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JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
MINISTRY FOR ENVIRONMENT AND REGIONAL POLICY
THE REPUBLIC OF HUNGARY

THE STUDY
ON
AN INTEGRATED AIR POLLUTION CONTROL PLAN
FOR
SAJÓ VALLEY AREA

FINAL REPORT

Data Book

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January 1995

PACIFIC CONSULTANTS INTERNATIONAL, TOKYO
In association with
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国際協力事業団

27822

**The Study on an Integrated Air Pollution Control Plan
for Sajó Valley Area**

FINAL REPORT

Data Book

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DATA FOR CHAPTER 2

Table D2.1.1 (1) Population and Household Distribution Within the Study Area

	Resident Population			Natural Increase/ Decrease	Migratory Difference	Number of households
	1970	1980	1990	1980-1990		1990
<u>Towns:</u>						
Miskolc	181,398	208,103	196,442	1,487	-13,148	73,500
Edelény	11,656	12,606	12,140	388	-854	3,934
Kazincbarcika	28,327	37,446	36,855	3,587	-4,178	12,528
Mezőcsát	6,890	6,835	6,694	132	-273	2,416
Ózd	45,765	48,466	43,592	1,117	-5,991	16,135
Putnok	7,206	7,404	7,318	80	-166	2,534
Sajószentpéter	14,126	14,341	13,370	661	-1,632	4,629
Sziksó	6,443	6,422	6,106	35	-351	2,128
Tiszaújváros	11,033	18,677	18,685	2,129	-2,121	6,250
Towns total	312,844	360,300	341,202	9,616	-28,714	124,054
<u>Villages:</u>						
Aggtelek	710	674	577	9	-106	204
Alacska	966	881	898	-8	25	295
Alsószuha	607	549	508	-2	-39	175
Alsótelekes	356	272	200	-28	-44	87
Alsózsolca	5,116	5,590	5,723	308	-175	1,754
Arló	4,112	4,221	3,924	302	-599	1,333
Arnót	1,155	1,560	2,082	170	352	624
Bánhorváti	1,952	1,817	1,751	5	-71	638
Bánréve	1,517	1,495	1,463	-43	11	552
Berzék	932	920	903	-6	-11	294
Boldva	2,332	2,288	2,301	121	-108	748
Borsodbóta	1,206	1,076	956	-25	-95	394
Borsodszirák	919	1,089	1,134	70	-25	332
Bőcs	2,414	2,485	2,521	103	-67	836
Bükkaranyos	1,229	1,171	1,122	-39	-10	405
Bükkszentkereszt	1,363	1,375	1,374	21	-22	475
Csermely	1,412	1,292	1,091	-105	-96	463
Csokvaomány	1,720	1,386	1,103	-129	-154	481
Dédestapolcsány	1,842	1,771	1,732	-108	69	652
Dövény	427	373	329	-6	-38	138
Dubicsány	365	373	286	-25	-62	106

Table D2.1.1 (2) Population and Household Distribution Within the Study Area

	Resident Population			Natural Increase/ Decrease	Migratory Difference	Number of households
	1970	1980	1990			
Emőd	5,683	5,635	5,422	59	-272	1,857
Égerszög	189	155	105	-24	-26	48
Felsőkelecsény	603	522	435	12	-99	158
Felsőnyárád	1,333	1,201	1,120	26	-107	433
Felsőtelekes	939	867	844	10	-33	277
Felsőzsolca	5,078	6,125	6,939	368	446	2,228
Fony	689	487	368	-41	-78	177
Gesztely	2,393	2,675	2,708	126	-93	848
Girincs	989	926	778	10	-158	239
Gömörszőlős	195	155	119	-24	-12	44
Hangony	1,892	1,803	1,753	38	-88	627
Harsány	1,944	1,896	1,948	-19	71	672
Hejőbába	1,571	1,762	1,886	-198	322	503
Hejőkeresztúr	1,041	992	1,010	-14	32	349
Hejőkürt	444	372	326	-36	-10	141
Hejőpapi	1,389	1,307	1,154	4	-157	409
Hejőszalonta	716	696	637	5	-64	221
Hernádkak	779	813	1,065	38	214	350
Hernádnémeti	3,213	3,427	3,425	102	-104	1,084
Hét	772	708	592	-44	-72	209
Igrici	1,371	1,352	1,196	20	-176	449
Imola	236	174	130	-9	-35	54
Izsófalva	6,846	5,819	4,545	-257	-1,017	1,623
Jákfalva	411	419	435	29	-13	151
Jósvaf	497	462	358	-56	-48	147
Kánó	295	283	246	-13	-24	88
Kelemér	670	600	525	12	-87	178
Kesznyéten	1,835	1,787	1,713	50	-124	598
Királd	1,563	1,254	992	-26	-236	401
Kiscséc	219	179	138	15	-56	50
Kisgyőr	1,720	1,632	1,572	7	-67	581
Kistokaj	1,169	1,245	1,489	39	205	476
Kondó	705	701	623	-11	-67	217

Table D2.1.1 (3) Population and Household Distribution Within the Study Area

	Resident Population			Natural Increase/Decrease	Migratory Difference	Number of households
	1970	1980	1990	1980-1990		1990
Köröm	1,018	1,008	1,021	96	-83	326
Kurityán	2,078	1,839	1,816	102	-125	601
Mályi	2,102	2,500	3,353	168	685	1,064
Múcsony	3,287	3,488	3,423	157	-222	1,186
Muhi	475	498	542	-2	46	180
Nagybarca	1,213	1,140	1,099	21	-62	370
Nagycsécs	985	863	879	34	-18	298
Nemesbikk	1,003	916	896	-7	-13	333
Nyékládháza	3,679	4,190	4,432	57	185	1,524
Nyomár	396	365	334	-10	-21	120
Onga	3,456	3,616	4,042	213	213	1,298
Ónod	2,349	2,293	2,229	-34	-30	750
Oszlár	502	490	400	-11	-79	177
Parasznya	1,450	1,285	1,251	20	-54	427
Radostyán	649	662	646	-24	8	220
Ragály	901	789	720	27	-96	245
Rudabánya	3,904	3,530	3,138	43	-435	1,173
Sajóbábony	3,150	3,416	3,291	274	-399	1,086
Sajóecseg	1,148	1,201	1,062	-18	-121	368
Sajógalgóc	391	367	334	16	-49	120
Sajóhidvég	968	1,044	969	38	-113	335
Sajóivánka	602	538	463	25	-100	172
Sajókaza	3,492	3,279	3,073	175	-381	1,031
Sajókápolna	551	546	487	-32	-27	160
Sajókeresztúr	1,462	1,520	1,506	12	-26	492
Sajólád	2,477	2,523	2,648	112	13	912
Sajólászlófalva	516	499	476	10	-33	164
Sajómercse	533	450	310	-43	-97	136
Sajónémeti	911	767	666	-14	-87	265

Table D2.1.1 (4) Population and Household Distribution Within the Study Area

	Resident Population			Natural Increase/ Decrease	Migratory Difference	Number of households
	1970	1980	1990	1980-1990		1990
Sajóörös	675	763	803	-52	92	294
Sajópálfalva	646	725	732	16	-9	237
Sajópetri	1,215	1,201	1,318	32	85	460
Sajópüspöki	666	673	561	-26	-86	220
Sajósenye	339	331	380	7	42	120
Sajószöged	1,193	1,556	1,964	-9	417	670
Sajóvámos	2,092	2,204	2,178	50	-76	715
Sajóvelezd	925	899	870	-25	-4	309
Sáta	1,746	1,630	1,509	-32	-89	525
Serényfalva	1,260	1,212	1,071	-18	-123	366
Szakáld	656	582	545	1	-38	209
Szalonna	972	952	991	40	-1	350
Szendrőlád	1,295	1,396	1,386	169	-179	375
Szirmabesenyő	4,391	4,769	4,836	144	-77	1,706
Szőlősardó	319	260	199	-27	-34	81
Szuhafő	332	258	240	1	-19	82
Szuhakálló	1,529	1,338	1,027	74	-385	389
Szuhogy	1,385	1,308	1,185	-3	-120	415
Tardona	1,325	1,205	1,150	-5	-50	411
Teresztenye	107	72	44	-10	-18	24
Tiszalúc	4,978	5,070	5,131	137	-76	1,684
Tiszapalkonya	1,846	1,734	1,499	-51	-184	604
Tornakápolna	113	51	22	-11	-18	13
Trizs	377	334	335	-2	3	105
Uppony	676	554	482	-45	-27	212
Vadna	631	593	550	7	-50	190
Varbó	1,360	1,273	1,170	-64	-39	411
Zádorfalva	700	579	504	24	-99	178
Ziliz	477	501	423	0	-78	144
Zubogy	793	713	637	-3	-73	221
Villages total:	162,708	161,447	157,822	2,507	-6,132	54,126
Study Area Total:	475,552	521,747	499,024	12,123	-34,846	178,180

Source : Ref. A-6.

DATA FOR CHAPTER 3

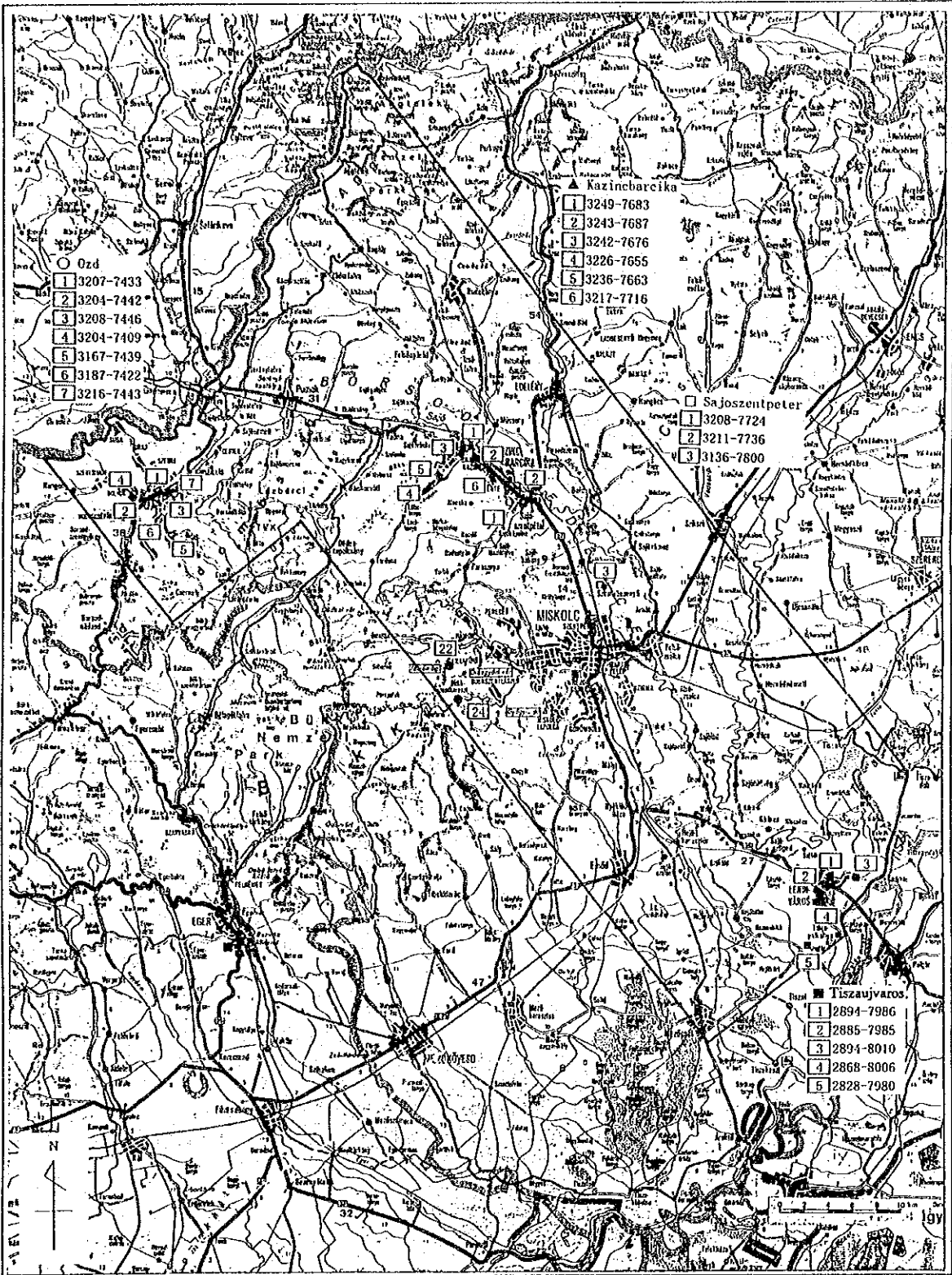


Figure D3.1.1 Measuring Points of Falling Dust in Sajó Valley

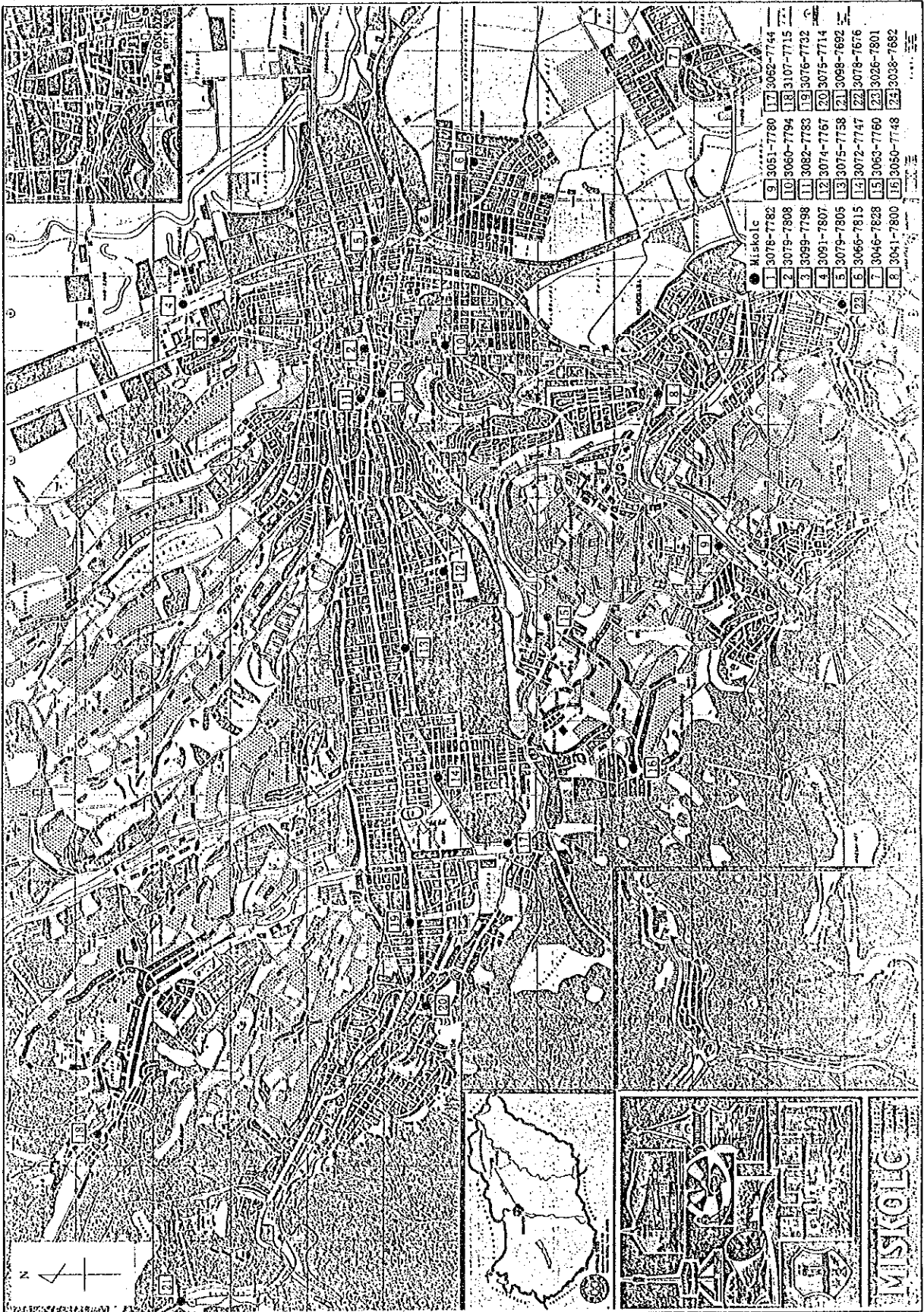


Figure D3.1.2 Measuring Points of Falling Dust in Miskolc

Table D3.2.1 - (1) Summary of Ambient Air Quality Monitoring Results

Pollutant	Kind of Value			MONITORING STATION									
				JF1	JF2	J1	J2	J3	J4	J5	J6	J7	
NO (ppb)	All season	30 minutes	Mean	3.6	1.6	2.9	13.0	4.8	5.1	12.0	10.1	13.7	
			σ	4.5	2.5	5.5	21.5	9.0	9.0	22.6	14.6	21.3	
			98%	18.3	8.5	19.1	82.0	33.6	31.6	86.0	54.0	85.0	
		Max.	55.0	59.0	134.0	252.0	142.0	131.0	253.0	220.0	232.0		
		Daily	Mean	3.6	1.6	2.8	13.0	4.8	5.1	11.9	10.1	13.7	
			σ	3.1	1.2	2.7	13.8	5.7	5.8	14.2	9.3	12.2	
	98%		12.1	4.8	10.0	51.0	23.8	19.8	49.5	39.5	50.0		
	Non-heating Season	30 minutes	Mean	2.0	1.3	1.6	7.5	2.2	1.9	5.3	5.3	9.4	
			σ	1.8	2.0	3.2	12.9	5.0	3.8	11.7	6.8	15.8	
			98%	7.2	6.9	11.2	48.8	17.8	13.1	39.8	27.0	60.2	
		Max.	23.0	30.0	57.0	143.0	93.0	51.0	200.0	71.0	186.0		
		Daily	Mean	2.0	1.3	1.6	7.5	2.3	1.9	5.3	5.3	9.4	
			σ	0.9	0.7	1.2	8.9	2.1	2.7	6.7	3.1	7.6	
	98%		3.3	2.2	4.3	30.4	8.2	10.4	25.4	12.4	32.4		
	Heating Season	30 minutes	Mean	5.2	2.0	3.9	18.5	7.2	8.2	18.4	14.8	17.9	
			σ	5.8	2.9	6.6	26.3	11.1	11.2	28.1	18.2	24.9	
			98%	22.6	10.4	23.8	101.0	42.9	42.9	116.0	75.0	102.0	
		Max.	55.0	59.0	134.0	252.0	142.0	131.0	253.0	220.0	232.0		
		Daily	Mean	5.3	2.0	3.8	18.5	7.2	8.2	18.4	14.8	17.9	
			σ	3.7	1.5	3.1	15.5	6.9	6.3	16.3	10.8	14.3	
	98%		13.8	5.8	12.7	58.9	28.8	23.6	53.8	48.5	54.1		
	Max.	17.3	9.4	16.1	76.4	35.3	35.5	102.4	72.1	62.0			
	NO2 (ppb)	All season	30 minutes	Mean	7.4	4.3	8.0	19.9	12.1	10.6	15.7	13.2	15.5
				σ	5.8	4.7	4.6	11.1	7.7	7.2	10.9	9.7	9.7
98%				22.4	16.4	19.8	46.9	31.5	28.9	42.2	39.8	40.3	
Max.			52.0	56.0	39.0	164.0	79.0	70.0	117.0	85.0	99.0		
Daily			Mean	7.4	4.3	8.0	19.9	12.1	10.6	15.6	13.2	15.5	
			σ	4.5	3.0	3.4	7.9	5.5	5.6	8.4	7.2	6.7	
		98%	16.1	11.8	13.8	36.7	22.9	21.8	34.8	32.8	30.8		
Max.		21.2	20.5	24.9	46.7	39.5	35.4	65.6	41.0	46.6			
Non-heating Season		30 minutes	Mean	4.2	3.8	6.6	17.6	10.1	7.0	10.9	9.4	14.2	
			σ	3.4	4.2	3.8	10.8	6.6	4.6	8.0	6.4	9.2	
			98%	12.5	14.5	16.1	45.5	27.6	18.7	33.2	27.1	39.8	
		Max.	27.0	52.0	37.0	70.0	76.0	39.0	67.0	64.0	63.0		
		Daily	Mean	4.2	3.8	6.6	17.6	10.1	7.0	10.9	9.3	14.2	
			σ	2.0	1.7	2.7	7.9	4.1	3.0	5.1	3.1	5.5	
98%			8.2	8.1	11.6	34.5	20.5	12.2	22.2	14.8	25.8		
Max.		10.1	11.6	14.0	40.7	24.0	16.9	29.8	18.7	31.0			
Heating Season		30 minutes	Mean	10.8	4.8	9.1	22.2	14.1	14.2	20.2	17.0	16.8	
			σ	5.9	5.2	4.9	11.0	8.1	7.5	11.3	10.9	10.1	
			98%	25.8	18.7	20.8	49.0	33.0	33.0	47.5	45.0	41.0	
		Max.	52.0	56.0	39.0	164.0	79.0	70.0	117.0	85.0	99.0		
		Daily	Mean	10.8	4.7	9.1	22.2	14.1	14.1	20.2	16.9	16.8	
			σ	3.9	3.8	3.5	7.2	5.9	5.3	8.5	8.0	7.5	
98%			18.8	14.2	16.8	38.5	23.6	25.1	37.8	35.5	35.5		
Max.		21.2	20.5	24.9	46.7	39.5	35.4	65.6	41.0	46.6			

Table D3.2.1 - (2) Summary of Ambient Air Quality Monitoring Results

Pollutant	Kind of Value		MONITORING STATION									
			JF1	JF2	J1	J2	J3	J4	J5	J6	J7	
NOx (ppb)	All season	30 minutes	Mean	10.8	5.9	10.8	32.6	16.8	16.2	27.4	23.4	29.2
			σ	9.1	6.5	8.5	28.6	14.7	14.7	30.2	22.3	28.0
			98%	36.8	23.7	35.9	117.9	59.7	59.9	120.0	87.0	118.0
		Max.	76.0	115.0	158.0	304.0	190.0	166.0	297.0	285.0	274.0	
		Daily	Mean	10.8	5.9	10.8	32.6	16.8	16.2	27.4	23.3	29.2
			σ	7.0	4.0	5.2	19.6	10.3	10.8	21.0	15.3	17.7
	98%		27.2	16.4	21.8	77.4	43.7	42.8	78.4	65.8	78.5	
	Non-heating Season	30 minutes	Mean	5.9	5.1	8.2	24.7	12.2	9.0	16.0	14.7	23.6
			σ	4.4	5.5	6.0	20.6	10.1	7.4	17.1	12.2	22.0
			98%	17.2	20.5	25.6	81.4	41.8	29.0	67.9	51.8	90.2
		Max.	40.0	70.0	76.0	172.0	122.0	78.0	230.0	106.0	230.0	
		Daily	Mean	5.9	5.2	8.2	24.7	12.2	9.1	16.0	14.7	23.6
			σ	2.7	2.2	3.5	15.7	5.5	5.3	10.3	5.7	12.2
	98%		11.6	10.2	15.0	62.2	24.8	24.5	43.5	26.8	58.2	
	Max.	13.4	15.3	16.8	68.9	31.9	31.2	63.8	34.7	64.2		
	Heating Season	30 minutes	Mean	15.9	6.7	12.9	40.4	21.3	23.2	38.4	31.9	34.6
			σ	9.9	7.2	9.6	33.0	17.0	16.5	35.7	26.3	31.8
			98%	43.0	26.8	41.8	139.0	68.0	72.0	156.0	111.0	137.0
		Max.	76.0	115.0	158.0	304.0	190.0	166.0	297.0	285.0	274.0	
		Daily	Mean	15.9	6.7	12.9	40.5	21.3	23.2	38.4	31.9	34.7
			σ	6.5	5.0	5.5	20.0	11.7	10.2	22.9	17.0	20.4
	98%		31.2	18.8	25.8	94.0	52.1	49.0	94.0	82.0	83.0	
	Max.	34.3	29.7	32.2	114.9	69.7	53.3	152.0	94.8	103.0		
	SO2 (ppb)	All season	30 minutes	Mean	27.6	8.9	5.9	16.2	16.2	9.3	13.9	8.5
σ				36.5	20.7	11.4	32.2	27.9	16.5	19.7	17.1	11.8
98%				136.1	61.8	38.0	113.0	94.0	53.0	75.0	53.0	45.0
Max.			417.0	407.0	200.0	501.0	487.0	325.0	205.0	321.0	170.0	
Daily			Mean	27.5	8.9	5.9	16.3	16.1	9.3	13.8	8.5	9.4
			σ	27.7	11.9	7.1	19.4	18.1	14.0	15.4	12.4	8.9
		98%	96.0	30.0	25.9	71.0	60.0	43.9	55.0	37.8	35.9	
Max.		196.9	164.3	55.7	212.8	200.4	148.1	106.9	102.1	49.6		
Non-heating Season		30 minutes	Mean	7.6	6.9	2.5	9.7	7.2	2.6	4.0	3.4	3.8
			σ	10.6	19.9	4.9	23.9	17.5	4.8	4.5	6.3	4.2
			98%	41.1	68.5	13.9	96.2	62.6	14.5	14.4	18.4	15.5
		Max.	164.0	322.0	100.0	385.0	359.0	96.0	90.0	119.0	88.0	
		Daily	Mean	7.6	7.1	2.4	9.8	7.2	2.6	4.0	3.3	3.8
			σ	5.8	8.0	2.2	8.7	6.4	2.1	2.1	3.3	2.2
98%			21.4	29.8	6.5	33.2	22.5	6.7	10.6	13.3	7.8	
Max.		36.8	51.4	15.9	43.1	44.8	11.7	13.9	24.2	14.8		
Heating Season		30 minutes	Mean	47.9	10.8	9.1	23.0	24.9	16.8	23.2	15.5	14.9
			σ	41.8	21.3	14.3	37.9	32.9	21.0	23.6	23.4	14.1
			98%	165.0	55.0	50.0	131.0	113.0	79.2	93.0	74.5	56.0
		Max.	417.0	407.0	200.0	501.0	487.0	325.0	205.0	321.0	170.0	
		Daily	Mean	47.6	10.7	9.1	23.2	24.9	16.8	23.2	15.5	14.9
			σ	26.5	14.7	8.5	24.6	21.3	17.3	16.6	16.2	9.7
98%			100.0	37.0	31.0	85.0	74.0	63.8	62.3	80.1	39.0	
Max.		196.9	164.3	55.7	212.8	200.4	148.1	106.9	102.1	49.6		

Table D3.2.1 - (3) Summary of Ambient Air Quality Monitoring Results

Pollutant	Kind of Value		MONITORING STATION																						
			JF1	JF2	J1	J2	J3	J4	J5	J6	J7														
CO (ppm)	All season	30 minutes	Mean	0.47	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
			σ	0.44	0.18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
			98%	1.70	0.67	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		Daily	Mean	0.47	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
			σ	0.36	0.16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
			98%	1.27	0.56	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		Non-heating Season	30 minutes	Mean	0.20	0.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
				σ	0.14	0.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
				98%	0.55	0.26	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Daily		Mean	0.20	0.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
			σ	0.09	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
			98%	0.33	0.16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	Heating Season		30 minutes	Mean	0.74	0.32	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
				σ	0.46	0.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
				98%	1.94	0.75	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		Daily	Mean	0.73	0.31	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
			σ	0.33	0.16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
			98%	1.35	0.61	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		O3 (ppb)	All season	30 minutes	Mean	38.1	43.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	27.4	--	
					σ	31.0	24.7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	22.2	--
					98%	114.0	98.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	84.0	--
	Daily			Mean	38.2	43.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	27.4	--	--
				σ	22.1	16.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	16.3	--	--
				98%	39.0	37.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.0	--	--
Non-heating Season	30 minutes			Mean	48.5	50.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	38.7	--	--	
				σ	30.4	25.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	23.6	--	--	
				98%	121.0	15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	92.5	--	--	
	Daily		Mean	48.6	50.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	38.6	--	--	--	
			σ	16.8	13.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	13.4	--	--	--	
			98%	39.8	37.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	33.1	--	--	--	
	Heating Season		30 minutes	Mean	27.9	36.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	16.0	--	--	--	
				σ	28.1	22.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	12.8	--	--	--	
				98%	15.0	89.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	45.0	--	--	--	
Daily			Mean	28.1	36.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	16.0	--	--	--		
			σ	22.1	17.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	9.6	--	--	--		
			98%	37.4	36.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	18.5	--	--	--		
Max.			Mean	96.0	81.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	41.5	--	--	--		

Table D3.2.1 - (4) Summary of Ambient Air Quality Monitoring Results

Pollutant	Kind of Value		MONITORING STATION										
			JF1	JF2	J1	J2	J3	J4	J5	J6	J7		
SPM ($\mu\text{g}/\text{m}^3$)	All season	30 minutes	Mean	23.7	21.7	--	--	--	--	--	26.4	--	
			σ	22.5	18.2	--	--	--	--	--	20.4	--	
			98%	87.0	64.6	--	--	--	--	--	83.1	--	
		Max.	154.0	673.0	--	--	--	--	--	752.0	--		
		Daily	Mean	23.6	21.5	--	--	--	--	--	26.4	--	
			σ	19.1	13.2	--	--	--	--	--	15.0	--	
	98%		71.8	61.9	--	--	--	--	--	69.9	--		
	Non-heating Season	30 minutes	Mean	11.0	17.5	--	--	--	--	--	19.1	--	
			σ	9.4	16.8	--	--	--	--	--	13.3	--	
			98%	33.0	35.3	--	--	--	--	--	43.0	--	
		Max.	135.0	673.0	--	--	--	--	--	752.0	--		
		Daily	Mean	11.0	17.5	--	--	--	--	--	19.1	--	
			σ	6.9	7.5	--	--	--	--	--	5.6	--	
	98%		27.4	27.8	--	--	--	--	--	3.7	--		
	Heating Season	30 minutes	Mean	36.9	25.9	--	--	--	--	--	33.8	--	
			σ	24.5	18.5	--	--	--	--	--	23.3	--	
			98%	1.7	72.2	--	--	--	--	--	94.6	--	
		Max.	154.0	136.0	--	--	--	--	--	314.0	--		
		Daily	Mean	36.6	25.7	--	--	--	--	--	33.8	--	
			σ	19.0	16.2	--	--	--	--	--	17.6	--	
	98%		77.0	66.5	--	--	--	--	--	75.2	--		
	Max.	99.4	88.9	--	--	--	--	--	84.6	--			
	CH4 (ppmC)	All season	30 minutes	Mean	1.76	2.11	--	--	--	--	--	--	--
				σ	0.15	0.32	--	--	--	--	--	--	--
98%				2.10	2.91	--	--	--	--	--	--	--	
Max.			3.84	7.65	--	--	--	--	--	--	--		
Daily			Mean	1.76	2.11	--	--	--	--	--	--	--	
			σ	0.13	0.14	--	--	--	--	--	--	--	
		98%	1.99	2.39	--	--	--	--	--	--	--		
Max.		2.19	2.76	--	--	--	--	--	--	--			
Non-heating Season		30 minutes	Mean	1.68	2.09	--	--	--	--	--	--	--	
			σ	0.09	0.34	--	--	--	--	--	--	--	
			98%	1.79	3.10	--	--	--	--	--	--	--	
		Max.	2.21	7.65	--	--	--	--	--	--	--		
		Daily	Mean	1.68	2.09	--	--	--	--	--	--	--	
			σ	0.07	0.12	--	--	--	--	--	--	--	
98%			1.75	2.33	--	--	--	--	--	--	--		
Max.		1.84	2.51	--	--	--	--	--	--	--			
Heating Season		30 minutes	Mean	1.84	2.13	--	--	--	--	--	--	--	
			σ	0.16	0.29	--	--	--	--	--	--	--	
			98%	2.70	2.70	--	--	--	--	--	--	--	
		Max.	3.84	6.96	--	--	--	--	--	--	--		
		Daily	Mean	1.83	2.12	--	--	--	--	--	--	--	
			σ	0.14	0.15	--	--	--	--	--	--	--	
98%			2.30	2.41	--	--	--	--	--	--	--		
Max.		2.19	2.76	--	--	--	--	--	--	--			

Table D3.2.1 - (5) Summary of Ambient Air Quality Monitoring Results

Pollutant	Kind of Value		MONITORING STATION										
			JF1	JF2	J1	J2	J3	J4	J5	J6	J7		
NMT (ppmC)	All season	30 minutes	Mean	0.29	0.22	--	--	--	--	--	--	--	
			σ	0.20	0.30	--	--	--	--	--	--	--	
			98%	1.28	2.21	--	--	--	--	--	--	--	
		Daily	Max.	1.30	5.54	--	--	--	--	--	--	--	
			Mean	0.29	0.22	--	--	--	--	--	--	--	
			σ	0.19	0.15	--	--	--	--	--	--	--	
	Non-heating Season	30 minutes	98%	1.18	1.20	--	--	--	--	--	--	--	
			Max.	0.74	1.16	--	--	--	--	--	--	--	
			Mean	0.18	0.18	--	--	--	--	--	--	--	
		Daily	σ	0.17	0.23	--	--	--	--	--	--	--	
			98%	1.70	1.78	--	--	--	--	--	--	--	
			Max.	1.13	4.14	--	--	--	--	--	--	--	
	Heating Season	30 minutes	Mean	0.18	0.19	--	--	--	--	--	--	--	
			σ	0.16	0.12	--	--	--	--	--	--	--	
			98%	1.00	0.96	--	--	--	--	--	--	--	
		Daily	Max.	0.61	0.93	--	--	--	--	--	--	--	
			Mean	0.41	0.26	--	--	--	--	--	--	--	
			σ	0.16	0.35	--	--	--	--	--	--	--	
	THC (ppmC)	All season	30 minutes	98%	1.38	2.69	--	--	--	--	--	--	--
				Max.	1.30	5.54	--	--	--	--	--	--	--
				Mean	0.41	0.26	--	--	--	--	--	--	--
			Daily	σ	0.13	0.17	--	--	--	--	--	--	--
				98%	1.24	1.37	--	--	--	--	--	--	--
				Max.	0.74	1.16	--	--	--	--	--	--	--
Non-heating Season		30 minutes	Mean	2.05	2.34	--	--	--	--	--	--	--	
			σ	0.29	0.47	--	--	--	--	--	--	--	
			98%	2.60	3.68	--	--	--	--	--	--	--	
		Daily	Max.	3.94	8.28	--	--	--	--	--	--	--	
			Mean	2.05	2.34	--	--	--	--	--	--	--	
			σ	0.27	0.23	--	--	--	--	--	--	--	
Heating Season		30 minutes	98%	2.49	2.87	--	--	--	--	--	--	--	
			Max.	2.78	3.42	--	--	--	--	--	--	--	
			Mean	1.85	2.28	--	--	--	--	--	--	--	
		Daily	σ	0.20	0.45	--	--	--	--	--	--	--	
			98%	2.22	3.57	--	--	--	--	--	--	--	
			Max.	3.34	7.67	--	--	--	--	--	--	--	
Non-heating Season		30 minutes	Mean	1.85	2.29	--	--	--	--	--	--	--	
			σ	0.18	0.18	--	--	--	--	--	--	--	
			98%	2.17	2.73	--	--	--	--	--	--	--	
		Daily	Max.	2.32	3.20	--	--	--	--	--	--	--	
			Mean	2.24	2.39	--	--	--	--	--	--	--	
			σ	0.24	0.49	--	--	--	--	--	--	--	
Heating Season	30 minutes	98%	2.69	3.77	--	--	--	--	--	--	--		
		Max.	3.94	8.28	--	--	--	--	--	--	--		
		Mean	2.24	2.38	--	--	--	--	--	--	--		
	Daily	σ	0.20	0.27	--	--	--	--	--	--	--		
		98%	2.59	3.20	--	--	--	--	--	--	--		
		Max.	2.78	3.42	--	--	--	--	--	--	--		

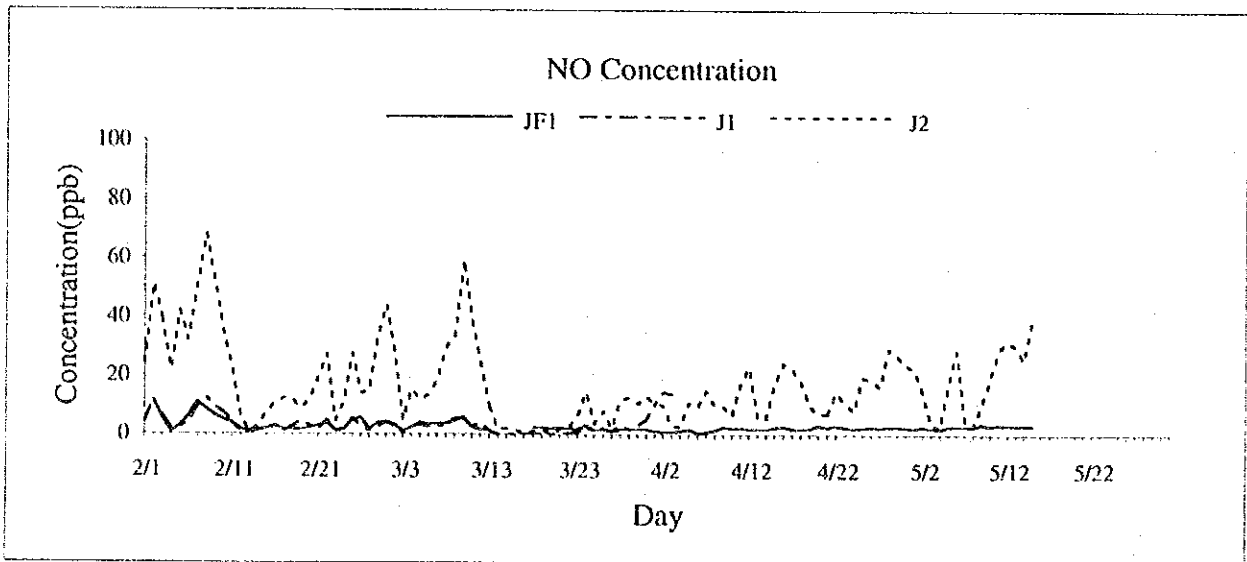
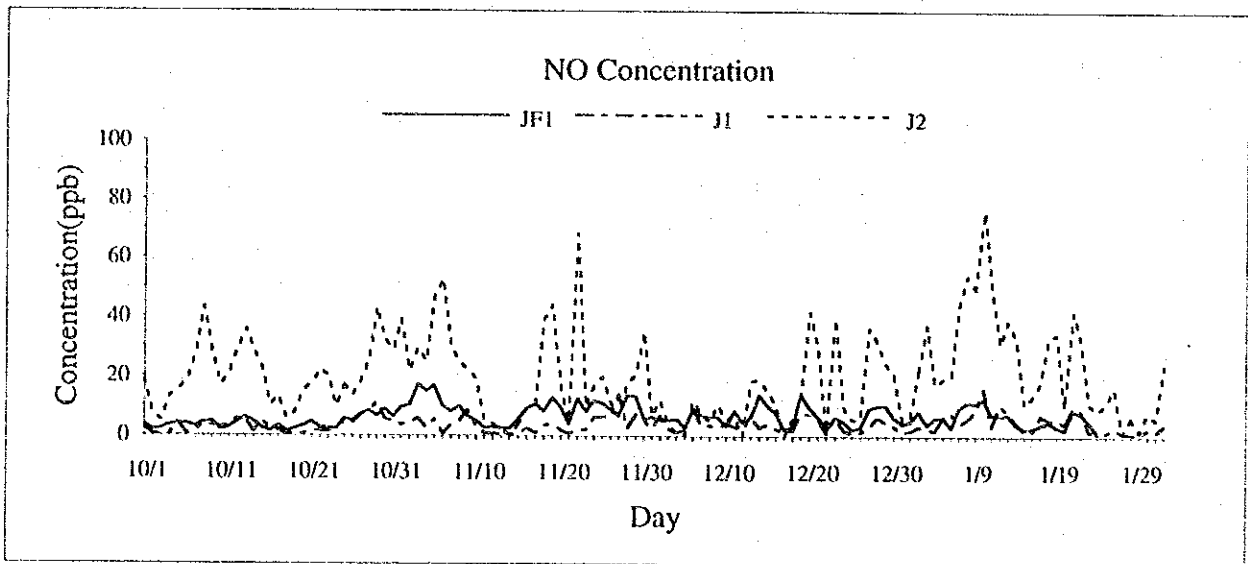
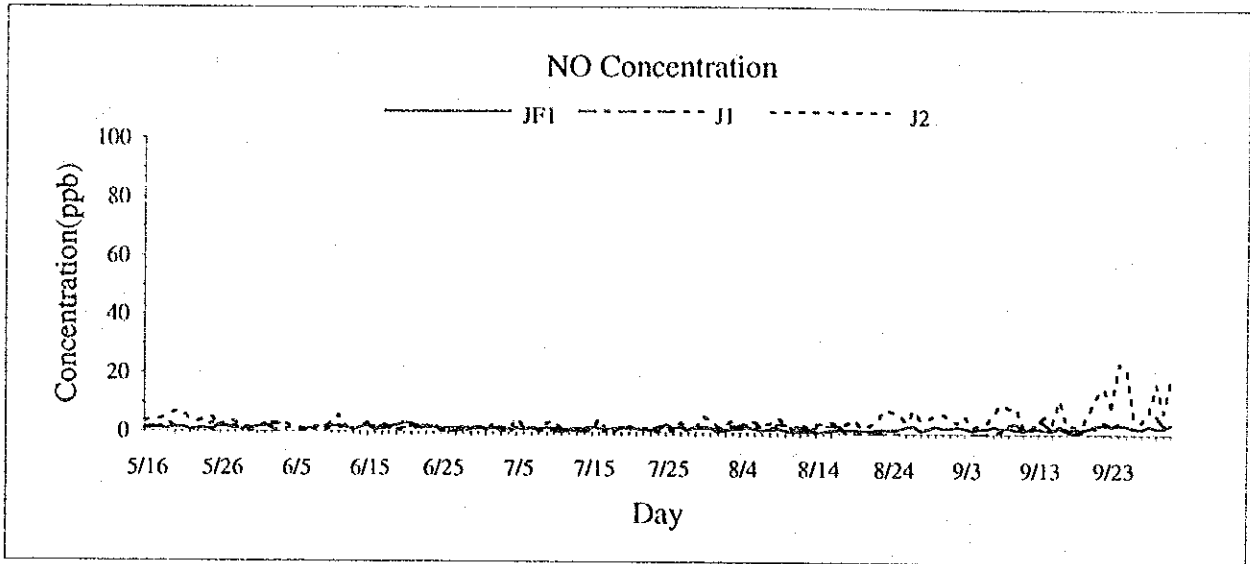


Figure D3.2.1 - (1) Daily Variation of NO Concentration (JF1, J1, J2 5/16-5/15)

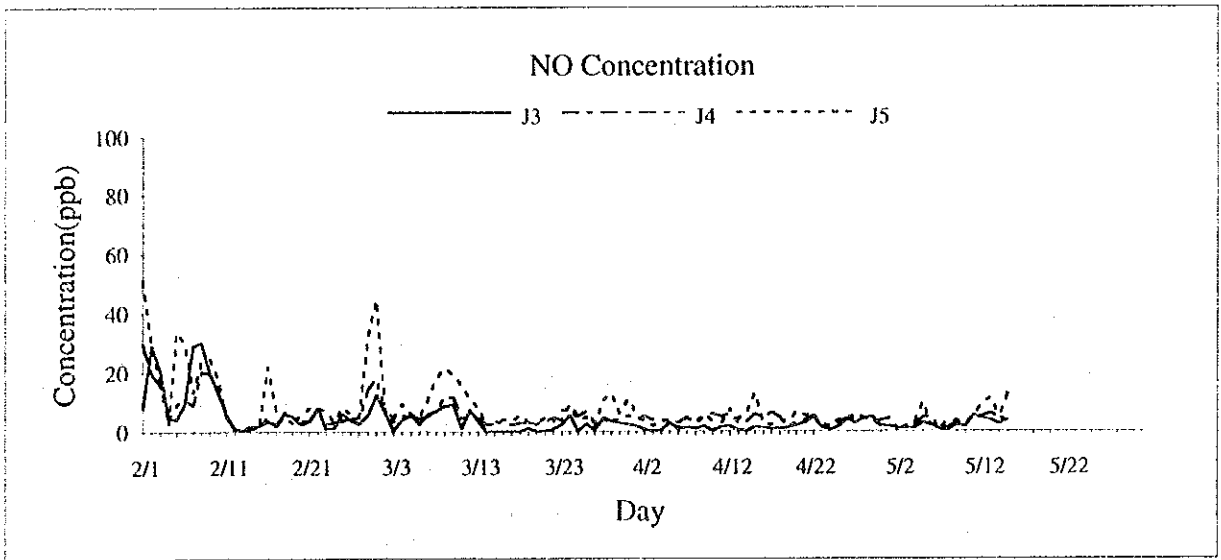
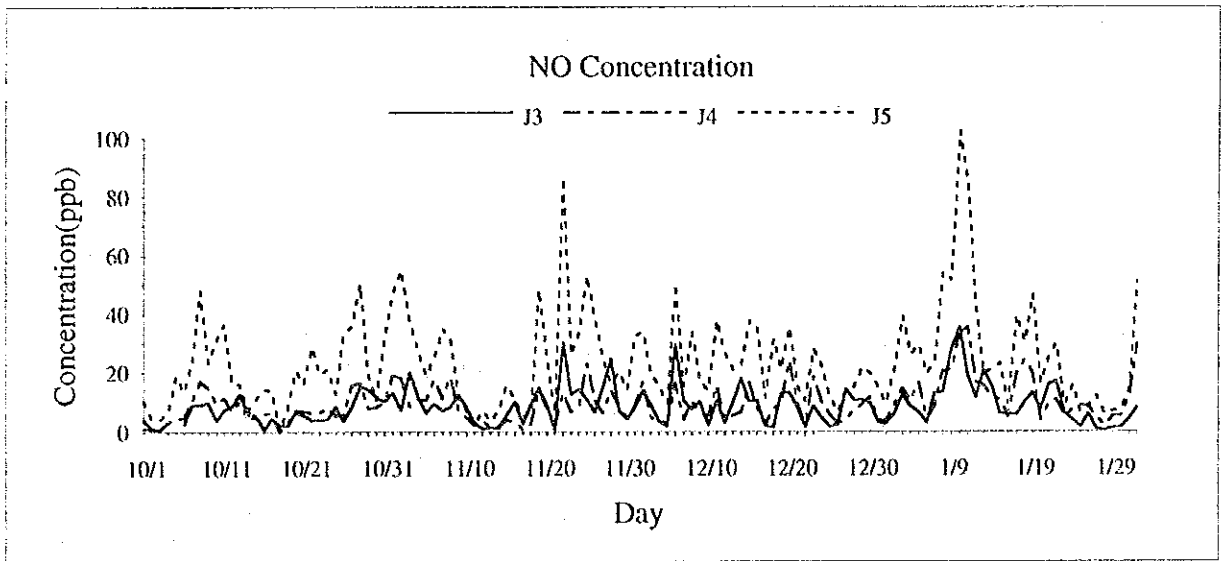
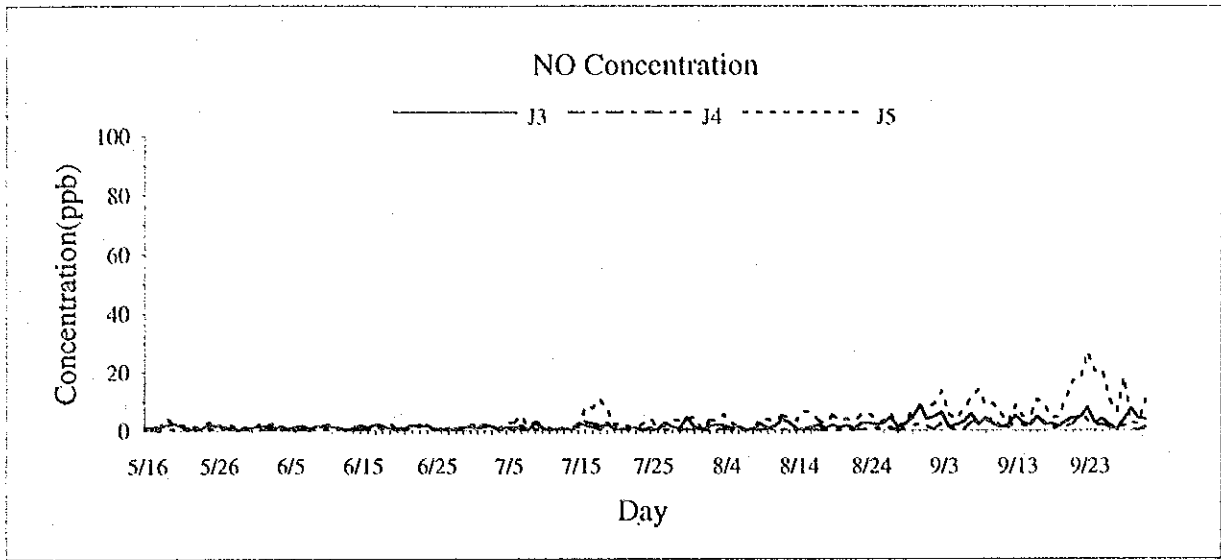


Figure D3.2.1 - (2) Daily Variation of NO Concentration (J3, J4, J5 5/16-5/15)

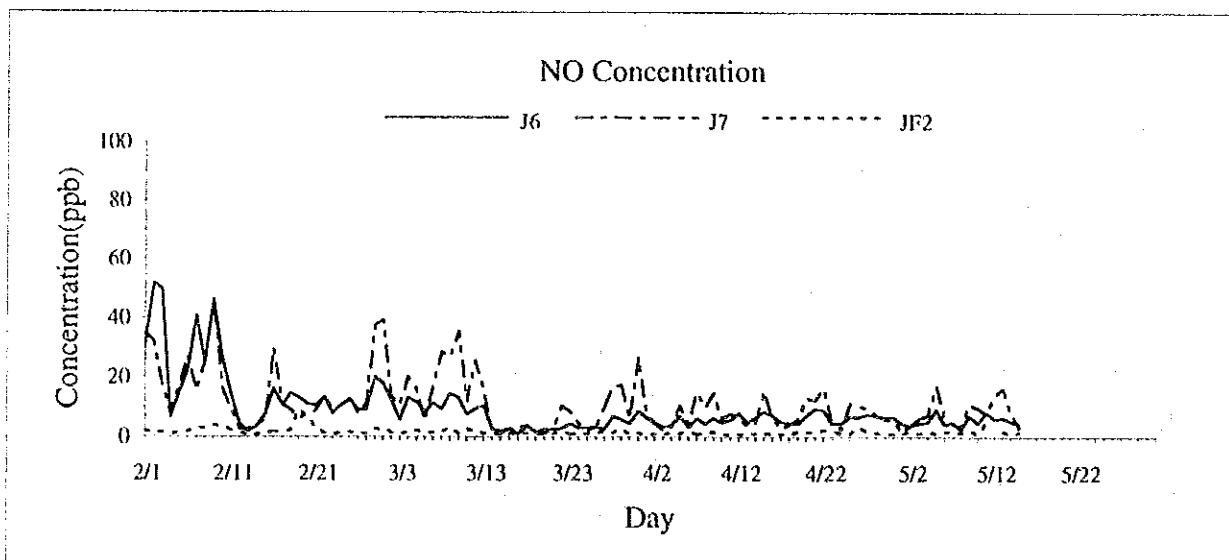
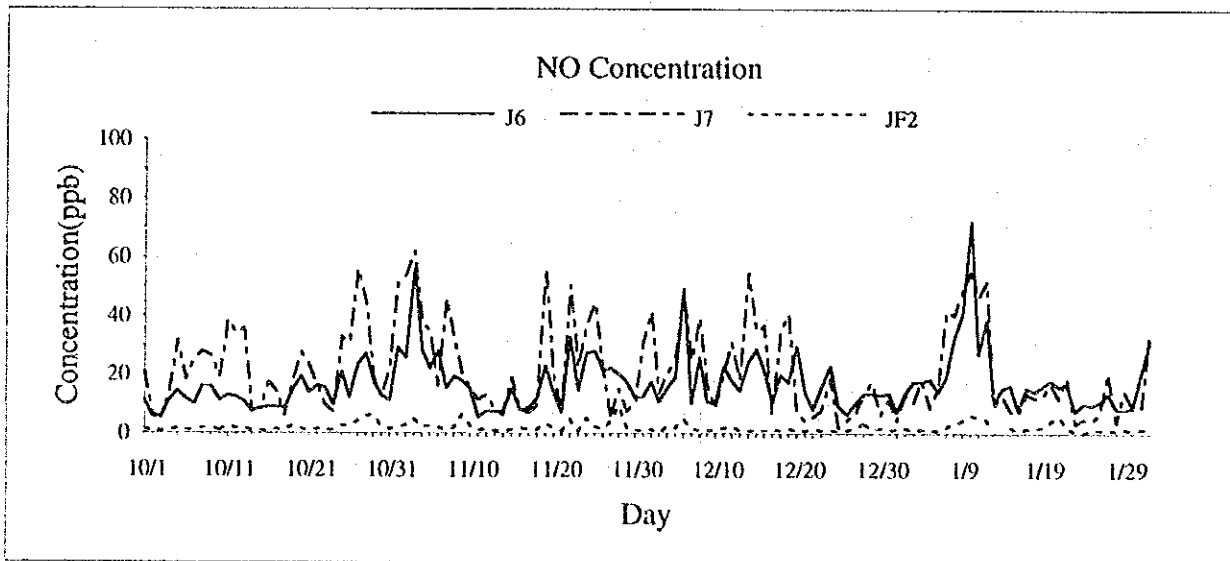
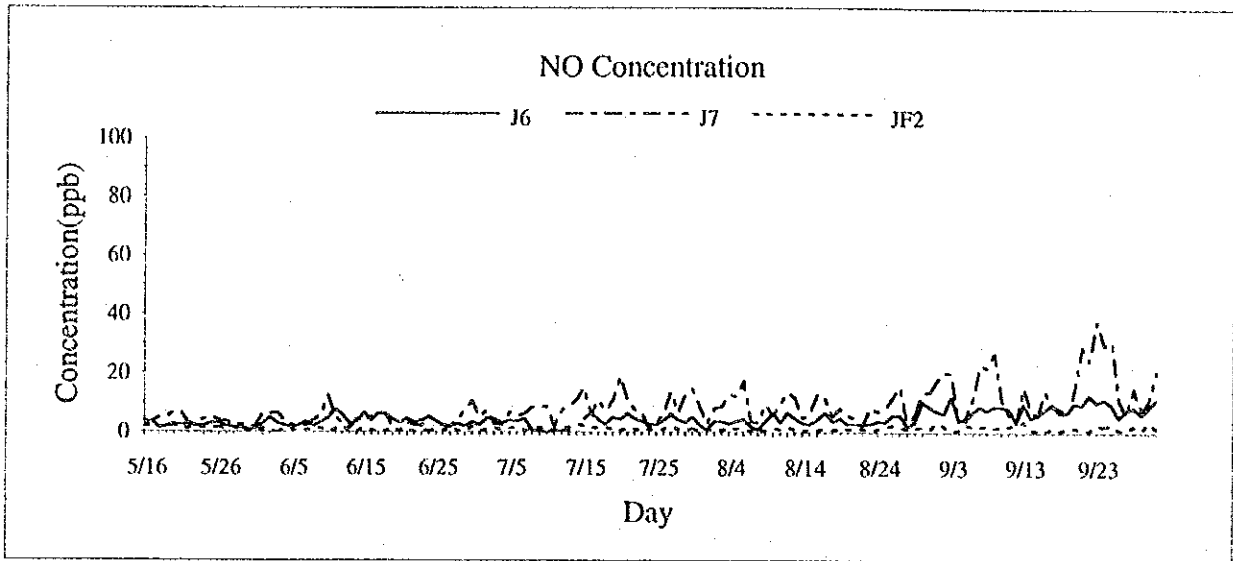


Figure D3.2.1 - (3) Daily Variation of NO Concentration (J6, J7, JF2 5/16-5/15)

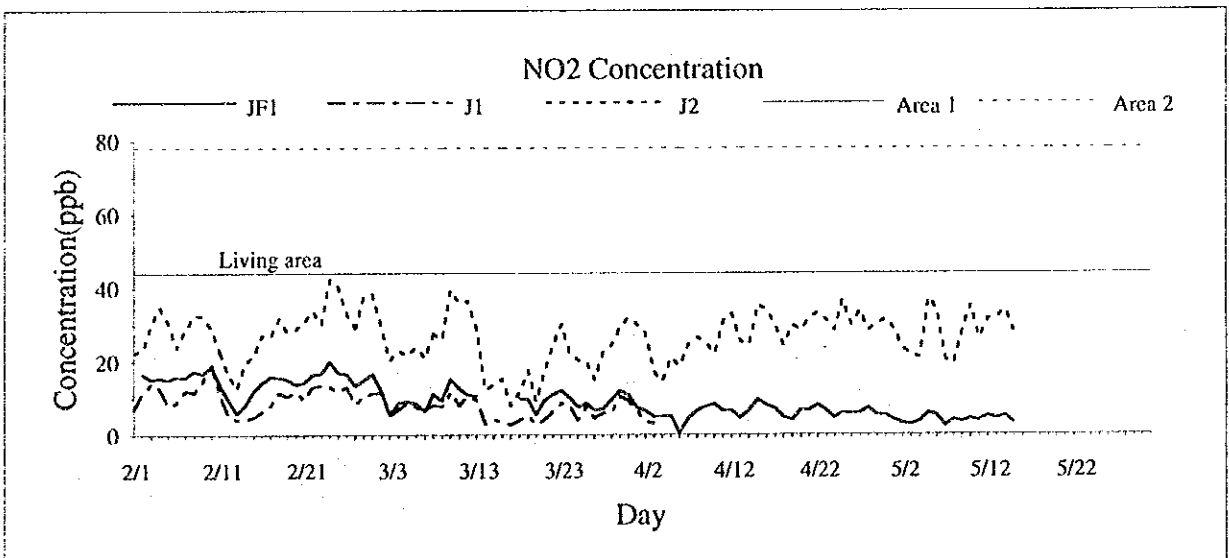
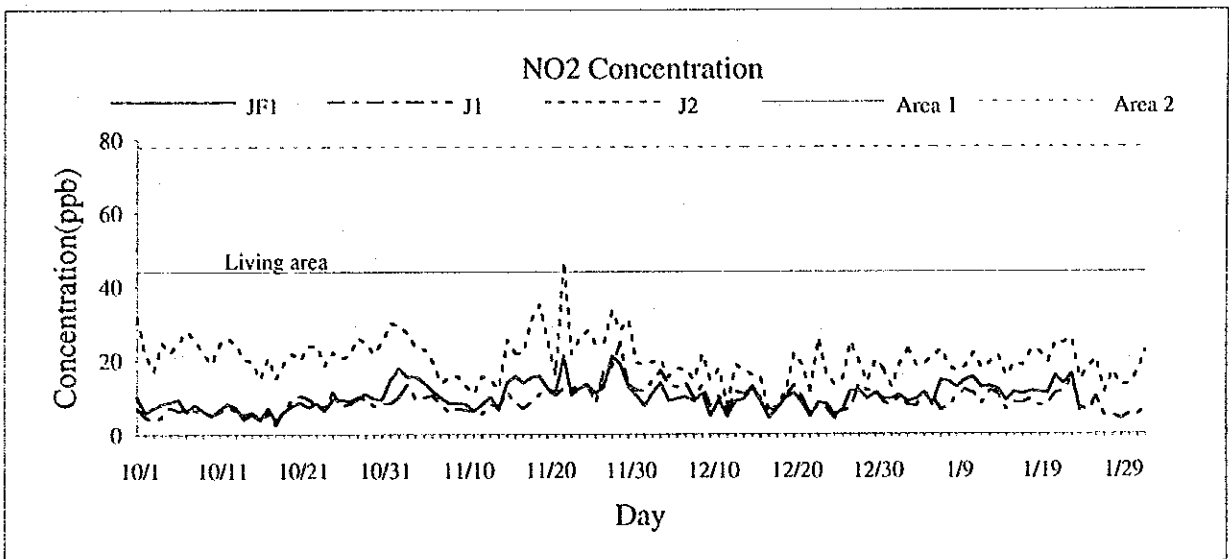
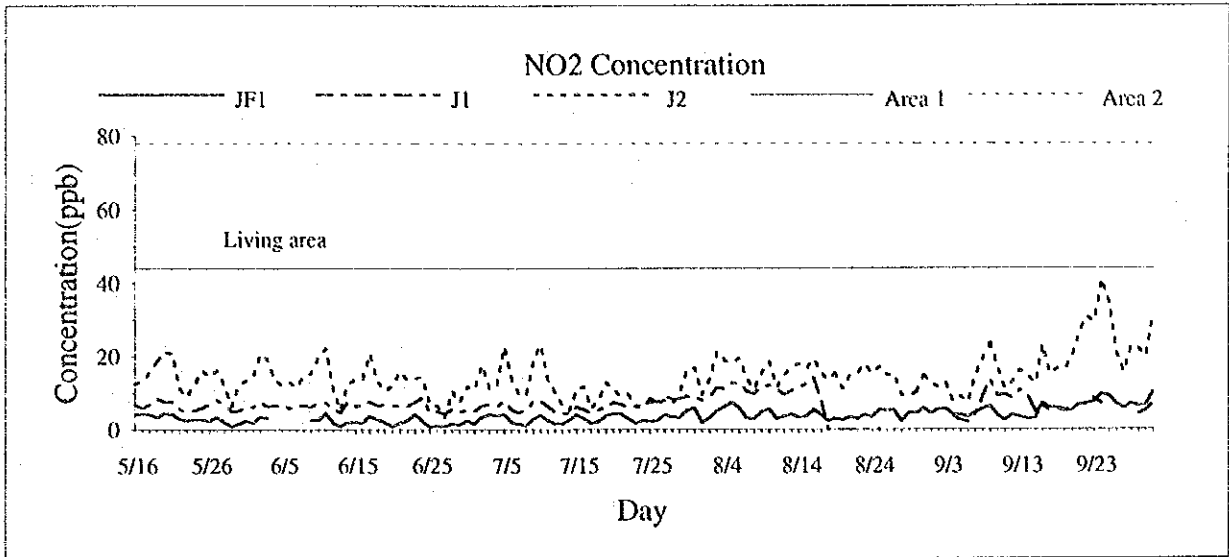


Figure D3.2.2 - (1) Daily Variation of NO2 Concentration (JF1, J1, J2 5/16-5/15)

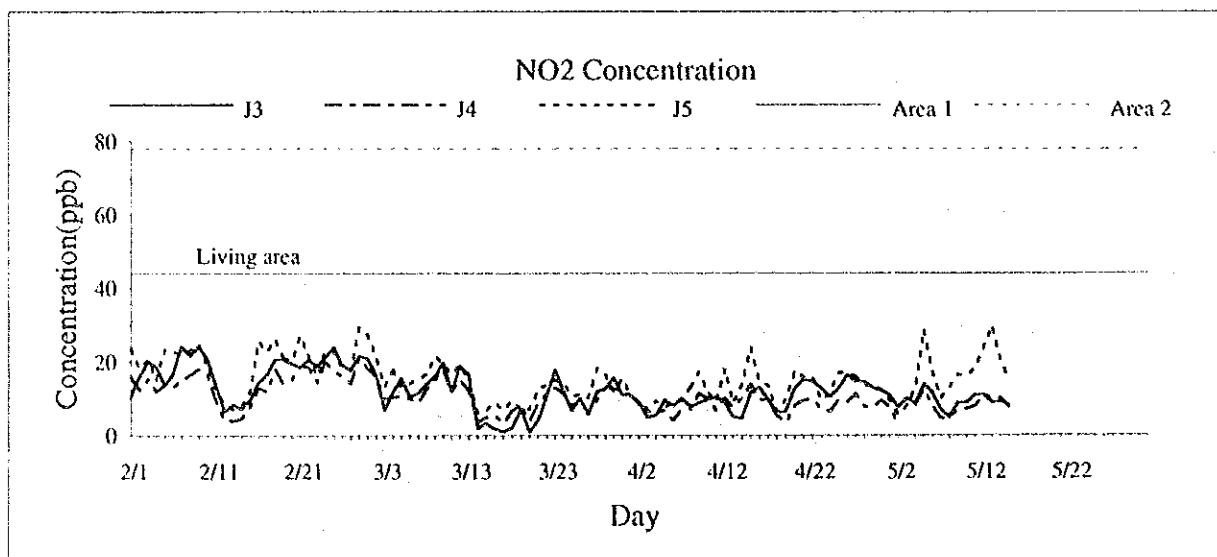
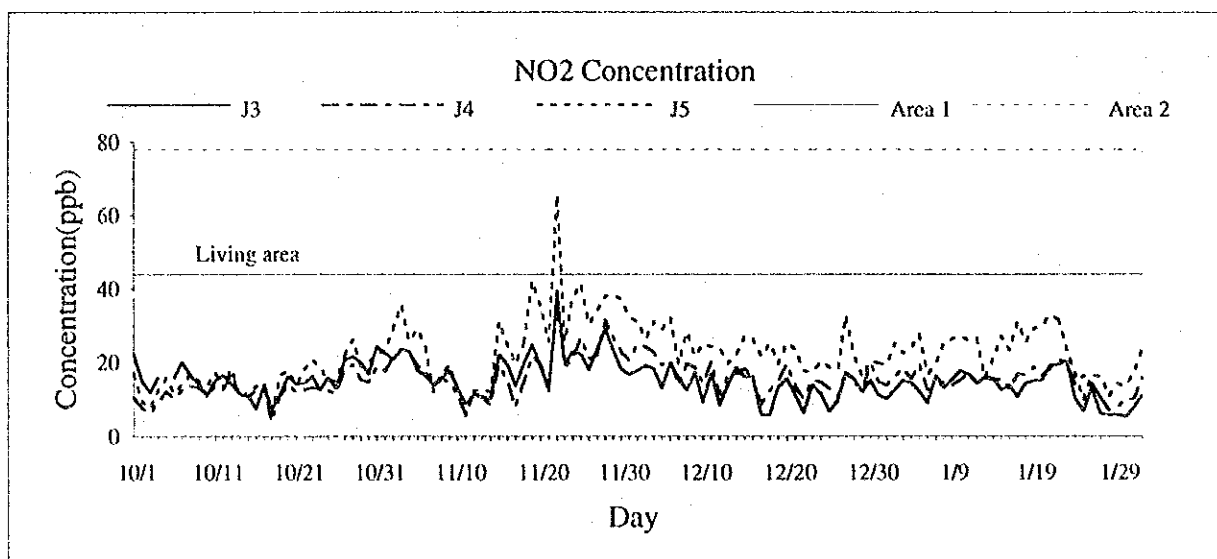
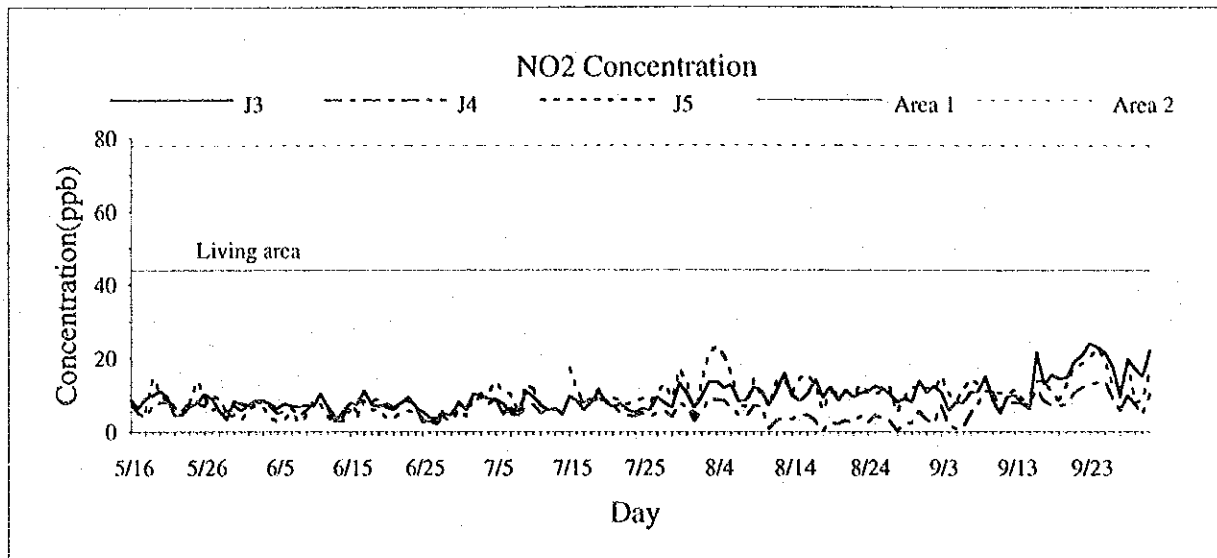


Figure D3.2.2 - (2) Daily Variation of NO2 Concentration (J3, J4, J5 5/16-5/15)

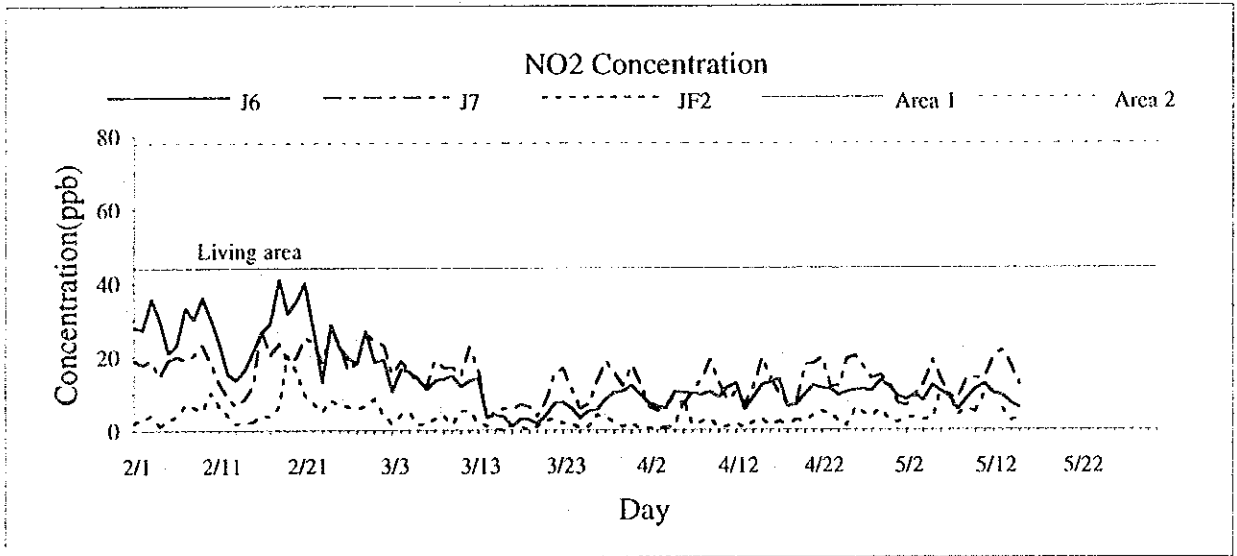
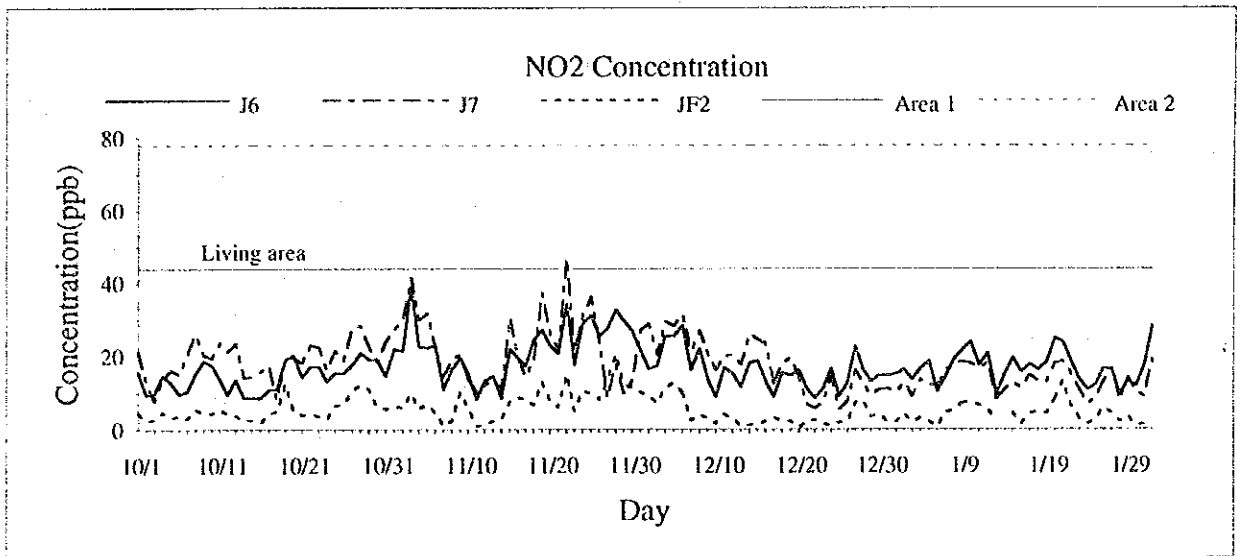
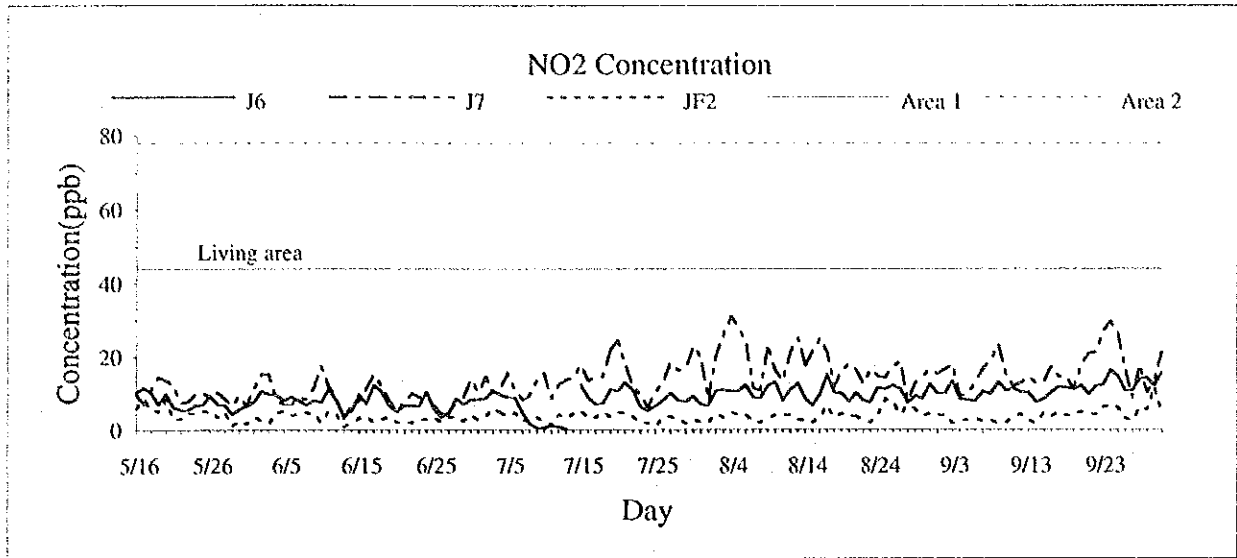


Figure D3.2.2 - (3) Daily Variation of NO2 Concentration (J6, J7, JF2 5/16-5/15)

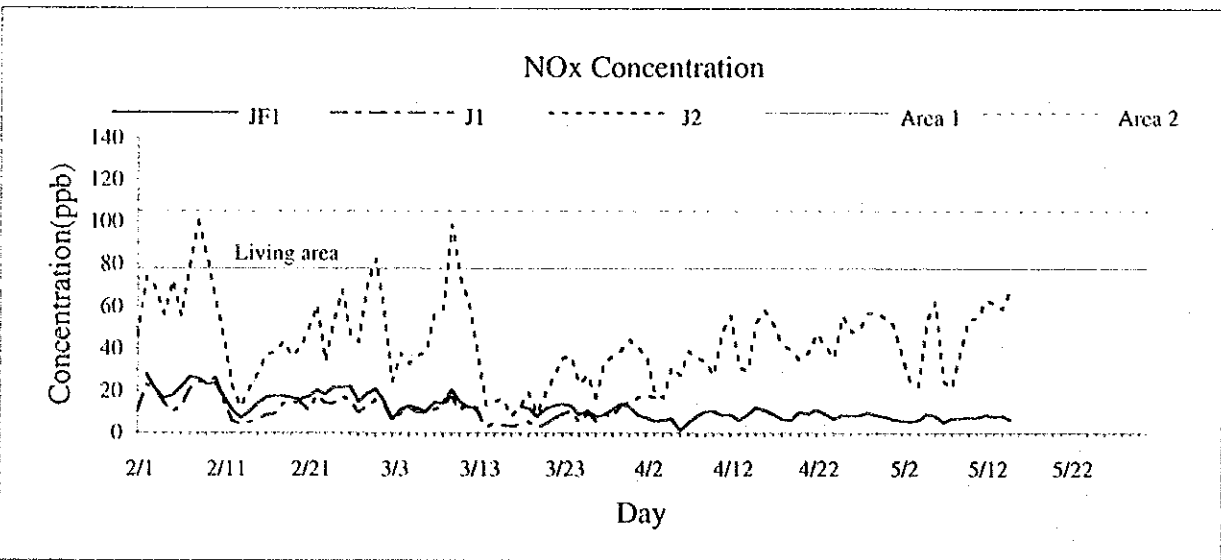
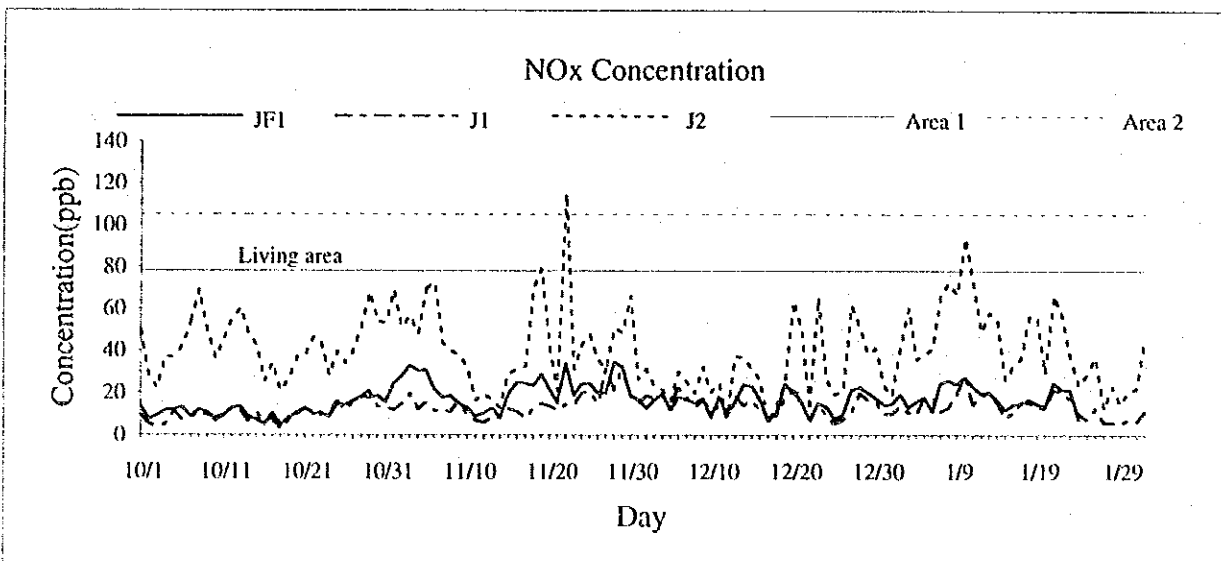
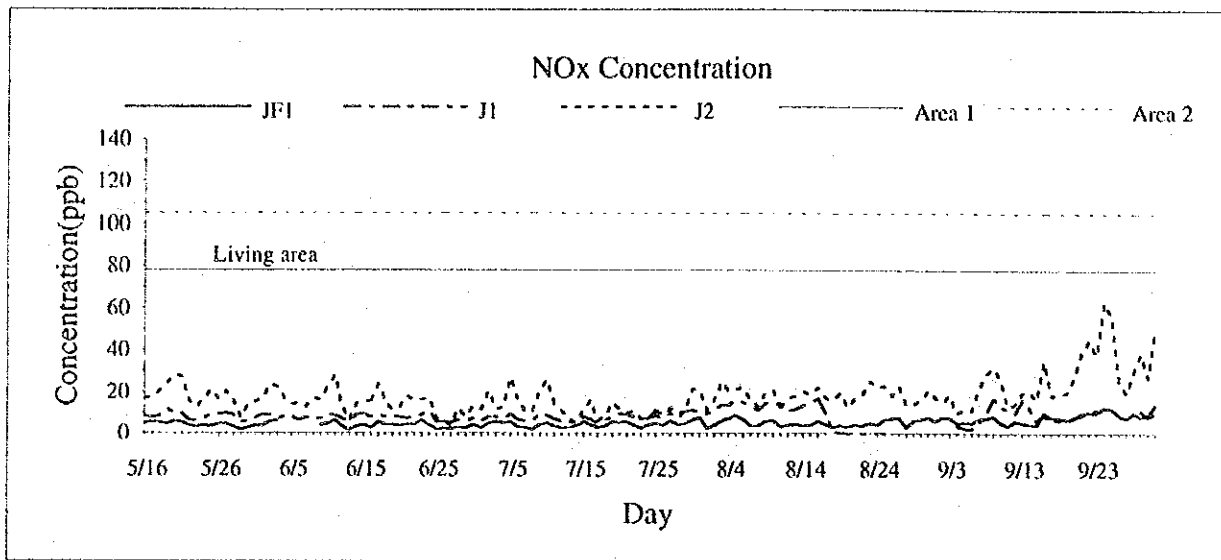


Figure D3.2.3 - (1) Daily Variation of NOx Concentration (JF1, J1, J2 5/16-5/15)

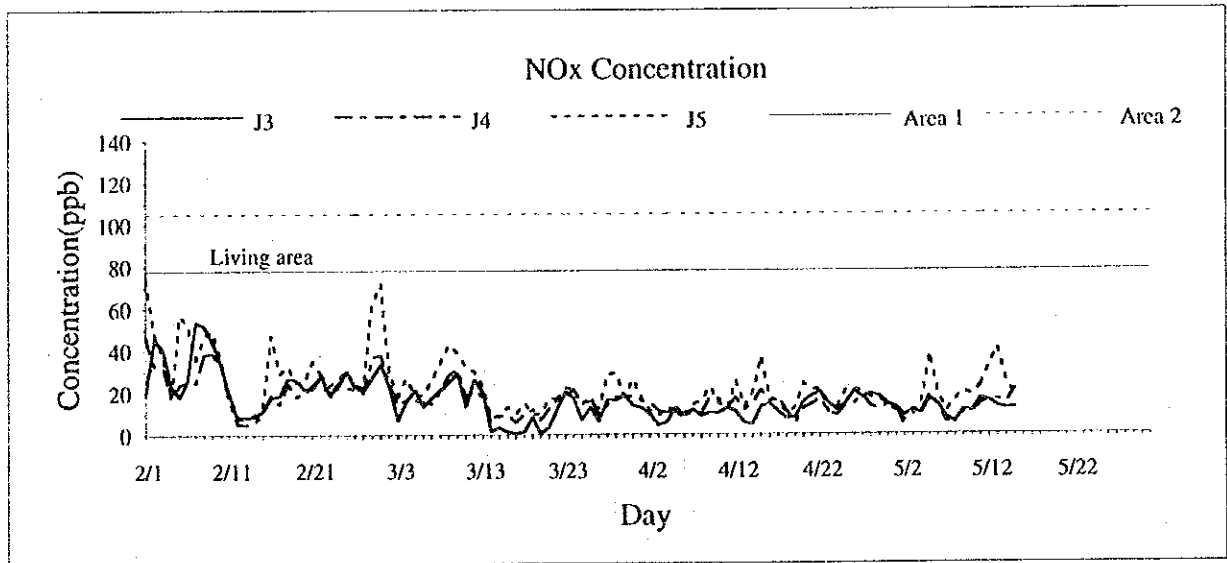
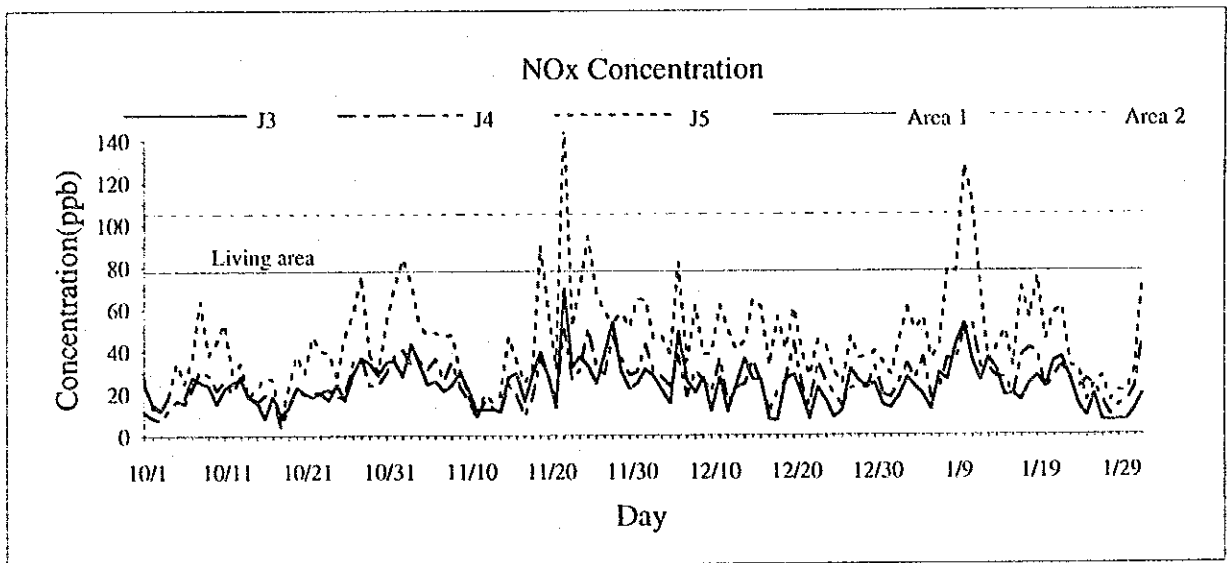
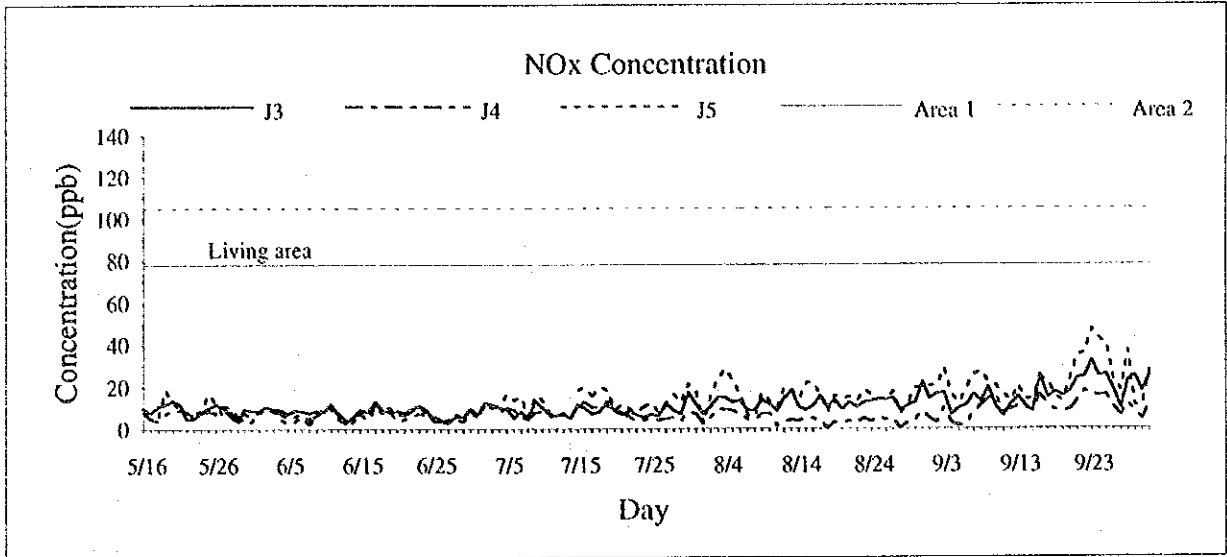


Figure D3.2.3 - (2) Daily Variation of NOx Concentration (J3, J4, J5 5/16-5/15)

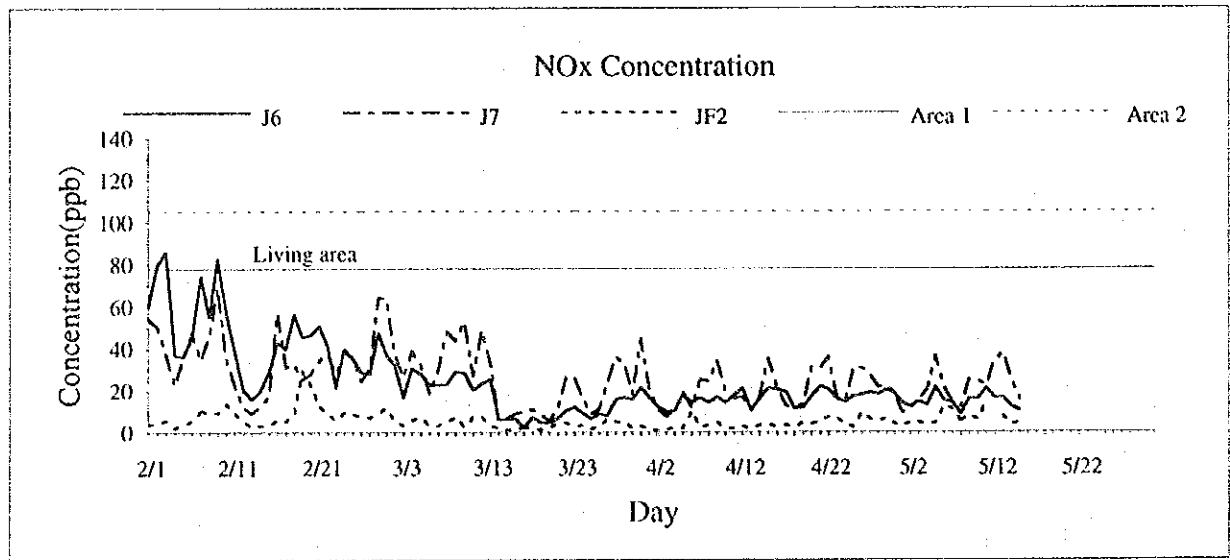
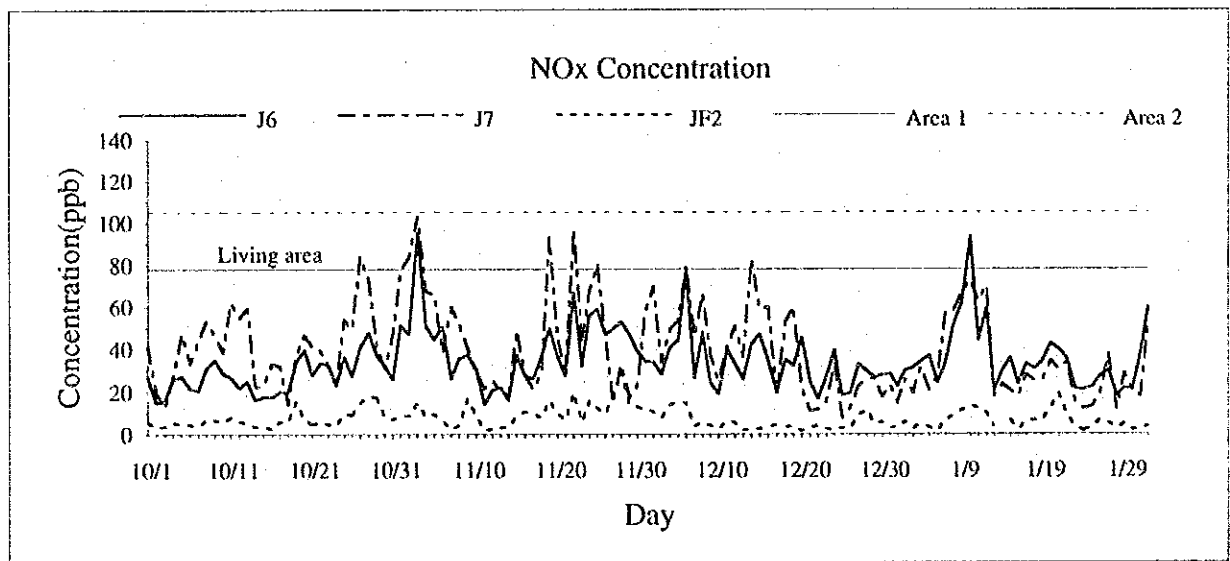
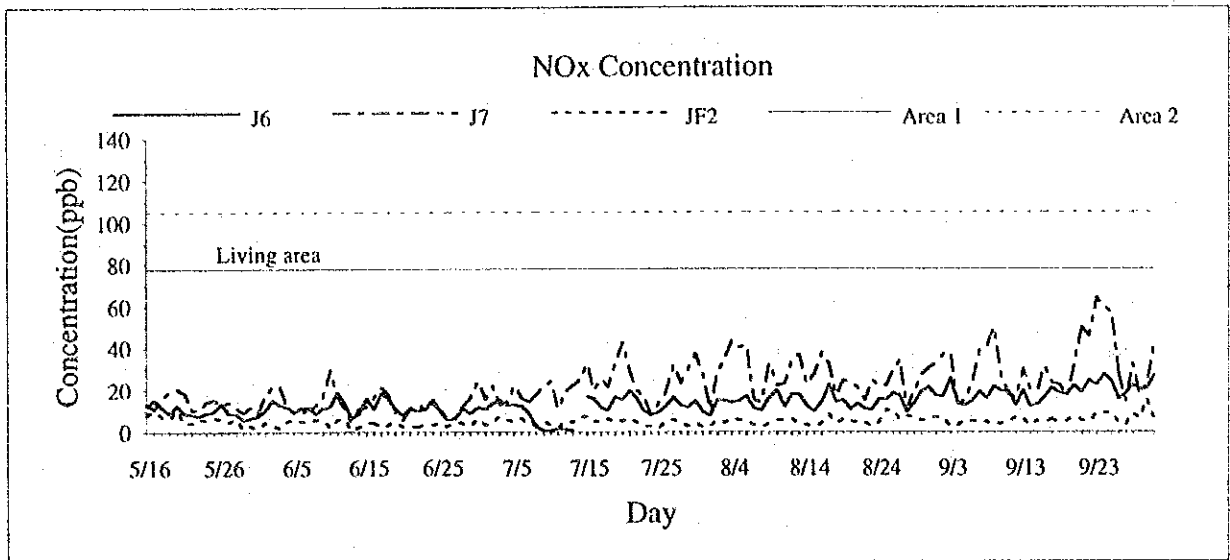


Figure D3.2.3 - (3) Daily Variation of NOx Concentration (J6, J7, JF2 5/16-5/15)

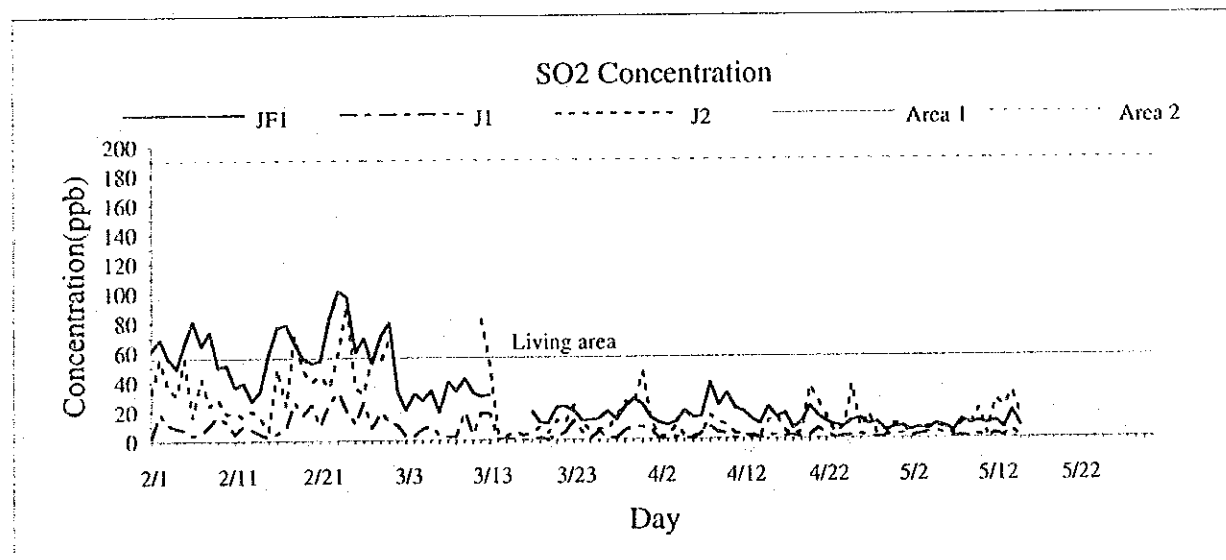
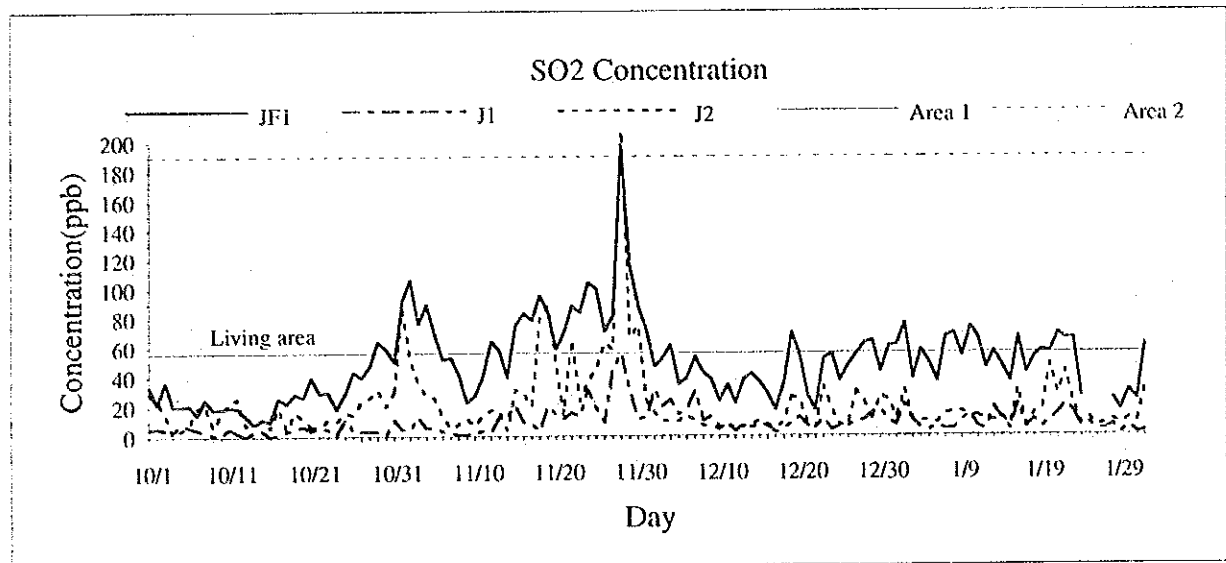
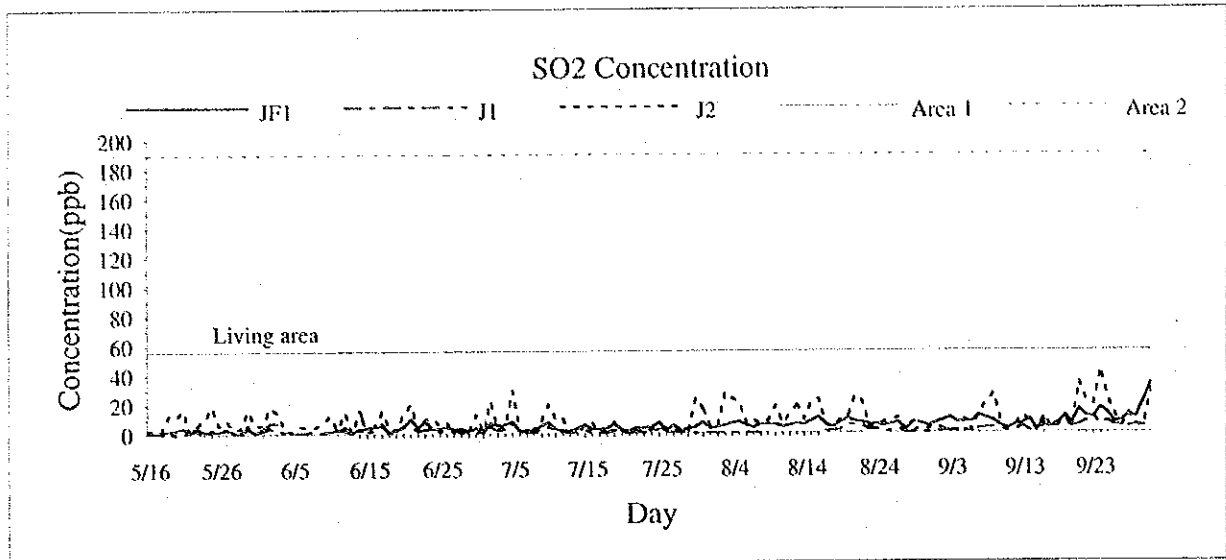


Figure D3.2.4 - (1) Daily Variation of SO2 Concentration (JF1, J1, J2 5/16-5/15)

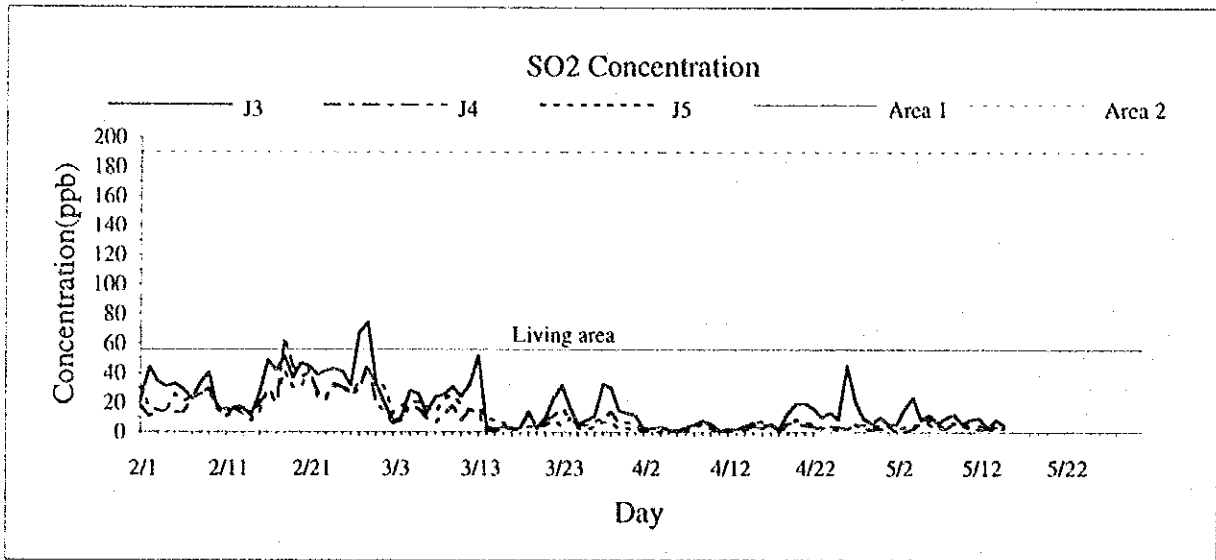
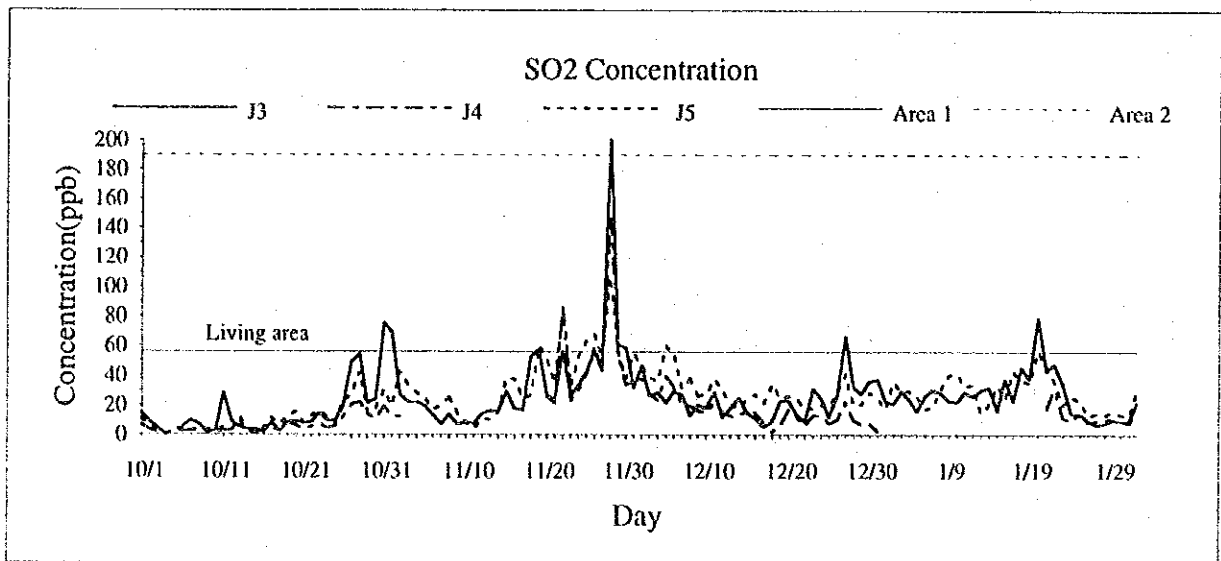
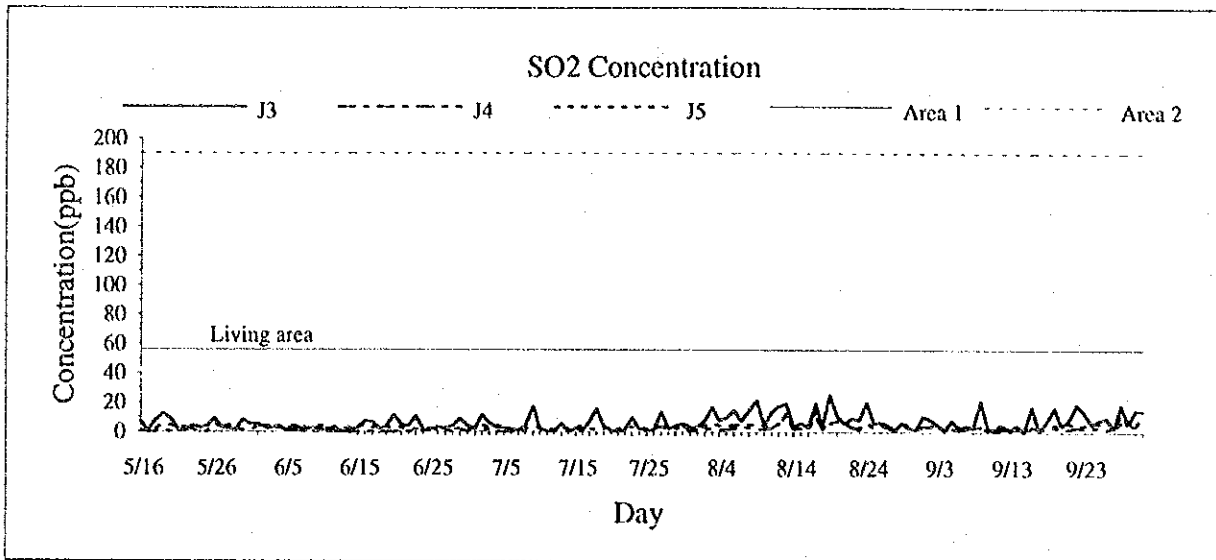


Figure D3.2.4 - (2) Daily Variation of SO2 Concentration (J3, J4, J5 5/16-5/15)

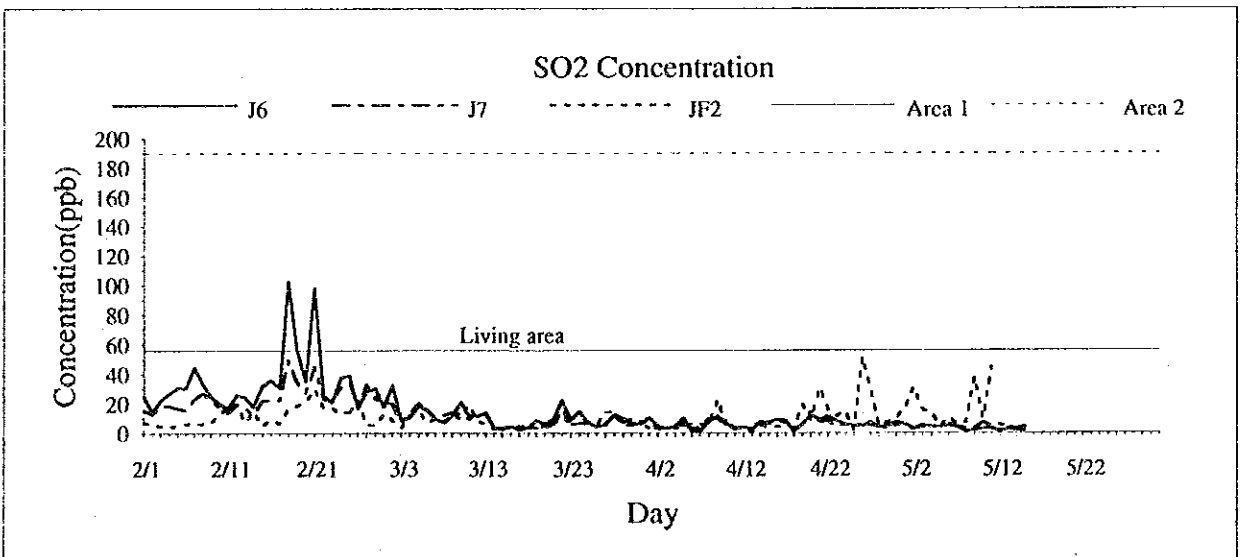
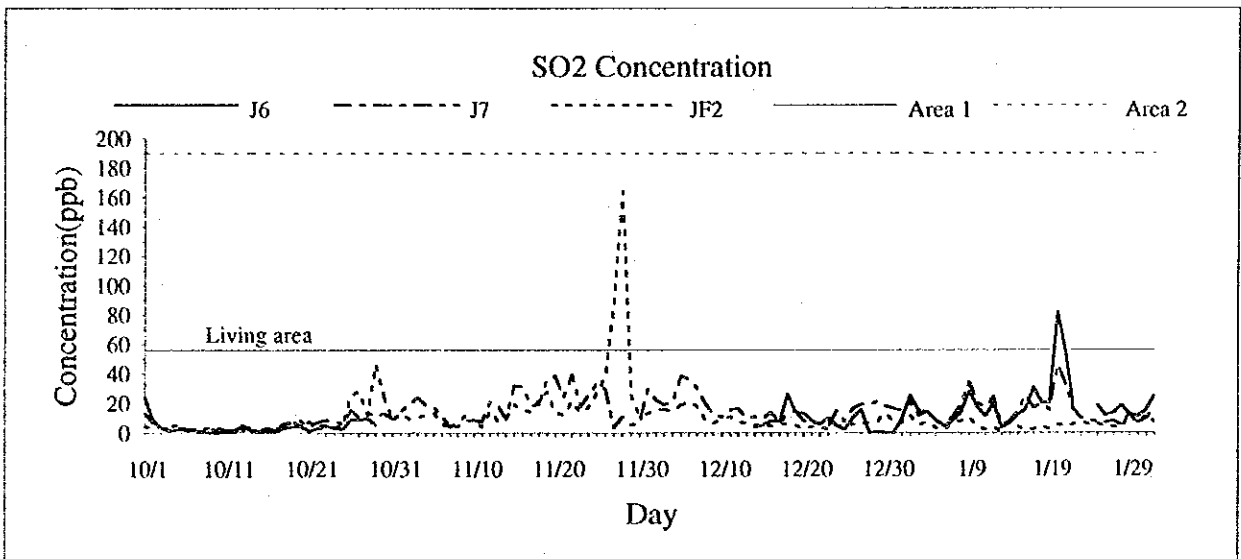
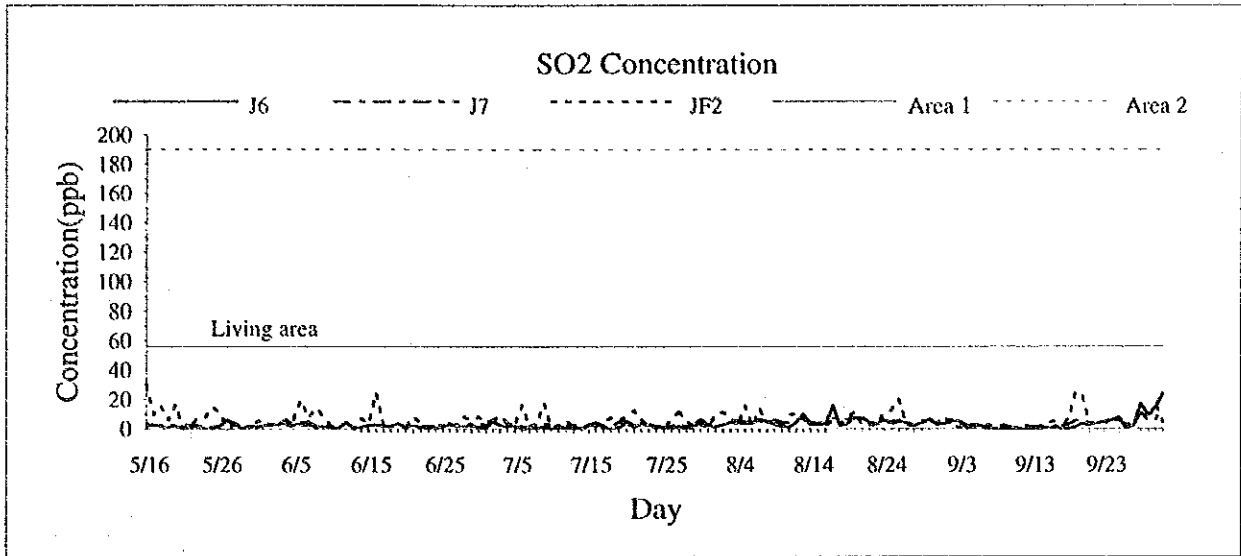


Figure D3.2.4 - (3) Daily Variation of SO2 Concentration (J6, J7, JF2 5/16-5/15)

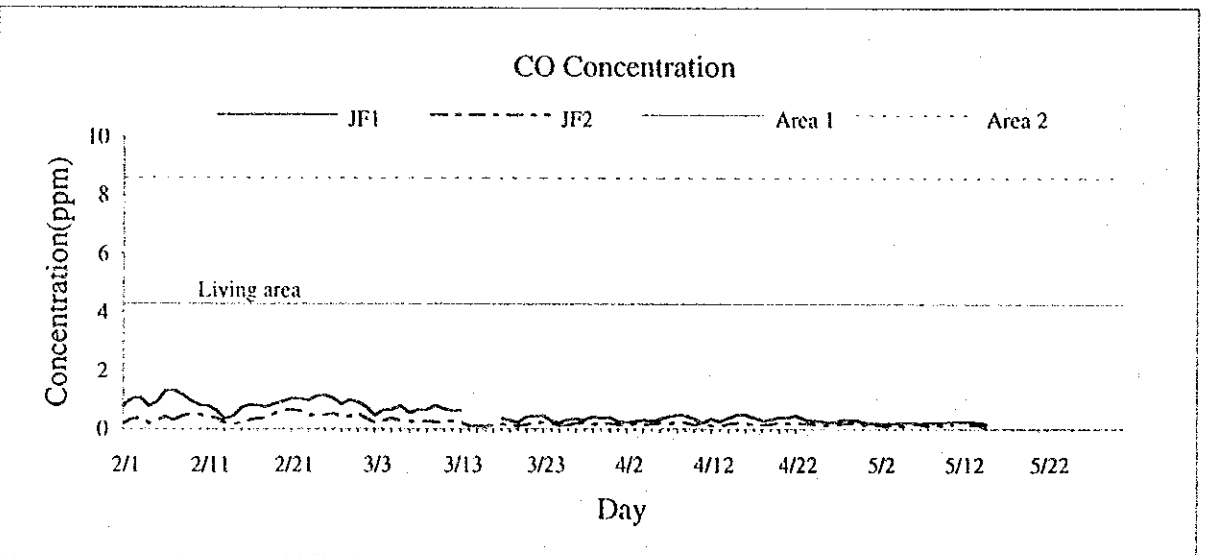
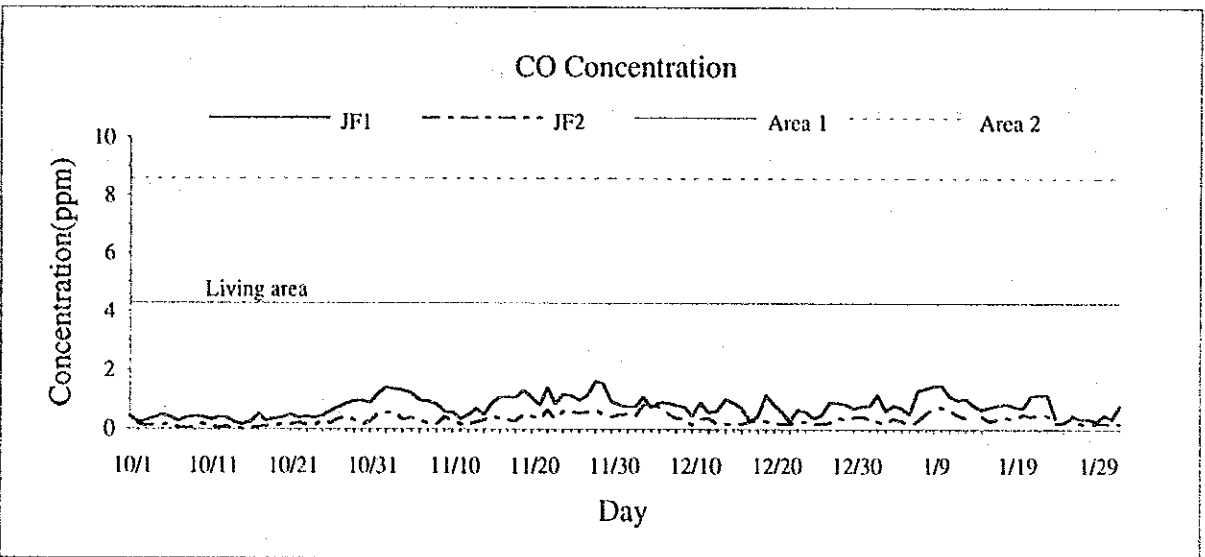
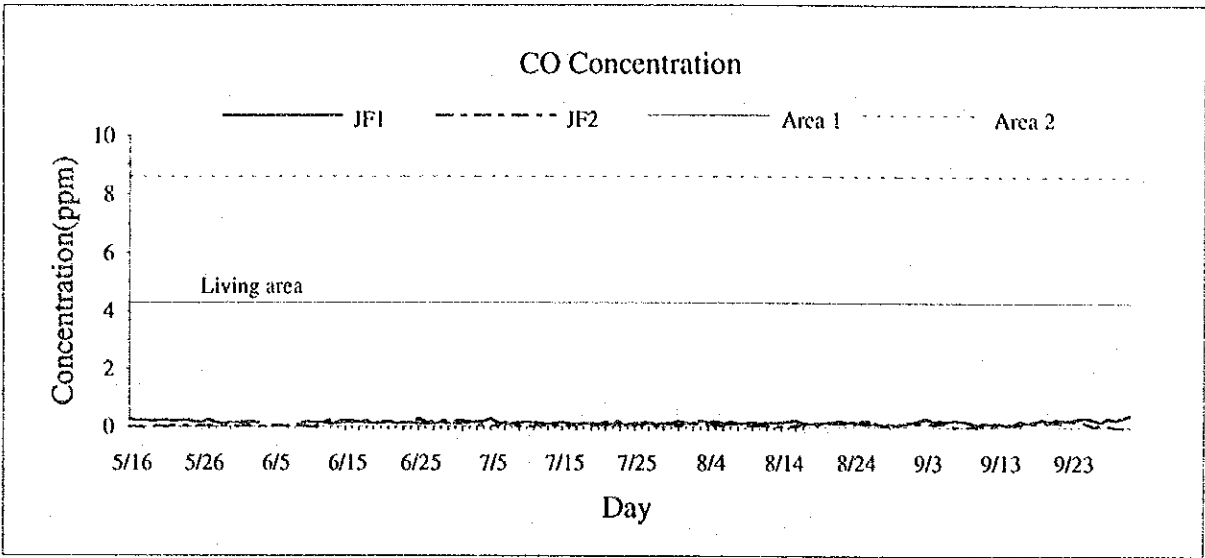


Figure D3.2.5 Daily Variation of CO Concentration (JF1, JF2 5/16-5/15)

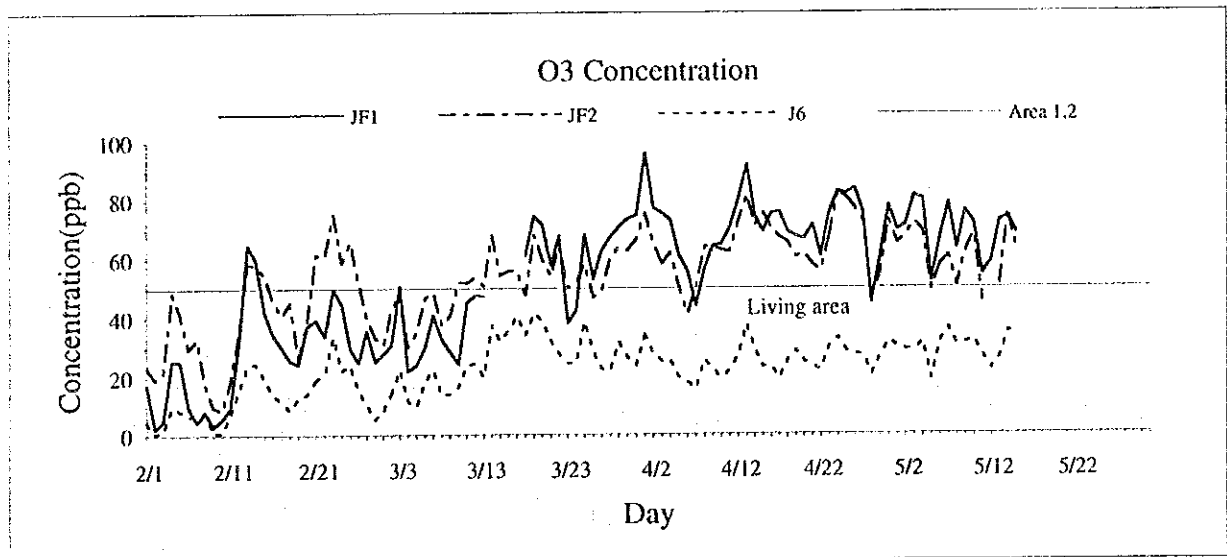
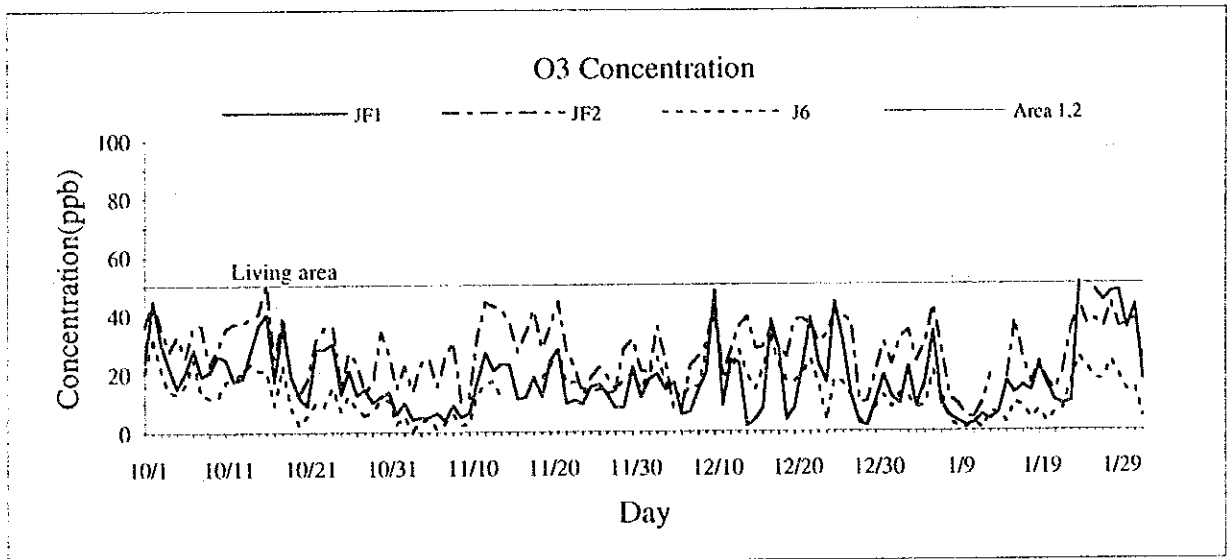
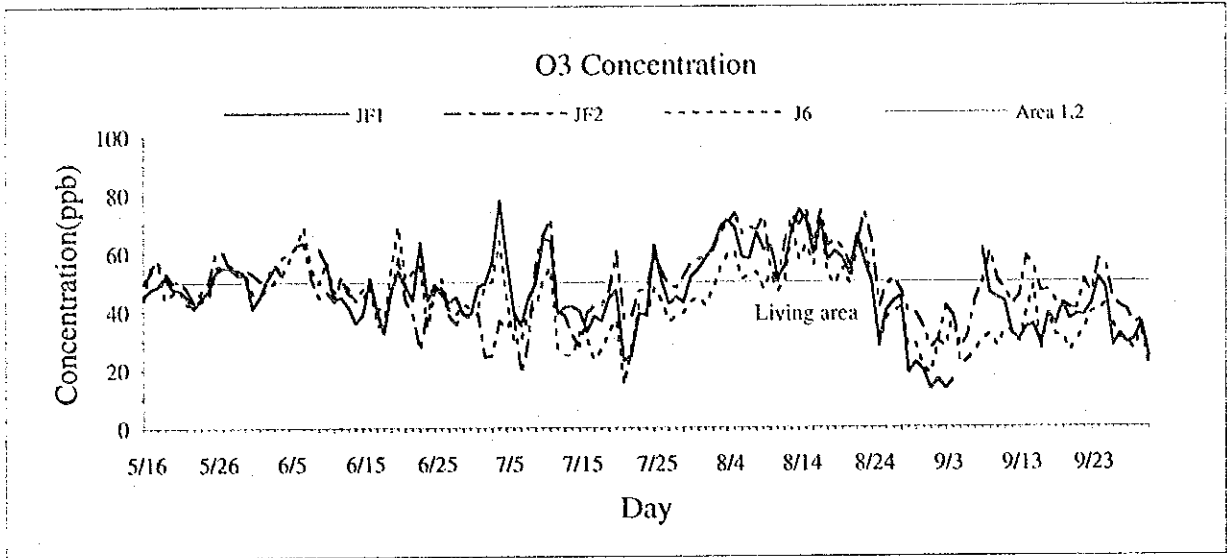


Figure D3.2.6 Daily Variation of O3 Concentration (JF1, JF2 5/16-5/15)

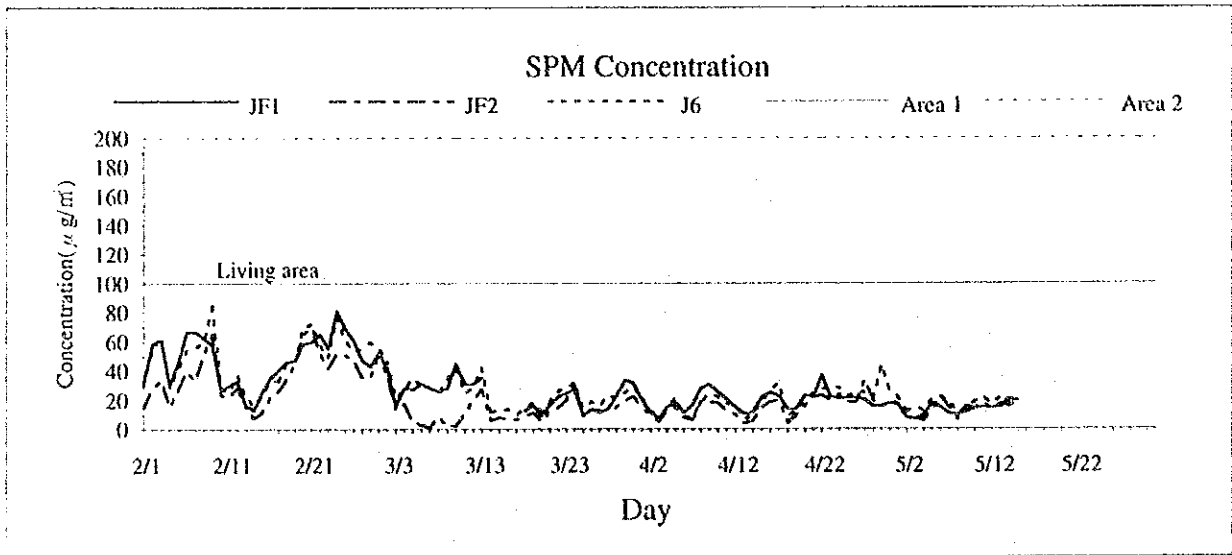
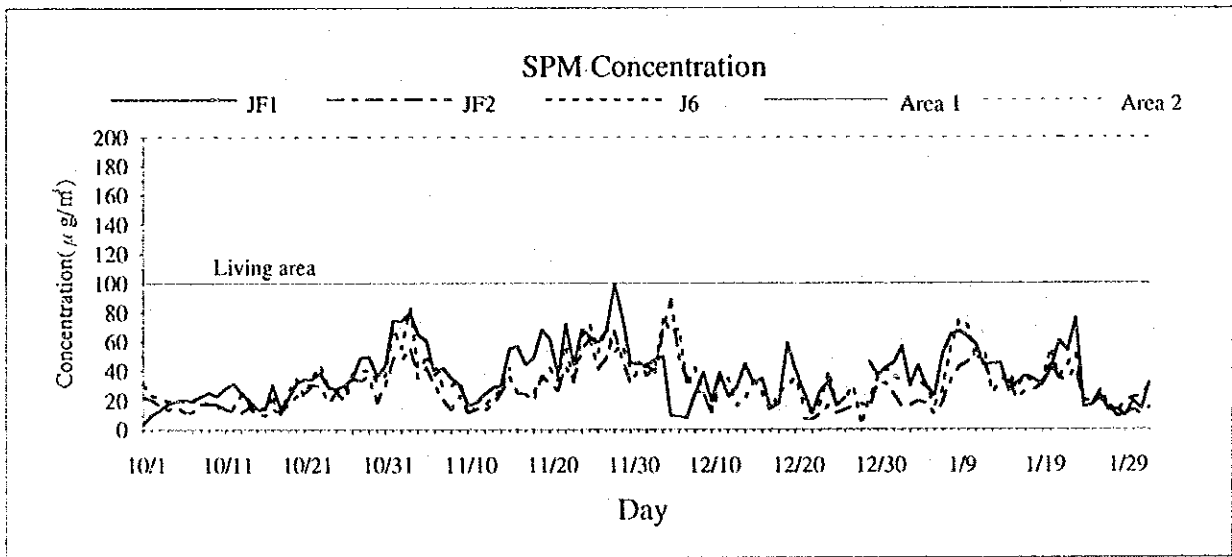
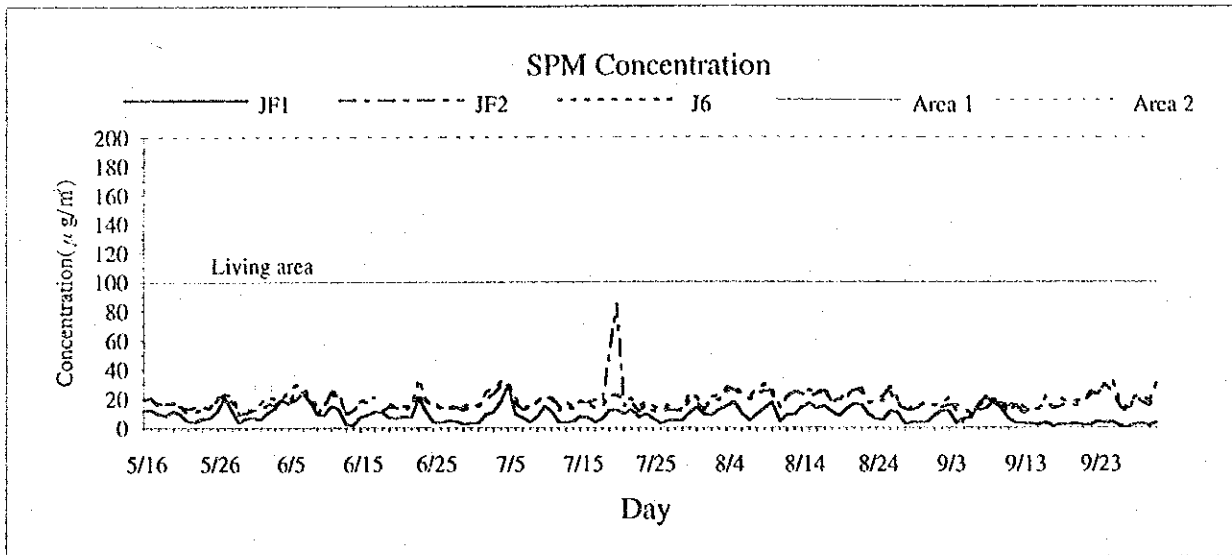


Figure D3.2.7 Daily Variation of SPM Concentration (JF1, JF2, J6 5/16-5/15)

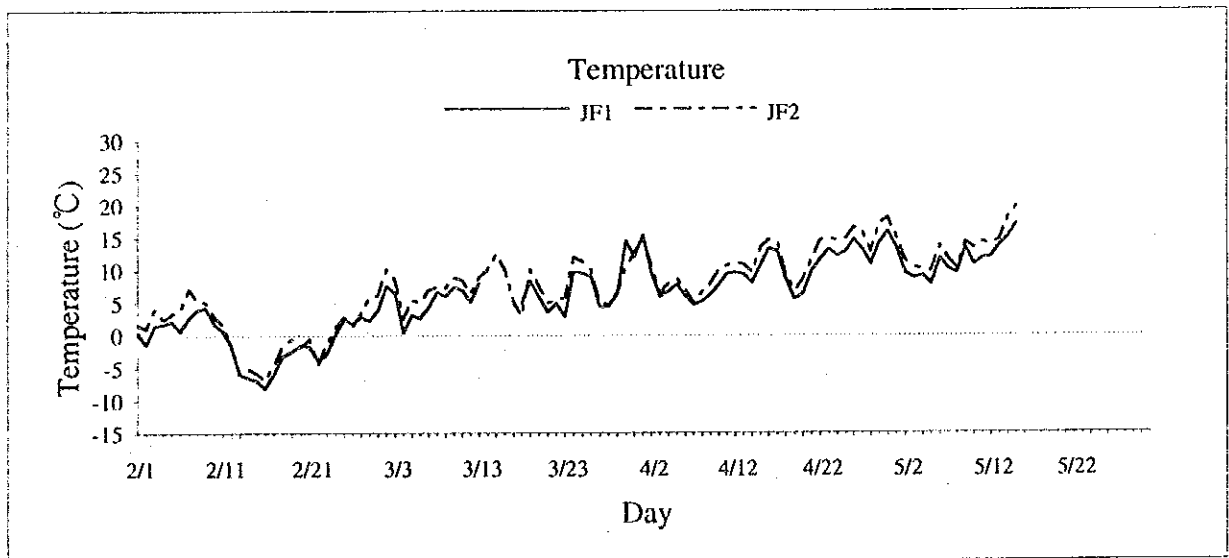
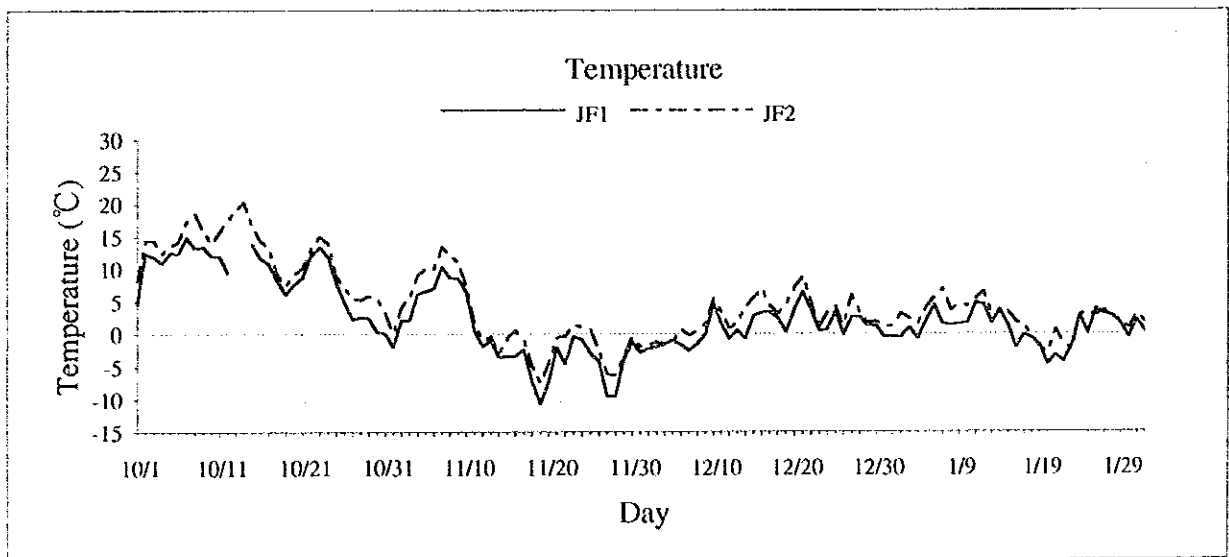
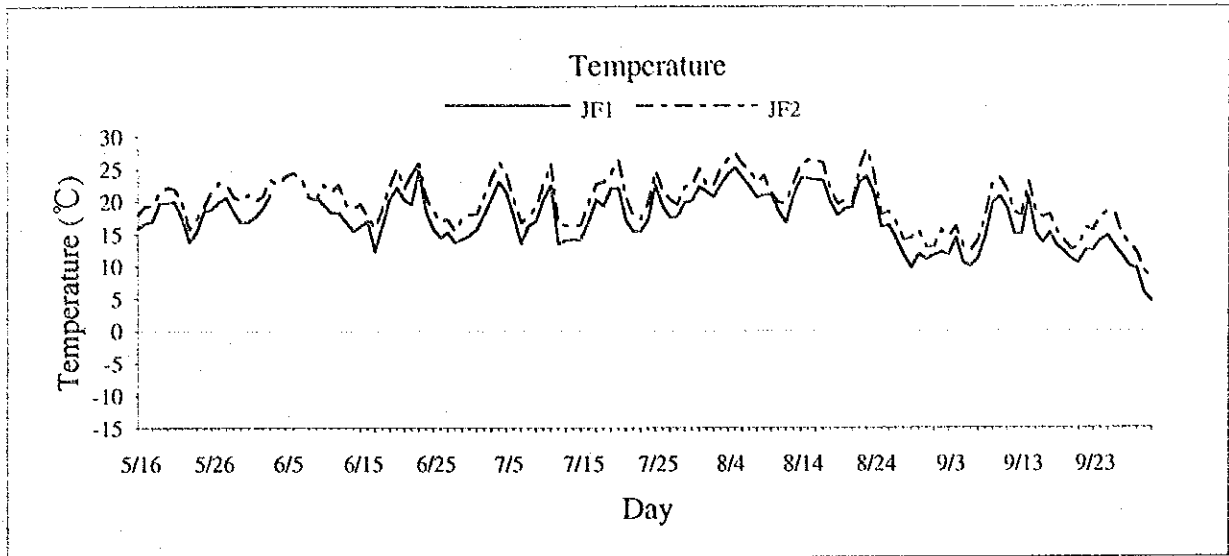


Figure D3.2.8 Daily Variation of Temperature (JF1, JF2 5/16-5/15)

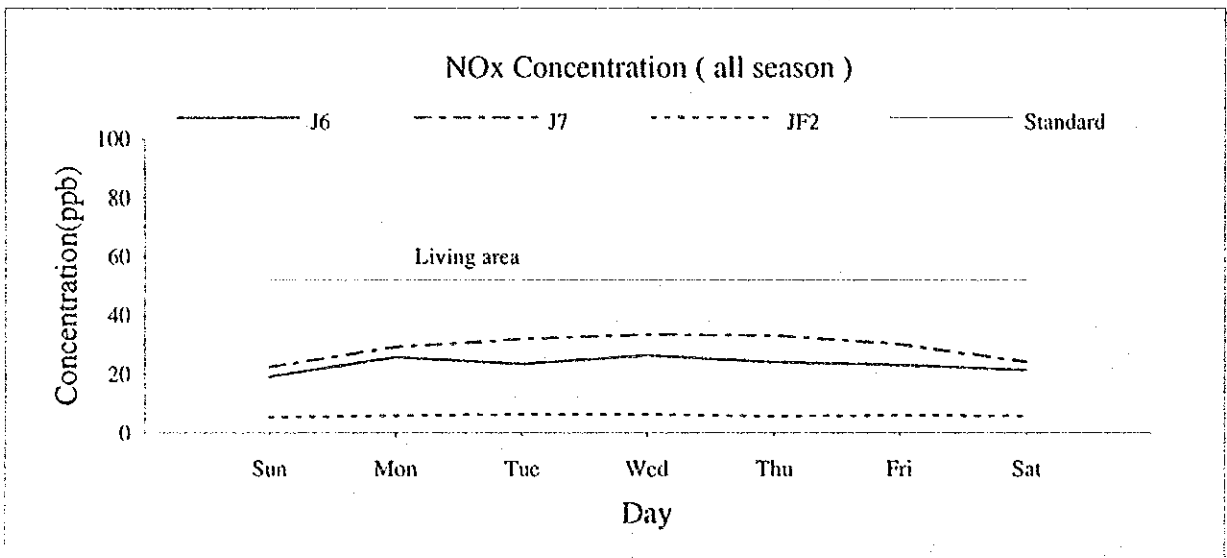
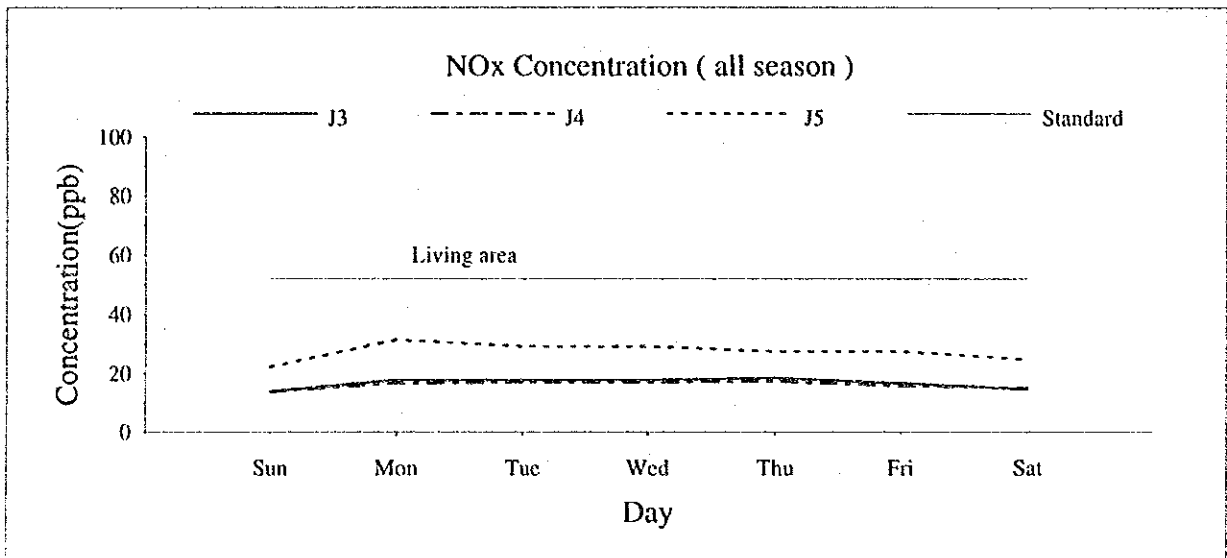
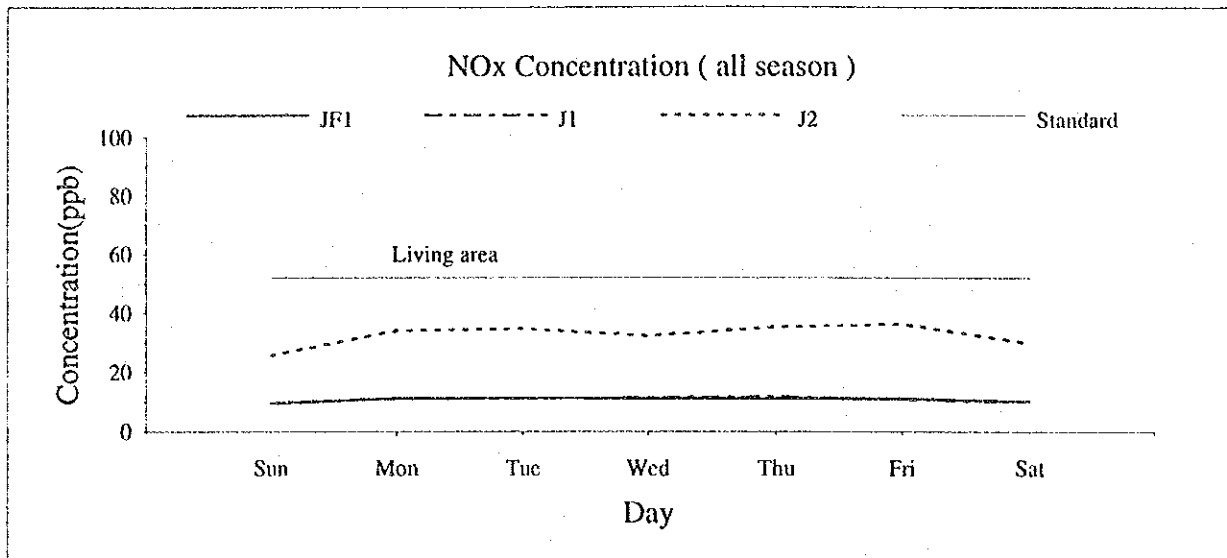


Figure D3.2.9 Day of the Week Variation of NOx Concentration

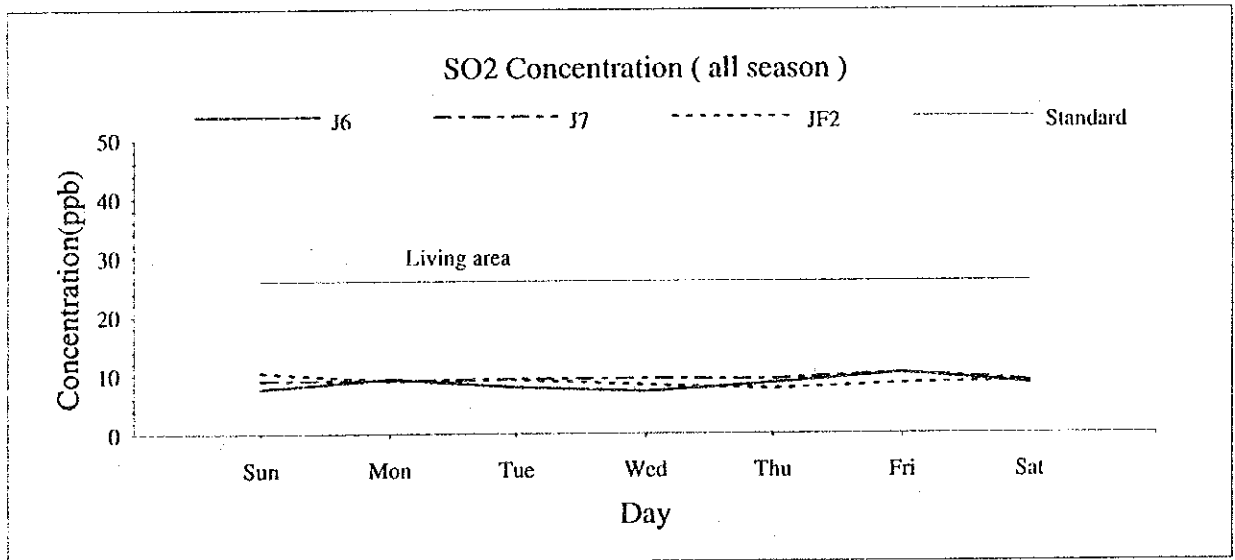
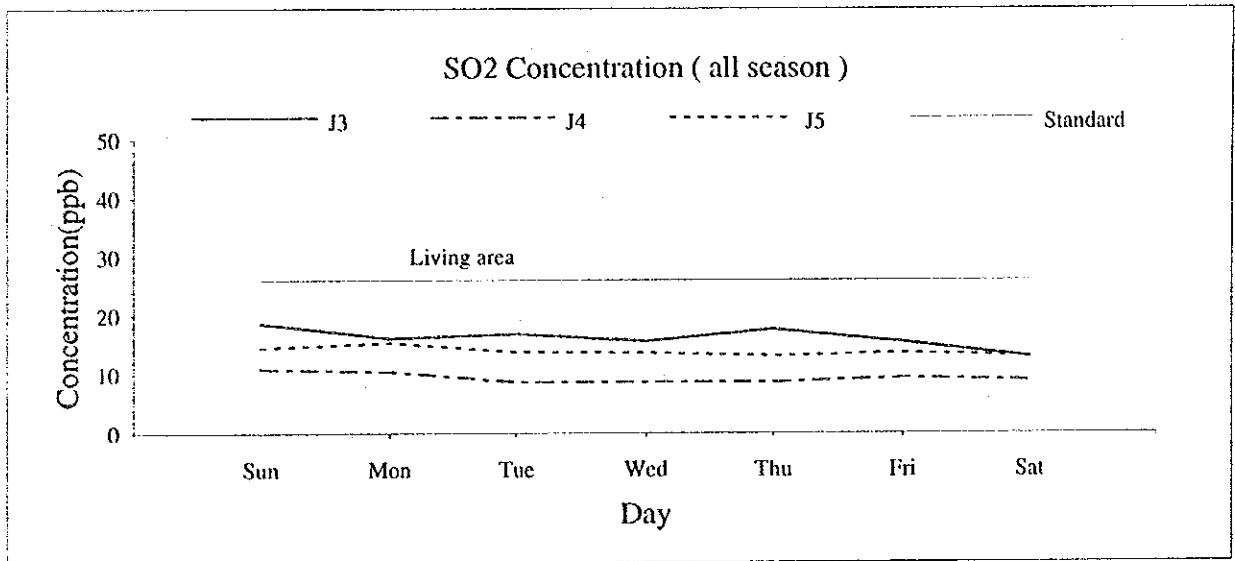
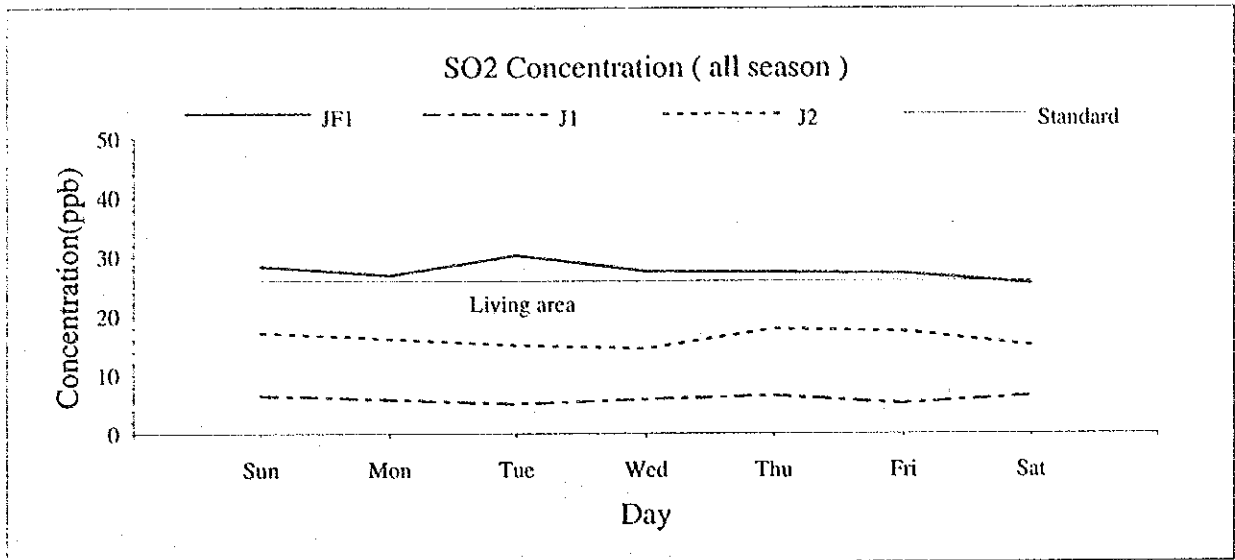


Figure D3.2.10 Day of the Week Variation of SOx Concentration

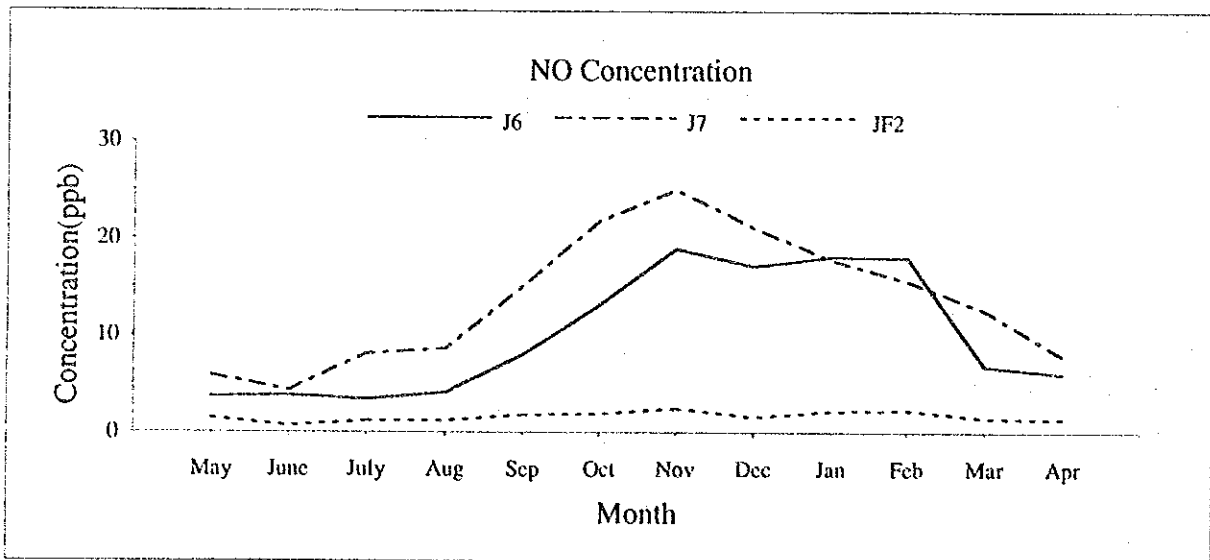
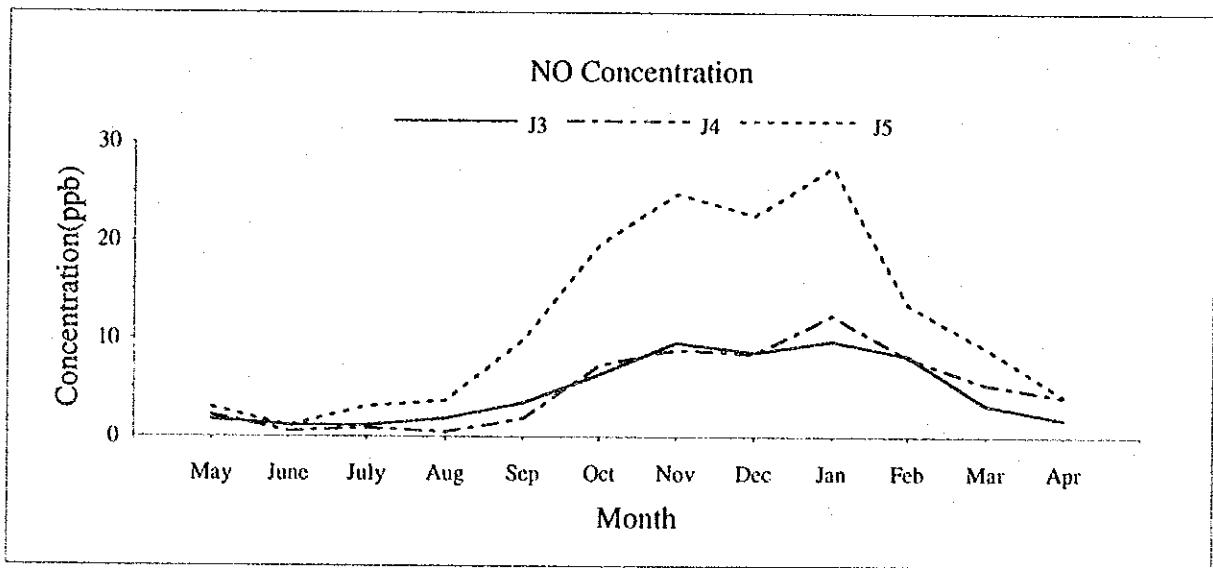
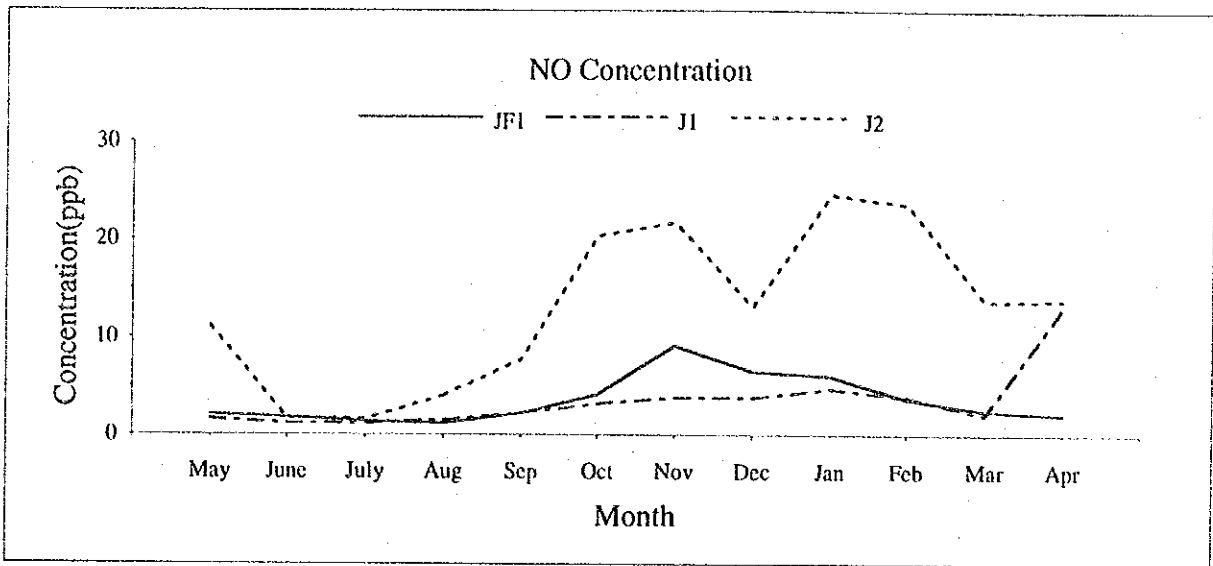


Figure D3.2.11 Monthly Variation of NO Concentration

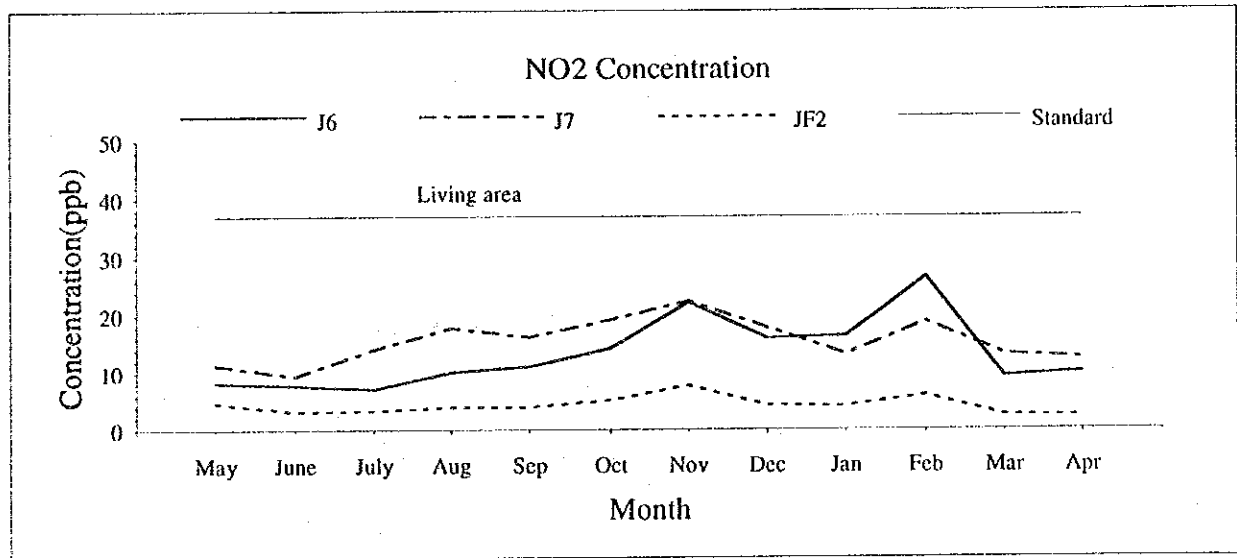
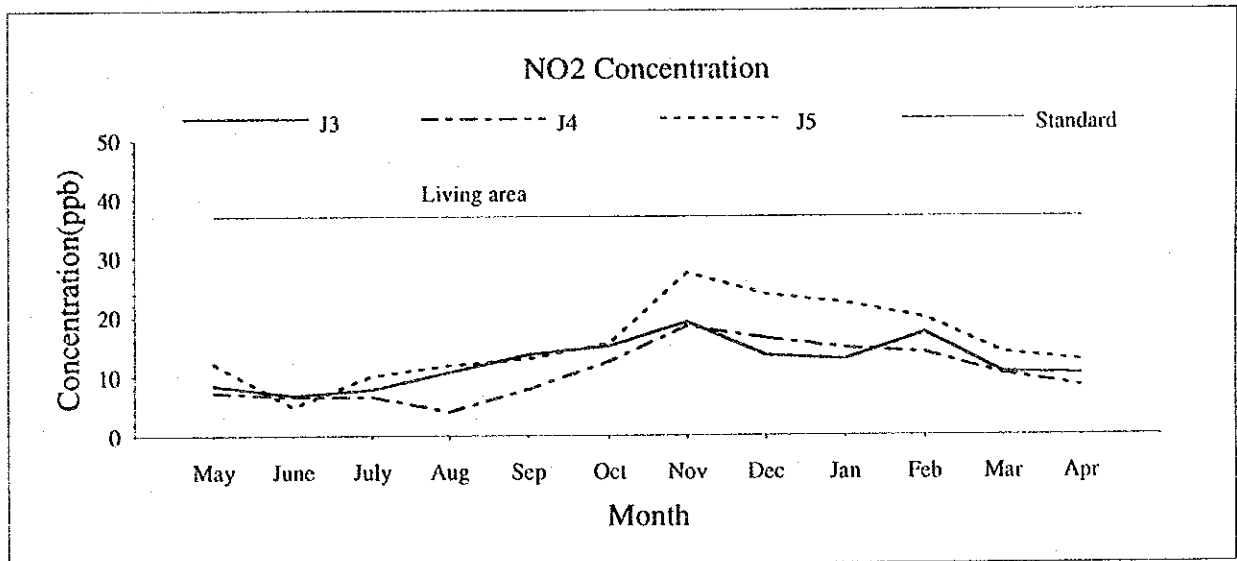
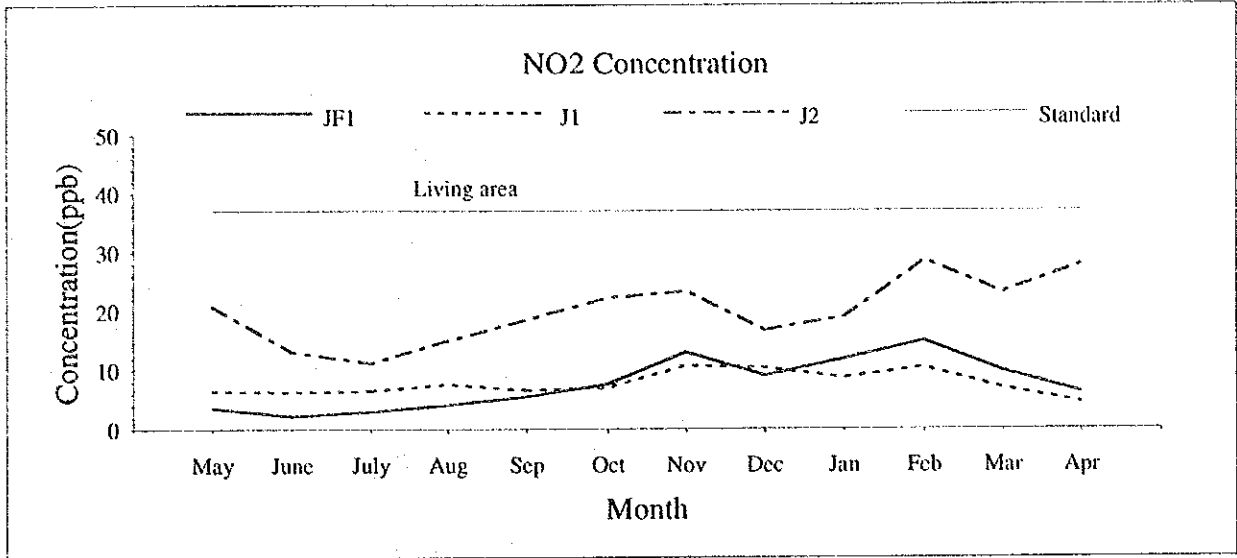


Figure D3.2.12 Monthly Variation of NO2 Concentration

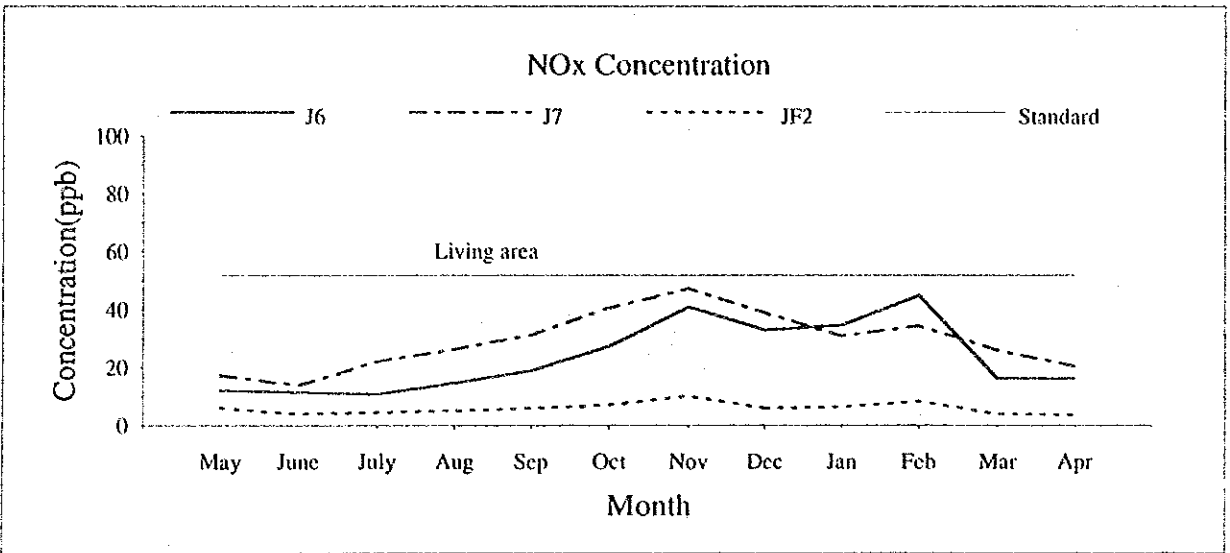
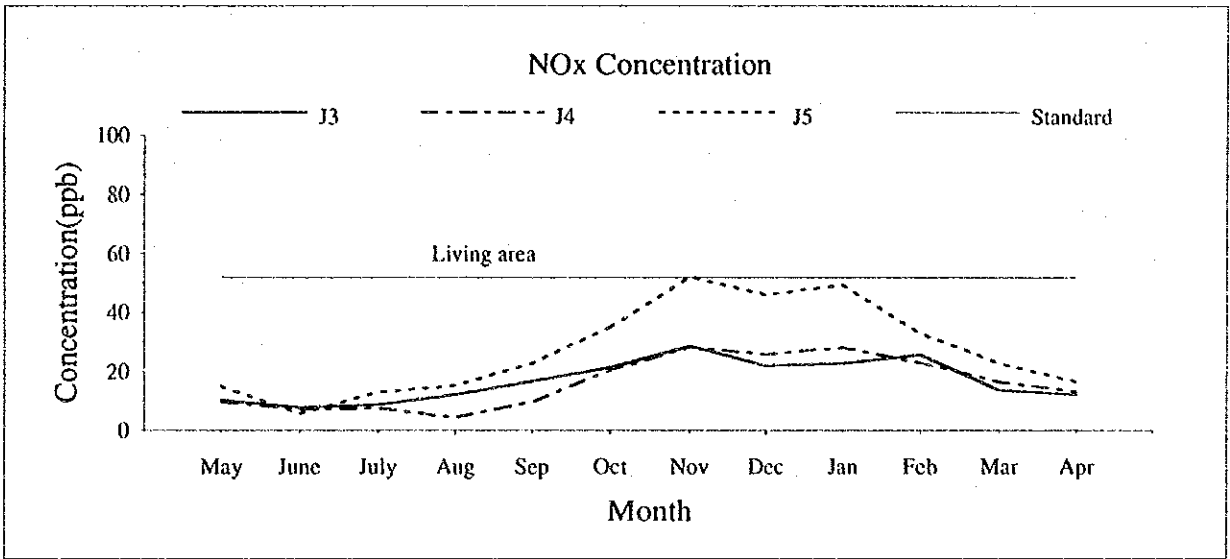
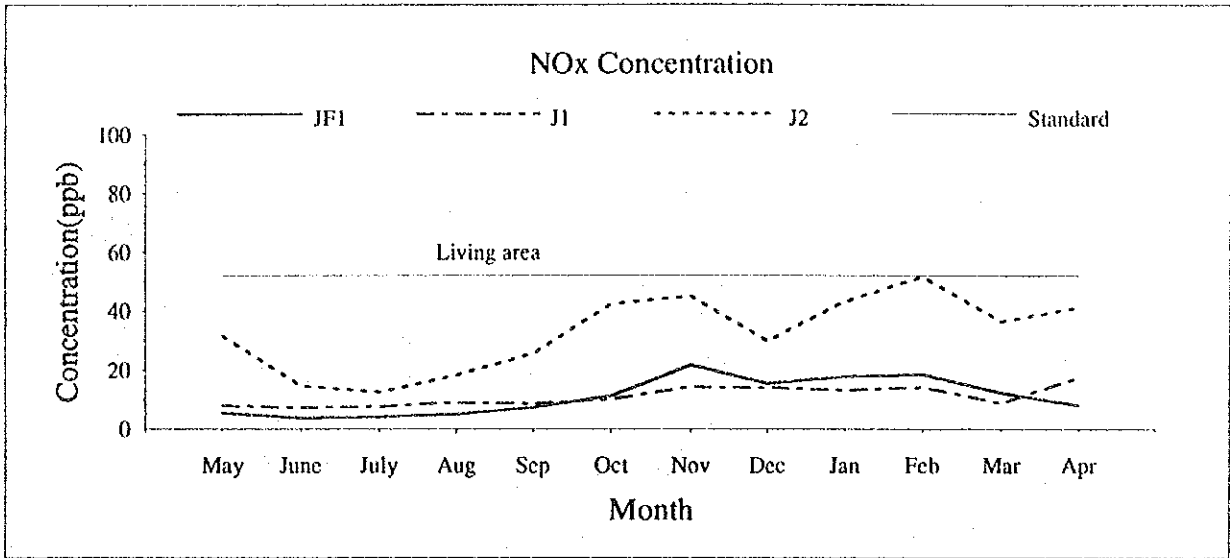


Figure D3.2.13 Monthly Variation of NOx Concentration

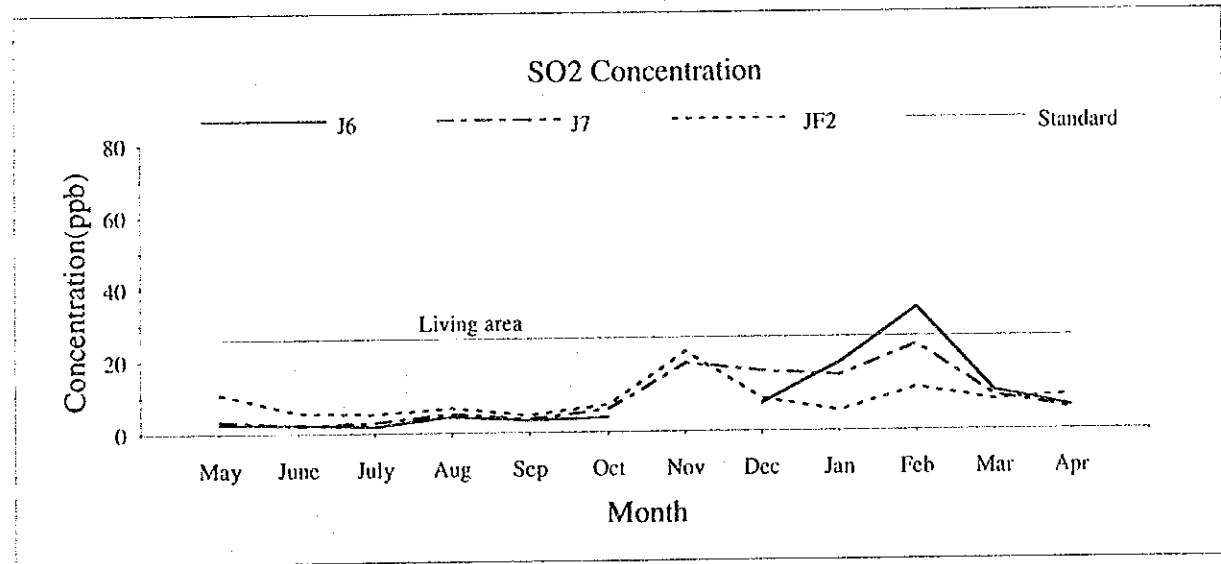
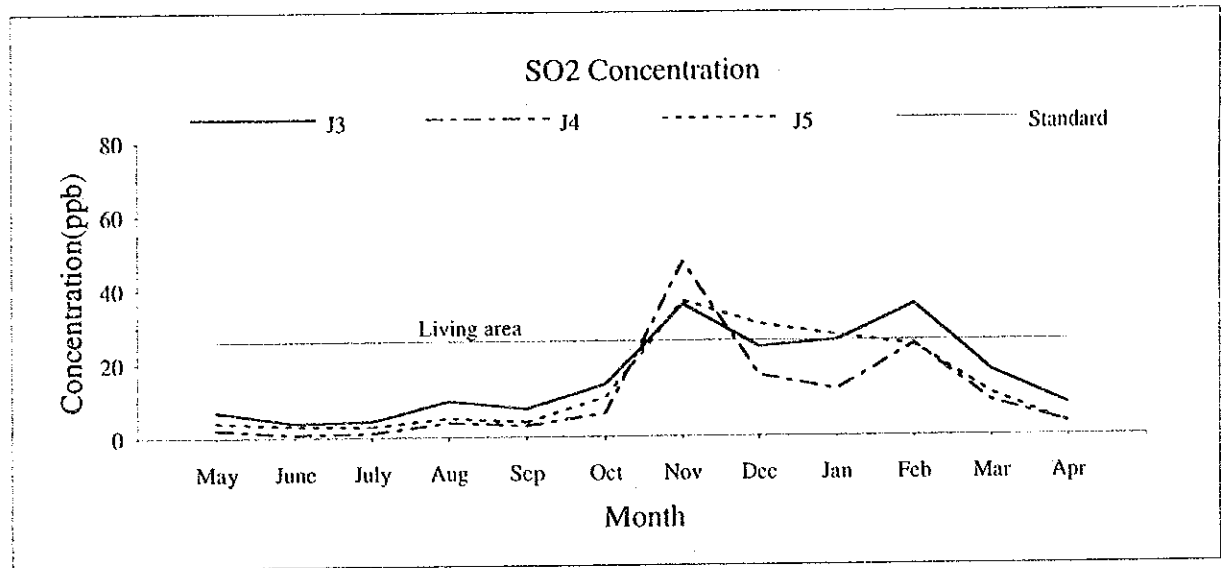
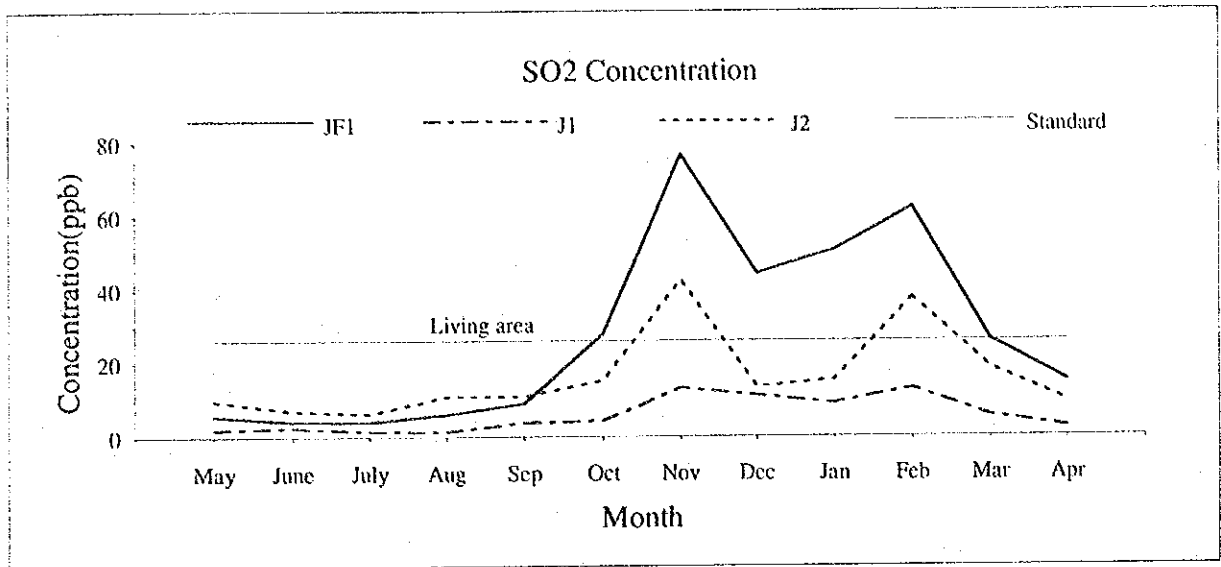


Figure D3.2.14 Monthly Variation of SO2 Concentration

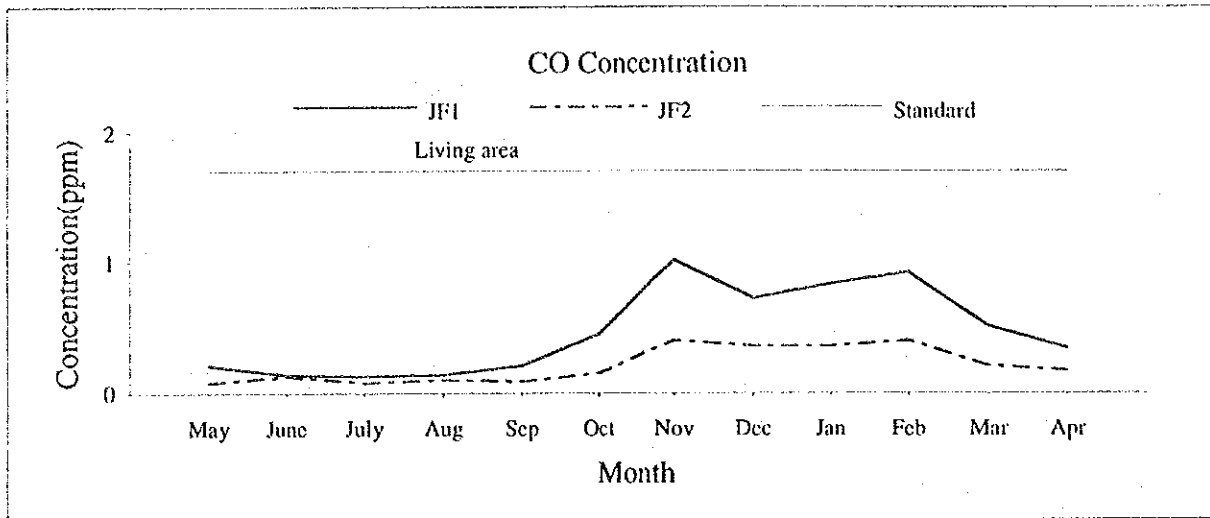


Figure 3.2.15 Monthly variation of CO concentration (JF1,JF2 May-April)

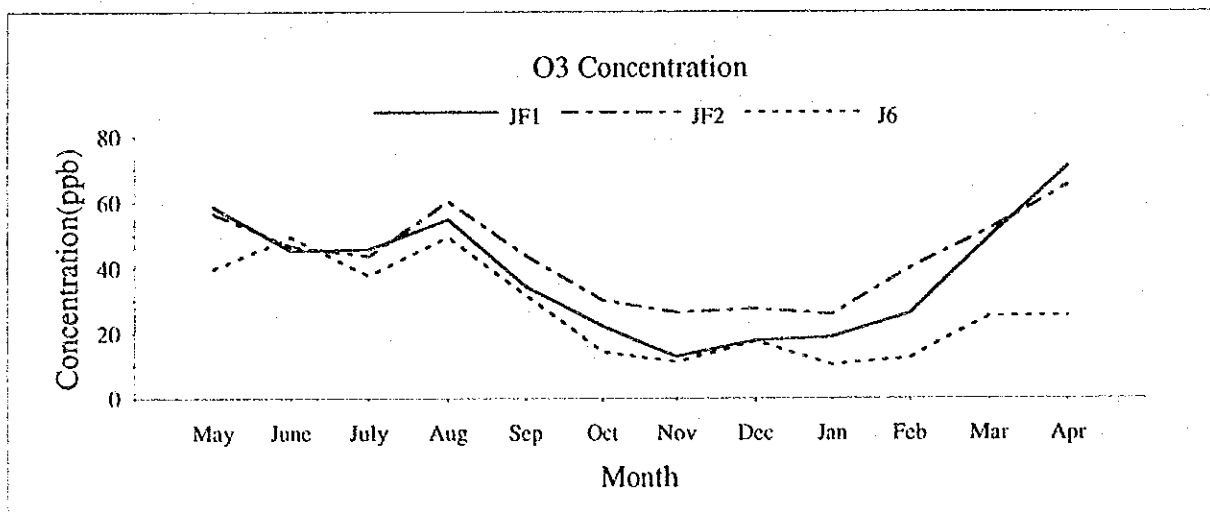


Figure 3.2.16 Monthly variation of O3 concentration (JF1,JF2,J6 May-April)

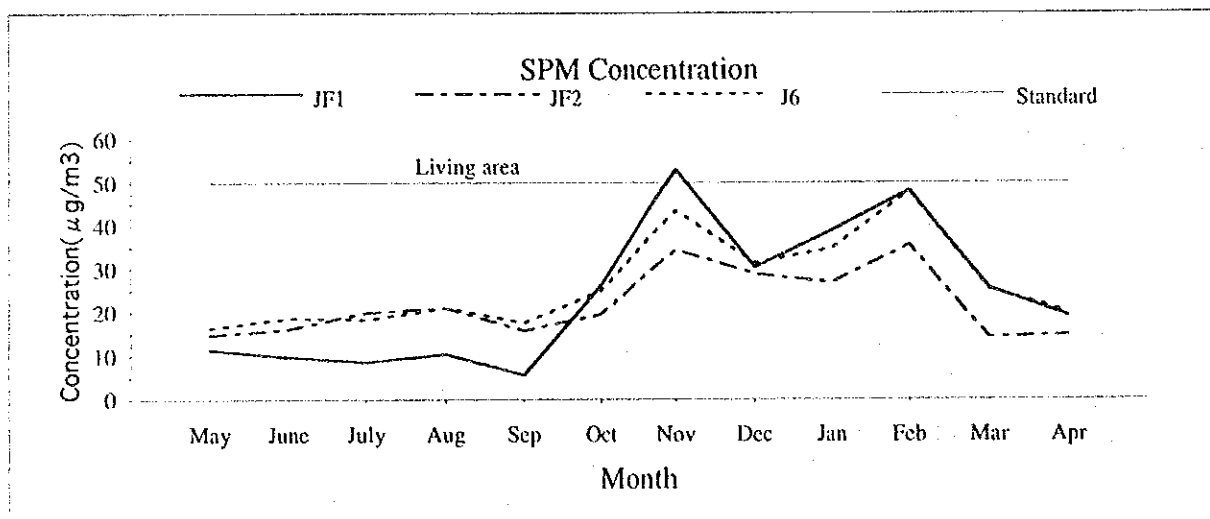


Figure D3.2.15 Monthly Variation of SPM Concentration (JF1, JF2, J6)

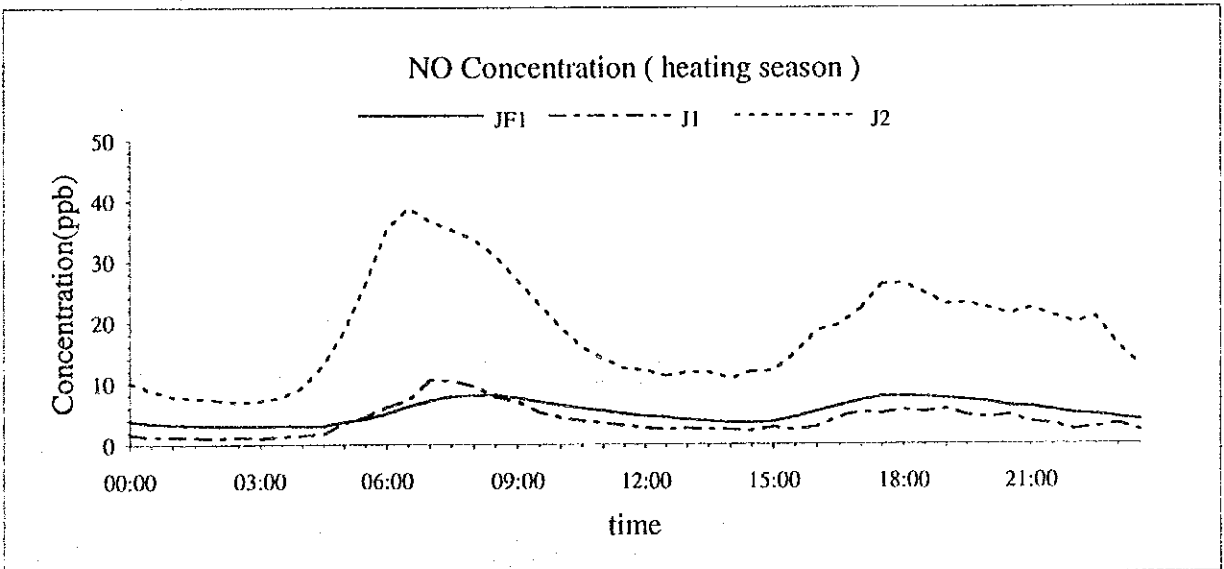
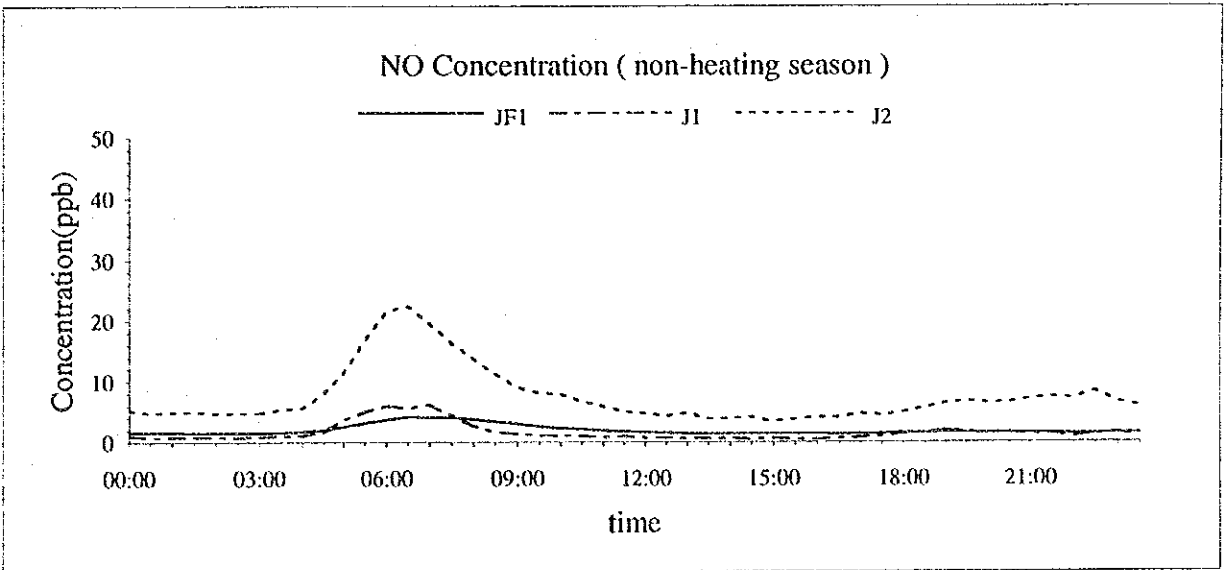
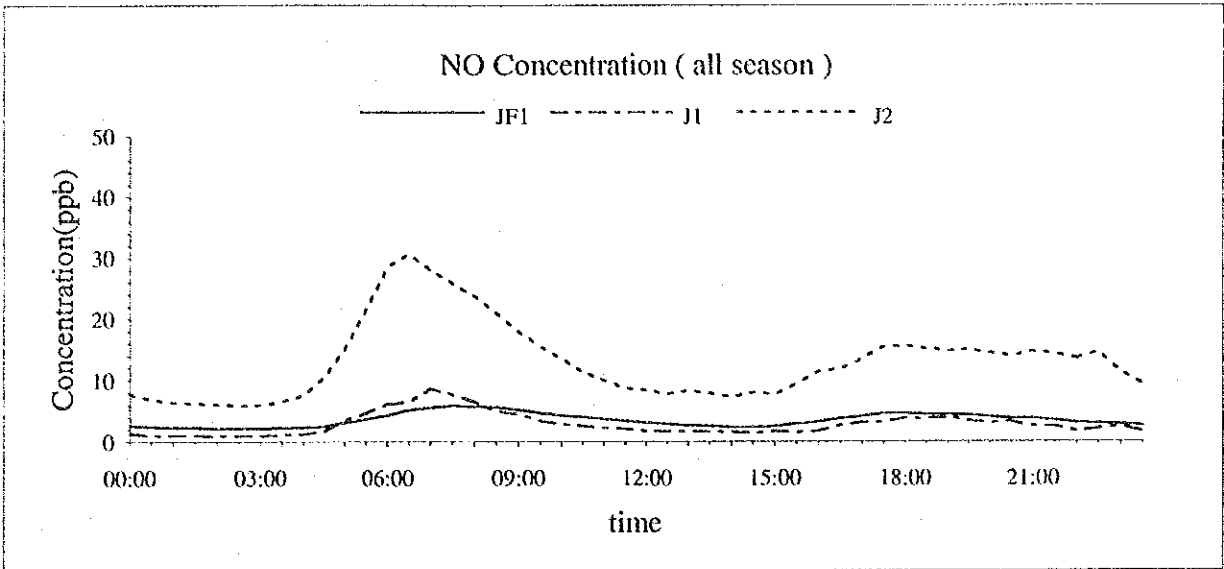


Figure D3.2.16 - (1) Hourly Variation of NO Concentration (JF1, J1, J2 00:00-23:30)

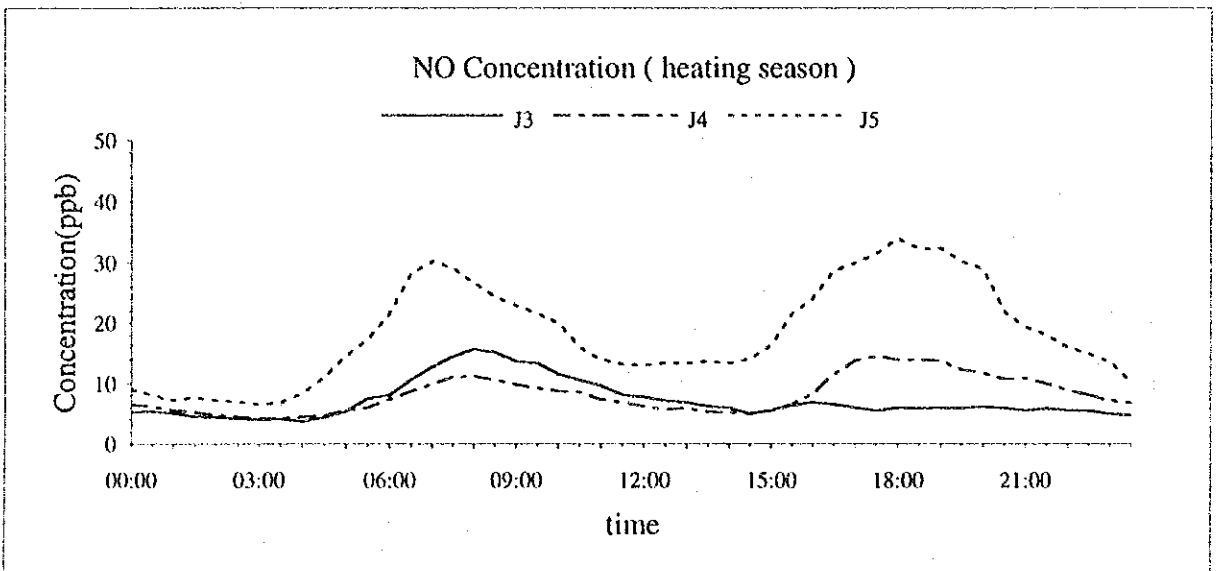
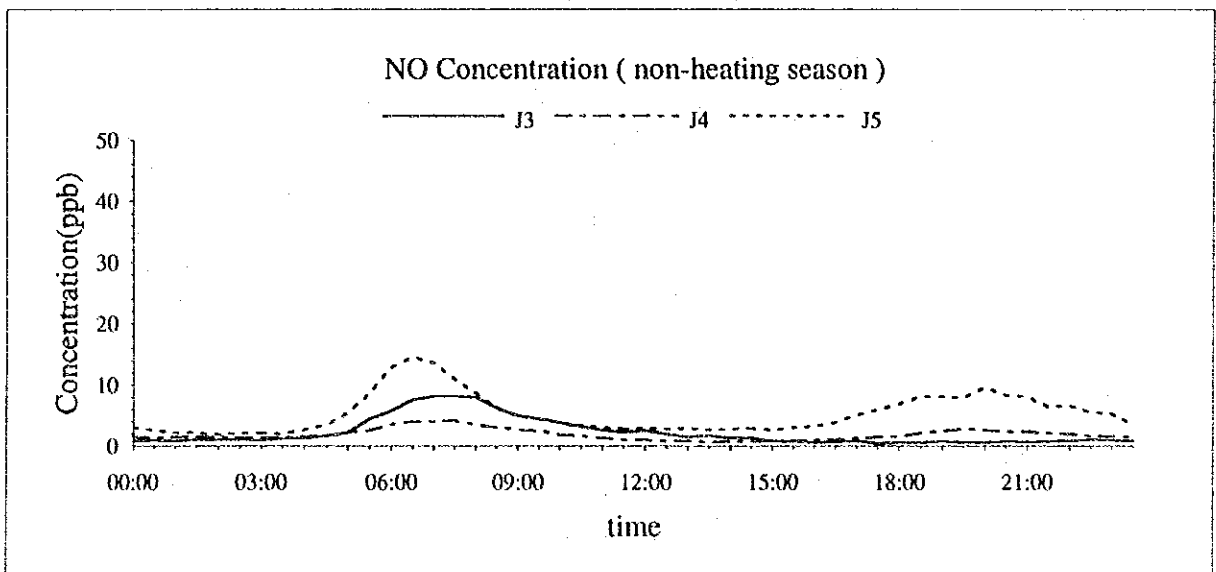
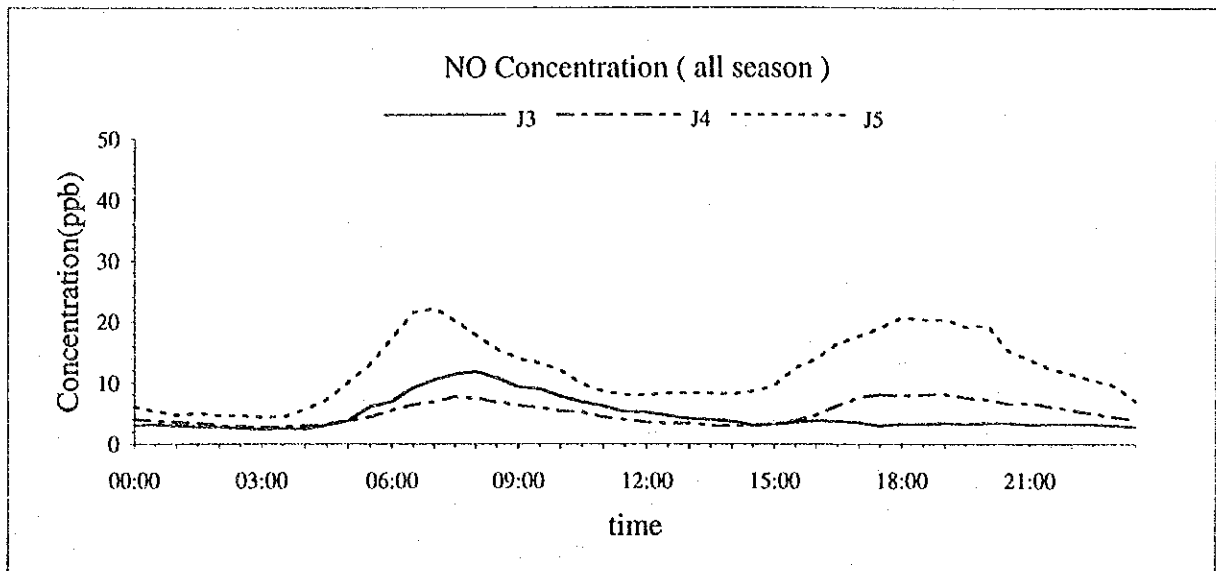


Figure D3.2.16 - (2) Hourly Variation of NO Concentration (J3, J4, J5 00:00-23:30)

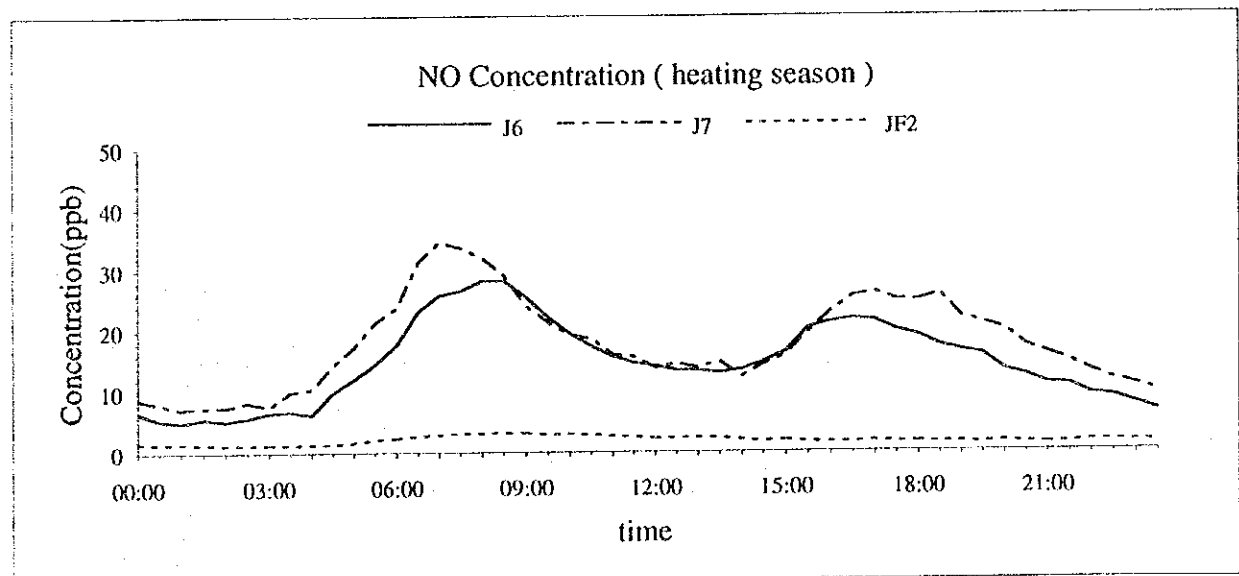
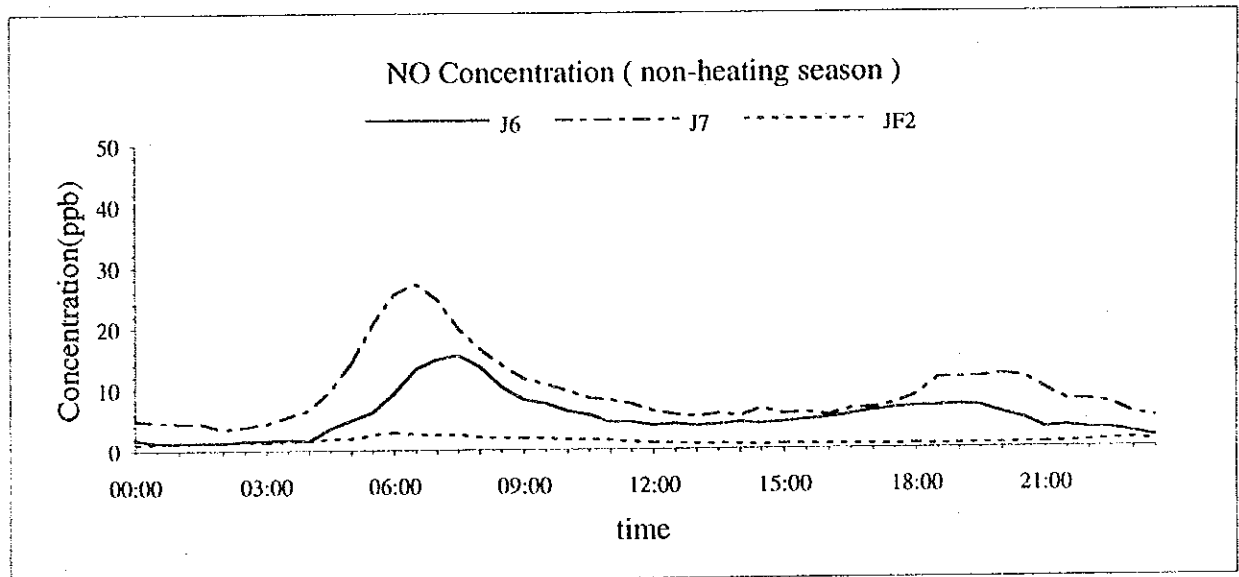
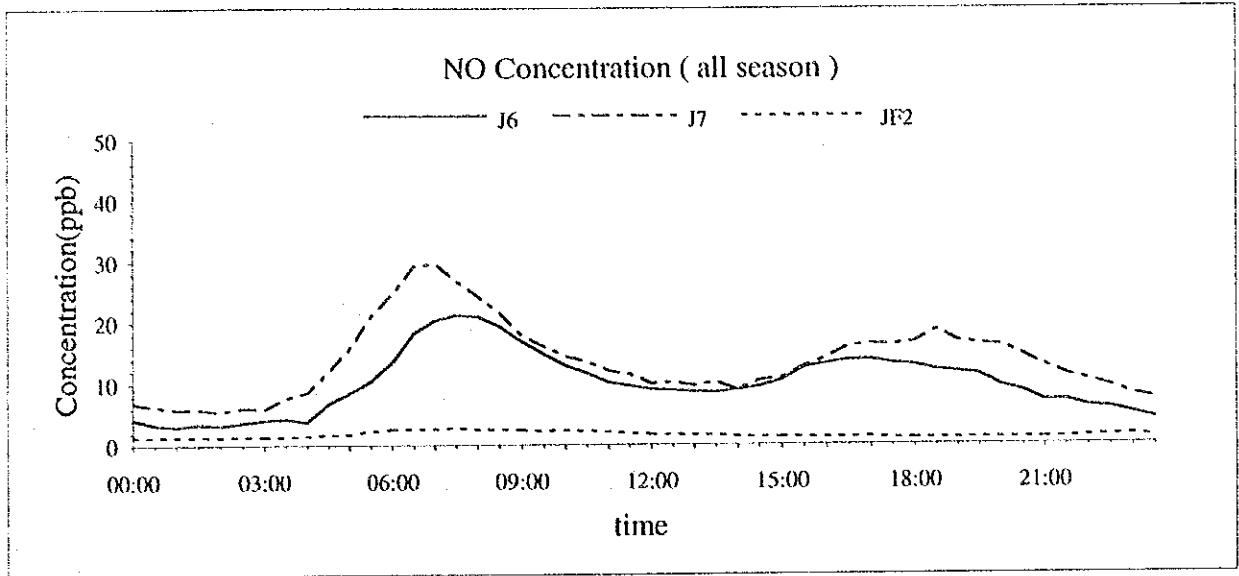


Figure D3.2.16 - (3) Hourly Variation of NO Concentration (J6, J7, JF2 00:00-23:30)

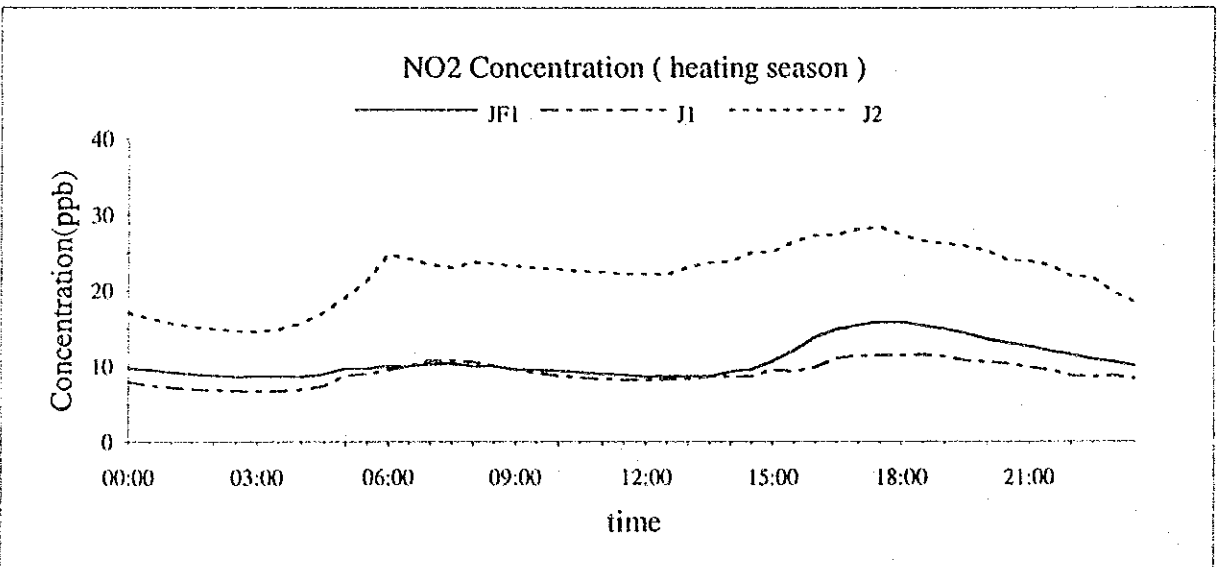
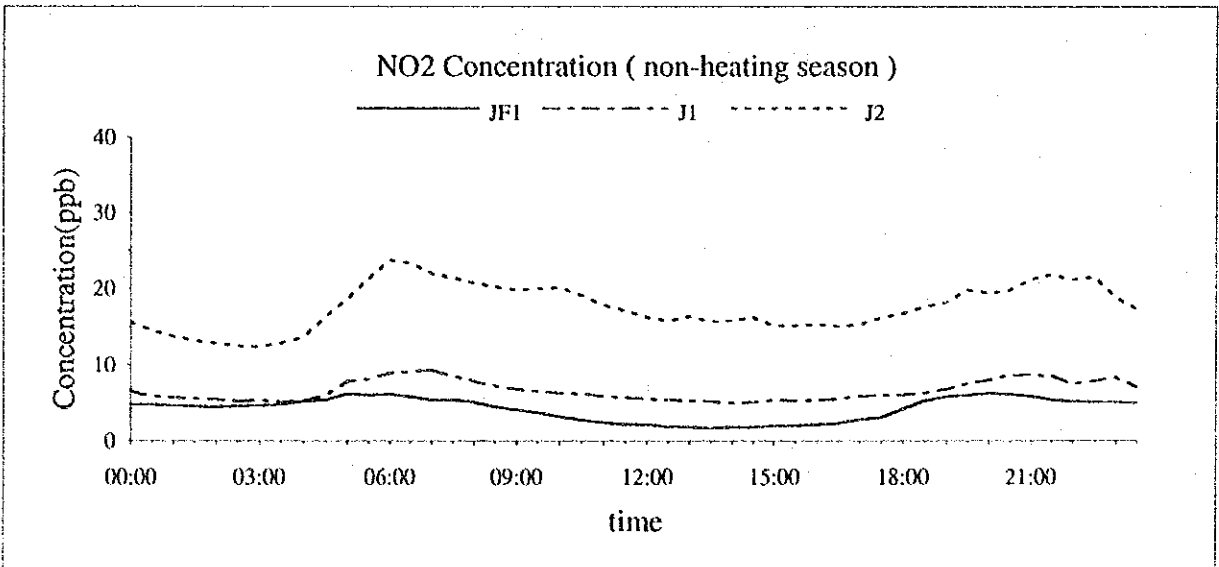
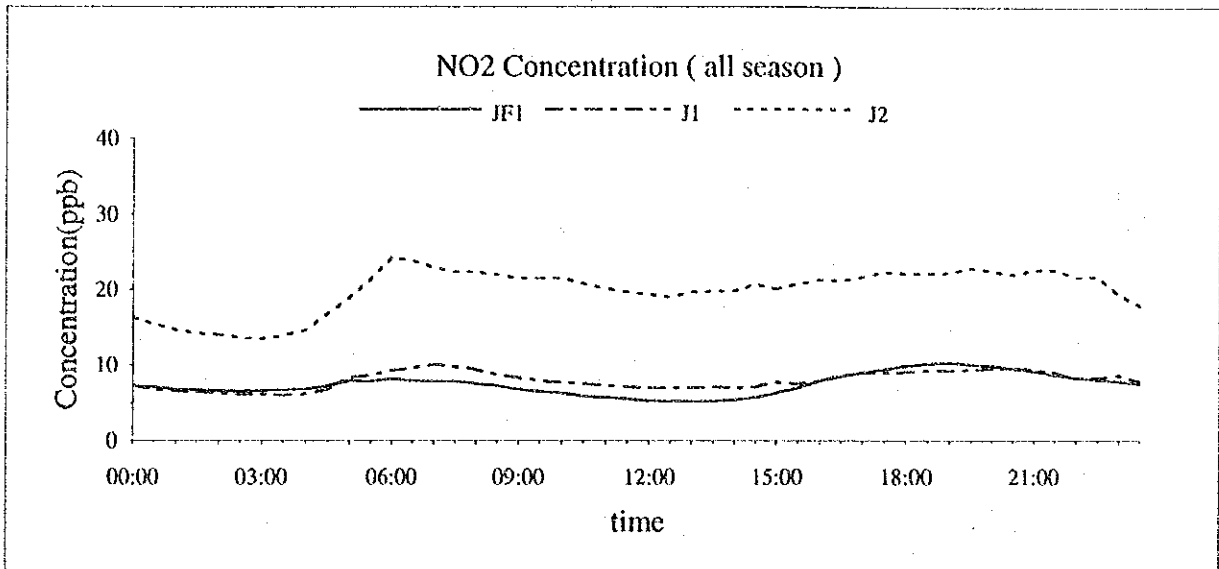


Figure D3.2.17 - (1) Hourly Variation of NO2 Concentration (JF1, J1, J2 00:00-23:30)

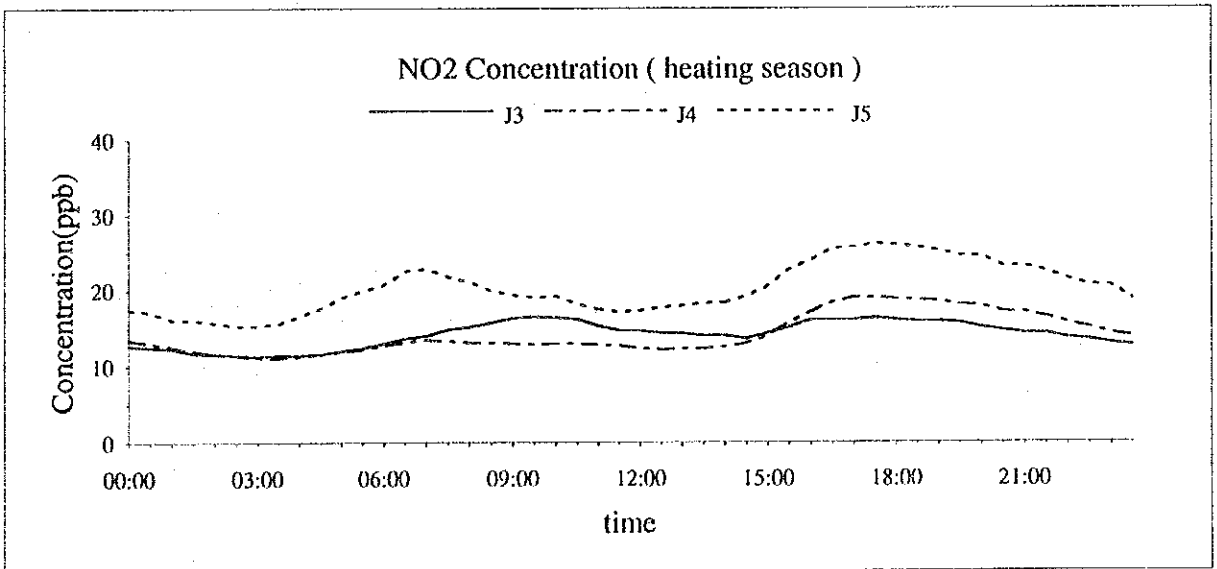
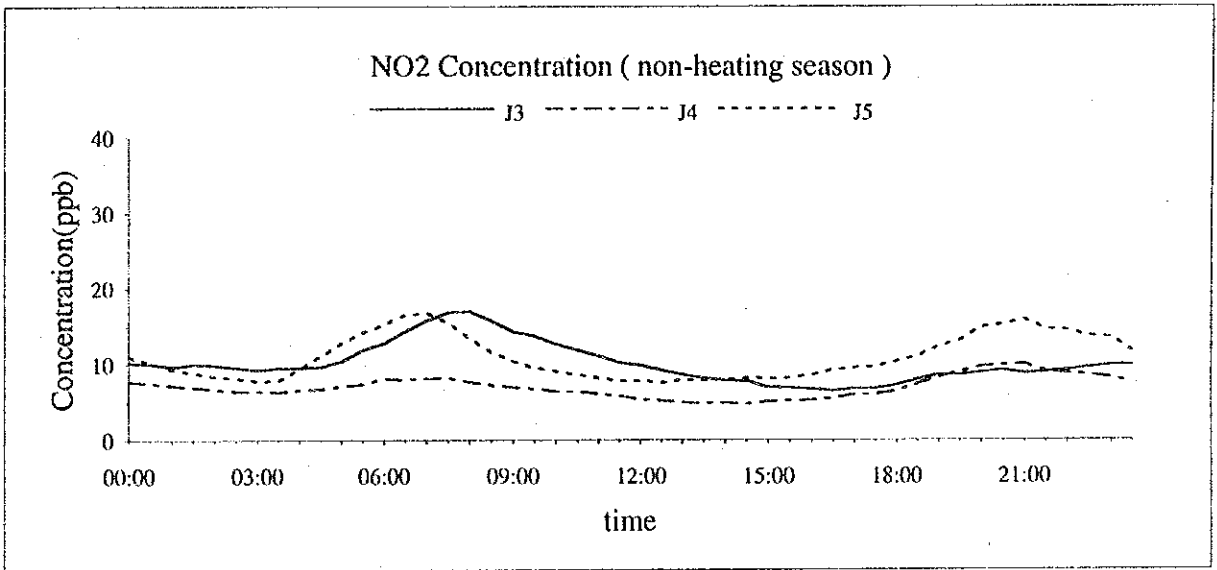
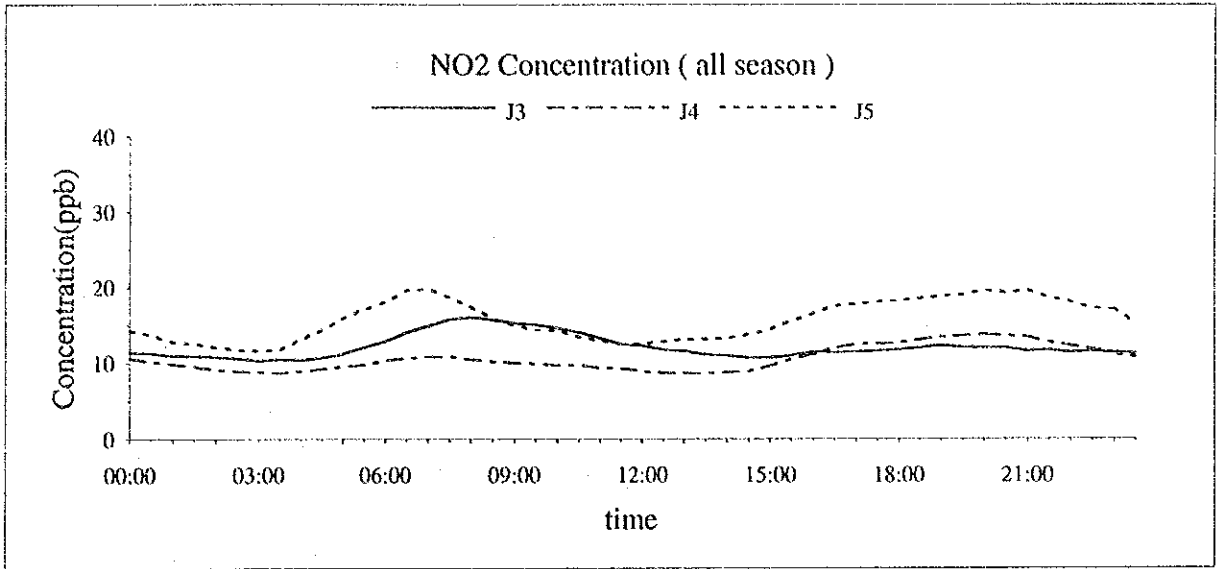


Figure D3.2.17 - (2) Hourly Variation of NO2 Concentration (J3, J4, J5 00:00-23:30)

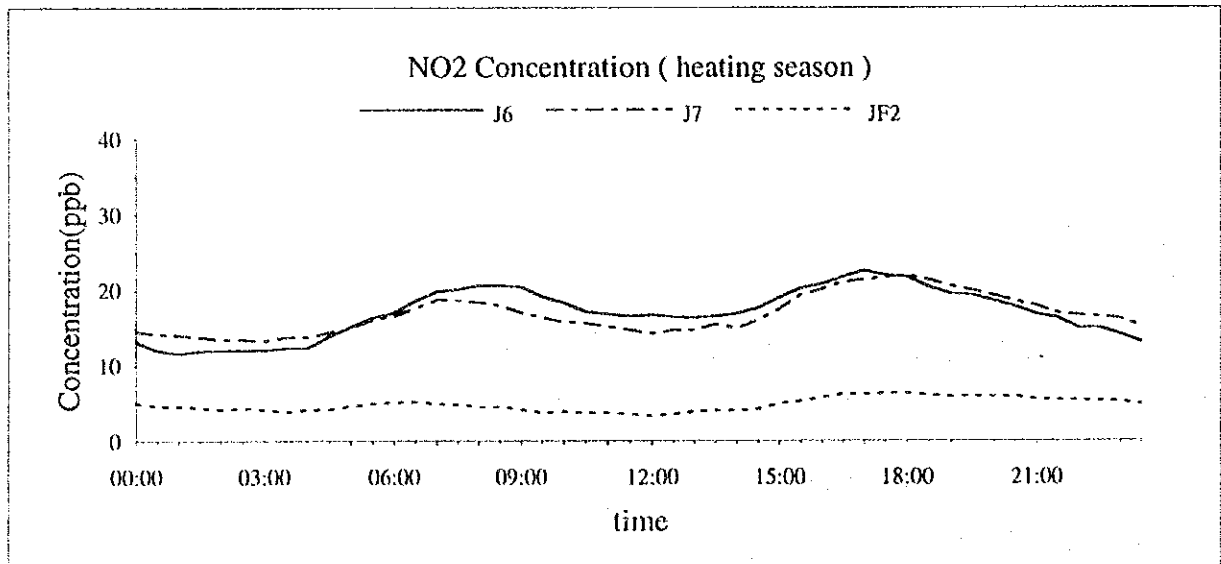
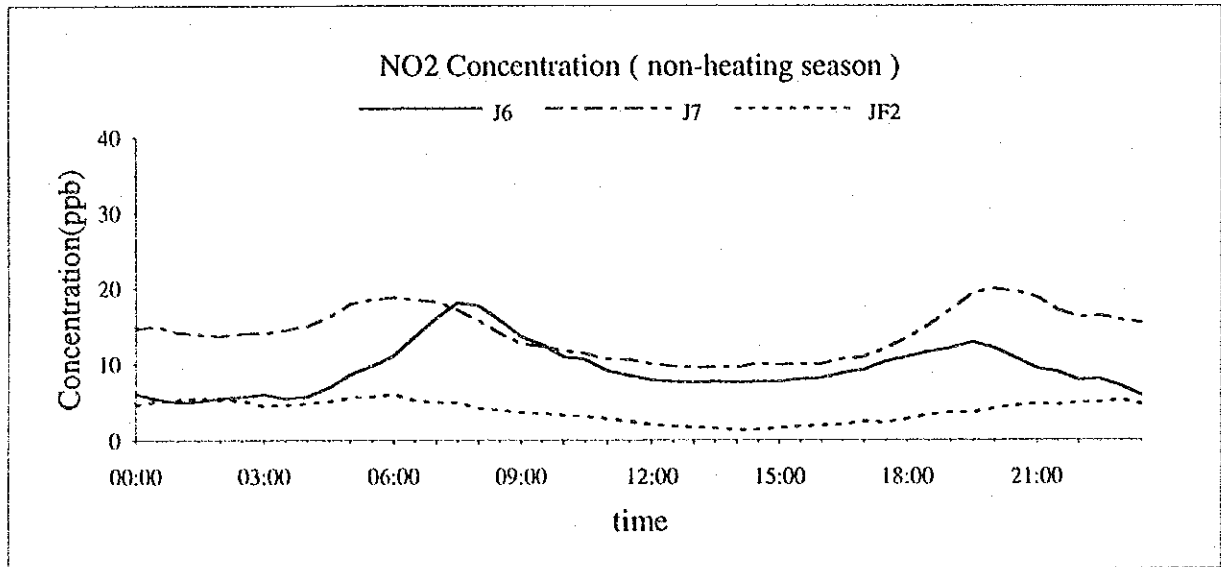
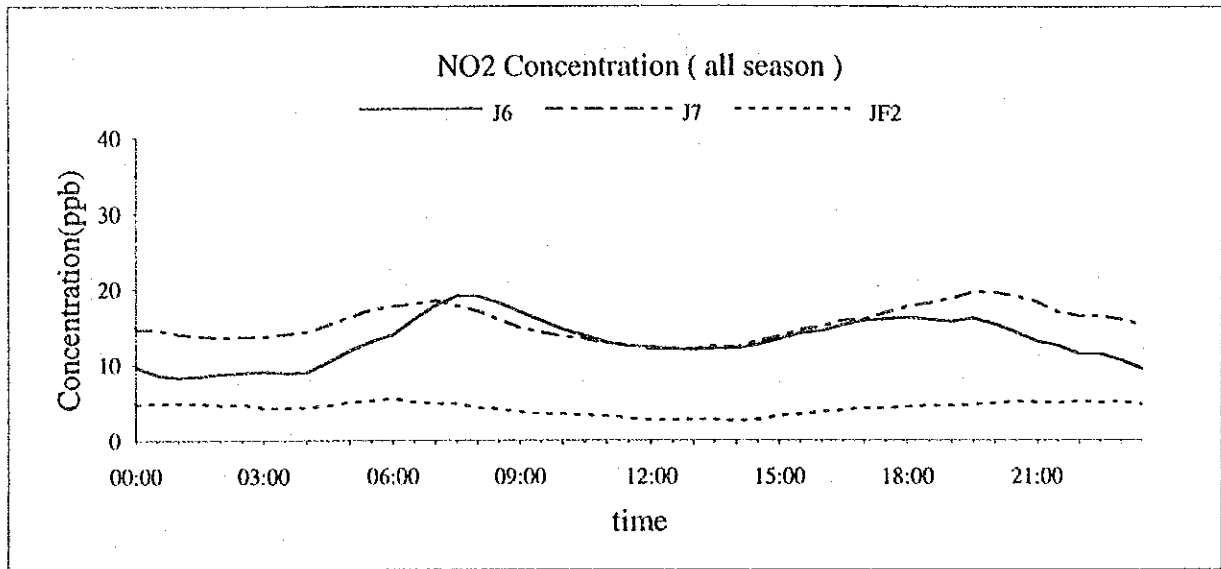


Figure D3.2.17 - (3) Hourly Variation of NO2 Concentration (J6, J7, JF2 00:00-23:30)

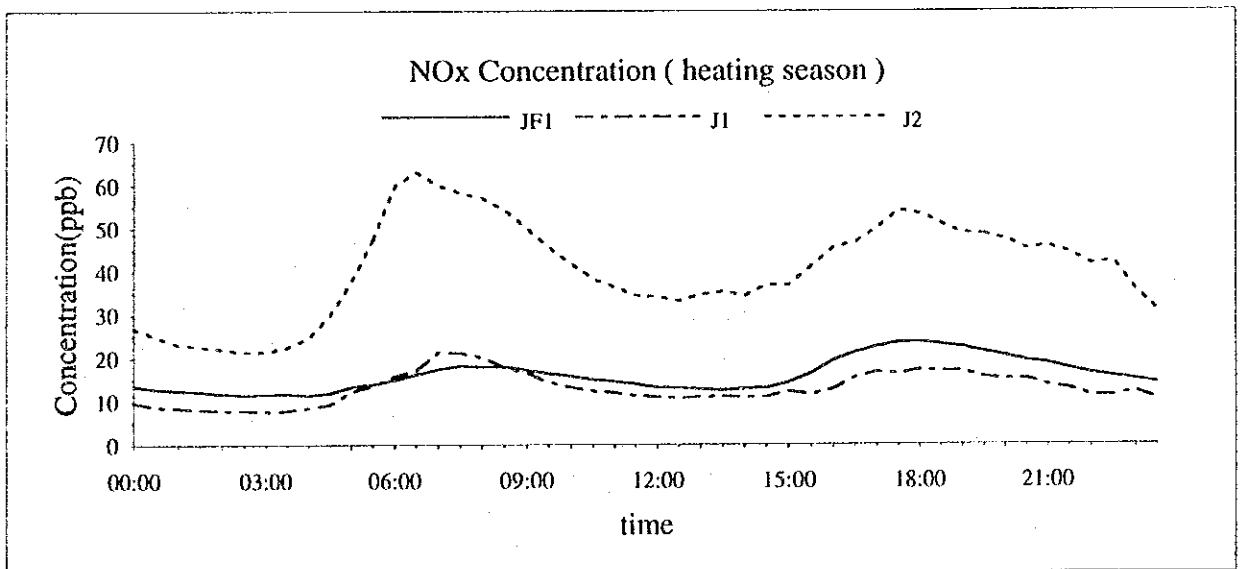
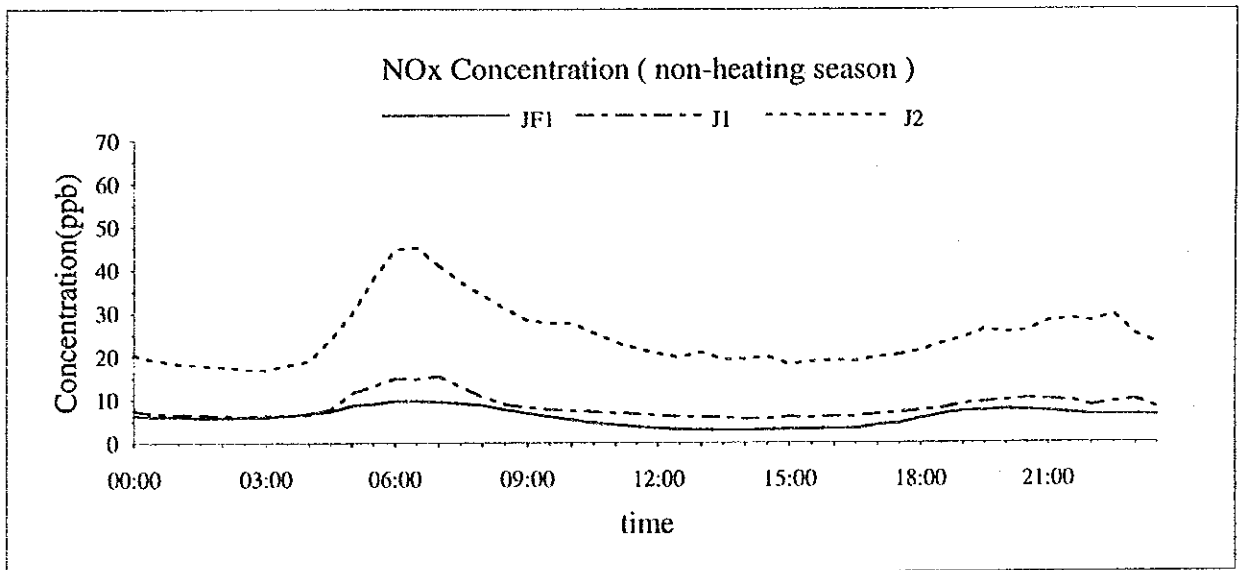
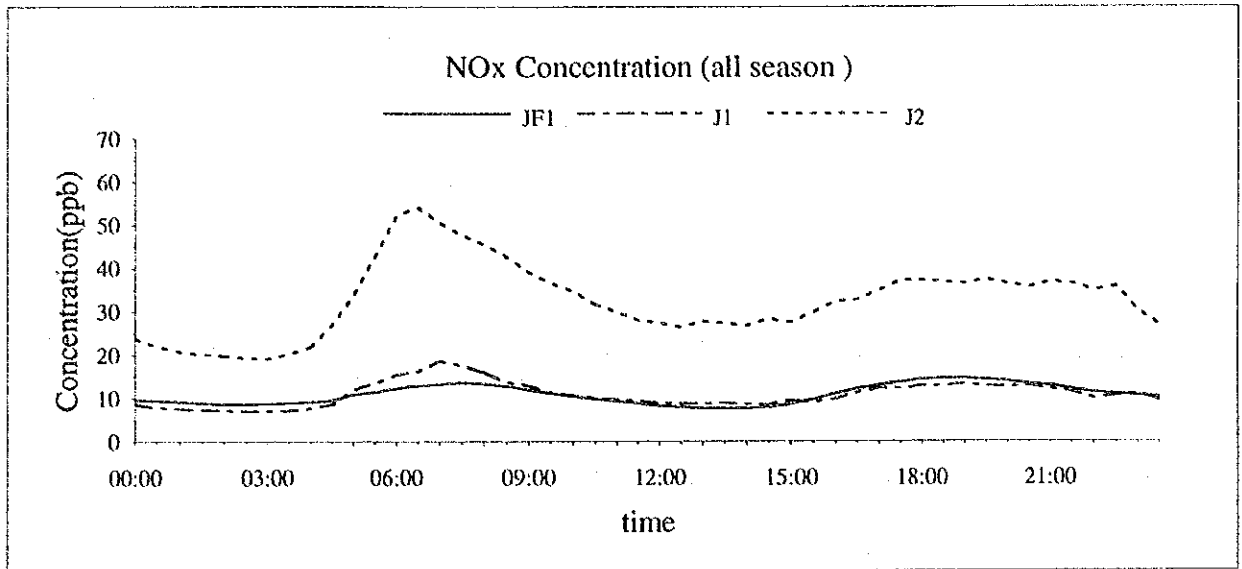


Figure D3.2.18 - (1) Hourly Variation of NOx Concentration (JF1, J1, J2 00:00-23:30)

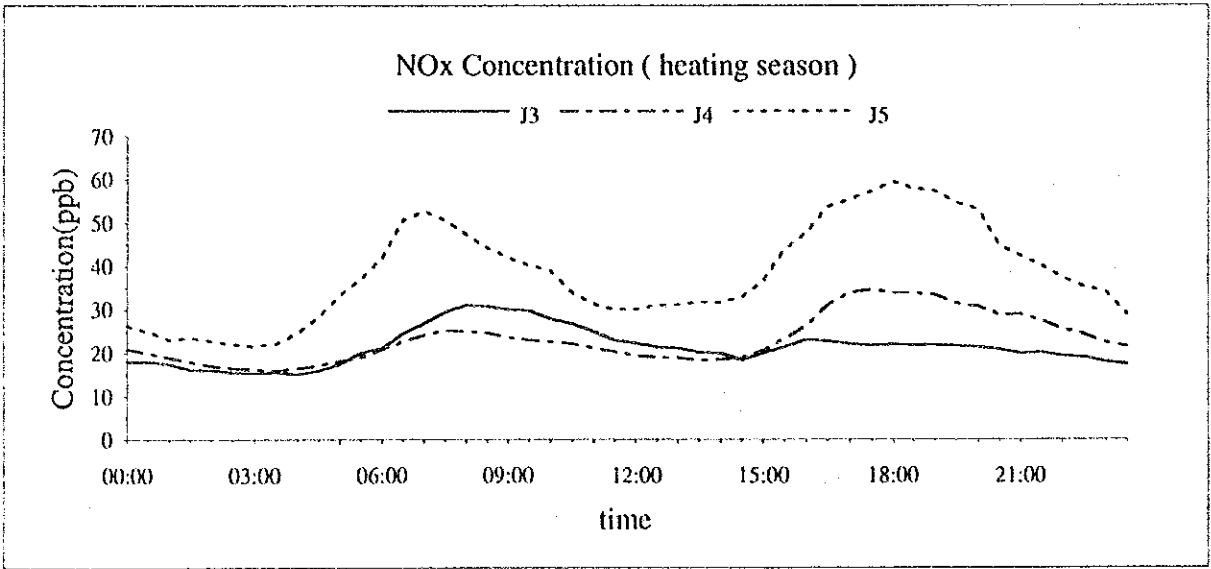
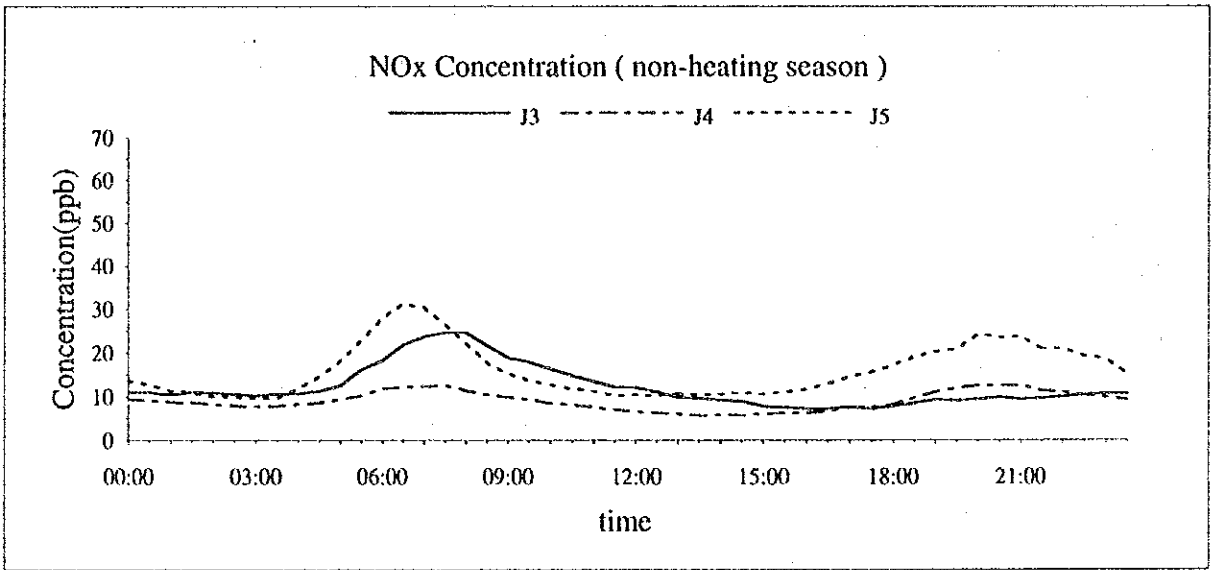
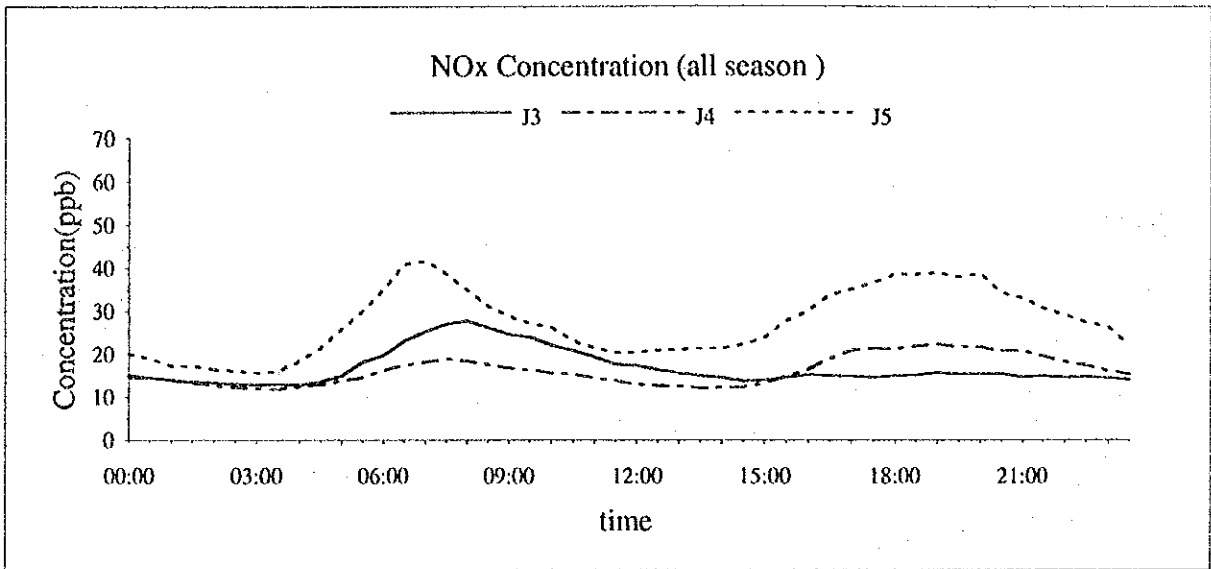


Figure D3.2.18 - (2) Hourly Variation of NOx Concentration (J3, J4, J5 00:00-23:30)

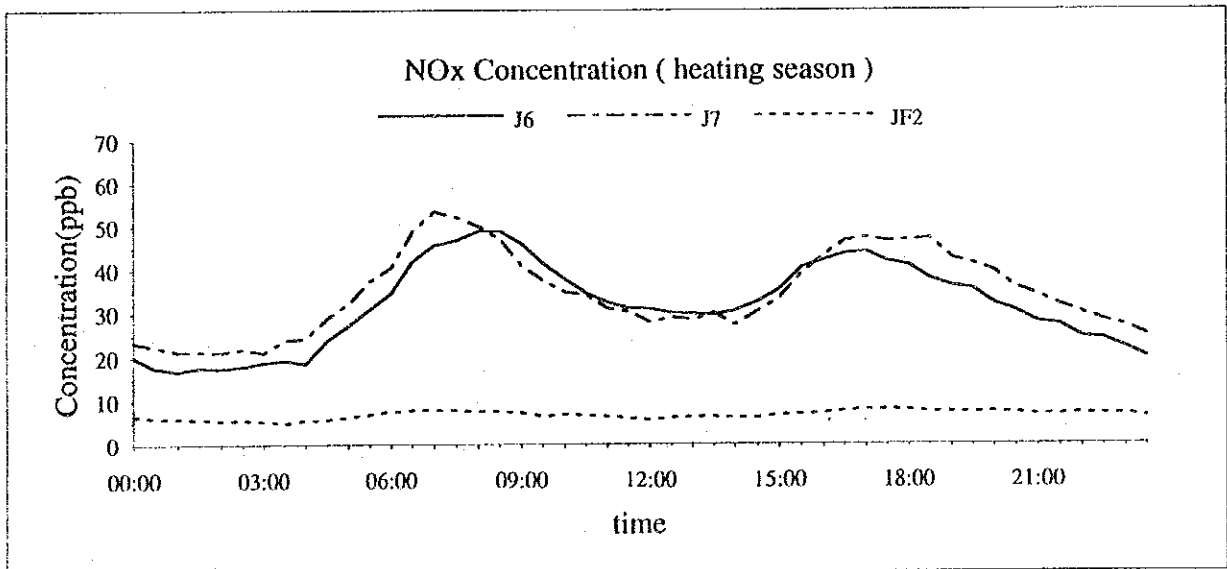
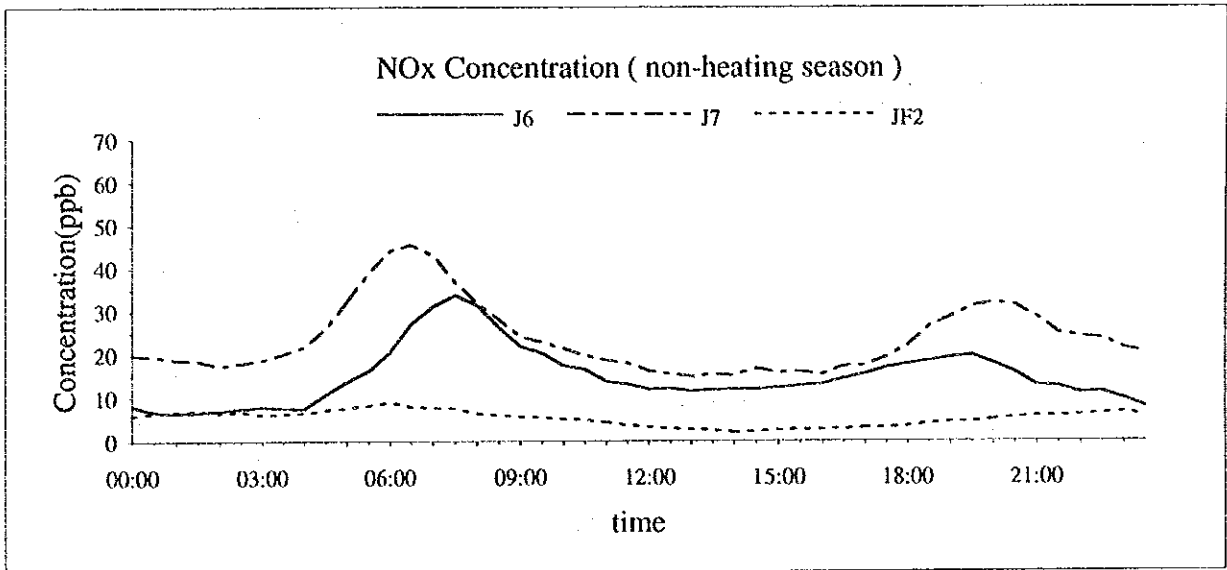
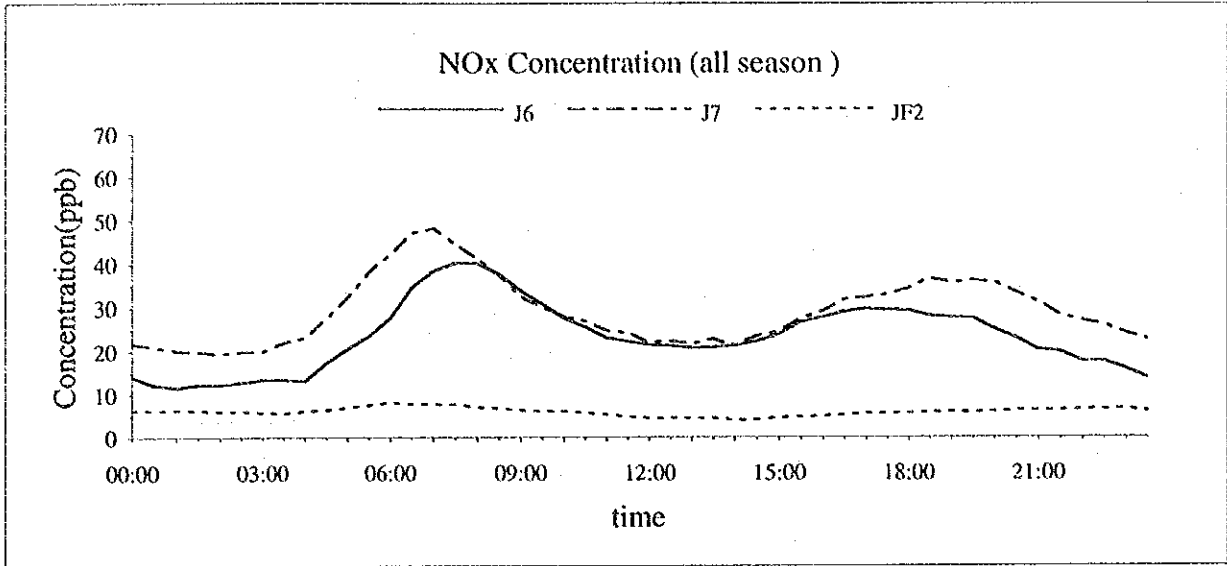


Figure D3.2.18 - (3) Hourly Variation of NOx Concentration (J6, J7, JF2 00:00-23:30)

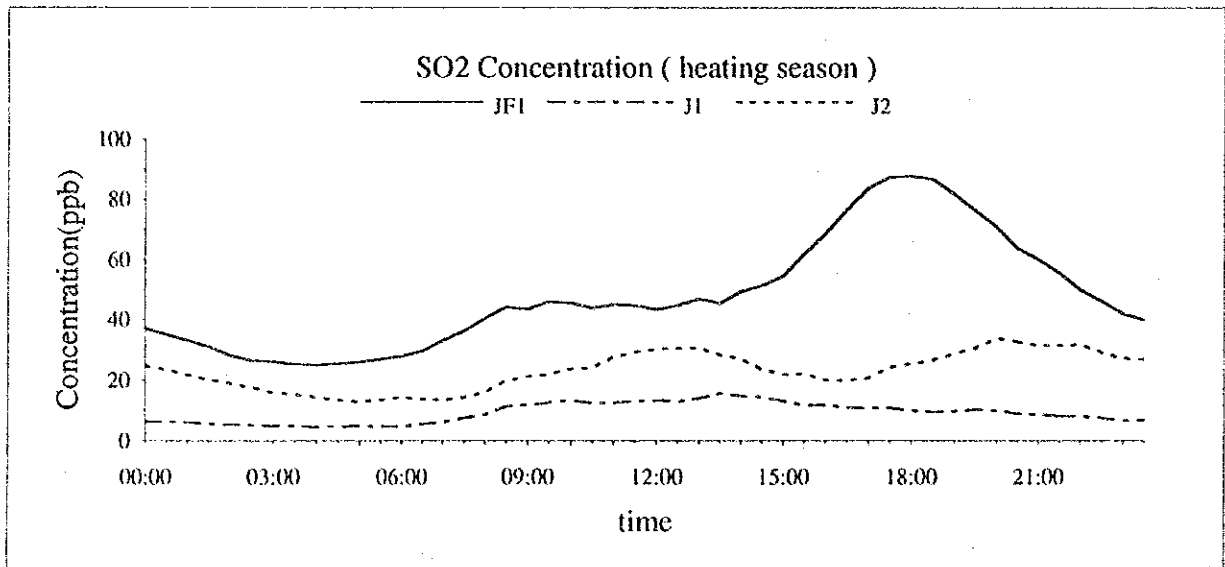
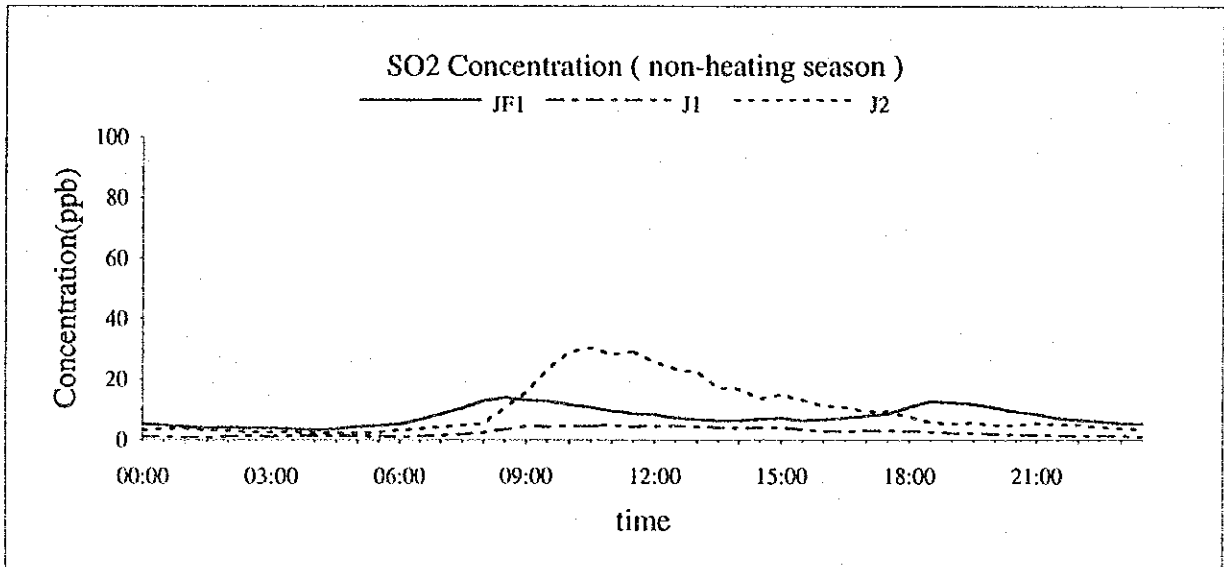
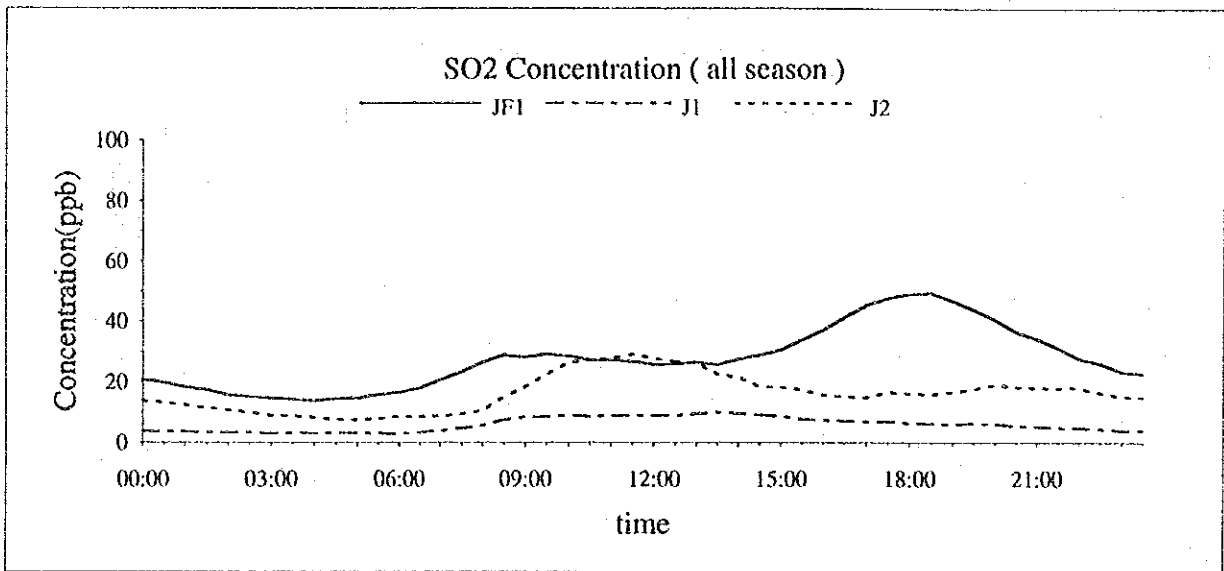


Figure D3.2.19 - (1) Hourly Variation of SO2 Concentration (JF1, J1, J2 00:00-23:30)

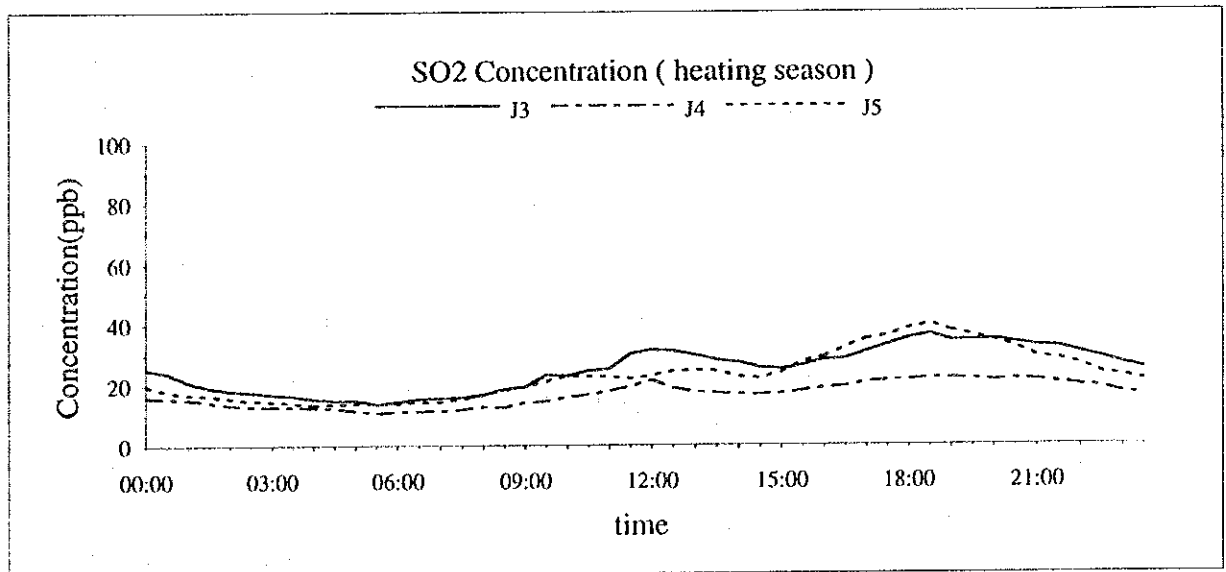
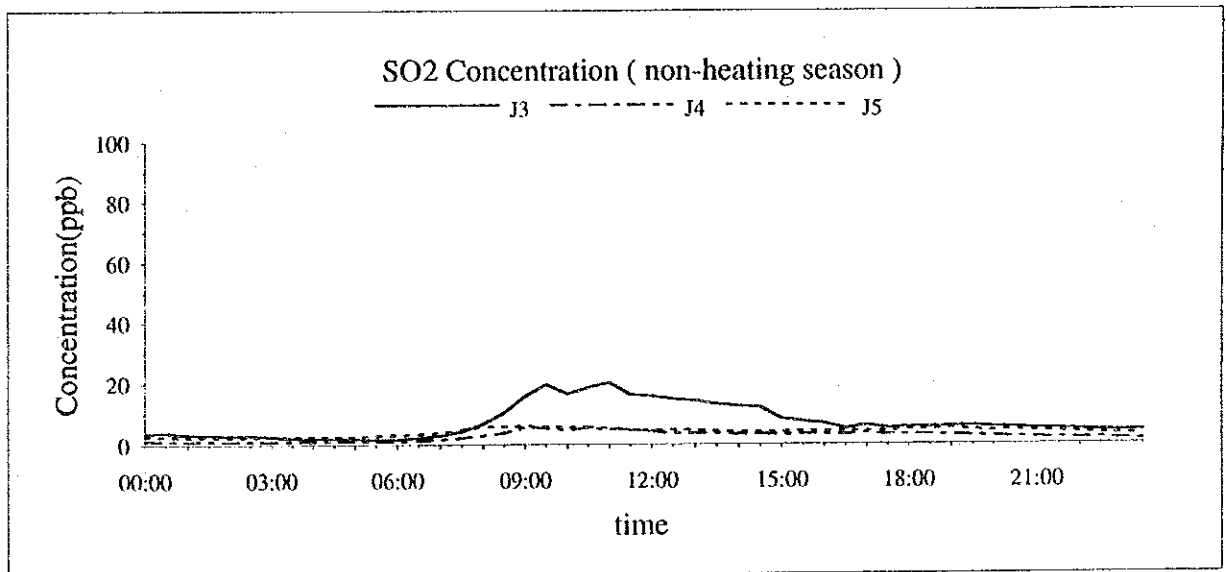
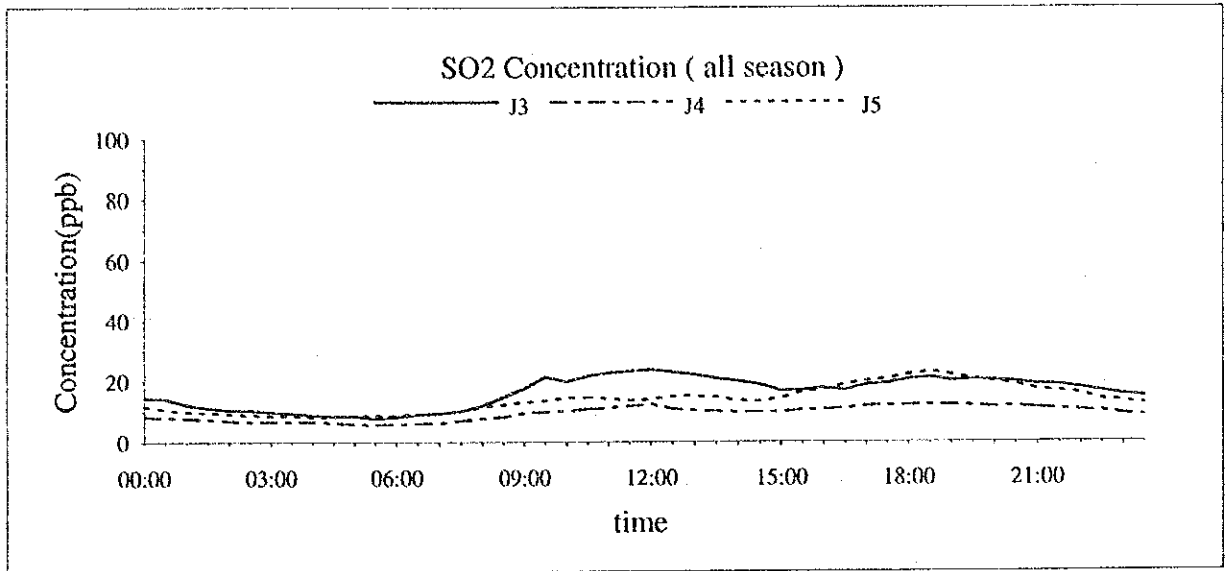


Figure D3.2.19 - (2) Hourly Variation of SO2 Concentration (J3, J4, J5 00:00-23:30)

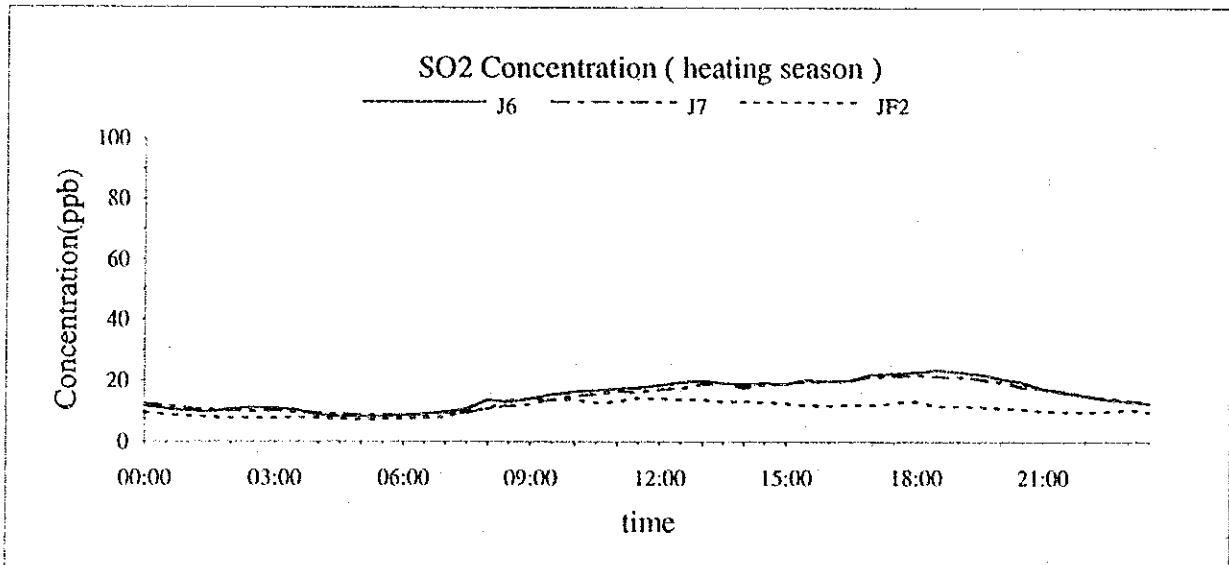
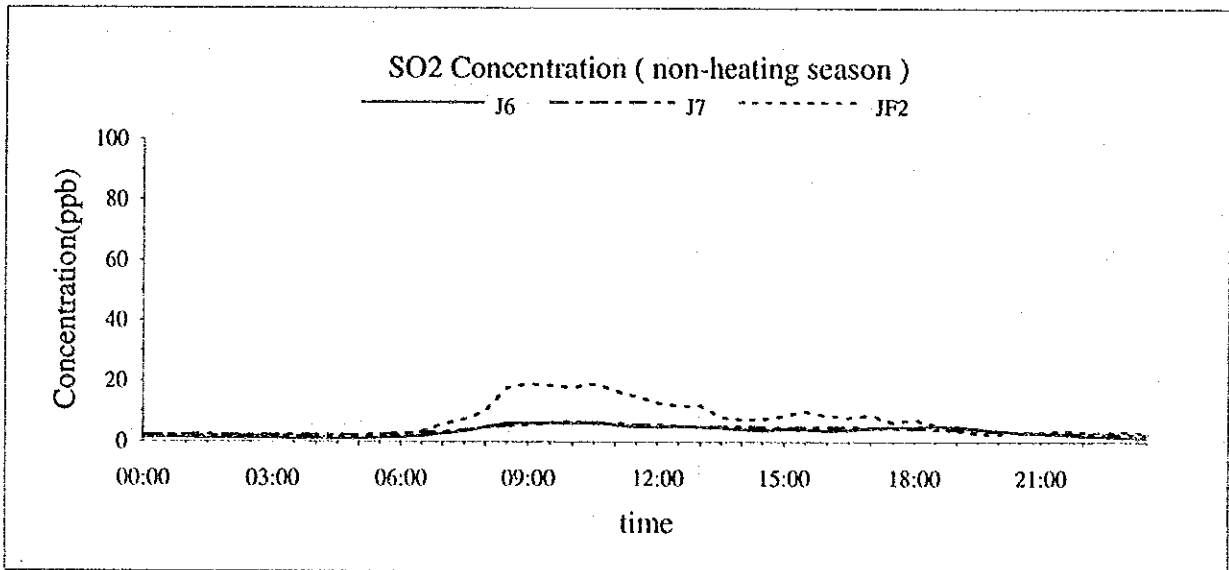
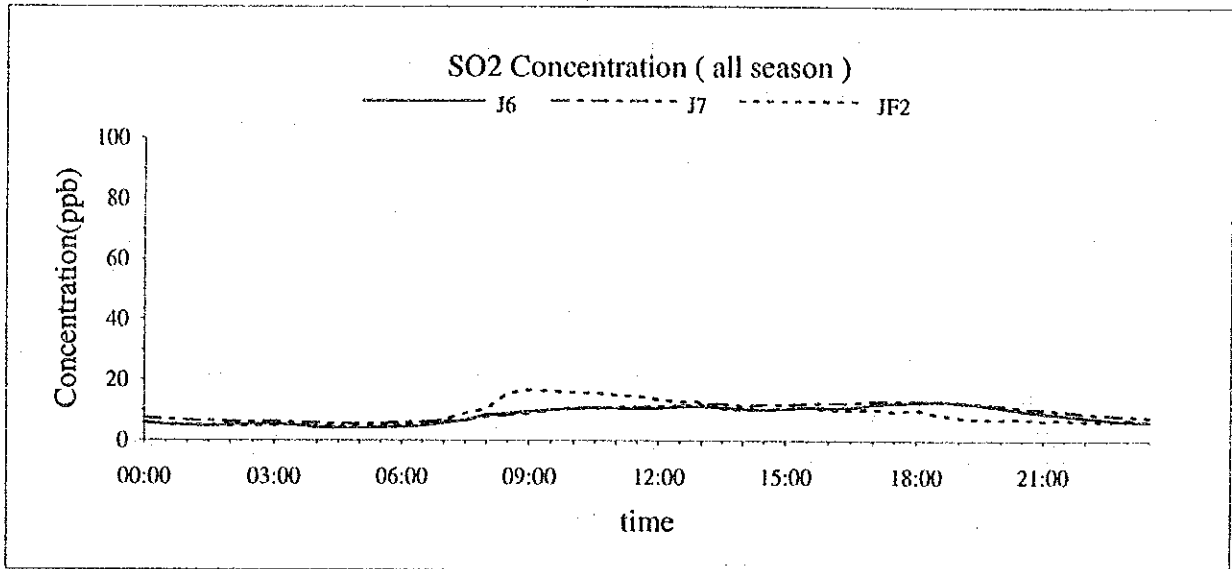


Figure D3.2.19 - (3) Hourly Variation of SO2 Concentration (J6, J7, JF2 00:00-23:30)

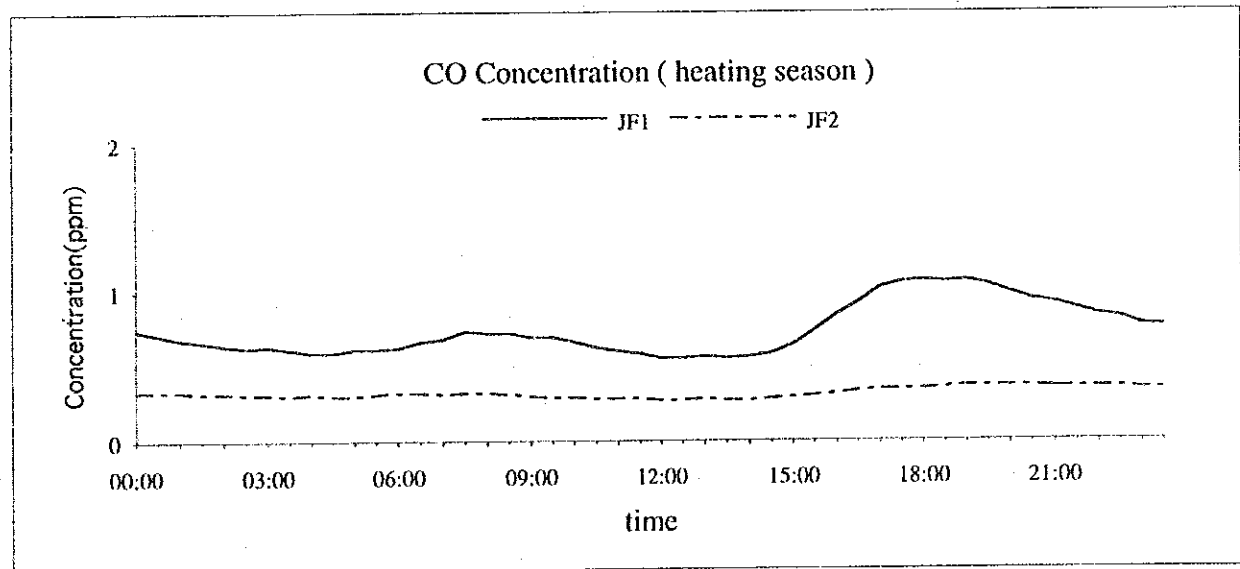
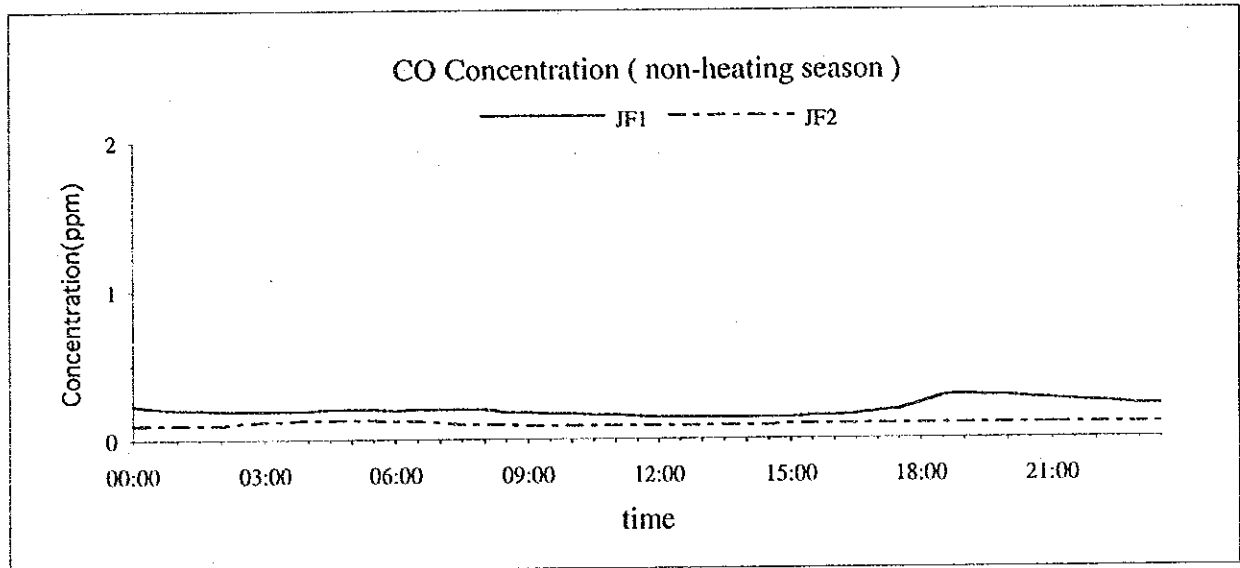
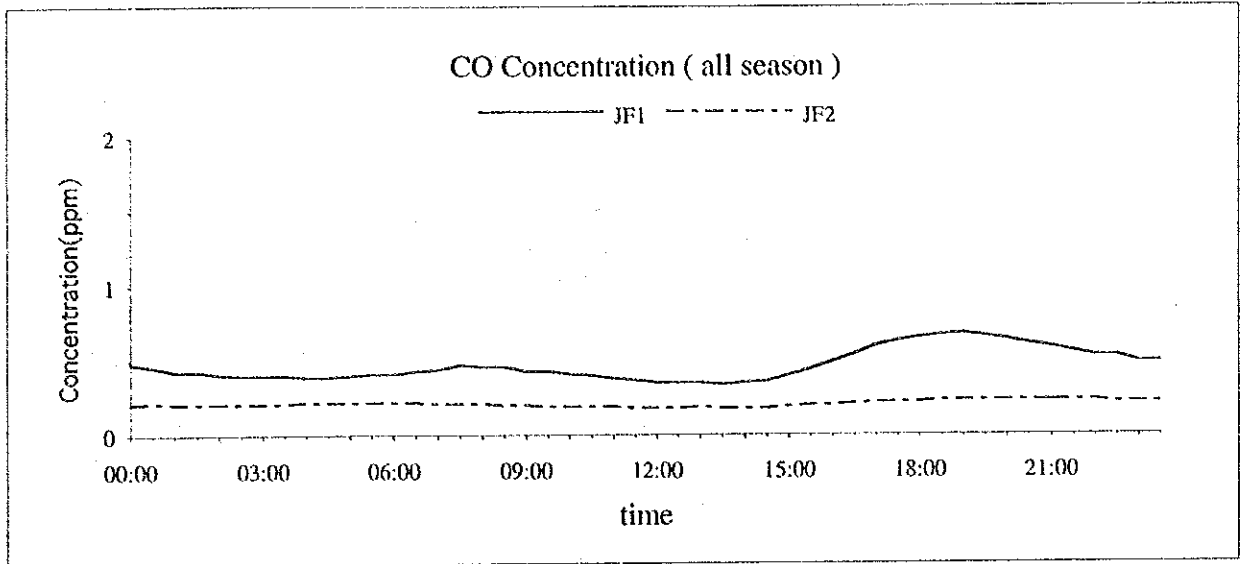


Figure D3.2.20 Hourly Variation of CO Concentration (JF1, JF2 00:00-23:30)

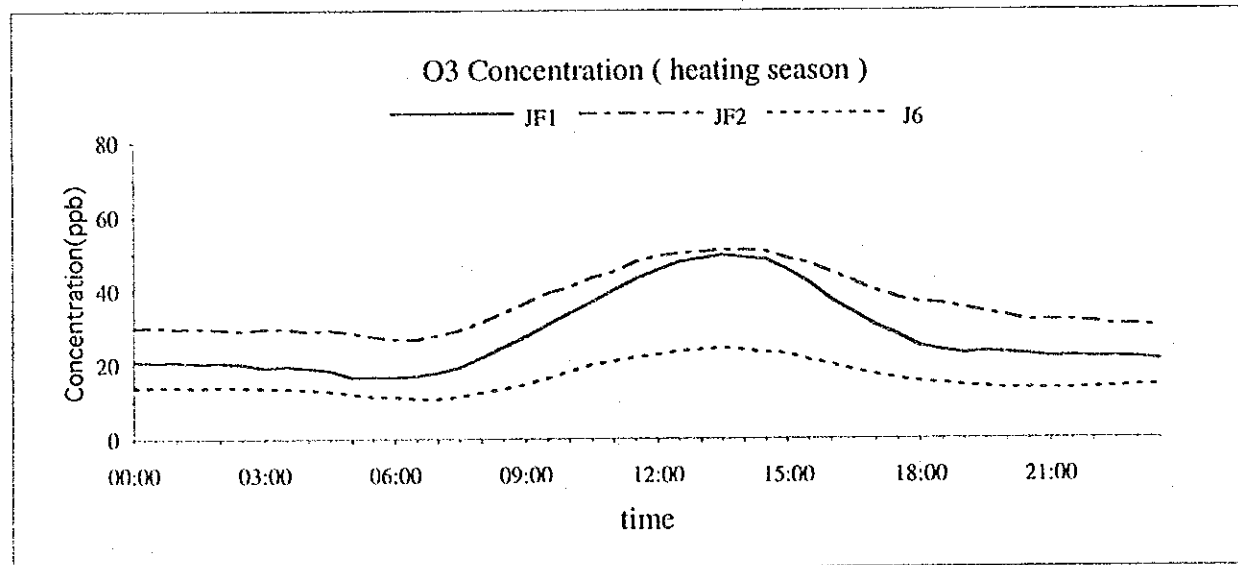
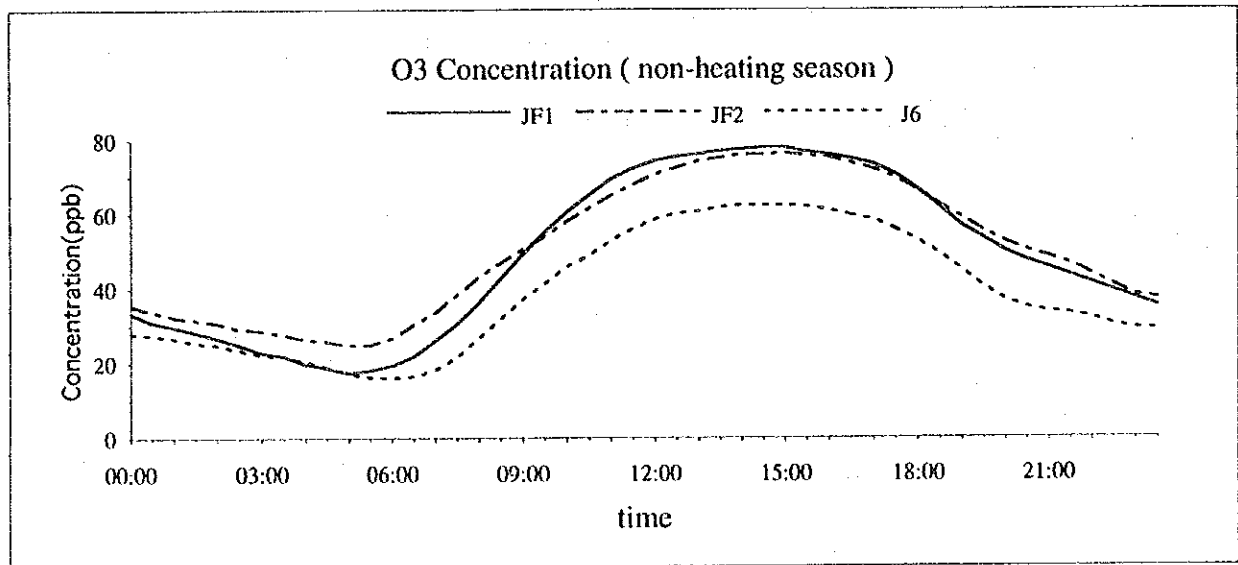
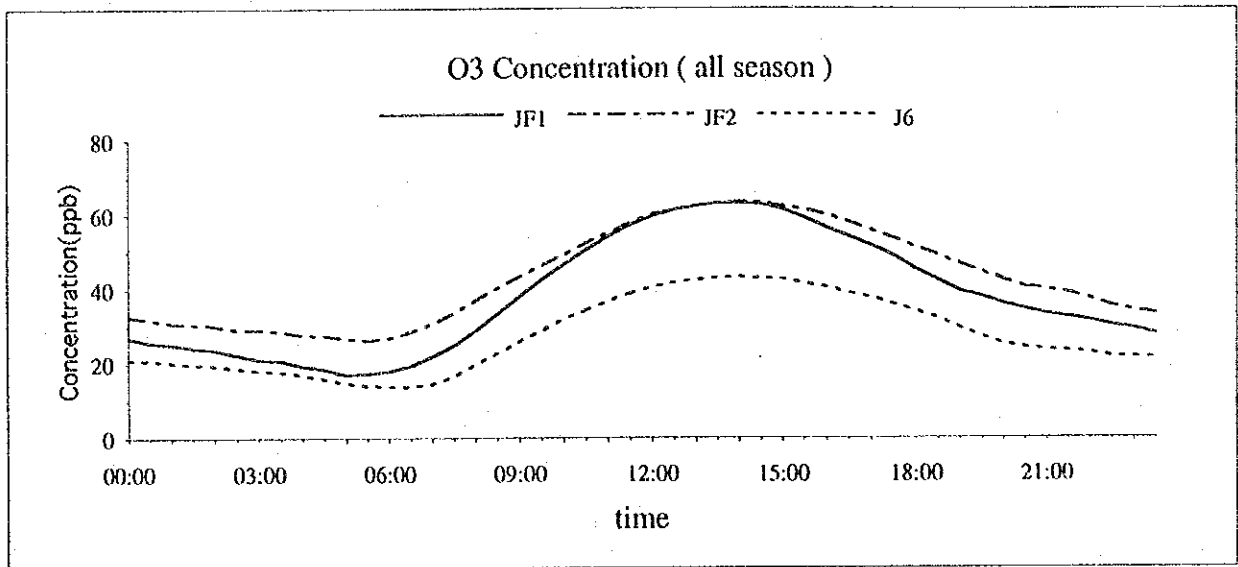


Figure D3.2.21 Hourly Variation of O3 Concentration (JF1, JF2, J6 00:00-23:30)

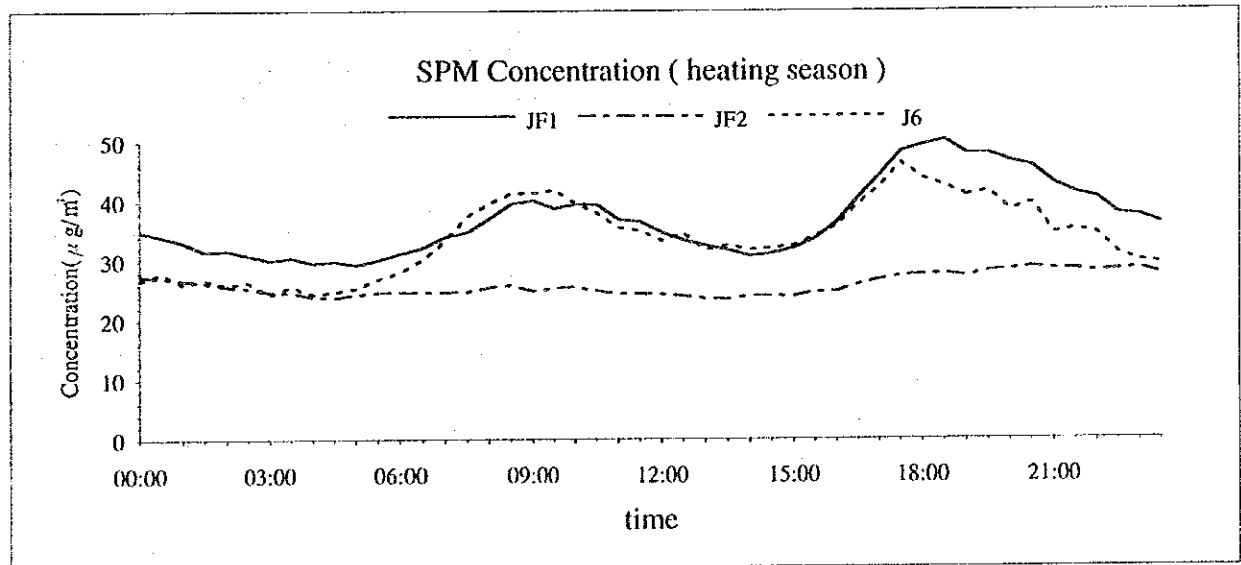
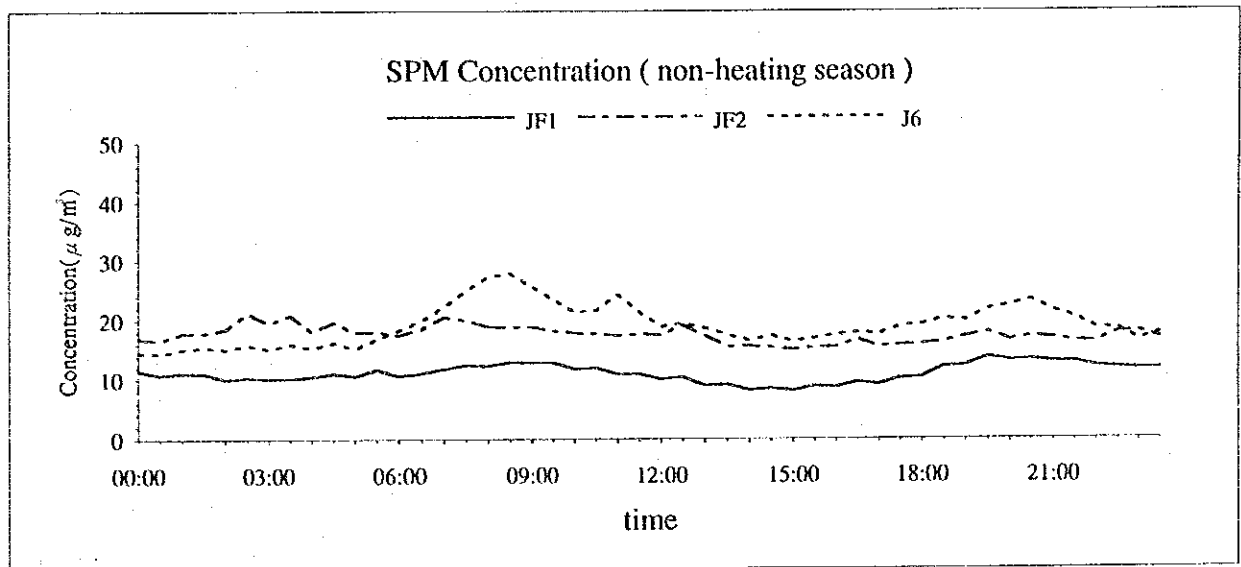
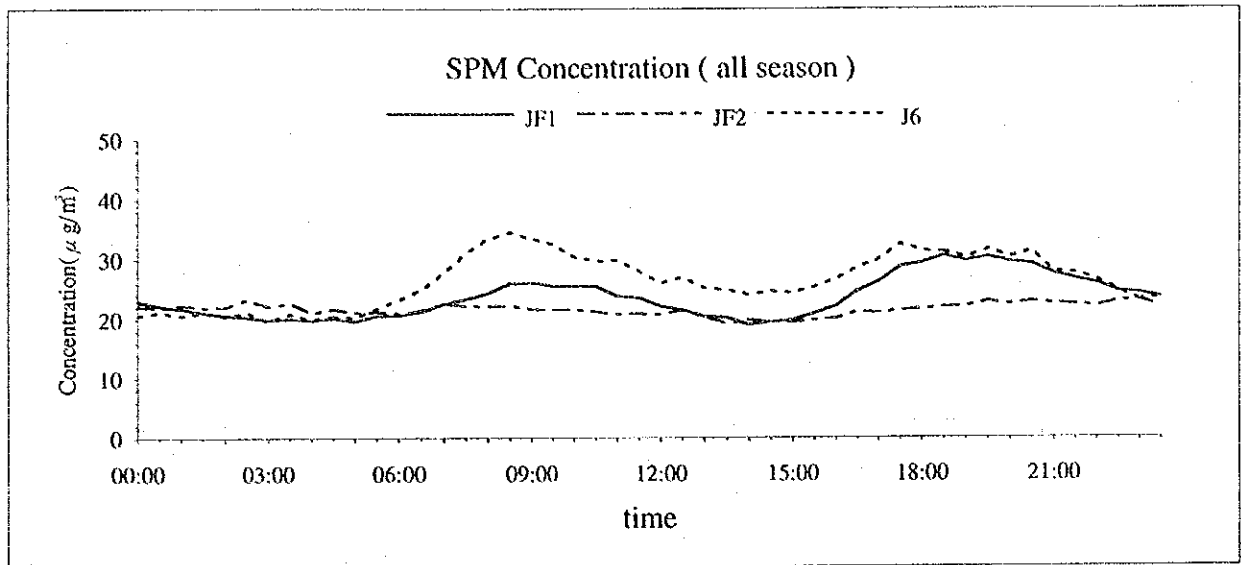


Figure D3.2.22 Hourly Variation of SPM Concentration (JF1, JF2, J6 00:00-23:30)

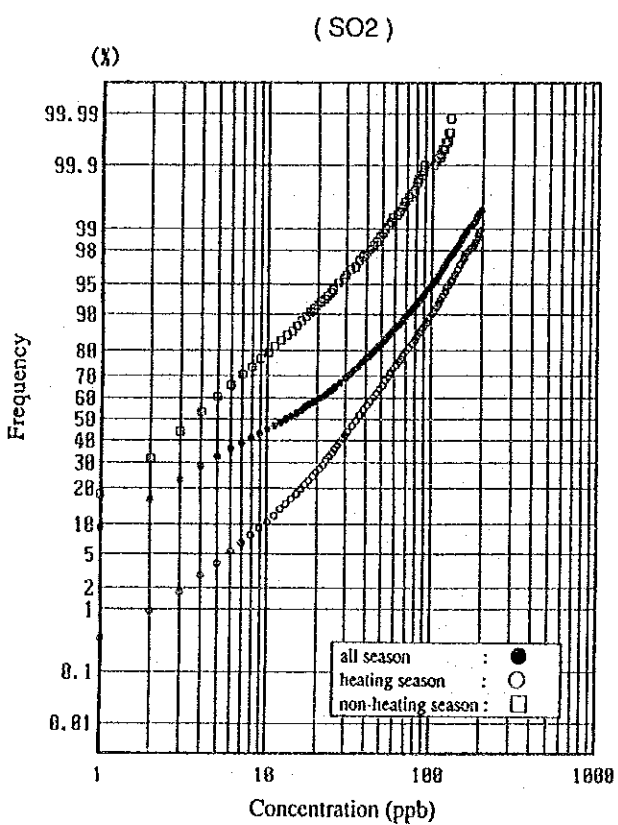
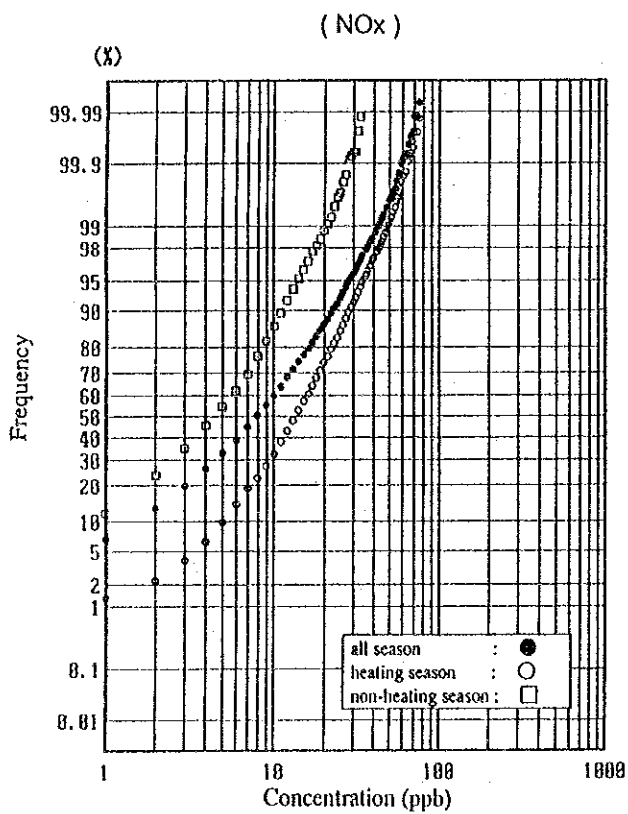
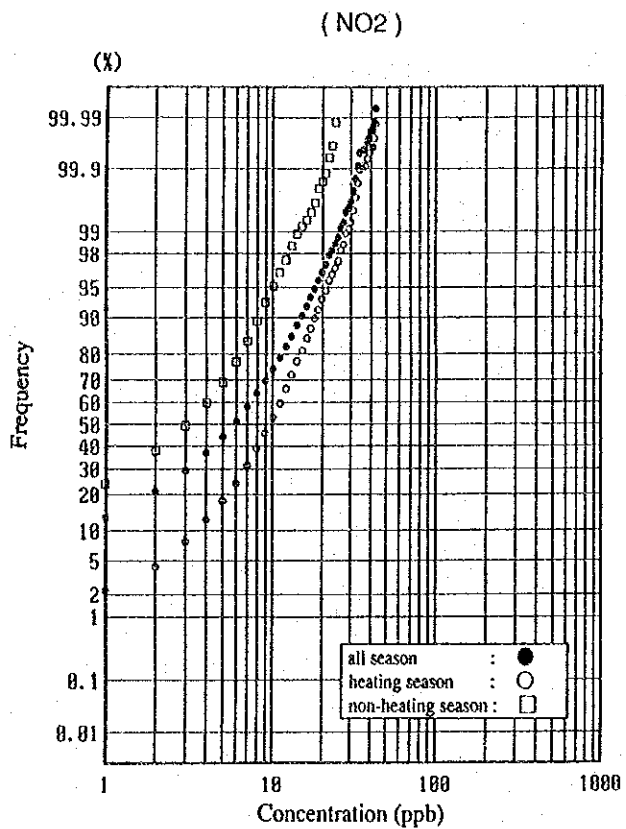
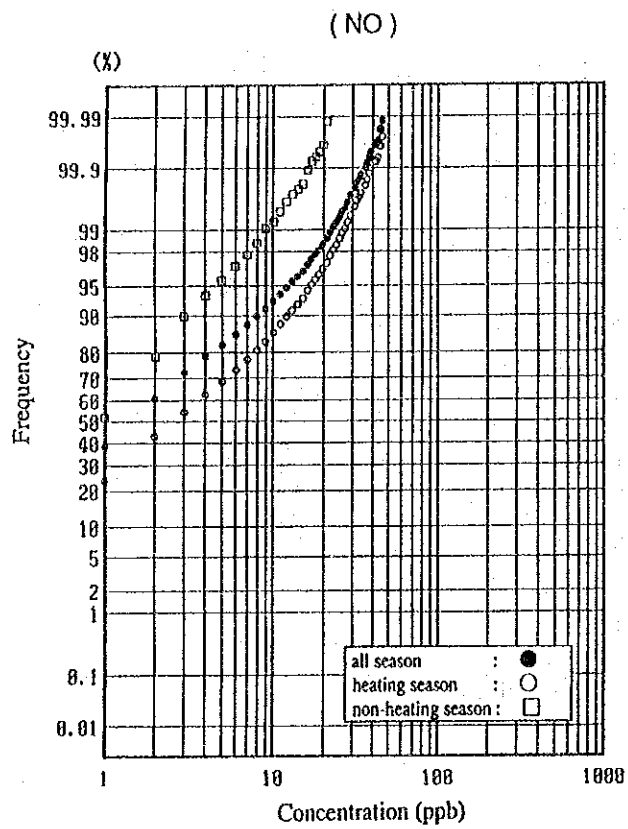


Figure D3.2.23 Cumulative Frequency Curve of Air Pollutant Concentration (30 minutes value : JF1 Station)

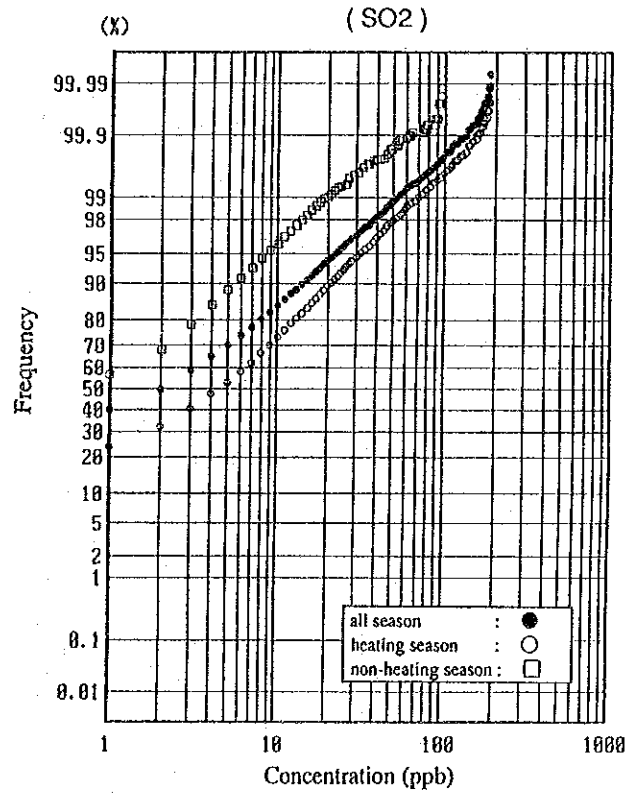
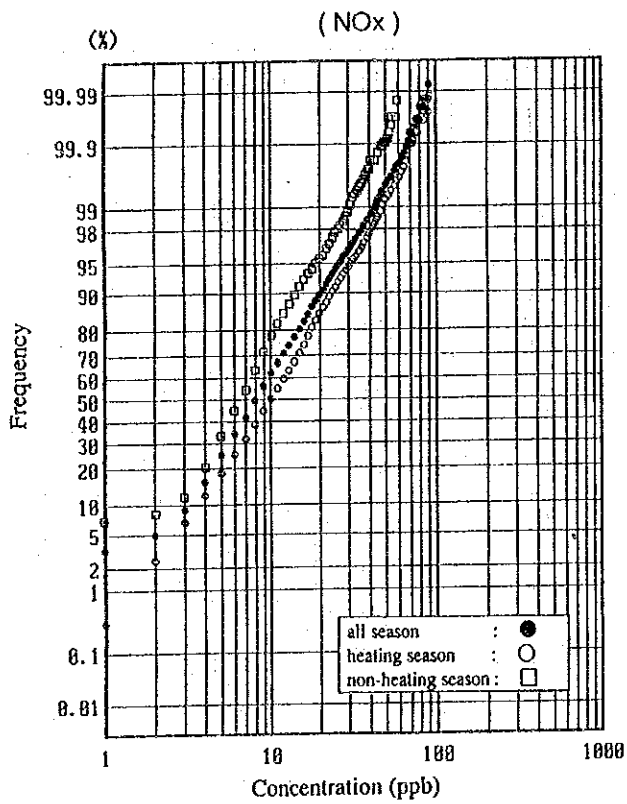
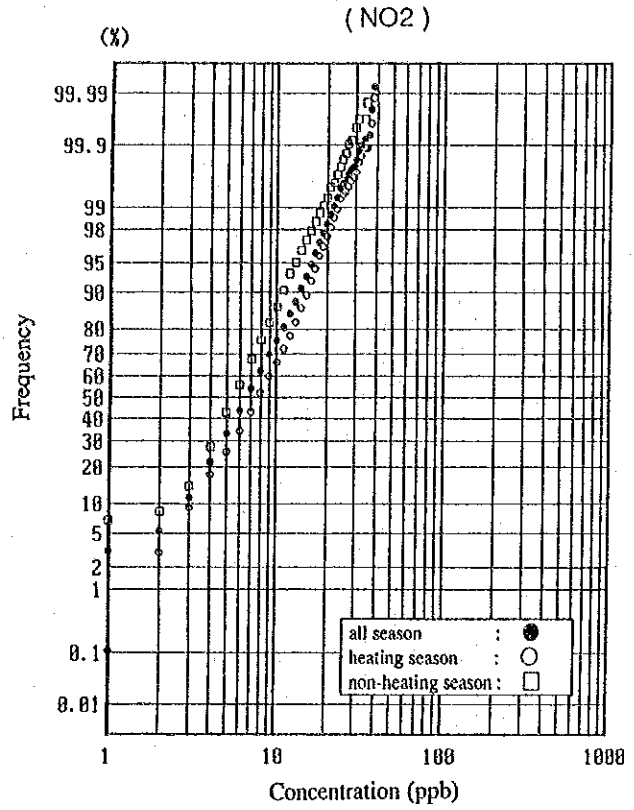
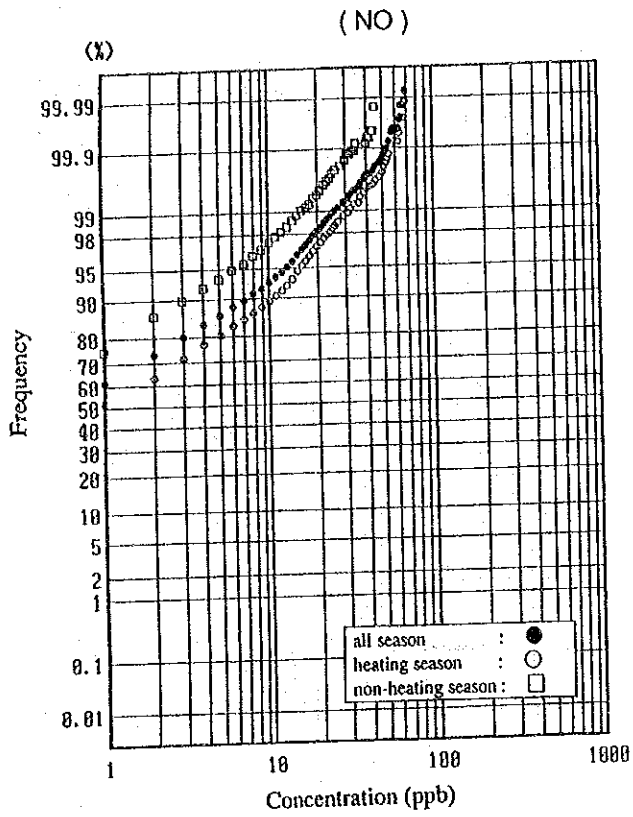


Figure D3.2.24 Cumulative Frequency Curve of Air Pollutant Concentration (30 minutes value : J1 Station)

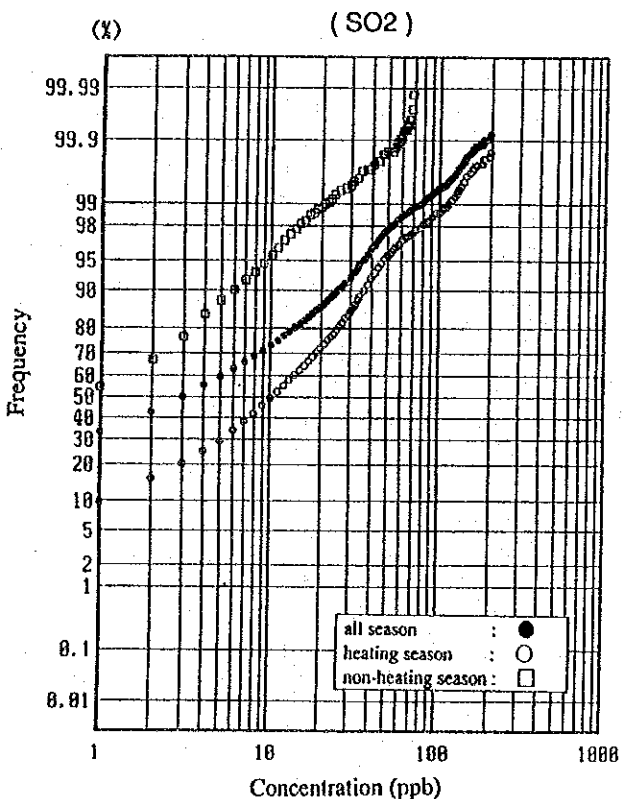
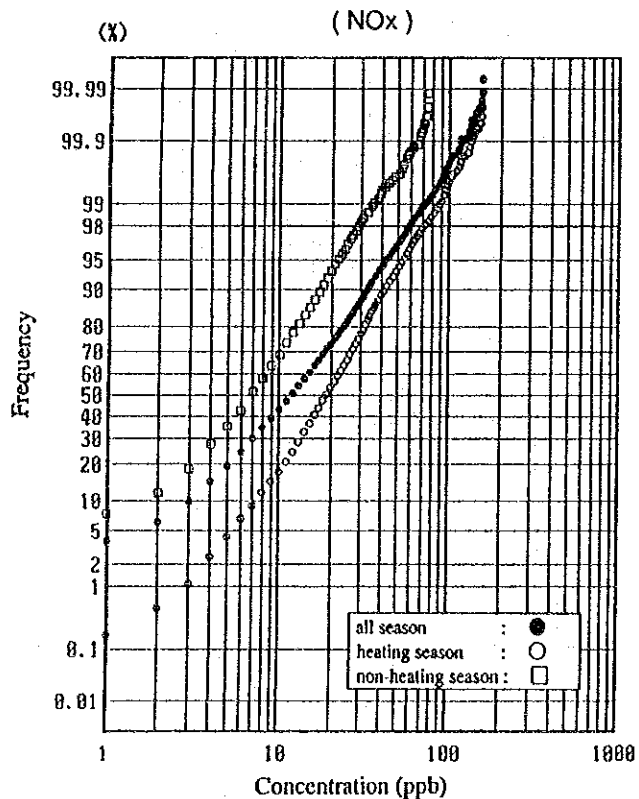
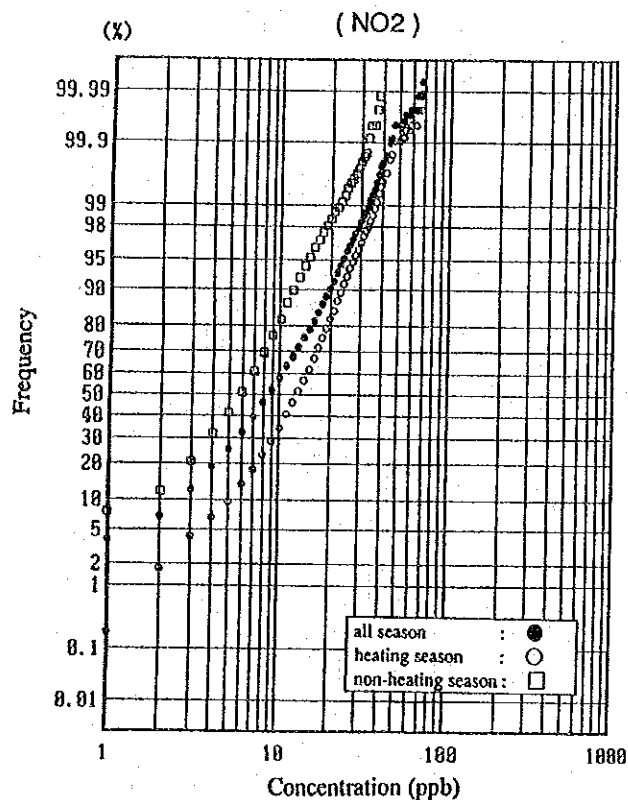
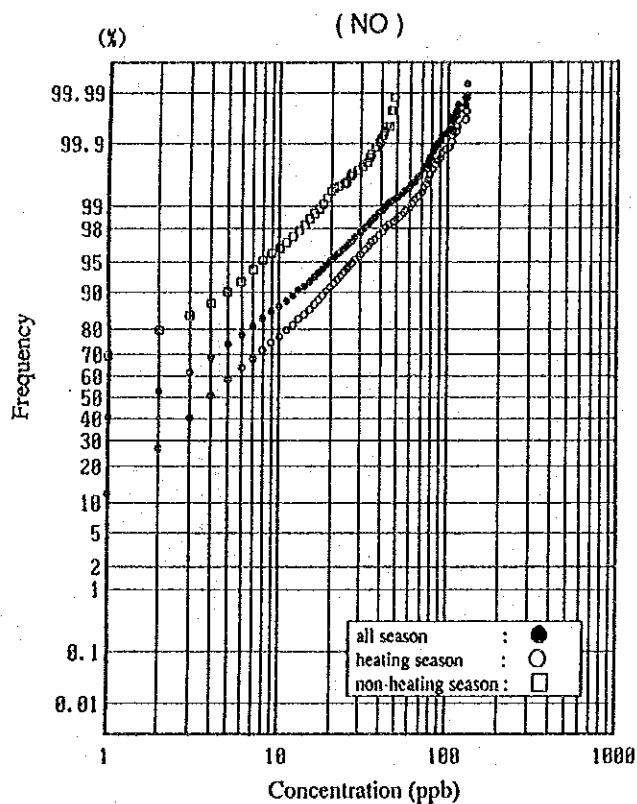


Figure D3.2.25 Cumulative Frequency Curve of Air Pollutant Concentration (30 minutes value : J4 Station)

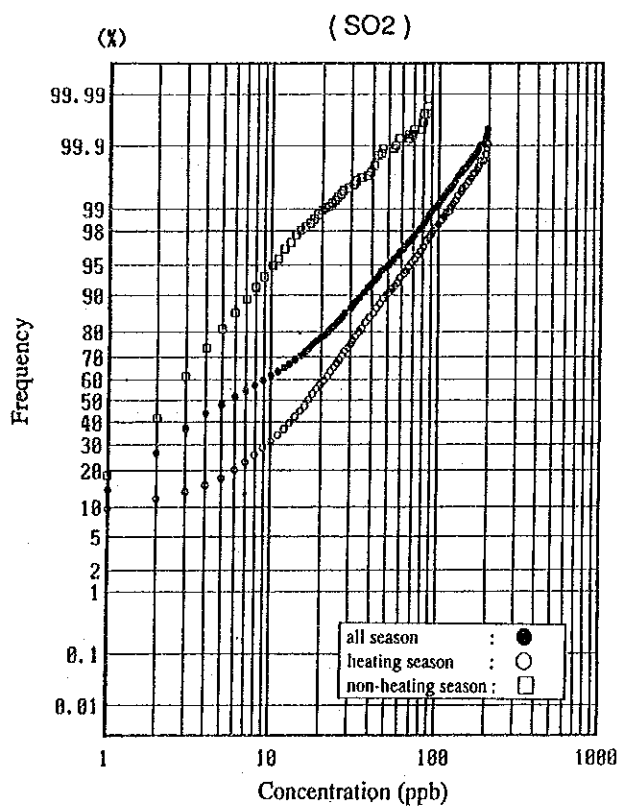
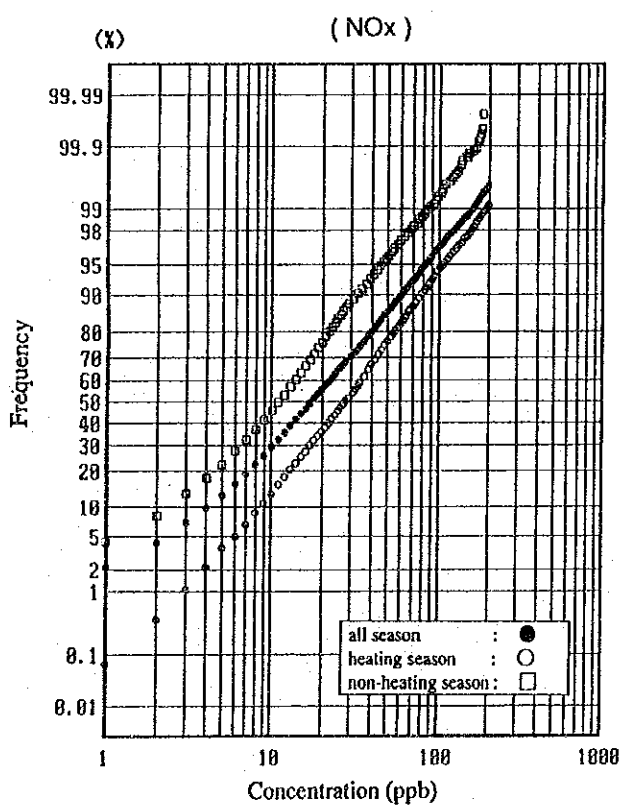
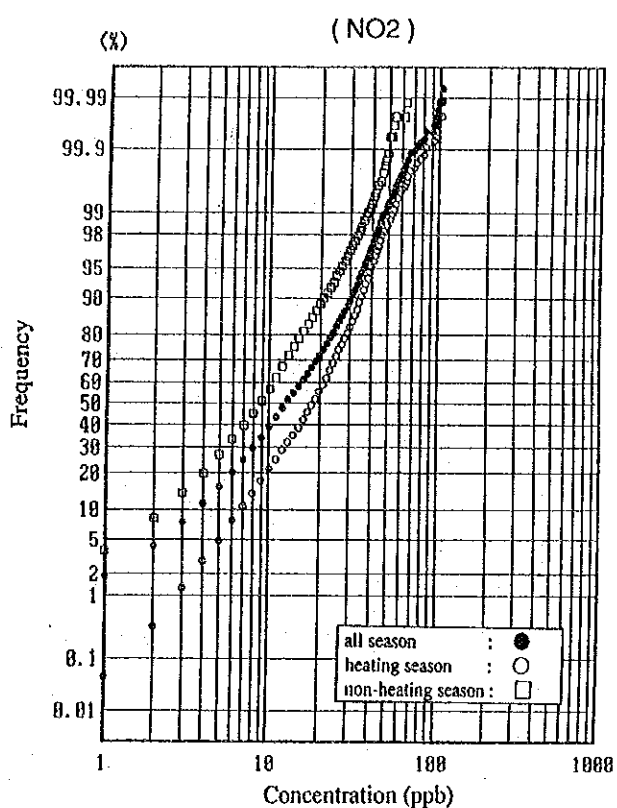
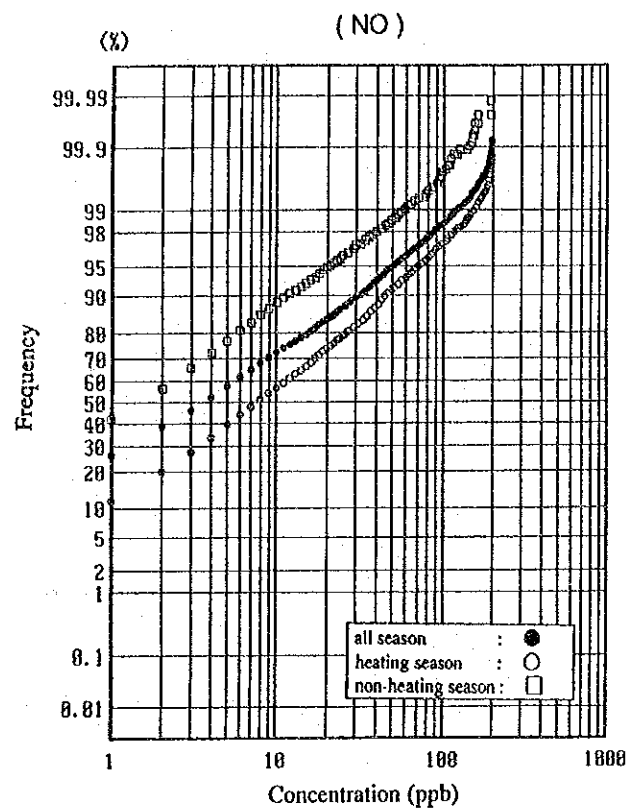


Figure D3.2.26 Cumulative Frequency Curve of Air Pollutant Concentration (30 minutes value : J5 Station)

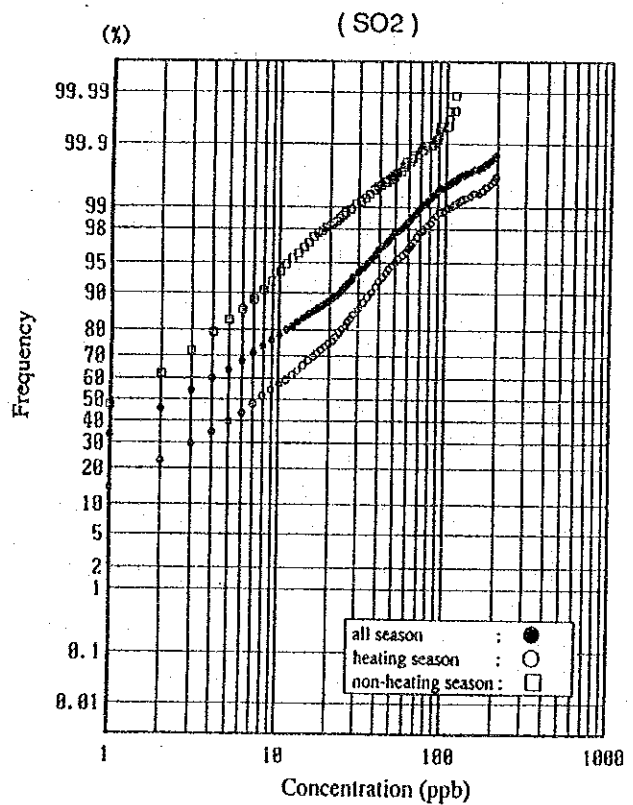
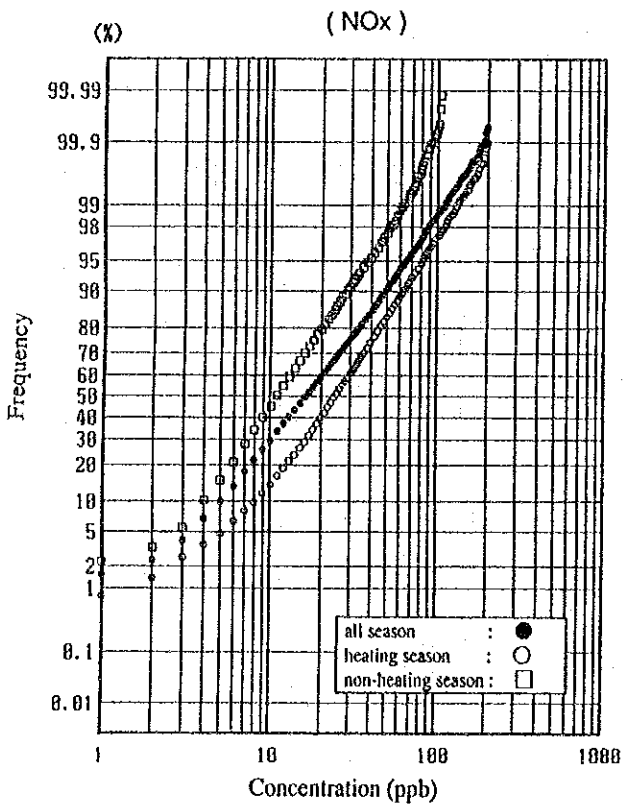
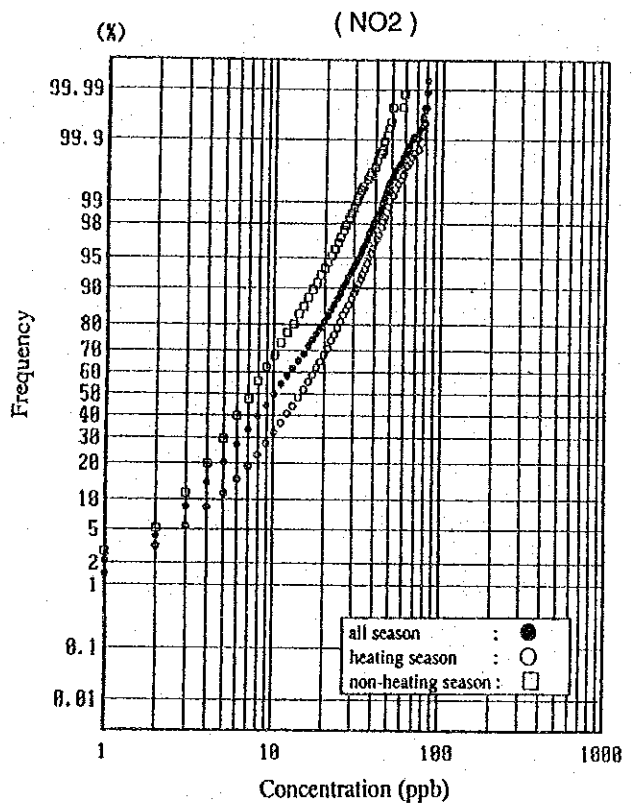
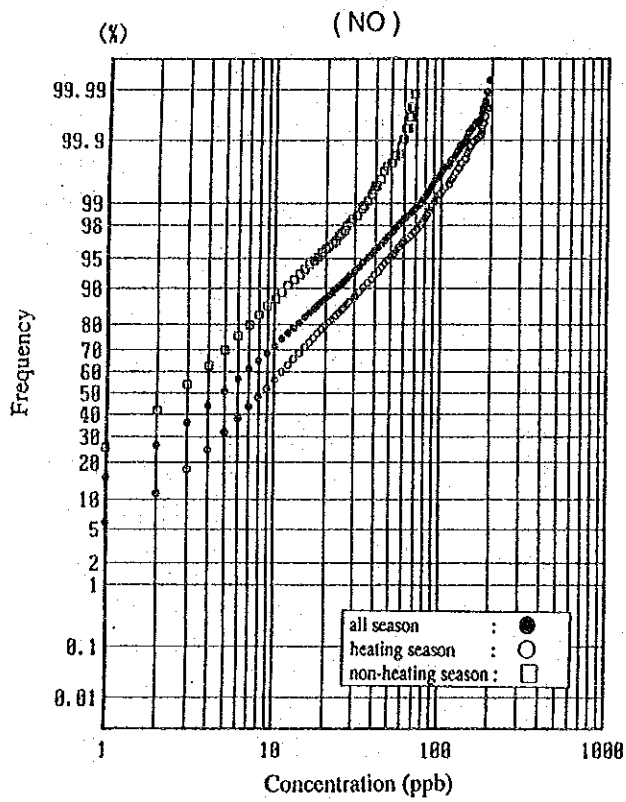


Figure D3.2.27 Cumulative Frequency Curve of Air Pollutant Concentration (30 minutes value : J6 Station)

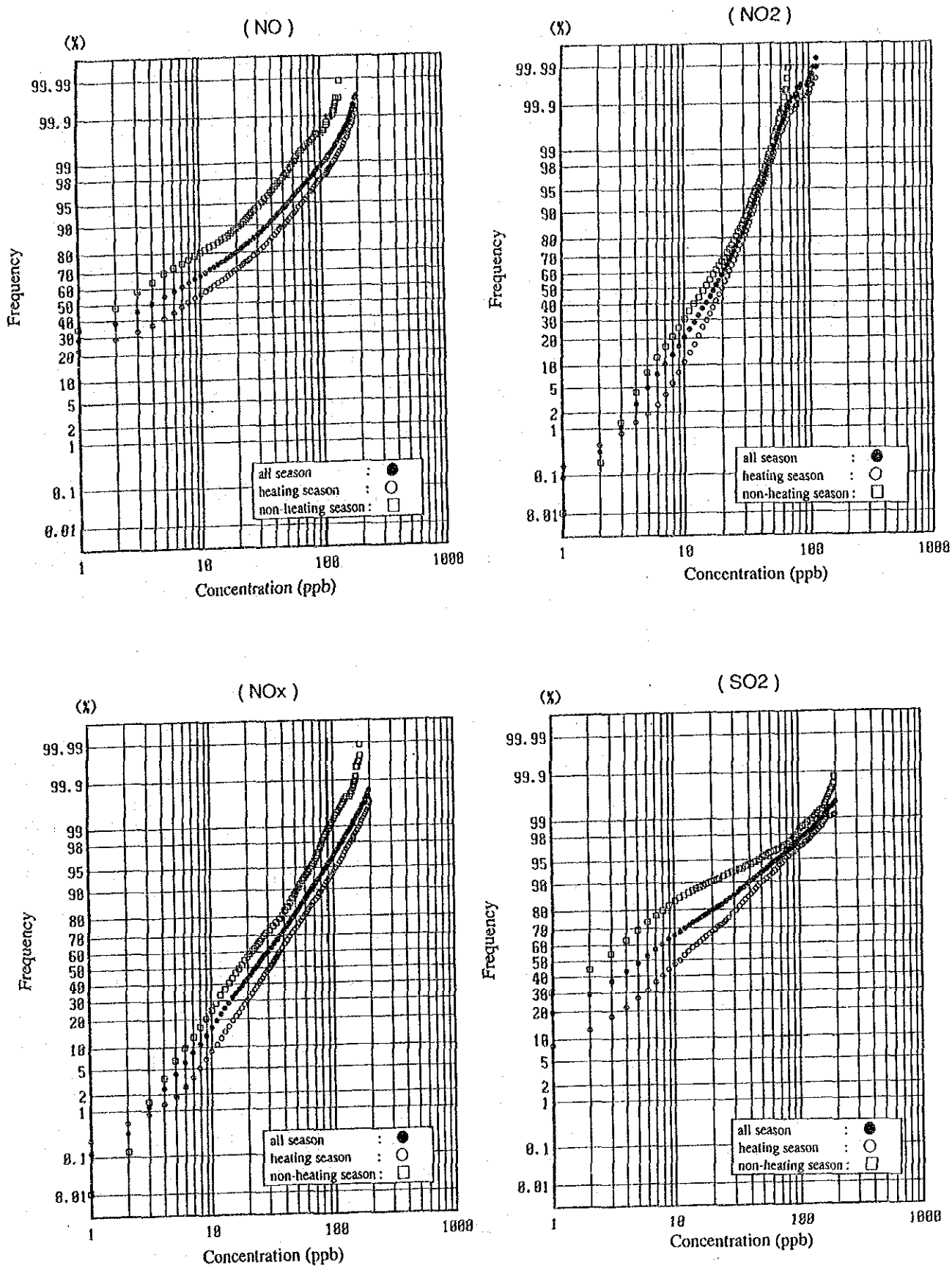


Figure D3.2.28 Cumulative Frequency Curve of Air Pollutant Concentration (30 minutes value : J2 Station)

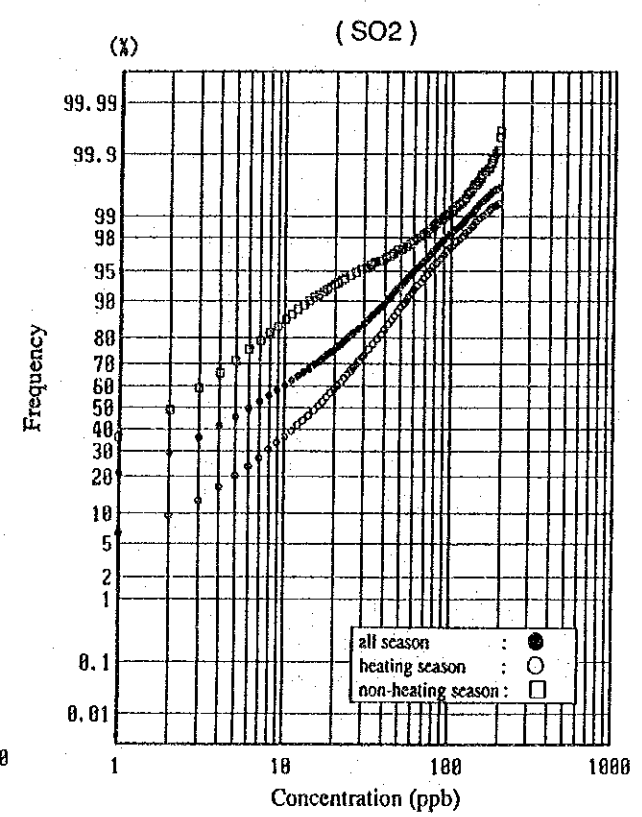
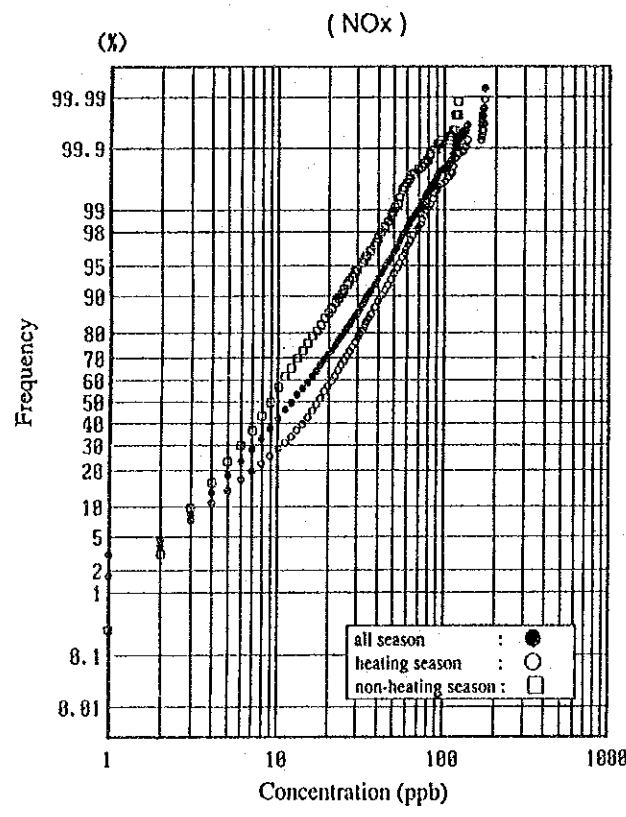
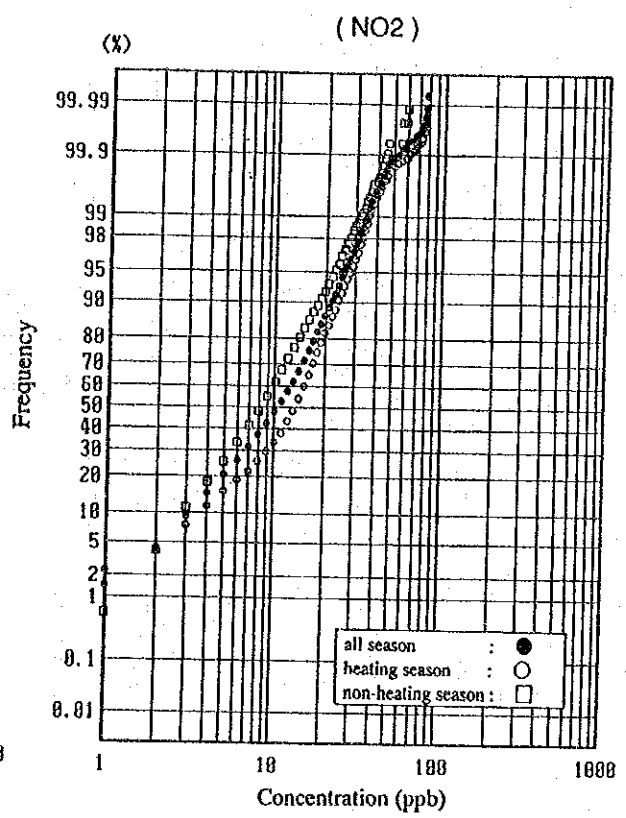
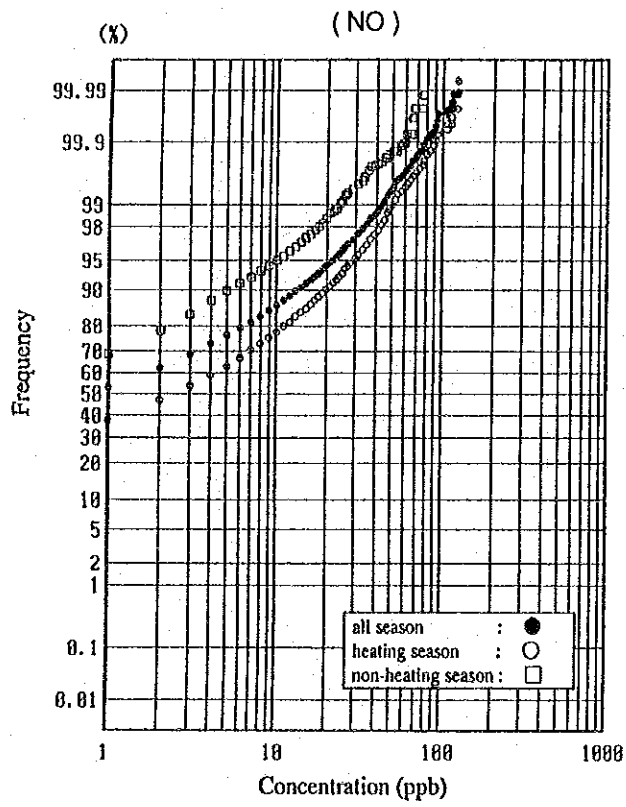


Figure D3.2.29 Cumulative Frequency Curve of Air Pollutant Concentration (30 minutes value : J3 Station)

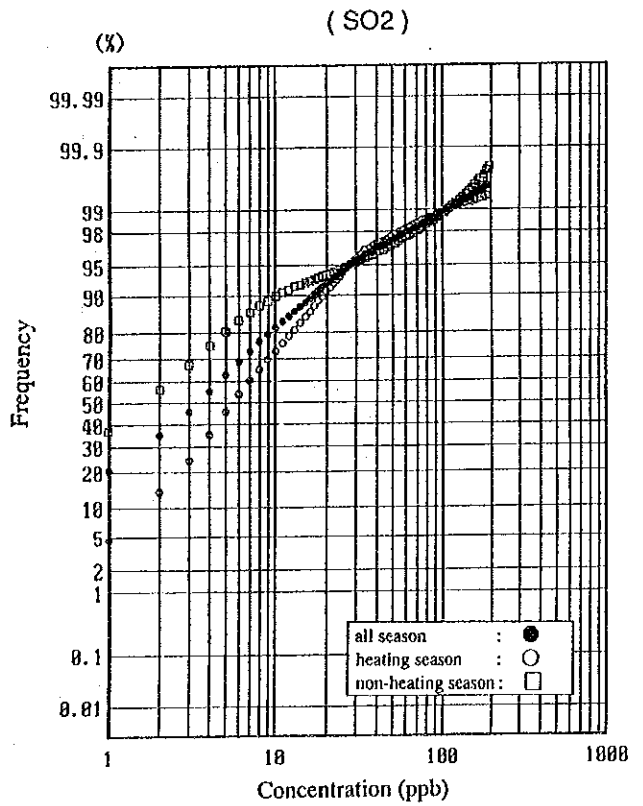
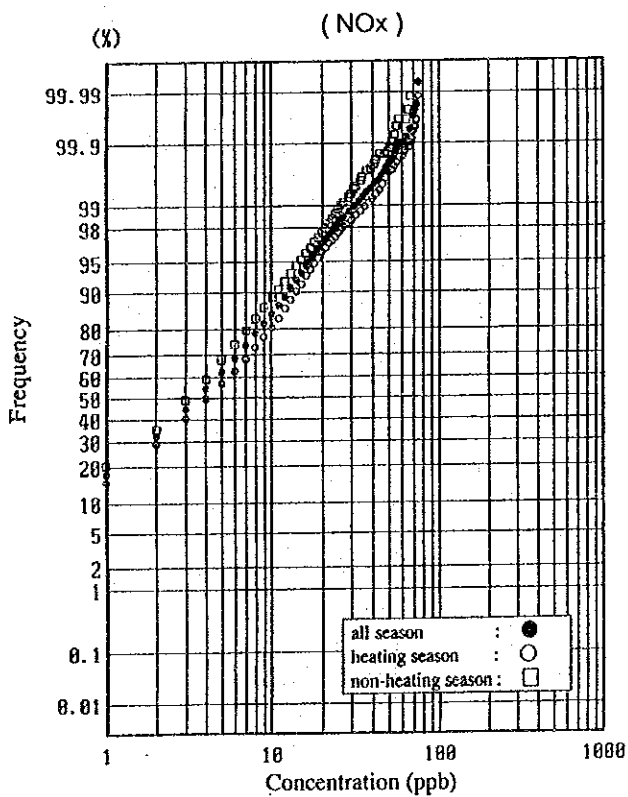
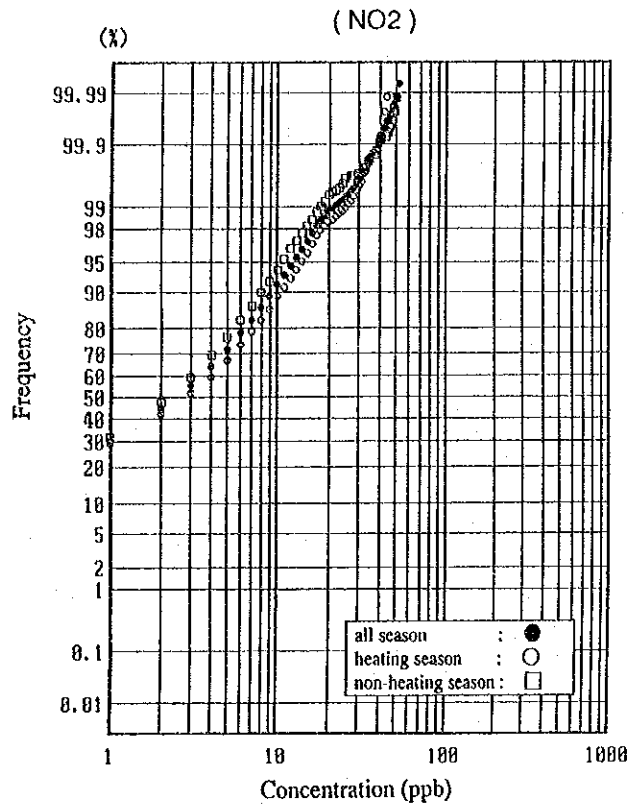
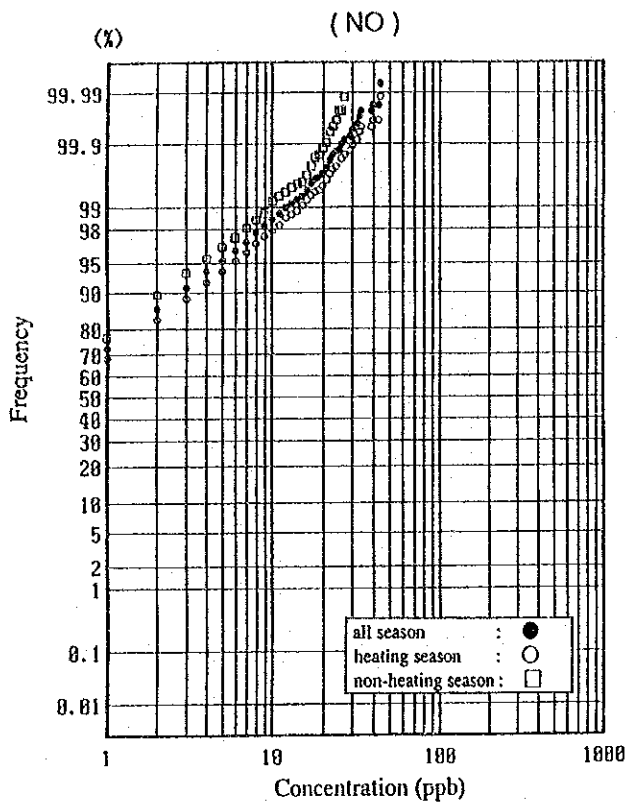


Figure D3.2.30 Cumulative Frequency Curve of Air Pollutant Concentration (30 minutes value : JF2 Station)

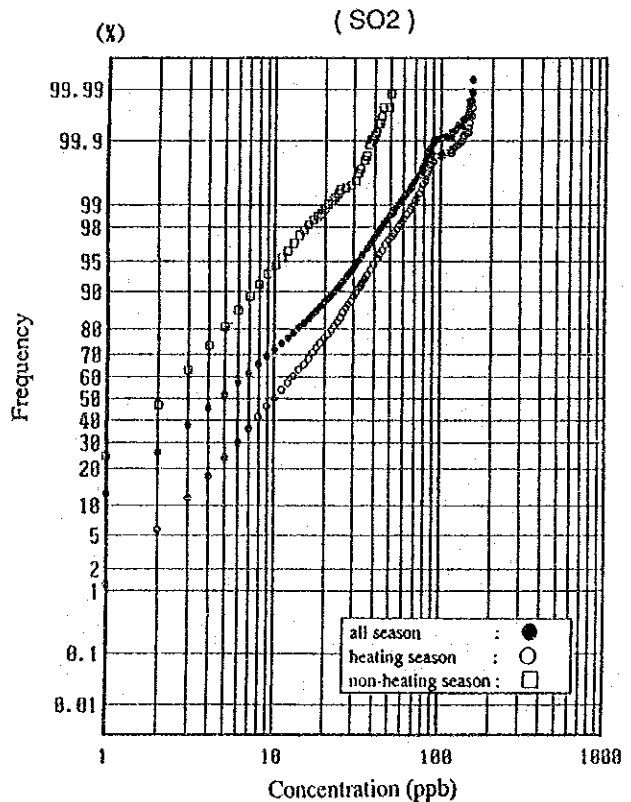
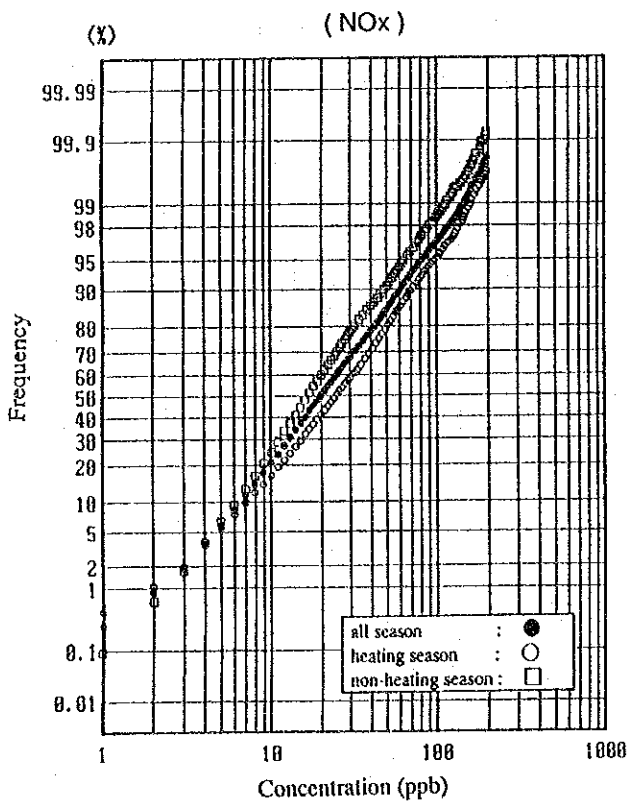
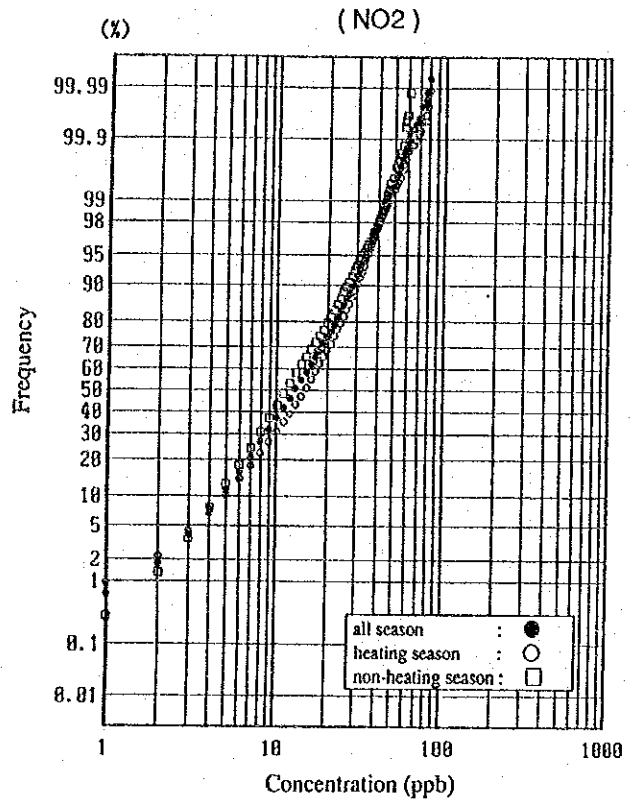
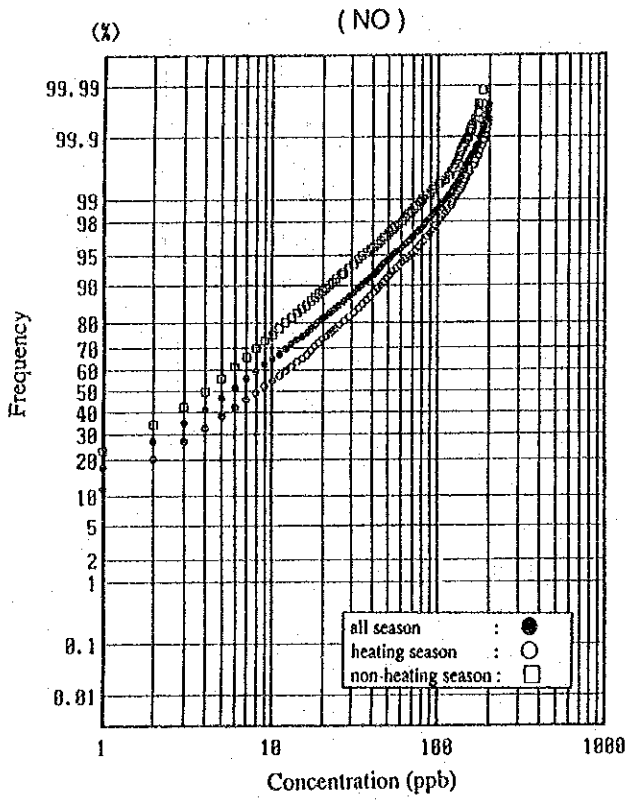


Figure D3.2.31 Cumulative Frequency Curve of Air Pollutant Concentration (30 minutes value : J7 Station)

Table D3.2.2 Appearance Frequency and Mean Wind Speed by Wind Direction (JF1, JF2)

		Wind direction																TOTAL	
		N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW		CALM
Year	Mean (m/s)	1.06	1.18	1.06	1.57	1.66	1.60	1.47	1.44	1.67	2.02	1.84	2.03	2.41	1.60	1.16	0.97	0.21	1.26
	Freq. (%)	1.65	0.99	1.86	2.53	6.90	14.72	5.13	1.01	1.16	1.31	2.00	4.20	11.02	8.93	5.40	3.24	27.95	100.00
non-heating season	Mean (m/s)	1.20	1.39	1.21	1.40	1.58	1.63	1.57	1.59	1.47	1.91	1.77	1.97	2.43	1.65	1.21	1.02	0.21	1.30
	Freq. (%)	1.91	1.38	2.54	2.93	6.54	11.45	4.62	1.45	1.45	1.55	2.68	5.04	11.49	9.96	6.08	3.57	25.35	100.00
heating season	Mean (m/s)	0.87	0.72	0.74	1.82	1.74	1.59	1.40	1.07	1.99	2.18	1.99	2.11	2.40	1.55	1.09	0.92	0.21	1.22
	Freq. (%)	1.38	0.61	1.19	2.12	7.25	17.97	5.64	0.56	0.86	1.07	1.32	3.37	10.54	7.92	4.72	2.92	30.54	100.00

Appearance Frequency and Mean Wind Speed by Wind Direction (JF2)

		Wind direction																TOTAL	
		N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW		CALM
Year	Mean (m/s)	1.50	1.88	2.32	2.38	1.82	1.38	1.45	1.49	2.04	3.13	3.57	3.44	3.29	2.13	1.40	1.00	0.29	2.18
	Freq. (%)	6.66	7.98	9.44	8.09	5.02	2.89	3.99	4.15	5.75	9.90	10.74	6.67	2.80	1.72	2.58	4.06	7.54	100.00
non-heating season	Mean (m/s)	1.49	1.95	2.25	2.32	1.81	1.44	1.50	1.51	1.93	2.86	3.20	3.05	3.12	1.92	1.46	1.06	0.30	2.04
	Freq. (%)	6.74	7.36	8.71	8.36	5.47	3.29	4.67	4.79	5.94	8.50	9.44	6.82	3.18	2.05	3.11	4.51	7.06	100.00
heating season	Mean (m/s)	1.52	1.82	2.38	2.45	1.83	1.29	1.38	1.46	2.15	3.33	3.85	3.84	3.52	2.44	1.32	0.93	0.28	2.32
	Freq. (%)	6.59	8.60	10.18	7.83	4.57	2.49	3.31	3.52	5.55	11.30	12.03	6.53	2.43	1.39	2.06	3.61	8.02	100.00

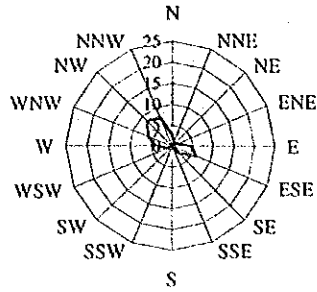
Table D3.2.3 Appearance Frequency and Mean Wind Speed by Wind Direction (JMI, J7)

		Wind direction														TOTAL			
		N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW		NW	NNW	CALM
Year	Mean (m/s)	1.87	2.13	2.48	3.00	2.31	1.86	2.47	2.93	2.71	2.49	1.92	2.29	3.06	3.28	3.11	2.41	0.24	2.42
	Freq. (%)	5.07	2.59	2.73	3.53	4.23	4.09	7.80	10.26	4.73	1.87	1.34	1.74	3.08	6.40	14.28	17.37	8.89	100.00
non-heating season	Mean (m/s)	1.90	2.52	3.05	3.05	2.49	1.97	2.37	2.90	2.73	2.44	1.99	2.33	2.76	2.95	2.75	2.25	0.25	2.40
	Freq. (%)	4.44	3.24	3.04	3.06	3.76	3.51	6.03	9.12	5.52	2.40	1.76	2.32	3.96	7.99	15.85	16.84	7.15	100.00
heating season	Mean (m/s)	1.84	1.49	1.78	2.96	2.18	1.77	2.53	2.95	2.68	2.58	1.77	2.21	3.59	3.81	3.56	2.56	0.23	2.44
	Freq. (%)	5.70	1.96	2.43	3.99	4.69	4.65	9.54	11.40	3.95	1.35	0.92	1.16	2.21	4.82	12.73	17.90	10.60	100.00

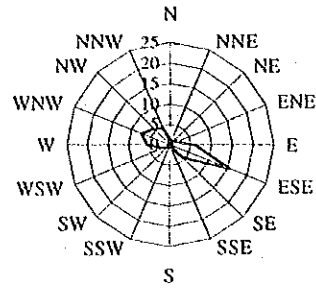
Appearance Frequency and Mean Wind Speed by Wind Direction (J7)

		Wind direction														TOTAL			
		N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW		NW	NNW	CALM
Year	Mean (m/s)	2.25	2.93	2.24	1.74	1.66	1.54	1.50	1.62	1.99	3.09	3.51	3.00	2.28	1.94	1.89	1.16	0.23	2.12
	Freq. (%)	23.72	7.92	3.40	2.24	2.28	2.03	1.99	3.77	6.47	9.00	8.59	4.43	2.86	1.93	1.73	7.05	10.59	100.00
non-heating season	Mean (m/s)	1.97	2.93	2.43	1.67	1.61	1.59	1.68	1.76	1.98	3.05	3.13	2.66	1.86	1.42	1.38	1.10	0.23	1.95
	Freq. (%)	21.62	9.55	4.43	2.73	3.01	2.76	2.39	3.76	5.50	7.39	7.24	4.31	3.13	2.07	1.73	7.09	11.28	100.00
heating season	Mean (m/s)	2.49	2.92	1.88	1.84	1.75	1.43	1.23	1.49	1.99	3.11	3.79	3.32	2.77	2.55	2.39	1.22	0.24	2.30
	Freq. (%)	25.81	6.30	2.37	1.77	1.55	1.30	1.59	3.78	7.44	10.60	9.92	4.55	2.59	1.79	1.73	7.01	9.90	100.00

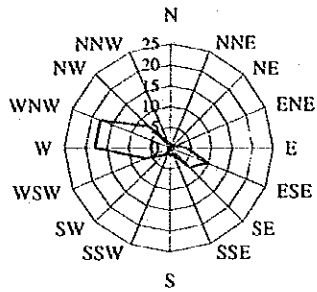
Time of 00 ~ 06 (non-heating season)
 Calm=52.7% , V.Mean=0.6m/s



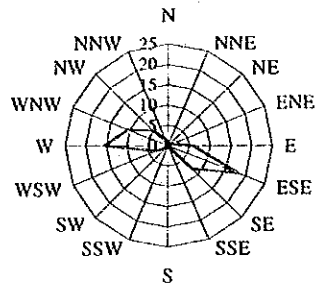
Time of 00 ~ 06 (heating season)
 Calm=41.6% , V.Mean=0.9m/s



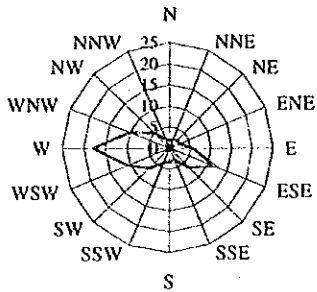
Time of 06 ~ 12 (non-heating season)
 Calm=18.3% , V.Mean=1.3m/s



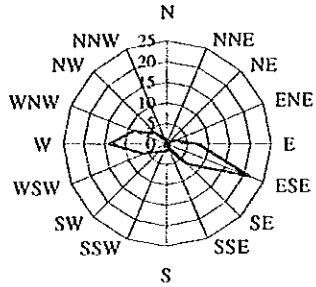
Time of 06 ~ 12 (heating season)
 Calm=26.3% , V.Mean=1.3m/s



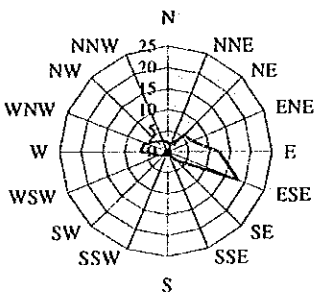
Time of 12 ~ 18 (non-heating season)
 Calm=3.7% , V.Mean=2.3m/s



Time of 12 ~ 18 (heating season)
 Calm=18.5% , V.Mean=1.7m/s



Time of 18 ~ 24 (non-heating season)
 Calm=26.5% , V.Mean=1.1m/s



Time of 18 ~ 24 (heating season)
 Calm=35.7% , V.Mean=1.0m/s

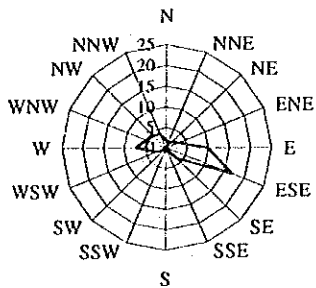
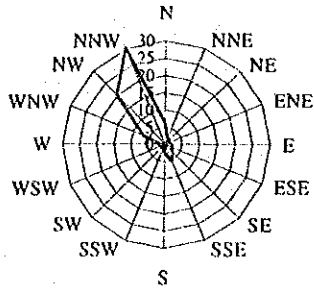
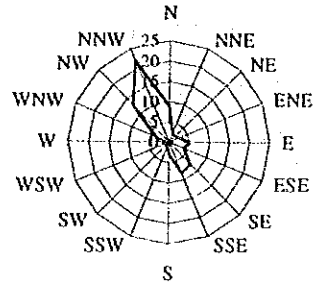


Figure D3.2.32 Wind Direction Distribution Diagram of Time Zone (JF1, 00:00-24:00)

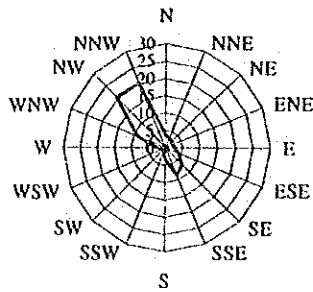
Time of 00 ~ 06 (non-heating season)
Calm=11.4% , V.Mean=1.7m/s



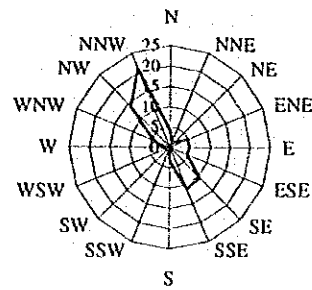
Time of 00 ~ 06 (heating season)
Calm=14.0% , V.Mean=2.1m/s



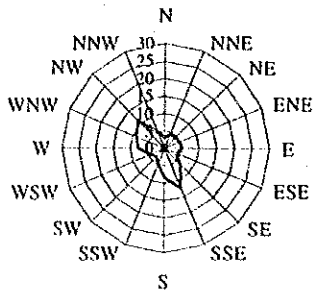
Time of 06 ~ 12 (non-heating season)
Calm=6.7% , V.Mean=2.3m/s



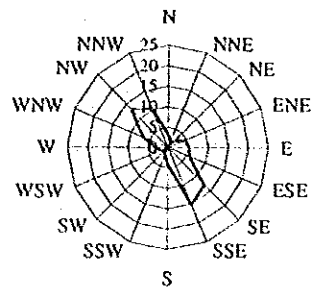
Time of 06 ~ 12 (heating season)
Calm=10.1% , V.Mean=2.6m/s



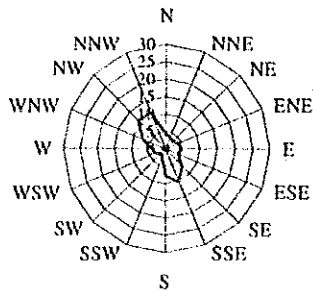
Time of 12 ~ 18 (non-heating season)
Calm=0.8% , V.Mean=3.5m/s



Time of 12 ~ 18 (heating season)
Calm=6.6% , V.Mean=3.1m/s



Time of 18 ~ 24 (non-heating season)
Calm=9.6% , V.Mean=2.1m/s



Time of 18 ~ 24 (heating season)
Calm=11.8% , V.Mean=2.0m/s

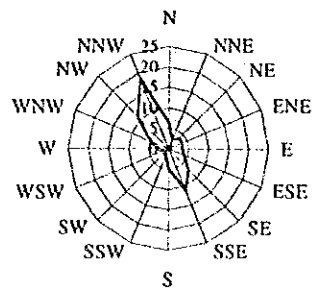
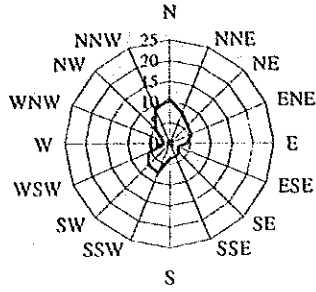
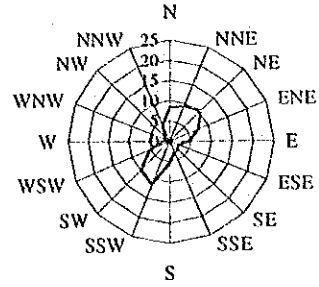


Figure D3.2.33 Wind Direction Distribution Diagram of Time Zone (JM1, 00:00-24:00)

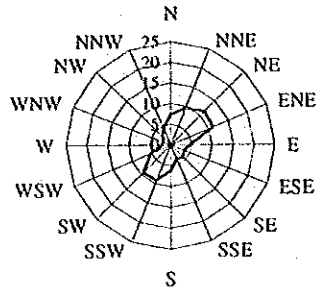
Time of 00 ~ 06 (non-heating season)
 Calm=15.5% , V.Mean=1.3m/s



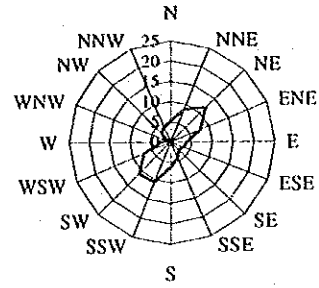
Time of 00 ~ 06 (heating season)
 Calm=11.0% , V.Mean=2.1m/s



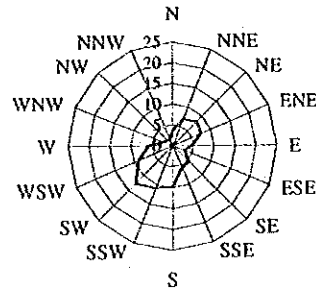
Time of 06 ~ 12 (non-heating season)
 Calm=3.3% , V.Mean=2.1m/s



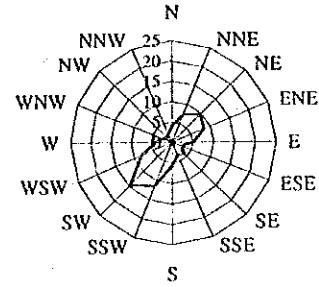
Time of 06 ~ 12 (heating season)
 Calm=6.2% , V.Mean=2.5m/s



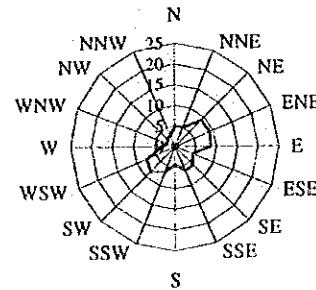
Time of 12 ~ 18 (non-heating season)
 Calm=0.8% , V.Mean=3.0m/s



Time of 12 ~ 18 (heating season)
 Calm=4.7% , V.Mean=2.7m/s



Time of 18 ~ 24 (non-heating season)
 Calm=8.7% , V.Mean=1.8m/s



Time of 18 ~ 24 (heating season)
 Calm=10.1% , V.Mean=2.1m/s

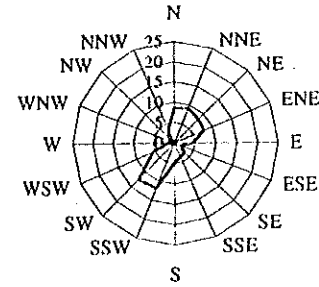
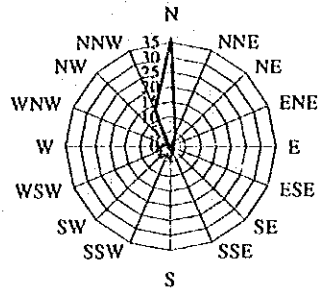
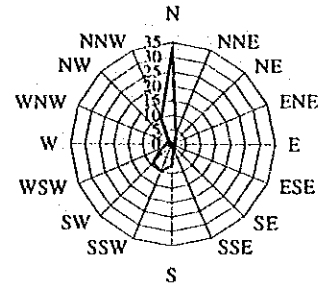


Figure D3.2.34 Wind Direction Distribution Diagram of Time Zone (JF2, 00:00-24:00)

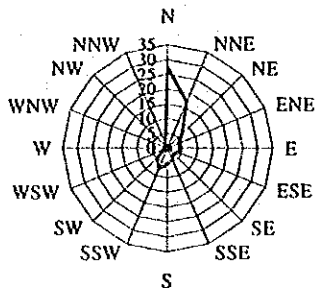
Time of 00~06 (non-heating season)
 Calm=19.7% , V.Mean=1.3m/s



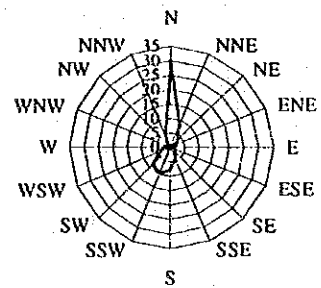
Time of 00~06 (heating season)
 Calm=12.2% , V.Mean=2.1m/s



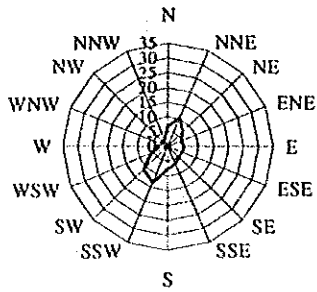
Time of 06~12 (non-heating season)
 Calm=6.2% , V.Mean=2.1m/s



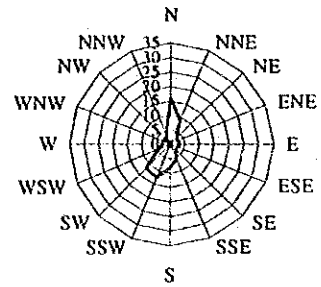
Time of 06~12 (heating season)
 Calm=8.3% , V.Mean=2.4m/s



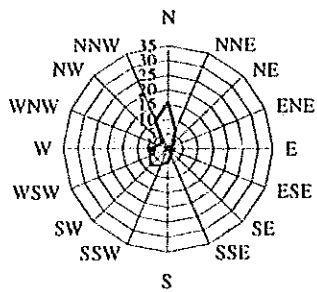
Time of 12~18 (non-heating season)
 Calm=0.7% , V.Mean=2.9m/s



Time of 12~18 (heating season)
 Calm=6.3% , V.Mean=2.6m/s



Time of 18~24 (non-heating season)
 Calm=18.5% , V.Mean=1.6m/s



Time of 18~24 (heating season)
 Calm=12.8% , V.Mean=2.1m/s

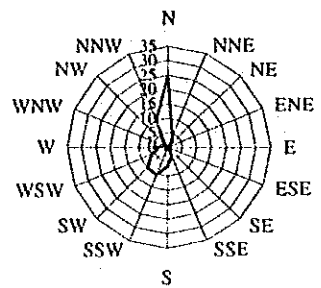


Figure D3.2.35 Wind Direction Distribution Diagram of Time Zone (J7, 00:00-24:00)

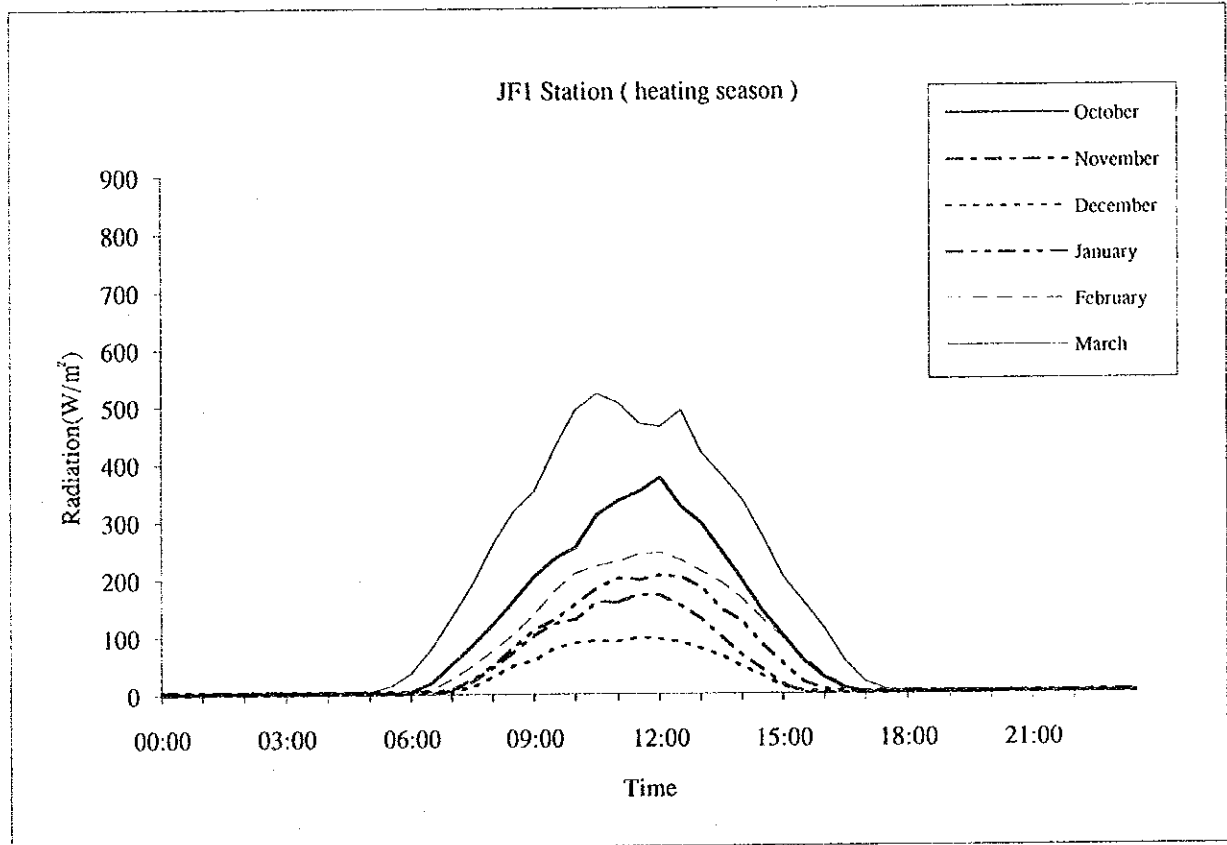
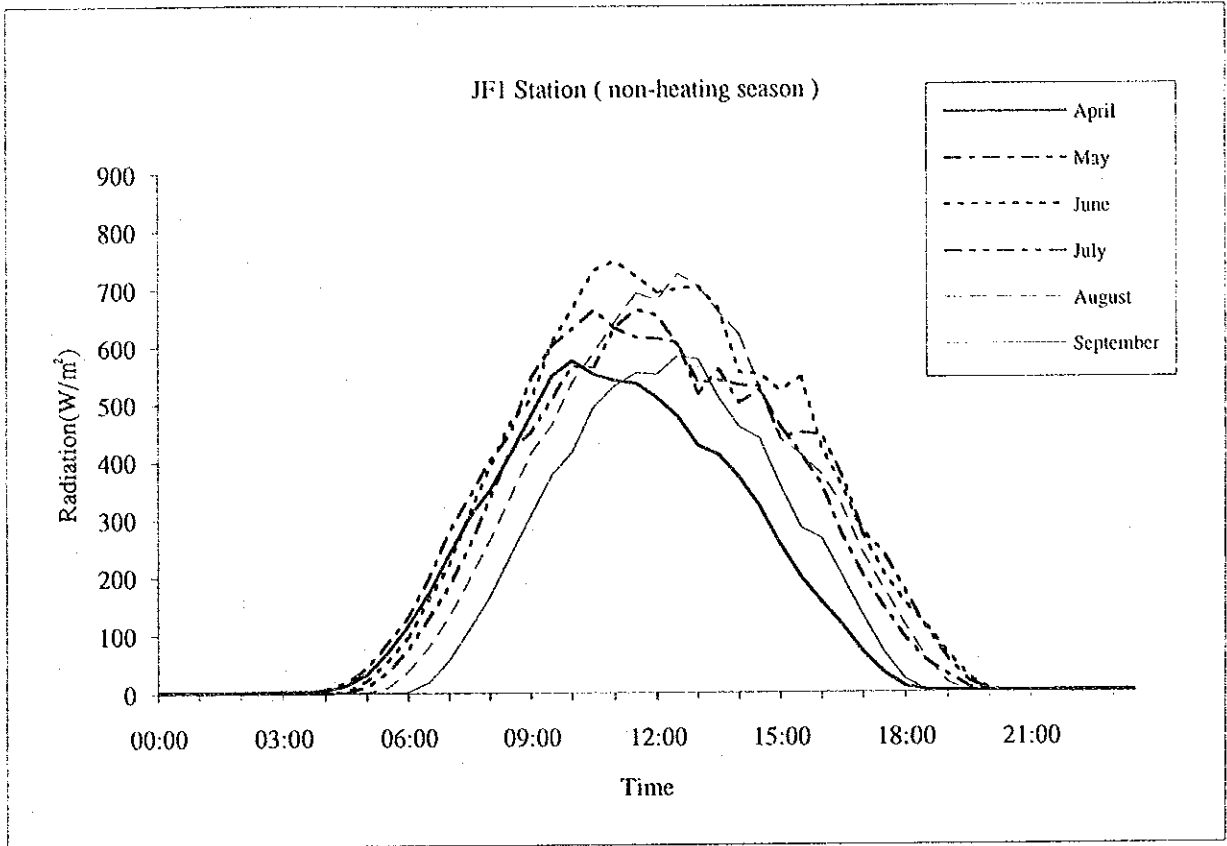


Figure D3.2.36 Hourly Variations by Month of Solar Radiation (JF1)

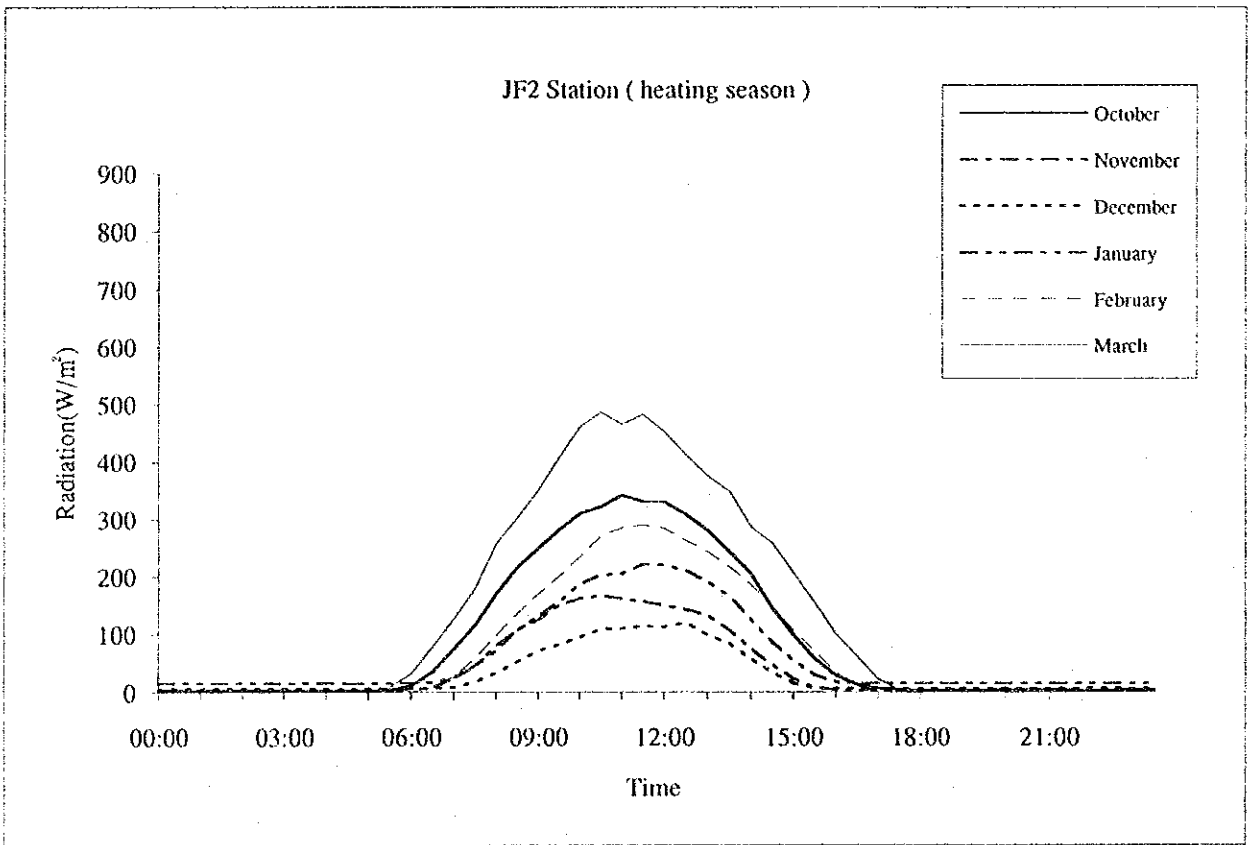
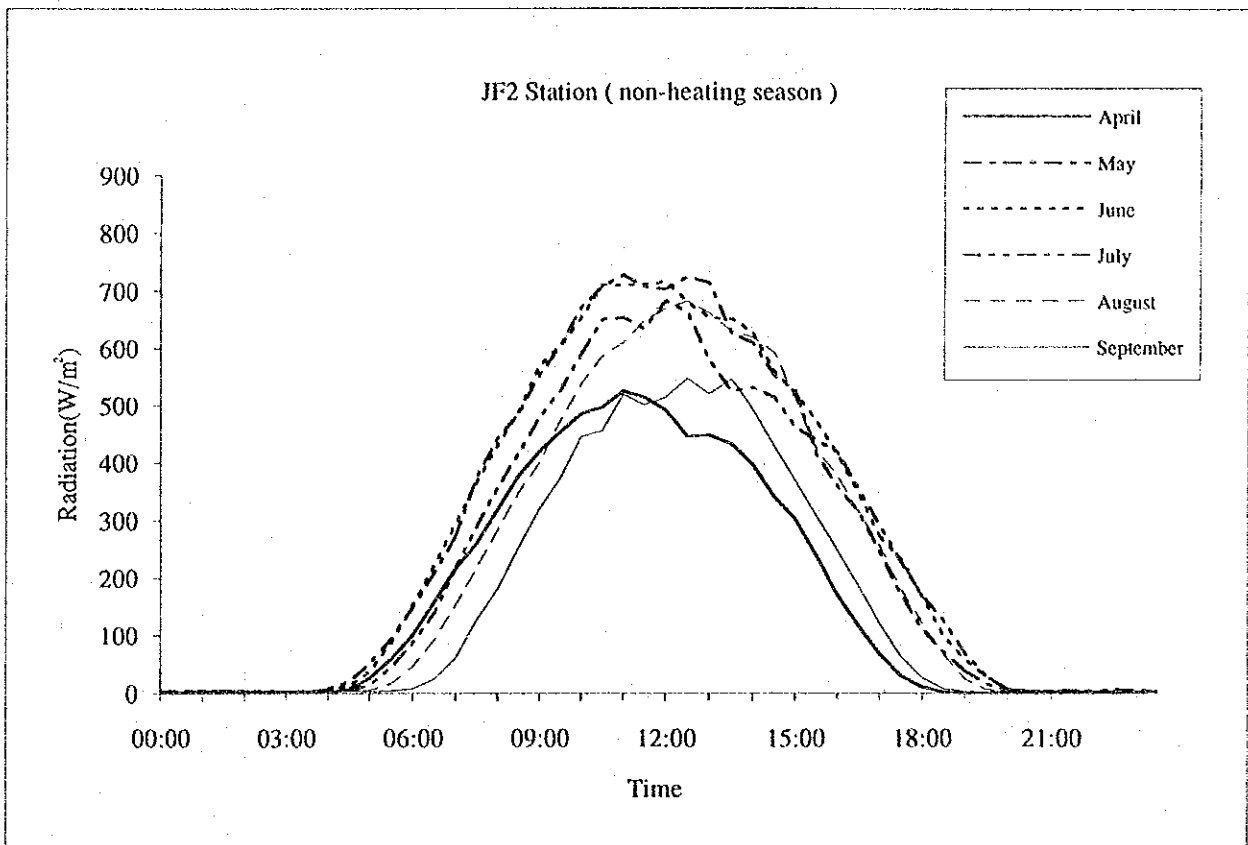


Figure D3.2.37 Hourly Variations by Month of Solar Radiation (JF2)

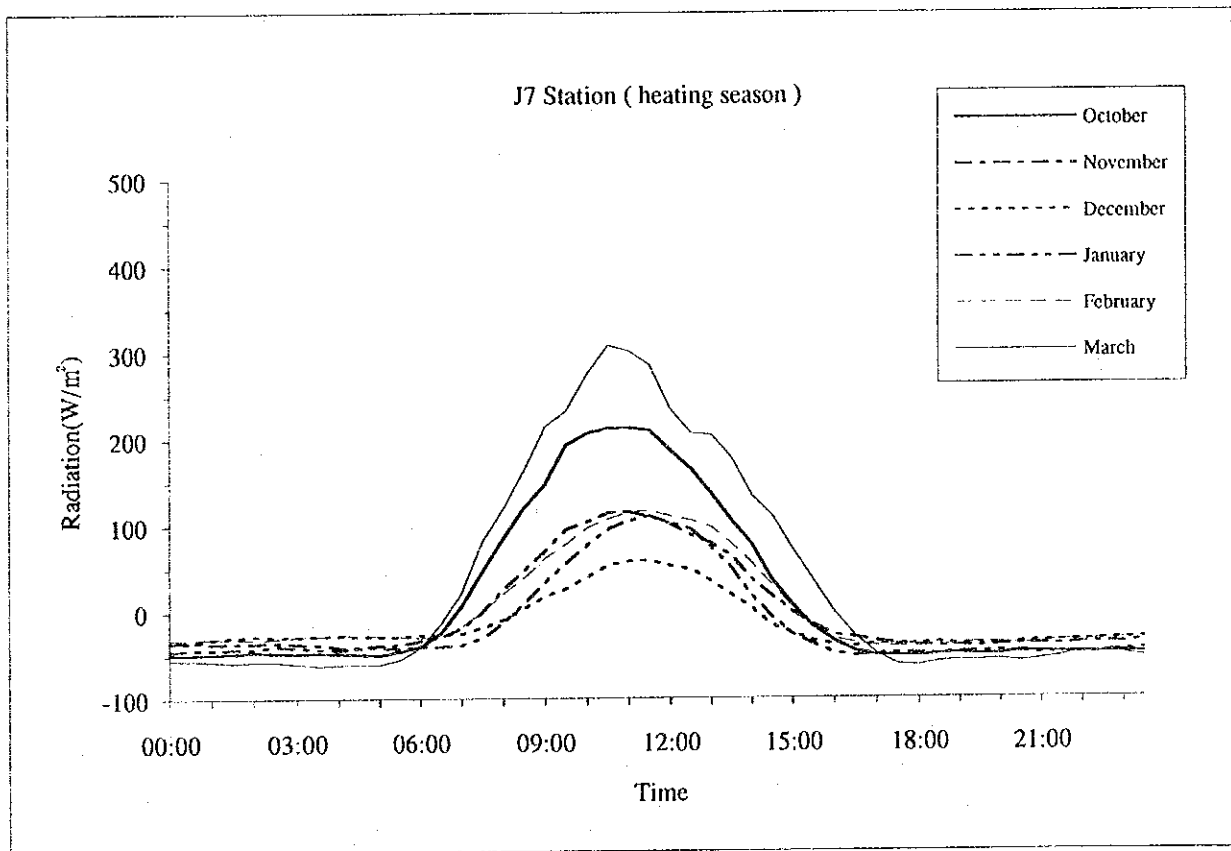
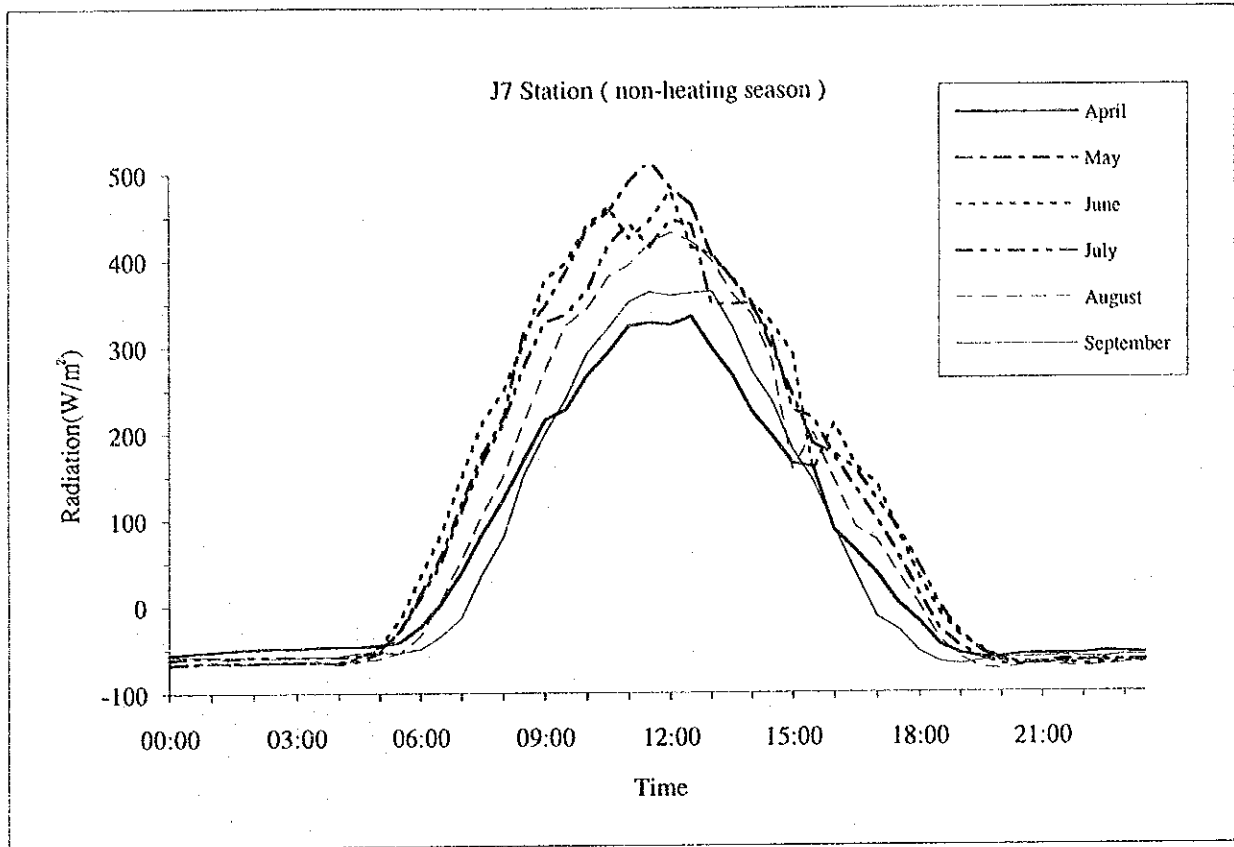


Figure D3.2.38 Hourly Variations by Month of Net Radiation (J7)

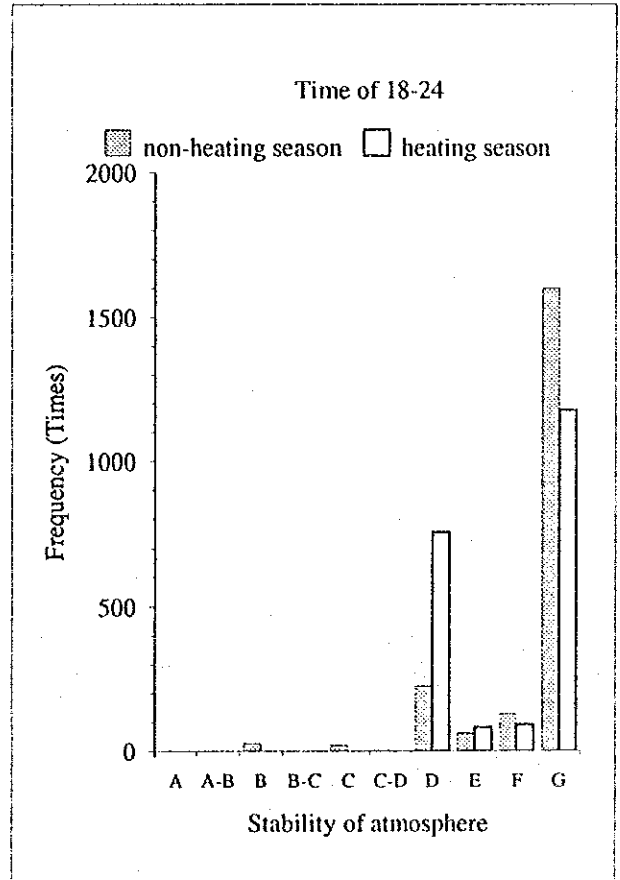
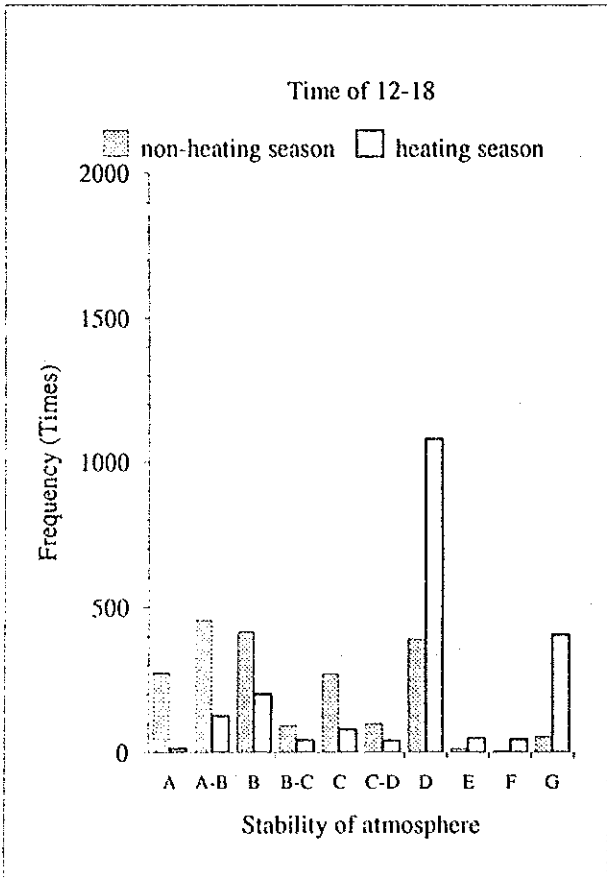
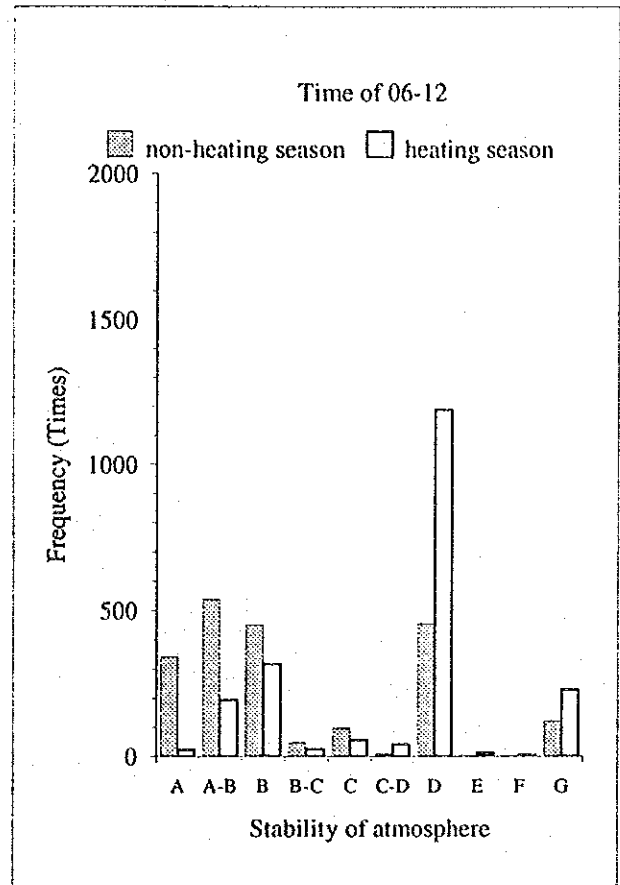
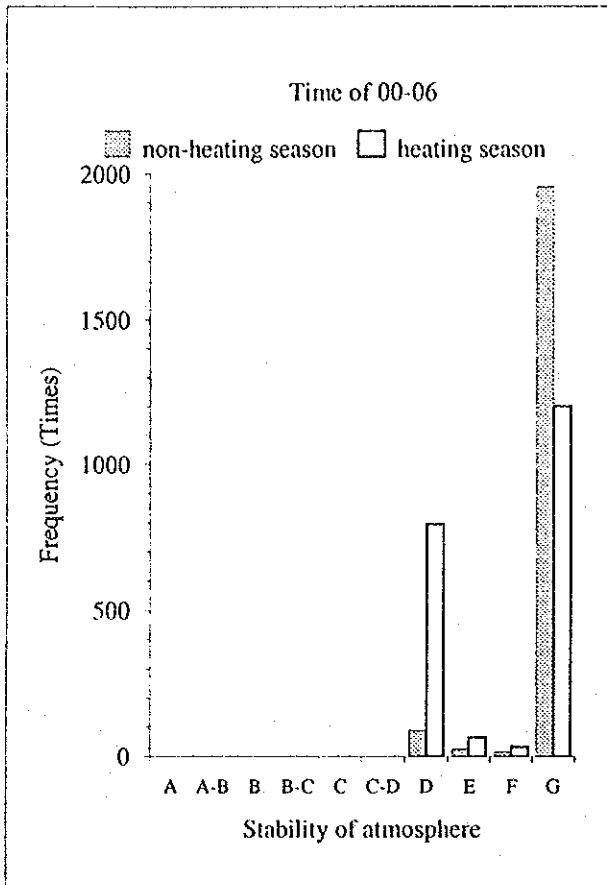


Figure D3.2.39 Appearance Frequency of Stability Classes (JF1, 00:00-24:00)

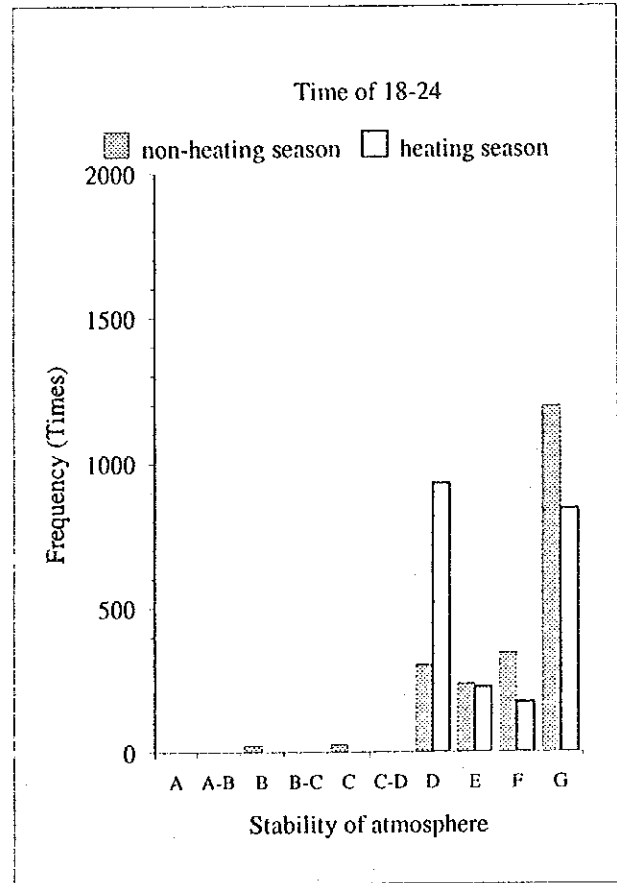
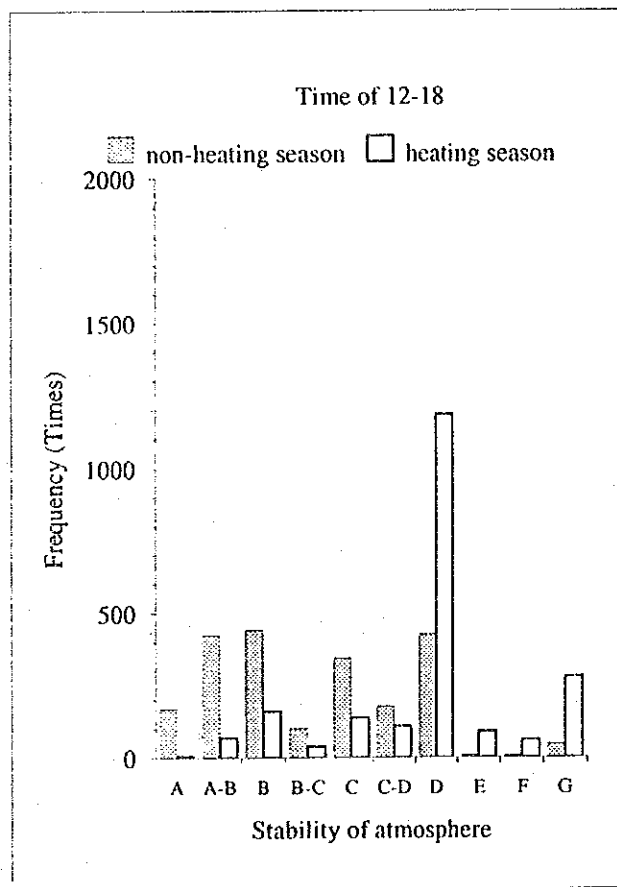
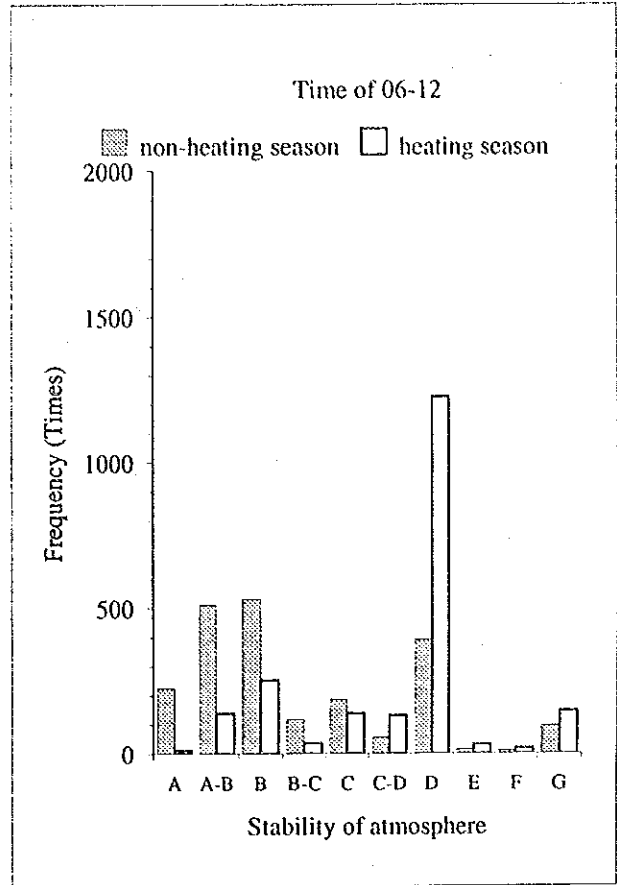
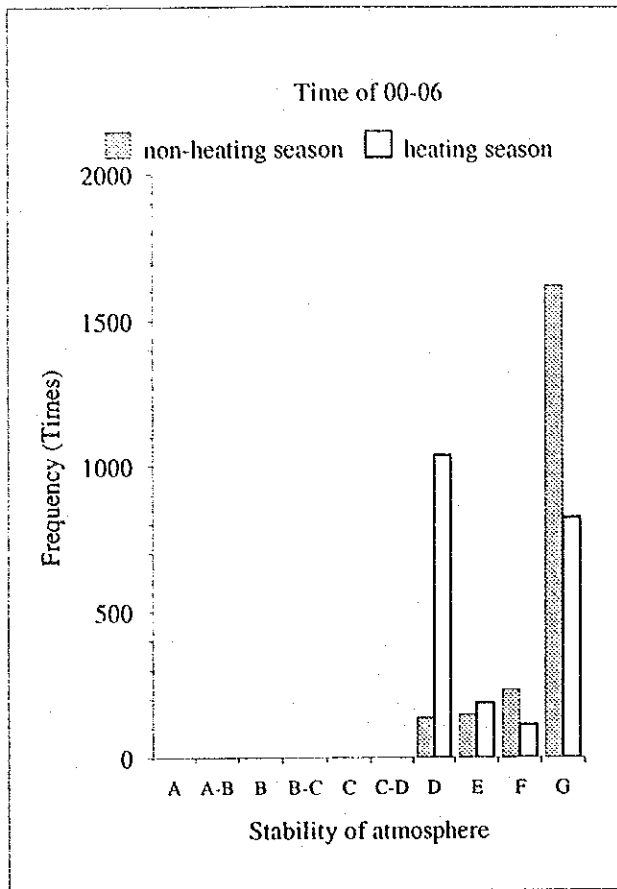


Figure D3.2.40 Appearance Frequency of Stability Classes (JF2, 00:00-24:00)

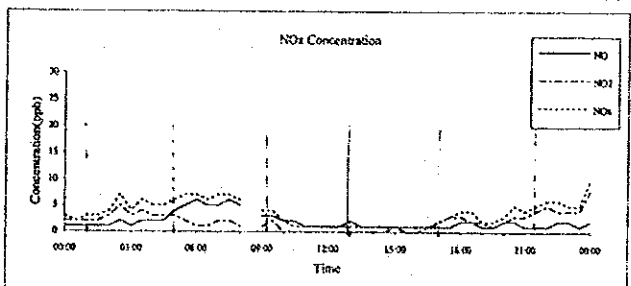
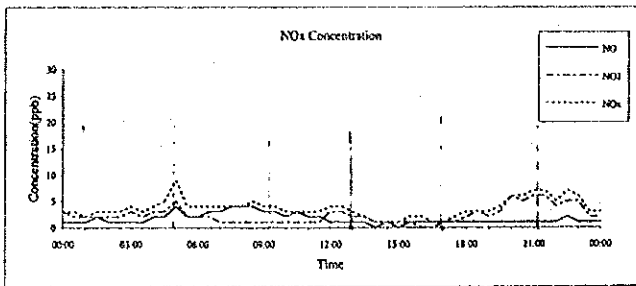
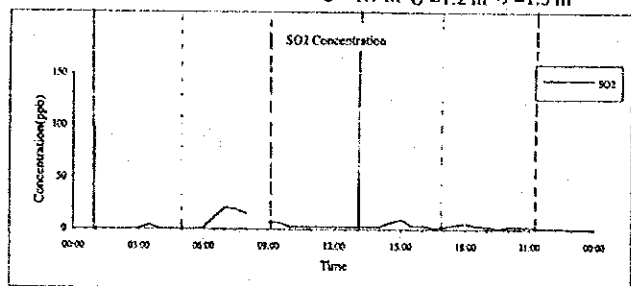
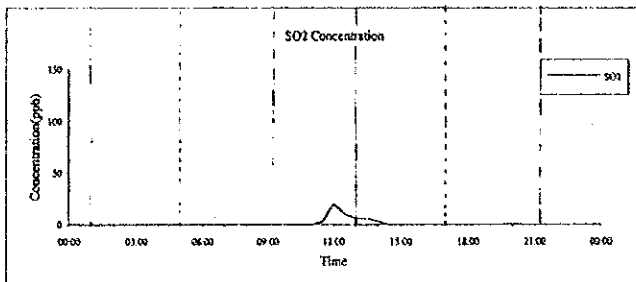
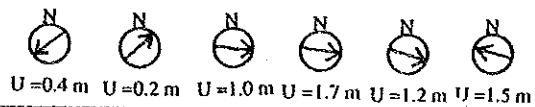
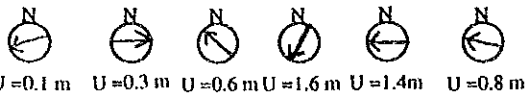
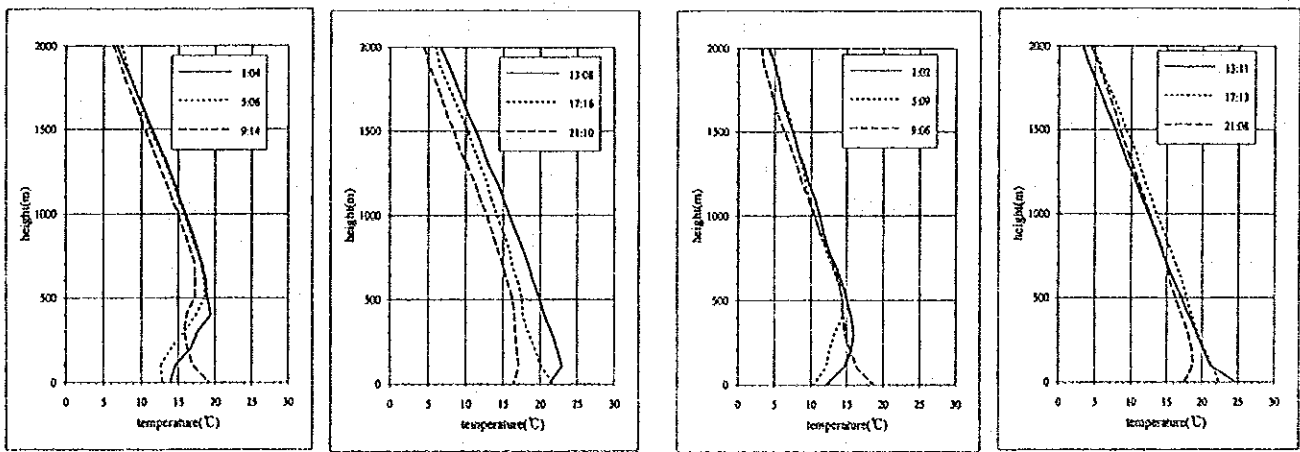
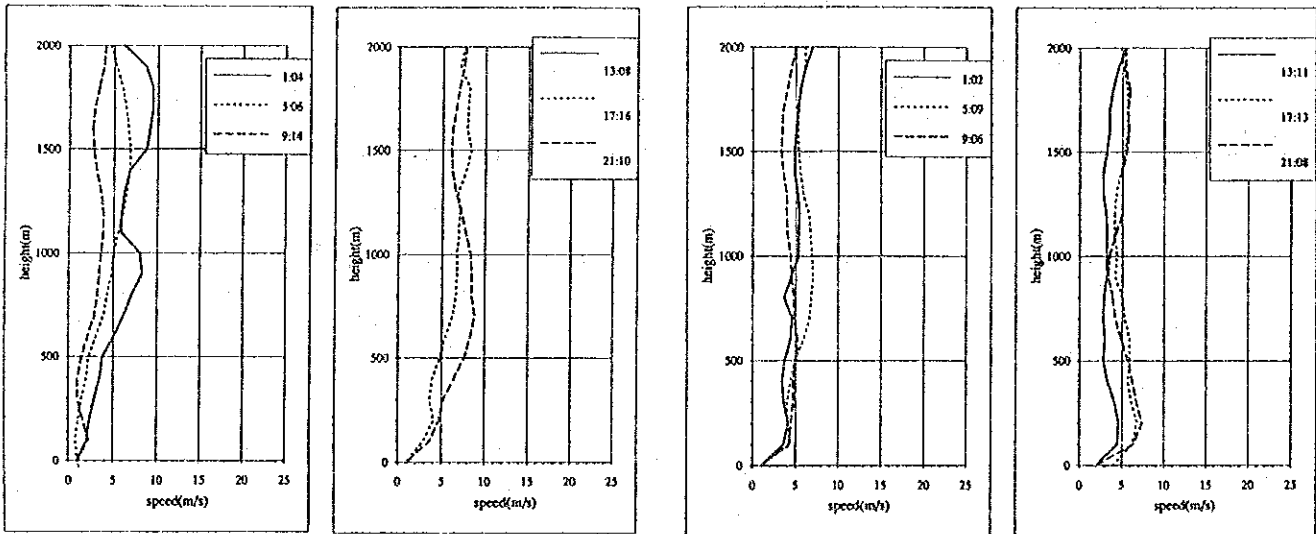


Figure D3.2.41 Vertical Profiles of Wind Speed and Temperature with Hourly Variation of Pollutant Concentration (JF1 May 31, June 1)

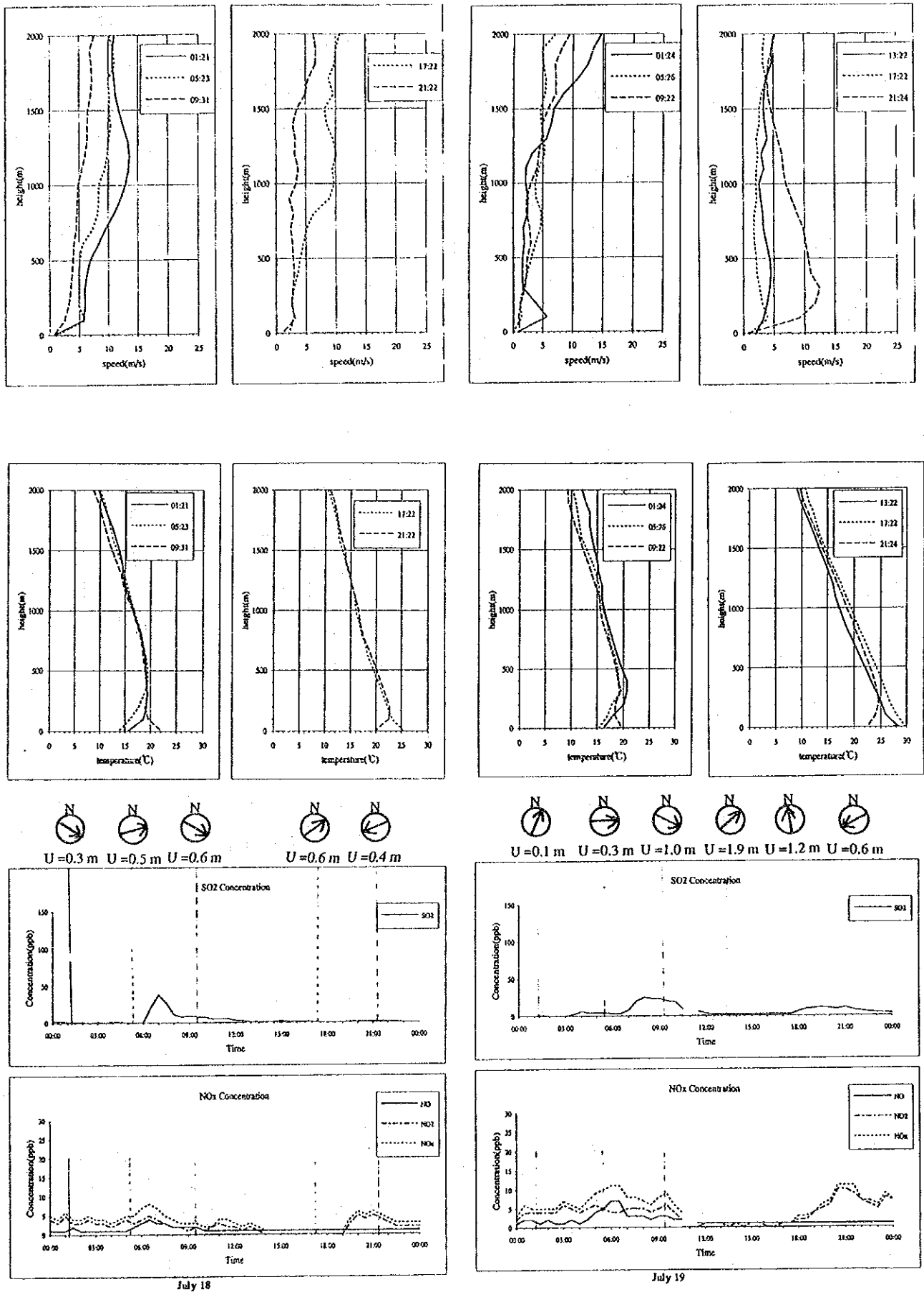


Figure D3.2.42 Vertical Profiles of Wind Speed and Temperature with Hourly Variation of Pollutant Concentration (JF1 July 18, 19)

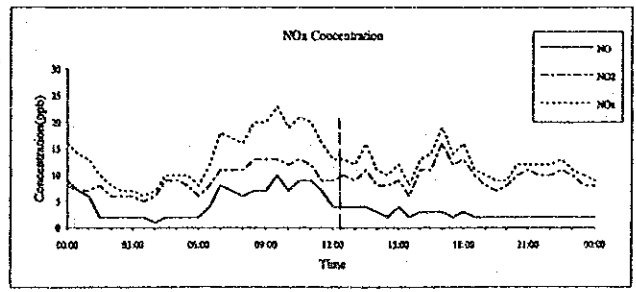
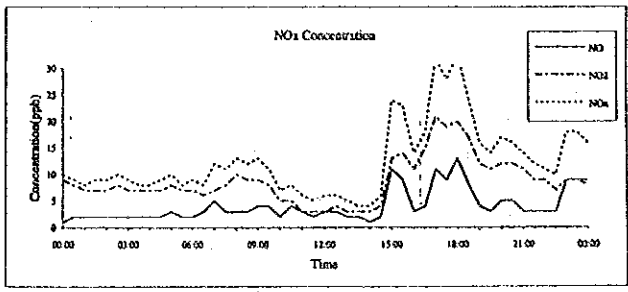
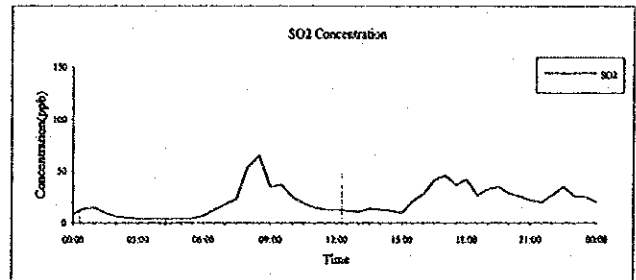
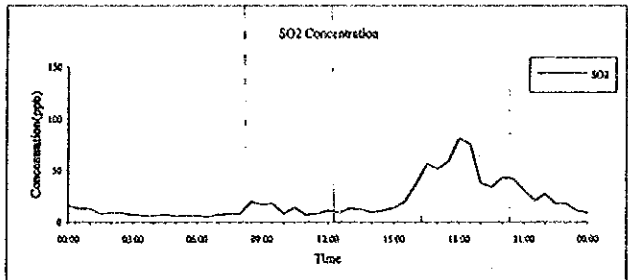
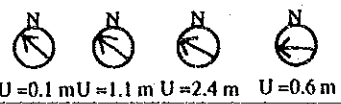
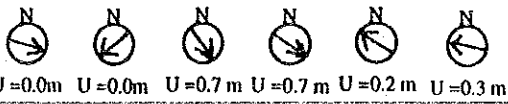
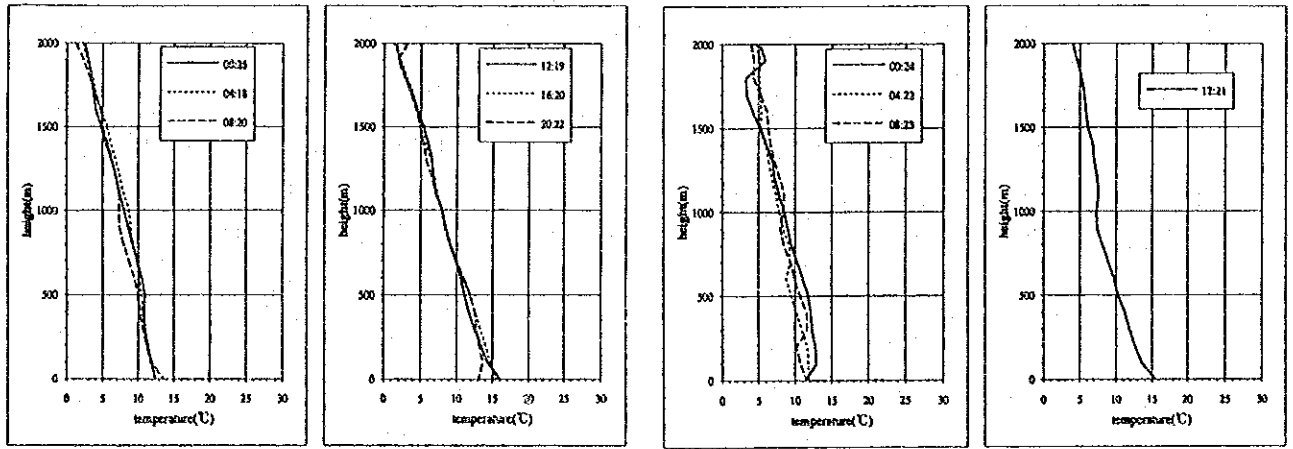
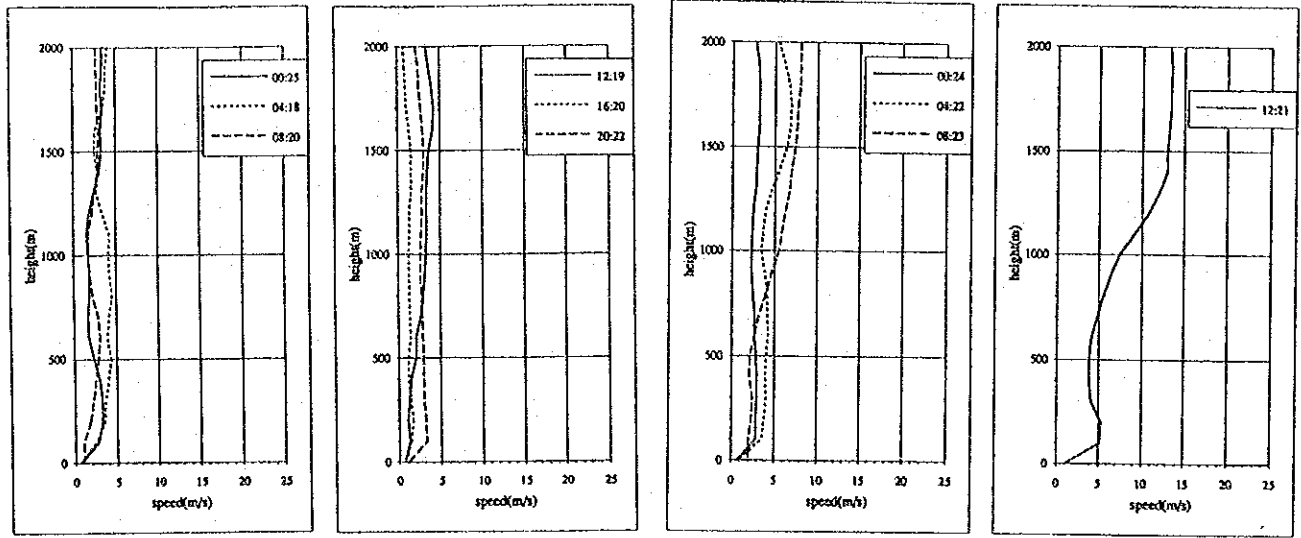


Figure D3.2.43 Vertical Profiles of Wind Speed and Temperature with Hourly Variation of Pollutant Concentration (JF1 October 5, 6)

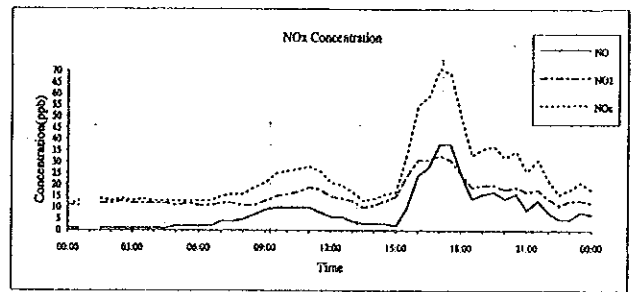
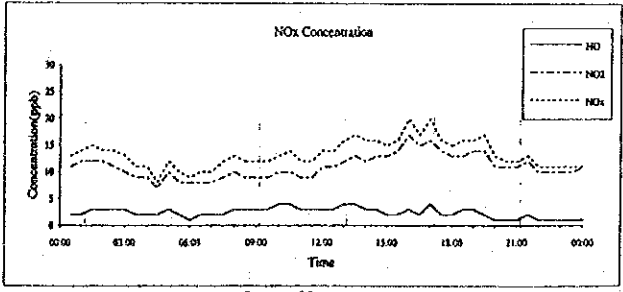
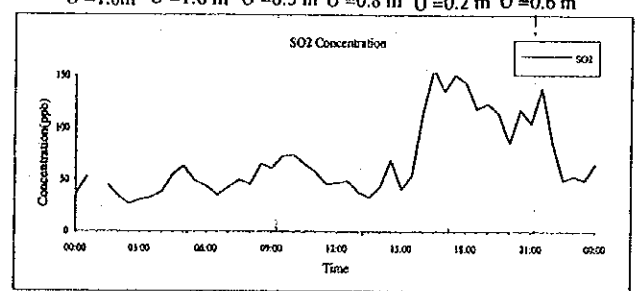
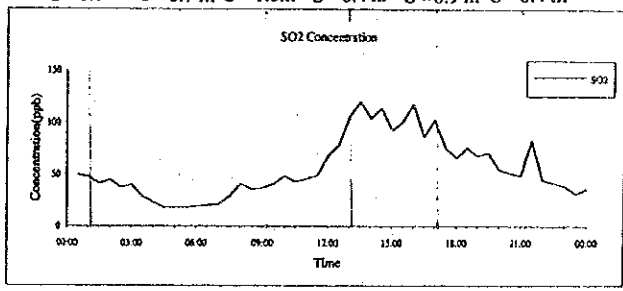
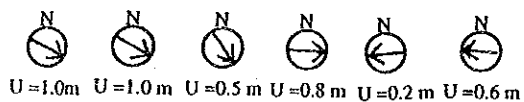
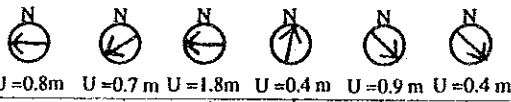
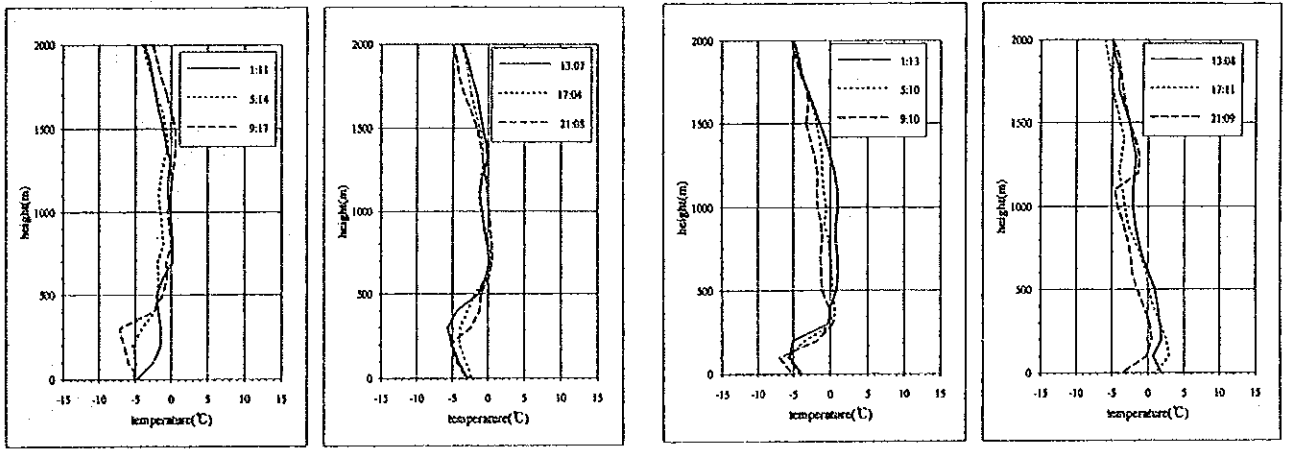
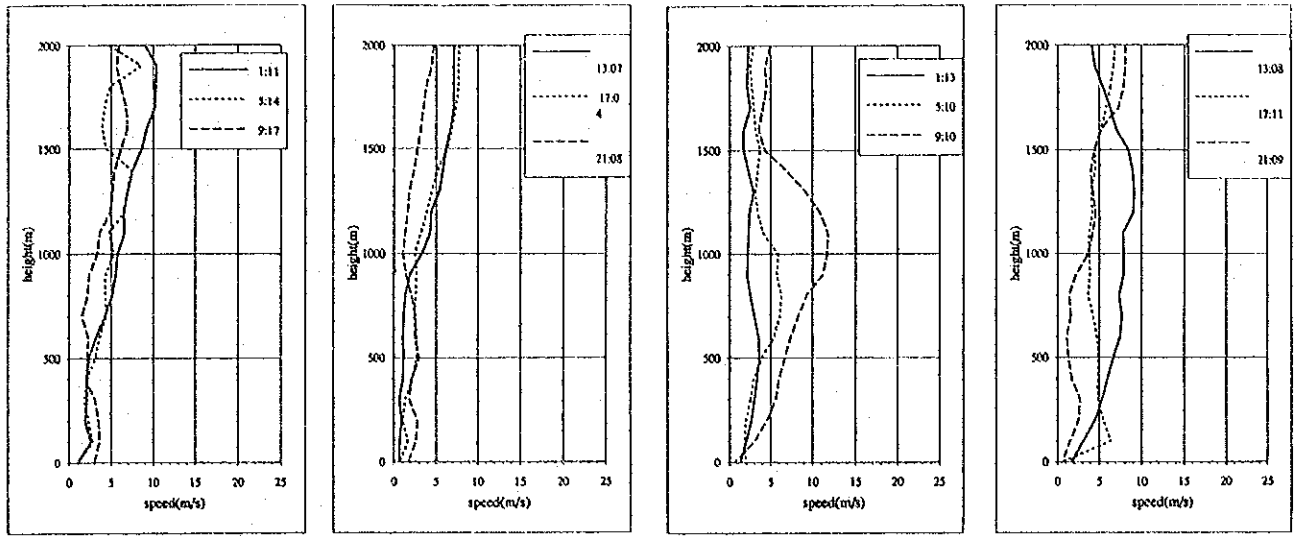
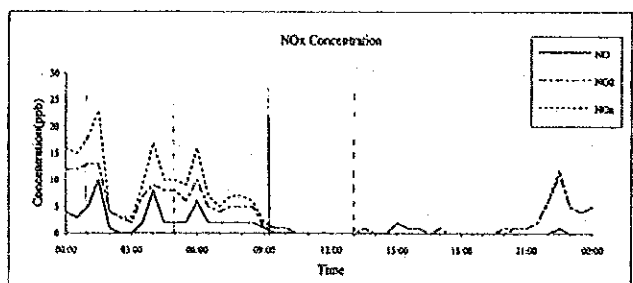
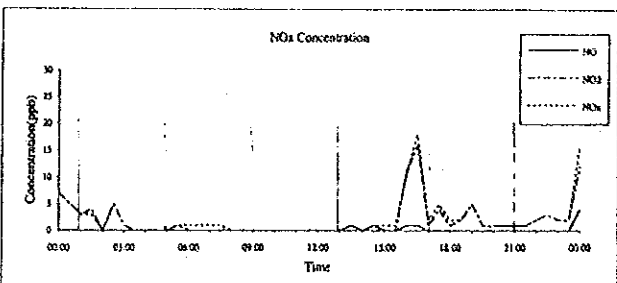
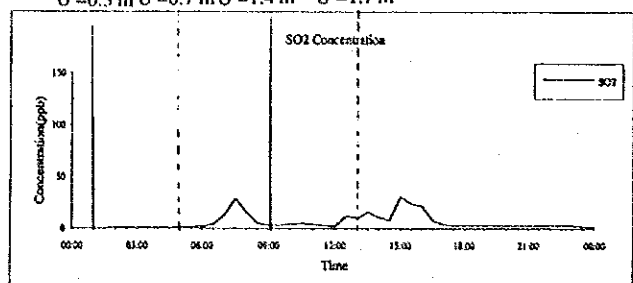
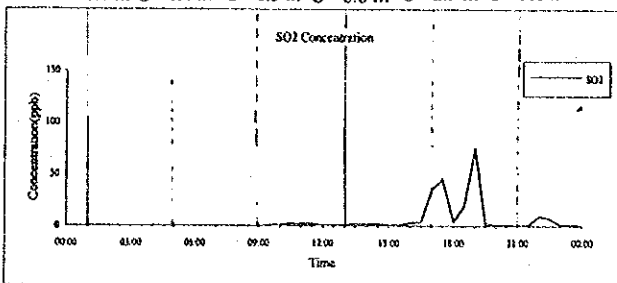
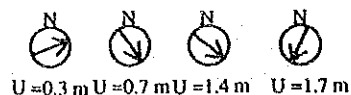
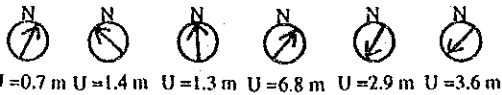
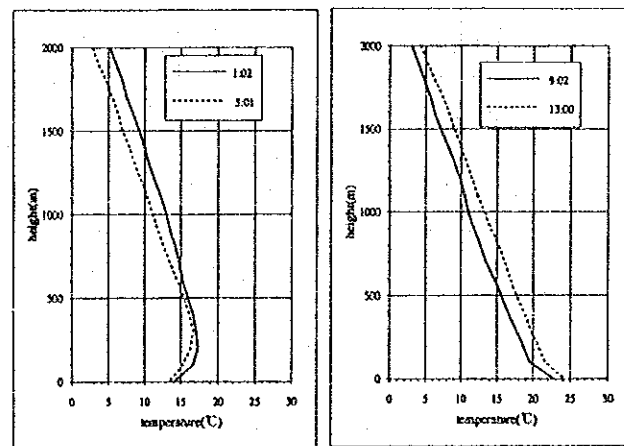
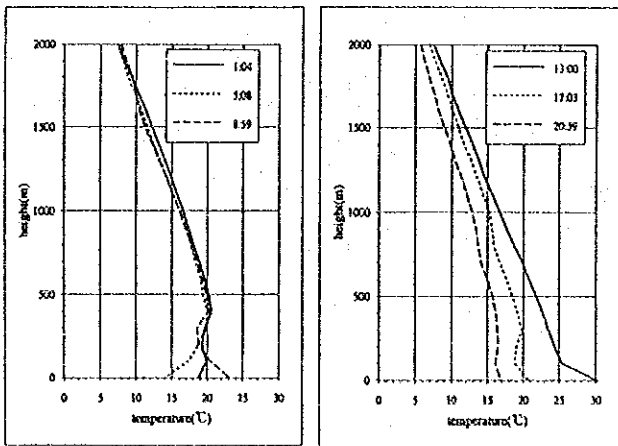
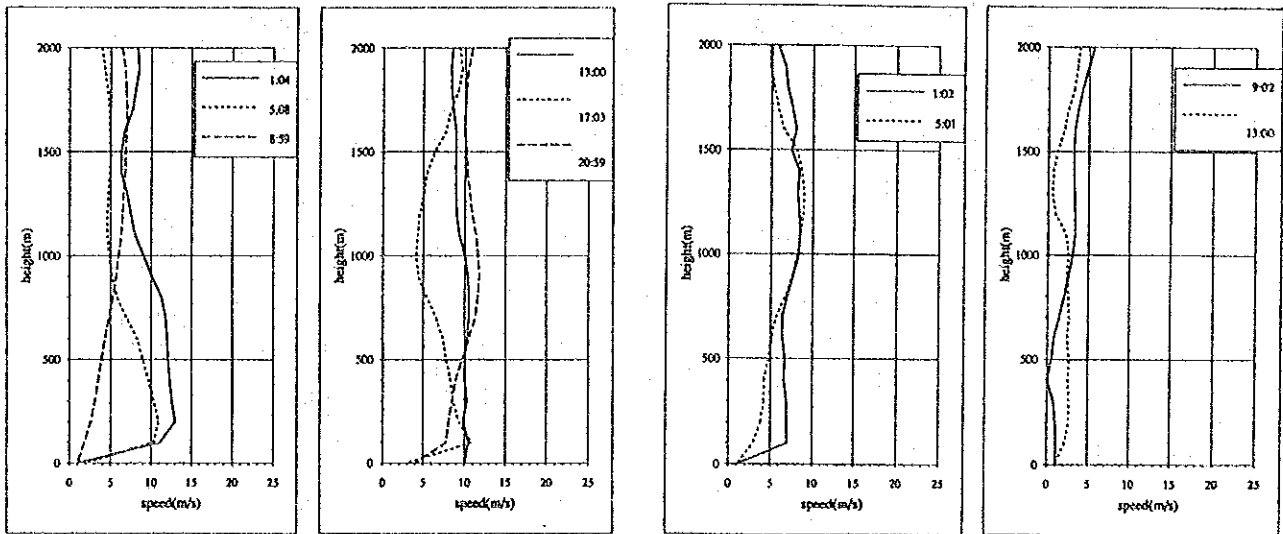


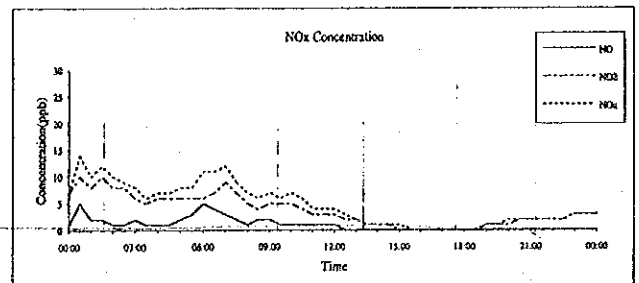
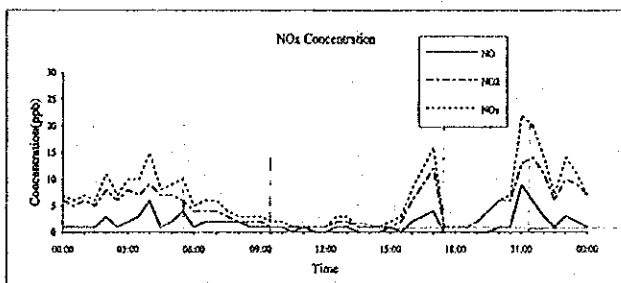
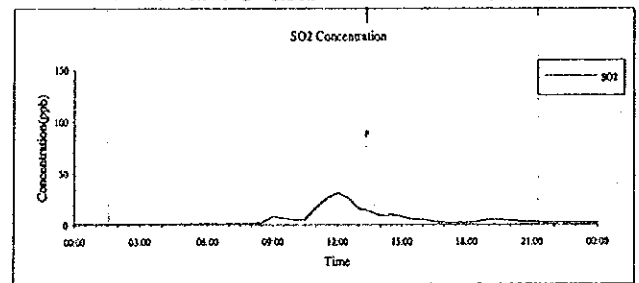
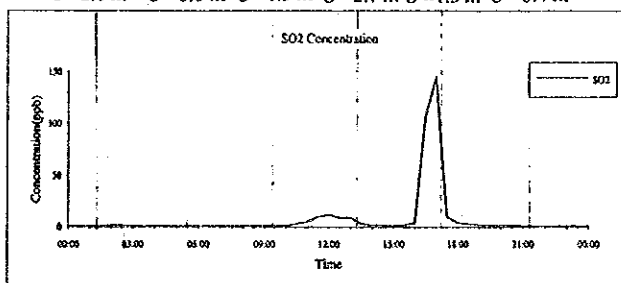
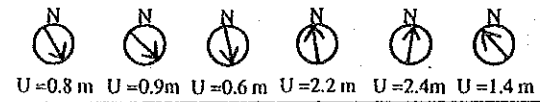
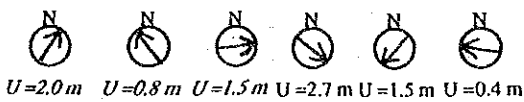
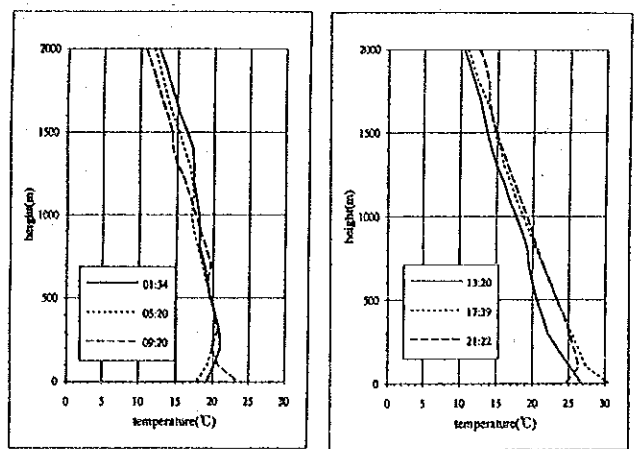
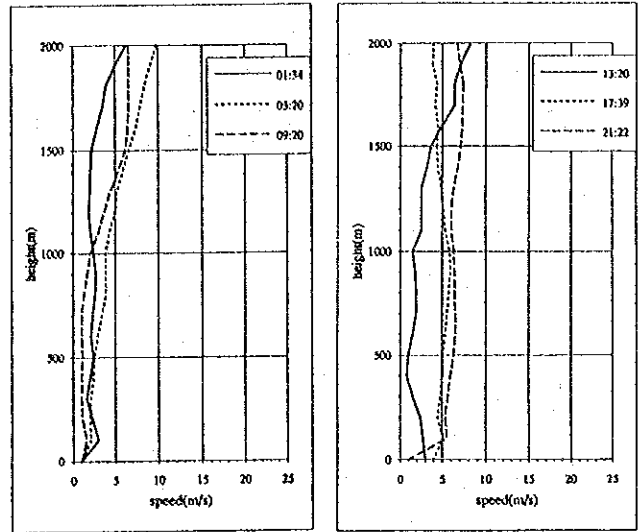
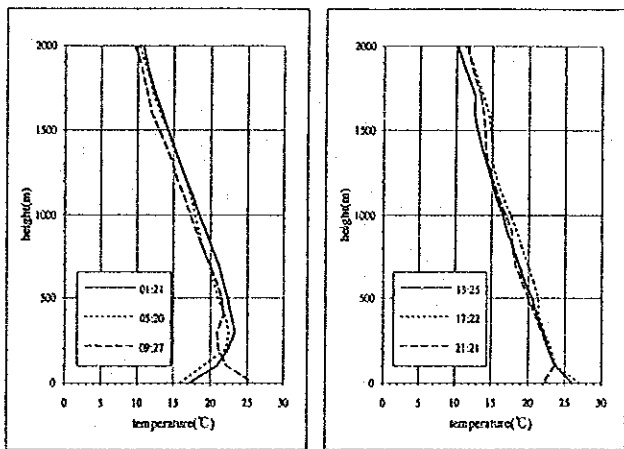
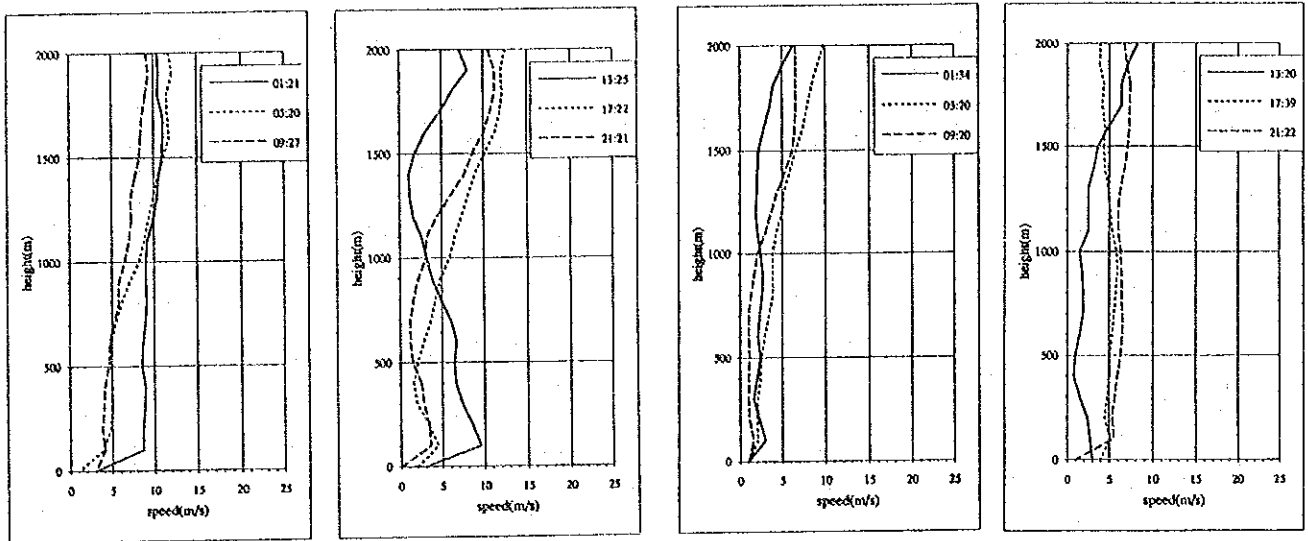
Figure D3.2.44 Vertical Profiles of Wind Speed and Temperature with Hourly Variation of Pollutant Concentration (JF1 January 20, 21)



May 31

June 1

Figure D3.2.45 Vertical Profiles of Wind Speed and Temperature with Hourly Variation of Pollutant Concentration (JF2 May 31, June 1)



July 18

July 19

Figure D3.2.46 Vertical Profiles of Wind Speed and Temperature with Hourly Variation of Pollutant Concentration (JF2 July 18, 19)