	200000	32.2	21.2	0	0	0.0	0	2060	20010430	200000	34.4	33.9	0	33	4.4	0
1965	20010426	210000	31.6	21.7	0	0	0.0	0	2061	20010430	210000	30.6	46.1	0	27	3.1	0
1966	20010426	220000	31.8	21.1	0	0	0.0	0	2062	20010430	220000	30.9	44.9	0	9	1.1	0
1967	20010426	230000	32.9	18.8	0	3	0.5	0	2063	20010430	230000	30.9	40.1	0	7	1.0	0
1968	20010426	240000	29.9	25.7	0	0	0.0	0	2064	20010430	240000	30.2	43.9	0	10	1.4	0
1969	20010427	10000	29.5	29.7	0	0	0.0	0	2065	20010501	10000	29.8	50.6	0	6	0.8	0
1970	20010427	20000	30.7	36.1	0	0	0.0	0	2066	20010501	20000	29.5	53.8	0	9	1.4	0
1971	20010427	30000	31.9	34.8	0	1	0.1	0	2067	20010501	30000	25.6	73.9	0	19	2.4	0
1972	20010427	40000	28.6	45.8	0	0	0.0	0	2068	20010501	40000	22.3	88.3	21	14	1.8	0
1973	20010427	50000	27.7	47.1	0	0	0.0	0	2069	20010501	50000	22.4	91.1	1	7	1.2	0
1974	20010427	60000	26.7	47.9	0	0	0.0	0	2070	20010501	60000	22.4	92.4	1	0	0.0	0
1975	20010427	70000	27.2	50.1	0	0	0.0	0	2071	20010501	70000	23.8	80.6	0	3	0.4	0
1976	20010427	80000	30.9	43.4	0	1	0.1	7	2072	20010501	80000	25.7	70.5	0	0	0.0	7
1977	20010427	90000	32.7	44.7	0	2	0.4	21	2073	20010501	90000	25.9	74.3	0	6	0.8	21
1978	20010427	100000	35.4	26.0	0	2	0.2	28	2074	20010501	100000	27.6	67.1	0	5	0.7	28
1979	20010427	110000	38.6	19.8	0	9	1.3	35	2075	20010501	110000	27.9	65.6	0	6	1.0	14
1980	20010427	120000	40.8	15.6	0	4	0.6	42	2076	20010501	120000	28.6	62.9	0	4	0.5	21
1981	20010427	130000	40.8	13.5	0	4	0.5	35	2077	20010501	130000	29.8	59.0	0	15	1.9	21
1982	20010427	140000	40.5	12.3	0	0	0.0	21	2078	20010501	140000	30.8	46.6	0	5	0.7	21
1983	20010427	150000	40.3	12.6	0	16	2.3	21	2079	20010501	150000	30.1	54.7	0	12	1.6	14
1984	20010427	160000	40.5	12.8	0	2	0.2	14	2080	20010501	160000	30.0	56.7	0	6	1.0	7
1985	20010427	170000	39.7	11.1	0	1	0.2	7	2081	20010501	170000	30.2	57.3	0	0	0.0	7
1986	20010427	180000	38.7	11.2	0	0	0.0	0	2082	20010501	180000	29.8	61.1	0	2	0.3	0
1987	20010427	190000	35.6	14.5	0	0	0.0	0	2083	20010501	190000	28.5	65.7	0	0	0.0	0
1988	20010427	200000	33.9	19.0	0	0	0.0	0	2084	20010501	200000	27.6	68.4	0	0	0.0	0
1989	20010427	210000	35.9	24.4	0	6	1.0	0	2085	20010501	210000	27.1	68.7	0	0	0.0	0
1990	20010427	220000	34.2	33.1	0	0	0.0	0	2086	20010501	220000	25.8	81.4	0	0	0.0	0
1991	20010427	230000	33.6	36.6	0	1	0.2	0	2087	20010501	230000	26.1	75.5	0	4	0.5	0
1992	20010427	240000	33.1	35.7	0	3	0.4	0	2088	20010501	240000	25.6	79.0	0	2	0.4	0
1993	20010428	10000	31.9	42.3	0	1	0.2	0	2089	20010502	10000	25.3	82.1	0	0	0.0	0
1994	20010428	20000	31.0	48.0	0	2	0.4	0	2090	20010502	20000	25.7	78.3	0	1	0.1	0
1995	20010428	30000	30.2	53.4	0	3	0.6	0	2091	20010502	30000	25.6	78.3	0	0	0.0	0
1996	20010428	40000	29.6	58.													

Appendice 7 Les données des observations météorologiques (toutes les données) (12/46)

No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation	No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation
			°C	%	mm	degree	m/s	kW/m ²				°C	%	mm	degree	m/s	kW/m ²
	yyyymmdd	hhmmss								yyyymmdd	hhmmss						
2113	20010503	10000	24.6	84.4	0	3	0.4	0	2209	20010507	10000	25.2	64.6	0	2	0.2	0
2114	20010503	20000	24.7	85.3	0	2	0.3	0	2210	20010507	20000	24.9	67.1	0	0	0.0	0
2115	20010503	30000	24.7	84.3	0	11	1.4	0	2211	20010507	30000	24.7	69.5	0	8	1.1	0
2116	20010503	40000	24.8	80.4	0	8	1.1	0	2212	20010507	40000	24.7	69.5	0	0	0.0	0
2117	20010503	50000	24.7	81.6	0	12	1.7	0	2213	20010507	50000	24.5	70.5	0	7	0.9	0
2118	20010503	60000	24.6	82.1	0	1	0.1	0	2214	20010507	60000	24.2	73.0	0	0	0.0	0
2119	20010503	70000	24.6	81.0	0	6	0.8	0	2215	20010507	70000	24.6	72.4	0	2	0.2	7
2120	20010503	80000	26.1	73.5	0	18	2.4	7	2216	20010507	80000	26.0	66.2	0	4	0.4	7
2121	20010503	90000	27.6	67.1	0	3	0.4	21	2217	20010507	90000	28.5	56.5	0	0	0.0	21
2122	20010503	100000	31.1	52.0	0	12	1.4	28	2218	20010507	100000	30.4	48.0	0	5	0.8	28
2123	20010503	110000	33.4	42.8	0	8	1.2	35	2219	20010507	110000	33.3	38.0	0	0	0.0	42
2124	20010503	120000	34.9	35.8	0	12	1.6	42	2220	20010507	120000	35.2	33.6	0	2	0.3	35
2125	20010503	130000	36.0	30.3	0	10	1.3	42	2221	20010507	130000	36.3	28.7	0	11	1.5	35
2126	20010503	140000	37.4	24.8	0	7	0.8	35	2222	20010507	140000	37.0	25.4	0	6	0.7	42
2127	20010503	150000	38.1	25.3	0	1	0.1	35	2223	20010507	150000	38.7	21.5	0	11	1.6	35
2128	20010503	160000	38.5	22.8	0	6	0.9	21	2224	20010507	160000	38.7	21.8	0	1	0.1	21
2129	20010503	170000	38.0	24.4	0	0	0.0	14	2225	20010507	170000	37.4	24.2	0	8	1.0	14
2130	20010503	180000	37.5	25.9	0	1	0.0	7	2226	20010507	180000	35.6	26.2	0	4	0.5	0
2131	20010503	190000	34.6	30.4	0	1	0.1	0	2227	20010507	190000	34.3	29.4	0	0	0.0	0
2132	20010503	200000	34.4	34.2	0	6	0.9	0	2228	20010507	200000	33.5	32.9	0	0	0.0	0
2133	20010503	210000	33.8	36.4	0	7	0.9	0	2229	20010507	210000	33.2	33.8	0	7	1.0	0
2134	20010503	220000	32.8	43.8	0	3	0.5	0	2230	20010507	220000	33.1	34.5	0	7	0.9	0
2135	20010503	230000	31.6	51.7	0	13	1.7	0	2231	20010507	230000	32.0	38.3	0	0	0.0	0
2136	20010503	240000	30.6	59.1	0	1	0.2	0	2232	20010507	240000	29.9	46.7	0	0	0.0	0
2137	20010504	10000	29.9	63.9	0	5	0.6	0	2233	20010508	10000	29.2	51.3	0	0	0.0	0
2138	20010504	20000	29.6	65.2	0	0	0.0	0	2234	20010508	20000	28.9	52.4	0	2	0.3	0
2139	20010504	30000	29.2	66.1	0	2	0.3	0	2235	20010508	30000	28.9	52.2	0	4	0.5	0
2140	20010504	40000	28.8	65.5	0	0	0.0	0	2236	20010508	40000	28.3	55.3	0	0	0.0	0
2141	20010504	50000	28.8	63.2	0	0	0.0	0	2237	20010508	50000	27.7	59.8	0	2	0.2	0
2142	20010504	60000	28.6	63.7	0	0	0.0	0	2238	20010508	60000	27.2	63.5	0	0	0.0	0
2143	20010504	70000	28.9	61.0	0	0	0.0	7	2239	20010508	70000	27.9	63.9	0	9	1.2	0
2144	20010504	80000	30.6	52.4	0	8	1.2	14	2240	20010508	80000	29.3	59.8	0	11	1.6	14
2145	20010504	90000	33.0	43.8	0	7	1.2	21	2241	20010508	90000	31.6	51.7	0	16	2.1	21
2146	20010504	100000	34.3	39.3	0	5	1.1	28	2242	20010508	100000	34.1	43.5	0	17	2.1	28
2147	20010504	110000	36.0	29.5	0	22	2.9	35	2243	20010508	110000	35.2	37.4	0	11	1.5	35
2148	20010504	120000	37.6	23.1	0	9	1.2	35	2244	20010508	120000	36.7	32.6	0	3	0.5	35
2149	20010504	130000	38.5	22.5	0	2	0.2	42	2245	20010508	130000	37.8	29.5	0	9	1.2	42
2150	20010504	140000	39.1	20.1	0	0	0.1	35	2246	20010508	140000	39.2	24.7	0	4	0.6	35
2151	20010504	150000	39.8	19.5	0	12	1.5	28	2247	20010508	150000	40.1	22.7	0	6	0.7	28
2152	20010504	160000	39.1	19.9	0	4	0.7	7	2248	20010508	160000	40.2	20.4	0	1	0.2	21
2153	20010504	170000	38.2	22.8	0	11	1.7	7	2249	20010508	170000	39.9	20.9	0	4	0.6	14
2154	20010504	180000	37.4	23.5	0	0	0.0	7	2250	20010508	180000	38.1	23.3	0	0	0.1	7
2155	20010504	190000	35.5	28.1	0	3	0.5	0	2251	20010508	190000	36.4	24.7	0	4	0.5	0
2156	20010504	200000	34.0	30.5	0	4	0.5	0	2252	20010508	200000	35.8	26.2	0	15	2.1	0
2157	20010504	210000	33.3	32.4	0	0	0.0	0	2253	20010508	210000	35.4	29.5	0	24	3.3	0
2158	20010504	220000	31.1	44.3	0	5	0.7	0	2254	20010508	220000	32.7	41.4	0	4	0.5	0
2159	20010504	230000	29.1	56.3	0	14	1.7	0	2255	20010508	230000	30.9	42.9	0	0	0.0	0
2160	20010504	240000	24.5	79.2	1	15	2.0	0	2256	20010508	240000	30.4	41.7	0	7	0.9	0
2161	20010505	10000	23.6	86.1	2	1	0.1	0	2257	20010509	10000	30.4	43.8	0	0	0.0	0
2162	20010505	20000	23.5	91.2	0.5	0	0.1	0	2258	20010509	20000	30.1	46.3	0	6	0.9	0
2163	20010505	30000	23.1	91.8	0	0	0.0	0	2259	20010509	30000	29.5	48.9	0	6	0.8	0
2164	20010505	40000	24.1	76.9	0	0	0.0	0	2260	20010509	40000	29.0	54.7	0	4	0.5	0
2165	20010505	50000	23.6	89.3	0	12	1.9	0	2261	20010509	50000	28.7	55.8	0	0	0.0	0
2166	20010505	60000	24.6	75.5	0	3	0.4	0	2262	20010509	60000	28.4	54.9	0	5	0.6	0
2167	20010505	70000	25.3	72.5	0	0	0.0	0	2263	20010509	70000	28.5	54.3	0	0	0.0	0
2168	20010505	80000	25.1	76.7	0	15	2.6	7	2264	20010509	80000	30.6	49.0	0	6	0.7	14
2169	20010505	90000	26.7	66.8	0	13	1.9	14	2265	20010509	90000	31.7	47.3	0	8	1.5	14
2170	20010505	100000	28.5	62.5	0	3	0.4	21	2266	20010509	100000	33.6	42.5	0	4	0.5	21
2171	20010505	110000	30.1	56.6	0	5	0.7	35	2267	20010509	110000	34.9	39.0	0	14	2.2	35
2172	20010505	120000	30.9	54.2	0	6	0.9	14	2268	20010509	120000	36.7	33.8	0	4	0.5	28
2173	20010505	130000	34.6	35.9	0	4	0.6	49	2269	20010509	130000	35.9	35.4	0	4	0.5	14
2174	20010505	140000	36.6	32.0	0	5	0.8	35	2270	20010509	140000	35.8	34.6	0	13	1.8	14
2175	20010505	150000	37.3	27.2	0	2	0.3	21	2271	20010509	150000	35.0	40.6	0	9	1.3	14
2176	20010505	160000	37.3	26.2	0	3	0.4	14	2272	20010509	160000	32.8	48.5	0	18	2.3	7
2177	20010505	170000	36.5	25.6	0	0	0.0	7	2273	20010509	170000	31.5	52.0	0	8	1.1	7
2178	20010505	180000	34.6	36.6	0	2	0.3	0	2274	20010509	180000	30.9	54.6	0	2	0.3	0
2179	20010505	190000	32.2	46.6	0	0	0.0	0	2275	20010509	190000	30.2	58.2	0	2	0.3	0
2180	20010505	200000	31.1	49.0	0	0	0.0	0	2276	20010509	200000	29.5	60.4	0	7	1.0	0
2181	20010505	210000	30.5	51.5	0	0	0.0	0	2277	20010509	210000	29.0	57.8	0	0	0.0	0
2182	20010505	220000	29.8	55.0	0	1	0.1	0	2278	20010509	220000	28.4	58.3	0	0	0.0	0
2183	20010505	230000	29.3	58.7	0	2	0.3	0	2279	20010509	230000	28.2	55.3	0	0	0.0	0
2184	20010505	240000	28.3	64.3	0	0	0.0	0	2280	20010509	240000	27.5	59.8	0	0	0.0	0
2185	20010506	10000	27.6	65.5	0	0	0.0	0	2281	20010510	10000	26.8	65.2	0	7	1.0	0
2186	20010506	20000	26.7	71.1	0	3	0.4	0	2282	20010510	20000	26.5	65.4	0	5	0.6	0
2187	20010506	30000	26.3	73.8	0	1	0.1	0	2283	20010510							

Appendice 7 Les données des observations météorologiques (toutes les données) (13/46)

No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation	No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation
			°C	%	mm	degree	m/s	kWh/m ²				°C	%	mm	degree	m/s	kWh/m ²
	yyyymmdd	hhmmss								yyyymmdd	hhmmss						
2305	20010511	10000	30.7	49.1	0	0	0.0	0	2401	20010515	10000	30.2	56.9	0	22	3.0	0
2306	20010511	20000	29.9	51.9	0	0	0.0	0	2402	20010515	20000	29.5	60.8	0	22	3.0	0
2307	20010511	30000	29.6	53.0	0	0	0.0	0	2403	20010515	30000	29.1	63.7	0	30	4.1	0
2308	20010511	40000	28.8	58.5	0	6	0.9	0	2404	20010515	40000	28.7	65.7	0	24	3.3	0
2309	20010511	50000	28.1	62.7	0	1	0.2	0	2405	20010515	50000	28.5	67.0	0	23	3.3	0
2310	20010511	60000	27.7	65.8	0	0	0.0	0	2406	20010515	60000	27.9	70.0	0	22	3.0	0
2311	20010511	70000	28.0	66.0	0	0	0.0	0	2407	20010515	70000	28.4	68.9	0	18	2.4	0
2312	20010511	80000	29.1	63.4	0	12	1.6	14	2408	20010515	80000	30.1	62.9	2	31	4.3	14
2313	20010511	90000	31.5	54.0	0	3	0.4	21	2409	20010515	90000	31.7	57.2	0	22	3.1	21
2314	20010511	100000	33.3	47.6	0	12	1.6	28	2410	20010515	100000	33.7	50.5	0	33	5.2	28
2315	20010511	110000	34.5	43.9	0	8	1.1	28	2411	20010515	110000	35.2	44.9	0	33	4.9	35
2316	20010511	120000	35.8	38.7	0	9	1.4	35	2412	20010515	120000	36.3	39.6	0	30	4.3	42
2317	20010511	130000	37.6	32.9	0	6	0.8	35	2413	20010515	130000	37.4	36.4	0	25	3.6	42
2318	20010511	140000	38.7	25.2	0	12	1.6	28	2414	20010515	140000	38.2	33.0	0	46	6.4	35
2319	20010511	150000	40.1	24.2	0	5	0.7	28	2415	20010515	150000	39.0	28.5	0	29	4.1	28
2320	20010511	160000	39.8	23.6	0	2	0.3	14	2416	20010515	160000	38.9	27.2	0	35	4.9	21
2321	20010511	170000	38.4	26.8	0	2	0.3	7	2417	20010515	170000	39.2	26.6	0	30	4.1	14
2322	20010511	180000	37.8	27.8	0	1	0.1	0	2418	20010515	180000	38.1	28.2	0	31	4.6	7
2323	20010511	190000	35.8	36.9	0	8	1.1	0	2419	20010515	190000	36.5	31.9	0	21	3.0	0
2324	20010511	200000	27.6	60.9	6.5	8	1.1	0	2420	20010515	200000	30.2	38.7	0	49	7.0	0
2325	20010511	210000	28.4	54.3	0	36	5.3	0	2421	20010515	210000	31.2	42.6	0	25	3.4	0
2326	20010511	220000	26.9	65.1	0	1	0.1	0	2422	20010515	220000	31.7	44.9	0	21	2.9	0
2327	20010511	230000	26.6	68.5	0	1	0.1	0	2423	20010515	230000	30.6	47.7	0	25	3.4	0
2328	20010511	240000	26.2	72.0	0	6	0.8	0	2424	20010515	240000	30.7	48.2	0	25	3.5	0
2329	20010512	10000	26.1	69.3	0	18	2.1	0	2425	20010516	10000	30.4	50.8	0	23	3.2	0
2330	20010512	20000	25.6	72.1	0	10	1.4	0	2426	20010516	20000	30.5	58.0	0	20	2.7	0
2331	20010512	30000	25.3	72.6	0	3	0.4	0	2427	20010516	30000	30.8	57.9	0	25	3.6	0
2332	20010512	40000	24.8	75.5	0	3	0.4	0	2428	20010516	40000	25.2	76.1	12.5	36	5.0	0
2333	20010512	50000	24.9	74.1	0	4	0.6	0	2429	20010516	50000	26.9	78.5	0.5	28	4.1	0
2334	20010512	60000	25.0	73.9	0	4	0.5	0	2430	20010516	60000	26.3	79.4	0	15	2.1	0
2335	20010512	70000	24.8	77.9	0	0	0.0	0	2431	20010516	70000	23.0	81.9	0	34	4.4	0
2336	20010512	80000	26.8	70.6	0	0	0.0	14	2432	20010516	80000	24.4	81.9	1.5	20	2.8	0
2337	20010512	90000	29.3	62.2	0	0	0.0	21	2433	20010516	90000	28.0	72.0	0	34	4.6	14
2338	20010512	100000	31.3	50.2	0	7	1.1	28	2434	20010516	100000	30.0	65.2	0	38	5.2	21
2339	20010512	110000	34.0	39.2	0	23	3.9	35	2435	20010516	110000	31.2	59.5	0	50	6.6	28
2340	20010512	120000	33.6	42.9	0	10	1.4	42	2436	20010516	120000	32.2	55.5	0	30	4.3	35
2341	20010512	130000	33.9	45.7	0	14	1.9	42	2437	20010516	130000	33.0	52.8	0	45	6.0	28
2342	20010512	140000	35.3	41.0	0	3	0.4	35	2438	20010516	140000	33.9	49.6	0	20	2.7	28
2343	20010512	150000	35.7	38.9	0	12	1.6	28	2439	20010516	150000	34.2	47.6	0	17	2.4	21
2344	20010512	160000	35.9	34.3	0	2	0.3	21	2440	20010516	160000	34.5	43.9	0	31	4.2	14
2345	20010512	170000	35.3	40.8	0	9	1.4	14	2441	20010516	170000	33.8	47.6	0	20	2.9	7
2346	20010512	180000	34.1	42.4	0	1	0.1	0	2442	20010516	180000	32.7	53.8	0	20	2.7	0
2347	20010512	190000	33.0	46.4	0	0	0.0	0	2443	20010516	190000	31.9	51.3	0	20	2.8	0
2348	20010512	200000	32.2	49.2	0	0	0.0	0	2444	20010516	200000	31.6	52.0	0	21	2.9	0
2349	20010512	210000	31.4	55.9	0	1	0.2	0	2445	20010516	210000	30.0	61.0	0	26	3.7	0
2350	20010512	220000	30.7	58.2	0	7	1.0	0	2446	20010516	220000	29.3	65.9	0	19	2.6	0
2351	20010512	230000	30.0	61.1	0	0	0.0	0	2447	20010516	230000	28.8	69.9	0	15	2.1	0
2352	20010512	240000	29.4	64.3	0	0	0.0	0	2448	20010516	240000	28.1	74.0	0	21	2.9	0
2353	20010513	10000	28.9	70.6	0	8	1.0	0	2449	20010517	10000	28.2	70.6	0	27	4.0	0
2354	20010513	20000	28.3	73.7	0	6	0.8	0	2450	20010517	20000	28.0	70.4	0	7	1.0	0
2355	20010513	30000	27.9	76.7	0	0	0.0	0	2451	20010517	30000	27.1	74.2	0	17	2.4	0
2356	20010513	40000	27.5	79.4	0	0	0.0	0	2452	20010517	40000	26.4	79.6	0	22	3.0	0
2357	20010513	50000	27.1	81.1	0	0	0.0	0	2453	20010517	50000	26.6	76.8	0	18	2.5	0
2358	20010513	60000	26.6	83.1	0	5	0.8	0	2454	20010517	60000	26.8	72.8	0	25	3.6	0
2359	20010513	70000	27.0	79.4	0	1	0.1	0	2455	20010517	70000	27.0	72.5	0	1	0.1	0
2360	20010513	80000	28.7	70.9	0	5	0.7	14	2456	20010517	80000	28.6	68.8	0	26	3.5	14
2361	20010513	90000	30.4	62.3	0	15	2.4	21	2457	20010517	90000	30.3	60.2	0	23	3.2	21
2362	20010513	100000	31.8	55.0	0	19	2.5	28	2458	20010517	100000	33.2	47.9	0	20	2.8	28
2363	20010513	110000	33.0	50.0	0	4	0.6	35	2459	20010517	110000	34.5	46.1	0	29	4.1	35
2364	20010513	120000	34.4	46.2	0	3	0.5	35	2460	20010517	120000	35.5	41.8	0	28	3.8	42
2365	20010513	130000	37.0	34.5	0	2	0.2	35	2461	20010517	130000	37.0	37.1	0	24	3.4	42
2366	20010513	140000	37.8	30.8	0	10	1.4	35	2462	20010517	140000	39.0	27.8	0	11	1.6	42
2367	20010513	150000	38.1	27.4	0	7	1.0	28	2463	20010517	150000	37.8	30.0	0	6	1.0	21
2368	20010513	160000	38.9	24.6	0	7	1.2	21	2464	20010517	160000	38.4	28.1	0	29	3.9	21
2369	20010513	170000	38.4	25.1	0	6	0.8	7	2465	20010517	170000	38.5	28.8	0	39	5.5	14
2370	20010513	180000	36.8	27.4	0	0	0.0	0	2466	20010517	180000	29.7	59.2	0	66	8.5	0
2371	20010513	190000	34.9	33.3	0	0	0.0	0	2467	20010517	190000	30.5	54.9	0	27	3.8	0
2372	20010513	200000	34.0	37.9	0	0	0.0	0	2468	20010517	200000	30.5	42.5	0	28	3.9	0
2373	20010513	210000	32.8	45.5	0	0	0.0	0	2469	20010517	210000	29.8	49.0	0	25	3.5	0
2374	20010513	220000	32.1	50.3	0	16	2.2	0	2470	20010517	220000	30.3	47.3	0	19	2.7	0
2375	20010513	230000	31.3	53.4	0	1	0.1	0	2471	20010517	230000	30.8	47.9	0	25	3.5	0
2376	20010513	240000	30.7	56.6	0	1	0.1	0	2472	20010517	240000	30.6	51.0	0	30	4.1	0
2377	20010514	10000	30.1	59.8	0	1	0.2	0	2473	20010518	10000	29.7	55.4	0	22	3.0	0
2378	20010514	20000	29.4	62.9	0	2	0.3	0	2474	20010518	20000	29.2	57.9	0	19	2.6	0
2379	20010514	300															

Appendice 7 Les données des observations météorologiques (toutes les données)
(14/46)

No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation	No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation
			°C	%	mm	degree	m/s	kWh/m ²				°C	%	mm	degree	m/s	kWh/m ²
	yyyymmdd	hhmmss								yyyymmdd	hhmmss						
2497	20010519	10000	24.9	79.0	0	26	3.5	0	2593	20010523	10000	29.1	50.4	0	29	4.0	0
2498	20010519	20000	24.7	83.7	0	40	5.2	0	2594	20010523	20000	27.5	58.0	0	31	4.2	0
2499	20010519	30000	24.2	81.9	0	23	3.2	0	2595	20010523	30000	27.0	55.8	0	6	0.9	0
2500	20010519	40000	24.0	80.9	0	31	4.4	0	2596	20010523	40000	22.0	96.8	7.5	20	2.9	0
2501	20010519	50000	23.8	81.2	0	16	2.2	0	2597	20010523	50000	22.4	93.2	3.5	14	2.0	0
2502	20010519	60000	23.6	82.5	0	19	2.7	0	2598	20010523	60000	22.1	95.0	2	22	3.0	0
2503	20010519	70000	24.6	75.7	0	25	3.5	7	2599	20010523	70000	22.6	88.3	0	34	4.7	0
2504	20010519	80000	26.1	70.3	0	31	4.1	7	2600	20010523	80000	24.5	75.5	0	19	2.7	7
2505	20010519	90000	27.2	66.4	0	16	2.2	14	2601	20010523	90000	26.5	75.5	0	32	4.3	21
2506	20010519	100000	27.8	56.1	0	33	4.7	14	2602	20010523	100000	28.6	66.5	0	40	5.6	35
2507	20010519	110000	28.3	53.7	0	2	0.3	14	2603	20010523	110000	30.6	52.2	0	41	5.7	42
2508	20010519	120000	31.4	44.0	0	23	3.2	21	2604	20010523	120000	31.6	48.4	0	37	5.1	21
2509	20010519	130000	31.1	44.1	0	21	2.9	14	2605	20010523	130000	32.3	48.1	0	42	5.8	28
2510	20010519	140000	33.0	33.4	0	27	3.7	21	2606	20010523	140000	33.3	44.6	0	33	4.6	35
2511	20010519	150000	33.1	32.3	0	33	4.6	14	2607	20010523	150000	34.1	42.7	0	34	4.7	35
2512	20010519	160000	33.3	32.1	0	32	4.4	7	2608	20010523	160000	34.2	42.1	0	32	4.4	21
2513	20010519	170000	31.6	47.7	0	22	3.1	7	2609	20010523	170000	33.8	43.0	0	40	5.5	14
2514	20010519	180000	30.5	55.2	0	20	2.7	7	2610	20010523	180000	32.5	49.0	0	42	5.8	7
2515	20010519	190000	28.4	63.7	0	23	3.2	0	2611	20010523	190000	30.8	56.8	0	37	5.4	0
2516	20010519	200000	27.4	65.4	0	31	4.3	0	2612	20010523	200000	29.9	61.7	0	24	3.4	0
2517	20010519	210000	26.5	72.4	0	23	3.2	0	2613	20010523	210000	29.1	65.8	0	28	4.0	0
2518	20010519	220000	26.0	79.5	0	20	2.9	0	2614	20010523	220000	28.1	72.2	0	24	3.3	0
2519	20010519	230000	25.5	81.9	0	18	2.5	0	2615	20010523	230000	27.4	57.9	0	7	0.8	0
2520	20010519	240000	25.3	82.6	0	19	2.8	0	2616	20010523	240000	22.2	78.6	0	16	2.2	0
2521	20010520	10000	25.0	83.3	0	18	2.5	0	2617	20010524	10000	20.8	89.6	2	16	2.2	0
2522	20010520	20000	25.1	82.4	0	30	4.2	0	2618	20010524	20000	21.0	94.1	1.5	40	5.7	0
2523	20010520	30000	24.4	86.2	0	29	4.0	0	2619	20010524	30000	21.6	95.9	1.5	43	6.0	0
2524	20010520	40000	24.3	84.4	0	27	3.7	0	2620	20010524	40000	21.7	94.1	0.5	35	4.9	0
2525	20010520	50000	24.3	84.8	0	37	5.0	0	2621	20010524	50000	21.9	92.7	0	38	5.6	0
2526	20010520	60000	24.1	84.8	0	21	3.0	0	2622	20010524	60000	22.0	89.8	0	33	4.5	0
2527	20010520	70000	24.7	81.8	0	25	3.5	7	2623	20010524	70000	22.4	87.7	0	33	4.6	0
2528	20010520	80000	26.9	72.3	0	23	3.2	14	2624	20010524	80000	24.2	76.6	0	32	4.5	14
2529	20010520	90000	29.4	61.7	0	31	4.1	21	2625	20010524	90000	25.9	69.7	0	36	5.1	21
2530	20010520	100000	31.5	51.9	0	32	4.4	28	2626	20010524	100000	28.9	54.1	0	41	5.7	28
2531	20010520	110000	33.3	45.4	0	38	4.8	35	2627	20010524	110000	31.4	43.1	0	39	5.4	35
2532	20010520	120000	35.2	36.8	0	38	5.1	42	2628	20010524	120000	33.1	37.7	0	29	4.1	42
2533	20010520	130000	36.0	34.0	0	35	4.8	42	2629	20010524	130000	34.7	37.1	0	2	0.3	42
2534	20010520	140000	36.8	31.2	0	36	4.7	21	2630	20010524	140000	35.2	31.2	0	31	4.4	35
2535	20010520	150000	36.4	33.3	0	25	3.6	28	2631	20010524	150000	36.4	31.9	0	41	5.7	28
2536	20010520	160000	36.0	30.2	0	23	3.4	21	2632	20010524	160000	36.3	30.0	0	2	0.2	21
2537	20010520	170000	35.0	36.1	0	25	3.5	7	2633	20010524	170000	36.4	29.9	0	31	4.4	14
2538	20010520	180000	33.9	39.4	0	24	3.3	7	2634	20010524	180000	34.9	35.6	0	38	5.2	0
2539	20010520	190000	32.5	45.2	0	19	2.7	0	2635	20010524	190000	31.9	52.8	0	33	4.5	0
2540	20010520	200000	31.7	49.3	0	21	2.9	0	2636	20010524	200000	30.5	54.7	0	28	3.9	0
2541	20010520	210000	31.3	53.5	0	20	2.7	0	2637	20010524	210000	29.6	58.6	0	27	3.8	0
2542	20010520	220000	31.1	54.0	0	18	2.6	0	2638	20010524	220000	29.4	56.6	0	22	3.1	0
2543	20010520	230000	31.2	51.8	0	31	4.6	0	2639	20010524	230000	29.3	56.6	0	20	2.8	0
2544	20010520	240000	30.3	53.6	0	18	2.4	0	2640	20010524	240000	28.6	63.3	0	23	3.2	0
2545	20010521	10000	29.1	56.5	0	22	3.1	0	2641	20010525	10000	28.6	62.6	0	34	4.6	0
2546	20010521	20000	27.3	59.3	0	21	2.8	0	2642	20010525	20000	28.2	65.1	0	26	3.6	0
2547	20010521	30000	25.3	72.8	0	4	0.5	0	2643	20010525	30000	27.5	70.4	0	17	2.4	0
2548	20010521	40000	25.4	72.4	0	25	3.6	0	2644	20010525	40000	27.1	73.1	0	21	2.9	0
2549	20010521	50000	25.5	71.7	0	29	3.9	0	2645	20010525	50000	26.6	75.5	0	34	4.7	0
2550	20010521	60000	23.9	77.5	0	36	5.0	0	2646	20010525	60000	26.6	74.9	0	34	5.1	0
2551	20010521	70000	24.2	76.1	0	20	2.8	0	2647	20010525	70000	26.4	77.4	0	22	3.2	0
2552	20010521	80000	24.8	74.7	0	32	4.5	7	2648	20010525	80000	27.0	74.4	0	32	4.4	7
2553	20010521	90000	27.7	66.6	0	21	2.8	14	2649	20010525	90000	27.8	67.7	0	29	4.2	14
2554	20010521	100000	28.7	63.8	0	27	3.8	7	2650	20010525	100000	28.6	65.3	0	46	6.6	21
2555	20010521	110000	31.1	53.6	0	24	3.3	28	2651	20010525	110000	29.9	60.4	0	27	3.8	28
2556	20010521	120000	34.4	41.0	0	24	3.4	49	2652	20010525	120000	30.4	59.4	0	35	5.3	21
2557	20010521	130000	35.8	33.7	0	19	2.6	49	2653	20010525	130000	31.1	56.9	0	25	3.6	21
2558	20010521	140000	36.0	30.8	0	33	4.5	21	2654	20010525	140000	31.8	54.3	0	28	4.1	21
2559	20010521	150000	34.8	29.8	0	25	3.5	7	2655	20010525	150000	32.6	50.4	0	41	5.8	21
2560	20010521	160000	32.4	49.2	0	70	10.0	21	2656	20010525	160000	30.9	54.2	0	41	5.7	14
2561	20010521	170000	32.5	50.9	0	41	6.1	14	2657	20010525	170000	30.1	56.9	0	48	6.5	7
2562	20010521	180000	31.5	53.1	0	46	6.4	7	2658	20010525	180000	30.4	57.3	0	31	4.3	7
2563	20010521	190000	30.1	57.0	0	41	5.6	0	2659	20010525	190000	28.8	62.9	0	25	3.5	0
2564	20010521	200000	29.5	60.1	0	34	4.7	0	2660	20010525	200000	27.8	68.1	0	18	2.5	0
2565	20010521	210000	28.9	60.5	0	29	4.0	0	2661	20010525	210000	27.6	69.5	0	28	3.9	0
2566	20010521	220000	27.7	67.6	0	25	3.4	0	2662	20010525	220000	27.4	68.6	0	27	3.7	0
2567	20010521	230000	27.4	68.9	0	23	3.2	0	2663	20010525	230000	27.1	68.5	0	25	3.6	0
2568	20010521	240000	27.6	66.5	0	25	3.5	0	2664	20010525	240000	26.4	71.6	0	25	3.5	0
2569	20010522	10000	27.3	67.3	0	26	3.6	0	2665	20010526	10000	25.8	74.3	0	27	3.7	0
2570	20010522	20000	27.2	69.6	0	21	3.0	0	2666	20010526	20000	25.5	74.6	0	30</		

Appendice 7 Les données des observations météorologiques (toutes les données)
(15/46)

No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation	No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation
			°C	%	mm	degree	m/s	kWh/m ²				°C	%	mm	degree	m/s	kWh/m ²
	yyyymmdd	hhmmss								yyyymmdd	hhmmss						
2689	20010527	10000	29.3	52.2	0	29	3.9	0	2785	20010531	10000	25.8	80.7	0	25	3.4	0
2690	20010527	20000	28.2	60.1	0	30	4.1	0	2786	20010531	20000	25.4	84.5	0	27	3.8	0
2691	20010527	30000	27.4	64.7	0	21	3.0	0	2787	20010531	30000	25.0	86.3	0	38	5.1	0
2692	20010527	40000	26.8	65.3	0	29	4.1	0	2788	20010531	40000	24.6	88.9	0	31	4.3	0
2693	20010527	50000	26.2	66.9	0	21	3.0	0	2789	20010531	50000	24.3	90.5	0	17	2.3	0
2694	20010527	60000	25.5	68.6	0	26	3.6	0	2790	20010531	60000	24.2	91.6	0	19	2.6	0
2695	20010527	70000	26.0	66.3	0	25	3.5	7	2791	20010531	70000	25.1	88.2	0	32	4.4	7
2696	20010527	80000	27.8	58.9	0	36	4.9	14	2792	20010531	80000	26.4	82.6	0	41	5.7	14
2697	20010527	90000	29.5	53.0	0	45	5.9	21	2793	20010531	90000	28.0	73.8	0	25	3.5	21
2698	20010527	100000	31.5	47.5	0	30	4.1	35	2794	20010531	100000	29.7	67.7	0	48	6.7	28
2699	20010527	110000	33.2	44.4	0	29	4.0	35	2795	20010531	110000	31.4	63.7	0	24	3.5	35
2700	20010527	120000	33.4	42.9	0	32	4.4	42	2796	20010531	120000	32.9	54.0	0	29	3.9	42
2701	20010527	130000	34.0	41.6	0	27	3.7	42	2797	20010531	130000	34.3	40.9	0	10	1.4	42
2702	20010527	140000	34.8	41.4	0	30	4.2	35	2798	20010531	140000	35.6	35.6	0	23	3.2	35
2703	20010527	150000	34.8	40.2	0	34	4.5	7	2799	20010531	150000	36.1	30.7	0	21	3.0	28
2704	20010527	160000	35.0	38.9	0	25	3.4	21	2800	20010531	160000	36.7	27.6	0	22	2.9	21
2705	20010527	170000	36.4	33.7	0	24	3.1	14	2801	20010531	170000	36.0	26.6	0	1	0.1	14
2706	20010527	180000	34.3	39.4	0	16	2.5	0	2802	20010531	180000	35.4	30.0	0	23	3.1	7
2707	20010527	190000	32.8	41.6	0	18	2.5	0	2803	20010531	190000	32.4	44.0	0	17	2.3	0
2708	20010527	200000	31.6	45.5	0	18	2.5	0	2804	20010531	200000	30.5	56.1	0	17	2.4	0
2709	20010527	210000	31.5	45.2	0	18	2.5	0	2805	20010531	210000	30.1	57.9	0	20	2.8	0
2710	20010527	220000	30.4	51.4	0	17	2.3	0	2806	20010531	220000	29.7	59.4	0	20	2.8	0
2711	20010527	230000	31.5	46.2	0	25	3.4	0	2807	20010531	230000	28.7	61.8	0	18	2.5	0
2712	20010527	240000	29.7	50.9	0	36	5.3	0	2808	20010531	240000	28.5	59.5	0	21	2.9	0
2713	20010528	10000	29.1	51.4	0	25	3.6	0	2809	20010601	10000	28.4	60.2	0	22	2.9	0
2714	20010528	20000	28.3	51.8	0	35	4.8	0	2810	20010601	20000	28.2	60.9	0	28	3.7	0
2715	20010528	30000	27.8	52.2	0	22	3.1	0	2811	20010601	30000	27.9	59.6	0	20	2.8	0
2716	20010528	40000	26.4	60.4	0	19	2.4	0	2812	20010601	40000	26.8	67.1	0	33	4.6	0
2717	20010528	50000	25.5	66.0	0	20	2.8	0	2813	20010601	50000	26.2	71.2	0	27	3.8	0
2718	20010528	60000	24.6	71.4	0	18	2.4	0	2814	20010601	60000	26.0	72.6	0	26	3.5	0
2719	20010528	70000	25.0	71.0	0	24	3.4	7	2815	20010601	70000	26.6	71.3	0	23	3.1	7
2720	20010528	80000	26.9	66.5	0	29	4.1	14	2816	20010601	80000	27.1	68.8	0	6	0.8	7
2721	20010528	90000	29.4	50.8	0	33	4.5	21	2817	20010601	90000	28.7	64.3	0	33	4.5	7
2722	20010528	100000	31.1	42.1	0	25	3.5	35	2818	20010601	100000	30.5	60.6	0	27	3.9	28
2723	20010528	110000	32.9	37.9	0	15	2.3	35	2819	20010601	110000	32.0	55.5	0	23	3.2	35
2724	20010528	120000	34.9	32.2	0	32	4.6	42	2820	20010601	120000	33.2	48.1	0	29	4.0	42
2725	20010528	130000	35.4	31.1	0	41	5.1	42	2821	20010601	130000	33.9	45.5	0	0	0.0	42
2726	20010528	140000	37.0	27.0	0	35	4.7	35	2822	20010601	140000	35.0	40.4	0	9	1.3	14
2727	20010528	150000	36.8	27.7	0	17	2.4	28	2823	20010601	150000	36.7	33.1	0	21	2.8	35
2728	20010528	160000	37.2	24.8	0	25	3.4	14	2824	20010601	160000	36.7	32.3	0	23	3.2	28
2729	20010528	170000	37.7	24.1	0	21	2.9	14	2825	20010601	170000	34.2	38.0	0	21	2.9	0
2730	20010528	180000	35.9	27.2	0	19	2.2	7	2826	20010601	180000	31.5	47.6	0	46	6.3	0
2731	20010528	190000	33.0	33.2	0	17	2.3	0	2827	20010601	190000	30.5	52.3	0	37	5.1	0
2732	20010528	200000	32.7	34.5	0	15	2.0	0	2828	20010601	200000	29.4	57.4	0	31	4.3	0
2733	20010528	210000	32.4	36.3	0	14	2.0	0	2829	20010601	210000	28.6	58.9	0	32	4.5	0
2734	20010528	220000	30.6	44.2	0	25	3.4	0	2830	20010601	220000	26.3	65.3	0.5	24	3.3	0
2735	20010528	230000	31.0	42.7	0	21	2.9	0	2831	20010601	230000	24.3	87.6	6	2	0.2	0
2736	20010528	240000	30.9	44.7	0	25	3.6	0	2832	20010601	240000	24.3	88.2	0	14	2.0	0
2737	20010529	10000	30.2	48.8	0	36	5.1	0	2833	20010602	10000	25.2	78.9	0	19	2.7	0
2738	20010529	20000	29.4	52.7	0	25	3.4	0	2834	20010602	20000	25.2	81.6	0	29	4.1	0
2739	20010529	30000	28.9	55.0	0	28	3.8	0	2835	20010602	30000	25.1	80.6	0	19	2.6	0
2740	20010529	40000	28.4	59.1	0	38	5.3	0	2836	20010602	40000	24.9	78.3	0	25	3.4	0
2741	20010529	50000	27.3	63.7	0	20	2.8	0	2837	20010602	50000	24.7	77.1	0	6	0.8	0
2742	20010529	60000	26.8	65.6	0	17	2.3	0	2838	20010602	60000	24.6	79.0	0	29	4.0	0
2743	20010529	70000	27.1	66.3	0	29	4.0	7	2839	20010602	70000	24.5	78.2	0	40	5.8	0
2744	20010529	80000	29.3	58.1	0	39	5.5	14	2840	20010602	80000	25.3	76.7	0	31	4.2	7
2745	20010529	90000	31.1	51.7	0	35	5.3	21	2841	20010602	90000	27.2	72.4	0	19	2.6	21
2746	20010529	100000	32.5	47.3	0	50	6.8	28	2842	20010602	100000	29.4	64.8	0	28	3.9	28
2747	20010529	110000	34.4	42.1	0	23	3.1	35	2843	20010602	110000	30.7	58.3	0	32	4.4	35
2748	20010529	120000	34.9	39.5	0	19	2.6	14	2844	20010602	120000	31.8	56.3	0	22	3.2	35
2749	20010529	130000	36.3	34.8	0	45	6.3	42	2845	20010602	130000	33.1	47.2	0	32	4.6	35
2750	20010529	140000	37.1	32.0	0	26	3.7	35	2846	20010602	140000	34.2	42.3	0	45	6.1	35
2751	20010529	150000	38.1	29.7	0	28	3.8	35	2847	20010602	150000	34.7	39.1	0	10	1.4	28
2752	20010529	160000	37.5	28.9	0	12	1.6	7	2848	20010602	160000	35.6	35.1	0	40	5.4	21
2753	20010529	170000	36.6	31.0	0	25	3.4	7	2849	20010602	170000	34.9	40.6	0	28	4.1	14
2754	20010529	180000	29.5	58.2	0	39	5.3	0	2850	20010602	180000	33.5	45.1	0	21	2.8	0
2755	20010529	190000	23.9	86.7	13.5	9	1.3	0	2851	20010602	190000	31.8	52.1	0	28	3.9	0
2756	20010529	200000	24.5	86.0	1	14	2.0	0	2852	20010602	200000	31.2	51.0	0	36	5.0	0
2757	20010529	210000	22.9	93.5	2.5	23	3.2	0	2853	20010602	210000	29.6	52.8	0	29	4.0	0
2758	20010529	220000	22.6	94.0	1	17	2.3	0	2854	20010602	220000	29.4	54.7	0	18	2.6	0
2759	20010529	230000	22.5	89.1	1.5	38	5.3	0	2855	20010602	230000	29.1	64.0	0	20	2.7	0
2760	20010529	240000	22.9	87.2	0	28	3.7	0	2856	20010602	240000	28.9	62.0	0	31	4.3	0
2761	20010530	10000	23.0	89.6	0	29	4.0	0	2857	20010603	10000	27.9	66.2	0	30	4.1	0
2762	20010530	20000	23.1	88.8	0	19	2.6	0	2858	20010603	20000	27.8	56.5	0	53		

Appendice 7 Les données des observations météorologiques (toutes les données)

(16/46)

No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation	No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation
			C	%	mm	degree	m/s	kW/m ²				C	%	mm	degree	m/s	kW/m ²
	yyyymmdd	hhmmss								yyyymmdd	hhmmss						
2881	20010604	10000	26.1	64.3	0	39	5.4	0	2977	20010608	10000	26.5	78.1	0	16	2.2	0
2882	20010604	20000	25.5	66.0	0	30	4.2	0	2978	20010608	20000	26.1	80.5	0	20	2.7	0
2883	20010604	30000	24.3	79.2	0	32	4.5	0	2979	20010608	30000	26.1	76.5	0	20	2.8	0
2884	20010604	40000	23.8	75.1	0	7	1.0	0	2980	20010608	40000	25.8	69.4	0	9	1.4	0
2885	20010604	50000	23.6	79.4	0	8	1.1	0	2981	20010608	50000	24.2	76.6	0	41	5.7	0
2886	20010604	60000	23.4	80.8	0	21	2.9	0	2982	20010608	60000	23.1	82.2	0	9	1.2	0
2887	20010604	70000	25.4	63.9	0	24	3.4	0	2983	20010608	70000	23.0	82.8	0	38	5.3	0
2888	20010604	80000	26.4	71.1	0	14	1.9	7	2984	20010608	80000	23.6	79.1	0	30	4.3	7
2889	20010604	90000	27.9	65.3	0	18	2.5	14	2985	20010608	90000	25.4	71.9	0	33	4.5	14
2890	20010604	100000	29.5	54.3	0	20	2.6	28	2986	20010608	100000	27.6	66.1	0	11	1.5	21
2891	20010604	110000	31.0	47.3	0	37	5.1	35	2987	20010608	110000	27.0	67.1	0	50	6.7	0
2892	20010604	120000	31.9	42.9	0	22	3.0	42	2988	20010608	120000	22.7	90.7	1	12	1.5	7
2893	20010604	130000	33.5	38.3	0	37	5.0	42	2989	20010608	130000	25.1	78.1	0	44	6.2	21
2894	20010604	140000	34.0	38.0	0	25	3.4	42	2990	20010608	140000	26.0	75.5	0	32	4.6	7
2895	20010604	150000	35.6	34.3	0	37	5.6	28	2991	20010608	150000	27.0	70.7	0	46	6.5	14
2896	20010604	160000	34.7	35.3	0	39	5.6	14	2992	20010608	160000	27.7	65.3	0	14	2.0	14
2897	20010604	170000	35.1	32.7	0	39	5.2	14	2993	20010608	170000	28.0	67.8	0	27	3.7	7
2898	20010604	180000	34.7	33.0	0	26	3.6	7	2994	20010608	180000	27.5	68.0	0	36	4.8	0
2899	20010604	190000	31.4	45.3	0	21	2.9	0	2995	20010608	190000	26.3	74.0	0	27	3.7	0
2900	20010604	200000	29.2	52.0	0	19	2.6	0	2996	20010608	200000	25.8	75.8	0	33	4.6	0
2901	20010604	210000	28.2	54.4	0	25	3.5	0	2997	20010608	210000	24.7	82.2	0	41	5.6	0
2902	20010604	220000	28.6	50.4	0	9	1.3	0	2998	20010608	220000	23.3	91.3	0	40	5.6	0
2903	20010604	230000	28.6	44.8	0	28	3.9	0	2999	20010608	230000	22.8	93.4	0	41	5.6	0
2904	20010604	240000	28.3	51.6	0	21	3.0	0	3000	20010608	240000	22.5	95.5	0	3	0.4	0
2905	20010605	10000	27.2	59.0	0	28	3.9	0	3001	20010609	10000	22.2	96.6	0	19	2.6	0
2906	20010605	20000	26.3	65.7	0	18	2.5	0	3002	20010609	20000	22.0	97.2	0	19	2.6	0
2907	20010605	30000	25.9	72.4	0	1	0.1	0	3003	20010609	30000	21.9	97.3	0	30	4.2	0
2908	20010605	40000	25.6	75.2	0	29	4.0	0	3004	20010609	40000	22.0	94.9	0	28	3.9	0
2909	20010605	50000	24.9	79.0	0	26	3.7	0	3005	20010609	50000	22.2	93.3	0	28	3.9	0
2910	20010605	60000	24.5	81.2	0	18	2.5	0	3006	20010609	60000	22.2	92.1	0	29	4.1	0
2911	20010605	70000	25.1	78.7	0	18	2.5	7	3007	20010609	70000	23.4	88.3	0	24	3.3	7
2912	20010605	80000	26.9	72.1	0	28	3.7	14	3008	20010609	80000	25.9	80.8	0	30	4.0	14
2913	20010605	90000	28.7	63.2	0	33	4.2	21	3009	20010609	90000	28.0	71.8	0	27	3.8	21
2914	20010605	100000	31.0	54.4	0	54	7.6	28	3010	20010609	100000	29.7	61.2	0	28	3.9	21
2915	20010605	110000	32.3	51.6	0	34	4.5	35	3011	20010609	110000	31.0	56.0	0	7	1.0	42
2916	20010605	120000	33.5	48.9	0	30	4.3	42	3012	20010609	120000	32.0	49.8	0	26	3.8	42
2917	20010605	130000	34.2	41.1	0	25	3.6	42	3013	20010609	130000	32.4	47.5	0	8	1.1	21
2918	20010605	140000	34.5	39.2	0	43	5.8	28	3014	20010609	140000	27.3	61.6	0	63	9.0	14
2919	20010605	150000	35.3	36.9	0	36	5.3	28	3015	20010609	150000	26.8	65.1	0	22	3.0	7
2920	20010605	160000	35.8	33.2	0	23	3.2	21	3016	20010609	160000	27.5	64.3	0	25	3.4	7
2921	20010605	170000	36.5	31.1	0	30	4.2	14	3017	20010609	170000	27.0	66.0	0	18	2.6	7
2922	20010605	180000	34.9	35.3	0	18	2.5	7	3018	20010609	180000	26.7	64.7	0	16	2.3	0
2923	20010605	190000	32.6	46.7	0	15	2.1	0	3019	20010609	190000	26.1	70.3	0	23	3.2	0
2924	20010605	200000	31.7	46.5	0	19	2.6	0	3020	20010609	200000	25.4	78.0	0	32	4.5	0
2925	20010605	210000	31.9	44.3	0	23	3.3	0	3021	20010609	210000	24.4	82.1	0	38	5.2	0
2926	20010605	220000	30.3	56.7	0	34	4.5	0	3022	20010609	220000	23.7	83.4	0	31	4.3	0
2927	20010605	230000	29.6	58.7	0	31	4.1	0	3023	20010609	230000	23.3	86.7	0	29	4.1	0
2928	20010605	240000	29.0	58.8	0	30	4.1	0	3024	20010609	240000	23.1	86.8	0	31	4.2	0
2929	20010606	10000	28.3	62.5	0	23	3.1	0	3025	20010610	10000	22.8	87.3	0	45	5.9	0
2930	20010606	20000	27.4	67.4	0	26	3.7	0	3026	20010610	20000	22.4	89.6	0	34	4.8	0
2931	20010606	30000	26.8	71.2	0	16	2.3	0	3027	20010610	30000	22.1	91.4	0	34	4.5	0
2932	20010606	40000	26.3	74.1	0	30	4.3	0	3028	20010610	40000	21.9	93.1	0	32	4.5	0
2933	20010606	50000	25.9	74.8	0	21	3.0	0	3029	20010610	50000	21.6	93.1	0	36	5.0	0
2934	20010606	60000	25.2	79.1	0	27	3.7	0	3030	20010610	60000	21.5	93.1	0	40	5.5	0
2935	20010606	70000	25.8	76.3	0	19	2.6	7	3031	20010610	70000	21.9	89.1	0	33	4.7	0
2936	20010606	80000	27.1	68.1	0	25	3.5	14	3032	20010610	80000	23.7	79.2	0	46	6.8	14
2937	20010606	90000	27.9	64.2	0	30	3.8	14	3033	20010610	90000	26.0	68.3	0	45	6.1	21
2938	20010606	100000	30.0	57.4	0	28	3.8	28	3034	20010610	100000	27.7	59.9	0	48	6.6	28
2939	20010606	110000	31.0	53.2	0	27	4.0	35	3035	20010610	110000	29.5	55.5	0	32	4.5	35
2940	20010606	120000	32.3	48.7	0	36	4.7	42	3036	20010610	120000	31.2	50.1	0	38	5.4	35
2941	20010606	130000	32.9	43.0	0	33	4.7	35	3037	20010610	130000	32.9	45.9	0	29	4.1	35
2942	20010606	140000	33.1	40.0	0	41	5.6	21	3038	20010610	140000	33.8	42.6	0	33	4.6	35
2943	20010606	150000	25.9	69.7	0	27	3.5	7	3039	20010610	150000	34.4	40.4	0	29	4.0	28
2944	20010606	160000	24.1	78.9	0	17	2.3	7	3040	20010610	160000	35.0	38.7	0	36	5.0	21
2945	20010606	170000	27.1	61.8	0.5	24	3.3	7	3041	20010610	170000	34.6	36.8	0	53	7.8	14
2946	20010606	180000	25.3	69.2	0	26	3.9	0	3042	20010610	180000	33.7	40.8	0	42	6.0	7
2947	20010606	190000	23.7	80.2	0	19	2.6	0	3043	20010610	190000	31.4	50.7	0	36	5.2	0
2948	20010606	200000	23.6	82.5	0	7	1.0	0	3044	20010610	200000	30.3	56.8	0	31	4.2	0
2949	20010606	210000	24.8	70.9	0	16	2.2	0	3045	20010610	210000	29.5	60.7	0	26	3.6	0
2950	20010606	220000	24.8	70.1	0	31	4.3	0	3046	20010610	220000	29.0	63.4	0	25	3.5	0
2951	20010606	230000	25.0	70.2	0	28	3.9	0	3047	20010610	230000	28.7	62.7	0	18	2.5	0
2952	20010606	240000	25.2	68.7	0	27	3.8	0	3048	20010610	240000	28.0	66.7	0	24	3.3	0
2953	20010607	10000	24.3	77.4	0	24	3.3	0	3049	20010611	10000	27.6	68.9	0	22	3.1	0
2954	20010607	20000	23.8	80.8	0	20	2.8	0	3050	20010611	20000	27.4	69.0				

Appendice 7 Les données des observations météorologiques (toutes les données)
(17/46)

No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation	No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation
			C	%	mm	degree	m/s	kW/m ²				C	%	mm	degree	m/s	kW/m ²
	yyyymmdd	hhmmss								yyyymmdd	hhmmss						
3073	20010612	10000	26.1	54.1	0	22	3.0	0	3169	20010616	10000	23.4	75.0	0	39	5.4	0
3074	20010612	20000	25.2	59.3	0	9	1.2	0	3170	20010616	20000	23.8	70.3	0	19	2.5	0
3075	20010612	30000	24.8	68.8	0	13	1.7	0	3171	20010616	30000	23.2	75.7	0	28	3.8	0
3076	20010612	40000	21.8	77.6	0	16	2.9	0	3172	20010616	40000	22.7	77.2	0	18	2.5	0
3077	20010612	50000	21.4	83.0	0	40	5.8	0	3173	20010616	50000	24.1	73.8	0	16	2.1	0
3078	20010612	60000	20.8	87.8	0	0	0.0	0	3174	20010616	60000	23.4	76.5	0	19	2.6	0
3079	20010612	70000	21.5	85.6	0	20	2.8	7	3175	20010616	70000	24.3	73.8	0	23	3.2	7
3080	20010612	80000	23.7	75.1	0	23	3.0	7	3176	20010616	80000	26.3	64.6	2	19	2.7	14
3081	20010612	90000	26.7	59.2	0	32	4.6	21	3177	20010616	90000	28.5	52.7	0	26	3.5	21
3082	20010612	100000	29.8	47.0	0	23	3.1	28	3178	20010616	100000	31.0	42.0	0	44	5.8	28
3083	20010612	110000	32.7	39.4	0	16	2.1	35	3179	20010616	110000	31.5	50.4	0	31	4.3	35
3084	20010612	120000	32.9	38.4	0	6	1.0	28	3180	20010616	120000	33.1	44.6	0	34	4.7	42
3085	20010612	130000	32.8	38.0	0	34	4.9	21	3181	20010616	130000	34.6	38.2	0	32	4.7	21
3086	20010612	140000	34.7	36.4	0	15	2.1	35	3182	20010616	140000	34.2	38.4	0	44	6.3	35
3087	20010612	150000	35.8	34.0	0	25	3.5	28	3183	20010616	150000	34.8	35.4	0	44	5.9	35
3088	20010612	160000	35.1	34.6	0	27	3.7	21	3184	20010616	160000	34.1	38.5	0	35	5.0	7
3089	20010612	170000	34.1	36.3	0	21	2.9	14	3185	20010616	170000	33.4	41.3	0	30	4.1	7
3090	20010612	180000	32.7	40.1	0	8	1.2	7	3186	20010616	180000	32.2	43.3	0	24	3.3	0
3091	20010612	190000	31.3	42.9	0	19	2.6	0	3187	20010616	190000	31.1	45.6	0	20	2.7	0
3092	20010612	200000	30.5	48.6	0	17	2.4	0	3188	20010616	200000	30.1	49.5	0	21	2.8	0
3093	20010612	210000	29.9	51.4	0	35	4.7	0	3189	20010616	210000	29.2	53.5	0	21	3.0	0
3094	20010612	220000	29.4	53.8	0	23	3.1	0	3190	20010616	220000	29.0	55.2	0	20	2.7	0
3095	20010612	230000	27.9	60.5	0	20	2.7	0	3191	20010616	230000	28.2	59.8	0	26	3.5	0
3096	20010612	240000	28.7	57.1	0	16	2.1	0	3192	20010616	240000	27.7	64.2	0	21	3.0	0
3097	20010613	10000	27.6	61.7	0	22	3.0	0	3193	20010617	10000	27.2	67.1	0	28	3.9	0
3098	20010613	20000	27.2	64.5	0	21	3.0	0	3194	20010617	20000	26.5	70.3	0	31	4.3	0
3099	20010613	30000	26.8	67.1	0	25	3.5	0	3195	20010617	30000	26.0	73.0	0	32	4.5	0
3100	20010613	40000	25.4	74.8	0	26	3.7	0	3196	20010617	40000	25.5	76.1	0	33	4.6	0
3101	20010613	50000	25.6	74.3	0	18	2.4	0	3197	20010617	50000	25.1	78.6	0	16	2.2	0
3102	20010613	60000	25.6	74.8	0	21	3.0	0	3198	20010617	60000	24.8	80.5	0	26	3.6	0
3103	20010613	70000	26.0	75.0	0	21	2.9	7	3199	20010617	70000	25.4	78.1	0	28	3.8	7
3104	20010613	80000	27.3	70.2	0	28	3.9	14	3200	20010617	80000	27.3	68.9	0	43	5.9	14
3105	20010613	90000	28.2	66.2	0	24	3.3	14	3201	20010617	90000	29.2	60.9	0	49	6.8	21
3106	20010613	100000	30.2	58.1	0	31	4.3	28	3202	20010617	100000	31.0	53.7	0	27	3.8	28
3107	20010613	110000	30.0	56.6	0	9	1.3	14	3203	20010617	110000	32.3	47.2	0	49	6.6	35
3108	20010613	120000	30.9	55.1	0	27	3.8	28	3204	20010617	120000	33.5	43.1	0	27	3.7	28
3109	20010613	130000	33.2	41.8	0	14	2.3	14	3205	20010617	130000	33.9	42.0	0	32	4.4	35
3110	20010613	140000	33.6	40.9	0	23	3.3	14	3206	20010617	140000	34.3	39.1	0	47	6.3	14
3111	20010613	150000	34.6	37.2	0	25	3.4	35	3207	20010617	150000	34.7	36.4	0	24	3.2	7
3112	20010613	160000	34.2	37.8	0	23	3.4	28	3208	20010617	160000	35.1	36.9	0	44	5.7	14
3113	20010613	170000	33.0	39.3	0	27	3.8	7	3209	20010617	170000	28.9	57.0	0	25	3.6	0
3114	20010613	180000	32.3	43.7	0	26	3.7	7	3210	20010617	180000	24.0	87.9	8.5	18	2.5	0
3115	20010613	190000	30.5	54.6	0	45	6.3	0	3211	20010617	190000	21.6	95.4	46	16	2.1	0
3116	20010613	200000	28.1	63.3	0	5	0.6	0	3212	20010617	200000	21.1	93.0	3.5	48	6.6	0
3117	20010613	210000	27.1	66.7	0	0	0.0	0	3213	20010617	210000	21.5	92.3	1	33	4.6	0
3118	20010613	220000	26.7	70.1	0	2	0.3	0	3214	20010617	220000	21.2	92.3	0	40	5.6	0
3119	20010613	230000	26.6	72.5	0	7	0.9	0	3215	20010617	230000	21.6	91.2	0	30	4.2	0
3120	20010613	240000	25.9	72.2	0	14	2.0	0	3216	20010617	240000	21.7	94.9	0	18	2.5	0
3121	20010614	10000	26.2	61.7	0	26	3.6	0	3217	20010618	10000	21.5	95.2	0	20	2.8	0
3122	20010614	20000	26.6	62.5	0	15	2.0	0	3218	20010618	20000	21.5	95.9	0	30	4.2	0
3123	20010614	30000	26.8	62.5	0	36	4.7	0	3219	20010618	30000	21.6	96.8	0	40	5.6	0
3124	20010614	40000	22.5	76.8	0	25	3.5	0	3220	20010618	40000	21.8	95.0	0	32	4.4	0
3125	20010614	50000	24.5	64.8	0	50	6.9	0	3221	20010618	50000	22.1	93.2	0	32	4.6	0
3126	20010614	60000	23.2	74.1	0	29	4.0	0	3222	20010618	60000	22.2	91.3	0	30	4.0	0
3127	20010614	70000	24.1	72.6	0	27	3.7	7	3223	20010618	70000	22.4	91.2	0	22	3.0	0
3128	20010614	80000	25.8	70.6	0	37	5.2	14	3224	20010618	80000	23.0	91.6	0	27	3.7	7
3129	20010614	90000	28.9	59.6	0	27	3.8	21	3225	20010618	90000	25.3	81.5	0	34	4.6	21
3130	20010614	100000	30.7	50.3	0	38	5.3	28	3226	20010618	100000	27.0	70.1	0	29	4.0	35
3131	20010614	110000	32.4	41.3	0	9	1.2	42	3227	20010618	110000	28.2	64.8	0	32	4.6	21
3132	20010614	120000	33.7	38.6	0	56	7.4	42	3228	20010618	120000	29.5	60.6	0	42	5.9	42
3133	20010614	130000	34.5	40.2	0	46	6.1	42	3229	20010618	130000	30.8	57.7	0	37	5.1	42
3134	20010614	140000	34.6	40.6	0	44	6.3	42	3230	20010618	140000	31.7	54.4	0	32	4.1	35
3135	20010614	150000	36.2	35.2	0	52	6.8	28	3231	20010618	150000	32.8	47.9	0	33	4.6	28
3136	20010614	160000	36.6	33.4	0	12	1.6	28	3232	20010618	160000	33.0	45.8	0	33	4.6	21
3137	20010614	170000	35.3	36.6	0	39	5.4	14	3233	20010618	170000	32.4	48.4	0	23	3.1	14
3138	20010614	180000	34.2	41.2	0	14	1.9	0	3234	20010618	180000	31.4	55.2	0	28	3.9	7
3139	20010614	190000	33.2	44.7	0	5	0.7	0	3235	20010618	190000	30.0	59.9	0	28	3.9	0
3140	20010614	200000	31.1	54.9	0	26	3.6	0	3236	20010618	200000	28.0	74.5	0	20	2.7	0
3141	20010614	210000	30.1	58.9	0	36	5.3	0	3237	20010618	210000	27.6	76.3	0	32	4.4	0
3142	20010614	220000	29.4	61.2	0	28	4.0	0	3238	20010618	220000	27.0	77.6	0	26	3.6	0
3143	20010614	230000	28.6	65.0	0	38	5.3	0	3239	20010618	230000	27.1	75.4	0	19	2.7	0
3144	20010614	240000	27.5	57.6	0	27	3.7	0	3240	20010618	240000	26.9	74.6	0	18	2.5	0
3145	20010615	10000	25.2	63.4	0	27	3.8	0	3241	20010619	10000	26.5	76.7	0	19	2.6	0
3146	20010615	20000	24.8	65.4	0	30	4.2	0	3242	20010619	20000	26.6	74.5	0	19	2.6	0

Appendice 7 Les données des observations météorologiques (toutes les données) (18/46)

No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation	No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation
			C	%	mm	degree	m/s	kW/m ²				C	%	mm	degree	m/s	kW/m ²
	yyyymmdd	hhmmss								yyyymmdd	hhmmss						
3265	20010620	10000	28.1	69.3	0	32	4.7	0	3361	20010624	10000	24.4	88.1	0	33	4.6	0
3266	20010620	20000	27.5	72.0	0	24	3.2	0	3362	20010624	20000	23.6	94.2	0	27	3.7	0
3267	20010620	30000	26.6	68.3	0	31	4.1	0	3363	20010624	30000	23.2	95.2	0	30	4.1	0
3268	20010620	40000	25.6	71.1	0	21	2.9	0	3364	20010624	40000	23.0	95.6	0	28	3.9	0
3269	20010620	50000	25.2	76.8	0	20	2.7	0	3365	20010624	50000	22.9	95.3	0	23	3.2	0
3270	20010620	60000	24.8	79.6	0	21	2.9	0	3366	20010624	60000	22.8	95.4	0	27	3.7	0
3271	20010620	70000	25.1	76.6	0	27	3.6	0	3367	20010624	70000	23.6	92.8	0	25	3.5	7
3272	20010620	80000	25.8	73.2	0	33	4.6	7	3368	20010624	80000	25.2	81.6	0	19	2.6	14
3273	20010620	90000	28.1	65.5	0	40	5.4	21	3369	20010624	90000	26.6	74.2	0	21	3.0	21
3274	20010620	100000	30.5	62.0	0	36	4.9	28	3370	20010624	100000	27.6	72.4	0	28	3.8	28
3275	20010620	110000	32.2	54.7	0	32	4.4	35	3371	20010624	110000	29.3	65.5	0	23	3.2	28
3276	20010620	120000	33.0	50.6	0	21	2.9	42	3372	20010624	120000	20.5	95.4	6	15	1.9	0
3277	20010620	130000	33.3	46.2	0	39	5.4	42	3373	20010624	130000	21.2	92.4	2.5	11	1.6	7
3278	20010620	140000	34.7	44.6	0	30	4.1	14	3374	20010624	140000	22.1	92.9	0	15	2.1	7
3279	20010620	150000	35.6	40.5	0	27	3.8	35	3375	20010624	150000	21.8	90.7	0	3	0.3	7
3280	20010620	160000	34.3	41.1	0	17	2.3	7	3376	20010624	160000	23.1	88.2	0	18	2.5	14
3281	20010620	170000	25.1	77.6	3	8	1.2	0	3377	20010624	170000	23.6	86.2	0	18	2.5	7
3282	20010620	180000	25.1	74.1	0	24	3.4	0	3378	20010624	180000	23.5	84.8	0	21	3.0	0
3283	20010620	190000	25.1	73.8	0	22	3.1	0	3379	20010624	190000	23.0	88.5	0	41	5.6	0
3284	20010620	200000	25.3	76.2	0	8	1.1	0	3380	20010624	200000	22.6	91.3	0	21	2.9	0
3285	20010620	210000	25.9	65.8	0	21	2.9	0	3381	20010624	210000	22.4	96.8	0	21	2.9	0
3286	20010620	220000	26.2	72.3	0	22	3.0	0	3382	20010624	220000	22.3	92.9	0	42	5.9	0
3287	20010620	230000	26.4	71.0	0	19	2.5	0	3383	20010624	230000	22.2	97.5	0	40	5.5	0
3288	20010620	240000	26.1	74.8	0	24	3.2	0	3384	20010624	240000	22.0	97.7	0	32	4.4	0
3289	20010621	10000	25.6	78.1	0	20	2.8	0	3385	20010625	10000	21.8	98.4	0	32	4.4	0
3290	20010621	20000	25.4	80.9	0	25	3.5	0	3386	20010625	20000	21.7	98.1	0	20	2.7	0
3291	20010621	30000	25.4	81.9	0	26	3.6	0	3387	20010625	30000	21.7	97.6	0	22	3.1	0
3292	20010621	40000	24.8	84.3	0	27	3.8	0	3388	20010625	40000	21.5	97.9	0	29	4.1	0
3293	20010621	50000	24.8	82.3	0	20	2.8	0	3389	20010625	50000	21.6	97.9	0	24	3.4	0
3294	20010621	60000	24.3	86.7	0	36	5.0	0	3390	20010625	60000	21.5	98.1	0	22	3.1	0
3295	20010621	70000	24.9	83.8	0	20	2.7	0	3391	20010625	70000	21.9	97.7	0	26	3.7	7
3296	20010621	80000	25.6	81.8	0	34	4.3	7	3392	20010625	80000	22.8	92.0	0	32	4.4	7
3297	20010621	90000	28.0	72.8	0	33	4.5	21	3393	20010625	90000	25.0	79.7	0	19	2.7	21
3298	20010621	100000	27.6	75.4	0	42	6.7	14	3394	20010625	100000	26.5	72.9	0	24	3.3	35
3299	20010621	110000	29.5	69.2	0	43	5.8	28	3395	20010625	110000	27.5	73.8	0	33	4.6	14
3300	20010621	120000	30.0	67.7	0	42	5.6	14	3396	20010625	120000	27.7	70.1	0	25	3.6	14
3301	20010621	130000	30.8	64.0	0	33	4.5	42	3397	20010625	130000	28.6	67.7	0	35	4.9	14
3302	20010621	140000	31.7	55.8	0	23	3.2	28	3398	20010625	140000	30.2	66.5	0	43	5.9	21
3303	20010621	150000	32.6	50.8	0	42	6.0	28	3399	20010625	150000	30.7	57.1	0	24	3.2	35
3304	20010621	160000	32.3	51.6	0	52	7.1	21	3400	20010625	160000	30.6	57.3	0	23	3.2	14
3305	20010621	170000	32.4	52.3	0	54	7.7	14	3401	20010625	170000	31.2	56.0	0	20	2.8	21
3306	20010621	180000	23.0	94.1	4.5	13	1.7	0	3402	20010625	180000	30.5	55.6	0	31	4.3	7
3307	20010621	190000	22.2	97.4	27.5	38	4.9	0	3403	20010625	190000	28.0	70.6	0	16	2.3	0
3308	20010621	200000	22.9	95.0	0	30	4.1	0	3404	20010625	200000	26.8	83.1	0	18	2.6	0
3309	20010621	210000	23.1	91.1	0	29	4.0	0	3405	20010625	210000	26.8	77.8	0	28	3.9	0
3310	20010621	220000	22.6	94.9	0	26	3.7	0	3406	20010625	220000	26.2	83.2	0	28	3.9	0
3311	20010621	230000	22.6	95.3	0	23	3.2	0	3407	20010625	230000	25.4	86.5	0	26	3.6	0
3312	20010621	240000	22.7	92.5	0	17	2.4	0	3408	20010625	240000	25.5	83.1	0	26	3.6	0
3313	20010622	10000	22.9	94.0	0	38	5.4	0	3409	20010626	10000	25.1	85.3	0	27	3.7	0
3314	20010622	20000	22.8	95.5	0	22	3.0	0	3410	20010626	20000	24.8	84.9	0	26	3.6	0
3315	20010622	30000	22.9	94.9	0	18	2.5	0	3411	20010626	30000	24.5	88.5	0	27	3.8	0
3316	20010622	40000	23.3	90.0	0	19	2.6	0	3412	20010626	40000	24.3	87.5	0	25	3.4	0
3317	20010622	50000	23.4	89.6	0	39	5.3	0	3413	20010626	50000	24.2	86.9	0	27	3.7	0
3318	20010622	60000	22.5	96.9	10.5	3	0.4	0	3414	20010626	60000	23.7	91.1	0	31	4.3	0
3319	20010622	70000	22.7	96.8	0	38	5.2	0	3415	20010626	70000	24.2	88.7	0	24	3.3	7
3320	20010622	80000	22.8	97.4	0	30	4.1	0	3416	20010626	80000	25.1	85.0	0	26	3.5	7
3321	20010622	90000	22.5	94.8	0	19	2.6	0	3417	20010626	90000	27.0	77.3	0	32	4.4	21
3322	20010622	100000	21.7	95.4	0	18	2.5	0	3418	20010626	100000	28.8	69.4	0	30	4.1	28
3323	20010622	110000	22.3	93.5	0	17	2.3	7	3419	20010626	110000	30.0	64.6	0	32	4.5	42
3324	20010622	120000	21.9	94.3	0	27	3.7	7	3420	20010626	120000	30.0	63.4	0	42	5.6	42
3325	20010622	130000	23.1	88.6	0.5	47	6.6	14	3421	20010626	130000	30.9	55.7	0	39	5.4	42
3326	20010622	140000	24.0	87.3	0	44	6.0	14	3422	20010626	140000	32.9	51.2	0	25	3.4	42
3327	20010622	150000	24.9	83.4	0	43	5.9	14	3423	20010626	150000	33.4	47.5	0	20	2.8	35
3328	20010622	160000	26.7	77.9	0	52	7.0	14	3424	20010626	160000	30.5	55.4	0	42	5.8	7
3329	20010622	170000	28.6	67.2	0	39	5.4	14	3425	20010626	170000	22.7	95.0	4	9	1.1	0
3330	20010622	180000	26.6	77.5	0	19	2.6	7	3426	20010626	180000	23.4	92.1	0	1	0.2	0
3331	20010622	190000	25.3	86.5	0	29	4.0	0	3427	20010626	190000	23.9	94.5	0	42	5.9	0
3332	20010622	200000	24.2	91.0	0	18	2.6	0	3428	20010626	200000	23.8	94.7	0	0	0.0	0
3333	20010622	210000	23.6	93.2	0	16	2.2	0	3429	20010626	210000	23.5	94.9	0	22	3.0	0
3334	20010622	220000	23.5	93.3	0	12	1.7	0	3430	20010626	220000	23.5	96.3	0	28	3.8	0
3335	20010622	230000	23.4	94.8	0	18	2.4	0	3431	20010626	230000	23.2	96.0	0	16	2.2	0
3336	20010622	240000	24.0	91.7	0	24	3.4	0	3432	20010626	240000	23.2	96.4	0	29	4.0	0
3337	20010623	10000	23.5	93.9	0	5	0.7	0	3433	20010627	10000	23.0	97.4	0	32	4.5	0
3338	20010623	20000	23.1	96.4	0	34	4.8	0	3434	20010627	20000	23.0	98.0	0	31	4.3</	

Appendice 7 Les données des observations météorologiques (toutes les données) (19/46)

No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation	No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation
			°C	%	mm	degree	m/s	kWh/m ²				°C	%	mm	degree	m/s	kWh/m ²
	yyyymmdd	hhmmss								yyyymmdd	hhmmss						
3457	20010628	10000	20.6	96.6	3.5	12	1.9	0	3553	20010702	10000	21.2	97.1	2.5	23	3.2	0
3458	20010628	20000	20.6	95.8	1.5	8	1.1	0	3554	20010702	20000	21.3	97.7	3	17	2.4	0
3459	20010628	30000	20.7	94.8	0.5	39	5.5	0	3555	20010702	30000	21.4	97.7	1	29	4.0	0
3460	20010628	40000	20.8	95.5	0	26	3.9	0	3556	20010702	40000	21.2	95.7	0	35	4.9	0
3461	20010628	50000	20.9	95.3	0	41	5.7	0	3557	20010702	50000	21.4	94.3	0	30	4.3	0
3462	20010628	60000	20.9	94.6	0	29	4.1	0	3558	20010702	60000	21.3	96.5	0	45	4.5	0
3463	20010628	70000	21.1	94.6	0	25	3.5	0	3559	20010702	70000	21.6	96.2	0	23	3.1	7
3464	20010628	80000	22.0	89.8	0	20	2.8	7	3560	20010702	80000	22.7	90.0	0	8	1.2	7
3465	20010628	90000	24.1	80.7	0	38	5.7	21	3561	20010702	90000	25.5	79.8	0	10	1.3	21
3466	20010628	100000	25.3	76.8	0	32	4.4	28	3562	20010702	100000	27.5	74.0	0	14	1.9	28
3467	20010628	110000	26.4	69.4	0	25	3.5	21	3563	20010702	110000	29.5	73.1	0	16	2.2	49
3468	20010628	120000	26.4	72.0	0	18	2.6	14	3564	20010702	120000	30.3	65.1	0	21	2.6	42
3469	20010628	130000	28.7	63.3	0	14	1.8	49	3565	20010702	130000	30.4	61.7	0	19	2.5	42
3470	20010628	140000	28.5	62.6	0	14	1.9	21	3566	20010702	140000	31.2	55.4	0	10	1.7	35
3471	20010628	150000	28.5	66.8	0	18	2.9	35	3567	20010702	150000	30.4	57.3	0	17	2.5	35
3472	20010628	160000	29.0	64.4	0	10	1.4	14	3568	20010702	160000	31.5	52.1	0	12	1.7	28
3473	20010628	170000	28.6	67.3	0	41	5.6	7	3569	20010702	170000	31.6	57.3	0	14	2.1	24
3474	20010628	180000	29.3	65.6	0	18	2.5	7	3570	20010702	180000	30.6	55.5	0	3	0.5	7
3475	20010628	190000	26.7	80.6	0	22	3.0	0	3571	20010702	190000	28.0	72.2	0	6	0.8	0
3476	20010628	200000	25.5	91.4	0	22	3.1	0	3572	20010702	200000	26.5	81.9	0	19	2.6	0
3477	20010628	210000	24.8	92.5	0	21	2.9	0	3573	20010702	210000	25.8	87.6	0	20	2.7	0
3478	20010628	220000	24.4	92.0	0	19	2.7	0	3574	20010702	220000	25.4	90.6	0	8	1.1	0
3479	20010628	230000	24.2	95.2	0	19	2.7	0	3575	20010702	230000	26.0	84.5	0	11	1.5	0
3480	20010628	240000	24.9	91.0	0	32	4.4	0	3576	20010702	240000	25.9	84.6	0	14	1.9	0
3481	20010629	10000	24.5	94.1	0	31	4.2	0	3577	20010703	10000	25.7	85.1	0	29	3.9	0
3482	20010629	20000	24.6	89.9	0	31	4.3	0	3578	20010703	20000	25.1	87.7	0	35	4.7	0
3483	20010629	30000	24.4	90.4	0	32	4.4	0	3579	20010703	30000	24.4	92.7	0	35	4.9	0
3484	20010629	40000	24.4	89.5	0	31	4.3	0	3580	20010703	40000	24.2	90.1	0	21	2.9	0
3485	20010629	50000	24.2	90.5	0	25	3.5	0	3581	20010703	50000	24.2	87.6	0	37	5.3	0
3486	20010629	60000	23.8	94.0	0	28	3.9	0	3582	20010703	60000	23.5	94.6	0	35	4.9	0
3487	20010629	70000	23.9	95.1	0	24	3.4	0	3583	20010703	70000	23.7	95.2	0	32	4.4	0
3488	20010629	80000	25.7	82.5	0	29	4.0	14	3584	20010703	80000	24.8	90.5	0	38	5.3	7
3489	20010629	90000	27.1	78.0	0	31	4.3	21	3585	20010703	90000	25.3	87.2	0	18	2.5	0
3490	20010629	100000	28.3	69.1	0	26	3.5	28	3586	20010703	100000	22.2	92.5	0.5	24	2.9	0
3491	20010629	110000	29.7	60.6	0	27	3.9	35	3587	20010703	110000	23.8	92.8	1	21	3.0	28
3492	20010629	120000	30.2	58.5	0	32	4.5	14	3588	20010703	120000	26.9	69.8	0	10	1.5	21
3493	20010629	130000	31.0	59.0	0	12	1.5	42	3589	20010703	130000	28.4	61.1	0	8	1.1	28
3494	20010629	140000	32.3	49.3	0	1	0.1	42	3590	20010703	140000	28.1	63.9	0	20	2.8	21
3495	20010629	150000	29.3	62.6	0	29	4.1	7	3591	20010703	150000	28.8	63.7	0	27	3.7	35
3496	20010629	160000	27.8	68.1	0	37	5.1	7	3592	20010703	160000	30.0	63.6	0	5	0.7	28
3497	20010629	170000	25.8	60.5	0	10	1.2	0	3593	20010703	170000	30.6	57.5	0	23	3.2	14
3498	20010629	180000	24.8	82.4	4	22	3.0	7	3594	20010703	180000	29.2	64.7	0	19	2.7	7
3499	20010629	190000	24.6	90.8	0	1	0.2	0	3595	20010703	190000	26.8	80.3	0	18	2.4	0
3500	20010629	200000	24.3	92.1	0	18	2.5	0	3596	20010703	200000	25.6	86.9	0	18	2.5	0
3501	20010629	210000	24.2	92.1	0	21	3.0	0	3597	20010703	210000	25.9	81.4	0	23	3.2	0
3502	20010629	220000	24.9	90.8	0	29	4.0	0	3598	20010703	220000	24.9	90.3	0	8	1.1	0
3503	20010629	230000	24.2	93.2	0	19	2.6	0	3599	20010703	230000	25.1	83.5	0	17	2.2	0
3504	20010629	240000	24.2	95.3	0	18	2.5	0	3600	20010703	240000	24.5	83.3	0	35	4.9	0
3505	20010630	10000	24.3	95.7	0	31	4.3	0	3601	20010704	10000	23.9	83.6	0	17	2.3	0
3506	20010630	20000	24.5	96.9	0.5	19	2.6	0	3602	20010704	20000	23.4	88.2	0	21	2.9	0
3507	20010630	30000	24.2	95.9	1.5	15	2.1	0	3603	20010704	30000	22.9	92.0	0	5	0.7	0
3508	20010630	40000	20.4	92.8	12.5	32	4.4	0	3604	20010704	40000	22.7	95.4	0	28	3.9	0
3509	20010630	50000	20.8	94.8	1	13	2.0	0	3605	20010704	50000	22.9	94.8	0	31	4.3	0
3510	20010630	60000	20.2	96.7	2	15	2.1	0	3606	20010704	60000	22.8	93.5	0	14	2.0	0
3511	20010630	70000	20.3	97.2	1	19	2.6	0	3607	20010704	70000	23.2	92.4	0	25	3.5	0
3512	20010630	80000	20.5	96.9	0	27	3.8	0	3608	20010704	80000	24.4	83.7	0	35	5.0	14
3513	20010630	90000	21.1	93.9	0	23	3.2	7	3609	20010704	90000	26.3	76.3	0	26	3.7	28
3514	20010630	100000	22.9	84.0	0	6	0.8	14	3610	20010704	100000	27.6	72.8	0	32	4.4	35
3515	20010630	110000	25.7	74.2	0	29	4.0	35	3611	20010704	110000	28.5	67.7	0	27	3.7	28
3516	20010630	120000	28.0	56.4	0	36	5.1	42	3612	20010704	120000	29.7	65.6	0	26	3.6	42
3517	20010630	130000	29.5	57.9	0	16	2.4	42	3613	20010704	130000	30.9	62.3	0	19	2.6	42
3518	20010630	140000	29.6	62.9	0	18	2.6	35	3614	20010704	140000	31.5	59.0	0	23	3.2	35
3519	20010630	150000	31.0	60.3	0	31	4.2	28	3615	20010704	150000	32.2	53.8	0	36	4.8	35
3520	20010630	160000	31.2	53.6	0	20	2.8	21	3616	20010704	160000	31.8	57.8	0	27	3.9	7
3521	20010630	170000	30.4	61.9	0	29	4.0	14	3617	20010704	170000	29.8	64.6	0	31	4.3	7
3522	20010630	180000	29.1	68.2	0	21	3.0	7	3618	20010704	180000	29.1	64.9	0	19	2.6	0
3523	20010630	190000	26.9	80.5	0	16	2.3	0	3619	20010704	190000	28.4	70.7	0	28	3.8	0
3524	20010630	200000	25.7	85.9	0	19	2.6	0	3620	20010704	200000	27.8	76.7	0	28	3.9	0
3525	20010630	210000	25.2	89.4	0	24	3.3	0	3621	20010704	210000	27.0	80.9	0	23	3.2	0
3526	20010630	220000	24.7	91.6	0	31	4.4	0	3622	20010704	220000	26.7	84.7	0	2	0.3	0
3527	20010630	230000	24.3	95.7	0	30	4.2	0	3623	20010704	230000	26.0	84.2	0	35	4.8	0
3528	20010630	240000	23.9	94.8	0	31	4.2	0	3624	20010704	240000	25.7	80.5	0	35	4.8	0
3529	20010701	10000	23.7	90.3	0	33	4.6	0	3625	20010705	10000	25.6	88.0	0	27	3.9	0
3530	20010701	20000	23.2	92.9	0	28	3.9	0	3626	20010705	20000	25.2	88.2	0	25</		

Appendice 7 Les données des observations météorologiques (toutes les données)
(20/46)

No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation	No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation
			°C	%	mm	degree	m/s	kW/m ²				°C	%	mm	degree	m/s	kW/m ²
	yyyymmdd	hhmmss								yyyymmdd	hhmmss						
3649	20010706	10000	23.3	92.1	0	4	0.5	0	3745	20010710	10000	26.1	73.5	0	28	4.0	0
3650	20010706	20000	23.5	92.5	0	40	5.6	0	3746	20010710	20000	25.3	74.9	0	33	4.6	0
3651	20010706	30000	23.5	94.3	0	15	2.2	0	3747	20010710	30000	24.8	80.6	0	27	3.7	0
3652	20010706	40000	23.4	95.4	0	14	2.0	0	3748	20010710	40000	24.5	79.1	0	24	3.4	0
3653	20010706	50000	23.0	94.7	3.5	37	5.2	0	3749	20010710	50000	24.0	81.7	0	33	4.5	0
3654	20010706	60000	22.4	95.4	0	28	3.9	0	3750	20010710	60000	23.3	84.0	0	23	3.2	0
3655	20010706	70000	22.5	95.3	0	16	2.2	0	3751	20010710	70000	24.2	82.5	0	20	2.8	7
3656	20010706	80000	23.1	95.5	0	17	2.3	0	3752	20010710	80000	26.3	74.4	0	31	4.3	14
3657	20010706	90000	22.7	95.2	1.5	25	3.7	0	3753	20010710	90000	27.7	67.6	0	24	3.4	21
3658	20010706	100000	20.6	97.1	5	14	2.1	0	3754	20010710	100000	29.4	64.1	0	19	2.6	28
3659	20010706	110000	21.1	97.0	4	13	2.0	0	3755	20010710	110000	30.3	61.3	0	34	4.2	35
3660	20010706	120000	21.6	95.4	3	38	5.3	7	3756	20010710	120000	31.2	59.5	0	24	3.2	42
3661	20010706	130000	22.9	94.1	0	28	4.2	14	3757	20010710	130000	32.0	53.2	0	32	4.3	42
3662	20010706	140000	23.5	91.2	0	43	6.5	14	3758	20010710	140000	32.8	55.9	0	48	6.7	35
3663	20010706	150000	24.0	85.0	0	45	6.2	14	3759	20010710	150000	32.5	57.1	0	30	4.2	14
3664	20010706	160000	24.4	84.1	0	5	0.6	7	3760	20010710	160000	33.3	52.3	0	32	4.4	7
3665	20010706	170000	24.3	85.4	0	19	2.6	7	3761	20010710	170000	33.7	48.1	0	27	3.7	14
3666	20010706	180000	24.8	82.3	0	20	2.7	7	3762	20010710	180000	32.9	52.7	0	25	3.6	7
3667	20010706	190000	23.8	89.3	0	22	3.1	0	3763	20010710	190000	29.0	60.5	0	24	3.3	0
3668	20010706	200000	22.6	97.0	0	20	2.8	0	3764	20010710	200000	27.6	65.5	0	26	3.5	0
3669	20010706	210000	22.3	97.4	0	15	2.0	0	3765	20010710	210000	28.2	63.2	0	30	4.1	0
3670	20010706	220000	22.1	97.3	0	23	3.2	0	3766	20010710	220000	27.3	70.2	0	28	3.9	0
3671	20010706	230000	22.1	96.9	0	30	4.1	0	3767	20010710	230000	27.2	69.6	0	35	5.0	0
3672	20010706	240000	22.0	97.9	0	32	4.5	0	3768	20010710	240000	26.5	78.0	0	23	3.3	0
3673	20010707	10000	22.0	97.5	0	26	3.7	0	3769	20010711	10000	26.2	80.3	0	26	3.7	0
3674	20010707	20000	22.1	97.2	0	30	4.1	0	3770	20010711	20000	26.0	81.2	0	34	4.7	0
3675	20010707	30000	22.1	95.9	0	28	3.9	0	3771	20010711	30000	25.5	84.1	0	21	2.9	0
3676	20010707	40000	22.2	95.8	0	29	4.1	0	3772	20010711	40000	21.4	91.9	0	8	1.2	0
3677	20010707	50000	22.2	93.8	0	30	4.2	0	3773	20010711	50000	21.3	97.5	8	8	1.1	0
3678	20010707	60000	21.9	95.8	0	27	3.7	0	3774	20010711	60000	21.5	94.5	0	21	2.9	0
3679	20010707	70000	22.2	95.1	0	25	3.4	0	3775	20010711	70000	21.5	96.1	0.5	26	3.6	0
3680	20010707	80000	23.4	90.0	0	25	3.4	7	3776	20010711	80000	21.4	93.6	0	15	2.0	0
3681	20010707	90000	24.7	82.5	0	24	3.4	14	3777	20010711	90000	21.7	92.5	0	40	5.6	7
3682	20010707	100000	27.1	73.5	0	31	4.4	28	3778	20010711	100000	22.8	89.4	0	40	5.5	7
3683	20010707	110000	28.0	68.4	0	28	4.0	35	3779	20010711	110000	24.0	82.6	0	34	4.6	14
3684	20010707	120000	29.3	69.9	0	5	0.8	14	3780	20010711	120000	24.9	78.1	0	32	4.6	21
3685	20010707	130000	30.3	59.5	0	29	3.9	14	3781	20010711	130000	26.2	74.0	0	41	5.7	21
3686	20010707	140000	30.5	62.9	0	40	5.6	42	3782	20010711	140000	27.1	67.6	0	37	5.1	21
3687	20010707	150000	31.0	55.4	0	32	4.7	35	3783	20010711	150000	27.6	68.8	0	37	5.0	14
3688	20010707	160000	30.9	59.6	0	24	3.2	28	3784	20010711	160000	26.8	73.6	0	34	4.8	7
3689	20010707	170000	30.4	59.3	0	30	4.0	21	3785	20010711	170000	26.2	77.5	0	21	2.9	0
3690	20010707	180000	29.1	65.9	0	20	2.8	0	3786	20010711	180000	25.5	84.2	0	23	3.2	0
3691	20010707	190000	27.8	76.1	0	16	2.2	0	3787	20010711	190000	24.9	86.5	0	18	2.6	0
3692	20010707	200000	25.8	84.5	0	16	2.2	0	3788	20010711	200000	24.6	87.2	0	16	2.2	0
3693	20010707	210000	25.2	89.1	0	12	1.7	0	3789	20010711	210000	24.4	87.6	0	14	2.0	0
3694	20010707	220000	24.7	92.8	0	12	1.7	0	3790	20010711	220000	24.3	84.5	0	29	4.0	0
3695	20010707	230000	24.6	94.5	0	3	0.4	0	3791	20010711	230000	24.2	87.3	0	33	4.6	0
3696	20010707	240000	24.5	95.6	0	1	0.2	0	3792	20010711	240000	24.1	85.8	0	18	2.4	0
3697	20010708	10000	24.4	95.9	0	19	2.6	0	3793	20010712	10000	23.9	85.9	0	19	2.7	0
3698	20010708	20000	24.5	95.5	0	19	2.6	0	3794	20010712	20000	23.5	91.0	0	4	0.5	0
3699	20010708	30000	24.0	96.6	0	12	1.6	0	3795	20010712	30000	23.4	92.4	0	34	4.7	0
3700	20010708	40000	23.2	94.1	0	39	5.4	0	3796	20010712	40000	23.0	90.2	0	34	4.7	0
3701	20010708	50000	22.6	96.1	0	14	2.0	0	3797	20010712	50000	23.0	95.2	0	6	0.9	0
3702	20010708	60000	22.4	94.7	0	16	2.2	0	3798	20010712	60000	22.8	94.1	0	0	0.0	0
3703	20010708	70000	23.7	87.9	0	4	0.6	0	3799	20010712	70000	23.6	91.2	0	6	0.8	0
3704	20010708	80000	26.2	81.9	0	23	3.0	14	3800	20010712	80000	26.1	79.8	0	25	3.5	14
3705	20010708	90000	27.2	72.8	0	34	4.7	21	3801	20010712	90000	28.3	70.9	0	4	0.6	14
3706	20010708	100000	28.6	70.3	0	35	4.7	28	3802	20010712	100000	30.1	65.1	0	3	0.4	28
3707	20010708	110000	30.1	68.4	0	16	2.2	42	3803	20010712	110000	29.7	70.6	0	15	2.0	14
3708	20010708	120000	31.3	59.3	0	20	2.7	14	3804	20010712	120000	22.9	91.5	4	40	5.8	14
3709	20010708	130000	31.9	54.3	0	24	3.4	42	3805	20010712	130000	27.6	76.3	0	7	0.9	21
3710	20010708	140000	33.0	51.3	0	39	5.6	35	3806	20010712	140000	27.1	69.8	0	51	7.0	21
3711	20010708	150000	32.8	47.7	0	28	3.8	35	3807	20010712	150000	27.2	72.3	0	48	6.6	14
3712	20010708	160000	32.9	49.0	0	20	2.8	28	3808	20010712	160000	28.7	64.5	0	6	0.8	28
3713	20010708	170000	31.3	60.3	0	15	2.1	7	3809	20010712	170000	27.8	70.8	0	5	0.7	7
3714	20010708	180000	29.8	59.2	0	17	2.4	0	3810	20010712	180000	27.0	71.7	0	45	6.1	0
3715	20010708	190000	28.3	70.8	0	16	2.3	0	3811	20010712	190000	25.9	81.0	0	3	0.4	0
3716	20010708	200000	27.0	73.2	0	20	2.8	0	3812	20010712	200000	24.9	82.3	0	28	3.9	0
3717	20010708	210000	26.4	72.4	0	20	2.8	0	3813	20010712	210000	24.1	89.2	0	12	1.7	0
3718	20010708	220000	26.3	71.7	0	17	2.3	0	3814	20010712	220000	24.0	88.6	0	15	2.1	0
3719	20010708	230000	26.0	79.3	0	18	2.5	0	3815	20010712	230000	23.8	91.6	0	10	1.4	0
3720	20010708	240000	25.8	81.3	0	38	5.3	0	3816	20010712	240000	24.1	92.1	0	18	2.5	0
3721	20010709	10000	25.9	78.0	0	20	2.8	0	3817	20010713	10000	23.9	95.0	0	28	3.8	0
3722	20010709	20000	25.7	80.7	0	24	3.3	0	3818	20010713	20000	23.6	95.3	0	27	3.7	0
3																	

Appendice 7 Les données des observations météorologiques (toutes les données) (21/46)

No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation	No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation
			°C	%	mm	degree	m/s	kWh/m ²				°C	%	mm	degree	m/s	kWh/m ²
	yyyymmdd	hhmmss								yyyymmdd	hhmmss						
3841	20010714	10000	23.7	95.6	0	19	2.7	0	3937	20010718	10000	22.4	91.2	0	17	2.4	0
3842	20010714	20000	23.6	94.5	0	29	4.0	0	3938	20010718	20000	22.3	94.2	0	15	2.1	0
3843	20010714	30000	24.2	89.5	0	28	3.8	0	3939	20010718	30000	22.2	95.3	0	28	3.8	0
3844	20010714	40000	24.2	89.8	0	31	4.4	0	3940	20010718	40000	22.2	96.2	0	25	3.4	0
3845	20010714	50000	24.0	90.2	0	30	4.1	0	3941	20010718	50000	22.3	96.8	0	36	5.0	0
3846	20010714	60000	23.3	94.2	0	29	4.1	0	3942	20010718	60000	22.5	96.9	0	39	5.4	0
3847	20010714	70000	24.1	89.5	0	30	4.2	0	3943	20010718	70000	22.9	95.3	0	34	5.0	0
3848	20010714	80000	26.0	81.7	0	42	5.9	7	3944	20010718	80000	23.9	90.1	0	19	2.7	7
3849	20010714	90000	27.9	75.5	0	40	5.8	21	3945	20010718	90000	25.1	85.9	0	31	4.3	7
3850	20010714	100000	28.3	70.3	0	41	5.7	21	3946	20010718	100000	26.3	75.4	0	39	5.5	14
3851	20010714	110000	29.8	68.1	0	38	5.6	28	3947	20010718	110000	28.4	69.1	0	46	6.7	35
3852	20010714	120000	30.5	64.0	0	23	3.2	28	3948	20010718	120000	28.5	66.0	0	41	6.7	42
3853	20010714	130000	24.3	73.1	0	45	6.3	0	3949	20010718	130000	29.2	63.2	0	32	4.4	42
3854	20010714	140000	25.2	86.0	0	9	1.2	7	3950	20010718	140000	30.0	58.7	0	31	4.5	28
3855	20010714	150000	29.0	72.0	0	30	4.0	21	3951	20010718	150000	30.9	53.6	0	35	5.0	35
3856	20010714	160000	30.0	71.1	0	38	5.3	14	3952	20010718	160000	32.4	54.4	0	5	0.7	28
3857	20010714	170000	30.8	66.8	0	39	5.6	14	3953	20010718	170000	31.9	47.9	0	30	4.2	14
3858	20010714	180000	29.8	68.6	0	38	5.6	0	3954	20010718	180000	28.4	72.8	0	12	1.7	0
3859	20010714	190000	28.0	73.6	0	28	3.9	0	3955	20010718	190000	26.6	80.3	0	16	2.2	0
3860	20010714	200000	26.3	85.9	0	28	3.9	0	3956	20010718	200000	25.7	80.4	0	26	3.6	0
3861	20010714	210000	25.9	87.3	0	22	3.0	0	3957	20010718	210000	25.2	87.3	0	40	5.6	0
3862	20010714	220000	26.0	78.4	0	34	4.7	0	3958	20010718	220000	25.0	85.2	0	21	2.9	0
3863	20010714	230000	26.2	76.4	0	29	4.0	0	3959	20010718	230000	24.1	90.7	0	25	3.5	0
3864	20010714	240000	25.6	79.4	0	38	5.2	0	3960	20010718	240000	23.9	91.3	0	28	3.9	0
3865	20010715	10000	24.7	83.9	0	43	5.9	0	3961	20010719	10000	23.7	93.3	0	30	4.1	0
3866	20010715	20000	24.5	84.6	0	41	5.4	0	3962	20010719	20000	23.4	96.6	0	28	3.9	0
3867	20010715	30000	24.0	86.6	0	28	4.3	0	3963	20010719	30000	23.2	95.5	0	27	3.7	0
3868	20010715	40000	23.3	90.7	0	26	3.6	0	3964	20010719	40000	23.0	95.1	0	21	3.0	0
3869	20010715	50000	22.9	92.9	0	21	2.9	0	3965	20010719	50000	22.7	96.2	0	29	4.1	0
3870	20010715	60000	23.0	90.9	0	29	4.0	0	3966	20010719	60000	22.6	96.2	0	24	3.4	0
3871	20010715	70000	23.4	88.0	0	34	4.7	0	3967	20010719	70000	23.0	96.2	0	21	2.9	0
3872	20010715	80000	25.1	79.9	0	43	5.8	7	3968	20010719	80000	24.3	89.7	0	31	4.1	7
3873	20010715	90000	27.1	72.4	0	41	5.6	21	3969	20010719	90000	24.5	86.1	0	28	3.9	7
3874	20010715	100000	28.6	68.5	0	51	7.2	28	3970	20010719	100000	25.8	80.0	0	37	4.9	21
3875	20010715	110000	29.5	64.1	0	52	7.4	28	3971	20010719	110000	27.7	71.2	0	41	6.1	14
3876	20010715	120000	29.6	66.5	0	32	4.6	28	3972	20010719	120000	29.0	67.7	0	45	6.2	42
3877	20010715	130000	30.6	63.3	0	38	5.4	35	3973	20010719	130000	30.1	63.3	0	49	6.8	42
3878	20010715	140000	31.1	61.4	0	37	5.0	28	3974	20010719	140000	30.9	60.6	0	31	4.4	42
3879	20010715	150000	32.0	58.7	0	49	7.0	28	3975	20010719	150000	30.9	62.8	0	45	6.2	35
3880	20010715	160000	31.8	59.6	0	35	4.9	28	3976	20010719	160000	31.3	57.0	0	46	6.0	28
3881	20010715	170000	30.1	64.9	0	27	3.7	0	3977	20010719	170000	31.1	56.9	0	30	4.3	14
3882	20010715	180000	25.1	77.6	0	3	0.4	0	3978	20010719	180000	30.0	58.5	0	30	4.1	7
3883	20010715	190000	22.2	89.3	2	5	0.7	0	3979	20010719	190000	27.6	73.3	0	30	4.2	0
3884	20010715	200000	22.9	87.7	0	13	1.8	0	3980	20010719	200000	26.2	80.5	0	25	3.5	0
3885	20010715	210000	22.2	92.7	0	21	2.9	0	3981	20010719	210000	25.6	84.2	0	29	4.0	0
3886	20010715	220000	22.5	91.3	0	33	4.5	0	3982	20010719	220000	25.3	85.9	0	27	3.7	0
3887	20010715	230000	22.6	88.4	0	28	3.9	0	3983	20010719	230000	25.1	84.7	0	23	3.2	0
3888	20010715	240000	22.4	88.6	0	22	3.1	0	3984	20010719	240000	24.8	85.5	0	30	4.1	0
3889	20010716	10000	22.1	85.6	0	19	2.7	0	3985	20010720	10000	24.5	87.9	0	26	3.7	0
3890	20010716	20000	21.6	90.9	0	28	4.3	0	3986	20010720	20000	24.1	89.6	0	28	3.9	0
3891	20010716	30000	21.7	87.9	0	26	3.6	0	3987	20010720	30000	23.9	91.2	0	28	4.0	0
3892	20010716	40000	21.3	92.1	0	19	2.7	0	3988	20010720	40000	23.5	93.8	0	30	4.2	0
3893	20010716	50000	21.4	90.1	0	26	3.6	0	3989	20010720	50000	23.5	94.5	0	24	3.3	0
3894	20010716	60000	21.2	91.3	0	30	4.2	0	3990	20010720	60000	23.6	92.2	0	38	5.4	0
3895	20010716	70000	21.5	93.0	0	19	2.6	0	3991	20010720	70000	23.7	91.9	0	44	6.2	0
3896	20010716	80000	22.6	88.3	0	31	4.4	7	3992	20010720	80000	23.8	92.3	0	36	5.0	0
3897	20010716	90000	24.4	80.5	6.5	36	5.0	21	3993	20010720	90000	23.8	93.2	0	43	6.0	0
3898	20010716	100000	26.4	70.8	0	40	5.6	28	3994	20010720	100000	22.4	92.3	0	15	2.1	0
3899	20010716	110000	27.9	71.5	0	27	3.8	35	3995	20010720	110000	21.2	95.3	2	22	3.1	0
3900	20010716	120000	29.1	63.7	0	29	3.9	35	3996	20010720	120000	22.5	95.0	0	17	2.3	7
3901	20010716	130000	30.0	63.9	0	45	6.2	42	3997	20010720	130000	26.5	73.9	0	28	4.0	28
3902	20010716	140000	29.9	60.8	0	25	3.5	42	3998	20010720	140000	27.5	70.0	0	17	2.4	28
3903	20010716	150000	31.1	55.7	0	29	3.9	14	3999	20010720	150000	27.6	64.6	0	14	1.9	14
3904	20010716	160000	31.5	58.9	0	33	4.5	14	4000	20010720	160000	25.6	70.4	0	4	0.4	14
3905	20010716	170000	31.1	62.3	0	28	3.9	14	4001	20010720	170000	26.1	71.0	0	3	0.5	7
3906	20010716	180000	29.2	64.8	0	18	2.4	0	4002	20010720	180000	26.1	73.2	0	14	2.0	7
3907	20010716	190000	27.8	71.6	0	55	7.6	0	4003	20010720	190000	24.4	86.9	0	4	0.5	0
3908	20010716	200000	24.5	85.8	0	34	4.9	0	4004	20010720	200000	23.7	87.1	0	27	3.6	0
3909	20010716	210000	22.6	96.6	14	22	3.1	0	4005	20010720	210000	22.9	91.4	0	27	3.7	0
3910	20010716	220000	22.7	97.5	0	17	2.3	0	4006	20010720	220000	22.6	88.5	0	10	1.4	0
3911	20010716	230000	22.9	97.4	0	28	3.9	0	4007	20010720	230000	22.2	90.5	0	11	1.5	0
3912	20010716	240000	23.4	97.6	0	26	3.7	0	4008	20010720	240000	22.0	91.2	0	20	2.6	0
3913	20010717	10000	23.3	96.5	0	21	3.0	0	4009	20010721	10000	21.9	91.9	0	19	2.7	0
3914	20010717	20000	23.5	92.4	0	36	4.9	0	4010	20010721	20000	21.9	93.9	0	19	2.7	

Appendice 7 Les données des observations météorologiques (toutes les données) (22/46)

No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation	No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation
			°C	%	mm	degree	m/s	kWh/m ²				°C	%	mm	degree	m/s	kWh/m ²
	yyyymmdd	hhmmss								yyyymmdd	hhmmss						
4033	20010722	10000	25.1	81.6	0	18	2.5	0	4129	20010726	10000	21.1	97.0	0	32	4.3	0
4034	20010722	20000	24.9	84.3	0	28	3.9	0	4130	20010726	20000	21.1	96.5	0	19	2.6	0
4035	20010722	30000	24.2	90.9	0	28	3.9	0	4131	20010726	30000	21.1	96.1	0	18	2.4	0
4036	20010722	40000	23.6	94.5	0	24	3.3	0	4132	20010726	40000	20.8	97.2	0	26	3.3	0
4037	20010722	50000	23.6	94.1	0	26	3.5	0	4133	20010726	50000	20.7	96.6	0	19	2.6	0
4038	20010722	60000	23.2	94.4	0	29	4.0	0	4134	20010726	60000	20.7	97.0	0	17	2.3	0
4039	20010722	70000	23.7	94.3	0	23	3.0	0	4135	20010726	70000	21.1	96.3	0	30	4.1	0
4040	20010722	80000	25.1	87.5	0	38	5.3	7	4136	20010726	80000	22.1	90.5	0	3	0.5	7
4041	20010722	90000	26.5	81.4	0	38	5.5	21	4137	20010726	90000	24.3	84.2	0	29	3.9	21
4042	20010722	100000	27.5	77.8	0	34	4.8	14	4138	20010726	100000	26.1	79.8	0	25	3.6	28
4043	20010722	110000	29.2	70.7	0	38	5.3	35	4139	20010726	110000	27.1	74.7	0	38	5.3	21
4044	20010722	120000	30.5	64.8	0	40	5.9	35	4140	20010726	120000	26.6	72.4	0	25	3.6	14
4045	20010722	130000	31.4	63.0	0	42	5.8	42	4141	20010726	130000	27.3	71.7	0	29	4.1	14
4046	20010722	140000	30.9	67.7	0	26	3.5	14	4142	20010726	140000	26.8	72.7	0	31	4.3	7
4047	20010722	150000	32.4	60.9	0	48	6.4	35	4143	20010726	150000	26.9	75.0	0	42	5.9	14
4048	20010722	160000	30.9	61.2	0	25	3.6	14	4144	20010726	160000	26.6	78.3	0	41	5.8	7
4049	20010722	170000	28.5	70.9	0	20	2.8	7	4145	20010726	170000	26.0	80.8	0	26	3.6	0
4050	20010722	180000	27.6	69.4	0	25	3.3	0	4146	20010726	180000	24.2	90.9	0	4	0.6	0
4051	20010722	190000	27.4	77.1	0	24	3.3	0	4147	20010726	190000	23.8	94.2	0	2	0.3	0
4052	20010722	200000	27.2	74.9	0	7	1.0	0	4148	20010726	200000	23.1	94.7	0	38	5.2	0
4053	20010722	210000	25.4	72.8	0	20	2.7	0	4149	20010726	210000	23.2	94.2	0	31	4.3	0
4054	20010722	220000	24.1	81.4	0	21	2.9	0	4150	20010726	220000	22.9	97.2	0	4	0.5	0
4055	20010722	230000	23.4	84.9	0	18	2.4	0	4151	20010726	230000	22.3	96.8	0	19	2.7	0
4056	20010722	240000	23.1	87.1	0	35	4.9	0	4152	20010726	240000	22.1	97.9	0	19	2.7	0
4057	20010723	10000	22.9	87.6	0	10	1.5	0	4153	20010727	10000	21.8	98.2	0	28	3.8	0
4058	20010723	20000	21.6	98.2	16	18	2.5	0	4154	20010727	20000	22.1	96.9	0	32	4.5	0
4059	20010723	30000	21.7	98.6	8	17	2.3	0	4155	20010727	30000	22.1	97.2	0	25	3.5	0
4060	20010723	40000	21.5	98.5	0	23	3.1	0	4156	20010727	40000	22.0	98.2	0	28	3.9	0
4061	20010723	50000	21.6	98.3	0	29	4.0	0	4157	20010727	50000	22.0	97.7	0	27	3.8	0
4062	20010723	60000	21.6	98.1	0	27	3.7	0	4158	20010727	60000	22.0	97.9	0	27	3.7	0
4063	20010723	70000	22.0	97.6	0	38	5.2	0	4159	20010727	70000	22.4	95.9	0	25	3.4	0
4064	20010723	80000	23.2	92.6	0	29	4.0	7	4160	20010727	80000	23.0	89.8	0	32	4.5	7
4065	20010723	90000	24.2	87.0	0	38	5.3	28	4161	20010727	90000	24.0	85.8	0	35	4.7	7
4066	20010723	100000	25.9	77.3	0	42	6.0	14	4162	20010727	100000	25.2	82.9	0	40	5.4	14
4067	20010723	110000	27.2	72.4	0	12	1.6	42	4163	20010727	110000	25.8	79.1	0	37	5.2	21
4068	20010723	120000	28.1	69.8	0	11	1.3	35	4164	20010727	120000	26.7	72.5	0	31	4.3	21
4069	20010723	130000	28.8	66.0	0	52	7.3	49	4165	20010727	130000	27.5	68.8	0	35	4.8	21
4070	20010723	140000	30.2	60.3	0	16	1.8	49	4166	20010727	140000	28.6	62.6	0	38	5.1	42
4071	20010723	150000	28.9	66.7	0	46	6.0	35	4167	20010727	150000	28.6	66.2	0	32	4.5	14
4072	20010723	160000	30.8	58.7	0	11	1.5	28	4168	20010727	160000	28.8	62.5	0	41	5.9	14
4073	20010723	170000	30.0	63.1	0	15	2.2	21	4169	20010727	170000	28.3	65.1	0	39	5.4	7
4074	20010723	180000	27.7	72.5	0	38	5.2	7	4170	20010727	180000	27.6	67.3	0	41	5.5	0
4075	20010723	190000	26.0	79.0	0	17	2.4	0	4171	20010727	190000	25.5	80.8	0	41	5.6	0
4076	20010723	200000	25.5	82.4	0	15	2.1	0	4172	20010727	200000	24.8	90.0	0	15	2.1	0
4077	20010723	210000	24.9	86.1	0	14	1.9	0	4173	20010727	210000	23.9	90.9	3	12	1.6	0
4078	20010723	220000	24.3	89.3	0	21	2.9	0	4174	20010727	220000	22.8	96.3	5.5	15	2.0	0
4079	20010723	230000	23.5	86.7	0	5	0.7	0	4175	20010727	230000	22.8	97.5	0.5	22	3.1	0
4080	20010723	240000	23.1	90.7	0	20	2.7	0	4176	20010727	240000	22.8	97.7	0	19	2.7	0
4081	20010724	10000	22.8	93.5	0	22	3.1	0	4177	20010728	10000	23.0	98.2	0	32	4.4	0
4082	20010724	20000	22.8	91.9	0	16	2.3	0	4178	20010728	20000	22.6	98.1	0	22	3.0	0
4083	20010724	30000	22.6	92.8	0	13	1.9	0	4179	20010728	30000	22.4	98.5	0	26	3.5	0
4084	20010724	40000	22.1	94.6	0	16	2.2	0	4180	20010728	40000	22.1	98.5	0	26	3.6	0
4085	20010724	50000	21.6	96.8	0	12	1.7	0	4181	20010728	50000	21.9	98.4	0	22	3.1	0
4086	20010724	60000	21.3	97.9	0	13	1.7	0	4182	20010728	60000	21.7	98.6	0	29	4.1	0
4087	20010724	70000	21.9	97.9	0	20	2.7	0	4183	20010728	70000	22.0	98.6	0	20	2.8	0
4088	20010724	80000	24.5	84.4	0	2	5.8	7	4184	20010728	80000	24.1	90.4	0	35	4.9	14
4089	20010724	90000	25.4	85.6	0	17	2.4	21	4185	20010728	90000	26.0	79.3	0	43	6.2	7
4090	20010724	100000	25.6	83.7	0	12	1.7	7	4186	20010728	100000	27.3	75.2	0	35	4.4	7
4091	20010724	110000	27.4	77.8	0	21	2.8	14	4187	20010728	110000	27.4	74.4	0	34	4.7	28
4092	20010724	120000	28.6	74.6	0	28	3.5	42	4188	20010728	120000	29.5	64.6	0	39	5.5	14
4093	20010724	130000	29.2	68.4	0	26	3.7	49	4189	20010728	130000	29.3	65.7	0	31	4.2	42
4094	20010724	140000	31.2	61.0	0	27	3.7	14	4190	20010728	140000	29.4	62.6	0	31	4.3	21
4095	20010724	150000	31.6	58.2	0	35	4.9	35	4191	20010728	150000	30.5	61.7	0	45	6.0	35
4096	20010724	160000	31.1	56.7	0	24	3.4	28	4192	20010728	160000	30.7	60.9	0	46	6.5	21
4097	20010724	170000	30.6	62.7	0	30	4.3	21	4193	20010728	170000	29.1	65.4	0	35	4.7	7
4098	20010724	180000	29.3	63.5	0	27	3.6	7	4194	20010728	180000	29.5	64.2	0	34	4.7	7
4099	20010724	190000	27.6	73.3	0	32	4.3	0	4195	20010728	190000	27.2	77.6	0	26	3.6	0
4100	20010724	200000	24.5	93.0	0	21	3.0	0	4196	20010728	200000	25.8	84.3	0	29	4.0	0
4101	20010724	210000	24.5	91.0	0	22	3.0	0	4197	20010728	210000	25.3	88.5	0	27	3.7	0
4102	20010724	220000	24.4	90.1	0	19	2.7	0	4198	20010728	220000	25.4	85.9	0	29	4.1	0
4103	20010724	230000	24.5	89.8	0	26	3.7	0	4199	20010728	230000	25.1	88.4	0	25	3.5	0
4104	20010724	240000	24.5	90.0	0	26	3.5	0	4200	20010728	240000	25.1	88.4	0	33	4.5	0
4105	20010725	10000	24.1	90.5	0	19	2.8	0	4201	20010729	10000	24.8	89.9	0	23	3.2	0
4106	20010725	20000	23.7	93.7	0	19	2.6	0	4202	20010729	20000	24.4	90.9	0	24	3.4</	

Appendice 7 Les données des observations météorologiques (toutes les données) (23/46)

No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation	No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation
			°C	%	mm	degree	m/s	kWh/m ²				°C	%	mm	degree	m/s	kWh/m ²
	yyyymmdd	hhmmss								yyyymmdd	hhmmss						
4225	20010730	10000	24.3	84.2	0	19	2.6	0	4321	20010803	10000	23.0	89.2	0	19	2.6	0
4226	20010730	20000	19.2	97.7	25.5	6	0.7	0	4322	20010803	20000	22.4	92.8	0	29	4.0	0
4227	20010730	30000	20.2	94.4	1	32	4.3	0	4323	20010803	30000	22.0	95.5	0	31	4.3	0
4228	20010730	40000	20.0	95.8	1	32	4.5	0	4324	20010803	40000	21.8	95.9	0	29	4.0	0
4229	20010730	50000	20.0	96.6	2	16	2.3	0	4325	20010803	50000	21.7	96.7	0	28	4.0	0
4230	20010730	60000	19.7	95.4	0.5	24	3.3	0	4326	20010803	60000	21.4	97.2	0	29	4.0	0
4231	20010730	70000	20.2	97.0	0	11	1.5	0	4327	20010803	70000	21.6	96.2	0	32	4.3	0
4232	20010730	80000	20.6	96.9	0.5	0	0.0	7	4328	20010803	80000	22.9	90.5	0	34	4.7	7
4233	20010730	90000	21.9	93.3	0	19	2.6	7	4329	20010803	90000	23.6	88.4	0	34	4.8	14
4234	20010730	100000	22.9	87.1	0	40	5.6	14	4330	20010803	100000	24.2	87.4	0	47	6.0	21
4235	20010730	110000	23.6	84.3	0	20	2.7	14	4331	20010803	110000	26.1	78.1	0	21	3.0	21
4236	20010730	120000	24.9	79.7	0	32	4.5	14	4332	20010803	120000	27.6	70.3	0	31	4.4	49
4237	20010730	130000	25.7	76.4	0	30	4.2	14	4333	20010803	130000	28.1	73.0	0	30	3.6	35
4238	20010730	140000	25.3	77.5	0	24	3.3	14	4334	20010803	140000	28.5	71.4	0	29	4.2	49
4239	20010730	150000	26.8	74.5	0	24	3.4	21	4335	20010803	150000	27.9	69.2	0	17	2.5	14
4240	20010730	160000	26.2	76.4	0	15	2.1	7	4336	20010803	160000	29.5	61.4	0	35	4.9	28
4241	20010730	170000	25.9	78.1	0	22	3.0	7	4337	20010803	170000	29.4	62.3	0	18	2.5	14
4242	20010730	180000	25.3	82.7	0	21	2.9	7	4338	20010803	180000	28.6	66.4	0	25	3.5	7
4243	20010730	190000	23.7	92.4	0	14	1.9	0	4339	20010803	190000	25.9	79.0	0	26	3.6	0
4244	20010730	200000	22.7	96.8	0	17	2.3	0	4340	20010803	200000	24.1	91.6	0	26	3.6	0
4245	20010730	210000	22.4	97.4	0	11	1.5	0	4341	20010803	210000	23.5	94.5	0	26	3.6	0
4246	20010730	220000	22.0	97.5	0	21	2.9	0	4342	20010803	220000	22.9	94.7	0	26	3.6	0
4247	20010730	230000	22.3	97.6	0	16	2.2	0	4343	20010803	230000	22.6	97.3	0	26	3.6	0
4248	20010730	240000	22.3	93.8	0	17	2.3	0	4344	20010803	240000	22.2	97.2	0	26	3.6	0
4249	20010731	10000	22.5	94.4	0	15	2.1	0	4345	20010804	10000	22.2	94.9	0	26	3.6	0
4250	20010731	20000	22.6	94.6	0	13	1.7	0	4346	20010804	20000	23.0	90.5	0	28	3.8	0
4251	20010731	30000	22.7	92.3	0	30	4.2	0	4347	20010804	30000	22.9	91.4	0	29	4.1	0
4252	20010731	40000	22.5	93.5	0	28	4.1	0	4348	20010804	40000	22.6	92.5	0	29	4.0	0
4253	20010731	50000	22.2	94.4	0	19	2.6	0	4349	20010804	50000	22.7	93.1	0	31	4.4	0
4254	20010731	60000	22.2	93.7	0	24	3.2	0	4350	20010804	60000	22.2	94.2	0	36	4.9	0
4255	20010731	70000	22.5	92.6	0	19	2.7	0	4351	20010804	70000	22.3	92.8	0	38	5.1	0
4256	20010731	80000	23.3	89.6	0	24	3.3	7	4352	20010804	80000	23.6	85.6	0	45	6.4	14
4257	20010731	90000	24.2	84.0	0	44	6.1	14	4353	20010804	90000	24.9	80.4	0	41	5.5	21
4258	20010731	100000	23.7	88.3	0	33	4.5	14	4354	20010804	100000	26.1	77.1	0	38	5.3	28
4259	20010731	110000	24.4	83.7	0	33	4.4	28	4355	20010804	110000	27.4	74.2	0	47	6.4	28
4260	20010731	120000	26.8	76.2	0	22	3.0	21	4356	20010804	120000	28.5	69.5	0	50	7.2	42
4261	20010731	130000	27.9	67.2	0	22	3.1	49	4357	20010804	130000	28.7	70.8	0	35	4.7	42
4262	20010731	140000	27.9	72.3	0	39	5.4	42	4358	20010804	140000	29.2	65.8	0	29	4.0	28
4263	20010731	150000	28.6	68.5	0	30	4.2	35	4359	20010804	150000	30.3	60.8	0	39	5.8	35
4264	20010731	160000	27.8	65.4	0	28	3.8	14	4360	20010804	160000	30.6	57.7	0	24	3.3	28
4265	20010731	170000	24.3	92.0	0	14	2.0	0	4361	20010804	170000	30.1	60.0	0	25	3.5	14
4266	20010731	180000	24.2	90.2	0	34	4.9	0	4362	20010804	180000	29.0	63.9	0	32	4.4	7
4267	20010731	190000	23.3	93.0	0	25	3.4	0	4363	20010804	190000	26.3	77.5	0	25	3.4	0
4268	20010731	200000	22.8	96.8	0	16	2.2	0	4364	20010804	200000	25.2	82.3	0	23	3.2	0
4269	20010731	210000	22.7	97.6	0	16	2.2	0	4365	20010804	210000	24.8	84.4	0	34	4.7	0
4270	20010731	220000	22.8	98.0	0	0	0.0	0	4366	20010804	220000	24.1	87.6	0	30	4.2	0
4271	20010731	230000	22.5	98.2	0	4	0.6	0	4367	20010804	230000	23.6	89.9	0	33	4.6	0
4272	20010731	240000	22.0	98.3	0	17	2.4	0	4368	20010804	240000	23.1	92.4	0	27	3.8	0
4273	20010801	10000	22.2	98.7	0	17	2.4	0	4369	20010805	10000	22.9	92.1	0	24	3.4	0
4274	20010801	20000	22.4	96.9	0	4	0.6	0	4370	20010805	20000	22.7	92.4	0	25	3.4	0
4275	20010801	30000	22.3	96.7	0	5	0.7	0	4371	20010805	30000	22.6	93.6	0	23	3.2	0
4276	20010801	40000	22.5	95.6	0	16	2.3	0	4372	20010805	40000	22.5	94.1	0	31	4.4	0
4277	20010801	50000	22.3	95.2	0	32	4.3	0	4373	20010805	50000	22.2	93.9	0	29	4.0	0
4278	20010801	60000	21.9	96.4	0	28	3.9	0	4374	20010805	60000	21.8	95.8	0	32	4.5	0
4279	20010801	70000	21.5	96.5	1	30	4.2	0	4375	20010805	70000	22.0	96.0	0	34	4.8	0
4280	20010801	80000	21.7	97.5	4	21	3.0	0	4376	20010805	80000	24.0	87.7	0	18	2.5	14
4281	20010801	90000	21.8	97.6	4.5	25	3.3	7	4377	20010805	90000	25.6	81.1	0	33	4.6	21
4282	20010801	100000	22.8	95.6	2	24	3.4	14	4378	20010805	100000	26.5	79.9	0	30	4.2	14
4283	20010801	110000	24.3	88.9	0	24	3.5	14	4379	20010805	110000	28.6	70.7	0	37	5.1	21
4284	20010801	120000	26.2	79.3	0	30	4.2	28	4380	20010805	120000	29.3	63.0	0	16	2.3	49
4285	20010801	130000	28.2	66.8	0	36	4.5	35	4381	20010805	130000	30.4	62.1	0	23	3.1	14
4286	20010801	140000	28.2	70.0	0	48	5.9	28	4382	20010805	140000	30.7	63.5	0	32	4.3	42
4287	20010801	150000	28.6	66.0	0	29	4.0	28	4383	20010805	150000	23.9	87.0	1.5	48	6.8	0
4288	20010801	160000	28.8	67.0	0	29	4.0	7	4384	20010805	160000	26.6	75.1	3	44	6.0	35
4289	20010801	170000	29.8	63.6	0	37	5.1	21	4385	20010805	170000	26.5	79.5	0	3	0.5	14
4290	20010801	180000	28.7	67.5	0	24	3.3	0	4386	20010805	180000	25.0	85.1	0	45	6.5	0
4291	20010801	190000	26.3	80.0	0	28	3.9	0	4387	20010805	190000	24.1	91.8	0	35	4.9	0
4292	20010801	200000	24.5	91.0	0	27	3.7	0	4388	20010805	200000	23.9	93.8	0	1	0.2	0
4293	20010801	210000	24.6	88.0	0	28	3.8	0	4389	20010805	210000	23.5	96.4	0	19	2.6	0
4294	20010801	220000	24.1	92.3	0	28	3.8	0	4390	20010805	220000	23.5	97.1	0	20	2.8	0
4295	20010801	230000	24.2	90.2	0	33	4.5	0	4391	20010805	230000	23.3	97.9	0	9	1.3	0
4296	20010801	240000	24.1	91.3	0	25	3.5	0	4392	20010805	240000	22.8	98.3	0	16	2.2	0
4297	20010802	10000	24.2	84.4	0	37	5.2	0	4393	20010806	10000	22.4	98.4	0	16	2.2	0
4298	20010802	20000	23.4	87.6	0	39	5.4	0	4394	20010806	20000	22.3	98.6	0	0</		

Appendice 7 Les données des observations météorologiques (toutes les données)
(24/46)

No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation	No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation
			°C	%	mm	degree	m/s	kW/m ²				°C	%	mm	degree	m/s	kW/m ²
	yyyymmdd	hhmmss								yyyymmdd	hhmmss						
4417	20010807	10000	25.3	91.1	0	31	4.3	0	4513	20010811	10000	23.2	97.7	0	0	0.0	0
4418	20010807	20000	24.9	90.6	0	16	2.2	0	4514	20010811	20000	23.4	95.9	0	13	1.8	0
4419	20010807	30000	24.9	93.2	0	0	0.0	0	4515	20010811	30000	22.9	97.7	0	21	2.9	0
4420	20010807	40000	24.5	91.1	0	22	3.2	0	4516	20010811	40000	22.8	98.4	0	4	0.5	0
4421	20010807	50000	24.2	94.0	0	33	4.5	0	4517	20010811	50000	22.6	98.7	0	29	4.0	0
4422	20010807	60000	23.7	94.7	0	19	2.6	0	4518	20010811	60000	22.4	98.6	0	21	2.9	0
4423	20010807	70000	24.0	93.6	0	34	4.7	0	4519	20010811	70000	23.1	98.8	0	19	2.6	0
4424	20010807	80000	25.7	86.3	0	40	5.5	14	4520	20010811	80000	24.9	92.0	0	34	4.9	7
4425	20010807	90000	27.3	78.8	0	23	3.3	21	4521	20010811	90000	26.3	86.9	0	29	4.1	7
4426	20010807	100000	29.2	68.6	0	27	3.8	28	4522	20010811	100000	26.5	84.4	0	16	2.2	14
4427	20010807	110000	30.2	68.5	0	32	4.5	35	4523	20010811	110000	30.2	72.2	0	24	3.3	42
4428	20010807	120000	30.7	65.8	0	27	3.7	14	4524	20010811	120000	29.3	75.1	0	22	3.0	49
4429	20010807	130000	30.8	62.5	0	33	4.7	21	4525	20010811	130000	30.2	67.1	0	40	5.6	14
4430	20010807	140000	31.7	60.9	0	35	5.0	35	4526	20010811	140000	31.1	66.4	0	31	4.0	42
4431	20010807	150000	32.3	60.9	0	27	3.9	35	4527	20010811	150000	32.4	55.5	0	3	0.5	35
4432	20010807	160000	32.3	57.1	0	27	3.7	28	4528	20010811	160000	32.1	58.9	0	24	3.3	28
4433	20010807	170000	30.4	64.5	0	34	4.6	7	4529	20010811	170000	31.4	65.9	0	21	2.9	14
4434	20010807	180000	29.2	68.5	0	43	6.4	0	4530	20010811	180000	30.4	66.2	0	20	2.8	7
4435	20010807	190000	23.9	94.0	13.5	41	6.2	0	4531	20010811	190000	27.1	83.9	0	20	2.8	0
4436	20010807	200000	22.9	95.0	0.5	31	4.3	0	4532	20010811	200000	25.8	87.4	0	20	2.8	0
4437	20010807	210000	21.8	94.4	22	35	4.9	0	4533	20010811	210000	25.4	90.8	0	29	4.1	0
4438	20010807	220000	22.0	97.0	0.5	16	2.2	0	4534	20010811	220000	25.0	90.4	0	29	4.0	0
4439	20010807	230000	20.5	97.0	9	28	3.8	0	4535	20010811	230000	25.6	89.0	0	27	3.8	0
4440	20010807	240000	20.3	94.8	4	16	2.5	0	4536	20010811	240000	25.2	92.5	0	24	3.4	0
4441	20010808	10000	20.4	97.3	3.5	14	2.1	0	4537	20010812	10000	24.5	96.4	0	28	3.8	0
4442	20010808	20000	20.3	97.5	1.5	32	4.4	0	4538	20010812	20000	24.4	96.0	0	1	0.1	0
4443	20010808	30000	20.2	97.4	0.5	20	2.7	0	4539	20010812	30000	24.7	94.3	0	37	5.2	0
4444	20010808	40000	20.2	97.7	0	15	2.1	0	4540	20010812	40000	24.8	91.2	0	35	4.8	0
4445	20010808	50000	20.2	97.2	0	29	4.1	0	4541	20010812	50000	24.4	92.1	0	37	5.2	0
4446	20010808	60000	20.3	97.7	0	19	2.6	0	4542	20010812	60000	24.1	92.6	0	35	4.9	0
4447	20010808	70000	20.7	95.6	0	24	3.4	0	4543	20010812	70000	23.9	94.8	0	19	2.7	0
4448	20010808	80000	21.2	93.0	0	23	3.3	7	4544	20010812	80000	25.7	87.3	0	40	5.5	7
4449	20010808	90000	22.2	85.9	0	22	3.0	7	4545	20010812	90000	27.1	79.0	0	42	5.9	21
4450	20010808	100000	25.1	77.6	0	33	4.6	35	4546	20010812	100000	29.0	66.3	0	41	5.7	28
4451	20010808	110000	26.6	73.2	0	32	4.4	35	4547	20010812	110000	30.3	61.1	0	43	6.0	35
4452	20010808	120000	25.8	74.8	0	33	4.5	14	4548	20010812	120000	31.1	57.4	0	37	5.1	42
4453	20010808	130000	26.8	71.2	0	24	3.3	14	4549	20010812	130000	31.9	62.1	0	52	7.0	42
4454	20010808	140000	27.7	72.9	0	6	0.8	14	4550	20010812	140000	30.8	61.9	0	1	0.1	7
4455	20010808	150000	29.2	59.8	0	49	4.2	35	4551	20010812	150000	32.7	61.6	0	19	2.6	28
4456	20010808	160000	29.2	58.4	0	23	3.3	14	4552	20010812	160000	31.5	61.3	0	10	1.4	21
4457	20010808	170000	28.6	66.5	0	30	4.3	14	4553	20010812	170000	24.8	75.2	0	44	6.0	0
4458	20010808	180000	27.8	66.8	0	17	2.4	7	4554	20010812	180000	24.4	84.9	0	32	4.3	0
4459	20010808	190000	25.1	86.0	0	30	4.1	0	4555	20010812	190000	24.0	85.4	0	32	4.6	0
4460	20010808	200000	24.2	94.2	0	30	4.1	0	4556	20010812	200000	23.6	86.0	0	29	4.0	0
4461	20010808	210000	24.0	89.3	0	17	2.4	0	4557	20010812	210000	23.1	89.3	0	37	5.0	0
4462	20010808	220000	23.7	89.5	0	17	2.4	0	4558	20010812	220000	22.7	91.5	0	32	4.4	0
4463	20010808	230000	23.2	92.0	0	31	4.4	0	4559	20010812	230000	22.4	94.0	0	28	3.8	0
4464	20010808	240000	23.2	88.5	0	15	2.2	0	4560	20010812	240000	22.6	93.8	0	3	0.5	0
4465	20010809	10000	23.6	86.6	0	31	4.3	0	4561	20010813	10000	22.9	77.5	0	19	2.6	0
4466	20010809	20000	23.0	90.4	0	30	4.2	0	4562	20010813	20000	21.4	91.9	0	11	1.8	0
4467	20010809	30000	22.7	93.0	0	28	3.8	0	4563	20010813	30000	20.8	95.7	0	23	3.1	0
4468	20010809	40000	22.7	95.6	0	28	3.9	0	4564	20010813	40000	20.5	95.3	0	5	0.6	0
4469	20010809	50000	22.8	93.7	0	31	4.3	0	4565	20010813	50000	20.6	96.1	0	25	3.6	0
4470	20010809	60000	22.8	93.9	0	23	3.3	0	4566	20010813	60000	20.8	95.5	0	30	4.2	0
4471	20010809	70000	23.0	92.3	0	28	4.0	0	4567	20010813	70000	21.2	94.7	0	33	4.5	0
4472	20010809	80000	20.3	98.0	18.5	20	2.8	0	4568	20010813	80000	22.5	91.7	0	43	6.2	7
4473	20010809	90000	20.0	97.3	4	26	3.8	0	4569	20010813	90000	23.5	84.3	0	29	4.0	7
4474	20010809	100000	21.0	95.0	2	36	5.7	7	4570	20010813	100000	24.3	82.9	0	32	4.3	7
4475	20010809	110000	24.1	86.5	0	35	4.8	35	4571	20010813	110000	24.8	80.7	0	31	4.3	14
4476	20010809	120000	25.7	79.6	0	47	7.1	21	4572	20010813	120000	26.3	72.1	0	34	4.7	14
4477	20010809	130000	26.6	76.4	0	42	5.7	14	4573	20010813	130000	26.1	75.7	0	25	3.5	14
4478	20010809	140000	27.9	70.4	0	45	6.2	42	4574	20010813	140000	26.3	82.6	0	19	2.6	14
4479	20010809	150000	27.8	69.5	0	36	5.1	28	4575	20010813	150000	27.0	74.5	0	43	5.7	21
4480	20010809	160000	28.6	63.5	0	35	4.8	21	4576	20010813	160000	27.9	69.9	0	28	3.8	28
4481	20010809	170000	27.1	72.8	0	32	4.5	7	4577	20010813	170000	28.6	68.3	0	19	2.7	14
4482	20010809	180000	27.1	73.7	0	40	5.6	7	4578	20010813	180000	27.7	73.2	0	34	4.7	7
4483	20010809	190000	25.8	81.4	0	34	4.7	0	4579	20010813	190000	25.1	86.1	0	25	3.5	0
4484	20010809	200000	24.5	93.3	0	35	4.9	0	4580	20010813	200000	24.4	90.8	0	28	3.9	0
4485	20010809	210000	24.0	95.1	0	27	3.7	0	4581	20010813	210000	24.6	86.8	0	29	4.1	0
4486	20010809	220000	24.0	95.8	0	20	2.7	0	4582	20010813	220000	24.1	89.0	0	26	3.6	0
4487	20010809	230000	23.9	95.9	0	28	3.8	0	4583	20010813	230000	24.1	90.3	0	28	3.8	0
4488	20010809	240000	23.2	96.6	0	18	2.5	0	4584	20010813	240000	24.0	92.5	0	18	2.4	0
4489	20010810	10000	23.6	96.0	0	27	3.7	0	4585	20010814	10000	23.6	92.9	0	23	3.2	0
4490	20010810	20000	23.5	94.0	0	21	2.9	0	4586	20010814	20000	23.2	95.6	0	20	2.	

Appendice 7 Les données des observations météorologiques (toutes les données)
(25/46)

No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation	No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation
			C	%	mm	degree	m/s	kWh/m ²				C	%	mm	degree	m/s	kWh/m ²
	yyyymmdd	hhmmss								yyyymmdd	hhmmss						
4609	20010815	10000	23.2	91.7	0	20	2.9	0	4705	20010819	10000	25.0	88.4	0	26	3.5	0
4610	20010815	20000	23.0	92.9	0	32	4.4	0	4706	20010819	20000	24.7	88.5	0	26	3.6	0
4611	20010815	30000	22.8	94.6	0	18	2.5	0	4707	20010819	30000	24.5	89.5	0	29	4.0	0
4612	20010815	40000	22.3	96.0	0	19	2.6	0	4708	20010819	40000	23.9	92.6	0	29	4.0	0
4613	20010815	50000	22.1	95.7	0	29	4.1	0	4709	20010819	50000	23.7	93.6	0	27	3.8	0
4614	20010815	60000	21.9	94.4	0	28	3.9	0	4710	20010819	60000	23.9	92.3	0	31	4.3	0
4615	20010815	70000	22.2	94.8	0	30	4.2	0	4711	20010819	70000	24.2	90.6	0	24	3.4	0
4616	20010815	80000	24.2	87.2	0	32	4.5	7	4712	20010819	80000	25.6	85.8	0	35	4.8	7
4617	20010815	90000	25.0	84.9	3.5	36	5.0	7	4713	20010819	90000	27.4	77.8	0	50	7.0	21
4618	20010815	100000	25.5	83.4	0	34	4.7	7	4714	20010819	100000	29.3	75.1	0	52	7.4	28
4619	20010815	110000	27.5	75.9	0	35	4.8	21	4715	20010819	110000	30.6	68.4	0	45	6.2	35
4620	20010815	120000	28.9	70.0	0	36	5.1	42	4716	20010819	120000	32.2	59.8	0	38	5.2	42
4621	20010815	130000	29.5	64.5	0	38	5.3	21	4717	20010819	130000	32.2	56.8	0	26	3.6	35
4622	20010815	140000	26.6	83.6	0	22	3.1	21	4718	20010819	140000	32.2	61.8	0	30	4.1	21
4623	20010815	150000	28.8	67.7	0.5	16	2.2	14	4719	20010819	150000	23.1	94.4	6	24	3.3	7
4624	20010815	160000	30.1	62.3	0	23	3.3	21	4720	20010819	160000	23.8	90.2	0	25	3.6	0
4625	20010815	170000	25.1	75.9	0	23	2.7	0	4721	20010819	170000	21.5	95.5	12.5	39	5.3	0
4626	20010815	180000	22.2	84.8	0	26	3.5	0	4722	20010819	180000	21.0	97.1	13.5	18	2.4	0
4627	20010815	190000	22.2	84.4	0	45	6.0	0	4723	20010819	190000	21.5	97.1	0.5	39	5.4	0
4628	20010815	200000	21.9	88.5	0	45	6.2	0	4724	20010819	200000	21.6	97.4	0.5	26	3.6	0
4629	20010815	210000	21.1	93.5	0	41	5.6	0	4725	20010819	210000	21.6	97.5	0	18	2.5	0
4630	20010815	220000	20.7	96.1	0	40	5.6	0	4726	20010819	220000	21.5	97.4	0	19	2.6	0
4631	20010815	230000	20.5	97.9	0	4	0.6	0	4727	20010819	230000	21.4	97.5	0	23	3.2	0
4632	20010815	240000	20.8	98.0	0	15	2.0	0	4728	20010819	240000	21.5	94.7	0	33	4.6	0
4633	20010816	10000	21.0	96.7	0	21	2.9	0	4729	20010820	10000	21.5	94.9	0	30	4.1	0
4634	20010816	20000	21.6	89.0	0	2	0.3	0	4730	20010820	20000	21.5	97.5	0	31	4.3	0
4635	20010816	30000	21.2	92.7	0	30	4.1	0	4731	20010820	30000	21.7	98.0	0	34	4.7	0
4636	20010816	40000	21.4	94.9	0	21	2.9	0	4732	20010820	40000	21.5	98.0	0	18	2.5	0
4637	20010816	50000	21.4	96.2	0	28	3.9	0	4733	20010820	50000	21.4	98.0	0	28	3.9	0
4638	20010816	60000	21.4	97.4	0	27	3.8	0	4734	20010820	60000	21.4	98.5	0	22	3.0	0
4639	20010816	70000	21.6	97.5	0	23	3.2	0	4735	20010820	70000	21.6	98.3	0	12	1.6	0
4640	20010816	80000	22.8	93.7	0	24	3.4	7	4736	20010820	80000	22.5	94.4	0	31	4.3	7
4641	20010816	90000	24.9	86.3	0	37	5.0	28	4737	20010820	90000	23.9	90.5	0	16	2.2	7
4642	20010816	100000	26.5	80.1	0	36	5.0	14	4738	20010820	100000	26.0	83.2	0	45	6.2	28
4643	20010816	110000	28.8	75.1	0	24	3.3	42	4739	20010820	110000	28.3	75.2	0	39	5.4	28
4644	20010816	120000	29.6	71.9	0	51	7.2	21	4740	20010820	120000	29.5	75.1	0	33	4.5	21
4645	20010816	130000	30.3	65.9	0	18	2.6	28	4741	20010820	130000	28.1	76.9	0	20	2.8	7
4646	20010816	140000	32.4	58.8	0	28	4.1	28	4742	20010820	140000	26.8	81.5	0	39	5.1	14
4647	20010816	150000	30.4	61.5	0	35	4.9	14	4743	20010820	150000	27.1	83.6	0	17	2.4	14
4648	20010816	160000	29.7	67.3	0	33	4.6	7	4744	20010820	160000	23.6	88.9	0	21	3.0	0
4649	20010816	170000	29.0	72.3	0	30	4.1	0	4745	20010820	170000	23.5	90.6	0	32	4.5	0
4650	20010816	180000	24.4	93.8	2.5	15	2.2	0	4746	20010820	180000	23.5	92.6	0	34	4.7	0
4651	20010816	190000	23.8	94.7	0	27	3.7	0	4747	20010820	190000	22.9	93.5	0	22	2.9	0
4652	20010816	200000	23.3	97.1	0	27	3.7	0	4748	20010820	200000	23.2	91.7	0	11	1.5	0
4653	20010816	210000	23.7	96.9	0	21	2.9	0	4749	20010820	210000	23.0	94.5	0	40	5.6	0
4654	20010816	220000	24.4	97.3	0	0	0.0	0	4750	20010820	220000	22.8	96.8	0	15	2.1	0
4655	20010816	230000	20.4	97.1	11	12	1.6	0	4751	20010820	230000	23.2	94.3	0	34	4.8	0
4656	20010816	240000	21.0	97.6	0	36	5.0	0	4752	20010820	240000	23.0	95.2	0	15	2.1	0
4657	20010817	10000	21.0	97.9	0	28	3.8	0	4753	20010821	10000	22.7	92.0	0	15	2.1	0
4658	20010817	20000	21.4	96.6	0	26	3.6	0	4754	20010821	20000	22.5	95.9	0	41	5.6	0
4659	20010817	30000	21.5	96.7	0	28	3.9	0	4755	20010821	30000	22.2	97.5	0	36	4.7	0
4660	20010817	40000	21.8	97.2	0	4	0.5	0	4756	20010821	40000	22.1	97.5	0	33	4.5	0
4661	20010817	50000	21.8	96.7	0	44	6.0	0	4757	20010821	50000	22.0	98.2	0	31	4.3	0
4662	20010817	60000	21.6	97.5	0	40	5.6	0	4758	20010821	60000	21.9	98.5	0	30	4.2	0
4663	20010817	70000	21.9	96.4	0	30	4.3	0	4759	20010821	70000	22.2	98.0	0	32	4.5	0
4664	20010817	80000	23.7	90.5	0	24	3.4	7	4760	20010821	80000	24.0	91.0	0	40	5.3	7
4665	20010817	90000	25.4	84.3	0	21	2.9	21	4761	20010821	90000	25.8	84.0	0	31	4.2	7
4666	20010817	100000	26.9	80.6	0	25	3.3	21	4762	20010821	100000	27.6	78.6	0	38	5.2	28
4667	20010817	110000	28.2	77.8	0	20	2.6	42	4763	20010821	110000	28.9	70.7	0	10	1.6	21
4668	20010817	120000	29.6	72.8	0	42	6.0	14	4764	20010821	120000	29.6	68.4	0	32	4.4	28
4669	20010817	130000	28.9	70.4	0	21	2.8	35	4765	20010821	130000	29.6	70.4	0	39	5.5	21
4670	20010817	140000	30.7	66.1	0	31	4.3	42	4766	20010821	140000	29.3	70.9	0	1	0.2	7
4671	20010817	150000	30.5	62.6	0	21	3.0	7	4767	20010821	150000	30.5	68.9	0	38	5.5	35
4672	20010817	160000	32.3	56.1	0	37	5.1	21	4768	20010821	160000	28.5	73.6	0	10	1.5	28
4673	20010817	170000	30.4	65.9	0	18	2.5	14	4769	20010821	170000	29.0	68.5	0	6	0.8	14
4674	20010817	180000	29.0	75.5	0	18	2.5	0	4770	20010821	180000	27.4	76.7	0	4	0.5	0
4675	20010817	190000	26.1	88.1	0	23	3.3	0	4771	20010821	190000	25.3	90.3	0	20	2.7	0
4676	20010817	200000	25.1	94.1	0	23	3.3	0	4772	20010821	200000	25.2	92.2	0	33	4.7	0
4677	20010817	210000	24.4	95.3	0	23	3.3	0	4773	20010821	210000	25.4	91.5	0	1	0.1	0
4678	20010817	220000	24.2	97.7	0	23	3.3	0	4774	20010821	220000	25.2	93.6	0	19	2.6	0
4679	20010817	230000	23.7	97.9	0	21	2.9	0	4775	20010821	230000	24.6	96.4	0	19	2.6	0
4680	20010817	240000	23.6	98.3	0	21	2.9	0	4776	20010821	240000	24.6	95.9	0	18	2.5	0
4681	20010818	10000	24.0	96.3	0	30	4.1	0	4777	20010822	10000	24.2	97.5	0	36	5.0	0
4682	20010818	20000	23.3	93.1	0	27	3.8	0	4778	20010822	20000	24.2	98.1	0	32	4.5	

Appendice 7 Les données des observations météorologiques (toutes les données)
(26/46)

No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation	No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation
			C	%	mm	degree	m/s	kW/m ²				C	%	mm	degree	m/s	kW/m ²
	yyyymmdd	hhmmss								yyyymmdd	hhmmss						
4801	20010823	10000	22.0	97.3	0	28	3.9	0	4897	20010827	10000	21.6	97.9	0	28	3.9	0
4802	20010823	20000	21.7	97.8	0	20	2.8	0	4898	20010827	20000	21.6	97.2	0	30	4.2	0
4803	20010823	30000	21.7	98.0	0	31	4.3	0	4899	20010827	30000	21.7	97.9	0	28	3.9	0
4804	20010823	40000	21.4	98.3	0	22	3.0	0	4900	20010827	40000	21.6	98.0	0	24	3.4	0
4805	20010823	50000	21.5	98.4	0	17	2.4	0	4901	20010827	50000	21.5	98.0	0	0	0.0	0
4806	20010823	60000	21.5	97.8	0	34	4.7	0	4902	20010827	60000	21.1	98.4	0	22	3.0	0
4807	20010823	70000	22.0	97.0	0	10	1.4	0	4903	20010827	70000	21.4	98.7	0	20	2.8	0
4808	20010823	80000	23.4	92.0	0	21	2.9	7	4904	20010827	80000	23.4	90.6	0	46	6.3	0
4809	20010823	90000	26.5	81.6	0	16	2.2	21	4905	20010827	90000	26.0	81.7	0	40	5.6	21
4810	20010823	100000	26.6	77.8	0	28	3.9	14	4906	20010827	100000	29.3	68.1	0	10	1.3	28
4811	20010823	110000	29.2	72.0	0	21	2.9	49	4907	20010827	110000	30.8	67.2	0	32	4.5	42
4812	20010823	120000	30.3	64.2	0	37	5.0	49	4908	20010827	120000	30.7	62.7	0	13	1.7	49
4813	20010823	130000	31.2	68.8	0	28	3.8	49	4909	20010827	130000	31.8	55.3	0	40	5.6	14
4814	20010823	140000	30.7	65.3	0	23	3.2	35	4910	20010827	140000	32.0	63.2	0	18	2.4	42
4815	20010823	150000	29.8	69.4	0	27	3.7	42	4911	20010827	150000	31.9	60.6	0	48	6.6	35
4816	20010823	160000	29.6	71.8	0	32	4.4	14	4912	20010827	160000	32.0	56.5	0	8	1.1	7
4817	20010823	170000	28.5	71.0	0	19	2.7	14	4913	20010827	170000	31.0	57.0	0	8	1.1	7
4818	20010823	180000	28.3	73.8	0	34	4.7	7	4914	20010827	180000	30.3	62.2	0	7	1.0	7
4819	20010823	190000	25.8	84.9	0	28	3.8	0	4915	20010827	190000	26.3	88.2	0	15	2.1	0
4820	20010823	200000	24.7	92.6	0	24	3.3	0	4916	20010827	200000	25.9	92.2	0	22	3.0	0
4821	20010823	210000	24.3	95.6	0	24	3.3	0	4917	20010827	210000	26.3	84.0	0	39	5.2	0
4822	20010823	220000	24.3	93.7	0	18	2.5	0	4918	20010827	220000	25.0	91.0	0	22	3.1	0
4823	20010823	230000	24.5	94.2	0	19	2.6	0	4919	20010827	230000	24.3	91.7	0	32	4.5	0
4824	20010823	240000	23.9	96.0	0	18	2.5	0	4920	20010827	240000	23.9	92.2	0	39	5.5	0
4825	20010824	10000	23.7	95.1	0	16	2.2	0	4921	20010828	10000	23.7	94.0	0	31	4.4	0
4826	20010824	20000	23.9	95.0	0	15	2.1	0	4922	20010828	20000	23.3	95.5	0	19	2.7	0
4827	20010824	30000	23.9	95.5	0	27	3.8	0	4923	20010828	30000	22.0	86.7	0	26	5.3	0
4828	20010824	40000	23.5	95.7	0	25	3.4	0	4924	20010828	40000	20.1	97.1	3	20	2.7	0
4829	20010824	50000	23.3	96.2	0	28	3.9	0	4925	20010828	50000	20.4	94.7	0	34	4.7	0
4830	20010824	60000	23.4	94.8	0	27	3.8	0	4926	20010828	60000	20.4	95.8	0	32	4.5	0
4831	20010824	70000	23.2	94.8	0	25	3.5	0	4927	20010828	70000	20.7	96.5	0	27	3.7	0
4832	20010824	80000	24.6	90.5	0	17	2.3	7	4928	20010828	80000	21.8	92.3	0	41	5.7	7
4833	20010824	90000	26.9	82.3	0	22	3.0	21	4929	20010828	90000	21.3	91.3	0.5	5	0.7	7
4834	20010824	100000	28.6	72.9	0	19	2.6	21	4930	20010828	100000	23.5	84.5	0	8	0.9	14
4835	20010824	110000	30.1	71.5	0	19	2.6	49	4931	20010828	110000	23.9	86.2	0	27	3.8	14
4836	20010824	120000	29.1	73.6	0	28	3.9	14	4932	20010828	120000	24.3	78.6	0	49	6.7	14
4837	20010824	130000	30.3	66.9	0	46	6.6	14	4933	20010828	130000	25.8	77.2	0	18	2.6	28
4838	20010824	140000	31.7	68.3	0	45	6.2	35	4934	20010828	140000	26.1	70.8	0	3	0.4	21
4839	20010824	150000	27.2	79.1	0	37	5.0	7	4935	20010828	150000	27.8	67.0	0	5	0.6	21
4840	20010824	160000	30.7	66.8	0	32	4.5	21	4936	20010828	160000	26.6	70.1	0	8	1.2	14
4841	20010824	170000	32.0	54.5	0	26	3.6	14	4937	20010828	170000	25.6	74.2	0	31	4.4	7
4842	20010824	180000	30.4	64.0	0	29	4.1	7	4938	20010828	180000	24.9	83.1	0	30	4.3	0
4843	20010824	190000	26.1	85.9	0	26	3.6	0	4939	20010828	190000	23.5	89.0	0	31	4.3	0
4844	20010824	200000	25.2	92.4	0	33	4.6	0	4940	20010828	200000	22.4	95.8	0	14	2.0	0
4845	20010824	210000	25.3	89.8	0	26	3.6	0	4941	20010828	210000	22.3	97.9	0	17	2.3	0
4846	20010824	220000	24.6	90.0	0	37	5.1	0	4942	20010828	220000	22.7	97.4	0	36	5.0	0
4847	20010824	230000	24.6	92.2	0	17	2.4	0	4943	20010828	230000	23.0	94.8	0	15	2.1	0
4848	20010824	240000	21.5	97.1	21.5	24	3.4	0	4944	20010828	240000	21.8	97.5	9	13	1.7	0
4849	20010825	10000	21.6	98.4	5	29	4.0	0	4945	20010829	10000	21.7	98.1	0	8	1.1	0
4850	20010825	20000	21.6	98.6	1	10	1.4	0	4946	20010829	20000	21.1	98.3	14	31	4.4	0
4851	20010825	30000	22.0	98.7	0	28	3.9	0	4947	20010829	30000	21.2	98.2	0	22	3.0	0
4852	20010825	40000	21.9	98.7	0	7	1.0	0	4948	20010829	40000	21.4	98.5	0	21	2.8	0
4853	20010825	50000	21.7	98.7	0	10	1.4	0	4949	20010829	50000	21.7	98.7	7.5	22	3.1	0
4854	20010825	60000	21.7	98.8	0	17	2.4	0	4950	20010829	60000	21.6	98.8	0.5	28	3.9	0
4855	20010825	70000	21.8	98.8	0	19	2.6	0	4951	20010829	70000	21.8	98.8	2	20	2.8	0
4856	20010825	80000	23.2	93.4	0	22	3.0	7	4952	20010829	80000	22.0	97.5	0.5	22	3.0	7
4857	20010825	90000	25.5	84.6	0	33	4.6	14	4953	20010829	90000	23.7	91.9	0	30	4.1	14
4858	20010825	100000	26.0	82.3	0	22	3.1	42	4954	20010829	100000	24.7	90.1	0	23	3.2	21
4859	20010825	110000	27.6	75.1	0	22	3.1	21	4955	20010829	110000	27.0	83.2	0	19	2.8	28
4860	20010825	120000	28.9	71.1	0	17	2.4	35	4956	20010829	120000	27.8	77.1	0	4	0.6	14
4861	20010825	130000	29.7	74.5	0	9	1.2	42	4957	20010829	130000	28.0	72.4	0	25	3.5	35
4862	20010825	140000	31.2	62.9	0	15	2.1	14	4958	20010829	140000	26.7	81.1	0	21	2.9	14
4863	20010825	150000	31.1	71.1	0	8	1.1	35	4959	20010829	150000	27.0	77.9	0	16	2.3	7
4864	20010825	160000	31.1	61.6	0	19	2.6	28	4960	20010829	160000	26.8	77.1	0	32	4.5	14
4865	20010825	170000	29.1	72.6	0	32	4.7	7	4961	20010829	170000	26.1	83.2	0	10	1.4	7
4866	20010825	180000	28.4	73.5	0	19	2.6	7	4962	20010829	180000	26.9	80.4	0	19	2.7	7
4867	20010825	190000	26.7	85.4	0	20	2.8	0	4963	20010829	190000	23.7	91.8	0	22	3.0	0
4868	20010825	200000	24.5	90.9	0	8	1.2	0	4964	20010829	200000	22.8	97.0	0	22	3.0	0
4869	20010825	210000	24.2	92.8	0	19	2.6	0	4965	20010829	210000	22.4	97.9	0	19	2.7	0
4870	20010825	220000	24.6	88.5	0	4	0.5	0	4966	20010829	220000	22.4	98.3	0	22	3.0	0
4871	20010825	230000	23.9	95.3	0	5	0.7	0	4967	20010829	230000	22.5	98.0	0	18	2.5	0
4872	20010825	240000	23.4	97.4	0	38	5.3	0	4968	20010829	240000	22.7	97.7	0	27	3.7	0
4873	20010826	10000	23.2	96.8	0	28	3.9	0	4969	20010830	10000	22.1	97.3	0	31	4.4	0
4874	20010826	20000	23.8	94.9	0	16	2.3	0	4970	20010830	20000	22.0	97.7	0	25	3.4	0

Appendice 7 Les données des observations météorologiques (toutes les données)
(27/46)

No.	Date	Time	Temperature C	Humidity %	Precipitation mm	Wind direction degree	Wind speed m/s	Insolation kW/m ²	No.	Date	Time	Temperature C	Humidity %	Precipitation mm	Wind direction degree	Wind speed m/s	Insolation kW/m ²
4993	20010831	10000	22.2	98.6	0	19	2.6	0	5089	20010904	10000	21.7	98.0	0	1	0.1	0
4994	20010831	20000	21.8	98.7	0	19	2.7	0	5090	20010904	20000	21.7	98.4	0	30	4.1	0
4995	20010831	30000	21.7	98.7	0	23	3.2	0	5091	20010904	30000	21.9	98.7	0	31	4.3	0
4996	20010831	40000	21.7	98.1	0	27	3.7	0	5092	20010904	40000	22.0	98.7	0	3	0.4	0
4997	20010831	50000	21.3	98.5	0	17	2.3	0	5093	20010904	50000	21.9	98.5	3	9	1.2	0
4998	20010831	60000	21.3	98.8	0	32	4.4	0	5094	20010904	60000	21.8	98.6	3.5	28	3.9	0
4999	20010831	70000	21.5	98.9	0	32	4.5	0	5095	20010904	70000	21.2	98.1	0	18	2.5	0
5000	20010831	80000	24.1	88.1	0	27	3.7	0	5096	20010904	80000	22.6	93.4	0	21	3.0	7
5001	20010831	90000	26.6	77.2	0	35	4.9	21	5097	20010904	90000	25.0	84.4	0	21	3.0	28
5002	20010831	100000	29.5	68.6	0	20	3.0	28	5098	20010904	100000	26.6	75.9	0	1	0.2	14
5003	20010831	110000	30.3	65.4	0	21	3.0	42	5099	20010904	110000	26.8	81.2	0	6	0.8	28
5004	20010831	120000	30.0	67.3	0	39	5.4	42	5100	20010904	120000	28.2	77.0	0	37	5.1	14
5005	20010831	130000	32.0	55.4	0	17	2.5	49	5101	20010904	130000	29.2	70.4	0	20	2.8	42
5006	20010831	140000	31.3	65.7	0	13	1.9	42	5102	20010904	140000	31.9	70.9	0	48	1.0	56
5007	20010831	150000	31.3	58.2	0	32	4.4	7	5103	20010904	150000	29.6	70.8	0	9	1.4	14
5008	20010831	160000	32.9	47.5	0	36	5.0	28	5104	20010904	160000	24.8	92.1	1	11	1.6	7
5009	20010831	170000	31.5	60.3	0	52	7.1	14	5105	20010904	170000	24.3	93.3	0	6	0.8	0
5010	20010831	180000	30.2	66.9	0	5	0.7	7	5106	20010904	180000	23.3	95.6	0	14	1.9	0
5011	20010831	190000	26.4	86.7	0	18	2.5	0	5107	20010904	190000	23.0	97.1	0	10	1.4	0
5012	20010831	200000	19.9	95.6	4	27	3.8	0	5108	20010904	200000	22.7	97.4	0.5	21	3.0	0
5013	20010831	210000	20.4	94.2	0	47	6.0	0	5109	20010904	210000	22.5	97.9	0	17	2.4	0
5014	20010831	220000	20.3	94.7	0.5	37	5.1	0	5110	20010904	220000	22.5	98.1	0	12	1.6	0
5015	20010831	230000	20.4	96.8	0.5	47	6.4	0	5111	20010904	230000	22.7	98.1	0	1	0.2	0
5016	20010831	240000	20.2	96.7	0	35	4.9	0	5112	20010904	240000	22.8	98.3	0	1	0.2	0
5017	20010901	10000	20.3	97.5	0	27	3.9	0	5113	20010905	10000	22.8	98.5	0	6	0.8	0
5018	20010901	20000	20.1	97.9	0	18	2.5	0	5114	20010905	20000	22.5	98.6	0	14	1.9	0
5019	20010901	30000	19.9	98.0	0	16	2.3	0	5115	20010905	30000	22.2	98.7	0	3	0.4	0
5020	20010901	40000	20.1	98.6	0	19	2.7	0	5116	20010905	40000	22.1	98.7	0	35	4.8	0
5021	20010901	50000	20.1	98.3	0	16	2.2	0	5117	20010905	50000	21.9	98.9	0	34	4.7	0
5022	20010901	60000	20.2	98.3	0	18	2.5	0	5118	20010905	60000	21.6	99.0	0	31	4.3	0
5023	20010901	70000	20.4	98.2	0	23	3.2	0	5119	20010905	70000	22.3	98.8	0	38	5.2	0
5024	20010901	80000	21.5	94.0	0	31	4.2	7	5120	20010905	80000	24.0	93.5	0	30	3.6	0
5025	20010901	90000	23.2	88.0	0	26	3.6	14	5121	20010905	90000	26.0	86.6	0	24	3.3	14
5026	20010901	100000	25.7	79.2	0	39	5.4	14	5122	20010905	100000	28.1	76.1	0	18	2.5	14
5027	20010901	110000	26.9	77.5	0	28	3.5	35	5123	20010905	110000	29.8	68.2	0	29	4.0	14
5028	20010901	120000	28.4	71.9	0	36	5.0	35	5124	20010905	120000	30.1	66.3	0	10	1.4	49
5029	20010901	130000	29.0	71.0	0	33	4.6	21	5125	20010905	130000	30.2	62.4	0	41	5.7	21
5030	20010901	140000	30.5	66.4	0	34	4.7	14	5126	20010905	140000	31.1	61.3	0	33	4.8	42
5031	20010901	150000	30.7	64.4	0	25	3.4	35	5127	20010905	150000	31.4	61.4	0	15	2.0	21
5032	20010901	160000	30.4	63.2	0	33	4.5	21	5128	20010905	160000	30.9	57.5	0	42	5.9	21
5033	20010901	170000	30.2	71.6	0	13	1.8	7	5129	20010905	170000	29.1	76.9	0	19	2.6	7
5034	20010901	180000	29.3	67.8	0	2	0.2	7	5130	20010905	180000	27.3	81.8	0	19	2.6	0
5035	20010901	190000	25.6	90.7	0	9	1.3	0	5131	20010905	190000	25.2	94.5	0	19	2.6	0
5036	20010901	200000	24.3	93.7	0	18	2.5	0	5132	20010905	200000	24.4	97.1	0	19	2.6	0
5037	20010901	210000	24.2	94.9	0	4	0.5	0	5133	20010905	210000	24.0	97.7	0	18	2.6	0
5038	20010901	220000	23.9	96.5	0	13	1.8	0	5134	20010905	220000	23.8	98.2	0	18	2.6	0
5039	20010901	230000	23.5	97.6	0	14	1.9	0	5135	20010905	230000	23.5	98.4	0	19	2.6	0
5040	20010901	240000	23.4	98.2	0	31	4.4	0	5136	20010905	240000	23.2	98.5	0	18	2.6	0
5041	20010902	10000	23.7	98.4	0	39	5.4	0	5137	20010906	10000	22.8	98.6	0	18	2.6	0
5042	20010902	20000	23.6	98.3	0	38	5.2	0	5138	20010906	20000	22.8	98.9	0	18	2.6	0
5043	20010902	30000	23.5	94.9	0	22	3.1	0	5139	20010906	30000	22.5	98.9	0	21	2.9	0
5044	20010902	40000	22.9	95.4	0	28	4.0	0	5140	20010906	40000	22.3	98.9	0	20	2.8	0
5045	20010902	50000	22.6	97.0	0	37	5.1	0	5141	20010906	50000	22.4	99.1	0	34	4.7	0
5046	20010902	60000	22.1	97.6	0	10	1.4	0	5142	20010906	60000	22.3	99.1	0	27	3.8	0
5047	20010902	70000	22.7	95.8	0	18	2.5	0	5143	20010906	70000	23.1	99.2	0	29	4.0	0
5048	20010902	80000	24.8	86.2	0	21	2.9	7	5144	20010906	80000	24.5	95.4	0	29	4.1	7
5049	20010902	90000	25.5	87.4	0	26	3.8	14	5145	20010906	90000	27.5	83.6	0	34	4.7	14
5050	20010902	100000	29.0	76.8	0	28	3.8	42	5146	20010906	100000	30.2	71.8	0	28	3.9	28
5051	20010902	110000	29.7	81.0	0	28	3.6	49	5147	20010906	110000	31.3	61.7	0	30	4.0	35
5052	20010902	120000	31.2	60.3	0	35	5.2	28	5148	20010906	120000	32.3	56.5	0	19	2.6	42
5053	20010902	130000	31.5	63.0	0	17	2.4	35	5149	20010906	130000	32.8	51.2	0	30	4.1	42
5054	20010902	140000	31.7	55.6	0	22	3.0	35	5150	20010906	140000	33.7	51.3	0	23	3.1	42
5055	20010902	150000	32.5	53.5	0	22	3.1	28	5151	20010906	150000	34.1	54.5	0	16	2.3	35
5056	20010902	160000	31.8	58.5	0	35	4.7	7	5152	20010906	160000	32.0	57.6	0	6	0.8	14
5057	20010902	170000	29.1	79.8	0	6	0.8	7	5153	20010906	170000	24.4	84.5	0	33	5.4	0
5058	20010902	180000	27.2	82.5	0	18	2.5	0	5154	20010906	180000	21.4	97.3	10.5	26	3.6	0
5059	20010902	190000	25.6	89.4	0	17	2.4	0	5155	20010906	190000	20.2	96.9	4.5	23	3.3	0
5060	20010902	200000	24.9	92.9	0	16	2.2	0	5156	20010906	200000	20.1	97.9	1	14	1.9	0
5061	20010902	210000	25.0	89.0	0	18	2.6	0	5157	20010906	210000	20.1	98.1	0	41	5.7	0
5062	20010902	220000	24.6	90.9	0	12	1.7	0	5158	20010906	220000	20.5	98.1	0	1	0.1	0
5063	20010902	230000	23.8	93.8	0	26	3.6	0	5159	20010906	230000	20.4	97.8	0	30	4.2	0
5064	20010902	240000	23.7	93.3	0	37	5.2	0	5160	20010906	240000	20.4	98.3	0	29	4.0	0
5065	20010903	10000	23.9	94.4	0	39	5.3	0	5161	20010907	10000	20.4	98.1	0	39	5.4	0
5066	20010903	20000	22.0	98.0	10.5	34	4.8	0	5162	20010907	20000	20.3	97.5	0	22	3.1	0
5067	20010903	30000	22.6	98.6	0	41	5.6	0									

Appendice 7 Les données des observations météorologiques (toutes les données)
(28/46)

No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation	No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation
			°C	%	mm	degree	m/s	kW/m ²				°C	%	mm	degree	m/s	kW/m ²
	yyyymmdd	hhmmss								yyyymmdd	hhmmss						
5185	20010908	10000	21.8	98.2	0	37	5.1	0	5281	20010912	10000	22.7	98.3	0	25	3.5	0
5186	20010908	20000	21.7	98.4	0	34	4.7	0	5282	20010912	20000	22.8	98.7	0	25	3.5	0
5187	20010908	30000	21.5	98.5	0	2	0.2	0	5283	20010912	30000	22.5	98.8	0	25	3.5	0
5188	20010908	40000	21.8	98.4	0	6	0.9	0	5284	20010912	40000	22.3	98.9	0	25	3.5	0
5189	20010908	50000	21.5	96.8	0	9	1.2	0	5285	20010912	50000	22.2	99.0	0	23	3.2	0
5190	20010908	60000	21.3	98.2	0	35	4.8	0	5286	20010912	60000	21.7	99.1	0	23	3.1	0
5191	20010908	70000	21.7	98.4	0	27	3.7	0	5287	20010912	70000	22.1	99.2	0	22	3.0	0
5192	20010908	80000	23.3	93.9	0	26	3.6	7	5288	20010912	80000	24.7	92.0	0	35	5.0	7
5193	20010908	90000	24.1	87.3	0	25	3.6	7	5289	20010912	90000	27.7	77.5	0	31	4.4	14
5194	20010908	100000	26.7	76.5	0	35	4.7	42	5290	20010912	100000	30.2	71.1	0	29	4.0	28
5195	20010908	110000	29.0	73.9	0	19	3.0	42	5291	20010912	110000	31.4	60.7	0	43	6.0	35
5196	20010908	120000	30.0	67.1	0	37	5.0	21	5292	20010912	120000	32.2	61.0	0	8	1.2	42
5197	20010908	130000	30.7	64.8	0	21	3.0	35	5293	20010912	130000	32.9	60.0	0	12	1.7	49
5198	20010908	140000	31.1	60.8	0	19	2.6	14	5294	20010912	140000	33.7	59.9	0	41	5.5	35
5199	20010908	150000	30.9	72.9	0	14	1.9	14	5295	20010912	150000	33.9	55.4	0	12	1.7	28
5200	20010908	160000	32.3	64.2	0	3	0.4	21	5296	20010912	160000	34.2	54.7	0	41	5.7	21
5201	20010908	170000	31.5	61.4	0	15	2.1	14	5297	20010912	170000	32.4	58.3	0	31	4.3	14
5202	20010908	180000	28.0	81.5	0	18	2.4	0	5298	20010912	180000	30.6	77.4	0	4	0.5	0
5203	20010908	190000	25.4	91.9	0	18	2.5	0	5299	20010912	190000	27.0	90.0	0	14	2.0	0
5204	20010908	200000	24.4	95.1	0	18	2.5	0	5300	20010912	200000	25.7	93.4	0	15	2.1	0
5205	20010908	210000	24.0	95.6	0	18	2.5	0	5301	20010912	210000	25.3	94.1	0	16	2.2	0
5206	20010908	220000	23.1	96.7	0	18	2.5	0	5302	20010912	220000	25.7	87.1	0	13	1.8	0
5207	20010908	230000	22.9	97.9	0	18	2.5	0	5303	20010912	230000	25.9	87.6	0	22	3.0	0
5208	20010908	240000	22.5	98.2	0	18	2.5	0	5304	20010912	240000	26.1	85.0	0	35	4.6	0
5209	20010909	10000	22.3	98.4	0	18	2.5	0	5305	20010913	10000	24.0	80.7	0	29	4.0	0
5210	20010909	20000	22.1	98.6	0	18	2.5	0	5306	20010913	20000	22.6	86.0	0	13	1.8	0
5211	20010909	30000	22.0	98.8	0	18	2.5	0	5307	20010913	30000	22.1	85.2	0	32	4.4	0
5212	20010909	40000	22.2	98.9	0	18	2.5	0	5308	20010913	40000	21.6	85.6	0	38	5.4	0
5213	20010909	50000	22.3	99.0	0	32	4.4	0	5309	20010913	50000	21.1	86.8	0	30	4.2	0
5214	20010909	60000	22.0	99.1	0	30	4.1	0	5310	20010913	60000	20.8	88.9	0	30	4.2	0
5215	20010909	70000	22.8	99.1	0	31	4.4	0	5311	20010913	70000	21.4	85.9	0	27	3.8	0
5216	20010909	80000	24.4	96.1	0	5	0.6	7	5312	20010913	80000	21.9	83.5	0	25	3.4	0
5217	20010909	90000	26.6	85.3	0	33	4.6	14	5313	20010913	90000	20.9	94.6	1	1	0.1	7
5218	20010909	100000	27.5	80.4	0	31	4.4	7	5314	20010913	100000	20.1	97.0	5.5	21	3.0	0
5219	20010909	110000	20.2	96.6	10	28	3.6	0	5315	20010913	110000	21.8	91.9	0	18	2.4	14
5220	20010909	120000	20.1	93.8	0.5	22	3.2	0	5316	20010913	120000	24.8	76.5	0	23	3.0	28
5221	20010909	130000	19.9	95.8	0	28	4.0	0	5317	20010913	130000	26.9	76.2	0	38	5.2	42
5222	20010909	140000	20.3	95.9	0	32	4.4	0	5318	20010913	140000	27.4	69.2	0	41	5.7	21
5223	20010909	150000	21.2	90.7	0	31	4.4	0	5319	20010913	150000	28.1	70.7	0	50	7.4	35
5224	20010909	160000	22.1	90.9	0	16	2.1	0	5320	20010913	160000	27.1	74.9	0	42	5.8	14
5225	20010909	170000	22.3	90.3	0	6	0.9	0	5321	20010913	170000	26.3	79.2	0	37	5.2	7
5226	20010909	180000	21.6	92.3	0	24	3.4	0	5322	20010913	180000	25.1	89.2	0	17	2.3	0
5227	20010909	190000	20.6	96.7	0	3	0.4	0	5323	20010913	190000	23.9	95.8	0	41	5.8	0
5228	20010909	200000	20.4	98.0	0	28	4.0	0	5324	20010913	200000	23.0	96.4	0	16	2.3	0
5229	20010909	210000	19.9	98.5	0	22	3.1	0	5325	20010913	210000	22.5	97.5	0	16	2.3	0
5230	20010909	220000	19.7	98.9	0	29	4.0	0	5326	20010913	220000	22.5	98.1	0	16	2.3	0
5231	20010909	230000	19.7	99.1	0	40	5.6	0	5327	20010913	230000	22.1	98.2	0	16	2.3	0
5232	20010909	240000	19.3	99.0	0	22	3.1	0	5328	20010913	240000	22.0	98.5	0	17	2.4	0
5233	20010910	10000	19.1	99.1	0	20	2.8	0	5329	20010914	10000	22.2	98.1	0	9	1.3	0
5234	20010910	20000	19.2	99.3	0	21	2.9	0	5330	20010914	20000	22.1	97.3	0	27	3.8	0
5235	20010910	30000	19.2	99.4	0	23	3.2	0	5331	20010914	30000	21.9	98.1	0	1	0.1	0
5236	20010910	40000	19.0	99.5	0	16	2.3	0	5332	20010914	40000	22.0	96.8	0	16	2.3	0
5237	20010910	50000	19.4	99.4	0	26	3.6	0	5333	20010914	50000	21.7	95.8	0	31	4.2	0
5238	20010910	60000	19.2	99.4	0	32	4.4	0	5334	20010914	60000	21.5	97.7	0	40	5.6	0
5239	20010910	70000	19.4	99.4	0	21	2.9	0	5335	20010914	70000	22.0	98.6	0	0	0.0	0
5240	20010910	80000	20.4	99.2	0	19	2.6	7	5336	20010914	80000	23.9	92.2	0	33	4.7	7
5241	20010910	90000	22.6	93.1	0	17	2.3	14	5337	20010914	90000	26.0	80.7	0	41	5.6	14
5242	20010910	100000	24.6	86.5	0	20	2.6	14	5338	20010914	100000	28.7	75.5	0	35	4.9	28
5243	20010910	110000	27.0	77.8	0	34	4.8	21	5339	20010914	110000	30.2	70.8	0	20	2.6	35
5244	20010910	120000	28.5	64.1	0	15	2.1	28	5340	20010914	120000	31.2	62.2	0	45	6.2	49
5245	20010910	130000	30.2	64.3	0	23	3.1	35	5341	20010914	130000	29.7	69.8	0	39	5.1	14
5246	20010910	140000	30.3	64.5	0	26	3.5	42	5342	20010914	140000	32.6	57.9	0	31	4.3	42
5247	20010910	150000	29.9	62.4	0	28	3.9	14	5343	20010914	150000	30.7	68.7	0	34	5.0	42
5248	20010910	160000	29.9	66.0	0	21	2.9	7	5344	20010914	160000	30.4	64.6	0	35	4.8	7
5249	20010910	170000	29.6	66.7	0	17	2.2	14	5345	20010914	170000	29.6	75.9	0	18	2.5	14
5250	20010910	180000	28.0	81.8	0	3	0.4	0	5346	20010914	180000	28.7	82.4	0	32	4.4	0
5251	20010910	190000	24.6	93.0	0	3	0.4	0	5347	20010914	190000	25.6	95.1	0	17	2.4	0
5252	20010910	200000	23.0	96.2	0	3	0.4	0	5348	20010914	200000	24.6	96.4	0	16	2.2	0
5253	20010910	210000	22.9	97.9	0	3	0.4	0	5349	20010914	210000	20.3	95.1	6	30	4.1	0
5254	20010910	220000	22.5	98.2	0	3	0.4	0	5350	20010914	220000	19.8	98.5	3.5	19	2.6	0
5255	20010910	230000	22.1	98.5	0	3	0.4	0	5351	20010914	230000	20.4	98.7	1.5	28	3.9	0
5256	20010910	240000	22.0	98.7	0	3	0.4	0	5352	20010914	240000	20.4	98.4	0	22	3.1	0
5257	20010911	10000	21.9	98.8	0	3	0.4	0	5353	20010915	10000	20.6	98.7	0	22	3.0	0
5258	20010911	20000	22.1	98.9	0	3	0.4	0	5354	20010915	20000	20.5	98.7	0	22	3.0	0
5259																	

Appendice 7 Les données des observations météorologiques (toutes les données)
(29/46)

No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation	No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation
			°C	%	mm	degree	m/s	kW/m ²				°C	%	mm	degree	m/s	kW/m ²
	yyyymmdd	hhmmss								yyyymmdd	hhmmss						
5377	20010916	10000	21.6	97.0	0.5	25	3.4	0	5473	20010920	10000	20.5	99.0	0	0	0.0	0
5378	20010916	20000	21.5	97.7	0	21	3.0	0	5474	20010920	20000	20.5	99.0	0	4	0.6	0
5379	20010916	30000	21.5	98.2	0	1	0.2	0	5475	20010920	30000	20.4	99.1	0	30	4.2	0
5380	20010916	40000	21.6	97.8	0	6	0.8	0	5476	20010920	40000	20.3	99.1	0	24	3.3	0
5381	20010916	50000	21.5	98.4	0	1	0.2	0	5477	20010920	50000	20.0	99.2	0	24	3.3	0
5382	20010916	60000	21.4	98.7	0	22	3.0	0	5478	20010920	60000	19.9	99.3	0	1	0.1	0
5383	20010916	70000	21.5	98.8	0	19	2.7	0	5479	20010920	70000	20.4	99.3	0	1	0.1	0
5384	20010916	80000	22.4	95.5	0	23	3.2	7	5480	20010920	80000	21.6	98.9	0	18	2.5	7
5385	20010916	90000	24.0	87.7	0	21	2.9	7	5481	20010920	90000	23.7	93.5	0	9	1.2	7
5386	20010916	100000	25.6	82.8	0	19	2.7	14	5482	20010920	100000	25.7	82.8	0	20	2.6	28
5387	20010916	110000	29.5	63.2	0	25	3.4	35	5483	20010920	110000	27.3	71.9	0	29	4.0	14
5388	20010916	120000	30.8	64.5	0	30	4.0	42	5484	20010920	120000	29.7	59.3	0	13	1.8	21
5389	20010916	130000	31.1	60.3	0	36	5.0	42	5485	20010920	130000	28.7	64.5	0	35	4.9	35
5390	20010916	140000	31.4	54.1	0	41	0.6	42	5486	20010920	140000	29.2	68.8	0	19	2.7	42
5391	20010916	150000	30.3	66.8	0	15	2.1	21	5487	20010920	150000	28.5	69.0	0	15	2.1	21
5392	20010916	160000	29.2	76.0	0	22	3.1	14	5488	20010920	160000	27.8	73.4	0	15	2.0	14
5393	20010916	170000	29.9	68.9	0	19	2.6	7	5489	20010920	170000	27.3	70.8	0	18	2.5	7
5394	20010916	180000	27.1	85.1	0	32	4.4	0	5490	20010920	180000	26.9	77.6	0	21	3.0	0
5395	20010916	190000	24.6	93.6	0	12	1.6	0	5491	20010920	190000	23.2	93.6	0	17	2.3	0
5396	20010916	200000	23.6	94.2	0	26	3.6	0	5492	20010920	200000	22.3	96.8	0	19	2.6	0
5397	20010916	210000	23.2	96.4	0	20	2.7	0	5493	20010920	210000	22.4	97.6	0	21	2.9	0
5398	20010916	220000	22.9	97.5	0	20	2.7	0	5494	20010920	220000	22.6	97.4	0	7	1.0	0
5399	20010916	230000	22.4	97.9	0	20	2.8	0	5495	20010920	230000	22.2	97.0	0	11	1.6	0
5400	20010916	240000	22.3	98.5	0	20	2.8	0	5496	20010920	240000	22.3	98.1	0	11	1.6	0
5401	20010917	10000	21.9	98.6	0	20	2.8	0	5497	20010921	10000	22.2	98.4	0	11	1.5	0
5402	20010917	20000	21.8	98.7	0	28	3.8	0	5498	20010921	20000	21.8	98.3	0	1	0.1	0
5403	20010917	30000	21.6	98.8	0	24	3.3	0	5499	20010921	30000	21.0	98.3	0	1	0.1	0
5404	20010917	40000	22.6	98.9	0	27	3.8	0	5500	20010921	40000	20.9	98.8	0	1	0.1	0
5405	20010917	50000	22.5	98.9	0	28	3.9	0	5501	20010921	50000	20.9	99.0	0	5	0.7	0
5406	20010917	60000	21.6	98.8	0	18	2.5	0	5502	20010921	60000	20.8	98.9	0	3	0.4	0
5407	20010917	70000	22.0	98.4	0	26	3.6	0	5503	20010921	70000	21.3	99.1	0	0	0.0	0
5408	20010917	80000	23.4	91.5	0	25	3.5	7	5504	20010921	80000	23.4	91.4	0	24	3.3	0
5409	20010917	90000	26.0	81.0	0	34	4.1	14	5505	20010921	90000	26.8	80.1	0	17	2.3	21
5410	20010917	100000	27.5	81.7	0	53	7.0	21	5506	20010921	100000	30.1	64.3	0	17	2.4	21
5411	20010917	110000	29.9	70.5	0	43	5.9	35	5507	20010921	110000	32.3	57.1	0	17	2.4	42
5412	20010917	120000	31.7	57.7	0	36	5.0	42	5508	20010921	120000	31.9	54.6	0	4	0.6	42
5413	20010917	130000	32.7	62.8	0	34	4.8	42	5509	20010921	130000	30.7	63.0	0	37	5.1	49
5414	20010917	140000	33.0	61.9	0	21	2.9	35	5510	20010921	140000	30.5	61.2	0	19	2.7	42
5415	20010917	150000	33.3	58.7	0	29	4.0	28	5511	20010921	150000	32.6	49.0	0	14	1.9	28
5416	20010917	160000	32.8	60.0	0	30	4.3	21	5512	20010921	160000	32.0	56.4	0	8	1.1	21
5417	20010917	170000	32.2	63.5	0	22	3.2	14	5513	20010921	170000	31.2	65.6	0	13	1.8	14
5418	20010917	180000	30.7	73.8	0	21	2.9	0	5514	20010921	180000	29.9	73.6	0	0	0.0	0
5419	20010917	190000	25.7	93.1	0	20	2.8	0	5515	20010921	190000	25.2	89.6	0	0	0.0	0
5420	20010917	200000	24.5	95.7	0	20	2.8	0	5516	20010921	200000	23.8	95.5	0	0	0.0	0
5421	20010917	210000	24.1	96.8	0	20	2.8	0	5517	20010921	210000	23.2	95.9	0	0	0.0	0
5422	20010917	220000	23.8	97.2	0	20	2.8	0	5518	20010921	220000	22.8	97.4	0	0	0.0	0
5423	20010917	230000	23.7	97.3	0	17	2.4	0	5519	20010921	230000	22.4	97.8	0	0	0.0	0
5424	20010917	240000	23.9	97.3	0	34	4.8	0	5520	20010921	240000	22.1	97.6	0	0	0.0	0
5425	20010918	10000	20.5	96.5	1	20	2.8	0	5521	20010922	10000	21.9	98.1	0	19	2.6	0
5426	20010918	20000	20.4	98.0	0	40	5.6	0	5522	20010922	20000	21.8	97.9	0	19	2.6	0
5427	20010918	30000	20.4	98.3	0	34	4.7	0	5523	20010922	30000	21.9	98.4	0	28	3.9	0
5428	20010918	40000	20.1	98.2	0	18	2.5	0	5524	20010922	40000	22.2	96.6	0	32	4.4	0
5429	20010918	50000	20.1	98.4	0	17	2.4	0	5525	20010922	50000	23.0	92.4	0	30	4.1	0
5430	20010918	60000	20.1	98.1	0	24	3.4	0	5526	20010922	60000	22.2	95.2	0	20	2.7	0
5431	20010918	70000	20.5	97.0	0	37	5.1	0	5527	20010922	70000	22.8	94.6	0	25	3.5	0
5432	20010918	80000	21.3	96.9	0	43	5.9	7	5528	20010922	80000	25.3	87.8	0	32	4.5	7
5433	20010918	90000	24.6	78.8	0	19	2.6	14	5529	20010922	90000	27.4	79.0	0	47	6.3	21
5434	20010918	100000	27.5	74.3	0	30	4.1	28	5530	20010922	100000	30.6	68.9	0	40	5.5	28
5435	20010918	110000	30.1	68.6	0	30	3.9	42	5531	20010922	110000	32.0	63.2	0	39	6.1	35
5436	20010918	120000	32.0	67.0	0	21	2.9	49	5532	20010922	120000	33.3	64.5	0	38	5.4	35
5437	20010918	130000	31.3	68.8	0	43	5.7	28	5533	20010922	130000	33.2	59.9	0	51	7.2	35
5438	20010918	140000	31.1	66.7	0	46	6.7	21	5534	20010922	140000	33.5	57.4	0	42	5.8	35
5439	20010918	150000	31.8	63.1	0	12	1.5	7	5535	20010922	150000	33.2	61.8	0	53	7.3	28
5440	20010918	160000	32.0	67.2	0	47	6.5	21	5536	20010922	160000	32.9	62.1	0	39	5.4	21
5441	20010918	170000	32.0	62.3	0	32	4.4	14	5537	20010922	170000	30.4	71.6	0	19	2.6	0
5442	20010918	180000	29.0	75.1	0	40	5.6	0	5538	20010922	180000	21.2	96.1	4	7	1.0	0
5443	20010918	190000	25.7	92.1	0	2	0.3	0	5539	20010922	190000	20.8	97.1	0	37	5.7	0
5444	20010918	200000	24.6	96.5	0	13	1.8	0	5540	20010922	200000	20.5	96.9	0	15	2.1	0
5445	20010918	210000	23.7	95.7	0	38	5.3	0	5541	20010922	210000	20.6	97.3	0	33	4.5	0
5446	20010918	220000	23.2	97.0	0	39	5.4	0	5542	20010922	220000	20.6	97.4	0	27	3.8	0
5447	20010918	230000	22.9	97.5	0	39	5.4	0	5543	20010922	230000	20.5	97.3	0	30	4.0	0
5448	20010918	240000	22.4	97.9	0	39	5.4	0	5544	20010922	240000	20.4	97.8	0	33	4.5	0
5449	20010919	10000	22.6	98.5	0	39	5.4	0	5545	20010923	10000	20.3	98.0	0	33	4.5	0
5450	20010919	20000	22.4	98.6	0	38	5.3	0	5546	20010923	20000	20.5	98.5	0	25	3.5	0
5451	200																

Appendice 7 Les données des observations météorologiques (toutes les données)
(30/46)

No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation	No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation
			C	%	mm	degree	m/s	kW/m ²				C	%	mm	degree	m/s	kW/m ²
	yyyymmdd	hhmmss								yyyymmdd	hhmmss						
5569	20010924	10000	23.9	80.9	0	27	3.8	0	5665	20010928	10000	22.2	95.5	0	19	2.6	0
5570	20010924	20000	23.8	82.2	0	31	4.4	0	5666	20010928	20000	22.8	93.9	0	19	2.7	0
5571	20010924	30000	23.8	83.5	0	24	3.6	0	5667	20010928	30000	22.4	94.5	0	14	2.0	0
5572	20010924	40000	23.5	88.6	0	33	4.6	0	5668	20010928	40000	22.0	96.4	0	20	2.7	0
5573	20010924	50000	22.5	92.2	0	32	4.5	0	5669	20010928	50000	21.8	95.9	0	18	2.5	0
5574	20010924	60000	21.7	96.9	0	3	0.4	0	5670	20010928	60000	22.4	92.6	0	8	1.1	0
5575	20010924	70000	22.5	97.5	0	3	0.3	0	5671	20010928	70000	23.0	91.1	0	6	0.8	0
5576	20010924	80000	24.1	87.6	0	19	2.7	7	5672	20010928	80000	21.8	86.4	0	20	2.9	7
5577	20010924	90000	27.3	77.1	0	19	2.7	21	5673	20010928	90000	23.9	79.4	0	16	2.0	7
5578	20010924	100000	29.8	69.1	0	24	3.3	35	5674	20010928	100000	22.5	88.6	0	28	4.0	7
5579	20010924	110000	30.8	62.9	0	21	3.0	49	5675	20010928	110000	24.1	83.5	0	42	5.6	14
5580	20010924	120000	30.7	64.5	0	27	3.9	14	5676	20010928	120000	28.1	70.8	0	28	4.0	42
5581	20010924	130000	31.3	60.8	0	17	2.5	14	5677	20010928	130000	30.5	58.2	0	16	2.2	42
5582	20010924	140000	31.7	59.3	0	25	3.5	35	5678	20010928	140000	30.2	61.1	0	31	4.2	28
5583	20010924	150000	31.0	52.9	0	8	0.8	7	5679	20010928	150000	30.7	60.0	0	23	3.2	21
5584	20010924	160000	29.4	53.9	0	10	1.5	21	5680	20010928	160000	29.9	64.3	0	20	2.8	7
5585	20010924	170000	30.1	54.1	0	20	2.8	14	5681	20010928	170000	28.7	67.7	0	42	5.8	7
5586	20010924	180000	28.0	68.4	0	3	0.5	0	5682	20010928	180000	27.0	80.6	0	39	5.4	0
5587	20010924	190000	24.8	79.1	0	39	5.5	0	5683	20010928	190000	24.7	90.7	0	23	3.2	0
5588	20010924	200000	23.3	86.0	0	1	0.1	0	5684	20010928	200000	23.8	93.3	0	19	2.7	0
5589	20010924	210000	22.2	91.3	0	17	2.3	0	5685	20010928	210000	23.2	95.7	0	19	2.7	0
5590	20010924	220000	21.4	95.0	0	17	2.4	0	5686	20010928	220000	23.0	96.0	0	19	2.7	0
5591	20010924	230000	20.9	95.3	0	17	2.4	0	5687	20010928	230000	23.1	97.2	0	19	2.7	0
5592	20010924	240000	21.5	96.5	0	17	2.4	0	5688	20010928	240000	22.7	96.7	0	23	3.1	0
5593	20010925	10000	22.0	92.9	0	17	2.4	0	5689	20010929	10000	22.7	96.4	0	26	3.6	0
5594	20010925	20000	22.1	90.3	0	17	2.4	0	5690	20010929	20000	22.6	94.5	0	26	3.6	0
5595	20010925	30000	21.2	95.0	0	18	2.5	0	5691	20010929	30000	21.7	96.5	0	25	3.4	0
5596	20010925	40000	21.2	97.4	0	26	3.6	0	5692	20010929	40000	22.1	95.0	0	18	2.4	0
5597	20010925	50000	20.8	96.9	0	39	5.3	0	5693	20010929	50000	22.1	95.8	0	27	3.8	0
5598	20010925	60000	20.4	97.8	0	24	3.3	0	5694	20010929	60000	21.9	96.2	0	30	4.1	0
5599	20010925	70000	20.6	95.9	0	23	3.2	0	5695	20010929	70000	22.5	95.4	0	22	3.0	0
5600	20010925	80000	23.7	83.6	0	33	4.7	7	5696	20010929	80000	23.9	91.0	0	40	5.9	7
5601	20010925	90000	27.8	65.1	0	31	4.3	21	5697	20010929	90000	26.2	84.5	0	23	3.1	21
5602	20010925	100000	30.1	56.3	0	30	4.2	28	5698	20010929	100000	29.7	71.9	0	27	3.7	28
5603	20010925	110000	31.7	51.4	0	30	4.4	35	5699	20010929	110000	30.6	66.5	0	35	4.8	21
5604	20010925	120000	32.2	51.8	0	45	6.1	42	5700	20010929	120000	31.2	63.7	0	27	3.7	49
5605	20010925	130000	32.8	51.5	0	52	7.1	42	5701	20010929	130000	32.1	62.9	0	18	2.6	42
5606	20010925	140000	34.1	48.1	0	59	7.4	35	5702	20010929	140000	32.2	57.5	0	14	1.9	35
5607	20010925	150000	34.1	49.3	0	4	0.5	28	5703	20010929	150000	33.7	51.9	0	22	3.1	28
5608	20010925	160000	34.1	51.1	0	38	5.4	21	5704	20010929	160000	33.2	50.0	0	27	3.9	21
5609	20010925	170000	33.2	52.9	0	41	0.2	7	5705	20010929	170000	32.6	47.6	0	31	4.2	7
5610	20010925	180000	30.7	69.7	0	7	1.0	0	5706	20010929	180000	29.9	71.1	0	18	2.6	0
5611	20010925	190000	26.9	88.2	0	7	1.0	0	5707	20010929	190000	26.3	85.7	0	18	2.6	0
5612	20010925	200000	26.0	92.2	0	16	2.3	0	5708	20010929	200000	25.0	87.3	0	34	4.7	0
5613	20010925	210000	26.7	78.6	0	29	4.0	0	5709	20010929	210000	24.2	91.0	0	33	4.6	0
5614	20010925	220000	25.4	84.1	0	27	3.8	0	5710	20010929	220000	26.2	74.7	0	22	3.0	0
5615	20010925	230000	25.0	85.0	0	20	2.8	0	5711	20010929	230000	26.2	73.2	0	20	2.8	0
5616	20010925	240000	24.5	85.4	0	25	3.5	0	5712	20010929	240000	24.5	88.8	0	38	5.3	0
5617	20010926	10000	23.8	88.7	0	32	4.5	0	5713	20010930	10000	23.5	91.4	0	33	4.6	0
5618	20010926	20000	23.3	88.5	0	25	3.4	0	5714	20010930	20000	23.6	91.5	0	6	0.8	0
5619	20010926	30000	22.8	89.5	0	23	3.2	0	5715	20010930	30000	23.9	88.3	0	40	5.6	0
5620	20010926	40000	21.9	90.8	0	31	4.3	0	5716	20010930	40000	23.6	89.1	0	35	4.9	0
5621	20010926	50000	21.2	94.2	0	15	2.0	0	5717	20010930	50000	23.5	89.6	0	34	4.9	0
5622	20010926	60000	20.8	93.9	0	30	4.0	0	5718	20010930	60000	23.8	87.0	0	35	4.8	0
5623	20010926	70000	21.1	91.5	0	37	5.1	0	5719	20010930	70000	24.3	88.1	0	5	0.7	0
5624	20010926	80000	23.3	84.9	0	39	5.5	7	5720	20010930	80000	26.3	77.2	0	31	4.3	7
5625	20010926	90000	26.0	76.8	0	18	2.5	21	5721	20010930	90000	28.0	73.1	0	35	4.8	21
5626	20010926	100000	27.7	69.5	0	19	2.7	35	5722	20010930	100000	31.2	58.0	0	23	3.1	28
5627	20010926	110000	29.6	61.9	0	29	3.9	35	5723	20010930	110000	32.7	53.4	0	20	2.7	28
5628	20010926	120000	30.9	57.3	0	20	2.8	35	5724	20010930	120000	33.7	50.1	0	10	1.4	35
5629	20010926	130000	31.4	57.7	0	26	3.7	35	5725	20010930	130000	34.0	45.2	0	31	4.4	35
5630	20010926	140000	31.6	57.6	0	22	3.0	28	5726	20010930	140000	34.3	47.6	0	25	3.6	42
5631	20010926	150000	31.1	59.5	0	19	2.6	28	5727	20010930	150000	35.3	42.1	0	18	2.5	28
5632	20010926	160000	30.9	65.3	0	25	3.4	14	5728	20010930	160000	34.0	45.3	0	9	1.3	21
5633	20010926	170000	29.7	65.2	0	22	3.1	7	5729	20010930	170000	33.7	50.3	0	16	2.3	14
5634	20010926	180000	28.4	77.3	0	18	2.5	0	5730	20010930	180000	29.8	72.2	0	20	2.8	0
5635	20010926	190000	25.6	90.1	0	18	2.5	0	5731	20010930	190000	26.4	83.5	0	20	2.8	0
5636	20010926	200000	25.7	85.9	0	21	3.0	0	5732	20010930	200000	25.4	70.8	0	17	2.4	0
5637	20010926	210000	25.5	83.8	0	41	5.6	0	5733	20010930	210000	24.1	77.5	0	39	5.5	0
5638	20010926	220000	24.7	85.2	0	40	5.7	0	5734	20010930	220000	23.4	82.5	0	38	5.2	0
5639	20010926	230000	24.3	85.8	0	27	4.0	0	5735	20010930	230000	22.1	91.1	0	17	2.4	0
5640	20010926	240000	24.1	81.8	0	27	3.9	0	5736	20010930	240000	22.0	91.4	0	30	4.2	0
5641	20010927	10000	24.0	82.5	0	35	4.7	0	5737	20011001	10000	21.9	90.2	0	29	4.1	0
5642	20010927	20000	23.6	84.6	0	29	4.2	0	5738	20011001	20000	21.3	92.2	0	23	3.1	0
5643																	

Appendice 7 Les données des observations météorologiques (toutes les données)
(31/46)

No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation	No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation
			°C	%	mm	degree	m/s	kWh/m ²				°C	%	mm	degree	m/s	kWh/m ²
	yyyymmdd	hhmmss								yyyymmdd	hhmmss						
5761	20011002	10000	22.8	89.6	0	29	4.0	0	5857	20011006	10000	22.3	94.5	0	15	2.1	0
5762	20011002	20000	22.4	87.4	0	20	2.8	0	5858	20011006	20000	22.0	93.3	0	12	1.7	0
5763	20011002	30000	22.6	83.2	0	16	2.2	0	5859	20011006	30000	22.2	93.2	0	40	5.6	0
5764	20011002	40000	23.4	73.6	0	37	5.0	0	5860	20011006	40000	21.0	97.4	0	38	5.2	0
5765	20011002	50000	21.8	82.3	0	36	5.0	0	5861	20011006	50000	20.8	97.7	0	39	5.4	0
5766	20011002	60000	20.7	87.4	0	35	4.8	0	5862	20011006	60000	20.6	97.8	0	30	4.1	0
5767	20011002	70000	20.8	85.3	0	30	4.2	0	5863	20011006	70000	20.6	98.5	0	27	3.7	0
5768	20011002	80000	23.2	74.9	0	26	3.6	7	5864	20011006	80000	24.1	86.9	0	2	0.3	0
5769	20011002	90000	27.3	62.2	0	20	2.7	21	5865	20011006	90000	29.5	64.4	0	24	3.3	21
5770	20011002	100000	29.6	53.8	0	35	4.8	28	5866	20011006	100000	31.5	54.5	0	16	2.3	28
5771	20011002	110000	31.5	47.6	0	33	4.6	28	5867	20011006	110000	32.4	49.6	0	12	1.7	35
5772	20011002	120000	32.4	45.6	0	25	3.5	42	5868	20011006	120000	33.9	40.6	0	17	2.4	42
5773	20011002	130000	33.8	41.2	0	9	1.2	42	5869	20011006	130000	34.5	39.9	0	5	0.7	35
5774	20011002	140000	34.5	41.5	0	35	4.9	35	5870	20011006	140000	34.6	40.8	0	19	2.7	35
5775	20011002	150000	33.9	40.4	0	40	5.5	21	5871	20011006	150000	36.0	30.2	0	23	3.2	28
5776	20011002	160000	34.7	40.0	0	5	0.6	14	5872	20011006	160000	35.3	33.9	0	17	2.3	21
5777	20011002	170000	32.8	49.6	0	32	4.5	7	5873	20011006	170000	34.6	39.9	0	20	2.8	7
5778	20011002	180000	30.7	60.8	0	31	4.3	0	5874	20011006	180000	31.3	57.7	0	17	2.3	0
5779	20011002	190000	26.2	79.6	0	20	2.7	0	5875	20011006	190000	25.6	77.0	0	17	2.4	0
5780	20011002	200000	25.3	80.7	0	19	2.6	0	5876	20011006	200000	24.3	85.2	0	17	2.4	0
5781	20011002	210000	25.9	77.2	0	28	3.9	0	5877	20011006	210000	23.5	90.1	0	17	2.4	0
5782	20011002	220000	24.2	86.3	0	19	2.7	0	5878	20011006	220000	23.2	92.3	0	17	2.4	0
5783	20011002	230000	24.9	80.3	0	21	3.0	0	5879	20011006	230000	22.9	93.3	0	18	2.4	0
5784	20011002	240000	25.0	85.7	0	24	3.3	0	5880	20011006	240000	22.4	94.2	0	18	2.4	0
5785	20011003	10000	24.5	88.1	0	31	4.2	0	5881	20011007	10000	23.3	89.9	0	3	0.5	0
5786	20011003	20000	24.0	89.7	0	29	4.0	0	5882	20011007	20000	22.7	91.2	0	21	3.0	0
5787	20011003	30000	23.7	91.2	0	30	4.2	0	5883	20011007	30000	22.0	94.3	0	27	3.8	0
5788	20011003	40000	23.6	91.8	0	30	4.1	0	5884	20011007	40000	22.1	93.3	0	21	2.9	0
5789	20011003	50000	23.1	93.9	0	28	3.9	0	5885	20011007	50000	22.7	87.1	0	27	3.7	0
5790	20011003	60000	22.9	95.1	0	30	4.1	0	5886	20011007	60000	22.4	89.4	0	23	3.2	0
5791	20011003	70000	23.3	94.0	0	22	2.9	0	5887	20011007	70000	23.0	86.3	0	22	3.0	0
5792	20011003	80000	24.9	87.9	0	18	2.5	7	5888	20011007	80000	26.5	71.2	0	41	5.6	7
5793	20011003	90000	27.7	75.6	0	11	1.5	21	5889	20011007	90000	30.3	55.8	0	47	6.4	21
5794	20011003	100000	30.5	60.4	0	35	4.9	28	5890	20011007	100000	33.0	41.7	0	38	5.3	28
5795	20011003	110000	32.0	57.1	0	35	4.7	35	5891	20011007	110000	34.5	39.8	0	47	6.6	35
5796	20011003	120000	33.3	46.4	0	26	3.6	42	5892	20011007	120000	35.8	35.9	0	39	5.4	35
5797	20011003	130000	34.8	42.5	0	11	1.9	42	5893	20011007	130000	36.5	31.8	0	41	5.5	35
5798	20011003	140000	34.9	39.7	0	33	4.6	35	5894	20011007	140000	37.1	29.0	0	22	2.8	35
5799	20011003	150000	36.0	34.9	0	23	3.2	28	5895	20011007	150000	37.4	26.9	0	47	6.5	28
5800	20011003	160000	36.0	33.9	0	42	5.8	21	5896	20011007	160000	37.5	26.7	0	15	2.0	21
5801	20011003	170000	33.8	45.7	0	24	3.3	7	5897	20011007	170000	36.1	32.7	0	14	2.0	7
5802	20011003	180000	30.1	63.9	0	18	2.4	0	5898	20011007	180000	31.7	60.7	0	16	2.2	0
5803	20011003	190000	26.5	79.8	0	18	2.4	0	5899	20011007	190000	25.8	76.5	0	16	2.2	0
5804	20011003	200000	21.9	85.4	4	36	5.0	0	5900	20011007	200000	23.9	85.2	0	16	2.2	0
5805	20011003	210000	21.5	94.5	0	1	0.1	0	5901	20011007	210000	23.4	87.9	0	18	2.5	0
5806	20011003	220000	22.6	97.5	0	9	1.2	0	5902	20011007	220000	23.4	84.7	0	36	5.0	0
5807	20011003	230000	23.3	83.6	0	32	4.2	0	5903	20011007	230000	23.4	87.8	0	33	4.5	0
5808	20011003	240000	22.4	87.4	0	4	0.6	0	5904	20011007	240000	23.7	85.1	0	18	2.6	0
5809	20011004	10000	24.0	69.9	0	23	3.1	0	5905	20011008	10000	23.9	84.0	0	28	3.9	0
5810	20011004	20000	22.3	81.6	0	32	4.5	0	5906	20011008	20000	23.5	88.0	0	8	1.1	0
5811	20011004	30000	21.4	91.2	0	36	5.0	0	5907	20011008	30000	22.8	91.4	0	15	2.1	0
5812	20011004	40000	21.3	92.6	0	36	5.0	0	5908	20011008	40000	22.4	91.5	0	8	1.1	0
5813	20011004	50000	21.3	94.1	0	41	5.7	0	5909	20011008	50000	22.5	91.1	0	16	2.2	0
5814	20011004	60000	21.1	95.8	0	6	0.8	0	5910	20011008	60000	22.9	89.3	0	34	4.7	0
5815	20011004	70000	21.4	92.8	0	29	3.9	0	5911	20011008	70000	22.6	91.7	0	30	4.2	0
5816	20011004	80000	23.4	85.2	0	33	4.5	7	5912	20011008	80000	25.2	81.6	0	35	5.0	7
5817	20011004	90000	26.1	69.0	0	29	4.1	21	5913	20011008	90000	28.9	71.1	0	38	5.5	21
5818	20011004	100000	27.9	64.3	0	24	3.3	21	5914	20011008	100000	31.9	52.0	0	59	8.3	28
5819	20011004	110000	30.4	58.5	0	21	2.9	35	5915	20011008	110000	33.7	41.7	0	43	6.2	35
5820	20011004	120000	30.8	62.7	0	24	3.4	42	5916	20011008	120000	35.0	36.8	0	49	6.5	35
5821	20011004	130000	32.6	56.4	0	27	3.8	42	5917	20011008	130000	36.9	31.7	0	16	2.4	42
5822	20011004	140000	33.4	52.4	0	25	3.6	35	5918	20011008	140000	36.5	35.9	0	16	2.3	28
5823	20011004	150000	34.5	52.0	0	17	2.4	28	5919	20011008	150000	35.7	39.8	0	29	4.0	28
5824	20011004	160000	34.7	47.0	0	36	4.9	21	5920	20011008	160000	35.9	36.6	0	17	2.4	7
5825	20011004	170000	32.7	59.5	0	28	3.9	7	5921	20011008	170000	33.9	44.3	0	19	2.6	7
5826	20011004	180000	29.9	61.2	0	18	2.4	0	5922	20011008	180000	28.4	58.4	0	41	5.7	0
5827	20011004	190000	26.2	85.4	0	22	3.1	0	5923	20011008	190000	26.8	61.0	0	37	5.1	0
5828	20011004	200000	27.8	69.0	0	17	2.5	0	5924	20011008	200000	26.2	63.3	0	36	5.0	0
5829	20011004	210000	26.4	80.8	0	19	2.7	0	5925	20011008	210000	27.0	54.6	0	16	2.2	0
5830	20011004	220000	25.8	83.1	0	28	3.9	0	5926	20011008	220000	26.3	57.5	0	8	1.1	0
5831	20011004	230000	25.4	84.2	0	21	3.0	0	5927	20011008	230000	26.4	63.4	0	6	0.8	0
5832	20011004	240000	24.8	87.7	0	17	2.3	0	5928	20011008	240000	25.2	70.6	0	4	0.6	0
5833	20011005	10000	24.4	90.3	0	17	2.3	0	5929	20011009	10000	25.0	69.4	0	32	4.2	0
5834	20011005	20000	24.5	90.5	0	19	2.7	0	5930	20011009	20000	23.8	74.6	0	44	6.0	0
583																	

Appendice 7 Les données des observations météorologiques (toutes les données)

(32/46)

No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation	No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation
			°C	%	mm	degree	m/s	kWh/m ²				°C	%	mm	degree	m/s	kWh/m ²
	yyyymmdd	hhmmss								yyyymmdd	hhmmss						
5953	20011010	10000	24.1	85.9	0	23	3.3	0	6049	20011014	10000	22.8	83.5	0	6	0.8	0
5954	20011010	20000	24.1	84.4	0	18	2.5	0	6050	20011014	20000	22.5	82.5	0	13	1.8	0
5955	20011010	30000	23.6	87.1	0	28	3.9	0	6051	20011014	30000	22.7	80.4	0	19	2.6	0
5956	20011010	40000	23.1	89.3	0	17	2.4	0	6052	20011014	40000	22.8	78.7	0	19	2.6	0
5957	20011010	50000	22.5	91.4	0	25	3.4	0	6053	20011014	50000	22.8	78.0	0	17	2.4	0
5958	20011010	60000	22.6	91.6	0	28	3.9	0	6054	20011014	60000	22.8	79.1	0	19	2.7	0
5959	20011010	70000	23.4	89.5	0	26	3.6	0	6055	20011014	70000	23.4	81.5	0	24	3.2	0
5960	20011010	80000	26.0	77.7	0	18	2.5	14	6056	20011014	80000	25.9	74.9	0	19	2.8	14
5961	20011010	90000	29.3	64.0	0	30	4.3	21	6057	20011014	90000	29.1	62.8	0	43	5.6	21
5962	20011010	100000	31.6	57.6	0	23	3.3	28	6058	20011014	100000	31.2	55.3	0	49	6.8	28
5963	20011010	110000	33.2	49.5	0	17	2.3	35	6059	20011014	110000	31.9	51.8	0	31	4.3	35
5964	20011010	120000	33.6	47.5	0	20	2.8	35	6060	20011014	120000	33.8	46.6	0	16	2.0	42
5965	20011010	130000	35.2	42.8	0	10	1.4	42	6061	20011014	130000	35.4	36.4	0	32	4.4	42
5966	20011010	140000	35.8	36.7	0	41	5.8	35	6062	20011014	140000	35.3	36.9	0	38	5.3	35
5967	20011010	150000	34.7	40.1	0	21	3.2	28	6063	20011014	150000	36.1	32.2	0	32	4.4	35
5968	20011010	160000	34.5	42.4	0	21	3.0	7	6064	20011014	160000	35.9	32.8	0	32	4.4	21
5969	20011010	170000	33.8	43.4	0	15	2.1	7	6065	20011014	170000	27.4	66.2	0	21	2.9	0
5970	20011010	180000	30.4	54.2	0	20	2.8	0	6066	20011014	180000	25.8	85.5	0	20	2.8	0
5971	20011010	190000	27.5	67.5	0	18	2.4	0	6067	20011014	190000	25.8	78.2	0	33	4.5	0
5972	20011010	200000	26.7	68.9	0	26	3.6	0	6068	20011014	200000	24.9	83.0	0	20	2.7	0
5973	20011010	210000	27.0	68.0	0	36	5.2	0	6069	20011014	210000	23.8	88.7	0	22	3.0	0
5974	20011010	220000	21.8	89.7	1	27	3.8	0	6070	20011014	220000	23.8	89.1	0	23	3.1	0
5975	20011010	230000	21.8	91.5	0	10	1.4	0	6071	20011014	230000	23.6	88.3	0	29	4.0	0
5976	20011010	240000	22.5	87.5	0	51	6.8	0	6072	20011014	240000	24.0	81.7	0	20	2.7	0
5977	20011011	10000	23.6	82.3	0	46	6.4	0	6073	20011015	10000	23.1	88.5	0	18	2.6	0
5978	20011011	20000	23.0	86.5	0	3	0.3	0	6074	20011015	20000	22.7	90.3	0	18	2.5	0
5979	20011011	30000	22.7	88.3	0	43	6.1	0	6075	20011015	30000	23.7	81.9	0	27	3.8	0
5980	20011011	40000	22.6	87.8	0	4	0.5	0	6076	20011015	40000	22.7	87.0	0	10	1.4	0
5981	20011011	50000	22.1	91.6	0	1	0.1	0	6077	20011015	50000	22.1	89.8	0	16	2.2	0
5982	20011011	60000	22.0	93.3	0.5	16	2.1	0	6078	20011015	60000	21.9	89.7	0	9	1.2	0
5983	20011011	70000	21.6	94.8	0.5	5	0.7	0	6079	20011015	70000	22.5	92.5	0	38	5.3	0
5984	20011011	80000	22.5	89.0	0	42	5.9	7	6080	20011015	80000	26.8	69.7	0	29	4.0	14
5985	20011011	90000	23.2	82.6	0	8	1.2	7	6081	20011015	90000	30.4	53.8	0	23	3.2	21
5986	20011011	100000	25.6	71.2	0	11	7.0	21	6082	20011015	100000	31.0	56.1	0	22	2.9	28
5987	20011011	110000	26.9	72.2	0	9	1.3	21	6083	20011015	110000	33.3	47.0	0	37	5.2	28
5988	20011011	120000	29.3	57.2	0	25	3.5	21	6084	20011015	120000	33.4	44.0	0	4	0.5	21
5989	20011011	130000	32.1	45.2	0	53	7.4	42	6085	20011015	130000	34.3	38.4	0	44	6.0	28
5990	20011011	140000	34.6	40.2	0	28	3.9	35	6086	20011015	140000	33.7	40.0	0	51	7.3	14
5991	20011011	150000	35.7	37.2	0	19	2.8	28	6087	20011015	150000	36.1	32.3	0	7	0.9	21
5992	20011011	160000	32.1	44.9	0	1	0.1	21	6088	20011015	160000	35.1	33.7	0	22	3.1	14
5993	20011011	170000	32.3	43.2	0	41	5.7	7	6089	20011015	170000	32.9	43.0	0	3	0.4	0
5994	20011011	180000	30.2	59.5	0	4	0.6	0	6090	20011015	180000	27.7	61.2	0	22	3.0	0
5995	20011011	190000	28.0	69.3	0	5	0.8	0	6091	20011015	190000	26.8	61.9	0	17	2.4	0
5996	20011011	200000	27.0	66.1	0	10	1.4	0	6092	20011015	200000	25.9	66.7	0	39	5.4	0
5997	20011011	210000	25.7	70.0	0	1	0.1	0	6093	20011015	210000	25.2	71.3	0	20	2.7	0
5998	20011011	220000	23.8	82.3	0	17	2.4	0	6094	20011015	220000	24.3	74.5	0	27	3.8	0
5999	20011011	230000	22.7	89.2	0	12	1.7	0	6095	20011015	230000	24.9	68.7	0	16	2.2	0
6000	20011011	240000	22.0	91.3	0	14	1.9	0	6096	20011015	240000	24.3	74.8	0	1	0.1	0
6001	20011012	10000	21.7	93.3	0	18	2.5	0	6097	20011016	10000	23.4	79.0	0	30	4.3	0
6002	20011012	20000	20.9	95.5	0	18	2.5	0	6098	20011016	20000	23.6	79.5	0	18	2.5	0
6003	20011012	30000	21.1	94.9	0	18	2.5	0	6099	20011016	30000	23.4	80.8	0	20	2.8	0
6004	20011012	40000	21.4	93.1	0	20	2.8	0	6100	20011016	40000	23.5	83.1	0	17	2.4	0
6005	20011012	50000	21.1	93.5	0	7	1.0	0	6101	20011016	50000	23.3	83.8	0	28	3.8	0
6006	20011012	60000	20.4	96.8	0	0	0.0	0	6102	20011016	60000	23.0	85.5	0	26	3.6	0
6007	20011012	70000	21.0	95.9	0	20	2.8	0	6103	20011016	70000	23.9	82.8	0	17	2.3	0
6008	20011012	80000	23.8	81.8	0	17	2.4	0	6104	20011016	80000	26.2	77.2	0	20	2.8	7
6009	20011012	90000	27.7	63.3	0	35	4.9	0	6105	20011016	90000	28.6	67.3	0	36	5.1	21
6010	20011012	100000	30.4	49.9	0	10	1.4	28	6106	20011016	100000	31.0	57.6	0	32	4.4	28
6011	20011012	110000	32.1	43.1	0	15	1.9	35	6107	20011016	110000	32.6	50.4	0	43	5.7	35
6012	20011012	120000	33.6	33.9	0	12	1.8	35	6108	20011016	120000	34.4	40.7	0	9	1.2	42
6013	20011012	130000	34.8	33.5	0	19	2.8	35	6109	20011016	130000	35.1	37.0	0	28	3.9	42
6014	20011012	140000	35.2	33.1	0	7	1.0	35	6110	20011016	140000	35.5	35.0	0	30	4.2	35
6015	20011012	150000	36.0	30.8	0	17	2.5	28	6111	20011016	150000	35.8	30.4	0	11	1.7	28
6016	20011012	160000	35.7	29.6	0	18	2.5	21	6112	20011016	160000	35.8	31.3	0	19	2.6	21
6017	20011012	170000	35.3	32.2	0	21	3.0	7	6113	20011016	170000	31.4	45.1	0	19	2.7	0
6018	20011012	180000	30.6	58.3	0	18	2.5	0	6114	20011016	180000	28.7	59.0	0	8	1.1	0
6019	20011012	190000	26.3	74.0	0	19	2.7	0	6115	20011016	190000	27.3	63.9	0	36	5.1	0
6020	20011012	200000	24.5	82.8	0	19	2.7	0	6116	20011016	200000	25.8	73.0	0	18	2.5	0
6021	20011012	210000	24.1	79.9	0	15	2.0	0	6117	20011016	210000	24.2	80.5	0	30	4.1	0
6022	20011012	220000	23.7	82.2	0	30	4.1	0	6118	20011016	220000	23.7	81.6	0	18	2.4	0
6023	20011012	230000	23.9	78.3	0	32	4.4	0	6119	20011016	230000	23.6	80.8	0	20	2.8	0
6024	20011012	240000	25.3	73.3	0	34	4.7	0	6120	20011016	240000	22.8	83.9	0	19	2.7	0
6025	20011013	10000	24.5	78.9	0	26	3.7	0	6121	20011017	10000	22.6	83.7	0	19	2.6	0
6026	20011013	20000	23.8	81.9	0	27	3.7	0	6122	20011017	20000	22.2	85.9	0	25	3.4	

Appendice 7 Les données des observations météorologiques (toutes les données)
(33/46)

No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation	No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation
			°C	%	mm	degree	m/s	kWh/m ²				°C	%	mm	degree	m/s	kWh/m ²
	yyyymmdd	hhmmss								yyyymmdd	hhmmss						
6145	20011018	10000	23.8	71.4	0	8	1.1	0	6241	20011022	10000	22.4	88.1	0	36	5.0	0
6146	20011018	20000	21.9	82.3	0	28	3.9	0	6242	20011022	20000	22.1	89.8	0	36	5.0	0
6147	20011018	30000	20.6	86.7	0	19	2.7	0	6243	20011022	30000	22.3	89.1	0	20	2.8	0
6148	20011018	40000	20.5	86.1	0	19	2.6	0	6244	20011022	40000	22.1	87.4	0	31	4.3	0
6149	20011018	50000	19.6	91.5	0	19	2.6	0	6245	20011022	50000	21.4	89.9	0	27	3.8	0
6150	20011018	60000	19.4	91.0	0	19	2.6	0	6246	20011022	60000	21.0	92.6	0	27	3.7	0
6151	20011018	70000	20.6	86.9	0	16	2.2	0	6247	20011022	70000	21.7	89.7	0	20	2.8	0
6152	20011018	80000	25.7	61.8	0	12	1.7	7	6248	20011022	80000	25.2	77.6	0	28	3.9	0
6153	20011018	90000	31.0	43.5	0	23	3.1	21	6249	20011022	90000	28.2	65.6	0	41	5.7	14
6154	20011018	100000	33.0	37.0	0	17	2.4	28	6250	20011022	100000	31.8	50.7	0	44	6.1	28
6155	20011018	110000	34.7	36.5	0	19	2.7	35	6251	20011022	110000	34.0	41.7	0	38	5.1	35
6156	20011018	120000	34.3	37.1	0	37	5.3	35	6252	20011022	120000	35.6	31.8	0	22	3.2	35
6157	20011018	130000	36.0	33.5	0	21	2.9	35	6253	20011022	130000	36.1	27.0	0	39	5.3	35
6158	20011018	140000	37.0	31.1	0	14	1.7	14	6254	20011022	140000	35.9	28.6	0	26	3.6	35
6159	20011018	150000	36.6	30.9	0	14	1.9	14	6255	20011022	150000	32.4	37.8	0	16	2.2	7
6160	20011018	160000	36.3	31.0	0	29	4.1	21	6256	20011022	160000	33.5	37.0	0	18	2.5	7
6161	20011018	170000	34.3	37.6	0	4	0.5	7	6257	20011022	170000	34.2	35.8	0	6	0.8	7
6162	20011018	180000	30.0	50.5	0	16	2.2	0	6258	20011022	180000	30.7	53.5	0	12	1.7	0
6163	20011018	190000	28.8	52.4	0	9	1.2	0	6259	20011022	190000	27.2	62.4	0	16	2.2	0
6164	20011018	200000	26.8	59.6	0	7	1.0	0	6260	20011022	200000	26.0	68.9	0	11	1.6	0
6165	20011018	210000	26.2	61.9	0	12	1.8	0	6261	20011022	210000	26.1	67.9	0	9	1.3	0
6166	20011018	220000	26.1	63.4	0	7	0.9	0	6262	20011022	220000	27.4	57.9	0	45	6.6	0
6167	20011018	230000	25.8	64.6	0	7	1.0	0	6263	20011022	230000	26.0	64.9	0	26	3.7	0
6168	20011018	240000	26.1	65.1	0	1	0.1	0	6264	20011022	240000	24.8	72.8	0	18	2.5	0
6169	20011019	10000	25.3	69.5	0	5	0.7	0	6265	20011023	10000	23.6	78.0	0	18	2.5	0
6170	20011019	20000	24.1	74.8	0	39	5.5	0	6266	20011023	20000	23.4	81.1	0	18	2.5	0
6171	20011019	30000	24.1	75.3	0	4	0.6	0	6267	20011023	30000	23.0	83.4	0	37	5.1	0
6172	20011019	40000	23.0	80.4	0	0	0.0	0	6268	20011023	40000	22.4	80.2	0	36	5.0	0
6173	20011019	50000	21.5	89.2	0	0	0.0	0	6269	20011023	50000	24.7	74.0	0	30	4.2	0
6174	20011019	60000	20.7	92.3	0	0	0.0	0	6270	20011023	60000	23.7	80.6	0	30	4.2	0
6175	20011019	70000	21.2	92.5	0	0	0.0	0	6271	20011023	70000	24.1	77.6	0	26	3.6	0
6176	20011019	80000	25.5	70.8	0	4	0.6	7	6272	20011023	80000	25.6	70.7	0	30	4.1	7
6177	20011019	90000	30.6	53.9	0	25	3.5	21	6273	20011023	90000	28.7	58.8	0	31	4.3	21
6178	20011019	100000	33.0	43.0	0	14	1.8	28	6274	20011023	100000	31.0	51.2	0	45	6.3	28
6179	20011019	110000	34.5	39.4	0	41	5.7	35	6275	20011023	110000	33.8	37.5	0	46	6.5	35
6180	20011019	120000	35.3	38.2	0	10	4.6	35	6276	20011023	120000	34.8	34.0	0	25	3.4	35
6181	20011019	130000	36.2	34.7	0	11	1.6	35	6277	20011023	130000	36.7	28.4	0	14	1.9	35
6182	20011019	140000	35.7	30.7	0	45	6.2	21	6278	20011023	140000	37.6	22.7	0	11	1.6	28
6183	20011019	150000	36.8	28.6	0	12	1.8	28	6279	20011023	150000	37.7	24.2	0	23	3.3	28
6184	20011019	160000	36.5	30.1	0	10	1.3	14	6280	20011023	160000	37.2	25.5	0	8	1.1	14
6185	20011019	170000	36.1	32.7	0	14	1.9	7	6281	20011023	170000	34.5	32.2	0	20	2.8	7
6186	20011019	180000	31.8	48.1	0	23	3.2	0	6282	20011023	180000	31.0	39.4	0	9	1.3	0
6187	20011019	190000	27.2	64.0	0	23	3.2	0	6283	20011023	190000	28.2	53.3	0	19	2.6	0
6188	20011019	200000	26.0	65.4	0	23	3.2	0	6284	20011023	200000	26.6	62.3	0	19	2.6	0
6189	20011019	210000	25.7	73.2	0	5	0.7	0	6285	20011023	210000	25.8	64.6	0	19	2.6	0
6190	20011019	220000	24.9	78.8	0	10	1.4	0	6286	20011023	220000	26.9	65.6	0	36	4.9	0
6191	20011019	230000	24.9	77.3	0	2	0.3	0	6287	20011023	230000	25.6	62.9	0	25	3.4	0
6192	20011019	240000	24.6	79.4	0	5	0.8	0	6288	20011023	240000	25.1	73.1	0	35	4.9	0
6193	20011020	10000	23.8	84.7	0	25	3.5	0	6289	20011024	10000	25.1	73.9	0	28	3.9	0
6194	20011020	20000	23.1	85.7	0	25	3.4	0	6290	20011024	20000	24.8	71.7	0	20	2.7	0
6195	20011020	30000	23.1	85.1	0	14	2.0	0	6291	20011024	30000	23.8	75.1	0	20	2.8	0
6196	20011020	40000	23.5	80.7	0	24	3.4	0	6292	20011024	40000	22.5	77.8	0	20	2.8	0
6197	20011020	50000	23.0	84.5	0	36	5.0	0	6293	20011024	50000	21.9	83.2	0	20	2.8	0
6198	20011020	60000	23.0	84.0	0	37	5.2	0	6294	20011024	60000	22.7	84.0	0	14	2.0	0
6199	20011020	70000	23.6	82.6	0	29	4.1	0	6295	20011024	70000	22.6	87.5	0	3	0.5	0
6200	20011020	80000	27.2	62.1	0	21	2.9	7	6296	20011024	80000	25.5	75.9	0	26	3.6	7
6201	20011020	90000	30.9	53.0	0	30	4.1	21	6297	20011024	90000	29.6	57.3	0	30	4.1	21
6202	20011020	100000	32.7	48.2	0	14	2.0	21	6298	20011024	100000	33.3	43.7	0	22	3.0	28
6203	20011020	110000	34.3	44.1	0	45	1.0	35	6299	20011024	110000	34.8	32.5	0	10	1.4	35
6204	20011020	120000	36.1	38.7	0	7	1.1	35	6300	20011024	120000	35.5	27.9	0	24	3.4	35
6205	20011020	130000	35.7	34.1	0	17	2.4	21	6301	20011024	130000	35.6	23.4	0	8	1.2	7
6206	20011020	140000	35.6	43.2	0	16	2.2	21	6302	20011024	140000	37.7	23.5	0	9	1.3	14
6207	20011020	150000	35.1	42.6	0	16	2.2	14	6303	20011024	150000	38.4	19.9	0	15	2.0	28
6208	20011020	160000	34.4	40.6	0	14	1.9	7	6304	20011024	160000	37.8	20.5	0	24	3.4	14
6209	20011020	170000	32.4	48.8	0	17	2.4	7	6305	20011024	170000	35.9	24.9	0	24	3.2	7
6210	20011020	180000	30.3	49.9	0	17	2.3	0	6306	20011024	180000	30.3	45.2	0	14	2.0	0
6211	20011020	190000	27.8	61.7	0	29	4.1	0	6307	20011024	190000	26.9	57.2	0	20	2.7	0
6212	20011020	200000	26.1	72.8	0	6	0.8	0	6308	20011024	200000	25.8	63.2	0	34	4.8	0
6213	20011020	210000	25.3	77.3	0	17	2.4	0	6309	20011024	210000	26.5	56.3	0	5	0.7	0
6214	20011020	220000	24.8	81.8	0	37	5.1	0	6310	20011024	220000	24.7	68.6	0	39	5.4	0
6215	20011020	230000	23.8	85.9	0	17	2.4	0	6311	20011024	230000	23.4	72.5	0	1	0.1	0
6216	20011020	240000	23.8	86.5	0	28	3.9	0	6312	20011024	240000	23.0	68.8	0	6	0.8	0
6217	20011021	10000	24.3	81.8	0	19	2.7	0	6313	20011025	10000	22.1	74.1	0	39	5.5	0
6218	20011021	20000	24.7	82.8	0	19	2.7	0	6314	20011025	20000	21.9	79.1	0	12	1.7	0
6219	20011021																

Appendice 7 Les données des observations météorologiques (toutes les données)
(34/46)

No.	Date	Time	Temperature C	Humidity %	Precipitation mm	Wind direction degree	Wind speed m/s	Insolation kW/m ²	No.	Date	Time	Temperature C	Humidity %	Precipitation mm	Wind direction degree	Wind speed m/s	Insolation kW/m ²
6337	20011026	10000	22.9	81.4	0	39	5.5	0	6433	20011030	10000	18.9	68.3	0	40	5.6	0
6338	20011026	20000	22.4	83.7	0	37	5.2	0	6434	20011030	20000	18.3	67.1	0	7	1.0	0
6339	20011026	30000	22.0	84.2	0	32	4.5	0	6435	20011030	30000	18.2	76.6	0	9	1.2	0
6340	20011026	40000	21.8	85.8	0	33	4.5	0	6436	20011030	40000	17.5	76.9	0	9	1.2	0
6341	20011026	50000	21.2	88.5	0	25	3.5	0	6437	20011030	50000	17.6	77.5	0	37	5.1	0
6342	20011026	60000	20.9	89.7	0	30	4.2	0	6438	20011030	60000	17.2	77.5	0	37	5.1	0
6343	20011026	70000	20.8	91.3	0	23	3.1	0	6439	20011030	70000	17.8	74.9	0	27	3.7	0
6344	20011026	80000	24.0	76.7	0	29	4.0	7	6440	20011030	80000	21.5	54.8	0	17	2.4	0
6345	20011026	90000	26.6	66.2	0	19	2.6	21	6441	20011030	90000	27.3	34.3	0	30	4.1	21
6346	20011026	100000	28.0	62.0	0	27	3.8	28	6442	20011030	100000	30.2	25.2	0	6	0.8	28
6347	20011026	110000	30.4	53.2	0	38	5.1	35	6443	20011030	110000	33.1	21.7	0	15	2.0	35
6348	20011026	120000	31.8	44.1	0	23	3.4	35	6444	20011030	120000	34.3	18.3	0	12	1.6	35
6349	20011026	130000	32.8	40.2	0	25	3.4	35	6445	20011030	130000	35.3	17.0	0	17	2.4	35
6350	20011026	140000	33.1	40.6	0	34	4.5	28	6446	20011030	140000	36.1	16.4	0	21	2.9	28
6351	20011026	150000	33.6	38.1	0	26	3.4	14	6447	20011030	150000	35.9	17.0	0	11	1.5	21
6352	20011026	160000	32.9	39.3	0	17	2.3	14	6448	20011030	160000	35.8	16.7	0	3	0.4	14
6353	20011026	170000	31.4	43.2	0	22	3.1	7	6449	20011030	170000	33.4	23.9	0	18	2.5	7
6354	20011026	180000	29.0	54.5	0	20	2.8	0	6450	20011030	180000	28.3	45.6	0	18	2.5	0
6355	20011026	190000	26.1	64.7	0	20	2.8	0	6451	20011030	190000	23.5	55.1	0	18	2.5	0
6356	20011026	200000	24.6	69.8	0	20	2.8	0	6452	20011030	200000	22.2	61.9	0	18	2.5	0
6357	20011026	210000	23.8	75.6	0	20	2.8	0	6453	20011030	210000	21.5	65.3	0	19	2.6	0
6358	20011026	220000	23.5	77.0	0	20	2.8	0	6454	20011030	220000	21.0	71.2	0	18	2.6	0
6359	20011026	230000	25.5	61.6	0	26	3.6	0	6455	20011030	230000	22.8	60.8	0	8	1.1	0
6360	20011026	240000	24.7	68.3	0	29	4.1	0	6456	20011030	240000	26.0	39.6	0	6	0.9	0
6361	20011027	10000	24.5	72.2	0	20	2.8	0	6457	20011031	10000	24.5	55.4	0	7	0.9	0
6362	20011027	20000	25.1	69.7	0	32	4.5	0	6458	20011031	20000	22.3	64.4	0	5	0.7	0
6363	20011027	30000	24.1	76.1	0	16	2.3	0	6459	20011031	30000	26.4	48.2	0	4	0.5	0
6364	20011027	40000	23.3	80.8	0	26	3.6	0	6460	20011031	40000	24.7	60.2	0	38	5.3	0
6365	20011027	50000	23.2	80.5	0	2	0.3	0	6461	20011031	50000	20.7	77.1	0	38	5.3	0
6366	20011027	60000	22.9	81.9	0	0	0.0	0	6462	20011031	60000	20.1	81.6	0	25	3.4	0
6367	20011027	70000	22.8	84.6	0	38	5.3	0	6463	20011031	70000	21.6	69.0	0	36	5.0	0
6368	20011027	80000	25.1	74.4	0	24	3.5	7	6464	20011031	80000	24.1	60.3	0	41	5.6	7
6369	20011027	90000	26.6	66.8	0	29	4.2	7	6465	20011031	90000	27.2	58.7	0	37	5.2	14
6370	20011027	100000	30.4	52.9	0	43	5.8	14	6466	20011031	100000	30.3	48.6	0	22	3.1	21
6371	20011027	110000	31.8	45.6	0	3	0.3	21	6467	20011031	110000	30.3	46.3	0	17	2.3	21
6372	20011027	120000	33.3	38.4	0	14	1.9	35	6468	20011031	120000	31.9	43.7	0	17	2.5	21
6373	20011027	130000	34.6	35.3	0	15	2.1	35	6469	20011031	130000	32.3	40.5	0	41	5.7	21
6374	20011027	140000	34.7	34.8	0	24	3.3	28	6470	20011031	140000	34.0	32.9	0	15	2.2	35
6375	20011027	150000	34.8	32.7	0	21	2.9	28	6471	20011031	150000	32.3	39.6	0	46	6.4	7
6376	20011027	160000	25.7	64.9	0	10	1.4	0	6472	20011031	160000	32.7	38.1	0	16	2.1	14
6377	20011027	170000	22.5	86.2	5.5	15	2.1	0	6473	20011031	170000	31.7	42.3	0	16	2.2	7
6378	20011027	180000	23.3	93.7	0	26	3.6	0	6474	20011031	180000	29.4	56.7	0	14	2.0	0
6379	20011027	190000	23.5	94.0	0	19	2.7	0	6475	20011031	190000	26.5	68.7	0	18	2.5	0
6380	20011027	200000	24.3	96.4	0	25	3.5	0	6476	20011031	200000	25.5	69.6	0	18	2.5	0
6381	20011027	210000	24.1	96.3	0	14	1.9	0	6477	20011031	210000	26.7	64.5	0	14	2.0	0
6382	20011027	220000	23.7	96.1	0	38	5.2	0	6478	20011031	220000	27.0	62.4	0	17	2.3	0
6383	20011027	230000	23.6	95.4	0	25	3.5	0	6479	20011031	230000	25.5	70.7	0	17	2.4	0
6384	20011027	240000	23.4	87.3	0	7	1.0	0	6480	20011031	240000	24.3	78.3	0	22	3.6	0
6385	20011028	10000	23.3	89.9	0	32	4.4	0	6481	20011101	10000	23.0	85.1	0	29	4.0	0
6386	20011028	20000	22.6	94.5	0	0	0.0	0	6482	20011101	20000	21.7	87.0	0	24	3.4	0
6387	20011028	30000	22.3	97.4	0	10	1.4	0	6483	20011101	30000	21.6	90.5	0.5	18	2.6	0
6388	20011028	40000	21.9	97.4	0	22	3.1	0	6484	20011101	40000	22.1	92.2	0	6	0.9	0
6389	20011028	50000	21.7	95.8	0	23	3.2	0	6485	20011101	50000	21.9	95.7	0	26	3.5	0
6390	20011028	60000	22.0	91.6	0	31	4.3	0	6486	20011101	60000	21.4	96.1	0	18	2.5	0
6391	20011028	70000	22.7	90.0	0	27	3.8	0	6487	20011101	70000	21.9	93.9	0	9	1.3	0
6392	20011028	80000	24.5	81.9	0	44	6.3	0	6488	20011101	80000	24.3	83.6	0	7	0.9	7
6393	20011028	90000	25.2	77.9	0	36	5.3	7	6489	20011101	90000	26.1	69.9	0	39	5.4	21
6394	20011028	100000	27.9	66.8	0	45	6.1	21	6490	20011101	100000	29.2	59.4	0	21	2.9	28
6395	20011028	110000	28.9	61.5	0	30	4.3	21	6491	20011101	110000	31.6	50.4	0	17	2.4	21
6396	20011028	120000	31.5	50.0	0	0	0.0	35	6492	20011101	120000	33.7	42.1	0	22	3.0	35
6397	20011028	130000	33.6	44.3	0	29	4.0	35	6493	20011101	130000	33.1	42.3	0	9	1.2	7
6398	20011028	140000	35.3	29.2	0	37	5.3	28	6494	20011101	140000	33.4	41.5	0	18	2.6	28
6399	20011028	150000	35.4	23.5	0	5	0.7	28	6495	20011101	150000	31.5	45.1	0	17	2.5	7
6400	20011028	160000	34.4	22.9	0	8	1.1	14	6496	20011101	160000	31.1	45.8	0	9	1.3	7
6401	20011028	170000	33.3	32.0	0	22	3.1	7	6497	20011101	170000	31.1	47.4	0	15	2.0	7
6402	20011028	180000	28.3	61.9	0	18	2.4	0	6498	20011101	180000	27.7	66.2	0	22	3.1	0
6403	20011028	190000	24.1	80.4	0	18	2.4	0	6499	20011101	190000	25.4	75.6	0	19	2.7	0
6404	20011028	200000	22.5	85.6	0	18	2.4	0	6500	20011101	200000	24.7	78.6	0	19	2.7	0
6405	20011028	210000	21.6	88.3	0	18	2.4	0	6501	20011101	210000	25.2	70.5	0	7	1.0	0
6406	20011028	220000	21.0	90.7	0	18	2.4	0	6502	20011101	220000	23.8	75.9	0	10	1.4	0
6407	20011028	230000	20.3	93.4	0	18	2.4	0	6503	20011101	230000	22.7	79.9	0	16	2.2	0
6408	20011028	240000	20.1	91.7	0	1	0.1	0	6504	20011101	240000	23.4	64.5	0	13	1.8	0
6409	20011029	10000	20.2	91.1	0	10	1.3	0	6505	20011102	10000	22.7	72.7	0	6	0.9	0
6410	20011029	20000	19.4	90.4	0	16	2.2	0	6506	20011102	20000	21.6	83.2	0	1	0.2	0
6411	20011029	30000	18.5	94.0	0	16	2.2	0	6507	20011102	30000						

Appendice 7 Les données des observations météorologiques (toutes les données)
(35/46)

No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation	No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation
			°C	%	mm	degree	m/s	kWh/m ²				°C	%	mm	degree	m/s	kWh/m ²
	yyyymmdd	hhmmss								yyyymmdd	hhmmss						
6529	20011103	10000	18.3	69.4	0	35	4.9	0	6625	20011107	10000	19.8	60.0	0	21	3.0	0
6530	20011103	20000	17.1	72.0	0	35	4.9	0	6626	20011107	20000	19.3	63.6	0	30	4.2	0
6531	20011103	30000	16.9	70.9	0	36	5.0	0	6627	20011107	30000	19.0	62.9	0	25	3.5	0
6532	20011103	40000	16.1	70.4	0	36	5.0	0	6628	20011107	40000	18.6	64.8	0	10	1.4	0
6533	20011103	50000	16.3	72.3	0	36	5.0	0	6629	20011107	50000	18.0	68.2	0	0	0.0	0
6534	20011103	60000	15.3	77.4	0	36	5.0	0	6630	20011107	60000	17.6	68.3	0	0	0.0	0
6535	20011103	70000	15.3	74.7	0	36	5.0	0	6631	20011107	70000	17.6	70.3	0	0	0.0	0
6536	20011103	80000	21.2	46.5	0	5	0.8	0	6632	20011107	80000	22.5	42.4	0	17	2.4	7
6537	20011103	90000	26.9	30.9	0	14	1.9	21	6633	20011107	90000	29.5	29.0	0	24	3.4	21
6538	20011103	100000	32.0	20.7	0	20	2.6	28	6634	20011107	100000	32.6	20.0	0	11	1.6	28
6539	20011103	110000	34.5	17.0	0	29	4.1	35	6635	20011107	110000	35.0	14.6	0	34	4.5	35
6540	20011103	120000	36.2	13.5	0	14	2.2	35	6636	20011107	120000	37.5	13.4	0	19	0.3	35
6541	20011103	130000	35.8	14.6	0	16	2.1	35	6637	20011107	130000	38.3	12.4	0	39	5.4	35
6542	20011103	140000	35.9	14.4	0	14	2.0	28	6638	20011107	140000	39.0	12.2	0	16	2.1	35
6543	20011103	150000	36.7	13.3	0	21	3.3	28	6639	20011107	150000	37.7	13.3	0	13	1.8	28
6544	20011103	160000	36.3	14.4	0	16	2.3	14	6640	20011107	160000	37.7	13.1	0	19	2.7	14
6545	20011103	170000	34.7	18.9	0	11	1.5	7	6641	20011107	170000	35.6	16.0	0	16	2.3	7
6546	20011103	180000	28.2	39.1	0	22	3.0	0	6642	20011107	180000	29.9	26.2	0	20	2.8	0
6547	20011103	190000	23.5	51.7	0	21	3.0	0	6643	20011107	190000	26.4	35.6	0	17	2.4	0
6548	20011103	200000	21.8	55.4	0	20	2.8	0	6644	20011107	200000	24.1	38.2	0	17	2.4	0
6549	20011103	210000	21.1	63.7	0	27	3.8	0	6645	20011107	210000	22.9	51.6	0	15	2.1	0
6550	20011103	220000	20.5	62.5	0	25	3.5	0	6646	20011107	220000	22.3	51.8	0	15	2.1	0
6551	20011103	230000	20.1	66.4	0	17	2.4	0	6647	20011107	230000	21.3	61.9	0	15	2.1	0
6552	20011103	240000	19.7	61.8	0	19	2.6	0	6648	20011107	240000	21.7	54.7	0	7	1.0	0
6553	20011104	10000	19.4	67.9	0	19	2.6	0	6649	20011108	10000	20.4	57.5	0	34	4.8	0
6554	20011104	20000	18.8	67.3	0	1	0.1	0	6650	20011108	20000	19.4	60.7	0	38	5.2	0
6555	20011104	30000	18.0	64.4	0	1	0.1	0	6651	20011108	30000	18.4	69.7	0	38	5.2	0
6556	20011104	40000	17.3	75.2	0	1	0.1	0	6652	20011108	40000	17.9	70.7	0	38	5.3	0
6557	20011104	50000	17.4	72.4	0	0	0.0	0	6653	20011108	50000	18.4	68.8	0	38	5.3	0
6558	20011104	60000	16.4	74.6	0	0	0.0	0	6654	20011108	60000	17.1	73.5	0	38	5.3	0
6559	20011104	70000	16.5	76.2	0	18	2.5	0	6655	20011108	70000	17.5	71.2	0	38	5.3	0
6560	20011104	80000	21.6	49.8	0	20	2.7	7	6656	20011108	80000	22.4	44.8	0	14	1.9	7
6561	20011104	90000	26.8	31.8	0	21	2.8	21	6657	20011108	90000	29.9	27.1	0	12	1.7	21
6562	20011104	100000	31.2	24.3	0	23	3.0	28	6658	20011108	100000	32.2	20.7	0	13	1.9	28
6563	20011104	110000	33.5	19.4	0	16	2.2	28	6659	20011108	110000	35.6	13.4	0	17	2.5	35
6564	20011104	120000	34.4	19.3	0	22	3.3	35	6660	20011108	120000	36.0	12.2	0	14	4.7	35
6565	20011104	130000	34.2	19.7	0	27	3.8	21	6661	20011108	130000	38.0	11.6	0	15	2.0	35
6566	20011104	140000	34.6	18.0	0	7	1.0	14	6662	20011108	140000	38.3	11.2	0	11	1.7	35
6567	20011104	150000	36.4	16.2	0	5	0.6	28	6663	20011108	150000	38.6	11.0	0	19	2.7	28
6568	20011104	160000	36.3	17.6	0	15	2.1	14	6664	20011108	160000	37.6	12.0	0	21	3.3	14
6569	20011104	170000	31.5	30.4	0	17	2.4	0	6665	20011108	170000	36.0	13.8	0	4	0.6	7
6570	20011104	180000	26.6	46.0	0	17	2.4	0	6666	20011108	180000	30.1	27.1	0	3	0.4	0
6571	20011104	190000	23.9	50.2	0	38	5.2	0	6667	20011108	190000	24.6	41.5	0	17	2.3	0
6572	20011104	200000	22.2	55.2	0	20	2.7	0	6668	20011108	200000	23.0	49.2	0	17	2.3	0
6573	20011104	210000	21.4	57.0	0	20	2.7	0	6669	20011108	210000	22.3	50.9	0	17	2.3	0
6574	20011104	220000	20.6	61.3	0	35	4.9	0	6670	20011108	220000	22.3	50.4	0	17	2.4	0
6575	20011104	230000	20.6	61.0	0	32	4.4	0	6671	20011108	230000	22.9	39.9	0	2	0.3	0
6576	20011104	240000	19.9	66.0	0	18	2.6	0	6672	20011108	240000	20.8	48.4	0	2	0.2	0
6577	20011105	10000	19.4	72.2	0	18	2.5	0	6673	20011109	10000	20.2	52.0	0	20	2.7	0
6578	20011105	20000	19.2	70.6	0	35	4.8	0	6674	20011109	20000	19.1	59.9	0	1	0.1	0
6579	20011105	30000	18.7	65.7	0	23	3.2	0	6675	20011109	30000	18.3	62.2	0	1	0.1	0
6580	20011105	40000	17.9	75.4	0	39	5.4	0	6676	20011109	40000	17.8	62.2	0	24	3.3	0
6581	20011105	50000	17.8	75.8	0	17	2.4	0	6677	20011109	50000	17.7	68.0	0	24	3.4	0
6582	20011105	60000	17.2	75.6	0	25	3.4	0	6678	20011109	60000	17.0	67.0	0	24	3.4	0
6583	20011105	70000	17.6	76.2	0	8	1.2	0	6679	20011109	70000	17.3	67.3	0	24	3.4	0
6584	20011105	80000	23.0	49.6	0	2	0.3	7	6680	20011109	80000	22.9	46.3	0	24	3.4	0
6585	20011105	90000	28.2	31.4	0	12	1.7	21	6681	20011109	90000	30.5	22.0	0	20	2.8	21
6586	20011105	100000	31.6	24.5	0	6	1.2	28	6682	20011109	100000	34.0	14.5	0	11	1.8	28
6587	20011105	110000	35.5	17.0	0	39	4.8	35	6683	20011109	110000	36.8	12.3	0	17	2.4	35
6588	20011105	120000	35.9	13.7	0	18	2.3	35	6684	20011109	120000	37.8	11.0	0	13	1.9	35
6589	20011105	130000	36.3	13.5	0	2	0.3	21	6685	20011109	130000	38.7	10.3	0	42	5.9	35
6590	20011105	140000	37.1	11.9	0	12	1.6	35	6686	20011109	140000	38.1	10.2	0	12	1.7	35
6591	20011105	150000	36.7	12.8	0	10	1.3	28	6687	20011109	150000	38.3	10.3	0	24	3.2	28
6592	20011105	160000	36.3	13.7	0	9	1.2	14	6688	20011109	160000	37.6	10.6	0	15	2.0	14
6593	20011105	170000	32.4	23.1	0	18	2.4	7	6689	20011109	170000	37.1	12.5	0	7	0.8	7
6594	20011105	180000	29.8	31.3	0	18	2.5	0	6690	20011109	180000	30.6	26.1	0	17	2.4	0
6595	20011105	190000	24.3	46.6	0	19	2.7	0	6691	20011109	190000	25.1	40.3	0	17	2.4	0
6596	20011105	200000	22.4	56.1	0	39	5.5	0	6692	20011109	200000	23.8	42.9	0	17	2.4	0
6597	20011105	210000	21.2	58.9	0	16	2.2	0	6693	20011109	210000	23.1	44.7	0	30	4.1	0
6598	20011105	220000	21.0	57.6	0	18	2.5	0	6694	20011109	220000	22.8	47.5	0	39	5.5	0
6599	20011105	230000	20.3	58.9	0	20	2.8	0	6695	20011109	230000	21.5	52.0	0	16	2.2	0
6600	20011105	240000	19.6	60.4	0	19	2.7	0	6696	20011109	240000	21.0	53.7	0	27	3.8	0
6601	20011106	10000	19.1	64.7	0	21	2.9	0	6697	20011110	10000	19.9	59.3	0	27	3.8	0
6602	20011106	20000	17.9	68.6	0	22	3.1	0	6698	20011110	20000	19.0	68.2	0	27	3.8	0
6603	200																

Appendice 7 Les données des observations météorologiques (toutes les données)
(36/46)

No.	Date	Time	Temperature C	Humidity %	Precipitation mm	Wind direction degree	Wind speed m/s	Insolation kW/m ²	No.	Date	Time	Temperature C	Humidity %	Precipitation mm	Wind direction degree	Wind speed m/s	Insolation kW/m ²
6721	20011111	10000	24.0	54.4	0	10	1.4	0	6817	20011115	10000	20.0	75.2	0	39	5.5	0
6722	20011111	20000	24.4	58.0	0	30	4.3	0	6818	20011115	20000	19.2	80.9	0	39	5.5	0
6723	20011111	30000	22.9	65.3	0	32	4.5	0	6819	20011115	30000	18.2	84.2	0	39	5.5	0
6724	20011111	40000	22.4	67.5	0	34	4.7	0	6820	20011115	40000	17.8	79.5	0	40	5.5	0
6725	20011111	50000	22.5	70.0	0	29	4.1	0	6821	20011115	50000	17.6	81.1	0	39	5.3	0
6726	20011111	60000	22.3	74.9	0	18	2.7	0	6822	20011115	60000	16.7	88.4	0	39	5.4	0
6727	20011111	70000	22.6	76.4	0	19	2.8	0	6823	20011115	70000	16.6	84.4	0	39	5.5	0
6728	20011111	80000	23.9	73.2	0	35	4.5	7	6824	20011115	80000	20.3	68.5	0	1	0.1	0
6729	20011111	90000	26.3	66.4	0	29	4.0	14	6825	20011115	90000	26.5	37.0	0	0	0.1	21
6730	20011111	100000	30.5	52.3	0	41	5.8	28	6826	20011115	100000	29.3	35.7	0	5	1.2	28
6731	20011111	110000	32.5	44.4	0	37	4.3	35	6827	20011115	110000	32.8	25.2	0	8	1.1	35
6732	20011111	120000	33.7	38.4	0	33	4.7	35	6828	20011115	120000	34.0	20.3	0	17	2.1	35
6733	20011111	130000	34.5	30.2	0	35	5.0	35	6829	20011115	130000	35.5	16.9	0	21	2.8	35
6734	20011111	140000	36.4	25.5	0	23	3.1	35	6830	20011115	140000	36.7	14.8	0	12	1.7	28
6735	20011111	150000	36.9	23.3	0	36	5.3	21	6831	20011115	150000	37.3	16.6	0	31	4.1	21
6736	20011111	160000	35.3	24.3	0	43	5.9	14	6832	20011115	160000	36.9	19.8	0	14	1.9	14
6737	20011111	170000	34.8	26.0	0	27	3.8	7	6833	20011115	170000	34.7	27.3	0	14	2.0	7
6738	20011111	180000	29.3	44.4	0	19	2.7	0	6834	20011115	180000	28.8	36.7	0	19	2.7	0
6739	20011111	190000	26.5	51.8	0	19	2.7	0	6835	20011115	190000	25.2	60.1	0	19	2.7	0
6740	20011111	200000	25.7	58.1	0	19	2.6	0	6836	20011115	200000	24.5	65.5	0	19	2.7	0
6741	20011111	210000	27.4	52.5	0	6	0.8	0	6837	20011115	210000	25.5	56.4	0	20	2.8	0
6742	20011111	220000	27.4	52.0	0	17	2.3	0	6838	20011115	220000	29.2	46.1	0	11	1.6	0
6743	20011111	230000	27.9	49.2	0	26	3.6	0	6839	20011115	230000	28.5	47.3	0	17	2.4	0
6744	20011111	240000	26.7	54.2	0	18	2.5	0	6840	20011115	240000	26.8	53.9	0	21	2.9	0
6745	20011112	10000	26.2	58.6	0	26	3.7	0	6841	20011116	10000	27.6	54.3	0	29	3.9	0
6746	20011112	20000	25.6	65.0	0	16	2.3	0	6842	20011116	20000	25.3	64.6	0	17	2.3	0
6747	20011112	30000	25.2	67.7	0	20	2.7	0	6843	20011116	30000	24.6	70.1	0	27	3.8	0
6748	20011112	40000	24.8	70.1	0	21	2.9	0	6844	20011116	40000	23.1	75.5	0	27	3.8	0
6749	20011112	50000	24.3	72.7	0	20	2.7	0	6845	20011116	50000	22.9	76.7	0	29	4.0	0
6750	20011112	60000	24.0	73.5	0	23	3.1	0	6846	20011116	60000	22.6	77.5	0	26	3.6	0
6751	20011112	70000	23.8	76.4	0	32	4.4	0	6847	20011116	70000	23.0	77.9	0	24	3.2	0
6752	20011112	80000	25.1	72.3	0	20	2.7	7	6848	20011116	80000	25.2	71.4	0	22	3.0	0
6753	20011112	90000	28.8	58.5	0	37	5.5	14	6849	20011116	90000	28.1	63.0	0	39	5.5	21
6754	20011112	100000	31.5	49.5	0	24	3.1	28	6850	20011116	100000	30.6	55.5	0	44	6.0	28
6755	20011112	110000	32.6	45.5	0	13	1.9	42	6851	20011116	110000	32.4	47.9	0	47	6.5	28
6756	20011112	120000	32.0	47.0	0	19	2.8	21	6852	20011116	120000	34.2	35.8	0	15	2.0	35
6757	20011112	130000	33.6	41.9	0	28	3.7	7	6853	20011116	130000	35.1	28.5	0	4	0.7	35
6758	20011112	140000	30.0	52.9	0	36	4.8	7	6854	20011116	140000	36.7	24.5	0	21	2.9	28
6759	20011112	150000	28.2	71.8	0	30	4.9	0	6855	20011116	150000	36.3	20.7	0	28	3.8	21
6760	20011112	160000	20.8	94.0	24	18	2.4	0	6856	20011116	160000	36.3	22.3	0	20	2.8	14
6761	20011112	170000	22.7	97.8	0	12	1.7	0	6857	20011116	170000	35.0	27.8	0	11	1.6	7
6762	20011112	180000	23.4	96.0	0	9	1.2	0	6858	20011116	180000	29.8	40.6	0	14	2.0	0
6763	20011112	190000	23.6	95.4	0	4	0.5	0	6859	20011116	190000	26.2	63.4	0	38	5.3	0
6764	20011112	200000	23.6	95.2	0	7	1.0	0	6860	20011116	200000	24.3	65.0	0	22	3.1	0
6765	20011112	210000	23.5	96.7	0	30	4.2	0	6861	20011116	210000	22.9	73.4	0	22	3.1	0
6766	20011112	220000	23.7	89.1	0	8	1.2	0	6862	20011116	220000	22.5	73.3	0	17	2.4	0
6767	20011112	230000	23.7	95.4	0	28	3.9	0	6863	20011116	230000	21.7	71.8	0	18	2.5	0
6768	20011112	240000	23.7	89.4	0	33	4.5	0	6864	20011116	240000	21.3	75.7	0	10	1.4	0
6769	20011113	10000	23.7	93.1	0	33	4.6	0	6865	20011117	10000	21.4	73.8	0	40	5.6	0
6770	20011113	20000	23.0	93.1	0	24	3.4	0	6866	20011117	20000	20.7	74.3	0	12	1.6	0
6771	20011113	30000	22.6	93.4	0	15	2.0	0	6867	20011117	30000	20.1	75.6	0	2	0.2	0
6772	20011113	40000	22.2	92.2	0	41	5.6	0	6868	20011117	40000	19.2	79.6	0	2	0.2	0
6773	20011113	50000	22.4	96.4	0	31	4.4	0	6869	20011117	50000	18.3	76.5	0	40	5.6	0
6774	20011113	60000	22.7	91.5	0	30	4.2	0	6870	20011117	60000	18.0	82.2	0	40	5.6	0
6775	20011113	70000	22.3	96.3	0	26	3.7	0	6871	20011117	70000	17.7	85.0	0	41	5.6	0
6776	20011113	80000	23.4	91.3	0	21	3.0	7	6872	20011117	80000	21.7	60.4	0	41	5.6	0
6777	20011113	90000	24.6	85.2	0	19	2.7	7	6873	20011117	90000	28.0	36.1	0	21	2.9	21
6778	20011113	100000	26.2	74.8	0	38	5.2	28	6874	20011117	100000	31.7	24.4	0	25	3.5	28
6779	20011113	110000	26.9	72.4	0	33	4.7	14	6875	20011117	110000	34.6	20.2	0	8	1.3	35
6780	20011113	120000	28.8	62.3	0	34	4.9	28	6876	20011117	120000	36.1	13.2	0	21	3.0	35
6781	20011113	130000	28.9	59.0	0	4	0.6	14	6877	20011117	130000	36.9	11.5	0	23	3.2	35
6782	20011113	140000	29.0	58.6	0	42	6.1	7	6878	20011117	140000	37.1	11.8	0	22	3.2	35
6783	20011113	150000	29.1	57.3	0	39	5.3	7	6879	20011117	150000	37.4	10.4	0	12	1.6	28
6784	20011113	160000	28.9	60.2	0	34	4.7	7	6880	20011117	160000	36.2	11.1	0	6	0.8	14
6785	20011113	170000	28.2	67.0	0	26	3.6	0	6881	20011117	170000	36.0	12.3	0	3	0.5	7
6786	20011113	180000	26.6	79.3	0	25	3.5	0	6882	20011117	180000	28.4	28.3	0	18	2.4	0
6787	20011113	190000	24.4	89.6	0	25	3.5	0	6883	20011117	190000	22.7	50.4	0	18	2.4	0
6788	20011113	200000	23.5	89.8	0	25	3.5	0	6884	20011117	200000	20.7	56.1	0	18	2.4	0
6789	20011113	210000	22.7	92.6	0	25	3.4	0	6885	20011117	210000	20.2	55.5	0	18	2.4	0
6790	20011113	220000	21.9	96.3	0	25	3.4	0	6886	20011117	220000	21.5	53.3	0	0	0.0	0
6791	20011113	230000	22.0	97.2	0	25	3.4	0	6887	20011117	230000	22.1	50.1	0	18	2.5	0
6792	20011113	240000	22.0	94.7	0	25	3.4	0	6888	20011117	240000	19.7	53.5	0	21	2.9	0
6793	20011114	10000	21.4	94.7	0	25	3.4	0	6889	20011118	10000	18.8	54.6	0	29	4.1	0
6794	20011114	20000	20.7	97.0	0	25	3.4	0	6890	20011118	20000	17.1	65.8	0	40	5.5	0
6795	20011114	30000	20.4	97.6	0	25	3.4	0	6891	20011118	30						

Appendice 7 Les données des observations météorologiques (toutes les données)
(37/46)

No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation	No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation
			°C	%	mm	degree	m/s	kWh/m ²				°C	%	mm	degree	m/s	kWh/m ²
	yyyymmdd	hhmmss								yyyymmdd	hhmmss						
6913	20011119	10000	17.1	67.5	0	28	3.9	0	7009	20011123	10000	25.1	69.3	0	31	4.3	0
6914	20011119	20000	16.6	63.8	0	40	5.6	0	7010	20011123	20000	23.9	75.0	0	26	3.7	0
6915	20011119	30000	16.7	58.3	0	38	5.3	0	7011	20011123	30000	24.0	75.4	0	17	2.4	0
6916	20011119	40000	16.7	63.8	0	21	2.9	0	7012	20011123	40000	23.4	78.1	0	8	1.1	0
6917	20011119	50000	15.8	66.0	0	0	0.0	0	7013	20011123	50000	23.1	79.8	0	18	2.4	0
6918	20011119	60000	15.0	71.2	0	0	0.0	0	7014	20011123	60000	22.1	84.8	0	32	4.5	0
6919	20011119	70000	14.6	67.0	0	0	0.0	0	7015	20011123	70000	22.1	85.5	0	22	3.2	0
6920	20011119	80000	18.8	58.9	0	0	0.0	0	7016	20011123	80000	23.8	79.8	0	28	3.9	7
6921	20011119	90000	25.6	29.1	0	25	3.4	21	7017	20011123	90000	27.3	65.5	0	19	2.8	14
6922	20011119	100000	30.2	21.6	0	8	1.1	28	7018	20011123	100000	29.2	58.6	0	32	4.4	21
6923	20011119	110000	33.6	15.7	0	24	3.3	35	7019	20011123	110000	31.5	48.6	0	43	5.7	28
6924	20011119	120000	35.7	12.5	0	18	2.8	35	7020	20011123	120000	33.2	42.3	0	23	2.9	28
6925	20011119	130000	36.7	10.7	0	28	3.9	35	7021	20011123	130000	34.5	32.6	0	20	2.6	35
6926	20011119	140000	36.8	10.6	0	23	3.0	28	7022	20011123	140000	35.3	25.8	0	42	5.8	28
6927	20011119	150000	36.1	11.0	0	9	1.2	21	7023	20011123	150000	35.0	24.7	0	4	0.5	21
6928	20011119	160000	35.7	11.8	0	38	5.3	14	7024	20011123	160000	34.7	20.7	0	15	2.1	7
6929	20011119	170000	34.0	15.9	0	10	1.3	7	7025	20011123	170000	32.6	31.9	0	10	1.4	0
6930	20011119	180000	27.4	31.7	0	17	2.4	0	7026	20011123	180000	27.6	46.7	0	12	1.6	0
6931	20011119	190000	22.3	47.3	0	17	2.4	0	7027	20011123	190000	25.1	50.2	0	19	2.6	0
6932	20011119	200000	21.0	51.7	0	17	2.4	0	7028	20011123	200000	24.2	53.9	0	19	2.6	0
6933	20011119	210000	19.9	56.4	0	20	2.8	0	7029	20011123	210000	23.4	60.7	0	18	2.5	0
6934	20011119	220000	19.2	59.8	0	20	2.8	0	7030	20011123	220000	22.7	68.9	0	10	1.4	0
6935	20011119	230000	18.3	62.9	0	20	2.8	0	7031	20011123	230000	22.3	70.4	0	19	2.7	0
6936	20011119	240000	18.8	62.3	0	2	0.3	0	7032	20011123	240000	21.5	68.2	0	2	0.2	0
6937	20011120	10000	18.0	61.7	0	1	0.1	0	7033	20011124	10000	20.8	69.0	0	19	2.7	0
6938	20011120	20000	17.0	64.6	0	1	0.1	0	7034	20011124	20000	21.1	70.8	0	31	4.2	0
6939	20011120	30000	16.0	65.3	0	1	0.1	0	7035	20011124	30000	21.1	73.3	0	6	0.9	0
6940	20011120	40000	15.9	67.9	0	1	0.1	0	7036	20011124	40000	21.6	74.9	0	20	2.7	0
6941	20011120	50000	15.2	65.3	0	1	0.1	0	7037	20011124	50000	20.6	83.6	0	19	2.6	0
6942	20011120	60000	14.1	76.2	0	1	0.1	0	7038	20011124	60000	19.5	87.2	0	20	2.8	0
6943	20011120	70000	14.1	81.6	0	1	0.1	0	7039	20011124	70000	19.6	90.3	0	31	4.3	0
6944	20011120	80000	19.2	56.9	0	0	0.0	7	7040	20011124	80000	23.2	72.4	0	32	4.4	7
6945	20011120	90000	26.2	27.5	0	15	2.1	21	7041	20011124	90000	27.5	54.3	0	32	4.4	14
6946	20011120	100000	31.0	18.5	0	24	3.3	28	7042	20011124	100000	30.1	47.8	0	0	0.0	21
6947	20011120	110000	34.1	15.3	0	10	1.4	35	7043	20011124	110000	33.0	36.1	0	19	2.6	28
6948	20011120	120000	36.0	10.2	0	26	3.3	35	7044	20011124	120000	34.0	29.8	0	4	0.5	28
6949	20011120	130000	35.7	10.3	0	16	2.4	28	7045	20011124	130000	36.1	21.4	0	18	2.6	28
6950	20011120	140000	37.3	10.5	0	42	6.0	28	7046	20011124	140000	35.6	23.1	0	12	1.5	28
6951	20011120	150000	35.8	9.2	0	28	3.8	28	7047	20011124	150000	36.5	22.1	0	42	2.4	21
6952	20011120	160000	34.2	12.4	0	1	0.2	14	7048	20011124	160000	36.2	21.4	0	21	2.9	7
6953	20011120	170000	30.9	27.6	0	11	1.5	7	7049	20011124	170000	33.0	27.3	0	16	2.2	0
6954	20011120	180000	25.9	38.6	0	22	3.1	0	7050	20011124	180000	28.7	45.3	0	16	2.2	0
6955	20011120	190000	22.6	41.5	0	21	2.9	0	7051	20011124	190000	25.2	55.1	0	14	2.0	0
6956	20011120	200000	21.0	40.0	0	21	2.9	0	7052	20011124	200000	23.7	56.4	0	14	2.0	0
6957	20011120	210000	19.5	52.6	0	21	2.9	0	7053	20011124	210000	23.6	56.4	0	14	2.0	0
6958	20011120	220000	19.2	53.6	0	37	5.1	0	7054	20011124	220000	23.0	63.1	0	14	2.0	0
6959	20011120	230000	18.0	54.5	0	20	2.7	0	7055	20011124	230000	21.9	67.9	0	14	2.0	0
6960	20011120	240000	18.4	55.2	0	19	2.6	0	7056	20011124	240000	21.6	62.3	0	14	2.0	0
6961	20011121	10000	17.0	64.1	0	9	1.3	0	7057	20011125	10000	20.8	65.3	0	14	2.0	0
6962	20011121	20000	16.4	68.8	0	10	1.3	0	7058	20011125	20000	20.5	62.6	0	7	0.9	0
6963	20011121	30000	18.0	46.6	0	2	0.3	0	7059	20011125	30000	20.6	60.2	0	7	0.9	0
6964	20011121	40000	16.4	56.7	0	1	0.1	0	7060	20011125	40000	19.4	66.8	0	39	5.4	0
6965	20011121	50000	16.8	55.3	0	7	0.9	0	7061	20011125	50000	18.6	76.4	0	17	2.3	0
6966	20011121	60000	17.8	68.4	0	10	1.4	0	7062	20011125	60000	19.1	73.7	0	23	3.2	0
6967	20011121	70000	20.8	81.7	0	11	1.5	0	7063	20011125	70000	19.4	74.5	0	40	5.5	0
6968	20011121	80000	23.5	71.3	0	24	3.3	7	7064	20011125	80000	21.5	72.9	0	1	0.1	7
6969	20011121	90000	27.4	60.6	0	26	3.3	14	7065	20011125	90000	26.7	66.3	0	43	5.9	14
6970	20011121	100000	30.1	51.2	0	35	4.8	21	7066	20011125	100000	30.1	53.7	0	36	5.2	21
6971	20011121	110000	32.9	36.9	0	17	2.3	28	7067	20011125	110000	31.6	46.6	0	22	3.0	28
6972	20011121	120000	33.5	33.9	0	16	2.2	35	7068	20011125	120000	34.4	31.0	0	6	0.8	35
6973	20011121	130000	35.5	25.6	0	27	3.7	28	7069	20011125	130000	34.9	28.3	0	31	4.3	21
6974	20011121	140000	35.8	19.8	0	16	2.3	28	7070	20011125	140000	35.2	23.8	0	15	2.2	28
6975	20011121	150000	35.5	19.2	0	16	2.2	21	7071	20011125	150000	35.5	22.3	0	23	3.1	21
6976	20011121	160000	34.5	24.8	0	10	1.5	7	7072	20011125	160000	35.3	23.4	0	18	2.5	14
6977	20011121	170000	33.5	23.0	0	21	3.0	7	7073	20011125	170000	33.4	27.3	0	11	1.5	7
6978	20011121	180000	27.8	41.7	0	21	3.0	0	7074	20011125	180000	28.3	39.6	0	14	1.9	0
6979	20011121	190000	23.6	43.7	0	21	3.0	0	7075	20011125	190000	24.8	48.3	0	14	1.9	0
6980	20011121	200000	22.0	45.3	0	21	3.0	0	7076	20011125	200000	23.5	57.0	0	14	1.9	0
6981	20011121	210000	21.2	52.0	0	21	3.0	0	7077	20011125	210000	22.9	65.7	0	14	1.9	0
6982	20011121	220000	21.2	53.6	0	21	3.0	0	7078	20011125	220000	22.1	69.5	0	14	1.9	0
6983	20011121	230000	20.8	58.7	0	21	3.0	0	7079	20011125	230000	21.1	69.8	0	14	1.9	0
6984	20011121	240000	20.8	65.3	0	21	3.0	0	7080	20011125	240000	20.5	66.9	0	14	1.9	0
6985	20011122	10000	21.5	63.3	0	35	4.9	0	7081	20011126	10000	20.5	69.1	0	14	1.9	0
6986	20011122	20000	21.1	65.9	0	9	1.2	0	7082	20011126	20000	20.9	61.8	0	40	5.5	0
6987	20011122																

Appendice 7 Les données des observations météorologiques (toutes les données)
(38/46)

No.	Date	Time	Temperature °C	Humidity %	Precipitation mm	Wind direction degree	Wind speed m/s	Insolation kW/m ²	No.	Date	Time	Temperature °C	Humidity %	Precipitation mm	Wind direction degree	Wind speed m/s	Insolation kW/m ²
7105	20011127	10000	19.9	68.7	0	15	2.0	0	7201	20011201	10000	18.2	49.1	0	5	0.7	0
7106	20011127	20000	19.6	65.5	0	19	2.7	0	7202	20011201	20000	17.6	54.0	0	1	0.1	0
7107	20011127	30000	19.4	59.9	0	20	2.8	0	7203	20011201	30000	17.7	49.6	0	39	5.4	0
7108	20011127	40000	20.6	54.7	0	29	4.0	0	7204	20011201	40000	17.7	47.2	0	3	0.5	0
7109	20011127	50000	20.5	57.6	0	28	3.8	0	7205	20011201	50000	17.4	48.7	0	10	1.9	0
7110	20011127	60000	19.7	61.8	0	39	5.4	0	7206	20011201	60000	19.9	34.9	0	2	0.2	0
7111	20011127	70000	22.2	62.2	0	20	2.7	0	7207	20011201	70000	19.7	34.0	0	3	0.4	0
7112	20011127	80000	24.4	63.3	0	30	4.2	7	7208	20011201	80000	20.6	31.4	0	11	1.4	0
7113	20011127	90000	25.9	63.2	0	38	5.4	14	7209	20011201	90000	23.2	25.4	0	21	2.9	14
7114	20011127	100000	29.2	48.4	0	37	5.1	21	7210	20011201	100000	26.5	20.5	0	24	3.7	21
7115	20011127	110000	31.5	35.3	0	30	4.2	28	7211	20011201	110000	28.0	20.4	0	14	2.5	28
7116	20011127	120000	33.4	28.7	0	28	3.9	28	7212	20011201	120000	30.2	19.4	0	16	2.2	35
7117	20011127	130000	34.2	27.6	0	21	2.9	28	7213	20011201	130000	32.0	16.6	0	10	1.2	35
7118	20011127	140000	33.6	24.4	0	9	1.2	14	7214	20011201	140000	32.1	15.8	0	18	2.6	21
7119	20011127	150000	34.9	21.0	0	10	1.4	14	7215	20011201	150000	32.1	16.2	0	4	0.7	14
7120	20011127	160000	34.5	22.9	0	38	5.3	14	7216	20011201	160000	32.2	16.8	0	9	1.5	14
7121	20011127	170000	32.9	29.3	0	4	0.6	7	7217	20011201	170000	29.6	20.7	0	6	0.7	7
7122	20011127	180000	28.9	44.6	0	4	0.6	0	7218	20011201	180000	27.0	28.3	0	2	0.3	0
7123	20011127	190000	25.0	52.8	0	13	1.8	0	7219	20011201	190000	23.1	39.0	0	19	2.7	0
7124	20011127	200000	24.3	58.9	0	37	5.1	0	7220	20011201	200000	21.5	45.0	0	19	2.7	0
7125	20011127	210000	23.0	58.2	0	19	2.7	0	7221	20011201	210000	20.4	53.1	0	19	2.7	0
7126	20011127	220000	22.6	59.7	0	12	1.7	0	7222	20011201	220000	19.6	46.6	0	19	2.7	0
7127	20011127	230000	21.7	59.1	0	16	2.2	0	7223	20011201	230000	18.6	49.3	0	20	2.8	0
7128	20011127	240000	21.2	54.8	0	16	2.2	0	7224	20011201	240000	18.3	54.5	0	20	2.8	0
7129	20011128	10000	21.3	55.4	0	27	3.8	0	7225	20011202	10000	17.5	56.5	0	20	2.8	0
7130	20011128	20000	20.6	54.9	0	20	2.8	0	7226	20011202	20000	17.7	57.2	0	20	2.8	0
7131	20011128	30000	19.7	54.6	0	20	2.8	0	7227	20011202	30000	16.4	59.3	0	20	2.8	0
7132	20011128	40000	19.4	56.1	0	20	2.8	0	7228	20011202	40000	16.3	61.5	0	18	2.4	0
7133	20011128	50000	19.1	56.9	0	20	2.8	0	7229	20011202	50000	18.7	47.2	0	4	0.5	0
7134	20011128	60000	19.0	55.0	0	18	2.5	0	7230	20011202	60000	18.8	42.7	0	6	0.8	0
7135	20011128	70000	18.5	59.7	0	18	2.5	0	7231	20011202	70000	17.5	49.4	0	10	1.4	0
7136	20011128	80000	22.0	50.3	0	30	4.2	7	7232	20011202	80000	20.2	40.2	0	6	0.8	7
7137	20011128	90000	25.8	39.8	0	43	6.0	7	7233	20011202	90000	23.9	25.5	0	19	2.7	14
7138	20011128	100000	29.1	22.8	0	11	1.6	21	7234	20011202	100000	26.1	22.1	0	31	3.8	21
7139	20011128	110000	32.2	19.6	0	5	0.7	28	7235	20011202	110000	28.4	19.4	0	16	2.6	28
7140	20011128	120000	34.1	15.8	0	10	1.5	28	7236	20011202	120000	30.9	16.7	0	7	1.0	35
7141	20011128	130000	35.3	16.5	0	9	1.3	35	7237	20011202	130000	31.9	15.3	0	20	2.6	35
7142	20011128	140000	35.7	17.1	0	5	0.6	21	7238	20011202	140000	33.1	13.7	0	18	2.2	28
7143	20011128	150000	35.2	17.0	0	48	6.4	14	7239	20011202	150000	33.7	13.1	0	12	1.8	21
7144	20011128	160000	35.4	18.7	0	5	0.8	14	7240	20011202	160000	33.5	13.2	0	56	7.4	14
7145	20011128	170000	33.5	23.3	0	11	1.5	7	7241	20011202	170000	31.9	14.3	0	4	0.6	7
7146	20011128	180000	29.6	35.9	0	16	2.3	0	7242	20011202	180000	27.2	24.9	0	4	0.6	0
7147	20011128	190000	26.3	44.1	0	16	2.3	0	7243	20011202	190000	22.2	36.7	0	4	0.6	0
7148	20011128	200000	24.8	50.8	0	16	2.3	0	7244	20011202	200000	20.3	39.7	0	4	0.6	0
7149	20011128	210000	25.1	51.6	0	16	2.3	0	7245	20011202	210000	19.6	49.6	0	14	2.0	0
7150	20011128	220000	25.6	49.8	0	17	2.3	0	7246	20011202	220000	18.6	45.9	0	2	0.3	0
7151	20011128	230000	25.5	51.3	0	2	0.3	0	7247	20011202	230000	18.4	55.2	0	40	5.6	0
7152	20011128	240000	24.7	54.0	0	17	2.4	0	7248	20011202	240000	18.5	47.4	0	39	5.4	0
7153	20011129	10000	23.8	62.7	0	17	2.4	0	7249	20011203	10000	17.1	51.5	0	37	5.2	0
7154	20011129	20000	22.2	64.3	0	3	0.4	0	7250	20011203	20000	16.5	54.5	0	37	5.2	0
7155	20011129	30000	22.2	55.3	0	21	2.9	0	7251	20011203	30000	16.2	59.7	0	39	5.5	0
7156	20011129	40000	21.1	53.6	0	19	2.6	0	7252	20011203	40000	15.8	60.7	0	39	5.4	0
7157	20011129	50000	-9999.0	-9999.0	-9999	19	2.6	0	7253	20011203	50000	16.2	56.6	0	19	2.6	0
7158	20011129	60000	18.8	53.1	0	34	4.7	0	7254	20011203	60000	14.8	60.9	0	17	2.4	0
7159	20011129	70000	18.0	61.9	0	34	4.8	0	7255	20011203	70000	15.1	52.1	0	19	2.6	0
7160	20011129	80000	21.7	47.6	0	9	1.2	0	7256	20011203	80000	17.5	41.9	0	5	0.7	0
7161	20011129	90000	24.9	32.4	0	13	1.9	14	7257	20011203	90000	22.5	25.4	0	22	3.1	14
7162	20011129	100000	27.7	27.3	0	46	6.4	21	7258	20011203	100000	26.6	19.6	0	12	1.6	21
7163	20011129	110000	30.1	22.4	0	18	2.6	28	7259	20011203	110000	30.4	14.8	0	23	3.1	28
7164	20011129	120000	33.4	17.1	0	27	3.5	28	7260	20011203	120000	32.2	14.2	0	16	2.3	35
7165	20011129	130000	34.8	14.3	0	10	1.4	28	7261	20011203	130000	32.9	13.9	0	22	3.0	28
7166	20011129	140000	36.0	13.4	0	24	3.6	21	7262	20011203	140000	33.3	13.1	0	19	2.5	14
7167	20011129	150000	36.0	13.8	0	16	2.2	21	7263	20011203	150000	33.8	13.4	0	29	3.9	21
7168	20011129	160000	34.9	13.5	0	16	2.6	14	7264	20011203	160000	33.6	13.1	0	22	3.0	14
7169	20011129	170000	33.3	15.0	0	12	1.8	7	7265	20011203	170000	32.9	15.3	0	17	2.3	7
7170	20011129	180000	27.9	31.1	0	7	0.9	0	7266	20011203	180000	27.0	27.3	0	35	4.8	0
7171	20011129	190000	23.6	44.8	0	18	2.5	0	7267	20011203	190000	22.7	35.6	0	25	3.5	0
7172	20011129	200000	21.5	46.7	0	18	2.5	0	7268	20011203	200000	22.8	35.7	0	13	1.9	0
7173	20011129	210000	20.7	46.2	0	21	2.9	0	7269	20011203	210000	22.1	38.2	0	9	1.3	0
7174	20011129	220000	20.3	49.0	0	18	2.5	0	7270	20011203	220000	20.1	48.3	0	19	2.7	0
7175	20011129	230000	19.5	51.6	0	18	2.6	0	7271	20011203	230000	18.6	51.2	0	20	2.7	0
7176	20011129	240000	22.7	33.1	0	4	0.6	0	7272	20011203	240000	17.6	54.1	0	20	2.7	0
7177	20011130	10000	21.9	36.4	0	6	1.0	0	7273	20011204	10000	17.2	60.1	0	23	3.2	0
7178	20011130	20000	19.3	47.2	0	17	2.4	0	7274	20011204	20000	16.5	55.4	0	39	5.4	0
7179	20011130	30000	21.0	36.9	0	12	1.7	0	7275	20011204							

Appendice 7 Les données des observations météorologiques (toutes les données)
(39/46)

No.	Date	Time	Temperature °C	Humidity %	Precipitation mm	Wind direction degree	Wind speed m/s	Insolation kW/m ²	No.	Date	Time	Temperature °C	Humidity %	Precipitation mm	Wind direction degree	Wind speed m/s	Insolation kW/m ²
7297	20011205	10000	19.2	54.3	0	18	2.4	0	7393	20011209	10000	17.2	54.7	0	35	4.8	0
7298	20011205	20000	18.5	54.1	0	21	2.9	0	7394	20011209	20000	16.8	54.9	0	38	5.3	0
7299	20011205	30000	18.8	53.5	0	3	0.5	0	7395	20011209	30000	16.3	57.1	0	40	5.5	0
7300	20011205	40000	18.1	59.7	0	0	0.0	0	7396	20011209	40000	15.3	61.2	0	40	5.5	0
7301	20011205	50000	16.9	63.7	0	0	0.0	0	7397	20011209	50000	15.1	61.4	0	39	5.4	0
7302	20011205	60000	15.8	65.6	0	0	0.0	0	7398	20011209	60000	13.9	68.9	0	39	5.4	0
7303	20011205	70000	16.0	65.0	0	0	0.0	0	7399	20011209	70000	13.7	67.2	0	39	5.4	0
7304	20011205	80000	18.8	58.6	0	0	0.0	0	7400	20011209	80000	17.4	47.9	0	26	3.6	0
7305	20011205	90000	24.9	33.0	0	18	2.5	14	7401	20011209	90000	23.2	31.1	0	14	2.0	14
7306	20011205	100000	30.0	19.8	0	19	2.7	14	7402	20011209	100000	29.6	17.5	0	15	2.2	28
7307	20011205	110000	32.9	14.6	0	37	5.2	28	7403	20011209	110000	32.0	12.5	0	8	1.1	28
7308	20011205	120000	33.6	13.0	0	14	2.0	21	7404	20011209	120000	32.2	14.2	0	9	1.3	35
7309	20011205	130000	33.5	13.1	0	1	0.1	21	7405	20011209	130000	33.1	10.8	0	20	2.8	35
7310	20011205	140000	34.0	12.9	0	16	2.1	21	7406	20011209	140000	33.8	10.3	0	46	6.7	28
7311	20011205	150000	35.4	12.3	0	12	1.8	21	7407	20011209	150000	33.3	10.5	0	6	0.4	21
7312	20011205	160000	32.9	14.6	0	19	2.6	7	7408	20011209	160000	33.7	10.8	0	25	3.7	14
7313	20011205	170000	30.8	26.0	0	19	2.6	0	7409	20011209	170000	31.7	10.9	0	7	1.3	7
7314	20011205	180000	25.8	37.9	0	19	2.7	0	7410	20011209	180000	27.2	18.6	0	5	0.7	0
7315	20011205	190000	22.6	40.1	0	19	2.7	0	7411	20011209	190000	21.8	30.2	0	5	0.7	0
7316	20011205	200000	21.3	44.0	0	5	0.7	0	7412	20011209	200000	19.7	34.8	0	13	1.8	0
7317	20011205	210000	20.3	47.1	0	1	0.1	0	7413	20011209	210000	18.2	37.8	0	13	1.8	0
7318	20011205	220000	19.5	49.0	0	23	3.2	0	7414	20011209	220000	-9999.0	-9999.0	-9999	13	1.8	0
7319	20011205	230000	18.8	49.1	0	35	4.8	0	7415	20011209	230000	16.9	45.2	0	13	1.8	0
7320	20011205	240000	18.5	47.7	0	4	0.5	0	7416	20011209	240000	16.5	48.3	0	13	1.8	0
7321	20011206	10000	17.4	54.3	0	19	2.6	0	7417	20011210	10000	16.2	45.9	0	39	5.5	0
7322	20011206	20000	17.1	54.8	0	24	3.3	0	7418	20011210	20000	15.6	48.7	0	38	5.3	0
7323	20011206	30000	17.1	53.2	0	40	5.6	0	7419	20011210	30000	14.8	47.2	0	39	5.4	0
7324	20011206	40000	16.7	59.6	0	31	4.3	0	7420	20011210	40000	14.1	54.5	0	39	5.4	0
7325	20011206	50000	16.1	60.1	0	35	4.9	0	7421	20011210	50000	13.5	57.5	0	39	5.4	0
7326	20011206	60000	15.4	60.5	0	35	4.9	0	7422	20011210	60000	13.1	56.5	0	39	5.4	0
7327	20011206	70000	15.4	65.2	0	35	4.9	0	7423	20011210	70000	13.0	61.6	0	39	5.4	0
7328	20011206	80000	19.4	54.5	0	1	0.1	7	7424	20011210	80000	16.9	46.7	0	39	5.4	0
7329	20011206	90000	25.4	25.9	0	10	1.3	14	7425	20011210	90000	23.3	27.2	0	19	2.7	14
7330	20011206	100000	31.0	15.1	0	20	2.7	21	7426	20011210	100000	27.9	18.6	0	17	2.7	28
7331	20011206	110000	32.7	13.2	0	21	3.2	28	7427	20011210	110000	30.3	13.6	0	9	1.2	28
7332	20011206	120000	34.4	11.3	0	22	2.8	35	7428	20011210	120000	33.4	10.3	0	12	1.8	35
7333	20011206	130000	35.3	11.0	0	41	5.7	35	7429	20011210	130000	33.7	10.6	0	17	2.5	35
7334	20011206	140000	36.3	10.7	0	19	2.7	28	7430	20011210	140000	34.0	10.1	0	22	2.5	28
7335	20011206	150000	35.7	10.6	0	48	6.6	21	7431	20011210	150000	34.0	10.2	0	22	2.9	21
7336	20011206	160000	35.1	10.5	0	18	2.7	14	7432	20011210	160000	34.3	10.4	0	10	1.3	14
7337	20011206	170000	34.1	11.3	0	10	1.4	7	7433	20011210	170000	32.5	10.8	0	42	5.9	7
7338	20011206	180000	28.9	21.3	0	1	0.1	0	7434	20011210	180000	28.5	16.9	0	1	0.1	0
7339	20011206	190000	23.3	32.5	0	1	0.1	0	7435	20011210	190000	22.4	29.3	0	1	0.1	0
7340	20011206	200000	21.2	38.3	0	1	0.1	0	7436	20011210	200000	20.6	30.7	0	1	0.1	0
7341	20011206	210000	20.9	39.6	0	1	0.1	0	7437	20011210	210000	21.0	28.1	0	6	0.8	0
7342	20011206	220000	21.0	40.9	0	0	0.0	0	7438	20011210	220000	20.7	30.2	0	3	0.4	0
7343	20011206	230000	19.6	48.7	0	39	5.4	0	7439	20011210	230000	18.7	33.7	0	17	2.3	0
7344	20011206	240000	19.1	45.2	0	18	2.5	0	7440	20011210	240000	18.1	37.3	0	13	1.8	0
7345	20011207	10000	17.3	51.1	0	27	3.8	0	7441	20011211	10000	17.9	37.2	0	14	1.9	0
7346	20011207	20000	16.9	58.8	0	31	4.3	0	7442	20011211	20000	18.6	37.2	0	13	1.8	0
7347	20011207	30000	17.1	56.2	0	32	4.4	0	7443	20011211	30000	19.0	41.2	0	14	2.0	0
7348	20011207	40000	16.1	62.2	0	32	4.4	0	7444	20011211	40000	18.8	43.1	0	14	2.0	0
7349	20011207	50000	15.8	61.9	0	39	5.5	0	7445	20011211	50000	17.4	45.9	0	17	2.4	0
7350	20011207	60000	14.6	66.3	0	39	5.5	0	7446	20011211	60000	18.0	39.4	0	17	2.3	0
7351	20011207	70000	14.7	69.3	0	40	5.5	0	7447	20011211	70000	17.1	48.5	0	39	5.4	0
7352	20011207	80000	18.5	54.6	0	9	1.3	0	7448	20011211	80000	19.6	39.4	0	5	0.7	7
7353	20011207	90000	25.1	32.4	0	5	0.7	14	7449	20011211	90000	21.4	33.0	0	10	1.3	7
7354	20011207	100000	30.7	20.1	0	22	3.1	21	7450	20011211	100000	25.6	22.6	0	17	2.5	28
7355	20011207	110000	34.6	13.1	0	14	1.8	28	7451	20011211	110000	28.8	16.8	0	19	2.6	28
7356	20011207	120000	35.6	12.0	0	8	1.6	35	7452	20011211	120000	31.5	13.5	0	22	3.0	42
7357	20011207	130000	34.9	11.8	0	3	0.4	35	7453	20011211	130000	33.1	12.3	0	37	5.0	21
7358	20011207	140000	36.7	12.0	0	11	1.6	28	7454	20011211	140000	32.4	12.2	0	10	1.4	21
7359	20011207	150000	35.0	11.7	0	12	1.5	21	7455	20011211	150000	31.0	13.3	0	7	1.1	14
7360	20011207	160000	35.7	12.3	0	20	2.8	14	7456	20011211	160000	30.3	14.2	0	7	0.9	7
7361	20011207	170000	33.9	12.6	0	20	2.7	7	7457	20011211	170000	29.1	16.6	0	4	0.6	7
7362	20011207	180000	29.5	21.3	0	11	1.5	0	7458	20011211	180000	26.0	23.9	0	2	0.3	0
7363	20011207	190000	23.4	32.8	0	14	1.9	0	7459	20011211	190000	23.3	31.7	0	14	2.0	0
7364	20011207	200000	21.2	41.0	0	14	1.9	0	7460	20011211	200000	22.7	33.5	0	3	0.4	0
7365	20011207	210000	20.1	49.6	0	14	1.9	0	7461	20011211	210000	21.2	33.4	0	38	5.2	0
7366	20011207	220000	19.8	48.3	0	40	5.6	0	7462	20011211	220000	21.4	33.8	0	19	2.7	0
7367	20011207	230000	18.6	53.6	0	39	5.4	0	7463	20011211	230000	22.6	27.6	0	5	0.7	0
7368	20011207	240000	18.8	50.4	0	39	5.4	0	7464	20011211	240000	22.1	27.8	0	3	0.4	0
7369	20011208	10000	17.6	55.8	0	39	5.4	0	7465	20011212	10000	21.3	32.5	0	11	1.5	0
7370	20011208	20000	17.6	55.1	0	39	5.4	0	7466	20011212	20000	20.1	35.9	0	0	0.0	0
7371	20011208	30000	16.1	60.6	0	39	5.4	0	7467	20011212	30000	19.					

Appendice 7 Les données des observations météorologiques (toutes les données)
(40/46)

No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation	No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation
			°C	%	mm	degree	m/s	kW/m ²				°C	%	mm	degree	m/s	kW/m ²
	yyyymmdd	hhmmss								yyyymmdd	hhmmss						
7489	20011213	10000	18.0	41.3	0	16	2.2	0	7585	20011217	10000	19.5	46.5	0	38	5.2	0
7490	20011213	20000	17.2	39.2	0	2	0.2	0	7586	20011217	20000	19.1	50.8	0	18	2.4	0
7491	20011213	30000	16.2	44.2	0	17	2.4	0	7587	20011217	30000	17.9	53.2	0	19	2.6	0
7492	20011213	40000	14.6	50.5	0	17	2.4	0	7588	20011217	40000	18.7	48.7	0	20	2.8	0
7493	20011213	50000	15.3	46.4	0	19	2.7	0	7589	20011217	50000	17.0	56.0	0	20	2.8	0
7494	20011213	60000	14.1	54.0	0	36	4.9	0	7590	20011217	60000	16.6	59.8	0	21	2.9	0
7495	20011213	70000	13.6	53.3	0	38	5.2	0	7591	20011217	70000	16.3	61.3	0	21	2.9	0
7496	20011213	80000	17.5	32.2	0	8	1.1	0	7592	20011217	80000	18.9	49.0	0	17	2.4	0
7497	20011213	90000	22.3	21.8	0	48	6.7	14	7593	20011217	90000	24.8	28.5	0	21	2.4	14
7498	20011213	100000	25.9	16.0	0	12	1.5	21	7594	20011217	100000	28.7	22.7	0	20	2.9	28
7499	20011213	110000	27.8	13.9	0	15	2.0	28	7595	20011217	110000	32.1	16.4	0	13	1.7	28
7500	20011213	120000	29.5	13.6	0	50	7.4	35	7596	20011217	120000	35.4	12.9	0	16	2.3	35
7501	20011213	130000	30.7	13.7	0	22	3.1	35	7597	20011217	130000	35.9	12.6	0	18	2.8	35
7502	20011213	140000	31.4	13.7	0	17	2.5	28	7598	20011217	140000	36.1	12.2	0	25	3.4	21
7503	20011213	150000	32.3	13.1	0	10	1.5	21	7599	20011217	150000	34.7	13.1	0	9	1.3	14
7504	20011213	160000	32.1	13.3	0	48	6.5	14	7600	20011217	160000	34.3	13.6	0	12	1.7	7
7505	20011213	170000	31.1	13.7	0	13	1.8	7	7601	20011217	170000	33.4	15.7	0	4	0.5	0
7506	20011213	180000	27.5	19.0	0	5	0.7	0	7602	20011217	180000	28.6	25.8	0	8	1.1	0
7507	20011213	190000	22.4	29.4	0	4	0.6	0	7603	20011217	190000	24.8	33.3	0	8	1.1	0
7508	20011213	200000	20.2	36.8	0	4	0.6	0	7604	20011217	200000	22.9	37.4	0	16	2.2	0
7509	20011213	210000	19.3	41.0	0	40	5.5	0	7605	20011217	210000	22.5	40.5	0	34	4.7	0
7510	20011213	220000	18.7	40.7	0	17	2.3	0	7606	20011217	220000	21.8	46.7	0	34	4.7	0
7511	20011213	230000	16.8	46.6	0	17	2.3	0	7607	20011217	230000	22.5	40.3	0	19	2.6	0
7512	20011213	240000	16.6	45.1	0	17	2.3	0	7608	20011217	240000	22.0	41.9	0	18	2.5	0
7513	20011214	10000	16.2	47.0	0	17	2.4	0	7609	20011218	10000	20.3	46.5	0	18	2.5	0
7514	20011214	20000	15.8	49.5	0	17	2.4	0	7610	20011218	20000	20.3	51.0	0	32	4.5	0
7515	20011214	30000	15.1	50.7	0	19	2.6	0	7611	20011218	30000	19.0	48.6	0	3	0.4	0
7516	20011214	40000	14.4	52.5	0	19	2.6	0	7612	20011218	40000	19.0	53.2	0	38	5.3	0
7517	20011214	50000	14.0	59.4	0	19	2.7	0	7613	20011218	50000	18.2	56.2	0	38	5.3	0
7518	20011214	60000	13.8	59.2	0	38	5.3	0	7614	20011218	60000	17.4	59.7	0	40	5.5	0
7519	20011214	70000	13.4	60.0	0	39	5.4	0	7615	20011218	70000	16.6	62.2	0	38	5.3	0
7520	20011214	80000	17.2	43.4	0	4	0.5	0	7616	20011218	80000	18.4	59.1	0	38	5.3	0
7521	20011214	90000	22.8	26.9	0	20	2.4	14	7617	20011218	90000	24.2	31.0	0	14	2.0	7
7522	20011214	100000	27.6	17.5	0	14	1.9	21	7618	20011218	100000	28.8	21.8	0	9	1.2	28
7523	20011214	110000	30.2	13.9	0	51	7.0	28	7619	20011218	110000	32.0	16.6	0	26	3.6	35
7524	20011214	120000	32.7	12.8	0	39	5.5	28	7620	20011218	120000	34.7	13.2	0	28	3.9	7
7525	20011214	130000	33.1	11.8	0	9	1.3	35	7621	20011218	130000	35.7	12.3	0	22	3.0	28
7526	20011214	140000	33.7	12.0	0	11	1.5	28	7622	20011218	140000	36.3	12.1	0	9	1.3	28
7527	20011214	150000	34.7	11.4	0	11	1.4	21	7623	20011218	150000	36.3	12.2	0	8	1.2	21
7528	20011214	160000	33.9	12.1	0	14	1.8	14	7624	20011218	160000	35.7	12.8	0	46	6.4	14
7529	20011214	170000	33.1	13.0	0	12	1.7	7	7625	20011218	170000	34.7	13.2	0	1	0.2	7
7530	20011214	180000	28.4	23.5	0	3	0.4	0	7626	20011218	180000	31.1	16.8	0	5	0.7	0
7531	20011214	190000	23.0	32.5	0	3	0.4	0	7627	20011218	190000	25.2	27.9	0	6	0.8	0
7532	20011214	200000	20.9	39.1	0	0	0.0	0	7628	20011218	200000	23.4	35.9	0	6	0.8	0
7533	20011214	210000	20.7	43.0	0	0	0.0	0	7629	20011218	210000	22.6	35.0	0	18	2.5	0
7534	20011214	220000	19.7	41.1	0	0	0.0	0	7630	20011218	220000	21.6	38.4	0	34	4.7	0
7535	20011214	230000	18.7	48.0	0	1	0.1	0	7631	20011218	230000	20.6	45.0	0	37	5.1	0
7536	20011214	240000	18.4	47.2	0	40	5.5	0	7632	20011218	240000	19.4	47.2	0	37	5.1	0
7537	20011215	10000	18.0	48.1	0	40	5.5	0	7633	20011219	10000	18.7	49.5	0	37	5.1	0
7538	20011215	20000	17.2	53.3	0	0	0.0	0	7634	20011219	20000	17.4	54.3	0	37	5.1	0
7539	20011215	30000	17.0	53.6	0	38	5.3	0	7635	20011219	30000	17.0	55.6	0	37	5.2	0
7540	20011215	40000	16.3	53.4	0	38	5.3	0	7636	20011219	40000	16.4	56.8	0	35	4.9	0
7541	20011215	50000	15.4	55.1	0	0	0.0	0	7637	20011219	50000	16.1	59.3	0	35	4.9	0
7542	20011215	60000	15.4	57.5	0	0	0.0	0	7638	20011219	60000	16.2	54.9	0	20	2.8	0
7543	20011215	70000	15.1	62.4	0	0	0.0	0	7639	20011219	70000	15.8	59.5	0	40	5.6	0
7544	20011215	80000	17.6	52.1	0	0	0.0	0	7640	20011219	80000	18.4	53.4	0	41	5.6	0
7545	20011215	90000	23.7	29.9	0	14	2.0	14	7641	20011219	90000	24.6	30.4	0	12	1.6	14
7546	20011215	100000	29.1	18.9	0	14	1.9	21	7642	20011219	100000	29.8	19.2	0	17	2.2	21
7547	20011215	110000	33.1	14.8	0	8	1.1	28	7643	20011219	110000	33.3	12.8	0	23	2.8	28
7548	20011215	120000	35.6	12.0	0	12	1.6	28	7644	20011219	120000	36.0	10.2	0	20	2.7	35
7549	20011215	130000	35.8	12.0	0	6	0.8	28	7645	20011219	130000	36.2	10.4	0	24	3.3	35
7550	20011215	140000	36.9	11.0	0	11	1.6	28	7646	20011219	140000	36.6	9.9	0	31	4.3	21
7551	20011215	150000	36.9	11.4	0	15	1.9	21	7647	20011219	150000	36.3	10.4	0	22	3.1	21
7552	20011215	160000	35.7	12.1	0	6	0.8	14	7648	20011219	160000	35.5	10.6	0	13	1.8	14
7553	20011215	170000	34.8	13.8	0	14	1.9	7	7649	20011219	170000	34.3	13.1	0	15	2.1	7
7554	20011215	180000	30.8	23.4	0	41	5.6	0	7650	20011219	180000	30.1	22.5	0	4	0.5	0
7555	20011215	190000	24.4	35.5	0	40	5.6	0	7651	20011219	190000	24.8	30.2	0	10	1.4	0
7556	20011215	200000	22.8	38.7	0	0	0.0	0	7652	20011219	200000	22.7	34.8	0	12	1.7	0
7557	20011215	210000	21.9	42.1	0	0	0.0	0	7653	20011219	210000	21.8	40.1	0	12	1.7	0
7558	20011215	220000	21.2	46.4	0	0	0.0	0	7654	20011219	220000	20.4	39.6	0	6	0.8	0
7559	20011215	230000	19.9	48.7	0	39	5.4	0	7655	20011219	230000	20.2	42.4	0	0	0.0	0
7560	20011215	240000	19.8	48.2	0	38	5.2	0	7656	20011219	240000	19.9	43.6	0	20	2.7	0
7561	20011216	10000	18.4	53.8	0	38	5.3	0	7657	20011220	10000	19.6	45.3	0	20	2.7	0
7562	20011216	20000	18.4	53.6	0	38	5.3	0	7658	20011220	20000	19.4	46.3	0	36	4.9	0
7563	20011216	30000</															

Appendice 7 Les données des observations météorologiques (toutes les données)
(41/46)

No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation	No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation
7681	20011221	10000	19.6	47.2	0	15	2.1	0	7777	20011225	10000	19.0	42.3	0	18	2.5	0
7682	20011221	20000	18.7	52.5	0	18	2.5	0	7778	20011225	20000	18.4	42.9	0	40	5.5	0
7683	20011221	30000	18.5	52.8	0	18	2.5	0	7779	20011225	30000	17.7	45.1	0	30	4.2	0
7684	20011221	40000	18.2	50.9	0	18	2.5	0	7780	20011225	40000	17.0	47.4	0	36	4.9	0
7685	20011221	50000	18.0	53.5	0	36	5.0	0	7781	20011225	50000	16.8	49.4	0	39	5.5	0
7686	20011221	60000	17.6	53.6	0	36	5.0	0	7782	20011225	60000	16.0	52.9	0	39	5.4	0
7687	20011221	70000	16.7	56.2	0	36	5.1	0	7783	20011225	70000	15.6	54.5	0	1	0.1	0
7688	20011221	80000	18.4	52.7	0	37	5.1	0	7784	20011225	80000	18.5	44.7	0	1	0.1	0
7689	20011221	90000	23.5	31.2	0	42	5.9	14	7785	20011225	90000	24.8	25.3	0	20	2.7	14
7690	20011221	100000	28.7	21.4	0	19	2.3	21	7786	20011225	100000	31.5	13.1	0	23	3.3	21
7691	20011221	110000	32.3	15.4	0	17	2.7	28	7787	20011225	110000	33.6	11.3	0	24	3.3	28
7692	20011221	120000	35.4	12.5	0	17	2.4	28	7788	20011225	120000	35.2	9.5	0	17	2.4	35
7693	20011221	130000	37.2	10.7	0	25	3.2	35	7789	20011225	130000	35.6	8.7	0	15	1.8	35
7694	20011221	140000	37.0	10.6	0	16	1.9	28	7790	20011225	140000	36.4	8.9	0	47	4.7	28
7695	20011221	150000	36.9	10.4	0	7	1.0	21	7791	20011225	150000	36.9	8.3	0	19	3.0	21
7696	20011221	160000	37.1	10.3	0	4	0.6	14	7792	20011225	160000	36.4	8.5	0	18	2.5	14
7697	20011221	170000	35.2	13.2	0	25	3.4	7	7793	20011225	170000	35.2	9.0	0	10	1.3	7
7698	20011221	180000	30.1	16.2	0	17	2.4	0	7794	20011225	180000	31.8	11.9	0	10	1.4	0
7699	20011221	190000	27.1	21.6	0	7	1.0	0	7795	20011225	190000	24.9	22.9	0	12	1.6	0
7700	20011221	200000	25.6	24.4	0	9	1.3	0	7796	20011225	200000	22.9	28.4	0	12	1.6	0
7701	20011221	210000	22.7	33.0	0	9	1.3	0	7797	20011225	210000	21.7	29.9	0	12	1.6	0
7702	20011221	220000	21.3	38.8	0	5	0.7	0	7798	20011225	220000	20.6	30.8	0	0	0.0	0
7703	20011221	230000	20.1	40.2	0	5	0.7	0	7799	20011225	230000	19.5	31.1	0	20	2.8	0
7704	20011221	240000	19.5	41.3	0	19	2.6	0	7800	20011225	240000	18.5	34.9	0	25	3.5	0
7705	20011222	10000	19.1	41.5	0	19	2.6	0	7801	20011226	10000	17.5	38.6	0	31	4.4	0
7706	20011222	20000	19.1	42.0	0	20	2.8	0	7802	20011226	20000	16.7	40.5	0	35	4.9	0
7707	20011222	30000	19.7	45.5	0	35	4.9	0	7803	20011226	30000	16.3	42.4	0	40	5.6	0
7708	20011222	40000	19.2	47.6	0	35	4.9	0	7804	20011226	40000	15.7	42.5	0	40	5.5	0
7709	20011222	50000	18.1	52.0	0	2	0.3	0	7805	20011226	50000	15.3	45.1	0	40	5.5	0
7710	20011222	60000	17.4	50.0	0	2	0.3	0	7806	20011226	60000	15.0	46.6	0	1	0.1	0
7711	20011222	70000	17.7	49.8	0	2	0.3	0	7807	20011226	70000	14.2	50.3	0	0	0.0	0
7712	20011222	80000	20.8	42.8	0	17	2.4	7	7808	20011226	80000	18.3	36.9	0	17	2.3	0
7713	20011222	90000	25.3	28.7	0	19	2.6	14	7809	20011226	90000	24.2	21.6	0	23	3.1	14
7714	20011222	100000	30.7	18.8	0	17	2.1	21	7810	20011226	100000	31.6	11.0	0	15	2.4	21
7715	20011222	110000	33.8	14.5	0	27	4.3	21	7811	20011226	110000	34.2	9.7	0	21	3.1	28
7716	20011222	120000	36.2	11.9	0	18	2.8	28	7812	20011226	120000	36.4	8.7	0	19	2.6	35
7717	20011222	130000	37.1	10.9	0	24	3.4	35	7813	20011226	130000	36.8	7.6	0	12	1.8	35
7718	20011222	140000	36.9	10.7	0	12	1.7	28	7814	20011226	140000	36.0	7.7	0	6	0.9	28
7719	20011222	150000	36.7	9.8	0	17	2.6	21	7815	20011226	150000	36.7	7.1	0	25	3.5	21
7720	20011222	160000	35.3	11.0	0	31	3.9	7	7816	20011226	160000	36.8	7.5	0	23	3.2	14
7721	20011222	170000	34.7	11.6	0	6	0.8	7	7817	20011226	170000	35.6	7.9	0	9	1.1	7
7722	20011222	180000	31.1	18.2	0	2	0.3	0	7818	20011226	180000	31.7	11.4	0	5	0.6	0
7723	20011222	190000	25.2	28.0	0	2	0.3	0	7819	20011226	190000	24.8	20.8	0	4	0.6	0
7724	20011222	200000	22.5	36.3	0	1	0.1	0	7820	20011226	200000	21.7	27.4	0	4	0.6	0
7725	20011222	210000	22.3	35.8	0	1	0.1	0	7821	20011226	210000	21.3	28.1	0	2	0.3	0
7726	20011222	220000	21.4	40.5	0	1	0.1	0	7822	20011226	220000	20.2	31.1	0	2	0.3	0
7727	20011222	230000	21.0	40.5	0	1	0.1	0	7823	20011226	230000	19.1	32.9	0	0	0.0	0
7728	20011222	240000	20.0	42.4	0	13	1.8	0	7824	20011226	240000	18.5	33.3	0	0	0.0	0
7729	20011223	10000	19.2	46.5	0	1	0.1	0	7825	20011227	10000	17.4	35.1	0	0	0.0	0
7730	20011223	20000	18.4	47.9	0	1	0.1	0	7826	20011227	20000	17.0	38.5	0	0	0.0	0
7731	20011223	30000	18.1	49.0	0	39	5.4	0	7827	20011227	30000	16.3	40.6	0	0	0.0	0
7732	20011223	40000	17.3	54.4	0	39	5.5	0	7828	20011227	40000	16.1	40.2	0	0	0.0	0
7733	20011223	50000	17.1	56.2	0	40	5.5	0	7829	20011227	50000	15.6	41.5	0	4	0.6	0
7734	20011223	60000	16.8	56.4	0	40	5.5	0	7830	20011227	60000	14.8	46.9	0	1	0.1	0
7735	20011223	70000	16.4	61.2	0	40	5.5	0	7831	20011227	70000	14.4	51.7	0	0	0.0	0
7736	20011223	80000	20.3	43.0	0	12	1.7	7	7832	20011227	80000	16.9	49.1	0	0	0.0	0
7737	20011223	90000	26.0	26.1	0	16	2.2	14	7833	20011227	90000	24.0	21.7	0	18	2.4	14
7738	20011223	100000	30.9	17.3	0	4	5.8	21	7834	20011227	100000	30.5	12.9	0	13	1.7	21
7739	20011223	110000	34.4	12.3	0	12	1.7	28	7835	20011227	110000	33.5	10.5	0	15	2.0	28
7740	20011223	120000	36.2	10.9	0	17	2.4	28	7836	20011227	120000	35.8	8.5	0	38	5.4	35
7741	20011223	130000	37.4	10.4	0	11	1.4	28	7837	20011227	130000	35.5	7.6	0	13	1.8	35
7742	20011223	140000	38.2	9.9	0	23	3.5	28	7838	20011227	140000	36.5	7.5	0	15	1.8	28
7743	20011223	150000	38.3	9.6	0	34	4.7	21	7839	20011227	150000	37.2	7.1	0	10	1.2	21
7744	20011223	160000	37.6	9.6	0	28	3.6	14	7840	20011227	160000	36.4	7.2	0	30	4.2	14
7745	20011223	170000	36.2	10.3	0	12	1.8	7	7841	20011227	170000	35.2	7.9	0	7	1.0	7
7746	20011223	180000	31.0	17.9	0	20	2.7	0	7842	20011227	180000	31.7	11.0	0	5	0.7	0
7747	20011223	190000	25.6	29.0	0	19	2.7	0	7843	20011227	190000	24.9	19.8	0	3	0.4	0
7748	20011223	200000	23.7	31.6	0	19	2.6	0	7844	20011227	200000	22.7	26.4	0	3	0.4	0
7749	20011223	210000	22.2	34.5	0	40	5.6	0	7845	20011227	210000	21.1	30.1	0	3	0.4	0
7750	20011223	220000	21.1	38.9	0	40	5.6	0	7846	20011227	220000	20.3	29.9	0	40	5.6	0
7751	20011223	230000	20.8	36.4	0	40	5.5	0	7847	20011227	230000	19.4	29.7	0	40	5.5	0
7752	20011223	240000	19.9	40.7	0	40	5.5	0	7848	20011227	240000	18.1	34.0	0	40	5.5	0
7753	20011224	10000	21.3	35.0	0	23	3.1	0	7849	20011228	10000	17.1	36.8	0	40	5.5	0
7754	20011224	20000	21.4	33.9	0	34	4.7	0	7850	20011228	20000	17.3	31.8	0	35	4.9	0
7755	20011224	30000	21.1	41.2	0	34	4.8	0	7851	20011228							

Appendice 7 Les données des observations météorologiques (toutes les données)

(42/46)

No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation	No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation
			°C	%	mm	degree	m/s	kW/m ²				°C	%	mm	degree	m/s	kW/m ²
	yyyymmdd	hhmmss								yyyymmdd	hhmmss						
7873	20011229	10000	18.5	34.7	0	38	5.3	0	7969	20020102	10000	20.7	40.5	0	29	4.1	0
7874	20011229	20000	17.6	35.1	0	38	5.3	0	7970	20020102	20000	19.5	41.3	0	29	4.1	0
7875	20011229	30000	17.5	38.1	0	40	5.5	0	7971	20020102	30000	18.7	42.7	0	30	4.2	0
7876	20011229	40000	17.5	42.8	0	40	5.5	0	7972	20020102	40000	18.3	47.8	0	30	4.2	0
7877	20011229	50000	16.4	44.3	0	40	5.5	0	7973	20020102	50000	18.2	46.1	0	30	4.2	0
7878	20011229	60000	15.9	49.6	0	39	5.4	0	7974	20020102	60000	17.5	47.0	0	31	4.3	0
7879	20011229	70000	15.2	54.0	0	39	5.4	0	7975	20020102	70000	16.6	52.2	0	31	4.3	0
7880	20011229	80000	18.3	45.4	0	5	0.8	0	7976	20020102	80000	18.9	44.9	0	5	0.7	0
7881	20011229	90000	24.8	30.0	0	16	1.8	14	7977	20020102	90000	24.1	27.6	0	26	3.6	14
7882	20011229	100000	28.8	23.2	0	15	2.0	21	7978	20020102	100000	29.6	17.7	0	28	3.5	21
7883	20011229	110000	32.6	16.8	0	32	4.1	28	7979	20020102	110000	31.4	15.8	0	29	3.9	28
7884	20011229	120000	33.8	14.9	0	20	2.4	35	7980	20020102	120000	33.0	14.3	0	14	2.0	21
7885	20011229	130000	35.8	12.3	0	5	0.9	35	7981	20020102	130000	33.1	13.3	0	5	0.7	35
7886	20011229	140000	36.6	11.2	0	38	5.4	28	7982	20020102	140000	34.6	12.3	0	16	2.2	35
7887	20011229	150000	36.0	10.5	0	13	1.8	14	7983	20020102	150000	35.2	11.4	0	18	2.4	28
7888	20011229	160000	35.1	11.0	0	5	0.7	14	7984	20020102	160000	34.1	12.1	0	11	1.4	14
7889	20011229	170000	34.5	11.5	0	16	2.0	7	7985	20020102	170000	32.5	13.3	0	43	6.1	7
7890	20011229	180000	31.0	16.0	0	7	0.9	0	7986	20020102	180000	30.8	14.7	0	4	0.5	0
7891	20011229	190000	26.1	26.1	0	4	0.5	0	7987	20020102	190000	27.4	21.8	0	4	0.6	0
7892	20011229	200000	23.5	30.5	0	4	0.5	0	7988	20020102	200000	25.1	27.1	0	4	0.6	0
7893	20011229	210000	22.6	35.9	0	4	0.5	0	7989	20020102	210000	24.8	24.9	0	3	0.4	0
7894	20011229	220000	21.1	36.6	0	4	0.6	0	7990	20020102	220000	-9999.0	-9999.0	-9999.0	5	0.6	0
7895	20011229	230000	20.6	41.3	0	4	0.5	0	7991	20020102	230000	21.8	30.3	0	5	0.6	0
7896	20011229	240000	19.4	42.1	0	0	0.0	0	7992	20020102	240000	21.9	28.6	0	21	2.9	0
7897	20011230	10000	18.7	49.3	0	0	0.0	0	7993	20020103	10000	20.0	32.2	0	19	2.6	0
7898	20011230	20000	17.7	49.9	0	0	0.0	0	7994	20020103	20000	19.6	33.6	0	0	0.0	0
7899	20011230	30000	17.8	48.7	0	0	0.0	0	7995	20020103	30000	19.5	35.4	0	0	0.0	0
7900	20011230	40000	17.1	49.1	0	22	3.1	0	7996	20020103	40000	19.5	37.1	0	0	0.0	0
7901	20011230	50000	16.6	49.2	0	1	0.1	0	7997	20020103	50000	18.5	39.2	0	0	0.0	0
7902	20011230	60000	16.1	46.6	0	7	1.0	0	7998	20020103	60000	18.5	44.9	0	0	0.0	0
7903	20011230	70000	15.5	48.2	0	17	2.3	0	7999	20020103	70000	18.5	41.0	0	0	0.0	0
7904	20011230	80000	18.8	33.3	0	5	0.6	0	8000	20020103	80000	19.5	36.0	0	4	0.6	0
7905	20011230	90000	22.5	21.5	0	15	1.6	14	8001	20020103	90000	22.1	28.9	0	14	1.9	7
7906	20011230	100000	26.1	18.0	0	16	2.2	28	8002	20020103	100000	24.9	21.0	0	0	0.0	14
7907	20011230	110000	29.2	14.7	0	11	1.5	28	8003	20020103	110000	28.9	13.9	0	18	2.8	28
7908	20011230	120000	33.0	13.0	0	9	1.3	35	8004	20020103	120000	32.6	10.6	0	15	2.1	35
7909	20011230	130000	34.4	12.7	0	44	6.0	35	8005	20020103	130000	31.9	10.4	0	18	3.0	28
7910	20011230	140000	35.6	12.0	0	18	2.5	28	8006	20020103	140000	32.5	10.2	0	29	3.9	28
7911	20011230	150000	35.3	11.6	0	11	1.5	21	8007	20020103	150000	33.5	8.7	0	16	2.2	28
7912	20011230	160000	36.0	10.6	0	5	0.7	14	8008	20020103	160000	33.2	8.8	0	20	2.8	21
7913	20011230	170000	35.7	11.4	0	14	2.0	7	8009	20020103	170000	31.3	9.9	0	10	1.2	7
7914	20011230	180000	31.3	18.8	0	4	0.5	0	8010	20020103	180000	29.6	11.8	0	1	0.1	0
7915	20011230	190000	24.8	27.4	0	4	0.5	0	8011	20020103	190000	25.3	19.6	0	0	0.0	0
7916	20011230	200000	22.3	34.1	0	4	0.5	0	8012	20020103	200000	22.9	21.8	0	0	0.0	0
7917	20011230	210000	21.5	36.0	0	4	0.5	0	8013	20020103	210000	21.8	25.5	0	0	0.0	0
7918	20011230	220000	-9999.0	-9999.0	-9999.0	2	0.3	0	8014	20020103	220000	20.3	28.9	0	0	0.0	0
7919	20011230	230000	20.7	38.8	0	16	2.3	0	8015	20020103	230000	19.3	28.1	0	0	0.0	0
7920	20011230	240000	20.2	39.6	0	41	5.7	0	8016	20020103	240000	19.8	26.3	0	1	0.1	0
7921	20011231	10000	19.7	41.1	0	19	2.7	0	8017	20020104	10000	19.9	27.3	0	14	2.0	0
7922	20011231	20000	19.0	41.9	0	1	0.1	0	8018	20020104	20000	19.3	28.7	0	14	2.0	0
7923	20011231	30000	18.4	46.3	0	40	5.5	0	8019	20020104	30000	18.0	30.9	0	40	5.6	0
7924	20011231	40000	17.6	47.3	0	39	5.4	0	8020	20020104	40000	16.7	37.3	0	7	1.0	0
7925	20011231	50000	17.3	48.6	0	35	4.8	0	8021	20020104	50000	15.4	40.0	0	39	5.5	0
7926	20011231	60000	16.9	46.8	0	40	5.5	0	8022	20020104	60000	15.2	42.6	0	38	5.3	0
7927	20011231	70000	16.3	52.5	0	38	5.3	0	8023	20020104	70000	14.7	41.8	0	16	2.2	0
7928	20011231	80000	18.7	42.4	0	11	1.5	0	8024	20020104	80000	19.4	30.9	0	7	1.0	7
7929	20011231	90000	24.2	28.0	0	20	2.8	14	8025	20020104	90000	22.6	24.5	0	17	2.3	7
7930	20011231	100000	29.2	19.7	0	16	6.3	21	8026	20020104	100000	26.7	15.0	0	15	2.0	14
7931	20011231	110000	33.1	13.8	0	9	1.1	28	8027	20020104	110000	28.6	13.9	0	12	1.8	21
7932	20011231	120000	34.5	12.8	0	6	1.0	35	8028	20020104	120000	30.6	10.9	0	29	3.9	35
7933	20011231	130000	37.1	10.5	0	23	3.1	35	8029	20020104	130000	32.6	9.2	0	48	6.9	35
7934	20011231	140000	37.1	10.3	0	18	2.5	28	8030	20020104	140000	32.5	10.1	0	48	6.7	35
7935	20011231	150000	38.2	9.9	0	1	0.1	21	8031	20020104	150000	34.0	8.7	0	8	1.0	28
7936	20011231	160000	37.0	10.0	0	16	2.3	14	8032	20020104	160000	33.9	8.8	0	14	1.9	14
7937	20011231	170000	35.5	11.9	0	15	2.0	7	8033	20020104	170000	33.1	8.6	0	38	5.1	7
7938	20011231	180000	31.3	18.3	0	7	1.0	0	8034	20020104	180000	30.1	11.4	0	5	0.6	0
7939	20011231	190000	25.9	27.3	0	11	1.5	0	8035	20020104	190000	24.9	18.8	0	40	5.5	0
7940	20011231	200000	24.1	30.5	0	2	0.3	0	8036	20020104	200000	22.5	22.9	0	20	2.8	0
7941	20011231	210000	22.6	34.5	0	2	0.3	0	8037	20020104	210000	22.1	25.9	0	33	4.6	0
7942	20011231	220000	20.9	37.4	0	2	0.3	0	8038	20020104	220000	21.7	23.1	0	33	4.6	0
7943	20011231	230000	-9999.0	-9999.0	-9999.0	2	0.3	0	8039	20020104	230000	20.7	26.1	0	25	3.5	0
7944	20011231	240000	20.5	38.0	0	2	0.3	0	8040	20020104	240000	19.4	29.1	0	37	5.2	0
7945	20020101	10000	19.5	42.1	0	20	2.8	0	8041	20020105	10000	19.1	33.3	0	38	5.2	0
7946	20020101	20000	19.2	42.5	0	38	5.3	0	8042	20020105	20000	18.8	29.3	0	38	5.2	0
7947	200																

Appendice 7 Les données des observations météorologiques (toutes les données)
(43/46)

No.	Date	Time	Temperature °C	%Humidity	Precipitation mm	Wind direction degree	Wind speed m/s	Insolation kW/m ²	No.	Date	Time	Temperature °C	%Humidity	Precipitation mm	Wind direction degree	Wind speed m/s	Insolation kW/m ²
8065	20020106	10000	18.6	29.6	0	39	5.4	0	8161	20020110	10000	20.3	60.4	0	15	2.0	0
8066	20020106	20000	17.7	30.3	0	21	3.0	0	8162	20020110	20000	19.2	69.4	0	15	2.0	0
8067	20020106	30000	17.7	31.3	0	37	5.2	0	8163	20020110	30000	18.7	60.2	0	15	2.0	0
8068	20020106	40000	18.0	31.5	0	38	5.3	0	8164	20020110	40000	17.2	67.7	0	15	2.0	0
8069	20020106	50000	17.6	35.1	0	2	0.2	0	8165	20020110	50000	16.7	73.7	0	15	2.1	0
8070	20020106	60000	16.6	38.0	0	40	5.6	0	8166	20020110	60000	16.3	65.0	0	15	2.1	0
8071	20020106	70000	15.1	39.4	0	40	5.6	0	8167	20020110	70000	16.5	56.6	0	5	0.7	0
8072	20020106	80000	16.2	38.5	0	16	2.3	0	8168	20020110	80000	18.1	47.2	0	9	1.3	0
8073	20020106	90000	23.3	17.4	0	5	0.7	7	8169	20020110	90000	20.9	35.4	0	6	0.9	7
8074	20020106	100000	27.8	12.9	0	13	1.7	14	8170	20020110	100000	24.7	23.4	0	15	2.1	21
8075	20020106	110000	30.4	11.7	0	15	2.1	14	8171	20020110	110000	27.3	17.0	0	21	2.8	28
8076	20020106	120000	32.3	10.5	0	30	4.2	21	8172	20020110	120000	28.6	16.3	0	19	2.5	28
8077	20020106	130000	32.9	10.2	0	24	3.4	14	8173	20020110	130000	28.2	15.2	0	0	0.0	21
8078	20020106	140000	32.5	10.6	0	36	5.2	14	8174	20020110	140000	29.5	14.0	0	13	1.8	28
8079	20020106	150000	34.5	9.3	0	12	1.7	21	8175	20020110	150000	29.9	13.0	0	10	1.3	21
8080	20020106	160000	33.3	11.4	0	20	2.7	14	8176	20020110	160000	30.0	13.6	0	17	2.3	14
8081	20020106	170000	32.8	11.9	0	18	2.5	7	8177	20020110	170000	29.3	13.2	0	4	0.6	7
8082	20020106	180000	28.9	20.5	0	18	2.6	0	8178	20020110	180000	25.5	24.3	0	12	1.7	0
8083	20020106	190000	23.9	25.5	0	37	5.1	0	8179	20020110	190000	23.4	27.6	0	12	1.7	0
8084	20020106	200000	21.7	29.1	0	37	5.1	0	8180	20020110	200000	22.4	33.4	0	15	2.1	0
8085	20020106	210000	20.5	32.0	0	38	5.2	0	8181	20020110	210000	21.9	39.8	0	38	5.3	0
8086	20020106	220000	21.0	29.1	0	38	5.3	0	8182	20020110	220000	21.0	37.5	0	38	5.3	0
8087	20020106	230000	21.4	30.3	0	3	0.4	0	8183	20020110	230000	22.5	26.8	0	5	0.6	0
8088	20020106	240000	21.5	24.7	0	3	0.4	0	8184	20020110	240000	22.7	24.9	0	8	1.1	0
8089	20020107	10000	21.4	25.0	0	6	0.8	0	8185	20020111	10000	23.2	21.3	0	1	0.1	0
8090	20020107	20000	22.2	20.9	0	7	1.0	0	8186	20020111	20000	22.4	24.1	0	2	0.2	0
8091	20020107	30000	22.1	21.4	0	7	0.9	0	8187	20020111	30000	21.6	24.3	0	4	0.5	0
8092	20020107	40000	24.0	14.8	0	19	2.8	0	8188	20020111	40000	21.5	24.4	0	2	0.3	0
8093	20020107	50000	21.6	24.3	0	21	2.9	0	8189	20020111	50000	21.2	23.3	0	9	1.3	0
8094	20020107	60000	19.7	29.6	0	7	1.0	0	8190	20020111	60000	20.8	23.0	0	45	1.3	0
8095	20020107	70000	-9999.0	-9999.0	-9999	8	1.1	0	8191	20020111	70000	20.5	22.3	0	14	1.9	0
8096	20020107	80000	21.2	28.8	0	11	1.5	0	8192	20020111	80000	21.4	21.2	0	11	1.6	0
8097	20020107	90000	23.8	44.3	0	36	4.8	7	8193	20020111	90000	22.0	21.7	0	19	2.7	7
8098	20020107	100000	25.2	45.6	0	19	2.6	14	8194	20020111	100000	25.2	15.7	0	17	2.6	21
8099	20020107	110000	27.8	48.5	0	29	3.8	14	8195	20020111	110000	27.4	11.7	0	33	4.3	21
8100	20020107	120000	30.0	44.4	0	46	6.4	21	8196	20020111	120000	28.5	10.4	0	36	5.1	21
8101	20020107	130000	31.2	40.8	0	38	5.1	28	8197	20020111	130000	28.9	10.4	0	24	3.4	21
8102	20020107	140000	31.9	36.9	0	42	5.6	21	8198	20020111	140000	29.4	10.6	0	7	1.2	28
8103	20020107	150000	32.9	33.8	0	24	3.4	21	8199	20020111	150000	29.2	11.0	0	6	1.0	21
8104	20020107	160000	33.4	31.2	0	36	5.2	14	8200	20020111	160000	30.8	9.8	0	12	1.6	7
8105	20020107	170000	32.1	33.7	0	21	2.9	7	8201	20020111	170000	28.2	11.3	0	28	4.4	7
8106	20020107	180000	30.6	38.3	0	21	2.9	0	8202	20020111	180000	27.0	12.3	0	12	1.6	0
8107	20020107	190000	27.1	50.5	0	21	2.9	0	8203	20020111	190000	25.7	13.9	0	7	1.0	0
8108	20020107	200000	26.6	52.3	0	21	2.9	0	8204	20020111	200000	24.7	16.2	0	6	0.8	0
8109	20020107	210000	26.7	52.1	0	27	3.7	0	8205	20020111	210000	24.5	16.5	0	12	1.7	0
8110	20020107	220000	25.4	57.7	0	25	3.5	0	8206	20020111	220000	24.3	16.0	0	2	0.4	0
8111	20020107	230000	23.9	64.5	0	24	3.4	0	8207	20020111	230000	23.7	17.1	0	6	0.8	0
8112	20020107	240000	23.7	64.9	0	24	3.4	0	8208	20020111	240000	23.1	16.8	0	6	0.9	0
8113	20020108	10000	23.2	67.6	0	22	3.1	0	8209	20020112	10000	22.7	16.7	0	5	0.7	0
8114	20020108	20000	22.6	70.2	0	22	3.1	0	8210	20020112	20000	22.1	17.5	0	5	0.6	0
8115	20020108	30000	24.2	67.5	0	22	3.0	0	8211	20020112	30000	21.9	17.6	0	9	1.2	0
8116	20020108	40000	22.5	67.1	0	35	5.0	0	8212	20020112	40000	21.5	17.3	0	10	1.4	0
8117	20020108	50000	20.9	85.2	0	28	3.9	0	8213	20020112	50000	21.0	17.9	0	19	2.4	0
8118	20020108	60000	20.9	86.4	0	35	5.0	0	8214	20020112	60000	20.7	18.4	0	9	1.2	0
8119	20020108	70000	20.8	82.0	0	17	2.4	0	8215	20020112	70000	20.2	19.1	0	8	1.5	0
8120	20020108	80000	21.5	80.9	0	7	1.0	0	8216	20020112	80000	21.1	18.0	0	38	5.6	7
8121	20020108	90000	23.9	74.5	0	26	3.6	14	8217	20020112	90000	22.6	15.9	0	28	3.7	14
8122	20020108	100000	27.7	40.9	0	10	1.4	21	8218	20020112	100000	24.0	13.3	0	28	3.5	14
8123	20020108	110000	30.6	18.1	0	17	2.3	28	8219	20020112	110000	25.0	13.0	0	16	2.2	21
8124	20020108	120000	31.4	22.1	0	30	4.2	28	8220	20020112	120000	26.8	11.7	0	14	1.9	28
8125	20020108	130000	32.8	23.6	0	37	5.4	28	8221	20020112	130000	28.2	11.6	0	26	4.1	21
8126	20020108	140000	33.3	23.3	0	42	5.8	28	8222	20020112	140000	28.9	10.6	0	19	2.3	35
8127	20020108	150000	33.6	25.0	0	16	2.5	21	8223	20020112	150000	28.6	11.3	0	14	1.9	14
8128	20020108	160000	34.1	26.0	0	42	5.7	14	8224	20020112	160000	27.6	12.0	0	11	1.5	7
8129	20020108	170000	33.5	25.6	0	35	4.9	7	8225	20020112	170000	27.2	12.1	0	9	1.2	0
8130	20020108	180000	31.8	27.4	0	38	5.3	0	8226	20020112	180000	26.5	12.7	0	40	5.5	0
8131	20020108	190000	28.4	35.7	0	23	3.1	0	8227	20020112	190000	25.5	14.0	0	7	0.9	0
8132	20020108	200000	26.0	44.6	0	23	3.2	0	8228	20020112	200000	24.2	16.4	0	10	1.3	0
8133	20020108	210000	25.6	45.7	0	39	5.4	0	8229	20020112	210000	23.5	17.6	0	3	0.4	0
8134	20020108	220000	25.0	48.5	0	18	2.6	0	8230	20020112	220000	22.2	20.0	0	9	1.2	0
8135	20020108	230000	25.2	53.2	0	10	1.4	0	8231	20020112	230000	20.8	24.1	0	36	5.1	0
8136	20020108	240000	25.0	60.4	0	39	5.5	0	8232	20020112	240000	20.4	24.9	0	16	2.2	0
8137	20020109	10000	24.5	65.1	0	40	5.5	0	8233	20020113	10000	20.7	22.0	0	2	0.2	0
8138	20020109	20000	24.3	63.3	0	27	3.7	0	8234	20020113	20000	19.7	23.7	0	6	0.8	0
8139	20020109	30000	24.4	63.2	0	27	3.8	0	8235	20020113	30000	20.0	24				

Appendice 7 Les données des observations météorologiques (toutes les données)
(44/46)

No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation	No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation
			°C	%	mm	degree	m/s	kW/m ²				°C	%	mm	degree	m/s	kW/m ²
	yyyymmdd	hhmmss								yyyymmdd	hhmmss						
8257	20020114	10000	17.1	32.9	0	39	5.4	0	8353	20020118	10000	17.7	33.7	0	38	5.3	0
8258	20020114	20000	17.3	29.6	0	17	2.4	0	8354	20020118	20000	17.5	36.6	0	38	5.3	0
8259	20020114	30000	17.4	29.7	0	12	1.6	0	8355	20020118	30000	16.8	36.2	0	39	5.4	0
8260	20020114	40000	16.2	34.7	0	12	1.6	0	8356	20020118	40000	16.2	40.7	0	39	5.4	0
8261	20020114	50000	16.0	36.9	0	11	1.6	0	8357	20020118	50000	15.9	38.1	0	14	2.0	0
8262	20020114	60000	15.3	39.8	0	11	1.6	0	8358	20020118	60000	15.6	39.5	0	12	1.7	0
8263	20020114	70000	15.6	35.9	0	8	1.1	0	8359	20020118	70000	15.3	38.3	0	8	1.1	0
8264	20020114	80000	16.9	34.3	0	7	0.9	7	8360	20020118	80000	16.8	33.8	0	7	1.0	0
8265	20020114	90000	20.8	23.1	0	19	2.6	14	8361	20020118	90000	22.4	21.6	0	16	2.3	14
8266	20020114	100000	24.4	16.0	0	13	1.6	21	8362	20020118	100000	26.8	14.6	0	16	2.2	21
8267	20020114	110000	27.2	13.3	0	22	3.0	28	8363	20020118	110000	30.2	11.4	0	15	2.6	28
8268	20020114	120000	28.7	12.1	0	13	1.8	28	8364	20020118	120000	31.7	10.7	0	12	1.7	35
8269	20020114	130000	29.2	11.6	0	10	1.5	35	8365	20020118	130000	32.6	10.0	0	27	3.7	35
8270	20020114	140000	29.4	11.0	0	20	2.7	28	8366	20020118	140000	34.0	9.7	0	8	1.1	35
8271	20020114	150000	30.6	10.9	0	9	1.4	21	8367	20020118	150000	34.7	9.7	0	11	1.4	28
8272	20020114	160000	30.0	10.1	0	17	2.2	14	8368	20020118	160000	34.7	9.6	0	24	3.2	21
8273	20020114	170000	29.4	9.9	0	44	6.0	7	8369	20020118	170000	33.2	10.2	0	15	2.1	7
8274	20020114	180000	27.6	12.2	0	4	0.5	0	8370	20020118	180000	31.5	11.5	0	8	1.1	0
8275	20020114	190000	23.2	20.2	0	3	0.5	0	8371	20020118	190000	26.6	17.8	0	2	0.3	0
8276	20020114	200000	20.9	23.9	0	3	0.5	0	8372	20020118	200000	23.2	23.6	0	3	0.4	0
8277	20020114	210000	19.3	27.8	0	3	0.5	0	8373	20020118	210000	21.7	27.3	0	3	0.4	0
8278	20020114	220000	19.5	27.0	0	38	5.3	0	8374	20020118	220000	21.4	26.9	0	2	0.2	0
8279	20020114	230000	18.4	30.3	0	38	5.3	0	8375	20020118	230000	20.5	25.2	0	4	0.5	0
8280	20020114	240000	17.8	28.9	0	16	2.2	0	8376	20020118	240000	19.1	28.7	0	17	2.4	0
8281	20020115	10000	17.0	34.0	0	16	2.3	0	8377	20020119	10000	18.4	29.3	0	17	2.4	0
8282	20020115	20000	16.3	30.8	0	17	2.3	0	8378	20020119	20000	18.5	28.6	0	7	1.0	0
8283	20020115	30000	15.6	34.1	0	17	2.3	0	8379	20020119	30000	17.3	33.5	0	7	1.0	0
8284	20020115	40000	15.2	36.7	0	17	2.3	0	8380	20020119	40000	16.3	36.1	0	11	1.5	0
8285	20020115	50000	14.9	33.1	0	17	2.3	0	8381	20020119	50000	16.7	38.0	0	39	5.4	0
8286	20020115	60000	15.0	36.5	0	11	1.5	0	8382	20020119	60000	15.6	40.2	0	39	5.4	0
8287	20020115	70000	-9999.0	-9999.0	-9999	5	0.7	0	8383	20020119	70000	15.8	37.2	0	18	2.5	0
8288	20020115	80000	-9999.0	-9999.0	-9999	16	2.2	0	8384	20020119	80000	18.1	30.5	0	6	0.8	7
8289	20020115	90000	21.4	22.0	0	14	1.9	14	8385	20020119	90000	21.6	23.9	0	13	1.8	14
8290	20020115	100000	26.1	13.6	0	20	3.0	21	8386	20020119	100000	26.9	14.0	0	17	2.4	21
8291	20020115	110000	28.1	11.7	0	10	1.9	28	8387	20020119	110000	30.3	12.0	0	25	3.1	28
8292	20020115	120000	28.9	10.2	0	15	2.1	35	8388	20020119	120000	31.6	10.4	0	13	1.8	35
8293	20020115	130000	29.4	9.6	0	16	2.0	35	8389	20020119	130000	33.2	10.2	0	15	2.0	35
8294	20020115	140000	30.6	9.5	0	30	4.2	28	8390	20020119	140000	33.5	9.8	0	23	3.0	35
8295	20020115	150000	31.6	9.1	0	49	6.6	28	8391	20020119	150000	33.9	9.8	0	28	4.0	28
8296	20020115	160000	31.5	9.6	0	14	1.8	21	8392	20020119	160000	32.9	10.1	0	10	1.8	21
8297	20020115	170000	31.1	10.3	0	11	2.3	7	8393	20020119	170000	32.7	10.3	0	17	2.3	7
8298	20020115	180000	29.1	12.5	0	6	0.8	0	8394	20020119	180000	30.5	11.2	0	53	7.2	0
8299	20020115	190000	25.0	18.4	0	8	1.1	0	8395	20020119	190000	28.7	12.3	0	4	0.5	0
8300	20020115	200000	22.8	22.0	0	19	2.6	0	8396	20020119	200000	27.1	13.9	0	9	1.3	0
8301	20020115	210000	20.9	27.9	0	21	2.9	0	8397	20020119	210000	26.1	14.8	0	12	1.7	0
8302	20020115	220000	19.9	32.0	0	21	2.9	0	8398	20020119	220000	25.0	16.7	0	41	5.7	0
8303	20020115	230000	18.8	31.1	0	39	5.4	0	8399	20020119	230000	24.2	17.4	0	3	0.4	0
8304	20020115	240000	19.8	28.0	0	18	2.6	0	8400	20020119	240000	24.0	17.7	0	11	1.3	0
8305	20020116	10000	17.9	35.1	0	18	2.5	0	8401	20020120	10000	23.8	18.5	0	16	2.2	0
8306	20020116	20000	16.6	34.5	0	18	2.5	0	8402	20020120	20000	22.2	21.8	0	42	5.8	0
8307	20020116	30000	15.9	38.4	0	18	2.6	0	8403	20020120	30000	20.4	24.8	0	8	1.0	0
8308	20020116	40000	15.7	39.1	0	19	2.6	0	8404	20020120	40000	20.5	23.9	0	9	1.3	0
8309	20020116	50000	15.2	38.6	0	32	4.4	0	8405	20020120	50000	20.2	22.1	0	11	1.4	0
8310	20020116	60000	14.7	41.8	0	22	3.1	0	8406	20020120	60000	19.5	21.8	0	14	2.0	0
8311	20020116	70000	14.1	44.9	0	40	5.6	0	8407	20020120	70000	18.9	22.8	0	10	1.4	0
8312	20020116	80000	16.2	35.9	0	0	0.0	0	8408	20020120	80000	20.3	19.9	0	15	2.3	7
8313	20020116	90000	21.6	21.6	0	15	1.9	0	8409	20020120	90000	21.6	16.5	0	16	2.1	7
8314	20020116	100000	26.4	15.1	0	11	1.6	21	8410	20020120	100000	23.8	14.2	0	13	2.0	21
8315	20020116	110000	30.1	11.7	0	7	0.9	28	8411	20020120	110000	26.8	12.4	0	26	3.8	28
8316	20020116	120000	30.3	11.0	0	38	5.2	35	8412	20020120	120000	28.8	11.4	0	27	3.4	35
8317	20020116	130000	32.0	10.3	0	8	1.1	35	8413	20020120	130000	30.3	10.8	0	12	1.6	35
8318	20020116	140000	33.2	10.9	0	24	3.3	35	8414	20020120	140000	32.3	10.0	0	10	1.3	28
8319	20020116	150000	32.8	10.7	0	14	2.0	28	8415	20020120	150000	32.0	10.0	0	13	1.7	28
8320	20020116	160000	32.9	11.3	0	9	1.3	21	8416	20020120	160000	32.2	10.2	0	3	0.7	21
8321	20020116	170000	31.9	11.8	0	7	1.0	7	8417	20020120	170000	31.5	10.6	0	51	8.3	7
8322	20020116	180000	30.2	13.7	0	4	0.6	0	8418	20020120	180000	29.7	11.9	0	43	6.1	0
8323	20020116	190000	25.0	23.1	0	6	0.9	0	8419	20020120	190000	27.5	13.3	0	7	1.0	0
8324	20020116	200000	22.0	29.0	0	6	0.9	0	8420	20020120	200000	26.1	14.4	0	6	0.9	0
8325	20020116	210000	21.3	31.5	0	6	0.8	0	8421	20020120	210000	24.0	17.1	0	8	1.1	0
8326	20020116	220000	20.3	31.3	0	0	0.0	0	8422	20020120	220000	24.4	16.5	0	9	1.2	0
8327	20020116	230000	19.1	33.4	0	39	5.4	0	8423	20020120	230000	23.8	18.2	0	13	1.8	0
8328	20020116	240000	18.1	34.9	0	39	5.4	0	8424	20020120	240000	23.3	18.6	0	12	1.7	0
8329	20020117	10000	17.8	34.1	0	38	5.3	0	8425	20020121	10000	22.8	18.4	0	12	1.5	0
8330	20020117	20000	17.2	33.8	0	22	3.1	0	8426	20020121	20000	21.6	20.0	0	19	2.9	0
8331	20020117	300															

Appendice 7 Les données des observations météorologiques (toutes les données)
(45/46)

No.	Date	Time	Temperature C	%Humidity	Precipitation mm	Wind direction degree	Wind speed m/s	Insolation kW/m ²	No.	Date	Time	Temperature C	%Humidity	Precipitation mm	Wind direction degree	Wind speed m/s	Insolation kW/m ²
8449	20020122	10000	21.7	22.1	0	34	4.8	0	8545	20020126	10000	19.2	27.3	0	19	2.6	0
8450	20020122	20000	22.0	19.4	0	18	2.3	0	8546	20020126	20000	18.1	28.3	0	19	2.7	0
8451	20020122	30000	21.3	19.9	0	22	2.8	0	8547	20020126	30000	17.7	28.4	0	19	2.6	0
8452	20020122	40000	20.5	20.3	0	14	1.9	0	8548	20020126	40000	16.2	31.6	0	19	2.6	0
8453	20020122	50000	18.8	22.6	0	6	0.8	0	8549	20020126	50000	15.5	37.8	0	19	2.6	0
8454	20020122	60000	18.2	21.9	0	13	1.6	0	8550	20020126	60000	15.5	34.7	0	38	5.3	0
8455	20020122	70000	17.4	21.4	0	5	0.7	0	8551	20020126	70000	14.9	37.3	0	38	5.3	0
8456	20020122	80000	18.4	20.2	0	7	0.9	0	8552	20020126	80000	18.6	27.3	0	21	2.9	0
8457	20020122	90000	21.1	14.0	0	8	1.7	14	8553	20020126	90000	22.4	19.5	0	13	1.8	14
8458	20020122	100000	24.0	12.2	0	23	3.2	21	8554	20020126	100000	27.6	12.9	0	14	1.9	21
8459	20020122	110000	27.1	10.3	0	29	4.4	28	8555	20020126	110000	30.4	10.1	0	59	3.2	28
8460	20020122	120000	29.5	9.4	0	19	2.3	35	8556	20020126	120000	31.2	10.3	0	14	1.8	35
8461	20020122	130000	32.5	8.4	0	43	5.9	35	8557	20020126	130000	33.0	9.0	0	7	0.8	35
8462	20020122	140000	33.8	8.1	0	14	1.9	35	8558	20020126	140000	34.3	8.2	0	7	1.1	35
8463	20020122	150000	33.6	9.0	0	3	0.8	28	8559	20020126	150000	35.4	7.5	0	16	2.0	28
8464	20020122	160000	34.4	9.0	0	28	3.8	21	8560	20020126	160000	33.8	7.8	0	16	2.0	21
8465	20020122	170000	33.5	9.5	0	17	2.2	7	8561	20020126	170000	33.3	7.7	0	6	0.9	7
8466	20020122	180000	31.6	10.4	0	6	1.1	0	8562	20020126	180000	31.2	8.3	0	16	1.9	0
8467	20020122	190000	28.3	13.1	0	4	0.5	0	8563	20020126	190000	27.2	11.5	0	2	0.3	0
8468	20020122	200000	23.5	20.8	0	3	0.4	0	8564	20020126	200000	23.4	16.7	0	6	0.8	0
8469	20020122	210000	22.3	22.6	0	6	0.9	0	8565	20020126	210000	21.6	19.0	0	6	0.8	0
8470	20020122	220000	21.4	23.5	0	10	1.3	0	8566	20020126	220000	-9999.0	-9999.0	-9999.0	6	0.8	0
8471	20020122	230000	20.7	23.1	0	10	1.3	0	8567	20020126	230000	19.8	21.3	0	38	5.2	0
8472	20020122	240000	19.2	27.3	0	13	1.8	0	8568	20020126	240000	19.3	21.7	0	5	0.8	0
8473	20020123	10000	18.7	29.2	0	38	5.2	0	8569	20020127	10000	19.6	21.3	0	19	2.7	0
8474	20020123	20000	21.5	17.5	0	7	0.9	0	8570	20020127	20000	18.1	26.0	0	32	4.5	0
8475	20020123	30000	22.2	16.0	0	13	1.8	0	8571	20020127	30000	16.4	28.6	0	32	4.5	0
8476	20020123	40000	19.9	21.2	0	7	0.9	0	8572	20020127	40000	-9999.0	-9999.0	-9999.0	32	4.5	0
8477	20020123	50000	17.5	27.4	0	15	2.1	0	8573	20020127	50000	16.4	26.2	0	6	0.8	0
8478	20020123	60000	17.4	27.5	0	7	1.0	0	8574	20020127	60000	16.3	26.2	0	11	1.5	0
8479	20020123	70000	16.5	31.0	0	16	2.3	0	8575	20020127	70000	-9999.0	-9999.0	-9999.0	3	0.5	0
8480	20020123	80000	19.0	25.0	0	6	0.8	0	8576	20020127	80000	-9999.0	-9999.0	-9999.0	40	5.6	0
8481	20020123	90000	23.1	14.7	0	8	1.1	14	8577	20020127	90000	-9999.0	-9999.0	-9999.0	15	2.2	14
8482	20020123	100000	25.6	12.7	0	17	2.3	21	8578	20020127	100000	27.9	12.0	0	20	2.6	21
8483	20020123	110000	30.8	9.5	0	8	1.1	28	8579	20020127	110000	30.8	9.0	0	11	1.5	35
8484	20020123	120000	32.9	9.0	0	19	2.1	35	8580	20020127	120000	32.7	8.5	0	18	1.9	35
8485	20020123	130000	34.7	8.3	0	27	3.6	35	8581	20020127	130000	34.4	7.2	0	18	2.6	35
8486	20020123	140000	34.5	8.1	0	17	2.6	28	8582	20020127	140000	34.1	6.9	0	4	0.6	35
8487	20020123	150000	34.5	8.7	0	12	1.7	28	8583	20020127	150000	34.8	6.9	0	18	2.6	28
8488	20020123	160000	35.5	9.2	0	15	2.1	21	8584	20020127	160000	35.0	6.5	0	15	2.0	21
8489	20020123	170000	34.2	9.7	0	2	0.3	7	8585	20020127	170000	33.0	7.0	0	9	1.3	7
8490	20020123	180000	32.5	11.1	0	7	1.0	0	8586	20020127	180000	31.3	8.1	0	7	1.0	0
8491	20020123	190000	27.4	17.9	0	41	5.6	0	8587	20020127	190000	27.1	11.8	0	2	0.3	0
8492	20020123	200000	24.5	23.6	0	41	5.6	0	8588	20020127	200000	22.4	17.7	0	15	2.1	0
8493	20020123	210000	22.4	26.5	0	40	5.6	0	8589	20020127	210000	21.4	20.9	0	15	2.1	0
8494	20020123	220000	22.3	27.0	0	40	5.6	0	8590	20020127	220000	20.3	22.5	0	16	2.2	0
8495	20020123	230000	20.9	27.2	0	40	5.6	0	8591	20020127	230000	19.2	23.3	0	16	2.2	0
8496	20020123	240000	20.1	28.3	0	40	5.5	0	8592	20020127	240000	18.3	24.1	0	1	0.1	0
8497	20020124	10000	19.1	33.0	0	40	5.5	0	8593	20020128	10000	18.3	21.7	0	18	2.5	0
8498	20020124	20000	19.2	31.6	0	38	5.3	0	8594	20020128	20000	16.8	23.7	0	20	2.7	0
8499	20020124	30000	18.3	33.6	0	39	5.4	0	8595	20020128	30000	16.3	23.5	0	20	2.7	0
8500	20020124	40000	18.1	34.1	0	39	5.4	0	8596	20020128	40000	15.4	29.1	0	37	5.2	0
8501	20020124	50000	17.1	38.4	0	39	5.4	0	8597	20020128	50000	14.9	30.8	0	39	5.4	0
8502	20020124	60000	16.7	39.0	0	39	5.5	0	8598	20020128	60000	14.4	30.1	0	39	5.4	0
8503	20020124	70000	16.4	40.7	0	39	5.5	0	8599	20020128	70000	13.4	31.9	0	39	5.4	0
8504	20020124	80000	17.8	37.5	0	39	5.4	0	8600	20020128	80000	16.4	24.8	0	14	1.9	0
8505	20020124	90000	23.4	21.7	0	9	1.2	14	8601	20020128	90000	22.6	13.7	0	19	2.3	14
8506	20020124	100000	28.4	13.3	0	17	2.4	21	8602	20020128	100000	27.4	9.5	0	15	2.1	21
8507	20020124	110000	30.7	11.7	0	2	0.2	28	8603	20020128	110000	30.2	7.9	0	24	3.2	28
8508	20020124	120000	33.9	9.7	0	11	1.6	35	8604	20020128	120000	31.4	7.7	0	16	2.1	35
8509	20020124	130000	33.8	9.6	0	52	7.3	35	8605	20020128	130000	32.9	6.9	0	17	2.3	35
8510	20020124	140000	35.3	9.3	0	23	3.2	35	8606	20020128	140000	33.7	6.5	0	22	3.1	28
8511	20020124	150000	35.2	9.3	0	7	1.0	28	8607	20020128	150000	34.2	6.3	0	16	2.2	28
8512	20020124	160000	35.0	8.9	0	3	0.4	21	8608	20020128	160000	34.1	6.8	0	14	2.0	21
8513	20020124	170000	34.3	9.2	0	7	1.1	7	8609	20020128	170000	32.2	7.6	0	4	0.5	7
8514	20020124	180000	32.4	10.6	0	5	0.6	0	8610	20020128	180000	31.3	8.1	0	5	0.7	0
8515	20020124	190000	27.5	15.6	0	3	0.4	0	8611	20020128	190000	26.5	12.8	0	6	0.8	0
8516	20020124	200000	25.3	19.2	0	19	2.6	0	8612	20020128	200000	22.6	17.3	0	5	0.8	0
8517	20020124	210000	24.0	20.9	0	24	3.3	0	8613	20020128	210000	22.4	21.1	0	3	0.4	0
8518	20020124	220000	23.0	22.3	0	40	5.6	0	8614	20020128	220000	21.4	21.5	0	0	0.0	0
8519	20020124	230000	22.1	22.2	0	5	0.7	0	8615	20020128	230000	20.1	23.2	0	1	0.1	0
8520	20020124	240000	22.4	22.4	0	19	2.7	0	8616	20020128	240000	20.3	18.8	0	3	0.4	0
8521	20020125	10000	20.1	26.5	0	19	2.6	0	8617	20020129	10000	18.4	22.8	0	3	0.4	0
8522	20020125	20000	22.2	21.7	0	6	0.9	0	8618	20020129	20000	17.8	25.1	0	16	2.2	0
8523	20020125	30000	19.6	27.7	0	19	2.6	0	8619	20020129	30000	17.3	24.7	0			

Appendice 7 Les données des observations météorologiques (toutes les données)
(46/46)

No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation	No.	Date	Time	Temperature	Humidity	Precipitation	Wind direction	Wind speed	Insolation
			°C	%	mm	degree	m/s	kWh/m ²				°C	%	mm	degree	m/s	kWh/m ²
	yyyymmdd	hhmmss								yyyymmdd	hhmmss						
8641	20020130	10000	19.3	23.5	0	18	2.6	0	8737	20020203	10000	18.8	25.3	0	19	2.7	0
8642	20020130	20000	18.1	29.9	0	34	4.7	0	8738	20020203	20000	18.3	28.2	0	32	4.5	0
8643	20020130	30000	17.0	28.5	0	34	4.7	0	8739	20020203	30000	18.7	24.0	0	22	3.0	0
8644	20020130	40000	17.8	25.8	0	18	2.5	0	8740	20020203	40000	17.4	27.2	0	20	2.8	0
8645	20020130	50000	16.3	31.8	0	29	4.0	0	8741	20020203	50000	16.7	29.1	0	20	2.8	0
8646	20020130	60000	15.2	34.3	0	33	4.7	0	8742	20020203	60000	16.3	30.7	0	20	2.8	0
8647	20020130	70000	14.6	37.6	0	34	4.7	0	8743	20020203	70000	15.2	35.0	0	20	2.8	0
8648	20020130	80000	16.8	30.6	0	4	0.5	0	8744	20020203	80000	17.8	28.2	0	15	2.0	7
8649	20020130	90000	21.8	20.2	0	16	2.0	14	8745	20020203	90000	23.4	17.2	0	15	1.7	14
8650	20020130	100000	26.3	14.1	0	16	2.2	21	8746	20020203	100000	27.4	12.9	0	22	3.1	21
8651	20020130	110000	29.9	11.4	0	12	1.6	28	8747	20020203	110000	31.3	10.4	0	12	1.6	28
8652	20020130	120000	30.6	11.2	0	35	4.8	35	8748	20020203	120000	33.2	8.8	0	9	1.4	35
8653	20020130	130000	31.6	10.1	0	18	2.5	35	8749	20020203	130000	33.6	8.8	0	20	2.8	35
8654	20020130	140000	33.7	9.1	0	11	1.5	35	8750	20020203	140000	34.2	8.1	0	10	1.3	35
8655	20020130	150000	33.5	8.9	0	5	0.7	28	8751	20020203	150000	34.1	7.9	0	8	1.2	28
8656	20020130	160000	34.0	8.9	0	8	1.2	21	8752	20020203	160000	34.4	8.1	0	7	1.1	21
8657	20020130	170000	34.1	9.1	0	5	0.7	7	8753	20020203	170000	33.5	8.3	0	46	3.8	7
8658	20020130	180000	31.6	11.3	0	0	0.0	0	8754	20020203	180000	31.9	9.5	0	6	0.9	0
8659	20020130	190000	26.1	18.7	0	3	0.4	0	8755	20020203	190000	27.5	14.3	0	1	0.1	0
8660	20020130	200000	24.2	20.1	0	15	2.1	0	8756	20020203	200000	24.1	19.0	0	39	5.4	0
8661	20020130	210000	22.9	21.9	0	16	2.2	0	8757	20020203	210000	22.8	23.0	0	39	5.4	0
8662	20020130	220000	21.8	25.6	0	16	2.2	0	8758	20020203	220000	21.4	22.5	0	39	5.4	0
8663	20020130	230000	20.9	26.7	0	38	5.2	0	8759	20020203	230000	20.5	25.3	0	39	5.4	0
8664	20020130	240000	21.7	21.5	0	17	2.3	0	8760	20020203	240000	19.8	27.4	0	39	5.4	0
8665	20020131	10000	20.9	24.1	0	24	3.3	0									
8666	20020131	20000	21.4	21.8	0	18	2.5	0	Note : -9999 in column of Temperature, Humidity, Precipitation and Insolation means that data was not recorded.								
8667	20020131	30000	20.0	25.8	0	15	2.1	0									
8668	20020131	40000	19.6	25.1	0	15	2.0	0									
8669	20020131	50000	18.7	28.2	0	13	1.8	0									
8670	20020131	60000	17.8	30.0	0	13	1.8	0									
8671	20020131	70000	17.6	31.2	0	5	0.7	0									
8672	20020131	80000	19.4	27.4	0	6	0.9	7									
8673	20020131	90000	21.2	22.7	0	7	1.0	7									
8674	20020131	100000	23.5	18.1	0	7	1.1	7									
8675	20020131	110000	27.9	13.1	0	5	0.8	35									
8676	20020131	120000	32.8	9.6	0	1	0.2	35									
8677	20020131	130000	33.6	9.0	0	22	2.7	35									
8678	20020131	140000	32.0	9.8	0	12	1.5	35									
8679	20020131	150000	34.9	8.4	0	12	1.7	14									
8680	20020131	160000	34.0	8.8	0	20	2.8	7									
8681	20020131	170000	32.9	9.3	0	23	3.2	7									
8682	20020131	180000	30.5	10.9	0	10	1.4	0									
8683	20020131	190000	27.9	13.5	0	6	0.8	0									
8684	20020131	200000	25.0	17.7	0	8	1.1	0									
8685	20020131	210000	23.2	19.6	0	8	1.1	0									
8686	20020131	220000	22.5	22.9	0	14	1.9	0									
8687	20020131	230000	22.4	19.9	0	3	0.5	0									
8688	20020131	240000	20.4	24.6	0	19	2.6	0									
8689	20020201	10000	18.7	28.6	0	19	2.6	0									
8690	20020201	20000	18.7	27.5	0	18	2.5	0									
8691	20020201	30000	19.0	26.0	0	19	2.7	0									
8692	20020201	40000	18.2	27.1	0	21	2.9	0									
8693	20020201	50000	16.5	32.7	0	21	2.9	0									
8694	20020201	60000	15.6	35.2	0	21	2.9	0									
8695	20020201	70000	15.4	36.6	0	21	2.9	0									
8696	20020201	80000	17.2	29.8	0	8	1.1	0									
8697	20020201	90000	22.8	18.9	0	7	1.0	14									
8698	20020201	100000	27.3	13.3	0	21	2.9	21									
8699	20020201	110000	30.7	10.4	0	25	3.4	35									
8700	20020201	120000	31.2	9.6	0	27	3.5	35									
8701	20020201	130000	34.2	7.9	0	11	1.4	35									
8702	20020201	140000	33.6	7.8	0	20	2.7	35									
8703	20020201	150000	33.4	7.8	0	11	1.5	28									
8704	20020201	160000	33.3	7.4	0	17	2.6	7									
8705	20020201	170000	32.5	8.3	0	14	2.1	14									
8706	20020201	180000	31.0	8.9	0	7	0.9	0									
8707	20020201	190000	28.4	10.7	0	10	1.3	0									
8708	20020201	200000	26.7	12.1	0	4	0.5	0									
8709	20020201	210000	23.9	16.1	0	14	2.0	0									
8710	20020201	220000	23.9	14.4	0	5	0.7	0									
8711	20020201	230000	23.3	15.2	0	5	0.6	0									
8712	20020201	240000	22.0	16.5	0	3	0.4	0									
8713	20020202	10000	20.8	18.8	0	8	1.1	0									
8714	20020202	20000	19.4	20.6	0	12	1.7	0									
8715	20020202	30000	17.7	23.5	0	18	2.4	0									
8716	20020202	40000	17.5	24.5	0	20	2.7	0									
8717	20020202	50000	15.6	29.7	0	38	5.3	0									
8718	20020202	60000	15.0	32.9	0	38	5.3	0									
8719	20020202	70000	14.7	34.3	0	38	5.3	0									
8720	20020202	80000	16.3	32.2	0	39	5.4	0									
8721	20020202	90000	22.4	17.1	0	12	1.8	14									
8722	20020202	100000	27.0	12.7	0	11	2.2	21									
8723	20020202	110000	30.4	10.3	0	24	3.2	35									
8724	20020202	120000	31.9	9.1	0	21	2.9	35									
8725	20020202	130000	31.7	8.9	0	20	2.8	35									
8726	20020202	140000	32.8	8.8	0	19	2.7	35									
8727	20020202	150000	32.8	8.6	0	55	7.5	28									
8728	20020202	160000	33.0	8.7	0	50	7.1	14									
8729	20020202	170000	31.6	9.0	0	6	1.2	7									
8730	20020202	180000	30.7	9.7	0	1	0.1	0									
8731	20020202	190000	28.9	10.3	0	6	0.9	0									
8732	20020202	200000	26.7	12.4	0	10											

Appendice 8 Les données existantes des observations météorologiques (Bamako)

Meteorological Data in Bamako Senou

Temperature Maximum

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ave.
1996	35.1	36.9	37.9	38.7	37.7	34.3	31.8	30.5	31.4	34.9	35.3	34.4	34.9
1997	34.4	34.6	35.7	38.0	36.6	33.8	31.8	31.0	31.7	34.1	35.9	32.8	34.2
1998	32.6	37.7	38.3	40.7	38.5	34.9	32.4	30.4	31.3	34.3	35.2	32.5	34.9
1999	31.9	33.2	37.9	38.5	38.1	36.0	30.3	28.3	30.3	32.1	33.4	32.0	33.5
2000	33.4	33.7	37.9	39.7	37.4	33.5	31.2	30.3	32.0	33.4	35.0	33.3	34.2
2001	33.6	35.1	39.5	39.5	38.1	34.1	31.0						

Temperature Minimum

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ave.
1996	19.4	22.0	24.5	25.0	24.9	23.4	22.2	21.0	21.2	22.0	19.3	18.5	22.0
1997	20.1	20.2	22.8	25.2	24.5	23.5	22.4	22.3	21.7	21.9	19.0	17.7	21.8
1998	17.9	22.3	23.8	26.9	26.5	24.4	23.4	22.1	22.0	22.0	18.8	18.1	22.4
1999	18.7	18.4	23.5	25.8	25.9	24.6	21.9	21.7	21.1	21.0	18.5	16.1	21.4
2000	19.8	18.8	22.7	25.6	25.4	22.7	22.0	21.1	21.4	20.6	17.7	16.1	21.2
2001	16.3	19.0	22.7	24.9	25.5	23.6	22.2						

Humidity Maximum

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ave.
1996	40	35	34	53	69	90	94	96	97	89	52	42	66
1997	42	36	34	64	78	89	94	97	97	94	67	48	70
1998	36	32	25	60	75	89	94	98	98	95	64	49	68
1999	37	31	37	59	71	80	96	98	98	97	84	53	70
2000	50	27	34	62	75	91	96	99	99	96	75	50	71
2001	42	30	37	56	75	88	97						

Humidity Minimum

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ave.
1996	16	13	14	20	31	46	56	61	59	41	19	16	33
1997	17	20	17	23	32	46	57	62	59	40	16	15	34
1998	11	9	8	18	29	46	57	66	62	41	15	18	32
1999	15	13	13	20	27	34	61	70	63	51	25	16	34
2000	20	9	11	19	31	47	58	64	59	40	17	12	32
2001	14	11	9	14	29	46	60						

Precipitation (amount)

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1996	0.0	23.1	0.9	8.5	84.9	121.6	133.0	259.2	186.5	28.1	0.0	0.0	845.8
1997	0.0	0.0	0.0	10.2	65.6	119.6	196.4	228.6	165.1	35.6	0.0	0.0	821.1
1998	0.0	2.2	0.9	3.6	53.5	129.8	163.1	242.4	148.5	40.7	0.0	0.0	784.7
1999	0.1	0.0	13.1	33.5	14.1	108.2	240.0	296.5	203.9	103.6	0.4	0.0	1013.4
2000	1.6	0.0	0.1	22.5	41.6	103.2	246.5	223.8	128.5	43.2	11.2	0.0	822.2
2001	0.0	0.0	0.0	27.2	38.5	139.5	213.3						

Precipitation (day)

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1996	0	2	1	3	7	12	15	14	15	6	0	0	75
1997	0	0	0	4	10	11	20	16	17	4	0	0	82
1998	0	1	1	3	9	12	16	22	19	10	0	0	93
1999	1	0	1	4	5	10	23	26	18	12	2	0	102
2000	1	0	1	4	5	13	19	23	12	9	2	0	89
2001	0	0	0	3	11	13	18	17					

Appendice 10 Les données existantes des observations météorologiques (Dioila)

Meteorological Data in DIOILA

Temperature Maximum

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ave.
1996													
1997													
1998													
1999													
2000										37.8	37	35.2	
2001	35.5	37.8	40.5	42	41.5	39.5	34	34.5	37.8	38.5	38.5	37.5	38.1

Temperature Minimum

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ave.
1996													
1997													
1998													
1999													
2000										18.7	14	12.2	
2001	11.6	13.4	17.2	20	19.8	20.5	19.8	20.1	19.9	18.5	15.2	14.8	17.6

Humidity Maximum

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ave.
1996													
1997													
1998													
1999													
2000										83	62	53	
2001	44	37	38	47	71	85	94	96	96	79	64	52	66.9

Humidity Minimum

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ave.
1996													
1997													
1998													
1999													
2000										39	21	17	
2001	14	12	18	23	36	59	70	72	66	38	26	20	37.8

Precipitation (amount)

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1996													
1997													
1998													
1999													
2000										47.6	4.5	0	
2001	0	0	0	2.1	53.4	163.9	289.7	131.8	119.3	0.5	21.2	0	781.9

Precipitation (day)

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1996													
1997													
1998													
1999													
2000										9	1	0	
2001	0	0	0	1	7	14	19	17	14	1	1	0	74

Appendice 11 Le résultat de l'analyse de la balance hydrologique

Water barance simulation (P=E+R+IG)

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Average temperature (°C)	25.6	26.1	30.0	32.0	30.8	28.4	26.6	26.1	27.1	27.8	26.7	25.2	
Precipitation (m ³)	3.94E+06	1.74E+06	5.56E+06	8.62E+07	3.32E+08	7.10E+08	1.11E+09	1.09E+09	5.72E+08	2.23E+08	1.01E+08	0.00E+00	4.23E+09
Precipitation (day)	1	0.5	1	3.25	7.75	14	17.25	19	12	5.5	1.75	0	83
Evapotranspiration (m ³)	2.31E+08	2.27E+08	4.64E+08	6.04E+08	5.40E+08	3.79E+08	2.92E+08	2.70E+08	3.00E+08	3.33E+08	2.69E+08	2.15E+08	4.13E+09
Runoff (m ³)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.14E+05	3.14E+06	3.14E+07	3.14E+07	3.14E+07	3.14E+06	3.14E+05	0.00E+00	1.01E+08
Addition of ground water (m ³)	-2.28E+08	-2.25E+08	-4.58E+08	-5.18E+08	-2.09E+08	3.28E+08	7.82E+08	7.88E+08	2.40E+08	-1.13E+08	-1.68E+08	-2.15E+08	4.88E+06
Infiltration (m ³) (1mm/day)	4.63E+06	2.32E+06	4.63E+06	1.50E+07	3.59E+07	6.48E+07	7.99E+07	8.80E+07	5.56E+07	2.55E+07	8.10E+06	0.00E+00	3.84E+08
Movement of ground water level (m)	-4.91E-02	-4.87E-02	-9.90E-02	-1.12E-01	-4.52E-02	7.09E-02	1.69E-01	1.70E-01	5.19E-02	-2.43E-02	-3.63E-02	-4.65E-02	1.05E-03

Catchment area of Banifing river (km²) 4630.7
 Modification coefficients for Evapotranspiratoin 0.445

Appendice 12 Le résultat de l'analyse chimique du sol (1/13)

Sample No.	UTM (km)		Au	Ag	Cu	Pb	Zn	Ni	Co	Cr	Mn	Fe	Al	Mg	Ca	K	Na	Ti	As	Ba	Be	P	Sr	V	Mo	Sb	Cd	Bi	W	Hg	CN
	Easting	Northing	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
SS001	694.359	1339.034	8	<0.5	14	27	27	19	15	62	255	2.14	4.37	0.10	0.04	0.36	0.03	0.75	<5	131	1	116	22	68	2	<5	2	<5	<20	<0.01	<1
SS002	687.177	1346.586	5	<0.5	20	33	27	18	15	95	227	7.07	7.18	0.09	0.05	0.32	0.02	0.77	11	142	1	146	19	137	2	<5	2	<5	<20	0.01	<1
SS003	689.840	1342.553	4	<0.5	23	19	33	30	20	53	363	3.25	7.60	0.14	0.06	0.43	0.03	0.83	<5	144	1	147	28	81	1	<5	1.6	<5	<20	0.01	<1
SS004	697.541	1345.968	2	<0.5	15	33	28	28	16	63	124	3.10	7.50	0.11	0.06	0.45	0.03	0.69	<5	175	2	122	33	74	1	<5	1.5	<5	<20	<0.01	<1
SS005	699.316	1350.329	7	<0.5	13	21	23	18	15	60	230	1.80	5.42	0.09	0.04	0.39	0.02	0.75	<5	142	1	105	25	58	<1	<5	<1	<5	<20	<0.01	<1
SS006	695.709	1349.237	3	<0.5	12	7	23	20	14	75	133	2.34	5.48	0.11	0.03	0.41	0.03	0.70	7	144	1	152	26	85	1	<5	<1	<5	<20	<0.01	<1
SS007	697.168	1363.632	3	<0.5	10	19	24	22	16	58	136	2.84	5.15	0.16	0.06	0.36	0.05	0.67	<5	121	1	225	27	67	2	<5	<1	<5	<20	0.02	<1
SS008	695.248	1359.751	5	<0.5	11	6	20	22	15	51	111	1.48	5.53	0.11	0.04	0.38	0.02	0.75	<5	131	1	88	26	46	2	<5	<1	<5	<20	<0.01	<1
SS009	693.117	1356.584	8	<0.5	13	18	25	26	15	52	227	2.14	6.78	0.13	0.07	0.40	0.07	0.75	<5	130	1	126	27	58	1	<5	<1	<5	<20	<0.01	<1
SS010	692.272	1352.672	6	<0.5	18	12	23	23	19	61	217	2.36	4.82	0.11	0.02	0.34	0.03	0.88	<5	108	1	162	20	76	<1	<5	<1	<5	<20	0.01	<1
SS011	691.338	1348.945	5	<0.5	15	13	32	27	23	54	317	3.07	7.66	0.12	0.03	0.60	0.04	0.78	<5	200	2	83	30	73	<1	<5	<1	<5	<20	<0.01	<1
SS012	706.000	1335.750	19	<0.5	9	8	15	17	13	48	143	0.87	2.98	0.07	0.06	0.38	0.04	0.59	<5	158	1	103	24	38	<1	<5	<1	<5	<20	0.01	<1
SS013	708.000	1330.750	11	<0.5	22	41	33	21	20	161	458	8.00	9.16	0.14	0.07	0.50	0.11	1.02	58	204	2	301	34	212	2	<5	1.4	<5	<20	0.04	<1
SS014	710.900	1335.750	12	<0.5	16	5	30	18	23	157	698	7.84	8.03	0.11	0.13	0.41	0.24	1.03	23	140	1	517	35	201	2	<5	<1	<5	<20	0.04	<1
SS015	712.900	1330.000	2	<0.5	16	13	39	21	24	65	1118	4.19	5.35	0.22	0.40	0.52	0.08	0.78	10	285	1	530	69	111	3	<5	<1	<5	<20	0.04	<1
SS016	670.008	1360.232	29	<0.5	15	17	25	33	6	30	182	2.53	8.22	0.14	0.08	0.62	0.10	0.68	15	169	1	143	38	67	<1	<5	<1	<5	<20	0.01	<1
SS017	664.247	1359.022	9	<0.5	7	8	14	18	4	12	109	1.67	5.05	0.07	0.03	0.34	0.06	0.53	<5	98	<1	84	21	39	<1	<5	<1	<5	<20	<0.01	<1
SS018	670.155	1355.490	6	<0.5	15	28	20	21	<1	44	151	1.38	4.55	0.10	0.16	0.52	0.12	0.65	<5	178	1	168	36	49	<1	<5	<1	<5	<20	<0.01	<1
SS019	672.573	1353.945	10	<0.5	10	270	16	18	<1	44	100	1.14	4.07	0.09	0.05	0.51	0.10	0.64	<5	157	1	78	31	52	<1	<5	<1	<5	<20	0.01	<1
SS020	663.315	1354.680	9	<0.5	16	19	19	23	6	41	179	1.98	5.40	0.09	0.04	0.45	0.05	0.68	<5	145	1	94	29	59	2	<5	<1	<5	<20	0.01	<1
SS021	685.552	1369.785	2	<0.5	9	16	20	18	6	37	183	3.03	4.60	0.18	0.08	0.45	0.09	0.61	<5	157	1	259	38	66	1	<5	<1	<5	<20	0.04	1
SS022	688.528	1369.143	7	<0.5	9	196	21	21	7	31	172	2.78	4.68	0.15	0.08	0.38	0.07	0.61	6	131	1	352	32	62	<1	<5	<1	<5	<20	0.04	<1
SS023	691.546	1372.298	<1	<0.5	10	2696	23	18	4	20	400	1.62	4.35	0.11	0.09	0.50	0.05	0.61	9	183	1	143	33	46	<1	<5	<1	<5	<20	0.02	<1
SS024	694.631	1370.688	80	<0.5	7	21	19	13	4	14	291	1.33	3.42	0.08	0.05	0.69	0.06	0.53	7	244	<1	87	32	39	2	<5	<1	<5	<20	<0.01	<1
SS025	696.663	1369.431	8	<0.5	16	38	30	25	15	36	387	2.73	6.11	0.11	0.03	0.68	0.09	0.76	8	228	2	156	35	70	<1	<5	<1	<5	<20	0.02	<1
SS026	688.006	1305.208	<1	<0.5	29	51	51	26	19	449	319	10.00	8.16	0.07	0.09	0.27	0.02	0.67	85	134	2	712	31	568	7	<5	<1	<5	<20	<0.01	<1
SS027	693.299	1305.179	4	<0.5	16	58	31	24	18	117	249	4.79	7.50	0.10	0.04	0.36	0.03	0.84	6	140	1	204	27	115	2	<5	<1	<5	<20	<0.01	<1
SS028	690.473	1305.580	8	<0.5	19	12	47	37	32	198	686	6.92	8.20	0.12	0.05	0.39	0.04	1.65	9	352	2	376	49	148	1	<5	<1	<5	<20	<0.01	<1
SS029	684.301	1307.889	37	<0.5	21	27	38	24	17	78	318	2.99	6.14	0.12	0.31	0.39	0.03	0.85	<5	207	1	692	48	90	2	<5	<1	<5	<20	<0.01	<1
SS030	681.320	1311.376	4	<0.5	47	<2	60	20	22	203	546	10.00	7.37	0.11	0.10	0.38	0.04	1.04	24	134	2	583	33	297	3	<5	<1	<5	<20	0.02	1
SS031	681.062	1304.508	6	<0.5	8	31	17	9	12	36	196	1.03	2.83	0.09	0.08	0.38	0.03	0.70	<5	177	<1	132	22	38	1	<5	<1	<5	<20	<0.01	<1
SS032	683.174	1302.095	13	<0.5	28	76	45	30	26	214	409	8.99	6.27	0.13	0.04	0.30	0.03	1.20	19	119	1	367	20	227	2	<5	<1	<5	<20	0.02	<1
SS033	687.194	1301.967	8	<0.5	19	6	29	27	22	82	235	2.32	5.32	0.10	0.02	0.33	0.03	0.92	<5	119	1	131	20	65	1	<5	<1	<5	<20	<0.01	<1
SS034	690.531	1299.717	4	<0.5	26	85	37	32	18	210	329	7.18	5.41	0.16	0.08	0.37	0.04	0.62	25	155	2	419	29	159	7	<5	4.6	<5	<20	0.05	<1
SS035	693.604	1298.170	21	<0.5	15	36	22	31	21	85	154	3.69	5.87	0.09	0.02	0.33	0.02	0.77	9	130	2	136	23	76	<1	<5	<1	<5	<20	<0.01	<1
SS036	690.402	1287.598	14	<0.5	11	28	22	24	16	51	149	1.79	6.23	0.09	0.02	0.32	0.02	0.84	<5	108	1	87	25	52	1	<5	<1	<5	<20	<0.01	<1
SS037	688.686	1288.569	3	<0.5	19	9	25	18	14	67	332	4.54	5.83	0.09	0.05	0.31	0.02	0.68	6	131	1	165	20	98	3	<5	<1	<5	<20	<0.01	<1
SS038	683.941	1289.341	3	<0.5	9	90	21	20	14	50	167	1.67	5.39	0.11	0.07	0.31	0.02	0.66	<5	120	1	130	25	48	<1	<5	<1	<5	<20	<0.01	<1
SS039	678.805	1288.001	7	<0.5	21	18	26	22	16	80	116	2.37	6.22	0.09	0.02	0.44	0.04	0.83	<5	175	2	199	22	91	2	<5	<1	<5	<20	<0.01	<1
SS040	679.864	1294.264	46	<0.5	10	16	26	27	16	53	137	2.27	9.02	0.09	0.03	0.36	0.06	0.76	<5	82	2	79	20	57	<1	<5	<1	<5	<20	<0.01	<1

Appendice 12 Le résultat de l'analyse chimique du sol (2/13)

Sample No.	UTM (km)		Au	Ag	Cu	Pb	Zn	Ni	Co	Cr	Mn	Fe	Al	Mg	Ca	K	Na	Ti	As	Ba	Be	P	Sr	V	Mo	Sb	Cd	Bi	W	Hg	CN
	Easting	Northing	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
SS041	678.751	1298.843	8	<0.5	15	46	33	11	10	39	246	1.62	4.42	0.12	0.54	0.44	0.03	0.50	<5	190	1	723	52	43	<1	<5	<1	<5	<20	<0.01	<1
SS042	664.961	1291.120	16	<0.5	21	34	35	28	29	301	649	10.00	7.13	0.10	0.08	0.29	0.03	0.79	<5	134	2	384	30	229	3	<5	<1	<5	<20	<0.01	<1
SS043	671.094	1289.450	38	<0.5	24	9	29	23	18	82	342	4.60	6.49	0.09	0.07	0.32	0.04	0.74	<5	104	1	168	15	109	<1	<5	<1	<5	<20	<0.01	<1
SS044	670.055	1287.059	7	<0.5	25	14	47	26	19	78	442	2.86	6.28	0.12	0.36	0.32	0.04	0.79	<5	163	1	644	43	75	<1	<5	<1	<5	<20	0.01	1
SS045	671.202	1284.553	6	<0.5	8	12	19	9	12	45	173	1.51	3.40	0.05	0.11	0.27	0.02	0.68	<5	126	1	175	27	41	1	<5	<1	<5	<20	<0.01	<1
SS046	675.755	1287.392	6	<0.5	22	<2	28	22	15	56	291	2.03	6.73	0.09	0.06	0.59	0.05	0.81	<5	258	1	144	26	57	<1	<5	<1	<5	<20	0.01	1
SS047	676.206	1289.857	7	<0.5	15	<2	27	14	15	36	367	1.72	5.32	0.10	0.18	0.32	0.03	0.80	<5	156	1	98	25	40	<1	<5	<1	<5	<20	<0.01	<1
SS048	676.143	1294.859	9	<0.5	20	8	28	21	16	55	244	2.17	5.25	0.11	0.36	0.29	0.03	0.79	<5	149	1	365	47	64	2	<5	<1	<5	<20	<0.01	<1
SS049	674.038	1300.594	2	<0.5	22	23	43	16	17	91	183	5.14	8.31	0.08	0.02	0.59	0.09	0.84	<5	239	1	87	20	116	2	<5	<1	<5	<20	<0.01	<1
SS050	668.528	1301.645	7	<0.5	6	10	17	10	11	31	144	1.04	3.61	0.06	0.04	0.33	0.03	0.67	<5	110	1	108	21	36	1	<5	<1	<5	<20	<0.01	<1
SS051	678.633	1308.216	9	<0.5	18	18	29	30	16	57	151	1.98	7.31	0.11	0.03	0.35	0.04	0.84	6	125	1	76	21	56	5	<5	3.8	<5	<20	0.02	<1
SS052	676.666	1303.798	6	<0.5	10	7	20	11	12	33	206	1.48	3.79	0.08	0.06	0.31	0.02	0.67	<5	132	1	127	20	40	<1	<5	<1	<5	<20	<0.01	<1
SS053	669.998	1304.161	10	<0.5	8	26	25	16	14	62	318	6.00	7.19	0.09	0.04	0.26	0.02	0.70	<5	92	1	216	19	83	4	<5	<1	<5	<20	0.02	<1
SS054	667.565	1307.164	2	<0.5	18	10	32	32	16	59	215	3.34	8.66	0.12	0.13	0.34	0.03	0.71	5	125	1	212	31	77	1	<5	<1	<5	<20	<0.01	<1
SS055	663.127	1301.797	6	<0.5	14	17	34	29	17	82	191	4.09	8.63	0.12	0.06	0.28	0.02	0.76	<5	89	2	175	26	98	1	<5	<1	<5	<20	0.01	<1
SS056	663.623	1307.381	4	<0.5	13	12	28	17	14	57	308	2.18	5.87	0.11	0.15	0.25	0.02	0.68	<5	151	1	347	31	55	<1	<5	<1	<5	<20	<0.01	<1
SS057	664.215	1311.726	16	<0.5	9	23	17	13	13	50	119	1.40	4.27	0.06	0.02	0.32	0.02	0.73	<5	128	2	108	23	53	2	<5	<1	<5	<20	<0.01	<1
SS058	668.114	1312.056	9	<0.5	12	9	32	18	16	44	248	1.96	5.11	0.09	0.16	0.39	0.04	0.77	<5	152	1	210	30	56	<1	<5	<1	<5	<20	<0.01	<1
SS059	671.559	1312.244	1	<0.5	14	14	22	16	16	56	270	2.45	5.12	0.08	0.05	0.33	0.04	0.80	<5	113	1	157	20	72	2	<5	<1	<5	<20	<0.01	<1
SS060	675.021	1311.319	6	<0.5	16	11	26	24	22	48	285	2.39	7.73	0.09	0.01	0.51	0.08	0.82	<5	184	2	47	26	67	<1	<5	<1	<5	<20	<0.01	<1
SS061	682.340	1316.134	3	<0.5	69	19	59	26	18	280	424	10.00	9.33	0.08	0.03	0.29	0.05	0.87	50	116	1	643	18	429	5	<5	<1	<5	<20	0.03	<1
SS062	686.293	1315.126	4	<0.5	22	12	30	21	17	82	343	4.42	5.90	0.09	0.03	0.45	0.03	0.75	13	207	1	136	27	104	2	<5	<1	<5	<20	<0.01	<1
SS063	691.288	1315.739	5	<0.5	27	28	48	20	21	83	589	3.30	4.11	0.17	0.48	0.51	0.03	0.97	<5	546	1	1110	169	86	2	<5	<1	<5	<20	0.02	<1
SS064	687.566	1282.521	11	<0.5	10	6	21	19	15	49	236	1.80	5.93	0.08	0.03	0.25	0.02	0.78	<5	102	1	78	23	47	<1	<5	<1	<5	<20	<0.01	<1
SS065	683.348	1286.944	5	<0.5	12	11	27	16	12	47	207	2.01	3.94	0.13	0.14	0.56	0.20	0.44	<5	233	2	193	50	50	<1	<5	<1	<5	<20	<0.01	<1
SS066	692.164	1282.434	6	<0.5	8	90	22	19	15	40	209	1.51	5.56	0.09	0.04	1.09	0.04	0.81	<5	511	1	99	73	43	<1	<5	<1	<5	<20	<0.01	<1
SS067	699.056	1295.046	12	<0.5	20	7	25	36	25	104	163	2.59	7.42	0.10	0.01	0.37	0.03	1.00	<5	146	2	131	30	71	<1	<5	<1	<5	<20	<0.01	<1
SS068	698.700	1289.635	5	<0.5	14	15	24	27	20	73	253	2.68	6.24	0.11	0.02	0.29	0.02	0.87	<5	109	1	198	23	72	1	<5	<1	<5	<20	<0.01	<1
SS069	697.633	1284.974	3	<0.5	7	3	22	16	14	44	360	1.88	3.91	0.10	0.13	0.32	0.03	0.69	<5	131	1	226	31	50	1	<5	<1	<5	<20	<0.01	<1
SS070	720.252	1344.357	7	<0.5	24	18	41	25	19	72	414	2.76	6.64	0.13	0.29	0.39	0.03	0.87	6	240	2	619	54	72	3	<5	2	<5	<20	0.02	<1
SS071	713.990	1341.373	8	<0.5	14	16	59	17	15	49	429	2.38	5.14	0.32	0.79	1.94	0.33	0.63	<5	1022	2	850	168	54	2	<5	<1	<5	<20	<0.01	<1
SS072	719.575	1340.686	3	<0.5	13	36	26	16	14	40	258	1.71	5.00	0.08	0.07	0.38	0.02	0.69	<5	186	1	405	27	44	<1	<5	<1	<5	<20	<0.01	<1
SS073	724.111	1343.489	8	<0.5	9	11	18	15	13	43	180	1.14	5.02	0.08	0.12	0.44	0.02	0.69	<5	209	1	119	29	40	<1	<5	<1	<5	<20	<0.01	<1
SS074	725.556	1346.890	7	<0.5	8	20	19	18	15	45	117	2.28	5.71	0.10	0.01	0.37	0.03	0.80	<5	117	1	104	19	48	<1	<5	<1	<5	<20	<0.01	<1
SS075	729.034	1350.359	6	<0.5	23	6	31	18	33	63	857	8.27	6.26	0.09	0.04	0.22	0.02	1.84	<5	81	1	210	14	205	2	<5	<1	<5	<20	<0.01	<1
SS076	726.576	1353.811	9	<0.5	11	16	20	20	13	48	128	1.86	5.89	0.10	0.06	0.35	0.03	0.72	<5	128	1	93	25	48	<1	<5	<1	<5	<20	<0.01	<1
SS077	727.737	1358.151	4	<0.5	12	17	21	26	15	47	125	1.40	6.26	0.10	0.02	0.31	0.03	0.75	<5	113	1	82	21	42	<1	<5	<1	<5	<20	0.01	<1
SS078	729.898	1362.266	10	<0.5	6	11	15	14	11	29	179	1.04	3.61	0.07	0.05	0.45	0.03	0.55	<5	169	1	80	24	32	<1	<5	<1	<5	<20	<0.01	<1
SS079	718.702	1346.991	6	<0.5	13	26	28	19	18	53	300	2.44	6.22	0.11	0.19	0.64	0.04	0.74	<5	215	1	414	36	62	<1	<5	<1	<5	<20	0.01	1
SS080	716.797	1350.541	11	<0.5	12	12	27	34	16	51	84	2.15	8.71	0.11	0.01	0.37	0.04	0.73	<5	111	1	66	26	58	1	<5	<1	<5	<20	<0.01	<1

Appendice 12 Le résultat de l'analyse chimique du sol (3/13)

Sample No.	UTM (km)		Au	Ag	Cu	Pb	Zn	Ni	Co	Cr	Mn	Fe	Al	Mg	Ca	K	Na	Ti	As	Ba	Be	P	Sr	V	Mo	Sb	Cd	Bi	W	Hg	CN
	Easting	Northing	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
SS081	714.700	1352.802	9	<0.5	12	39	24	23	13	44	141	1.71	7.59	0.12	0.11	0.36	0.03	0.64	<5	126	1	174	32	44	2	<5	<1	<5	<20	<0.01	<1
SS082	717.305	1356.686	10	<0.5	16	14	26	31	23	61	384	3.04	7.55	0.12	0.04	0.37	0.03	0.99	<5	146	2	128	26	68	1	<5	<1	<5	<20	0.01	<1
SS083	717.729	1362.849	7	<0.5	11	28	24	23	19	41	188	2.08	6.46	0.09	0.01	0.44	0.03	0.73	<5	151	2	89	24	56	<1	<5	<1	<5	<20	<0.01	<1
SS084	714.247	1365.838	11	<0.5	11	10	21	27	18	45	127	2.03	6.58	0.12	0.02	0.34	0.03	0.85	<5	120	2	104	25	55	2	<5	<1	<5	<20	<0.01	<1
SS085	712.259	1369.761	5	<0.5	10	6	22	26	16	43	221	1.55	6.44	0.12	0.05	0.45	0.03	0.66	<5	157	1	67	29	45	<1	<5	<1	<5	<20	<0.01	<1
SS086	714.173	1372.021	9	<0.5	11	15	20	18	11	40	101	0.84	4.28	0.08	0.04	0.40	0.03	0.60	<5	145	1	45	21	29	4	<5	4.1	<5	<20	0.01	1
SS087	717.212	1371.517	10	<0.5	12	27	28	24	15	105	155	8.64	6.77	0.13	0.07	0.31	0.04	0.64	7	103	2	278	22	154	3	<5	<1	<5	<20	0.01	1
SS088	721.098	1372.379	3	<0.5	10	9	20	17	14	33	254	1.36	4.85	0.09	0.05	0.58	0.04	0.60	<5	233	2	153	30	38	<1	<5	<1	<5	<20	<0.01	1
SS089	724.315	1371.363	8	<0.5	6	9	14	12	10	28	179	1.04	3.45	0.07	0.04	0.35	0.03	0.55	<5	131	1	85	20	34	<1	<5	<1	<5	<20	<0.01	1
SS090	725.823	1370.308	5	<0.5	7	8	17	11	10	33	150	1.12	3.36	0.07	0.07	0.39	0.02	0.54	<5	145	1	149	19	34	<1	<5	<1	<5	<20	<0.01	<1
SS091	724.593	1331.762	9	<0.5	8	2	27	14	22	53	381	4.15	5.57	0.08	0.03	0.23	0.07	1.32	<5	87	1	239	21	94	1	<5	<1	<5	<20	<0.01	<1
SS092	720.563	1329.973	8	<0.5	9	58	23	18	16	38	333	1.58	5.07	0.08	0.05	0.41	0.10	0.75	<5	157	1	154	25	44	<1	<5	<1	<5	<20	<0.01	<1
SS093	716.668	1332.125	10	<0.5	14	8	29	21	16	48	257	1.60	5.77	0.12	0.23	0.43	0.07	0.75	<5	177	2	423	42	50	2	<5	<1	<5	<20	<0.01	<1
SS094	717.134	1334.887	5	<0.5	6	44	15	11	12	38	141	1.38	3.43	0.06	0.03	0.47	0.05	0.66	<5	170	1	92	26	41	1	<5	<1	<5	<20	<0.01	1
SS095	717.100	1341.840	5	<0.5	12	10	24	20	16	70	229	3.90	6.27	0.09	0.04	0.40	0.15	0.77	<5	134	1	168	22	93	2	<5	<1	<5	<20	0.01	<1
SS096	729.572	1355.774	5	<0.5	12	33	28	17	13	40	271	1.49	4.66	0.10	0.24	0.46	0.03	0.60	<5	215	1	449	38	37	<1	<5	<1	<5	<20	<0.01	<1
SS097	722.347	1361.406	8	<0.5	11	7	19	23	14	49	114	1.50	5.69	0.11	0.03	0.35	0.03	0.71	<5	126	1	65	22	44	<1	<5	<1	<5	<20	<0.01	<1
SS098	724.106	1363.466	8	<0.5	13	25	23	29	14	43	99	1.65	6.81	0.11	0.04	0.37	0.05	0.78	<5	123	1	75	23	47	<1	<5	<1	<5	<20	<0.01	<1
SS099	727.707	1366.603	16	<0.5	9	7	21	21	13	38	203	1.59	5.78	0.11	0.06	0.42	0.06	0.68	<5	155	1	66	27	44	<1	<5	<1	<5	<20	<0.01	<1
SS100	731.109	1368.848	9	<0.5	8	31	18	12	12	38	225	0.89	3.49	0.07	0.06	0.54	0.04	0.64	<5	214	1	135	27	34	<1	<5	<1	<5	<20	<0.01	1
SS101	733.241	1372.506	6	<0.5	13	14	24	23	19	60	540	2.50	5.32	0.11	0.11	0.57	0.05	0.70	<5	243	2	165	32	65	<1	<5	<1	<5	<20	<0.01	1
SS102	713.952	1317.018	46	<0.5	10	6	20	14	15	47	226	1.70	4.38	0.09	0.10	0.24	0.03	0.76	5	102	1	200	21	52	2	<5	<1	<5	<20	<0.01	<1
SS103	711.923	1320.700	<1	<0.5	6	6	14	11	13	37	220	0.81	3.00	0.08	0.10	0.41	0.04	0.72	<5	170	1	158	27	32	<1	<5	<1	<5	<20	<0.01	<1
SS104	715.078	1323.377	1	<0.5	13	11	30	23	15	66	219	4.75	6.86	0.15	0.10	0.46	0.14	0.74	<5	145	2	255	32	97	2	<5	<1	<5	<20	0.02	<1
SS105	716.998	1326.834	5	<0.5	19	17	32	30	18	62	145	3.22	7.25	0.13	0.11	0.53	0.06	0.77	15	191	2	145	35	73	4	<5	<1	<5	<20	<0.01	<1
SS106	716.624	1309.342	<1	<0.5	34	9	43	31	22	96	357	3.22	5.50	0.19	0.08	0.53	0.05	0.91	<5	241	1	127	26	99	<1	<5	<1	<5	<20	0.02	<1
SS107	710.582	1308.713	3	<0.5	25	11	36	27	22	160	342	6.21	6.72	0.16	0.07	0.43	0.08	0.94	12	157	1	334	27	160	3	<5	<1	<5	<20	0.03	<1
SS108	709.303	1306.573	2	<0.5	42	14	68	35	23	90	626	4.37	7.36	0.49	0.25	1.02	0.23	0.78	<5	501	2	266	78	116	<1	<5	<1	<5	<20	0.02	<1
SS109	716.889	1282.642	9	<0.5	10	6	20	9	11	33	238	1.30	4.14	0.06	0.05	0.22	0.02	0.69	<5	79	<1	98	16	38	<1	<5	<1	<5	<20	<0.01	<1
SS110	714.074	1285.267	<1	<0.5	7	11	17	11	13	37	223	1.52	3.63	0.05	0.05	0.30	0.03	0.74	<5	154	1	173	25	43	<1	<5	<1	<5	<20	<0.01	<1
SS111	705.034	1291.178	95	<0.5	11	3	20	14	13	34	217	1.32	4.12	0.08	0.14	0.34	0.03	0.74	<5	160	1	269	28	41	<1	<5	<1	<5	<20	<0.01	<1
SS112	707.670	1286.315	7	<0.5	19	4	28	30	17	45	216	2.52	7.44	0.11	0.02	0.43	0.15	0.83	8	125	1	97	21	71	<1	<5	<1	<5	<20	<0.01	<1
SS113	708.185	1312.322	20	<0.5	65	22	65	38	23	90	443	6.69	10.00	0.26	0.09	1.11	0.12	0.62	187	412	2	191	90	137	<1	<5	1	<5	<20	0.03	<1
SS114	670.467	1363.969	3	<0.5	12	21	25	23	6	40	226	1.83	5.89	0.12	0.13	0.62	0.06	0.65	13	217	1	230	41	52	2	5	<1	<5	<20	<0.01	<1
SS115	672.818	1365.251	8	<0.5	8	26	15	18	3	31	163	1.67	5.28	0.09	0.06	0.45	0.04	0.62	8	183	1	108	34	45	<1	<5	<1	<5	<20	<0.01	<1
SS116	674.132	1361.452	9	<0.5	18	26	25	35	10	28	151	3.15	8.16	0.13	0.03	0.37	0.05	0.80	10	117	2	147	30	79	2	<5	<1	<5	<20	0.02	<1
SS117	665.371	1364.252	8	<0.5	8	502	13	12	3	38	128	2.50	3.23	0.08	0.05	0.27	0.04	0.52	<5	99	<1	201	22	56	<1	<5	<1	<5	<20	0.02	<1
SS118	665.212	1368.087	5	<0.5	6	17	11	12	2	32	185	0.93	3.16	0.07	0.05	0.44	0.04	0.54	8	170	<1	102	30	33	<1	<5	<1	<5	<20	0.02	<1
SS119	666.783	1321.856	7	<0.5	15	45	19	20	5	34	289	1.37	5.02	0.12	0.10	0.68	0.05	0.72	6	282	2	126	44	50	2	<5	<1	<5	<20	0.01	<1
SS120	669.398	1368.612	12	<0.5	8	23	18	24	2	38	258	1.35	5.70	0.11	0.06	0.52	0.04	0.65	<5	185	1	96	34	43	1	<5	<1	<5	<20	0.02	<1

Appendice 12 Le résultat de l'analyse chimique du sol (4/13)

Sample No.	UTM (km)		Au	Ag	Cu	Pb	Zn	Ni	Co	Cr	Mn	Fe	Al	Mg	Ca	K	Na	Ti	As	Ba	Be	P	Sr	V	Mo	Sb	Cd	Bi	W	Hg	CN
	Easting	Northing	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
SS121	670.669	1372.883	6	<0.5	9	121	16	19	5	34	203	1.63	4.87	0.10	0.09	0.47	0.03	0.61	9	189	1	165	34	44	<1	<5	<1	<5	<20	0.02	<1
SS122	689.248	1327.359	28	<0.5	13	45	25	28	18	59	273	2.69	6.96	0.12	0.06	0.37	0.03	0.81	5	137	2	135	26	68	3	<5	<1	<5	<20	0.02	<1
SS123	701.970	1328.672	14	<0.5	20	5	26	31	22	62	262	3.09	6.45	0.11	0.02	0.24	0.02	0.90	<5	87	1	191	19	77	2	<5	<1	<5	<20	0.03	<1
SS124	698.409	1327.577	2	<0.5	48	78	44	64	42	119	591	6.69	9.86	0.38	0.21	0.59	0.11	0.81	6	251	3	190	44	136	1	<5	<1	<5	<20	0.03	<1
SS125	695.194	1326.588	2	<0.5	27	26	38	30	22	141	564	6.49	7.34	0.10	0.04	0.49	0.06	0.65	20	218	2	263	33	134	2	<5	<1	<5	<20	0.02	<1
SS126	691.882	1323.925	5	<0.5	28	32	37	49	17	103	178	3.87	8.32	0.35	0.26	0.80	0.16	0.63	<5	410	2	157	80	99	<1	<5	<1	<5	<20	0.01	<1
SS127	688.355	1322.026	28	<0.5	41	55	42	44	23	139	429	7.28	8.34	0.13	0.06	0.40	0.26	0.93	10	99	2	268	22	221	6	<5	4.7	<5	<20	0.04	<1
SS128	691.534	1319.974	19	<0.5	24	22	28	39	16	209	258	3.82	6.44	0.09	0.04	0.37	0.11	0.84	9	118	2	188	22	117	<1	<5	1.2	<5	<20	<0.01	<1
SS129	694.851	1319.704	35	<0.5	37	21	56	30	18	86	411	3.29	5.00	0.24	0.44	0.61	0.11	0.65	12	358	1	778	80	75	1	<5	<1	<5	<20	0.02	<1
SS130	700.574	1317.131	10	<0.5	17	26	25	26	17	83	155	2.54	6.33	0.11	0.02	0.28	0.05	0.79	<5	100	1	139	18	67	1	<5	<1	<5	<20	0.01	<1
SS131	696.571	1323.525	9	<0.5	23	28	31	33	19	115	404	4.74	7.61	0.12	0.05	0.40	0.13	0.80	20	146	1	259	27	116	3	<5	<1	<5	<20	0.03	<1
SS132	687.948	1319.015	347	<0.5	28	29	35	35	20	258	459	6.68	7.75	0.11	0.10	0.43	0.14	0.88	10	217	2	418	48	151	3	<5	<1	<5	<20	0.02	<1
SS133	683.898	1320.006	9	<0.5	25	17	30	32	19	128	282	4.97	8.31	0.08	0.03	0.34	0.15	0.93	23	154	2	333	69	122	2	<5	<1	<5	<20	<0.01	<1
SS134	684.983	1322.952	11	<0.5	18	3	26	23	15	76	318	1.71	3.88	0.10	0.06	0.52	0.08	0.79	<5	210	1	80	21	54	<1	<5	<1	<5	<20	<0.01	<1
SS135	686.247	1327.319	12	<0.5	18	18	24	33	18	64	151	1.63	8.50	0.12	0.05	0.53	0.22	0.85	<5	155	2	60	30	56	<1	<5	<1	<5	<20	0.01	<1
SS136	683.953	1335.266	7	<0.5	16	5	25	20	17	62	237	2.78	6.19	0.10	0.02	0.42	0.11	0.89	<5	135	2	120	22	77	2	<5	<1	<5	<20	<0.01	<1
SS137	678.417	1335.532	7	<0.5	8	7	17	14	11	42	127	1.16	3.61	0.08	0.09	0.52	0.32	0.70	<5	138	1	112	27	39	<1	<5	<1	<5	<20	<0.01	<1
SS138	681.711	1329.689	18	<0.5	9	9	17	13	12	47	174	1.19	3.48	0.08	0.05	0.32	0.04	0.70	<5	117	1	110	20	40	1	<5	<1	<5	<20	<0.01	<1
SS139	680.114	1325.787	8	<0.5	7	14	19	12	12	36	235	1.49	4.92	0.09	0.09	0.41	0.07	0.64	<5	115	1	91	22	39	<1	<5	<1	<5	<20	0.02	<1
SS140	680.724	1322.545	13	<0.5	10	9	23	20	14	46	184	1.91	6.33	0.09	0.02	0.39	0.06	0.76	<5	102	2	83	20	51	1	<5	<1	<5	<20	<0.01	<1
SS141	679.847	1320.159	9	<0.5	15	14	21	19	13	73	140	3.96	5.13	0.08	0.08	0.36	0.07	0.73	6	169	2	253	27	87	2	<5	<1	<5	<20	0.02	<1
SS142	666.559	1315.369	8	<0.5	14	11	22	28	15	107	118	1.74	7.25	0.10	0.02	0.31	0.12	0.83	<5	96	1	87	21	75	1	<5	<1	<5	<20	0.02	<1
SS143	664.556	1320.943	10	<0.5	14	12	20	13	13	62	187	2.40	5.09	0.08	0.06	0.37	0.08	0.72	<5	94	1	165	21	65	1	<5	<1	<5	<20	<0.01	<1
SS144	663.103	1325.881	7	<0.5	12	10	26	18	15	53	359	1.75	4.53	0.11	0.22	0.43	0.05	0.80	<5	160	2	258	36	53	1	<5	<1	<5	<20	<0.01	<1
SS145	665.710	1327.958	9	<0.5	15	18	26	26	16	84	142	3.21	5.54	0.18	0.09	0.43	0.16	0.73	<5	138	2	274	27	83	2	<5	<1	<5	<20	0.02	<1
SS146	664.921	1331.415	12	<0.5	14	12	23	21	14	58	219	1.56	4.45	0.09	0.08	0.46	0.38	0.83	7	124	1	119	21	57	5	<5	5	<5	<20	0.03	<1
SS147	669.567	1333.134	8	<0.5	9	26	17	15	12	48	146	1.37	3.87	0.07	0.05	0.30	0.08	0.71	<5	105	<1	85	18	48	1	<5	1	<5	<20	<0.01	<1
SS148	671.318	1329.746	16	<0.5	15	10	31	23	16	50	282	2.16	5.70	0.11	0.19	0.39	0.07	0.76	<5	188	2	528	41	58	1	<5	<1	<5	<20	<0.01	<1
SS149	680.124	1338.783	9	<0.5	7	6	24	11	14	43	350	2.07	4.66	0.08	0.09	0.32	0.04	0.81	<5	128	1	173	25	45	3	<5	<1	<5	<20	<0.01	<1
SS150	676.668	1338.441	13	<0.5	23	28	39	25	13	61	199	2.82	6.40	0.17	0.12	0.51	0.08	0.68	<5	185	2	256	27	76	2	<5	<1	<5	<20	<0.01	<1
SS151	674.498	1334.323	8	<0.5	13	6	25	17	14	62	255	2.29	4.67	0.09	0.09	0.33	0.06	0.76	<5	132	1	185	21	61	<1	<5	<1	<5	<20	<0.01	<1
SS152	675.451	1327.032	6	<0.5	6	6	14	12	12	38	200	1.29	2.93	0.06	0.04	0.39	0.03	0.67	<5	151	1	95	22	37	<1	<5	<1	<5	<20	<0.01	<1
SS153	677.955	1330.807	11	<0.5	17	6	34	20	16	63	333	1.89	4.81	0.13	0.52	0.39	0.07	0.81	<5	189	1	807	57	55	<1	<5	<1	<5	<20	0.02	<1
SS154	677.874	1313.560	9	<0.5	15	23	27	18	22	64	478	2.11	3.84	0.09	0.09	0.40	0.04	0.94	<5	192	1	224	25	63	<1	<5	<1	<5	<20	0.02	<1
SS155	671.401	1316.103	28	<0.5	14	10	24	18	17	63	287	1.82	4.15	0.10	0.16	0.36	0.07	0.92	<5	154	1	252	27	61	2	<5	<1	<5	<20	0.02	<1
SS156	671.997	1321.319	6	<0.5	11	8	21	19	13	62	136	1.82	5.17	0.09	0.09	0.58	0.42	0.80	<5	130	2	156	29	68	<1	<5	1.4	<5	<20	<0.01	<1
SS157	668.118	1326.163	10	<0.5	8	2	51	11	11	44	251	1.67	3.20	0.07	0.09	0.26	0.04	0.63	<5	102	<1	204	19	45	<1	<5	<1	<5	<20	0.02	<1
SS158	673.600	1319.166	15	<0.5	9	15	24	16	20	129	473	5.90	5.31	0.07	0.03	0.16	0.04	1.14	6	60	1	200	12	141	2	<5	<1	<5	<20	<0.01	<1
SS159	676.598	1323.365	13	<0.5	15	17	25	28	17	74	208	2.25	6.47	0.11	0.04	0.31	0.07	0.89	<5	103	1	112	21	66	<1	<5	<1	<5	<20	<0.01	<1
SS160	686.816	1330.354	<1	<0.5	5	10	7	8	5	23	67	1.43	1.81	0.03	0.03	0.05	<0.01	0.02	<5	21	1	58	5	37	<1	<5	<1	<5	<20	<0.01	<1

Appendice 12 Le résultat de l'analyse chimique du sol (5/13)

Sample No.	UTM (km)		Au	Ag	Cu	Pb	Zn	Ni	Co	Cr	Mn	Fe	Al	Mg	Ca	K	Na	Ti	As	Ba	Be	P	Sr	V	Mo	Sb	Cd	Bi	W	Hg	CN
	Easting	Northing	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
SS161	692.264	1330.506	3	<0.5	8	9	10	9	8	99	330	2.89	1.55	0.05	0.02	0.04	<0.01	0.07	<5	16	1	50	5	74	<1	<5	<1	<5	<20	<0.01	<1
SS162	697.400	1331.000	5	<0.5	30	26	17	27	25	80	668	3.15	2.40	0.45	0.17	0.37	0.02	0.05	31	201	1	258	29	94	<1	<5	<1	<5	<20	0.03	<1
SS163	697.400	1336.000	<1	<0.5	28	19	21	13	11	157	798	5.86	2.47	0.11	0.16	0.07	<0.01	0.04	<5	70	1	246	17	170	<1	<5	<1	<5	<20	<0.01	<1
SS164	692.700	1336.000	74	<0.5	15	10	16	12	8	43	331	2.21	1.46	0.17	0.08	0.19	<0.01	0.03	<5	111	1	110	13	43	<1	<5	<1	<5	<20	<0.01	<1
SS165	688.000	1335.750	6	<0.5	33	20	31	11	12	553	538	10.00	2.86	0.07	0.11	0.05	<0.01	0.07	6	63	1	77	<1	491	<1	6	<1	7	<20	<0.01	<1
SS166	686.300	1339.500	16	<0.5	9	10000	14	6	3	41	237	1.84	1.64	0.08	0.13	0.07	<0.01	0.02	<5	53	<1	166	8	41	<1	<5	<1	5	<20	0.01	<1
SS167	679.000	1351.000	10	<0.5	11	14	14	12	10	36	281	2.66	2.56	0.06	0.03	0.10	<0.01	0.03	<5	49	1	49	<1	55	<1	<5	<1	<5	<20	<0.01	<1
SS168	684.000	1351.000	<1	<0.5	7	10	11	8	7	24	302	2.09	1.63	0.04	<0.01	0.07	<0.01	0.04	<5	123	<1	31	<1	37	<1	<5	<1	<5	<20	<0.01	<1
SS169	679.000	1347.250	3	<0.5	19	40	20	13	9	174	762	9.95	2.51	0.13	0.34	0.10	<0.01	0.04	60	102	1	390	39	218	<1	6	<1	<5	<20	0.03	<1
SS170	684.000	1347.250	36	<0.5	15	10	18	12	8	90	488	4.72	2.66	0.11	0.13	0.07	<0.01	0.04	7	70	1	232	18	108	<1	5	<1	<5	<20	0.01	<1
SS171	679.100	1343.250	12	<0.5	4	47	10	10	5	40	223	1.75	1.83	0.06	0.07	0.05	<0.01	0.03	<5	41	1	147	10	40	<1	<5	<1	<5	<20	<0.01	<1
SS172	684.000	1343.250	10	<0.5	14	10	19	13	15	162	573	6.58	1.64	0.07	0.09	0.05	<0.01	0.05	5	56	1	156	11	152	2	<5	<1	<5	<20	<0.01	<1
SS173	693.500	1345.000	6	<0.5	25	47	19	19	13	93	273	7.87	2.56	0.07	0.05	0.05	<0.01	0.04	13	43	1	91	7	120	1	<5	<1	<5	<20	0.01	<1
SS174	702.200	1344.000	35	<0.5	20	160	21	6	4	19	173	2.15	1.65	0.05	0.08	0.10	<0.01	0.02	6	36	<1	84	9	29	1	<5	<1	<5	<20	0.01	<1
SS175	698.300	1341.250	7	<0.5	10	15	16	12	8	60	503	3.22	2.35	0.10	0.06	0.07	<0.01	0.03	17	43	1	123	10	85	1	<5	<1	<5	<20	0.02	<1
SS176	702.200	1341.250	11	<0.5	27	26	38	22	16	84	637	5.69	2.06	0.16	0.29	0.12	<0.01	0.03	15	92	1	369	38	116	2	<5	<1	<5	<20	0.01	1
SS177	690.200	1340.000	10	<0.5	8	3	7	6	3	27	119	1.41	1.08	0.03	0.03	0.04	<0.01	0.03	<5	25	<1	64	2	28	<1	<5	<1	<5	<20	<0.01	<1
SS178	743.081	1337.478	7	<0.5	20	37	28	31	20	55	234	2.70	7.79	0.13	0.06	0.41	0.14	0.96	<5	127	2	118	28	79	1	<5	<1	<5	<20	0.01	<1
SS179	741.761	1330.909	4	<0.5	7	8	14	11	11	40	171	1.04	3.26	0.06	0.06	0.33	0.03	0.59	<5	127	1	141	20	35	2	<5	<1	<5	<20	<0.01	<1
SS180	739.095	1332.448	4	<0.5	10	60	17	17	13	48	140	1.12	4.87	0.08	0.05	0.37	0.06	0.73	<5	132	1	51	23	46	<1	<5	<1	<5	<20	<0.01	<1
SS181	733.527	1334.117	1	<0.5	8	14	15	16	13	36	106	1.23	3.70	0.06	0.03	0.32	0.06	0.58	<5	94	1	99	18	37	2	<5	<1	<5	<20	0.05	<1
SS182	730.428	1334.478	5	1.4	11	50	22	22	22	47	323	1.70	5.83	0.10	0.05	0.47	0.07	0.89	<5	162	2	106	29	57	2	<5	1.1	<5	<20	0.02	<1
SS183	725.293	1335.148	10	<0.5	19	9	27	28	25	72	484	3.56	6.67	0.11	0.05	0.33	0.05	0.88	5	117	1	160	24	95	1	<5	1.1	<5	<20	<0.01	<1
SS184	736.133	1366.070	5	<0.5	8	78	20	22	18	43	225	1.26	5.20	0.09	0.04	0.55	0.05	0.59	<5	171	1	76	27	39	<1	<5	<1	<5	<20	0.01	<1
SS185	732.781	1364.818	2	<0.5	8	25	25	13	12	33	283	0.75	2.86	0.09	0.56	0.45	0.04	0.48	<5	211	1	601	53	25	1	<5	<1	<5	<20	0.01	<1
SS186	734.075	1360.351	6	<0.5	10	14	19	22	17	43	124	2.23	5.14	0.11	0.03	0.39	0.07	0.72	<5	119	2	131	22	60	2	<5	<1	<5	<20	0.01	<1
SS187	734.276	1356.240	5	<0.5	13	23	23	28	21	43	161	2.21	6.38	0.12	0.02	0.47	0.12	0.83	<5	138	2	113	24	62	1	<5	<1	<5	<20	0.01	<1
SS188	731.912	1351.794	7	<0.5	24	75	24	16	32	36	784	3.58	5.18	0.08	0.06	0.28	0.08	1.62	<5	97	1	136	18	101	2	<5	<1	<5	<20	0.02	<1
SS189	730.840	1347.742	71	<0.5	10	9	17	19	16	49	114	1.47	3.92	0.07	0.02	0.33	0.07	0.69	<5	105	1	92	18	40	3	<5	3.6	<5	<20	<0.01	<1
SS190	732.337	1341.179	7	<0.5	6	9	15	14	15	38	262	0.89	3.27	0.06	0.04	0.44	0.05	0.60	<5	159	1	102	24	32	<1	<5	1	<5	<20	<0.01	<1
SS191	729.887	1343.493	10	<0.5	8	35	14	15	15	42	130	1.25	2.75	0.07	0.02	0.26	0.05	0.66	<5	95	1	94	15	37	2	<5	1.3	<5	<20	<0.01	<1
SS192	724.263	1339.395	100	<0.5	25	19	32	25	22	152	422	8.39	10.00	0.08	0.05	0.34	0.20	0.97	8	128	1	187	21	226	3	<5	1.4	<5	<20	0.02	<1
SS193	743.178	1343.047	9	<0.5	9	33	22	26	19	58	152	2.31	7.06	0.10	0.02	0.33	0.07	0.81	<5	87	1	106	18	57	1	<5	<1	<5	<20	<0.01	<1
SS194	738.474	1341.742	5	<0.5	10	7	15	19	15	73	152	1.60	5.28	0.10	0.04	0.49	0.04	0.71	<5	163	1	79	24	50	<1	<5	<1	<5	<20	<0.01	<1
SS195	742.048	1350.701	9	<0.5	9	49	23	16	15	47	263	1.37	4.36	0.11	0.50	0.47	0.04	0.61	<5	196	1	412	48	42	<1	<5	<1	<5	<20	0.01	<1
SS196	740.250	1353.331	94	<0.5	18	18	30	44	25	69	192	2.68	9.36	0.19	0.04	0.50	0.12	0.88	<5	147	2	140	31	74	2	<5	1	<5	<20	0.02	<1
SS197	741.887	1358.107	5	<0.5	12	77	26	26	21	87	204	3.01	5.87	0.16	0.08	0.44	0.10	0.81	<5	142	2	246	27	80	2	<5	1	<5	<20	0.03	<1
SS198	743.974	1371.807	8	<0.5	17	11	21	22	17	81	210	2.00	4.98	0.14	0.07	0.42	0.08	0.78	5	147	1	124	25	61	1	<5	1.2	<5	<20	0.01	<1
SS199	743.705	1367.342	11	<0.5	7	39	17	12	13	42	315	1.11	2.98	0.07	0.10	0.49	0.08	0.62	<5	170	1	137	26	36	1	<5	<1	<5	<20	0.04	<1
SS200	740.317	1365.635	9	<0.5	9	18	19	18	32	35	1351	1.33	4.97	0.08	0.03	0.54	0.07	0.66	<5	369	1	78	25	43	<1	<5	<1	<5	<20	<0.01	<1

Appendice 12 Le résultat de l'analyse chimique du sol (6/13)

Sample No.	UTM (km)		Au	Ag	Cu	Pb	Zn	Ni	Co	Cr	Mn	Fe	Al	Mg	Ca	K	Na	Ti	As	Ba	Be	P	Sr	V	Mo	Sb	Cd	Bi	W	Hg	CN
	Easting	Northing	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
SS201	615.457	1371.081	21	<0.5	9	2	14	13	4	29	130	0.97	3.00	0.06	0.05	0.33	0.04	0.16	<5	140	0.5	60	22	18	3	5	<0.5	<2	<10	<0.01	<1
SS202	620.041	1372.249	95	<0.5	13	<2	10	11	3	26	100	1.23	3.69	0.05	0.02	0.18	0.02	0.23	<5	70	<0.5	60	14	27	<1	<5	<0.5	<2	<10	<0.01	<1
SS203	625.442	1370.839	177	<0.5	11	8	18	20	6	35	170	1.31	4.03	0.08	0.05	0.44	0.04	0.19	<5	170	0.5	50	25	20	1	<5	<0.5	<2	<10	<0.01	<1
SS204	629.433	1369.797	217	<0.5	16	<2	20	25	7	41	115	1.46	5.24	0.10	0.07	0.39	0.03	0.28	<5	140	0.5	90	29	31	<1	<5	<0.5	<2	<10	<0.01	<1
SS205	632.098	1366.686	24	<0.5	21	4	48	17	7	42	480	1.12	3.60	0.23	3.80	0.48	0.04	0.42	<5	390	1	1560	233	39	3	10	<0.5	<2	<10	<0.01	<1
SS206	634.760	1371.208	28	<0.5	11	12	18	22	7	46	145	2.00	5.62	0.10	0.11	0.41	0.03	0.29	<5	160	0.5	120	34	36	<1	10	<0.5	<2	<10	0.08	<1
SS207	640.111	1370.959	60	<0.5	12	<2	16	18	6	41	85	1.88	5.03	0.09	0.04	0.44	0.03	0.34	<5	170	1	60	28	46	<1	10	<0.5	<2	<10	<0.01	<1
SS208	644.298	1367.620	30	0.5	13	10	18	18	6	32	160	1.44	5.21	0.08	0.04	0.46	0.04	0.33	<5	180	0.5	80	29	35	<1	<5	<0.5	<2	<10	<0.01	<1
SS209	645.840	1370.788	55	<0.5	12	14	18	24	5	35	70	1.44	6.34	0.08	0.01	0.33	0.03	0.24	5	120	0.5	60	25	30	<1	5	<0.5	<2	<10	<0.01	<1
SS210	648.797	1370.050	16	<0.5	22	22	28	34	8	59	130	2.18	7.47	0.14	0.06	0.30	0.03	0.55	5	120	1	120	29	64	<1	15	<0.5	<2	<10	<0.01	<1
SS211	653.904	1370.297	16	0.5	10	<2	12	9	<1	25	80	0.77	2.55	0.06	0.04	0.41	0.04	0.19	<5	170	0.5	50	26	18	<1	<5	<0.5	<2	<10	<0.01	<1
SS212	653.238	1362.885	21	<0.5	11	2	18	16	5	36	110	1.74	4.40	0.09	0.02	0.32	0.03	0.24	5	110	0.5	80	22	31	<1	<5	<0.5	4	<10	0.01	<1
SS213	646.656	1365.012	17	<0.5	12	<2	18	22	3	49	95	1.39	3.89	0.08	0.06	0.38	0.03	0.20	<5	150	0.5	100	26	29	3	<5	<0.5	4	<10	<0.01	<1
SS214	645.824	1360.951	21	<0.5	13	8	20	17	7	58	260	2.65	6.17	0.10	0.11	0.43	0.04	0.38	5	200	0.5	130	32	61	<1	<5	<0.5	<2	<10	0.01	<1
SS215	643.395	1357.735	14	<0.5	11	<2	16	12	5	31	150	1.20	3.92	0.07	0.12	0.34	0.04	0.17	15	260	0.5	120	31	19	<1	5	<0.5	4	<10	<0.01	<1
SS216	638.895	1355.700	25	<0.5	9	<2	14	14	5	23	100	0.97	3.89	0.07	0.07	0.38	0.04	0.14	<5	160	0.5	50	28	15	<1	5	<0.5	<2	<10	<0.01	<1
SS217	637.308	1351.801	17	0.5	13	18	16	14	5	29	135	1.45	4.86	0.08	0.08	0.28	0.03	0.18	10	110	0.5	70	30	22	<1	<5	<0.5	8	<10	<0.01	<1
SS218	643.760	1354.183	25	0.5	14	14	14	16	3	73	85	4.01	6.58	0.06	0.05	0.24	0.02	0.39	5	90	1	100	23	94	<1	<5	<0.5	<2	<10	<0.01	<1
SS219	647.736	1356.633	16	<0.5	10	<2	24	15	5	28	135	1.05	3.77	0.09	0.21	0.41	0.04	0.18	<5	160	0.5	80	35	20	<1	<5	<0.5	<2	<10	<0.01	<1
SS220	650.640	1360.380	19	0.5	17	<2	20	20	4	38	135	1.51	5.07	0.09	0.05	0.29	0.03	0.26	<5	100	0.5	70	23	27	<1	5	<0.5	<2	<10	<0.01	<1
SS221	636.951	1365.822	13	<0.5	10	<2	14	18	4	39	85	1.74	4.22	0.08	0.02	0.30	0.03	0.22	5	100	0.5	80	22	27	<1	<5	<0.5	<2	<10	<0.01	<1
SS222	642.414	1363.166	15	0.5	14	<2	18	22	5	46	90	1.59	5.30	0.09	0.04	0.23	0.02	0.34	<5	90	0.5	120	22	37	<1	5	<0.5	<2	<10	<0.01	<1
SS223	609.161	1362.139	16	0.5	26	20	20	31	45	221	3200	12.88	6.20	0.06	0.04	0.22	0.01	0.37	20	420	1.5	430	26	327	2	<5	<0.5	<2	<10	<0.01	<1
SS224	611.252	1365.251	17	<0.5	10	4	14	9	5	36	200	1.74	4.05	0.07	0.05	0.26	0.03	0.27	<5	110	0.5	120	27	37	<1	5	<0.5	<2	<10	<0.01	<1
SS225	615.881	1366.242	15	<0.5	19	<2	16	17	4	84	195	3.07	5.39	0.08	0.04	0.27	0.03	0.44	5	130	0.5	100	21	81	1	<5	<0.5	<2	<10	<0.01	<1
SS226	620.288	1366.809	16	<0.5	16	10	14	15	5	59	100	2.03	4.51	0.08	0.02	0.33	0.03	0.28	<5	160	0.5	30	19	42	<1	<5	<0.5	<2	<10	<0.01	<1
SS227	626.420	1364.164	15	<0.5	25	12	42	16	6	49	260	1.55	4.41	0.14	0.62	0.37	0.04	0.39	5	200	0.5	610	66	47	<1	<5	<0.5	<2	<10	<0.01	<1
SS228	630.661	1361.420	16	<0.5	11	2	18	9	4	33	170	0.89	2.67	0.07	0.24	0.30	0.03	0.31	<5	140	<0.5	350	32	27	1	15	<0.5	<2	<10	<0.01	<1
SS229	637.985	1359.647	23	0.5	14	10	22	20	8	37	580	1.68	4.91	0.09	0.10	0.44	0.04	0.33	<5	280	0.5	240	35	33	1	15	<0.5	<2	<10	<0.01	<1
SS230	621.177	1299.687	15	1.5	18	30	24	17	5	104	210	7.97	7.11	0.09	0.06	0.24	0.03	0.40	130	110	1.5	290	37	167	4	<5	<0.5	<2	<10	0.02	<1
SS231	617.909	1294.055	9	0.5	20	20	36	15	6	44	215	1.54	5.47	0.10	0.44	0.26	0.03	0.45	<5	180	1.5	970	62	53	<1	<5	<0.5	<2	<10	<0.01	<1
SS232	615.449	1289.958	8	1.5	17	28	20	19	3	183	215	7.65	8.13	0.08	0.09	0.15	0.02	0.53	45	70	1	190	28	175	<1	5	<0.5	4	<10	0.01	<1
SS233	613.999	1286.707	9	<0.5	17	26	22	22	7	50	110	1.77	7.22	0.08	0.15	0.24	0.03	0.50	5	110	1.5	160	32	57	1	5	<0.5	<2	10	<0.01	<1
SS234	610.543	1283.532	12	<0.5	11	8	22	15	5	29	220	1.20	4.44	0.09	0.12	0.31	0.04	0.28	5	110	1	160	27	26	<1	10	<0.5	<2	<10	<0.01	<1
SS235	610.042	1288.907	10	0.5	18	<2	18	19	5	46	185	1.98	5.28	0.07	0.04	0.28	0.03	0.38	10	150	0.5	90	25	51	<1	10	<0.5	<2	<10	<0.01	<1
SS236	619.151	1318.472	9	<0.5	11	24	14	15	4	48	105	1.32	3.95	0.07	0.05	0.28	0.03	0.24	<5	130	0.5	70	29	31	<1	15	<0.5	<2	<10	<0.01	<1
SS237	617.673	1314.154	9	0.5	12	40	14	19	6	489	180	7.56	3.63	0.07	0.04	0.18	0.03	0.39	5	80	0.5	440	22	199	<1	<5	<0.5	<2	<10	<0.01	<1
SS238	616.062	1309.910	10	0.5	16	6	44	27	7	72	295	1.47	4.41	0.12	0.30	0.29	0.04	0.36	<5	140	0.5	320	43	39	1	<5	<0.5	2	<10	<0.01	<1
SS239	614.358	1306.279	12	<0.5	63	20	28	24	6	396	370	12.72	5.60	0.08	0.07	0.21	0.03	0.38	45	100	1	500	29	431	7	<5	<0.5	<2	<10	0.02	<1
SS240	612.795	1302.481	12	<0.5	28	32	38	25	8	111	295	3.91	6.36	0.12	0.18	0.41	0.03	0.51	40	200	0.5	380	41	125	<1	<5	<0.5	<2	<10	0.01	<1

Appendice 12 Le résultat de l'analyse chimique du sol (7/13)

Sample No.	UTM (km)		Au	Ag	Cu	Pb	Zn	Ni	Co	Cr	Mn	Fe	Al	Mg	Ca	K	Na	Ti	As	Ba	Be	P	Sr	V	Mo	Sb	Cd	Bi	W	Hg	CN
	Eastings	Northing	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
SS241	616.994	1303.005	13	<0.5	19	8	20	67	12	152	255	1.84	4.24	0.10	0.05	0.39	0.05	0.34	15	210	1	130	26	46	8	<5	<0.5	<2	<10	0.01	<1
SS242	614.162	1297.630	11	1	23	14	28	59	15	184	380	3.65	6.25	0.12	0.04	0.28	0.02	0.61	5	120	1	200	26	104	6	10	<0.5	<2	<10	<0.01	<1
SS243	613.924	1294.316	9	0.5	29	28	20	27	8	226	480	8.73	6.79	0.09	0.21	0.32	0.03	0.36	60	160	0.5	410	42	232	3	<5	<0.5	<2	<10	0.02	<1
SS244	610.353	1294.340	14	0.5	24	28	22	31	17	70	335	2.64	7.14	0.11	0.03	0.57	0.03	0.56	<5	300	1	100	30	84	1	<5	<0.5	<2	<10	<0.01	<1
SS245	613.548	1314.954	14	<0.5	13	2	18	16	4	32	95	1.07	4.59	0.07	0.08	0.25	0.03	0.29	5	110	0.5	70	22	28	<1	<5	<0.5	<2	<10	<0.01	<1
SS246	612.845	1318.573	10	<0.5	20	12	22	19	13	44	400	1.71	5.28	0.11	0.14	0.52	0.04	0.40	<5	430	1	180	45	47	<1	<5	<0.5	<2	<10	<0.01	<1
SS247	615.998	1322.653	12	<0.5	14	4	16	13	6	35	175	1.27	3.95	0.07	0.04	0.32	0.03	0.24	<5	160	0.5	100	22	28	<1	5	<0.5	<2	<10	<0.01	<1
SS248	618.596	1326.243	8	<0.5	15	14	26	15	10	47	475	1.50	3.70	0.10	0.07	0.40	0.05	0.28	5	210	1	190	30	28	<1	<5	<0.5	<2	<10	<0.01	<1
SS249	614.548	1329.687	7	<0.5	10	28	16	14	4	62	180	1.38	3.93	0.07	0.06	0.36	0.04	0.25	<5	170	0.5	90	28	28	1	<5	<0.5	2	<10	<0.01	<1
SS250	614.800	1336.889	9	<0.5	20	18	14	17	5	176	305	6.08	4.92	0.09	0.08	0.23	0.03	0.43	10	90	0.5	220	24	145	<1	<5	<0.5	<2	<10	<0.01	<1
SS251	608.699	1334.986	13	0.5	35	20	18	28	6	49	95	1.41	6.77	0.09	0.02	0.30	0.03	0.46	5	110	1	70	26	38	<1	<5	<0.5	<2	10	<0.01	<1
SS252	610.339	1340.255	10	<0.5	22	30	14	14	3	32	225	1.48	3.99	0.08	0.06	0.41	0.04	0.26	<5	140	0.5	110	28	25	<1	<5	<0.5	8	<10	<0.01	<1
SS253	613.969	1344.713	11	<0.5	22	30	18	31	3	57	150	1.87	5.19	0.09	0.13	0.32	0.04	0.36	<5	110	0.5	160	27	39	3	<5	<0.5	<2	<10	<0.01	<1
SS254	617.185	1344.759	15	0.5	26	32	22	28	8	182	410	5.35	6.97	0.09	0.10	0.27	0.03	0.54	<5	110	1	150	23	121	<1	<5	<0.5	<2	10	<0.01	<1
SS255	619.883	1346.854	12	0.5	31	30	26	34	15	65	255	2.33	8.23	0.12	0.04	0.61	0.04	0.59	5	290	1.5	80	34	70	<1	<5	<0.5	<2	10	0.01	<1
SS256	618.333	1350.838	15	0.5	19	34	24	27	4	56	250	1.52	4.79	0.10	0.16	0.43	0.05	0.32	5	170	0.5	150	34	32	<1	<5	<0.5	<2	<10	<0.01	<1
SS257	614.408	1350.182	13	1	19	26	18	28	2	115	255	5.30	7.56	0.07	0.07	0.18	0.03	0.47	<5	70	1	150	30	109	2	5	<0.5	<2	<10	0.01	<1
SS258	609.993	1350.507	11	0.5	19	24	20	40	2	124	185	7.46	7.47	0.06	0.13	0.34	0.03	0.37	5	70	1	170	22	140	4	<5	<0.5	<2	<10	<0.01	<1
SS259	609.493	1354.518	10	0.5	18	40	68	14	3	39	210	1.72	4.27	0.09	0.26	0.36	0.04	0.39	<5	140	0.5	550	35	44	<1	<5	<0.5	<2	<10	0.01	<1
SS260	612.344	1358.342	10	<0.5	12	22	12	10	4	25	135	0.71	2.95	0.06	0.05	0.45	0.05	0.15	<5	150	0.5	20	25	13	<1	<5	<0.5	<2	<10	<0.01	<1
SS261	619.678	1362.619	13	<0.5	17	24	16	18	5	67	120	3.46	4.15	0.11	0.06	0.33	0.05	0.40	<5	120	0.5	160	25	82	<1	<5	<0.5	<2	<10	<0.01	<1
SS262	622.701	1361.276	12	<0.5	18	18	20	24	8	36	150	1.66	6.75	0.11	0.05	0.41	0.04	0.32	<5	130	0.5	90	32	29	<1	5	<0.5	<2	<10	<0.01	<1
SS263	627.666	1358.160	13	<0.5	13	16	18	15	2	42	220	2.42	4.30	0.07	0.08	0.22	0.03	0.33	20	80	0.5	180	22	41	<1	5	<0.5	<2	10	<0.01	<1
SS264	632.481	1356.065	10	<0.5	11	26	12	10	2	35	160	2.26	4.78	0.06	0.04	0.22	0.03	0.40	<5	90	1	100	25	40	2	<5	<0.5	<2	<10	<0.01	<1
SS265	629.871	1353.426	13	<0.5	13	12	14	16	4	29	120	1.27	5.23	0.07	0.04	0.32	0.03	0.31	<5	110	0.5	40	23	24	<1	5	<0.5	<2	<10	<0.01	<1
SS266	633.196	1350.670	15	0.5	19	20	24	14	5	37	520	2.44	4.30	0.09	0.10	0.38	0.05	0.31	<5	170	0.5	110	29	28	<1	<5	<0.5	2	<10	<0.01	<1
SS267	631.871	1347.356	18	<0.5	17	38	24	16	3	31	205	1.32	4.77	0.10	0.55	0.36	0.04	0.36	<5	150	0.5	470	53	35	<1	<5	<0.5	<2	<10	<0.01	<1
SS268	627.096	1345.279	21	<0.5	10	24	16	16	5	27	145	0.91	3.83	0.08	0.07	0.41	0.04	0.18	<5	130	0.5	60	26	14	<1	<5	<0.5	<2	<10	<0.01	<1
SS269	626.606	1349.777	16	<0.5	12	22	14	16	4	29	180	1.08	4.17	0.08	0.05	0.42	0.04	0.22	<5	140	0.5	50	30	18	<1	<5	<0.5	2	<10	<0.01	<1
SS270	624.749	1354.138	15	<0.5	17	30	20	25	5	45	100	1.98	7.06	0.09	0.04	0.42	0.03	0.48	<5	130	1	70	37	58	<1	<5	<0.5	<2	<10	0.01	<1
SS271	623.267	1357.681	13	0.5	10	22	16	10	2	27	140	0.95	2.64	0.06	0.06	0.31	0.04	0.23	<5	110	<0.5	90	23	20	<1	<5	<0.5	8	<10	<0.01	<1
SS272	620.046	1357.267	24	<0.5	11	18	14	13	3	31	150	1.48	3.75	0.07	0.05	0.29	0.03	0.21	5	100	0.5	90	23	24	<1	<5	<0.5	<2	<10	<0.01	<1
SS273	610.565	1322.850	17	<0.5	23	28	26	37	7	55	185	2.30	7.11	0.12	0.05	0.35	0.03	0.45	<5	120	1	110	30	54	<1	<5	<0.5	<2	10	<0.01	<1
SS274	623.222	1341.965	12	<0.5	9	30	12	13	3	29	150	0.76	2.91	0.06	0.04	0.38	0.04	0.32	<5	130	0.5	60	22	22	<1	<5	<0.5	<2	<10	<0.01	<1
SS275	621.952	1350.565	17	0.5	15	22	18	21	6	41	145	2.08	5.59	0.10	0.02	0.32	0.03	0.32	<5	120	0.5	80	28	36	<1	<5	<0.5	<2	<10	0.01	<1
SS276	616.472	1361.867	11	0.5	22	34	18	22	5	138	330	6.52	6.44	0.11	0.19	0.41	0.04	0.48	15	180	0.5	200	38	145	<1	5	<0.5	<2	<10	0.01	<1
SS277	616.714	1356.070	15	<0.5	23	42	72	25	3	156	275	6.00	7.43	0.10	0.20	0.37	0.03	0.47	25	140	0.5	310	33	142	5	5	<0.5	<2	10	0.01	<1
SS278	620.367	1340.622	9	<0.5	14	36	18	17	6	47	225	1.85	4.20	0.09	0.13	0.38	0.04	0.23	<5	140	0.5	100	32	27	<1	<5	<0.5	<2	<10	<0.01	<1
SS279	619.816	1337.461	17	<0.5	15	32	18	14	5	49	205	2.35	4.27	0.09	0.09	0.37	0.04	0.27	<5	140	0.5	90	27	37	<1	<5	<0.5	18	<10	<0.01	<1
SS280	618.769	1331.491	14	0.5	21	32	20	28	10	66	180	3.10	8.52	0.10	0.06	0.62	0.05	0.49	5	240	1.5	60	42	62	<1	20	<0.5	6	10	0.01	<1

Appendice 12 Le résultat de l'analyse chimique du sol (8/13)

Sample No.	UTM (km)		Au	Ag	Cu	Pb	Zn	Ni	Co	Cr	Mn	Fe	Al	Mg	Ca	K	Na	Ti	As	Ba	Be	P	Sr	V	Mo	Sb	Cd	Bi	W	Hg	CN
	Easting	Northing	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
SS281	635.961	1297.056	16	0.5	24	24	18	18	6	70	175	2.87	4.41	0.07	0.04	0.22	0.03	0.39	15	90	0.5	180	17	71	5	<5	<0.5	<2	<10	<0.01	<1
SS282	637.390	1291.105	14	<0.5	24	8	10	9	3	23	140	0.89	1.84	0.04	0.04	0.15	0.03	0.20	<5	60	0.5	120	10	15	<1	<5	<0.5	2	<10	<0.01	<1
SS283	638.730	1286.178	16	<0.5	20	16	8	3	3	20	105	1.18	2.04	0.03	0.03	0.13	0.02	0.16	<5	40	0.5	120	10	20	<1	<5	<0.5	<2	<10	<0.01	<1
SS284	639.094	1281.161	16	1.5	21	16	16	9	3	27	260	1.39	3.21	0.06	0.05	0.65	0.05	0.28	<5	180	3	170	33	25	<1	<5	<0.5	<2	<10	<0.01	<1
SS285	646.822	1281.873	17	1	21	8	8	1	3	22	90	1.44	1.74	0.03	0.03	0.10	0.02	0.15	<5	30	<0.5	120	8	25	<1	<5	<0.5	<2	<10	<0.01	<1
SS286	649.582	1286.898	16	0.5	18	16	16	17	7	44	230	2.27	4.12	0.11	0.08	0.24	0.05	0.31	<5	100	0.5	210	23	45	<1	<5	<0.5	<2	<10	0.01	<1
SS287	656.766	1295.677	16	2	22	18	20	20	6	44	325	2.21	5.03	0.12	0.39	0.25	0.03	0.44	<5	140	0.5	240	48	58	1	<5	<0.5	<2	<10	0.02	<1
SS288	660.247	1298.555	15	<0.5	22	8	14	18	6	130	310	4.52	5.34	0.07	0.05	0.30	0.03	0.39	<5	150	0.5	180	17	119	<1	<5	<0.5	2	<10	<0.01	<1
SS289	661.093	1294.187	17	0.5	20	28	14	24	5	97	85	2.41	7.14	0.05	0.01	0.13	0.02	0.44	10	60	0.5	150	20	71	<1	<5	<0.5	2	<10	<0.01	<1
SS290	660.944	1289.492	16	0.5	17	28	12	16	5	43	175	1.07	3.06	0.05	0.03	0.16	0.03	0.34	<5	70	0.5	110	13	26	<1	5	<0.5	<2	<10	<0.01	<1
SS291	658.993	1286.126	81	0.5	19	18	16	19	4	80	290	3.08	5.66	0.08	0.07	0.21	0.03	0.45	5	80	0.5	210	21	79	4	5	<0.5	18	<10	0.01	<1
SS292	662.164	1283.086	56	1.5	19	18	16	16	5	25	65	1.09	4.79	0.06	0.03	0.38	0.03	0.27	<5	120	1	110	16	26	<1	<5	<0.5	2	<10	<0.01	<1
SS293	639.575	1307.872	57	0.5	15	16	14	9	4	25	220	1.05	2.86	0.06	0.05	0.27	0.04	0.24	<5	120	0.5	90	17	20	1	<5	<0.5	<2	<10	<0.01	<1
SS294	644.013	1309.050	40	0.5	19	26	18	13	5	47	290	1.94	3.74	0.07	0.12	0.28	0.04	0.33	<5	130	0.5	160	23	37	<1	<5	<0.5	<2	<10	<0.01	<1
SS295	648.565	1310.888	22	0.5	17	24	16	12	6	101	310	4.03	6.27	0.08	0.06	0.26	0.03	0.52	<5	90	0.5	230	18	102	2	10	<0.5	<2	<10	0.01	<1
SS296	655.232	1310.628	47	1	11	12	12	12	6	27	180	0.90	2.70	0.06	0.04	0.27	0.03	0.27	<5	90	0.5	90	18	19	3	<5	<0.5	16	<10	<0.01	<1
SS297	659.963	1310.351	48	<0.5	19	22	16	16	7	77	325	2.20	4.25	0.08	0.19	0.21	0.03	0.30	<5	110	0.5	250	27	45	<1	<5	<0.5	10	<10	0.01	<1
SS298	650.328	1307.007	79	1.5	13	16	12	11	4	62	165	1.77	3.54	0.06	0.04	0.25	0.03	0.29	<5	90	0.5	130	17	63	3	<5	<0.5	2	<10	<0.01	<1
SS299	647.745	1299.586	30	1	15	22	14	15	5	36	180	1.55	4.05	0.08	0.05	0.24	0.03	0.27	<5	90	0.5	120	20	31	<1	<5	<0.5	<2	<10	<0.01	<1
SS300	652.560	1301.356	21	0.5	11	14	10	7	4	40	195	1.20	2.91	0.05	0.07	0.21	0.04	0.28	<5	80	0.5	110	20	25	<1	<5	<0.5	6	<10	<0.01	<1
SS301	656.361	1300.929	34	1.5	22	28	26	36	9	56	155	3.73	8.33	0.12	0.02	0.34	0.02	0.67	<5	100	1	210	29	84	3	15	<0.5	<2	<10	0.01	<1
SS302	660.086	1303.767	32	1.5	18	28	18	15	8	61	405	3.66	5.52	0.08	0.07	0.29	0.03	0.46	<5	130	0.5	290	33	85	<1	<5	<0.5	<2	<10	0.01	<1
SS303	655.542	1305.136	31	1.5	15	18	18	22	6	48	175	1.73	3.83	0.09	0.04	0.25	0.03	0.30	<5	90	0.5	200	23	34	<1	<5	<0.5	<2	<10	0.01	<1
SS304	653.299	1289.802	24	0.5	11	22	14	9	3	27	235	0.94	2.69	0.06	0.06	0.31	0.04	0.21	5	120	0.5	100	23	15	<1	5	<0.5	12	<10	<0.01	<1
SS305	644.369	1290.776	48	<0.5	10	20	10	4	1	18	100	0.68	2.20	0.04	0.03	0.16	0.03	0.16	<5	50	0.5	80	12	9	1	<5	<0.5	12	<10	<0.01	<1
SS306	643.501	1287.528	22	1.5	12	20	14	16	5	25	90	1.15	3.70	0.08	0.03	0.22	0.03	0.26	<5	80	0.5	100	17	18	<1	<5	<0.5	<2	<10	<0.01	<1
SS307	642.393	1297.895	32	0.5	15	14	20	17	5	34	140	1.55	5.22	0.09	0.07	0.20	0.03	0.30	<5	70	0.5	200	23	26	<1	10	<0.5	<2	<10	<0.01	<1
SS308	661.066	1315.168	36	1	21	24	16	18	5	62	175	1.34	3.93	0.07	0.05	0.36	0.04	0.32	<5	150	0.5	130	32	27	3	15	<0.5	16	<10	<0.01	<1
SS309	660.090	1319.259	165	0.5	10	18	14	6	5	26	140	0.97	3.10	0.06	0.03	0.46	0.04	0.26	5	110	0.5	130	21	15	<1	<5	<0.5	<2	<10	<0.01	<1
SS310	659.228	1323.025	25	1.5	17	24	14	15	6	37	145	1.20	5.37	0.07	0.03	0.32	0.03	0.31	<5	120	0.5	110	19	24	<1	<5	<0.5	6	<10	<0.01	<1
SS311	654.841	1321.290	7	<0.5	11	18	14	6	5	30	225	1.24	3.30	0.06	0.05	0.32	0.04	0.27	<5	110	0.5	120	21	22	3	<5	<0.5	<2	<10	<0.01	<1
SS312	655.614	1317.509	6	0.5	11	22	14	17	6	29	120	1.27	4.57	0.07	0.04	0.25	0.03	0.32	<5	80	0.5	140	22	28	1	10	<0.5	<2	<10	<0.01	<1
SS313	636.246	1302.583	7	<0.5	15	26	18	12	3	38	205	1.68	2.91	0.09	0.06	0.25	0.04	0.34	<5	90	0.5	220	19	34	<1	<5	<0.5	6	<10	0.01	<1
SS314	642.052	1304.160	6	0.5	11	30	14	11	1	39	175	1.59	3.68	0.06	0.05	0.26	0.04	0.28	<5	80	1	120	15	26	<1	<5	<0.5	<2	<10	<0.01	<1
SS315	639.402	1299.476	6	1.5	28	28	22	26	10	63	205	3.68	8.07	0.09	0.05	0.42	0.04	0.57	<5	150	1.5	190	31	94	<1	<5	<0.5	<2	<10	0.01	<1
SS316	643.310	1294.227	5	0.5	15	20	20	14	5	32	395	1.61	4.25	0.09	0.07	0.26	0.04	0.31	<5	100	0.5	180	22	28	1	5	<0.5	<2	<10	0.01	<1
SS317	647.930	1291.925	7	1	12	18	16	13	4	31	260	1.40	3.64	0.07	0.06	0.30	0.04	0.31	<5	100	0.5	180	21	24	<1	<5	<0.5	<2	<10	0.01	<1
SS318	652.450	1295.824	12	0.5	16	26	18	15	5	32	155	1.41	4.73	0.08	0.03	0.23	0.03	0.31	<5	80	0.5	130	18	25	<1	<5	<0.5	<2	<10	<0.01	<1
SS319	656.467	1281.464	14	<0.5	22	48	18	10	3	47	150	2.15	4.73	0.07	0.05	0.31	0.04	0.41	<5	100	1	170	21	49	<1	<5	<0.5	<2	<10	<0.01	<1
SS320	654.619	1286.057	15	0.5	16	44	22	6	1	36	325	2.02	3.53	0.06	0.10	0.71	0.05	0.43	<5	250	1	210	37	36	<1	<5	<0.5	8	<10	<0.01	<1

Appendice 12 Le résultat de l'analyse chimique du sol (9/13)

Sample No.	UTM (km)		Au	Ag	Cu	Pb	Zn	Ni	Co	Cr	Mn	Fe	Al	Mg	Ca	K	Na	Ti	As	Ba	Be	P	Sr	V	Mo	Sb	Cd	Bi	W	Hg	CN
	Eastings	Northing	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
SS321	656.641	1360.966	7	<0.5	17	28	18	13	5	92	190	5.46	4.87	0.11	0.06	0.28	0.04	0.44	<5	110	0.5	230	22	146	1	5	<0.5	<2	<10	0.01	<1
SS322	658.074	1365.225	9	1.5	15	26	18	14	5	39	240	1.25	4.02	0.08	0.21	0.42	0.04	0.37	<5	170	0.5	180	27	32	4	5	<0.5	<2	<10	<0.01	<1
SS323	660.160	1369.905	7	0.5	12	24	18	17	6	35	100	1.35	5.10	0.09	0.05	0.53	0.04	0.32	<5	170	0.5	100	29	30	1	<5	<0.5	<2	<10	<0.01	<1
SS324	662.341	1364.877	7	0.5	15	20	14	14	6	33	130	1.65	3.63	0.09	0.03	0.30	0.03	0.31	<5	100	0.5	140	19	31	<1	5	<0.5	<2	<10	<0.01	<1
SS325	646.585	1350.219	8	0.5	16	14	26	18	6	42	235	1.46	4.74	0.11	0.62	0.43	0.04	0.43	5	170	0.5	560	53	40	1	<5	<0.5	<2	<10	<0.01	<1
SS326	654.973	1356.627	7	<0.5	12	24	14	4	6	51	325	1.92	3.58	0.08	0.07	0.37	0.05	0.42	<5	110	0.5	190	20	49	<1	<5	<0.5	<2	<10	0.01	<1
SS327	660.711	1359.244	6	1	32	22	24	18	11	65	770	2.89	5.02	0.11	0.08	0.78	0.06	0.60	<5	240	0.5	160	28	52	3	<5	<0.5	<2	<10	0.01	<1
SS328	659.477	1356.721	<5	0.5	14	30	20	20	7	35	425	1.60	4.65	0.11	0.09	0.44	0.05	0.38	<5	170	0.5	180	29	38	<1	<5	<0.5	18	<10	0.01	<1
SS329	658.152	1352.325	<5	1	11	24	16	13	3	31	165	1.03	4.09	0.08	0.04	0.50	0.04	0.30	10	160	0.5	120	25	24	<1	<5	<0.5	<2	<10	<0.01	<1
SS330	660.027	1350.114	<5	0.5	25	38	24	29	15	117	480	3.08	4.90	0.09	0.07	0.68	0.05	0.56	5	250	0.5	170	25	78	2	<5	<0.5	<2	<10	<0.01	<1
SS331	650.278	1353.192	<5	1	10	22	14	13	4	26	105	0.96	4.13	0.06	0.05	0.33	0.03	0.24	5	110	0.5	120	22	19	1	<5	<0.5	<2	<10	<0.01	<1
SS332	651.944	1351.107	12	1.5	14	18	18	16	5	48	175	1.89	3.52	0.09	0.03	0.27	0.03	0.31	<5	100	0.5	160	18	32	<1	<5	<0.5	<2	<10	<0.01	<1
SS333	654.426	1345.110	<5	1.5	22	28	28	16	6	48	295	1.79	4.33	0.09	0.21	0.31	0.03	0.43	<5	180	0.5	520	33	52	<1	<5	<0.5	<2	<10	<0.01	<1
SS334	651.152	1346.244	20	<0.5	16	28	22	20	7	77	410	4.23	5.93	0.14	0.08	0.38	0.04	0.67	<5	120	0.5	360	30	109	<1	15	<0.5	6	<10	0.01	<1
SS335	647.094	1346.465	27	0.5	11	26	14	12	5	43	205	1.66	3.86	0.06	0.04	0.31	0.04	0.32	15	90	1	170	14	35	<1	<5	<0.5	8	<10	<0.01	<1
SS336	637.679	1345.832	12	0.5	15	18	14	19	6	47	245	1.61	3.82	0.06	0.05	0.26	0.03	0.35	<5	100	0.5	110	19	28	<1	5	<0.5	10	<10	<0.01	<1
SS337	642.575	1348.010	7	<0.5	29	20	30	20	7	76	605	3.20	4.23	0.08	0.08	0.24	0.03	0.52	<5	120	0.5	180	20	58	5	<5	<0.5	<2	<10	<0.01	<1
SS338	641.570	1344.919	5	0.5	26	18	26	19	9	255	515	6.26	4.71	0.14	0.07	0.32	0.04	0.81	5	110	0.5	410	25	191	2	10	<0.5	<2	<10	0.03	<1
SS339	640.797	1341.474	<5	1.5	17	22	16	22	6	48	130	1.80	5.68	0.08	0.07	0.42	0.03	0.40	<5	150	1	140	27	46	<1	5	<0.5	<2	<10	<0.01	<1
SS340	646.622	1341.733	11	<0.5	25	24	20	30	7	83	175	4.43	8.58	0.06	0.03	0.32	0.02	0.54	<5	100	2	160	24	114	3	15	<0.5	8	<10	0.01	<1
SS341	650.017	1337.191	<5	<0.5	56	24	22	25	14	102	550	10.39	5.85	0.07	0.06	0.27	0.01	0.81	5	100	1.5	270	18	367	1	<5	<0.5	<2	10	<0.01	<1
SS342	646.330	1331.885	45	0.5	15	22	16	16	5	52	225	1.81	4.10	0.07	0.09	0.34	0.03	0.42	<5	120	0.5	220	23	42	2	<5	<0.5	<2	<10	<0.01	<1
SS343	641.599	1332.970	61	0.5	14	16	16	22	6	54	165	2.62	6.98	0.08	0.03	0.29	0.03	0.48	<5	80	0.5	150	17	64	1	<5	<0.5	<2	<10	<0.01	<1
SS344	656.306	1339.180	<5	1.5	12	24	16	8	5	34	290	1.03	3.19	0.07	0.07	0.47	0.05	0.33	<5	190	0.5	150	28	27	<1	<5	<0.5	<2	<10	<0.01	<1
SS345	655.512	1335.613	<5	1	11	20	20	13	8	39	340	1.67	4.05	0.07	0.05	0.43	0.04	0.38	<5	180	0.5	140	24	39	5	5	<0.5	<2	<10	<0.01	<1
SS346	655.239	1331.073	<5	1	20	12	20	19	5	59	295	2.43	5.16	0.09	0.04	0.27	0.02	0.57	<5	90	0.5	160	19	56	<1	5	<0.5	12	<10	<0.01	<1
SS347	652.174	1332.475	5	1.5	14	20	16	15	5	43	285	1.67	3.45	0.08	0.07	0.28	0.03	0.32	<5	110	0.5	130	23	32	<1	<5	<0.5	<2	<10	<0.01	<1
SS348	644.658	1336.814	8	1	18	22	18	24	6	57	105	2.65	7.77	0.10	0.05	0.37	0.03	0.54	<5	110	1	160	29	65	<1	10	<0.5	<2	<10	<0.01	<1
SS349	631.161	1328.770	5	1	16	10	18	25	8	40	165	1.73	6.16	0.10	0.04	0.37	0.03	0.38	5	130	0.5	160	24	35	<1	5	<0.5	<2	<10	<0.01	<1
SS350	635.949	1328.299	5	0.5	13	20	16	16	5	53	160	2.05	4.86	0.07	0.03	0.38	0.04	0.43	<5	150	0.5	120	21	51	1	<5	<0.5	<2	<10	<0.01	<1
SS351	642.209	1329.598	5	<0.5	10	20	12	13	4	27	140	0.96	3.47	0.06	0.05	0.26	0.03	0.21	<5	90	0.5	100	17	16	<1	<5	<0.5	<2	<10	<0.01	<1
SS352	645.944	1327.443	<5	1	10	20	14	13	6	38	245	1.41	3.47	0.07	0.05	0.26	0.03	0.33	<5	100	0.5	130	19	31	<1	<5	<0.5	<2	<10	<0.01	<1
SS353	650.824	1328.122	5	0.5	12	26	16	13	5	39	255	1.45	4.58	0.08	0.06	0.41	0.04	0.30	<5	150	0.5	140	24	24	<1	5	<0.5	<2	<10	<0.01	<1
SS354	648.631	1323.511	<5	<0.5	12	38	14	12	4	44	205	1.69	4.57	0.07	0.07	0.29	0.04	0.31	<5	120	0.5	170	27	27	1	<5	<0.5	<2	<10	<0.01	<1
SS355	643.001	1323.685	<5	0.5	18	40	18	26	6	148	260	6.06	7.26	0.10	0.04	0.25	0.03	0.59	<5	100	1.5	290	24	145	<1	<5	<0.5	<2	<10	0.01	<1
SS356	636.620	1321.183	<5	0.5	14	10	12	8	4	35	155	1.08	3.01	0.06	0.03	0.22	0.03	0.17	5	100	0.5	50	15	15	<1	<5	<0.5	<2	<10	<0.01	<1
SS357	623.757	1322.146	<5	<0.5	22	18	42	18	6	43	370	1.87	3.53	0.11	0.59	0.24	0.03	0.38	<5	160	0.5	960	59	40	<1	<5	<0.5	4	<10	0.02	<1
SS358	630.626	1321.643	<5	<0.5	20	16	18	23	9	121	395	5.70	6.87	0.09	0.14	0.31	0.03	0.51	<5	190	0.5	270	28	135	3	15	<0.5	<2	<10	0.01	<1
SS359	635.422	1324.212	<5	0.5	15	30	16	17	6	38	155	1.82	4.63	0.10	0.05	0.26	0.03	0.22	15	120	0.5	150	20	30	1	<5	<0.5	<2	<10	<0.01	<1
SS360	629.125	1325.327	<5	<0.5	18	18	16	19	8	119	155	6.32	5.77	0.13	0.06	0.39	0.04	0.49	30	160	0.5	320	24	147	<1	<5	<0.5	<2	10	0.01	<1

Appendice 12 Le résultat de l'analyse chimique du sol (10/13)

Sample No.	UTM (km)		Au	Ag	Cu	Pb	Zn	Ni	Co	Cr	Mn	Fe	Al	Mg	Ca	K	Na	Ti	As	Ba	Be	P	Sr	V	Mo	Sb	Cd	Bi	W	Hg	CN	
	Eastings	Northing	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
SS361	623.954	1327.801	5	0.5	19	30	24	30	9	42	125	2.02	6.78	0.11	0.03	0.35	0.03	0.29	<5	130	0.5	160	23	35	4	<5	<0.5	<2	<10	<0.01	<1	
SS362	624.215	1316.927	<5	1	20	22	28	27	8	53	110	2.02	7.51	0.09	0.02	0.54	0.04	0.37	<5	190	1	110	26	47	<1	10	<0.5	20	<10	<0.01	<1	
SS363	627.652	1311.956	8	0.5	16	16	18	16	6	47	180	1.91	4.36	0.08	0.04	0.30	0.03	0.26	30	110	0.5	130	18	37	<1	<5	<0.5	<2	<10	<0.01	<1	
SS364	631.095	1308.424	<5	<0.5	15	18	16	15	4	32	140	1.31	2.92	0.07	0.04	0.25	0.04	0.16	<5	90	0.5	110	15	17	<1	5	<0.5	<2	<10	<0.01	<1	
SS365	628.260	1332.772	<5	0.5	16	26	18	16	6	56	300	2.20	4.92	0.11	0.09	0.44	0.04	0.36	<5	190	0.5	140	24	48	2	<5	<0.5	<2	<10	0.01	<1	
SS366	630.755	1335.534	<5	1	21	20	20	27	9	50	140	2.35	6.76	0.10	0.03	0.29	0.03	0.27	25	110	0.5	160	20	38	<1	<5	<0.5	<2	<10	<0.01	<1	
SS367	633.106	1332.468	6	1	15	28	22	20	5	37	135	1.61	6.32	0.09	0.03	0.40	0.03	0.33	<5	100	1.5	140	20	31	<1	<5	<0.5	<2	<10	<0.01	<1	
SS368	634.918	1336.430	7	0.5	11	12	12	13	5	26	85	0.67	3.20	0.05	0.03	0.38	0.04	0.10	<5	150	0.5	50	18	9	<1	<5	<0.5	<2	<10	<0.01	<1	
SS369	638.990	1336.357	5	0.5	11	28	14	12	5	26	145	0.88	3.42	0.06	0.05	0.34	0.04	0.12	<5	130	0.5	80	23	11	<1	<5	<0.5	<2	<10	<0.01	<1	
SS370	633.664	1340.650	<5	<0.5	22	20	20	21	10	62	450	2.35	4.30	0.08	0.06	0.31	0.04	0.20	<5	130	0.5	110	19	24	<1	<5	<0.5	<2	<10	0.01	<1	
SS371	629.756	1340.502	5	0.5	16	20	24	17	5	86	270	3.14	4.66	0.13	0.13	0.34	0.04	0.43	10	120	0.5	340	24	73	<1	<5	<0.5	<2	<10	0.01	<1	
SS372	623.520	1339.782	10	0.5	15	36	16	18	6	46	205	1.21	3.79	0.08	0.03	0.32	0.04	0.26	5	140	0.5	110	16	24	<1	<5	<0.5	<2	<10	<0.01	<1	
SS373	624.373	1334.771	5	0.5	17	24	18	23	6	41	115	1.56	5.06	0.09	0.04	0.29	0.03	0.26	5	120	0.5	110	21	27	3	<5	<0.5	<2	<10	<0.01	<1	
SS374	624.150	1331.528	14	0.5	19	24	18	18	7	59	280	2.89	5.26	0.11	0.06	0.46	0.04	0.31	<5	170	0.5	170	21	51	1	<5	<0.5	<2	<10	0.01	<1	
SS375	640.331	1312.782	18	<0.5	13	20	14	20	5	36	115	1.51	5.49	0.07	0.03	0.28	0.03	0.30	<5	90	0.5	130	19	31	<1	<5	<0.5	<2	<10	<0.01	<1	
SS376	644.477	1313.492	12	1.5	28	20	26	36	12	120	330	4.06	7.55	0.15	0.08	0.26	0.03	0.66	<5	100	0.5	310	30	114	1	<5	<0.5	<2	<10	0.02	<1	
SS377	647.631	1314.767	15	0.5	12	14	12	5	2	41	175	1.61	3.71	0.06	0.07	0.27	0.04	0.24	<5	80	0.5	170	16	31	<1	<5	<0.5	10	<10	<0.01	<1	
SS378	651.183	1318.195	13	0.5	13	26	12	9	4	35	135	1.82	5.78	0.07	0.05	0.24	0.03	0.25	10	70	0.5	120	14	30	3	<5	<0.5	<2	<10	<0.01	<1	
SS379	645.680	1316.647	15	1	13	24	12	12	4	60	165	3.71	6.47	0.08	0.06	0.29	0.03	0.41	<5	80	0.5	240	17	78	1	<5	<0.5	<2	<10	0.01	<1	
SS380	642.886	1319.376	16	2	92	32	42	42	39	455	1725	11.40	7.05	0.10	0.15	0.23	0.02	1.15	<5	130	1	340	24	375	<1	<5	<0.5	<2	<10	0.02	<1	
SS381	620.060	1290.854	22	1.5	12	20	16	17	4	39	90	1.33	5.04	0.08	0.05	0.28	0.02	0.31	5	100	1	130	23	34	<1	5	<0.5	<2	<10	<0.01	<1	
SS382	619.944	1288.496	19	0.5	10	40	14	8	4	27	200	0.91	3.35	0.06	0.06	0.40	0.04	0.19	5	130	2	110	26	16	2	<5	<0.5	<2	<10	<0.01	<1	
SS383	622.398	1288.936	11	1	14	18	14	16	5	32	115	1.61	4.55	0.07	0.07	0.21	0.03	0.27	5	90	0.5	180	22	31	<1	<5	<0.5	2	<10	<0.01	<1	
SS384	622.763	1285.775	75	1	13	32	18	21	7	30	170	1.52	5.31	0.08	0.05	0.22	0.03	0.30	<5	90	1.5	170	29	27	<1	<5	<0.5	<2	<10	<0.01	<1	
SS385	623.555	1282.386	10	0.5	12	38	14	15	6	32	245	1.40	4.73	0.07	0.06	0.28	0.03	0.23	<5	110	0.5	140	21	22	1	<5	<0.5	<2	<10	<0.01	<1	
SS386	630.382	1285.520	12	0.5	12	12	24	14	4	30	240	1.08	2.95	0.06	0.13	0.21	0.03	0.33	10	100	0.5	480	23	23	1	<5	<0.5	<2	<10	<0.01	<1	
SS387	627.518	1287.149	10	0.5	14	24	18	22	8	38	255	2.16	6.09	0.09	0.04	0.40	0.04	0.38	<5	140	1.5	190	27	39	3	<5	<0.5	2	<10	<0.01	<1	
SS388	622.757	1296.431	10	1	10	12	12	11	3	37	300	2.27	2.88	0.07	0.07	0.25	0.04	0.20	<5	80	1	190	20	35	<1	<5	<0.5	14	<10	<0.01	<1	
SS389	626.663	1300.274	9	0.5	11	18	14	15	1	35	165	1.61	4.33	0.08	0.04	0.23	0.03	0.31	<5	80	0.5	160	17	29	<1	<5	<0.5	<2	<10	<0.01	<1	
SS390	634.073	1290.985	11	1	13	22	16	20	6	50	290	2.27	4.90	0.09	0.07	0.29	0.03	0.31	5	110	0.5	180	23	44	<1	<5	<0.5	<2	<10	<0.01	<1	
SS391	629.590	1293.524	11	<0.5	20	30	20	25	7	40	140	1.51	6.14	0.10	0.02	0.30	0.03	0.32	15	120	1.5	120	20	28	<1	<5	<0.5	18	<10	<0.01	<1	
SS392	630.676	1300.241	12	<0.5	15	46	18	23	7	41	110	1.51	6.74	0.10	0.04	0.36	0.04	0.31	<5	110	1.5	160	23	30	1	<5	<0.5	<2	<10	<0.01	<1	
SS393	629.338	1303.949	15	0.5	11	32	14	14	4	49	180	2.80	5.83	0.09	0.04	0.30	0.03	0.35	5	80	1.5	200	21	51	<1	<5	<0.5	<2	<10	<0.01	<1	
SS394	625.169	1305.080	11	0.5	13	26	14	14	4	30	95	0.89	3.56	0.06	0.05	0.35	0.04	0.15	<5	120	1	100	23	14	<1	<5	<0.5	<2	<10	<0.01	<1	
SS395	623.234	1309.264	30	<0.5	21	32	16	25	5	86	185	4.12	6.01	0.11	0.09	0.27	0.03	0.39	20	110	0.5	220	24	92	3	<5	<0.5	<2	10	<10	<0.01	<1
SS396	635.231	1310.589	41	0.5	20	26	14	20	7	73	170	2.09	6.26	0.08	0.04	0.39	0.04	0.27	5	180	0.5	120	20	60	3	<5	<0.5	<2	<10	<0.01	<1	
SS397	637.211	1314.536	12	<0.5	16	40	12	15	4	45	110	1.30	6.37	0.09	0.03	0.56	0.05	0.26	<5	230	0.5	90	21	28	<1	<5	<0.5	<2	10	<10	<0.01	<1
SS398	631.795	1316.055	13	1	24	26	18	25	8	58	120	2.82	6.72	0.11	0.05	0.39	0.03	0.35	<5	150	0.5	190	21	56	<1	10	<0.5	<2	<10	<0.01	<1	
SS399	628.521	1317.185	23	0.5	23	26	18	26	8	149	220	9.67	6.02	0.13	0.08	0.35	0.05	0.44	55	130	1	480	25	226	4	<5	<0.5	<2	<10	0.02	<1	
SS400	631.309	1312.012	32	1.5	28	36	20	29	13	68	205	3.01	7.61	0.12	0.04	0.44	0.03	0.50	15	170	1.5	200	24	73	<1	<5	<0.5	<2	<10	0.01	<1	

Appendice 12 Le résultat de l'analyse chimique du sol (11/13)

Sample No.	UTM (km)		Au	Ag	Cu	Pb	Zn	Ni	Co	Cr	Mn	Fe	Al	Mg	Ca	K	Na	Ti	As	Ba	Be	P	Sr	V	Mo	Sb	Cd	Bi	W	Hg	CN
	Easting	Northing	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
SS401	724.720	1343.968	10	<0.5	12	18	24	21	7	41	195	1.38	5.37	0.10	0.07	0.46	0.05	0.33	<5	200	1.5	90	28	31	1	5	<0.5	6	<10	<0.01	<1
SS402	728.362	1346.595	5	0.5	17	10	22	26	10	40	255	1.48	5.68	0.11	0.10	0.46	0.04	0.33	15	180	1	110	33	34	<1	<5	<0.5	8	<10	<0.01	<1
SS403	725.869	1348.993	5	<0.5	15	10	18	20	6	34	165	1.09	4.61	0.08	0.05	0.33	0.03	0.28	5	140	0.5	60	24	24	<1	5	<0.5	8	10	<0.01	<1
SS404	725.629	1347.883	5	0.5	19	32	16	24	8	395	790	23.04	6.04	0.06	0.05	0.16	0.01	0.32	40	120	1.5	350	23	533	6	<5	<0.5	<2	<10	<0.01	<1
SS405	725.063	1345.990	5	<0.5	16	12	20	24	5	39	85	1.52	6.45	0.09	0.02	0.28	0.02	0.37	10	100	0.5	70	20	37	<1	5	<0.5	<2	<10	<0.01	<1
SS406	724.811	1345.143	5	<0.5	14	8	18	18	5	36	75	1.16	5.39	0.09	0.04	0.28	0.03	0.27	5	120	0.5	30	23	28	<1	5	<0.5	<2	<10	<0.01	<1
SS407	723.598	1343.531	5	<0.5	14	10	16	16	6	34	105	1.05	5.37	0.08	0.03	0.40	0.03	0.30	5	170	0.5	50	23	26	<1	<5	<0.5	<2	<10	<0.01	<1
SS408	721.541	1341.960	13	<0.5	36	36	24	25	10	276	400	7.69	7.44	0.08	0.02	0.19	0.01	0.76	20	80	1	120	20	234	<1	<5	<0.5	<2	<10	<0.01	<1
SS409	719.346	1338.692	12	<0.5	13	14	16	13	5	42	160	2.03	4.96	0.07	0.02	0.23	0.03	0.29	<5	100	0.5	90	20	32	3	<5	<0.5	<2	<10	0.02	<1
SS410	718.960	1337.435	17	<0.5	19	16	22	22	6	56	185	2.03	5.26	0.09	0.07	0.25	0.03	0.33	5	120	0.5	140	27	40	<1	<5	<0.5	<2	<10	<0.01	<1
SS411	718.494	1336.038	16	<0.5	19	18	26	25	8	90	270	4.02	6.99	0.12	0.05	0.25	0.02	0.55	15	120	1	200	31	108	3	5	<0.5	<2	10	<0.01	<1
SS412	718.434	1334.512	12	<0.5	11	18	16	15	4	38	125	1.89	5.35	0.07	0.03	0.31	0.03	0.27	5	140	0.5	60	25	36	3	<5	<0.5	<2	<10	<0.01	<1
SS413	720.056	1332.982	15	<0.5	22	14	32	18	17	44	775	1.92	5.10	0.11	0.05	0.49	0.05	0.38	5	290	1.5	190	32	44	1	<5	<0.5	<2	10	<0.01	<1
SS414	721.285	1335.231	13	<0.5	13	14	18	17	7	34	105	1.25	4.83	0.09	0.01	0.30	0.03	0.30	<5	130	0.5	60	24	23	1	<5	<0.5	2	10	<0.01	<1
SS415	720.244	1337.452	17	0.5	18	22	24	22	8	49	170	2.00	6.88	0.09	0.04	0.37	0.03	0.43	5	160	1	110	30	45	<1	5	<0.5	<2	<10	<0.01	<1
SS416	720.605	1341.171	14	<0.5	24	24	28	25	8	86	190	2.94	7.10	0.09	0.02	0.32	0.03	0.59	5	140	1	70	26	73	<1	5	<0.5	6	<10	<0.01	<1
SS417	722.622	1342.885	26	<0.5	16	24	20	21	7	133	215	4.96	7.36	0.08	0.04	0.30	0.02	0.54	10	140	1.5	130	33	136	3	<5	<0.5	<2	<10	<0.01	<1
SS418	725.065	1333.280	16	<0.5	12	16	20	20	8	40	225	1.70	5.64	0.09	0.06	0.38	0.03	0.35	<5	160	0.5	70	27	33	<1	<5	<0.5	<2	10	<0.01	<1
SS419	723.809	1336.436	29	1.5	7	20	16	14	5	153	205	13.68	5.95	0.05	0.03	0.18	0.01	0.41	5	80	1	340	21	223	<1	<5	<0.5	<2	<10	<0.01	<1
SS420	726.509	1336.930	17	0.5	15	8	20	19	9	67	310	3.44	6.21	0.09	0.03	0.26	0.02	0.46	5	120	1	130	23	79	<1	<5	<0.5	<2	<10	<0.01	<1
SS421	725.773	1338.449	21	<0.5	17	16	22	22	19	64	545	3.45	6.19	0.09	0.05	0.35	0.02	0.49	<5	220	1	90	25	84	<1	<5	<0.5	<2	<10	<0.01	<1
SS422	724.526	1340.138	17	<0.5	10	12	18	12	6	39	230	1.48	4.04	0.06	0.08	0.28	0.03	0.27	<5	140	0.5	70	25	32	<1	<5	<0.5	<2	<10	<0.01	<1
SS423	723.462	1340.874	19	<0.5	14	18	22	18	8	49	210	2.54	6.31	0.08	0.02	0.25	0.02	0.46	<5	110	0.5	80	22	64	<1	<5	<0.5	<2	<10	<0.01	<1
SS424	724.396	1341.535	10	0.5	8	10	16	13	5	30	165	1.34	4.35	0.07	0.06	0.27	0.03	0.24	<5	120	0.5	60	23	23	<1	<5	<0.5	<2	<10	<0.01	<1
SS425	727.170	1336.611	11	<0.5	15	16	22	20	8	57	235	2.81	5.68	0.09	0.03	0.28	0.02	0.43	<5	100	0.5	120	19	67	<1	5	<0.5	<2	<10	<0.01	<1
SS426	728.299	1335.972	13	<0.5	14	8	20	25	6	57	110	2.26	6.68	0.09	0.03	0.30	0.02	0.43	<5	110	0.5	70	23	62	<1	<5	<0.5	<2	<10	<0.01	<1
SS427	729.177	1335.242	17	<0.5	7	4	14	15	6	27	145	1.04	3.77	0.06	0.03	0.24	0.02	0.18	<5	110	0.5	40	20	19	<1	<5	<0.5	2	<10	<0.01	<1
SS428	728.529	1339.935	14	<0.5	22	2	18	36	7	82	170	2.11	4.34	0.10	0.03	0.24	0.03	0.33	<5	100	0.5	100	21	39	<1	<5	<0.5	<2	<10	<0.01	<1
SS429	727.233	1341.597	16	0.5	24	14	22	25	11	110	600	4.73	6.26	0.08	0.04	0.27	0.02	0.65	5	120	0.5	60	21	96	<1	<5	<0.5	<2	<10	<0.01	<1
SS430	727.398	1335.963	19	<0.5	17	<2	32	11	5	35	370	1.19	3.32	0.16	7.00	0.24	0.02	0.43	<5	490	0.5	940	458	43	6	<5	<0.5	<2	<10	<0.01	<1
SS431	731.620	1339.793	19	0.5	49	28	24	20	9	167	240	9.40	6.06	0.13	0.07	0.25	0.03	0.60	25	110	1	380	27	391	<1	<5	<0.5	<2	<10	<0.01	<1
SS432	730.374	1338.765	16	<0.5	10	2	16	16	7	34	140	1.74	3.70	0.08	0.04	0.23	0.03	0.21	<5	100	0.5	90	16	26	<1	<5	<0.5	<2	<10	<0.01	<1
SS433	731.309	1338.018	21	<0.5	15	26	24	29	9	55	140	1.81	7.09	0.12	0.15	0.48	0.03	0.52	15	240	1.5	50	38	56	<1	<5	<0.5	6	<10	<0.01	<1
SS434	730.083	1336.989	48	<0.5	16	20	24	36	14	57	170	2.37	7.42	0.16	0.07	0.31	0.03	0.53	5	170	1.5	190	33	62	<1	<5	<0.5	<2	<10	<0.01	<1
SS435	732.967	1339.110	17	<0.5	7	8	14	11	4	32	135	0.88	3.28	0.07	0.06	0.29	0.03	0.16	5	120	0.5	50	20	13	<1	<5	<0.5	<2	<10	<0.01	<1
SS436	735.000	1340.418	19	<0.5	20	20	22	28	7	96	215	3.36	6.90	0.11	0.01	0.22	0.02	0.55	5	90	1	150	19	90	1	<5	<0.5	<2	<10	<0.01	<1
SS437	730.930	1342.279	34	<0.5	50	26	20	26	11	308	555	7.10	6.05	0.10	0.03	0.24	0.03	0.63	20	140	1	240	23	191	<1	<5	<0.5	<2	<10	<0.01	<1
SS438	732.374	1342.221	19	<0.5	10	12	16	16	5	48	190	1.23	4.27	0.07	0.05	0.33	0.03	0.20	<5	140	0.5	<10	26	19	<1	5	<0.5	<2	<10	<0.01	<1
SS439	731.081	1343.630	17	0.5	9	6	18	17	7	35	185	0.89	4.28	0.08	0.05	0.37	0.04	0.20	5	150	0.5	30	24	16	<1	<5	<0.5	<2	<10	<0.01	<1
SS440	729.038	1334.152	9	0.5	27	20	24	28	8	274	310	8.85	6.82	0.12	0.05	0.28	0.03	0.62	20	110	1	270	23	272	<1	<5	<0.5	<2	<10	0.01	<1

Appendice 12 Le résultat de l'analyse chimique du sol (12/13)

Sample No.	UTM (km)		Au	Ag	Cu	Pb	Zn	Ni	Co	Cr	Mn	Fe	Al	Mg	Ca	K	Na	Ti	As	Ba	Be	P	Sr	V	Mo	Sb	Cd	Bi	W	Hg	CN
	Easting	Northing	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
SS441	727.893	1343.978	24	<0.5	31	10	28	27	16	132	580	3.92	6.46	0.10	0.06	0.27	0.02	0.71	5	140	1	50	21	88	1	<5	<0.5	<2	<10	<0.01	<1
SS442	726.255	1343.781	13	0.5	17	34	18	12	4	260	225	15.47	5.29	0.11	0.13	0.20	0.03	0.35	20	100	1	350	27	341	3	<5	<0.5	<2	<10	<0.01	<1
SS443	723.703	1342.666	10	0.5	40	36	30	36	15	282	700	9.67	7.60	0.09	0.03	0.17	0.01	1.05	<5	90	1	150	17	303	<1	5	<0.5	<2	<10	<0.01	<1
SS444	722.764	1344.552	10	1.5	15	22	18	21	7	118	160	3.88	7.16	0.08	0.02	0.43	0.03	0.56	<5	190	1	70	20	106	1	10	<0.5	<2	<10	<0.01	<1
SS445	721.848	1344.607	11	<0.5	14	24	26	21	7	52	200	1.70	5.79	0.10	0.15	0.35	0.04	0.37	<5	190	1	200	32	47	<1	5	<0.5	<2	<10	<0.01	<1
SS446	730.220	1352.738	9	<0.5	9	8	16	15	6	36	125	1.19	3.59	0.08	0.01	0.37	0.04	0.18	5	140	0.5	40	20	16	<1	<5	<0.5	<2	<10	<0.01	<1
SS447	731.573	1352.549	7	<0.5	11	14	16	17	4	46	140	1.34	4.18	0.08	0.04	0.28	0.03	0.25	<5	120	1	40	20	25	<1	<5	<0.5	<2	<10	<0.01	<1
SS448	732.862	1353.437	18	0.5	14	10	24	28	8	43	175	2.24	6.83	0.11	0.05	0.34	0.02	0.42	15	130	1	80	28	52	<1	<5	<0.5	<2	<10	<0.01	<1
SS449	733.501	1354.765	15	<0.5	17	28	26	22	7	232	410	13.70	5.92	0.07	0.03	0.18	0.01	0.36	45	90	1.5	520	19	315	<1	<5	<0.5	<2	<10	<0.01	<1
SS450	735.698	1357.367	13	<0.5	9	18	18	14	5	34	100	1.04	4.12	0.08	0.02	0.32	0.03	0.28	10	130	0.5	20	21	29	<1	<5	<0.5	<2	<10	<0.01	<1
SS451	738.347	1357.946	11	<0.5	11	10	20	22	8	42	150	1.87	5.94	0.11	0.05	0.27	0.02	0.36	5	110	0.5	90	22	39	<1	<5	<0.5	<2	<10	<0.01	<1
SS452	739.721	1358.497	13	<0.5	10	6	16	17	7	39	110	1.57	4.10	0.09	0.02	0.25	0.03	0.19	<5	100	0.5	80	18	24	<1	<5	<0.5	2	<10	<0.01	<1
SS453	738.370	1360.072	13	<0.5	9	18	18	18	6	29	90	0.78	4.41	0.08	0.03	0.48	0.04	0.19	5	180	0.5	20	28	15	<1	10	<0.5	<2	<10	<0.01	<1
SS454	743.772	1358.347	14	<0.5	13	14	20	20	7	44	120	1.66	5.11	0.11	0.03	0.29	0.03	0.27	10	120	0.5	80	24	29	<1	<5	<0.5	6	<10	<0.01	<1
SS455	736.812	1356.397	8	0.5	8	20	22	20	8	34	170	1.40	5.54	0.10	0.05	0.46	0.04	0.21	5	180	0.5	30	28	20	<1	<5	<0.5	<2	<10	<0.01	<1
SS456	736.367	1355.012	15	<0.5	8	16	20	19	7	35	205	1.41	4.59	0.09	0.06	0.32	0.03	0.21	5	140	0.5	60	25	22	<1	<5	<0.5	<2	<10	<0.01	<1
SS457	735.221	1353.473	12	<0.5	9	12	16	20	7	42	115	1.58	4.46	0.11	0.02	0.31	0.03	0.25	<5	120	0.5	70	22	28	<1	<5	<0.5	<2	<10	<0.01	<1
SS458	734.124	1352.638	10	<0.5	12	14	20	25	7	42	305	2.04	5.69	0.11	0.05	0.29	0.03	0.39	<5	120	0.5	130	24	44	<1	<5	<0.5	<2	<10	<0.01	<1
SS459	743.770	1353.825	28	<0.5	5	2	14	13	4	26	205	0.79	3.25	0.06	0.07	0.34	0.04	0.16	<5	160	0.5	60	27	13	<1	<5	<0.5	<2	<10	<0.01	<1
SS460	741.449	1353.616	11	0.5	8	4	14	9	7	27	375	1.02	2.75	0.06	0.03	0.43	0.04	0.15	15	190	0.5	30	24	13	<1	<5	<0.5	<2	<10	<0.01	<1
SS461	741.195	1355.956	13	<0.5	12	6	18	14	6	35	150	1.06	4.34	0.06	0.04	0.36	0.04	0.22	<5	170	0.5	40	21	20	<1	<5	<0.5	<2	<10	<0.01	<1
SS462	739.582	1353.694	11	<0.5	8	6	12	10	5	31	105	1.08	2.29	0.07	0.03	0.30	0.04	0.18	5	130	0.5	20	16	13	<1	<5	<0.5	2	<10	<0.01	<1
SS463	738.548	1353.877	11	<0.5	8	4	20	14	6	40	130	1.59	3.31	0.13	0.06	0.29	0.05	0.19	<5	140	0.5	90	23	23	<1	<5	<0.5	<2	<10	<0.01	<1
SS464	736.835	1353.517	10	<0.5	9	10	18	18	5	42	140	1.55	4.57	0.10	0.05	0.30	0.03	0.23	<5	130	0.5	40	24	24	<1	10	<0.5	<2	<10	<0.01	<1
SS465	735.692	1351.895	12	<0.5	8	16	18	16	8	37	305	1.24	4.20	0.09	0.05	0.35	0.04	0.24	<5	150	0.5	50	28	23	<1	5	<0.5	<2	<10	<0.01	<1
SS466	733.781	1350.620	12	<0.5	10	8	18	17	7	40	215	1.76	5.53	0.10	0.05	0.28	0.03	0.32	5	120	0.5	70	21	33	<1	<5	<0.5	<2	<10	<0.01	<1
SS467	734.637	1349.335	16	0.5	8	14	18	15	5	64	210	3.45	4.70	0.10	0.07	0.26	0.03	0.39	<5	100	0.5	120	25	52	<1	<5	<0.5	<2	<10	0.01	<1
SS468	733.272	1347.331	55	<0.5	18	10	22	22	8	51	265	2.42	6.33	0.09	0.04	0.20	0.01	0.41	<5	90	0.5	50	21	42	<1	<5	<0.5	<2	<10	<0.01	<1
SS469	732.515	1344.475	50	<0.5	11	12	18	17	8	46	200	1.80	3.89	0.09	0.03	0.32	0.04	0.25	5	130	0.5	80	21	25	<1	<5	<0.5	<2	<10	<0.01	<1
SS470	731.611	1345.350	792	<0.5	9	6	16	15	4	37	200	1.07	3.77	0.07	0.04	0.24	0.03	0.18	<5	110	0.5	10	19	15	<1	5	<0.5	<2	<10	<0.01	<1
SS471	731.129	1346.809	20	<0.5	6	4	14	14	5	32	140	1.07	2.47	0.07	0.03	0.32	0.04	0.21	5	130	0.5	50	18	16	<1	<5	<0.5	<2	<10	<0.01	<1
SS472	731.201	1349.171	38	<0.5	5	8	14	12	4	30	130	1.07	2.92	0.06	0.04	0.31	0.03	0.17	5	140	0.5	20	22	15	<1	10	<0.5	<2	<10	<0.01	<1
SS473	731.979	1350.174	34	<0.5	15	10	20	21	8	37	120	1.18	5.17	0.09	0.03	0.28	0.03	0.23	<5	120	0.5	40	22	22	<1	<5	<0.5	2	<10	<0.01	<1
SS474	742.850	1352.208	17	1.5	8	20	22	18	8	73	135	3.03	4.85	0.17	0.09	0.35	0.05	0.40	<5	160	1	170	31	79	<1	<5	<0.5	<2	<10	<0.01	<1
SS475	740.833	1352.653	17	<0.5	7	18	18	17	9	38	200	1.39	4.77	0.08	0.05	0.36	0.03	0.30	<5	150	0.5	40	25	27	<1	<5	<0.5	<2	<10	<0.01	<1
SS476	739.982	1351.897	20	<0.5	4	2	14	9	4	24	200	0.73	2.72	0.06	0.03	0.34	0.04	0.16	<5	160	0.5	10	21	12	<1	<5	<0.5	4	<10	<0.01	<1
SS477	739.227	1351.165	52	<0.5	12	16	26	26	10	50	165	2.05	6.77	0.11	0.03	0.49	0.03	0.54	<5	170	1.5	70	32	58	<1	5	<0.5	<2	<10	<0.01	<1
SS478	738.164	1352.300	17	<0.5	6	10	14	14	8	33	155	1.31	3.19	0.09	0.04	0.34	0.04	0.20	5	140	0.5	50	22	19	<1	<5	<0.5	<2	<10	<0.01	<1
SS479	737.293	1350.692	16	<0.5	4	<2	14	12	4	30	150	0.90	3.00	0.06	0.04	0.24	0.03	0.21	<5	100	0.5	50	19	18	<1	<5	<0.5	<2	<10	<0.01	<1
SS480	740.536	1350.690	38	<0.5	4	4	18	15	5	30	245	1.09	3.80	0.08	0.06	0.36	0.04	0.20	<5	140	0.5	40	24	18	<1	10	<0.5	<2	<10	<0.01	<1

Appendice 12 Le résultat de l'analyse chimique du sol (13/13)

Sample No.	UTM (km)		Au	Ag	Cu	Pb	Zn	Ni	Co	Cr	Mn	Fe	Al	Mg	Ca	K	Na	Ti	As	Ba	Be	P	Sr	V	Mo	Sb	Cd	Bi	W	Hg	CN
	Easting	Northing	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
SS481	742.203	1347.442	130	<0.5	11	16	24	23	9	50	235	1.91	5.91	0.11	0.03	0.37	0.03	0.36	15	150	0.5	60	22	41	<1	<5	<0.5	<2	<10	<0.01	<1
SS482	742.153	1349.398	34	<0.5	12	22	24	22	9	74	235	3.67	5.27	0.18	0.10	0.37	0.05	0.48	<5	150	1	290	33	78	<1	15	<0.5	<2	<10	0.02	<1
SS483	740.320	1349.779	32	0.5	4	20	16	13	5	30	195	0.92	3.31	0.07	0.04	0.35	0.04	0.22	5	130	0.5	40	24	17	<1	<5	<0.5	<2	<10	<0.01	<1
SS484	738.473	1348.669	191	<0.5	9	2	20	17	5	42	165	1.66	4.91	0.10	0.04	0.28	0.03	0.37	15	130	0.5	80	23	39	<1	<5	<0.5	<2	<10	<0.01	<1
SS485	739.596	1346.983	40	<0.5	5	<2	14	9	5	28	235	0.90	2.52	0.06	0.09	0.36	0.03	0.15	<5	170	<0.5	20	23	11	<1	10	<0.5	2	<10	<0.01	<1
SS486	739.237	1345.040	192	0.5	7	2	16	16	8	35	240	1.17	3.86	0.08	0.06	0.36	0.04	0.22	5	150	0.5	60	23	22	1	<5	<0.5	4	<10	<0.01	<1
SS487	737.833	1344.654	160	<0.5	16	2	16	17	13	98	415	3.65	3.58	0.08	0.06	0.25	0.03	0.23	<5	120	0.5	60	16	51	<1	<5	<0.5	<2	<10	<0.01	<1
SS488	736.490	1343.401	15	<0.5	13	6	16	18	7	46	170	1.75	4.98	0.09	0.03	0.29	0.03	0.28	<5	120	0.5	80	22	30	<1	<5	<0.5	2	<10	<0.01	<1
SS489	737.464	1348.731	9	<0.5	9	28	18	19	6	175	255	9.16	5.00	0.09	0.05	0.23	0.02	0.40	10	90	0.5	380	19	203	<1	<5	<0.5	<2	<10	<0.01	<1
SS490	736.598	1346.861	12	<0.5	10	10	22	16	11	35	695	1.49	4.53	0.11	0.11	0.53	0.06	0.25	15	240	0.5	140	36	24	1	<5	<0.5	<2	<10	<0.01	<1
SS491	735.239	1345.848	45	<0.5	10	2	16	10	5	29	275	1.28	3.08	0.07	0.14	0.26	0.03	0.22	<5	140	0.5	160	26	16	1	<5	<0.5	2	<10	<0.01	<1
SS492	733.792	1345.194	15	0.5	14	2	20	24	9	38	220	1.62	5.56	0.10	0.02	0.27	0.03	0.28	5	110	0.5	80	19	25	<1	5	<0.5	<2	<10	<0.01	<1
SS493	733.693	1343.271	13	<0.5	28	18	26	34	11	71	450	3.97	7.24	0.09	0.02	0.26	0.02	0.72	<5	110	1	120	19	118	1	5	<0.5	<2	<10	<0.01	<1
SS494	734.710	1342.995	10	<0.5	10	8	28	18	7	43	245	1.41	4.35	0.08	0.07	0.26	0.03	0.27	5	120	0.5	70	21	27	<1	15	<0.5	<2	<10	<0.01	<1
SS495	736.256	1341.439	13	0.5	19	12	20	23	10	83	425	3.98	5.56	0.12	0.05	0.34	0.04	0.55	<5	140	1	160	26	106	<1	<5	<0.5	2	<10	<0.01	<1
SS496	727.789	1345.288	18	<0.5	3	8	10	9	4	23	185	0.74	2.39	0.05	0.04	0.41	0.04	0.13	<5	160	0.5	10	21	8	<1	<5	<0.5	<2	<10	<0.01	<1
SS497	729.159	1346.298	12	<0.5	10	14	20	24	7	44	110	1.45	6.05	0.11	0.05	0.32	0.03	0.40	<5	130	0.5	40	27	35	<1	<5	<0.5	<2	<10	<0.01	<1
SS498	730.050	1347.219	14	<0.5	5	6	14	14	7	26	175	0.84	3.48	0.07	0.04	0.35	0.04	0.14	<5	140	0.5	<10	23	10	<1	<5	<0.5	2	<10	<0.01	<1
SS499	729.961	1349.608	13	<0.5	16	14	22	29	8	44	140	1.66	6.18	0.10	0.03	0.28	0.02	0.37	<5	110	1	70	23	35	<1	10	<0.5	2	<10	<0.01	<1
SS500	728.986	1351.098	24	<0.5	7	20	14	16	5	31	190	1.13	3.52	0.08	0.05	0.38	0.04	0.18	5	170	0.5	60	24	16	<1	<5	<0.5	<2	<10	<0.01	<1

Appendice 13 Le résultat de l'analyse chimique du sédiment au lit(1/3)

Sample No.	UTM (km)		Au	Ag	Cu	Pb	Zn	Ni	Co	Cr	Mn	Fe	Al	Mg	Ca	K	Na	Ti	As	Ba	Be	P	Sr	V	Mo	Sb	Cd	Bi	W	Hg	CN
	Easting	Northing	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
FS01	640.037	1323.461	11	<0.5	18	135	27	17	5	45	380	1.87	4.61	0.11	0.07	0.57	0.09	0.84	11	220	2	306	36	60	<1	<5	<1	<5	<20	0.03	<1
FS02	640.039	1323.463	9	<0.5	26	1602	23	15	9	34	315	1.81	3.94	0.09	0.06	0.43	0.05	0.72	6	183	1	215	27	54	2	<5	<1	<5	<20	0.03	<1
FS03	641.570	1320.417	8	<0.5	44	367	32	24	12	84	336	3.35	5.34	0.12	0.08	0.47	0.05	0.93	13	199	2	242	31	100	2	<5	<1	<5	<20	0.03	<1
FS04	644.372	1367.515	6	<0.5	14	427	19	10	11	45	433	3.09	3.68	0.06	0.05	0.40	0.03	0.43	7	164	1	249	26	63	<1	<5	<1	<5	<20	0.03	<1
FS05	655.073	1365.922	5	<0.5	14	50	22	16	6	34	289	1.85	5.10	0.10	0.09	0.66	0.05	0.69	7	243	1	207	41	53	1	<5	<1	<5	<20	0.03	<1
FS06	651.207	1363.199	1	<0.5	7	215	13	11	2	27	139	1.27	3.56	0.07	0.03	0.41	0.03	0.48	6	137	<1	78	28	38	<1	<5	<1	<5	<20	0.02	<1
FS07	640.809	1371.776	7	<0.5	8	101	14	12	4	23	178	1.53	3.80	0.07	0.03	0.51	0.04	0.47	<5	192	<1	70	29	43	<1	<5	<1	<5	<20	0.02	<1
FS08	647.942	1299.763	6	<0.5	12	196	16	11	5	33	273	1.74	3.79	0.06	0.06	0.27	0.03	0.59	6	105	2	184	23	56	<1	<5	<1	<5	<20	0.02	<1
FS09	650.637	1300.166	15	<0.5	13	103	17	12	4	58	180	2.22	3.89	0.06	0.05	0.25	0.05	0.54	<5	106	2	257	20	60	<1	<5	<1	<5	<20	0.02	<1
FS10	664.939	1291.154	8	<0.5	14	59	20	24	12	74	602	2.45	5.99	0.10	0.04	0.40	0.13	0.90	<5	152	2	115	32	68	<1	<5	<1	<5	<20	0.02	<1
FS11	659.785	1280.894	7	<0.5	12	219	17	9	4	36	150	1.52	3.61	0.06	0.04	0.23	0.05	0.32	<5	90	1	178	19	48	2	<5	<1	<5	<20	0.01	<1
FS12	636.968	1290.823	9	<0.5	10	42	18	12	2	27	135	1.52	3.47	0.06	0.05	0.23	0.03	0.49	6	82	3	153	21	46	1	<5	<1	<5	<20	0.02	<1
FS13	633.321	1292.254	7	<0.5	14	46	18	13	1	31	188	1.33	3.50	0.06	0.04	0.23	0.03	0.62	12	103	2	149	23	43	<1	<5	<1	<5	<20	0.02	<1
FS14	632.441	1294.799	8	<0.5	10	74	15	10	2	40	119	0.76	3.77	0.06	0.02	0.31	0.03	0.77	9	121	3	68	24	43	<1	<5	<1	<5	<20	0.02	<1
FS15	699.136	1339.019	6	<0.5	21	72	31	21	27	60	644	3.64	4.43	0.13	0.09	0.63	0.07	0.91	9	232	1	201	26	94	1	<5	<1	<5	<20	<0.01	<1
FS16	695.965	1352.008	3	<0.5	12	30	24	19	17	52	313	2.00	4.89	0.09	0.08	0.50	0.06	0.67	6	195	1	238	28	57	1	<5	<1	<5	<20	0.01	<1
FS17	679.434	1344.856	62	<0.5	9	35	16	11	14	53	260	1.69	2.98	0.05	0.04	0.30	0.03	0.60	<5	121	1	142	18	51	2	<5	<1	<5	<20	<0.01	<1
FS18	679.898	1344.767	22	<0.5	23	39	35	27	24	80	568	4.07	6.60	0.18	0.09	0.80	0.11	0.66	9	282	2	171	33	104	2	<5	<1	<5	<20	0.01	<1
FS19	624.235	1327.798	13	<0.5	15	143	21	13	8	61	328	3.62	3.69	0.07	0.07	0.33	0.03	0.51	23	150	1	226	24	78	1	<5	<1	<5	<20	0.01	<1
FS20	637.915	1358.953	14	<0.5	15	57	28	20	7	39	375	2.05	5.78	0.11	0.13	0.52	0.05	0.77	9	253	2	383	42	61	<1	<5	<1	5	<20	0.02	1
FS21	636.442	1359.203	7	<0.5	23	418	24	24	13	148	468	8.33	6.37	0.09	0.07	0.37	0.03	0.52	33	183	2	203	30	170	2	<5	<1	<5	<20	0.02	<1
FS22	696.677	1369.421	9	<0.5	14	25	24	19	13	56	1387	3.42	4.79	0.11	0.11	0.45	0.04	0.72	11	209	2	277	36	93	<1	<5	<1	<5	<20	0.02	<1
FS23	686.174	1302.142	11	<0.5	23	15	34	30	46	120	949	3.98	5.97	0.13	0.14	0.46	0.08	1.84	7	257	2	257	37	104	2	<5	<1	<5	<20	0.02	<1
FS24	685.896	1302.188	8	<0.5	43	143	59	44	49	149	1061	7.89	6.58	0.19	0.13	0.58	0.12	0.93	14	247	2	309	36	179	4	<5	<1	<5	<20	<0.01	<1
FS25	688.983	1301.514	11	<0.5	27	28	37	32	38	101	798	3.85	5.72	0.13	0.08	0.55	0.13	1.03	12	204	2	140	29	108	4	<5	3.8	<5	<20	0.01	<1
FS26	681.135	1289.125	37	<0.5	6	16	15	10	17	43	432	1.38	2.31	0.04	0.03	0.23	0.04	0.76	<5	99	1	157	15	37	<1	<5	1	<5	<20	0.02	<1
FS27	678.792	1287.985	7	<0.5	20	26	24	21	19	89	215	4.16	4.78	0.06	0.05	0.33	0.05	0.57	7	129	2	252	20	120	2	<5	<1	<5	<20	<0.01	<1
FS28	673.998	1290.058	3	<0.5	20	35	32	25	23	126	755	5.51	6.87	0.09	0.09	0.38	0.05	0.65	6	186	2	412	33	133	3	<5	1.1	<5	<20	0.02	<1
FS29	655.617	1309.107	1	<0.5	15	87	26	23	22	68	185	1.41	5.79	0.10	0.07	0.43	0.08	0.90	<5	182	2	250	31	60	2	<5	<1	<5	<20	0.02	1
FS30	718.270	1342.995	<1	<0.5	16	20	29	23	24	62	348	2.30	5.36	0.09	0.09	0.43	0.06	0.80	6	199	2	348	28	69	1	<5	<1	<5	<20	0.01	<1
FS31	715.298	1352.332	<1	<0.5	5	34	8	6	8	32	92	0.96	1.43	0.02	0.02	0.18	0.02	0.36	<5	82	<1	79	9	27	1	<5	<1	<5	<20	<0.01	<1
FS32	717.731	1362.891	7	<0.5	10	18	22	23	22	44	610	1.93	5.37	0.09	0.06	0.47	0.05	0.69	6	188	2	124	28	50	1	<5	<1	<5	<20	0.01	<1
FS33	725.642	1332.374	24	<0.5	13	68	28	19	21	51	193	1.73	5.33	0.10	0.06	0.56	0.12	0.97	<5	201	2	354	33	59	1	<5	<1	<5	<20	0.02	<1
FS34	620.172	1322.900	5	<0.5	15	106	22	17	7	48	220	3.41	5.12	0.07	0.05	0.35	0.09	0.61	9	123	1	114	26	83	<1	<5	<1	<5	<20	0.01	<1
FS35	608.185	1342.162	6	<0.5	14	47	26	16	7	43	501	2.37	4.42	0.10	0.10	0.46	0.08	0.71	8	189	2	339	32	66	<1	<5	<1	<5	<20	0.02	<1

Appendice 13 Le résultat de l'analyse chimique du sédiment au lit(2/3)

Sample No.	UTM (km)		Au	Ag	Cu	Pb	Zn	Ni	Co	Cr	Mn	Fe	Al	Mg	Ca	K	Na	Ti	As	Ba	Be	P	Sr	V	Mo	Sb	Cd	Bi	W	Hg	CN
	Easting	Northing	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
FS36	608.898	1362.164	2	<0.5	8	6	15	9	5	24	597	1.61	2.47	0.05	0.04	0.29	0.04	0.59	<5	123	1	132	18	43	<1	<5	<1	<5	<20	0.02	<1
FS37	656.747	1348.130	1	<0.5	15	24	20	16	4	110	210	3.15	3.71	0.12	0.07	0.67	0.04	0.89	6	173	2	120	24	121	2	<5	<1	<5	<20	0.02	<1
FS38	655.358	1342.138	3	<0.5	11	29	20	11	2	51	214	1.85	4.07	0.08	0.09	0.42	0.04	0.63	6	161	1	255	31	61	<1	<5	<1	<5	<20	0.03	<1
FS39	655.371	1342.218	2	<0.5	14	26	27	15	5	38	354	2.67	4.77	0.09	0.09	0.48	0.05	0.69	5	173	2	239	33	72	<1	<5	<1	<5	<20	0.02	<1
FS40	627.487	1313.184	9	<0.5	13	26	17	14	2	42	189	1.79	3.81	0.07	0.04	0.38	0.04	0.61	10	147	1	171	25	57	<1	<5	<1	<5	<20	0.02	<1
FS41	629.113	1317.117	6	<0.5	12	28	13	8	4	23	208	1.36	2.70	0.06	0.04	0.37	0.03	0.62	8	160	<1	189	24	42	<1	<5	<1	<5	<20	0.01	<1
FS42	690.045	1321.122	11	<0.5	24	33	32	24	22	167	371	5.00	4.64	0.09	0.08	0.45	0.14	0.86	14	163	2	427	30	144	3	<5	1.1	<5	<20	<0.01	<1
FS43	691.494	1320.222	11	<0.5	29	119	39	36	24	162	505	3.90	5.84	0.18	0.12	0.63	0.19	0.76	11	240	2	261	35	110	<1	<5	1	<5	<20	0.03	<1
FS44	697.724	1323.608	10	<0.5	24	28	41	32	23	91	520	4.09	7.41	0.15	0.11	0.65	0.26	0.79	14	241	2	470	38	108	2	<5	1	<5	<20	0.03	<1
FS45	659.146	1324.253	4	<0.5	12	27	19	14	15	65	154	2.23	3.67	0.05	0.03	0.32	0.10	0.63	6	120	2	246	18	68	1	<5	<1	<5	<20	0.02	<1
FS46	674.899	1330.831	4	<0.5	17	28	19	17	13	109	170	3.23	3.46	0.05	0.05	0.26	0.06	0.42	<5	116	2	316	18	100	2	<5	<1	<5	<20	0.01	<1
FS47	725.676	1337.388	42	<0.5	10	12	20	16	16	48	225	1.70	4.01	0.08	0.08	0.44	0.11	0.73	<5	168	1	247	27	53	2	<5	1	<5	<20	<0.01	2
FS48	740.515	1358.562	79	<0.5	8	53	16	13	18	40	254	1.14	2.89	0.05	0.04	0.48	0.05	0.63	<5	184	1	147	22	35	<1	<5	<1	<5	<20	0.02	<1
FS49	739.185	1359.277	14	<0.5	9	126	17	15	17	36	388	1.16	2.91	0.06	0.12	0.39	0.06	0.56	<5	182	1	237	25	33	<1	<5	<1	<5	<20	0.03	1
FS50	740.678	1365.542	<1	<0.5	17	20	34	27	23	53	420	1.57	6.33	0.12	0.09	0.64	0.13	0.77	5	228	2	218	33	53	4	<5	3.5	<5	<20	0.02	<1
FS51	629.469	1371.728	15	<0.5	17	14	20	16	7	65	165	2.31	4.14	0.08	0.04	0.43	0.04	0.25	<5	180	1	220	26	50	<1	<5	<0.5	<2	<10	<10	<1
FS52	650.314	1360.275	16	<0.5	7	22	10	6	4	22	110	0.61	2.28	0.04	0.03	0.37	0.04	0.12	<5	150	0.5	70	24	10	<1	<5	<0.5	6	<10	<10	<1
FS53	650.049	1361.514	23	<0.5	20	32	32	24	12	40	320	1.62	6.30	0.12	0.07	0.62	0.06	0.42	5	250	1.5	360	39	45	4	5	<0.5	<2	<10	20	<1
FS54	641.934	1363.405	16	<0.5	23	52	22	19	11	49	425	2.59	4.46	0.09	0.09	0.43	0.05	0.27	<5	250	1.5	300	32	39	<1	5	<0.5	<2	<10	10	<1
FS55	644.113	1365.638	17	0.5	22	22	6	10	2	44	145	2.25	1.25	0.01	0.02	0.26	0.03	0.09	<5	80	<0.5	170	13	28	2	15	<0.5	<2	<10	<10	<1
FS56	633.449	1359.714	17	<0.5	19	26	16	18	6	158	215	4.77	5.16	0.08	0.04	0.35	0.03	0.39	15	160	1	200	24	130	<1	10	<0.5	<2	<10	<10	<1
FS57	615.896	1316.069	18	<0.5	14	18	14	15	5	39	135	0.88	3.53	0.07	0.05	0.37	0.04	0.25	<5	170	0.5	100	29	25	<1	<5	<0.5	<2	<10	<10	<1
FS58	616.981	1317.327	17	<0.5	13	20	14	18	5	48	185	0.85	2.60	0.06	0.06	0.29	0.03	0.38	<5	140	0.5	150	22	33	1	15	<0.5	<2	<10	<10	<1
FS59	616.035	1322.652	22	0.5	11	32	10	10	3	35	140	1.04	2.48	0.04	0.04	0.24	0.03	0.29	<5	120	0.5	130	16	33	<1	<5	<0.5	2	10	<10	<1
FS60	617.483	1325.673	18	<0.5	24	38	20	20	8	70	130	2.41	6.26	0.10	0.05	0.46	0.05	0.37	5	200	1.5	120	35	59	1	<5	<0.5	20	<10	<10	<1
FS61	622.460	1361.471	26	0.5	17	20	18	15	7	41	155	1.55	4.92	0.09	0.03	0.47	0.05	0.24	<5	190	1	160	24	31	2	15	<0.5	2	<10	10	<1
FS62	623.087	1361.824	21	<0.5	18	28	36	19	7	39	275	1.62	4.71	0.10	0.21	0.47	0.04	0.40	5	270	1	580	43	45	1	5	<0.5	<2	<10	10	<1
FS63	627.606	1357.517	19	<0.5	10	22	14	15	5	32	180	1.20	3.19	0.06	0.05	0.35	0.04	0.21	<5	150	0.5	100	24	24	<1	<5	<0.5	<2	<10	<10	<1
FS64	631.857	1356.503	36	<0.5	12	18	16	18	4	38	145	1.41	3.92	0.07	0.06	0.38	0.04	0.20	5	160	0.5	160	29	29	<1	<5	<0.5	<2	<10	10	<1
FS65	622.518	1336.068	16	0.5	10	14	14	10	4	35	185	1.05	2.98	0.06	0.04	0.30	0.03	0.25	<5	140	0.5	110	15	25	<1	<5	<0.5	<2	<10	<10	<1
FS66	620.539	1331.130	15	<0.5	22	38	26	23	12	70	425	2.47	6.28	0.11	0.06	0.43	0.04	0.48	<5	220	1.5	290	32	70	2	<5	<0.5	<2	<10	10	<1
FS67	686.323	1312.652	14	<0.5	36	10	30	27	11	73	450	3.94	5.11	0.14	0.13	0.37	0.04	0.36	<5	200	1.5	190	37	73	1	5	<0.5	<2	<10	<10	<1
FS68	686.287	1313.134	5	<0.5	18	<2	12	10	4	28	210	1.50	1.60	0.12	0.21	0.35	0.38	0.20	5	170	1.5	80	66	28	<1	<5	<0.5	<2	<10	<10	<1
FS69	675.233	1310.875	5	<0.5	18	<2	14	18	6	90	120	2.20	2.79	0.04	0.03	0.13	0.02	0.20	<5	60	0.5	170	12	76	<1	5	<0.5	<2	<10	<10	<1
FS70	675.189	1310.907	41	<0.5	14	<2	14	9	3	32	145	0.96	1.87	0.03	0.02	0.30	0.04	0.23	<5	130	0.5	60	18	20	<1	<5	<0.5	<2	<10	<10	<1

Appendice 13 Le résultat de l'analyse chimique du sédiment au lit(3/3)

Sample No.	UTM (km)		Au	Ag	Cu	Pb	Zn	Ni	Co	Cr	Mn	Fe	Al	Mg	Ca	K	Na	Ti	As	Ba	Be	P	Sr	V	Mo	Sb	Cd	Bi	W	Hg	CN
	Easting	Northing	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
FS71	673.212	1308.549	9	<0.5	15	10	18	13	6	30	110	0.87	4.48	0.07	0.03	0.42	0.05	0.15	10	190	1.5	60	31	14	<1	15	<0.5	4	<10	<10	<1
FS72	672.658	1306.846	21	<0.5	19	<2	22	19	5	43	150	1.74	5.09	0.08	0.06	0.36	0.04	0.31	5	170	1.5	240	30	37	1	15	<0.5	6	<10	20	<1
FS73	682.487	1301.204	12	<0.5	17	12	18	14	7	39	345	1.60	2.78	0.07	0.07	0.30	0.06	0.24	5	190	0.5	160	26	31	<1	<5	<0.5	<2	<10	10	<1
FS74	645.163	1288.253	13	<0.5	16	30	20	25	6	61	85	1.30	6.88	0.08	0.04	0.40	0.04	0.50	<5	140	1.5	70	31	70	<1	5	<0.5	<2	<10	<10	<1
FS75	645.618	1288.592	18	<0.5	16	6	16	10	4	29	90	0.59	3.91	0.06	0.03	0.36	0.05	0.14	<5	140	1.5	70	27	11	<1	5	<0.5	<2	<10	<10	<1
FS76	642.154	1298.187	27	<0.5	19	4	14	12	4	36	90	0.80	3.79	0.06	0.02	0.32	0.04	0.12	<5	130	1.5	40	21	14	<1	5	<0.5	<2	<10	<10	<1
FS77	642.667	1302.837	28	<0.5	15	2	12	8	3	31	90	0.64	3.04	0.05	0.02	0.30	0.04	0.11	15	140	1.5	60	19	13	<1	5	<0.5	<2	<10	<10	<1
FS78	639.397	1299.556	25	<0.5	23	16	28	29	12	77	515	3.03	6.43	0.11	0.10	0.43	0.06	0.58	<5	200	2	230	39	92	<1	5	<0.5	<2	<10	10	<1
FS79	648.055	1291.865	19	<0.5	12	2	14	10	3	31	120	1.22	3.52	0.05	0.04	0.32	0.04	0.16	<5	130	1	80	23	18	<1	10	<0.5	<2	<10	<10	<1
FS80	646.755	1292.608	15	<0.5	18	24	22	17	6	50	110	1.58	6.89	0.10	0.05	0.39	0.04	0.56	<5	160	2.5	110	34	58	<1	10	<0.5	<2	<10	10	<1
FS81	652.239	1295.786	17	<0.5	16	16	14	16	4	59	125	2.51	4.73	0.07	0.05	0.27	0.03	0.34	5	110	1.5	120	24	54	<1	5	<0.5	<2	<10	10	<1
FS82	652.604	1296.255	14	0.5	14	6	16	19	5	46	140	2.14	4.37	0.07	0.04	0.30	0.03	0.24	<5	120	1	90	23	30	<1	5	<0.5	<2	<10	<10	<1
FS83	656.443	1281.406	47	<0.5	19	22	24	27	6	62	100	1.09	6.12	0.09	0.03	0.41	0.05	0.36	5	140	2	170	31	37	2	10	<0.5	4	<10	20	<1
FS84	655.089	1286.144	25	<0.5	12	10	16	10	3	30	180	0.70	3.06	0.06	0.04	0.38	0.05	0.23	<5	160	1.5	50	26	14	<1	5	<0.5	12	<10	<10	<1
FS85	654.524	1285.900	6	0.5	25	36	30	26	9	47	210	1.30	7.25	0.12	0.07	0.45	0.06	0.43	<5	210	4	220	41	44	<1	20	<0.5	<2	<10	30	<1
FS86	633.637	1322.741	10	0.5	18	10	18	17	5	44	135	1.81	4.11	0.08	0.05	0.32	0.04	0.27	<5	150	0.5	150	23	35	<1	15	<0.5	<2	<10	<10	<1
FS87	631.794	1325.493	11	0.5	17	16	18	15	7	53	385	2.01	3.44	0.07	0.06	0.32	0.04	0.36	<5	170	1	160	21	48	<1	<5	<0.5	<2	<10	10	<1
FS88	631.418	1336.108	10	0.5	22	6	22	29	7	51	95	1.41	7.09	0.11	0.03	0.52	0.04	0.34	5	250	1.5	90	30	39	<1	<5	<0.5	<2	<10	<10	<1
FS89	632.658	1336.383	9	0.5	14	<2	18	15	5	33	135	1.02	3.66	0.08	0.06	0.36	0.04	0.22	15	160	0.5	110	23	23	<1	5	<0.5	<2	<10	10	<1
FS90	635.502	1334.310	7	<0.5	13	<2	14	12	5	34	125	1.09	3.68	0.06	0.04	0.31	0.04	0.20	10	140	0.5	80	22	22	<1	5	<0.5	12	<10	<10	<1
FS91	639.715	1317.914	10	<0.5	16	<2	16	13	9	60	285	2.15	3.94	0.07	0.07	0.30	0.03	0.33	<5	150	1	200	23	45	<1	<5	<0.5	<2	<10	10	<1
FS92	640.789	1315.853	10	<0.5	13	<2	12	11	4	37	120	0.85	3.17	0.05	0.03	0.31	0.04	0.19	<5	140	1.5	40	20	17	<1	5	<0.5	<2	<10	10	<1
FS93	637.430	1310.420	11	<0.5	25	16	22	15	6	45	160	1.17	4.98	0.10	0.04	0.49	0.05	0.29	5	240	1.5	190	30	33	1	5	<0.5	<2	<10	20	<1
FS94	637.426	1310.390	12	<0.5	19	4	16	14	8	42	165	1.54	4.82	0.09	0.05	0.47	0.04	0.29	<5	220	1.5	160	29	38	<1	<5	<0.5	4	<10	10	<1
FS95	634.934	1316.502	9	<0.5	21	12	22	22	10	61	200	2.18	5.66	0.11	0.06	0.38	0.04	0.42	15	170	1	170	29	55	<1	<5	<0.5	<2	<10	<10	<1
FS96	630.071	1313.894	7	<0.5	14	10	16	8	4	32	110	1.01	3.05	0.07	0.03	0.33	0.04	0.22	<5	150	1	130	20	23	<1	<5	<0.5	<2	<10	10	<1
FS97	630.081	1313.899	13	<0.5	17	10	22	15	7	43	170	1.57	4.56	0.12	0.05	0.45	0.06	0.27	<5	210	1.5	170	31	31	<1	10	<0.5	<2	<10	20	<1
FS98	737.152	1357.656	5	<0.5	6	10	16	7	5	25	125	0.92	2.27	0.04	0.03	0.32	0.04	0.23	<5	140	0.5	60	20	18	<1	<5	<0.5	2	<10	<10	<1
FS99	733.229	1352.341	5	<0.5	6	<2	10	6	3	28	190	0.76	1.09	0.03	0.04	0.27	0.03	0.25	<5	140	<0.5	50	15	16	<1	<5	<0.5	2	<10	<10	<1
FS100	733.551	1351.197	5	0.5	18	22	18	13	5	39	270	1.16	3.47	0.09	0.07	0.42	0.05	0.33	<5	190	0.5	220	31	30	<1	20	<0.5	<2	<10	<10	<1

Appendice 14 Le résultat de l'analyse chimique de la roche (1/2)

Sample No.	UTM (km)		Rock name	Lateritization	Au	Ag	Cu	Pb	Zn	Ni	Co	Cr	Mn	Fe	Al	Mg	Ca	K	Na	Ti	As	Ba	Be	P	Sr	V	Mo	Sb	Cd	Bi	W	Hg	CN	S	
Rock	Soil	Eastig	Northing	Soil kind	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppm	%		
R01		684.178	1345.717	pelitic schist	8	<0.5	80	20	26	12	<1	106	55	7.45	7.14	0.31	0.09	3.29	0.10	0.29	5	510	1.5	460	57	196	107	<5	<0.5	<2	<10	<10	<1	0.02	
	R01-S1	684.180	1345.721	C-bed	weak(2)	17	0.5	43	18	34	31	18	74	405	3.10	6.25	0.65	0.13	2.10	0.37	0.43	5	520	1.5	260	47	89	4	<5	<0.5	<2	<10	10	<1	0.01
	R01-S2	684.219	1345.769	C-bed	weak(1)	31	0.5	28	<2	24	23	12	58	270	2.47	4.72	0.40	0.06	1.60	0.10	0.31	<5	380	1.0	140	27	70	<1	<5	<0.5	6	<10	10	<1	0.01
R02		682.707	1336.101	granodiorite		10	1	9	36	46	<1	2	8	275	1.43	7.34	0.30	0.98	2.41	3.05	0.15	<5	940	5.5	540	552	15	2	<5	<0.5	12	<10	<10	<1	<0.01
	R02-S1	682.710	1336.104	C-bed	weak(2)	19	1	13	42	46	3	5	16	565	1.90	8.78	0.35	0.95	3.00	1.97	0.38	<5	1210	4.5	330	493	31	5	<5	<0.5	<2	<10	<10	<1	0.01
	R02-S2	682.716	1336.131	B-bed	weak(1)	24	<0.5	16	32	32	2	3	10	300	1.16	7.72	0.21	0.63	3.31	2.16	0.34	<5	1300	5.5	170	433	25	<1	<5	<0.5	<2	<10	<10	<1	<0.01
R03		696.825	1369.207	arkose sandstone		77	0.5	11	42	26	21	20	37	1530	1.60	6.86	0.14	0.04	9.05	0.16	0.22	<5	1350	1.5	130	81	37	4	<5	<0.5	<2	<10	<10	<1	<0.01
	R03-S1	696.830	1369.211	C-bed	weak(2)	20	0.5	21	22	22	28	14	51	185	2.07	6.40	0.09	0.02	0.56	0.06	0.40	<5	200	1.5	150	32	50	3	<5	<0.5	4	<10	<10	<1	<0.01
	R03-S2	696.845	1369.227	B-bed	weak(1)	23	0.5	17	28	18	15	8	40	290	1.80	3.72	0.09	0.05	0.59	0.07	0.29	<5	210	1.5	120	27	31	<1	<5	<0.5	<2	<10	<10	<1	<0.01
R04		676.440	1295.604	dolerite		132	<0.5	116	62	64	100	42	180	1230	7.17	7.15	4.36	7.30	0.36	1.19	0.51	<5	100	<0.5	330	146	246	4	20	<0.5	<2	30	<10	<1	<0.01
	R04-S1	676.436	1295.595	saprolite	weak(3)	23	0.5	47	26	22	36	11	150	345	4.19	4.26	0.11	0.06	0.22	0.04	0.41	<5	110	0.5	160	11	81	1	<5	<0.5	12	<10	<10	<1	0.01
	R04-S2	676.483	1295.592	pisolith	strong(2)	30	0.5	34	18	16	26	12	127	350	4.59	7.11	0.09	0.04	0.46	0.04	0.51	<5	200	0.5	140	17	123	<1	<5	<0.5	12	<10	<10	<1	<0.01
	R04-S3	676.481	1295.631	carapace	strong(1)	29	<0.5	42	12	16	19	6	493	535	10.53	6.20	0.06	0.05	0.24	0.02	0.48	<5	170	0.5	160	16	312	4	<5	<0.5	12	<10	<10	<1	<0.01
R05		680.077	1309.819	granite		12	1	17	34	22	<1	5	9	260	1.25	6.44	0.13	0.26	3.42	2.30	0.05	<5	350	7.0	670	114	9	1	5	<0.5	<2	<10	<10	<1	<0.03
	R05-S1	680.081	1309.807	C-bed	weak(3)	15	1	16	42	26	10	3	31	140	1.42	5.26	0.10	0.04	1.50	0.25	0.24	<5	200	4.5	150	35	33	<1	<5	<0.5	10	10	<10	<1	<0.01
	R05-S2	680.071	1309.794	pisolith	strong(2)	35	0.5	16	38	24	7	6	45	375	2.58	3.73	0.10	0.07	1.06	0.16	0.28	<5	210	3.5	190	34	48	<1	<5	<0.5	<2	<10	10	<1	0.01
	R05-S3	680.064	1309.794	crust	strong(1)	12	<0.5	66	76	38	34	28	582	810	23.19	6.65	0.06	0.05	0.38	0.02	0.22	70	140	4.0	430	22	599	8	<5	<0.5	<2	10	<10	<1	0.01
R06		682.244	1314.279	granite		23	<0.5	7	24	24	1	2	6	240	0.66	6.72	0.06	0.19	2.82	2.95	0.01	<5	30	10.0	1040	19	1	2	<5	<0.5	<2	<10	<10	<1	<0.01
	R06-S1	682.253	1314.273	C-bed	weak(2)	23	0.5	11	36	24	4	4	12	250	0.88	7.45	0.09	0.08	2.50	2.42	0.16	5	70	17.5	350	24	15	<1	<5	<0.5	<2	<10	10	<1	<0.01
	R06-S2	682.171	1314.320	B-bed	weak(1)	29	1	15	34	16	4	3	14	250	1.38	6.86	0.07	0.08	2.53	2.15	0.21	<5	80	14.5	300	20	18	<1	<5	<0.5	16	<10	<10	<1	<0.01
R07		688.204	1340.825	psamitic schist		19	<0.5	21	12	46	26	11	50	300	2.86	6.98	0.80	1.00	1.31	2.97	0.26	<5	450	1.5	390	396	77	2	<5	<0.5	<2	10	<10	<1	0.01
	R07-S1	688.206	1340.820	C-bed	weak(2)	15	0.5	29	24	58	40	17	79	390	3.90	9.85	1.05	1.50	1.67	2.01	0.34	<5	500	2.0	210	368	104	2	<5	<0.5	<2	10	<10	<1	0.01
	R07-S2	688.240	1340.773	C-bed	weak(1)	18	<0.5	34	28	48	36	14	67	325	3.14	7.20	0.83	0.82	1.40	1.44	0.32	5	500	1.5	170	267	84	1	<5	<0.5	4	<10	<10	<1	0.01
R08		693.567	1333.842	arkose sandstone		23	2	9	32	36	15	11	24	905	2.97	4.19	1.66	1.00	4.79	0.17	0.13	15	1170	1.5	700	124	24	4	<5	<0.5	6	10	<10	<1	<0.01
	R08-S1	693.566	1333.847	B-bed	weak(2)	12	0.5	20	32	20	16	7	28	750	2.22	3.04	0.15	0.14	1.38	0.08	0.16	<5	390	0.5	250	41	33	<1	<5	<0.5	10	<10	10	<1	0.01
	R08-S2	693.588	1333.824	B-bed	weak(1)	15	<0.5	20	22	16	14	4	48	430	3.00	4.76	0.28	0.09	3.00	0.12	0.29	<5	390	0.5	170	33	50	3	<5	<0.5	<2	<10	10	<1	0.01
R09		693.603	1333.485	psamitic schist		83	<0.5	19	36	36	25	13	74	185	3.71	8.16	0.76	0.07	7.48	0.20	0.37	5	810	2.0	340	37	123	<1	30	<0.5	<2	<10	<10	<1	<0.01
	R09-S1	693.609	1333.487	saprolite	moderate(3)	12	<0.5	56	<2	24	39	13	123	250	7.35	13.66	0.58	0.07	3.00	0.08	0.54	5	530	2.0	250	44	162	<1	<5	<0.5	<2	10	10	<1	0.01
	R09-S2	693.615	1333.495	pisolith	strong(2)	14	<0.5	82	26	24	39	15	378	510	17.77	6.65	0.17	0.03	1.61	0.05	0.34	20	270	2.5	280	15	411	<1	<5	<0.5	6	10	10	<1	0.01
	R09-S3	693.622	1333.490	cuirasse	strong(1)	22	<0.5	59	8	14	22	11	467	550	25.00	5.53	0.12	0.07	0.27	0.03	0.25	45	190	2.5	1070	21	612	2	<5	<0.5	<2	<10	10	<1	0.01
R10		693.114	1333.256	psamitic schist		70	0.5	34	2	52	48	17	89	325	4.50	9.16	1.29	0.04	4.93	0.13	0.39	5	2050	2.0	240	55	156	2	<5	<0.5	<2	<10	<10	<1	<0.01
	R10-S1	693.109	1333.254	C-bed	weak(2)	22	1	46	28	42	43	17	96	510	5.19	6.78	0.77	0.17	3.06	0.17	0.40	5	550	2.0	340	46	109	4	5	<0.5	<2	10	10	<1	0.02
	R10-S2	693.100	1333.208	B-bed	weak(1)	19	0.5	35	20	32	30	12	67	265	3.49	5.66	0.63	0.09	2.43	0.11	0.33	<5	460	1.5	210	34	89	1	<5	<0.5	<2	10	<10	<1	0.01
R11		691.494	1324.359	granodiorite		64	0.5	14	36	48	8	8	14	350	2.36	7.90	0.55	1.70	2.11	3.02	0.19	<5	930	2.0	520	973	35	4	<5	<0.5	<2	<10	<10	<1	<0.01
	R11-S1	691.496	1324.363	A-bed	weak(3)	5	<0.5	28	34	52	37	17	112	620	3.50	6.79	1.09	1.60	1.31	1.33	0.48	<5	790	2.0	310	503	93	1	<5	<0.5	<2	10	<10	<1	0.01
	R1																																		

Appendice 14 Le résultat de l'analyse chimique de la roche (2/2)

Sample No.		UTM (km)		Rock name	Lateritization	Au	Ag	Cu	Pb	Zn	Ni	Co	Cr	Mn	Fe	Al	Mg	Ca	K	Na	Ti	As	Ba	Be	P	Sr	V	Mo	Sb	Cd	Bi	W	Hg	CN	S
Rock	Soil	Easting	Northing	Soil kind		ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
R14		688.692	1313.397	diorite		25	<0.5	97	80	72	62	38	208	1210	6.55	6.70	4.31	6.50	0.62	1.35	0.48	<5	170	<0.5	410	221	207	3	30	<0.5	<2	<10	<10	<1	0.04
	R14-S1	688.709	1313.373	B-bed	moderate(3)	5	<0.5	98	16	94	86	53	361	1880	7.87	8.63	1.85	1.85	0.45	0.40	0.93	<5	240	1.0	340	77	296	3	5	<0.5	<2	<10	<10	<1	0.02
	R14-S2	688.692	1313.397	saprolite	strong(2)	5	<0.5	140	22	70	109	56	488	1415	8.87	9.16	1.06	0.71	0.22	0.19	0.76	<5	200	0.5	280	37	266	<1	5	<0.5	<2	<10	<10	<1	0.02
	R14-S3	688.692	1313.397	pisolith	strong(1)	5	0.5	18	26	32	11	8	42	370	1.72	2.65	0.11	0.08	0.50	0.06	0.27	5	200	3.0	130	27	30	2	<5	<0.5	<2	<10	<10	<1	<0.01
R15		691.786	1310.163	dolerite		27	0.5	133	38	70	74	39	170	1360	8.39	5.77	3.41	6.00	0.38	1.22	0.61	<5	110	0.5	480	143	254	<1	<5	<0.5	<2	20	<10	<1	0.05
	R15-S1	691.780	1310.163	C-bed	weak(2)	42	<0.5	57	54	42	67	79	232	3340	7.64	6.91	0.29	0.31	1.97	0.23	1.01	20	2180	1.5	290	116	190	1	<5	<0.5	<2	<10	<10	<1	0.01
	R15-S2	691.784	1310.164	pisolith	strong(1)	31	1.5	36	36	34	48	68	139	3320	4.74	5.39	0.23	0.28	1.90	0.26	0.76	5	2140	1.0	270	114	98	1	<5	<0.5	<2	<10	<10	<1	0.01
R16		709.089	1312.375	dolerite		8	<0.5	123	<2	94	76	41	157	1395	7.53	5.82	3.52	5.80	0.48	1.22	0.63	<5	180	0.5	480	157	264	4	<5	<0.5	<2	10	<10	<1	0.05
	R16-S1	709.091	1312.375	B-bed	strong(2)	21	<0.5	195	4	98	168	62	350	1750	11.49	14.41	0.69	0.50	0.51	0.09	0.97	20	280	1.0	320	34	327	1	10	<0.5	<2	<10	<10	<1	0.01
	R16-S2	709.100	1312.359	B-bed	strong(1)	32	0.5	189	10	90	156	64	315	1820	11.42	14.43	0.51	0.22	0.44	0.04	0.98	<5	230	1.0	210	22	341	<1	5	<0.5	<2	10	<10	<1	0.01
R17		714.474	1340.858	granite		24	0.5	22	22	70	15	11	32	480	3.43	7.79	0.96	1.65	2.84	2.82	0.28	5	1220	2.0	840	658	63	3	<5	<0.5	<2	<10	<10	<1	0.01
	R17-S1	714.483	1340.873	C-bed	weak(3)	14	<0.5	23	6	78	19	14	47	635	4.25	13.19	1.16	0.54	2.52	0.65	0.42	5	1210	2.5	630	251	84	1	10	<0.5	<2	20	30	<1	0.03
	R17-S2	714.481	1341.100	carapace	strong(2)	15	0.5	14	22	42	12	7	32	310	2.47	6.98	0.54	0.61	2.55	1.06	0.31	<5	1220	2.5	140	274	54	<1	<5	<0.5	<2	<10	<10	<1	0.01
	R17-S3	714.561	1341.068	carapace	strong(1)	16	<0.5	22	38	52	22	13	49	355	3.95	12.65	0.79	0.49	2.60	0.74	0.41	<5	1060	3.5	200	265	81	3	<5	<0.5	<2	10	<10	<1	0.01
R18		742.129	1370.196	arkose sandstone		20	<0.5	19	32	6	4	1	11	105	1.26	0.23	0.05	0.08	0.06	0.06	0.01	<5	40	<0.5	100	10	8	2	<5	<0.5	<2	<10	<10	<1	<0.01
	R18-S1	742.124	1370.215	A-bed	weak(3)	16	1	33	30	30	24	20	151	1330	6.02	6.89	0.16	0.17	0.48	0.06	0.62	<5	190	0.5	330	37	148	1	<5	<0.5	<2	<10	30	<1	0.02
	R18-S2	742.143	1370.225	cuirasse	strong(2)	15	1.5	38	38	32	29	19	173	1295	6.65	7.67	0.16	0.23	0.41	0.06	0.82	10	180	1.0	340	37	185	<1	<5	<0.5	<2	<10	30	<1	0.02
	R18-S3	742.124	1370.190	cuirasse	strong(1)	12	<0.5	53	26	34	33	23	334	1290	10.50	10.32	0.10	0.11	0.30	0.03	0.99	10	130	1.0	310	24	321	<1	<5	<0.5	4	<10	30	<1	0.02
R19		619.908	1302.853	granite		7	1.5	12	44	38	4	4	16	210	1.64	7.04	0.29	0.57	3.88	2.83	0.12	<5	770	7.0	360	171	16	3	<5	<0.5	<2	<10	<10	<1	<0.01
	R19-S1	619.911	1302.852	A-bed	weak(2)	10	1.5	10	34	30	11	6	21	505	1.72	9.25	0.23	0.43	5.12	0.73	0.31	<5	1060	4.5	280	174	30	2	<5	<0.5	<2	<10	10	<1	0.02
	R19-S2	619.903	1302.826	A-bed	weak(1)	12	1.5	12	48	42	13	7	27	545	2.12	10.97	0.31	0.42	4.74	0.93	0.44	5	1020	6.5	260	164	43	3	<5	<0.5	<2	<10	20	<1	0.02
R20		659.674	1350.576	gabbro		31	<0.5	121	14	62	58	39	148	1280	7.29	6.21	3.38	5.30	1.55	1.31	0.66	<5	1030	0.5	530	245	261	<1	<5	<0.5	<2	<10	<10	<1	0.01
	R20-S1	659.674	1350.576	C-bed	weak(3)	10	0.5	6	4	6	15	2	53	55	0.27	0.61	0.02	0.01	0.26	0.03	0.04	<5	50	<0.5	40	6	6	6	<5	0.5	<2	<10	10	<1	<0.01
	R20-S2	659.664	1350.569	C-bed	weak(2)	8	0.5	15	20	14	21	11	38	390	1.96	4.72	0.12	0.09	1.24	0.07	0.35	10	320	0.5	160	36	42	<1	<5	<0.5	<2	<10	10	<1	0.01
	R20-S3	659.672	1350.591	C-bed	weak(1)	10	1.5	9	28	10	13	10	32	400	1.70	3.80	0.09	0.06	1.58	0.09	0.36	5	360	0.5	110	32	43	1	<5	<0.5	4	<10	<10	<1	0.01

Appendice 15 La vérification sur les lieux de la végétation et de l'image de satellite SPOT (la zone de Diban)

No.	Location UTM (km)		Satellite Image Dry season (December to February)			Area Ratio (%) Dry season (January)				Area Ratio (%) Rainy season (September)				Soil	
	Eatsing	Northing	natural color	false color	texture	tree	grass	crops	soil	tree	grass	crops	soil	color	kind
1	685.339	1322.156	greenish brown	blue / dark red	coarse	10	40	0	50	15	55	0	30	brown / light gray	laterite gravel / surface soil
2	685.312	1322.179	greenish brown	blue / dark red	coarse	30	30	0	40	40	40	0	20	gray ~ light gray	surface soil
3	685.438	1322.168	grayish brown	dark green	moderate	5	50	0	45	10	60	0	30	brown / light gray	laterite gravel / surface soil
4	685.422	1322.161	grayish brown	dark green	moderate	5	45	0	50	10	55	0	35	brown / light gray	laterite gravel / surface soil
5	685.794	1323.173	deep green	dark red	fine	100	0	0	0	100	0	0	0	dark gray	surface soil with gravels
6	685.807	1323.173	deep green	dark red	fine	95	5	0	0	100	0	0	0	reddish brown	surface soil with gravels
7	686.570	1322.937	greensih gray	dark blue	moderate	5	50	0	45	10	60	0	30	reddish brown	laterite gravel
8	686.606	1322.945	greensih gray	dark blue	moderate	5	25	0	70	10	30	0	60	reddish brown	laterite gravel
9	685.945	1323.271	pale brown	light blue	moderate	0	5	40	55	0	5	95	0	gray ~ light gray	surface soil with gravels
10	686.005	1323.296	pale brown	light blue	moderate	0	5	20	75	0	10	90	0	dark gray	surface soil with gravels
11	685.859	1323.545	deep green	dark red	fine	85	10	0	5	90	0	0	10	gray ~ dark gray	surface soil (organic)
12	685.860	1323.533	deep green	dark red	fine	85	5	0	10	100	0	0	0	gray ~ dark gray	surface soil (organic)
13	685.934	1323.988	greenish brown	blue / dark red	coarse	2	2	0	96	2	3	85	10	light gray / brown	surface soil / laterite gravel
14	685.940	1323.966	pale brown	light blue	moderate	2	5	0	93	2	10	75	13	gray / brown	surface soil / laterite gravel
15	684.104	1324.042	green	garyish blue	moderate	5	10	0	85	10	85	0	5	reddish brown	laterite gravel
16	684.135	1324.084	green	garyish blue	moderate	10	20	0	70	10	65	0	25	reddish brown	laterite crust and gravel
17	683.923	1324.132	grayish brown	brown / dark red	coarse	20	30	0	50	30	50	0	20	brown / light gray	laterite gravel / surface soil
18	683.904	1324.240	greenish brown	brown / dark red	moderate	10	5	0	85	30	60	0	10	brown / gray	laterite gravel / surface soil
19	683.447	1324.401	brown	grayish brown	moderate	10	0	0	90	40	40	0	20	gray ~ dark gray	surface soil
20	683.413	1324.403	brown	grayish brown	moderate	10	5	0	85	30	55	0	15	gray ~ dark gray	surface soil

Note: No.18 to 20 are the fields burned artificially.

Appendice 16 L'indice de végétation (la zone de Diban)

No.	Satellite Image false color	Vegetation	Soil	Area Ratio (%) in January				Tree Index (Jan.)	Soil Index (Jan.)	Remarks (Sept. data)	
				tree	grass	crops	soil			T-Idx.	S-Idx.
15	blue	grass dominant	laterite gravel	5	10	0	85	-33	76	-79	-5
16	blue	grass dominant	laterite crust and gravel	10	20	0	70	-33	54	-73	14
1	blue	mosaic of tree and grass	laterite gravel and surface soil	10	40	0	50	-60	36	-71	18
2	blue	mosaic of tree and grass	surface soil	30	30	0	40	0	7	0	-12
7	dark blue	grass dominant	laterite gravel	5	50	0	45	-82	38	-71	18
8	dark blue	grass dominant	laterite gravel	5	25	0	70	-67	62	-50	45
17	brown	mosaic of tree and grass	laterite gravel and surface soil	20	30	0	50	-20	24	-25	-7
18	brown	mosaic of tree and grass	laterite gravel and surface soil	10	5	0	85	33	68	-33	-14
20	brown	mosaic of tree and grass	surface soil	10	5	0	85	33	68	-29	-11
19	brown	mosaic of tree and grass	surface soil	10	0	0	90	100	72	0	-12
3	dark green	grass dominant	laterite gravel and surface soil	5	50	0	45	-82	38	-71	18
4	dark green	grass dominant	laterite gravel and surface soil	5	45	0	50	-80	43	-69	23
12	dark red	many trees along stream	surface soil (organic)	85	5	0	10	89	-11	100	0
11	dark red	many trees along stream	surface soil (organic)	85	10	0	5	79	-12	100	-8
5	dark red	many trees on the plateau edge	surface soil with gravels	100	0	0	0	100	0	100	0
6	dark red	many trees on the plateau edge	surface soil with gravels	95	5	0	0	90	-5	100	0
9	white	millet plantation	surface soil with gravels	0	5	40	55	-100	55	-100	0
10	white	millet plantation	surface soil with gravels	0	5	20	75	-100	75	-100	0
14	white	cotton plantation	surface soil and laterite gravel	2	5	0	93	-43	89	-67	3
13	white	peanut plantation	surface soil and laterite gravel	2	2	0	96	0	92	-20	1

Tree Index (T-Idx.) = (tree-grass) / (tree+grass), Soil Index (S-Idx.) = (soil+grass+crops) x (soil-tree) /100

Appendice 17 La vérification sur les lieux de l'image de satellite SPOT (la zone de Sido)

No.	Location UTM (km)		Satellite Image Dry season (December to February)			Area Ratio (%) Dry season (January)				Area Ratio (%) Rainy season (September)				Soil	
	Eatsing	Northing	natural color	false color	texture	tree	grass	crops	soil	tree	grass	crops	soil	color	kind
1	655.051	1292.306	pale green	blue	fine	10	10	0	80	10	80	0	10	dark gray	surface soil
2	655.075	1292.316	pale green	blue	fine	5	5	0	90	0	95	0	5	dark gray	surface soil
3	655.421	1293.044	grayish brown	grayish brown	coase	20	75	0	5	25	70	0	5	gray	surface soil
4	655.432	1293.081	grayish brown	grayish brown	coase	5	50	0	45	10	80	0	10	dark gray	surface soil
5	655.633	1293.489	dark brown	red	moderate	40	30	0	30	90	10	0	0	light brown	surface soil
6	655.619	1293.488	dark brown	red	moderate	60	30	0	10	70	30	0	0	reddish gray	surface soil
7	655.689	1293.478	white	white	coase	10	5	0	85	10	80	0	10	light gray	surface soil
8	655.697	1293.446	white	white	coase	5	0	5	90	5	5	90	0	gray	surface soil
9	655.906	1294.074	brown	dark brown	coase	70	20	0	10	80	15	0	5	gray / red brown	surface soil with gravels
10	655.896	1294.058	brown	dark brown	coase	40	35	0	25	50	45	0	5	gray / brown	surface soil / laterite gravel
11	656.272	1294.890	green	red	moderate	50	5	0	45	60	15	0	25	reddish brown	alluvial soil and gravel
12	656.265	1294.904	green	red	moderate	50	30	0	20	60	25	0	15	reddish brown	alluvial soil and gravel
13	656.869	1295.771	blueish gray	dark blue	fine	5	10	0	85	5	80	0	15	brown / dark gray	laterite crust / surface soil
14	656.843	1295.752	blueish gray	dark blue	fine	0	2	0	98	0	80	0	20	brown / gray	laterite crust / surface soil
15	658.109	1297.785	brownish gray	reddish gray	coase	65	10	0	25	80	15	0	5	light gray	surface soil
16	658.140	1297.755	brownish gray	reddish gray	coase	30	30	0	40	40	55	0	5	light gray / brown	surface soil with gravels
17	658.184	1298.106	grayish green	dark red	coase	70	5	0	25	75	5	0	20	light gray / brown	surface soil with gravels
18	658.180	1298.127	grayish green	dark red	coase	70	3	0	27	80	5	0	15	gray / brown	surface soil with gravels
19	658.272	1299.207	moss green	purple	moderate	40	2	0	58	60	35	0	5	gray / brown	surface soil / laterite gravel
20	658.219	1299.206	moss green	purple	moderate	50	20	0	30	60	35	0	5	light gray / brown	surface soil with gravels
21	658.642	1300.140	gray	grayish red	coase	40	5	0	55	50	45	0	5	gray	surface soil
22	658.627	1300.094	gray	grayish red	coase	10	5	0	85	50	40	0	10	gray ~ brown	surface soil with gravels

Appendice 18 L'indice de végétation (la zone de Sido)

No.	Satellite Image false color	Vegetation	Soil	Area Ratio (%) in January				Tree Index (Jan.)	Soil Index (Jan.)	Remarks (Sept. data)	
				tree	grass	crops	soil			T-Idx.	S-Idx.
2	blue	grass very dominant	surface soil	5	5	0	90	0	81	-100	5
1	blue	grass very dominant	surface soil	10	10	0	80	0	63	-78	0
14	dark blue	grass very dominant	laterite crust and surface soil	0	2	0	98	-100	98	-100	20
13	dark blue	grass very dominant	laterite crust and surface soil	5	10	0	85	-33	76	-88	10
19	purple	tree dominant	surface soil and laterite gravel	40	2	0	58	90	11	26	-22
20	purple	tree dominant	surface soil with gravels	50	20	0	30	43	-10	26	-22
4	brown	mosaic of tree and grass	surface soil	5	50	0	45	-82	38	-78	0
3	brown	mosaic of tree and grass	surface soil	20	75	0	5	-58	-12	-47	-15
10	brown	mosaic of tree and grass	surface soil and laterite gravel	40	35	0	25	7	-9	-16	-21
16	brown	mosaic of tree and grass	surface soil with gravels	30	30	0	40	0	7	-16	-21
21	brown	mosaic of tree and grass	surface soil	40	5	0	55	78	9	5	-23
22	brown	mosaic of tree and grass	surface soil with gravels	10	5	0	85	33	68	11	-20
15	brown	tree dominant	surface soil	65	10	0	25	73	-14	68	-15
9	brown	tree dominant	surface soil with gravels	70	20	0	10	56	-18	68	-15
17	dark red	tree dominant	surface soil with gravels	70	5	0	25	87	-14	88	-14
18	dark red	tree dominant	surface soil with gravels	70	3	0	27	92	-13	88	-13
5	red	many trees along stream	surface soil	40	30	0	30	14	-6	80	-9
12	red	many trees along stream	alluvial soil and gravel	50	30	0	20	25	-15	41	-18
6	red	many trees along stream	surface soil	60	30	0	10	33	-20	40	-21
11	red	many trees along stream	alluvial soil and gravel	50	5	0	45	82	-3	60	-14
7	white	stopped plantation	surface soil	10	5	0	85	33	68	-78	0
8	white	millet plantation	surface soil	5	0	5	90	100	81	0	-5

Tree Index (T-Idx.) = (tree-grass) / (tree+grass), Soil Inex (S-Idx.) = (soil+grass) x (soil-tree) /100

Appendice 19 Les noms des espèces apparaissant des plantes arborescentes

No.	Bambara name	Latin name
1	Bakoro N'peku	<i>Lannea velutina</i>
2	Balembo	<i>Crossopteryx febrifuga</i>
3	Bamu	<i>Bombax costatum</i>
4	Banan	<i>Ceiba pentandra</i>
5	Baro	<i>Nauclea latifolia</i>
6	Boulougou	<i>Echinochloa stagniana</i>
7	Boure	<i>Gardenia erubescens</i>
8	Bourintie	<i>Gardenia ternifolia</i>
9	Djoro	<i>Securidaca longepedunculata</i>
10	Dougara	<i>Cordyla pinnata</i>
11	Dourasoungara	<i>Psorpspermum senegalense</i>
12	Dyala	<i>Khaya senegalensis</i>
13	Fougandie	?
14	Gala	<i>Indigofera tinctoria</i>
15	Geleba	<i>Burkea africana</i>
16	Goro goueni	<i>Hymenocardia acida</i>
17	Goyave	<i>Psidium Guajava</i>
18	Gundie	<i>Guiera senegalensis</i>
19	Gweni	<i>Pterocarpus erinaceus</i>
20	Gwele	<i>Prosopis africana</i>
21	Gweni-firini	?
22	Jun	<i>Mitragyna inermis</i>
23	Kaba	<i>Ficus platyphylla</i>
24	Kalakari	<i>Heeria insignis</i>
25	Kolokolo	<i>Afromosia laxiflora</i>
26	Kongosira	<i>Sterculia setigera</i>
27	Koro ni fing	<i>Vitex Doniana</i>
28	Koroba	<i>Vitex curcata</i>
29	Korongouni	?
30	Kouo safoune	<i>Macrosphyra longistyla</i>
31	Kouo sounsou	?
32	Kunan	<i>Sclerocarya birrea</i>
33	Manan	?
34	Mande sunsun	<i>Annona senegalensis</i>
35	Mbebe, Mpegou	<i>Lannea acida</i>
36	Mingon	<i>Spondias Mombin</i>
37	Mogoyiri	<i>Stereospermum Kunthianum</i>
38	Mounounan	?
39	Moussosana	<i>Connarus africanus</i>
40	Nere	<i>Parkia biglobosa</i>
41	N'galama	<i>Anogeissus leiocarpus</i>
42	N'gangoro	<i>Strychnos spinosa</i>
43	N'gangorodie	?
44	N'ganiaka	<i>Combretum molle</i>
45	N'garo	<i>Cissus populnea</i>

No.	Bambara name	Latin name
46	N'golobe	<i>Combretum micranthum</i>
47	N'gourou	<i>Cenchrus ciliaris</i>
48	N'kababe	?
49	Nokonoko	<i>Grewia lasiodiscus</i>
50	N'taba	<i>Cola cordifolia</i>
51	N'te (palmier)	<i>Elaeisis guineensis</i>
52	N'tereni	<i>Pterosia suberosa</i>
53	N'tomi	<i>Tamarindus indica</i>
54	N'tomono	<i>Ziziphus mauritiana</i>
55	N'triba	?
56	N'tribara	?
57	N'woni	?
58	Nyagala	?
59	Nyaman	<i>Piliostigma thonningii</i>
60	Palanpalan	<i>Sesbania pachycarpa</i>
61	Sama nere	<i>Entada africana</i>
62	Sanan	<i>Daniellia oliveri</i>
63	Segou falı	?
64	Seurou	?
65	Shyo	<i>Isobertinia doka</i>
66	Si	<i>Vitellaria paradoxa</i>
67	Sindian	<i>Cassia sieberiana</i>
68	Sira	<i>Adansonia digitata</i>
69	Sisal	<i>Agave sisalana</i>
70	Sofara N'goni	<i>Acacia macrostachya</i>
71	Soula finsan	<i>Trichilla roka</i>
72	Sunsun fing	<i>Diospyros mespiliformis</i>
73	Suruku Gninge	<i>Securinea virosa</i>
74	Suruku Tiga	<i>Ctenolepis cerasiformis</i>
75	Tabakoumba	?
76	Tamba	<i>Detarium microcarpum</i>
77	Tiegana fisingui	?
78	Tonge	<i>Ximenia americana</i>
79	Tore	?
80	Toro	<i>Ficus gnaphalocarpa</i>
81	Toutou	?
82	Toutoukoura	?
83	Tyangara	<i>Combretum glutinosum</i>
84	Tyangarablen	<i>Discrostachys glomerata</i>
85	Wagadje	?
86	Warasa kaman	?
87	Wolo	<i>Terminalia macroptera</i>
88	Woo	?
89	Zaban	<i>Saba senegalensis</i>
90	Zere	<i>Polycarpon prostratum</i>

Appendice 20 Le tableau de végétation—le tableau brut (la zone de Diban)

No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	5			
False color	B/G	W	B	W	R	R	N	R	R	N	N	W	W	G	G	G/N	G/N	B	B	G	G	R	R	B	B	B/R	B/R	5			
Number of kind	18	5	6	5	6	8	16	24	18	19	18	3	4	19	13	15	14	22	12	23	19	11	10	18	17	14	20	16			
Si	+	+		+				+	+	+				3.2	+	2.1	2.1	3.1	+	+	+	+							16		
Sama nere	1.2							+	+	+	+				+	+	1.2	+	+	+	+	+							13		
Mbebe		2.1						3.3	+		+					+		2.1	+	+		+	2.1			+	+	+	15		
Kolokoto	+							+											+	+		+	+					+	7		
Tore	+																1.2	+			+		+						+	4	
Tyangara	+		+	+							+				+	+	2.1	+	+	+	+	+	+			2.2	+	1.2	+	17	
Mingon	+									+																+	+		+	5	
Wolo	+								+	+	+			+	+	+	+	+	+							+	+		+	14	
Mande sunsun	+	+						+			3.4				+	+	+								1.2	+	+		+	14	
Temba	2.3							3.3			3.4	2.2																	+	4	
Gweni	+	+	+						+	+	+						2.1	+			2.1	+	2.2	+	+	2.1				15	
Boure	+															+				+									+	6	
Gundie											+						2.2	+	2.2	+						+	+	+	+	9	
Nyaman	+		+						+	+					+	+													+	8	
Koro ni fing	+								+		+										+								+	6	
N'triba	+		+					+		+					+					+						2.2		1.2		9	
Kalakari	+									+																				2	
Gwele	+									+					+											2.1		+	2.2	6	
Geleba	+									+																				2	
Nere		3.1		+					2.1		+	3.1			3.1	+	+	+			+							+	13		
Palanpalan								+	+					+		2.2	1.2			+	+							+	+	8	
Nokonoko			+					+		+					+	+	+	+		+	+						+	+	13		
N'tomono			+																											1	
Toro				+				+																					+	3	
Kongosira				+				+													+								+	3	
Banan					3.1	3.1			+																				+	2	
N'golobe					3.1	3.2			+		+										2.1	+	+	+	1.2		2.3		10		
Manan					+																									1	
Woo					2.1										+														+	3	
Sofara N'goni					+	+			+		+									+	+					+		+	9		
Sunsun fing					+	+	+		+				+	+							+	+							8		
N'te					+	+			+																				1		
N'galama					+			+												+									+	4	
Baro					+			1.2	+																				+	5	
Kouo safoune					1.2																									1	
Dyala							2.1		+		+		2.1							+									+	5	
N'tereni							2.1		+					+						1.2		+					+	+	+	7	
Zaban							+	+	+	+											+								+	7	
N'garo							+							+	+														+	4	
Bamu							+					+											+	+					+	4	
Sanan								+	+	+										+									+	4	
Kunan								+	+	+						+				+									+	4	
Sindian								3.2	2.1	+						+											+		+	8	
Sira								+																					+	2	
Gala								+																					+	1	
Jun								+	+																				+	3	
N'gourou								+																						1	
Boulougou								+		+																			+	4	
Goyave								+																						1	
Sisal								1.2																						1	
Tonge								+		+						+				+	+	+					+	+	8		
Wagadie								2.3																						1	
Tyangarablen									+																					1	
Bourintie									+																					1	
N'taba										+																				3	
N'ganiaka											+	+																		5	
Balemo											+	+																		1	
Fougandie											+	+																		4	
N'gangoro											+	+																		6	
Gweni firini											+																			1	
Korongouni															1.2															2	
Soula finsan															+															1	
Warasa kaman															+															1	
Moussosana																+														1	
Suruku Gnringe																2.3														1	
N'woni																	2.2			+		2.2					+	+	+	5	
N'tribara																				1.2	+						+	+	+	5	
Djoro																				+									+	1	
Toutou																					+								+	1	
Tiegana fisingui																													+	1	
Segou fali																													+	2	
Dura soungalan																													+	2	
Pouopouo																													+	2	
Koroba																													+	1	
Shyo																													3.2	3.2	2
Zere																													3.2	1	
N'gangorodie																													+	1	
Mounounan																													+	2	
Dougara																														+	1
Bakoro N'peku																														+	1

note: B: blue, R: red, G: green, W: white, N: brown

##: the left number is coverage (1 to 5) and the right number is sociability (1 to 5). "+" means "1.1".

Appendice 21 Le tableau de végétation—le tableau partiel (la zone de Diban)

No.	8	9	22	23	6	5	27	10	11	28	7	20	16	17	14	21	15	24	25	1	18	19	3	2	4	13	12	Total number of kind
False color	R	R	R	R	R	R	R/B	N	N	R/B	N	G	N/G	N/G	G	G	G	B	B	G/B	B	B	B	W	W	W	W	
Topography	wag	wag	riv	riv	riv	e-L	s-L	L-gr	L-gr	s-L	L	e-L	L-gr	L-gr	s-L	e-L	s-L	L	L	L-gr	L-gr	L-gr	L-gr	P-p	P-c	P-m	P-m	
Tree coverage(%)	100	100	100	100	100	100	100	100	80	70	100	95	80	90	75	100	100	65	80	30	40	20	5	65	15	45	60	
Number of kind	24	18	11	10	8	6	20	19	18	14	16	23	15	14	19	19	13	18	17	18	22	12	6	5	5	4	3	
Tyangara			+				+	+	1.2			+	2.1	+	+	+	+	2.2	+	+	+	+	+		+			17
Si		+	+									+	3.1	+	2.1	+	2.1			+	+	+		+	+	+	3.2	16
Nere		2.1					+	+	+			+	+	+	+	3.1		+		+				3.1	+		3.1	13
Mbebe	+						+	+	+	3.3		+	2.1	+	+	2.1		+	+	+	+			2.1				15
Gweni	+	+	2.2	+			+					2.1	2.1	+	+	+		+	2.1	+			+					15
Wolo	+	+					+	+	+			+	+	+	+		+		+	+	+						+	14
Sama nere	+	+					+	+	+			+	1.2	+	+	+	+			1.2	+							13
Nokonoko	+		+				+	+	+	+		+	+	+	+	+	+					+		+				13
N'golobe		+	+	+	3.2	3.1			+	2.3		2.1				+		1.2										10
Sofara N'goni		+			+	+	+	+						+	+	+				+		+						9
Nyaman	+	+		+			+								+	+				+		+						8
Palanpala	+											+	+	+	2.2	1.2	+	+										8
Sunsun fing		+			+	+						+	+		+	+										+		8
Tonge	+						+	+	+			+	+	+	+				+	+	+	+						8
Sindian	3.2	2.1					+	+				2.1	+		+			+										8
Zaban	+	+	+				+			+		+							+									7
Koro ni fing	+						+	+				+						+	+									6
Mande sunsun							+	+	+	+	+	+	+	+	+	+	+	1.2	+	+	+			+				14
Gundie							+	+	+			+	2.2	+				+		2.2	+							9
N'triba							+		1.2	+	+	+	+	+				2.2	+	+	+	+						9
Kokokolo							+	+	+	+		+								+	+	+						7
N'tereni							+			2.1	+	+	+	+				+	+		1.2							7
Boure							+					+	+	+						+	+							6
Gwele							2.2	+	+						+			2.1	+									6
N'gangoro							+	+	+									+	2.2	+								6
Mingon							+											+	+	+	+							5
Baro	1.2	+	+	+	+																							5
Dyala		+						+		2.1											+					2.1		5
N'ganiaka			+				+	+	+											2.1								5
N'galama	+			+	+																+							4
N'woni									+			2.2	2.2					+		+								5
N'tribara							+							+					+		1.2	+						5
Tore															1.2		+				+	+						4
Tamba							3.4	2.2		3.3											2.3							4
N'garo										+				+	+		+											4
Fougandie								+	+									1.2	+									4
N'taba							+					2.1				2.1												3
Banan					3.1	3.1																						2
Shyo			3.2	3.2																								2
Suruku Gninge																	2.3											1
Kouo safoune					1.2																							1
Wagadje	2.3																											1
Zere			3.2																									1

note: B: blue, R: red, G: green, W: white, N: brown

wag: wagi, riv: river, L: laterite crust plateau, e-L: edge of laterite plateau, s-L: slope of laterite plateau, L-gr: laterite gravel,

P-: plantation of, c: cotton, m: millet, p: peanut

Appendice 22 Le tableau de végétation—le tableau brut (la zone de Sido)

No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	Num. of kind
False color	N	N	B	B	R	R	N	N	B	B	R/N	R/N	B/G	B/G	N	N	R	R	W	W	N	N	B	B	B/R	B/R	
Number of kind	23	22	16	14	18	27	18	23	10	9	20	28	21	24	21	23	20	23	12	14	24	25	11	11	21	20	
Wolo	1.2	+	1.2	+	1.2	+	3.2	+	+	+	3.1	1.2	2.3	+	2.1	+	3.2	+	2.2	1.2	2.1	1.2	2.2	+	2.2	+	26
Mbebe	+	+	+	+	+	+	+	+	+	+	+	+	+	+	2.1	+	+	+	+	+	+	+	+	+	1.2	1.2	24
N'triba	+	+	1.2	+	+	+	1.2	+	+	+	1.2	1.2	+	2.2	1.2	+	1.2	+	+	+	+	+	+	+	+	+	24
Si	+	2.1	+	+	+	+	3.1	+	+	+	+	+	3.3	+	+	+	2.2	1.2	2.1	+	+	+	+	+	+	+	21
Tyangara	+	+	+	+	2.2	+	1.2	+	2.1	+	+	+	+	+	2.1	1.2	+	+	+	+	+	+	+	+	+	1.2	20
Mande Sunsun	+	+	2.1	+	+	+	1.2	+	+	+	+	+	+	+	2.2	+	1.2	+	+	+	1.2	+	+	+	+	+	18
Nyaman	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	2.1	+	+	+	+	+	+	+	+	+	18
Boure	+	+	+	+	+	+	2.1	+	+	+	+	+	+	+	+	+	+	+	+	+	+	1.2	+	+	+	1.2	17
Korokoro	+	+	2.1	+	+	+	+	+	+	+	+	+	+	+	1.2	+	+	1.2	+	+	+	+	+	+	+	+	16
Nokonoko	1.2	+	+	+	+	+	+	+	+	+	+	+	+	2.2	+	+	+	+	+	+	+	+	+	+	+	+	16
Sanan	2.2	2.1	+	1.2	+	2.1	+	+	+	+	+	+	+	+	2.1	1.2	+	1.2	+	+	2.2	+	+	+	+	+	16
Nere	+	+	+	+	+	+	+	+	+	+	+	+	2.1	+	+	+	+	+	+	+	+	+	+	2.1	+	+	12
Mingon	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	1.2	+	+	+	+	+	+	+	+	+	+	10
N'woni	2.1	+	+	+	2.2	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	1.2	+	10
Sunsun fing	1.2	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	9
Bourougou	+	+	+	+	+	+	1.2	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	8
Shyo	2.1	+	3.1	+	2.1	+	+	+	+	+	3.3	1.2	+	+	+	+	+	+	+	+	+	+	+	+	+	+	8
Goro goueni	+	+	+	1.2	+	2.2	+	+	+	+	+	+	+	+	+	+	+	+	1.2	+	1.2	+	+	+	+	+	7
Gwele	+	+	+	+	+	+	+	1.2	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	7
N'golobe	+	+	+	2.2	1.2	+	+	+	+	+	1.2	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	6
Durasoungara	1.2	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	4
Warasa kaman	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	4
Goundie	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	2
Palanpala	+	+	+	+	+	+	+	+	+	+	1.2	+	+	+	+	+	1.2	1.2	+	1.2	+	+	+	+	2.2	+	15
Sindian	+	+	+	+	+	+	+	+	+	2.3	+	+	+	+	+	+	+	+	1.2	1.2	+	+	+	+	2.2	+	13
N'gangoro	+	+	+	2.2	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	10
Gweni	+	2.1	+	2.2	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	9
Tabakoumba	+	+	+	1.2	+	+	+	+	+	+	+	+	+	2.2	+	2.2	+	+	+	+	+	+	+	+	+	+	8
N'tribara	+	+	+	+	+	+	1.2	+	+	1.2	+	+	+	+	+	+	+	+	+	+	1.2	2.3	+	+	+	+	6
N'gourou	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	2.1	+	5
Woo	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	3
Sama nere	+	1.2	+	2.1	+	1.2	+	+	+	+	1.2	+	+	+	2.1	+	+	+	+	+	+	1.2	+	+	+	+	20
Sura finsan	+	+	+	+	+	+	+	+	+	+	3.2	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	7
Tamba	+	+	+	+	+	+	+	+	+	+	+	+	3.2	+	2.2	+	2.2	+	+	+	+	+	+	+	+	+	5
Zaban	+	+	2.2	+	2.2	+	+	+	+	+	1.2	+	+	+	+	+	+	+	+	+	+	1.2	+	+	+	+	10
N'tereni	+	+	+	+	2.2	+	+	+	+	+	+	+	+	+	+	+	+	+	1.2	1.2	+	1.2	+	+	+	+	14
N'ganiaka	+	+	+	2.1	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	4
Bamu	+	+	+	+	+	+	2.1	+	+	+	+	+	2.1	+	+	+	+	+	+	+	+	2.2	+	+	+	+	13
Koro ni fing	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	1.2	10
Baro	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	2.2	+	1.2	+	+	+	5
Sofara n'goueni	+	+	+	+	1.3	+	+	+	+	+	+	+	+	1.2	+	+	+	+	+	+	+	+	+	+	+	+	4
Kouo safoune	+	+	+	+	1.2	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	1
Toutoukoura	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	1
Balemba	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	1.2	7
Tonge	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	3
Seurou	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	1
Suruku tiga	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	2
Mogoyiri	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	1
Geleba	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	4
Djoro	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	1
Dyala	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	1
Kongosira	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	1
Jun	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	3
Gala	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	1
Kouo sounsou	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	1
N'kababe	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	1
Tore	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	1
Kaba	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	1
Mounounan	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	1
Kunan	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	1
N'tomi	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	2.1	1

note; B: blue, R: red, G: green, W: white, N: brown

#: the left number is coverage (1 to 5) and the right number is sociability (1 to 5). "+" means "1.1".

Appendice 23 Le tableau de végétation—le tableau partiel (la zone de Sido)

No.	6	18	17	5	12	11	25	26	22	16	21	8	2	1	7	15	13	14	3	4	23	24	9	10	19	20	Total number of kind		
False color	R	R	R	R	R/N	R/N	B/R	B/R	N	N	N	N	N	N	N	N	B/G	B/G	B	B	B	B	B	B	B	W		W	
Topography	wag	R-b	R-b	wag	wag	wag	PI	PI	PI	PI	PI	PI	PI	PI	PI	PI	PI	PI	L-gr	L-gr	L	L	L	L	L	P		P	
Tree coverage(%)	100	85	100	100	85	70	100	70	90	70	70	70	90	70	90	90	80	80	80	70	15	30	15	60	20	50			
Number of kind	27	23	20	18	28	20	21	20	25	23	24	23	22	23	18	21	21	24	16	14	11	11	10	9	12	14			
Nyaman	+	+	2.1	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+								+	+	18
Boure	+	+	+		+	+	1.2	1.2	+	+	+	+	+	+	2.1				+	+	+		+						17
Nokonoko	+	+	+		+	+			+	+	+	+	+	1.2				+	2.2	+	+			+					16
Palanpalan	+	1.2	1.2		+	1.2	2.2	+	+			+	+					+				+				+	1.2	15	
Sindian	+	1.2	+	+			2.2	+					+	+	+										+	2.3	+	+	13
Bamu		+	+	+				2.2	+	+							2.1	+				+	2.1	+	+			13	
Nere		+			+			+	+		+	+		+			2.1	+					2.1	+		+		12	
N'woni			+	2.2			1.2				+			2.1	+	+	+					+	+					10	
Tabakoumba	1.2	+			+			+	2.2			+					2.2										+	8	
Koro ni fing	+	+	+		+	+	+	1.2		+		+		+														10	
Sunsun fing	+		+		+	+	+			+	+	+	+	1.2														9	
Bourougou		+			+				+	+	1.2		+	+													+	8	
Gwele	+		+		+						+	1.2		+	+													7	
Gweni		+		2.2	+	+					+		+	+	+													9	
Shyo	+		2.1	1.2	3.3					+		+		2.1						3.1								8	
Sanan	2.1	1.2	+	+	+	+	+	+	1.2	2.2	+	2.1	2.2	2.1	+												1.2	16	
Kolokolo		1.2	+		+		+	+	+	+	+	+	+	+	1.2	+	+	2.1	+							+	+	16	
N'tereni		+	+		+	+	+	1.2		+	+		2.2	+	+											1.2	1.2	14	
Zaban	2.2	+	+		1.2		+	+	1.2	+									+		2.2							10	
N'gangoro		+	+		+	+							+	+	+			+	+	2.2								10	
Mingon		+			+			+	1.2		+		+	+	+			+	+	+								10	
Sura finsan		+			3.2	+			+									+	+	+								7	
Balemba							+	1.2	+	+	+	+										+						7	
N'tribara								+	2.3	1.2	1.2	+													1.2			6	
Goro goueni	2.2								1.2				+	+							1.2		+			1.2		7	
N'golobe	1.2			2.2										+								+	+	1.2				6	
N'gourou			+		+	2.1							+										+					5	
Baro	+							+		2.2												1.2			+			5	
Tamba			2.2													2.2	3.2	+	+									5	
Durasoungara						+							+	1.2														4	
Warasa kaman						+							+															4	
N'ganiaka	+			2.1	+							+																4	
Sofara n'goueni	1.3							+	+										1.2									4	
Kouo safoune	1.2																											1	
N'tomi								2.1																				1	

note: B: blue, R: red, G: green, W: white, N: brown

wag: wagi, R-b: river basin, PI: Plateau, L: laterite crust, L-gr: laterite gravel, P: plantation field