JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

Municipality of TEHRAN

The Islamic Republic of IRAN

The Study on an Integrated Master Plan for Air Pollution Control in The Greater Tehran Area in The Islamic Republic of Iran

Final Report (Supporting)

December 1997

JAPAN WATER AGENCY

UNICO International Corporation

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2. Outline of social and economic situation relating to the air pollution

2.5 City planing and land use

2.5.2 City planing

Table 2.5.2-1(1) The development project in MOT

ID	Project name	Land area	Building area	Start Date	Finish Date	Type of Activity									Parkings
		(m²)	(m²)			Comercial	Culture Center	Sports Center	Sports Stores	Office Block	Recreational	Vehicle Market	Educational Libraries	Residential	
1R1	Khana Farhang-e Dezashib	2,000	800	Feb.95	Mar.97		CC								
1R2	Varzeshgah-e Shahid Aghili	1,000	450	Jan.95	Aug.97			SC							
1R3	Markaz-e Foroush-e Ketab Niavaran	2,000	600	Jan.95	Sep.97		CC								
1R4	Majmoe Farhangi Bagh-e shater	3,000	1,500	Feb.96	97		CC	SC							
1R5	Forosh Gahe Shahrvand Lavasani	5,000		May.95	97										
1R6	Sakhteman-e Maskoni Gotzar	1,500	7,000	96	97										
		14,500	10,350												
2R1	Ketabkhan-e khiaban Piamber	2,600	1,600	Nov.96	July.97								E		
2R2	Ketabkhan-e Shahrak-e Pardisan	2,600	1,500	Nov.96	July.97								E		
2R3	Pump-e Benzin Khiaban-e Darya	13,610	50,000	Jan.96	Mar.98										
2R4	Mojtama-e Varzeshi Enghelab	85,000		Jan.97	Mar.98			SC							
2R5	Mojtama-e Farhangi Yadegar Emam	30,000		Feb.96	June.98		CC								
2R6	Mojtama-e Maskoni Rasli	22,400	196,350	Feb.96	98										
2R7	FOROSH Ghahe Shahrvand Sadeghiah	3,000		May.95	97										
		159,210	255,450												
3R1	Mozeh Olom-e Qnema		12,000	96	99		CC								
3R3	Mojtama-e Maskoni Nilofar	630	5,000	95	97										
		630	17,000												
4R1	Ketab khaneh-e Eshragh	1,000	670	Sep.96	June.97								E		
4R2	Farhangsara-e Eshragh	12,000	6,500	93	Sep.97		CC								
4R3	Forosh Gahe Shahrvand Azadegan		5,250	May.95	97										U
4R4	Sakhteman-e Maskoni Shabnam	920	4,000	96	97										
		13,920	16,420												
5R1	Amuzeu Varzesh-e Ekbatan	8,000	4,000	95	97			SC							
5R2	Varzeshgah-e Shahid Fahmideh	13,000	8,000	96	97			SC							U
5R3	Farhang saraye Marefat	6,000	4,600	94	Jan.97		CC								
5R4	Farhang saraye Ferdos	7,800	8,400	94	97		CC								U
5R5	Ketabkhane Ferdos	1,400	3,250	96	97								E		
		36,200	28,250												
6R1	Farhang saraye Sarve	3,297	2,000	Jan.95	97		CC								
6R2	Ketab khaneh-e Park-e Nezami	1,600	700	96	97								E		
6R3	Forosh Gahe Sharvand Jalale Ale Ahmad		5,000	May.95	Mar.97										
		4,897	7,700												
7R1	Majmoe Varzeshy Sarbaze Gomnam	12,000	8,000	Sep.96	July.98			SC							
7R2	Majmoe Tejari-e Mofateh	317	1,780	Dec.96	97										
8R1	Majmoe Tejari Edari Khiaban Damavand	540	7,585	96	97					OB					
8R2	Mojtama-e Farhangi Golestan	2,800	6,300	96	97		CC								

Table 2.5.2-1(2) The development project in MOT

ID	Project name	Land area	Building area	Start Date	Finish Date	Type of Activity									Parking
		(m²)	(m²)			Comercial	Culture Center	Sports Center	Sports Stores	Office Block	Recreational	Vehicle Market	Educational Libraries	Residential	
8R3	Ghara st Khaneh	224	920	96	97								E		
8R4	Mojtama-e Amozeshi Saede Shohada	5,500	6,500	95	97								E		
8R5	Mozeh Olom Va Technology Modern Tehran		89,600	96	99		CC						E		
		9,064	111,005												
9R1	Khaneh-e farhang-e Mahale Mehr Abad	1,000	670	Dec.94	Sep.97		CC						E		U
9R2	Varzesh Gahe Shamshiri	1,200	560	Feb.96	Mar.97			SC							U
		2,200	1,230												
10R1	Varzesh Gahe Azarbaiejan	1,904	800	Jan.91	97			SC							
10R2	Majmoe Varzeshi Beryanak	3,000	1,000	96	98			SC							
10R3	Khaneh-e Farhang Haft Chenar	1,531	800	Dec.94	97		CC								
10R4	Farhang saraye 16 Metry Amin	4,787	3,000	May.94	July.97		CC								U
10R5	Fatakhr Jahon	882	1,314	Dec.95	May.97			SC							
10R6	Mozeh-e Hayat-e Vahab	7,693	2,683	July.95	May.97		CC								
10R7	Farsha Resam	1,049	314	Jan.96	May.97		CC								U
10R8	Ketabkhaneh Etemad	11,000	400	June.96	May.97								E		U
		31,846	10,311												
11R1	Forosh Gahe Sharvand	4,000	6,000	96	97										
11R2	Mojtama-e Edari Tejari Vali-e Asr	11,500	20,000	Jan.96	Jan.97					OB					
11R2	Majmoe Razi	1,500	3,000	May.96	May.97					OB					
11R4	Mojtama-e Varzeshy Sohrab	4,000	2,100	July.96	98			SC							
		21,000	31,100												
12R1	Varzesh Ghahe Shahid Harandi	15,000	3,000	May.95	97			SC							
12R2	Farhang saraye Molavi	15,000	8,000	Mar.94	97		CC								
12R3	Sakhteman-e Edareh Kol Khadamat Omomi		25,700	91	97					OB					
		30,000	36,700												
13R1	Mojtama-e Varzeshy Kuye-ye Zoynabiyeh	6,000	2,000	July.96	97			SC							
13R2	Sakhteman Haye Mantaghe 13	520	2,000	Dec.96	97					OB					
		6,520	4,000												
14R1	Varzesh Ghahe Ayatolah Seyidi	30,000	8,000	93	July.97			SC							U
14R2	Mojtame Tafrihi Park Bani	150,000	4,000	94	98										
14R3	Khaneh-e Farhang Shahid Anderzgo	2,000	1,300	Dec.96	July.97		CC								U
14R4	Soleh-e Varzeshi Shokofeh	450		Dec.96	97			SC							
14R5	Soleh-e Varzeshi Shahid Saiedi	1,000	800	July.96	97			SC							
		183,450	14,100												
15R1	Mojtama-e Varzeshi Shardari Mantegheh 13	50,000	8,000	Mar.96	June.97			SC							
15R2	Mojtama-e Cinamaie	25,000	18,000	Mar.96	Sep.97										
15R3	Mojtama-e Varzeshi Shahid Rebakhani	24,366	19,800	Dec.96	Mar.97			SC							
15R4	Markazo Khadamat Elmi Amir Kabir	1,650		June.96	Mar.97								E		
15R5	Khaneh -e Farsh-e Banafshe	1,500	800	Sep.96	Mar.97		CC								
15R6	Majmoe Varzeshi Golestan	800		Mar.96	97			SC							
		103,316	46,600												

Table 2.5.2-1(3) The development project in MOT

ID	Project name	Land area	Building area	Start Date	Finish Date	Type of Activity									Parkings
		[m²]	[m²]			Comercial	Culture Center	Sports Center	Sports Stores	Office Block	Recreational	Vehicle Market	Educational Libraries	Residential	
16R1	Khaneh-e Farsh-e Mantaghe 16	1,100	400	Feb.96	Mar.97		CC								
16R2	Mojtama-e Farhangi Fajr		1,600	Feb.96	FEB.97		CC								
16R3	Majmoe Varzeshi Farhangi Yadavaran	4,100	22,000	June.96	Sep.97		CC	SC							
16R4	Madreseh-e Alghadir	1,700	3,450	June.96	Feb.97								E		
		6,900	27,450												
17R1	Markaze Tejari Ghalemorghi	5,400	12,000	92	97										
17R2	Varzesh Ghahe Javanane Ghazvini	1,800		95	97			SC							U
17R2	Varzesh Ghahe Javanan Sajjad	6,750	2,300	95	97			SC							U
17R4	Ketabkhaneh Eaharan	4,500	2,100	92	97								E		U
17R5	Sinama tentr-e Baharan	3,400		92	97		CC								U
		21,850	16,400												
18R1	Markaz-e Kharid -o Forosh Khodro Comrok	160,000		96	98										
18R2	Amaken Varzeshi 17 Shahrivar	15,000		94	97			SC							
18R3	Salon Varzeshi Badr	6,100	1,400	Mar.95	Feb.97			SC					E		
18R4	Kavosh Kadeh Moalem	11,000	1,900	Mar.94	July.97								E		
		492,100	3,300												
19R1	Majmoe Varzeshi Emamat	4,572		Dec.96	Mar.97			SC							
19R2	Majmoe Farhangi Tohid	2,500		Dec.96	Feb.97		CC								
19R3	Ketabkhaneh-e Omomi Kahrizak	2,000		Dec.96	*								E		
19R4	Majmoe Varzeshi Poria-e Vali	5,000		Dec.96	97			SC							U
		14,072	-												
20R1	Varzesh Gahe Modares	30,000		Mar.94	98			SC							U
20R2	Farhang saraye Vali-e Asr	5,300	2,400	Jan.94	97		CC								
20R3	Varzesh Gahe Taleghani	70,000		96	97			SC							U
		105,300	2,400												

Data Source: AQCC, 1997

Remarks:

1. Project ID means district number and sequential number of each district's project.
2. Project type
   - I : Industrial
   - C : Commercial
   - E : Educational/Libraries
   - R : Residential
   - CC : Cultural Centers
   - SC : Sports Centers
   - SS : Super Stores
   - OB : Office Block
   - REC : Recreational
   - VM : Vehicle Market
3. Parkings
   - Y: Equipped
   - N: Not equipped
   - U: Not fixed (un-known)
4. These are a part of projects that were budgeted by MOT.

3. Present situation of air pollution in GTA

3.3 Present situation of sub-sector relating to the air pollution

3.3.1 Transportation and traffic

Table 3.3.1 The List of Parkings administrated by TTTO

No	Name	Address (Street)	Area [m²]	Capacity [Car]
1	Amir-Kabir	Amir Kabir-Eshraghi	570	30
2	Boushehri	South Lale-Zar	2,358	75
3	Shiva	Sar-Asiab sq. Shiva Street	1,700	40
4	Lalezar-no	Lalezar-no-Kristal Cinema	8,400	190
5	Ghazali	Fatemi-Vali-e-Asr	70	39
6	Taleqani	TaleganiStreet	1,674	80
7	Homa	Bijan Street-Hotel Homa	1,400	45
8	Iran-Shahr	Iran Shahr-Niku	32,000	769
9	Niavaran	South of Niavaran Park	7,200	220
Total			55,372	1,488

Data Source : TTTO, Parking and Parko Meter Bureau, 1996

Table 3.3.2(1) The List of Parkings in Tehran

No	Name	Address (Street)	Area [m²]	Capacity [Car]
1	Giti	Azarbayejan	467	24
2	29 Esphand	Azarbayejan	784	95
3	Aref	Azarbayejan-Aref	1,350	70
4	Tarasht	Azadi-Tarasht	1,353	35
5	Chabok	Azadi-Eskandari	1,550	50
6	241	Azadi-Eskandari	1,400	105
7	Shad-Meher 333	Azadi	2,400	25
8	Saadi	Azadi-Kaye	1,300	70
9	Jeihoun	Azadi-Jeihoun	1,000	50
10	Teimouri	Azadi-Jei	1,300	45
11	Mahdieh	Azadi-Mokhaberat	3,132	100
12	Behboudi	Azadi-Behboudi	1,040	47
13	Mohammadi	Ayatollah Saeedi	1,081	70
14	Seraj	Abuzar	3,136	140
15	Emrouz	Emam Khomeini Square	731	30
16	Dulabi 2	Emam Hosein Square	400	30
17	Kangarlu	Amir-Kabir-Sarcheshme	234	16
18	Nader	East Amir-Kabir	2,500	70
19	Shirayani	Amin-ol-Molk	1,457	30
20	Mir-Shahi	Amin-ol-Molk	1,600	50
21	Arab-Shahi	Amin-ol-Molk	1,776	50
22	Kabir	Anbar-e-Naft	1,333	25
23	Nahari	Eskandar-Jonubi	342	26
24	Nadimi	First of Save Road	2,850	50
25	Bolvar	Bolvare-e-Kashavarz	795	40
26	Pat-Kamak	Bolvare-e-Kashavarz	1,650	70
27	Afzun-Far	Bahar	858	30
28	Dulabi 1	Behbahani	690	60
29	Lavasani	Pamenar	470	20
30	Safi-Yari	Pamenar	800	60
31	Zomorrod	Pamenar	1,100	240
32	Taeed	Pamenar	432	20
33	Bozorg	Pamenar	3,640	250
34	Nadeeri	15-Khordad-Khayyam	529	20
35	Iran-Torno	15-Khordad-Bazar Norouz	420	15
36	Ehmi	West 15-Khordad Street	646	30
37	Reza	15-Khordad-Sirous	666	30
38	Ghaem	15-Khordad-Khayyam	467	20
39	Ali-e-Radian	15-Khordad-Galoubandak	754	60
40	Forutan 1	East 15-Khordad-Khayyam	800	50
41	Comercial Insurance Bank	15-Khordad-Pamenar	694	60
42	Kaviani	West 15-Khordad-Khordad	782	60
43	Pirouzi	Pirouzi-Enqelab	399	30
44	Sadeghi	Pirouzi	1,050	50
45	Oghab	Pirouzi-Soleimanie	1,176	60
46	Marman	Pirouzi-Nirouye-Havai	1,016	60
47	Mousavi	Pirouzi-Farvardin	615	50
48	Shargh	Pirouzi	600	30
49	Mabhas	Pirouzi-Soleimanie	640	30
50	Asadi	Pirouzi	741	40
51	No	Tehran no-Emam Hosein sq.	342	60

Table 3.3.2(2) The List of Parkings in Tehran

No	Name	Address (Street)	Area [m²]	Capacity [Car]
52	Damavand 1	Emam-Hosein-Iran Mehr	693	30
53	Jannat	Tehran-no-Madrese	1,170	50
54	Taheri	Tehran-no-Pol	912	50
55	Tehran-no	Tehran-no	845	7-Bus
56	Pirouzi	Tehran-no-Vahidie	5,976	200
57	Mahnaz	Tehran-no-Ghasem-Abad	660	30
58	Afshar	Old Karaj Road	4,950	50
59	Baghestani	Save Road	4,200	50
60	Afshar	Save Road-Yaft-Abad	2,870	150
61	Estanbol	Jomhouri-e-Eslami	5,000	180
62	Kasra	Jomhouri-e-Eslami	1,025	40
63	Ghavam	Jomhouri-e-Eslami No. 252	1,025	60
64	Amad-Golparvar	Jomhouri-e-Eslami No. 136	858	35
65	Jomhouri	Jomhouri-e-Eslami Hafez Cinema	2,200	150
66	Goharshad	Jomhouri-e-Eslami	1,081	50
67	Aluminium	Jomhouri-e-Eslami	1,020	40
68	Hafez 1	Jomhouri-e-Eslami Bazar-e-Hafez	5,286	120
69	Baradaran	Javadie	456	30
70	Rabchi	Javadie-Saleh Nia	2,400	100
71	Soleiman-Ja	Jeihoun	1,500	70
72	Sehhat	Molawi-Amin Sottan	400	40
73	Samsam	Estanbol	3,224	120
74	Shanzelize	Amir-Akram No. 24	2,268	800
75	Vali-e-Asr	Amir-Akram No. 22	2,310	60
76	Hafez 2	Hafez-France	1,400	60
77	Babak	Khani-Abad-e-no	720	50
78	Namazi	Khavaran-Fadaieane-Eslam	465	20
79	Pour-Salehi	Khazane-Bokharae	684	50
80	Auto-Pishgan	Shariati No. 78	4,000	300
81	Khayyam	Khayyam-Goloubandak	2,800	200
82	Azimi	North Khayyam No. 188	1,000	80
83	Sajjad	North Khayyam No. 208	754	60
84	Ataii	Khayyam	1,200	80
85	Rangin	South Khayyam No. 113, No. 125	3,000	120
86	Iran	South Khayyam No. 220	500	30
87	Hagh-Baf	South Khayyam No. 2	1,000	80
88	Roudaki	South Khayyam No. 162	900	60
89	Nasr	South Khayyam No. 310	800	40
90	Lux	Khayyam No. 344	1,490	30
91	Iran-Tranzit	Khayyam-Galoubandak	1,245	80
92	Hosein-Marvi	Dampezeshki No. 690	1,275	70
93	Shahin 2	Darvaze-Shemiran	827	30
94	Taavoni 1	Shariati No. 251	483	25
95	Nour	Robat-Karim No. 262	600	15
96	Nemoune	Rey-15 Khordad	360	25
97	Ebadi 1	Rey-Ghiyam sq. No. 2	1,250	120
98	Ebadi 2	Rey-Andarzgu Hospital	828	50
99	Salehi	'Rey Street	665	30
99	Salehi	Rey Street	665	30
100	Peyman-Rey	Rey Street-Asef-o-Dolleh	2,460	180
101	Sevom Shaban	Rey Street No. 417	1,700	145
102	Seyed	Rey Street-Derakhshande No. 62	482	30

Table 3.3.2(3) The List of Parkings in Tehran

No	Name	Address (Street)	Area [m²]	Capacity [Car]
103	Vahdat	Rey Street-Vahdat sq.	552	60
104	Saeed	Rey Street No. 272	180	20
105	Salac	Sasan No. 214	2,670	150
106	Azim-Khademi	North Sabalan No. 418	468	20
107	Shargh- Delgosha	Sarasiab-Shiva No. 33	1,440	60
108	Goudarzi	Sarbaz-Goudarzi Parking	625	30
109	Toska	Javadie-North Abolfazle No. 20	850	50
110	Rahnavard	Sarcheshme	1,696	40
111	Bozorg-Sadi	Sadi-Kuche Mehran	2,860	93
112	Asia	Sadi-Kashef No. 53	735	40
113	Baz-Sadi	South Sadi No. 120	3,050	120
114	Al-Javad	South Sadi	4,758	200
115	Shirazi	North Sadi	720	45
116	Haghighat	Ghale-Morghi No. 131	790	50
117	Arab-Ali	Shokufe No. 57	624	30
118	Khaki	Azari	2,775	62
119	Cina-Khoramshahr	Cina-Khoramshahr No.173	2,300	120
120	Cina	Cina-Khosh No. 491	1,749	100
121	Malak-Mohammadi	Shariati-Malak No. 39	600	30
122	Kerman Shahi	Shariati-Kuche Kargar	408	25
123	Firouze	Shariati-Kuche Sari	430	40
124	Kolbe-Bazi	Shariati	450	37
125	Auto Mobil Shahrak	Shariati-Ershad	390	40
126	Shoush Parking	West Shoush No.21, No. 66	925	20
127	Sanii-Pour	East Shoush No.116, No.114	1,650	30
128	Bakhtiari	East Shoush-Tir Dogholu	400	20
129	Khan-Ahmadi	Shahbaz-Ahmadie sq.	1,800	65
130	Payam	Shahrak-e-Shariati No. 206	170,000	4,500
131	Gholi-Pour	Shahid-Rajai	779	40
132	Etminan	Rajai No. 161	494	25
133	Peyman	Rajai-Abrisham No. 27	500	45
134	Safa	Rajai-Polpich No. 212	800	50
135	Mosalla-ye-Tehran	Beheshti-Mir Emad	255	20
136	Darvish	Sahebjam-Shoush No.134	513	30
137	Mir	Sahebjam-Saffari No.134	960	50
138	General	Taleqani-Hafez	870	30
139	Zamani	Tous-Bank of Saderat	1,329	70
140	Tous	Tous-Meimanat	1,100	40
141	Bazar-e-Bozorg	Ferdowsi-Samsam	1,500	35
142	Berlan	Ferdowsi-Beljik No.18	460	22
143	Ferdowsi	South-Ferdowsi No.16	1,056	35
144	Forsat	Forsat-e-Sirazi No. 111	600	40
145	Air Port Terminal	Mehr-Abad Air Port Terminal 1, 2	294	20
146	Air Pot Terminal	Mehr-Abad Air Port Terminal 3	240	20
147	Khadem	Fallah	680	30
148	Qazvin-Tour	Street Qazvin-Navvab No.845	1,086	50
149	Safahi	Qazvin Street, Abaasi No. 718	595	20
150	Golestan	Qazvin Street, Shahid Arab No. 5	544	30
151	Pour-Seif	Qazvin Street-Azaari No.1781, No.1783	540	15
152	Masoudi	Qazvin Street-Emamzadeh Masoum	828	30
153	Mohammadi	Qazvin Street-Emamzadeh Masoum	1,824	30
154	Keyhan	Qazvin Street-Dorahe Ghapan	1,258	50

Table 3.3.2(4) The List of Parkings in Tehran

No	Name	Address (Street)	Area [m²]	Capacity [Car]
155	Eslami	Qazvin Street-Shamshiri	912	40
156	Shams	Qazvin Street-Abbasi	3,372	120
157	Sdab	Qazvin Street No. 761	380	15
158	Shah-Par	Qazvin Street-Amiri	438	20
159	Rah-Peyma	Ghale-Morghi-Zamzam Park No. 372	2,400	120
160	Bidar	Kargar-Qazvin sq.	1,016	60
161	Baradaran	South Kargr Razi sq. No. 1478	600	35
162	Karimi	South Kargar	840	40
163	Zohre	South Kargar	1,471	50
164	Abdol	Karoun No. 5-48	1,400	50
165	Novin	Karoun-Hashemi No. 250	1,300	60
166	Behjat-Abad	Karim-Khan-Hafez No. 636	3,000	120
167	Shahin 1	Karim-Khan-Sanai	672	40
168	Aban	North Karim-Khan No. 136	420	25
169	110	Komeil No. 686	420	25
170	Alborz	South Lale-Zar No. 276	1,541	120
171	Lale-Zar	South Lale-Zar	1,431	70
172	Lale	Lale-Zar-no No. 138	1,326	50
173	Minoo	Mojahedin No. 91	575	40
174	Damavand	Mostafa-Khomeini	675	60
175	Niku-Azm	Mostafa-Khomeini	2,021	80
176	Javid	Mostafa-Khomeini	825	30
177	555	Mostafa-Khomeini No. 5	1,100	80
178	Rezai	Mostafa-Khomeini	600	30
179	Modern-2	Molawi-Moshir-Dole No. 102	600	15
180	Sangi	Molawi-Sangi No. 1361	3,524	120
181	Keyhan	Molawi-Ghiyam sq.	1,032	40
182	Pahlevan	Molawi No. 478	1,984	20
183	Nasiriyan	Molawi-Vahdate-Eslami	684	40
184	Azimi	Molawi No. 3	630	30
185	Saadat	Molawi No. 867	1,360	50
186	Mohammadie	Molawi No. 810.8	3,000	93
187	Tohidi	Molawi-Takhti No. 449	1,020	40
188	Adl-Save	Molawi-Vali-e-Asr	335	20
189	Haghighat	Molawi-Bazarche Saadat	672	40
190	Moazen	Emam-Hosein sq. No. 85	594	20
191	Beyhaqi	Arjantin sq.	765	50
192	Mohammadi	Gorgan sq. No. 1002	1,200	50
193	Razi-Pour 2	Gorgan sq. -East Kave	1,263	90
194	Tehrani	Vahdat-e-Eslami sq. No. 810	650	40
195	Fard	Boroujerdi sq. No. 85	414	20
196	Khosh-Kar	Khorasan sq. No. 295	3,666	100
197	Jahan	Shoush sq. No. 17	800	30
198	Hezar-Khani	Razi sq. No. 61	486	30
199	Nakhostin	Razi sq. Robat Karim sq.	3,626	150
200	Eizadi	Abuzar sq. No. 653	750	75
201	Pirmoradi	Shohada sq. No. 397, No. 399	1,056	30
202	Haj-Asgari	Sarasiab	1,220	100
203	Bime Parking	Narmak-Ayat No. 494	1,253	50
204	Sarsabz Parking	Resalat	223	25
205	Sharifian	Nazi-Abad No. 267	860	65
206	Oskoui	Nazi-Abad-Jangal No. 267	21,809	800

Table 3.3.2(5) The List of Parkings in Tehran

No	Name	Address (Street)	Area [m²]	Capacity [Car]
207	Madaen	Nazi-Abad-Madaen	7,804	230
208	Nezam-Bar	Nezam-Abad-Hoseini	722	40
209	Masoud	North Nezam-Abad No. 568	1,440	100
210	Modern 3	South Nezam-Abad No. 200	1,700	50
211	Khalili	South Nezam-Kohan	3,008	120
212	Basari	South Nezam-Abad No. 314	2,414	20
213	Shahhin	Nezam-Abad No. 401	1,525	70
214	Eslami	Navvab No. 101	4,524	45
215	Daryush	Navvab No. 839	1,056	60
216	Shahrzad	Navvab-Beryanak No. 275	2,800	80
217	Beryanak	Navvab-Haft Chenar sq. Beryanak sq.	1,890	50
218	Mortazavi	Navvab-Jeyhoun No. 561	15,000	30
219	Vahidie	Vahidie No. 412	1,245	60
220	Assal	Valie-Asr-Zartosht No. 10	2,525	70
221	Human	Valie-Asr-Amir-Bahador No.10, 12	1,624	50
222	Mohammadie	Valie-Asr No. 951	2,000	40
223	Mahtab	Valie-Asr-Jomhouri No. 82	3,000	80
224	Molan-Rouj	valie-Asr-Mahdie No. 450	625	30
225	Takmil	Valie-Asr-Mokhtari No. 338, 340	2,184	115
226	Ashtiani	Valie-Asr-Rah Ahan No. 50	865	45
227	Simorgh	Valie-Asr-Jomhouri-Simotgh No. 11	1,675	100
228	Hamid	Valie-Asr-Amir-Bahador No. 22	579	45
229	Niku	Valie-Asr No. 63	900	30
230	Tarashti	Hashemi sq. No. 979	1,000	25
231	Golestani	Haft-Chenar-Golestani No. 202	1,548	110
232	Saeed-Pour	17-Shahrivar No. 70	1,920	100
233	Saffari	17-Shahrivar No. 273	1,184	50
234	Saffari 2	17-Shahrivar No. 17	941	60
235	Shahpar	South-17-Shahrivar	1,117	20
236	Abedini	17-Shahrivar-Barzi	630	30
237	Haj-Abddlah	South-17-Shahrivar No. 738	960	75
238	Hedayat	Helal-e-Ahmar	700	35
239	Habibi	Helal-e-Ahmar-Estakhr	312	25
240	Sedaghat	Helal-e-Ahmar No. 142	936	40
241	Sadat	Yart-Abad No. 34	663	45
242	Zeini	East Yart-Abad No. 137	2,496	10
243	Partovi	Yousef-Abad No. 174	500	40
Total			528,393	20,205

Data Source : TTTO, Parking and Parko Meter Bureau, 1996

4. Clarification of pollution mechanism and characteristics

4.1 Meteorological condition in Tehran

4.1.1 Surface meteorological condition

Frequency of wind speed class by wind direction

Observation point ; Aghdasiyeh
Observation period ; October, 1996 - February, 1997

*** whole period ; whole day ***

wind speed class(m/s)	wind direction																total
	NNE	N E	ENE	E	ESE	S E	SSE	S	SSW	S W	WSW	W	WNW	N W	NNW	N	
0.5- 0.9	204	254	50	33	41	53	38	52	64	71	39	27	20	19	20	63	1048
	(5.8)	(7.2)	(1.4)	(0.9)	(1.2)	(1.5)	(1.1)	(1.5)	(1.8)	(2.0)	(1.1)	(0.8)	(0.6)	(0.5)	(0.6)	(1.8)	(29.9)
1.0- 1.9	298	552	28	26	21	36	53	154	235	215	78	17	12	12	17	39	1793
	(8.5)	(15.7)	(0.8)	(0.7)	(0.6)	(1.0)	(1.5)	(4.4)	(6.7)	(6.1)	(2.2)	(0.5)	(0.3)	(0.3)	(0.5)	(1.1)	(51.1)
2.0- 2.9	12	49	5	3	2	1	4	17	47	51	26	16	10	8	6	5	262
	(0.3)	(1.4)	(0.1)	(0.1)	(0.1)	(0.0)	(0.1)	(0.5)	(1.3)	(1.5)	(0.7)	(0.5)	(0.3)	(0.2)	(0.2)	(0.1)	(7.5)
3.0- 3.9	4	0	0	0	0	0	2	0	2	7	9	5	6	5	3	2	45
	(0.1)	(-)	(-)	(-)	(-)	(-)	(0.1)	(-)	(0.1)	(0.2)	(0.3)	(0.1)	(0.2)	(0.1)	(0.1)	(0.1)	(1.3)
4.0- 5.9	2	0	0	0	0	0	0	0	1	3	0	2	5	5	1	3	22
	(0.1)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0.0)	(0.1)	(-)	(0.1)	(0.1)	(0.1)	(0.0)	(0.1)	(0.6)
6.0- 7.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0.1)	(0.1)
8.0-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
total	520	855	83	62	64	90	97	223	349	347	152	67	53	49	47	114	3172
	(14.8)	(24.4)	(2.4)	(1.8)	(1.8)	(2.6)	(2.8)	(6.4)	(10.0)	(9.9)	(4.3)	(1.9)	(1.5)	(1.4)	(1.3)	(3.3)	(90.4)
mean w.s.	1.1	1.2	1.0	1.0	0.9	1.0	1.2	1.3	1.4	1.5	1.5	1.6	1.8	1.8	1.4	1.2	

calm 335 (9.6 %) obtained data 3507 (99.2 %) missed data 30 (0.8 %) mean wind speed 1.2 m/s

note ; Upper figure shows the frequency, and lower figure in parenthesis is its percentage.
(-) denotes no appearance.

Frequency of wind speed class by wind direction

Observation point ; Aghdasiyeh
Observation period ; October, 1996 - February, 1997

*** whole period ; daytime ***

wind speed class(m/s)	wind direction NNE	N E	ENE	E	ESE	S E	SSE	S	SSW	S W	WSW	W	WNW	N W	NNW	N	total
0.5- 0.9	22	24	5	4	15	30	26	35	53	57	31	20	10	10	6	13	361
	(1.5)	(1.6)	(0.3)	(0.3)	(1.0)	(2.0)	(1.7)	(2.3)	(3.5)	(3.8)	(2.1)	(1.3)	(0.7)	(0.7)	(0.4)	(0.9)	(23.9)
1.0- 1.9	28	58	7	8	11	22	47	149	222	196	64	9	3	1	6	7	838
	(1.9)	(3.8)	(0.5)	(0.5)	(0.7)	(1.5)	(3.1)	(9.9)	(14.7)	(13.0)	(4.2)	(0.6)	(0.2)	(0.1)	(0.4)	(0.5)	(55.4)
2.0- 2.9	2	4	2	0	0	0	4	16	46	44	22	8	2	3	1	3	157
	(0.1)	(0.3)	(0.1)	(-)	(-)	(-)	(0.3)	(1.1)	(3.0)	(2.9)	(1.5)	(0.5)	(0.1)	(0.2)	(0.1)	(0.2)	(10.4)
3.0- 3.9	4	0	0	0	0	0	2	0	2	7	7	1	2	2	1	1	29
	(0.3)	(-)	(-)	(-)	(-)	(-)	(0.1)	(-)	(0.1)	(0.5)	(0.5)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(1.9)
4.0- 5.9	0	0	0	0	0	0	0	0	1	3	0	2	3	0	1	2	12
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0.1)	(0.2)	(-)	(0.1)	(0.2)	(-)	(0.1)	(0.1)	(0.8)
6.0- 7.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
8.0-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
total	56	86	14	12	26	52	79	200	324	307	124	40	20	16	15	26	1397
	(3.7)	(5.7)	(0.9)	(0.8)	(1.7)	(3.4)	(5.2)	(13.2)	(21.4)	(20.3)	(8.2)	(2.6)	(1.3)	(1.1)	(1.0)	(1.7)	(92.4)
mean w.s.	1.3	1.2	1.3	1.0	0.9	1.0	1.2	1.3	1.5	1.5	1.5	1.5	1.8	1.4	1.5	1.4	

calm 115 (7.6 %) obtained data 1512 (99.1 %) missed data 14 (0.9 %) mean wind speed 1.3 m/s

*** whole period ; night-time ***

wind speed class(m/s)	wind direction NNE	N E	ENE	E	ESE	S E	SSE	S	SSW	S W	WSW	W	WNW	N W	NNW	N	total
0.5- 0.9	182	230	45	29	26	23	12	17	11	14	8	7	10	9	14	50	687
	(9.1)	(11.5)	(2.3)	(1.5)	(1.3)	(1.2)	(0.6)	(0.9)	(0.6)	(0.7)	(0.4)	(0.4)	(0.5)	(0.5)	(0.7)	(2.5)	(34.4)
1.0- 1.9	270	494	21	18	10	14	6	5	13	19	14	8	9	11	11	32	955
	(13.5)	(24.8)	(1.1)	(0.9)	(0.5)	(0.7)	(0.3)	(0.3)	(0.7)	(1.0)	(0.7)	(0.4)	(0.5)	(0.6)	(0.6)	(1.6)	(47.9)
2.0- 2.9	10	45	3	3	2	1	0	1	1	7	4	8	8	5	5	2	105
	(0.5)	(2.3)	(0.2)	(0.2)	(0.1)	(0.1)	(-)	(0.1)	(0.1)	(0.4)	(0.2)	(0.4)	(0.4)	(0.3)	(0.3)	(0.1)	(5.3)
3.0- 3.9	0	0	0	0	0	0	0	0	0	0	2	4	4	3	2	1	16
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0.1)	(0.2)	(0.2)	(0.2)	(0.1)	(0.1)	(0.8)
4.0- 5.9	2	0	0	0	0	0	0	0	0	0	0	0	2	5	0	1	10
	(0.1)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0.1)	(0.3)	(-)	(0.1)	(0.5)
6.0- 7.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0.1)	(0.1)
8.0-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
total	464	769	69	50	38	38	18	23	25	40	28	27	33	33	32	88	1775
	(23.3)	(38.5)	(3.5)	(2.5)	(1.9)	(1.9)	(0.9)	(1.2)	(1.3)	(2.0)	(1.4)	(1.4)	(1.7)	(1.7)	(1.6)	(4.4)	(89.0)
mean w.s.	1.1	1.2	0.9	1.0	0.9	0.9	0.9	0.9	1.0	1.2	1.4	1.8	1.9	2.0	1.3	1.2	

calm 220 (11.0 %) obtained data 1995 (99.2 %) missed data 16 (0.8 %) mean wind speed 1.1 m/s

note ; Upper figure shows the frequency, and lower figure in parenthesis is its percentage.
(-) denotes no appearance.

Frequency of wind speed class by wind direction

Observation point ; Aghdasiyeh
Observation period ; October, 1996 - November, 1996

*** autumn ; whole day ***

wind speed class(m/s)	wind direction																total
	NNE	N E	ENE	E	ESE	S E	SSE	S	SSW	S W	WSW	W	WNW	N W	NNW	N	
0.5- 0.9	95	111	6	5	6	12	18	22	31	38	21	17	2	6	3	19	412
	(7.0)	(8.2)	(0.4)	(0.4)	(0.4)	(0.9)	(1.3)	(1.6)	(2.3)	(2.8)	(1.6)	(1.3)	(0.1)	(0.4)	(0.2)	(1.4)	(30.5)
1.0- 1.9	118	239	6	8	3	6	6	49	100	89	31	4	4	2	6	12	683
	(8.7)	(17.7)	(0.4)	(0.6)	(0.2)	(0.4)	(0.4)	(3.6)	(7.4)	(6.6)	(2.3)	(0.3)	(0.3)	(0.1)	(0.4)	(0.9)	(50.5)
2.0- 2.9	3	24	2	0	0	0	0	1	18	19	7	6	7	4	1	2	94
	(0.2)	(1.8)	(0.1)	(-)	(-)	(-)	(-)	(0.1)	(1.3)	(1.4)	(0.5)	(0.4)	(0.5)	(0.3)	(0.1)	(0.1)	(7.0)
3.0- 3.9	3	0	0	0	0	0	1	0	2	2	3	3	1	1	2	1	19
	(0.2)	(-)	(-)	(-)	(-)	(-)	(0.1)	(-)	(0.1)	(0.1)	(0.2)	(0.2)	(0.1)	(0.1)	(0.1)	(0.1)	(1.4)
4.0- 5.9	2	0	0	0	0	0	0	0	1	0	0	1	0	2	0	2	8
	(0.1)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0.1)	(-)	(-)	(0.1)	(-)	(0.1)	(-)	(0.1)	(0.6)
6.0- 7.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0.1)	(0.1)
8.0-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
total	221	374	14	13	9	18	25	72	152	148	62	31	14	15	12	38	1218
	(16.3)	(27.7)	(1.0)	(1.0)	(0.7)	(1.3)	(1.8)	(5.3)	(11.2)	(10.9)	(4.6)	(2.3)	(1.0)	(1.1)	(0.9)	(2.8)	(90.1)
mean w.s.	1.2	1.3	1.3	1.0	0.7	0.9	1.0	1.1	1.4	1.4	1.3	1.5	2.0	2.0	1.6	1.5	

calm 134 (9.9 %) obtained data 1352 (98.2 %) missed data 25 (1.8 %) mean wind speed 1.2 m/s

note ; Upper figure shows the frequency, and lower figure in parenthesis is its percentage.
(-) denotes no appearance.

Frequency of wind speed class by wind direction

Observation point : Aqhdasiyeh
Observation period : October, 1996 - November, 1996

*** autumn : daytime ***

wind speed class(m/s)	wind direction																total
	NNE	N E	ENE	E	ESE	S E	SSE	S	SSW	S W	WSW	W	WNW	N W	NNW	N	
0.5- 0.9	8	9	0	0	2	6	17	16	26	33	18	14	2	3	1	5	160
	(1.3)	(1.5)	(-)	(-)	(0.3)	(1.0)	(2.8)	(2.6)	(4.2)	(5.4)	(2.9)	(2.3)	(0.3)	(0.5)	(0.2)	(0.8)	(26.0)
1.0- 1.9	14	28	1	4	1	4	6	49	100	86	27	3	1	0	3	3	330
	(2.3)	(4.5)	(0.2)	(0.6)	(0.2)	(0.6)	(1.0)	(8.0)	(16.2)	(14.0)	(4.4)	(0.5)	(0.2)	(-)	(0.5)	(0.5)	(53.6)
2.0- 2.9	1	2	1	0	0	0	0	1	18	19	7	4	2	1	1	2	59
	(0.2)	(0.3)	(0.2)	(-)	(-)	(-)	(-)	(0.2)	(2.9)	(3.1)	(1.1)	(0.6)	(0.3)	(0.2)	(0.2)	(0.3)	(9.6)
3.0- 3.9	3	0	0	0	0	0	1	0	2	2	3	1	1	1	1	0	15
	(0.5)	(-)	(-)	(-)	(-)	(-)	(0.2)	(-)	(0.3)	(0.3)	(0.5)	(0.2)	(0.2)	(0.2)	(0.2)	(-)	(2.4)
4.0- 5.9	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	1	3
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0.2)	(-)	(-)	(0.2)	(-)	(-)	(-)	(0.2)	(0.5)
6.0- 7.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
8.0-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
total	26	39	2	4	3	10	24	66	147	140	55	23	6	5	6	11	567
	(4.2)	(6.3)	(0.3)	(0.6)	(0.5)	(1.6)	(3.9)	(10.7)	(23.9)	(22.7)	(8.9)	(3.7)	(1.0)	(0.8)	(1.0)	(1.8)	(92.0)
mean w.s.	1.4	1.3	2.2	1.2	0.7	0.9	1.0	1.2	1.4	1.4	1.4	1.4	1.8	1.6	1.8	1.5	

calm 49 (8.0 %) obtained data 616 (97.9 %) missed data 13 (2.1 %) mean wind speed 1.3 m/s

*** autumn : night-time ***

wind speed class(m/s)	wind direction																total
	NNE	N E	ENE	E	ESE	S E	SSE	S	SSW	S W	WSW	W	WNW	N W	NNW	N	
0.5- 0.9	87	102	6	5	4	6	1	6	5	5	3	3	0	3	2	14	252
	(11.8)	(13.9)	(0.8)	(0.7)	(0.5)	(0.8)	(0.1)	(0.8)	(0.7)	(0.7)	(0.4)	(0.4)	(-)	(0.4)	(0.3)	(1.9)	(34.2)
1.0- 1.9	104	211	5	4	2	2	0	0	0	3	4	1	3	2	3	9	353
	(14.1)	(28.7)	(0.7)	(0.5)	(0.3)	(0.3)	(-)	(-)	(-)	(0.4)	(0.5)	(0.1)	(0.4)	(0.3)	(0.4)	(1.2)	(48.0)
2.0- 2.9	2	22	1	0	0	0	0	0	0	0	0	2	5	3	0	0	35
	(0.3)	(3.0)	(0.1)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0.3)	(0.7)	(0.4)	(-)	(-)	(4.8)
3.0- 3.9	0	0	0	0	0	0	0	0	0	0	0	2	0	0	1	1	4
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0.3)	(-)	(-)	(0.1)	(0.1)	(0.5)
4.0- 5.9	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	5
	(0.3)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0.3)	(-)	(0.1)	(0.7)
6.0- 7.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0.3)	(0.3)
8.0-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
total	195	335	12	9	6	8	1	6	5	8	7	8	8	10	6	27	651
	(26.5)	(45.5)	(1.6)	(1.2)	(0.8)	(1.1)	(0.1)	(0.8)	(0.7)	(1.1)	(1.0)	(1.1)	(1.1)	(1.4)	(0.8)	(3.7)	(88.5)
mean w.s.	1.1	1.3	1.1	0.9	0.7	0.8	0.7	0.7	0.7	0.9	0.9	1.8	2.1	2.2	1.4	1.5	

calm 85 (11.5 %) obtained data 736 (98.4 %) missed data 12 (1.6 %) mean wind speed 1.1 m/s

note : Upper figure shows the frequency, and lower figure in parenthesis is its percentage.
(-) denotes no appearance.

Frequency of wind speed class by wind direction

Observation point : Aghdasiyeh
Observation period : December, 1996 - February, 1997

*** winter : whole day ***

wind speed class(m/s)	wind direction																total
	NNE	N E	ENE	E	ESE	S E	SSE	S	SSW	S W	WSW	W	WNW	N W	NNW	N	
0.5- 0.9	109	143	44	28	35	41	20	30	33	33	18	10	18	13	17	44	636
	(5.1)	(6.6)	(2.0)	(1.3)	(1.6)	(1.9)	(0.9)	(1.4)	(1.5)	(1.5)	(0.8)	(0.5)	(0.8)	(0.6)	(0.8)	(2.0)	(29.5)
1.0- 1.9	180	313	22	18	18	30	47	105	135	126	47	13	8	10	11	27	1110
	(8.4)	(14.5)	(1.0)	(0.8)	(0.8)	(1.4)	(2.2)	(4.9)	(6.3)	(5.8)	(2.2)	(0.6)	(0.4)	(0.5)	(0.5)	(1.3)	(51.5)
2.0- 2.9	9	25	3	3	2	1	4	16	29	32	19	10	3	4	5	3	168
	(0.4)	(1.2)	(0.1)	(0.1)	(0.1)	(0.0)	(0.2)	(0.7)	(1.3)	(1.5)	(0.9)	(0.5)	(0.1)	(0.2)	(0.2)	(0.1)	(7.8)
3.0- 3.9	1	0	0	0	0	0	1	0	0	5	6	2	5	4	1	1	26
	(0.0)	(-)	(-)	(-)	(-)	(-)	(0.0)	(-)	(-)	(0.2)	(0.3)	(0.1)	(0.2)	(0.2)	(0.0)	(0.0)	(1.2)
4.0- 5.9	0	0	0	0	0	0	0	0	0	3	0	1	5	3	1	1	14
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0.1)	(-)	(0.0)	(0.2)	(0.1)	(0.0)	(0.0)	(0.6)
6.0- 7.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
8.0-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
total	299	481	69	49	55	72	72	151	197	199	90	36	39	34	35	76	1954
	(13.9)	(22.3)	(3.2)	(2.3)	(2.6)	(3.3)	(3.3)	(7.0)	(9.1)	(9.2)	(4.2)	(1.7)	(1.8)	(1.6)	(1.6)	(3.5)	(90.7)
mean w.s.	1.1	1.2	0.9	1.0	0.9	1.0	1.2	1.4	1.4	1.5	1.6	1.7	1.8	1.7	1.3	1.1	

calm 201 (9.3 %) obtained data 2155 (99.8 %) missed data 5 (0.2 %) mean wind speed 1.2 m/s

note ; Upper figure shows the frequency, and lower figure in parenthesis is its percentage.
(-) denotes no appearance.

Frequency of wind speed class by wind direction

Observation point ; Aghdasiyeh
Observation period ; December, 1996 - February, 1997

*** winter ; daytime ***

wind speed class(m/s)	wind direction																total
	NNE	N E	ENE	E	ESE	S E	SSE	S	SSW	S W	WSW	W	WNW	N W	NNW	N	
0.5- 0.9	14	15	5	4	13	24	9	19	27	24	13	6	8	7	5	8	201
	(1.6)	(1.7)	(0.6)	(0.4)	(1.5)	(2.7)	(1.0)	(2.1)	(3.0)	(2.7)	(1.5)	(0.7)	(0.9)	(0.8)	(0.6)	(0.9)	(22.4)
1.0- 1.9	14	30	6	4	10	18	41	100	122	110	37	6	2	1	3	4	508
	(1.6)	(3.3)	(0.7)	(0.4)	(1.1)	(2.0)	(4.6)	(11.2)	(13.6)	(12.3)	(4.1)	(0.7)	(0.2)	(0.1)	(0.3)	(0.4)	(56.7)
2.0- 2.9	1	2	1	0	0	0	4	15	28	25	15	4	0	2	0	1	98
	(0.1)	(0.2)	(0.1)	(-)	(-)	(-)	(0.4)	(1.7)	(3.1)	(2.8)	(1.7)	(0.4)	(-)	(0.2)	(-)	(0.1)	(10.9)
3.0- 3.9	1	0	0	0	0	0	1	0	0	5	4	0	1	1	0	1	14
	(0.1)	(-)	(-)	(-)	(-)	(-)	(0.1)	(-)	(-)	(0.6)	(0.4)	(-)	(0.1)	(0.1)	(-)	(0.1)	(1.6)
4.0- 5.9	0	0	0	0	0	0	0	0	0	3	0	1	3	0	1	1	9
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0.3)	(-)	(0.1)	(0.3)	(-)	(0.1)	(0.1)	(1.0)
6.0- 7.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
8.0-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
total	30	47	12	8	23	42	55	134	177	167	69	17	14	11	9	15	830
	(3.3)	(5.2)	(1.3)	(0.9)	(2.6)	(4.7)	(6.1)	(15.0)	(19.8)	(18.6)	(7.7)	(1.9)	(1.6)	(1.2)	(1.0)	(1.7)	(92.6)
mean w.s.	1.1	1.2	1.2	1.0	0.9	1.0	1.3	1.4	1.5	1.6	1.6	1.6	1.8	1.3	1.3	1.4	

calm 66 (7.4 %) obtained data 896 (99.9 %) missed data 1 (0.1 %) mean wind speed 1.3 m/s

*** winter ; night-time ***

wind speed class(m/s)	wind direction																total
	NNE	N E	ENE	E	ESE	S E	SSE	S	SSW	S W	WSW	W	WNW	N W	NNW	N	
0.5- 0.9	95	128	39	24	22	17	11	11	6	9	5	4	10	6	12	36	435
	(7.5)	(10.2)	(3.1)	(1.9)	(1.7)	(1.4)	(0.9)	(0.9)	(0.5)	(0.7)	(0.4)	(0.3)	(0.8)	(0.5)	(1.0)	(2.9)	(34.6)
1.0- 1.9	166	283	16	14	8	12	6	5	13	16	10	7	6	9	8	23	602
	(13.2)	(22.5)	(1.3)	(1.1)	(0.6)	(1.0)	(0.5)	(0.4)	(1.0)	(1.3)	(0.8)	(0.6)	(0.5)	(0.7)	(0.6)	(1.8)	(47.8)
2.0- 2.9	8	23	2	3	2	1	0	1	1	7	4	6	3	2	5	2	70
	(0.6)	(1.8)	(0.2)	(0.2)	(0.2)	(0.1)	(-)	(0.1)	(0.1)	(0.6)	(0.3)	(0.5)	(0.2)	(0.2)	(0.4)	(0.2)	(5.6)
3.0- 3.9	0	0	0	0	0	0	0	0	0	0	2	2	4	3	1	0	12
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0.2)	(0.2)	(0.3)	(0.2)	(0.1)	(-)	(1.0)
4.0- 5.9	0	0	0	0	0	0	0	0	0	0	0	0	2	3	0	0	5
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0.2)	(0.2)	(-)	(-)	(0.4)
6.0- 7.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
8.0-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
total	269	434	57	41	32	30	17	17	20	32	21	19	25	23	26	61	1124
	(21.4)	(34.5)	(4.5)	(3.3)	(2.5)	(2.4)	(1.4)	(1.4)	(1.6)	(2.5)	(1.7)	(1.5)	(2.0)	(1.8)	(2.1)	(4.8)	(89.3)
mean w.s.	1.1	1.2	0.9	1.0	0.9	1.0	0.9	1.0	1.1	1.3	1.6	1.9	1.8	1.9	1.2	1.0	

calm 135 (10.7 %) obtained data 1259 (99.7 %) missed data 4 (0.3 %) mean wind speed 1.1 m/s

note ; Upper figure shows the frequency, and lower figure in parenthesis is its percentage.
(-) denotes no appearance.

Frequency of wind speed class by wind direction

Observation point : Aghdasiyeh
Observation period : October, 1996

*** whole day (1 h ~ 24 h) ***

wind speed class(m/s)	wind direction																total
	NNE	N E	ENE	E	ESE	S E	SSE	S	SSW	S W	WSW	W	WNW	N W	NNW	N	
0.5- 0.9	36	41	4	3	3	4	6	5	11	14	14	11	2	3	1	10	168
	(5.7)	(6.5)	(0.6)	(0.5)	(0.5)	(0.6)	(0.9)	(0.8)	(1.7)	(2.2)	(2.2)	(1.7)	(0.3)	(0.5)	(0.2)	(1.6)	(26.5)
1.0- 1.9	71	108	3	5	3	3	3	17	30	45	16	3	4	1	1	9	322
	(11.2)	(17.1)	(0.5)	(0.8)	(0.5)	(0.5)	(0.5)	(2.7)	(4.7)	(7.1)	(2.5)	(0.5)	(0.6)	(0.2)	(0.2)	(1.4)	(50.9)
2.0- 2.9	2	16	1	0	0	0	0	1	12	15	5	6	7	4	0	1	70
	(0.3)	(2.5)	(0.2)	(-)	(-)	(-)	(-)	(0.2)	(1.9)	(2.4)	(0.8)	(0.9)	(1.1)	(0.6)	(-)	(0.2)	(11.1)
3.0- 3.9	3	0	0	0	0	0	1	0	2	2	1	2	1	0	0	0	12
	(0.5)	(-)	(-)	(-)	(-)	(-)	(0.2)	(-)	(0.3)	(0.3)	(0.2)	(0.3)	(0.2)	(-)	(-)	(-)	(1.9)
4.0- 5.9	0	0	0	0	0	0	0	0	1	0	0	1	0	2	0	0	4
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0.2)	(-)	(-)	(0.2)	(-)	(0.3)	(-)	(-)	(0.6)
6.0- 7.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0.2)	(0.2)
8.0-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
total	112	165	8	8	6	7	10	23	56	76	36	23	14	10	2	21	577
	(17.7)	(26.1)	(1.3)	(1.3)	(0.9)	(1.1)	(1.6)	(3.6)	(8.8)	(12.0)	(5.7)	(3.6)	(2.2)	(1.6)	(0.3)	(3.3)	(91.2)
mean w.s.	1.3	1.4	1.2	1.0	0.8	1.0	1.2	1.2	1.6	1.5	1.3	1.7	2.0	2.3	0.9	1.3	

calm 56 (8.8 %) obtained data 633 (96.3 %) missed data 24 (3.7 %) mean wind speed 1.3 m/s

note : Upper figure shows the frequency, and lower figure in parenthesis is its percentage.
(-) denotes no appearance.

Frequency of wind speed class by wind direction

Observation point ; Aqhdasiyeh
Observation period ; October, 1996

*** daytime (7 h ~ 17 h) ***

wind speed class(m/s)	wind direction																total
	NNE	N E	ENE	E	ESE	S E	SSE	S	SSW	S W	WSW	W	WNW	N W	NNW	N	
0.5- 0.9	2	4	0	0	0	2	6	5	9	13	11	9	2	2	0	4	69
	(0.7)	(1.4)	(-)	(-)	(-)	(0.7)	(2.1)	(1.7)	(3.1)	(4.5)	(3.8)	(3.1)	(0.7)	(0.7)	(-)	(1.4)	(24.0)
1.0- 1.9	9	14	0	2	1	1	3	17	30	42	15	2	1	0	0	2	129
	(3.1)	(4.9)	(-)	(0.7)	(0.3)	(0.3)	(1.0)	(5.9)	(10.5)	(14.6)	(5.2)	(0.7)	(0.3)	(-)	(-)	(0.7)	(48.4)
2.0- 2.9	1	1	0	0	0	0	0	1	12	15	5	4	2	1	0	1	43
	(0.3)	(0.3)	(-)	(-)	(-)	(-)	(-)	(0.3)	(4.2)	(5.2)	(1.7)	(1.4)	(0.7)	(0.3)	(-)	(0.3)	(15.0)
3.0- 3.9	3	0	0	0	0	0	1	0	2	2	1	0	1	0	0	0	10
	(1.0)	(-)	(-)	(-)	(-)	(-)	(0.3)	(-)	(0.7)	(0.7)	(0.3)	(-)	(0.3)	(-)	(-)	(-)	(3.5)
4.0- 5.9	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	2
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0.3)	(-)	(-)	(0.3)	(-)	(-)	(-)	(-)	(0.7)
6.0- 7.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
8.0-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
total	15	19	0	2	1	3	10	23	54	72	32	16	6	3	0	7	263
	(5.2)	(6.6)	(-)	(0.7)	(0.3)	(1.0)	(3.5)	(8.0)	(18.8)	(25.1)	(11.1)	(5.6)	(2.1)	(1.0)	(-)	(2.4)	(91.6)
mean w.s.	1.8	1.3	0.0	1.2	1.0	0.9	1.2	1.2	1.6	1.5	1.3	1.5	1.8	1.3	0.0	1.0	

calm 24 (8.4 %) obtained data 287 (96.0 %) missed data 12 (4.0 %) mean wind speed 1.4 m/s

*** night-time (18 h ~ 6 h) ***

wind speed class(m/s)	wind direction																total
	NNE	N E	ENE	E	ESE	S E	SSE	S	SSW	S W	WSW	W	WNW	N W	NNW	N	
0.5- 0.9	34	37	4	3	3	2	0	0	2	1	3	2	0	1	1	6	99
	(9.8)	(10.7)	(1.2)	(0.9)	(0.9)	(0.6)	(-)	(-)	(0.6)	(0.3)	(0.9)	(0.6)	(-)	(0.3)	(0.3)	(1.7)	(28.6)
1.0- 1.9	62	94	3	3	2	2	0	0	0	3	1	1	3	1	1	7	183
	(17.9)	(27.2)	(0.9)	(0.9)	(0.6)	(0.6)	(-)	(-)	(-)	(0.9)	(0.3)	(0.3)	(0.9)	(0.3)	(0.3)	(2.0)	(52.9)
2.0- 2.9	1	15	1	0	0	0	0	0	0	0	0	2	5	3	0	0	27
	(0.3)	(4.3)	(0.3)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0.6)	(1.4)	(0.9)	(-)	(-)	(7.8)
3.0- 3.9	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0.6)	(-)	(-)	(-)	(-)	(0.6)
4.0- 5.9	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0.6)	(-)	(-)	(0.6)
6.0- 7.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0.3)	(0.3)
8.0-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
total	97	146	8	6	5	4	0	0	2	4	4	7	8	7	2	14	314
	(28.0)	(42.2)	(2.3)	(1.7)	(1.4)	(1.2)	(-)	(-)	(0.6)	(1.2)	(1.2)	(2.0)	(2.3)	(2.0)	(0.6)	(4.0)	(90.8)
mean w.s.	1.2	1.4	1.2	1.0	0.8	1.1	0.0	0.0	0.7	1.1	0.7	2.0	2.1	2.7	0.9	1.4	

calm 32 (9.2 %) obtained data 346 (96.6 %) missed data 12 (3.4 %) mean wind speed 1.2 m/s

note ; Upper figure shows the frequency, and lower figure in parenthesis is its percentage.
(-) denotes no appearance.

Frequency of wind speed class by wind direction

Observation point ; Aghdasiyeh
Observation period ; November, 1996

*** whole day (1 h ~ 24 h) ***

wind speed class(m/s)	wind direction																total
	NNE	N E	ENE	E	ESE	S E	SSE	S	SSW	S W	WSW	W	WNW	N W	NNW	N	
0.5- 0.9	59	70	2	2	3	8	12	17	20	24	7	6	0	3	2	9	244
	(8.2)	(9.7)	(0.3)	(0.3)	(0.4)	(1.1)	(1.7)	(2.4)	(2.8)	(3.3)	(1.0)	(0.8)	(-)	(0.4)	(0.3)	(1.3)	(33.9)
1.0- 1.9	47	131	3	3	0	3	3	32	70	44	15	1	0	1	5	3	361
	(6.5)	(18.2)	(0.4)	(0.4)	(-)	(0.4)	(0.4)	(4.5)	(9.7)	(6.1)	(2.1)	(0.1)	(-)	(0.1)	(0.7)	(0.4)	(50.2)
2.0- 2.9	1	8	1	0	0	0	0	0	6	4	2	0	0	0	1	1	24
	(0.1)	(1.1)	(0.1)	(-)	(-)	(-)	(-)	(-)	(0.8)	(0.6)	(0.3)	(-)	(-)	(-)	(0.1)	(0.1)	(3.3)
3.0- 3.9	0	0	0	0	0	0	0	0	0	0	2	1	0	1	2	1	7
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0.3)	(0.1)	(-)	(0.1)	(0.3)	(0.1)	(1.0)
4.0- 5.9	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4
	(0.3)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0.3)	(0.6)
6.0- 7.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0.1)	(0.1)
8.0-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
total	109	209	6	5	3	11	15	49	96	72	26	8	0	5	10	17	641
	(15.2)	(29.1)	(0.8)	(0.7)	(0.4)	(1.5)	(2.1)	(6.8)	(13.4)	(10.0)	(3.6)	(1.1)	(-)	(0.7)	(1.4)	(2.4)	(89.2)
mean w.s.	1.0	1.2	1.4	0.9	0.6	0.8	0.8	1.1	1.3	1.3	1.4	1.0	0.0	1.4	1.7	1.8	

calm 78 (10.8 %) obtained data 719 (99.9 %) missed data 1 (0.1 %) mean wind speed 1.1 m/s

note ; Upper figure shows the frequency, and lower figure in parenthesis is its percentage.
(-) denotes no appearance.

Frequency of wind speed class by wind direction

Observation point ; Aghdasiyeh
Observation period ; November, 1996

*** daytime (7 h ~ 17 h) ***

wind speed class(m/s)	wind direction																total
	NNE	N E	ENE	E	ESE	S E	SSE	S	SSW	S W	WSW	W	WNW	N W	NNW	N	
0.5- 0.9	6	5	0	0	2	4	11	11	17	20	7	5	0	1	1	1	91
	(1.8)	(1.5)	(-)	(-)	(0.6)	(1.2)	(3.3)	(3.3)	(5.2)	(6.1)	(2.1)	(1.5)	(-)	(0.3)	(0.3)	(0.3)	(27.7)
1.0- 1.9	5	14	1	2	0	3	3	32	70	44	12	1	0	0	3	1	191
	(1.5)	(4.3)	(0.3)	(0.6)	(-)	(0.9)	(0.9)	(9.7)	(21.3)	(13.4)	(3.6)	(0.3)	(-)	(-)	(0.9)	(0.3)	(58.1)
2.0- 2.9	0	1	1	0	0	0	0	0	6	4	2	0	0	0	1	1	16
	(-)	(0.3)	(0.3)	(-)	(-)	(-)	(-)	(-)	(1.8)	(1.2)	(0.6)	(-)	(-)	(-)	(0.3)	(0.3)	(4.9)
3.0- 3.9	0	0	0	0	0	0	0	0	0	0	2	1	0	1	1	0	5
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0.6)	(0.3)	(-)	(0.3)	(0.3)	(-)	(1.5)
4.0- 5.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0.3)	(0.3)
6.0- 7.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
8.0-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
total	11	20	2	2	2	7	14	43	93	68	23	7	0	2	6	4	304
	(3.3)	(6.1)	(0.6)	(0.6)	(0.6)	(2.1)	(4.3)	(13.1)	(28.3)	(20.7)	(7.0)	(2.1)	(-)	(0.6)	(1.8)	(1.2)	(92.4)
mean w.s.	0.9	1.2	2.2	1.2	0.6	0.9	0.8	1.2	1.3	1.3	1.4	1.1	0.0	2.0	1.8	2.3	

calm 25 (7.6 %) obtained data 329 (99.7 %) missed data 1 (0.3 %) mean wind speed 1.2 m/s

*** night-time (18 h ~ 6 h) ***

wind speed class(m/s)	wind direction																total
	NNE	N E	ENE	E	ESE	S E	SSE	S	SSW	S W	WSW	W	WNW	N W	NNW	N	
0.5- 0.9	53	65	2	2	1	4	1	6	3	4	0	1	0	2	1	8	153
	(13.6)	(16.7)	(0.5)	(0.5)	(0.3)	(1.0)	(0.3)	(1.5)	(0.8)	(1.0)	(-)	(0.3)	(-)	(0.5)	(0.3)	(2.1)	(39.2)
1.0- 1.9	42	117	2	1	0	0	0	0	0	0	3	0	0	1	2	2	170
	(10.8)	(30.0)	(0.5)	(0.3)	(-)	(-)	(-)	(-)	(-)	(-)	(0.8)	(-)	(-)	(0.3)	(0.5)	(0.5)	(43.6)
2.0- 2.9	1	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
	(0.3)	(1.8)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(2.1)
3.0- 3.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0.3)	(0.3)	(0.5)
4.0- 5.9	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3
	(0.5)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0.3)	(0.8)
6.0- 7.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0.3)	(0.3)
8.0-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
total	98	189	4	3	1	4	1	6	3	4	3	1	0	3	4	13	337
	(25.1)	(48.5)	(1.0)	(0.8)	(0.3)	(1.0)	(0.3)	(1.5)	(0.8)	(1.0)	(0.8)	(0.3)	(-)	(0.8)	(1.0)	(3.3)	(86.4)
mean w.s.	1.0	1.2	1.0	0.8	0.6	0.6	0.7	0.7	0.7	0.6	1.2	0.5	0.0	0.9	1.7	1.6	

calm 53 (13.6 %) obtained data 390 (100.0 %) missed data 0 (0.0 %) mean wind speed 1.0 m/s

note ; Upper figure shows the frequency, and lower figure in parenthesis is its percentage.
(-) denotes no appearance.

Frequency of wind speed class by wind direction

Observation point ; Aghdasiyeh
Observation period ; December, 1996

*** whole day (1 h ~ 24 h) ***

wind speed class(m/s)	wind direction																total
	NNE	N E	ENE	E	ESE	S E	SSE	S	SSW	S W	WSW	W	WNW	N W	NNW	N	
0.5- 0.9	50	57	19	8	14	12	8	16	11	22	10	3	5	9	8	23	275
	(6.7)	(7.7)	(2.6)	(1.1)	(1.9)	(1.6)	(1.1)	(2.2)	(1.5)	(3.0)	(1.3)	(0.4)	(0.7)	(1.2)	(1.1)	(3.1)	(37.0)
1.0- 1.9	52	106	4	6	4	10	12	23	43	44	18	3	3	4	5	10	347
	(7.0)	(14.2)	(0.5)	(0.8)	(0.5)	(1.3)	(1.6)	(3.1)	(5.8)	(5.9)	(2.4)	(0.4)	(0.4)	(0.5)	(0.7)	(1.3)	(46.6)
2.0- 2.9	2	15	0	0	0	0	2	0	7	3	4	1	1	1	2	2	40
	(0.3)	(2.0)	(-)	(-)	(-)	(-)	(0.3)	(-)	(0.9)	(0.4)	(0.5)	(0.1)	(0.1)	(0.1)	(0.3)	(0.3)	(5.4)
3.0- 3.9	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	3
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0.1)	(-)	(-)	(0.1)	(0.1)	(-)	(-)	(0.4)
4.0- 5.9	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0.1)	(-)	(-)	(0.1)
6.0- 7.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
8.0-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
total	104	178	23	14	18	22	22	39	61	70	32	7	10	16	15	35	666
	(14.0)	(23.9)	(3.1)	(1.9)	(2.4)	(3.0)	(3.0)	(5.2)	(8.2)	(9.4)	(4.3)	(0.9)	(1.3)	(2.2)	(2.0)	(4.7)	(89.5)
mean w.s.	1.0	1.2	0.7	0.9	0.8	0.9	1.2	1.1	1.3	1.2	1.2	1.2	1.4	1.4	1.0	0.9	

calm 78 (10.5 %) obtained data 744 (100.0 %) missed data 0 (0.0 %) mean wind speed 1.0 m/s

note ; Upper figure shows the frequency, and lower figure in parenthesis is its percentage.
(-) denotes no appearance.

Frequency of wind speed class by wind direction

Observation point ; Aghdasiyeh
Observation period ; December, 1996

*** daytime (8 h ~ 16 h) ***

wind speed class(m/s)	wind direction																total
	NNE	N E	ENE	E	ESE	S E	SSE	S	SSW	S W	WSW	W	WNW	N W	NNW	N	
0.5- 0.9	6	4	2	1	5	7	2	10	10	18	7	3	3	5	1	3	87
	(2.2)	(1.4)	(0.7)	(0.4)	(1.8)	(2.5)	(0.7)	(3.6)	(3.6)	(6.5)	(2.5)	(1.1)	(1.1)	(1.8)	(0.4)	(1.1)	(31.2)
1.0- 1.9	1	7	1	1	3	6	11	21	40	40	17	1	1	0	1	3	154
	(0.4)	(2.5)	(0.4)	(0.4)	(1.1)	(2.2)	(3.9)	(7.5)	(14.3)	(14.3)	(6.1)	(0.4)	(0.4)	(-)	(0.4)	(1.1)	(55.2)
2.0- 2.9	0	0	0	0	0	0	2	0	7	3	3	1	0	0	0	0	16
	(-)	(-)	(-)	(-)	(-)	(-)	(0.7)	(-)	(2.5)	(1.1)	(1.1)	(0.4)	(-)	(-)	(-)	(-)	(5.7)
3.0- 3.9	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0.4)	(-)	(-)	(-)	(-)	(-)	(-)	(0.4)
4.0- 5.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
6.0- 7.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
8.0-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
total	7	11	3	2	8	13	15	31	57	62	27	5	4	5	2	6	258
	(2.5)	(3.9)	(1.1)	(0.7)	(2.9)	(4.7)	(5.4)	(11.1)	(20.4)	(22.2)	(9.7)	(1.8)	(1.4)	(1.8)	(0.7)	(2.2)	(92.5)
mean w.s.	0.9	1.1	0.9	0.8	1.0	0.9	1.3	1.1	1.4	1.2	1.3	1.2	1.0	0.6	1.1	1.0	

calm 21 (7.5 %) obtained data 279 (100.0 %) missed data 0 (0.0 %) mean wind speed 1.1 m/s

*** night-time (17 h ~ 7 h) ***

wind speed class(m/s)	wind direction																total
	NNE	N E	ENE	E	ESE	S E	SSE	S	SSW	S W	WSW	W	WNW	N W	NNW	N	
0.5- 0.9	44	53	17	7	9	5	6	6	1	4	3	0	2	4	7	20	188
	(9.5)	(11.4)	(3.7)	(1.5)	(1.9)	(1.1)	(1.3)	(1.3)	(0.2)	(0.9)	(0.6)	(-)	(0.4)	(0.9)	(1.5)	(4.3)	(40.4)
1.0- 1.9	51	99	3	5	1	4	1	2	3	4	1	2	2	4	4	7	193
	(11.0)	(21.3)	(0.6)	(1.1)	(0.2)	(0.9)	(0.2)	(0.4)	(0.6)	(0.9)	(0.2)	(0.4)	(0.4)	(0.9)	(0.9)	(1.5)	(41.5)
2.0- 2.9	2	15	0	0	0	0	0	0	0	0	1	0	1	1	2	2	24
	(0.4)	(3.2)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0.2)	(-)	(0.2)	(0.2)	(0.4)	(0.4)	(5.2)
3.0- 3.9	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0.2)	(0.2)	(-)	(-)	(0.4)
4.0- 5.9	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0.2)	(-)	(-)	(0.2)
6.0- 7.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
8.0-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
total	97	167	20	12	10	9	7	8	4	8	5	2	6	11	13	29	408
	(20.9)	(35.9)	(4.3)	(2.6)	(2.2)	(1.9)	(1.5)	(1.7)	(0.9)	(1.7)	(1.1)	(0.4)	(1.3)	(2.4)	(2.8)	(6.2)	(87.7)
mean w.s.	1.0	1.2	0.7	0.9	0.7	0.8	0.7	0.9	1.0	0.9	1.1	1.1	1.6	1.7	1.0	0.9	

calm 57 (12.3 %) obtained data 465 (100.0 %) missed data 0 (0.0 %) mean wind speed 1.0 m/s

note ; Upper figure shows the frequency, and lower figure in parenthesis is its percentage.
(-) denotes no appearance.

Frequency of wind speed class by wind direction

Observation point ; Aghdasiyeh
Observation period ; January, 1997

*** whole day (1 h ~ 24 h) ***

wind speed class(m/s)	wind direction																total
	NNE	N E	ENE	E	ESE	S E	SSE	S	SSW	S W	WSW	W	WNW	N W	NNW	N	
0.5- 0.9	32	38	16	7	14	16	4	7	17	5	5	5	8	3	3	15	195
	(4.3)	(5.1)	(2.2)	(0.9)	(1.9)	(2.2)	(0.5)	(0.9)	(2.3)	(0.7)	(0.7)	(0.7)	(1.1)	(0.4)	(0.4)	(2.0)	(26.2)
1.0- 1.9	79	111	13	5	9	5	15	44	48	37	24	3	3	4	3	11	404
	(10.6)	(14.9)	(1.7)	(0.7)	(1.2)	(0.7)	(2.0)	(5.9)	(6.5)	(5.0)	(1.9)	(0.4)	(0.4)	(0.5)	(0.4)	(1.5)	(54.3)
2.0- 2.9	5	7	2	1	1	1	1	3	8	9	3	4	0	2	2	1	50
	(0.7)	(0.9)	(0.3)	(0.1)	(0.1)	(0.1)	(0.1)	(0.4)	(1.1)	(1.2)	(0.4)	(0.5)	(-)	(0.3)	(0.3)	(0.1)	(6.7)
3.0- 3.9	1	0	0	0	0	0	0	0	0	0	3	1	1	2	1	0	9
	(0.1)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0.4)	(0.1)	(0.1)	(0.3)	(0.1)	(-)	(1.2)
4.0- 5.9	0	0	0	0	0	0	0	0	0	0	0	1	3	1	0	1	6
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0.1)	(0.4)	(0.1)	(-)	(0.1)	(0.8)
6.0- 7.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
8.0-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
total	117	156	31	13	24	22	20	54	73	51	25	14	15	12	9	28	664
	(15.7)	(21.0)	(4.2)	(1.7)	(3.2)	(3.0)	(2.7)	(7.3)	(9.8)	(6.9)	(3.4)	(1.9)	(2.0)	(1.6)	(1.2)	(3.8)	(89.2)
mean w.s.	1.2	1.2	1.0	1.1	0.9	0.9	1.2	1.4	1.4	1.5	1.6	1.8	1.7	1.9	1.5	1.2	

calm 80 (10.8 %) obtained data 744 (100.0 %) missed data 0 (0.0 %) mean wind speed 1.2 m/s

note : Upper figure shows the frequency, and lower figure in parenthesis is its percentage.
(-) denotes no appearance.

Frequency of wind speed class by wind direction

Observation point : Aghdasiyeh
Observation period : January, 1997

*** daytime (8 h ~ 17 h) ***

wind speed class(m/s)	wind direction																total
	NNE	N E	ENE	E	ESE	S E	SSE	S	SSW	S W	WSW	W	WNW	N W	NNW	N	
0.5- 0.9	5	5	1	0	6	10	1	5	14	2	3	3	2	2	1	4	64
	(1.6)	(1.6)	(0.3)	(-)	(1.9)	(3.2)	(0.3)	(1.6)	(4.5)	(0.6)	(1.0)	(1.0)	(0.6)	(0.6)	(0.3)	(1.3)	(20.6)
1.0- 1.9	5	6	3	1	6	4	14	43	45	34	10	2	1	1	2	1	178
	(1.6)	(1.9)	(1.0)	(0.3)	(1.9)	(1.3)	(4.5)	(13.9)	(14.5)	(11.0)	(3.2)	(0.6)	(0.3)	(0.2)	(0.6)	(0.3)	(57.4)
2.0- 2.9	1	1	0	0	0	0	1	3	8	8	2	2	0	2	0	1	29
	(0.3)	(0.3)	(-)	(-)	(-)	(-)	(0.3)	(1.0)	(2.6)	(2.6)	(0.6)	(0.6)	(-)	(0.6)	(-)	(0.3)	(9.4)
3.0- 3.9	1	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	4
	(0.3)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0.3)	(-)	(0.3)	(0.3)	(-)	(-)	(1.3)
4.0- 5.9	0	0	0	0	0	0	0	0	0	0	0	1	3	0	0	1	5
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0.3)	(1.0)	(-)	(-)	(0.3)	(1.6)
6.0- 7.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
8.0-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
total	12	12	4	1	12	14	16	51	67	44	16	8	7	6	3	7	280
	(3.9)	(3.9)	(1.3)	(0.3)	(3.9)	(4.5)	(5.2)	(16.5)	(21.6)	(14.2)	(5.2)	(2.6)	(2.3)	(1.9)	(1.0)	(2.3)	(90.3)
mean w.s.	1.3	1.1	1.1	1.6	0.9	0.9	1.3	1.4	1.4	1.6	1.4	1.8	2.8	1.9	1.2	1.6	

calm 30 (9.7 %) obtained data 310 (100.0 %) missed data 0 (0.0 %) mean wind speed 1.3 m/s

*** night-time (18 h ~ 7 h) ***

wind speed class(m/s)	wind direction																total
	NNE	N E	ENE	E	ESE	S E	SSE	S	SSW	S W	WSW	W	WNW	N W	NNW	N	
0.5- 0.9	27	33	15	7	8	6	3	2	3	3	2	2	6	1	2	11	131
	(6.2)	(7.6)	(3.5)	(1.6)	(1.8)	(1.4)	(0.7)	(0.5)	(0.7)	(0.7)	(0.5)	(0.5)	(1.4)	(0.2)	(0.5)	(2.5)	(30.2)
1.0- 1.9	74	105	10	4	3	1	1	1	3	3	4	1	2	3	1	10	226
	(17.1)	(24.2)	(2.3)	(0.9)	(0.7)	(0.2)	(0.2)	(0.2)	(0.7)	(0.7)	(0.9)	(0.2)	(0.5)	(0.7)	(0.2)	(2.3)	(52.1)
2.0- 2.9	4	6	2	1	1	1	0	0	0	1	1	2	0	0	2	0	21
	(0.9)	(1.4)	(0.5)	(0.2)	(0.2)	(0.2)	(-)	(-)	(-)	(0.2)	(0.2)	(0.5)	(-)	(-)	(0.5)	(-)	(4.8)
3.0- 3.9	0	0	0	0	0	0	0	0	0	0	2	1	0	1	1	0	5
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0.5)	(0.2)	(-)	(0.2)	(0.2)	(-)	(1.2)
4.0- 5.9	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0.2)	(-)	(-)	(0.2)
6.0- 7.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
8.0-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
total	105	144	27	12	12	8	4	3	6	7	9	6	8	6	6	21	384
	(24.2)	(33.2)	(6.2)	(2.8)	(2.8)	(1.8)	(0.9)	(0.7)	(1.4)	(1.6)	(2.1)	(1.4)	(1.8)	(1.4)	(1.4)	(4.8)	(88.5)
mean w.s.	1.2	1.2	1.0	1.0	1.0	1.0	1.0	0.7	0.9	1.1	1.9	1.8	0.8	1.9	1.7	1.0	

calm 50 (11.5 %) obtained data 434 (100.0 %) missed data 0 (0.0 %) mean wind speed 1.1 m/s

note ; Upper figure shows the frequency, and lower figure in parenthesis is its percentage.
(-) denotes no appearance.

Frequency of wind speed class by wind direction

Observation point : Aghdasiyeh
Observation period : February, 1997

*** whole day (1 h ~ 24 h) ***

wind speed class(m/s)	wind direction NNE	N E	ENE	E	ESE	S E	SSE	S	SSW	S W	WSW	W	WNW	N W	NNW	N	total
0.5- 0.9	27	48	9	13	7	13	8	7	5	6	3	2	5	1	6	6	166
	(4.0)	(7.2)	(1.3)	(1.9)	(1.0)	(1.9)	(1.2)	(1.0)	(0.7)	(0.9)	(0.4)	(0.3)	(0.7)	(0.1)	(0.9)	(0.9)	(24.9)
1.0- 1.9	49	96	5	7	5	15	20	38	44	45	15	7	2	2	3	6	359
	(7.3)	(14.4)	(0.7)	(1.0)	(0.7)	(2.2)	(3.0)	(5.7)	(6.6)	(6.7)	(2.2)	(1.0)	(0.3)	(0.3)	(0.4)	(0.9)	(53.8)
2.0- 2.9	2	3	1	2	1	0	1	13	14	20	12	5	2	1	1	0	78
	(0.3)	(0.4)	(0.1)	(0.3)	(0.1)	(-)	(0.1)	(1.9)	(2.1)	(3.0)	(1.8)	(0.7)	(0.3)	(0.1)	(0.1)	(-)	(11.7)
3.0- 3.9	0	0	0	0	0	0	1	0	0	4	3	1	3	1	0	1	14
	(-)	(-)	(-)	(-)	(-)	(-)	(0.1)	(-)	(-)	(0.6)	(0.4)	(0.1)	(0.4)	(0.1)	(-)	(0.1)	(2.1)
4.0- 5.9	0	0	0	0	0	0	0	0	0	3	0	0	2	1	1	0	7
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0.4)	(-)	(-)	(0.3)	(0.1)	(0.1)	(-)	(1.0)
6.0- 7.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
8.0-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
total	78	147	15	22	13	28	30	58	63	78	33	15	14	6	11	13	624
	(11.7)	(22.0)	(2.2)	(3.3)	(1.9)	(4.2)	(4.5)	(8.7)	(9.4)	(11.7)	(4.9)	(2.2)	(2.1)	(0.9)	(1.6)	(1.9)	(93.6)
mean w.s.	1.2	1.2	1.0	1.0	1.0	1.1	1.3	1.5	1.6	1.8	1.9	2.0	2.2	2.2	1.4	1.3	

calm 43 (6.4 %) obtained data 667 (99.3 %) missed data 5 (0.7 %) mean wind speed 1.3 m/s

note ; Upper figure shows the frequency, and lower figure in parenthesis is its percentage.
(-) denotes no appearance.

Frequency of wind speed class by wind direction

Observation point : Aghdasiyeh
Observation period : February, 1997

*** daytime (7 h ~ 17 h) ***

wind speed class(m/s)	wind direction																total
	NNE	N E	ENE	E	ESE	S E	SSE	S	SSW	S W	WSW	W	WNW	N W	NNW	N	
0.5- 0.9	3	6	2	3	2	7	6	4	3	4	3	0	3	0	3	1	50
	(1.0)	(2.0)	(0.7)	(1.0)	(0.7)	(2.3)	(2.0)	(1.3)	(1.0)	(1.3)	(1.0)	(-)	(1.0)	(-)	(1.0)	(0.3)	(16.3)
1.0- 1.9	8	17	2	2	1	8	16	36	37	36	10	3	0	0	0	0	176
	(2.6)	(5.5)	(0.7)	(0.7)	(0.3)	(2.6)	(5.2)	(11.7)	(12.1)	(11.7)	(3.3)	(1.0)	(-)	(-)	(-)	(-)	(57.3)
2.0- 2.9	0	1	1	0	0	0	1	12	13	14	10	1	0	0	0	0	53
	(-)	(0.3)	(0.3)	(-)	(-)	(-)	(0.3)	(3.9)	(4.2)	(4.6)	(3.3)	(0.3)	(-)	(-)	(-)	(-)	(17.3)
3.0- 3.9	0	0	0	0	0	0	1	0	0	4	3	0	0	0	0	1	9
	(-)	(-)	(-)	(-)	(-)	(-)	(0.3)	(-)	(-)	(1.3)	(1.0)	(-)	(-)	(-)	(-)	(0.3)	(2.9)
4.0- 5.9	0	0	0	0	0	0	0	0	0	3	0	0	0	0	1	0	4
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(1.0)	(-)	(-)	(-)	(-)	(0.3)	(-)	(1.3)
6.0- 7.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
8.0-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
total	11	24	5	5	3	15	24	52	53	61	26	4	3	0	4	2	292
	(3.6)	(7.8)	(1.6)	(1.6)	(1.0)	(4.9)	(7.8)	(16.9)	(17.3)	(19.9)	(8.5)	(1.3)	(1.0)	(-)	(1.3)	(0.7)	(95.1)
mean w.s.	1.1	1.2	1.4	0.9	0.9	1.1	1.4	1.6	1.7	1.9	1.9	1.8	0.7	0.0	1.6	2.2	

calm 15 (4.9 %) obtained data 307 (99.7 %) missed data 1 (0.3 %) mean wind speed 1.5 m/s

*** night-time (18 h ~ 6 h) ***

wind speed class(m/s)	wind direction																total
	NNE	N E	ENE	E	ESE	S E	SSE	S	SSW	S W	WSW	W	WNW	N W	NNW	N	
0.5- 0.9	24	42	7	10	5	6	2	3	2	2	0	2	2	1	3	5	116
	(6.7)	(11.7)	(1.9)	(2.8)	(1.4)	(1.7)	(0.6)	(0.8)	(0.6)	(0.6)	(-)	(0.6)	(0.6)	(0.3)	(0.8)	(1.4)	(32.2)
1.0- 1.9	41	79	3	5	4	7	4	2	7	9	5	4	2	2	3	6	183
	(11.4)	(21.9)	(0.8)	(1.4)	(1.1)	(1.9)	(1.1)	(0.6)	(1.9)	(2.5)	(1.4)	(1.1)	(0.6)	(0.6)	(0.8)	(1.7)	(50.8)
2.0- 2.9	2	2	0	2	1	0	0	1	1	6	2	4	2	1	1	0	25
	(0.6)	(0.6)	(-)	(0.6)	(0.3)	(-)	(-)	(0.3)	(0.3)	(1.7)	(0.6)	(1.1)	(0.6)	(0.3)	(0.3)	(-)	(6.9)
3.0- 3.9	0	0	0	0	0	0	0	0	0	0	0	1	3	1	0	0	5
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0.3)	(0.8)	(0.3)	(-)	(-)	(1.4)
4.0- 5.9	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	3
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0.6)	(0.3)	(-)	(-)	(0.8)
6.0- 7.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
8.0-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
total	67	123	10	17	10	13	6	6	10	17	7	11	11	6	7	11	332
	(18.6)	(34.2)	(2.8)	(4.7)	(2.8)	(3.6)	(1.7)	(1.7)	(2.8)	(4.7)	(1.9)	(3.1)	(3.1)	(1.7)	(1.9)	(3.1)	(92.2)
mean w.s.	1.2	1.1	0.9	1.1	1.1	1.0	1.1	1.2	1.2	1.6	1.6	2.0	2.6	2.2	1.3	1.1	

calm 28 (7.8 %) obtained data 360 (98.9 %) missed data 4 (1.1 %) mean wind speed 1.2 m/s

note ; Upper figure shows the frequency, and lower figure in parenthesis is its percentage.
(-) denotes no appearance.

Comparison of wind direction frequency obtained by JICA and IRIMO.

Observation point ; Aghdasiyeh
Observation period ; October, 1996 - February, 1997

day / night	observation point	wind direction																total	exception
		NNE	N E	ENE	E	ESE	S E	SSE	S	SSW	S W	WSW	W	WNW	N W	NNW	N	calm	
daytime	JICA	42	77	12	24	23	46	70	157	282	252	98	27	20	13	7	17	94	1261	293
		(3.3)	(6.1)	(1.0)	(1.9)	(1.8)	(3.6)	(5.6)	(12.5)	(22.4)	(20.0)	(7.8)	(2.1)	(1.6)	(1.0)	(0.6)	(1.3)	(7.5)	(100.0)	(18.9)
	IRIMO	123	76	12	10	18	41	77	213	283	213	48	18	18	16	6	15	74	1261	292
		(9.8)	(6.0)	(1.0)	(0.8)	(1.4)	(3.3)	(6.1)	(16.9)	(22.4)	(16.9)	(3.8)	(1.4)	(1.4)	(1.3)	(0.5)	(1.2)	(5.9)	(100.0)	(18.9)
night-time	JICA	360	620	52	47	26	29	21	18	18	41	25	22	16	30	30	86	167	1608	378
		(22.4)	(38.6)	(3.2)	(2.9)	(1.6)	(1.8)	(1.3)	(1.1)	(1.1)	(2.5)	(1.6)	(1.4)	(1.0)	(1.9)	(1.9)	(5.3)	(10.4)	(100.0)	(19.0)
	IRIMO	601	409	31	34	32	23	22	28	26	34	30	30	25	29	28	64	162	1608	378
		(37.4)	(25.4)	(1.9)	(2.1)	(2.0)	(1.4)	(1.4)	(1.7)	(1.6)	(2.1)	(1.9)	(1.9)	(1.6)	(1.8)	(1.7)	(4.0)	(10.1)	(100.0)	(19.0)
whole day	JICA	402	697	64	71	49	75	91	175	300	293	123	49	36	43	37	103	261	2869	671
		(14.0)	(24.3)	(2.2)	(2.5)	(1.7)	(2.6)	(3.2)	(6.1)	(10.5)	(10.2)	(4.3)	(1.7)	(1.3)	(1.5)	(1.3)	(3.6)	(9.1)	(100.0)	(19.0)
	IRIMO	724	485	43	44	50	64	99	241	309	247	78	48	43	45	34	79	236	2869	671
		(25.2)	(16.9)	(1.5)	(1.5)	(1.7)	(2.2)	(3.5)	(8.4)	(10.8)	(8.6)	(2.7)	(1.7)	(1.5)	(1.6)	(1.2)	(2.8)	(8.2)	(100.0)	(19.0)

note 1. The pair of data from which one is missed is excepted.
2. Calm is defind as wind speed less than 0.5m/s.
Upper figure shows the frequency of the wind direction, and lower figure in parenthesis is its percentage.

Comparison of mean wind speed for each wind direction based on the data obtained by JICA and IRIMO.

Observation point ; Aghdasiyeh
Observation period ; October, 1996 - February, 1997

day / night	observation point	wind direction																total mean	total count	exception (%)
		NNE	N E	ENE	E	ESE	S E	SSE	S	SSW	S W	WSW	W	WNW	N W	NNW	N			
daytime	JICA	1.4	1.3	0.9	0.9	0.9	1.1	1.2	1.4	1.4	1.6	1.5	1.3	2.0	1.2	1.9	1.0	1.3	1261	(18.9)
	IRIMO	1.4	1.3	0.9	0.9	0.9	1.1	1.2	1.4	1.4	1.6	1.5	1.3	2.0	1.2	1.9	1.0	1.3	1261	(18.9)
night-time	JICA	1.2	1.2	0.9	1.1	0.9	1.1	1.0	0.9	1.0	1.2	1.3	1.7	2.8	2.1	1.4	1.1	1.1	1608	(19.0)
	IRIMO	1.2	1.2	0.9	1.1	0.9	1.1	1.0	0.9	1.0	1.2	1.3	1.7	2.8	2.1	1.4	1.1	1.1	1608	(19.0)
whole day	JICA	1.2	1.2	0.9	1.0	0.9	1.1	1.1	1.3	1.4	1.5	1.5	1.5	2.3	1.9	1.5	1.1	1.2	2869	(19.0)
	IRIMO	1.2	1.2	0.9	1.0	0.9	1.1	1.1	1.3	1.4	1.5	1.5	1.5	2.3	1.9	1.5	1.1	1.2	2869	(19.0)

note 1. The pair of data from which one is missed is excepted.
2. The mean wind speed for each wind direction is calculated with the exception of calm (less than 0.5m/s). As for total mean wind speed, calms are included.

Frequency of atmospheric stability

(Pasquill's classification)

Observation point ; Aghdasiyeh
Observation period ; October, 1996 - February, 1997

year	month	daytime							night-time				total	missed
		A	A-B	B	B-C	C	C-D	D	D*	E	F	G		
96	10	48 (7.6)	112 (17.7)	47 (7.4)	2 (0.3)	3 (0.5)	1 (0.2)	74 (11.7)	5 (0.8)	6 (0.9)	22 (3.5)	313 (49.4)	633 (100.0)	24 (3.7)
96	11	9 (1.3)	119 (16.6)	73 (10.2)	1 (0.1)	7 (1.0)	0 (0.0)	120 (16.7)	7 (1.0)	1 (0.1)	7 (1.0)	375 (52.2)	719 (100.0)	1 (0.1)
96	12	0 (0.0)	82 (11.0)	96 (12.9)	0 (0.0)	3 (0.4)	0 (0.0)	98 (13.2)	41 (5.5)	3 (0.4)	19 (2.6)	402 (54.0)	744 (100.0)	0 (0.0)
97	1	1 (0.1)	115 (15.5)	73 (9.8)	1 (0.1)	7 (0.9)	5 (0.7)	108 (14.5)	53 (7.1)	2 (0.3)	9 (1.2)	370 (49.7)	744 (100.0)	0 (0.0)
97	2	30 (4.5)	115 (17.2)	64 (9.6)	5 (0.7)	11 (1.6)	2 (0.3)	80 (12.0)	15 (2.2)	10 (1.5)	18 (2.7)	317 (47.5)	667 (100.0)	5 (0.7)
total		88 (2.5)	543 (15.5)	353 (10.1)	9 (0.3)	31 (0.9)	8 (0.2)	480 (13.7)	121 (3.5)	22 (0.6)	75 (2.1)	1777 (50.7)	3507 (100.0)	30 (0.8)

Obtained data 3507 (99.2 %)

note ; Upper figure shows the frequency, and lower figure in parenthesis is its percentage.

4.1.2 Upper layer meteorological condition

Frequency of wind direction by altitude

(All through the observation period ; whole day)

Observation point ; Aghdasiyeh
Observation period ; October 8 - October 15, 1996
February 22 - March 1, 1997

altitude (m)	wind direction																	total	missed
	NNE	N E	ENE	E	ESE	S E	SSE	S	SSW	S W	WSW	W	WNW	N W	NNW	N	calm		
surface	16	16	4	1	3	3	6	5	10	12	7	3	3	0	1	2	5	97	2
	(16.5)	(16.5)	(4.1)	(1.0)	(3.1)	(3.1)	(6.2)	(5.2)	(10.3)	(12.4)	(7.2)	(3.1)	(3.1)	(-)	(1.0)	(2.1)	(5.2)	(100.0)	(2.0)
50	7	7	7	4	2	8	3	3	12	17	6	4	4	3	2	9	1	99	0
	(7.1)	(7.1)	(7.1)	(4.0)	(2.0)	(8.1)	(3.0)	(3.0)	(12.1)	(17.2)	(6.1)	(4.0)	(4.0)	(3.0)	(2.0)	(9.1)	(1.0)	(100.0)	(-)
100	2	6	5	8	6	6	3	8	8	15	10	4	3	4	3	2	0	93	6
	(2.2)	(6.5)	(5.4)	(8.6)	(6.5)	(6.5)	(3.2)	(8.6)	(8.6)	(16.1)	(10.8)	(4.3)	(3.2)	(4.3)	(3.2)	(2.2)	(-)	(100.0)	(6.1)
150	0	5	2	4	7	11	2	9	10	12	8	7	2	0	1	2	1	83	16
	(-)	(6.0)	(2.4)	(4.8)	(8.4)	(13.3)	(2.4)	(10.8)	(12.0)	(14.5)	(9.6)	(8.4)	(2.4)	(-)	(1.2)	(2.4)	(1.2)	(100.0)	(16.2)
200	2	1	3	5	8	5	8	7	8	15	8	4	2	2	1	1	2	82	17
	(2.4)	(1.2)	(3.7)	(6.1)	(9.8)	(6.1)	(9.8)	(8.5)	(9.8)	(18.3)	(9.8)	(4.9)	(2.4)	(2.4)	(1.2)	(1.2)	(2.4)	(100.0)	(17.2)
250	0	3	2	8	4	9	4	10	15	9	8	5	0	1	1	0	1	80	19
	(-)	(3.8)	(2.5)	(10.0)	(5.0)	(11.2)	(5.0)	(12.5)	(18.8)	(11.2)	(10.0)	(6.2)	(-)	(1.2)	(1.2)	(-)	(1.2)	(100.0)	(19.2)
300	0	1	1	3	10	5	4	10	13	12	12	4	2	0	1	0	0	78	21
	(-)	(1.3)	(1.3)	(3.8)	(12.8)	(6.4)	(5.1)	(12.8)	(16.7)	(15.4)	(15.4)	(5.1)	(2.6)	(-)	(1.3)	(-)	(-)	(100.0)	(21.2)
350	0	2	3	5	7	2	10	6	12	9	12	4	2	1	1	2	0	78	21
	(-)	(2.6)	(3.8)	(6.4)	(9.0)	(2.6)	(12.8)	(7.7)	(15.4)	(11.5)	(15.4)	(5.1)	(2.6)	(1.3)	(1.3)	(2.6)	(-)	(100.0)	(21.2)
400	2	2	1	2	9	4	5	6	9	14	15	2	2	1	1	2	1	78	21
	(2.6)	(2.6)	(1.3)	(2.6)	(11.5)	(5.1)	(6.4)	(7.7)	(11.5)	(17.9)	(19.2)	(2.6)	(2.6)	(1.3)	(1.3)	(2.6)	(1.3)	(100.0)	(21.2)
450	0	1	2	5	6	4	6	6	4	13	16	3	2	3	1	1	2	75	24
	(-)	(1.3)	(2.7)	(6.7)	(8.0)	(5.3)	(8.0)	(8.0)	(5.3)	(17.3)	(21.3)	(4.0)	(2.7)	(4.0)	(1.3)	(1.3)	(2.7)	(100.0)	(24.2)
500	0	2	3	1	8	5	3	9	7	5	18	2	6	2	2	0	0	73	26
	(-)	(2.7)	(4.1)	(1.4)	(11.0)	(6.8)	(4.1)	(12.3)	(9.6)	(6.8)	(24.7)	(2.7)	(8.2)	(2.7)	(2.7)	(-)	(-)	(100.0)	(26.3)
550	1	2	0	3	4	7	4	3	9	8	12	6	3	1	1	3	2	69	30
	(1.4)	(2.9)	(-)	(4.3)	(5.8)	(10.1)	(5.8)	(4.3)	(13.0)	(11.6)	(17.4)	(8.7)	(4.3)	(1.4)	(1.4)	(4.3)	(2.9)	(100.0)	(30.3)
600	2	1	2	4	5	5	6	6	2	6	14	6	4	3	2	0	1	69	30
	(2.9)	(1.4)	(2.9)	(5.8)	(7.2)	(7.2)	(8.7)	(8.7)	(2.9)	(8.7)	(20.3)	(8.7)	(5.8)	(4.3)	(2.9)	(-)	(1.4)	(100.0)	(30.3)
650	0	2	2	5	1	7	1	3	7	8	8	9	3	4	0	2	1	63	36
	(-)	(3.2)	(3.2)	(7.9)	(1.6)	(11.1)	(1.6)	(4.8)	(11.1)	(12.7)	(12.7)	(14.3)	(4.8)	(6.3)	(-)	(3.2)	(1.6)	(100.0)	(36.4)
700	0	2	4	4	3	4	4	4	4	7	12	5	4	1	1	1	1	61	38
	(-)	(3.3)	(6.6)	(6.6)	(4.9)	(6.6)	(6.6)	(6.6)	(6.6)	(11.5)	(19.7)	(8.2)	(6.6)	(1.6)	(1.6)	(1.6)	(1.6)	(100.0)	(38.4)

note ; Upper figure shows the frequency, and lower figure in parenthesis is its percentage.
(-) denotes no appearance.

Frequency of wind direction by altitude

(All through the observation period : daytime)

Observation point ; Aghdasiyeh
Observation period ; October 8 - October 15, 1996
February 22 - March 1, 1997

altitude (m)	wind direction																	total	missed
	NNE	N E	ENE	E	ESE	S E	SSE	S	SSW	S W	WSW	W	WNW	N W	NNW	N	calm		
surface	0	0	0	0	1	3	3	5	9	7	2	2	0	0	0	0	2	34	0
	(-)	(-)	(-)	(-)	(2.9)	(8.8)	(8.8)	(14.7)	(26.5)	(20.6)	(5.9)	(5.9)	(-)	(-)	(-)	(-)	(5.9)	(100.0)	(-)
50	0	0	3	2	1	1	3	3	5	13	1	2	0	0	0	0	0	34	0
	(-)	(-)	(8.8)	(5.9)	(2.9)	(2.9)	(8.8)	(8.8)	(14.7)	(38.2)	(2.9)	(5.9)	(-)	(-)	(-)	(-)	(-)	(100.0)	(-)
100	0	1	1	2	2	1	1	5	4	9	4	0	0	0	1	0	0	31	3
	(-)	(3.2)	(3.2)	(6.5)	(6.5)	(3.2)	(3.2)	(16.1)	(12.9)	(29.0)	(12.9)	(-)	(-)	(-)	(3.2)	(-)	(-)	(100.0)	(8.8)
150	0	1	0	1	3	2	1	6	6	4	2	3	0	0	0	0	0	29	5
	(-)	(3.4)	(-)	(3.4)	(10.3)	(6.9)	(3.4)	(20.7)	(20.7)	(13.8)	(6.9)	(10.3)	(-)	(-)	(-)	(-)	(-)	(100.0)	(14.7)
200	1	0	0	2	1	1	5	3	4	8	2	0	2	0	0	0	0	29	5
	(3.4)	(-)	(-)	(6.9)	(3.4)	(3.4)	(17.2)	(10.3)	(13.8)	(27.6)	(6.9)	(-)	(6.9)	(-)	(-)	(-)	(-)	(100.0)	(14.7)
250	0	1	0	2	0	2	2	4	10	6	1	1	0	0	0	0	0	29	5
	(-)	(3.4)	(-)	(6.9)	(-)	(6.9)	(6.9)	(13.8)	(34.5)	(20.7)	(3.4)	(3.4)	(-)	(-)	(-)	(-)	(-)	(100.0)	(14.7)
300	0	1	0	1	1	0	1	6	7	7	3	0	0	0	0	0	0	27	7
	(-)	(3.7)	(-)	(3.7)	(3.7)	(-)	(3.7)	(22.2)	(25.9)	(25.9)	(11.1)	(-)	(-)	(-)	(-)	(-)	(-)	(100.0)	(20.6)
350	0	1	0	1	1	0	5	3	6	6	3	1	0	0	0	0	0	27	7
	(-)	(3.7)	(-)	(3.7)	(3.7)	(-)	(18.5)	(11.1)	(22.2)	(22.2)	(11.1)	(3.7)	(-)	(-)	(-)	(-)	(-)	(100.0)	(20.6)
400	0	1	0	1	2	0	4	1	4	9	4	0	0	1	0	0	0	27	7
	(-)	(3.7)	(-)	(3.7)	(7.4)	(-)	(14.8)	(3.7)	(14.8)	(33.3)	(14.8)	(-)	(-)	(3.7)	(-)	(-)	(-)	(100.0)	(20.6)
450	0	0	0	3	0	1	4	2	3	4	6	2	0	0	1	0	0	26	8
	(-)	(-)	(-)	(11.5)	(-)	(3.8)	(15.4)	(7.7)	(11.5)	(15.4)	(23.1)	(7.7)	(-)	(-)	(3.8)	(-)	(-)	(100.0)	(23.5)
500	0	1	1	0	3	1	2	2	4	2	7	0	0	1	1	0	0	25	9
	(-)	(4.0)	(4.0)	(-)	(12.0)	(4.0)	(8.0)	(8.0)	(16.0)	(8.0)	(28.0)	(-)	(-)	(4.0)	(4.0)	(-)	(-)	(100.0)	(26.5)
550	0	1	0	0	0	1	2	2	6	5	3	1	0	1	0	1	0	23	11
	(-)	(4.3)	(-)	(-)	(-)	(4.3)	(8.7)	(8.7)	(26.1)	(21.7)	(13.0)	(4.3)	(-)	(4.3)	(-)	(4.3)	(-)	(100.0)	(32.4)
600	0	1	1	0	0	0	4	4	1	4	4	2	0	2	0	0	0	23	11
	(-)	(4.3)	(4.3)	(-)	(-)	(-)	(17.4)	(17.4)	(4.3)	(17.4)	(17.4)	(8.7)	(-)	(8.7)	(-)	(-)	(-)	(100.0)	(32.4)
650	0	1	1	0	0	2	0	2	4	5	4	0	0	2	0	0	0	21	13
	(-)	(4.8)	(4.8)	(-)	(-)	(9.5)	(-)	(9.5)	(19.0)	(23.8)	(19.0)	(-)	(-)	(9.5)	(-)	(-)	(-)	(100.0)	(38.2)
700	0	0	1	0	1	2	1	2	2	5	4	1	0	1	0	0	0	20	14
	(-)	(-)	(5.0)	(-)	(5.0)	(10.0)	(5.0)	(10.0)	(10.0)	(25.0)	(20.0)	(5.0)	(-)	(5.0)	(-)	(-)	(-)	(100.0)	(41.2)

note ; Upper figure shows the frequency, and lower figure in parenthesis is its percentage.
(-) denotes no appearance.

Frequency of wind direction by altitude

(All through the observation period ; night-time)

Observation point ; Aghdasiyeh
Observation period ; October 8 - October 15, 1996
February 22 - March 1, 1997

altitude (m)	wind direction																	total	missed
	NNE	N E	ENE	E	ESE	S E	SSE	S	SSW	S W	WSW	W	WNW	N W	NNW	N	calm		
surface	16	16	4	1	2	0	3	0	1	5	5	1	3	0	1	2	3	63	2
	(25.4)	(25.4)	(6.3)	(1.6)	(3.2)	(-)	(4.8)	(-)	(1.6)	(7.9)	(7.9)	(1.6)	(4.8)	(-)	(1.6)	(3.2)	(4.8)	(100.0)	(3.1)
50	7	7	4	2	1	7	0	0	7	4	5	2	4	3	2	9	1	65	0
	(10.8)	(10.8)	(6.2)	(3.1)	(1.5)	(10.8)	(-)	(-)	(10.8)	(6.2)	(7.7)	(3.1)	(6.2)	(4.6)	(3.1)	(13.8)	(1.5)	(100.0)	(-)
100	2	5	4	6	4	5	2	3	4	6	6	4	3	4	2	2	0	62	3
	(3.2)	(8.1)	(6.5)	(9.7)	(6.5)	(8.1)	(3.2)	(4.8)	(6.5)	(9.7)	(9.7)	(6.5)	(4.8)	(6.5)	(3.2)	(3.2)	(-)	(100.0)	(4.6)
150	0	4	2	3	4	9	1	3	4	8	6	4	2	0	1	2	1	54	11
	(-)	(7.4)	(3.7)	(5.6)	(7.4)	(16.7)	(1.9)	(5.6)	(7.4)	(14.8)	(11.1)	(7.4)	(3.7)	(-)	(1.9)	(3.7)	(1.9)	(100.0)	(16.9)
200	1	1	3	3	7	4	3	4	4	7	6	4	0	2	1	1	2	53	12
	(1.9)	(1.9)	(5.7)	(5.7)	(13.2)	(7.5)	(5.7)	(7.5)	(7.5)	(13.2)	(11.3)	(7.5)	(-)	(3.8)	(1.9)	(1.9)	(3.8)	(100.0)	(18.5)
250	0	2	2	6	4	7	2	6	5	3	7	4	0	1	1	0	1	51	14
	(-)	(3.9)	(3.9)	(11.8)	(7.8)	(13.7)	(3.9)	(11.8)	(9.8)	(5.9)	(13.7)	(7.8)	(-)	(2.0)	(2.0)	(-)	(2.0)	(100.0)	(21.5)
300	0	0	1	2	9	5	3	4	6	5	9	4	2	0	1	0	0	51	14
	(-)	(-)	(2.0)	(3.9)	(17.6)	(9.8)	(5.9)	(7.8)	(11.8)	(9.8)	(17.6)	(7.8)	(3.9)	(-)	(2.0)	(-)	(-)	(100.0)	(21.5)
350	0	1	3	4	6	2	5	3	6	3	9	3	2	1	1	2	0	51	14
	(-)	(2.0)	(5.9)	(7.8)	(11.8)	(3.9)	(9.8)	(5.9)	(11.8)	(5.9)	(17.6)	(5.9)	(3.9)	(2.0)	(2.0)	(3.9)	(-)	(100.0)	(21.5)
400	2	1	1	1	7	4	1	5	5	5	11	2	2	0	1	2	1	51	14
	(3.9)	(2.0)	(2.0)	(2.0)	(13.7)	(7.8)	(2.0)	(9.8)	(9.8)	(9.8)	(21.6)	(3.9)	(3.9)	(-)	(2.0)	(3.9)	(2.0)	(100.0)	(21.5)
450	0	1	2	2	6	3	2	4	1	9	10	1	2	3	0	1	2	49	16
	(-)	(2.0)	(4.1)	(4.1)	(12.2)	(6.1)	(4.1)	(8.2)	(2.0)	(18.4)	(20.4)	(2.0)	(4.1)	(6.1)	(-)	(2.0)	(4.1)	(100.0)	(24.6)
500	0	1	2	1	5	4	1	7	3	3	11	2	6	1	1	0	0	48	17
	(-)	(2.1)	(4.2)	(2.1)	(10.4)	(8.3)	(2.1)	(14.6)	(6.2)	(6.2)	(22.9)	(4.2)	(12.5)	(2.1)	(2.1)	(-)	(-)	(100.0)	(26.2)
550	1	1	0	3	4	6	2	1	3	3	9	5	3	0	1	2	2	46	19
	(2.2)	(2.2)	(-)	(6.5)	(8.7)	(13.0)	(4.3)	(2.2)	(6.5)	(6.5)	(19.6)	(10.9)	(6.5)	(-)	(2.2)	(4.3)	(4.3)	(100.0)	(29.2)
600	2	0	1	4	5	5	2	2	1	2	10	4	4	1	2	0	1	46	19
	(4.3)	(-)	(2.2)	(8.7)	(10.9)	(10.9)	(4.3)	(4.3)	(2.2)	(4.3)	(21.7)	(8.7)	(8.7)	(2.2)	(4.3)	(-)	(2.2)	(100.0)	(29.2)
650	0	1	1	5	1	5	1	1	3	3	4	9	3	2	0	2	1	42	23
	(-)	(2.4)	(2.4)	(11.9)	(2.4)	(11.9)	(2.4)	(2.4)	(7.1)	(7.1)	(9.5)	(21.4)	(7.1)	(4.8)	(-)	(4.8)	(2.4)	(100.0)	(35.4)
700	0	2	3	4	2	2	3	2	2	2	8	4	4	0	1	1	1	41	24
	(-)	(4.9)	(7.3)	(9.8)	(4.9)	(4.9)	(7.3)	(4.9)	(4.9)	(4.9)	(19.5)	(9.8)	(9.8)	(-)	(2.4)	(2.4)	(2.4)	(100.0)	(36.9)

note ; Upper figure shows the frequency, and lower figure in parenthesis is its percentage.
(-) denotes no appearance.

Mean wind speed by wind direction and altitude

(All through the observation period ; whole day)

Observation point ; Aghdasiyeh
Observation period ; October 8 - October 15, 1996
February 22 - March 1, 1997

altitude (m)	wind direction																	total	
	NNE	N E	ENE	E	ESE	S E	SSE	S	SSW	S W	WSW	W	WNW	N W	NNW	N	calm		
	mean w.s. (m/s)	mean w.s. (m/s)	mean w.s. (m/s)	mean w.s. (m/s)	mean w.s. (m/s)	mean w.s. (m/s)	mean w.s. (m/s)	mean w.s. (m/s)	mean w.s. (m/s)	mean w.s. (m/s)	mean w.s. (m/s)	mean w.s. (m/s)	mean w.s. (m/s)	mean w.s. (m/s)	mean w.s. (m/s)	mean w.s. (m/s)	mean w.s. (m/s)	mean w.s. (m/s)	total count
surface	1.4	1.1	1.1	0.5	0.6	1.3	1.0	1.2	1.8	1.7	1.5	0.8	2.0		2.5	1.2	0.4	1.3	97
50	2.8	2.8	2.9	2.7	2.2	2.5	3.1	3.7	2.8	3.8	4.1	3.3	4.5	1.8	1.6	2.1	0.4	3.0	99
100	2.3	3.6	4.4	2.1	1.8	3.3	2.6	3.1	3.2	3.6	3.8	3.9	1.4	2.0	1.2	2.0		3.0	93
150		2.4	2.5	3.1	2.0	2.1	3.5	3.7	3.2	2.6	2.7	2.5	0.9		0.7	2.8	0.2	2.6	83
200	3.6	3.9	1.8	2.9	2.4	1.9	2.7	3.4	3.2	3.1	2.6	1.5	1.7	1.0	0.9	4.3	0.3	2.6	82
250		3.1	2.2	3.0	1.8	2.4	2.0	3.0	2.7	2.6	3.3	1.8		0.9	2.1		0.4	2.6	80
300		3.7	2.9	3.1	2.1	2.0	2.0	2.5	2.5	2.6	2.9	2.0	1.0		1.8			2.4	78
350		2.3	1.7	2.7	2.4	1.6	2.1	2.8	2.3	3.1	2.4	2.7	1.3	0.8	1.6	1.3		2.4	78
400	1.5	2.5	1.7	2.3	2.8	1.8	2.6	1.7	1.6	2.9	2.6	1.0	4.2	1.8	0.8	2.3	0.0	2.3	78
450		1.3	1.8	2.6	3.0	1.7	1.7	2.1	2.9	2.3	2.3	2.4	3.3	1.3	1.8	1.1	0.2	2.2	75
500		1.3	2.9	1.1	2.7	2.0	2.5	1.6	2.2	3.1	2.5	3.4	2.3	2.0	2.2			2.3	73
550	0.8	1.5		1.3	2.1	2.2	2.2	2.6	2.7	2.5	2.8	2.7	0.9	3.2	1.0	1.4	0.1	2.2	69
600	0.8	2.0	2.0	1.2	2.2	2.3	2.5	2.4	1.9	2.7	3.7	2.7	1.1	2.0	1.5		0.4	2.4	69
650		1.5	1.9	1.3	2.6	3.1	1.8	2.2	3.2	2.9	3.4	2.5	2.4	2.6		1.4	0.0	2.6	63
700		0.8	1.5	1.4	3.7	3.0	2.2	4.1	1.9	3.6	2.8	3.0	1.9	2.4	0.9	1.4	0.0	2.5	61

note ; Blank denotes no appearance.

Mean wind speed by wind direction and altitude

(All through the observation period ; daytime)

Observation point ; Aghdasiyeh
Observation period ; October 8 - October 15, 1996
February 22 - March 1, 1997

altitude (m)	wind direction																	total	
	NNE	N E	ENE	E	ESE	S E	SSE	S	SSW	S W	WSW	W	WNW	N W	NNW	N	calm		
	mean w.s. (m/s)	mean w.s. (m/s)	mean w.s. (m/s)	mean w.s. (m/s)	mean w.s. (m/s)	mean w.s. (m/s)	mean w.s. (m/s)	mean w.s. (m/s)	mean w.s. (m/s)	mean w.s. (m/s)	mean w.s. (m/s)	mean w.s. (m/s)	mean w.s. (m/s)	mean w.s. (m/s)	mean w.s. (m/s)	mean w.s. (m/s)	mean w.s. (m/s)	mean w.s. (m/s)	total count
surface					0.5	1.3	0.8	1.2	1.8	1.7	1.7	0.6					0.4	1.4	34
50			4.1	2.2	1.5	3.1	3.1	3.7	3.0	4.1	3.6	3.3						3.5	34
100		2.8	6.0	2.8	2.2	3.0	4.6	3.4	3.8	3.4	4.6				1.5			3.5	31
150		3.4		5.6	2.1	2.2	2.2	4.2	3.2	3.5	3.6	3.1						3.3	29
200	5.1			3.1	1.9	1.6	2.8	4.3	4.3	3.3	2.4		1.7					3.2	29
250		4.4		3.3		2.7	2.5	4.3	3.3	3.2	2.9	1.5						3.3	29
300		3.7		5.6	2.6		3.0	3.0	3.3	2.7	2.8							3.1	27
350		3.2		5.9	3.0		2.3	3.5	2.9	3.3	2.8	0.8						3.0	27
400		3.4		2.7	3.9		2.8	3.3	2.0	3.0	2.5			1.8				2.8	27
450				3.5		2.1	1.9	2.7	3.3	2.9	2.8	1.9			1.8			2.7	26
500		1.6	6.3		2.6	1.7	3.1	3.2	2.7	3.5	2.7			2.3	2.4			2.9	25
550		2.4				3.1	2.7	3.2	3.0	3.0	2.1	2.8		3.2		2.3		2.8	23
600		2.0	2.7				2.7	2.9	1.7	3.0	3.6	3.2		2.2				2.9	23
650		1.7	2.7			3.0		2.7	4.0	3.3	3.7			4.0				3.4	21
700			1.3		3.0	2.2	2.9	5.8	2.1	3.4	4.0	3.6		2.4				3.3	20

note ; Blank denotes no appearance.

Mean wind speed by wind direction and altitude

(All through the observation period ; night-time)

Observation point ; Aghdasiyeh
Observation period ; October 8 - October 15, 1996
February 22 - March 1, 1997

altitude (m)	wind direction																	total	
	NNE	N E	ENE	E	ESE	S E	SSE	S	SSW	S W	WSW	W	WNW	N W	NNW	N	calm		
	mean w.s. (m/s)	mean w.s. (m/s)	mean w.s. (m/s)	mean w.s. (m/s)	mean w.s. (m/s)	mean w.s. (m/s)	mean w.s. (m/s)	mean w.s. (m/s)	mean w.s. (m/s)	mean w.s. (m/s)	mean w.s. (m/s)	mean w.s. (m/s)	mean w.s. (m/s)	mean w.s. (m/s)	mean w.s. (m/s)	mean w.s. (m/s)	mean w.s. (m/s)	mean w.s. (m/s)	total count
surface	1.4	1.1	1.1	0.5	0.6		1.2		1.2	1.8	1.4	1.0	2.0		2.5	1.2	0.4	1.3	63
50	2.8	2.8	2.0	3.2	2.9	2.5			2.7	2.7	4.2	3.3	4.5	1.8	1.6	2.1	0.4	2.7	65
100	2.3	3.7	4.0	1.9	1.6	3.4	1.7	2.5	2.7	3.9	3.2	3.9	1.4	2.0	1.0	2.0		2.8	62
150		2.2	2.5	2.3	1.9	2.0	4.8	2.8	3.2	2.1	2.4	2.1	0.9		0.7	2.8	0.2	2.2	54
200	2.1	3.9	1.8	2.9	2.4	2.0	2.5	2.7	2.0	2.8	2.7	1.5		1.0	0.9	4.3	0.3	2.3	53
250		2.5	2.2	2.8	1.8	2.3	1.5	2.1	1.6	1.4	3.4	1.9		0.9	2.1		0.4	2.2	51
300			2.9	1.9	2.1	2.0	1.6	1.7	1.5	2.3	3.0	2.0	1.0		1.8			2.1	51
350		1.4	1.7	1.9	2.4	1.6	1.8	2.2	1.8	2.8	2.2	3.3	1.3	0.8	1.6	1.3		2.0	51
400	1.5	1.5	1.7	1.9	2.5	1.8	2.2	1.4	1.4	2.8	2.6	1.0	4.2		0.8	2.3	0.0	2.1	51
450		1.3	1.8	1.2	3.0	1.6	1.4	1.8	1.8	2.0	2.0	3.5	3.3	1.3		1.1	0.2	2.0	49
500		1.0	1.2	1.1	2.7	2.1	1.3	1.2	1.5	2.9	2.3	3.4	2.3	1.7	2.0			2.1	48
550	0.8	0.5		1.3	2.1	2.0	1.6	1.4	2.1	1.6	3.0	2.7	0.9		1.0	1.0	0.1	1.9	46
600	0.8		1.4	1.2	2.2	2.3	2.0	1.5	2.0	2.2	3.7	2.4	1.1	1.6	1.5		0.4	2.2	46
650		1.2	1.1	1.3	2.6	3.2	1.8	1.2	2.2	2.4	3.0	2.5	2.4	1.2		1.4	0.0	2.2	42
700		0.8	1.5	1.4	4.0	3.7	1.9	2.5	1.6	4.2	2.2	2.8	1.9		0.9	1.4	0.0	2.2	41

note ; Blank denotes no appearance.

Mean wind speed by time and altitude

(All through the observation period)

Observation point : Aghdasiyeh
Observation period : October 8 - October 15, 1996
February 22 - March 1, 1997

time	3	6	9	12	15	18	21	24	daytime	night-time	whole day
altitude (m)	mean w.s. (m/s)	mean w.s. (m/s)	mean w.s. (m/s)	mean w.s. (m/s)	mean w.s. (m/s)	mean w.s. (m/s)	mean w.s. (m/s)	mean w.s. (m/s)	mean w.s. (m/s)	mean w.s. (m/s)	mean w.s. (m/s)
surface	1.1	1.4	0.9	1.5	1.9	1.4	1.1	1.3	1.4	1.3	1.3
50	2.4	2.4	2.9	4.2	3.7	3.6	2.3	2.9	3.5	2.7	3.0
100	2.2	2.7	2.7	4.6	3.6	3.6	2.5	2.8	3.5	2.8	3.0
150	1.9	2.1	2.9	3.9	3.6	2.9	2.0	2.2	3.3	2.2	2.6
200	2.1	2.3	2.9	3.5	3.6	2.9	2.1	2.2	3.2	2.3	2.6
250	2.1	2.2	2.7	3.8	3.8	2.6	2.0	2.2	3.3	2.2	2.6
300	2.0	2.2	2.6	3.8	3.2	2.3	1.9	2.1	3.1	2.1	2.4
350	2.0	2.4	2.5	3.7	3.1	2.1	2.1	1.8	3.0	2.0	2.4
400	2.3	2.3	2.2	3.8	2.8	2.2	2.2	1.6	2.8	2.1	2.3
450	2.1	2.1	2.3	3.4	2.5	2.0	1.8	1.8	2.7	2.0	2.2
500	2.4	2.1	2.4	3.7	2.9	1.7	1.8	2.2	2.9	2.1	2.3
550	2.5	2.1	2.7	2.7	3.1	1.7	1.5	1.8	2.8	1.9	2.2
600	2.8	2.4	2.7	2.7	3.4	2.0	1.8	1.8	2.9	2.2	2.4
650	1.9	2.2	2.8	3.9	4.1	2.2	1.8	2.6	3.4	2.2	2.6
700	2.3	2.5	3.1	3.3	4.1	2.2	2.1	1.9	3.3	2.2	2.5
data count	12	13	14	12	8	13	13	13	34	64	98

Frequency of wind speed class by altitude

(All through the observation period : whole day)

Observation point : Aghdasiyeh
Observation period : October 8 - October 15, 1996
February 22 - March 1, 1997

altitude (m)	wind speed class (m/s) 0.0 ~ 0.4	0.5 ~ 0.9	1.0 ~ 1.9	2.0 ~ 2.9	3.0 ~ 3.9	4.0 ~ 5.9	6.0 ~ 7.9	8.0 ~	total
surface	5	24	54	14	1	0	0	0	98
	(5.1)	(24.5)	(55.1)	(14.3)	(1.0)	(-)	(-)	(-)	(100.0)
50	1	3	28	19	21	22	5	0	99
	(1.0)	(3.0)	(28.3)	(19.2)	(21.2)	(22.2)	(5.1)	(-)	(100.0)
100	0	5	25	20	20	14	9	0	93
	(-)	(5.4)	(26.9)	(21.5)	(21.5)	(15.1)	(9.7)	(-)	(100.0)
150	1	5	22	26	16	12	1	0	83
	(1.2)	(6.0)	(26.5)	(31.3)	(19.3)	(14.5)	(1.2)	(-)	(100.0)
200	2	2	27	18	20	11	2	0	82
	(2.4)	(2.4)	(32.9)	(22.0)	(24.4)	(13.4)	(2.4)	(-)	(100.0)
250	1	4	25	25	11	12	2	0	80
	(1.2)	(5.0)	(31.2)	(31.2)	(13.8)	(15.0)	(2.5)	(-)	(100.0)
300	0	7	22	24	18	7	0	0	78
	(-)	(9.0)	(28.2)	(30.8)	(23.1)	(9.0)	(-)	(-)	(100.0)
350	0	8	26	22	15	7	0	0	78
	(-)	(10.3)	(33.3)	(28.2)	(19.2)	(9.0)	(-)	(-)	(100.0)
400	1	8	30	19	11	6	3	0	78
	(1.3)	(10.3)	(38.5)	(24.4)	(14.1)	(7.7)	(3.8)	(-)	(100.0)
450	2	6	25	24	13	5	0	0	75
	(2.7)	(8.0)	(33.3)	(32.0)	(17.3)	(6.7)	(-)	(-)	(100.0)
500	0	8	29	14	11	10	1	0	73
	(-)	(11.0)	(39.7)	(19.2)	(15.1)	(13.7)	(1.4)	(-)	(100.0)
550	2	11	18	21	12	5	0	0	69
	(2.9)	(15.9)	(26.1)	(30.4)	(17.4)	(7.2)	(-)	(-)	(100.0)
600	1	9	19	17	16	4	3	0	69
	(1.4)	(13.0)	(27.5)	(24.6)	(23.2)	(5.8)	(4.3)	(-)	(100.0)
650	1	7	19	15	8	12	1	0	63
	(1.6)	(11.1)	(30.2)	(23.8)	(12.7)	(19.0)	(1.6)	(-)	(100.0)
700	1	6	22	11	11	8	2	0	61
	(1.6)	(9.8)	(36.1)	(18.0)	(18.0)	(13.1)	(3.3)	(-)	(100.0)

note ; Upper figure shows the frequency, and lower figure in parenthesis is its percentage.
(-) denotes no appearance.

Frequency of wind speed class by altitude

(All through the observation period ; daytime)

Observation point ; Aghdasiyeh
Observation period ; October 8 - October 15, 1996
February 22 - March 1, 1997

altitude (m)	wind speed class (m/s) 0.0 ~ 0.4	0.5 ~ 0.9	1.0 ~ 1.9	2.0 ~ 2.9	3.0 ~ 3.9	4.0 ~ 5.9	6.0 ~ 7.9	8.0 ~	total
surface	2	7	18	7	0	0	0	0	34
	(5.9)	(20.6)	(52.9)	(20.6)	(-)	(-)	(-)	(-)	(100.0)
50	0	0	4	7	11	10	2	0	34
	(-)	(-)	(11.8)	(20.6)	(32.4)	(29.4)	(5.9)	(-)	(100.0)
100	0	0	2	13	4	9	3	0	31
	(-)	(-)	(6.5)	(41.9)	(12.9)	(29.0)	(9.7)	(-)	(100.0)
150	0	0	3	9	11	6	0	0	29
	(-)	(-)	(10.3)	(31.0)	(37.9)	(20.7)	(-)	(-)	(100.0)
200	0	0	4	7	12	5	1	0	29
	(-)	(-)	(13.8)	(24.1)	(41.4)	(17.2)	(3.4)	(-)	(100.0)
250	0	0	2	13	6	7	1	0	29
	(-)	(-)	(6.9)	(44.8)	(20.7)	(24.1)	(3.4)	(-)	(100.0)
300	0	0	3	8	13	3	0	0	27
	(-)	(-)	(11.1)	(29.6)	(48.1)	(11.1)	(-)	(-)	(100.0)
350	0	1	3	10	10	3	0	0	27
	(-)	(3.7)	(11.1)	(37.0)	(37.0)	(11.1)	(-)	(-)	(100.0)
400	0	1	7	9	6	3	1	0	27
	(-)	(3.7)	(25.9)	(33.3)	(22.2)	(11.1)	(3.7)	(-)	(100.0)
450	0	0	6	11	7	2	0	0	26
	(-)	(-)	(23.1)	(42.3)	(26.9)	(7.7)	(-)	(-)	(100.0)
500	0	0	8	6	6	4	1	0	25
	(-)	(-)	(32.0)	(24.0)	(24.0)	(16.0)	(4.0)	(-)	(100.0)
550	0	0	3	12	6	2	0	0	23
	(-)	(-)	(13.0)	(52.2)	(26.1)	(8.7)	(-)	(-)	(100.0)
600	0	0	2	10	10	1	0	0	23
	(-)	(-)	(8.7)	(43.5)	(43.5)	(4.3)	(-)	(-)	(100.0)
650	0	1	2	7	4	7	0	0	21
	(-)	(4.8)	(9.5)	(33.3)	(19.0)	(33.3)	(-)	(-)	(100.0)
700	0	0	3	6	6	4	1	0	20
	(-)	(-)	(15.0)	(30.0)	(30.0)	(20.0)	(5.0)	(-)	(100.0)

note ; Upper figure shows the frequency, and lower figure in parenthesis is its percentage.
(-) denotes no appearance.

Frequency of wind speed class by altitude

(All through the observation period ; night-time)

Observation point ; Aghdasiyeh
Observation period ; October 8 - October 15, 1996
February 22 - March 1, 1997

altitude (m)	wind speed class (m/s) 0.0 ~ 0.4	0.5 ~ 0.9	1.0 ~ 1.9	2.0 ~ 2.9	3.0 ~ 3.9	4.0 ~ 5.9	6.0 ~ 7.9	8.0 ~	total
surface	3	17	36	7	1	0	0	0	64
	(4.7)	(26.6)	(56.2)	(10.9)	(1.6)	(-)	(-)	(-)	(100.0)
50	1	3	24	12	10	12	3	0	65
	(1.5)	(4.6)	(36.9)	(18.5)	(15.4)	(18.5)	(4.6)	(-)	(100.0)
100	0	5	23	7	16	5	6	0	62
	(-)	(8.1)	(37.1)	(11.3)	(25.8)	(8.1)	(9.7)	(-)	(100.0)
150	1	5	19	17	5	6	1	0	54
	(1.9)	(9.3)	(35.2)	(31.5)	(9.3)	(11.1)	(1.9)	(-)	(100.0)
200	2	2	23	11	8	6	1	0	53
	(3.8)	(3.8)	(43.4)	(20.8)	(15.1)	(11.3)	(1.9)	(-)	(100.0)
250	1	4	23	12	5	5	1	0	51
	(2.0)	(7.8)	(45.1)	(23.5)	(9.8)	(9.8)	(2.0)	(-)	(100.0)
300	0	7	19	16	5	4	0	0	51
	(-)	(13.7)	(37.3)	(31.4)	(9.8)	(7.8)	(-)	(-)	(100.0)
350	0	7	23	12	5	4	0	0	51
	(-)	(13.7)	(45.1)	(23.5)	(9.8)	(7.8)	(-)	(-)	(100.0)
400	1	7	23	10	5	3	2	0	51
	(2.0)	(13.7)	(45.1)	(19.6)	(9.8)	(5.9)	(3.9)	(-)	(100.0)
450	2	6	19	13	6	3	0	0	49
	(4.1)	(12.2)	(38.8)	(26.5)	(12.2)	(6.1)	(-)	(-)	(100.0)
500	0	8	21	8	5	6	0	0	48
	(-)	(16.7)	(43.8)	(16.7)	(10.4)	(12.5)	(-)	(-)	(100.0)
550	2	11	15	9	6	3	0	0	46
	(4.3)	(23.9)	(32.6)	(19.6)	(13.0)	(6.5)	(-)	(-)	(100.0)
600	1	9	17	7	6	3	3	0	46
	(2.2)	(19.6)	(37.0)	(15.2)	(13.0)	(6.5)	(6.5)	(-)	(100.0)
650	1	6	17	8	4	5	1	0	42
	(2.4)	(14.3)	(40.5)	(19.0)	(9.5)	(11.9)	(2.4)	(-)	(100.0)
700	1	6	19	5	5	4	1	0	41
	(2.4)	(14.6)	(46.3)	(12.2)	(12.2)	(9.8)	(2.4)	(-)	(100.0)

note ; Upper figure shows the frequency, and lower figure in parenthesis is its percentage.
(-) denotes no appearance.

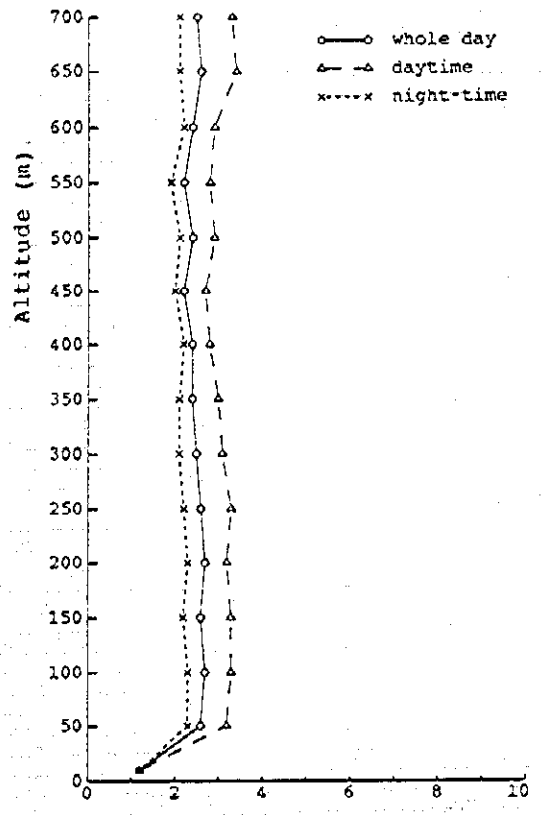
Power-low exponent of wind speed profile

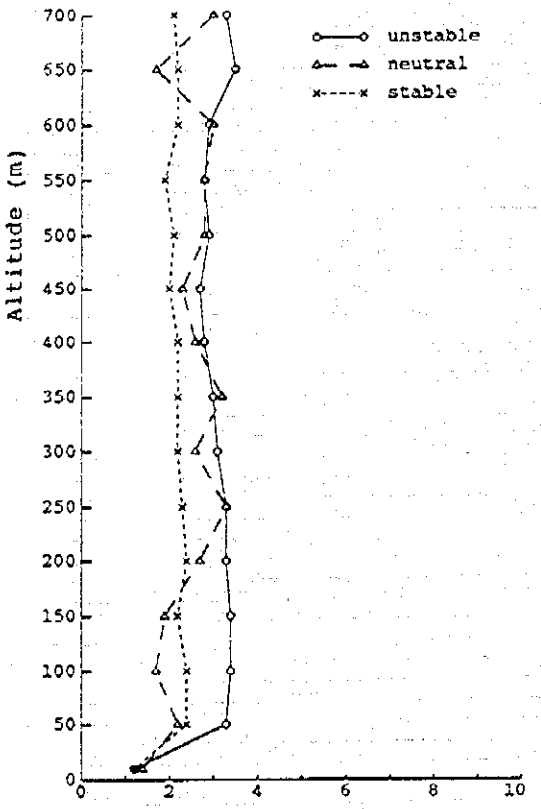
*** All through the observation period ***

Observation point ; Aghdasiyeh
Observation period ; October 8 - October 15, 1996
February 22 - March 1, 1997

division / altitude (m)	whole day		daytime		night-time		unstable		neutral		stable	
	mean w.s. (m/s)	power-low exponent	mean w.s. (m/s)	power-low exponent	mean w.s. (m/s)	power-low exponent	mean w.s. (m/s)	power-low exponent	mean w.s. (m/s)	power-low exponent	mean w.s. (m/s)	power-low exponent
surface	1.2		1.2		1.2		1.2		1.4		1.2	
50	2.6	0.48	3.2	0.61	2.3	0.40	3.3	0.63	2.2	0.28	2.4	0.43
100	2.7	0.35	3.3	0.44	2.3	0.28	3.4	0.45	1.7	0.08	2.4	0.30
150	2.6	0.29	3.3	0.37	2.2	0.22	3.4	0.38	1.9	0.11	2.2	0.22
200	2.7	0.27	3.2	0.33	2.3	0.22	3.3	0.34	2.7	0.22	2.4	0.23
250	2.6	0.24	3.3	0.31	2.2	0.19	3.3	0.31	3.2	0.27	2.3	0.20
300	2.5	0.22	3.1	0.28	2.1	0.16	3.1	0.28	2.5	0.18	2.2	0.18
350	2.4	0.19	3.0	0.26	2.1	0.16	3.0	0.26	3.2	0.23	2.2	0.17
400	2.4	0.19	2.8	0.23	2.2	0.16	2.8	0.23	2.5	0.17	2.2	0.16
450	2.2	0.16	2.7	0.21	2.0	0.13	2.7	0.21	2.2	0.13	2.0	0.13
500	2.4	0.18	2.9	0.23	2.1	0.14	2.9	0.23	2.8	0.18	2.1	0.14
550	2.2	0.15	2.8	0.21	1.9	0.11	2.8	0.21	2.8	0.17	1.9	0.11
600	2.4	0.17	2.9	0.22	2.2	0.15	2.9	0.22	3.0	0.19	2.2	0.15
650	2.6	0.19	3.4	0.25	2.1	0.13	3.5	0.26	1.7	0.05	2.2	0.15
700	2.5	0.17	3.3	0.24	2.1	0.13	3.3	0.24	3.0	0.18	2.1	0.13
data count	80		29		51		27		2		48	

note 1. Atmospheric stability is classified here as unstable(A,A-B,B,B-C),neutral(C,C-D,D) and stable(E,F,G).
2. Difference in wind direction depending on altitude is taken no account in this statistics.





Observation point ; Aghdasiyeh
Observation period ; October 8 - October 15, 1996
February 22 - March 1, 1997

Vertical Profiles of mean wind speed
by day/night,whole day and by atmospheric stability.

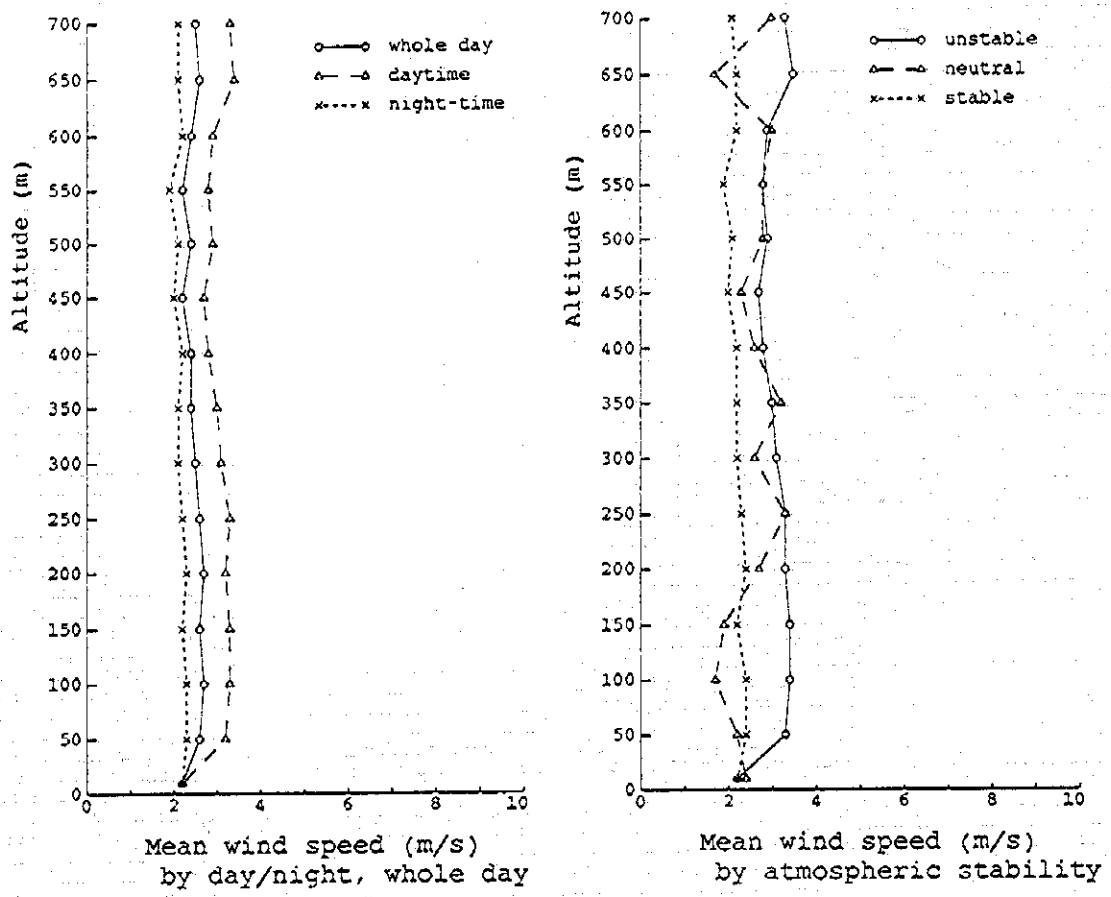
Power-low exponent of wind speed profile

*** All through the observation period ***

Observation point ; Aghdasiyeh
Observation period ; October 8 - October 15, 1996
February 22 - March 1, 1997

division / altitude (m)	whole day		daytime		night-time		unstable		neutral		stable	
	mean w.s. (m/s)	power-low exponent	mean w.s. (m/s)	power-low exponent	mean w.s. (m/s)	power-low exponent	mean w.s. (m/s)	power-low exponent	mean w.s. (m/s)	power-low exponent	mean w.s. (m/s)	power-low exponent
surface	2.2		2.2		2.2		2.2		2.4		2.2	
50	2.6	0.10	3.2	0.23	2.3	0.03	3.3	0.25	2.2	-0.05	2.4	0.05
100	2.7	0.09	3.3	0.18	2.3	0.02	3.4	0.19	1.7	-0.15	2.4	0.04
150	2.6	0.06	3.3	0.15	2.2	0.00	3.4	0.16	1.9	-0.09	2.2	0.00
200	2.7	0.07	3.2	0.13	2.3	0.01	3.3	0.14	2.7	0.04	2.4	0.03
250	2.6	0.05	3.3	0.13	2.2	0.00	3.3	0.13	3.2	0.10	2.3	0.01
300	2.5	0.04	3.1	0.10	2.1	-0.01	3.1	0.10	2.5	0.02	2.2	0.00
350	2.4	0.02	3.0	0.09	2.1	-0.01	3.0	0.09	3.2	0.08	2.2	0.00
400	2.4	0.02	2.8	0.07	2.2	0.00	2.8	0.07	2.5	0.02	2.2	0.00
450	2.2	0.00	2.7	0.05	2.0	-0.03	2.7	0.05	2.2	-0.01	2.0	-0.03
500	2.4	0.02	2.9	0.07	2.1	-0.01	2.9	0.07	2.8	0.04	2.1	-0.01
550	2.2	0.00	2.8	0.06	1.9	-0.04	2.8	0.06	2.8	0.04	1.9	-0.04
600	2.4	0.02	2.9	0.07	2.2	0.00	2.9	0.07	3.0	0.05	2.2	0.00
650	2.6	0.04	3.4	0.10	2.1	-0.01	3.5	0.11	1.7	-0.08	2.2	0.00
700	2.5	0.03	3.3	0.10	2.1	-0.01	3.3	0.10	3.0	0.05	2.1	-0.01
data count	80		29		51		27		2		48	

note 1. Atmospheric stability is classified here as unstable(A,A-B,B,B-C),neutral(C,C-D,D) and stable(E,F,G).
2. Difference in wind direction depending on altitude is taken no account in this statistics.



Observation point ; Aghdasiyeh
Observation period ; October 8 - October 15, 1996
February 22 - March 1, 1997

Vertical Profiles of mean wind speed
by day/night,whole day and by atmospheric stability.

Mean temperature by altitude

(All through the observation period)
[unit ; ℃]

Observation point ; Aghdasiyeh
Observation period ; October 8 - October 15, 1996
February 22 - March 1, 1997

time	3 h	6 h	9 h	12 h	15 h	18 h	21 h	24 h	daytime		night-time		whole day	
altitude (m)	mean temp. (℃)	mean temp. (℃)	mean temp. (℃)	mean temp. (℃)	mean temp. (℃)	mean temp. (℃)	mean temp. (℃)	mean temp. (℃)	mean temp. (℃)	std. dev. (℃)	mean temp. (℃)	std. dev. (℃)	mean temp. (℃)	std. dev. (℃)
surface	7.4	6.8	12.1	15.5	15.7	12.4	10.8	8.8	14.2	6.57	9.3	5.62	11.0	6.40
50	10.2	9.7	11.1	13.9	14.7	13.1	12.3	11.0	12.9	6.50	11.3	6.42	11.9	6.49
100	9.8	9.5	10.5	14.6	13.4	12.5	12.2	10.9	12.5	6.51	11.0	6.62	11.5	6.62
150	9.8	9.7	10.0	13.4	13.5	11.6	13.2	10.9	11.8	6.58	11.0	6.72	11.3	6.68
200	9.3	9.3	9.6	12.9	13.0	11.4	12.8	10.5	11.3	6.56	10.6	6.77	10.9	6.71
250	8.9	8.9	9.1	12.5	12.5	12.0	12.3	10.1	10.9	6.57	10.4	6.73	10.5	6.67
300	8.4	8.6	9.1	11.4	12.0	12.3	11.8	9.7	10.4	6.49	10.1	6.72	10.2	6.64
350	8.0	9.4	8.6	10.9	11.4	11.9	11.4	9.3	9.9	6.48	9.9	6.48	9.9	6.48
400	7.6	9.0	8.2	10.6	11.0	11.4	11.0	8.8	9.5	6.46	9.4	6.51	9.5	6.49
450	6.7	8.6	7.8	9.4	10.5	11.0	10.1	8.5	8.9	6.45	8.9	6.55	8.9	6.52
500	6.3	8.1	7.4	8.9	11.2	10.5	9.7	8.5	8.6	6.50	8.5	6.59	8.6	6.56
550	7.1	6.8	6.4	9.1	10.7	10.1	9.2	8.1	8.0	6.59	8.2	6.32	8.2	6.41
600	6.7	6.4	6.0	8.6	10.2	9.5	8.7	7.6	7.6	6.56	7.8	6.31	7.7	6.40
650	6.0	4.6	6.7	8.3	8.5	9.1	8.3	7.3	7.5	6.00	7.2	6.40	7.3	6.27
700	5.6	4.2	6.4	9.9	8.0	8.7	7.9	6.3	7.6	5.70	6.7	6.40	7.0	6.19
data count	12	13	14	12	8	13	13	13	34		64		98	

note : Only the data obtained by ascending captive sonde are used for the statistics.

Mean vertical temperature gradient by altitude

(All through the observation period)
[unit ; ℃/100m]

Observation point ; Aghdasiyeh
Observation period ; October 8 - October 15, 1996
February 22 - March 1, 1997

time	3 h	6 h	9 h	12 h	15 h	18 h	21 h	24 h	daytime		night-time		whole day	
altitude (m) - (m)	temp. grad.	temp. grad.	temp. grad.	temp. grad.	temp. grad.	temp. grad.	temp. grad.	temp. grad.	mean	std. div.	mean	std. div.	mean	std. div.
surface - 50	5.7	5.8	-2.1	-3.3	-2.1	0.7	3.2	4.6	-2.5	1.17	4.0	4.11	1.7	4.59
50 - 100	-0.6	-0.4	-1.1	-1.1	-0.9	-0.9	-0.3	-0.6	-1.1	0.38	-0.6	0.65	-0.7	0.62
100 - 150	-0.7	-0.7	-1.0	-1.2	-1.1	-0.9	-0.8	-0.8	-1.1	0.32	-0.8	0.38	-0.9	0.40
150 - 200	-1.0	-0.8	-0.8	-1.1	-1.0	-1.0	-0.8	-0.9	-0.9	0.28	-0.9	0.22	-0.9	0.25
200 - 250	-0.8	-0.9	-0.9	-0.8	-1.0	-0.9	-0.9	-0.8	-0.9	0.28	-0.9	0.22	-0.9	0.24
250 - 300	-0.9	-0.6	-1.0	-1.0	-1.0	-1.0	-0.9	-0.7	-1.0	0.27	-0.8	0.38	-0.9	0.36
300 - 350	-0.8	-0.8	-1.0	-0.8	-1.1	-1.0	-0.9	-0.8	-1.0	0.33	-0.8	0.29	-0.9	0.31
350 - 400	-0.9	-0.9	-0.8	-0.8	-0.9	-0.9	-0.8	-1.0	-0.8	0.41	-0.9	0.22	-0.9	0.31
400 - 450	-0.6	-0.8	-0.8	-1.0	-0.9	-0.9	-0.9	-0.7	-0.9	0.30	-0.8	0.42	-0.8	0.38
450 - 500	-0.9	-0.9	-0.8	-0.9	-0.8	-1.0	-0.9	-0.8	-0.8	0.39	-0.9	0.22	-0.9	0.29
500 - 550	-0.9	-0.9	-0.8	-1.0	-1.0	-0.9	-1.0	-0.9	-0.9	0.21	-0.9	0.18	-0.9	0.19
550 - 600	-0.8	-0.7	-0.7	-0.8	-1.0	-1.0	-0.9	-0.8	-0.8	0.44	-0.9	0.24	-0.8	0.32
600 - 650	-0.8	-0.7	-0.6	-0.7	-0.6	-0.9	-0.8	-0.7	-0.6	0.55	-0.8	0.37	-0.7	0.45
650 - 700	-0.7	-0.8	-0.8	-1.0	-1.0	-0.8	-0.8	-0.9	-0.9	0.39	-0.8	0.21	-0.8	0.28
data count	12	13	14	12	8	13	13	13	34		64		98	

note : Only the data obtained by ascending captive sonde are used for the statistics.

Frequency of vertical temperature gradient class by altitude

(All through the observation period ; whole day)

Observation point ; Aghdasiyeh
Observation period ; October 8 - October 15, 1996
February 22 - March 1, 1997

altitude (m)	temperature gradient class (℃/100m)										total	inversion count
	/ -1.8	-1.7 / -1.3	-1.2 / -0.8	-0.7 / -0.3	-0.2 / 0.0	0.1 / 0.2	0.3 / 0.7	0.8 / 1.2	1.3 / 1.7	1.8 /		
surface - 50	27	3	11	2	7	1	1	7	1	38	98	48
	(27.6)	(3.1)	(11.2)	(2.0)	(7.1)	(1.0)	(1.0)	(7.1)	(1.0)	(38.8)	(100.0)	(49.0)
50 - 100	2	6	47	25	8	1	0	3	0	1	93	5
	(2.2)	(6.5)	(50.5)	(26.9)	(8.6)	(1.1)	(0.0)	(3.2)	(0.0)	(1.1)	(100.0)	(5.4)
100 - 150	1	4	62	14	1	0	1	1	0	0	84	2
	(1.2)	(4.8)	(73.8)	(16.7)	(1.2)	(0.0)	(1.2)	(1.2)	(0.0)	(0.0)	(100.0)	(2.4)
150 - 200	1	3	64	14	1	0	0	0	0	0	83	0
	(1.2)	(3.6)	(77.1)	(16.9)	(1.2)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(100.0)	(0.0)
200 - 250	0	2	64	14	2	0	0	0	0	0	82	0
	(0.0)	(2.4)	(78.0)	(17.1)	(2.4)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(100.0)	(0.0)
250 - 300	0	4	65	5	3	0	2	0	0	0	79	2
	(0.0)	(5.1)	(82.3)	(6.3)	(3.8)	(0.0)	(2.5)	(0.0)	(0.0)	(0.0)	(100.0)	(2.5)
300 - 350	1	2	61	12	1	0	1	0	0	0	78	1
	(1.3)	(2.6)	(78.2)	(15.4)	(1.3)	(0.0)	(1.3)	(0.0)	(0.0)	(0.0)	(100.0)	(1.3)
350 - 400	0	2	64	9	2	0	0	1	0	0	78	1
	(0.0)	(2.6)	(82.1)	(11.5)	(2.6)	(0.0)	(0.0)	(1.3)	(0.0)	(0.0)	(100.0)	(1.3)
400 - 450	1	2	55	11	4	0	1	1	0	0	75	2
	(1.3)	(2.7)	(73.3)	(14.7)	(5.3)	(0.0)	(1.3)	(1.3)	(0.0)	(0.0)	(100.0)	(2.7)
450 - 500	1	1	55	14	1	0	1	0	0	0	73	1
	(1.4)	(1.4)	(75.3)	(19.2)	(1.4)	(0.0)	(1.4)	(0.0)	(0.0)	(0.0)	(100.0)	(1.4)
500 - 550	0	1	59	9	0	0	0	0	0	0	69	0
	(0.0)	(1.4)	(85.5)	(13.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(100.0)	(0.0)
550 - 600	0	3	52	11	2	0	1	0	0	0	69	1
	(0.0)	(4.3)	(75.4)	(15.9)	(2.9)	(0.0)	(1.4)	(0.0)	(0.0)	(0.0)	(100.0)	(1.4)
600 - 650	0	1	43	12	3	0	3	1	0	0	63	4
	(0.0)	(1.6)	(68.3)	(19.0)	(4.8)	(0.0)	(4.8)	(1.6)	(0.0)	(0.0)	(100.0)	(6.3)
650 - 700	2	0	45	13	1	0	0	0	0	0	61	0
	(3.3)	(0.0)	(73.8)	(21.3)	(1.6)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(100.0)	(0.0)

note 1. Upper figure shows the frequency, and lower figure in parenthesis is its percentage.
2. Only the data obtained by ascending captive sonde are used for the statistics.

Frequency of vertical temperature gradient class by altitude

(All through the observation period ; daytime)

Observation point ; Aghdasiyeh
Observation period ; October 8 - October 15, 1996
February 22 - March 1, 1997

altitude (m)	temperature gradient class (℃/100m)										total	inversion count
	/ -1.8	-1.7 / -1.3	-1.2 / -0.8	-0.7 / -0.3	-0.2 / 0.0	0.1 / 0.2	0.3 / 0.7	0.8 / 1.2	1.3 / 1.7	1.8 /		
surface - 50	27	2	3	1	1	0	0	0	0	0	34	0
	(79.4)	(5.9)	(8.8)	(2.9)	(2.9)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(100.0)	(0.0)
50 - 100	2	4	22	2	1	0	0	0	0	0	31	0
	(6.5)	(12.9)	(71.0)	(6.5)	(3.2)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(100.0)	(0.0)
100 - 150	1	4	22	2	0	0	0	0	0	0	29	0
	(3.4)	(13.8)	(75.9)	(6.9)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(100.0)	(0.0)
150 - 200	1	2	20	6	0	0	0	0	0	0	29	0
	(3.4)	(6.9)	(69.0)	(20.7)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(100.0)	(0.0)
200 - 250	0	2	18	9	0	0	0	0	0	0	29	0
	(0.0)	(6.9)	(62.1)	(31.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(100.0)	(0.0)
250 - 300	0	4	21	2	0	0	0	0	0	0	27	0
	(0.0)	(14.8)	(77.8)	(7.4)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(100.0)	(0.0)
300 - 350	1	2	18	6	0	0	0	0	0	0	27	0
	(3.7)	(7.4)	(66.7)	(22.2)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(100.0)	(0.0)
350 - 400	0	2	19	5	0	0	0	1	0	0	27	1
	(0.0)	(7.4)	(70.4)	(18.5)	(0.0)	(0.0)	(0.0)	(3.7)	(0.0)	(0.0)	(100.0)	(3.7)
400 - 450	0	2	19	4	1	0	0	0	0	0	26	0
	(0.0)	(7.7)	(73.1)	(15.4)	(3.8)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(100.0)	(0.0)
450 - 500	1	1	16	6	0	0	1	0	0	0	25	1
	(4.0)	(4.0)	(64.0)	(24.0)	(0.0)	(0.0)	(4.0)	(0.0)	(0.0)	(0.0)	(100.0)	(4.0)
500 - 550	0	1	18	4	0	0	0	0	0	0	23	0
	(0.0)	(4.3)	(78.3)	(17.4)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(100.0)	(0.0)
550 - 600	0	3	15	3	1	0	1	0	0	0	23	1
	(0.0)	(13.0)	(65.2)	(13.0)	(4.3)	(0.0)	(4.3)	(0.0)	(0.0)	(0.0)	(100.0)	(4.3)
600 - 650	0	1	11	4	2	0	3	0	0	0	21	3
	(0.0)	(4.8)	(52.4)	(19.0)	(9.5)	(0.0)	(14.3)	(0.0)	(0.0)	(0.0)	(100.0)	(14.3)
650 - 700	2	0	11	7	0	0	0	0	0	0	20	0
	(10.0)	(0.0)	(55.0)	(35.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(100.0)	(0.0)

note 1. Upper figure shows the frequency, and lower figure in parenthesis is its percentage.
2. Only the data obtained by ascending captive sonde are used for the statistics.

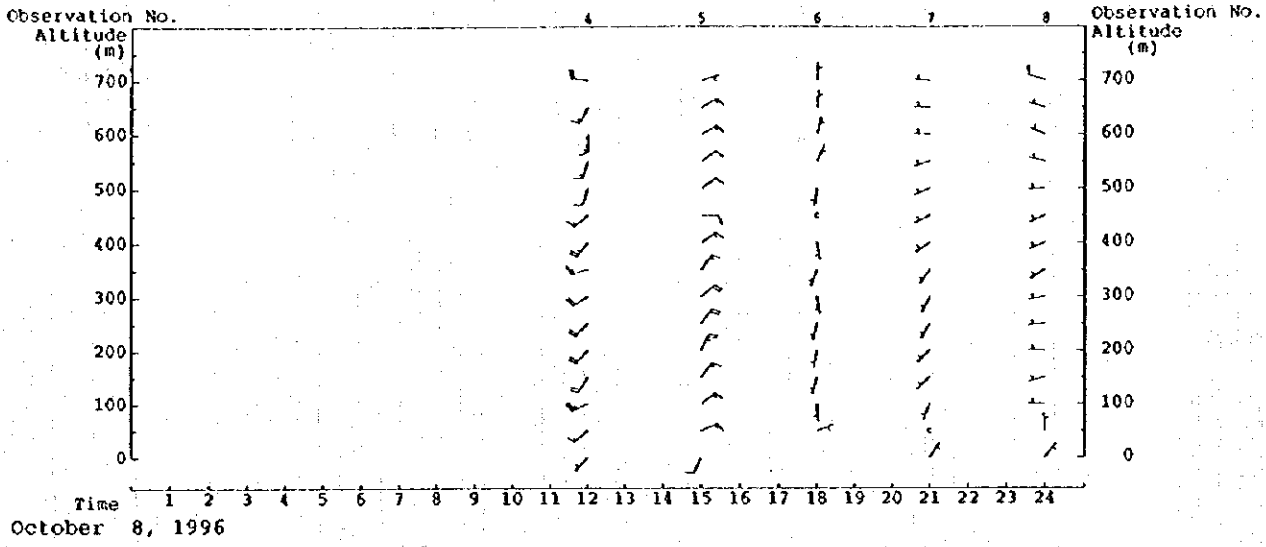
Frequency of vertical temperature gradient class by altitude

(All through the observation period ; night-time)

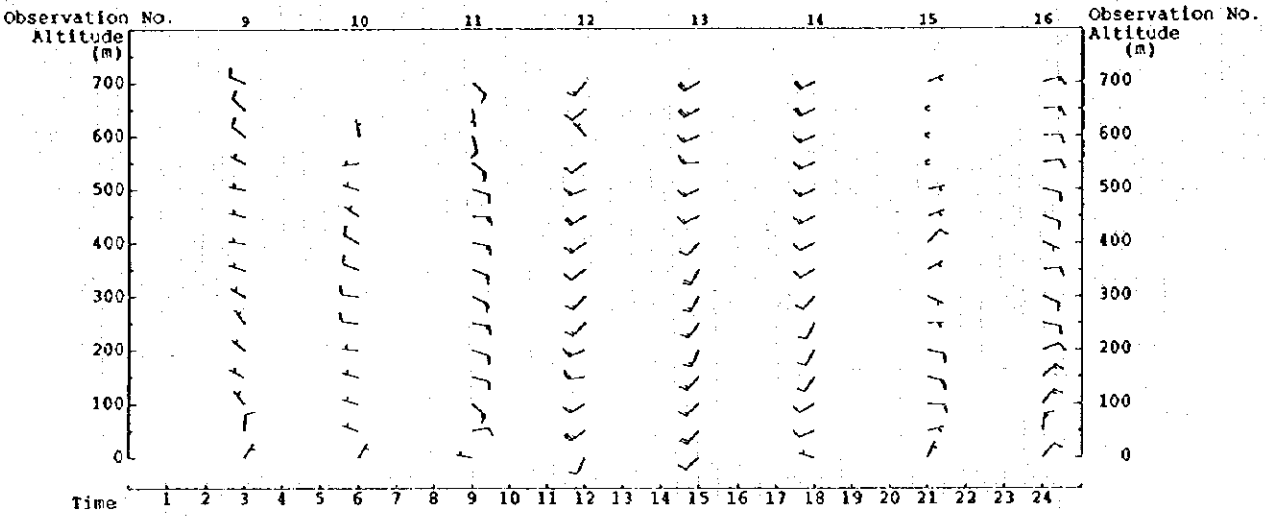
Observation point ; Aghdasiyeh
Observation period ; October 8 - October 15, 1996
February 22 - March 1, 1997

altitude (m)	temperature gradient class (℃/100m)										total	inversion count
	/ -1.8	-1.7 / -1.3	-1.2 / -0.8	-0.7 / -0.3	-0.2 / 0.0	0.1 / 0.2	0.3 / 0.7	0.8 / 1.2	1.3 / 1.7	1.8 /		
surface - 50	0	1	8	1	6	1	1	7	1	38	64	48
	(0.0)	(1.6)	(12.5)	(1.6)	(9.4)	(1.6)	(1.6)	(10.9)	(1.6)	(59.4)	(100.0)	(75.0)
50 - 100	0	2	25	23	7	1	0	3	0	1	62	5
	(0.0)	(3.2)	(40.3)	(37.1)	(11.3)	(1.6)	(0.0)	(4.8)	(0.0)	(1.6)	(100.0)	(8.1)
100 - 150	0	0	40	12	1	0	1	1	0	0	55	2
	(0.0)	(0.0)	(72.7)	(21.8)	(1.8)	(0.0)	(1.8)	(1.8)	(0.0)	(0.0)	(100.0)	(3.6)
150 - 200	0	1	44	8	1	0	0	0	0	0	54	0
	(0.0)	(1.9)	(81.5)	(14.8)	(1.9)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(100.0)	(0.0)
200 - 250	0	0	46	5	2	0	0	0	0	0	53	0
	(0.0)	(0.0)	(86.8)	(9.4)	(3.8)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(100.0)	(0.0)
250 - 300	0	0	44	3	3	0	2	0	0	0	52	2
	(0.0)	(0.0)	(84.6)	(5.8)	(5.8)	(0.0)	(3.8)	(0.0)	(0.0)	(0.0)	(100.0)	(3.8)
300 - 350	0	0	43	6	1	0	1	0	0	0	51	1
	(0.0)	(0.0)	(84.3)	(11.8)	(2.0)	(0.0)	(2.0)	(0.0)	(0.0)	(0.0)	(100.0)	(2.0)
350 - 400	0	0	45	4	2	0	0	0	0	0	51	0
	(0.0)	(0.0)	(88.2)	(7.8)	(3.9)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(100.0)	(0.0)
400 - 450	1	0	36	7	3	0	1	1	0	0	49	2
	(2.0)	(0.0)	(73.5)	(14.3)	(6.1)	(0.0)	(2.0)	(2.0)	(0.0)	(0.0)	(100.0)	(4.1)
450 - 500	0	0	39	8	1	0	0	0	0	0	48	0
	(0.0)	(0.0)	(81.2)	(16.7)	(2.1)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(100.0)	(0.0)
500 - 550	0	0	41	5	0	0	0	0	0	0	46	0
	(0.0)	(0.0)	(89.1)	(10.9)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(100.0)	(0.0)
550 - 600	0	0	37	8	1	0	0	0	0	0	46	0
	(0.0)	(0.0)	(80.4)	(17.4)	(2.2)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(100.0)	(0.0)
600 - 650	0	0	32	8	1	0	0	1	0	0	42	1
	(0.0)	(0.0)	(76.2)	(19.0)	(2.4)	(0.0)	(0.0)	(2.4)	(0.0)	(0.0)	(100.0)	(2.4)
650 - 700	0	0	34	6	1	0	0	0	0	0	41	0
	(0.0)	(0.0)	(82.9)	(14.6)	(2.4)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(100.0)	(0.0)

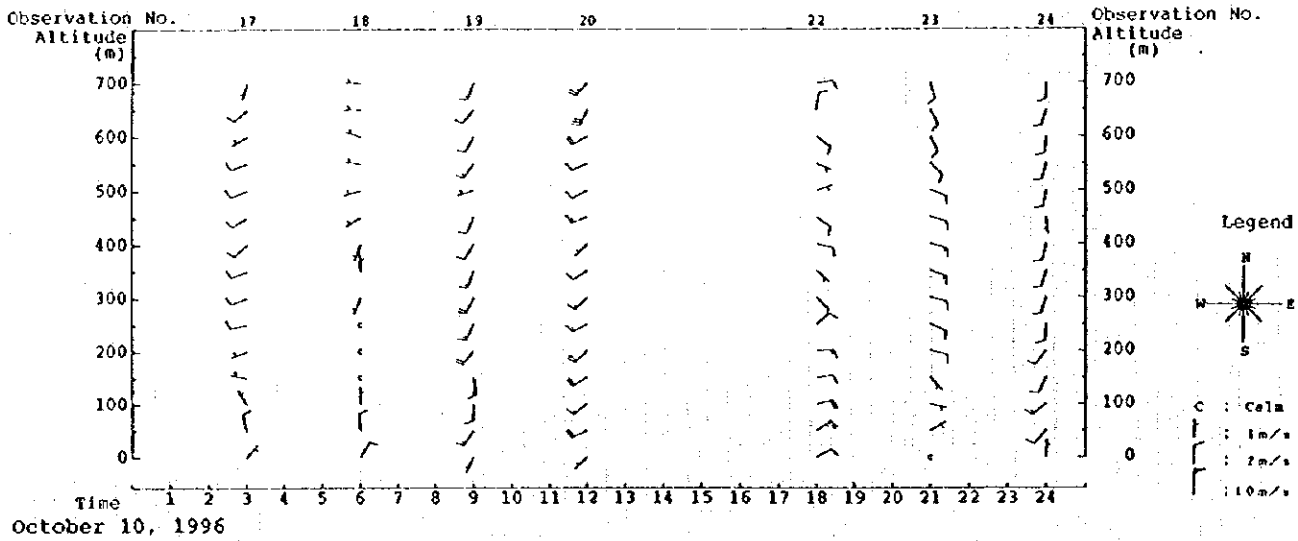
note 1. Upper figure shows the frequency, and lower figure in parenthesis is its percentage.
2. Only the data obtained by ascending captive sonde are used for the statistics.



October 8, 1996



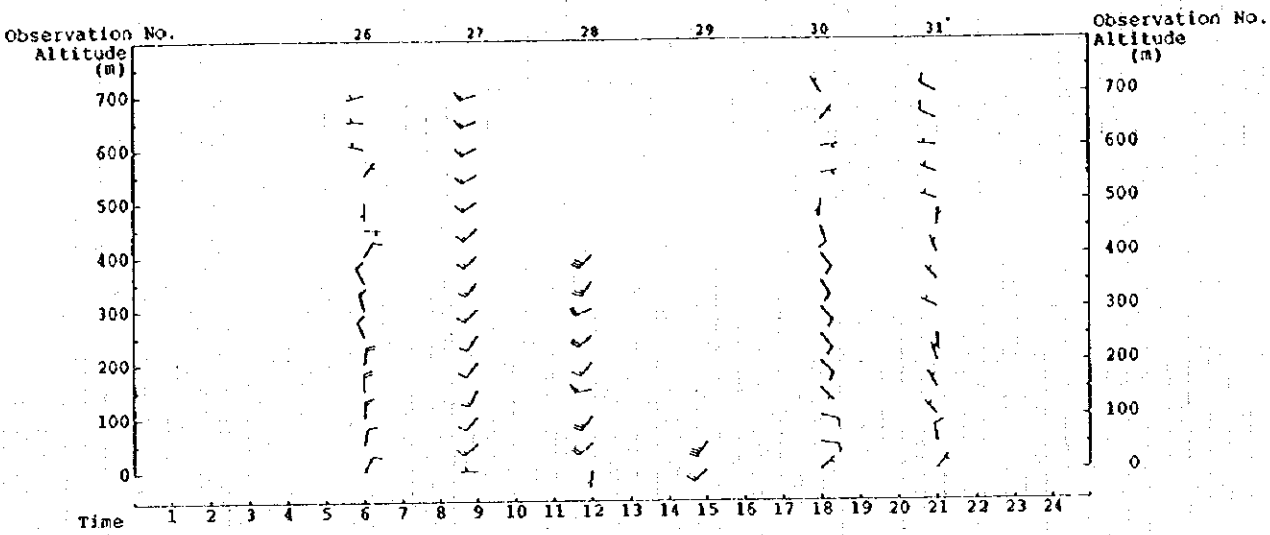
October 9, 1996



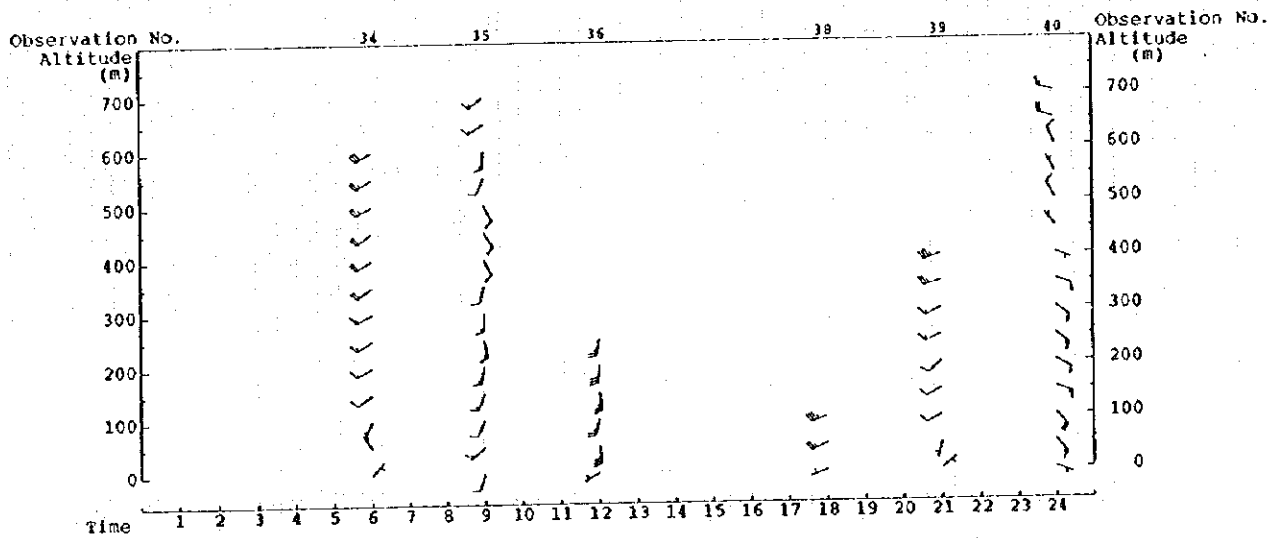
October 10, 1996

Observation point ; Aghdaciye Area

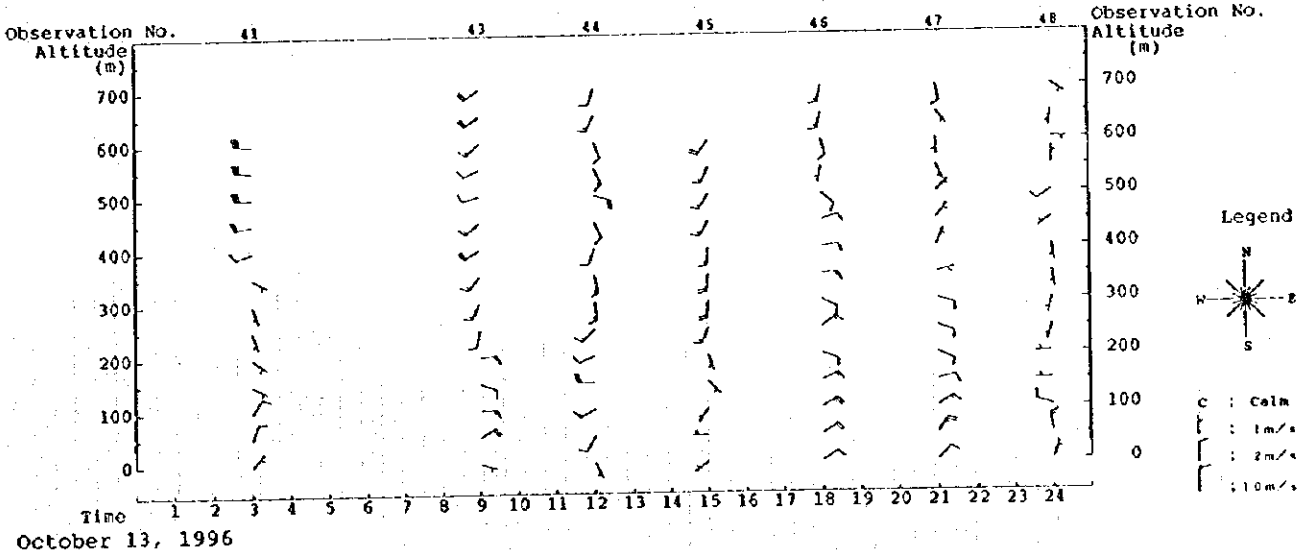
Vertical Profile of Upper Wind
(Observed by a Captive sonde)



October 11, 1996



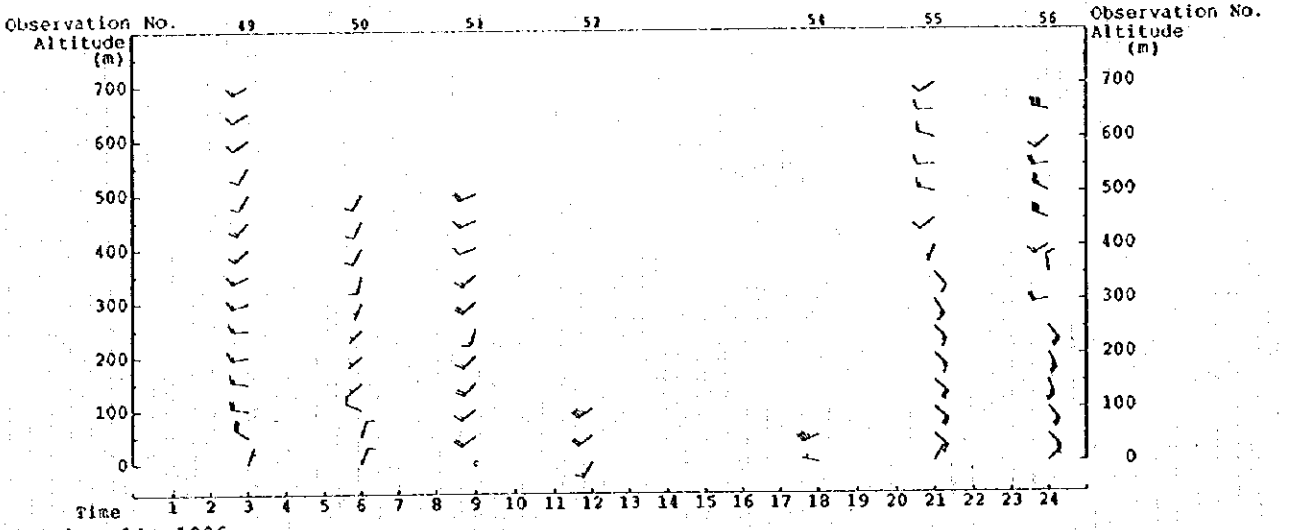
October 12, 1996



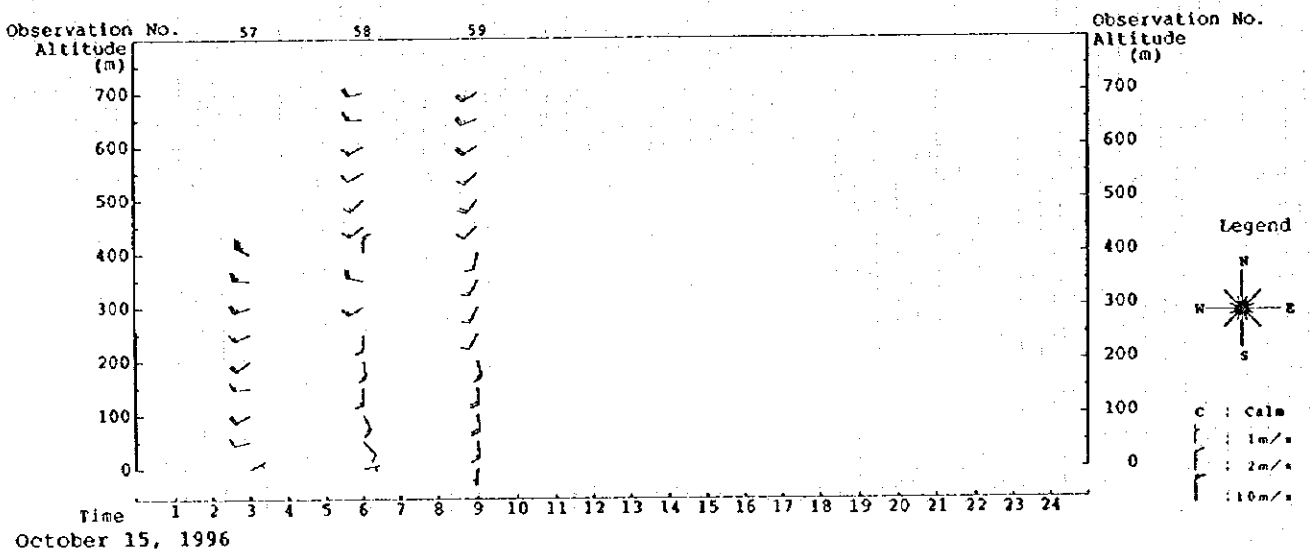
October 13, 1996

Observation point ; Aghdaciye Area

Vertical Profile of Upper Wind
(Observed by a Captive sonde)



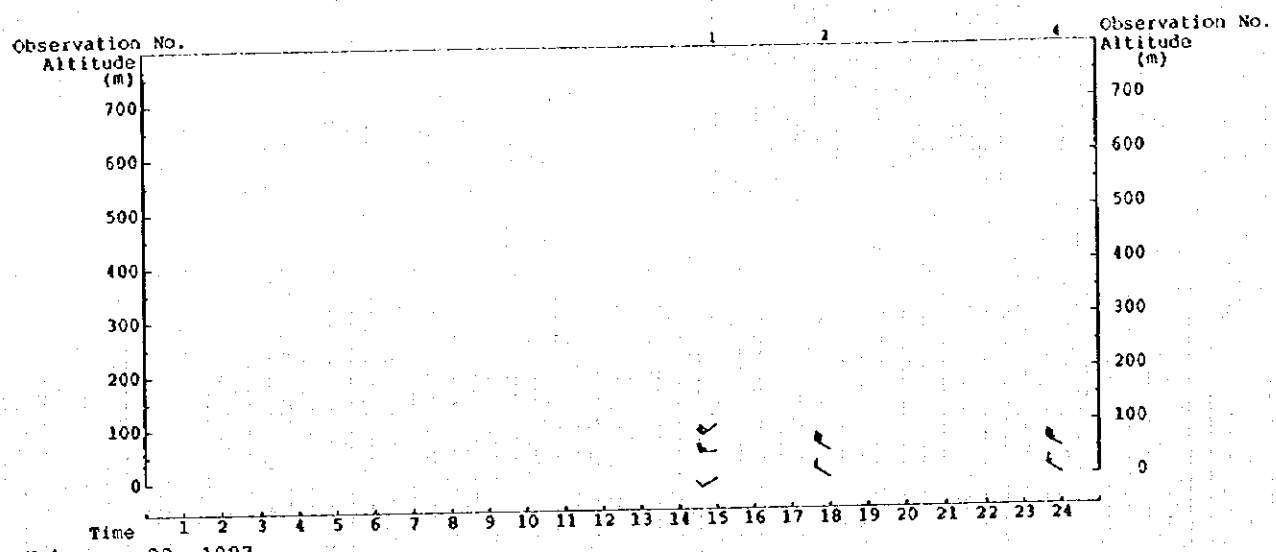
October 14, 1996



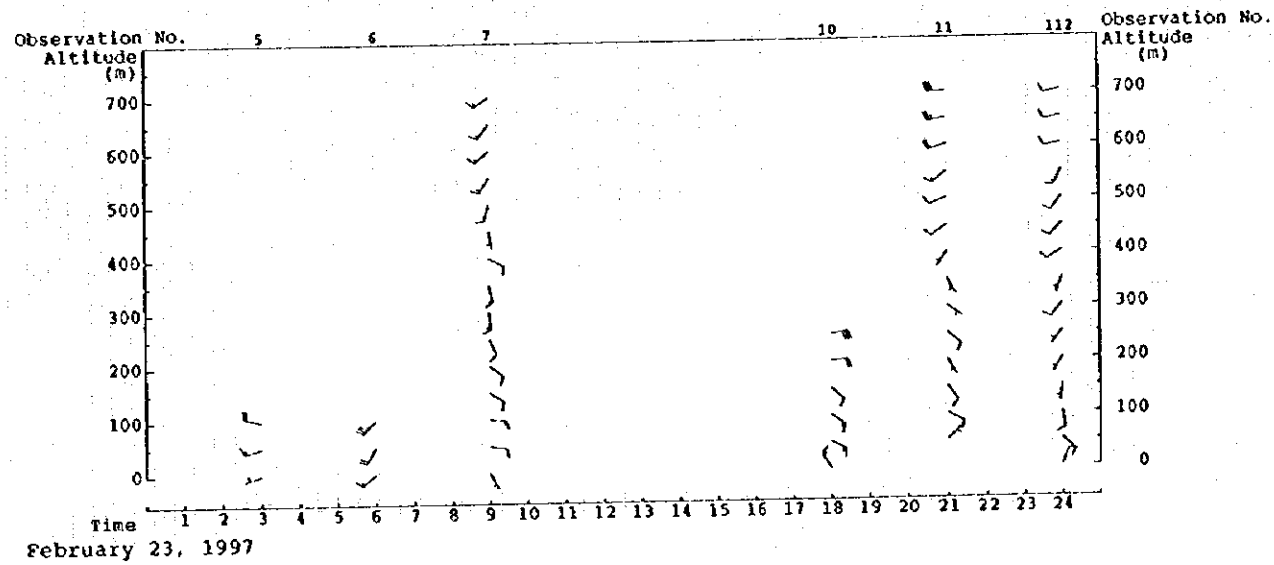
October 15, 1996

Observation point ; Aghdaciye Area

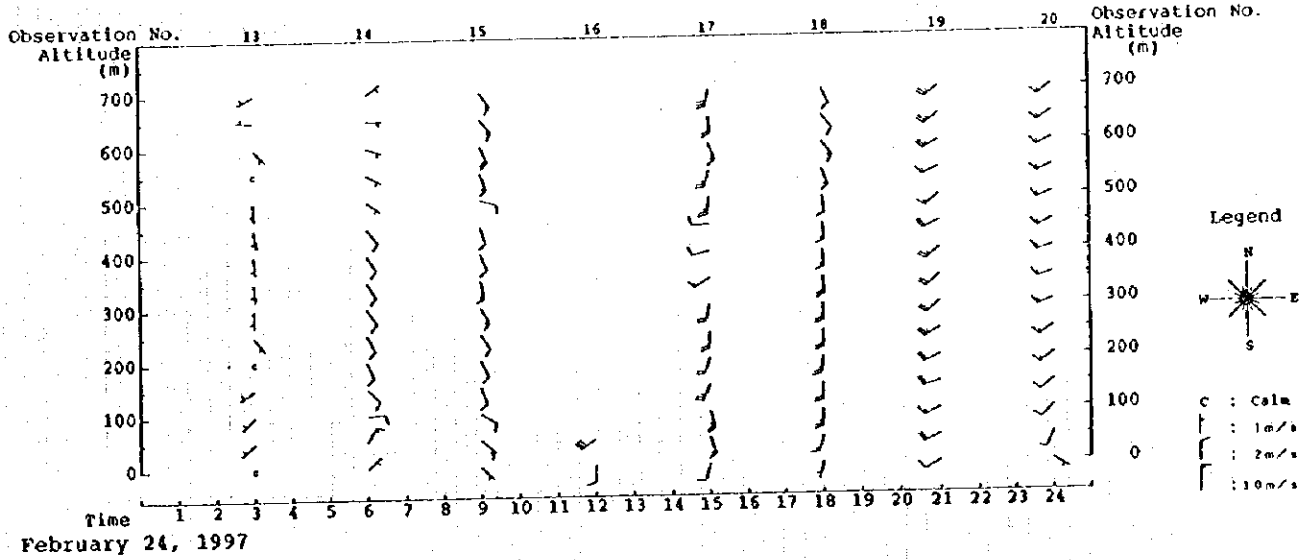
Vertical Profile of Upper Wind
(Observed by a Captive sonde)



February 22, 1997



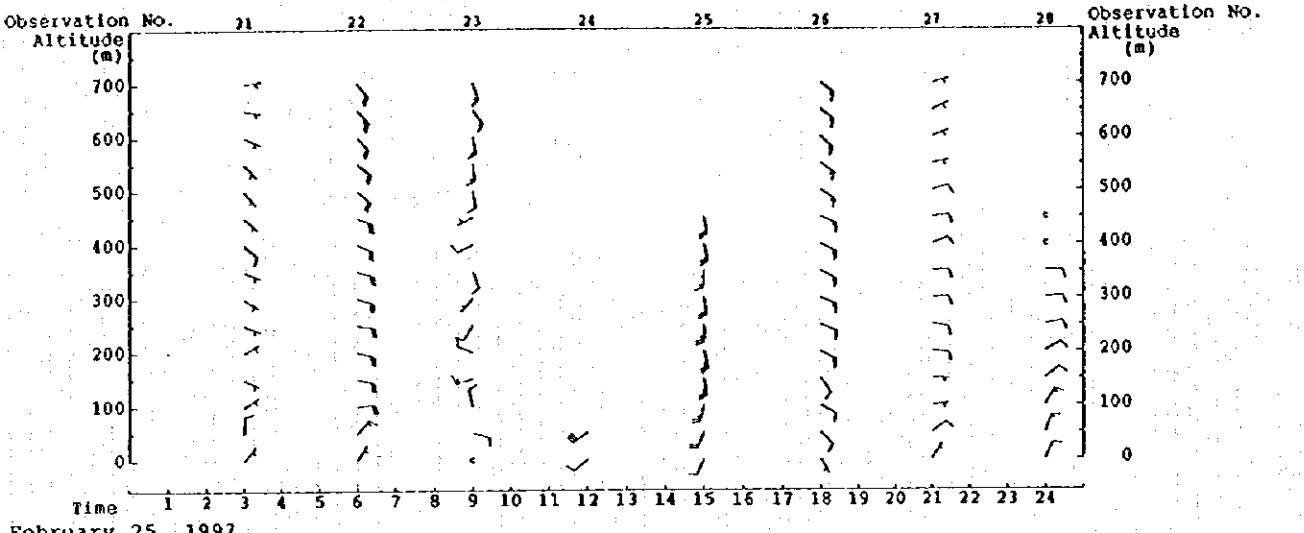
February 23, 1997

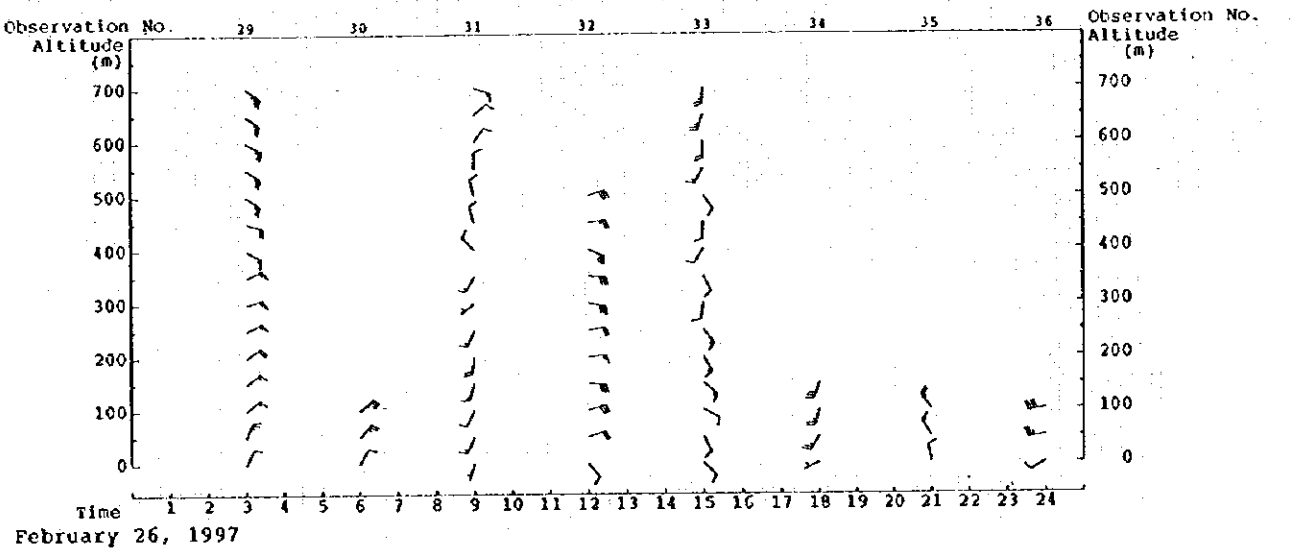


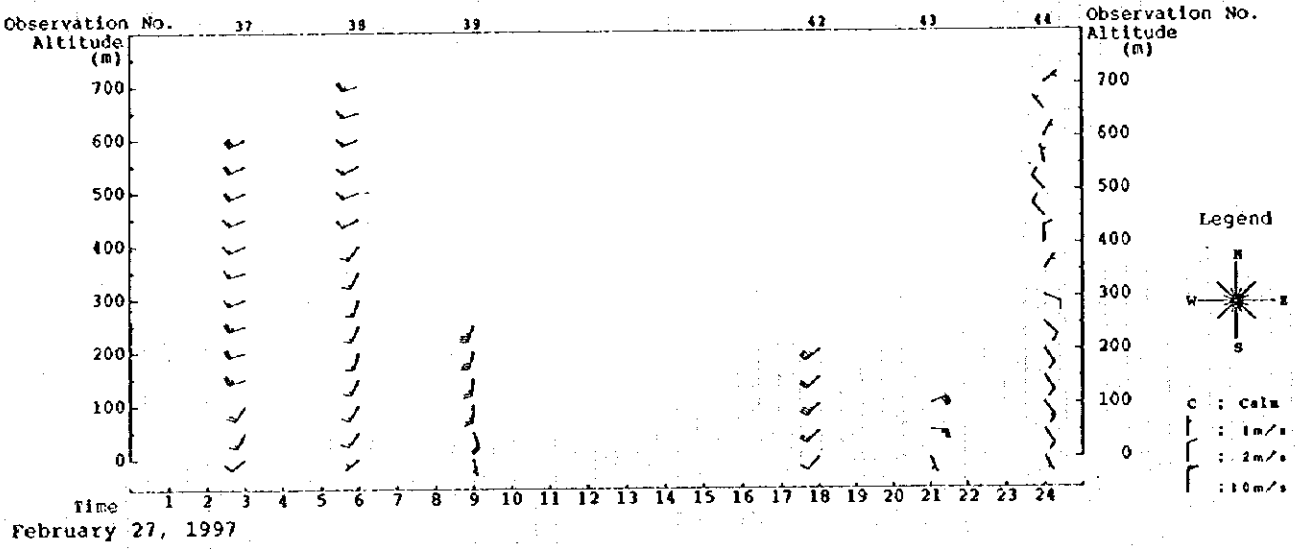
February 24, 1997

Observation point ; Aghdaciye Area

Vertical Profile of Upper Wind
(Observed by a Captive sonde)

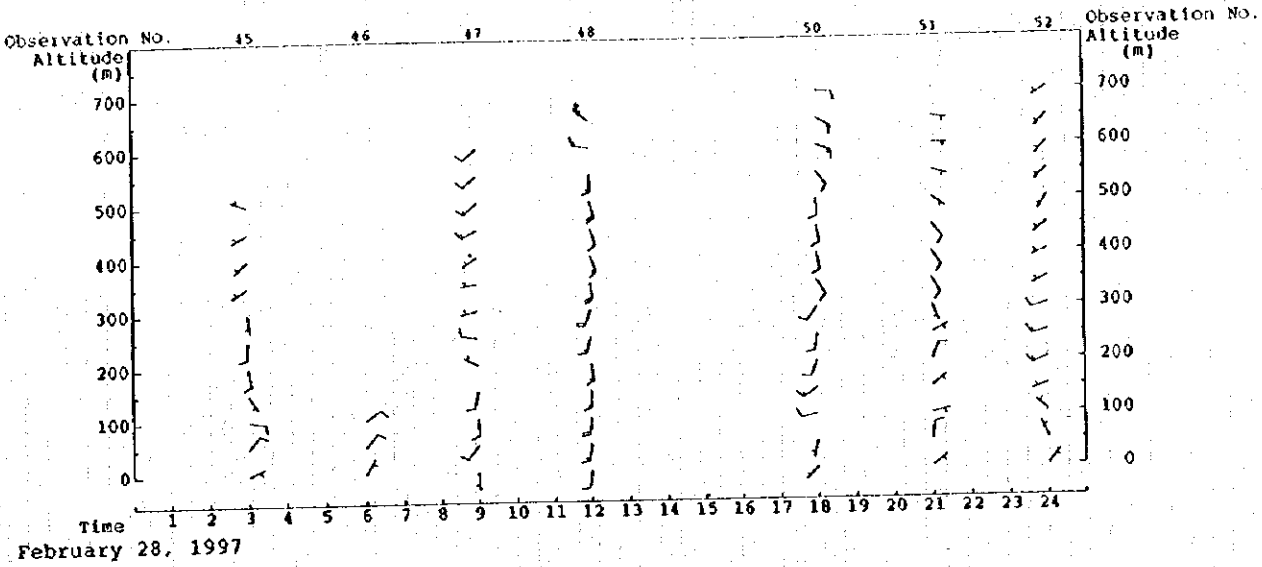




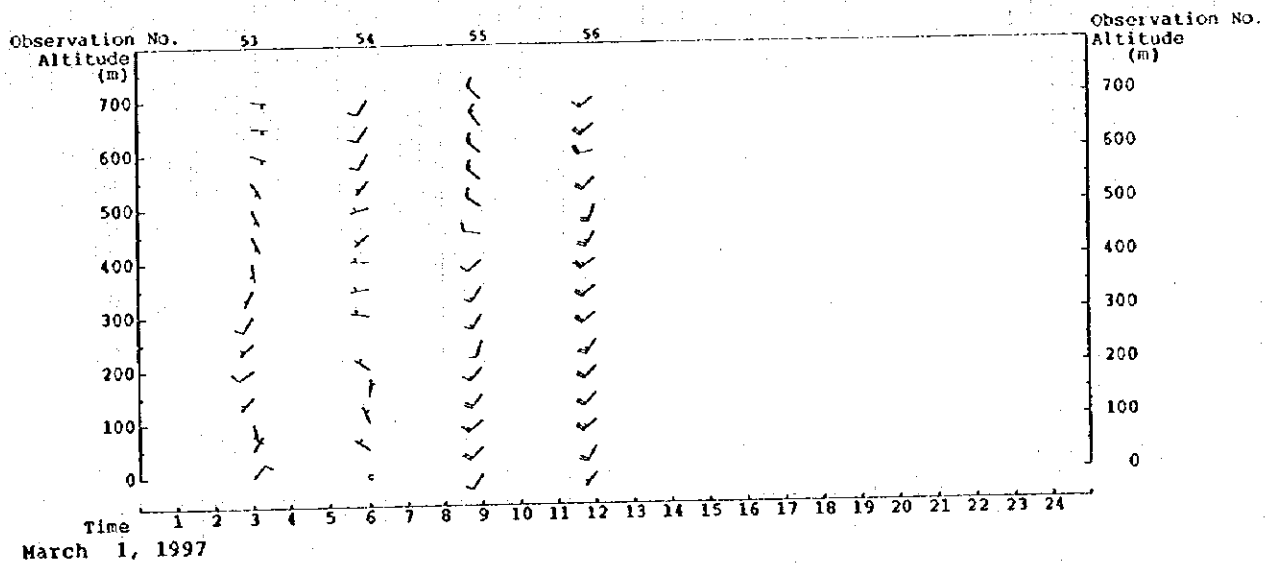


Observation point : Aghdaciye Area

Vertical Profile of Upper Wind
(Observed by a Captive sonde)



February 28, 1997



March 1, 1997

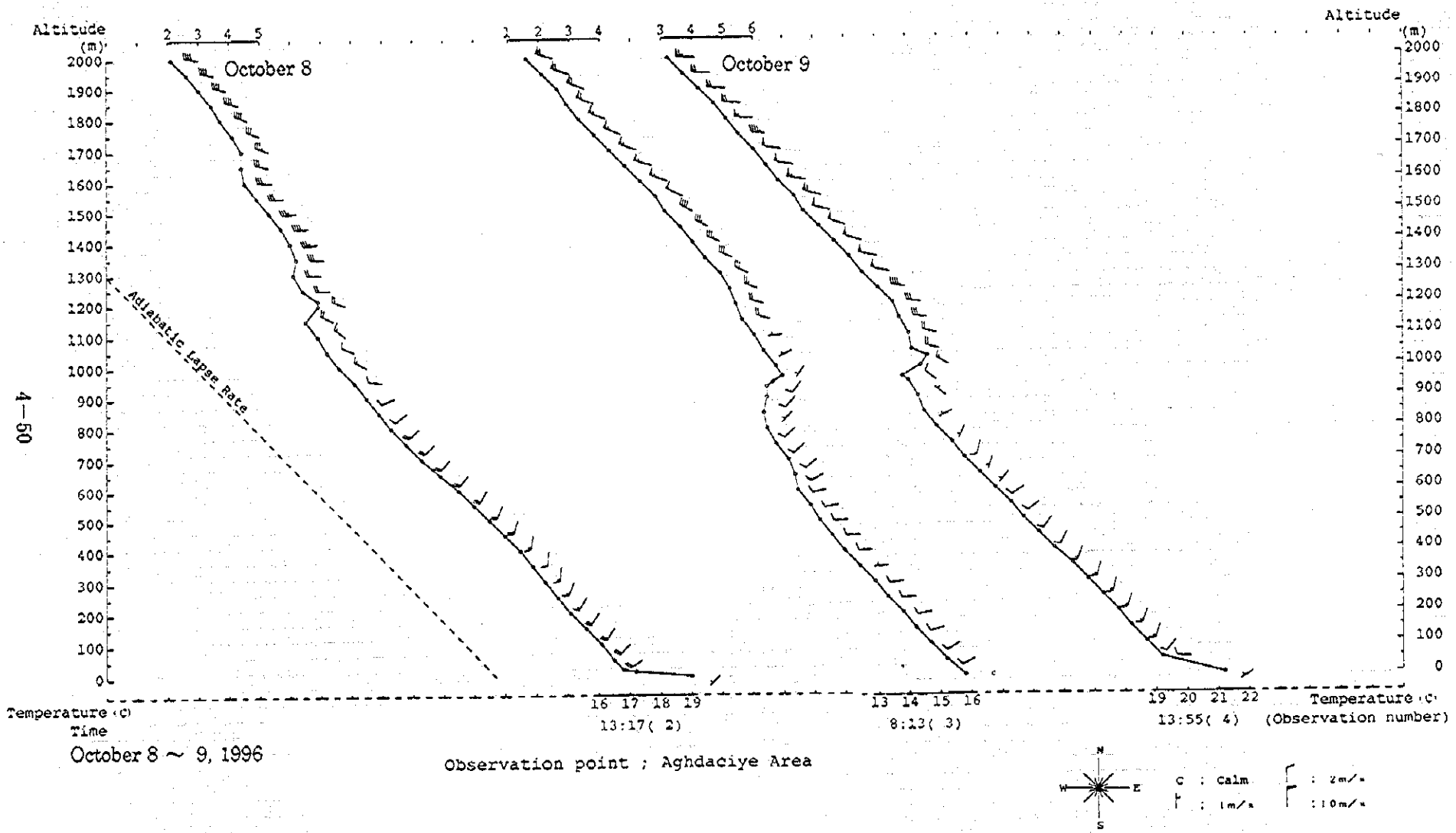
Legend

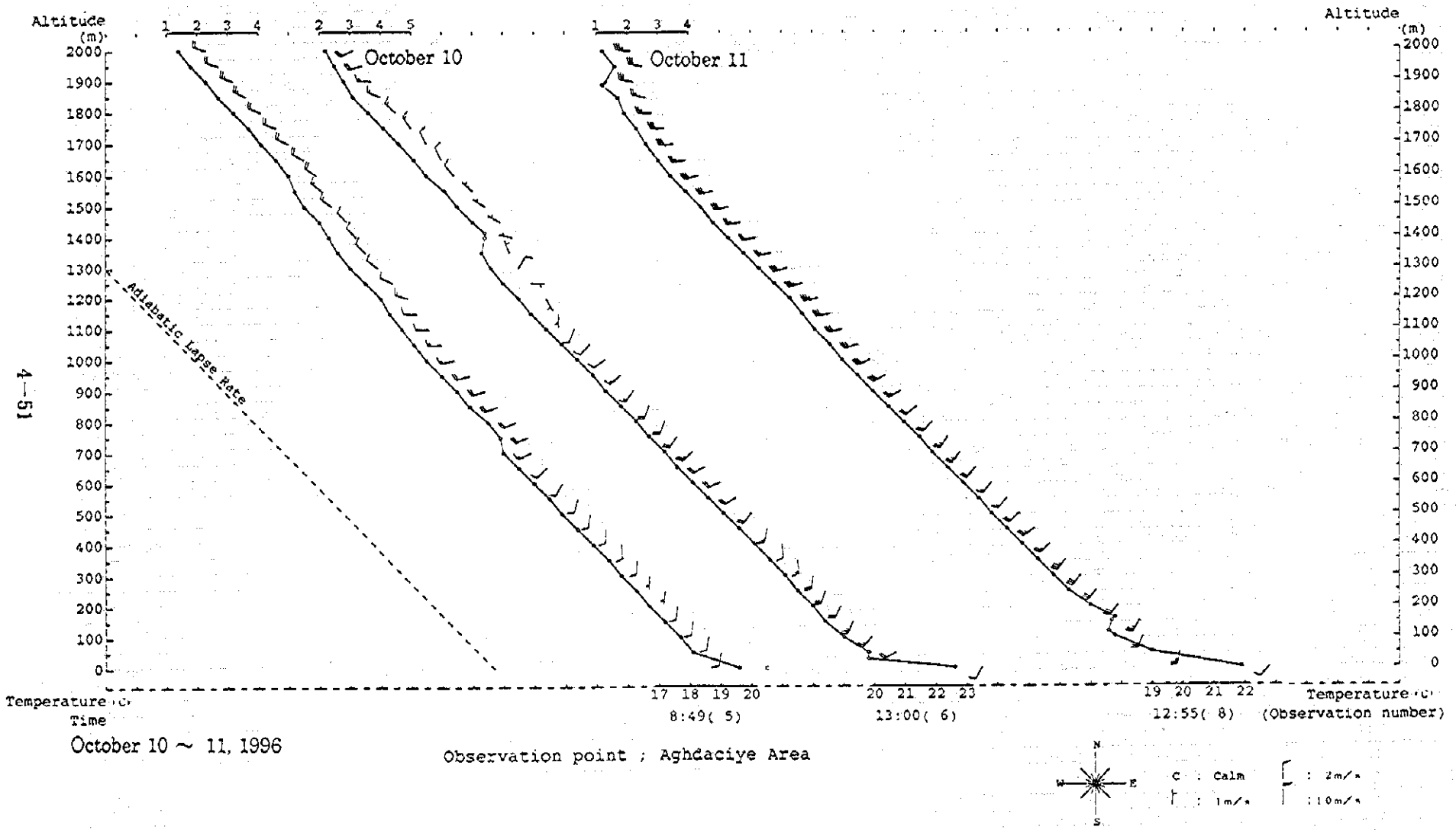
N
W
E
S

C : Calm
: 1m/s
: 5m/s
: 10m/s

Observation point : Aghdaciye Area

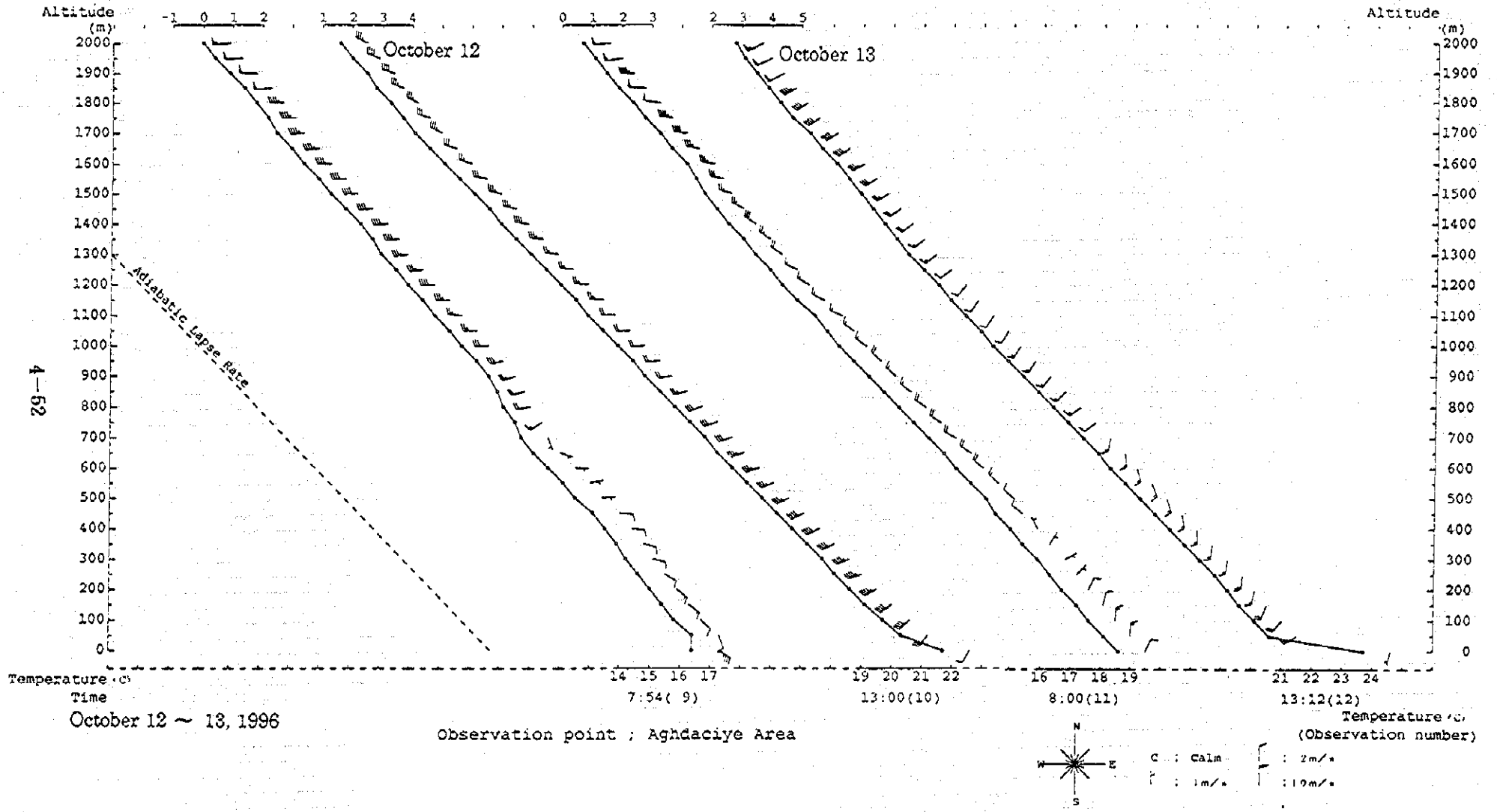
Vertical Profile of Upper Wind
(Observed by a Captive sonde)

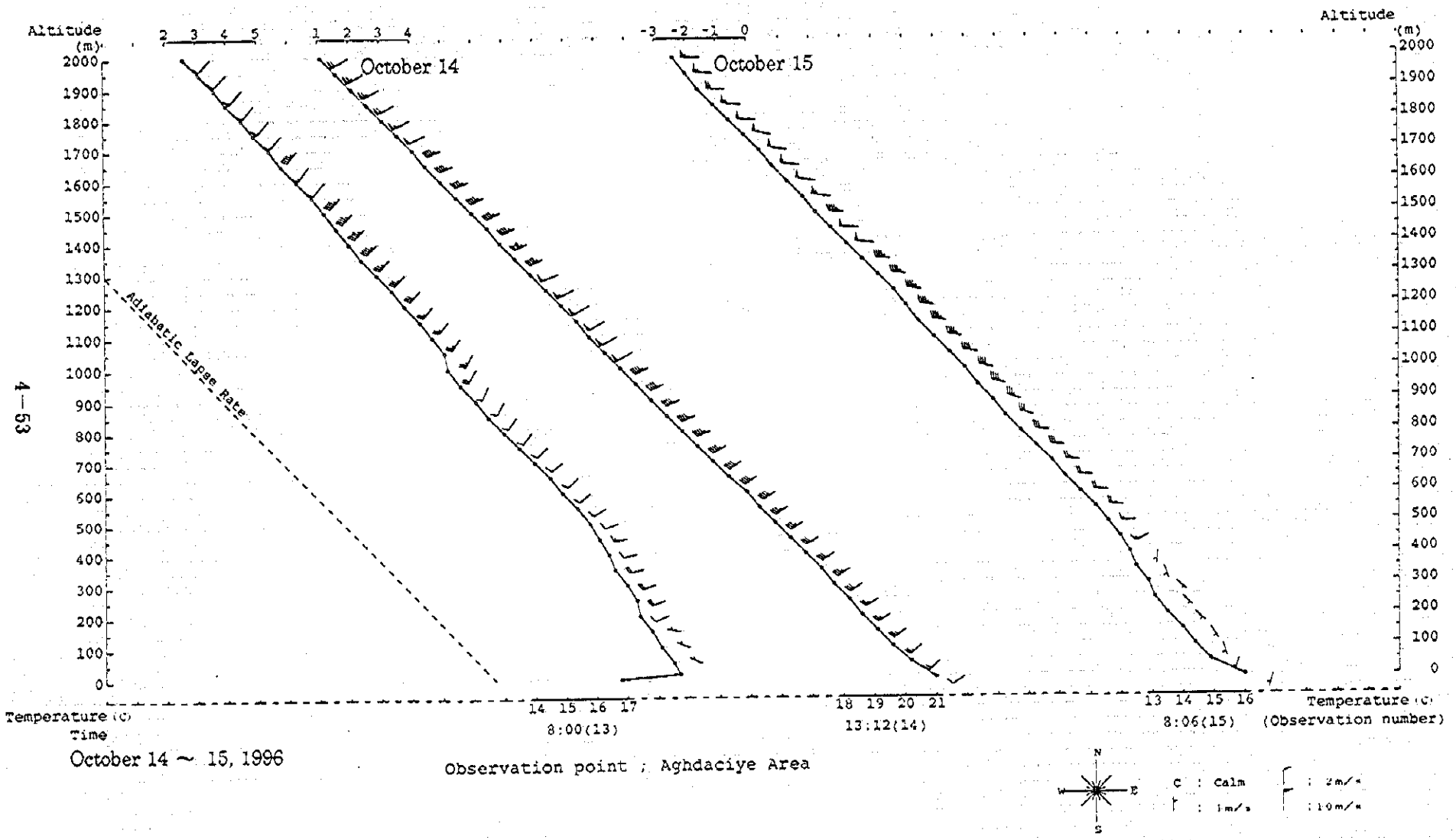

Altitude (m)
October 8
October 9
Adiabatic Lapse Rate
Temperature (C)
Time
October 8 ~ 9, 1996
Observation point ; Aghdaciye Area
13:17(2)
8:13(3)
13:55(4)
(Observation number)
C : Calm



October 10 ~ 11, 1996

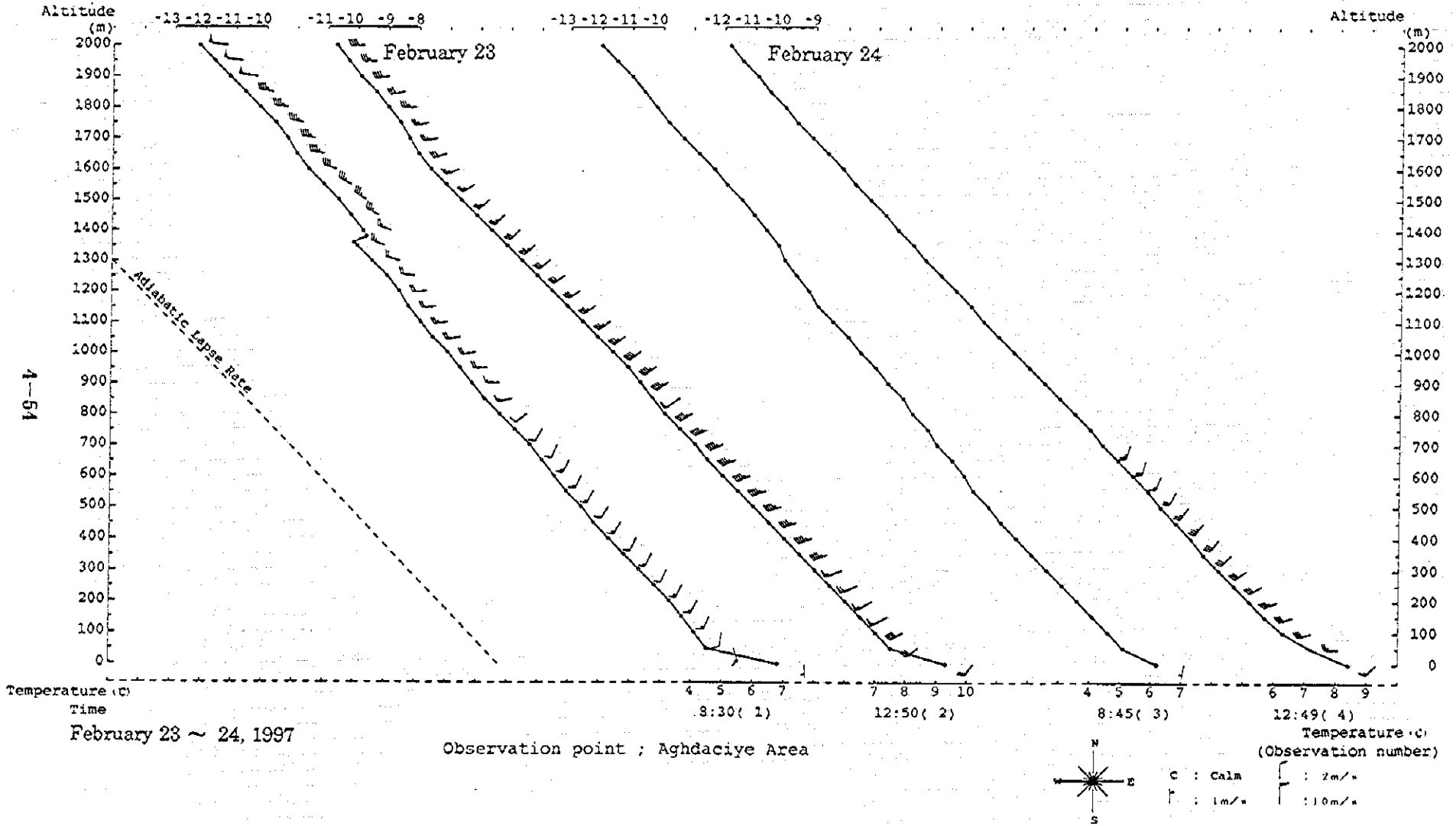
Observation point ; Aghdaciye Area


Altitude (m)
October 12
October 13
Adiabatic Lapse Rate
Temperature ℃
Time
7:54(9)
13:00(10)
8:00(11)
13:12(12)
Temperature ℃
(Observation number)
October 12 ~ 13, 1996
Observation point ; Aghdaciye Area
N
W
E
S
C : Calm
: 1m/s
: 2m/s
: 10m/s



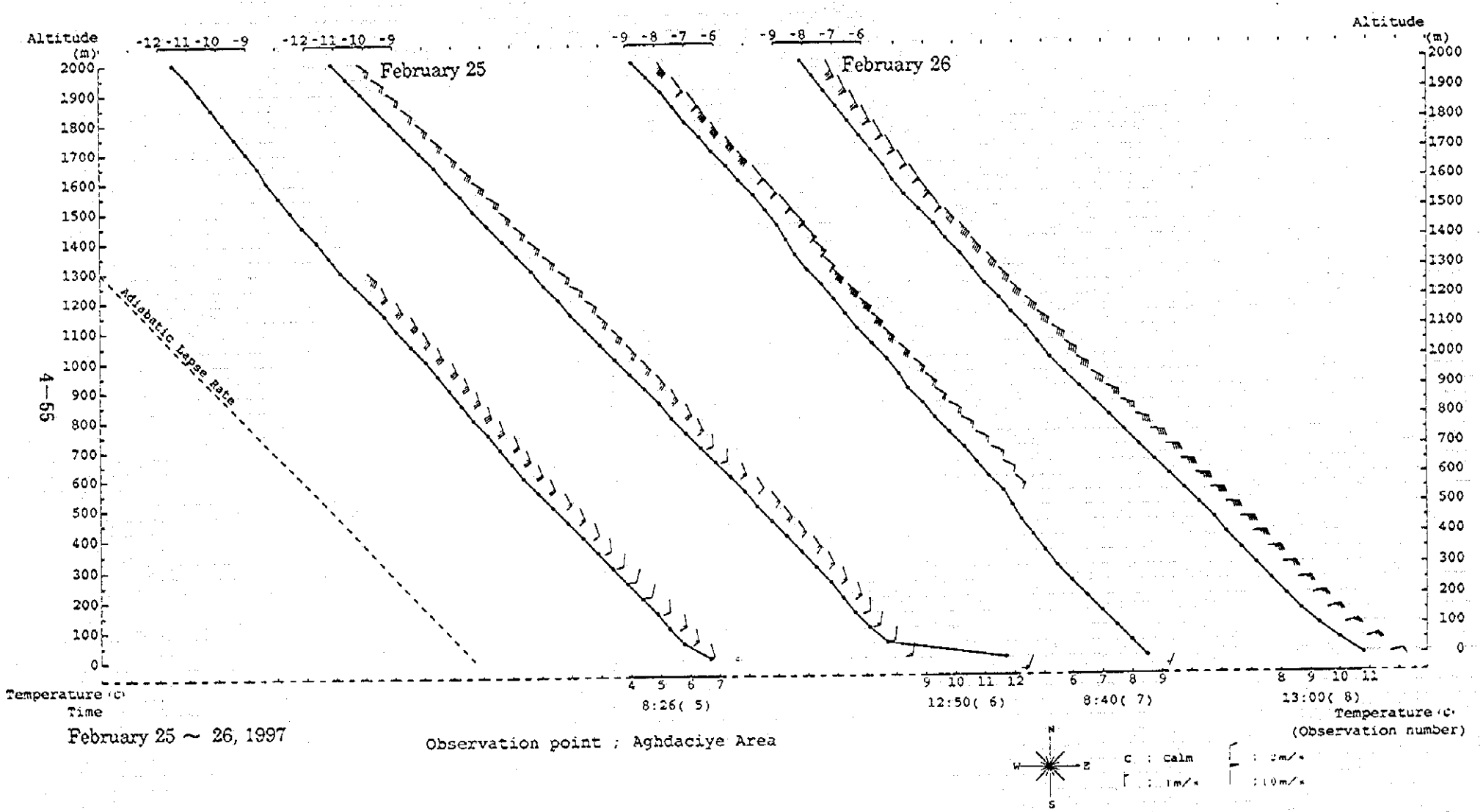
October 14 ~ 15, 1996

Observation point ; Aghdaciye Area



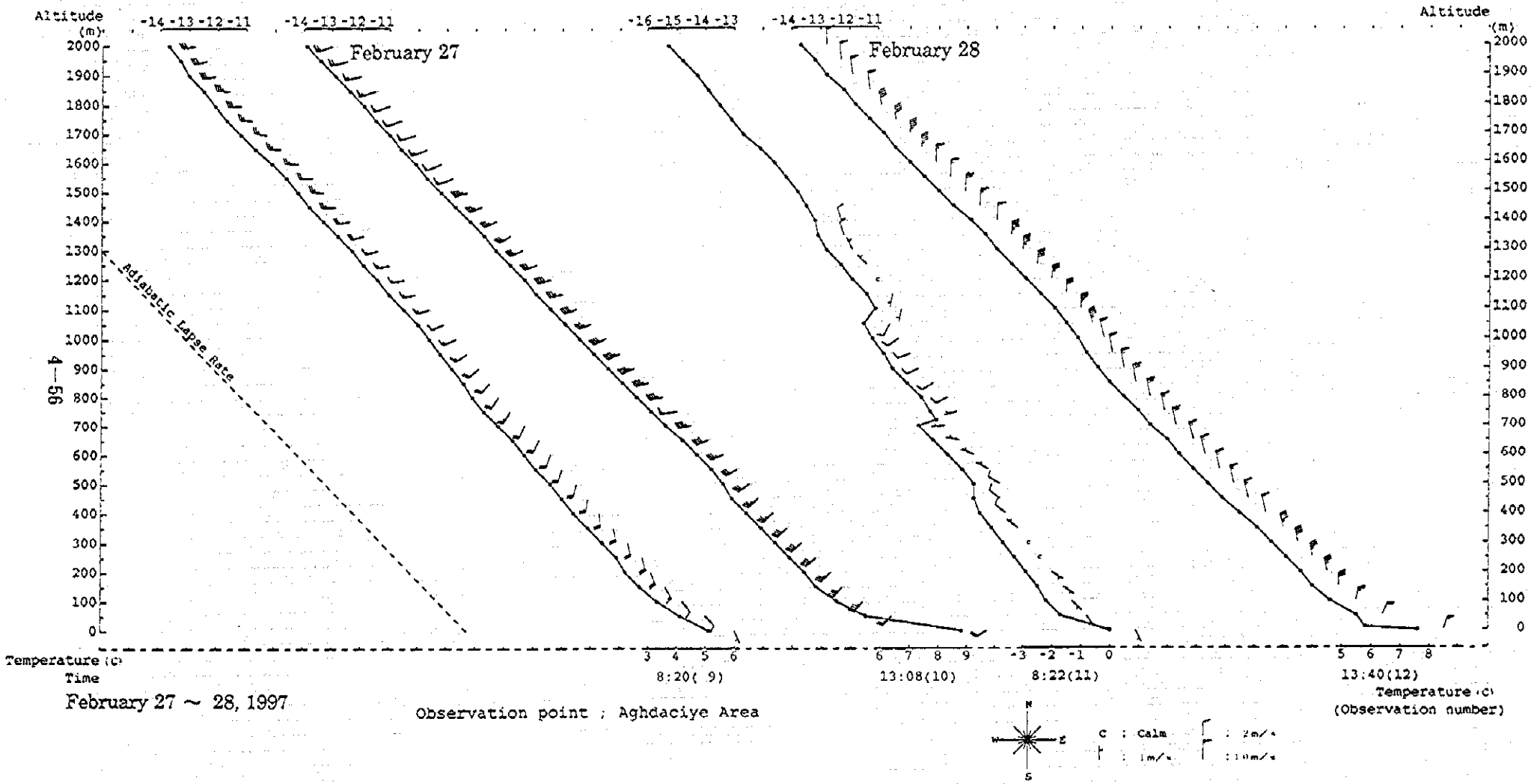
February 23 ~ 24, 1997

Observation point ; Aghdaciye Area



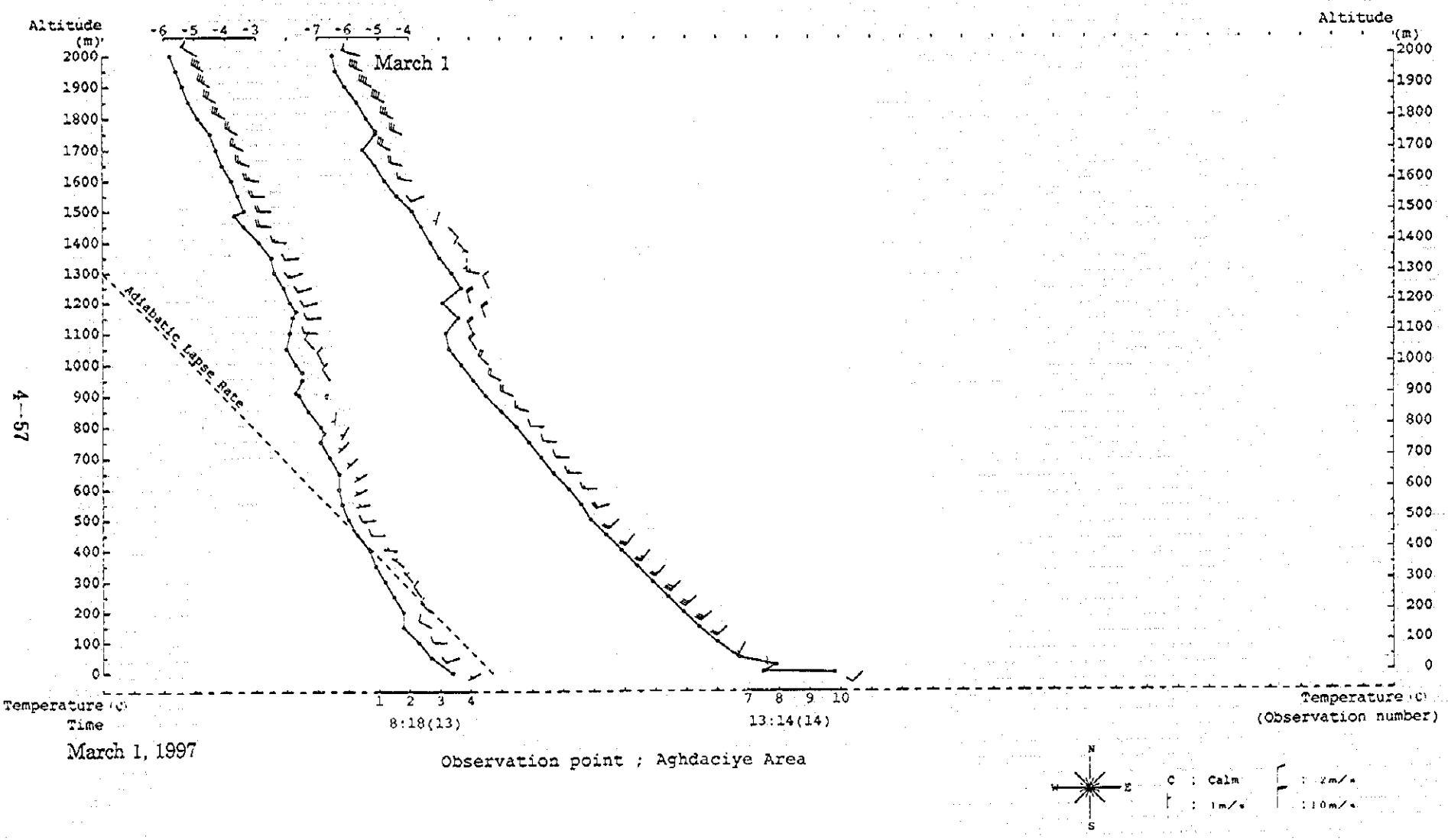
February 25 ~ 26, 1997

Observation point : Aghdaciye Area



February 27 ~ 28, 1997

Observation point ; Aghdaciye Area


Altitude (m)
-6 -5 -4 -3
-7 -6 -5 -4
March 1
Adiabatic Lapse Rate
Temperature (C)
Time
8:18(13)
13:14(14)
Temperature (C)
(Observation number)
March 1, 1997
Observation point ; Aghdaciye Area
N
W
E
S
C : Calm
1m/s
10m/s

4.3 Analysis of field survey in the vehicle sector

4.3.4 Traffic volume survey

4.3.4 Traffic volume survey

In order to analyze the present status of pollution and evaluate impacts of these measures, it is necessary to understand the current status, such as the traffic volume within Tehran and their daily fluctuation patterns. Such variables are characterized by places, time and land usage in each area of the City, such as, commercial, industrial and residential areas and are affected by traffic regulations or restrictions.

The objectives of this survey are to understand the characteristics inherent with the volume of traffic and their daily fluctuation patterns within Tehran, and to correlate these findings for preparation of an effective countermeasure.

The survey was implemented at the following intersections in Tehran.

1 BOZORG-RAH-E-RESALAT

2 MEDAN-E-FATEMI

3 MEDAN-E-ENQELAB

4 MEYDAN-E-GOMROK

5 INTERSECTION, SHAHID MOSTAFA KHOMEYNI and MOLAVI

6 INTERSECTION, JOMHURI-YE-ESLAMI and FERDOWSI

7 BOZORG-RAH-E-SHAHID DOKTOR CHAMRAN

8 BOZORG-RAH-E-SHEYKH FAZL-OL-LAH-NURI

9 MEYDAN-E-RESALAT

10 MEYDAN-E-KHORASAN

11 MEYDAN-E-AZADI

12 MEYDAN-E-VALI-YE-ASR

13 MEYDAN-E-SHUSH

14 INTERSECTION, VALI-YE-ASR and ENQELAB

15 INTERSECTION, SOHRVARDI and SHAHID AYATOLLA BEHESHTI

16 INTERSECTION, SABALAN and DAMAVAND

17 JADDEH-YE-KHORASAN

18 INTERSECTION, FADA'IYAN-E-ESLAM and JADDEH-YE-VARAMIN

19 INTERSECTION, QUAZVIN and AZARI

20 BOZORG RAH-E-AYATOLLAH-E-SADR

At each surveying point, a video camera with a recorder unit was installed to count traffics and classified by vehicle types and driving pictures were later played back. The types of vehicle were classified into seven categories, i.e. passenger cars, pick-ups, mini-buses, buses, mini trucks, trucks and motor cycles. Although recordings were made continuously over a 24hour period from midnight, measurements and counting were selectively carried out so as to meet the study objectives. The measurements were based on 10 minute periods from the beginning of every hour during the off-peak time, i.e. total of 10 minutes every hour, and additionally 10 minutes at a frequency of every 20 minutes during the peak hours totaling 30 minutes every hour.

-Measurement/Counting time in off-peak times;

12:00 midnight to 05:00, 10:00 to 15:00, 21:00 to 23:00

-Measurement/Counting time in peak times;

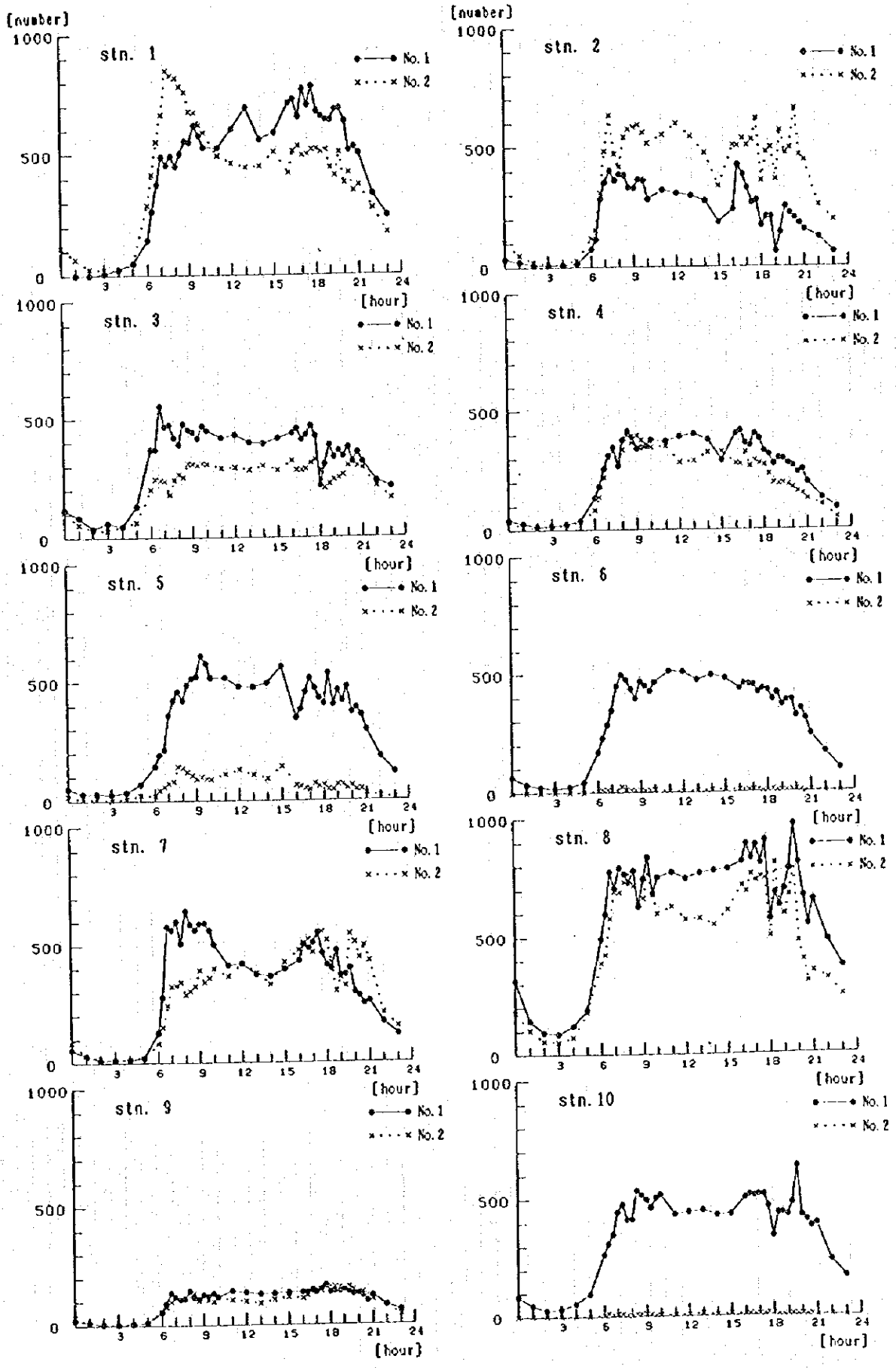
06:00 to 09:00, 16:00 to 20:00

The survey was carried out on two separate days; a normal working day and a holiday. As Thursday is a half-day and Friday is a holiday in Iran, Friday was selected as the holiday for the survey, and Monday was selected as the normal working day.

1st survey (working day) : October 7, 1996 (Monday)

2nd survey (holiday) : October 11, 1996 (Friday)

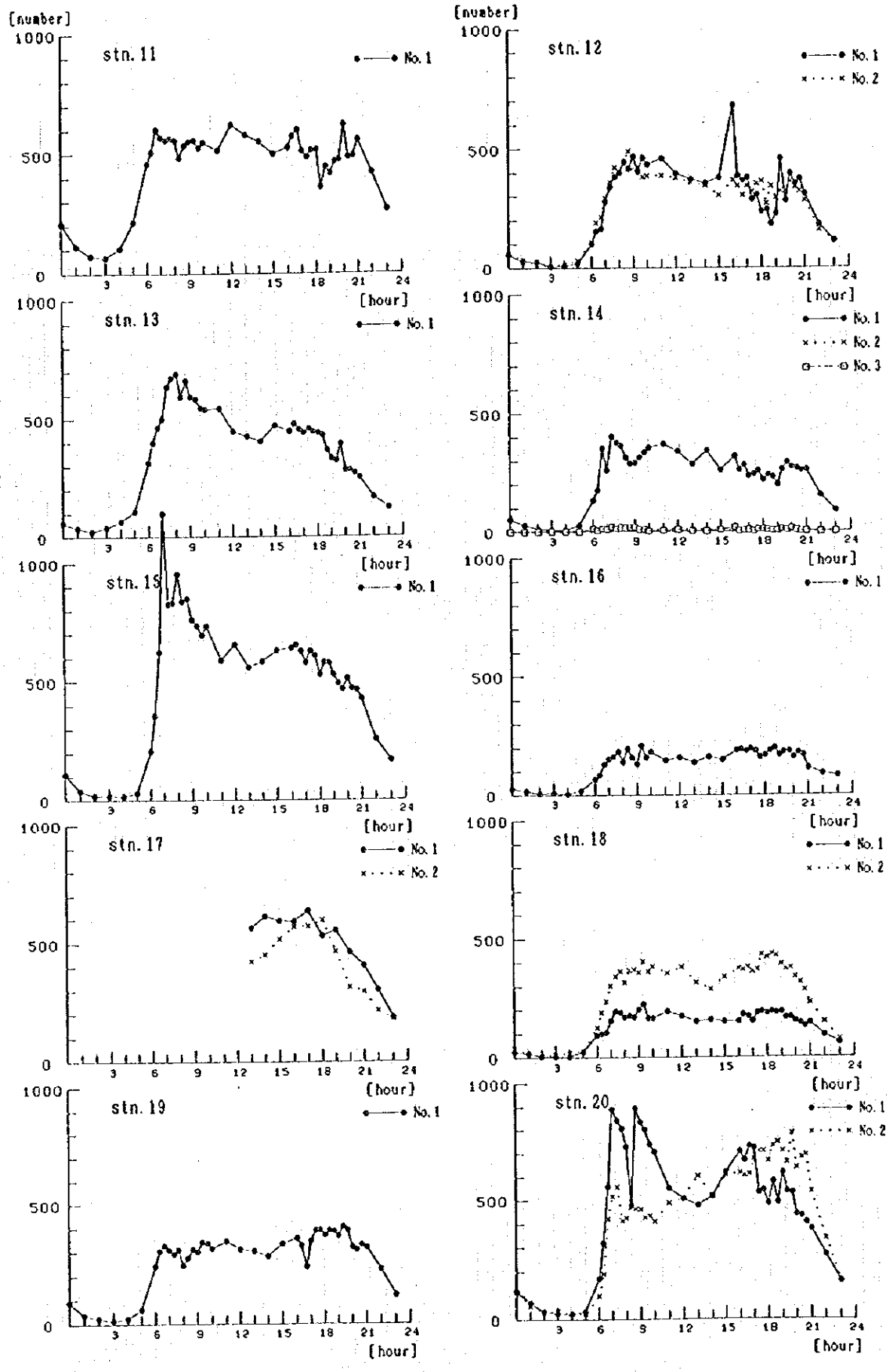
In this section, the daily fluctuation patterns at each survey point are shown schematically.



Traffic Volume (10min.)

all vehicle

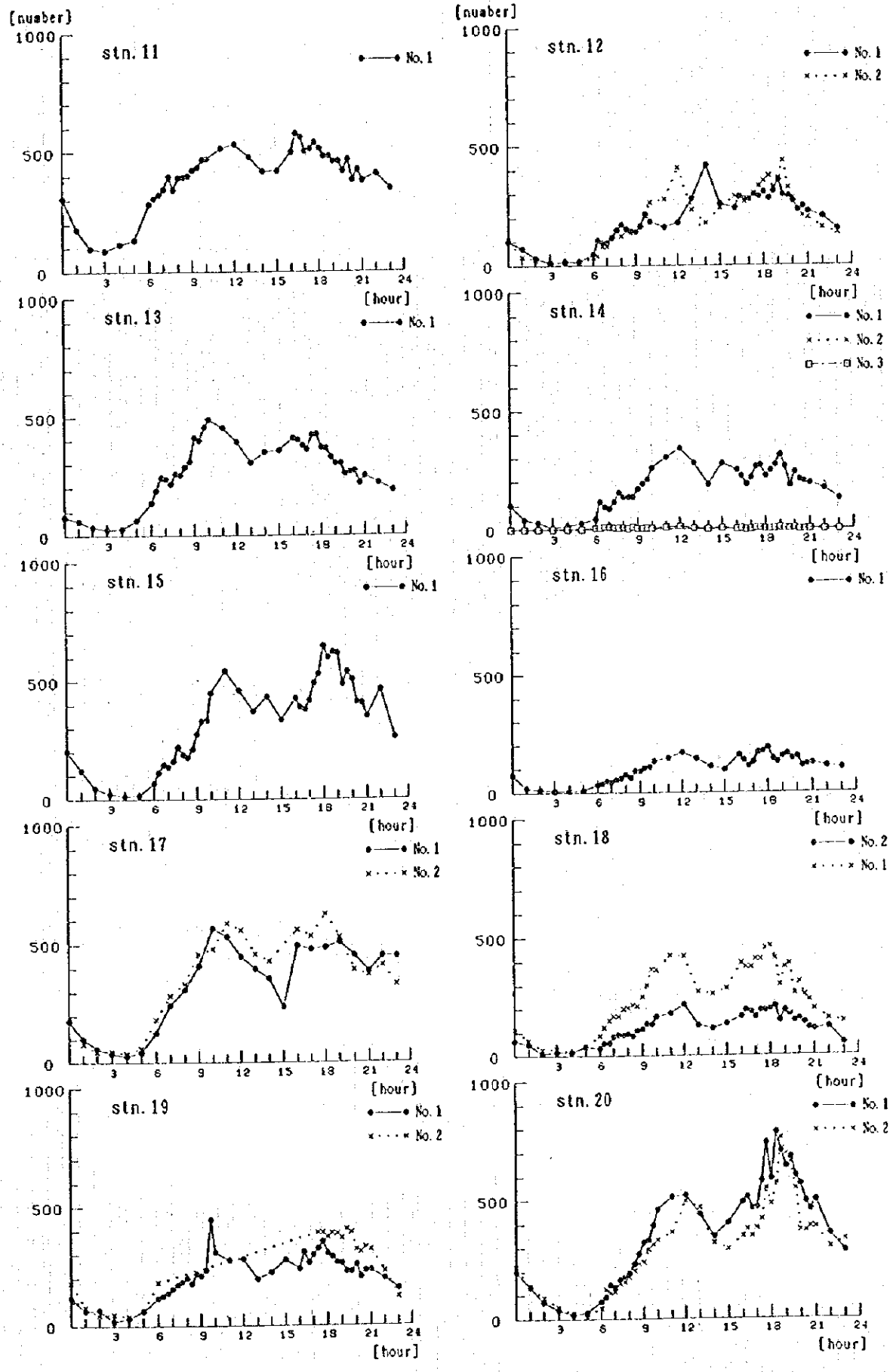
1996 Oct. 7 (Monday)



Traffic Volume (10min.)

all vehicle

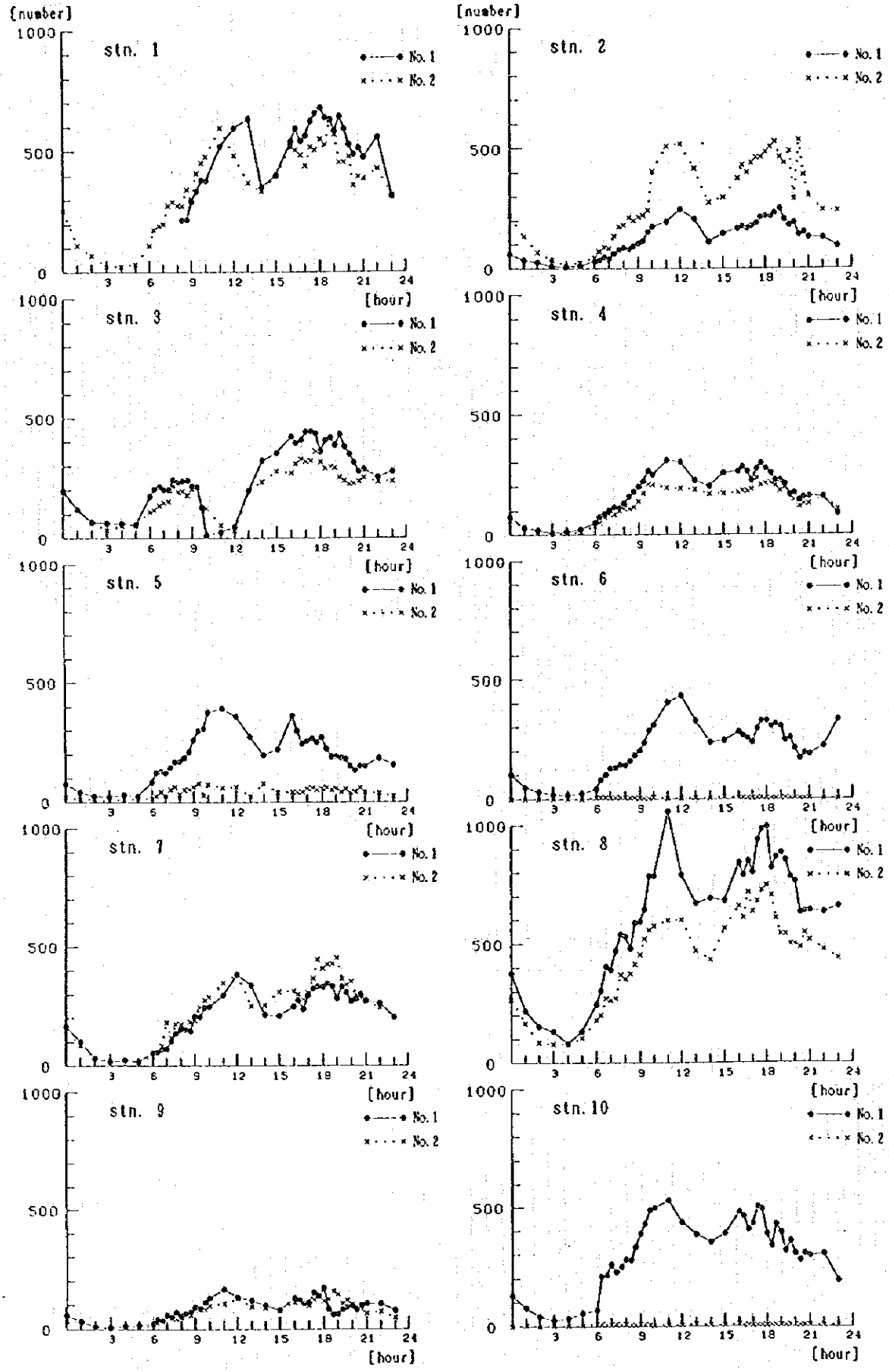
1996 Oct. 7 (Monday)



Traffic Volume (10min.)

all vehicle

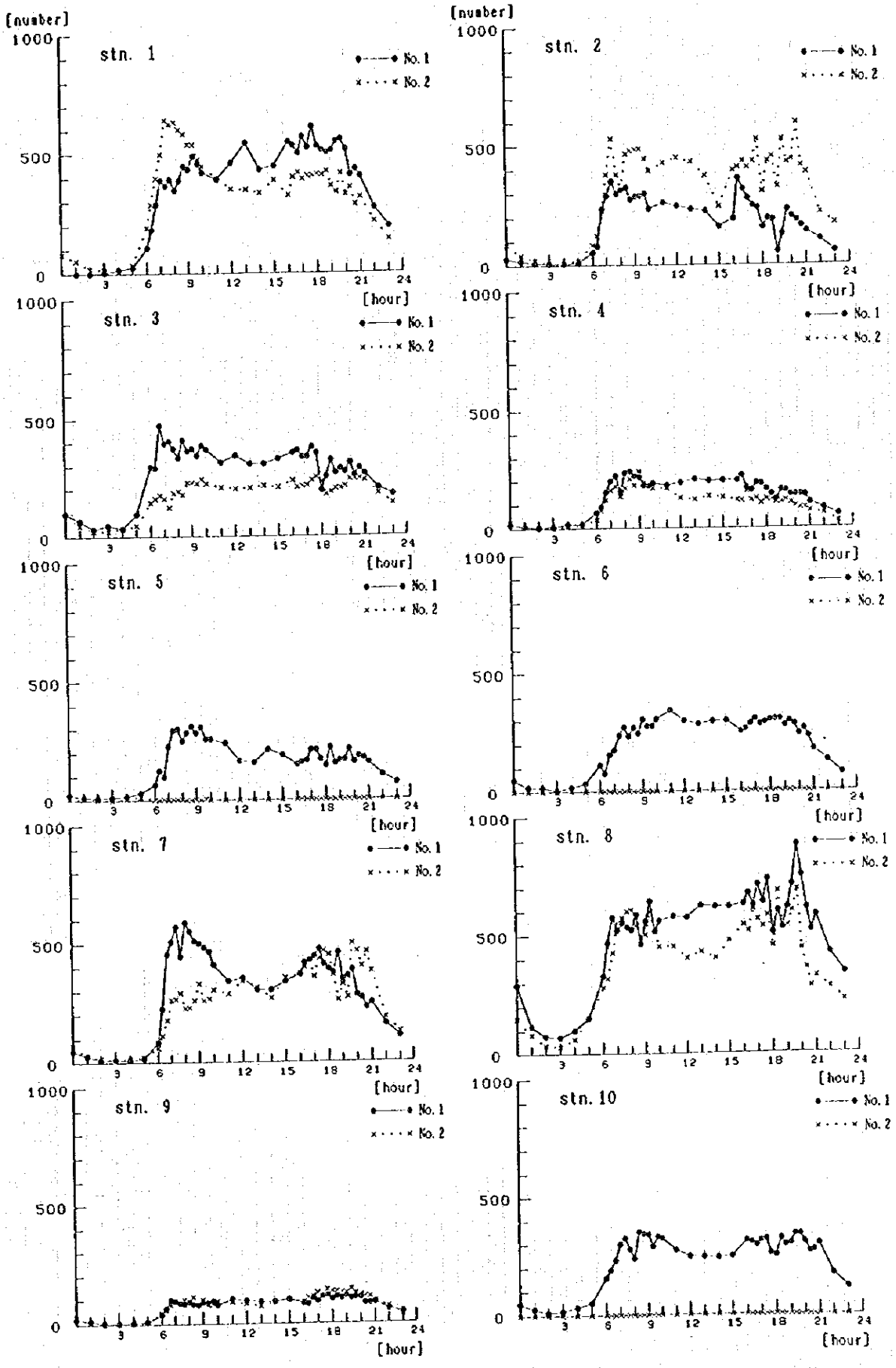
1996 Oct. 11 (Friday)



Traffic Volume (10min.)

all vehicle

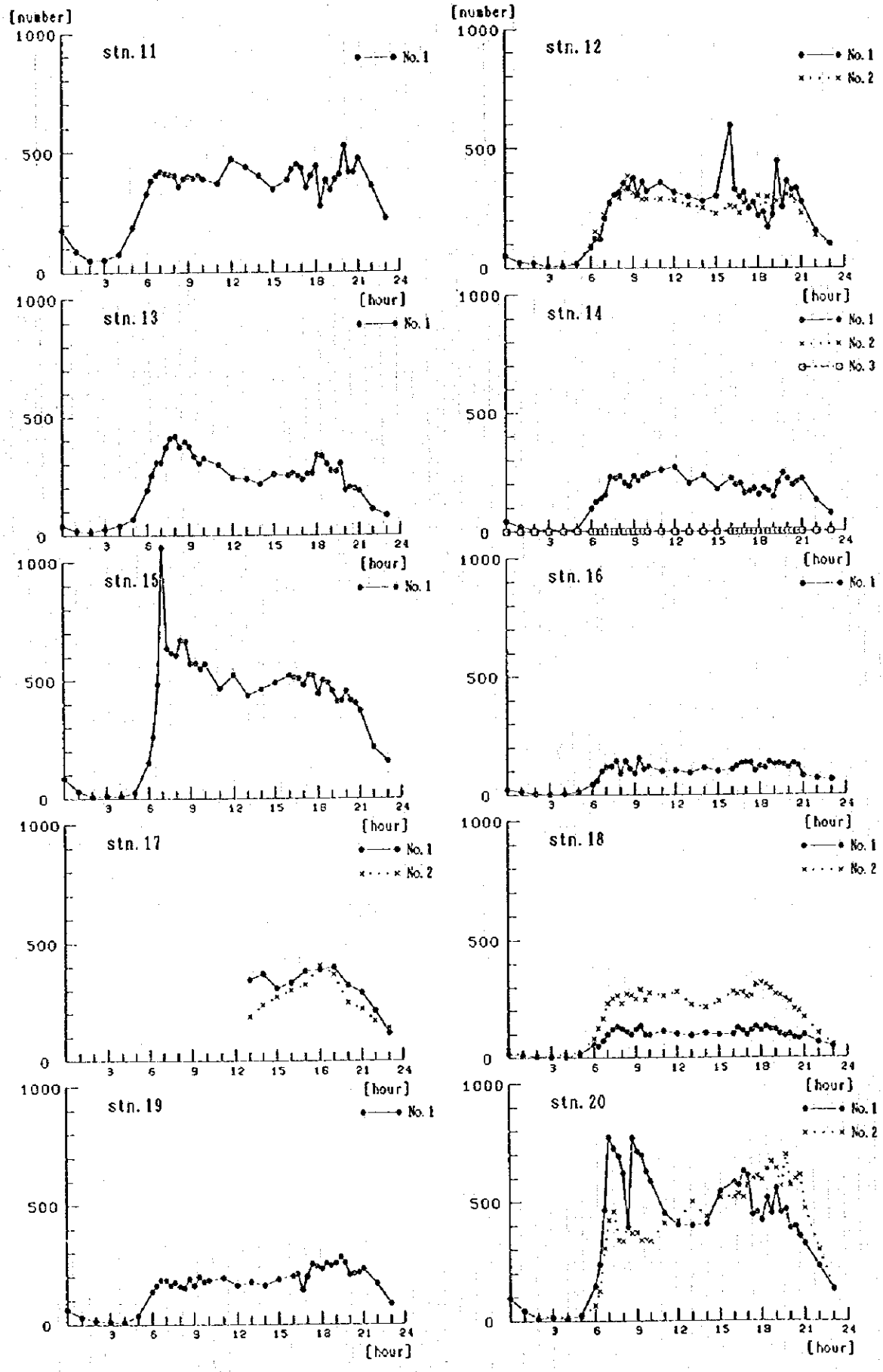
1996 Oct. 11 (Friday)



Traffic Volume (10min.)

passenger car

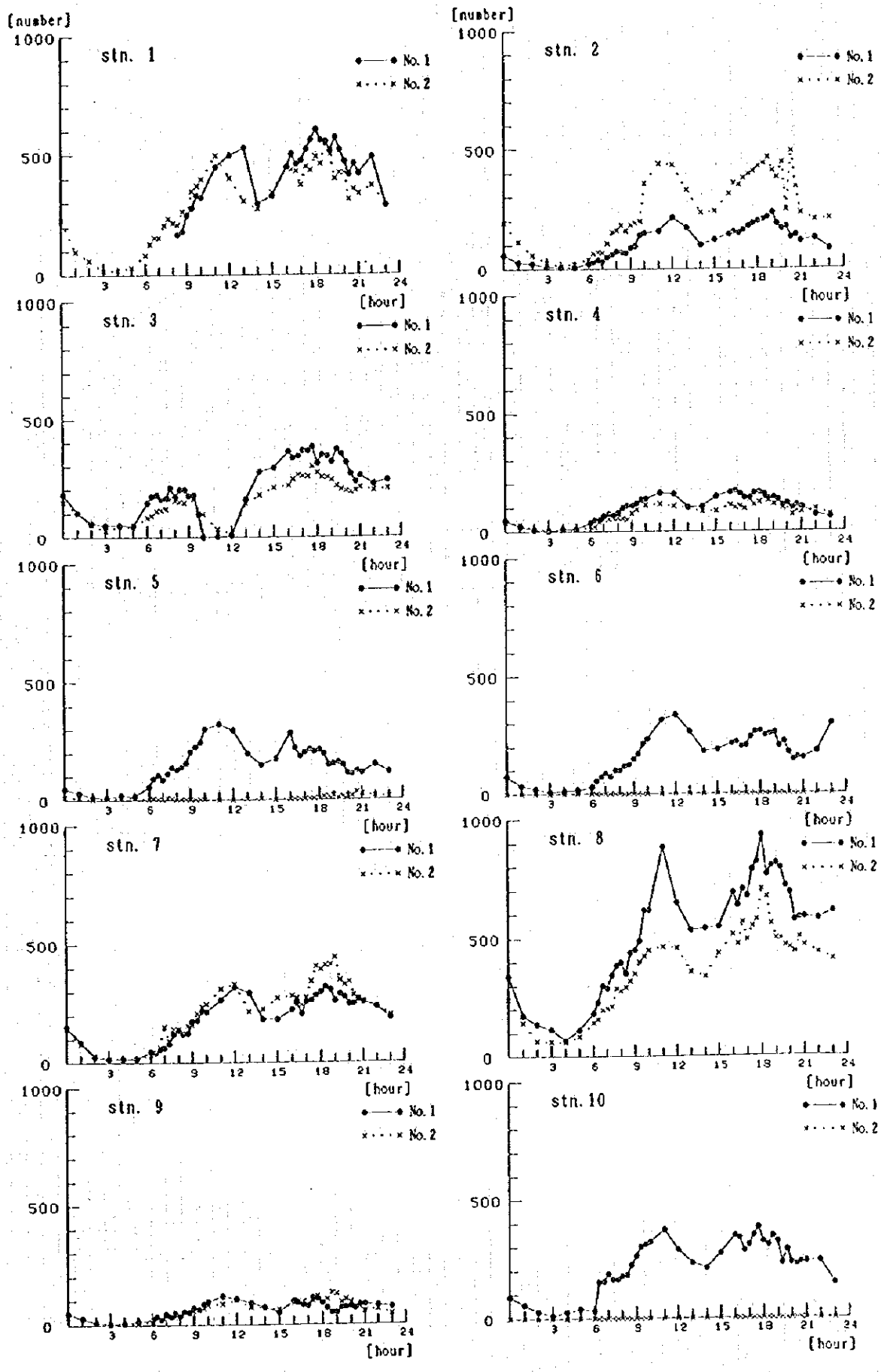
1996 Oct. 7 (Monday)



Traffic Volume (10min.)

passenger car

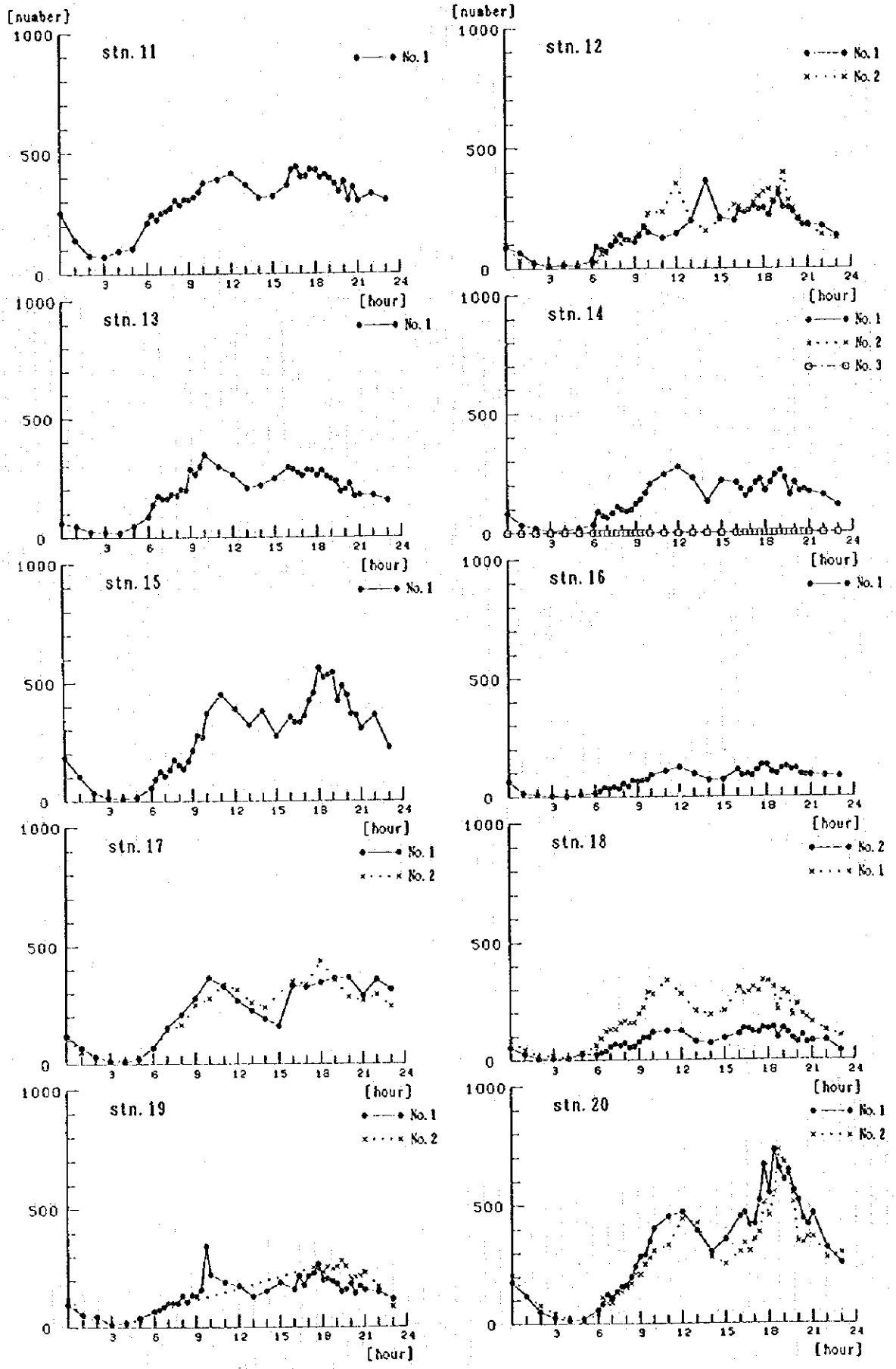
1996 Oct. 7 (Monday)



Traffic Volume (10min.)

passenger car

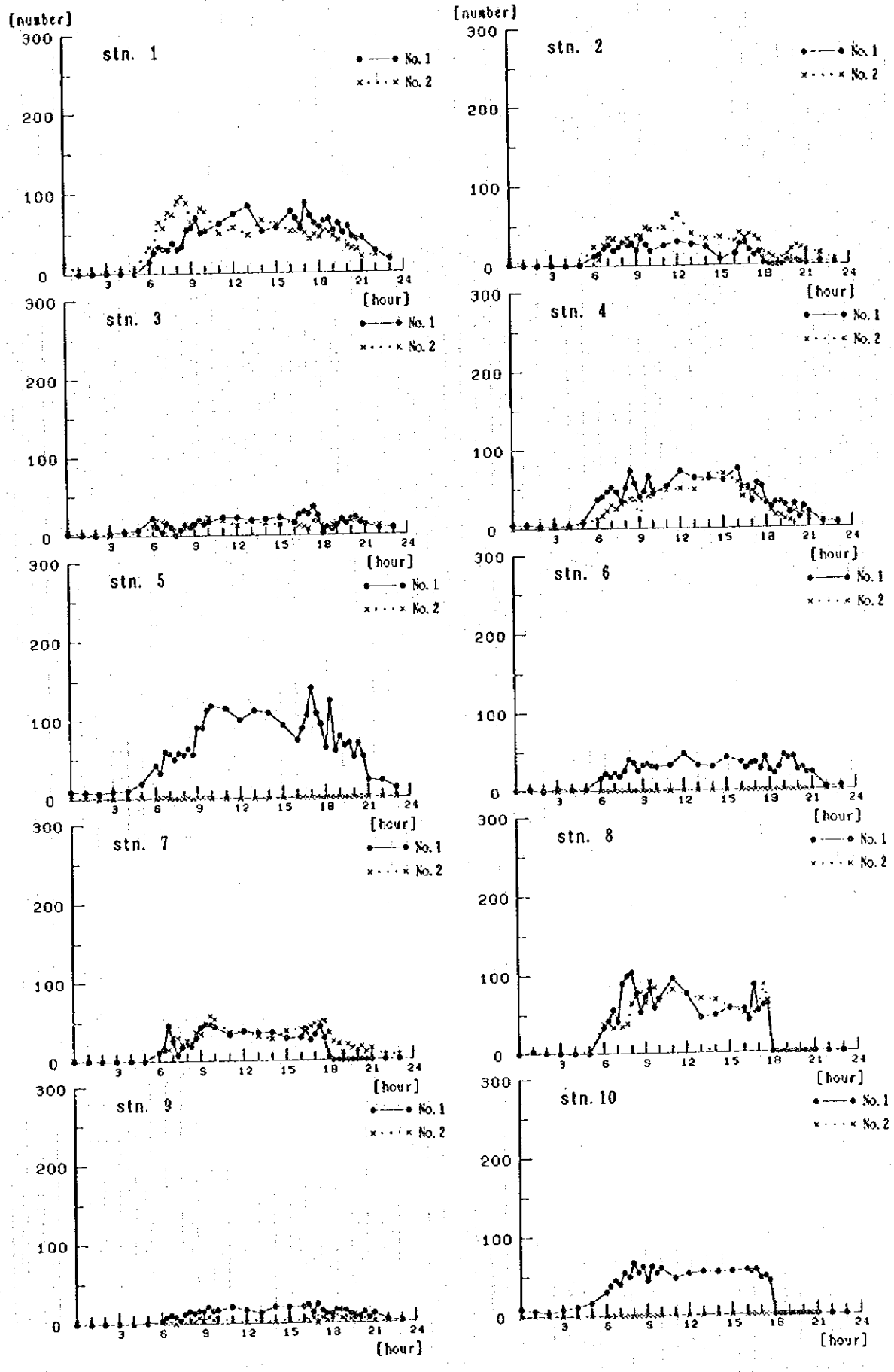
1996 Oct. 11 (Friday)



Traffic Volume (10min.)

passenger car

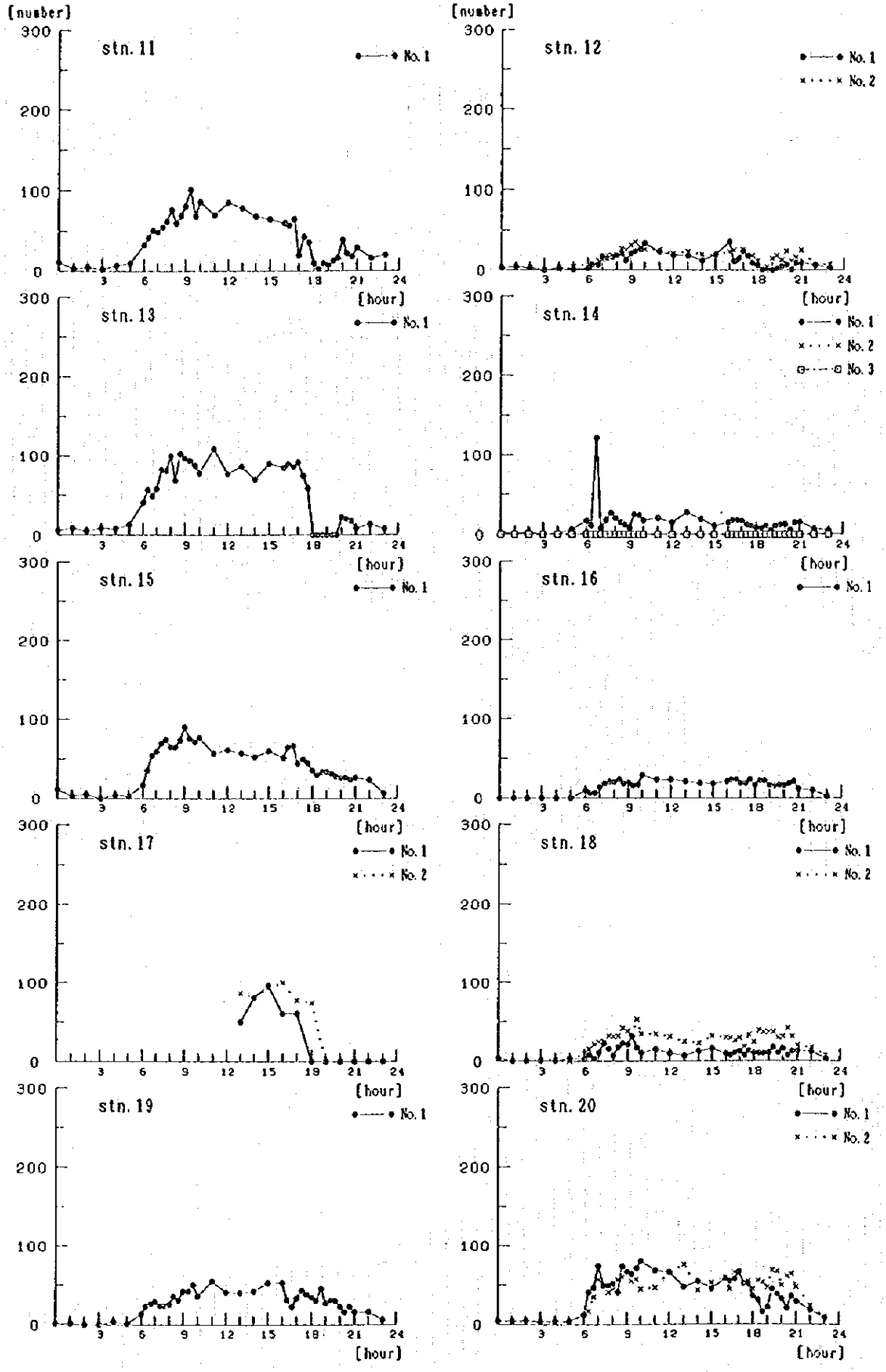
1996 Oct. 11 (Friday)



Traffic Volume (10min.)

pick up

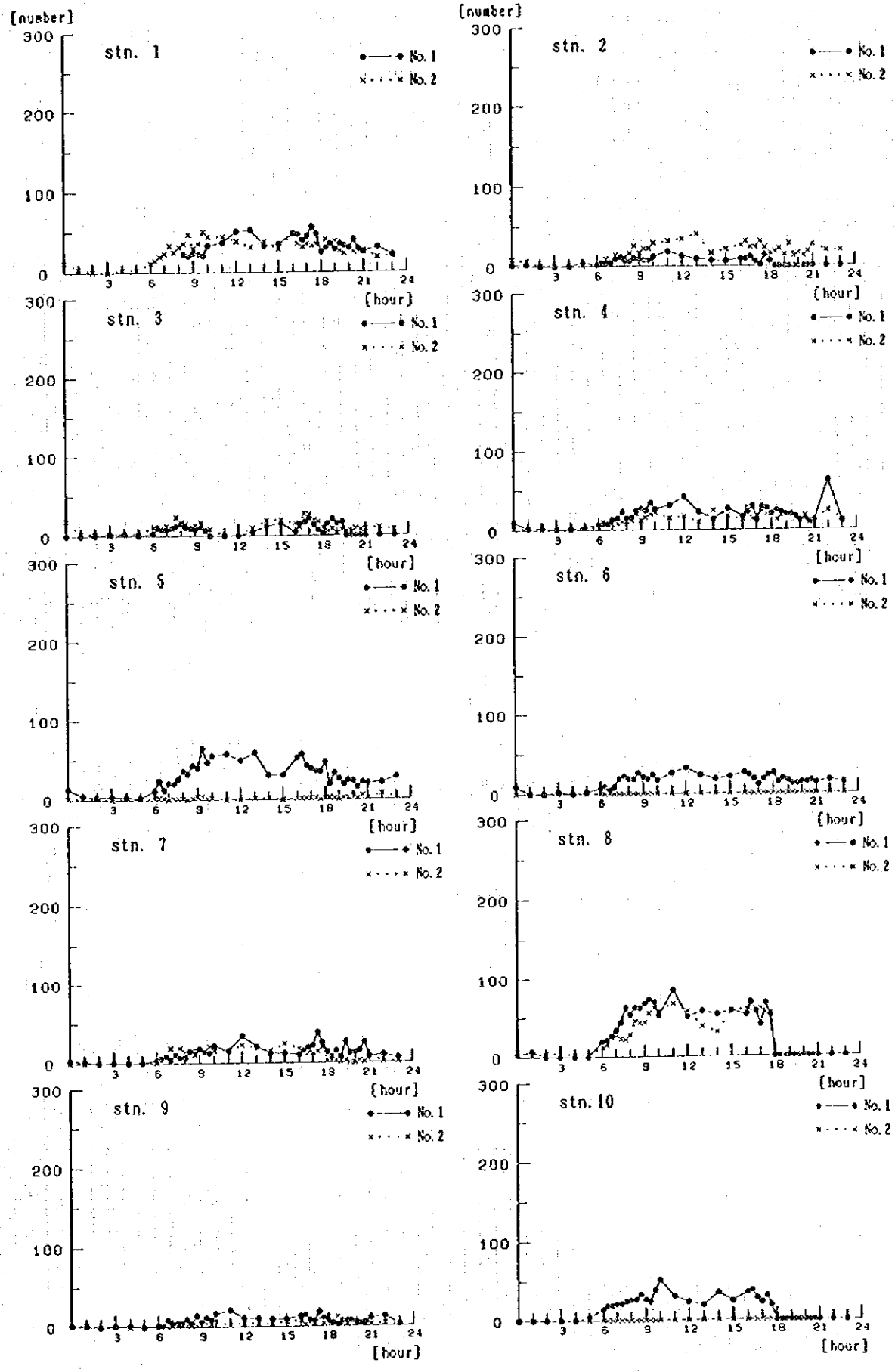
1996 Oct. 7 (Monday)



Traffic Volume (10min.)

pick up

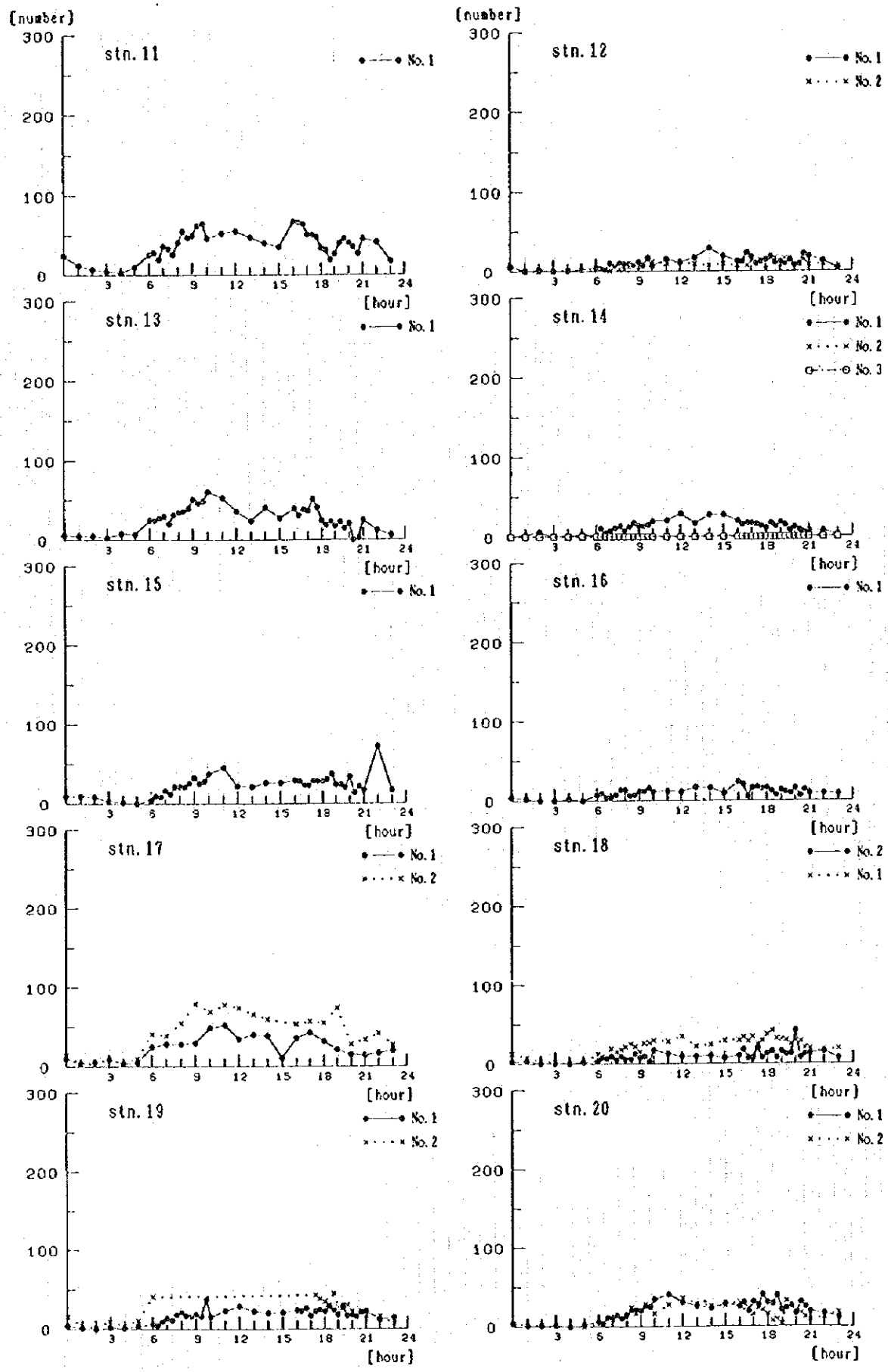
1996 Oct. 7 (Monday)



Traffic Volume (10min.)

pick up

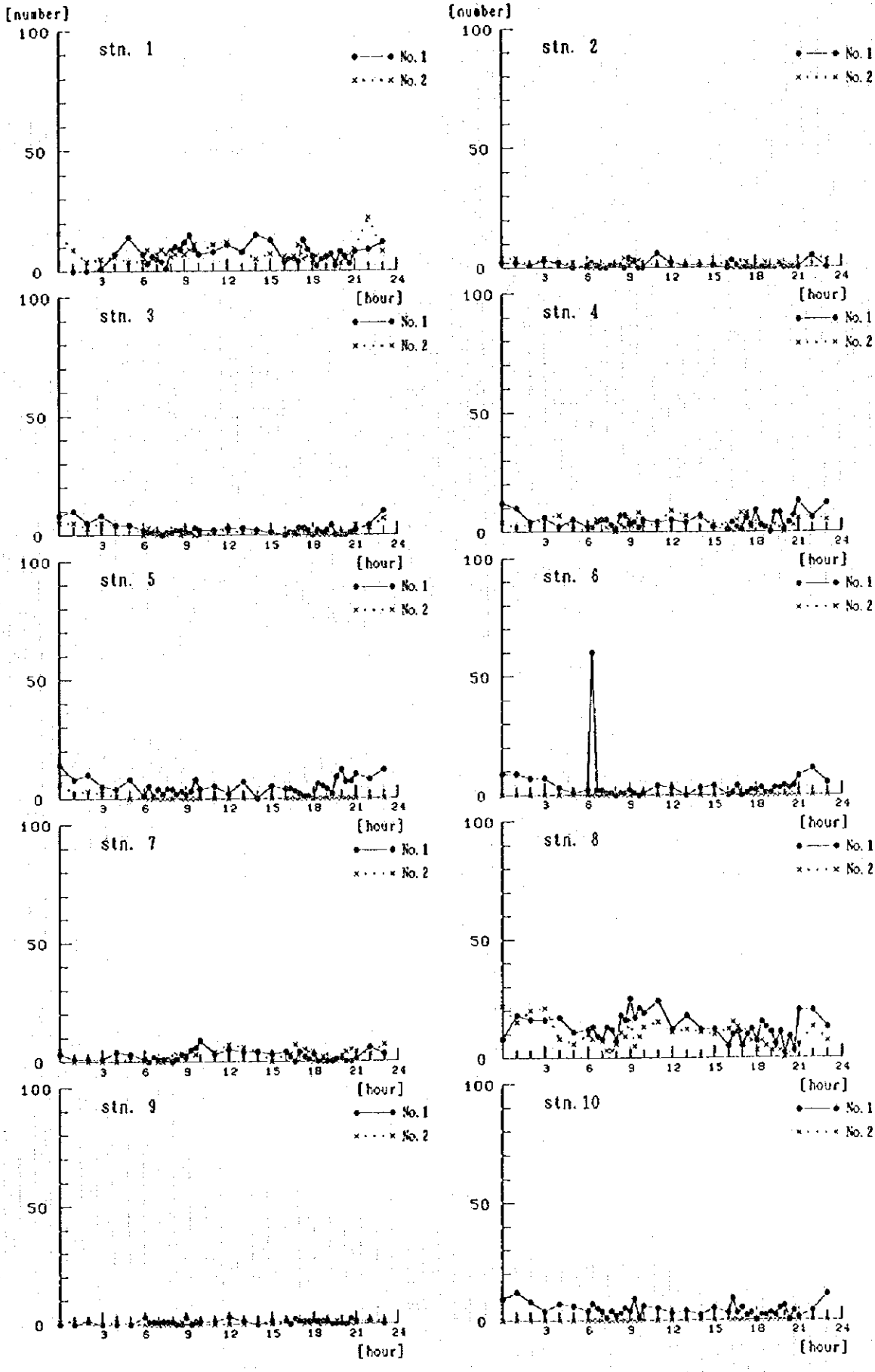
1996 Oct. 11 (Friday)



Traffic Volume (10min.)

pick up

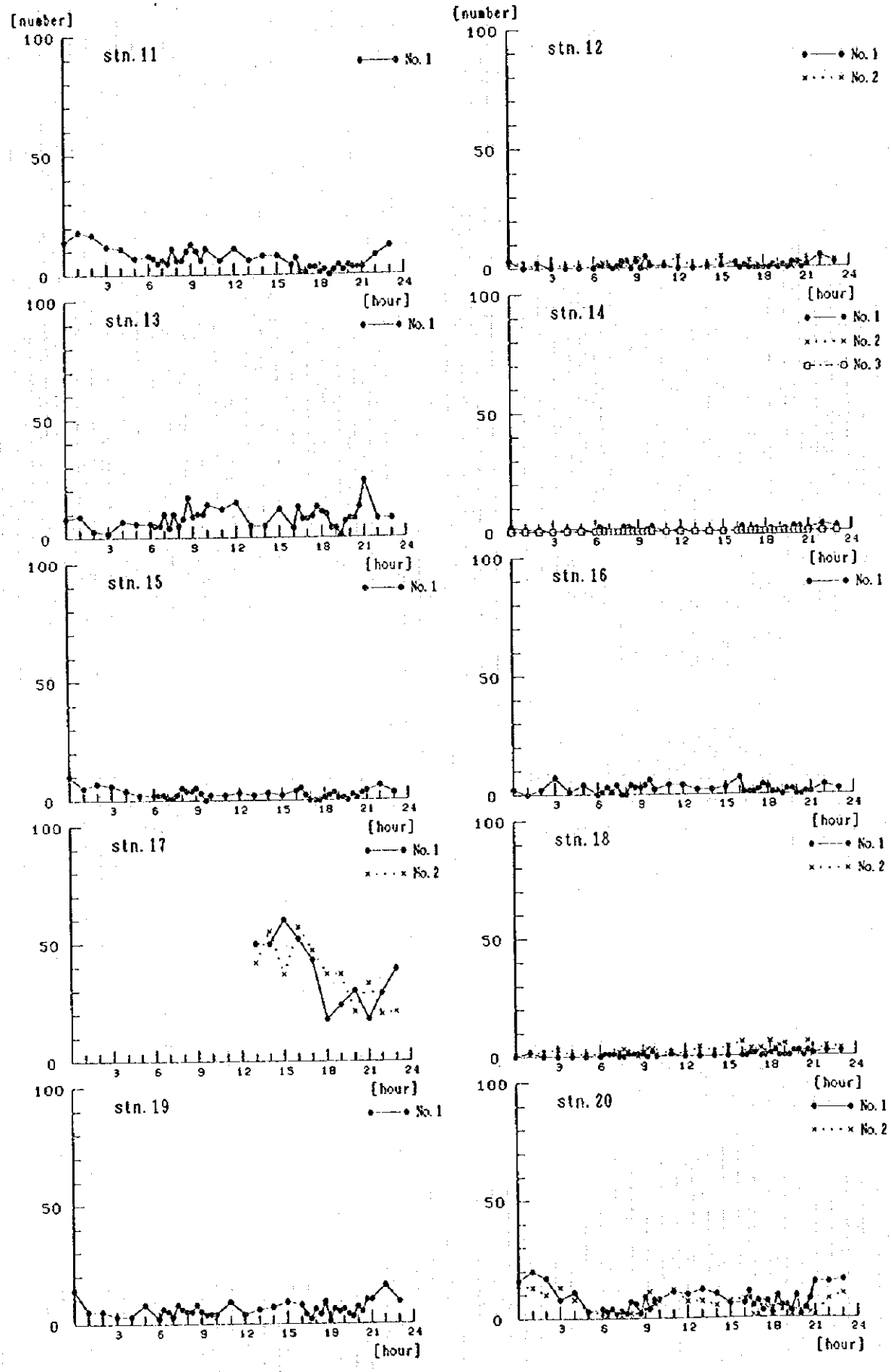
1996 Oct. 11 (Friday)



Traffic Volume (10min.)

truck & mini truck

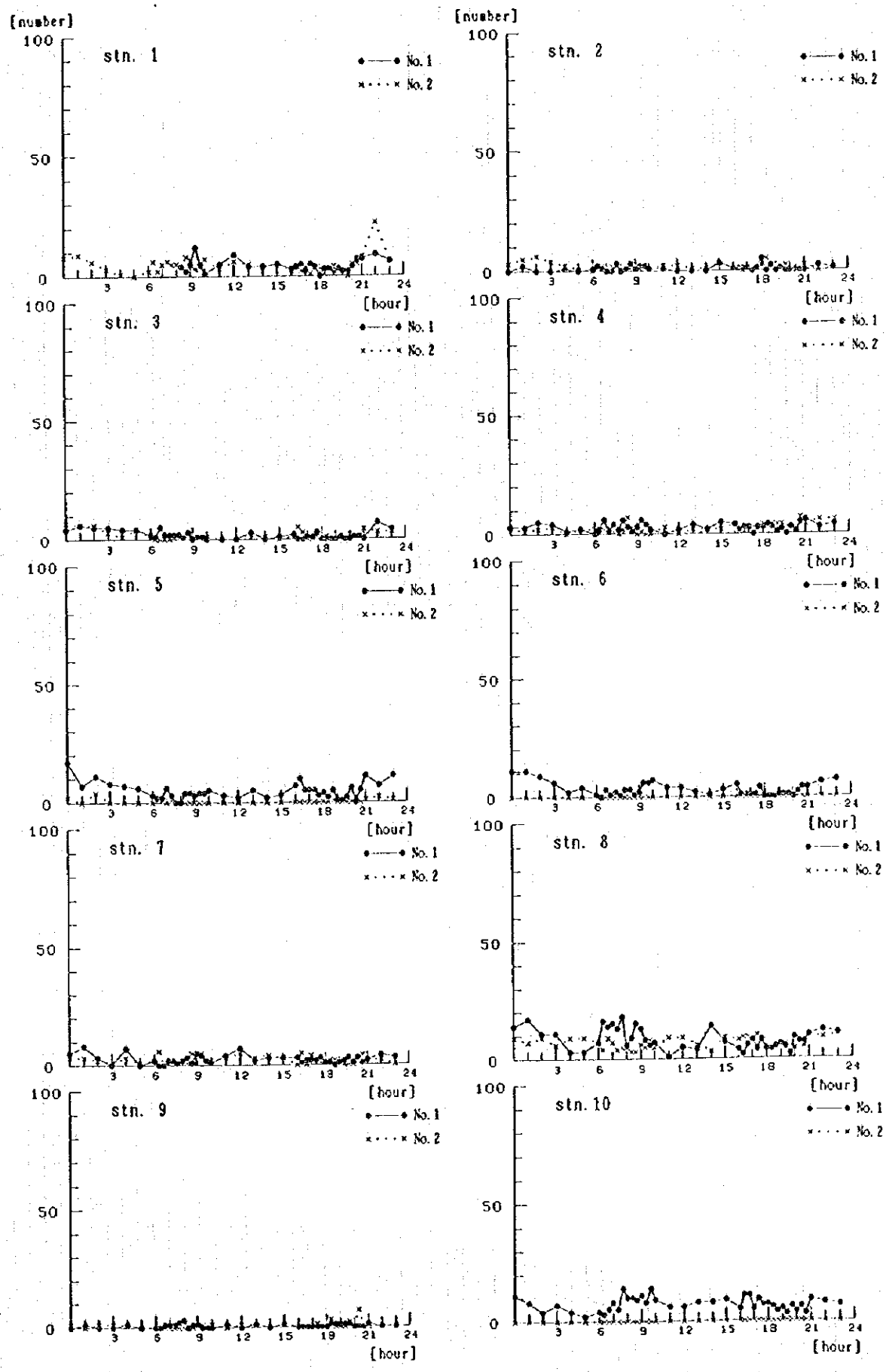
1996 Oct. 7 (Monday)



Traffic Volume (10min.)

truck & mini truck

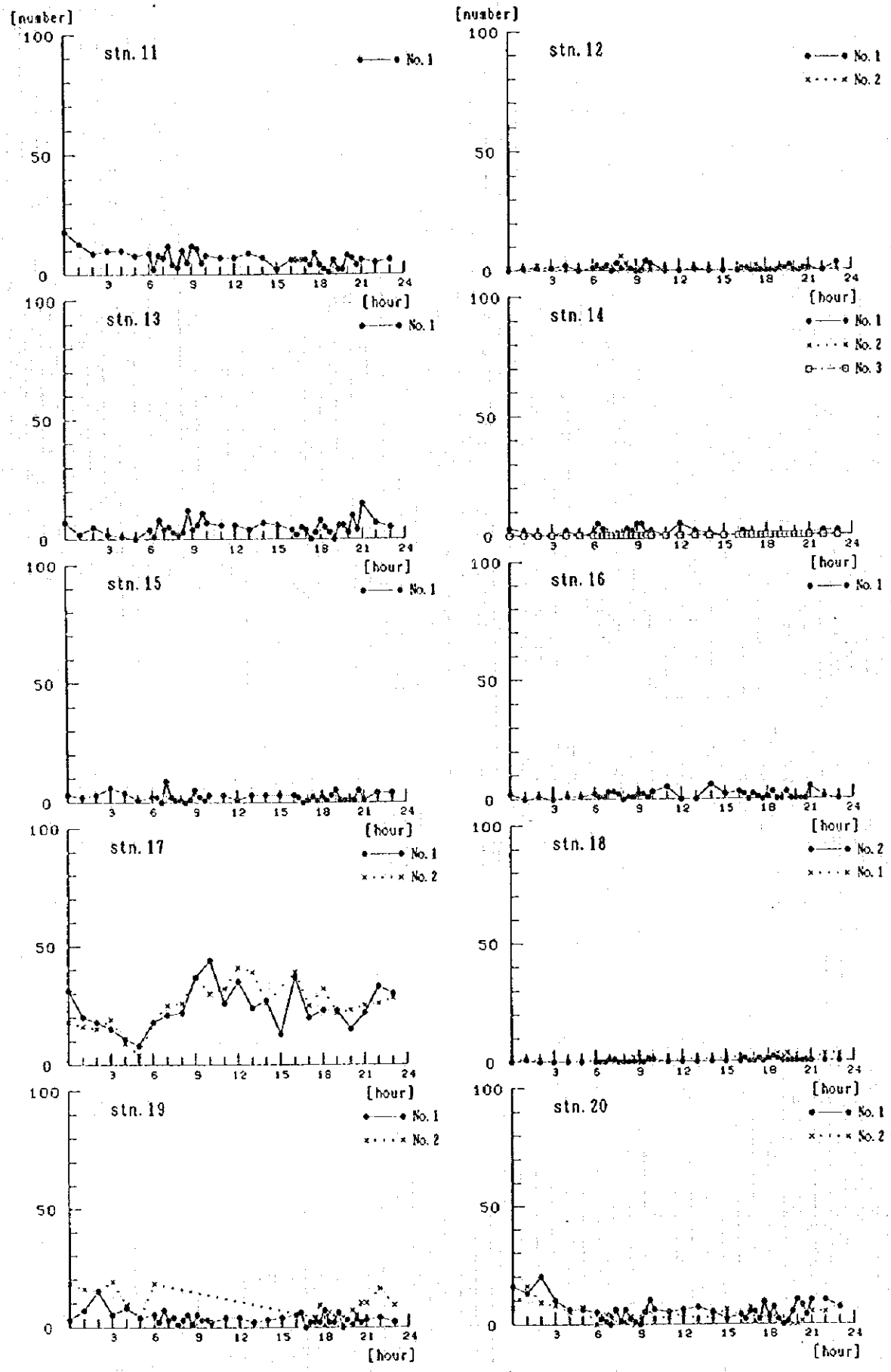
1996 Oct. 7 (Monday)



Traffic Volume (10min.)

truck & mini truck

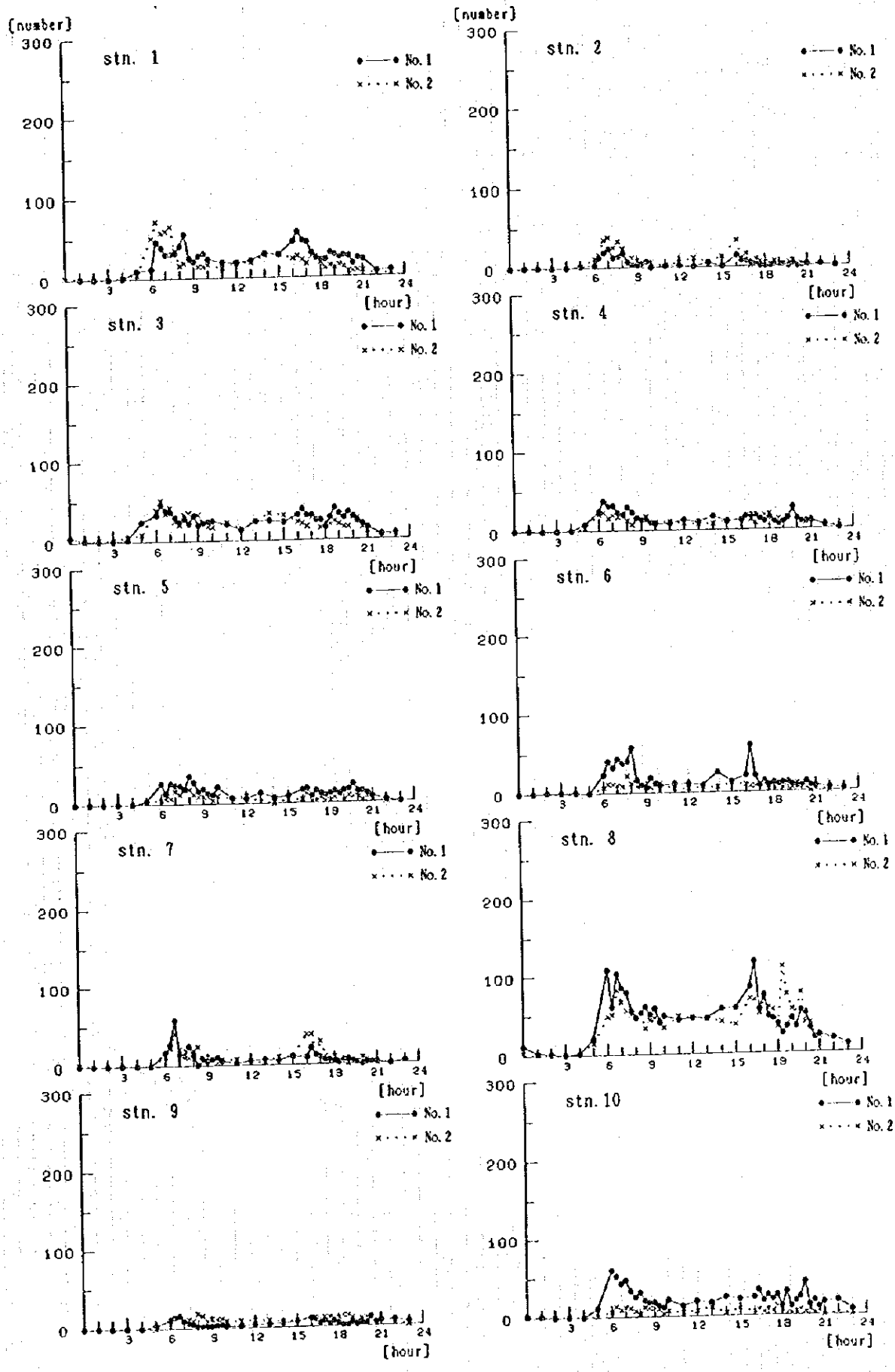
1996 Oct. 11 (Friday)



Traffic Volume (10min.)

truck & mini truck

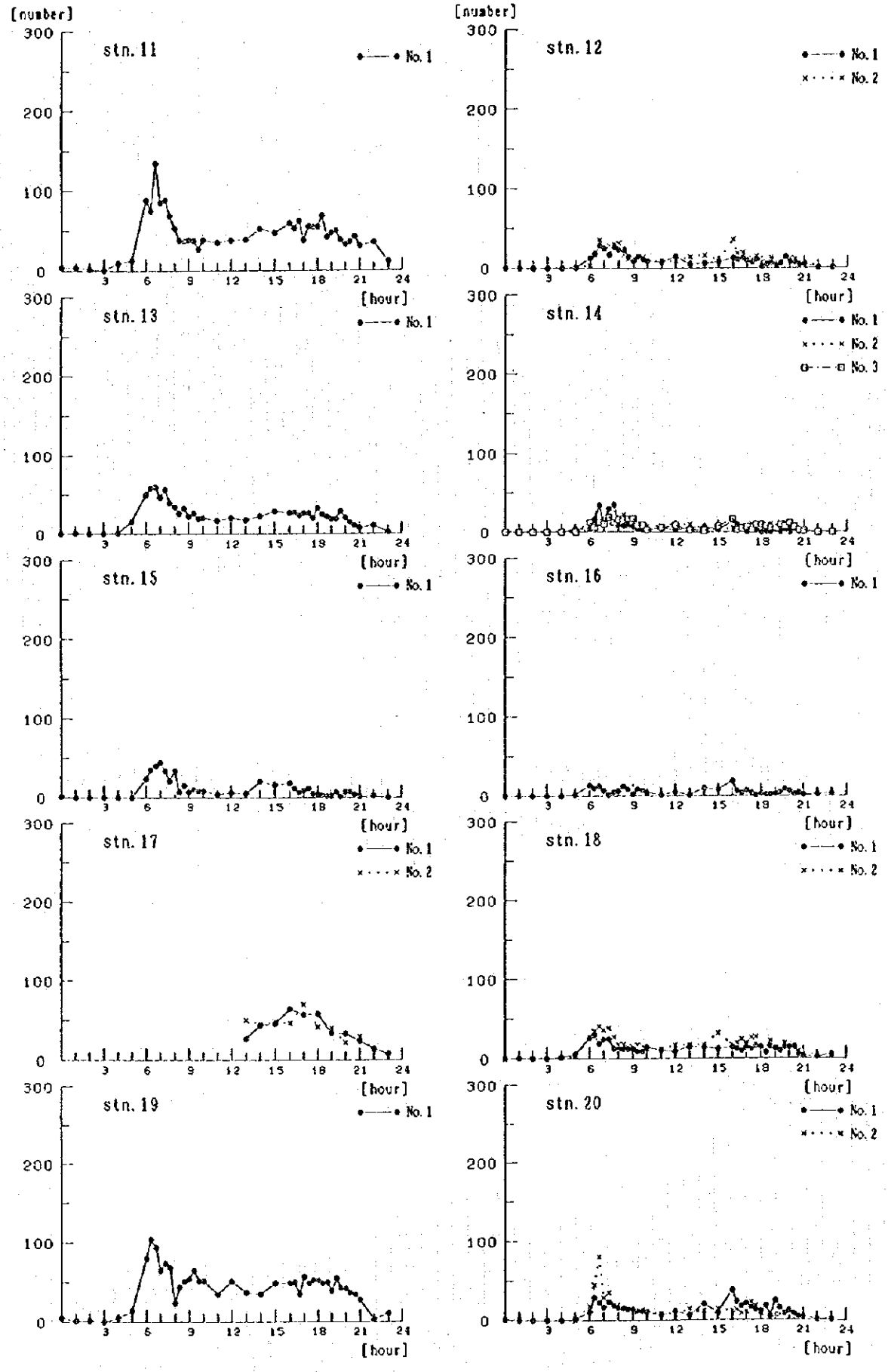
1996 Oct. 11 (Friday)



Traffic Volume (10min.)

bus & mini bus

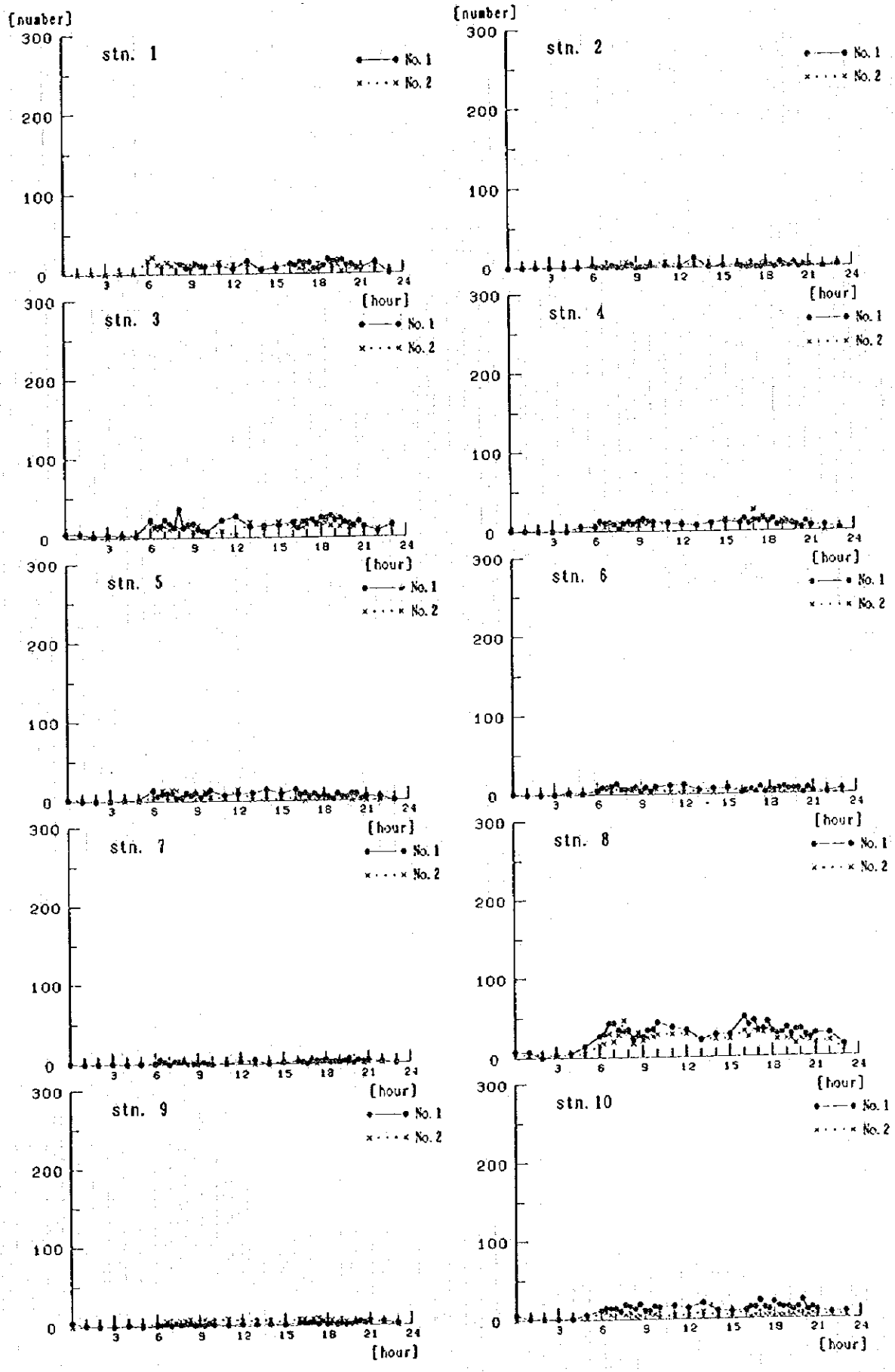
1996 Oct. 7 (Monday)



Traffic Volume (10min.)

bus & mini bus

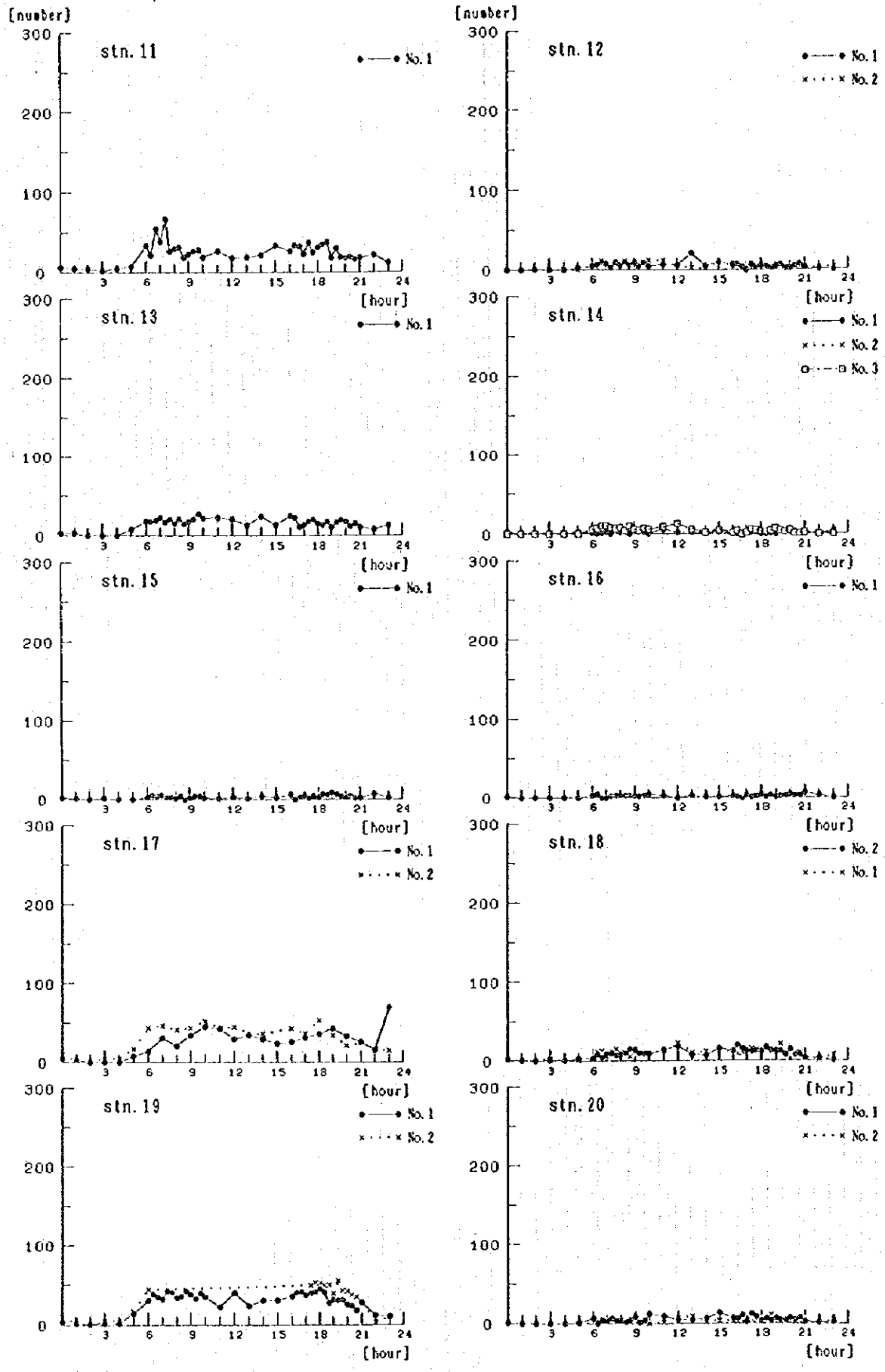
1996 Oct. 7 (Monday)



Traffic Volume (10min.)

bus & mini bus

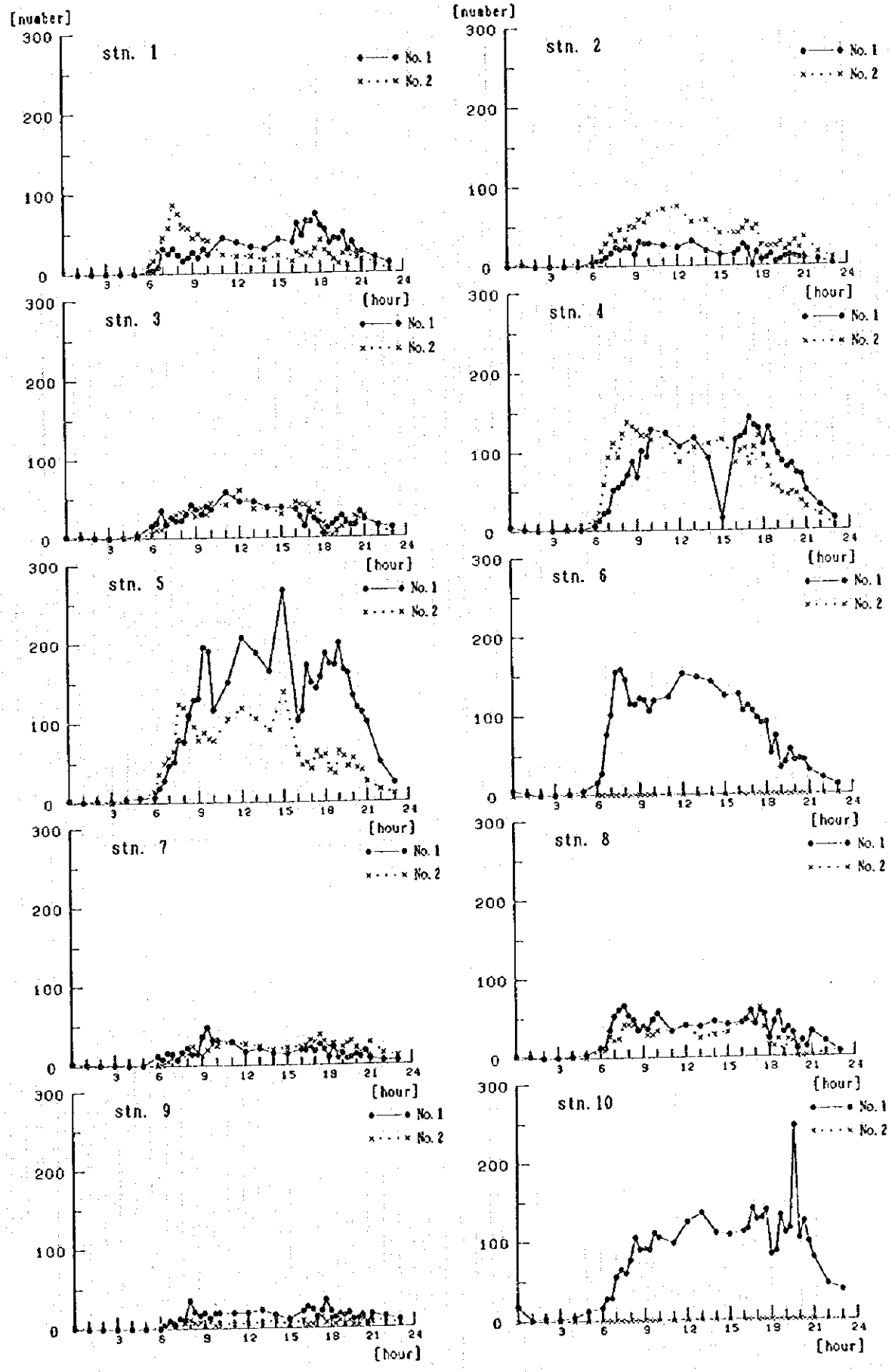
1996 Oct. 11 (Friday)



Traffic Volume (10min.)

bus & mini bus

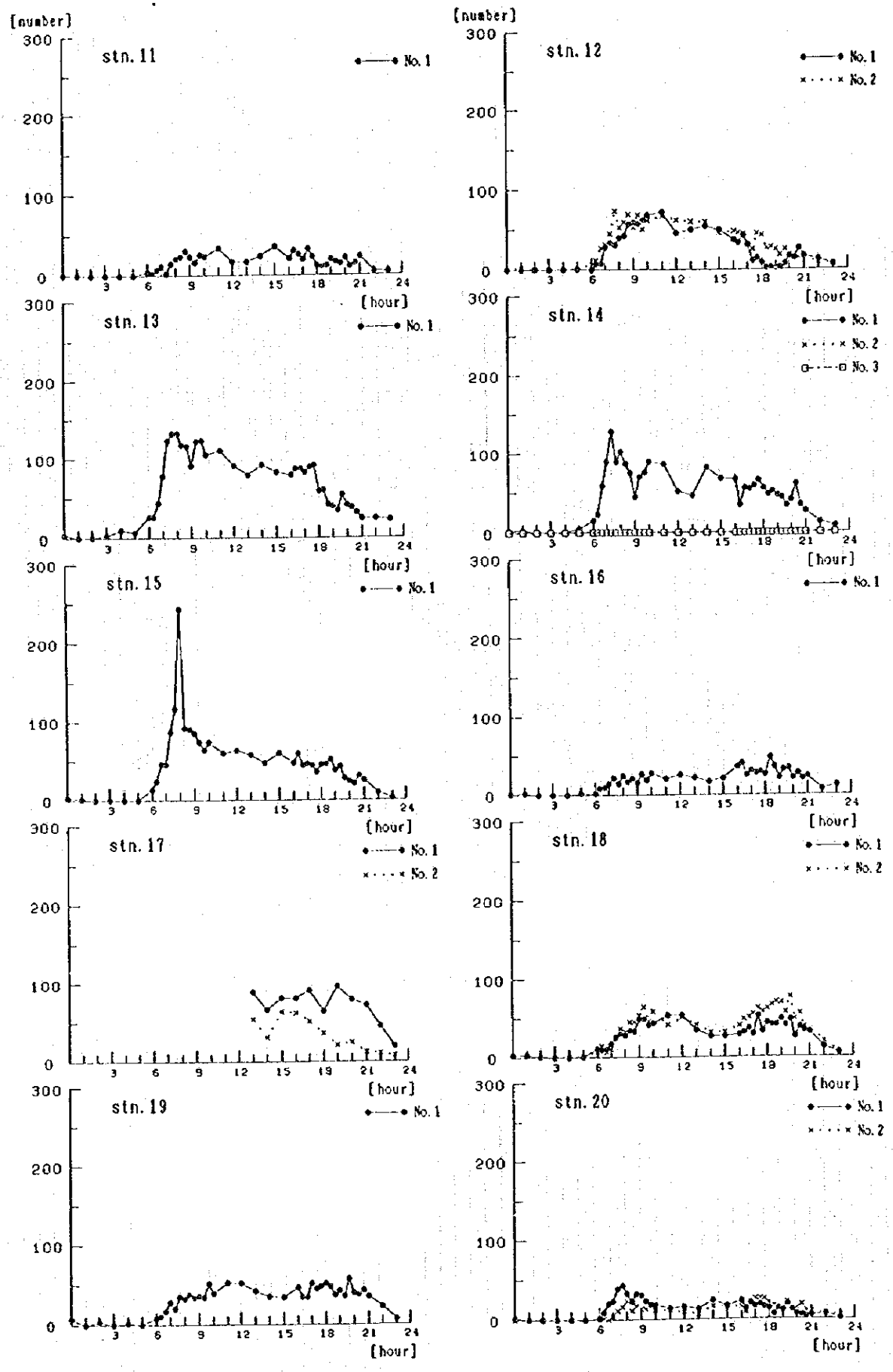
1996 Oct. 11 (Friday)



Traffic Volume (10min.)

motorcycle

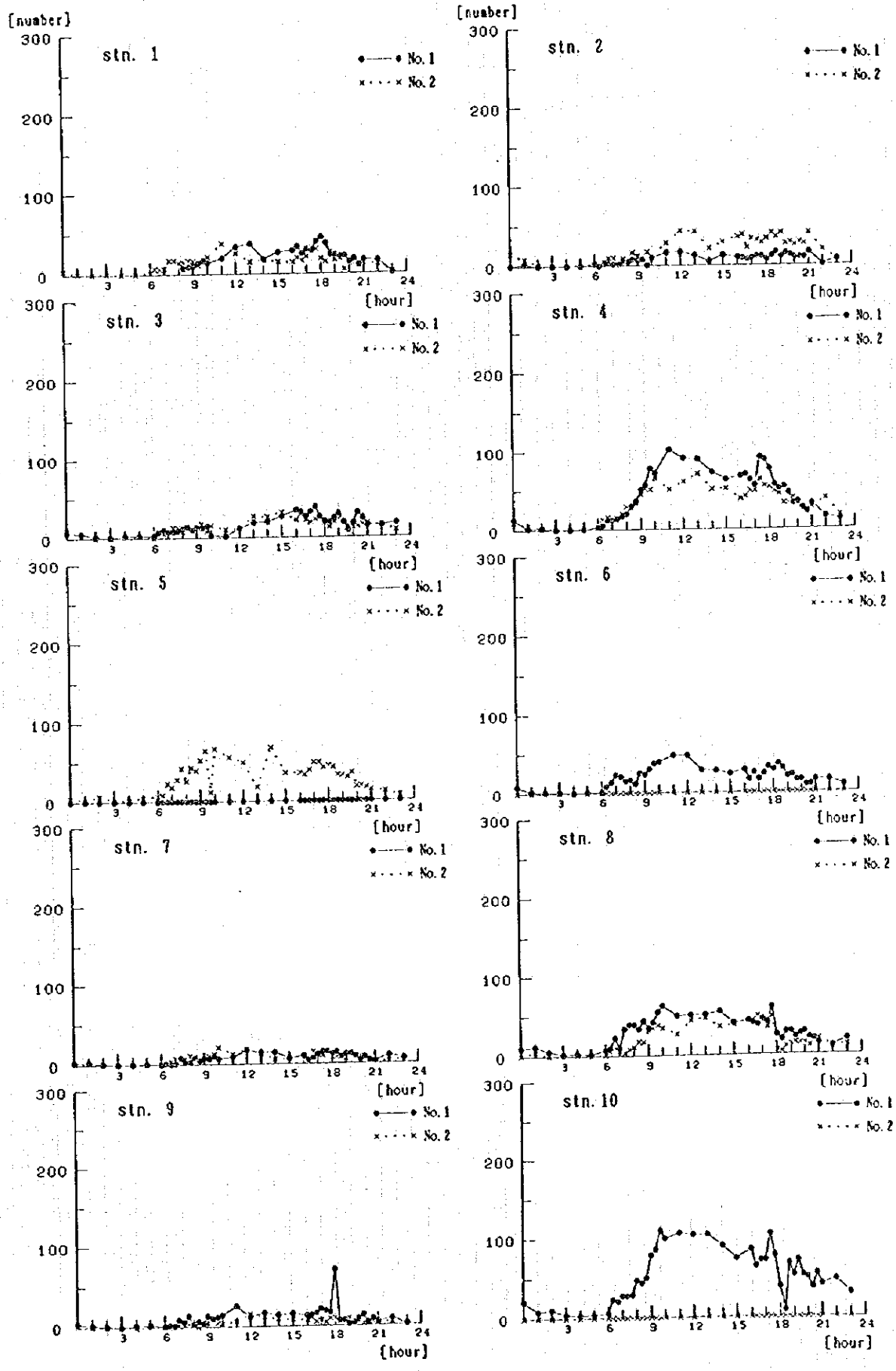
1996 Oct. 7 (Monday)



Traffic Volume (10min.)

motorcycle

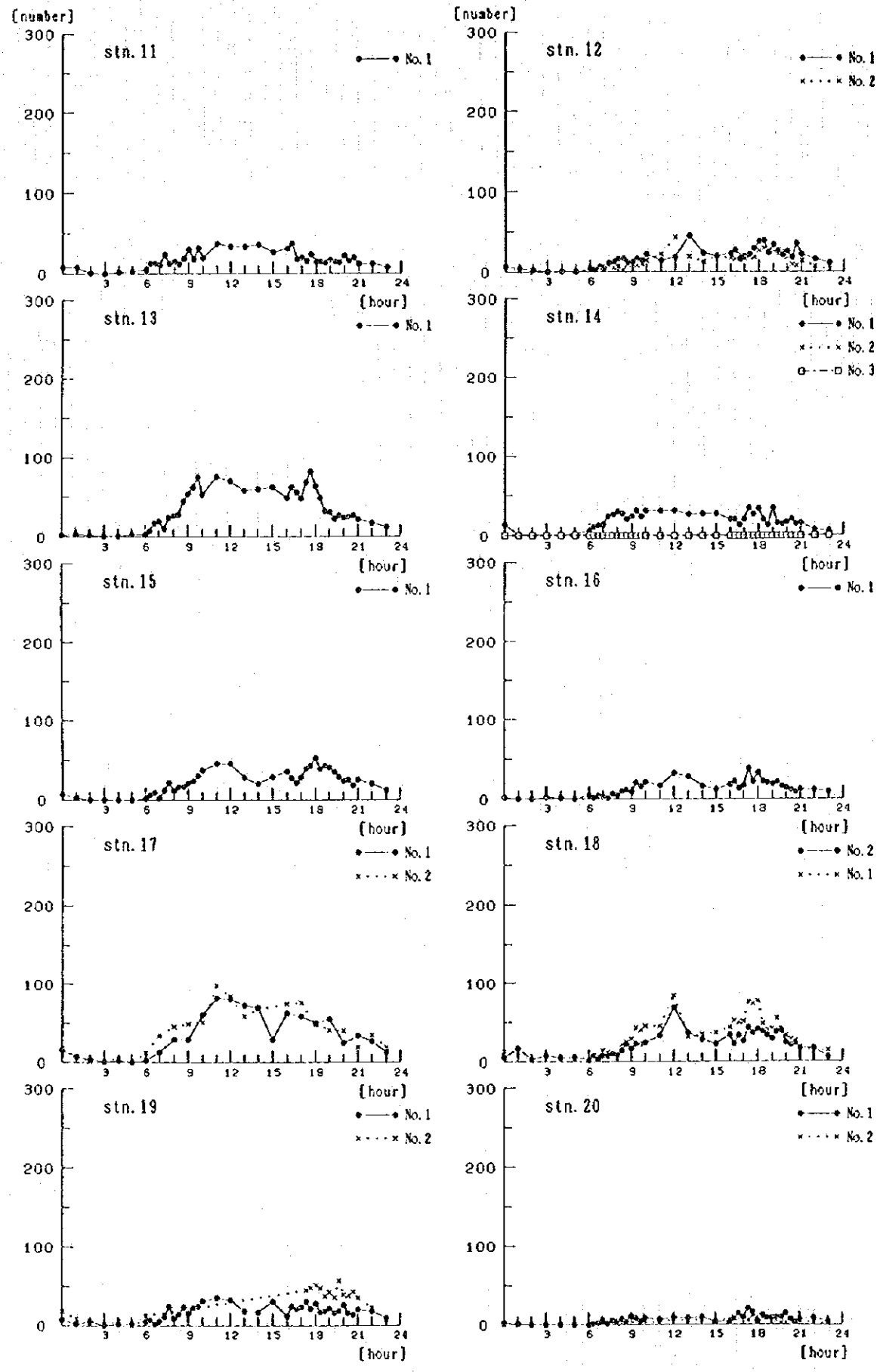
1996 Oct. 7 (Monday)



Traffic Volume (10min.)

motorcycle

1996 Oct. 11 (Friday)



Traffic Volume (10min.)

motorcycle

1996 Oct. 11 (Friday)