

APPENDIX B - 4.

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MEAN MINIMUM TEMPERATURE

Station: EL MANSOURA Lat. = 31°00'N Long. = 31°27'E Alt. = 3.8 m

(Unit: °C)

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Mean
1969	6.2	7.7	10.6	10.5	15.3	19.0	19.0	19.4	19.3	16.6	13.2	7.5	13.7
1970	7.4	6.5	8.4	11.2	14.3	17.8	18.4	19.3	18.2	14.5	12.4	7.0	13.0
1971	7.2	6.4	7.9	10.2	14.9	17.9	19.1	20.2	18.2	15.0	11.3	8.0	13.0
1972	5.9	5.7	8.3	12.9	14.3	18.0	19.7	20.9	19.4	15.7	12.6	8.2	13.5
1973	4.7	6.7	7.4	10.2	14.1	17.5	19.9	19.3	18.2	-	-	-	-
1974	-	6.5	9.8	11.5	13.6	18.2	19.9	19.9	18.6	16.7	12.7	7.0	-
1975	5.6	5.9	7.6	12.7	14.4	18.4	20.2	19.0	17.8	16.5	-	8.5	-
1976	5.8	5.2	7.8	11.9	15.3	18.0	19.9	18.6	17.4	16.5	13.7	8.6	13.2
1977	6.1	7.9	8.1	12.2	16.0	19.1	21.0	20.8	18.2	14.4	12.4	6.9	13.6
1978	5.3	6.2	8.1	11.0	15.7	17.3	20.3	18.7	17.3	16.2	10.5	8.8	12.9
Mean	6.0	6.5	8.4	11.4	14.8	18.2	19.7	19.7	18.3	15.8	12.4	7.8	13.3

Source: The Egyptian Meteorological Authority (Organization of Weather)

MEAN TEMPERATURE

Station: EL MANSOURA Lat. = 31°00'N Long. = 31°27'E Alt. = 3.8 m

(Unit: °C)

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Mean
1969	11.8	15.1	17.6	18.1	23.1	27.2	25.9	26.5	26.7	23.2	19.5	14.7	20.8
1970	14.2	14.4	16.5	19.7	22.8	25.7	26.2	27.1	25.8	21.9	18.6	13.7	20.6
1971	14.3	13.3	15.9	17.6	23.5	26.0	26.2	27.4	25.5	22.2	17.9	13.6	20.3
1972	12.6	13.1	15.4	20.4	21.8	26.0	26.8	28.2	26.9	22.9	18.6	14.4	20.6
1973	12.1	14.3	16.5	18.2	23.0	25.8	27.8	26.9	25.9	-	-	-	-
1974	-	13.4	16.6	19.2	22.2	26.0	27.2	26.8	25.8	24.0	18.9	12.7	-
1975	12.1	12.9	15.9	21.6	22.4	26.0	27.1	26.0	25.0	23.1	-	14.2	-
1976	12.3	11.7	14.8	19.0	22.7	25.3	26.7	25.6	24.4	23.2	19.7	14.8	20.0
1977	12.5	15.2	14.8	19.4	23.9	26.5	27.9	27.6	25.1	20.9	19.0	13.0	20.5
1978	11.8	13.9	15.4	19.2	24.2	25.9	27.5	25.6	24.5	23.3	16.8	14.7	20.2
Mean	12.6	13.7	15.9	19.2	23.0	26.0	26.9	25.8	25.6	22.7	18.6	14.0	20.4

Source: The Egyptian Meteorological Authority (Organization of Weather)

MEAN MAXIMUM TEMPERATURE

Station: EL MANSOURA Lat. = 31°00'N Long. = 31°27'E Alt. = 3.8 m

(Unit: °C)

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Mean
1969	17.4	22.5	24.6	25.7	30.9	35.4	32.8	33.6	34.1	29.8	25.8	21.8	27.9
1970	21.0	22.2	24.6	28.2	31.2	33.6	33.9	34.3	33.4	29.2	24.7	20.3	28.1
1971	21.4	20.1	23.9	24.9	32.1	34.0	33.2	34.5	32.8	29.4	24.5	19.1	27.5
1972	19.3	20.4	22.4	27.9	29.3	33.9	33.9	35.5	34.4	30.0	24.5	20.5	27.7
1973	19.4	21.9	25.6	26.1	31.9	34.1	35.7	34.5	33.6	-	-	-	-
1974	-	20.2	23.4	26.9	30.7	33.7	34.4	33.6	33.0	31.3	25.0	18.3	-
1975	18.5	19.8	24.1	30.5	30.3	33.5	33.9	32.9	32.2	29.6	-	19.8	-
1976	18.7	18.1	21.8	26.1	30.0	32.5	33.4	32.6	31.4	29.8	25.7	20.9	26.8
1977	18.8	22.4	21.5	26.5	31.8	33.9	34.8	34.3	32.0	27.3	25.5	19.0	27.3
1978	18.2	21.5	22.7	27.3	32.6	34.0	34.7	32.5	31.7	30.3	23.0	20.6	27.4
Mean	19.2	20.9	23.5	27.0	31.1	33.9	34.1	33.8	32.9	29.6	24.8	20.0	27.6

Source: The Egyptian Meteorological Authority (Organization of Weather)

WIND SPEED

Station: EL MANSOURA Lat. = 31°00'N Long. = 31°27'E Alt. = 3.8 m

(Unit: %)

Direction	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Calm & Variable	7.1	3.2	1.4	1.1	2.5	2.6	1.9	1.9	2.4	4.6	2.4	2.2
1 - 3 (knots)	14.1	16.4	8.8	10.3	17.0	22.6	32.2	41.1	38.8	31.8	22.2	22.1
4 - 6 "	33.1	34.3	29.7	35.0	33.6	29.4	33.0	31.7	32.9	35.9	42.7	32.0
7 - 10 "	29.6	29.8	35.9	32.6	26.2	26.2	23.9	19.6	20.7	20.9	23.3	28.1
11 - 16 "	12.9	13.0	19.9	18.8	17.9	18.2	8.7	4.4	5.1	6.6	8.3	12.2
17 - 21 "	2.5	2.7	3.6	2.0	2.5	0.8	0.3	1.3	0.1	0.2	0.9	2.7
22 - 27 "	0.7	0.5	0.6	0.2	0.3	0.2	0.0	0.0	0.0	0.0	0.2	0.7
28 - 33 "	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
more than 34 "	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Mean

Wind speed (m/s) 3.5 3.6 4.2 4.0 3.7 3.5 2.9 2.5 2.5 2.6 3.0 3.5

Source: The Egyptian Meteorological Authority (Organization of Weather)

SUNSHINE HOUR

Station: EL MANSOURA Lat. = 31°00'N Long. = 31°27'E Alt. = 3.8 m

(Unit: hr.)

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Mean
1969	5.7	7.4	6.7	9.4	10.2	12.1	11.8	11.3	10.6	9.1	8.7	7.6	9.2
1970	7.1	8.1	8.4	9.9	10.4	11.7	11.7	11.1	10.8	9.4	7.9	7.0	9.5
1971	7.1	7.6	8.5	8.8	11.0	11.7	11.5	10.9	10.5	9.4	7.4	5.3	9.1
1972	7.3	8.6	7.5	8.0	9.9	11.7	11.3	10.9	10.6	9.2	7.3	6.7	9.1
1973	7.8	8.0	8.9	10.1	11.4	11.6	11.2	11.3	10.6	-	-	-	-
1974	-	7.3	7.9	8.6	11.3	11.8	11.3	11.3	10.1	9.8	8.3	6.3	-
1975	7.0	7.1	9.6	9.7	10.7	11.7	11.4	11.3	10.3	9.8	7.8	5.6	9.3
1976	6.9	6.5	8.0	8.7	10.0	11.5	11.4	11.3	10.0	8.6	7.7	7.3	9.0
1977	6.4	8.3	8.8	8.8	10.6	11.3	11.2	11.1	12.6	9.1	8.2	9.2	9.6
1978	6.9	8.6	8.2	9.6	11.2	11.7	11.6	11.2	10.0	8.5	7.1	6.3	9.2
Mean	6.9	7.8	8.3	9.2	10.7	11.7	11.4	11.2	10.6	9.2	7.8	6.8	9.3

Source: The Egyptian Meteorological Authority (Organization of Weather)

WIND DIRECTION

Station: EL MANSOURA Lat. = 31°00'N Long. = 31°27'E Alt. = 3.8 m

(Unit: %)

Direction	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Calm & Variable	2.8	4.1	2.2	1.7	3.1	4.2	2.3	2.6	3.6	6.1	2.8	2.7
345° - 014°	3.9	7.3	9.7	9.5	16.7	12.9	10.3	10.0	14.9	17.1	19.1	5.3
015 - 044	5.0	9.7	11.2	15.2	15.9	14.3	8.2	9.0	14.7	18.5	21.0	8.2
045 - 074	5.1	7.1	8.9	13.7	9.6	6.6	2.2	2.0	3.4	9.4	4.6	6.5
075 - 104	4.8	5.2	6.3	5.7	7.2	3.8	0.8	0.8	1.0	4.0	2.5	5.7
105 - 134	3.5	4.4	3.9	3.0	3.0	1.7	0.2	0.3	0.8	1.8	0.7	4.0
135 - 164	4.3	3.5	3.8	2.6	1.8	0.9	0.2	0.3	0.8	1.0	0.8	3.1
165 - 194	11.5	5.7	4.2	2.8	1.3	0.7	0.4	0.7	0.6	0.8	3.2	8.9
195 - 224	16.5	11.0	6.7	3.6	2.9	2.9	3.2	3.9	2.3	2.9	8.5	17.7
225 - 254	16.2	13.8	10.8	7.4	4.2	5.0	8.8	10.6	6.3	6.0	6.9	15.6
255 - 284	10.7	11.7	12.0	10.0	8.0	9.5	15.1	12.7	11.9	7.1	8.1	10.8
285 - 314	8.1	9.3	12.1	12.6	10.3	17.0	14.7	23.6	16.9	12.1	9.3	6.5
315 - 344	7.6	7.1	9.2	12.3	16.0	20.5	23.6	23.5	22.8	13.2	13.5	5.0

Source: The Egyptian Meteorological Authority (Organization of Weather)

MINIMUM RELATIVE HUMIDITY

Station: EL MANSOURA Lat. = 31°00'N Long. = 31°27'E Alt. = 3.8 m

(Unit: %)

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Mean
1969	34	28	22	21	13	14	28	30	29	30	40	31	
1970	36	28	13	12	10	16	25	24	27	17	35	36	
1971	37	21	18	12	9	15	24	33	36	23	36	37	
1972	28	25	27	16	18	19	30	27	19	30	36	40	
1973	21	26	25	19	18	20	26	26	19	-	-	-	
1974	-	30	24	19	10	17	28	26	21	13	29	38	
1975	33	30	15	22	15	13	22	31	25	24	31	34	
1976	28	35	25	24	17	22	29	35	30	25	26	33	
1977	31	29	30	17	15	16	26	29	25	25	24	41	
1978	36	27	27	17	12	15	20	23	22	24	29	30	
Mean	32	28	23	18	14	17	26	28	25	23	32	36	

Source: The Egyptian Meteorological Authority (Organization of Weather)

MEAN DAILY EVAPORATION

Station: EL MANSOURA Lat. = 31°00'N Long. = 31°27'E Alt. = 3.8 m

(Unit: mm/day)

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Mean
1969	2.8	3.3	4.2	5.5	6.4	8.0	6.3	5.3	4.7	4.8	4.4	4.3	5.0
1970	3.8	4.1	5.6	6.0	7.6	6.8	5.5	4.7	4.4	5.0	3.0	2.7	4.9
1971	2.2	4.2	5.2	5.5	7.6	7.1	5.4	4.9	4.5	4.6	3.3	2.7	4.8
1972	2.3	3.2	3.7	5.8	6.4	7.0	5.3	5.3	5.2	4.5	2.8	2.2	4.5
1973	2.3	3.6	3.7	4.8	6.4	6.8	5.4	4.2	4.2	-	-	-	-
1974	-	3.3	3.8	5.3	8.0	8.3	6.3	5.2	6.3	5.8	4.0	2.5	-
1975	2.8	3.2	4.8	-	8.2	8.7	6.4	5.9	6.1	6.4	-	3.5	-
1976	3.5	3.8	5.4	6.3	8.3	8.6	6.4	5.8	6.4	6.1	4.5	3.6	5.7
1977	3.0	4.1	4.5	6.5	10.2	8.6	6.6	6.2	8.8	6.7	4.4	3.9	6.1
1978	3.0	4.4	4.6	6.3	9.6	9.7	7.7	5.9	6.2	5.9	4.1	3.3	5.9
Mean	2.9	3.7	4.6	5.8	7.9	8.0	6.1	5.3	5.7	5.5	3.8	3.2	4.9

Source: The Egyptian Meteorological Authority (Organization of Weather)

MEAN RELATIVE HUMIDITY

Station: EL MANSOURA Lat. = 31°00'N Long. = 31°27'E Alt. = 3.3 m

(Unit: %)

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Mean
1969	65	63	58	56	56	54	63	64	63	63	69	64	62
1970	68	62	56	53	50	55	60	60	63	53	64	68	59
1971	68	60	56	56	49	53	59	65	67	60	66	68	61
1972	64	62	59	55	57	56	64	62	58	65	64	69	61
1973	59	62	58	58	55	59	62	61	58	-	-	-	-
1974	-	65	62	57	52	54	62	61	58	56	62	69	-
1975	67	65	54	59	50	52	58	64	62	57	61	65	60
1976	64	67	62	60	53	53	62	66	64	59	62	63	61
1977	61	63	65	53	52	55	61	62	60	61	60	70	60
1978	68	61	62	56	51	55	58	60	58	61	63	64	60
Mean	<u>65</u>	<u>63</u>	<u>59</u>	<u>56</u>	<u>53</u>	<u>55</u>	<u>61</u>	<u>63</u>	<u>61</u>	<u>59</u>	<u>63</u>	<u>67</u>	<u>59</u>

Note: Above figures have been calculated by the following equation,
 Mean Rel. Hum. = (Max. R. H. + Min. R. H.)/2

MAXIMUM RELATIVE HUMIDITY

Station: EL MANSOURA Lat. = 31°00'N Long. = 31°27'E Alt. = 3.8 m

(Unit: %)

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Mean
1969	96	98	93	90	99	93	98	97	96	96	98	96	
1970	99	95	98	93	89	93	94	96	98	88	93	99	
1971	98	98	93	99	89	90	93	96	98	96	96	99	
1972	99	99	91	94	95	93	97	97	97	99	91	97	
1973	96	98	90	96	92	97	98	95	97	-	-	-	
1974	-	100	100	94	93	91	95	96	95	98	95	99	
1975	100	100	92	95	84	90	94	97	98	90	91	95	
1976	99	98	98	95	88	83	94	96	97	93	98	92	
1977	91	96	100	88	89	93	95	94	94	96	96	99	
1978	100	95	96	94	90	94	96	97	93	98	96	97	
Mean	98	98	95	94	91	92	95	96	96	95	95	97	

Source: The Egyptian Meteorological Authority (Organization of Weather)

MONTHLY RAINFALL

Station: EL MANSOURA Lat. = 31°00'N Long. = 31°27'E Alt. = 3.8 m

(Unit: mm)

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Total
1969	11.3	0.5	22.5	0.5	1.8	0.0	Trace	0.0	0.0	18.2	0.2	0.6	55.6
1970	3.5	0.7	10.5	5.5	0.0	0.0	0.0	0.0	0.0	0.2	1.7	3.8	25.9
1971	30.3	3.0	0.7	24.5	0.0	0.0	0.0	0.0	0.0	0.0	0.2	30.4	89.1
1972	2.7	5.6	12.9	12.6	0.2	0.0	0.0	0.0	0.0	0.4	17.1	8.0	59.5
1973	12.6	0.9	7.4	0.0	0.0	1.8	0.0	0.0	0.0	-	-	-	-
1974	-	5.5	5.5	1.8	0.0	0.0	0.0	0.0	0.0	0.0	4.6	21.3	-
1975	16.4	11.4	5.9	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	10.0	48.8
1976	1.5	3.5	1.4	6.8	0.9	0.2	0.0	0.0	0.0	0.2	1.1	2.8	18.4
1977	8.2	1.4	8.5	3.0	1.3	0.0	0.0	0.0	0.0	3.0	0.1	16.0	41.5
1978	24.3	9.1	10.0	0.2	0.0	0.0	0.0	0.0	0.0	7.8	7.4	3.3	62.1
Mean	<u>12.3</u>	<u>4.2</u>	<u>8.5</u>	<u>6.0</u>	<u>0.4</u>	<u>0.2</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>3.3</u>	<u>3.6</u>	<u>10.7</u>	<u>49.2</u>

Source: The Egyptian Meteorological Authority (Organization of Weather)

WIND DIRECTION

Station: ISMAILIYA Lat. = 30°35'N Long. = 32°14'E Alt. = 12.5 m

(Unit: %)

Direction	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Calm & Variable	7.1	6.0	3.7	4.1	6.0	4.0	2.8	4.7	6.3	10.3	4.3	7.6
345 - 014	3.3	6.8	7.8	11.6	15.6	20.5	13.7	16.4	20.3	17.5	14.2	4.0
015 - 044	4.7	3.2	10.9	16.9	21.6	13.5	6.3	7.4	14.1	17.0	16.1	7.6
045 - 074	5.2	7.8	7.9	11.0	10.7	6.4	1.2	1.8	4.1	9.0	6.2	5.2
075 - 104	2.9	4.6	4.3	4.7	4.1	2.9	0.6	0.6	1.5	3.1	2.1	3.8
105 - 134	5.1	4.8	5.8	3.4	2.8	1.6	0.3	0.4	0.9	1.8	0.9	4.7
135 - 164	4.0	4.0	5.0	1.8	1.4	1.2	0.2	0.2	0.4	1.2	1.1	3.5
165 - 194	4.6	3.7	2.9	1.1	1.1	0.3	0.3	0.5	0.5	0.7	2.8	4.9
195 - 224	16.7	10.4	7.0	4.3	1.6	1.5	1.8	2.4	2.8	3.8	9.4	17.6
225 - 254	22.2	19.0	17.4	10.4	5.4	6.9	10.7	9.4	6.6	7.4	12.2	22.8
255 - 284	11.7	10.6	10.8	11.0	7.6	9.2	13.6	1.2	9.0	7.8	8.2	8.4
285 - 314	7.6	8.1	9.3	11.2	9.5	14.9	25.3	21.4	14.3	9.3	8.3	5.7
315 - 344	6.9	6.0	7.0	5.5	11.6	17.7	23.2	23.6	19.2	11.1	9.2	4.5

Source: The Egyptian Meteorological Authority (Organization of Weather)

Note: 1) Wind from Abu Sueir station.

2) Period 1957 - 1970.

WIND SPEED

Station: ISMAILIYA Lat. = 30°35"N Long. = 32°14'E Alt. = 12.5 m

(Unit: %)

Direction	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
1 - 3 (Knots)	23.2	20.9	15.7	16.8	19.7	21.0	22.8	24.0	27.6	24.2	26.6	25.3
4 - 6 "	21.4	22.0	18.6	20.2	20.8	21.5	24.4	26.5	26.3	23.3	23.3	21.2
7 - 10 "	20.2	23.4	24.4	23.4	22.0	25.2	28.0	25.1	21.5	24.7	22.9	20.3
11 - 16 "	18.3	19.1	25.8	26.7	23.4	24.0	20.9	17.5	17.5	17.9	14.8	17.8
17 - 21 "	6.7	6.1	7.5	7.3	6.6	4.0	0.9	1.6	1.0	1.7	2.5	5.1
22 - 27 "	2.9	2.4	3.6	1.7	1.6	0.5	0.3	0.2	0.1	0.3	0.7	2.8
28 - 33 "	0.6	0.5	0.9	0.2	0.1	0.0	0.0	0.6	0.0	0.0	0.1	0.4
more than 34 "	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calm & Variable	6.7	5.6	3.3	3.7	5.8	3.8	2.7	4.5	6.0	7.9	9.1	7.1

Source: The Egyptian Meteorological Authority (Organization of Weather)

Note: 1) Wind from Abu Sueir station

2) Period 1957 - 1970.

MAXIMUM RELATIVE HUMIDITY

Station: ISMAILIYA Lat. = 30°35'N Long. = 32°14'E Alt. = 12.5 m

(Unit: %)

<u>Year</u>	<u>Jan.</u>	<u>Feb.</u>	<u>Mar.</u>	<u>Apr.</u>	<u>May</u>	<u>Jun.</u>	<u>Jul.</u>	<u>Aug.</u>	<u>Sep.</u>	<u>Oct.</u>	<u>Nov.</u>	<u>Dec.</u>
1975	100	100	95	85	79	94	100	100	91	100	100	100
1976	94	94	86	80	77	75	79	80	79	79	100	92
1977	97	81	88	75	76	75	87	83	82	100	93	100
1978	100	100	88	80	74	80	86	88	86	87	90	87

Source: The Egyptian Meteorological Authority (Organization of Weather)

MINIMUM MEAN TEMPERATURE

Station: ISMAILIYA Lat. = 30°35'N Long. = 32°14'E Alt. = 12.5 m

(Unit: °C)

<u>Year</u>	<u>Jan.</u>	<u>Feb.</u>	<u>Mar.</u>	<u>Apr.</u>	<u>May</u>	<u>Jun.</u>	<u>Jul.</u>	<u>Aug.</u>	<u>Sep.</u>	<u>Oct.</u>	<u>Nov.</u>	<u>Dec.</u>	<u>Mean</u>
1975	7.8	8.6	10.1	19.7	16.2	19.3	21.6	21.4	20.3	16.6	12.8	8.7	15.3
1976	7.3	6.8	9.9	13.9	16.1	18.7	21.1	22.1	19.2	17.3	14.6	9.0	14.7
1977	7.5	8.7	9.4	13.5	16.2	19.1	21.7	22.4	20.5	15.7	12.1	7.8	14.6
1978	7.3	9.1	10.9	14.4	17.1	18.7	20.8	20.2	19.1	17.3	11.0	9.6	14.6
<u>Mean</u>	<u>7.5</u>	<u>8.3</u>	<u>10.1</u>	<u>15.4</u>	<u>16.4</u>	<u>19.0</u>	<u>21.3</u>	<u>21.5</u>	<u>19.8</u>	<u>16.7</u>	<u>12.6</u>	<u>8.8</u>	<u>14.8</u>

Source: The Egyptian Meteorological Authority (Organization of Weather)

MEAN DAILY EVAPORATION

Station: ISMAILIYA Lat. = 30°35'N Long. = 32°14'E Alt. = 12.5 m

(Unit: mm/day)

<u>Year</u>	<u>Jan.</u>	<u>Feb.</u>	<u>Mar.</u>	<u>Apr.</u>	<u>May</u>	<u>Jun.</u>	<u>Jul.</u>	<u>Aug.</u>	<u>Sep.</u>	<u>Oct.</u>	<u>Nov.</u>	<u>Dec.</u>	<u>Mean</u>
1975	4.9	6.4	8.4	10.9	11.6	12.9	12.8	10.7	8.4	7.4	6.5	5.4	8.9
1976	6.3	5.7	8.7	9.3	10.6	10.4	10.1	9.7	9.6	9.4	7.9	5.2	8.6
1977	5.0	6.8	7.9	12.2	12.4	11.9	10.2	9.3	8.1	7.2	5.2	5.3	8.5
1978	5.1	7.1	8.1	9.7	11.7	11.7	11.7	9.3	8.5	7.7	5.2	6.0	8.5
<u>Mean</u>	<u>5.3</u>	<u>6.5</u>	<u>8.3</u>	<u>10.5</u>	<u>11.6</u>	<u>11.7</u>	<u>11.2</u>	<u>9.8</u>	<u>8.7</u>	<u>7.9</u>	<u>6.1</u>	<u>5.5</u>	<u>8.6</u>

Source: The Egyptian Meteorological Authority (Organization of Weather)

MAXIMUM MEAN TEMPERATURE

Station: ISMAILIYA Lat. = 30°35'N Long. = 32°14'E Alt. = 12.5 m

(Unit: °C)

<u>Year</u>	<u>Jan.</u>	<u>Feb.</u>	<u>Mar.</u>	<u>Apr.</u>	<u>May</u>	<u>Jun.</u>	<u>Jul.</u>	<u>Aug.</u>	<u>Sep.</u>	<u>Oct.</u>	<u>Nov.</u>	<u>Dec.</u>	<u>Mean</u>
1975	18.6	20.9	26.6	30.7	32.1	35.2	37.0	35.8	34.3	30.5	26.1	20.0	29.0
1976	20.3	19.6	24.3	29.9	33.1	34.2	35.5	35.6	34.6	31.7	27.7	22.8	29.1
1977	19.6	24.3	22.9	27.7	32.5	34.7	36.8	36.2	33.6	28.5	26.4	19.8	28.6
1978	19.3	22.5	24.3	29.1	33.8	35.7	36.7	34.1	32.7	30.8	23.1	21.5	28.6
<u>Mean</u>	<u>19.5</u>	<u>21.8</u>	<u>24.5</u>	<u>29.4</u>	<u>32.9</u>	<u>35.0</u>	<u>36.5</u>	<u>35.4</u>	<u>33.8</u>	<u>30.4</u>	<u>25.8</u>	<u>21.0</u>	<u>28.8</u>

Source: The Egyptian Meteorological Authority (Organization of Weather)

MONTHLY RAINFALL

Station: ISMAILIYA Lat. = 30°35'N Long. = 32°14'E Alt. = 12.5 m

(Unit: mm)

<u>Year</u>	<u>Jan.</u>	<u>Feb.</u>	<u>Mar.</u>	<u>Apr.</u>	<u>May</u>	<u>Jun.</u>	<u>Jul.</u>	<u>Aug.</u>	<u>Sep.</u>	<u>Oct.</u>	<u>Nov.</u>	<u>Dec.</u>	<u>Total</u>
1975	7.2	10.6	2.3	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	24.6
1976	0.0	0.8	0.5	0.0	0.0	0.0	0.0	0.0	0.0	3.6	2.9	1.5	9.3
1977	2.2	3.6	2.2	4.2	0.0	0.0	0.0	0.0	0.0	1.7	6.6	13.9	34.4
1978	20.4	7.6	2.5	1.5	0.0	0.0	0.0	0.0	0.0	2.5	0.0	3.2	37.7
<u>Mean</u>	<u>7.7</u>	<u>5.7</u>	<u>1.9</u>	<u>2.3</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>2.0</u>	<u>2.4</u>	<u>4.9</u>	<u>26.5</u>

Source: The Egyptian Meteorological Authority (Organization of Weather)

MINIMUM RELATIVE HUMIDITY

Station: ISMAILIYA Lat. = 30°35'N Long. = 32°14'E Alt. = 12.5 m

(Unit: %)

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
1975	3	19	11	1	1	8	16	17	21	18	16	18
1976	12	20	12	7	11	12	12	15	10	12	16	22
1977	4	14	5	2	7	7	10	17	12	5	20	21
1978	19	12	12	11	6	7	13	12	12	15	13	18

Source: The Egyptian Meteorological Authority (Organization of Weather)

MEAN DAILY EVAPORATION

Station: PORT SAID Lat. = 31°16'N Long. = 32°17'E Alt. = 1.0 m

(Unit: mm/day)

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Mean
1969	3.8	5.4	6.4	6.7	6.1	8.9	8.2	7.2	7.4	8.4	7.5	5.8	6.8
1970	4.5	5.2	6.0	6.1	6.6	6.1	6.1	6.3	5.7	5.3	5.5	4.6	5.7
1971	4.0	5.1	6.2	5.0	5.6	5.9	5.8	5.4	5.1	6.0	5.1	4.7	5.3
1972	4.1	4.8	4.2	7.8	5.9	7.0	5.4	5.2	5.3	5.6	4.7	4.7	5.4
1973	3.9	4.7	5.0	5.0	4.3	4.7	4.9	5.0	5.0	3.1	2.7	3.5	4.4
1974	4.1	4.3	3.1	4.5	4.4	5.0	4.3	4.4	4.4	4.4	5.6	4.0	4.4
1975	4.0	3.8	4.2	-	4.3	4.4	4.3	4.4	4.3	4.0	3.9	3.4	-
1976	3.3	3.4	3.7	4.1	4.0	3.2	3.8	3.8	3.6	3.9	3.4	5.3	3.3
1977	4.2	5.0	4.9	6.1	5.7	5.6	5.1	4.8	5.1	6.2	5.1	3.8	5.1
1978	3.7	4.1	5.5	5.0	6.3	6.5	5.9	5.8	6.5	5.1	4.9	3.8	5.3
Mean	4.0	4.6	4.9	5.1	5.4	5.7	5.4	5.2	5.2	5.2	4.8	4.4	5.1

Source: The Egyptian Meteorological Authority (Organization of Weather)

WIND DIRECTION

Station: PORT SAID Lat. = 31°16'N Long. = 32°17'E Alt. = 1.0 m

(Unit: %)

<u>Direction</u>	<u>Jan.</u>	<u>Feb.</u>	<u>Mar.</u>	<u>Apr.</u>	<u>May</u>	<u>Jun.</u>	<u>Jul.</u>	<u>Aug.</u>	<u>Sep.</u>	<u>Oct.</u>	<u>Nov.</u>	<u>Dec.</u>
Calm & Variable	2.6	1.5	1.0	0.7	0.6	0.5	0.8	0.9	1.4	0.7	1.3	2.7
345° - 014°	4.5	9.2	11.0	19.9	31.2	33.5	26.5	27.3	35.7	25.2	16.2	5.5
015 - 044	5.1	9.3	9.9	12.5	15.6	9.0	4.0	4.7	11.2	20.5	17.9	8.6
045 - 074	6.8	9.9	11.5	12.8	10.6	4.3	0.9	0.7	2.9	11.4	14.2	8.5
075 - 104	5.8	8.8	9.7	9.1	7.5	2.5	0.4	0.3	0.8	3.7	3.8	6.3
105 - 134	3.9	4.2	3.8	3.4	2.9	1.4	0.3	0.3	0.5	1.6	1.6	4.1
135 - 164	4.5	2.9	2.9	1.9	1.5	1.1	0.4	0.3	0.5	1.8	1.5	4.1
165 - 194	7.4	4.1	3.3	1.7	1.0	0.6	0.2	0.3	0.4	1.3	2.7	6.6
195 - 224	14.1	6.8	3.8	1.8	1.2	1.2	0.5	0.9	0.6	2.1	5.1	14.4
225 - 254	19.5	14.0	8.8	4.1	3.0	3.0	3.9	4.1	3.3	3.8	8.7	18.9
255 - 284	14.9	14.0	14.7	8.1	5.4	7.7	15.3	15.3	8.3	7.4	10.8	10.6
285 - 314	6.0	7.6	9.3	8.4	5.9	10.9	16.1	13.4	6.9	5.7	6.4	4.8
315 - 344	4.9	8.5	10.3	15.6	13.6	24.3	30.7	31.5	27.5	13.8	9.8	4.9

Source: The Egyptian Meteorological Authority (Organization of Weather)

WIND SPEED

Station: PORT SAID Lat. = 31°16'N Long. = 32°17'E Alt. = 1.0 m

(Unit: %)

<u>Direction</u>	<u>Jan.</u>	<u>Feb.</u>	<u>Mar.</u>	<u>Apr.</u>	<u>May</u>	<u>Jun.</u>	<u>Jul.</u>	<u>Aug.</u>	<u>Sep.</u>	<u>Oct.</u>	<u>Nov.</u>	<u>Dec.</u>
Calm & Variable	1.0	0.7	0.6	0.4	0.4	0.3	0.4	0.7	0.7	0.4	0.7	1.3
1 - 3 (Knots)	18.5	15.0	8.2	9.6	13.3	13.0	13.7	17.4	17.6	16.2	17.6	23.7
4 - 6 "	18.6	16.0	11.8	13.6	15.7	19.8	21.4	25.3	25.4	23.5	21.2	19.6
7 - 10 "	24.4	25.5	24.9	25.1	28.7	30.6	33.0	33.6	34.8	34.3	29.8	23.2
11 - 16 "	24.4	28.6	34.7	38.2	33.9	32.0	28.8	22.0	20.5	23.0	24.9	20.7
17 - 21 "	7.8	8.8	13.7	9.9	6.3	3.7	2.6	1.0	0.9	2.3	3.9	7.5
22 - 27 "	4.5	4.4	5.0	2.9	1.6	0.6	0.1	0.0	0.1	0.3	1.6	3.6
28 - 33 "	0.7	0.9	1.0	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.3	0.3
more than 34 "	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1

Source: The Egyptian Meteorological Authority (Organization of Weather)

MONTHLY RAINFALL

Station: PORT SAID Lat. = 31°16'N Long. = 32°17'E Alt. = 1.0 m
(Unit: mm)

<u>Year</u>	<u>Jan.</u>	<u>Feb.</u>	<u>Mar.</u>	<u>Apr.</u>	<u>May</u>	<u>Jun.</u>	<u>Jul.</u>	<u>Aug.</u>	<u>Sep.</u>	<u>Oct.</u>	<u>Nov.</u>	<u>Dec.</u>	<u>Total</u>
1969	14.5	1.0	15.3	1.0	2.0	0.0	0.0	0.0	0.0	20.7	1.0	0.5	56.0
1970	12.7	0.6	7.6	2.2	0.0	0.0	0.0	0.0	0.0	4.0	11.0	18.2	56.3
1971	21.1	2.2	2.6	18.8	0.4	0.0	0.0	0.0	0.0	0.4	17.3	42.8	106.6
1972	2.3	14.4	29.9	13.7	0.5	0.0	0.0	0.0	0.0	0.2	14.1	36.2	111.3
1973	17.5	0.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	0.2	30.0
1974	50.9	15.4	5.5	2.7	0.0	0.0	0.0	0.0	0.0	0.0	1.7	7.4	83.6
1975	7.7	19.9	6.2	12.9	0.0	0.0	0.0	0.0	0.0	0.4	2.7	13.0	62.8
1976	0.5	14.8	1.1	5.7	0.2	Trac	0.0	0.0	0.0	1.3	1.2	9.5	34.3
1977	21.5	1.2	14.9	11.4	1.9	0.0	0.0	0.0	0.0	7.3	0.0	16.5	74.7
1978	11.4	1.4	7.0	4.2	0.0	0.0	0.0	0.0	0.0	1.6	33.0	7.0	65.6
<u>Mean</u>	<u>16.0</u>	<u>7.1</u>	<u>10.0</u>	<u>7.3</u>	<u>0.5</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>3.6</u>	<u>8.4</u>	<u>15.1</u>	<u>68.1</u>

Source: The Egyptian Meteorological Authority (Organization of Weather)

SUNSHINE HOURS

Station: PORT SAID Lat. = 31°16'N Long. = 32°17'E Alt. = 1.0 m

(Unit: hr.)

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
1969	5.7	8.0	6.5	9.1	9.8	12.2	11.5	-	9.9	8.6	8.3	6.9
1970	7.1	8.0	8.3	9.9	10.8	12.1	12.1	11.7	11.0	9.7	8.0	7.0
1971	7.6	8.0	8.6	9.4	11.4	12.3	12.2	11.6	10.8	9.5	7.7	5.1
1972	7.8	8.6	7.5	8.2	10.1	12.3	12.1	11.8	10.5	9.2	7.6	7.0
1973	7.6	8.4	9.1	10.2	12.0	12.4	12.3	11.5	10.8	10.1	-	7.1
1974	5.8	7.5	8.1	8.4	11.8	12.2	12.2	11.7	10.2	9.5	8.4	6.6
1975	6.9	7.6	9.1	-	11.5	11.8	11.8	11.3	10.5	9.9	7.6	6.1
1976	7.2	7.0	8.4	9.3	10.5	11.6	12.0	11.6	10.4	8.4	8.0	7.3
1977	7.2	9.7	8.8	8.6	10.4	11.2	11.3	11.0	10.2	9.1	8.6	7.2
1978	8.0	8.4	8.2	9.7	11.0	11.8	11.8	11.3	10.3	8.5	7.6	6.6
Mean	7.1	8.1	8.3	9.2	10.9	12.0	11.9	11.5	10.5	9.3	8.0	6.7

Source: The Egyptian Meteorological Authority (Organization of Weather)

MAXIMUM RELATIVE HUMIDITY

Station: PORT SAID Lat. = 31°16'N Long. = 32°17'E Alt. = 1.0 m

(Unit: %)

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Mean
1969	96	96	96	93	100	92	90	89	89	93	93	91	
1970	98	89	96	92	87	89	89	92	90	95	96	97	
1971	99	96	98	95	97	95	92	91	95	93	96	99	
1972	96	95	93	98	91	91	94	87	89	83	93	98	
1973	84	97	87	89	93	82	90	91	90	89	93	98	
1974	92	99	90	97	88	86	89	92	83	90	90	86	
1975	91	95	92	92	85	90	91	96	93	98	90	99	
1976	94	94	97	96	94	97	98	95	94	95	97	97	
1977	99	99	98	97	93	96	95	84	86	85	90	88	
1978	100	93	90	84	83	88	91	95	87	91	84	93	

Mean

Source: The Egyptian Meteorological Authority (Organization of Weather)

MINIMUM RELATIVE HUMIDITY

Station: PORT SAID Lat. = 31°16'N Long. = 32°17'E Alt. = 1.0 m

(Unit: %)

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Mean
1969	41	34	29	31	54	33	52	53	47	45	47	34	
1970	43	24	16	14	14	29	38	33	45	32	41	42	
1971	26	31	16	43	31	24	48	31	45	38	41	37	
1972	42	32	27	23	16	29	43	29	40	34	44	40	
1973	39	35	30	22	31	23	44	40	49	38	48	45	
1974	39	32	38	20	27	38	46	44	23	27	35	36	
1975	33	34	16	32	20	28	37	44	45	44	30	41	
1976	30	32	26	21	38	47	24	49	27	31	28	31	
1977	39	23	25	20	35	36	39	49	43	39	18	40	
1978	34	28	18	16	28	25	45	53	35	14	33	33	
Mean													

Source: The Egyptian Meteorological Authority (Organization of Weather)

MAXIMUM MEAN TEMPERATURE

Station: PORT SAID Lat. = 31°16'N Long. = 32°17'E Alt. = 1.0 m

(Unit: °C)

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Mean
1969	16.8	19.6	22.1	21.1	24.8	27.6	29.4	29.6	29.6	27.1	24.1	20.7	24.4
1970	19.5	20.5	22.9	24.1	27.1	28.9	30.9	30.9	30.8	27.2	23.2	19.7	25.5
1971	21.1	19.6	21.5	22.0	26.7	29.5	30.1	31.8	29.9	27.0	23.6	19.0	25.2
1972	19.2	19.2	20.9	23.9	25.9	27.4	30.5	32.3	31.7	29.6	24.5	20.3	25.5
1973	18.0	21.1	20.8	22.5	26.1	29.9	32.1	31.3	30.7	29.7	22.9	21.0	25.5
1974	16.3	19.8	21.8	23.2	25.5	26.9	31.3	31.3	30.6	28.9	24.0	19.0	25.1
1975	18.3	19.3	21.9	23.7	26.0	29.2	31.0	31.1	31.0	28.9	24.3	20.1	25.4
1976	19.3	18.3	21.1	24.5	26.6	27.8	30.9	30.9	30.6	29.1	25.8	19.7	25.4
1977	17.2	19.3	19.0	22.7	25.0	28.3	30.3	30.6	29.0	25.4	23.8	17.9	24.0
1978	17.3	18.9	19.9	22.6	25.6	27.7	29.2	28.3	28.1	26.9	26.5	18.8	24.2
Mean	18.3	19.6	21.2	23.0	25.9	28.5	30.6	30.8	30.2	28.0	24.3	19.6	25.0

Source: The Egyptian Meteorological Authority (Organization of Weather)

MINIMUM MEAN TEMPERATURE

Station: PORT SAID Lat. = 31°16'N Long. = 32°17'E Alt. = 1.0 m

(Unit: °C)

<u>Year</u>	<u>Jan.</u>	<u>Feb.</u>	<u>Mar.</u>	<u>Apr.</u>	<u>May</u>	<u>Jun.</u>	<u>Jul.</u>	<u>Aug.</u>	<u>Sep.</u>	<u>Oct.</u>	<u>Nov.</u>	<u>Dec.</u>	<u>Mean</u>
1969	10.0	12.8	14.2	15.0	19.0	23.1	23.3	23.6	24.3	21.7	18.9	12.6	18.2
1970	12.6	11.4	13.4	15.7	17.8	20.7	22.4	23.2	22.5	18.6	16.4	11.2	17.2
1971	12.4	10.2	12.4	13.7	18.2	20.8	22.0	23.2	21.7	18.1	15.0	11.7	16.6
1972	11.2	11.2	12.7	16.0	18.1	21.1	22.8	24.2	23.4	22.1	17.7	12.9	17.8
1973	9.2	11.6	12.1	14.6	17.9	21.6	23.7	23.4	23.1	24.0	18.6	13.6	17.8
1974	10.1	11.5	14.6	15.4	17.6	21.1	23.2	23.7	23.0	21.3	15.8	11.7	17.4
1975	10.4	11.1	13.4	15.6	18.4	21.4	23.4	23.7	23.0	20.7	16.7	12.3	17.5
1976	10.0	10.0	12.4	15.0	18.1	20.6	22.2	22.3	21.4	20.6	17.2	13.6	17.0
1977	11.1	13.4	13.2	15.1	19.2	22.1	24.3	23.7	24.0	21.0	18.7	12.9	18.2
1978	11.5	13.1	13.9	16.7	20.5	22.8	24.6	23.7	23.4	22.4	17.2	14.0	18.7
<u>Mean</u>	<u>10.9</u>	<u>11.6</u>	<u>13.2</u>	<u>15.3</u>	<u>18.5</u>	<u>21.5</u>	<u>23.2</u>	<u>23.5</u>	<u>23.0</u>	<u>21.1</u>	<u>17.2</u>	<u>12.7</u>	<u>17.6</u>

Source: The Egyptian Meteorological Authority (Organization of Weather)

MONTHLY RAINFALL

Station: SALHIYA Lat. = 30°48'N Long. = 32°02'E Alt. = 6.19 m

(Unit: mm)

<u>Year</u>	<u>Jan.</u>	<u>Feb.</u>	<u>Mar.</u>	<u>Apr.</u>	<u>May</u>	<u>Jun.</u>	<u>Jul.</u>	<u>Aug.</u>	<u>Sep.</u>	<u>Oct.</u>	<u>Nov.</u>	<u>Dec.</u>	<u>Total</u>
1972	2.7	0.0	10.2	0.3	Trace	0.0	0.0	0.0	0.0	Trace	2.9	0.1	16.2
1973	2.9	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	0.3	6.7
1974	16.8	3.9	10.8	0.2	0.0	0.0	0.0	0.0	0.8	0.0	0.0	4.2	36.7
1975	2.5	10.3	5.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	Trace	0.8	19.3
1976	1.2	1.8	Trace	0.7	0.0	0.0	0.0	0.0	0.0	0.8	0.4	0.0	4.9
1977	0.4	2.3	7.2	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.4	20.2
1978	18.0	41.2	76.2	0.3	0.0	0.0	0.0	0.0	0.0	0.4	8.1	5.9	150.1
<u>Mean</u>	<u>6.4</u>	<u>8.5</u>	<u>15.7</u>	<u>0.6</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.1</u>	<u>0.2</u>	<u>2.1</u>	<u>2.8</u>	<u>36.4</u>

Source: The Egyptian Meteorological Authority (Organization of Weather)

MINIMUM MEAN TEMPERATURE

Station: SALHYIA Lat. = 30°48'N Long. = 32°02'E Alt. = 6.19 m

(Unit: °C)

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Mean
1972	6.8	7.2	9.9	14.7	16.0	18.5	19.6	22.0	20.3	15.6	12.6	7.7	14.2
1973	4.5	7.8	8.4	11.4	13.0	15.6	16.4	17.9	18.5	14.3	11.2	7.5	12.2
1974	8.6	8.5	11.2	13.2	14.7	17.6	20.1	12.8	19.1	17.4	12.3	8.0	13.6
1975	6.1	8.2	9.1	14.2	14.9	18.5	20.2	20.0	19.0	16.3	12.4	8.2	13.9
1976	6.9	6.5	9.9	12.9	15.4	18.0	19.9	19.7	18.4	17.0	13.1	8.3	13.8
1977	6.3	7.4	8.7	12.7	15.9	18.5	20.7	21.2	19.4	15.7	12.6	7.7	13.9
1978	7.4	8.8	10.5	13.4	17.1	18.9	21.1	19.8	18.6	17.8	11.7	10.1	14.6
Mean	6.7	7.8	9.7	13.2	15.3	17.9	19.7	19.1	19.0	16.3	12.3	8.2	13.7

Source: The Egyptian Meteorological Authority (Organization of Weather)

WIND SPEED

Station: SALHIYA

Lat. = 30°48'N

Long. = 32°02'E

Alt. = 6.19 m

(Unit: %)

Direction	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Calm & Variable	2.5	2.8	1.2	0.8	1.6	1.3	1.1	1.6	2.6	3.9	6.1	2.7
1 - 3 (knots)	28.5	29.7	21.6	26.0	26.9	35.0	41.8	48.4	46.1	40.3	40.3	30.6
4 - 6 "	19.4	21.2	21.1	20.5	20.9	20.4	22.5	23.9	22.4	21.5	21.5	20.6
7 - 10 "	23.1	23.2	25.6	25.0	25.2	24.1	23.7	20.2	20.3	22.1	19.8	21.8
11 - 16 "	19.7	17.6	22.8	22.0	21.7	17.3	10.3	5.8	8.2	11.4	10.8	18.4
17 - 21 "	4.8	3.6	5.4	4.6	3.2	1.8	0.6	0.0	0.4	0.7	1.1	3.4
22 - 27 "	1.5	1.5	1.9	0.8	0.5	0.1	0.0	0.0	0.0	0.1	0.4	2.0
18 - 33 "	0.4	0.3	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
more than 34(knots)	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Source: The Egyptian Meteorological Authority (Organization of Weather)

Note: Wind from Belbese Station

WIND DIRECTION

Station: SALHIYA Lat. = 30°48'N Long. = 32°02'E Alt. = 6.19 m

(Unit: %)

Direction	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Calm & Variable	3.3	4.5	2.5	2.8	3.5	2.2	1.6	2.3	3.8	5.2	7.8	4.2
345° - 014°	3.4	8.5	8.4	11.7	17.2	22.2	18.1	17.7	26.0	17.3	13.8	4.7
015 - 044	3.6	7.9	8.9	14.3	20.0	13.6	5.7	3.5	11.8	19.8	16.8	6.2
045 - 074	4.2	7.1	8.7	12.5	11.4	4.9	1.6	1.2	3.4	8.6	7.2	6.2
075 - 104	3.5	3.9	5.0	6.0	5.8	2.9	0.8	0.7	1.6	4.3	3.6	4.3
105 - 134	3.7	3.7	3.8	4.1	3.1	1.8	0.5	0.5	1.5	3.4	3.0	5.1
135 - 164	6.5	5.5	5.1	3.9	2.4	1.4	0.4	0.5	1.1	2.7	3.1	6.9
165 - 174	7.7	4.8	3.6	1.6	0.9	0.4	0.4	0.3	0.6	1.8	3.3	7.6
195 - 224	18.6	11.6	7.3	3.1	2.3	1.9	1.7	2.0	2.8	4.3	7.8	18.1
225 - 254	25.3	19.0	18.3	10.0	6.7	8.3	10.7	10.8	7.9	8.7	12.4	19.4
255 - 284	9.8	8.5	10.3	8.7	6.4	6.8	12.9	12.1	7.3	5.5	7.3	8.2
285 - 314	5.1	7.5	10.2	10.2	8.0	14.7	17.8	18.6	9.6	7.1	5.7	4.7
315 - 344	5.3	7.5	7.9	11.1	12.3	18.9	27.8	29.8	22.6	11.3	8.2	4.4

Source: The Egyptian Meteorological Authority (Organization of Weather)

Note: Wind from Belbese Station

MEAN DAILY EVAPORATION

Station: SALHIYA Lat. = 30°48'N Long. = 32°02'E Alt. = 6.19 m

(Unit: mm/day)

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Mean
1972	3.8	5.3	6.1	9.3	10.2	9.1	8.7	8.2	7.9	6.9	4.7	4.0	7.0
1973	4.2	5.7	6.7	8.4	9.0	10.0	7.6	7.8	8.1	6.4	6.5	4.8	7.1
1974	4.3	5.5	6.6	11.7	11.3	11.0	8.8	8.3	9.0	9.0	5.8	4.7	8.0
1975	4.9	4.8	7.1	10.5	9.6	10.1	8.0	7.0	6.9	5.2	4.9	3.6	6.9
1976	4.7	4.9	7.1	9.2	10.7	9.7	7.4	6.6	7.2	7.0	5.7	4.6	7.1
1977	4.3	5.5	6.2	10.2	11.5	10.1	8.0	8.0	7.3	6.8	6.1	4.3	7.4
1978	4.5	6.6	6.8	8.5	12.6	10.0	8.3	6.3	6.7	5.7	4.0	4.1	7.0
Mean	<u>4.4</u>	<u>5.5</u>	<u>6.7</u>	<u>9.7</u>	<u>10.7</u>	<u>10.0</u>	<u>8.1</u>	<u>7.5</u>	<u>7.6</u>	<u>6.8</u>	<u>5.4</u>	<u>4.3</u>	<u>7.2</u>

Source: The Egyptian Meteorological Authority (Organization of Weather)

SUNSHINE HOURS

Station: ZAGAZIG Lat. = 30°35'N Long. = 31°30'E Alt. = 11.3 m

(Unit: hr.)

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Mean
1969	6.1	7.9	6.9	9.5	8.8	12.0	11.2	10.7	10.3	9.9	8.1	7.8	9.1
1970	7.5	8.6	8.9	10.0	10.5	11.8	11.5	10.9	10.4	9.9	8.8	7.6	9.7
1971	7.7	8.6	8.5	9.3	11.0	11.8	11.8	11.1	10.4	9.7	8.3	6.0	9.5
1972	8.1	9.2	7.9	8.8	10.3	11.9	11.7	11.3	10.3	9.7	8.3	8.0	9.6
1973	8.1	8.2	8.7	9.9	11.1	11.1	11.4	11.2	9.6	9.5	8.7	8.1	9.6
1974	6.3	8.2	7.7	8.8	11.7	11.8	11.3	11.3	10.2	9.4	8.3	7.7	9.4
1975	7.9	7.7	9.7	-	11.1	11.9	11.6	11.3	10.0	9.7	7.4	6.1	-
1976	7.9	7.7	9.7	-	11.1	11.9	11.6	11.3	10.0	9.7	7.4	6.1	-
1977	6.9	8.3	9.1	8.9	10.6	11.4	11.1	10.9	10.2	9.2	10.7	7.2	9.5
1978	7.1	8.9	9.3	9.6	11.3	11.8	11.4	10.8	10.3	8.8	7.9	6.8	9.5
Mean	7.4	8.3	8.6	9.4	10.8	11.7	11.5	11.1	10.2	9.6	8.4	7.1	9.5

Source: The Egyptian Meteorological Authority (Organization of Weather)

WIND DIRECTION

Station: ZAGAZIG Lat. = 30°35'N Long. = 31°30'E Alt. = 11.3 m
(Unit: %)

Direction	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Calm & Variable	48.5	41.5	31.8	22.8	27.6	31.7	42.5	55.5	44.7	38.5	50.2	51.5
345° - 014°	1.6	2.2	4.8	8.8	11.8	14.3	11.8	8.7	14.9	11.6	7.3	1.8
015 - 044	4.2	8.4	9.9	20.3	22.5	14.4	7.0	4.8	16.7	21.3	12.0	6.4
045 - 074	2.4	7.3	6.7	9.7	9.4	6.3	0.5	0.8	3.7	6.3	3.5	3.5
075 - 104	3.3	3.6	4.1	7.2	4.3	2.1	0.2	0.2	1.1	1.5	2.2	2.9
105 - 134	0.2	0.3	0.7	0.7	0.3	0.2	0.2	-	-	0.1	0.1	0.3
135 - 164	-	0.2	0.1	0.0	0.1	0.0	-	-	-	0.0	0.0	0.1
165 - 194	1.1	0.9	1.6	0.5	0.2	0.2	0.0	0.1	0.0	0.1	0.6	0.9
195 - 224	3.4	1.8	1.9	1.0	0.3	0.4	0.5	0.5	0.2	0.5	1.0	2.0
225 - 254	11.5	7.7	7.1	4.0	1.4	1.6	2.5	1.6	0.7	3.0	4.9	9.5
255 - 284	20.9	18.5	20.9	14.2	7.6	8.7	8.7	9.1	4.1	7.4	10.6	16.3
285 - 314	2.1	4.2	5.6	5.1	4.1	6.6	8.2	8.5	4.3	3.9	3.1	3.3
315 - 344	0.8	3.4	4.8	5.7	10.4	13.5	17.9	10.2	9.6	5.9	4.5	1.0

Source: The Egyptian Meteorological Authority (Organization of Weather)

Note: Direction in degrees 000° to 360° East of North

One Knot = 1.85 kilometers per hour

WIND SPEED

Station: ZAGAZIG Lat. = 30°35'N Long. = 31°30'E Alt. = 11.3 m (Unit: %)

	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
1 - 3 (Knots)	11.6	14.1	16.1	17.0	17.9	20.4	24.3	21.4	20.0	15.5	16.0	14.2
4 - 6 "	21.0	24.4	24.9	34.0	31.1	29.7	26.9	20.3	28.2	30.4	23.3	19.7
7 - 10 "	14.9	16.7	20.9	21.4	20.9	16.8	6.2	2.7	7.0	14.8	9.0	12.8
11 - 16 "	3.8	3.2	6.1	4.6	2.1	1.2	0.1	0.1	0.1	0.8	1.5	1.8
17 - 21 "	0.2	-	0.2	0.2	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0
22 - 27 "	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
28 - 33 "	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
more than 34 "	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calm & Variable	48.5	41.5	31.8	22.8	27.6	31.7	42.5	55.5	44.7	38.5	50.2	51.5

Source: The Egyptian Meteorological Authority (Organization of Weather)

Note: Direction in degree 000° to 360° East of North

One Knot = 1.85 kilometers per hour

MONTHLY RAINFALL

Station: ZAGAZIG Lat. = 30°35'N Long. = 31°30'E Alt. = 11.3 m

(Unit: mm)

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Total
1969	12.0	0.0	19.7	Tr	2.6	0.0	0.0	0.0	0.0	15.6	4.0	0.0	53.9
1970	2.9	0.0	6.0	3.7	0.0	0.0	0.0	0.0	0.0	0.6	17.9	3.3	34.4
1971	11.8	0.2	0.0	15.9	0.4	0.0	0.0	0.0	0.0	0.0	Tr	26.0	54.3
1972	Tr	3.5	0.8	4.8	Tr	0.0	0.0	0.0	0.0	0.6	13.6	0.3	23.6
1973	7.2	0.1	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.4	0.0	13.1
1974	24.9	2.5	5.9	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.8	43.6
1975	5.9	9.5	0.1	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.3	10.5	26.7
1976	0.1	3.2	3.2	2.5	0.2	Tr	0.0	0.0	0.0	0.7	0.9	Tr	10.8
1977	5.5	1.5	1.6	0.1	0.5	0.0	0.0	0.0	0.0	2.3	2.2	7.6	21.8
1978	20.7	3.0	7.0	Tr	0.0	0.0	0.0	0.0	0.0	0.3	1.6	7.8	40.4
Mean	9.1	2.4	4.5	2.9	0.4	0.0	0.0	0.0	0.0	2.1	4.6	6.4	32.3

Source: The Egyptian Meteorological Authority (Organization of Weather)

Note: Tr = Trace

MEAN DAILY EVAPORATION

Station: ZAGAZIG Lat. = 30°35'N Long. = 31°30'E Alt. = 11.3 m

(Unit: mm/day)

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Mean
1969	3.4	4.4	6.2	6.8	8.8	10.1	6.0	4.8	5.3	5.2	3.6	3.6	5.7
1970	3.3	4.1	6.2	7.3	9.9	8.2	5.6	4.9	5.6	5.6	3.2	3.1	5.5
1971	2.6	4.7	5.2	5.8	8.4	8.6	6.2	4.5	4.8	4.8	3.2	2.9	5.1
1972	2.9	4.2	4.6	7.5	8.8	8.4	6.0	5.3	5.1	5.2	3.1	2.7	5.3
1973	2.9	3.8	4.4	5.3	6.5	7.1	5.0	4.1	4.0	4.5	3.2	2.4	4.4
1974	2.7	3.0	3.1	5.3	6.4	6.8	5.3	4.1	4.5	4.1	3.7	3.5	4.4
1975	2.7	3.0	4.3	-	6.2	7.0	5.1	4.3	4.4	4.4	2.8	2.4	-
1976	3.0	2.7	3.7	5.0	6.4	6.8	5.4	4.3	4.3	4.6	3.4	2.7	4.4
1977	2.2	3.1	3.7	5.8	7.2	7.6	5.4	4.5	4.7	4.0	2.9	2.2	4.4
1978	2.5	3.9	4.0	5.2	6.6	7.4	5.5	4.2	4.5	4.2	2.7	2.5	4.4
Mean	<u>2.8</u>	<u>3.7</u>	<u>4.5</u>	<u>6.0</u>	<u>7.4</u>	<u>7.8</u>	<u>5.6</u>	<u>4.5</u>	<u>4.7</u>	<u>4.7</u>	<u>3.2</u>	<u>2.9</u>	<u>4.8</u>

Source: The Egyptian Meteorological Authority (Organization of Weather)

MINIMUM RELATIVE HUMIDITY

Station: ZAGAZIG Lat. = 30°35' N Long. = 31°30' E Alt. = 11.3 m

(Unit: %)

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
1969	-	24	18	18	11	14	31	41	32	26	35	25
1970	27	22	7	10	5	15	30	41	23	21	41	34
1971	32	21	17	19	18	16	29	29	30	23	39	41
1972	42	18	21	11	12	15	22	35	24	27	32	31
1973	30	19	20	20	17	18	25	39	28	24	29	28
1974	38	30	24	18	9	19	29	35	22	18	25	36
1975	33	27	13	14	16	15	24	32	24	19	24	31
1976	20	26	19	14	14	19	25	36	24	21	16	28
1977	29	18	21	12	10	12	28	33	17	18	24	32
1978	23	16	18	14	7	10	27	29	17	19	27	24

Source: The Egyptian Meteorological Authority (Organization of Weather)

MAXIMUM RELATIVE HUMIDITY

Station: ZAGAZIG Lat. = 30°35'N Long. = 31°30'E Alt. = 11.3 m

(Unit: %)

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
1969	-	88	84	69	81	78	81	89	96	80	87	90
1970	90	89	87	82	83	84	86	91	75	80	90	87
1971	98	89	80	79	79	77	81	81	87	86	90	88
1972	95	93	91	86	77	81	85	88	81	80	75	93
1973	86	86	83	84	84	78	84	86	86	82	90	85
1974	84	92	87	96	81	75	82	88	90	83	85	91
1975	77	93	85	87	87	97	87	93	100	88	100	90
1976	100	100	93	86	88	89	88	88	91	88	100	87
1977	94	100	100	100	85	79	87	93	97	89	95	94
1978	100	100	100	93	86	99	91	96	88	89	89	99

Source: The Egyptian Meteorological Authority (Organization of Weather)

MEAN DAILY EVAPORATION

Station: CAIRO Lat. = 30°08'N Long. = 31°24'E Alt. = 111.5 m

(Unit: mm/day)

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Mean
1969	9.1	12.5	17.5	16.4	17.9	21.8	13.9	13.2	13.5	11.3	8.1	10.7	13.8
1970	9.2	11.4	15.0	17.6	20.3	16.2	14.5	12.2	14.1	14.0	7.9	7.2	13.3
1971	8.2	12.7	15.1	16.0	19.7	17.8	13.8	12.9	12.9	11.8	9.2	7.3	13.1
1972	7.8	9.9	11.5	17.7	15.9	16.2	12.7	13.2	13.4	11.7	5.9	6.4	11.9
1973	7.9	9.6	11.7	12.6	14.6	14.7	12.1	9.7	10.1	-	-	6.3	-
1974	5.1	8.5	7.6	14.4	15.9	16.3	12.0	12.0	14.1	13.6	7.9	7.4	11.2
1975	7.7	9.0	12.9	-	15.6	16.7	12.1	9.9	11.6	-	8.3	6.8	-
1976	9.0	8.4	11.0	14.9	15.2	13.5	11.0	9.9	11.8	12.4	10.3	8.7	11.3
1977	8.4	12.8	10.7	17.4	20.2	17.0	11.7	11.7	12.6	10.4	9.7	6.4	12.4
1978	7.7	10.7	11.2	15.2	19.5	16.2	14.8	10.6	10.3	11.4	6.2	6.5	11.7
<u>Mean</u>	<u>8.0</u>	<u>10.6</u>	<u>12.4</u>	<u>15.8</u>	<u>17.5</u>	<u>16.6</u>	<u>12.9</u>	<u>11.5</u>	<u>12.5</u>	<u>12.1</u>	<u>8.2</u>	<u>7.4</u>	<u>12.1</u>

Source: The Egyptian Meteorological Authority (Organization of Weather)

WIND SPEED

Station: CAIRO Lat. = 30°08'N Long. = 31°24'E Alt. = 111.5 m

(Unit: %)

Direction	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
1 - 3 (Knots)	16.7	19.3	16.2	14.3	14.0	17.2	24.3	24.7	22.0	20.0	19.1	21.4
4 - 6 "	21.9	21.0	20.7	19.9	20.4	20.5	24.9	24.6	22.5	22.8	24.3	22.4
7 - 10 "	25.7	25.0	25.9	28.1	30.0	28.7	27.8	29.4	29.3	29.5	27.4	24.6
11 - 16 "	21.9	20.7	23.6	26.6	26.7	24.5	16.3	14.0	16.4	18.9	16.9	18.4
17 - 21 "	5.6	5.3	6.3	5.3	4.4	3.7	0.7	0.4	0.9	1.9	1.6	4.6
22 - 27 "	1.6	2.1	2.1	1.4	0.9	0.3	0.0	0.0	0.1	0.2	0.5	1.6
28 - 33 "	0.3	0.7	0.3	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.3
more than 34 "	0.1	0.1	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calm & Variable	6.2	5.8	4.6	4.3	3.5	5.1	6.0	6.8	8.8	6.7	10.2	6.7

Source: The Egyptian Meteorological Authority (Organization of Weather)

Note: Direction in degrees 000° to 360° East of North

One Knot = 1.85 kilometers per hour

WIND DIRECTION

Station: CAIRO Lat. = 30°06'N Long. = 31°24'E Alt. = 111.5 m

(Unit: %)

Direction	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Calm & Variable	7.8	7.1	5.7	5.6	4.7	6.1	6.8	8.0	10.1	8.8	11.3	9.8
345° - 014°	2.5	4.8	5.8	8.8	11.6	17.0	20.5	20.6	17.7	8.9	7.2	2.6
015 - 044	5.4	8.7	9.7	15.7	20.8	22.3	15.7	19.8	26.8	21.9	15.8	6.8
045 - 074	7.8	10.0	12.6	15.4	21.1	13.0	5.6	6.7	14.0	21.4	16.1	9.3
075 - 104	5.1	7.2	7.0	8.1	8.7	5.1	1.6	2.1	5.1	10.3	9.0	7.6
105 - 134	5.2	6.2	5.1	4.9	4.2	2.4	0.7	0.9	2.0	3.8	5.3	6.1
135 - 164	5.5	4.8	3.3	2.9	1.6	0.9	0.2	0.2	0.5	1.0	2.1	4.2
165 - 194	11.5	6.6	4.4	2.2	0.9	0.2	0.1	0.1	0.2	1.3	3.7	9.6
195 - 224	19.2	11.4	7.8	3.5	1.2	0.9	0.2	0.3	0.3	2.5	6.9	18.4
225 - 254	11.5	10.4	7.9	4.6	2.2	1.2	0.8	0.8	0.6	3.0	6.0	9.5
255 - 284	7.8	7.3	9.1	5.6	3.7	2.9	4.2	2.8	1.7	2.5	4.2	6.4
285 - 314	5.7	8.4	11.4	9.1	6.6	8.9	13.6	12.3	5.4	5.2	5.2	5.2
315 - 344	5.0	7.1	10.2	13.6	12.7	19.1	30.0	26.4	15.6	9.4	7.2	4.5

Source: The Egyptian Meteorological Authority (Organization of Weather)

Note: Direction in degrees 000° to 360° East of North

One Knot = 1.85 kilometers per hour

SUNSHINE HOURS

Station: CAIRO (ALMAZA) Lat. = 30°08'N Long. = 31°24'E Alt. = 111.5 m

(Unit: hr.)

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Mean
1969	5.9	8.4	6.8	8.9	10.3	11.8	11.3	11.3	10.1	9.1	8.4	8.0	9.2
1970	7.6	-	-	-	-	12.1	12.1	10.8	10.4	10.1	8.1	7.1	-
1971	7.3	8.7	8.5	9.2	11.1	11.9	12.0	11.4	9.5	9.4	8.0	5.8	9.4
1972	8.2	9.2	8.0	8.3	10.5	12.2	12.1	11.4	9.4	9.1	8.0	8.4	9.6
1973	8.0	8.1	9.0	11.9	11.5	11.3	11.8	11.3	9.4	-	-	-	-
1974	-	6.8	8.1	9.0	11.7	-	12.0	11.4	9.6	9.5	8.5	7.3	-
1975	7.8	7.9	8.8	-	10.9	11.3	11.6	11.4	9.5	9.5	9.6	6.3	-
1976	7.9	6.8	8.6	8.4	8.1	10.8	12.0	11.5	9.8	9.0	8.3	8.0	9.1
1977	7.3	8.6	9.5	9.0	11.0	11.8	11.8	11.5	10.5	9.7	8.5	7.6	9.7
1978	7.5	9.3	8.7	10.1	11.8	12.1	12.0	11.2	10.7	9.2	8.3	7.3	9.9
Mean	7.8	8.2	9.4	9.4	10.8	11.8	11.9	11.3	9.9	9.4	8.4	7.3	9.5

Source: The Egyptian Meteorological Authority (Organization of Weather)

JICA