

DATA SUPPLEMENT
WIND-TUNNEL STUDY OF
TAIKOO SHING CITY PLAZA SITE B, HONG KONG

by

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for

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1. INTRODUCTION

Subsequent to the submission of the report of the wind-tunnel study of the Taikoo Shing City Plaza building,* modifications were made to the building including an enlarged sloping glass atrium roof on the north side and vertical triangular slots in the face of the towers. In addition, some concerns arose over the area extent of the single largest pressure measured on the building. To determine the appropriate wind loading on the atrium roof, the influence of the vertical slots on peak pressures in and near the slots and to examine the area extent and pressure magnitude of the large peak pressure near tap location 917, the model was modified to reflect the new geometries and additional wind-tunnel tests were made. This report provides that data and comments on its implications for design. Data presented in this report have Figure and Table numbers which correspond to numbers for similar data presentations in the main report to facilitate integration of the data in this supplement with that of the main report.

2. EXPERIMENT

The model was modified to include the glass atrium ceiling and roof details between the two towers as shown in the photographs of Figure 5. Slots were cut into the northwest face of the east tower. Pressure taps were installed on these areas as shown in Figure 3. In addition, taps were installed near tap 917, as shown in Figures 3d and 3e, in order to obtain a better definition of the area distribution of peak pressures. For the purpose of this supplemental test, tap 917 was renamed tap 2209 and was measured with the surrounding taps.

*WIND-TUNNEL STUDY OF TAIKOO SHING CITY PLAZA SITE B, HONG KONG by J. A. Peterka and J. E. Cermak, Report CER82-83JAP-JEC10, Fluid Mechanics and Wind Engineering Program, Colorado State University, July 1982.

The model was installed in the Environmental Wind Tunnel, Figure 5, in Configuration A of the original report without the modified hill. Data were obtained at each tap location of Figure 3 for 36 wind directions at 10-degree intervals. This data was called Configuration C for presentation here to distinguish it from Configuration A data of the original report. Pressure taps at and near tap 917 were remeasured at 2-degree azimuthal increments for wind directions from 360 degrees through 0 to 20 degrees. This data was identified as Configuration D in this report.

For taps 2208, 2209 (tap 917), 2210, 2213, 2214 and 2215, data were recorded at 2-degree intervals from 358 through 10 degrees, repeated 5 times. These 5 sets of data were identified as Configurations E, F, G, H and I and were used in a statistical analysis of the peak negative pressure coefficients to provide an improved determination of the peaks in that area.

3. RESULTS

Appendix A lists the data obtained for data Configurations C and D. Table 6 shows the largest peak pressure coefficients measured at each pressure tap location and the corresponding peak local pressures for the design wind speed selected for the original report. Tap 2209 (917) had peak pressures of about -5500 Pa for both Configurations C and D. The data of Table 6a is plotted in contour plots in Figures 10a-10f. These figures show that peak pressures on the atrium roof were generally no more than a little over 1500 Pa. One local area on the north elevation showed a value of 2160 Pa.

Pressures in the slots on the northwest face of the east tower, Figure 10e, showed one tap adjacent to a slot at the roof level with

a somewhat elevated pressure which might be due to slot geometry. No evidence of elevated pressures in the slots was noted.

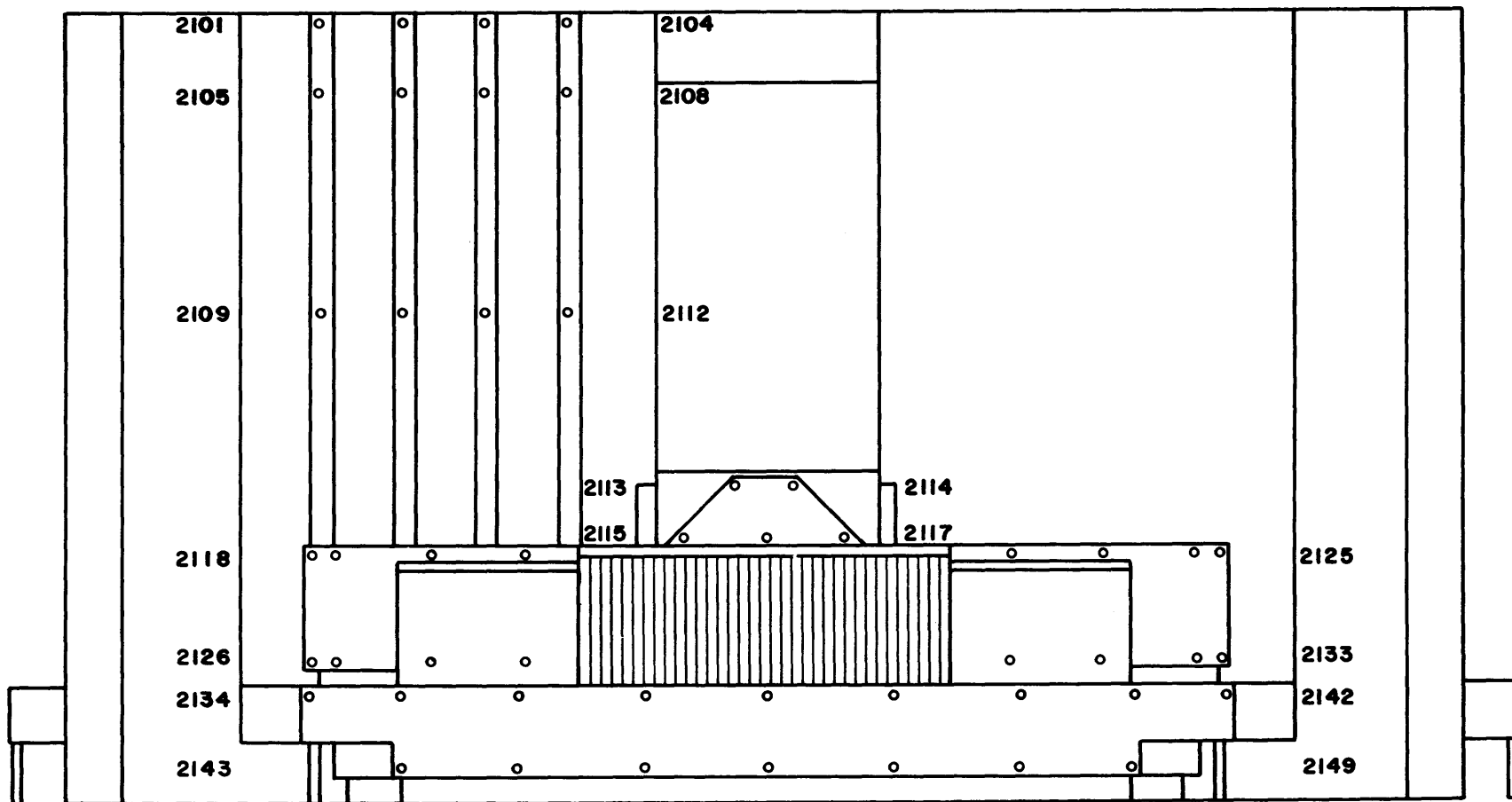
Figures 10g and 10h show contours of peak negative pressure and pressure coefficient for the area near tap 917. These figures were obtained from the data of Configurations E, F, G, H and I which are tabulated in Appendix B. A recently developed technique for using multiple samples of a measured peak* was used to process the data. A copy of the paper describing the technique is included in Appendix C. The method used was to average the largest peak negative pressures obtained from each of the five repeat runs of data. The average was then increased by 1.07 as explained in the research paper. The result of the analysis is a peak pressure at tap 917 of -5400 Pa or a coefficient of -2.5. The extent of this high pressure is quite small as shown in Figures 10g and 10h.

The wind flow pattern near tap 917 for the wind direction giving the high local pressures is shown in a photograph in Figure 5. A vortex formed over the north wing of the east tower which brought high speed flow down on the roof impinging at the location of tap 917. Thus high speed winds were observed just above the parapet at location 917. The resulting separated flow near tap 917 then caused the elevated pressures.

The remaining parts of Figure 10 beginning with 10i show contour plots of peak positive and peak negative pressure coefficients for the entire building. These plots were requested as part of this data supplement.

*Peterka, J. A., "Selection of Local Peak Pressure Coefficients for Wind-Tunnel Studies of Buildings," to be presented at Sixth International Conference on Wind Engineering, Gold Coast, Australia, March 21-25, 1983, CEP82-83JAP9.

FIGURES



5

NORTH ELEVATION

Figure 3a. Pressure Tap Locations

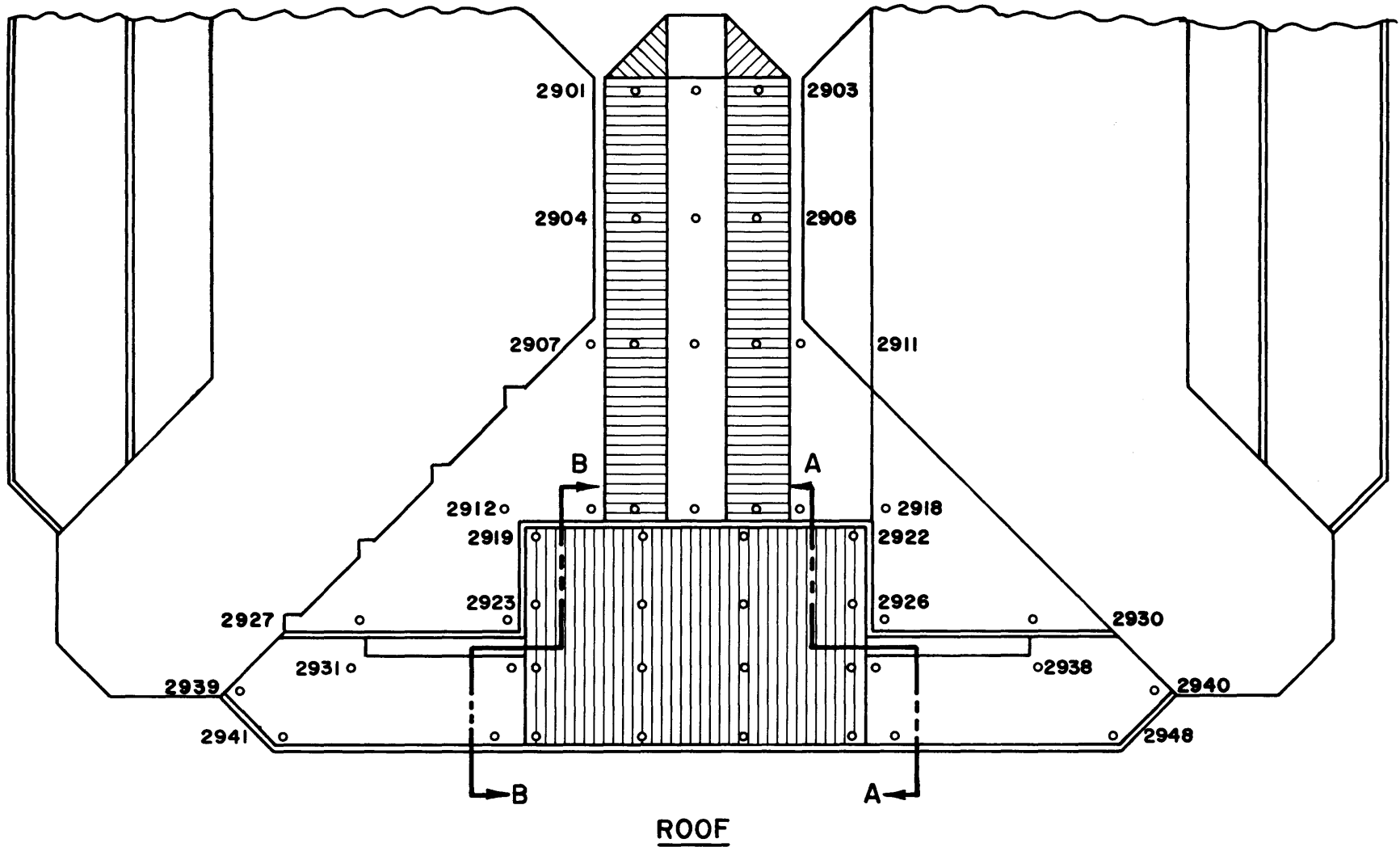
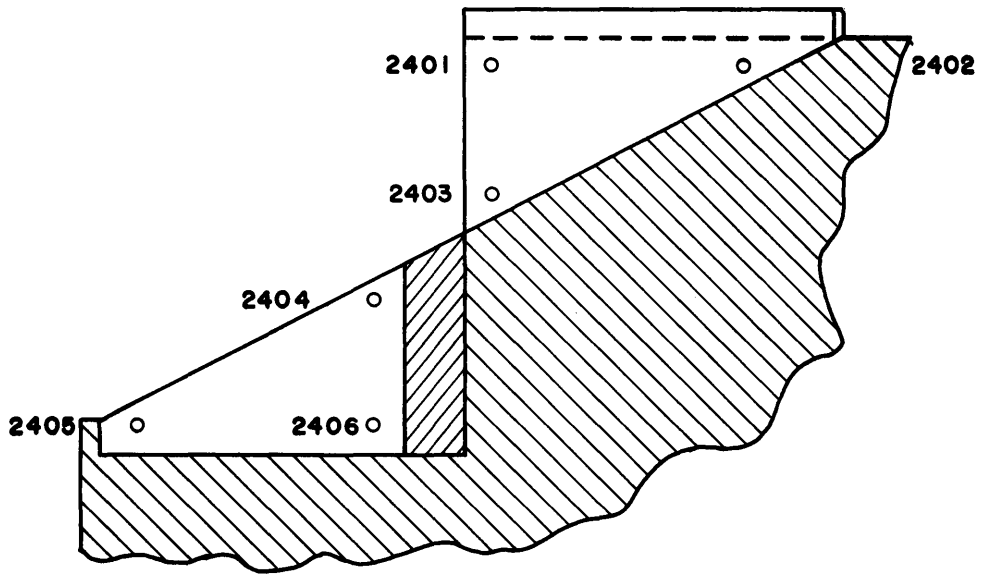
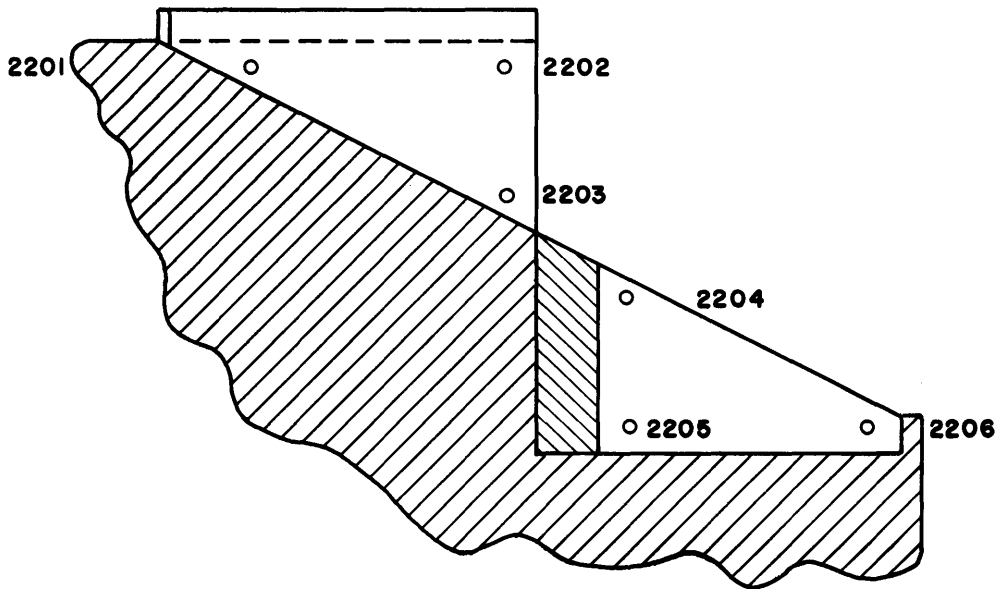


Figure 3b. Pressure Tap Locations

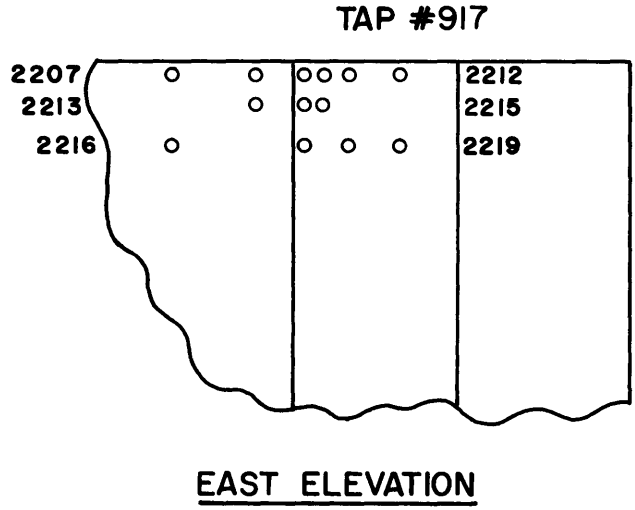


SECTION A-A



SECTION B-B

Figure 3c. Pressure Tap Locations



**ADDED TAPS NEAR TAP #917
(SEE FIG. 3e ALSO)**

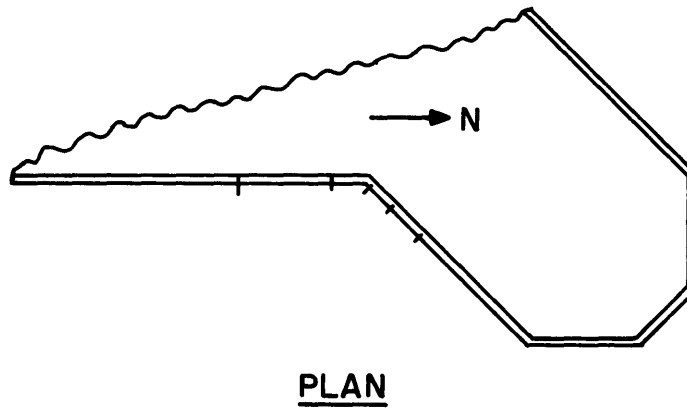
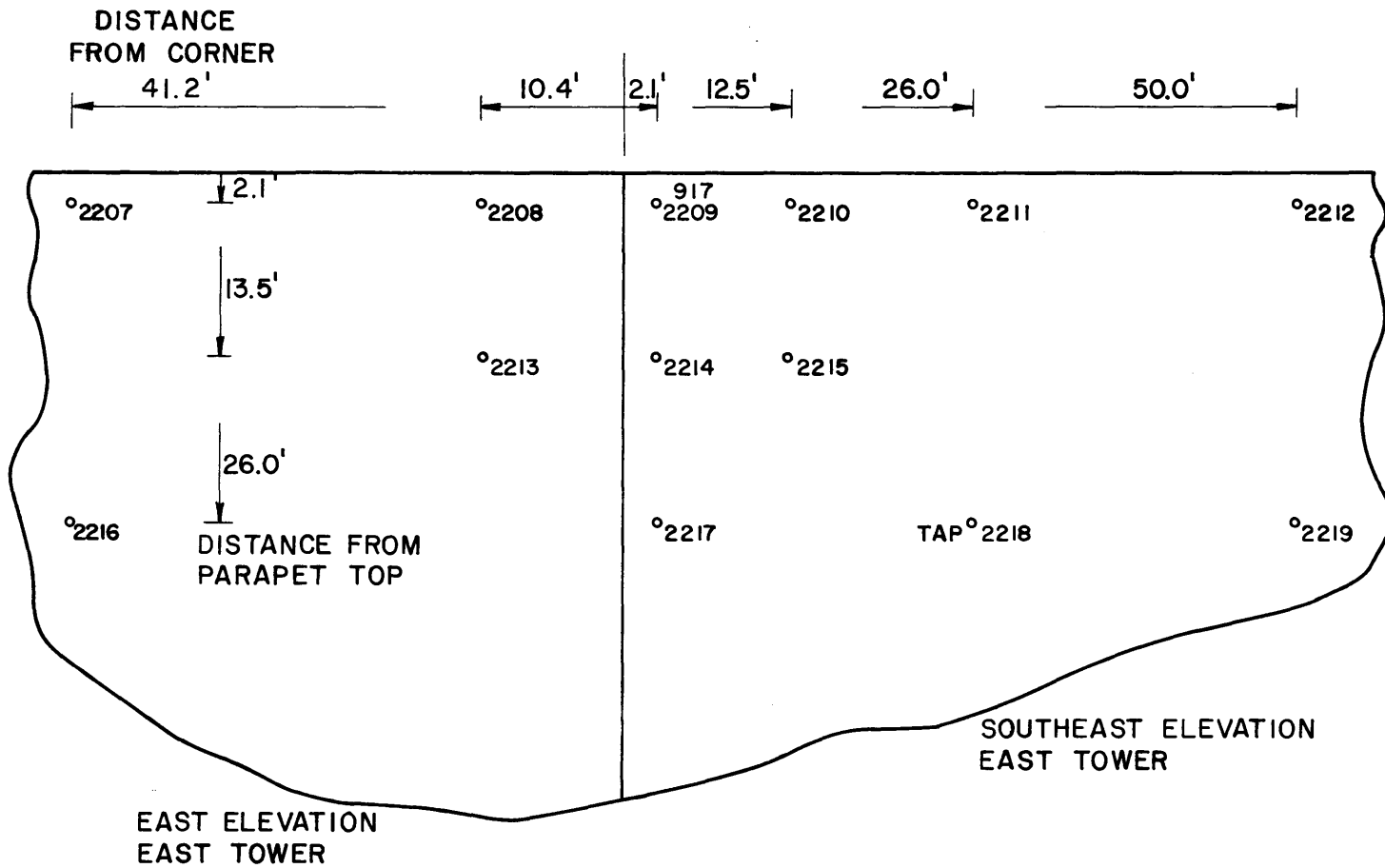


Figure 3d. Pressure Tap Locations



DETAILED PRESSURE INVESTIGATION NEAR TAP 917

Figure 3e. Pressure Tap Locations



Figure 5. Model Installed in the Wind Tunnel

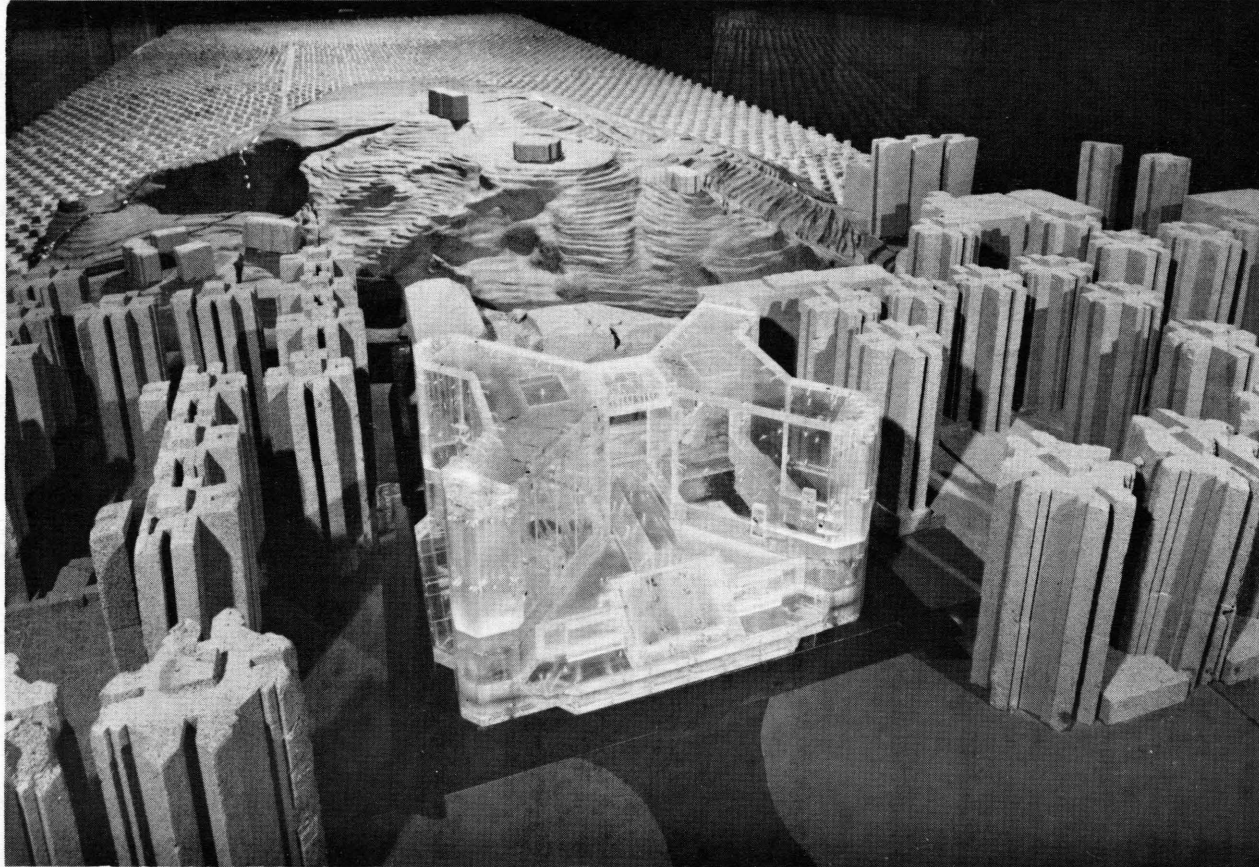
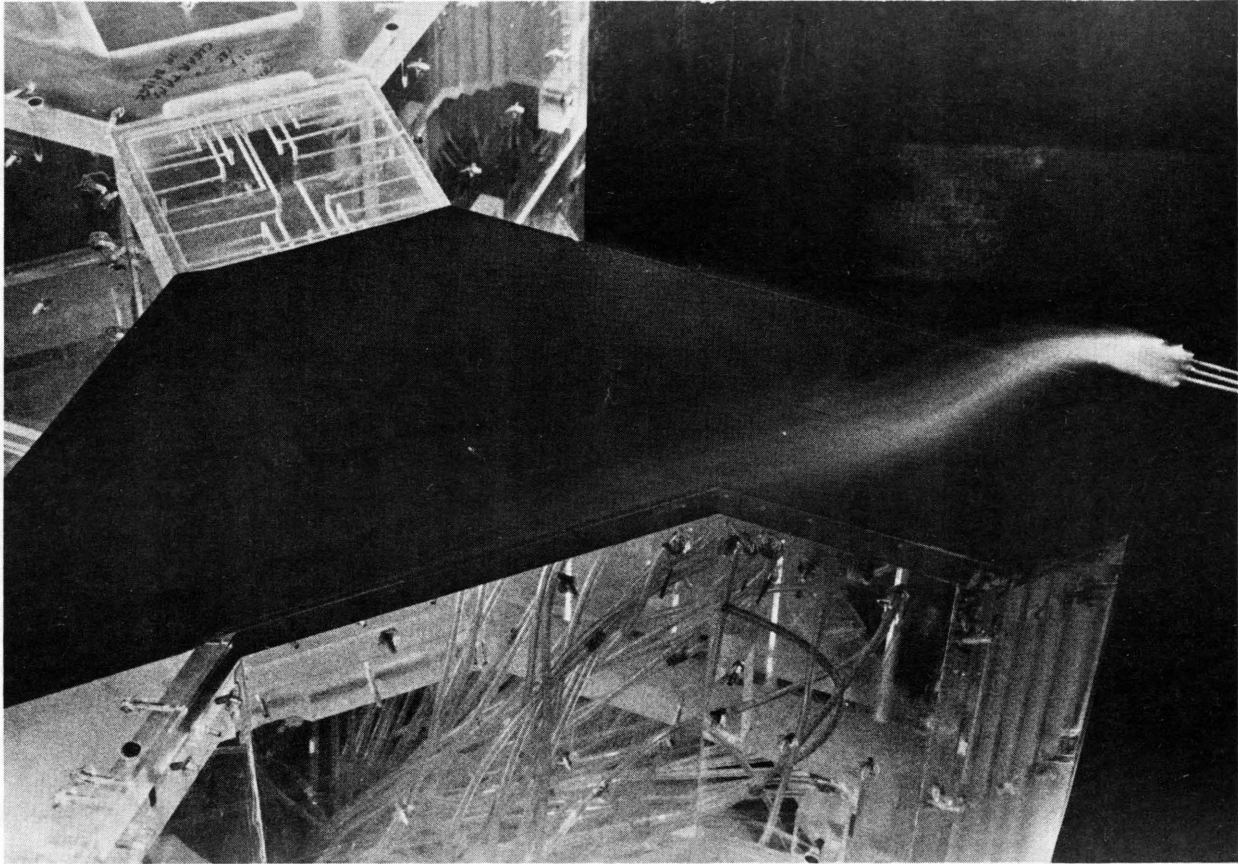


Figure 5. Model Installed in the Wind Tunnel



Flow near tap 917 when high pressures were measured.

Figure 5. Model Installed in the Wind Tunnel

BASE, MODIFIED MODEL

ROOF
PEAK NEGATIVE CLADDING LOADS (PA)
FOR 50-YEAR RECURRENCE WIND
REFERENCE PRESSURE = 2170 PA

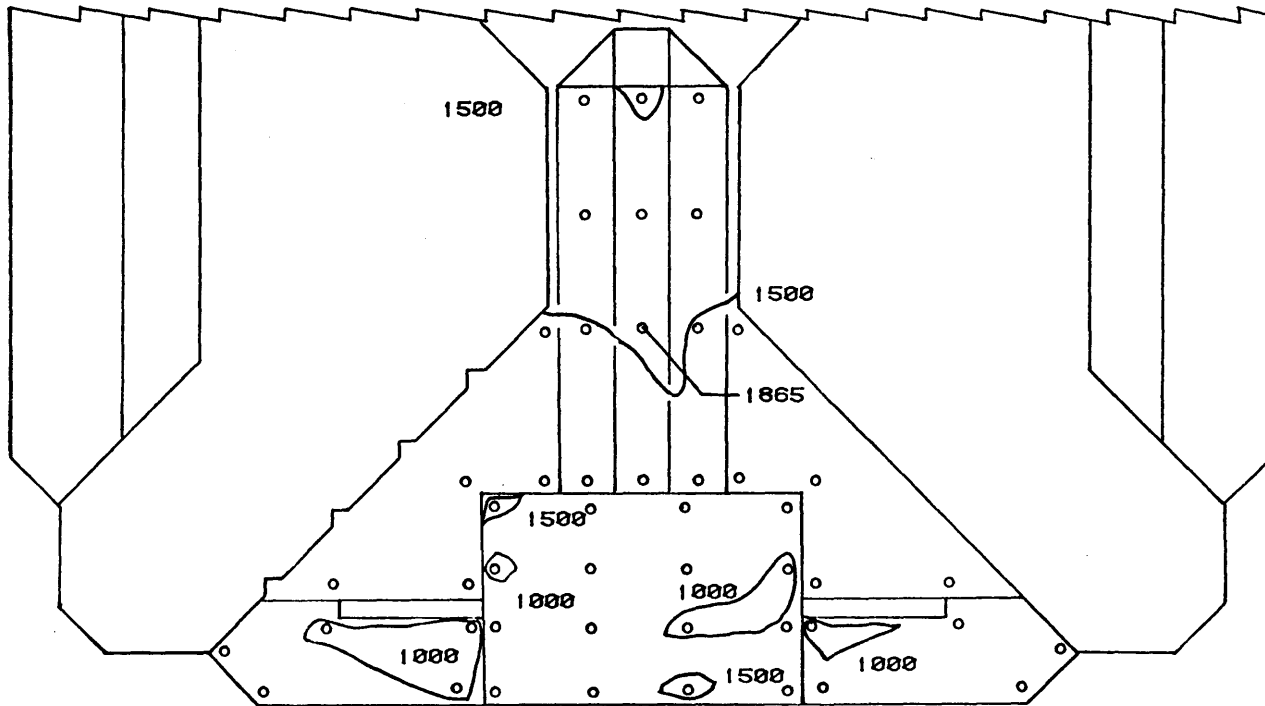


Figure 10a. Peak Pressure Contours

BASE, MODIFIED MODEL

ROOF
PEAK POSITIVE CLADDING LOADS (PA)
FOR 50-YEAR RECURRENCE WIND
REFERENCE PRESSURE = 2170 PA

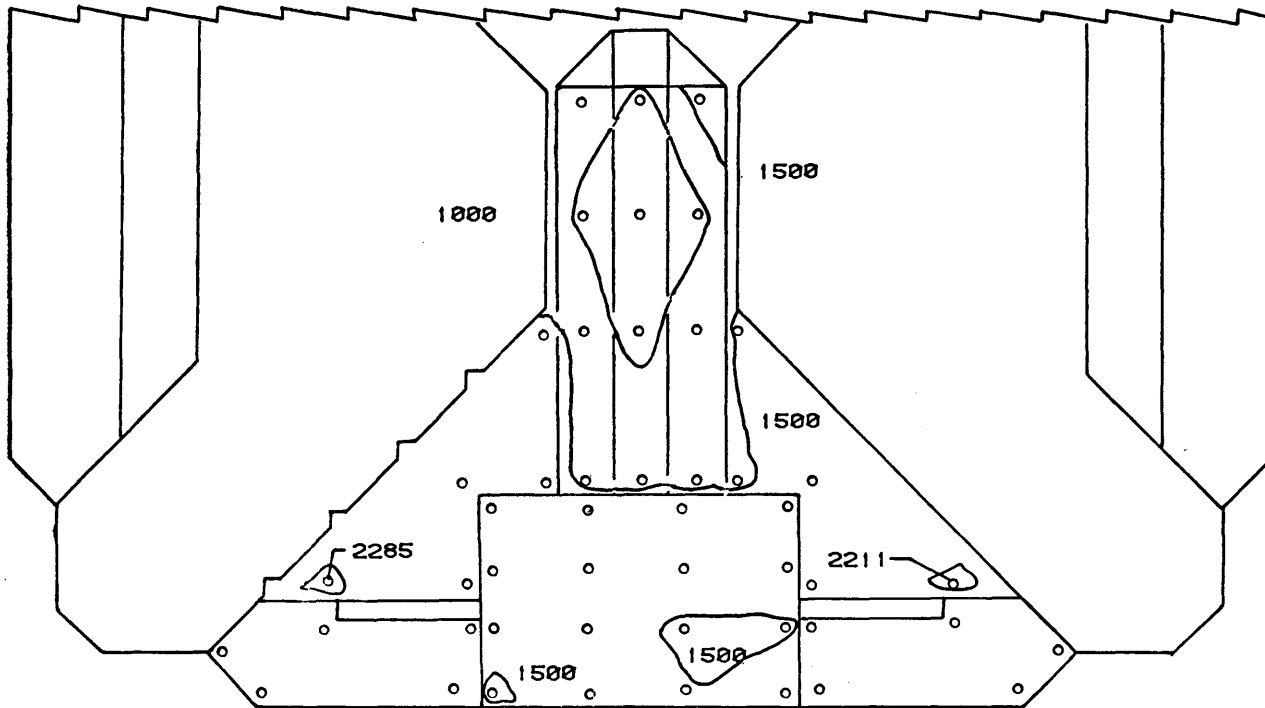


Figure 10b. Peak Pressure Contours

BASE, MODIFIED MODEL

NORTH ELEVATION
PEAK NEGATIVE CLADDING LOADS (PA)
FOR 50-YEAR RECURRENCE WIND
REFERENCE PRESSURE = 2170 PA

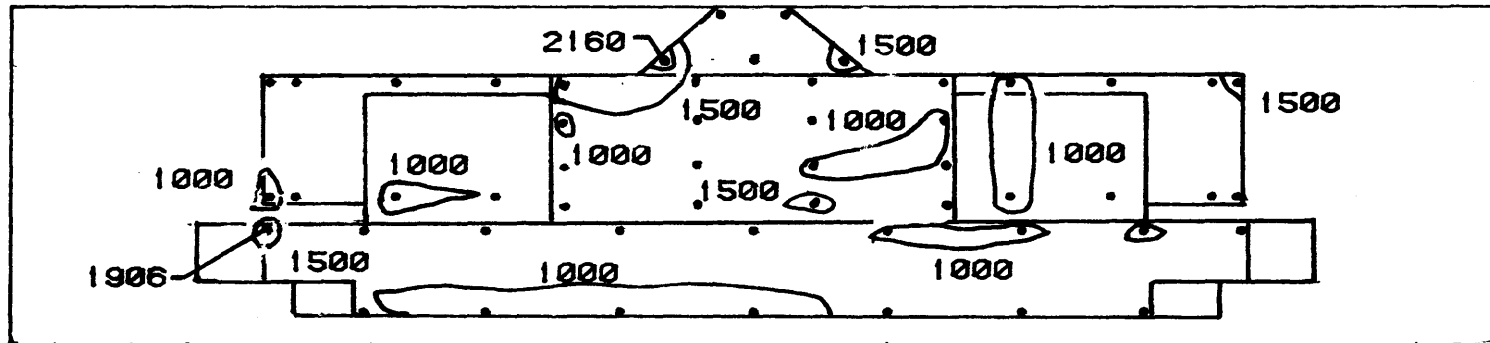


Figure 10c. Peak Pressure Contours

BASE, MODIFIED MODEL

NORTH ELEVATION

PEAK POSITIVE CLADDING LOADS (PA)

FOR 50-YEAR RECURRENCE WIND

REFERENCE PRESSURE = 2170 PA

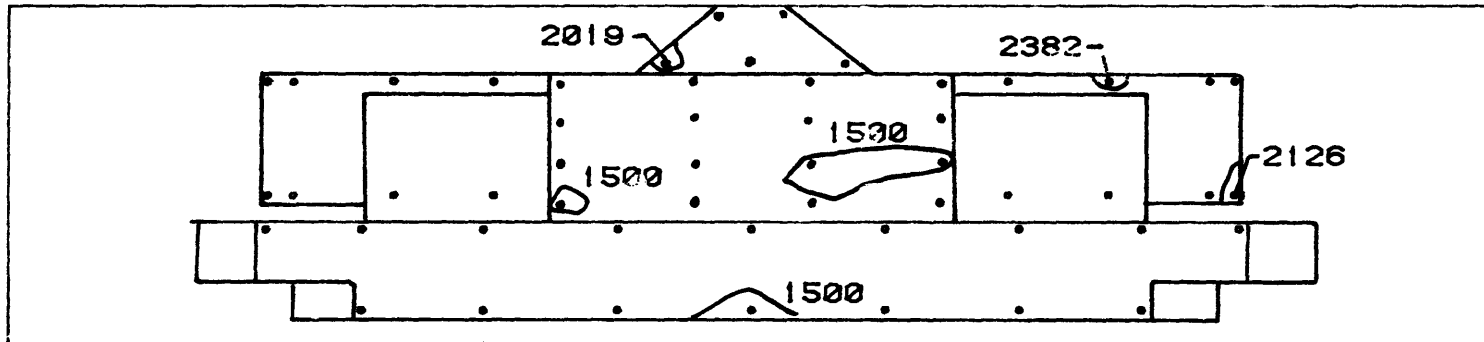


Figure 10d. Peak Pressure Contours

EAST TOWER, MODIFIED MODEL

NORTHWEST ELEVATION
PEAK NEGATIVE CLADDING LOADS (PA)
FOR 50-YEAR RECURRENCE WIND
REFERENCE PRESSURE = 2170 PA

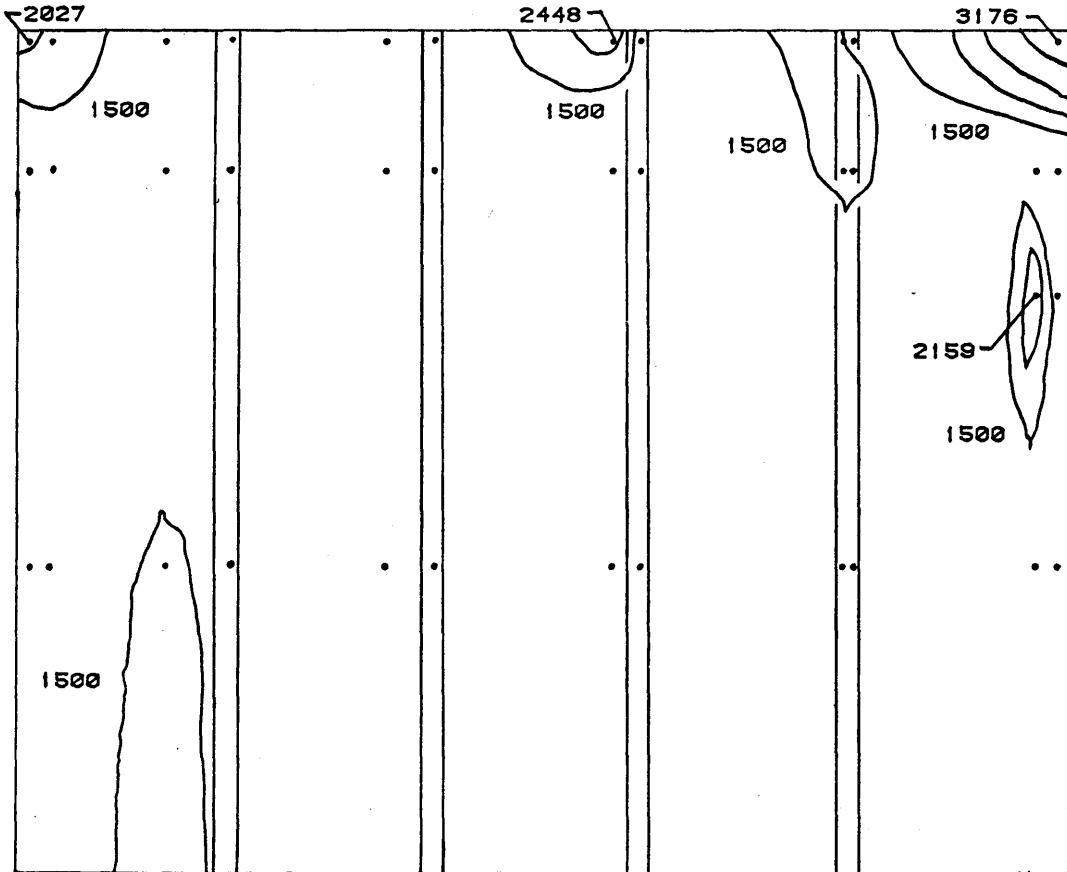


Figure 10e. Peak Pressure Contours

EAST TOWER, MODIFIED MODEL

NORTHWEST ELEVATION
PEAK POSITIVE CLADDING LOADS (PA)
FOR 50-YEAR RECURRENCE WIND
REFERENCE PRESSURE = 2170 PA

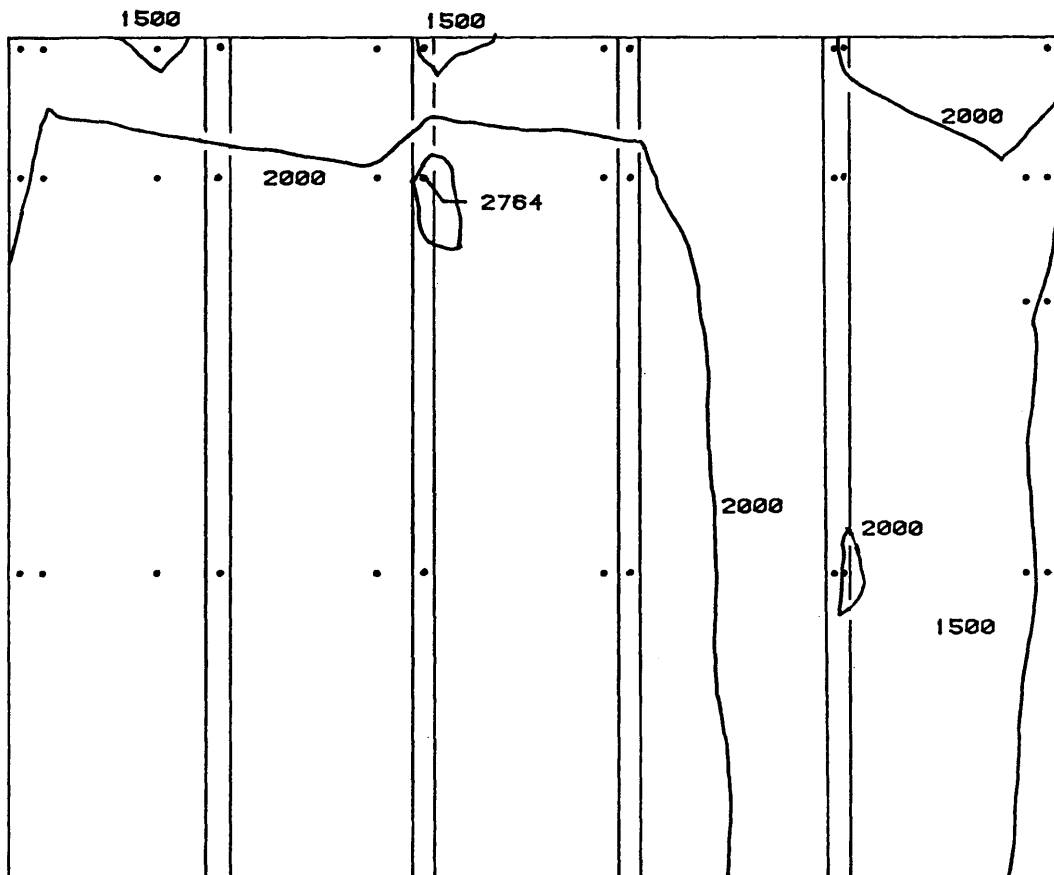
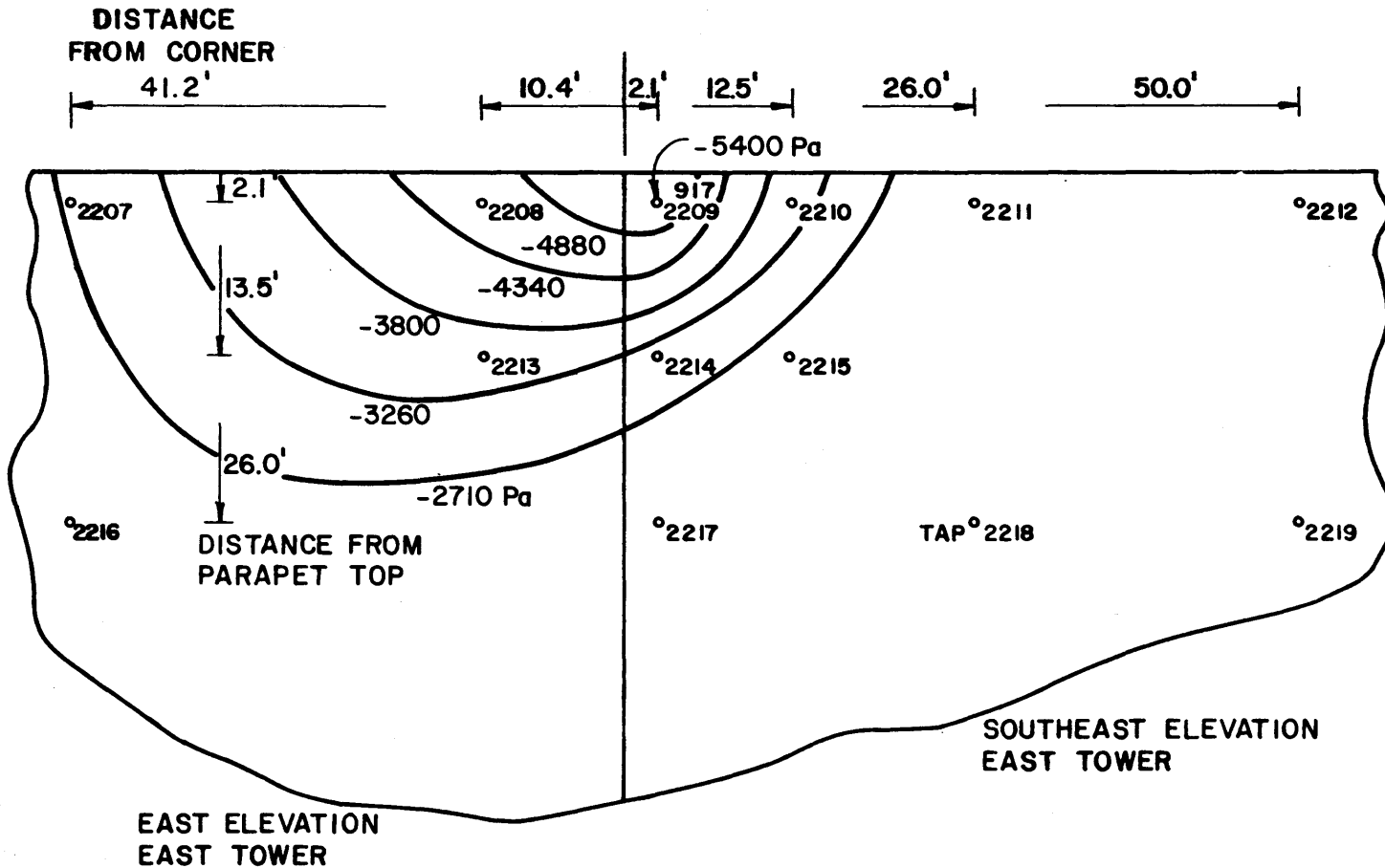
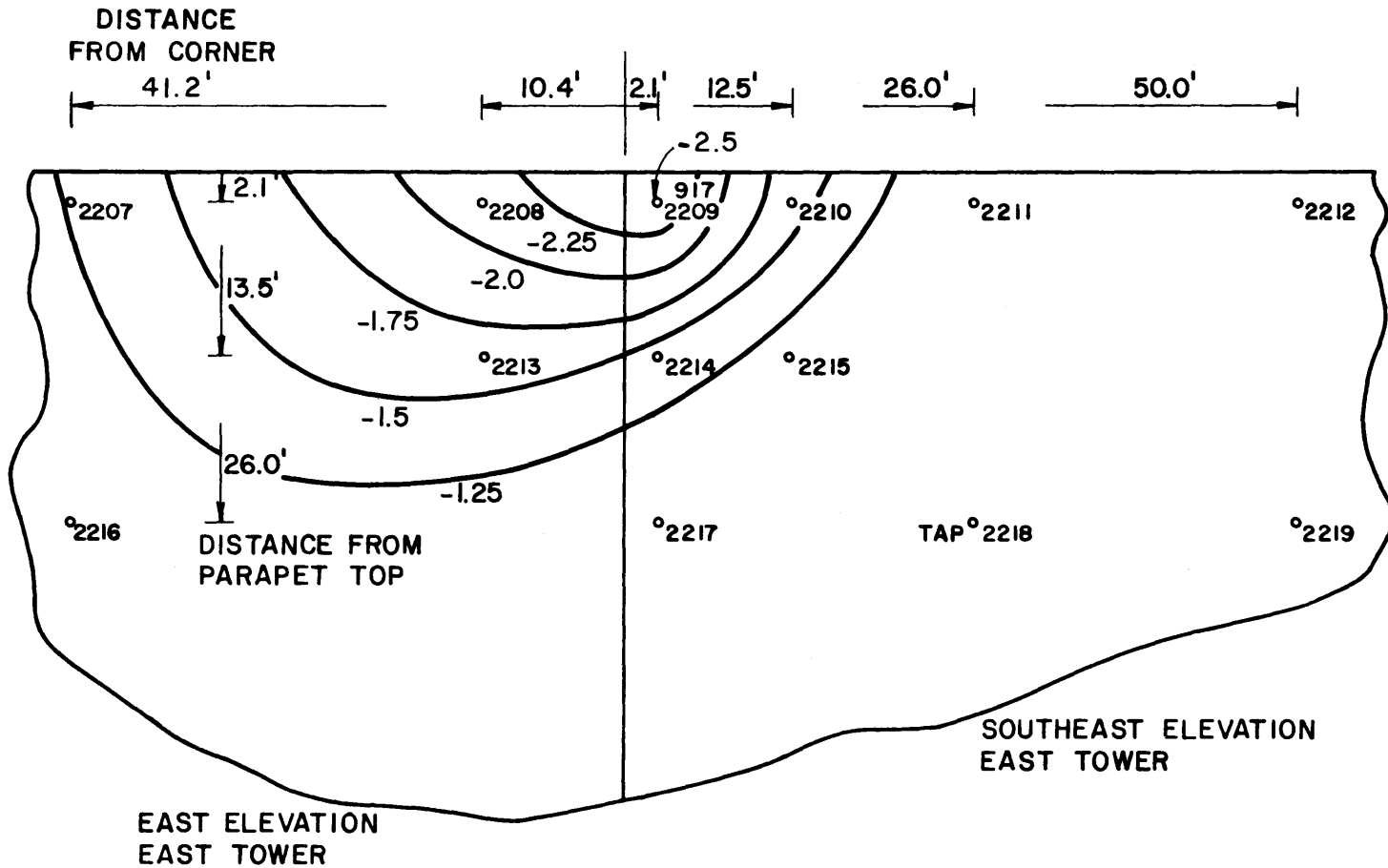


Figure 10f. Peak Pressure Contours



DETAILED PRESSURE INVESTIGATION NEAR TAP 917
 PEAK PRESSURE CONTOURS IN Pa

Figure 10g. Peak Pressure Contours



DETAILED PRESSURE INVESTIGATION NEAR TAP 917
 PEAK PRESSURE CONTOURS IN COEFFICIENT FORM

Figure 10h. Peak Pressure Contours

KEY TO CONTOUR DRAWINGS ON WEST TOWER

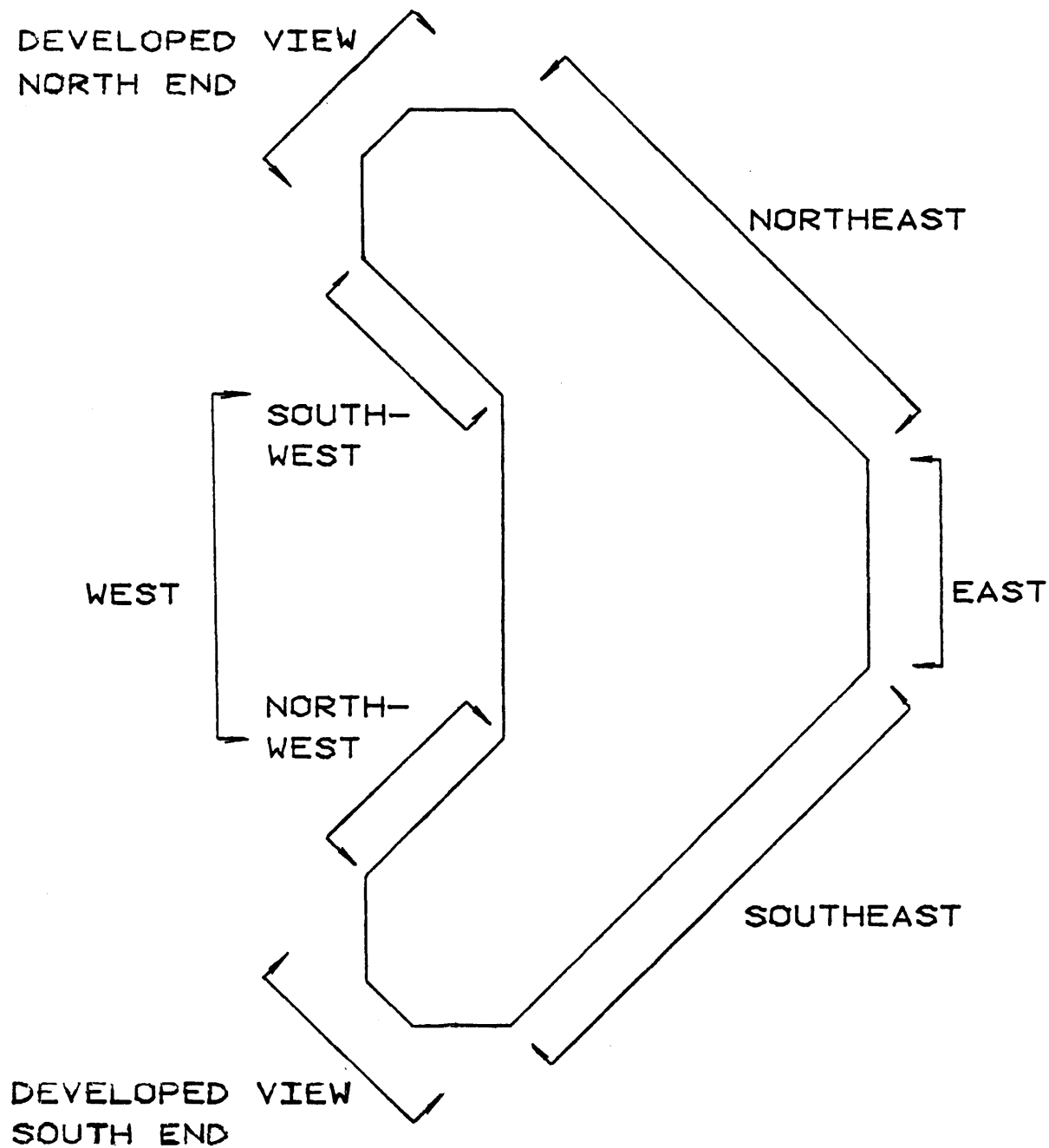


Figure 10i. Peak Pressure Contours

KEY TO CONTOUR DRAWINGS ON EAST TOWER

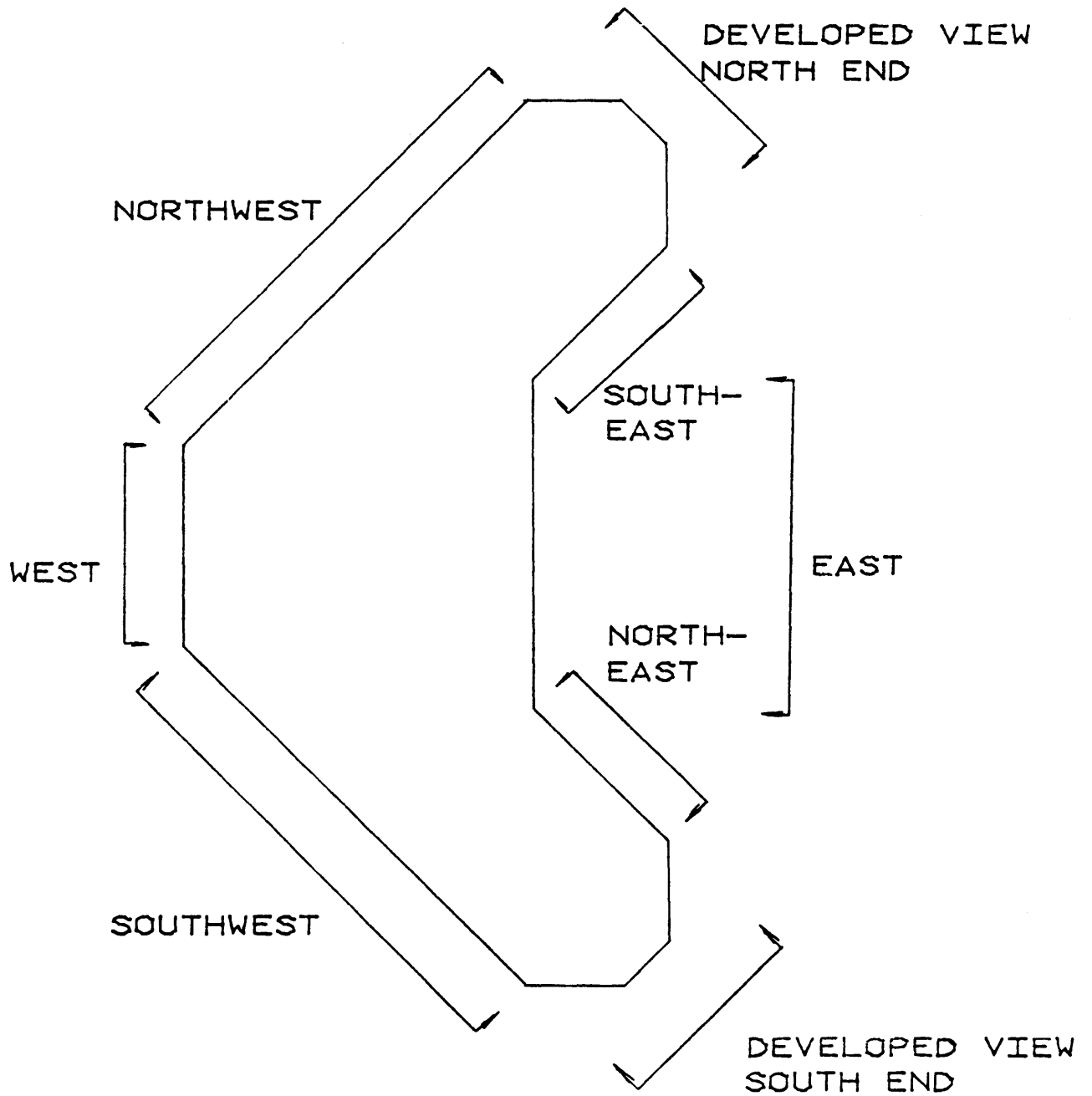


Figure 10j. Peak Pressure Contours

WEST TOWER

DEVELOPED VIEW

NORTH END

PEAK NEGATIVE PRESSURE COEFFICIENTS

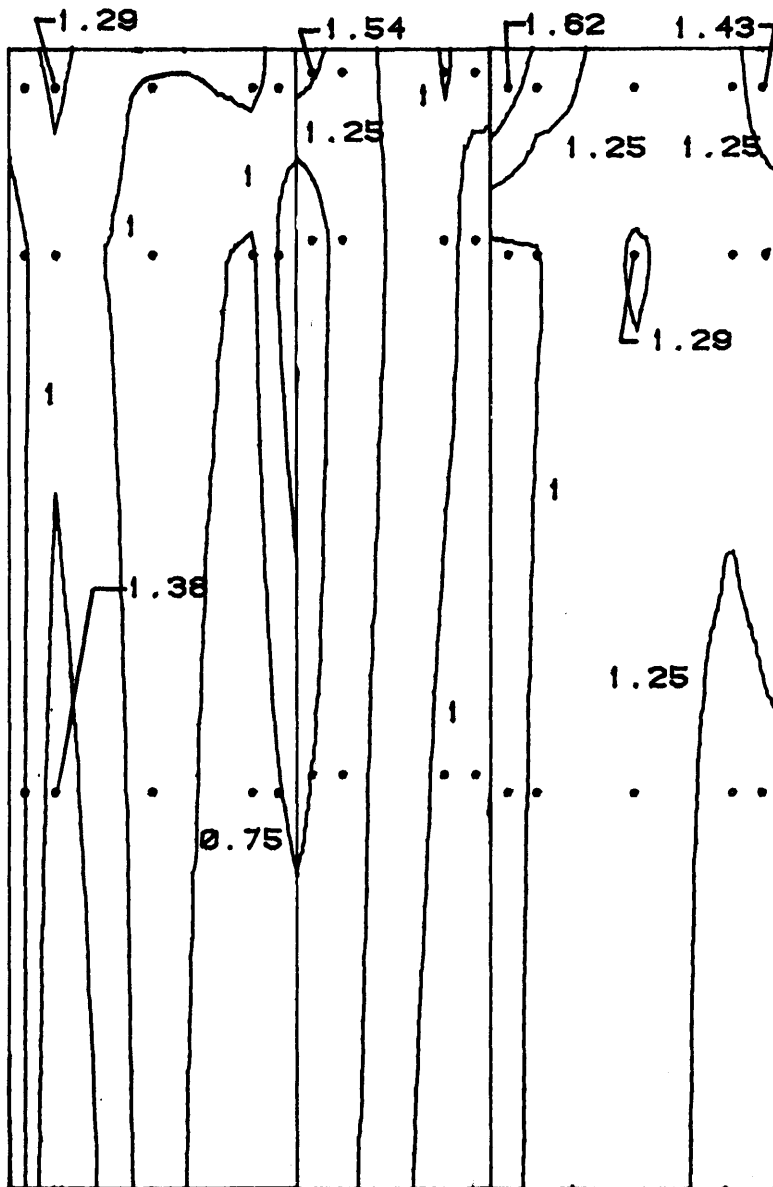


Figure 10k. Peak Pressure Contours

WEST TOWER

SOUTHWEST ELEVATION
PEAK NEGATIVE PRESSURE COEFFICIENTS

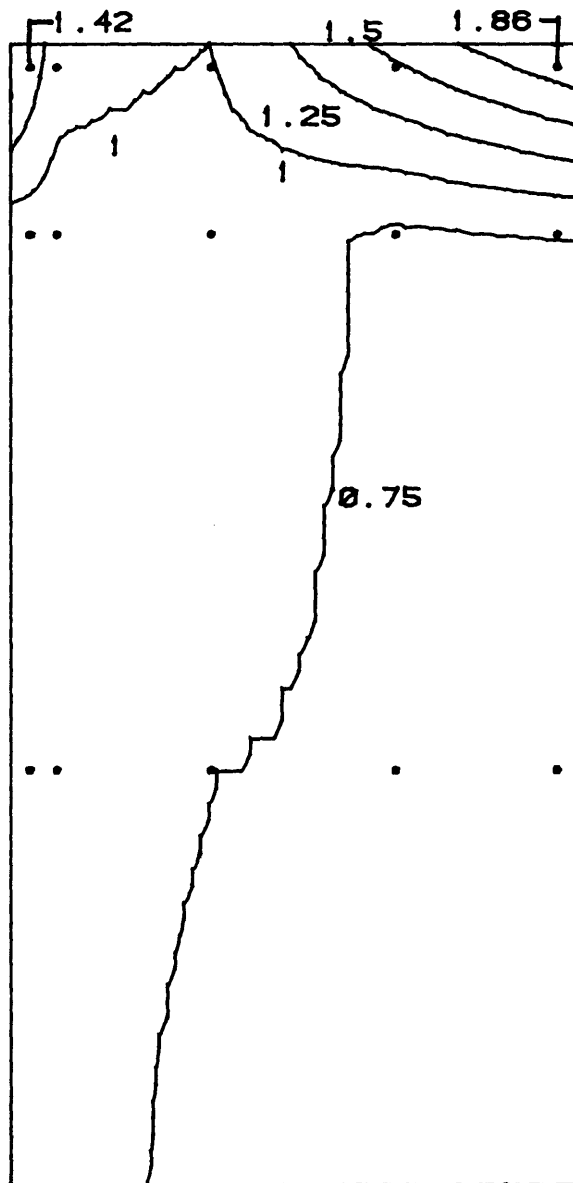


Figure 101. Peak Pressure Contours

WEST TOWER

WEST ELEVATION

PEAK NEGATIVE PRESSURE COEFFICIENTS

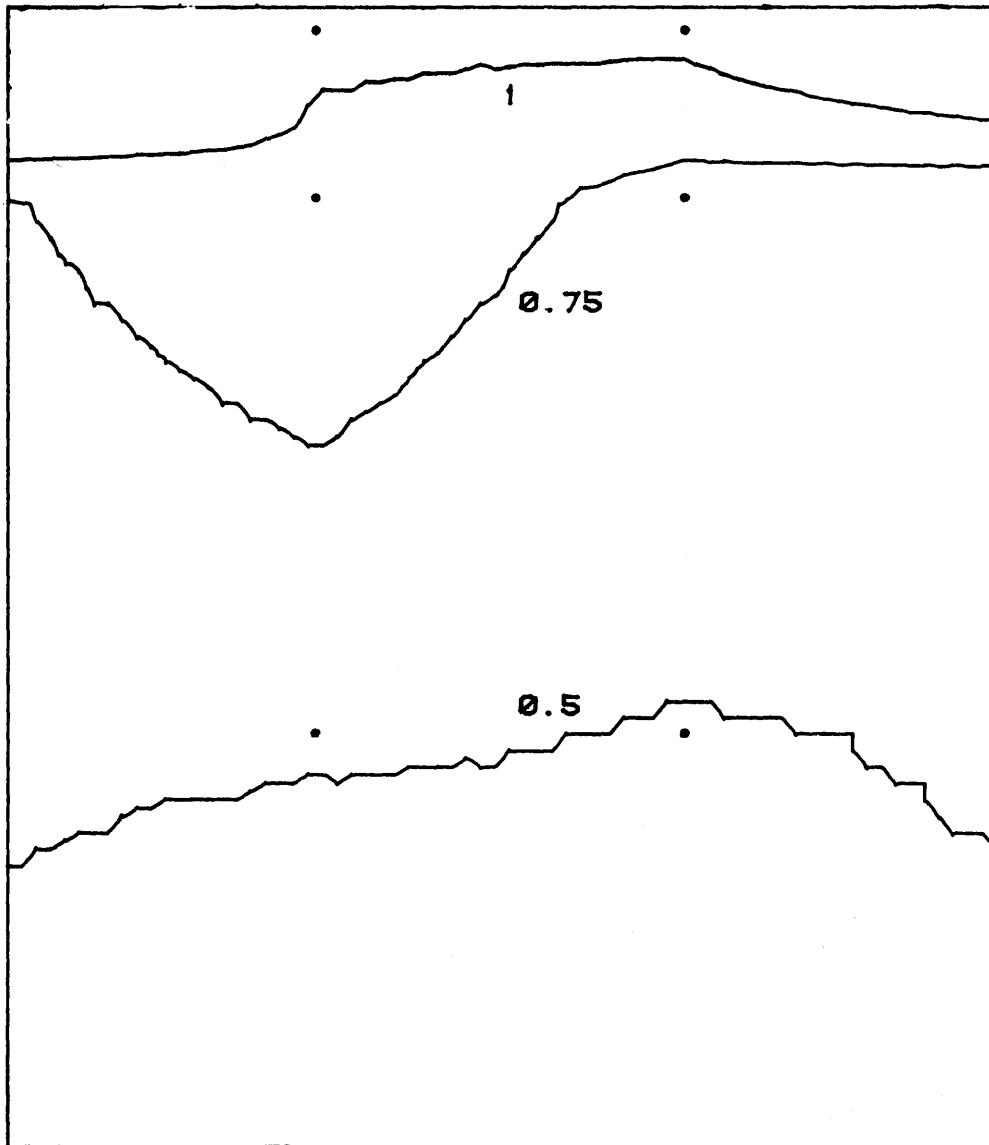


Figure 10m. Peak Pressure Contours

WEST TOWER

NORTHWEST ELEVATION
PEAK NEGATIVE PRESSURE COEFFICIENTS

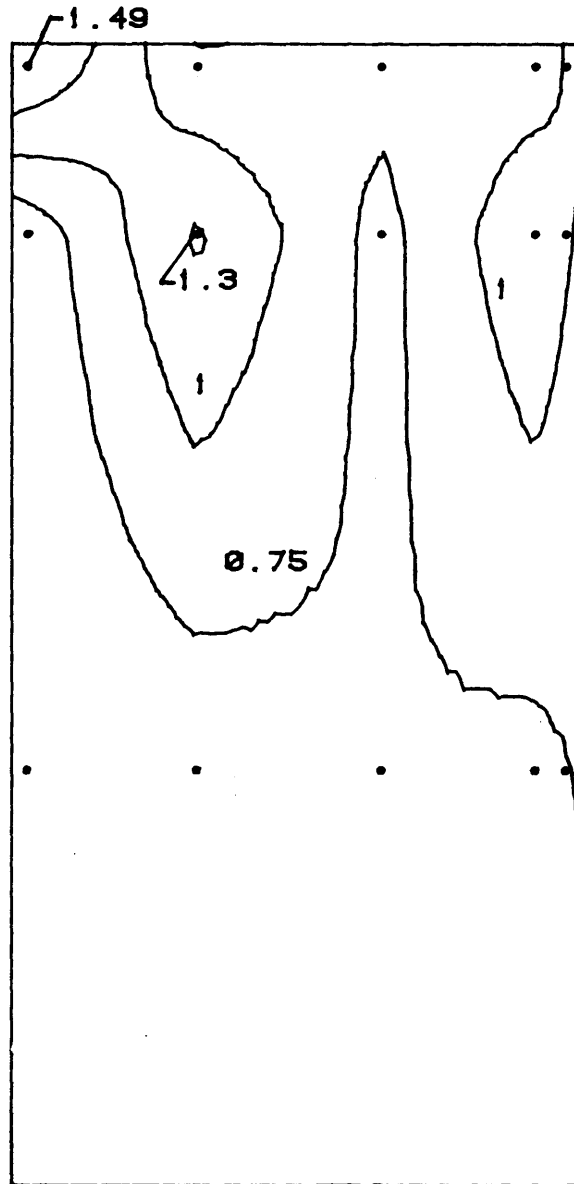


Figure 10n. Peak Pressure Contours

WEST TOWER

DEVELOPED VIEW

SOUTH END

PEAK NEGATIVE PRESSURE COEFFICIENTS

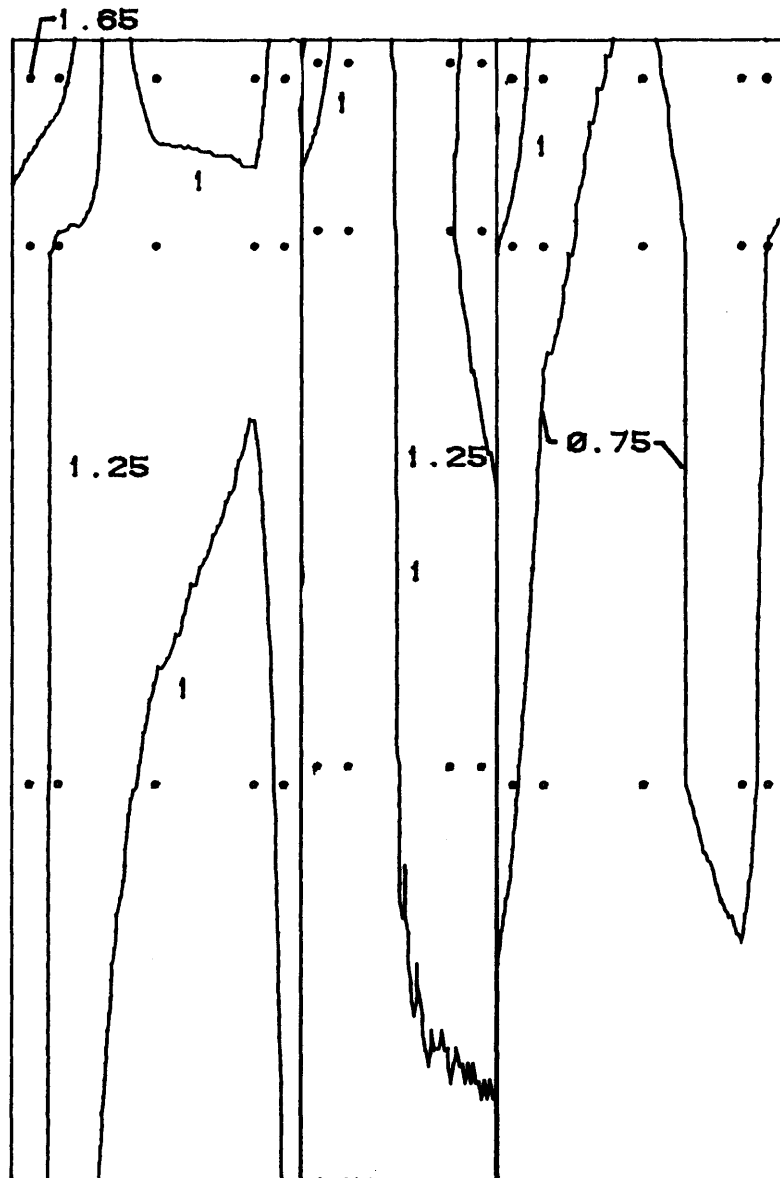


Figure 10o. Peak Pressure Contours

WEST TOWER

SOUTHEAST ELEVATION
PEAK NEGATIVE PRESSURE COEFFICIENTS

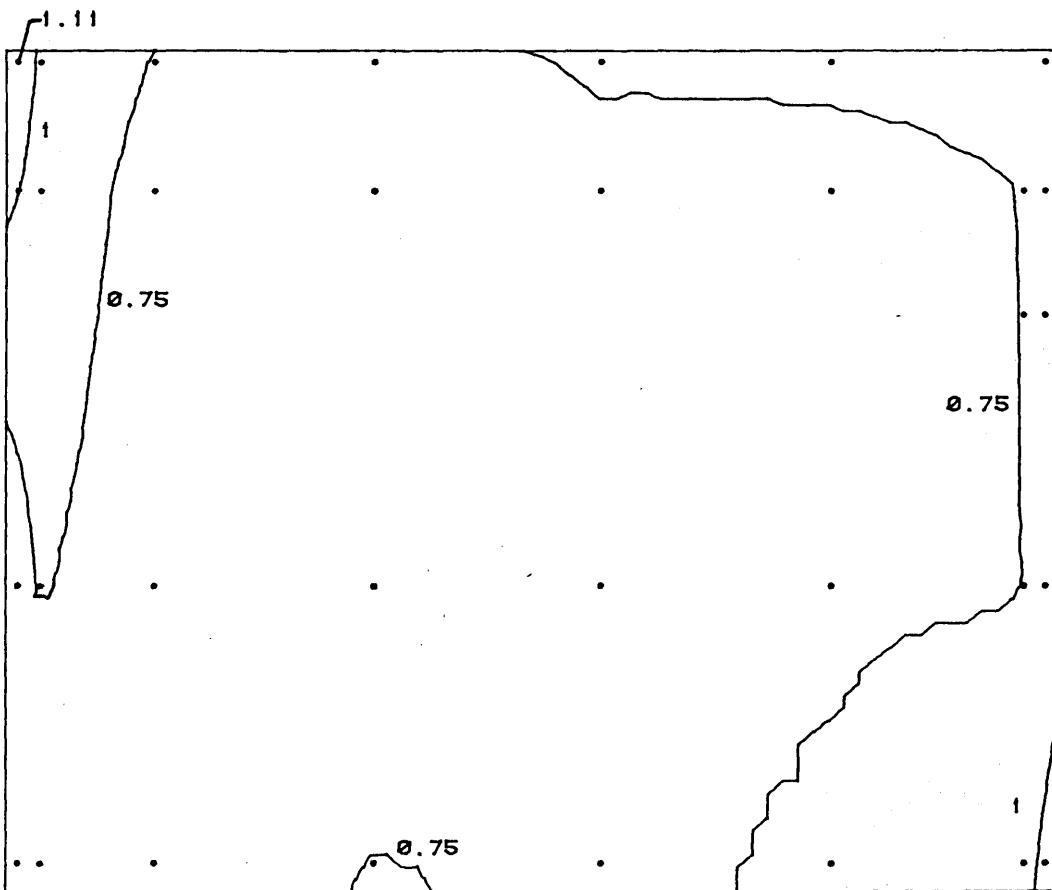


Figure 10p. Peak Pressure Contours

WEST TOWER

EAST ELEVATION
PEAK NEGATIVE PRESSURE COEFFICIENTS

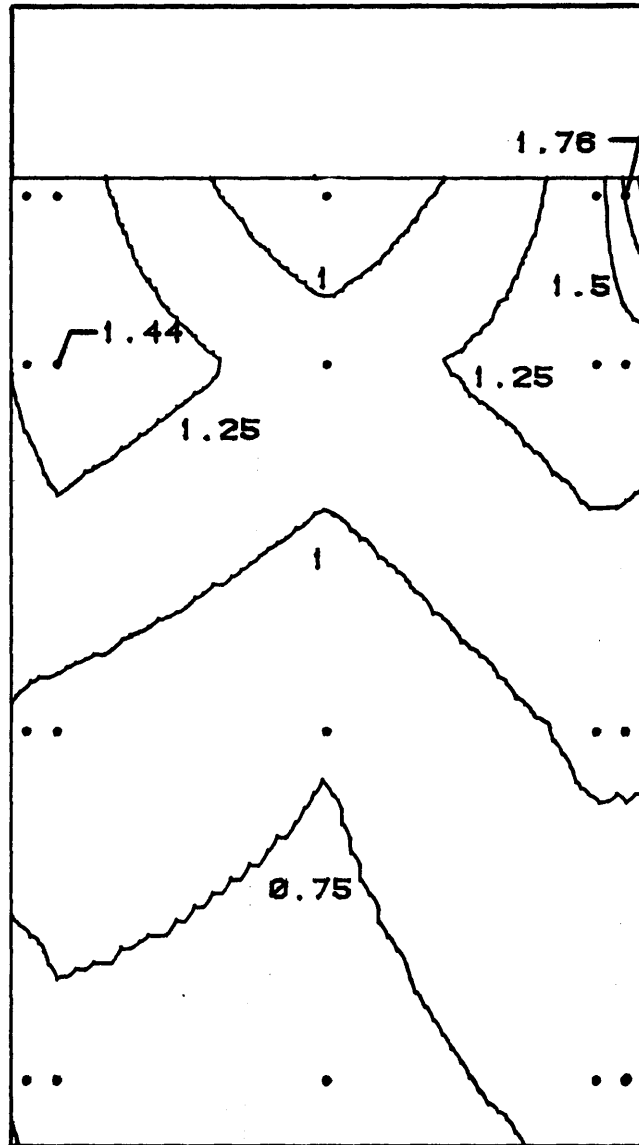


Figure 10q. Peak Pressure Contours

WEST TOWER

NORTHEAST ELEVATION
PEAK NEGATIVE PRESSURE COEFFICIENTS

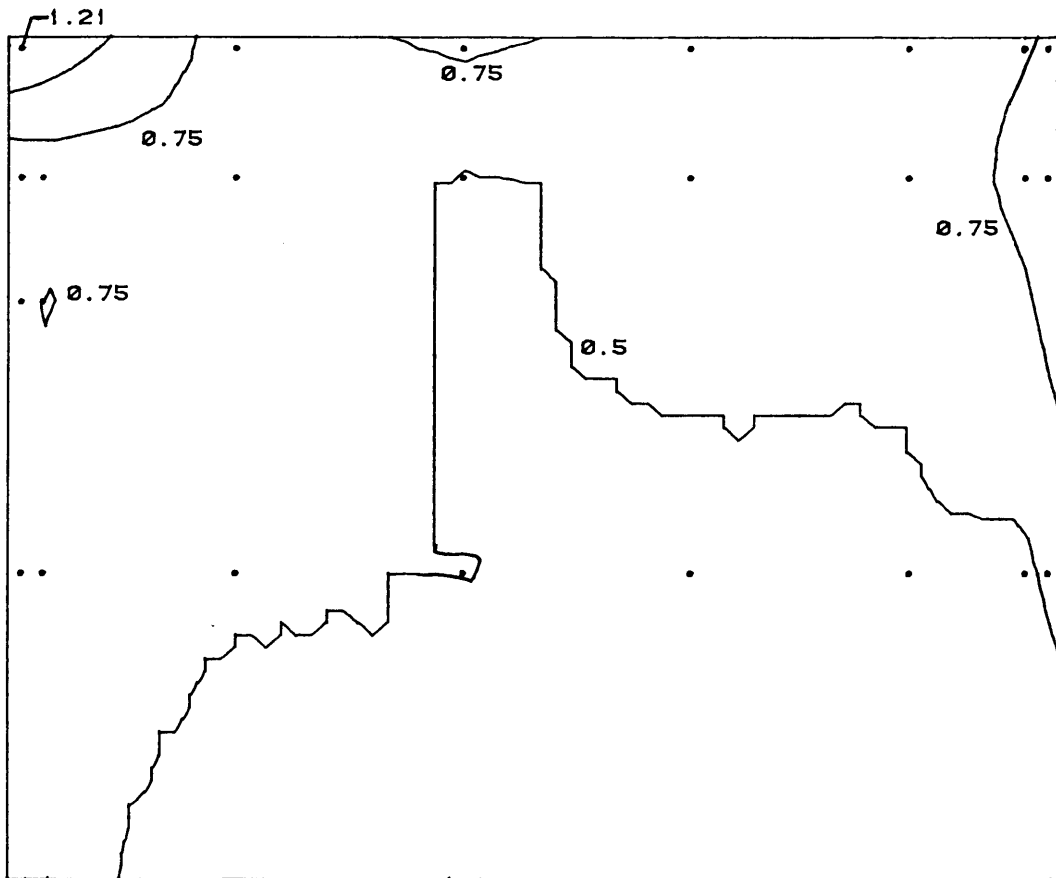


Figure 10r. Peak Pressure Contours

WEST TOWER

DEVELOPED VIEW

NORTH END

PEAK POSITIVE PRESSURE COEFFICIENTS

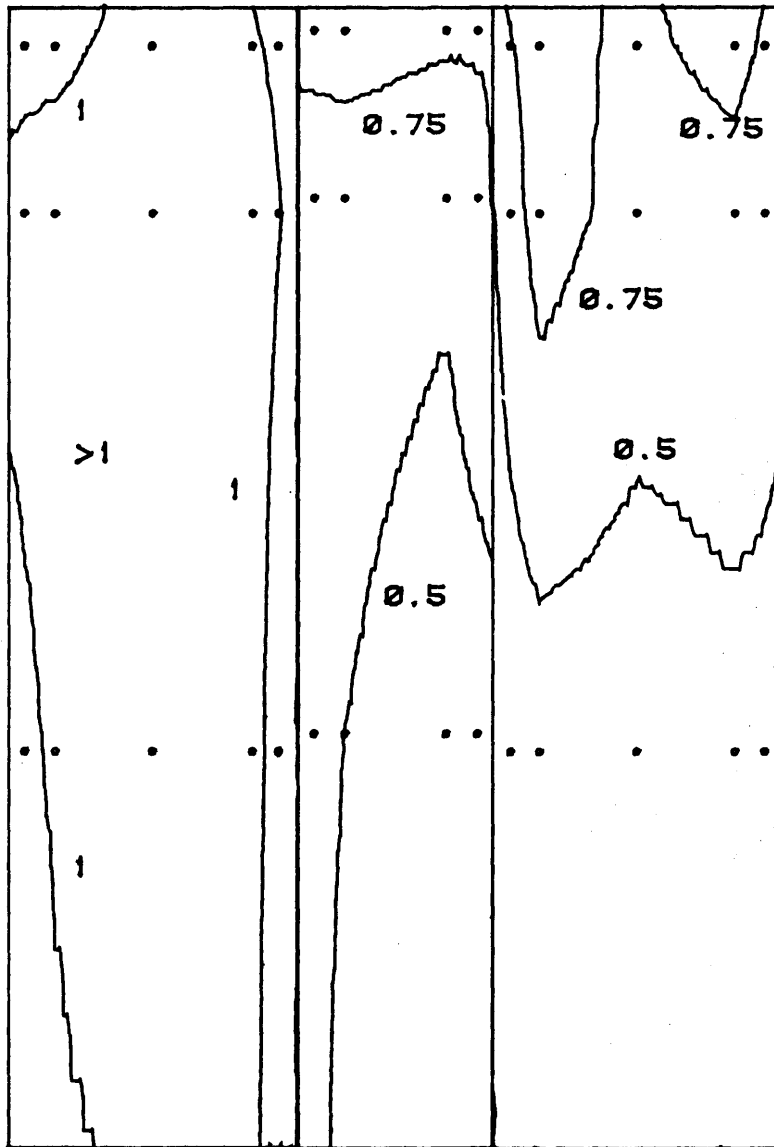


Figure 10s. Peak Pressure Contours

WEST TOWER

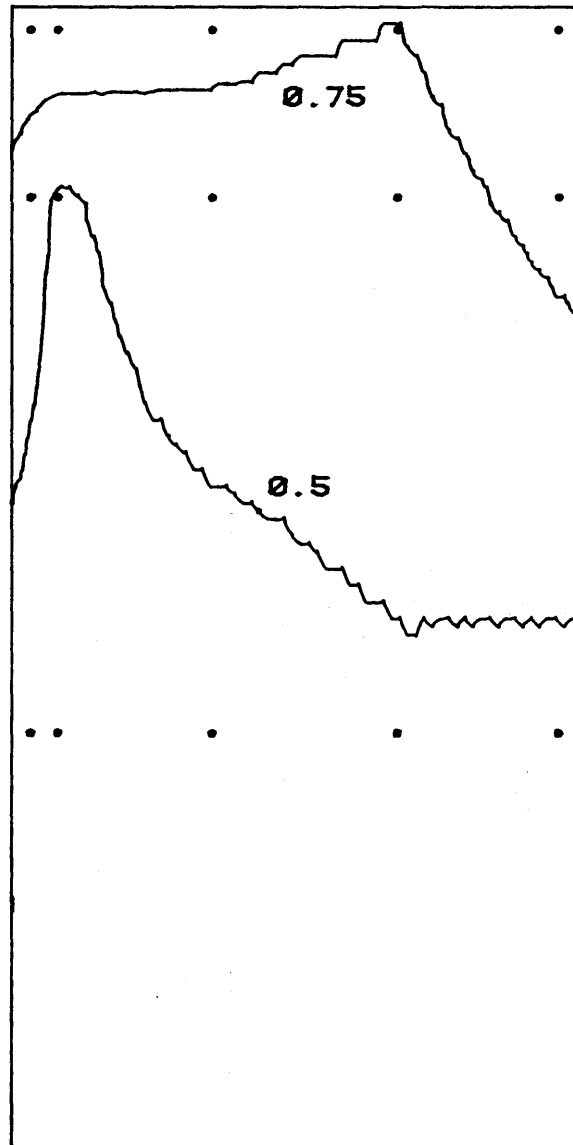
SOUTHWEST ELEVATION
PEAK POSITIVE PRESSURE COEFFICIENTS

Figure 10t. Peak Pressure Contours

WEST TOWER

WEST ELEVATION
PEAK POSITIVE PRESSURE COEFFICIENTS

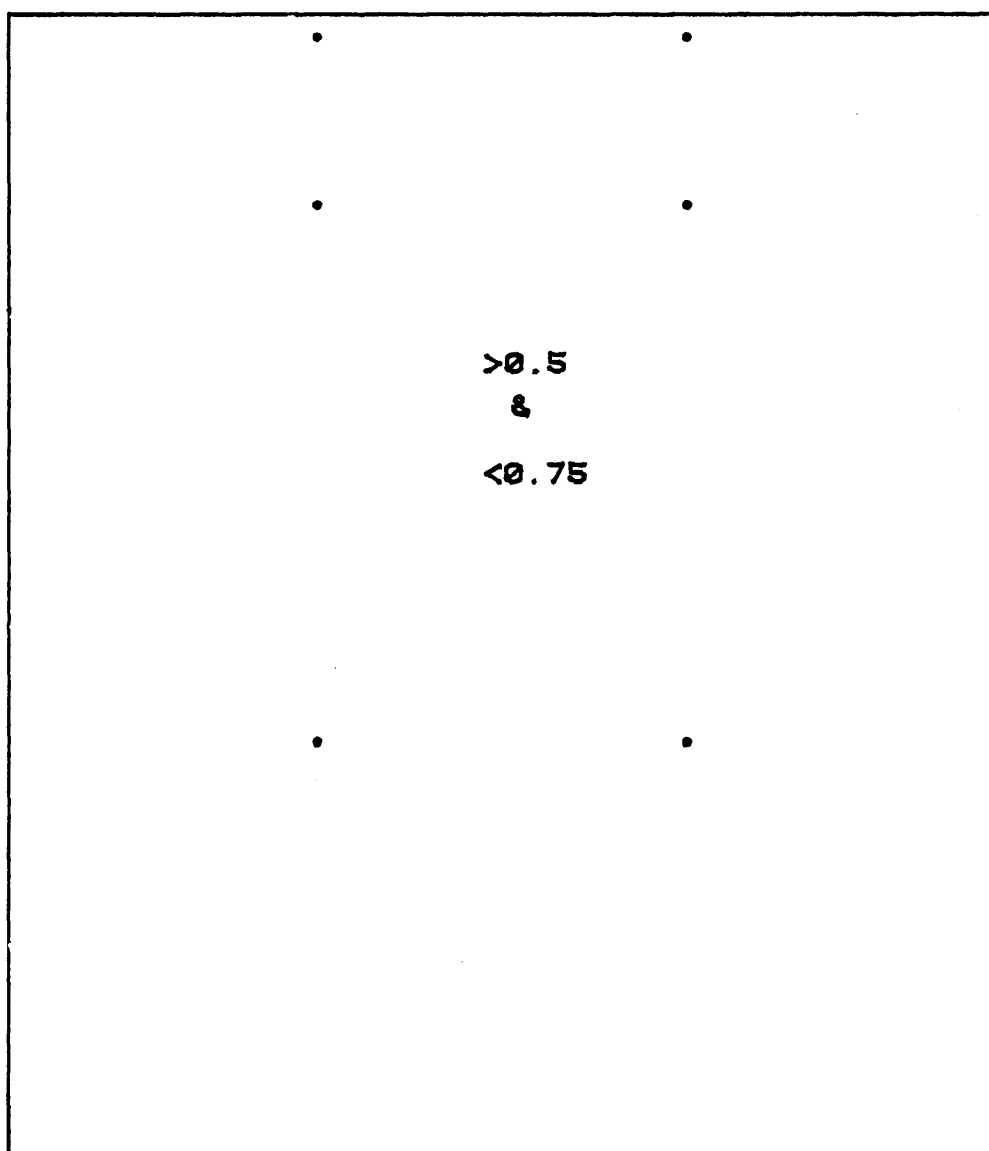


Figure 10u. Peak Pressure Contours

WEST TOWER

NORTHWEST ELEVATION
PEAK POSITIVE PRESSURE COEFFICIENTS

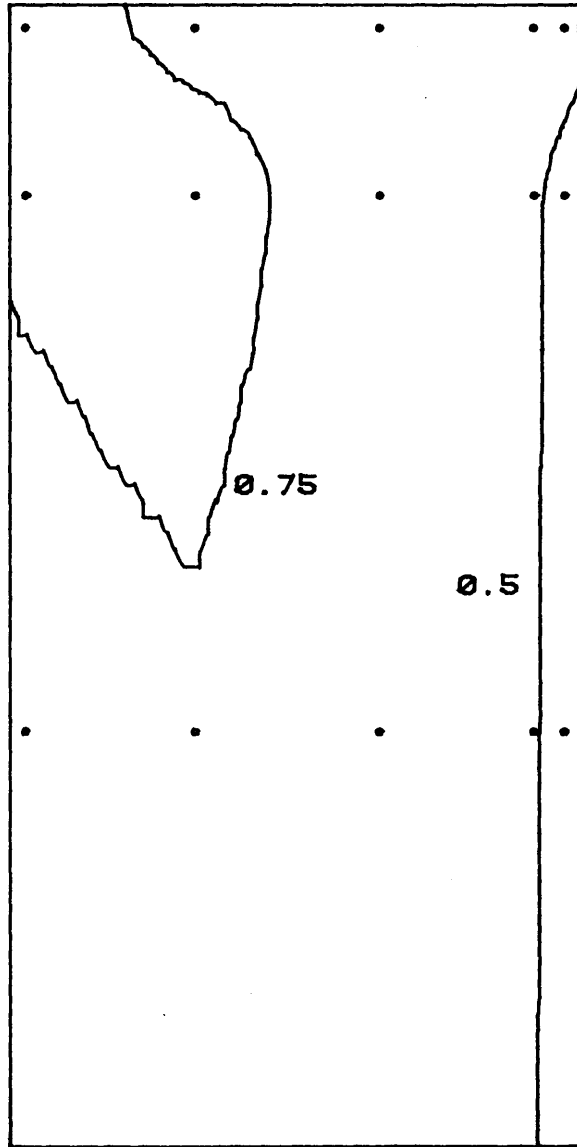


Figure 10v. Peak Pressure Contours

WEST TOWER

DEVELOPED VIEW

SOUTH END

PEAK POSITIVE PRESSURE COEFFICIENTS

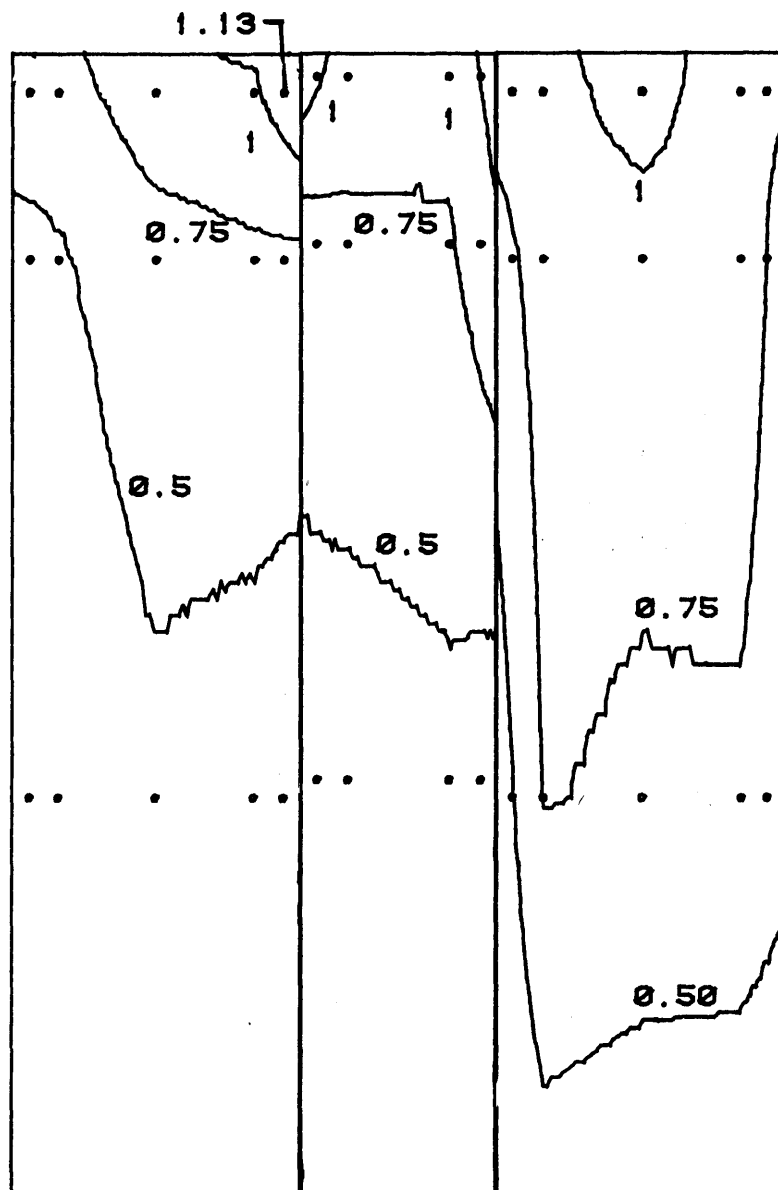


Figure 10w. Peak Pressure Contours

WEST TOWER

SOUTHEAST ELEVATION
PEAK POSITIVE PRESSURE COEFFICIENTS

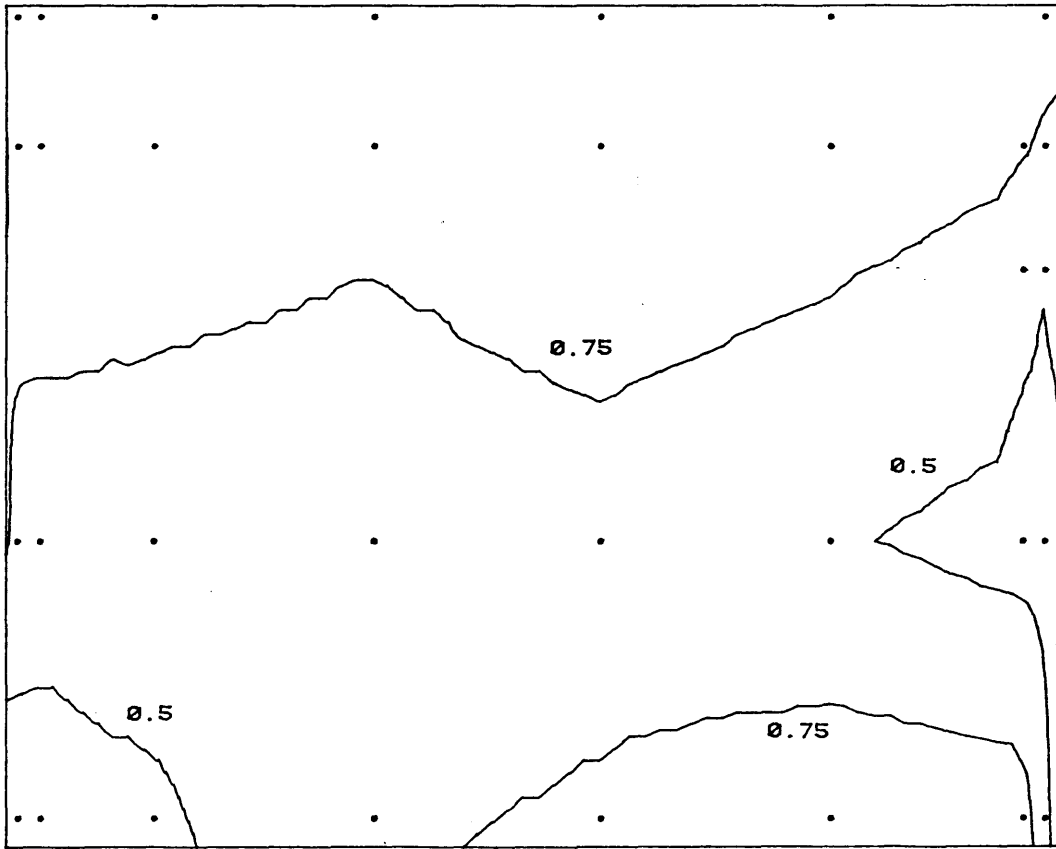


Figure 10x. Peak Pressure Contours

WEST TOWER

EAST ELEVATION

PEAK POSITIVE PRESSURE COEFFICIENTS

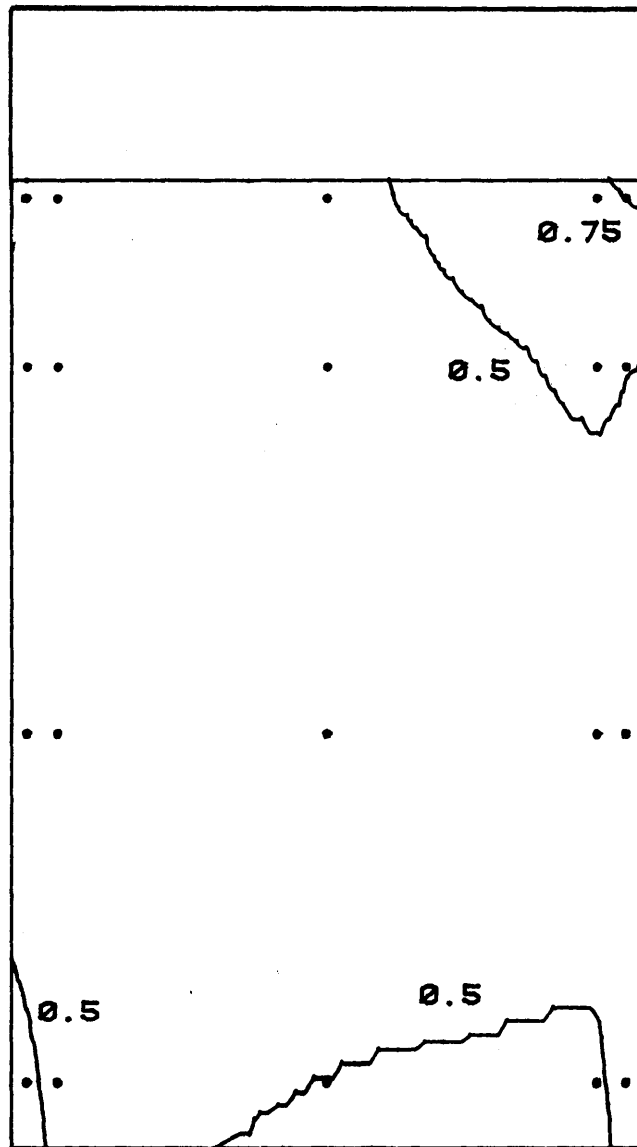


Figure 10y. Peak Pressure Contours

WEST TOWER

NORTHEAST ELEVATION
PEAK POSITIVE PRESSURE COEFFICIENTS

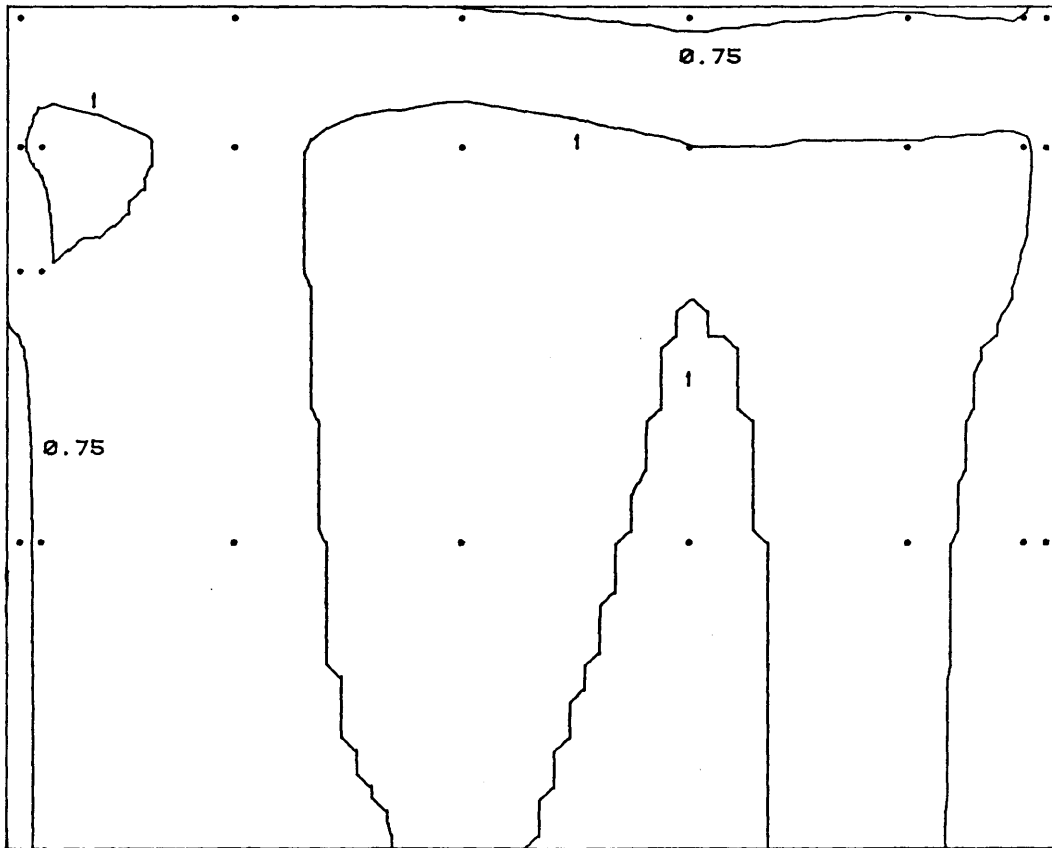


Figure 10z. Peak Pressure Contours

EAST TOWER

DEVELOPED VIEW

NORTH END

PEAK NEGATIVE PRESSURE COEFFICIENTS

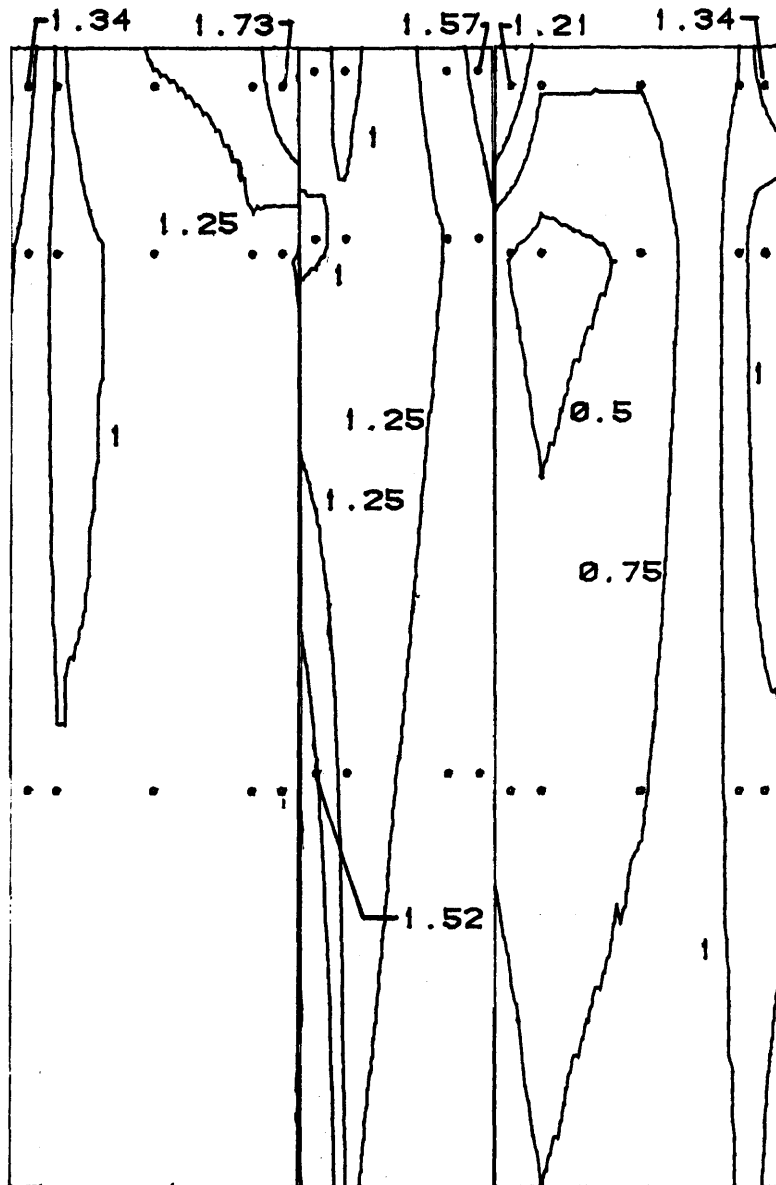


Figure 10A. Peak Pressure Contours

EAST TOWER

NORTHWEST ELEVATION
PEAK NEGATIVE PRESSURE COEFFICIENTS

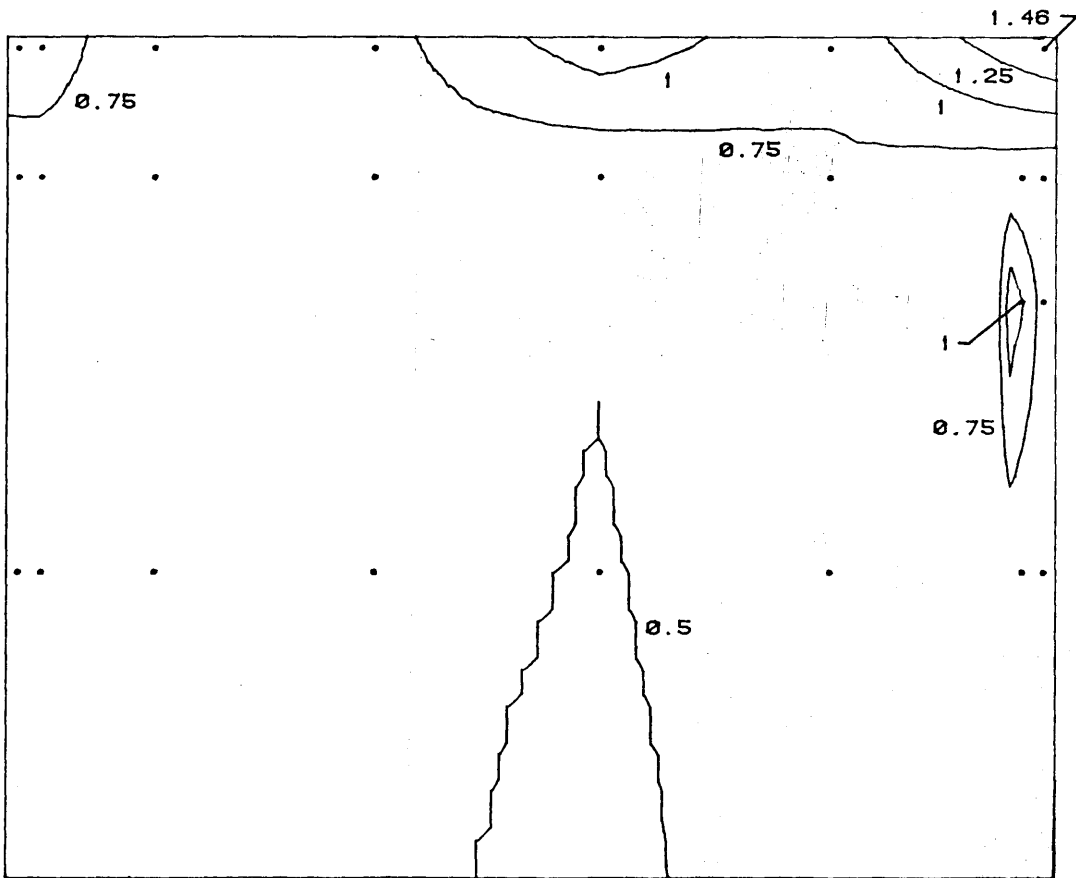


Figure 10B. Peak Pressure Contours

EAST TOWER

WEST ELEVATION

PEAK NEGATIVE PRESSURE COEFFICIENTS

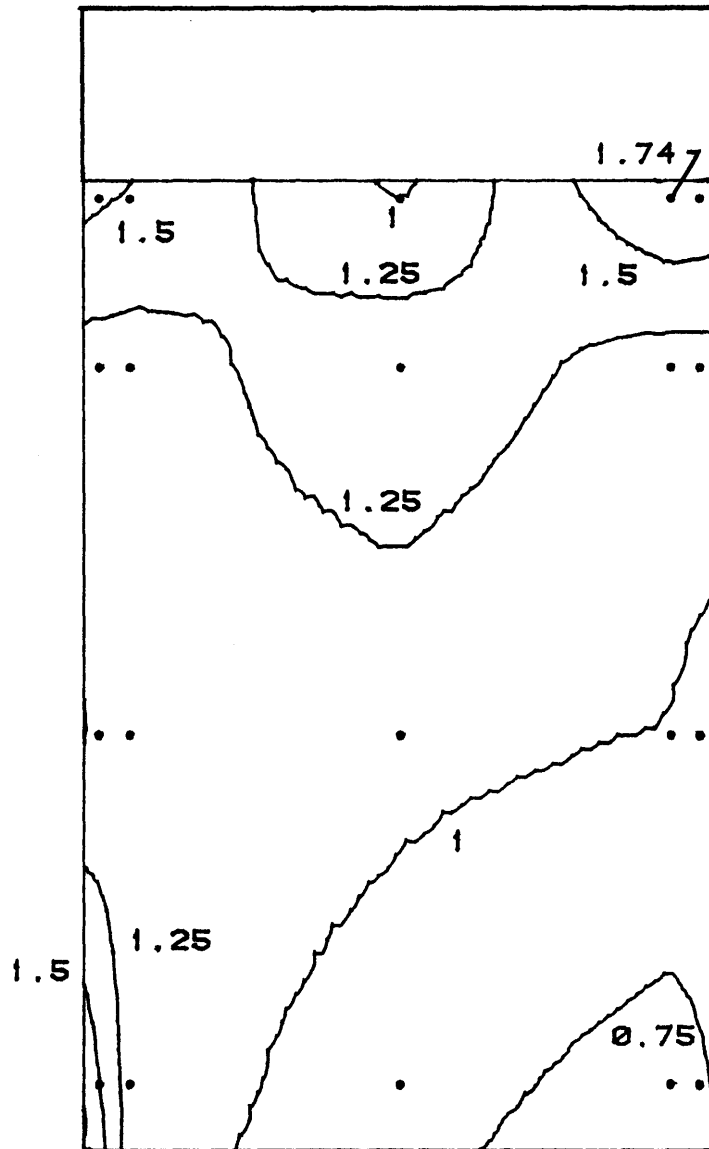


Figure 10C. Peak Pressure Contours

EAST TOWER

SOUTHWEST ELEVATION
PEAK NEGATIVE PRESSURE COEFFICIENTS

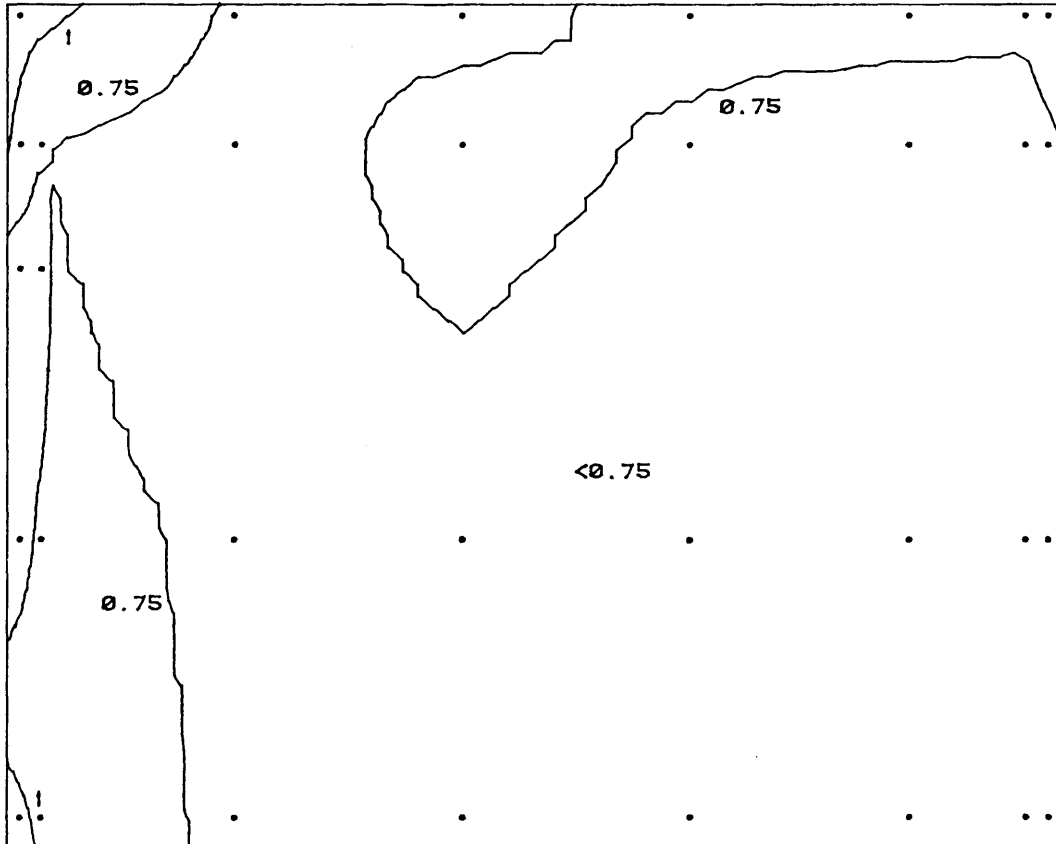


Figure 10D. Peak Pressure Contours

EAST TOWER

DEVELOPED VIEW

SOUTH END

PEAK NEGATIVE PRESSURE COEFFICIENTS

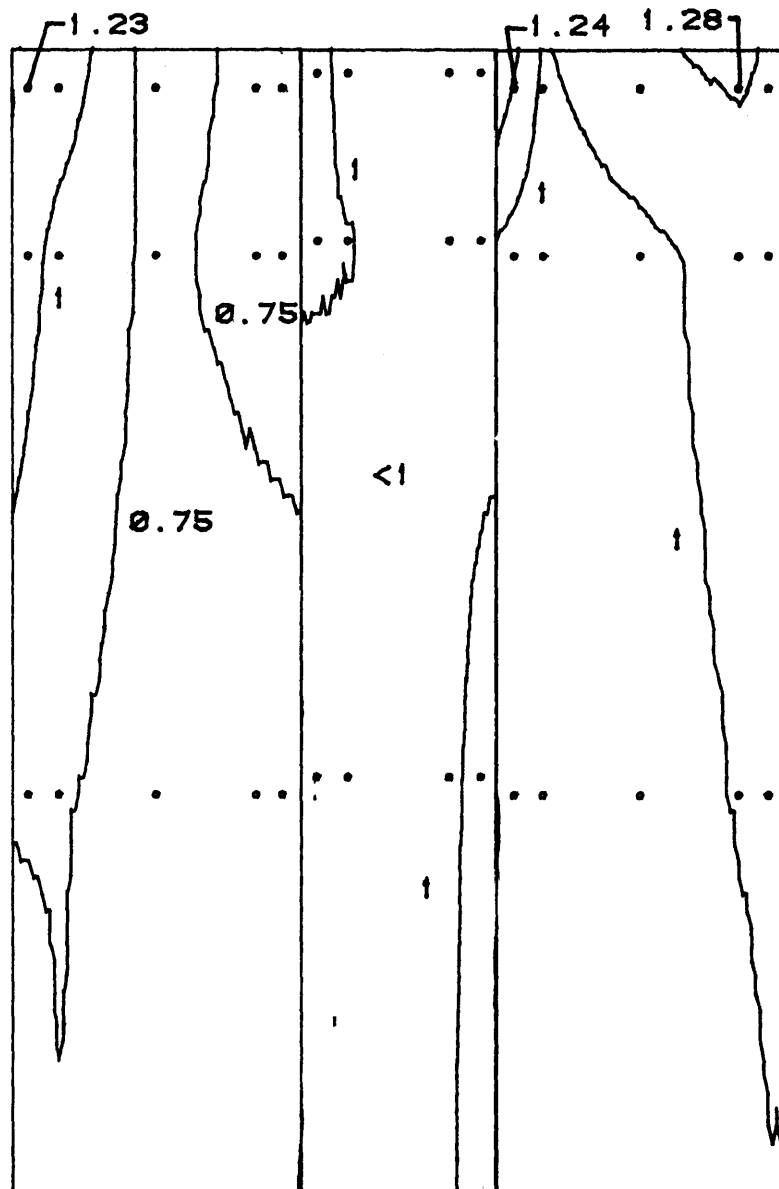


Figure 10E. Peak Pressure Contours

EAST TOWER

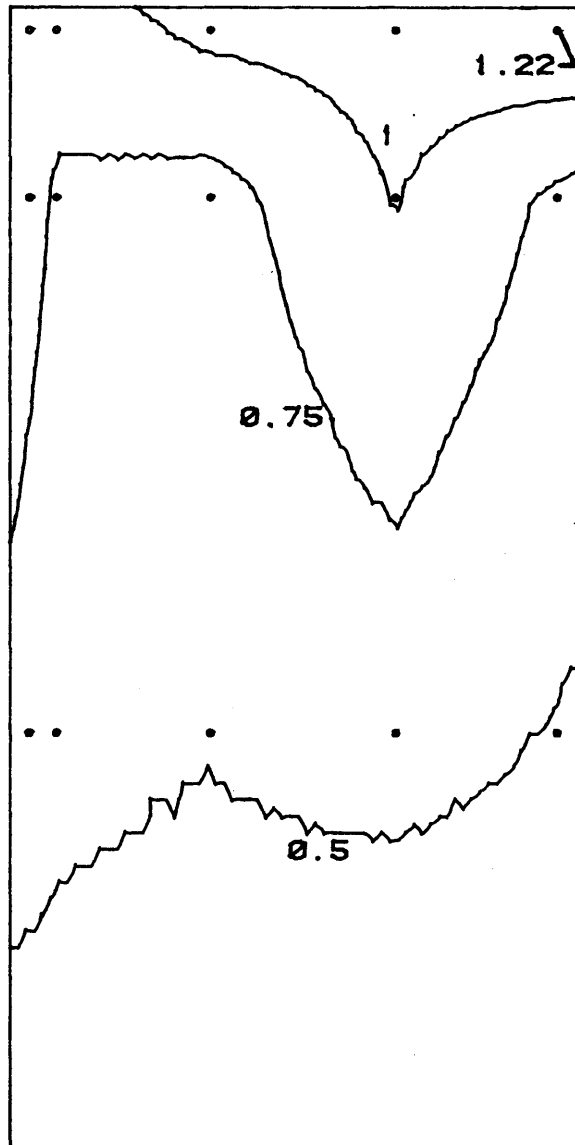
NORTHEAST ELEVATION
PEAK NEGATIVE PRESSURE COEFFICIENTS

Figure 10F. Peak Pressure Contours

EAST TOWER

EAST ELEVATION
PEAK NEGATIVE PRESSURE COEFFICIENTS

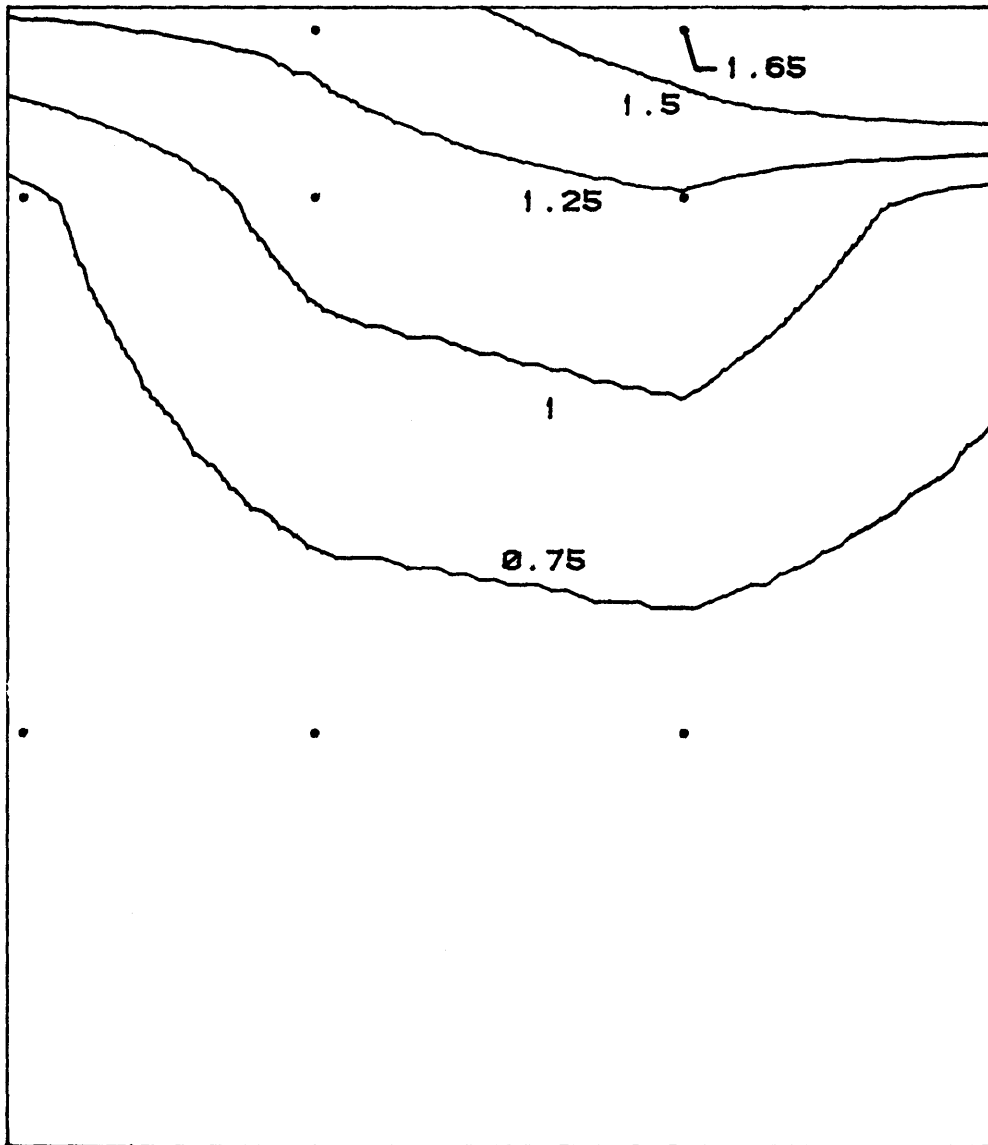


Figure 10G. Peak Pressure Contours

EAST TOWER

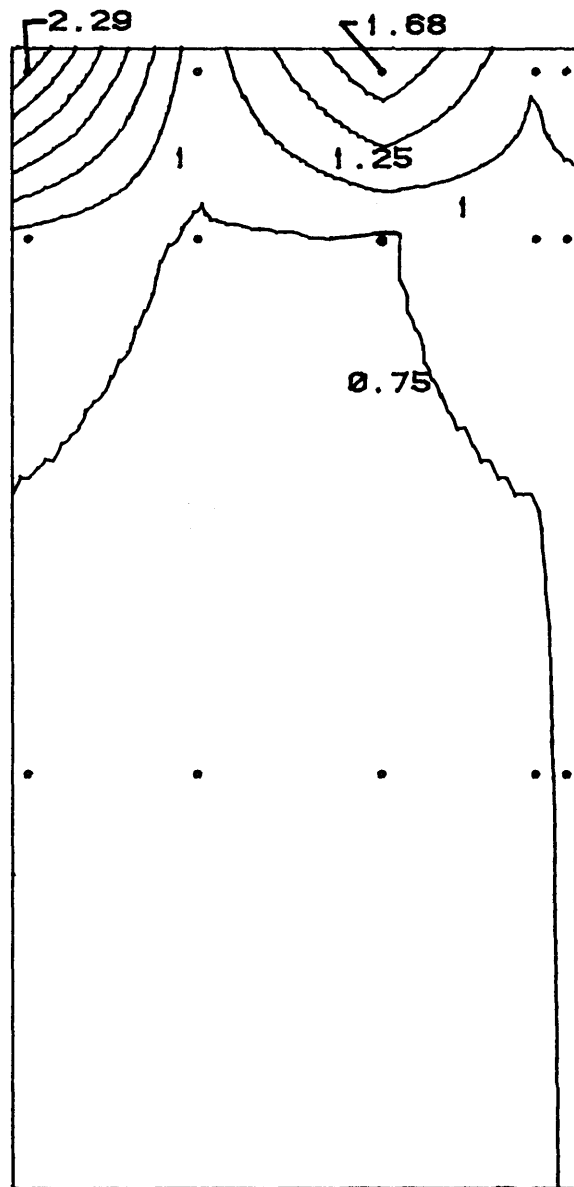
SOUTHEAST ELEVATION
PEAK NEGATIVE PRESSURE COEFFICIENTS

Figure 10H. Peak Pressure Contours

EAST TOWER

DEVELOPED VIEW

NORTH END

PEAK POSITIVE PRESSURE COEFFICIENTS

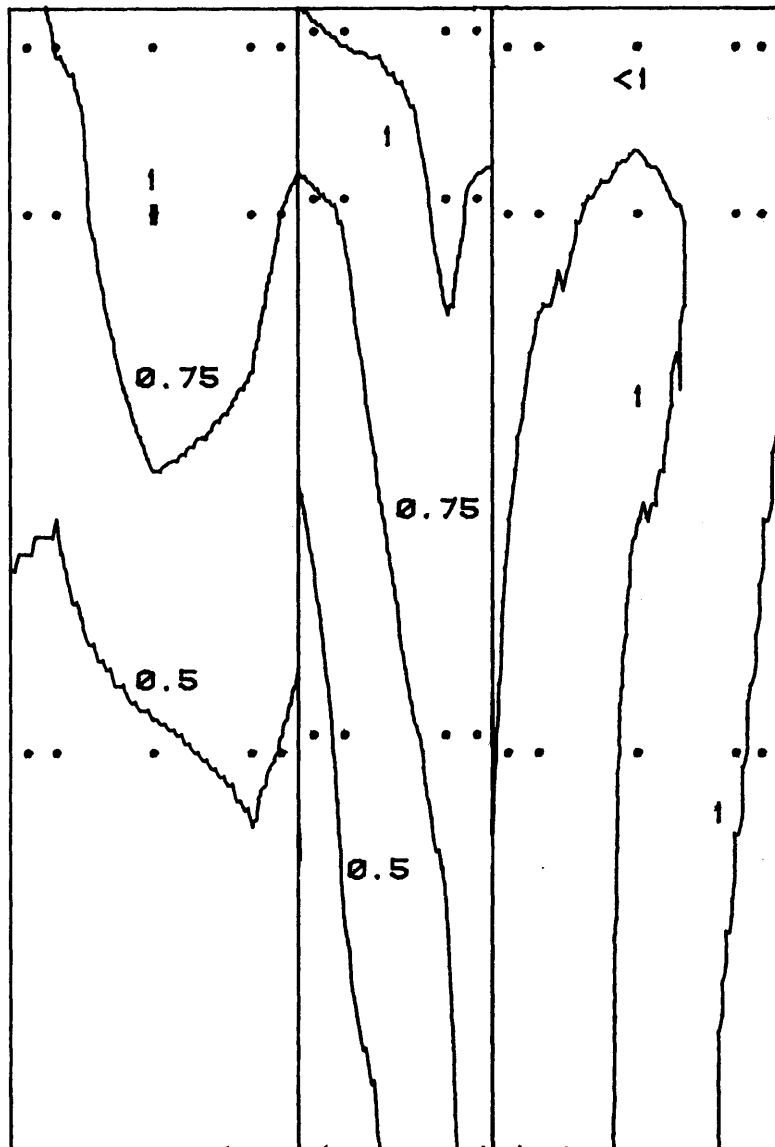


Figure 10I. Peak Pressure Contours

EAST TOWER

NORTHWEST ELEVATION
PEAK POSITIVE PRESSURE COEFFICIENTS

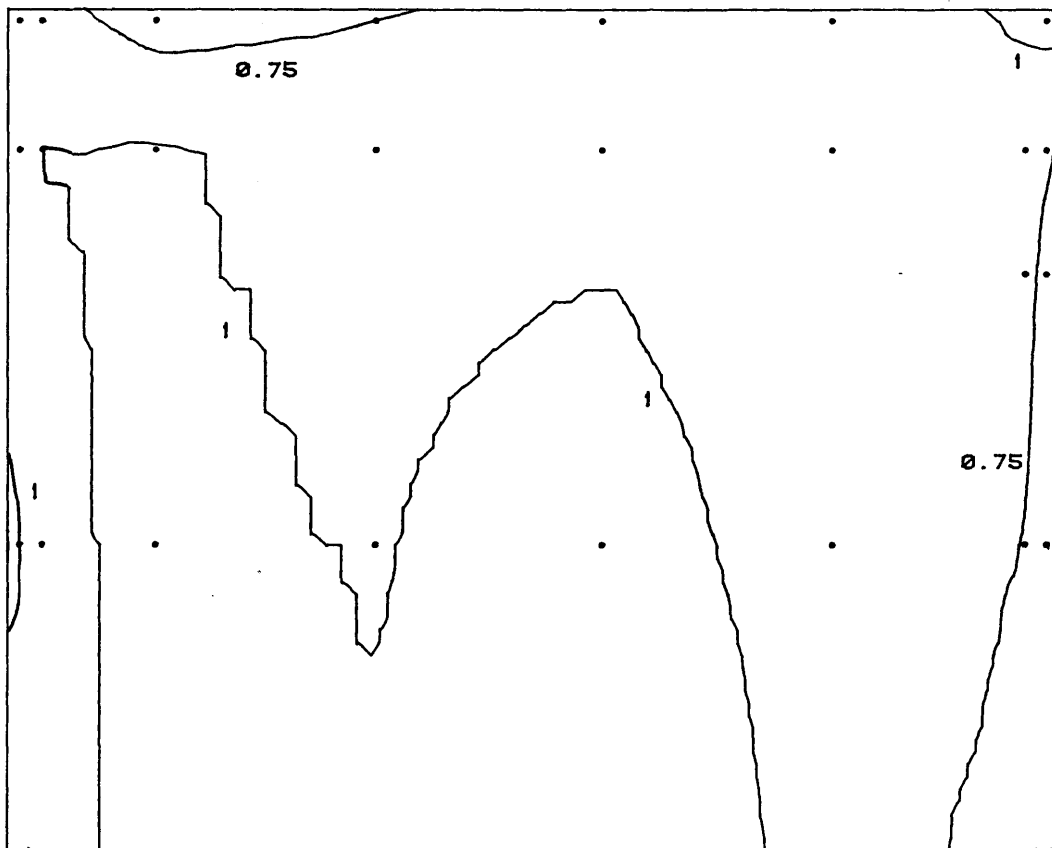


Figure 10J. Peak Pressure Contours

EAST TOWER

WEST ELEVATION

PEAK POSITIVE PRESSURE COEFFICIENTS

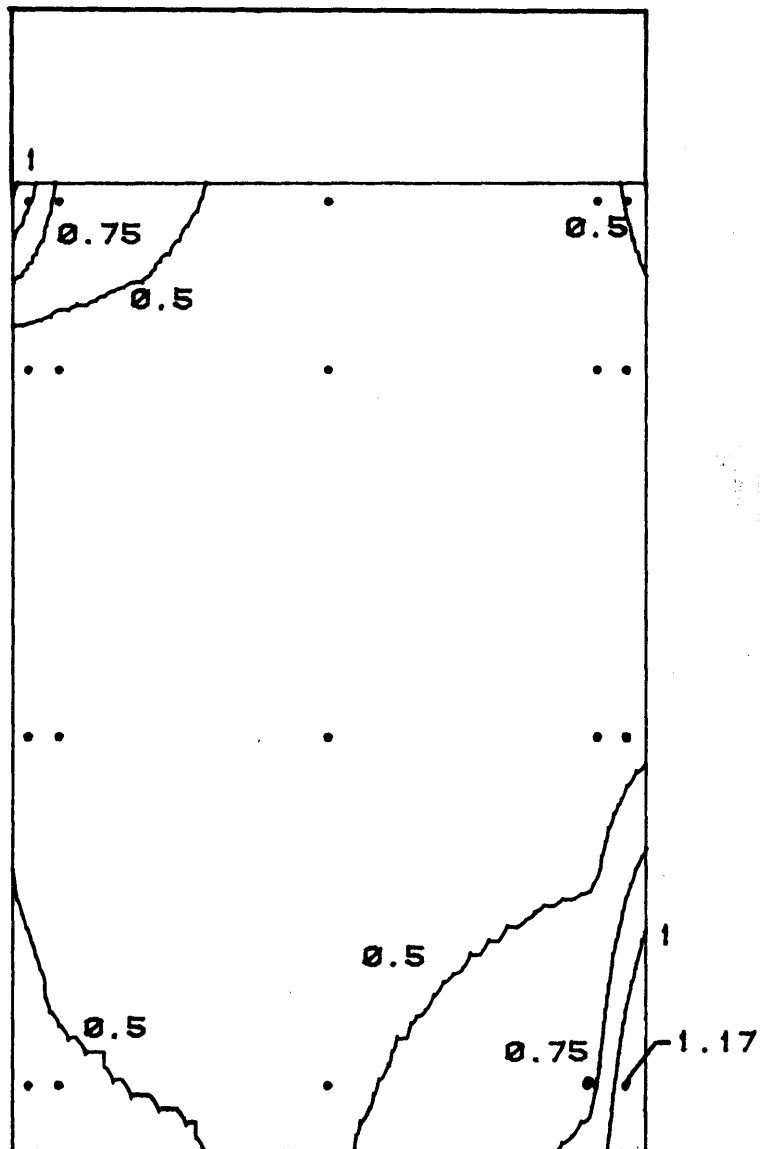


Figure 10K. Peak Pressure Contours

EAST TOWER

SOUTHWEST ELEVATION
PEAK POSITIVE PRESSURE COEFFICIENTS

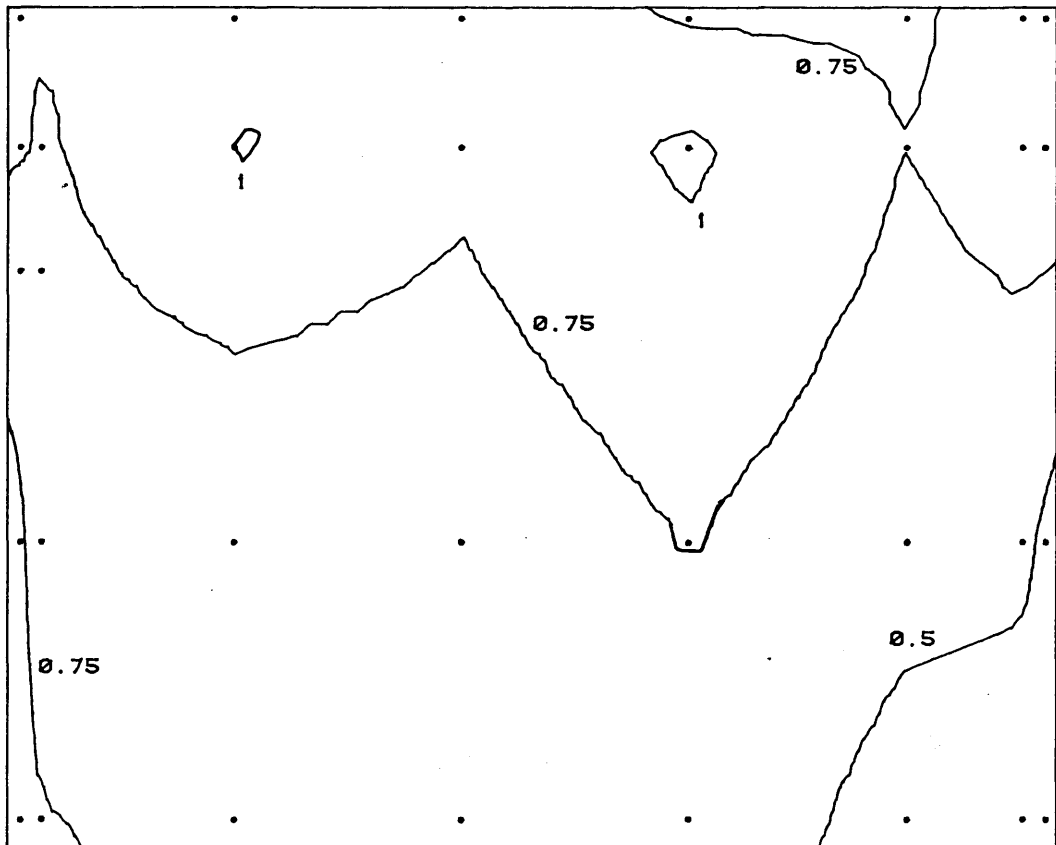


Figure 10L. Peak Pressure Contours

EAST TOWER

DEVELOPED VIEW

SOUTH END

PEAK POSITIVE PRESSURE COEFFICIENTS

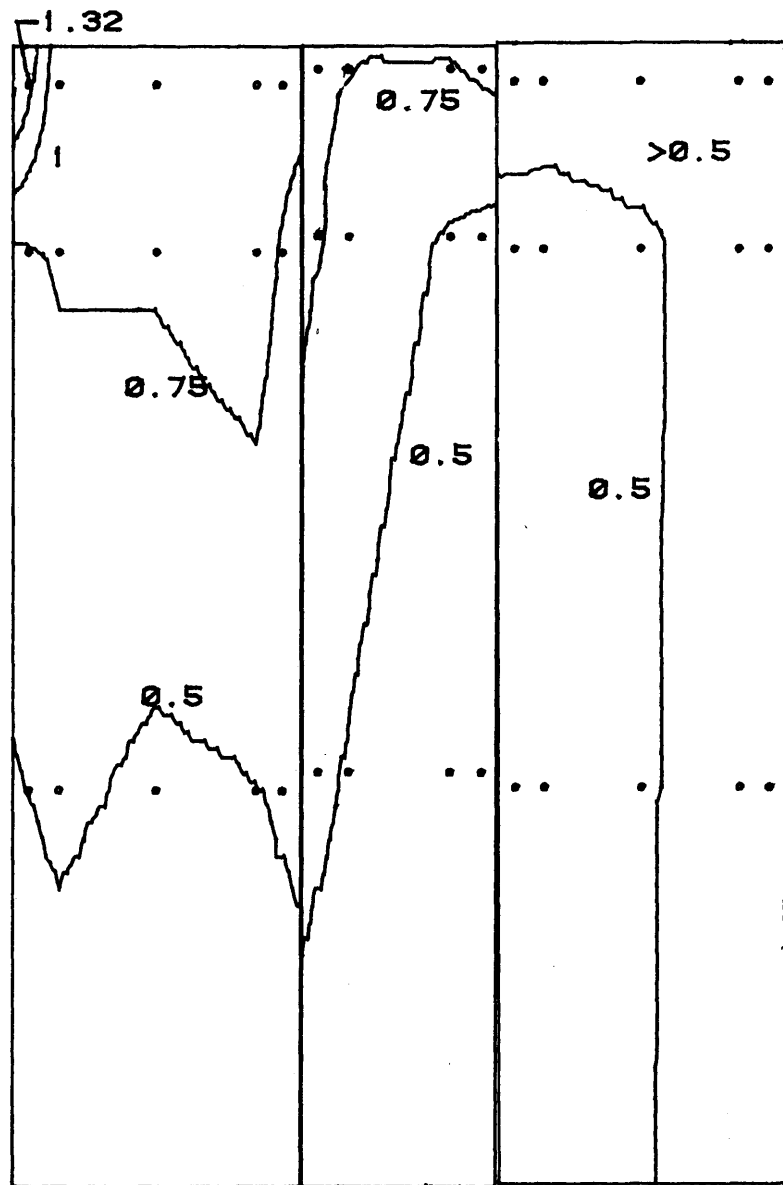


Figure 10M. Peak Pressure Contours

EAST TOWER

NORTHEAST
PEAK POSITIVE PRESSURE COEFFICIENTS

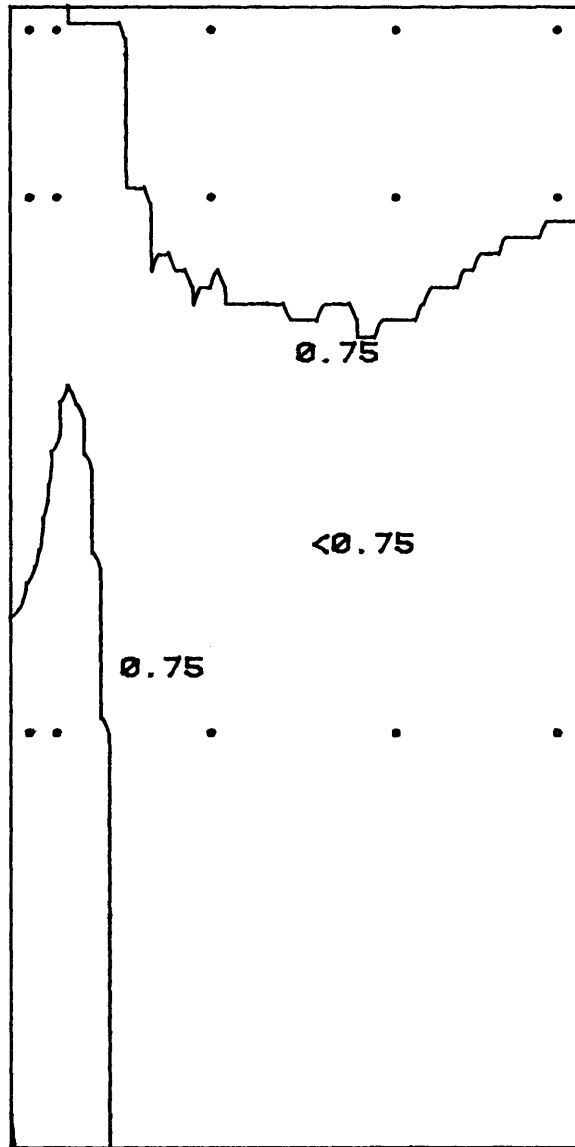


Figure 10N. Peak Pressure Contours

EAST TOWER

EAST ELEVATION
PEAK POSITIVE PRESSURE COEFFICIENTS

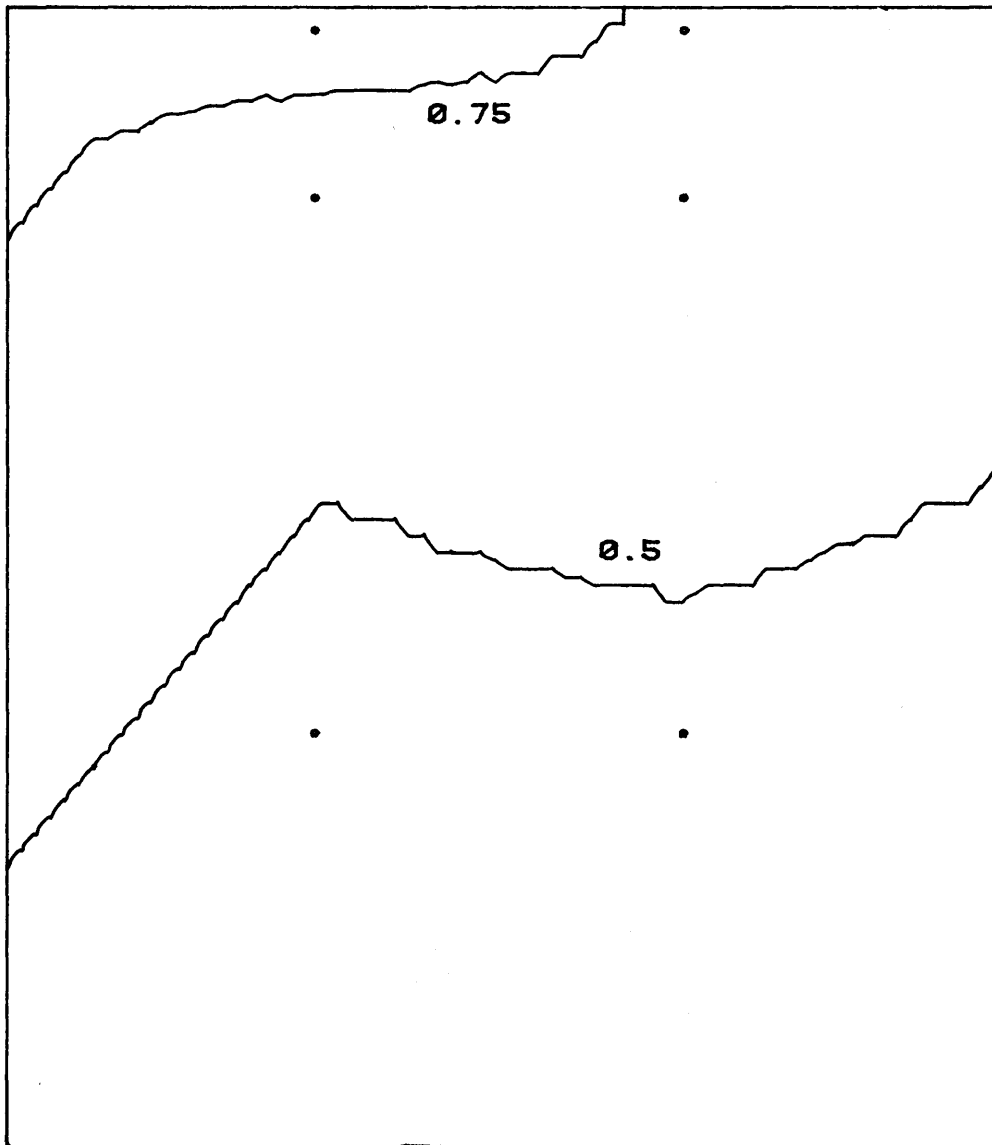


Figure 100. Peak Pressure Contours

EAST TOWER

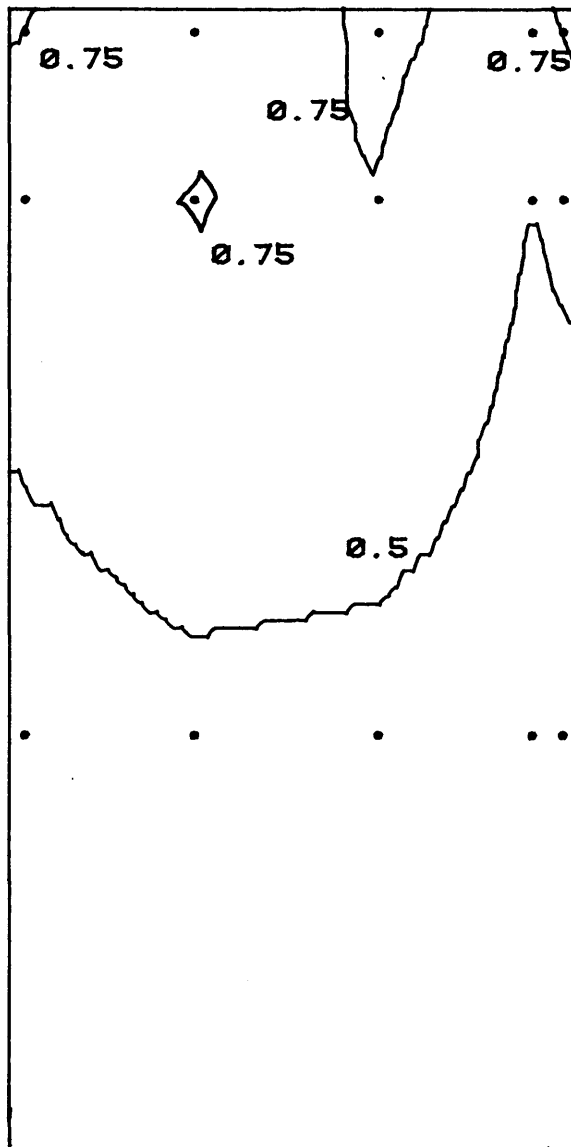
SOUTHEAST ELEVATION
PEAK POSITIVE PRESSURE COEFFICIENTS

Figure 10P. Peak Pressure Contours

BASE

NORTH ELEVATION

PEAK NEGATIVE PRESSURE COEFFICIENTS

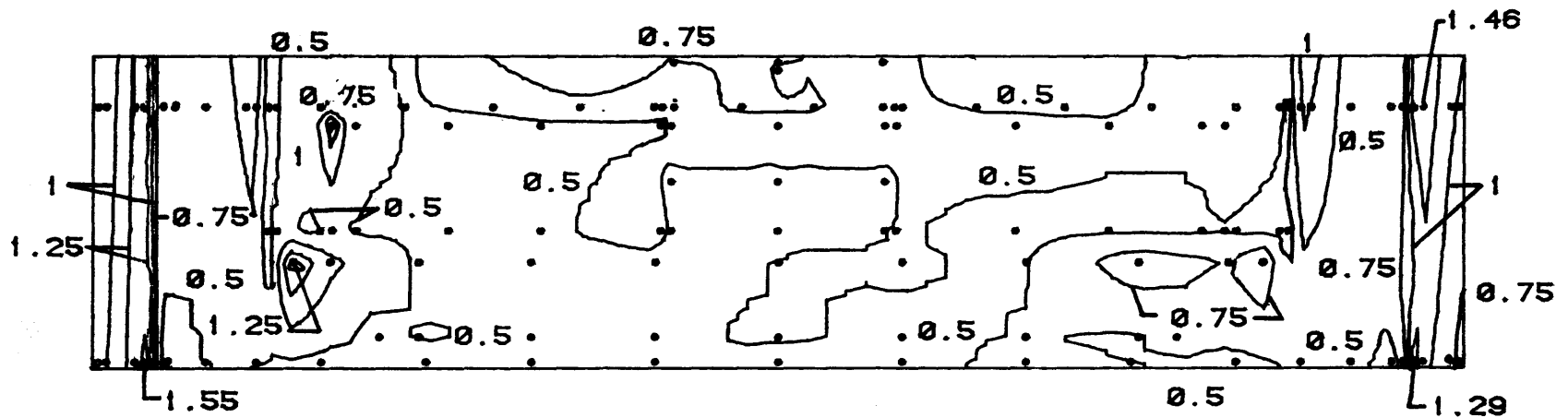


Figure 10Q. Peak Pressure Contours

BASE

WEST ELEVATION

PEAK NEGATIVE PRESSURE COEFFICIENTS

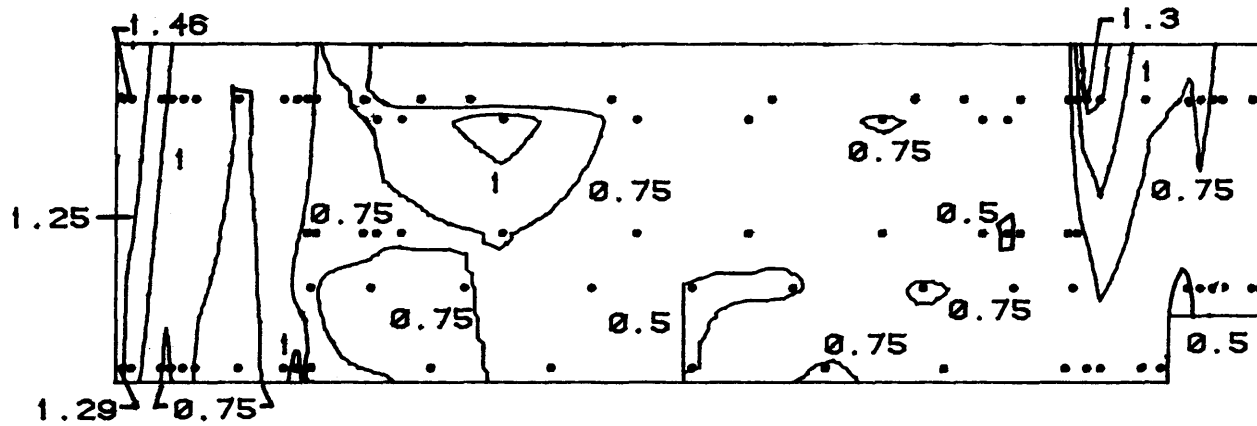


Figure 10R. Peak Pressure Contours

BASE

SOUTH ELEVATION
PEAK NEGATIVE PRESSURE COEFFICIENTS

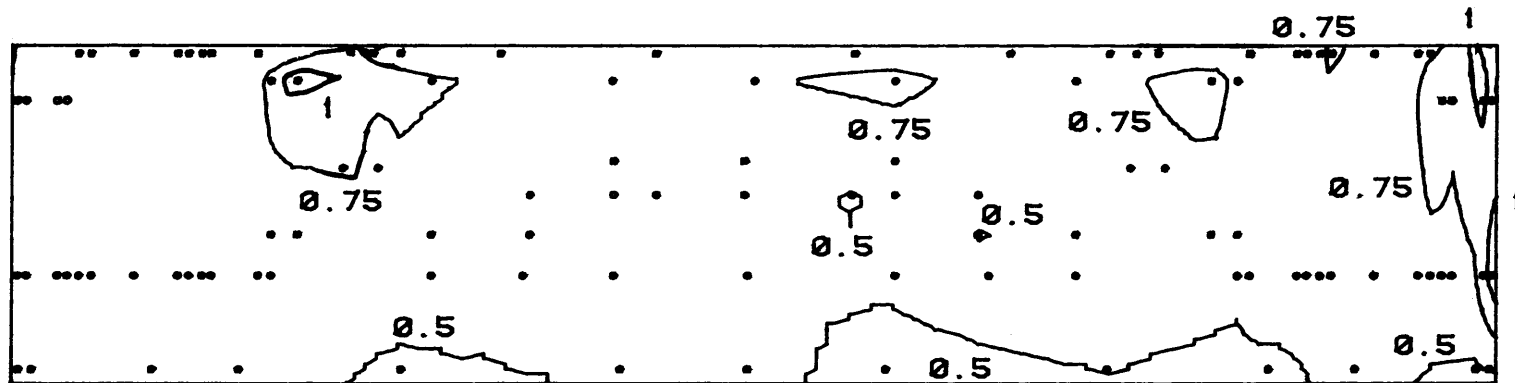


Figure 10S. Peak Pressure Contours

BASE

EAST ELEVATION

PEAK NEGATIVE PRESSURE COEFFICIENTS

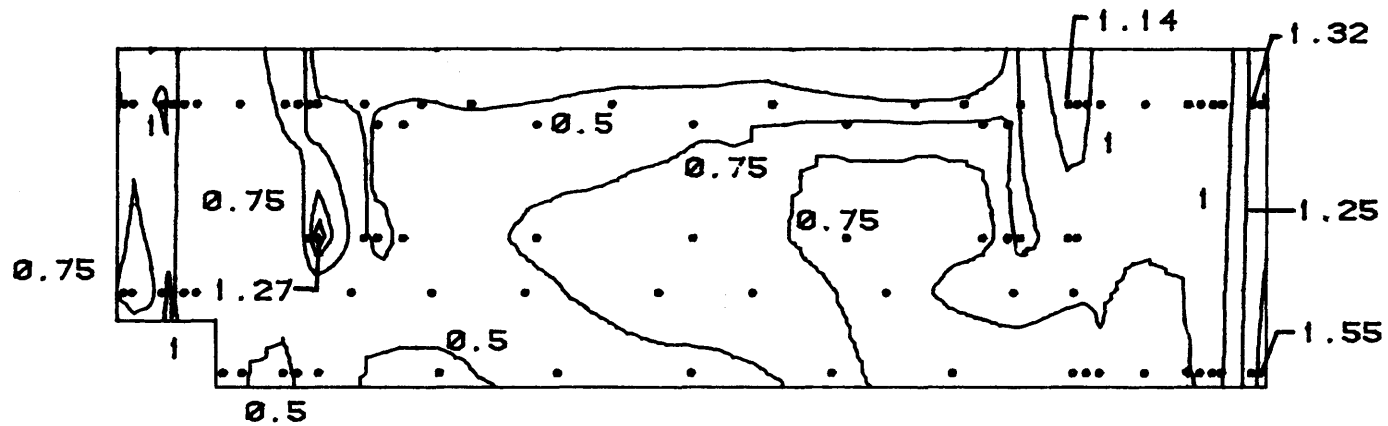


Figure 10T. Peak Pressure Contours

BASE

NORTH ELEVATION

PEAK POSITIVE PRESSURE COEFFICIENTS

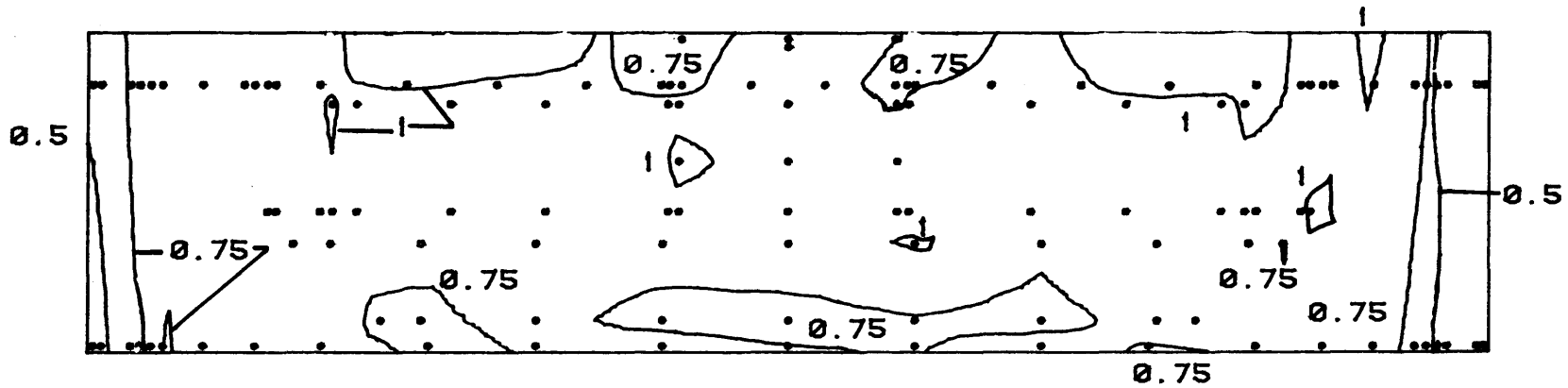


Figure 10U. Peak Pressure Contours

BASE

WEST ELEVATION
PEAK POSITIVE PRESSURE COEFFICIENTS

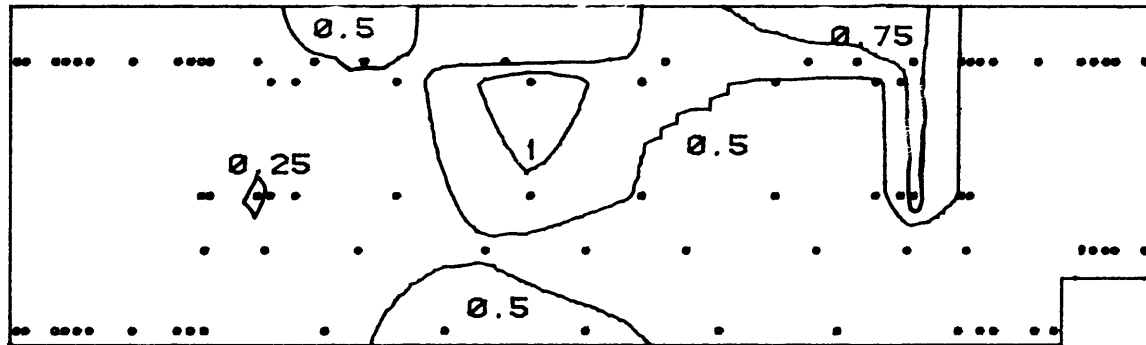


Figure 10V. Peak Pressure Contours

BASE

SOUTH ELEVATION

PEAK POSITIVE PRESSURE COEFFICIENTS

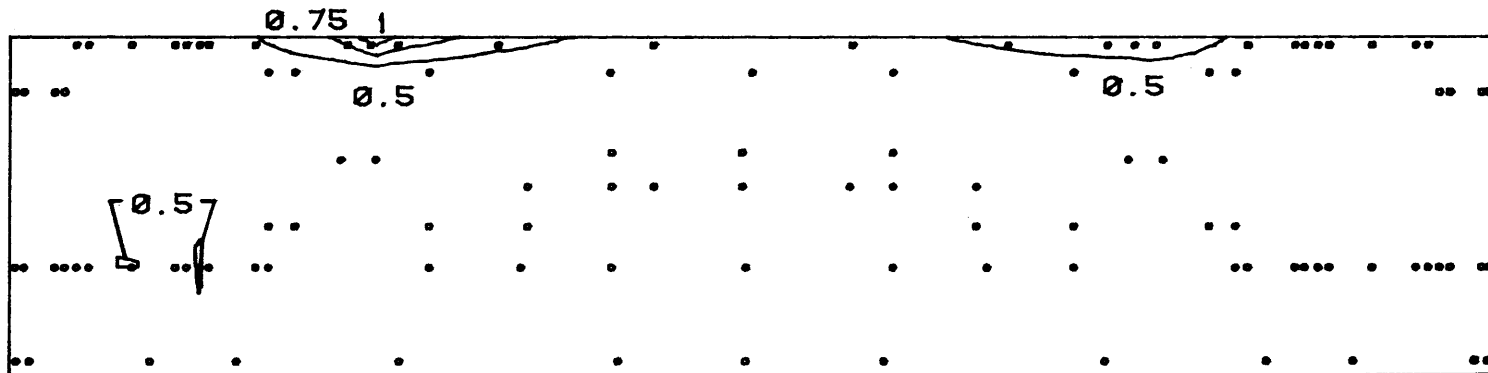


Figure 10W. Peak Pressure Contours

BASE

EAST ELEVATION

PEAK POSITIVE PRESSURE COEFFICIENTS

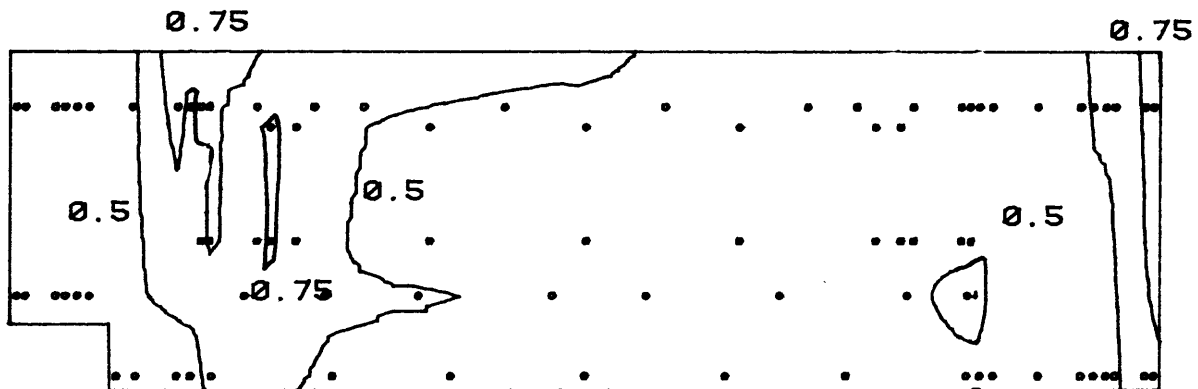


Figure 10X. Peak Pressure Contours

TABLES

TABLE 6A. PEAK LOADS FOR CONFIGURATION C :
LARGEST VALUES OF CLADDING LOAD

TAIKOO SHING CITYPLAZA, HONG KONG (MODIFIED MODEL)
REFERENCE PRESSURE = 2170 PA

TAP	AZI-MUTH	PRESS COEFF	NEGATIVE PEAK	POSITIVE PEAK	TAP	AZI-MUTH	PRESS COEFF	NEGATIVE PEAK	POSITIVE PEAK	TAP	AZI-MUTH	PRESS COEFF	NEGATIVE PEAK	POSITIVE PEAK
			PA	PA				PA	PA				PA	PA
2101	310	.75	-1385.8	1622.3	2142	340	.89	-1484.7	1929.7	2909	320	-.86	-1866.5	741.4
2102	300	.68	-1313.0	1486.9	2143	10	.83	-1002.0	1811.9	2910	40	.61	-1252.5	1316.4
2103	290	.79	-1488.9	1703.7	2144	350	.74	-947.1	1603.6	2911	50	.77	-1109.9	1673.8
2104	300	1.04	-1435.2	2251.6	2145	350	.69	-997.5	1506.5	2912	0	.70	-1264.3	1514.0
2105	310	1.07	-1081.7	2322.6	2146	0	.65	-911.6	1404.0	2913	330	.75	-1154.0	1629.6
2106	310	1.27	-1106.4	2763.3	2147	340	.73	-1018.8	1587.2	2914	320	.68	-1281.9	1469.7
2107	320	.96	-1112.2	2084.2	2148	330	.82	-1006.3	1769.6	2915	330	.52	-1104.4	1135.2
2108	300	.90	-1640.4	1960.1	2149	340	.81	-1006.5	1767.5	2916	350	.62	-1099.9	1356.1
2109	340	.98	-1005.5	2126.0	2201	40	.74	-1036.4	1605.9	2917	50	.67	-1381.3	1443.3
2110	340	1.02	-1199.8	2214.0	2202	30	1.04	-1099.9	2265.0	2918	50	.72	-1103.3	1570.4
2111	340	.94	-1269.7	2044.9	2203	40	.82	-1032.3	1771.0	2919	50	.77	-1146.8	1669.6
2112	320	.98	-1167.0	2123.8	2204	50	.73	-959.9	1593.2	2920	30	.76	-1336.8	1652.6
2113	20	.90	-1295.3	1949.8	2205	0	.96	-904.4	2092.9	2921	10	.76	-1228.8	1646.6
2114	330	.76	-1163.6	1650.8	2206	340	.80	-1138.8	1730.2	2922	50	.73	-1199.9	1576.8
2115	290	-1.00	-2159.9	2019.2	2207	0	-1.28	-2782.8	1585.2	2923	0	.84	-963.3	1825.9
2116	350	.86	-1514.6	1869.9	2208	350	-1.54	-3350.1	1501.1	2924	340	.84	-1121.1	1816.7
2117	330	-1.86	-1577.6	1909.9	2209	10	-2.52	-5465.3	1591.1	2925	330	.74	-1352.2	1608.0
2118	30	.86	-1404.4	1665.9	2210	350	-1.64	-3567.9	1417.0	2926	20	.79	-980.3	1708.0
2119	10	.88	-1273.4	1820.0	2211	340	-1.14	-2479.4	1303.8	2927	310	1.05	-1123.3	2285.4
2120	350	.86	-1151.4	1872.6	2212	350	-1.33	-2879.7	1596.5	2928	350	.73	-1289.9	1574.1
2121	310	.78	-1227.0	1685.9	2213	10	-1.46	-3158.9	1799.2	2929	40	.74	-1116.4	1601.6
2122	330	.84	-995.5	1823.1	2214	350	-1.20	-2609.6	1767.1	2930	60	1.02	-1171.1	2211.1
2123	330	1.10	-1029.5	2382.9	2215	0	-1.14	-2463.6	1654.3	2931	40	.81	-924.3	1762.5
2124	340	.90	-1114.6	1955.9	2216	0	-1.16	-2507.9	1317.4	2932	0	.78	-924.3	1686.9
2125	0	.89	-1544.4	1940.0	2217	0	-1.02	-2205.5	1363.8	2933	0	.74	-1060.0	1605.1
2126	10	.81	-981.9	1755.0	2218	20	-1.04	-2262.6	1320.1	2934	0	.70	-1019.9	1512.4
2127	320	.86	-1051.5	1864.9	2219	350	-.66	-1430.0	1300.0	2935	330	.67	-973.3	1450.4
2128	340	.84	-959.9	1823.1	2401	320	.94	-1431.4	2040.2	2936	350	.68	-1015.1	1465.1
2129	20	.80	-1002.2	1737.0	2402	340	.80	-1037.7	1741.7	2937	340	.85	-977.0	1846.8
2130	330	.81	-959.9	1760.0	2403	320	.82	-1006.6	1781.1	2938	20	.80	-1045.0	1731.9
2131	350	.76	-1124.4	1641.6	2404	340	.89	-1664.3	1931.6	2939	310	.89	-1079.9	1925.5
2132	340	.90	-1128.8	1944.8	2405	350	.84	-1223.2	1830.3	2940	340	.88	-1091.1	1912.9
2133	320	.98	-1231.1	2125.5	2406	330	.83	-958.8	1800.3	2941	340	.87	-1087.7	1697.8
2134	330	-1.88	-1906.6	1638.8	2901	0	.81	-1762.6	1425.5	2942	20	.75	-974.0	1624.2
2135	340	.70	-1070.6	1509.9	2902	310	.66	-1443.3	1991.2	2943	0	.66	-1162.2	1441.6
2136	290	.73	-1000.0	1585.5	2903	150	.84	-1687.6	1830.0	2944	10	.75	-1119.0	1621.7
2137	310	.74	-1020.2	1595.4	2904	0	.81	-1754.4	866.5	2945	70	-.75	-1633.8	1508.7
2138	30	.76	-1011.3	1653.3	2905	20	-.72	-1564.3	832.7	2946	30	.73	-1149.9	1575.3
2139	0	.75	-995.5	1634.5	2906	350	-.77	-1674.0	908.2	2947	340	.72	-1026.8	1569.1
2140	350	.82	-914.4	1773.3	2907	320	.71	-1166.7	1541.1	2948	340	.79	-1033.5	1718.7
2141	10	-.77	-1686.0	1629.3	2908	290	.66	-1097.6	1425.6					

TABLE 6A. PEAK LOADS FOR CONFIGURATION C : TAIKOO SHING CITYPLAZA, HONG KONG (MODIFIED MODEL)
 LARGEST VALUES OF CLADDING LOAD REFERENCE PRESSURE = 2170 PA

* * 15 GREATEST PRESSURE MAGNITUDES * *

TAP	AZI- MUTH	PRESS COEFF	NEGATIVE PEAK ----- PA	POSITIVE PEAK -----
2209	10	-2.52	-5465.3	1591.1
2210	350	-1.64	-3567.9	1417.0
2208	350	-1.54	-3350.1	1501.1
2213	10	-1.46	-3158.9	1790.2
2212	350	-1.33	-2879.7	1596.5
2207	0	-1.28	-2782.8	1585.2
2106	310	1.27	-1106.4	2763.9
2214	350	-1.20	-2609.6	1767.1
2216	0	-1.16	-2507.9	1317.4
2211	340	-1.14	-2475.4	1303.8
2215	0	-1.14	-2463.0	1654.3
2123	330	1.10	-1029.5	2382.1
2105	310	1.07	-1081.7	2326.1
2927	310	1.05	-1125.2	2285.4
2202	30	1.04	-1099.9	2265.0

TABLE 6A. PEAK LOADS FOR CONFIGURATION D :
LARGEST VALUES OF CLADDING LOAD

TAIKOO SHING CITYPLAZA, HONG KONG (MODIFIED MODEL)
REFERENCE PRESSURE = 2170 PA

TAP	AZI- MUTH	PRESS COEFF	NEGATIVE PEAK ----- PA	POSITIVE PEAK -----	TAP	AZI- MUTH	PRESS COEFF	NEGATIVE PEAK ----- PA	POSITIVE PEAK -----	TAP	AZI- MUTH	PRESS COEFF	NEGATIVE PEAK ----- PA	POSITIVE PEAK -----
2207	4	-1.67	-3618.6	1473.8	2210	4	-1.72	-3732.4	897.4	2214	354	-1.26	-2734.3	726.2
2208	354	-1.76	-3812.4	1060.8	2212	4	-1.59	-3444.3	755.0	2215	2	-1.37	-2963.8	790.6
2209	4	-2.50	-5435.4	917.3	2213	358	-2.06	-4473.1	834.9					

TABLE 6A. PEAK LOADS FOR CONFIGURATION D :
LARGEST VALUES OF CLADDING LOAD

TAIKOO SHING CITYPLAZA, HONG KONG (MODIFIED MODEL)
REFERENCE PRESSURE = 2170 PA

* * 8 GREATEST PRESSURE MAGNITUDES * *

TAP	AZI- MUTH	PRESS COEFF	NEGATIVE PEAK ----- PA	POSITIVE PEAK -----
2209	4	-2.50	-5435.4	917.3
2213	358	-2.06	-4473.1	834.9
2208	354	-1.76	-3812.4	1060.8
2210	4	-1.72	-3732.4	897.4
2207	4	-1.67	-3618.6	1473.8
2212	4	-1.59	-3444.3	755.0
2215	2	-1.37	-2963.8	790.6
2214	354	-1.26	-2734.3	726.2

TABLE 6B. COMPARISON OF CONFIGURATIONS C AND D : TAIKOO SHING CITYPLAZA, HONG KONG (MODIFIED MODEL)
TAPS WHERE NEGATIVE PEAK LOAD FOR CONFIG. D EXCEEDED THAT FOR CONFIG. C BY 200 PA
REF. PRESSURE = 2170 PA

TAP	AZIMUTH	C CONFIG. PA LOAD	AZIMUTH	D CONFIG.. PA LOAD
2207	0	-2782.8	4	-3618.6
2208	350	-3350.1	354	-3812.4
2212	350	-2879.7	4	-3444.3
2213	10	-3158.9	358	-4473.1
2215	0	-2463.0	2	-2963.8

APPENDIX A

APPENDIX A -- PRESSURE DATA ; CONFIGURATION C : TAIKOO SHING CITYPLAZA, HONG KONG (MODIFIED MODEL)

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
0	2101	110	136	428	536	0	2202	239	122	647	202	0	2927	280	130	716	153
0	2102	137	124	384	594	0	2203	238	113	666	189	0	2928	257	102	691	156
0	2103	80	122	333	521	0	2204	285	100	644	111	0	2929	251	107	627	127
0	2104	88	121	366	601	0	2205	318	115	364	11	0	2930	203	154	699	267
0	2105	200	180	941	189	0	2206	297	106	673	229	0	2931	327	96	640	048
0	2106	197	132	666	173	0	2207	279	197	338	282	0	2932	324	113	777	049
0	2107	143	139	752	204	0	2208	255	202	351	370	0	2933	267	133	740	073
0	2108	343	120	637	192	0	2209	228	198	408	911	0	2934	287	105	697	001
0	2109	345	131	752	027	0	2210	200	159	288	342	0	2935	2861	99	657	048
0	2110	292	127	887	008	0	2211	189	101	159	749	0	2936	223	129	607	274
0	2111	249	126	796	044	0	2212	207	125	221	320	0	2937	306	112	686	157
0	2112	232	101	628	206	0	2213	241	173	185	453	0	2938	329	117	776	004
0	2113	241	104	593	085	0	2214	200	139	180	188	0	2939	339	118	824	082
0	2114	253	106	609	071	0	2215	199	143	206	135	0	2940	344	133	835	164
0	2115	310	114	663	214	0	2216	252	149	203	156	0	2941	299	115	667	091
0	2116	269	114	749	035	0	2217	188	125	180	16	0	2942	308	105	694	074
0	2117	343	113	711	052	0	2218	202	114	159	639	0	2943	281	108	664	328
0	2118	342	107	857	015	0	2219	203	099	115	541	0	2944	260	103	603	125
0	2119	301	133	813	235	0	2401	278	122	745	89	0	2945	260	114	636	042
0	2120	303	123	796	206	0	2402	270	110	649	75	0	2946	241	114	596	340
0	2121	327	120	776	035	0	2403	291	126	718	140	0	2947	294	102	712	004
0	2122	327	112	653	092	0	2404	291	108	682	058	0	2948	319	103	664	066
0	2123	327	126	785	083	0	2405	310	103	697	049	10	2101	159	122	298	639
0	2124	333	127	741	137	0	2406	322	110	731	006	10	2102	173	110	183	605
0	2125	340	132	894	101	0	2901	234	103	060	812	10	2103	124	130	304	561
0	2126	333	118	785	002	0	2902	267	102	105	663	10	2104	154	123	248	639
0	2127	333	114	709	002	0	2903	268	101	074	63	10	2105	213	121	703	208
0	2128	337	116	658	095	0	2904	282	116	150	809	10	2106	166	121	636	183
0	2129	307	111	721	046	0	2905	295	113	070	717	10	2107	173	130	620	279
0	2130	309	105	678	034	0	2906	290	120	056	705	10	2108	138	122	602	255
0	2131	332	116	742	047	0	2907	139	109	517	221	10	2109	322	131	811	065
0	2132	339	110	754	005	0	2908	012	115	421	378	10	2110	263	121	676	089
0	2133	333	126	837	055	0	2909	064	119	316	729	10	2111	245	109	751	110
0	2134	333	131	837	055	0	2910	000	102	322	316	10	2112	208	115	627	119
0	2135	254	131	626	392	0	2911	130	100	480	212	10	2113	233	107	850	076
0	2136	268	106	675	104	0	2912	263	101	698	055	10	2114	221	112	553	115
0	2137	284	105	706	069	0	2913	191	131	689	230	10	2115	244	113	623	096
0	2138	282	112	665	084	0	2914	101	118	520	224	10	2116	301	111	849	001
0	2139	287	105	753	008	0	2915	107	110	457	219	10	2117	253	110	635	089
0	2140	300	105	665	222	0	2916	099	116	521	342	10	2118	342	117	748	071
0	2141	293	118	692	186	0	2917	160	108	544	206	10	2119	320	125	885	032
0	2142	254	147	756	614	0	2918	244	107	678	161	10	2120	288	107	713	059
0	2143	226	098	676	097	0	2919	267	107	638	161	10	2121	241	113	706	150
0	2144	092	092	601	000	0	2920	290	113	637	103	10	2122	275	115	675	031
0	2145	090	090	570	013	0	2921	288	102	684	055	10	2123	292	113	672	121
0	2146	097	097	647	070	0	2922	234	104	575	177	10	2124	307	114	670	280
0	2147	086	101	704	016	0	2923	297	119	841	030	10	2125	331	128	792	093
0	2148	098	098	699	024	0	2924	272	108	653	053	10	2126	322	128	800	093
0	2149	107	107	658	139	0	2925	281	101	699	078	10	2127	298	101	673	035
0	2201	339	105	576	080	0	2926	225	108	558	161	10	2128	280	108	713	030

APPENDIX A -- PRESSURE DATA : CONFIGURATION C : TAIKOO SHING CITYPLAZA, HONG KONG (MODIFIED MODEL)

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
10	2129	.286	.110	.747	-.014	10	2905	-.271	.103	.039	-.630	20	2107	.106	.107	.459	-.307
10	2130	.291	.106	.729	-.018	10	2906	-.259	.108	.069	-.627	20	2108	.114	.118	.608	-.235
10	2131	.282	.108	.624	-.129	10	2907	-.125	.102	.497	-.225	20	2109	.262	.123	.722	-.140
10	2132	.324	.115	.815	-.012	10	2908	.001	.107	.347	-.393	20	2110	.235	.104	.581	-.051
10	2133	.323	.106	.670	-.054	10	2909	-.051	.097	.247	-.430	20	2111	.202	.108	.570	-.145
10	2134	.234	.132	.674	-.242	10	2910	.005	.105	.373	-.448	20	2112	.164	.112	.511	-.220
10	2135	.265	.099	.637	-.104	10	2911	.120	.108	.622	-.172	20	2113	.241	.123	.899	-.137
10	2136	.269	.103	.687	-.159	10	2912	.228	.103	.549	-.115	20	2114	.202	.115	.544	-.190
10	2137	.281	.104	.707	-.064	10	2913	.133	.116	.489	-.312	20	2115	.226	.110	.672	-.126
10	2138	.289	.111	.665	-.237	10	2914	.100	.119	.656	-.241	20	2116	.282	.114	.786	-.068
10	2139	.277	.105	.748	-.070	10	2915	.110	.102	.780	-.300	20	2117	.272	.115	.695	-.146
10	2140	.276	.106	.616	-.141	10	2916	.101	.123	.493	-.279	20	2118	.303	.110	.688	-.022
10	2141	.256	.124	.655	-.774	10	2917	.168	.106	.536	-.221	20	2119	.286	.114	.725	-.067
10	2142	.208	.150	.596	-.562	10	2918	.253	.101	.586	-.082	20	2120	.260	.114	.712	-.075
10	2143	.252	.111	.835	-.128	10	2919	.248	.105	.634	-.096	20	2121	.220	.115	.632	-.209
10	2144	.267	.095	.605	-.013	10	2920	.302	.117	.687	-.111	20	2122	.284	.109	.662	-.078
10	2145	.264	.105	.614	-.095	10	2921	.279	.108	.759	-.047	20	2123	.289	.129	.697	-.124
10	2146	.263	.100	.577	-.037	10	2922	.266	.108	.641	-.135	20	2124	.286	.125	.757	-.294
10	2147	.282	.097	.627	-.035	10	2923	.231	.114	.581	-.161	20	2125	.313	.129	.817	-.123
10	2148	.275	.099	.586	-.036	10	2924	.253	.100	.660	-.086	20	2126	.325	.119	.753	-.116
10	2149	.247	.109	.659	-.064	10	2925	.267	.103	.620	-.040	20	2127	.297	.108	.751	-.063
10	2201	.264	.106	.660	-.066	10	2926	.253	.107	.673	-.059	20	2128	.286	.106	.641	-.031
10	2202	.276	.126	.671	-.201	10	2927	.216	.141	.623	-.368	20	2129	.283	.110	.890	-.073
10	2203	.251	.118	.754	-.142	10	2928	.216	.107	.551	-.107	20	2130	.277	.104	.642	-.025
10	2204	.300	.114	.726	-.069	10	2929	.256	.105	.619	-.044	20	2131	.266	.111	.626	-.123
10	2205	.293	.106	.828	-.051	10	2930	.239	.154	.719	-.429	20	2132	.300	.111	.757	-.006
10	2206	.278	.102	.633	-.076	10	2931	.325	.105	.791	-.016	20	2133	.300	.108	.737	-.002
10	2207	.224	.200	.411	-1.133	10	2932	.303	.112	.748	-.010	20	2134	.265	.119	.653	-.277
10	2208	.207	.184	.408	-1.250	10	2933	.228	.108	.590	-.166	20	2135	.260	.104	.589	-.129
10	2209	.194	.210	.463	-2.319	10	2934	.249	.097	.599	-.130	20	2136	.264	.099	.699	-.113
10	2210	.162	.151	.263	-1.000	10	2935	.264	.101	.588	-.010	20	2137	.282	.099	.687	-.079
10	2211	.164	.103	.184	-.620	10	2936	.237	.116	.609	-.251	20	2138	.285	.099	.612	-.133
10	2212	.168	.123	.222	-.831	10	2937	.287	.102	.683	-.002	20	2139	.266	.102	.596	-.035
10	2213	.221	.190	.222	-1.456	10	2938	.311	.114	.711	-.032	20	2140	.273	.105	.585	-.240
10	2214	.181	.146	.352	-.894	10	2939	.305	.127	.752	-.131	20	2141	.236	.120	.644	-.375
10	2215	.167	.138	.217	-.880	10	2940	.306	.105	.677	-.116	20	2142	.173	.143	.715	-.540
10	2216	.198	.150	.284	-.978	10	2941	.280	.109	.695	-.005	20	2143	.237	.104	.560	-.329
10	2217	.158	.128	.302	-.788	10	2942	.281	.106	.709	-.001	20	2144	.272	.104	.673	-.068
10	2218	.168	.112	.207	-.848	10	2943	.246	.108	.540	-.172	20	2145	.249	.107	.534	-.138
10	2219	.157	.095	.139	-.556	10	2944	.244	.105	.747	-.065	20	2146	.250	.093	.564	-.120
10	2401	.231	.110	.593	-.104	10	2945	.268	.106	.668	-.197	20	2147	.264	.099	.560	-.063
10	2402	.246	.112	.671	-.115	10	2946	.248	.114	.593	-.363	20	2148	.239	.103	.603	-.119
10	2403	.237	.103	.575	-.111	10	2947	.291	.095	.626	-.002	20	2149	.204	.103	.593	-.185
10	2404	.269	.108	.654	-.050	10	2948	.301	.109	.722	-.080	20	2201	.253	.110	.680	-.080
10	2405	.277	.105	.700	-.080	20	2101	-.140	.110	.386	-.460	20	2202	.270	.121	.786	-.083
10	2406	.299	.110	.766	-.020	20	2102	-.152	.097	.178	-.476	20	2203	.275	.122	.733	-.075
10	2901	.220	.104	.114	-.590	20	2103	-.127	.110	.247	-.473	20	2204	.281	.114	.700	-.107
10	2902	.244	.092	.100	-.549	20	2104	-.175	.111	.241	-.519	20	2205	.301	.099	.703	-.002
10	2903	.238	.097	.049	-.623	20	2105	.167	.109	.556	-.169	20	2206	.269	.098	.658	-.050
10	2904	.251	.109	.086	-.781	20	2106	.121	.113	.683	-.241	20	2207	.112	.171	.364	-1.064

APPENDIX A -- PRESSURE DATA : CONFIGURATION C : TAIKOO SHING CITYPLAZA, HONG KONG (MODIFIED MODEL)

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
20	2208	156	171	435	-1.200	20	2933	170	116	589	-2.46	30	2135	265	108	428	-0.27
20	2209	145	174	329	-2.217	20	2934	245	106	618	-0.81	30	2136	255	105	646	-0.75
20	2210	133	133	369	-7.59	20	2935	261	096	591	-0.62	30	2137	251	098	601	-1.10
20	2211	133	110	230	-6.98	20	2936	254	111	604	-1.19	30	2138	242	112	637	-2.01
20	2212	119	118	296	-5.97	20	2937	270	108	616	-0.96	30	2139	245	106	711	-0.55
20	2213	148	155	506	-1.200	20	2938	301	116	798	-0.82	30	2140	218	103	630	-1.73
20	2214	129	133	296	-9.10	20	2939	298	115	666	-1.39	30	2141	186	119	560	-2.61
20	2215	132	129	328	-8.27	20	2940	324	120	764	-0.77	30	2142	092	143	496	-4.63
20	2216	121	137	328	-8.16	20	2941	277	108	673	-0.27	30	2143	230	106	585	-1.52
20	2217	125	116	169	-7.62	20	2942	277	107	743	-0.75	30	2144	255	083	557	-0.02
20	2218	128	128	197	-1.043	20	2943	222	116	593	-3.88	30	2145	238	092	556	-0.87
20	2219	111	113	209	-4.97	20	2944	227	104	623	-1.40	30	2146	234	089	663	-0.63
20	2401	188	116	649	-2.79	20	2945	237	098	609	-0.90	30	2147	235	100	665	-0.96
20	2402	212	112	558	-1.94	20	2946	237	096	613	-0.85	30	2148	232	107	539	-1.42
20	2403	204	122	662	-2.06	20	2947	263	094	575	-0.18	30	2149	171	097	534	-1.85
20	2404	263	098	639	-1.12	20	2948	278	100	692	-0.59	30	2201	271	109	698	-0.95
20	2405	289	108	651	-0.51	20	2101	082	115	355	-4.31	30	2202	281	128	644	-1.90
20	2406	283	103	652	-0.08	30	2102	095	102	246	-4.27	30	2203	284	121	787	-0.78
20	2901	213	101	147	-6.14	30	2103	086	108	258	-4.74	30	2204	263	108	727	-1.00
20	2902	240	096	152	-5.58	30	2104	129	106	270	-5.26	30	2205	294	121	685	-0.25
20	2903	245	106	119	-6.44	30	2105	135	112	547	-1.55	30	2206	264	109	682	-1.23
20	2904	268	114	111	-6.92	30	2106	114	096	466	-1.91	30	2207	006	134	417	-6.56
20	2905	277	112	054	-7.21	30	2107	097	110	554	-3.59	30	2208	042	140	414	-6.92
20	2906	249	126	115	-6.75	30	2108	101	109	471	-2.39	30	2209	103	148	335	-2.36
20	2907	103	102	551	-2.67	30	2109	203	105	613	-2.07	30	2210	100	121	289	-6.06
20	2908	001	101	327	-3.66	30	2110	183	110	589	-1.17	30	2211	110	098	241	-4.96
20	2909	080	119	263	-6.65	30	2111	161	110	543	-2.33	30	2212	105	124	574	-6.24
20	2910	011	109	427	-3.92	30	2112	143	104	477	-1.76	30	2213	066	150	513	-8.72
20	2911	145	113	587	-2.31	30	2113	240	105	638	-0.95	30	2214	085	129	447	-7.46
20	2912	205	102	555	-0.99	30	2114	215	103	576	-1.30	30	2215	109	130	260	-7.37
20	2913	129	114	539	-3.39	30	2115	213	102	634	-1.20	30	2216	003	134	447	-5.53
20	2914	094	116	583	-3.00	30	2116	269	116	707	-1.04	30	2217	077	114	299	-5.57
20	2915	096	097	410	-1.91	30	2117	249	116	653	-1.21	30	2218	110	111	208	-6.18
20	2916	091	114	586	-2.23	30	2118	312	112	860	-0.65	30	2219	112	109	266	-5.47
20	2917	177	105	525	-2.34	30	2119	294	108	663	-1.46	30	2401	172	111	501	-1.69
20	2918	252	098	550	-0.89	30	2120	262	113	682	-0.82	30	2402	185	110	507	-1.64
20	2919	202	101	619	-1.43	30	2121	204	107	579	-1.03	30	2403	166	101	476	-1.90
20	2920	268	105	692	-1.14	30	2122	271	117	720	-1.83	30	2404	254	112	759	-0.81
20	2921	273	111	724	-0.41	30	2123	276	135	758	-3.09	30	2405	250	101	603	-0.36
20	2922	268	110	607	-1.24	30	2124	271	130	794	-1.86	30	2406	261	103	701	-0.19
20	2923	213	101	553	-0.56	30	2125	273	122	732	-2.29	30	2901	213	104	113	-6.87
20	2924	234	099	553	-0.74	30	2126	308	125	747	-1.21	30	2902	231	099	052	-5.47
20	2925	253	099	568	-1.11	30	2127	313	112	844	-0.29	30	2903	224	104	185	-5.51
20	2926	284	119	787	-1.51	30	2128	271	115	803	-0.42	30	2904	276	113	126	-6.75
20	2927	122	146	531	-3.55	30	2129	289	114	765	-0.20	30	2905	257	110	067	-6.99
20	2928	179	102	523	-1.77	30	2130	259	104	665	-0.25	30	2906	198	121	213	-6.22
20	2929	265	113	642	-0.80	30	2131	261	108	615	-1.02	30	2907	098	105	475	-2.01
20	2930	320	140	783	-2.01	30	2132	290	126	808	-0.74	30	2908	003	109	291	-3.31
20	2931	296	103	681	-0.02	30	2133	298	112	682	-0.38	30	2909	062	124	290	-6.52
20	2932	278	111	715	-0.53	30	2134	277	115	764	-0.54	30	2910	034	126	603	-4.61

APPENDIX A -- PRESSURE DATA ;

CONFIGURATION C : TAIKOO SHING CITYPLAZA, HONG KONG (MODIFIED MODEL)

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
30	2911	167	126	711	-193	40	2113	243	125	752	-108	40	2214	-000	107	316	-446
30	2912	186	104	503	-177	40	2114	213	112	679	-145	40	2215	-012	115	388	-514
30	2913	133	117	565	-351	40	2115	234	129	930	-158	40	2216	-056	112	588	-291
30	2914	117	120	561	-239	40	2116	272	113	746	-098	40	2217	-002	115	408	-439
30	2915	100	100	407	-241	40	2117	247	111	676	-108	40	2218	-033	108	269	-645
30	2916	089	133	559	-299	40	2118	272	116	854	-076	40	2219	-071	113	309	-441
30	2917	182	121	663	-245	40	2119	255	109	709	-280	40	2401	-155	102	432	-208
30	2918	247	108	628	-067	40	2120	227	127	707	-474	40	2402	-183	102	555	-153
30	2919	191	094	507	-116	40	2121	187	114	586	-225	40	2403	-150	102	516	-140
30	2920	244	118	762	-203	40	2122	261	124	662	-187	40	2404	-218	106	642	-187
30	2921	256	107	726	-056	40	2123	244	115	653	-182	40	2405	-230	103	634	-060
30	2922	254	108	666	-078	40	2124	225	126	757	-124	40	2406	-235	104	653	-147
30	2923	160	112	498	-249	40	2125	249	129	824	-280	40	2901	-180	095	176	-562
30	2924	208	110	536	-173	40	2126	281	123	784	-056	40	2902	-193	103	095	-605
30	2925	251	104	581	-081	40	2127	283	120	726	-108	40	2903	-195	104	299	-603
30	2926	280	100	599	-033	40	2128	243	113	611	-146	40	2904	-237	118	089	-586
30	2927	083	129	483	-342	40	2129	253	117	676	-187	40	2905	-223	104	099	-586
30	2928	152	093	483	-199	40	2130	229	105	614	-149	40	2906	-170	114	268	-555
30	2929	261	111	708	-101	40	2131	265	117	691	-136	40	2907	-095	101	440	-246
30	2930	311	139	756	-156	40	2132	256	118	708	-157	40	2908	-007	099	322	-356
30	2931	312	103	706	-020	40	2133	268	124	780	-107	40	2909	-072	126	312	-700
30	2932	289	106	731	-092	40	2134	249	128	686	-221	40	2910	-049	135	607	-484
30	2933	146	117	648	-375	40	2135	244	113	617	-086	40	2911	-184	128	673	-189
30	2934	236	099	552	-087	40	2136	234	108	628	-171	40	2912	-159	101	488	-188
30	2935	250	099	615	-027	40	2137	226	099	655	-118	40	2913	-138	111	590	-273
30	2936	256	113	659	-159	40	2138	220	100	547	-164	40	2914	-106	113	618	-227
30	2937	259	117	766	-069	40	2139	224	108	591	-177	40	2915	-089	107	450	-350
30	2938	278	113	630	-091	40	2140	209	099	514	-124	40	2916	-139	121	579	-359
30	2939	264	121	662	-124	40	2141	173	122	595	-279	40	2917	-216	114	664	-134
30	2940	282	115	689	-059	40	2142	019	148	483	-684	40	2918	-259	105	593	-055
30	2941	276	115	750	-141	40	2143	231	106	619	-147	40	2919	-182	091	498	-104
30	2942	280	110	708	-024	40	2144	236	108	668	-104	40	2920	-238	105	652	-125
30	2943	162	132	544	-486	40	2145	227	096	568	-074	40	2921	-272	112	643	-064
30	2944	218	105	563	-100	40	2146	228	106	627	-103	40	2922	-275	109	636	-042
30	2945	238	101	599	-054	40	2147	221	096	600	-054	40	2923	-166	104	517	-164
30	2946	238	108	726	-093	40	2148	209	100	509	-143	40	2924	-224	100	628	-073
30	2947	232	099	612	-043	40	2149	140	098	499	-184	40	2925	-244	098	563	-112
30	2948	254	114	669	-239	40	2201	277	112	740	-162	40	2926	-283	121	726	-079
40	21101	005	105	311	-379	40	2202	266	119	707	-124	40	2927	-093	117	559	-340
40	21102	009	097	301	-310	40	2203	307	126	816	-052	40	2928	-155	106	519	-178
40	21103	019	107	311	-433	40	2204	252	113	675	-229	40	2929	-279	110	738	-045
40	21104	058	109	334	-407	40	2205	275	124	706	-075	40	2930	-325	133	980	-055
40	21105	110	094	481	-194	40	2206	241	108	771	-082	40	2931	-282	110	812	-067
40	21106	107	091	469	-234	40	2207	031	115	731	-343	40	2932	-269	105	677	-024
40	21107	101	094	418	-229	40	2208	005	137	622	-602	40	2933	-141	110	470	-296
40	21108	106	112	527	-277	40	2209	023	125	558	-109	40	2934	-219	105	619	-092
40	21109	181	099	562	-113	40	2210	029	120	320	-658	40	2935	-243	110	584	-103
40	21110	177	101	477	-134	40	2211	039	095	240	-411	40	2936	-239	101	622	-122
40	21111	157	094	466	-163	40	2212	068	110	283	-452	40	2937	-234	112	658	-138
40	21112	118	095	420	-208	40	2213	014	125	415	-613	40	2938	-274	111	719	-061

APPENDIX A -- PRESSURE DATA ; CONFIGURATION C : TAIKOO SHING CITYPLAZA, HONG KONG (MODIFIED MODEL)

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
40	2939	252	119	657	143	50	2141	154	115	585	232	50	2917	203	120	665	223
40	2940	275	116	671	138	50	2142	009	135	423	453	50	2918	245	112	724	129
40	2941	244	116	614	177	50	2143	158	117	580	183	50	2919	150	086	413	112
40	2942	246	114	618	238	50	2144	188	099	506	134	50	2920	196	119	632	208
40	2943	158	112	550	334	50	2145	196	098	522	179	50	2921	221	114	636	176
40	2944	195	101	533	117	50	2146	205	090	513	064	50	2922	250	116	727	167
40	2945	213	101	565	135	50	2147	207	097	529	068	50	2923	123	097	439	242
40	2946	230	106	578	162	50	2148	188	091	487	156	50	2924	182	106	550	233
40	2947	217	094	554	086	50	2149	126	097	471	201	50	2925	217	116	639	144
40	2948	232	103	590	120	50	2201	257	105	655	045	50	2926	266	113	687	097
50	2101	026	102	421	343	50	2202	248	128	697	219	50	2927	081	101	433	327
50	2102	022	098	351	288	50	2203	255	119	720	205	50	2928	109	093	486	306
50	2103	013	099	342	312	50	2204	178	127	734	375	50	2929	273	114	670	067
50	2104	023	106	340	338	50	2205	170	115	697	266	50	2930	318	129	849	268
50	2105	066	106	399	257	50	2206	143	121	550	292	50	2931	138	113	623	249
50	2106	073	091	378	213	50	2207	039	125	542	387	50	2932	180	125	677	267
50	2107	068	102	417	299	50	2208	036	129	630	348	50	2933	146	113	548	366
50	2108	071	108	402	292	50	2209	019	110	427	367	50	2934	185	100	586	099
50	2109	105	107	485	248	50	2210	020	096	389	304	50	2935	209	107	583	131
50	2110	102	100	432	233	50	2211	017	082	281	215	50	2936	232	099	591	156
50	2111	112	099	435	267	50	2212	003	094	344	362	50	2937	226	110	638	112
50	21112	108	106	470	248	50	2213	089	123	566	443	50	2938	254	109	671	141
50	21113	182	118	675	267	50	2214	068	121	564	298	50	2939	139	109	509	199
50	21114	167	110	641	253	50	2215	054	113	448	330	50	2940	243	116	664	080
50	21115	175	110	677	142	50	2216	088	107	484	268	50	2941	116	110	446	211
50	21116	245	120	862	092	50	2217	077	107	502	252	50	2942	148	130	626	356
50	21117	218	109	774	322	50	2218	045	102	372	363	50	2943	118	109	471	509
50	21118	135	109	496	212	50	2219	017	100	343	342	50	2944	165	122	614	348
50	21119	132	120	677	196	50	2401	111	102	486	255	50	2945	196	115	539	328
50	2120	139	129	579	354	50	2402	159	088	543	176	50	2946	212	106	526	177
50	2121	130	109	503	238	50	2403	125	105	456	208	50	2947	218	103	702	104
50	2122	240	121	671	169	50	2404	208	107	559	099	50	2948	231	104	642	157
50	2123	240	124	635	313	50	2405	228	108	641	135	60	2101	019	107	376	446
50	2124	222	132	712	196	50	2406	231	096	524	072	60	2102	027	095	344	297
50	2125	230	126	767	232	50	2901	125	102	168	435	60	2103	024	108	445	461
50	2126	151	115	528	195	50	2902	153	101	244	492	60	2104	014	104	374	376
50	2127	126	115	521	218	50	2903	152	093	231	464	60	2105	029	101	389	379
50	2128	125	118	475	296	50	2904	137	102	213	520	60	2106	034	093	369	289
50	2129	166	126	629	300	50	2905	187	103	145	647	60	2107	041	095	346	289
50	2130	229	099	538	067	50	2906	170	101	136	532	60	2108	038	098	379	289
50	2131	238	108	568	091	50	2907	084	096	500	264	60	2109	037	094	326	285
50	2132	269	109	639	067	50	2908	006	098	363	506	60	2110	051	094	394	227
50	2133	276	120	676	121	50	2909	143	146	284	679	60	2111	055	101	446	351
50	2134	148	119	661	176	50	2910	143	137	538	502	60	2112	064	089	332	209
50	2135	169	123	666	331	50	2911	170	127	771	244	60	2113	087	108	520	245
50	2136	181	095	648	180	50	2912	102	097	409	248	60	2114	096	106	464	258
50	2137	203	093	533	156	50	2913	066	105	511	244	60	2115	090	105	445	208
50	2138	199	106	540	148	50	2914	058	101	421	293	60	2116	152	105	602	299
50	2139	206	112	595	230	50	2915	023	120	388	423	60	2117	136	137	624	366
50	2140	195	103	546	177	50	2916	096	136	496	397	60	2118	058	098	418	36

APPENDIX A -- PRESSURE DATA ; CONFIGURATION C : TAIKOO SHING CITYPLAZA, HONG KONG (MODIFIED MODEL)

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
60	2119	.052	.096	.417	-.300	60	2401	.070	.099	.395	-.243	60	2945	.109	.108	.481	-.262
60	2120	.054	.098	.351	-.256	60	2402	.079	.096	.401	-.229	60	2946	.158	.119	.549	-.272
60	2121	.055	.099	.452	-.302	60	2403	.076	.098	.413	-.402	60	2947	.186	.105	.549	-.131
60	2122	.175	.118	.578	-.244	60	2404	.169	.100	.628	-.178	60	2948	.209	.113	.601	-.118
60	2123	.211	.128	.655	-.254	60	2405	.179	.094	.499	-.192	70	2101	-.009	.100	.340	-.330
60	2124	.201	.129	.716	-.270	60	2406	.178	.097	.468	-.114	70	2102	.003	.103	.351	-.359
60	2125	.200	.141	.733	-.328	60	2901	-.093	.097	.258	-.428	70	2103	.006	.110	.399	-.358
60	2126	.048	.095	.329	-.245	60	2902	-.121	.099	.172	-.502	70	2104	.005	.093	.352	-.389
60	2127	.060	.098	.464	-.236	60	2903	-.115	.095	.165	-.442	70	2105	-.015	.096	.322	-.407
60	2128	.054	.095	.337	-.219	60	2904	-.085	.094	.238	-.415	70	2106	-.006	.099	.319	-.352
60	2129	.071	.094	.410	-.335	60	2905	-.137	.101	.197	-.578	70	2107	.004	.097	.362	-.288
60	2130	.172	.100	.486	-.120	60	2906	-.148	.101	.196	-.519	70	2108	.009	.093	.330	-.375
60	2131	.207	.119	.585	-.187	60	2907	-.056	.101	.433	-.284	70	2109	.011	.090	.325	-.254
60	2132	.250	.117	.673	-.159	60	2908	-.020	.103	.358	-.383	70	2110	.017	.087	.304	-.317
60	2133	.222	.110	.644	-.181	60	2909	-.124	.129	.245	-.681	70	2111	.025	.088	.325	-.337
60	2134	.066	.110	.502	-.318	60	2910	.030	.111	.592	-.315	70	2112	.034	.087	.323	-.290
60	2135	.090	.113	.407	-.329	60	2911	.105	.102	.599	-.236	70	2113	.037	.092	.409	-.427
60	2136	.107	.104	.600	-.285	60	2912	.046	.090	.327	-.298	70	2114	.032	.108	.375	-.367
60	2137	.124	.102	.521	-.170	60	2913	.032	.098	.341	-.352	70	2115	.044	.099	.492	-.252
60	2138	.148	.110	.540	-.287	60	2914	.014	.093	.364	-.380	70	2116	.082	.093	.399	-.288
60	2139	.159	.109	.534	-.226	60	2915	.013	.100	.318	-.323	70	2117	.057	.145	.466	-.247
60	2140	.163	.108	.507	-.270	60	2916	.051	.135	.558	-.506	70	2118	.025	.094	.331	-.241
60	2141	.128	.112	.440	-.253	60	2917	.138	.126	.484	-.283	70	2119	.026	.090	.295	-.352
60	2142	.037	.129	.466	-.508	60	2918	.177	.109	.607	-.148	70	2120	.026	.093	.384	-.335
60	2143	.086	.101	.479	-.274	60	2919	.080	.088	.394	-.196	70	2121	.031	.088	.334	-.283
60	2144	.115	.108	.610	-.239	60	2920	.119	.108	.558	-.185	70	2122	.101	.105	.549	-.313
60	2145	.132	.100	.468	-.156	60	2921	.150	.107	.613	-.157	70	2123	.106	.112	.612	-.274
60	2146	.148	.107	.497	-.157	60	2922	.170	.108	.506	-.415	70	2124	.124	.120	.677	-.240
60	2147	.159	.096	.516	-.146	60	2923	.086	.095	.438	-.211	70	2125	.134	.120	.582	-.12
60	2148	.154	.108	.535	-.170	60	2924	.104	.103	.424	-.315	70	2126	.025	.083	.293	-.247
60	2149	.120	.097	.465	-.153	60	2925	.139	.095	.453	-.176	70	2127	.027	.085	.374	-.355
60	2201	.168	.108	.561	-.298	60	2926	.172	.120	.634	-.189	70	2128	.035	.090	.325	-.308
60	2202	.168	.126	.736	-.233	60	2927	.045	.087	.390	-.248	70	2129	.035	.091	.365	-.305
60	2203	.173	.116	.603	-.167	60	2928	.046	.095	.399	-.252	70	2130	.115	.096	.467	-.203
60	2204	.064	.115	.542	-.425	60	2929	.191	.102	.521	-.151	70	2131	.123	.106	.467	-.243
60	2205	.082	.100	.560	-.224	60	2930	.242	.139	.019	-.207	70	2132	.141	.100	.499	-.162
60	2206	.058	.111	.507	-.491	60	2931	.058	.099	.411	-.246	70	2133	.154	.120	.708	-.217
60	2207	.098	.128	.729	-.276	60	2932	.083	.109	.496	-.333	70	2134	.031	.095	.329	-.259
60	2208	.123	.142	.654	-.241	60	2933	.074	.104	.384	-.293	70	2135	.040	.086	.404	-.210
60	2209	.073	.114	.530	-.582	60	2934	.104	.098	.430	-.217	70	2136	.052	.094	.388	-.254
60	2210	.072	.115	.490	-.294	60	2935	.132	.101	.447	-.190	70	2137	.066	.101	.392	-.368
60	2211	.057	.087	.360	-.213	60	2936	.172	.110	.558	-.213	70	2138	.085	.098	.399	-.268
60	2212	.032	.106	.386	-.352	60	2937	.185	.100	.590	-.196	70	2139	.106	.097	.457	-.273
60	2213	.164	.140	.764	-.248	60	2938	.214	.121	.630	-.205	70	2140	.111	.095	.432	-.201
60	2214	.156	.133	.670	-.301	60	2939	.047	.092	.317	-.243	70	2141	.113	.097	.489	-.181
60	2215	.103	.118	.527	-.270	60	2940	.223	.125	.722	-.142	70	2142	.059	.092	.347	-.244
60	2216	.111	.115	.604	-.220	60	2941	.053	.090	.322	-.201	70	2143	.045	.086	.329	-.284
60	2217	.113	.110	.608	-.264	60	2942	.055	.096	.403	-.362	70	2144	.058	.093	.436	-.286
60	2218	.077	.099	.486	-.229	60	2943	.052	.102	.403	-.411	70	2145	.076	.098	.421	-.233
60	2219	.043	.094	.410	-.332	60	2944	.075	.116	.416	-.411	70	2146	.096	.100	.463	-.241

APPENDIX A -- PRESSURE DATA ; CONFIGURATION C : TAIKOO SHING CITYPLAZA, HONG KONG (MODIFIED MODEL)

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
70	2147	.111	.093	.404	-.195	70	2923	.049	.087	.309	-.225	80	2125	.073	.103	.526	-.269
70	2148	.111	.097	.439	-.293	70	2924	.047	.084	.317	-.235	80	2126	.004	.087	.289	-.303
70	2149	.100	.096	.414	-.184	70	2925	.068	.084	.350	-.258	80	2127	.004	.082	.273	-.259
70	2201	.079	.104	.399	-.357	70	2926	.087	.096	.459	-.400	80	2128	.013	.086	.284	-.285
70	2202	.079	.100	.424	-.359	70	2927	.020	.091	.274	-.292	80	2129	.019	.088	.314	-.250
70	2203	.087	.097	.459	-.271	70	2928	.020	.091	.293	-.278	80	2130	.058	.087	.379	-.246
70	2204	.035	.092	.340	-.308	70	2929	.123	.091	.416	-.198	80	2131	.067	.090	.326	-.300
70	2205	.040	.089	.325	-.242	70	2930	.168	.124	.660	-.348	80	2132	.074	.090	.408	-.300
70	2206	.028	.091	.321	-.447	70	2931	.030	.093	.334	-.261	80	2133	.081	.092	.352	-.232
70	2207	.074	.142	.685	-.290	70	2932	.040	.092	.369	-.261	80	2134	.068	.087	.310	-.316
70	2208	.111	.144	.610	-.302	70	2933	.033	.094	.372	-.316	80	2135	.017	.092	.317	-.224
70	2209	.057	.125	.556	-.333	70	2934	.054	.089	.373	-.233	80	2136	.025	.091	.361	-.461
70	2210	.044	.110	.469	-.312	70	2935	.069	.093	.392	-.287	80	2137	.037	.084	.312	-.206
70	2211	.041	.085	.489	-.210	70	2936	.085	.097	.509	-.300	80	2138	.048	.090	.310	-.271
70	2212	.021	.103	.385	-.429	70	2937	.110	.097	.487	-.184	80	2139	.057	.087	.353	-.243
70	2213	.137	.138	.825	-.254	70	2938	.128	.098	.505	-.295	80	2140	.063	.091	.371	-.235
70	2214	.130	.134	.654	-.228	70	2939	.023	.081	.284	-.251	80	2141	.068	.098	.398	-.239
70	2215	.094	.116	.563	-.259	70	2940	.146	.102	.655	-.173	80	2142	.042	.096	.371	-.436
70	2216	.086	.110	.607	-.272	70	2941	.026	.087	.303	-.302	80	2143	.018	.081	.270	-.280
70	2217	.117	.125	.628	-.302	70	2942	.027	.090	.373	-.297	80	2144	.028	.088	.436	-.266
70	2218	.066	.106	.473	-.232	70	2943	.023	.095	.314	-.293	80	2145	.038	.095	.331	-.280
70	2219	.023	.099	.417	-.308	70	2944	.030	.094	.328	-.349	80	2146	.049	.088	.434	-.247
70	2401	.042	.090	.321	-.353	70	2945	.052	.114	.499	-.755	80	2147	.057	.098	.394	-.330
70	2402	.046	.086	.321	-.256	70	2946	.086	.104	.423	-.274	80	2148	.069	.096	.452	-.259
70	2403	.046	.088	.401	-.304	70	2947	.106	.086	.411	-.153	80	2149	.060	.086	.364	-.271
70	2404	.101	.096	.440	-.242	70	2948	.129	.103	.484	-.345	80	2201	.050	.091	.427	-.248
70	2405	.104	.092	.401	-.210	80	2101	.032	.088	.284	-.332	80	2202	.040	.094	.307	-.322
70	2406	.118	.094	.476	-.210	80	2102	.024	.083	.266	-.317	80	2203	.044	.089	.309	-.272
70	2901	.069	.093	.206	-.369	80	2103	.015	.092	.272	-.420	80	2204	.030	.095	.418	-.334
70	2902	.082	.098	.266	-.464	80	2104	.005	.087	.356	-.457	80	2205	.031	.093	.344	-.247
70	2903	.072	.089	.283	-.361	80	2105	.034	.091	.355	-.307	80	2206	.021	.090	.300	-.346
70	2904	.059	.092	.233	-.432	80	2106	.025	.082	.222	-.377	80	2207	.034	.128	.614	-.290
70	2905	.082	.096	.240	-.482	80	2107	.014	.085	.299	-.356	80	2208	.032	.124	.692	-.313
70	2906	.053	.106	.265	-.383	80	2108	.009	.085	.317	-.319	80	2209	.037	.129	.665	-.329
70	2907	.032	.092	.388	-.360	80	2109	.028	.089	.298	-.351	80	2210	.022	.108	.443	-.317
70	2908	.043	.088	.269	-.308	80	2110	.019	.091	.285	-.355	80	2211	.008	.099	.424	-.289
70	2909	.069	.104	.342	-.345	80	2111	.003	.091	.283	-.366	80	2212	.010	.119	.613	-.426
70	2910	.075	.125	.523	-.334	80	2112	.007	.081	.281	-.280	80	2213	.085	.120	.706	-.272
70	2911	.088	.099	.423	-.256	80	2113	.018	.094	.356	-.470	80	2214	.069	.122	.814	-.322
70	2912	.024	.091	.347	-.263	80	2114	.020	.102	.344	-.370	80	2215	.043	.110	.543	-.347
70	2913	.012	.097	.321	-.301	80	2115	.016	.089	.322	-.351	80	2216	.043	.106	.502	-.307
70	2914	.008	.082	.298	-.278	80	2116	.044	.096	.401	-.296	80	2217	.068	.114	.607	-.323
70	2915	.016	.098	.306	-.372	80	2117	.035	.109	.393	-.445	80	2218	.032	.106	.580	-.297
70	2916	.049	.104	.360	-.462	80	2118	.010	.085	.257	-.344	80	2219	.006	.096	.366	-.305
70	2917	.110	.092	.451	-.223	80	2119	.005	.090	.278	-.330	80	2401	.007	.093	.353	-.306
70	2918	.130	.102	.548	-.185	80	2120	.003	.088	.317	-.340	80	2402	.022	.089	.287	-.267
70	2919	.043	.092	.357	-.337	80	2121	.004	.086	.311	-.268	80	2403	.009	.085	.291	-.240
70	2920	.060	.094	.457	-.295	80	2122	.052	.091	.344	-.283	80	2404	.058	.088	.383	-.247
70	2921	.077	.100	.411	-.395	80	2123	.057	.103	.377	-.400	80	2405	.059	.091	.390	-.214
70	2922	.087	.096	.413	-.255	80	2124	.063	.098	.386	-.289	80	2406	.062	.087	.367	-.243

APPENDIX A -- PRESSURE DATA ;

CONFIGURATION C : TAIKOO SHING CITYPLAZA, HONG KONG (MODIFIED MODEL)

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
80	2901	061	091	209	444	90	2103	040	090	364	478	90	2204	007	089	401	316
80	2902	075	090	274	377	90	2104	034	088	231	462	90	2205	007	093	285	361
80	2903	067	086	215	400	90	2105	054	087	227	320	90	2206	016	082	235	317
80	2904	054	091	323	368	90	2106	049	095	288	384	90	2207	035	124	622	400
80	2905	071	095	284	482	90	2107	042	090	285	316	90	2208	038	133	667	431
80	2906	065	091	256	388	90	2108	034	092	230	377	90	2209	013	129	679	386
80	2907	066	093	396	283	90	2109	052	084	349	315	90	2210	007	114	484	334
80	2908	024	093	276	348	90	2110	049	092	263	408	90	2211	006	107	524	295
80	2909	073	094	254	482	90	2111	041	083	230	361	90	2212	008	111	592	338
80	2910	021	099	451	320	90	2112	031	086	258	365	90	2213	049	123	574	404
80	2911	038	095	403	251	90	2113	013	087	303	367	90	2214	061	127	677	308
80	2912	013	087	292	284	90	2114	017	096	292	324	90	2215	032	115	488	275
80	2913	022	089	277	422	90	2115	014	090	341	307	90	2216	034	108	548	287
80	2914	020	083	334	298	90	2116	001	094	306	285	90	2217	039	106	527	257
80	2915	023	083	226	306	90	2117	004	089	309	328	90	2218	007	104	419	295
80	2916	019	087	311	357	90	2118	045	089	208	314	90	2219	000	113	427	395
80	2917	061	087	449	216	90	2119	039	088	239	349	90	2401	044	091	266	375
80	2918	079	098	509	266	90	2120	032	088	236	316	90	2402	025	081	296	260
80	2919	012	078	272	237	90	2121	037	079	239	326	90	2403	043	088	228	326
80	2920	029	087	337	315	90	2122	008	092	340	277	90	2404	010	088	289	249
80	2921	038	088	314	276	90	2123	014	087	418	265	90	2405	011	084	288	257
80	2922	047	094	352	304	90	2124	018	098	309	280	90	2406	012	085	291	225
80	2923	019	089	332	275	90	2125	025	096	364	293	90	2901	061	088	211	404
80	2924	028	093	321	411	90	2126	045	083	290	287	90	2902	064	083	204	392
80	2925	037	081	292	239	90	2127	044	088	223	337	90	2903	056	080	240	314
80	2926	043	095	355	252	90	2128	023	086	239	295	90	2904	056	089	241	365
80	2927	013	091	265	328	90	2129	011	087	273	284	90	2905	066	088	204	407
80	2928	018	084	276	463	90	2130	010	086	285	326	90	2906	057	097	259	358
80	2929	070	102	470	312	90	2131	010	091	327	289	90	2907	026	092	275	355
80	2930	110	117	682	285	90	2132	023	089	316	256	90	2908	041	083	283	301
80	2931	000	083	262	298	90	2133	020	083	316	266	90	2909	068	094	244	382
80	2932	025	088	325	258	90	2134	043	086	263	363	90	2910	019	089	317	294
80	2933	004	089	370	296	90	2135	020	087	272	333	90	2911	004	089	283	263
80	2934	024	086	332	301	90	2136	013	088	261	290	90	2912	039	084	255	271
80	2935	040	090	427	233	90	2137	007	093	304	327	90	2913	040	089	252	331
80	2936	041	092	337	263	90	2138	000	091	317	306	90	2914	046	080	174	360
80	2937	057	087	339	249	90	2139	010	091	289	325	90	2915	046	080	213	328
80	2938	072	093	362	233	90	2140	016	091	439	270	90	2916	023	083	261	311
80	2939	006	085	267	291	90	2141	020	095	320	350	90	2917	001	085	320	296
80	2940	079	092	411	235	90	2142	010	086	293	298	90	2918	008	087	295	319
80	2941	011	085	260	292	90	2143	026	086	240	362	90	2919	028	089	260	319
80	2942	011	087	303	270	90	2144	011	086	248	328	90	2920	008	089	335	305
80	2943	005	085	322	363	90	2145	006	095	294	302	90	2921	002	088	268	305
80	2944	018	087	364	263	90	2146	003	090	306	293	90	2922	004	088	329	265
80	2945	031	086	346	369	90	2147	003	094	293	282	90	2923	037	092	254	415
80	2946	041	089	365	264	90	2148	019	091	323	261	90	2924	013	081	241	311
80	2947	061	082	364	215	90	2149	022	088	345	242	90	2925	005	083	275	349
80	2948	073	093	489	260	90	2201	004	093	315	303	90	2926	008	083	275	367
90	2101	051	087	215	421	90	2202	003	089	314	295	90	2927	050	091	255	339
90	2102	047	079	203	367	90	2203	009	089	271	288	90	2928	052	085	207	350

APPENDIX A -- PRESSURE DATA ; CONFIGURATION C : TAIKOO SHING CITYPLAZA, HONG KONG (MODIFIED MODEL)

WD	TAP	CPNEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPNEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPNEAN	CPRMS	CPMAX	CPMIN
90	2129	005	094	319	278	100	2131	030	086	243	371	100	2907	053	088	251	355
90	2130	020	093	301	301	100	2132	028	084	216	361	100	2908	061	087	246	357
90	2131	031	087	227	305	100	2133	026	084	289	338	100	2909	068	083	297	343
90	2132	010	083	240	335	100	2134	073	093	275	381	100	2910	049	089	287	367
90	2133	032	090	217	323	100	2135	056	089	200	368	100	2911	045	090	238	345
90	2134	012	080	265	288	100	2136	049	085	211	398	100	2912	064	092	236	348
90	2135	005	089	288	298	100	2137	042	086	282	344	100	2913	054	084	212	357
90	2136	001	086	364	265	100	2138	038	093	237	338	100	2914	061	080	172	343
90	2137	010	093	311	278	100	2139	034	089	259	355	100	2915	067	076	190	332
90	2138	019	093	343	328	100	2140	034	083	244	379	100	2916	061	083	235	344
90	2139	042	080	279	284	100	2141	030	094	253	360	100	2917	047	087	203	327
90	2140	017	093	328	264	100	2142	030	090	338	381	100	2918	045	081	182	320
90	2141	044	083	274	319	100	2143	060	089	216	456	100	2919	062	083	238	329
90	2142	017	086	273	281	100	2144	049	081	216	345	100	2920	050	092	216	336
90	2143	024	084	247	248	100	2145	043	090	263	336	100	2921	045	085	226	337
90	2144	019	083	217	274	100	2146	038	087	226	337	100	2922	045	078	226	286
90	2145	011	082	269	326	100	2147	038	083	275	318	100	2923	071	089	196	356
90	2146	001	089	291	321	100	2148	036	088	233	366	100	2924	057	085	275	390
90	2147	009	086	353	292	100	2149	030	083	237	348	100	2925	046	086	248	364
90	2148	016	089	387	287	100	2201	037	085	287	313	100	2926	043	080	200	354
100	2149	069	087	195	375	100	2202	042	094	223	353	100	2927	067	086	223	352
100	2150	068	078	201	420	100	2203	040	087	236	362	100	2928	075	084	178	372
100	2151	064	094	264	378	100	2204	050	080	250	297	100	2929	042	082	258	325
100	2152	057	093	241	504	100	2205	052	090	214	344	100	2930	037	089	270	347
100	2153	067	086	218	471	100	2206	056	086	272	386	100	2931	068	081	175	354
100	2154	064	087	249	335	100	2207	017	119	321	322	100	2932	052	084	225	360
100	2155	062	095	232	367	100	2208	025	118	585	275	100	2933	074	085	210	389
100	2156	054	089	233	354	100	2209	020	118	585	292	100	2934	055	077	199	380
100	2157	069	083	222	322	100	2210	014	125	542	395	100	2935	049	093	277	344
100	2158	068	092	207	374	100	2211	004	094	432	301	100	2936	046	083	253	350
100	2159	061	088	277	409	100	2212	008	124	736	429	100	2937	043	079	237	310
100	2160	052	087	229	402	100	2213	036	112	522	345	100	2938	032	087	258	319
100	2161	051	079	194	362	100	2214	049	121	682	296	100	2939	074	083	193	349
100	2162	050	088	256	336	100	2215	040	121	686	280	100	2940	034	083	243	367
100	2163	053	086	233	339	100	2216	015	104	491	283	100	2941	073	088	186	370
100	2164	041	085	267	320	100	2217	033	115	525	268	100	2942	060	087	210	330
100	2165	042	087	239	310	100	2218	003	104	392	400	100	2943	068	090	230	330
100	2166	068	081	184	354	100	2219	019	094	369	309	100	2944	056	082	168	352
100	2167	065	083	193	347	100	2401	066	087	249	347	100	2945	048	080	222	340
100	2168	062	083	228	320	100	2402	057	085	233	340	100	2946	040	089	275	319
100	2169	065	077	221	374	100	2403	065	083	187	324	100	2947	036	086	231	328
100	2170	037	097	294	326	100	2404	036	088	199	322	100	2948	031	085	244	382
100	2171	035	085	237	335	100	2405	033	088	251	324	110	2101	073	079	202	367
100	2172	033	082	264	290	100	2406	030	092	266	324	110	2102	072	077	196	393
100	2173	020	089	278	326	100	2901	038	089	234	334	110	2103	069	091	278	381
100	2174	067	086	199	358	100	2902	060	086	233	349	110	2104	064	084	220	346
100	2175	066	082	182	316	100	2903	060	081	240	375	110	2105	068	089	242	351
100	2176	058	089	191	375	100	2904	055	096	286	345	110	2106	068	087	232	355
100	2177	052	089	237	324	100	2905	062	084	200	363	110	2107	065	084	227	338
100	2178	033	092	268	329	100	2906	061	081	248	316	110	2108	067	090	246	350

APPENDIX A -- PRESSURE DATA ; CONFIGURATION C : TAIKOO SHING CITYPLAZA, HONG KONG (MODIFIED MODEL)

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
110	22109	068	082	215	389	110	22110	000	117	564	336	110	2935	066	088	252	338
110	22110	072	086	189	396	110	22111	015	109	459	260	110	2936	065	089	191	363
110	22111	070	091	265	473	110	22112	013	123	569	326	110	2937	054	073	189	316
110	22112	068	083	257	323	110	22113	027	131	613	342	110	2938	036	081	242	398
110	22113	064	082	253	372	110	22114	032	120	533	346	110	2939	080	083	216	370
110	22114	061	083	237	335	110	22115	028	120	552	300	110	2940	038	079	192	300
110	22115	062	089	215	355	110	22116	011	109	416	323	110	2941	076	090	164	333
110	22116	059	085	274	402	110	22117	013	111	531	299	110	2942	073	087	227	391
110	22117	061	079	175	348	110	22118	005	108	469	322	110	2943	078	081	214	350
110	22118	076	086	179	416	110	22119	002	100	573	323	110	2944	068	077	208	307
110	22119	075	093	223	373	110	2401	072	080	199	375	110	2945	062	079	200	442
110	22120	069	080	211	387	110	2402	066	085	234	378	110	2946	060	088	270	300
110	22121	071	096	275	420	110	2403	067	077	182	365	110	2947	053	079	237	372
110	22122	058	089	249	337	110	2404	054	090	183	382	110	2948	054	087	276	332
110	22123	056	091	203	367	110	2405	057	084	218	333	120	2101	075	085	198	307
110	22124	055	074	189	342	110	2406	051	083	272	322	120	2102	079	083	212	360
110	22125	053	082	248	392	110	2901	052	097	288	387	120	2103	077	080	209	384
110	22126	072	086	225	377	110	2902	044	085	338	346	120	2104	082	083	181	358
110	22127	069	078	204	347	110	2903	014	107	269	373	120	2105	080	092	313	390
110	22128	070	091	182	398	110	2904	058	092	297	347	120	2106	078	087	196	390
110	22129	068	088	199	348	110	2905	059	090	231	352	120	2107	081	082	143	363
110	22130	054	083	273	322	110	2906	042	083	325	308	120	2108	081	080	216	304
110	22131	058	084	219	456	110	2907	079	083	197	362	120	2109	079	083	212	448
110	22132	054	083	251	326	110	2908	072	089	251	385	120	2110	078	085	193	324
110	22133	057	085	210	343	110	2909	066	080	182	370	120	2111	081	087	181	404
110	22134	055	088	231	344	110	2910	058	093	231	401	120	2112	085	090	224	509
110	22135	070	083	200	384	110	2911	064	088	231	338	120	2113	072	086	178	370
110	22136	063	089	222	351	110	2912	072	083	214	367	120	2114	071	085	193	367
110	22137	059	087	258	328	110	2913	068	085	227	437	120	2115	074	081	193	225
110	22138	056	084	276	332	110	2914	066	076	192	292	120	2116	074	086	235	460
110	22139	056	089	243	335	110	2915	069	077	184	339	120	2117	079	080	172	322
110	22140	052	084	227	314	110	2916	065	083	245	291	120	2118	082	077	221	311
110	22141	054	089	256	407	110	2917	058	079	230	307	120	2119	080	083	230	351
110	22142	053	092	294	444	110	2918	060	087	223	379	120	2120	082	088	165	414
110	22143	073	082	266	446	110	2919	067	084	234	320	120	2121	075	082	245	445
110	22144	064	083	260	376	110	2920	062	086	267	335	120	2122	081	086	185	355
110	22145	053	083	235	355	110	2921	066	081	223	342	120	2123	074	089	178	366
110	22146	056	090	244	362	110	2922	062	081	205	311	120	2124	077	082	185	334
110	22147	054	084	268	359	110	2923	075	084	195	385	120	2125	077	086	216	356
110	22148	054	081	189	355	110	2924	073	087	241	468	120	2126	084	088	160	372
110	22149	059	084	207	351	110	2925	067	080	252	321	120	2127	077	086	193	381
110	22201	064	087	260	330	110	2926	066	082	234	360	120	2128	076	081	188	306
110	22202	066	083	265	375	110	2927	069	081	213	342	120	2129	072	083	190	315
110	22203	067	087	211	336	110	2928	076	087	203	367	120	2130	076	088	227	439
110	22204	066	081	192	352	110	2929	065	082	268	359	120	2131	076	090	282	363
110	22205	067	083	206	371	110	2930	066	079	170	353	120	2132	076	089	219	353
110	22206	070	088	251	446	110	2931	073	084	171	420	120	2133	083	090	253	409
110	22207	018	114	595	432	110	2932	066	091	242	360	120	2134	086	081	193	309
110	22208	010	127	597	379	110	2933	071	079	187	386	120	2135	074	085	219	397
110	22209	004	116	554	336	110	2934	067	095	274	416	120	2136	075	092	298	391

APPENDIX A -- PRESSURE DATA : CONFIGURATION C : TAIKOO SHING CITYPLAZA, HONG KONG (MODIFIED MODEL)

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
120	2137	-072	088	193	-385	120	2913	-076	091	254	-380	130	2115	-090	086	178	-381
120	2138	-074	083	200	-372	120	2914	-071	084	201	-372	130	2116	-087	077	163	-402
120	2139	-069	086	234	-353	120	2915	-076	084	211	-362	130	2117	-089	080	196	-377
120	2140	-071	085	234	-375	120	2916	-074	075	158	-366	130	2118	-092	076	198	-372
120	2141	-074	087	185	-425	120	2917	-072	080	180	-362	130	2119	-091	077	140	-356
120	2142	-082	086	213	-401	120	2918	-082	089	273	-383	130	2120	-095	081	229	-362
120	2143	-076	090	239	-378	120	2919	-077	084	181	-377	130	2121	-093	079	148	-383
120	2144	-070	087	169	-388	120	2920	-078	079	174	-366	130	2122	-099	073	152	-322
120	2145	-068	085	207	-355	120	2921	-075	081	193	-332	130	2123	-095	080	140	-415
120	2146	-074	084	206	-341	120	2922	-081	082	217	-347	130	2124	-098	078	141	-390
120	2147	-074	088	226	-433	120	2923	-077	082	170	-415	130	2125	-094	082	188	-366
120	2148	-075	082	189	-350	120	2924	-078	082	167	-387	130	2126	-093	077	197	-360
120	2149	-086	079	206	-323	120	2925	-079	088	224	-371	130	2127	-088	082	236	-382
120	2201	-072	086	181	-376	120	2926	-076	085	196	-371	130	2128	-090	075	171	-352
120	2202	-074	080	211	-357	120	2927	-076	084	205	-371	130	2129	-092	082	214	-410
120	2203	-073	084	202	-338	120	2928	-085	079	178	-340	130	2130	-094	079	154	-359
120	2204	-073	081	220	-336	120	2929	-081	085	186	-440	130	2131	-095	078	151	-337
120	2205	-073	082	187	-402	120	2930	-079	081	167	-344	130	2132	-090	081	185	-383
120	2206	-074	084	179	-375	120	2931	-085	077	215	-316	130	2133	-090	088	195	-384
120	2207	-011	116	525	-333	120	2932	-078	082	201	-346	130	2134	-087	079	170	-364
120	2208	-007	111	522	-340	120	2933	-081	087	167	-411	130	2135	-083	081	216	-366
120	2209	-004	121	666	-421	120	2934	-073	082	242	-347	130	2136	-086	085	192	-354
120	2210	-004	115	488	-300	120	2935	-082	084	193	-337	130	2137	-088	088	227	-384
120	2211	-012	103	574	-264	120	2936	-077	089	184	-363	130	2138	-085	084	204	-385
120	2212	-000	117	503	-384	120	2937	-077	080	180	-338	130	2139	-092	084	151	-403
120	2213	-012	101	465	-266	120	2938	-084	086	205	-381	130	2140	-089	088	202	-332
120	2214	-036	117	491	-258	120	2939	-091	085	150	-377	130	2141	-097	077	153	-401
120	2215	-017	119	618	-367	120	2940	-090	089	223	-375	130	2142	-101	088	158	-413
120	2216	-021	092	303	-382	120	2941	-085	081	184	-383	130	2143	-079	081	192	-388
120	2217	-028	106	414	-276	120	2942	-082	082	184	-320	130	2144	-079	084	186	-371
120	2218	-002	102	422	-289	120	2943	-089	085	220	-451	130	2145	-088	078	231	-375
120	2219	-005	101	441	-313	120	2944	-074	085	196	-359	130	2146	-092	089	186	-407
120	22401	-076	085	183	-357	120	2945	-079	087	244	-375	130	2147	-090	079	169	-413
120	22402	-076	087	183	-368	120	2946	-077	081	169	-363	130	2148	-091	082	185	-385
120	22403	-070	086	200	-314	120	2947	-072	082	187	-382	130	2149	-110	076	136	-379
120	22404	-073	083	196	-409	120	2948	-079	092	263	-395	130	2201	-094	086	200	-380
120	22405	-073	084	196	-310	130	2101	-090	080	212	-379	130	2202	-088	080	170	-355
120	22406	-072	087	229	-440	130	2102	-090	078	198	-358	130	2203	-096	082	151	-396
120	22901	-064	086	207	-304	130	2103	-096	079	141	-355	130	2204	-086	083	200	-345
120	22902	-067	092	261	-415	130	2104	-101	078	173	-357	130	2205	-088	074	148	-373
120	22903	-019	093	456	-327	130	2105	-095	083	167	-355	130	2206	-089	081	129	-340
120	22904	-066	086	195	-331	130	2106	-096	086	216	-349	130	2207	-034	097	470	-368
120	22905	-061	089	199	-343	130	2107	-097	082	166	-373	130	2208	-020	113	544	-430
120	22906	-054	082	256	-299	130	2108	-106	083	140	-413	130	2209	-013	117	466	-343
120	22907	-088	089	179	-372	130	2109	-090	086	227	-373	130	2210	-008	131	643	-363
120	22908	-085	091	195	-389	130	2110	-099	075	146	-377	130	2211	-002	113	498	-318
120	22909	-074	088	213	-343	130	2111	-102	084	157	-377	130	2212	-021	117	552	-369
120	22910	-073	085	206	-394	130	2112	-097	082	209	-392	130	2213	-002	105	433	-343
120	22911	-083	086	199	-374	130	2113	-088	082	175	-367	130	2214	-020	112	739	-288
120	22912	-081	088	251	-441	130	2114	-090	077	204	-371	130	2215	-011	108	541	-368

APPENDIX A -- PRESSURE DATA ; CONFIGURATION C : TAIKOO SHING CITYPLAZA, HONG KONG (MODIFIED MODEL)

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
130	2216	-012	096	363	-331	130	2941	-091	075	167	-360	140	2143	-098	095	173	-403
130	2217	-010	096	563	-248	130	2942	-093	086	199	-399	140	2144	-102	094	200	-424
130	2218	-006	103	490	-277	130	2943	-101	079	165	-371	140	2145	-088	091	221	-365
130	2219	-001	107	521	-276	130	2944	-095	076	191	-351	140	2146	-109	086	155	-396
130	2401	-091	079	175	-338	130	2945	-093	083	186	-366	140	2147	-099	091	210	-416
130	2402	-092	077	193	-342	130	2946	-096	079	200	-357	140	2148	-129	098	155	-464
130	2403	-087	081	222	-359	130	2947	-088	079	197	-342	140	2149	-093	091	237	-332
130	2404	-086	073	176	-340	130	2948	-091	081	193	-358	140	2201	-091	106	308	-410
130	2405	-088	086	198	-392	140	2101	-114	090	179	-418	140	2202	-105	086	172	-443
130	2406	-090	078	158	-355	140	2102	-117	093	262	-422	140	2203	-124	086	152	-397
130	2901	-052	083	213	-384	140	2103	-122	085	171	-399	140	2204	-103	082	177	-397
130	2902	-079	084	273	-427	140	2104	-116	096	277	-430	140	2205	-101	076	126	-335
130	2903	-063	091	339	-407	140	2105	-130	090	152	-416	140	2206	-099	081	160	-343
130	2904	-062	078	230	-306	140	2106	-092	102	253	-399	140	2207	-042	113	494	-406
130	2905	-076	082	195	-374	140	2107	-112	084	163	-406	140	2208	-046	123	499	-501
130	2906	-092	085	234	-358	140	2108	-130	086	168	-419	140	2209	-003	132	625	-337
130	2907	-104	083	184	-364	140	2109	-114	082	171	-429	140	2210	-007	124	501	-316
130	2908	-099	081	213	-380	140	2110	-120	079	122	-362	140	2211	-001	115	601	-305
130	2909	-092	082	225	-367	140	2111	-135	086	128	-413	140	2212	-041	140	660	-426
130	2910	-098	077	161	-364	140	2112	-143	097	126	-469	140	2213	030	114	535	-315
130	2911	-108	089	175	-429	140	2113	-152	099	139	-477	140	2214	039	122	578	-299
130	2912	-108	082	158	-429	140	2114	-133	099	197	-524	140	2215	045	132	762	-357
130	2913	-102	081	196	-337	140	2115	-142	095	150	-604	140	2216	018	089	347	-309
130	2914	-092	076	191	-342	140	2116	-146	096	176	-452	140	2217	039	109	576	-271
130	2915	-090	079	182	-345	140	2117	-187	113	118	-654	140	2218	014	104	491	-366
130	2916	-094	072	168	-319	140	2118	-076	089	232	-365	140	2219	-001	107	501	-309
130	2917	-096	076	160	-371	140	2119	-101	084	289	-388	140	2401	-117	083	153	-390
130	2918	-100	079	168	-370	140	2120	-100	099	282	-484	140	2402	-123	083	145	-435
130	2919	-096	084	182	-371	140	2121	-128	078	147	-446	140	2403	-109	082	154	-401
130	2920	-087	081	165	-348	140	2122	-108	085	165	-459	140	2404	-093	078	168	-376
130	2921	-095	081	133	-392	140	2123	-110	083	172	-426	140	2405	-096	092	212	-386
130	2922	-092	083	192	-342	140	2124	-107	092	223	-402	140	2406	-095	079	174	-385
130	2923	-096	073	145	-377	140	2125	-101	082	151	-362	140	2901	-010	103	343	-362
130	2924	-093	082	144	-355	140	2126	-099	082	165	-376	140	2902	-070	115	355	-476
130	2925	-085	078	193	-354	140	2127	-092	084	201	-385	140	2903	-030	133	520	-436
130	2926	-091	082	174	-383	140	2128	-104	077	173	-391	140	2904	-027	093	322	-357
130	2927	-102	075	185	-359	140	2129	-110	092	190	-410	140	2905	-062	091	250	-400
130	2928	-098	084	169	-376	140	2130	-100	080	177	-396	140	2906	-114	113	263	-544
130	2929	-094	076	154	-397	140	2131	-104	088	254	-402	140	2907	-119	086	202	-422
130	2930	-096	080	176	-380	140	2132	-106	090	188	-394	140	2908	-110	087	186	-400
130	2931	-095	076	168	-363	140	2133	-104	099	283	-422	140	2909	-081	087	291	-366
130	2932	-089	076	144	-363	140	2134	-097	087	227	-378	140	2910	-111	084	161	-408
130	2933	-096	080	218	-341	140	2135	-088	097	295	-385	140	2911	-126	097	295	-443
130	2934	-094	079	154	-379	140	2136	-107	091	172	-406	140	2912	-129	082	169	-466
130	2935	-098	072	155	-331	140	2137	-073	106	326	-398	140	2913	-121	092	296	-480
130	2936	-098	078	145	-422	140	2138	-091	088	219	-432	140	2914	-137	089	139	-441
130	2937	-091	077	147	-353	140	2139	-109	087	200	-412	140	2915	-135	095	238	-449
130	2938	-092	082	182	-359	140	2140	-097	082	182	-385	140	2916	-144	081	164	-427
130	2939	-096	075	193	-347	140	2141	-101	082	149	-348	140	2917	-093	099	322	-478
130	2940	-095	080	223	-356	140	2142	-106	086	160	-377	140	2918	-142	090	144	-460

APPENDIX A -- PRESSURE DATA ; CONFIGURATION C : TAIKOO SHING CITYPLAZA, HONG KONG (MODIFIED MODEL)

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
140	22919	.103	.101	.263	.438	150	2121	.142	.092	.180	.504	150	2403	.133	.090	.202	.430
140	22920	.129	.085	.128	.427	150	2122	.122	.084	.267	.430	150	2404	.133	.087	.216	.394
140	22921	.177	.099	.133	.421	150	2123	.128	.083	.226	.404	150	2405	.141	.091	.158	.479
140	22922	.129	.082	.148	.352	150	2124	.137	.102	.186	.514	150	2406	.121	.091	.131	.401
140	22923	.123	.078	.126	.358	150	2125	.140	.084	.182	.414	150	2401	.004	.113	.414	.471
140	22924	.140	.086	.133	.416	150	2126	.113	.085	.167	.445	150	2402	.049	.113	.359	.413
140	22925	.145	.098	.121	.519	150	2127	.113	.088	.222	.429	150	2403	.093	.149	.844	.348
140	22926	.128	.092	.143	.442	150	2128	.127	.083	.162	.397	150	2404	.028	.090	.337	.555
140	22927	.144	.093	.166	.512	150	2129	.126	.092	.159	.446	150	2405	.052	.090	.394	.349
140	22928	.147	.084	.129	.401	150	2130	.126	.092	.130	.391	150	2406	.034	.121	.419	.519
140	22929	.120	.088	.191	.413	150	2131	.132	.090	.140	.518	150	2407	.140	.089	.183	.416
140	22930	.151	.095	.137	.424	150	2132	.136	.091	.197	.498	150	2408	.121	.089	.159	.500
140	22931	.083	.087	.201	.363	150	2133	.140	.091	.169	.452	150	2409	.090	.090	.237	.398
140	22932	.112	.082	.264	.401	150	2134	.113	.094	.168	.453	150	2410	.122	.090	.228	.379
140	22933	.103	.099	.230	.489	150	2135	.102	.086	.160	.400	150	2411	.144	.097	.150	.511
140	22934	.126	.080	.159	.432	150	2136	.104	.077	.178	.381	150	2412	.143	.095	.130	.503
140	22935	.111	.085	.177	.421	150	2137	.108	.101	.301	.442	150	2413	.137	.096	.181	.322
140	22936	.117	.083	.159	.420	150	2138	.109	.089	.144	.456	150	2414	.133	.089	.174	.459
140	22937	.102	.089	.244	.398	150	2139	.102	.090	.162	.435	150	2415	.126	.089	.155	.477
140	22938	.103	.082	.147	.347	150	2140	.106	.089	.226	.390	150	2416	.136	.089	.126	.473
140	22939	.116	.081	.150	.380	150	2141	.116	.089	.159	.442	150	2417	.101	.093	.215	.441
140	22940	.104	.083	.165	.401	150	2142	.134	.089	.172	.474	150	2418	.148	.076	.113	.418
140	22941	.107	.077	.165	.398	150	2143	.107	.088	.213	.427	150	2419	.144	.097	.231	.447
140	22942	.113	.090	.183	.410	150	2144	.092	.086	.194	.365	150	2420	.159	.092	.122	.500
140	22943	.119	.079	.164	.416	150	2145	.097	.094	.195	.455	150	2421	.174	.099	.161	.525
140	22944	.121	.089	.134	.428	150	2146	.108	.086	.217	.420	150	2422	.138	.090	.193	.441
140	22945	.107	.096	.253	.446	150	2147	.106	.099	.259	.427	150	2423	.136	.087	.140	.444
140	22946	.113	.088	.202	.436	150	2148	.109	.092	.199	.429	150	2424	.158	.096	.117	.517
140	22947	.096	.096	.268	.383	150	2149	.116	.086	.211	.398	150	2425	.158	.099	.219	.623
140	22948	.122	.091	.142	.388	150	2201	.136	.102	.220	.478	150	2426	.127	.090	.178	.406
150	22101	.124	.090	.192	.488	150	2202	.137	.093	.147	.487	150	2427	.161	.095	.139	.519
150	22102	.125	.088	.166	.397	150	2203	.126	.091	.149	.448	150	2428	.149	.087	.136	.594
150	22103	.135	.094	.153	.493	150	2204	.123	.088	.233	.437	150	2429	.142	.100	.218	.509
150	22104	.134	.088	.137	.427	150	2205	.121	.086	.141	.412	150	2430	.141	.089	.161	.441
150	22105	.124	.077	.157	.375	150	2206	.126	.086	.169	.494	150	2431	.121	.084	.243	.426
150	22106	.130	.097	.247	.434	150	2207	.057	.106	.361	.432	150	2432	.123	.083	.180	.406
150	22107	.133	.086	.120	.475	150	2208	.051	.112	.391	.414	150	2433	.133	.090	.213	.481
150	22108	.131	.089	.133	.430	150	2209	.037	.150	.676	.409	150	2434	.145	.095	.205	.470
150	22109	.123	.089	.228	.406	150	2210	.026	.126	.532	.472	150	2435	.134	.090	.272	.438
150	22110	.131	.090	.153	.447	150	2211	.013	.122	.412	.369	150	2436	.117	.085	.213	.365
150	22111	.150	.092	.163	.519	150	2212	.019	.136	.659	.394	150	2437	.111	.101	.221	.450
150	22112	.157	.092	.136	.538	150	2213	.009	.121	.432	.364	150	2438	.140	.084	.177	.427
150	22113	.131	.091	.159	.411	150	2214	.020	.132	.663	.400	150	2439	.123	.084	.137	.497
150	22114	.135	.104	.159	.492	150	2215	.006	.121	.571	.333	150	2440	.144	.086	.178	.466
150	22115	.148	.101	.160	.630	150	2216	.040	.102	.422	.523	150	2441	.124	.082	.192	.388
150	22116	.156	.102	.196	.514	150	2217	.006	.106	.416	.361	150	2442	.123	.091	.158	.443
150	22117	.192	.125	.129	.723	150	2218	.011	.107	.608	.376	150	2443	.132	.091	.120	.424
150	22118	.111	.085	.235	.410	150	2219	.023	.117	.492	.430	150	2444	.137	.091	.206	.549
150	22119	.112	.086	.177	.401	150	2401	.143	.090	.173	.439	150	2445	.133	.098	.161	.483
150	2120	.130	.092	.238	.447	150	2402	.146	.087	.112	.475	150	2446	.134	.096	.179	.465

APPENDIX A -- PRESSURE DATA ; CONFIGURATION C : TAIKOO SHING CITYPLAZA, HONG KONG (MODIFIED MODEL)

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
150	2947	.136	.087	.120	-.433	160	2149	-.128	.083	.142	-.461	160	2925	-.131	.092	.152	-.471
150	2948	-.141	.076	.162	-.432	160	2201	-.125	.092	.176	-.433	160	2926	-.122	.087	.207	-.452
160	2101	-.112	.087	.228	-.386	160	2202	-.132	.095	.193	-.464	160	2927	-.163	.086	.117	-.444
160	22102	-.126	.081	.115	-.469	160	2203	-.120	.086	.120	-.420	160	2928	-.156	.083	.126	-.482
160	22103	-.128	.087	.153	-.450	160	2204	-.124	.088	.151	-.433	160	2929	-.138	.093	.161	-.511
160	2104	-.142	.092	.228	-.456	160	2205	-.117	.082	.151	-.367	160	2930	-.130	.081	.162	-.408
160	2105	-.123	.084	.153	-.461	160	2206	-.122	.087	.144	-.396	160	2931	-.113	.080	.132	-.426
160	2106	-.124	.088	.158	-.422	160	2207	-.055	.091	.281	-.417	160	2932	-.121	.086	.162	-.412
160	2107	-.134	.092	.172	-.414	160	2208	-.039	.101	.373	-.645	160	2933	-.130	.087	.126	-.418
160	2108	-.132	.085	.141	-.397	160	2209	-.029	.121	.708	-.415	160	2934	-.128	.096	.110	-.466
160	2109	-.122	.090	.199	-.463	160	2210	-.003	.123	.544	-.363	160	2935	-.118	.087	.164	-.388
160	22110	-.147	.084	.125	-.416	160	2211	-.009	.106	.482	-.340	160	2936	-.122	.089	.152	-.427
160	22111	-.154	.088	.125	-.484	160	2212	-.024	.115	.624	-.408	160	2937	-.109	.083	.194	-.396
160	22112	-.148	.083	.125	-.421	160	2213	-.016	.097	.373	-.304	160	2938	-.136	.082	.119	-.379
160	22113	-.119	.091	.209	-.379	160	2214	-.017	.105	.534	-.315	160	2939	-.123	.088	.209	-.401
160	22114	-.127	.090	.169	-.472	160	2215	-.012	.113	.590	-.336	160	2940	-.146	.080	.095	-.498
160	22115	-.127	.086	.111	-.488	160	2216	-.045	.091	.221	-.405	160	2941	-.123	.087	.143	-.501
160	22116	-.131	.100	.173	-.479	160	2217	-.009	.101	.377	-.417	160	2942	-.115	.087	.168	-.449
160	22117	-.157	.119	.195	-.727	160	2218	-.012	.104	.401	-.308	160	2943	-.128	.088	.155	-.380
160	22118	-.098	.082	.155	-.426	160	2219	-.008	.095	.516	-.364	160	2944	-.136	.091	.200	-.457
160	22119	-.109	.087	.173	-.371	160	2401	-.125	.089	.167	-.423	160	2945	-.137	.087	.144	-.455
160	22120	-.134	.089	.140	-.405	160	2402	-.128	.088	.172	-.400	160	2946	-.136	.087	.148	-.499
160	22121	-.139	.090	.108	-.405	160	2403	-.126	.084	.139	-.453	160	2947	-.141	.087	.205	-.473
160	22122	-.113	.087	.179	-.383	160	2404	-.133	.089	.156	-.452	160	2948	-.138	.083	.157	-.477
160	22123	-.127	.088	.161	-.436	160	2405	-.131	.088	.147	-.463	170	2101	-.113	.092	.171	-.441
160	22124	-.134	.084	.190	-.407	160	2406	-.121	.087	.175	-.349	170	2102	-.122	.082	.154	-.530
160	22125	-.136	.082	.125	-.389	160	2901	-.051	.116	.443	-.437	170	2103	-.128	.094	.209	-.446
160	22126	-.103	.086	.194	-.374	160	2902	-.073	.109	.457	-.506	170	2104	-.142	.086	.227	-.433
160	22127	-.111	.081	.151	-.412	160	2903	-.028	.124	.508	-.324	170	2105	-.122	.087	.203	-.414
160	22128	-.124	.087	.157	-.425	160	2904	-.085	.096	.249	-.535	170	2106	-.127	.080	.160	-.378
160	22129	-.117	.089	.169	-.462	160	2905	-.092	.096	.234	-.401	170	2107	-.134	.085	.156	-.404
160	22130	-.125	.086	.172	-.346	160	2906	-.022	.097	.414	-.344	170	2108	-.143	.082	.122	-.430
160	22131	-.133	.080	.146	-.421	160	2907	-.141	.088	.112	-.471	170	2109	-.128	.087	.153	-.416
160	22132	-.143	.089	.210	-.433	160	2908	-.129	.093	.208	-.437	170	2110	-.140	.090	.138	-.459
160	22133	-.148	.085	.122	-.408	160	2909	-.123	.087	.143	-.446	170	2111	-.161	.088	.119	-.508
160	22134	-.107	.085	.195	-.463	160	2910	-.117	.092	.176	-.469	170	2112	-.150	.088	.165	-.467
160	22135	-.102	.088	.271	-.435	160	2911	-.137	.090	.147	-.451	170	2113	-.119	.092	.213	-.483
160	22136	-.101	.085	.211	-.444	160	2912	-.160	.090	.144	-.409	170	2114	-.118	.092	.227	-.475
160	22137	-.102	.090	.213	-.411	160	2913	-.128	.087	.192	-.469	170	2115	-.120	.092	.176	-.472
160	22138	-.105	.092	.201	-.398	160	2914	-.128	.089	.220	-.482	170	2116	-.124	.086	.157	-.407
160	22139	-.102	.086	.162	-.386	160	2915	-.129	.085	.127	-.380	170	2117	-.133	.094	.131	-.580
160	22140	-.106	.091	.213	-.403	160	2916	-.131	.082	.140	-.439	170	2118	-.097	.087	.171	-.423
160	22141	-.122	.084	.137	-.404	160	2917	-.122	.090	.197	-.637	170	2119	-.105	.089	.180	-.419
160	22142	-.139	.090	.155	-.436	160	2918	-.139	.085	.152	-.478	170	2120	-.130	.083	.176	-.425
160	22143	-.095	.083	.193	-.386	160	2919	-.133	.088	.167	-.434	170	2121	-.141	.081	.157	-.472
160	22144	-.095	.088	.234	-.369	160	2920	-.134	.098	.148	-.458	170	2122	-.135	.088	.176	-.431
160	22145	-.102	.082	.175	-.400	160	2921	-.138	.093	.145	-.565	170	2123	-.147	.084	.139	-.421
160	22146	-.114	.083	.151	-.409	160	2922	-.125	.089	.168	-.463	170	2124	-.154	.090	.190	-.478
160	22147	-.103	.091	.151	-.469	160	2923	-.118	.083	.145	-.410	170	2125	-.156	.087	.157	-.418
160	22148	-.112	.086	.161	-.391	160	2924	-.136	.094	.154	-.514	170	2126	-.107	.088	.214	-.416

APPENDIX A -- PRESSURE DATA

CONFIGURATION C : TAIKOO SHING CITYPLAZA, HONG KONG (MODIFIED MODEL)

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
170	2127	-.109	.090	.184	-.485	170	2903	-.063	.107	.383	-.472	180	2105	-.128	.079	.151	-.412
170	2128	-.120	.085	.161	-.399	170	2904	-.104	.099	.399	-.490	180	2106	-.135	.088	.151	-.460
170	2129	-.121	.087	.133	-.441	170	2905	-.113	.089	.177	-.489	180	2107	-.140	.078	.090	-.446
170	2130	-.146	.078	.139	-.421	170	2906	-.095	.098	.197	-.476	180	2108	-.136	.087	.182	-.488
170	2131	-.156	.083	.142	-.455	170	2907	-.145	.092	.200	-.446	180	2109	-.127	.093	.166	-.388
170	2132	-.165	.092	.137	-.494	170	2908	-.133	.094	.171	-.456	180	2110	-.144	.090	.135	-.418
170	2133	-.165	.089	.157	-.527	170	2909	-.129	.090	.133	-.476	180	2111	-.159	.087	.111	-.522
170	2134	-.112	.094	.197	-.380	170	2910	-.138	.090	.193	-.449	180	2112	-.158	.092	.192	-.489
170	2135	-.109	.084	.129	-.427	170	2911	-.155	.093	.170	-.498	180	2113	-.101	.084	.192	-.376
170	2136	-.108	.098	.238	-.421	170	2912	-.154	.081	.153	-.490	180	2114	-.100	.092	.179	-.404
170	2137	-.106	.083	.200	-.379	170	2913	-.134	.087	.175	-.476	180	2115	-.105	.081	.181	-.400
170	2138	-.112	.088	.197	-.434	170	2914	-.128	.093	.165	-.591	180	2116	-.103	.085	.189	-.462
170	2139	-.119	.092	.178	-.445	170	2915	-.120	.082	.154	-.457	180	2117	-.110	.086	.241	-.385
170	2140	-.131	.087	.141	-.421	170	2916	-.134	.088	.157	-.423	180	2118	-.110	.089	.177	-.396
170	2141	-.144	.090	.134	-.457	170	2917	-.142	.081	.122	-.442	180	2119	-.116	.080	.123	-.395
170	2142	-.163	.089	.120	-.586	170	2918	-.164	.096	.177	-.477	180	2120	-.123	.090	.201	-.429
170	2143	-.103	.087	.212	-.439	170	2919	-.129	.079	.148	-.391	180	2121	-.128	.088	.157	-.380
170	2144	-.098	.086	.227	-.363	170	2920	-.117	.083	.165	-.409	180	2122	-.129	.080	.127	-.353
170	2145	-.103	.093	.203	-.460	170	2921	-.123	.091	.145	-.429	180	2123	-.133	.094	.223	-.474
170	2146	-.118	.091	.178	-.417	170	2922	-.140	.083	.188	-.439	180	2124	-.144	.086	.161	-.462
170	2147	-.120	.085	.166	-.395	170	2923	-.117	.087	.168	-.440	180	2125	-.140	.081	.116	-.483
170	2148	-.126	.089	.136	-.414	170	2924	-.126	.085	.131	-.505	180	2126	-.120	.083	.128	-.431
170	2149	-.146	.089	.144	-.464	170	2925	-.139	.087	.140	-.440	180	2127	-.120	.076	.131	-.368
170	2201	-.137	.082	.157	-.422	170	2926	-.136	.088	.181	-.423	180	2128	-.119	.083	.206	-.442
170	2202	-.141	.087	.182	-.473	170	2927	-.160	.098	.177	-.482	180	2129	-.114	.085	.153	-.403
170	2203	-.137	.090	.148	-.432	170	2928	-.154	.091	.142	-.462	180	2130	-.133	.085	.167	-.442
170	2204	-.131	.089	.161	-.410	170	2929	-.156	.083	.104	-.482	180	2131	-.141	.081	.130	-.410
170	2205	-.120	.086	.168	-.416	170	2930	-.144	.084	.137	-.410	180	2132	-.140	.086	.179	-.452
170	2206	-.121	.084	.143	-.504	170	2931	-.117	.084	.161	-.424	180	2133	-.136	.092	.144	-.367
170	2207	-.040	.108	.347	-.457	170	2932	-.117	.086	.151	-.426	180	2134	-.118	.085	.137	-.414
170	2208	.001	.115	.361	-.526	170	2933	-.128	.080	.147	-.404	180	2135	-.115	.089	.164	-.421
170	2209	.050	.161	.733	-.770	170	2934	-.136	.091	.151	-.469	180	2136	-.101	.081	.161	-.419
170	2210	.084	.158	.653	-.378	170	2935	-.135	.087	.196	-.413	180	2137	-.098	.089	.221	-.418
170	2211	.081	.119	.475	-.318	170	2936	-.143	.084	.137	-.424	180	2138	-.105	.080	.145	-.415
170	2212	.068	.140	.564	-.352	170	2937	-.135	.089	.223	-.410	180	2139	-.109	.087	.156	-.439
170	2213	.032	.118	.602	-.366	170	2938	-.156	.086	.163	-.424	180	2140	-.115	.092	.180	-.396
170	2214	.066	.123	.557	-.293	170	2939	-.124	.089	.197	-.431	180	2141	-.132	.088	.140	-.410
170	2215	.108	.136	.669	-.327	170	2940	-.157	.088	.120	-.466	180	2142	-.147	.088	.130	-.444
170	2216	.029	.108	.366	-.414	170	2941	-.118	.087	.170	-.396	180	2143	-.117	.090	.257	-.399
170	2217	.056	.118	.543	-.232	170	2942	-.123	.086	.229	-.414	180	2144	-.101	.085	.180	-.384
170	2218	.074	.117	.516	-.391	170	2943	-.137	.078	.137	-.391	180	2145	-.094	.090	.171	-.350
170	2219	.051	.113	.599	-.259	170	2944	-.147	.091	.136	-.440	180	2146	-.103	.082	.174	-.403
170	2401	-.124	.090	.240	-.419	170	2945	-.151	.088	.173	-.482	180	2147	-.111	.086	.220	-.425
170	2402	-.124	.089	.179	-.478	170	2946	-.159	.093	.147	-.457	180	2148	-.112	.085	.195	-.458
170	2403	-.117	.088	.178	-.464	170	2947	-.159	.083	.105	-.451	180	2149	-.128	.088	.125	-.393
170	2404	-.146	.092	.137	-.566	170	2948	-.161	.096	.158	-.474	180	2201	-.124	.089	.176	-.458
170	2405	-.150	.088	.191	-.564	180	2101	-.130	.089	.189	-.505	180	2202	-.128	.079	.102	-.425
170	2406	-.139	.079	.147	-.410	180	2102	-.125	.088	.146	-.536	180	2203	-.118	.086	.219	-.476
170	2901	-.054	.112	.348	-.424	180	2103	-.145	.087	.115	-.686	180	2204	-.127	.092	.133	-.441
170	2902	-.105	.096	.289	-.553	180	2104	-.147	.091	.134	-.585	180	2205	-.118	.083	.124	-.369

APPENDIX A -- PRESSURE DATA :

CONFIGURATION C : TAIKOO SHING CITYPLAZA, HONG KONG (MODIFIED MODEL)

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
180	2206	.123	.087	.160	-.448	180	2931	-.119	.086	.137	-.403	190	2133	-.127	.091	.199	-.546
180	2207	.085	.121	.351	-.753	180	2932	-.115	.079	.134	-.390	190	2134	-.126	.092	.137	-.447
180	2208	.058	.111	.367	-.822	180	2933	-.116	.088	.217	-.427	190	2135	-.115	.089	.161	-.424
180	2209	.035	.141	.516	-1.086	180	2934	-.119	.085	.164	-.384	190	2136	-.103	.088	.185	-.389
180	2210	.001	.138	.585	-1.553	180	2935	-.121	.079	.137	-.374	190	2137	-.097	.088	.167	-.369
180	2211	.016	.116	.529	-1.340	180	2936	-.124	.092	.219	-.468	190	2138	-.093	.092	.214	-.396
180	2212	.016	.129	.498	-.377	180	2937	-.128	.084	.186	-.438	190	2139	-.112	.088	.169	-.427
180	2213	.042	.116	.369	-.476	180	2938	-.136	.080	.122	-.482	190	2140	-.121	.091	.210	-.413
180	2214	.013	.117	.528	-.504	180	2939	-.122	.081	.122	-.407	190	2141	-.132	.091	.202	-.429
180	2215	.002	.127	.602	-.588	180	2940	-.139	.073	.093	-.364	190	2142	-.133	.087	.198	-.396
180	2216	.065	.103	.366	-.627	180	2941	-.118	.082	.179	-.439	190	2143	-.114	.085	.153	-.462
180	2217	.022	.100	.464	-.711	180	2942	-.124	.085	.145	-.446	190	2144	-.104	.092	.186	-.436
180	2218	.003	.116	.492	-.792	180	2943	-.132	.087	.198	-.536	190	2145	-.096	.089	.199	-.400
180	2219	.008	.106	.416	-.833	180	2944	-.135	.086	.167	-.434	190	2146	-.099	.091	.155	-.391
180	2401	.112	.087	.195	-.357	180	2945	-.136	.091	.148	-.532	190	2147	-.109	.083	.175	-.422
180	2402	.120	.085	.135	-.395	180	2946	-.144	.081	.098	-.416	190	2148	-.119	.088	.158	-.446
180	2403	.111	.078	.160	-.376	180	2947	-.145	.084	.090	-.426	190	2149	-.123	.077	.126	-.535
180	2404	.144	.086	.156	-.417	180	2948	-.142	.079	.143	-.426	190	2201	-.120	.088	.166	-.437
180	2405	.142	.085	.115	-.435	190	2101	-.130	.091	.174	-.494	190	2202	-.125	.090	.193	-.393
180	2406	.134	.085	.171	-.442	190	2102	-.138	.088	.134	-.448	190	2203	-.124	.085	.144	-.432
180	2905	.048	.104	.407	-.355	190	2103	-.147	.093	.177	-.470	190	2204	-.131	.089	.166	-.442
180	29052	.118	.110	.242	-.491	190	2104	-.154	.093	.188	-.465	190	2205	-.118	.090	.176	-.417
180	29053	.080	.106	.349	-.440	190	2105	-.133	.088	.148	-.426	190	2206	-.125	.086	.201	-.438
180	29054	.094	.097	.620	-.490	190	2106	-.132	.090	.150	-.416	190	2207	-.078	.111	.258	-.726
180	29055	.116	.096	.220	-.490	190	2107	-.146	.091	.166	-.433	190	2208	-.068	.117	.370	-.562
180	2906	.100	.093	.212	-.402	190	2108	-.142	.089	.143	-.431	190	2209	-.069	.126	.469	-.734
180	2907	.165	.091	.165	-.508	190	2109	-.129	.090	.189	-.419	190	2210	-.060	.141	.509	-.733
180	2908	.146	.090	.142	-.429	190	2110	-.150	.091	.173	-.445	190	2211	-.049	.102	.371	-.538
180	2909	.138	.076	.119	-.378	190	2111	-.163	.084	.127	-.446	190	2212	-.033	.131	.441	-.544
180	2910	.143	.088	.146	-.457	190	2112	-.154	.086	.095	-.469	190	2213	-.045	.106	.289	-.527
180	2911	.161	.088	.100	-.471	190	2113	-.097	.091	.182	-.410	190	2214	-.036	.117	.462	-.602
180	2912	.162	.091	.170	-.540	190	2114	-.100	.089	.175	-.420	190	2215	-.023	.120	.525	-.638
180	2913	.125	.085	.163	-.446	190	2115	-.103	.091	.177	-.413	190	2216	-.022	.091	.262	-.505
180	2914	.116	.083	.192	-.401	190	2116	-.101	.085	.199	-.392	190	2217	-.032	.108	.342	-.533
180	2915	.105	.086	.149	-.509	190	2117	-.115	.087	.153	-.412	190	2218	-.019	.111	.460	-.608
180	2916	.127	.078	.135	-.364	190	2118	-.111	.078	.153	-.366	190	2219	-.022	.110	.543	-.638
180	2917	.145	.087	.132	-.417	190	2119	-.113	.087	.178	-.412	190	2401	-.116	.089	.184	-.538
180	2918	.160	.081	.120	-.449	190	2120	-.119	.097	.228	-.428	190	2402	-.118	.088	.183	-.515
180	2919	.122	.086	.183	-.480	190	2121	-.126	.086	.180	-.487	190	2403	-.108	.083	.162	-.385
180	2920	.106	.077	.149	-.384	190	2122	-.130	.089	.207	-.430	190	2404	-.134	.088	.164	-.432
180	2921	.107	.084	.189	-.469	190	2123	-.132	.083	.182	-.401	190	2405	-.133	.088	.199	-.450
180	2922	.127	.090	.152	-.431	190	2124	-.135	.084	.136	-.396	190	2406	-.122	.084	.133	-.413
180	2923	.112	.089	.137	-.420	190	2125	-.130	.085	.163	-.459	190	2901	-.049	.111	.401	-.408
180	2924	.113	.085	.175	-.424	190	2126	-.117	.086	.200	-.430	190	2902	-.105	.114	.316	-.523
180	2925	.115	.086	.240	-.377	190	2127	-.121	.081	.109	-.357	190	2903	-.059	.106	.373	-.531
180	2926	.122	.083	.159	-.398	190	2128	-.119	.083	.196	-.427	190	2904	-.106	.104	.354	-.482
180	2927	.138	.088	.122	-.417	190	2129	-.115	.090	.152	-.433	190	2905	-.107	.090	.205	-.521
180	2928	.153	.084	.139	-.485	190	2130	-.125	.085	.139	-.413	190	2906	-.089	.097	.255	-.421
180	2929	.159	.087	.176	-.510	190	2131	-.133	.086	.135	-.416	190	2907	-.166	.093	.143	-.538
180	2930	.137	.083	.162	-.404	190	2132	-.132	.080	.144	-.404	190	2908	-.144	.093	.179	-.487

APPENDIX A -- PRESSURE DATA ; CONFIGURATION C : TAIKOO SHING CITYPLAZA, HONG KONG (MODIFIED MODEL)

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
190	2909	131	.082	.124	- .390	200	2111	138	.087	.120	- .432	200	2212	090	.096	.305	- .442
190	2910	138	.088	.183	- .462	200	2112	152	.089	.092	- .473	200	2213	053	.087	.350	- .332
190	2911	162	.093	.127	- .467	200	2113	100	.086	.175	- .396	200	2214	057	.090	.359	- .353
190	2912	152	.090	.131	- .583	200	2114	093	.095	.179	- .415	200	2215	057	.099	.259	- .583
190	2914	117	.082	.217	- .441	200	2115	103	.082	.249	- .385	200	2216	064	.082	.204	- .302
190	2915	103	.086	.168	- .466	200	2116	102	.087	.166	- .392	200	2217	053	.087	.269	- .349
190	2916	121	.093	.208	- .419	200	2117	092	.083	.189	- .432	200	2218	051	.101	.313	- .346
190	2917	145	.091	.155	- .469	200	2118	112	.075	.165	- .378	200	2219	047	.096	.270	- .326
190	2918	163	.089	.133	- .509	200	2119	115	.081	.162	- .365	200	2401	103	.085	.185	- .660
190	2919	123	.087	.131	- .384	200	2120	114	.091	.194	- .462	200	2402	107	.093	.174	- .450
190	2920	103	.087	.199	- .388	200	2121	111	.083	.192	- .396	200	2403	098	.094	.197	- .454
190	2921	110	.083	.174	- .384	200	2122	106	.082	.156	- .371	200	2404	109	.078	.120	- .354
190	2922	132	.089	.175	- .397	200	2123	111	.085	.175	- .374	200	2405	106	.085	.211	- .380
190	2923	113	.092	.206	- .422	200	2124	106	.076	.192	- .360	200	2406	101	.082	.139	- .362
190	2924	110	.084	.202	- .384	200	2125	105	.077	.113	- .368	200	2901	016	.104	.410	- .301
190	2925	115	.080	.142	- .415	200	2126	112	.090	.177	- .371	200	2902	086	.100	.268	- .569
190	2926	121	.088	.171	- .426	200	2127	103	.092	.193	- .442	200	2903	061	.101	.402	- .378
190	2927	143	.089	.108	- .434	200	2128	105	.078	.129	- .383	200	2904	060	.093	.316	- .424
190	2928	155	.096	.186	- .457	200	2129	100	.089	.234	- .396	200	2905	097	.090	.197	- .403
190	2929	151	.085	.240	- .537	200	2130	102	.082	.148	- .357	200	2906	082	.085	.222	- .372
190	2930	144	.086	.121	- .456	200	2131	107	.078	.146	- .420	200	2907	146	.085	.122	- .494
190	2931	121	.077	.130	- .366	200	2132	111	.095	.192	- .520	200	2908	127	.093	.200	- .428
190	2932	114	.085	.159	- .424	200	2133	107	.087	.200	- .436	200	2909	106	.095	.171	- .485
190	2933	113	.096	.246	- .462	200	2134	126	.087	.182	- .477	200	2910	105	.081	.140	- .387
190	2934	121	.085	.153	- .437	200	2135	115	.083	.145	- .412	200	2911	111	.089	.219	- .396
190	2935	124	.088	.224	- .448	200	2136	104	.081	.140	- .352	200	2912	141	.090	.132	- .481
190	2936	129	.083	.174	- .388	200	2137	093	.088	.168	- .389	200	2913	115	.086	.184	- .415
190	2937	121	.084	.162	- .413	200	2138	089	.085	.235	- .393	200	2914	106	.094	.205	- .505
190	2938	134	.084	.158	- .444	200	2139	090	.086	.194	- .385	200	2915	099	.081	.194	- .420
190	2939	120	.085	.194	- .426	200	2140	090	.086	.192	- .371	200	2916	109	.080	.173	- .423
190	2940	132	.080	.112	- .399	200	2141	099	.082	.180	- .428	200	2917	117	.080	.112	- .509
190	2941	120	.083	.202	- .419	200	2142	100	.087	.157	- .401	200	2918	120	.079	.114	- .347
190	2942	124	.089	.143	- .435	200	2143	111	.084	.134	- .415	200	2919	121	.087	.133	- .392
190	2943	130	.086	.172	- .418	200	2144	100	.087	.159	- .363	200	2920	104	.086	.167	- .388
190	2944	136	.082	.154	- .401	200	2145	091	.092	.169	- .404	200	2921	100	.085	.180	- .398
190	2945	136	.092	.175	- .527	200	2146	095	.084	.281	- .375	200	2922	107	.084	.144	- .362
190	2946	138	.086	.147	- .453	200	2147	092	.085	.182	- .389	200	2923	107	.082	.194	- .383
190	2947	138	.086	.133	- .440	200	2148	092	.082	.185	- .351	200	2924	117	.087	.151	- .449
190	2948	130	.085	.164	- .405	200	2149	093	.076	.167	- .345	200	2925	110	.084	.173	- .401
200	2101	128	.103	.172	- .543	200	2201	101	.087	.160	- .367	200	2926	107	.083	.147	- .399
200	2102	133	.087	.146	- .489	200	2202	106	.083	.154	- .399	200	2927	122	.093	.138	- .438
200	2103	157	.097	.182	- .534	200	2203	101	.085	.184	- .406	200	2928	134	.086	.241	- .487
200	2104	163	.091	.125	- .522	200	2204	109	.084	.191	- .426	200	2929	119	.083	.123	- .394
200	2105	125	.084	.131	- .498	200	2205	105	.082	.178	- .403	200	2930	118	.081	.165	- .405
200	2106	133	.092	.145	- .451	200	2206	111	.086	.150	- .524	200	2931	111	.075	.167	- .403
200	2107	138	.088	.175	- .476	200	2207	072	.103	.255	- .574	200	2932	104	.080	.183	- .354
200	2108	145	.092	.158	- .446	200	2208	069	.102	.410	- .528	200	2933	110	.090	.198	- .388
200	2109	120	.088	.173	- .392	200	2209	099	.120	.395	- .850	200	2934	110	.081	.207	- .387
200	2110	131	.085	.139	- .442	200	2210	098	.108	.401	- .740	200	2935	107	.082	.161	- .394
						200	2211	094	.085	.331	- .343	200	2936	110	.084	.166	- .374

APPENDIX A -- PRESSURE DATA : CONFIGURATION C : TAIKOO SHING CITYPLAZA, HONG KONG (MODIFIED MODEL)

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
2200	29337	099	075	177	351	210	2139	076	093	315	456	210	2915	085	078	193	340
2200	29338	108	076	107	361	210	2140	080	084	189	374	210	2916	088	074	160	401
2200	29339	116	088	165	378	210	2141	084	085	151	390	210	2917	094	082	203	354
2200	29400	107	090	165	331	210	2142	095	084	181	365	210	2918	095	085	190	348
2200	29411	109	078	134	378	210	2143	087	084	168	389	210	2919	095	078	140	448
2200	29422	107	088	206	394	210	2144	081	084	172	394	210	2920	081	080	161	360
2200	29433	112	083	172	389	210	2145	077	091	236	361	210	2921	081	089	305	434
2200	29444	117	098	194	542	210	2146	082	084	241	382	210	2922	089	080	177	369
2200	29455	115	085	170	451	210	2147	078	088	231	378	210	2923	085	083	152	404
2200	29466	113	083	139	440	210	2148	084	083	328	389	210	2924	089	082	196	328
2200	29477	112	080	117	404	210	2149	090	088	217	358	210	2925	086	082	177	376
2200	29488	106	077	139	341	210	2201	094	078	133	460	210	2926	086	081	152	370
2210	21011	102	088	182	327	210	2202	092	080	169	367	210	2927	096	090	214	391
2210	21012	110	085	207	436	210	2203	087	090	306	437	210	2928	099	082	203	323
2210	21013	113	092	195	483	210	2204	092	082	158	395	210	2929	090	083	164	380
2210	21014	112	089	186	486	210	2205	087	084	138	389	210	2930	094	080	303	328
2210	21015	096	090	183	416	210	2206	092	081	162	330	210	2931	087	087	216	347
2210	21016	102	086	200	510	210	2207	063	094	325	640	210	2932	081	083	172	337
2210	21017	104	086	147	313	210	2208	068	095	322	522	210	2933	083	081	214	348
2210	21018	107	095	336	499	210	2209	090	117	373	767	210	2934	085	088	249	394
2210	21019	090	084	172	399	210	2210	091	094	248	616	210	2935	084	084	261	349
2210	21110	101	086	151	78	210	2211	093	083	176	527	210	2936	085	086	157	459
2210	21111	107	085	190	369	210	2212	093	094	355	648	210	2937	079	082	170	327
2210	21112	109	084	153	398	210	2213	058	093	300	398	210	2938	090	085	196	349
2210	21113	077	082	172	367	210	2214	058	092	292	349	210	2939	089	075	168	360
2210	21114	082	091	211	363	210	2215	058	087	207	339	210	2940	093	081	199	324
2210	21115	088	085	224	383	210	2216	068	091	253	370	210	2941	084	076	190	394
2210	21116	079	087	238	361	210	2217	051	089	274	351	210	2942	089	083	261	345
2210	21117	086	080	303	375	210	2218	057	094	250	422	210	2943	089	082	152	368
2210	21118	090	088	204	300	210	2219	061	088	280	365	210	2944	091	082	166	389
2210	21119	085	086	180	335	210	2401	083	088	206	344	210	2945	096	081	170	402
2210	21200	087	082	201	377	210	2402	091	077	171	427	210	2946	095	078	172	417
2210	21211	091	089	244	398	210	2403	081	082	225	332	210	2947	092	083	189	350
2210	21222	088	085	237	448	210	2404	093	076	157	357	210	2948	094	084	197	360
2210	21233	088	088	154	460	210	2405	097	084	264	358	220	2101	082	092	230	321
2210	21244	092	082	147	340	210	2406	088	081	175	333	220	2102	097	086	157	399
2210	21255	093	085	195	361	210	2901	033	105	416	300	220	2103	093	085	259	449
2210	21266	091	077	166	371	210	2902	080	086	201	382	220	2104	096	095	209	561
2210	21277	086	083	232	329	210	2903	047	099	287	358	220	2105	080	092	260	456
2210	21288	087	078	183	387	210	2904	074	094	295	405	220	2106	087	090	193	419
2210	21299	086	084	270	348	210	2905	069	089	185	444	220	2107	088	086	186	406
2210	21310	091	082	172	346	210	2906	054	085	208	330	220	2108	099	082	169	397
2210	21311	094	081	191	341	210	2907	108	090	176	400	220	2109	082	080	196	333
2210	21312	097	080	153	376	210	2908	100	079	169	369	220	2110	089	085	190	386
2210	21313	099	083	178	370	210	2909	085	085	231	334	220	2111	088	082	172	414
2210	21314	096	083	173	335	210	2910	087	080	163	414	220	2112	096	081	202	361
2210	21315	089	087	215	332	210	2911	098	085	281	398	220	2113	085	072	165	336
2210	21316	084	086	180	365	210	2912	101	084	172	453	220	2114	089	082	171	438
2210	21317	084	081	185	360	210	2913	078	084	200	356	220	2115	096	086	161	399
2210	21318	078	082	187	369	210	2914	087	079	150	351	220	2116	092	078	182	377

APPENDIX A -- PRESSURE DATA ;

CONFIGURATION C : TAIKOO SHING CITYPLAZA, HONG KONG (MODIFIED MODEL)

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
220	2117	.090	.077	.272	.366	220	2218	.059	.079	.195	.352	220	2943	.078	.074	.165	.316
220	2118	.082	.084	.233	.340	220	2219	.063	.082	.246	.336	220	2944	.073	.087	.222	.352
220	2119	.082	.076	.169	.392	220	2401	.089	.078	.148	.375	220	2945	.082	.083	.198	.333
220	2120	.081	.073	.174	.323	220	2402	.083	.077	.222	.340	220	2946	.078	.078	.254	.333
220	2121	.078	.077	.215	.401	220	2403	.078	.077	.192	.348	220	2947	.075	.068	.263	.333
220	2122	.082	.080	.158	.354	220	2404	.075	.077	.182	.334	220	2948	.070	.087	.294	.333
220	2123	.084	.074	.157	.332	220	2405	.077	.078	.221	.354	230	2101	.063	.092	.235	.477
220	2124	.073	.079	.215	.322	220	2406	.073	.074	.157	.313	230	2102	.073	.089	.260	.499
220	2125	.075	.075	.152	.361	220	2901	.011	.092	.507	.249	230	2103	.075	.097	.243	.454
220	2126	.077	.078	.211	.398	220	2902	.066	.078	.166	.332	230	2104	.081	.093	.342	.393
220	2127	.080	.078	.187	.331	220	2903	.063	.085	.226	.441	230	2105	.064	.094	.313	.421
220	2128	.078	.078	.197	.359	220	2904	.043	.086	.262	.390	230	2106	.075	.089	.248	.405
220	2129	.076	.080	.213	.343	220	2905	.062	.077	.183	.351	230	2107	.083	.089	.198	.461
220	2130	.076	.074	.157	.314	220	2906	.057	.080	.257	.311	230	2108	.094	.085	.232	.393
220	2131	.077	.079	.233	.368	220	2907	.098	.078	.153	.387	230	2109	.084	.090	.209	.444
220	2132	.069	.088	.231	.369	220	2908	.077	.079	.217	.306	230	2110	.083	.088	.222	.393
220	2133	.073	.085	.233	.367	220	2909	.068	.077	.158	.304	230	2111	.094	.085	.228	.369
220	2134	.087	.080	.256	.337	220	2910	.076	.081	.192	.367	230	2112	.106	.082	.221	.366
220	2135	.076	.092	.214	.389	220	2911	.086	.081	.212	.383	230	2113	.093	.082	.144	.360
220	2136	.073	.090	.333	.412	220	2912	.090	.076	.163	.361	230	2114	.093	.087	.162	.429
220	2137	.070	.087	.231	.383	220	2913	.083	.083	.228	.379	230	2115	.101	.080	.243	.393
220	2138	.071	.085	.193	.390	220	2914	.086	.083	.191	.349	230	2116	.094	.085	.196	.393
220	2139	.071	.078	.187	.338	220	2915	.090	.079	.178	.340	230	2117	.093	.083	.199	.447
220	2140	.068	.080	.194	.308	220	2916	.089	.072	.199	.323	230	2118	.083	.087	.243	.333
220	2141	.069	.085	.213	.346	220	2917	.083	.086	.189	.376	230	2119	.082	.084	.172	.363
220	2142	.063	.081	.191	.364	220	2918	.086	.087	.301	.412	230	2120	.091	.079	.209	.383
220	2143	.078	.082	.214	.353	220	2919	.088	.085	.212	.363	230	2121	.087	.091	.217	.470
220	2144	.067	.073	.183	.317	220	2920	.097	.080	.160	.401	230	2122	.091	.097	.222	.428
220	2145	.063	.080	.219	.322	220	2921	.097	.078	.152	.366	230	2123	.085	.096	.234	.399
220	2146	.063	.082	.212	.357	220	2922	.080	.076	.173	.324	230	2124	.078	.084	.168	.337
220	2147	.067	.078	.188	.390	220	2923	.083	.082	.172	.360	230	2125	.072	.090	.222	.386
220	2148	.068	.077	.303	.330	220	2924	.092	.080	.173	.378	230	2126	.082	.095	.241	.452
220	2149	.066	.082	.230	.307	220	2925	.096	.080	.188	.368	230	2127	.076	.083	.215	.320
220	2201	.086	.086	.213	.376	220	2926	.078	.070	.170	.318	230	2128	.070	.086	.247	.316
220	2202	.080	.081	.176	.370	220	2927	.081	.079	.193	.353	230	2129	.072	.093	.231	.399
220	2203	.079	.077	.189	.358	220	2928	.080	.079	.163	.363	230	2130	.082	.088	.241	.353
220	2204	.070	.076	.194	.360	220	2929	.087	.076	.179	.363	230	2131	.078	.093	.264	.428
220	2205	.070	.082	.192	.354	220	2930	.098	.074	.222	.336	230	2132	.069	.079	.180	.343
220	2206	.070	.078	.180	.333	220	2931	.082	.082	.212	.349	230	2133	.074	.079	.215	.333
220	2207	.058	.093	.233	.794	220	2932	.075	.073	.166	.356	230	2134	.082	.084	.245	.428
220	2208	.051	.079	.247	.571	220	2933	.076	.072	.181	.318	230	2135	.077	.084	.256	.333
220	2209	.057	.093	.262	.740	220	2934	.078	.078	.194	.392	230	2136	.069	.084	.291	.333
220	2210	.060	.093	.197	.853	220	2935	.078	.080	.163	.347	230	2137	.072	.080	.202	.334
220	2211	.067	.071	.181	.423	220	2936	.083	.073	.157	.311	230	2138	.070	.084	.207	.416
220	2212	.072	.085	.231	.501	220	2937	.077	.077	.217	.327	230	2139	.067	.082	.208	.477
220	2213	.050	.086	.272	.321	220	2938	.080	.074	.144	.355	230	2140	.070	.082	.214	.333
220	2214	.051	.078	.201	.623	220	2939	.082	.073	.196	.303	230	2141	.069	.088	.227	.333
220	2215	.059	.083	.221	.783	220	2940	.075	.075	.132	.321	230	2142	.075	.082	.252	.333
220	2216	.062	.078	.209	.463	220	2941	.080	.077	.194	.366	230	2143	.081	.083	.274	.428
220	2217	.052	.084	.206	.340	220	2942	.079	.079	.214	.360	230	2144	.071	.082	.179	.428

APPENDIX A -- PRESSURE DATA : CONFIGURATION C : TAIKOO SHING CITYPLAZA, HONG KONG (MODIFIED MODEL)

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
2330	2143	-0.69	0.87	2.07	-339	2330	2921	-0.88	0.78	2.01	-381	240	2123	-0.68	0.93	2.23	-352
2330	2146	-0.70	0.81	2.56	-346	2330	2922	-0.79	0.79	2.12	-403	240	2124	-0.65	0.84	2.63	-346
2330	2147	-0.70	0.84	2.42	-353	2330	2923	-0.77	0.85	2.12	-376	240	2125	-0.65	0.92	2.59	-371
2330	2148	-0.75	0.86	2.24	-439	2330	2924	-0.95	0.81	2.47	-346	240	2126	-0.66	0.94	2.16	-330
2330	2149	-0.71	0.87	2.59	-333	2330	2925	-0.98	0.80	2.47	-355	240	2127	-0.61	0.89	2.53	-390
2201	-0.95	0.77	1.70	-423	2330	2926	-0.81	0.81	1.50	-344	240	2128	-0.66	0.91	2.57	-324	
2202	-0.80	0.81	1.70	-427	2330	2927	-0.80	0.84	2.07	-368	240	2129	-0.61	0.93	2.57	-402	
2203	-0.77	0.79	1.99	-364	2330	2928	-0.83	0.77	2.33	-384	240	2130	-0.65	0.92	2.16	-380	
2204	-0.71	0.81	1.99	-394	2330	2929	-0.88	0.81	2.04	-344	240	2131	-0.64	0.90	2.70	-362	
2205	-0.68	0.85	2.18	-364	2330	2930	-0.94	0.84	2.07	-423	240	2132	-0.65	1.01	3.02	-389	
2206	-0.75	0.83	2.25	-350	2330	2931	-0.76	0.85	2.41	-343	240	2133	-0.60	1.00	2.56	-421	
2207	-0.56	0.85	2.97	-509	2330	2932	-0.71	0.81	1.75	-330	240	2134	-0.69	0.90	2.24	-337	
2208	-0.45	0.84	2.48	-536	2330	2933	-0.83	0.78	2.06	-396	240	2135	-0.61	0.92	2.04	-375	
2209	-0.46	0.85	2.62	-313	2330	2934	-0.82	0.91	2.19	-467	240	2136	-0.60	0.87	2.64	-342	
2210	-0.50	0.86	2.69	-300	2330	2935	-0.83	0.96	2.18	-409	240	2137	-0.62	0.91	2.03	-397	
2211	-0.52	0.72	1.92	-387	2330	2936	-0.78	0.94	2.24	-384	240	2138	-0.63	0.92	3.01	-336	
2212	-0.59	0.91	2.70	-309	2330	2937	-0.79	0.84	1.91	-343	240	2139	-0.61	0.89	2.15	-435	
2213	-0.50	0.87	2.30	-323	2330	2938	-0.71	0.90	2.36	-379	240	2140	-0.55	0.90	2.24	-373	
2214	-0.48	0.82	2.14	-334	2330	2939	-0.79	0.93	2.29	-444	240	2141	-0.62	0.92	2.47	-394	
2215	-0.51	0.80	2.51	-410	2330	2940	-0.70	0.78	1.95	-309	240	2142	-0.62	0.92	2.12	-224	
2216	-0.64	0.91	2.42	-409	2330	2941	-0.66	0.85	2.36	-327	240	2143	-0.64	0.96	2.28	-361	
2217	-0.53	0.97	2.60	-363	2330	2942	-0.69	0.92	2.35	-381	240	2144	-0.59	0.92	2.74	-373	
2218	-0.58	0.92	2.76	-333	2330	2943	-0.83	0.86	2.50	-373	240	2145	-0.59	0.94	2.31	-366	
2219	-0.59	0.88	1.98	-339	2330	2944	-0.71	0.78	1.98	-328	240	2146	-0.57	0.93	2.25	-413	
2401	-0.83	0.92	2.38	-442	2330	2945	-0.81	0.78	2.16	-346	240	2147	-0.63	0.89	2.00	-332	
2402	-0.85	0.94	2.32	-406	2330	2946	-0.77	0.80	2.25	-339	240	2148	-0.62	0.95	3.10	-364	
2403	-0.76	0.82	1.95	-318	2330	2947	-0.80	0.80	2.24	-371	240	2149	-0.61	0.86	2.58	-334	
2404	-0.71	0.84	2.53	-325	2330	2948	-0.70	0.80	1.89	-334	240	2201	-0.78	0.88	1.88	-407	
2405	-0.78	0.90	2.16	-426	240	2101	-0.53	1.15	3.20	-524	240	2202	-0.74	0.82	2.70	-330	
2406	-0.83	0.88	2.38	-355	240	2102	-0.55	1.13	3.34	-540	240	2203	-0.68	0.85	1.87	-392	
2901	-0.01	0.98	4.34	-295	240	2103	-0.69	1.03	2.95	-428	240	2204	-0.57	0.87	2.28	-354	
2902	-0.76	0.85	2.56	-371	240	2104	-0.72	1.00	3.07	-402	240	2205	-0.61	0.91	2.43	-404	
2903	-0.75	0.98	2.45	-318	240	2105	-0.58	0.96	2.67	-465	240	2206	-0.59	0.91	2.45	-357	
2904	-0.57	0.99	2.42	-412	240	2106	-0.63	0.98	2.66	-391	240	2207	-0.44	0.95	2.29	-385	
2905	-0.68	0.97	2.55	-374	240	2107	-0.72	1.00	2.69	-362	240	2208	-0.38	0.91	2.87	-331	
2906	-0.61	0.87	2.30	-339	240	2108	-0.86	0.92	2.19	-528	240	2209	-0.37	0.96	2.41	-346	
2907	-0.99	0.96	2.46	-432	240	2109	-0.69	0.93	2.07	-394	240	2210	-0.40	0.95	2.52	-498	
2908	-0.82	0.95	2.30	-467	240	2110	-0.79	0.96	2.17	-463	240	2211	-0.44	0.77	1.74	-481	
2909	-0.72	0.83	2.13	-309	240	2111	-0.81	0.94	2.35	-356	240	2212	-0.50	1.03	3.39	-442	
2910	-0.72	0.88	2.39	-342	240	2112	-0.88	0.99	2.01	-425	240	2213	-0.43	0.85	2.76	-361	
2911	-0.85	0.94	2.29	-444	240	2113	-0.79	0.89	2.60	-383	240	2214	-0.41	0.86	2.58	-330	
2912	-0.96	0.91	1.98	-382	240	2114	-0.89	0.97	1.94	-422	240	2215	-0.42	0.95	2.90	-368	
2913	-0.83	0.96	2.53	-409	240	2115	-0.85	0.96	2.35	-452	240	2216	-0.55	0.95	2.14	-354	
2914	-0.79	0.76	1.75	-321	240	2116	-0.86	0.92	1.81	-421	240	2217	-0.49	0.87	2.48	-452	
2915	-0.86	0.74	1.75	-344	240	2117	-0.79	0.96	2.94	-374	240	2218	-0.44	0.92	2.58	-361	
2916	-0.84	0.76	2.16	-361	240	2118	-0.69	0.87	2.60	-338	240	2219	-0.49	0.87	2.68	-266	
2917	-0.86	0.78	1.97	-368	240	2119	-0.71	0.88	2.38	-378	240	2401	-0.69	0.93	2.46	-407	
2918	-0.81	0.80	1.74	-343	240	2120	-0.70	0.94	2.53	-369	240	2402	-0.76	0.94	2.02	-364	
2919	-0.88	0.77	1.60	-312	240	2121	-0.68	0.96	2.39	-346	240	2403	-0.67	0.88	2.17	-334	
2920	-0.96	0.81	1.81	-434	240	2122	-0.80	0.90	2.12	-438	240	2404	-0.70	0.90	2.53	-353	

APPENDIX A -- PRESSURE DATA) CONFIGURATION C : TAIKOO SHING CITYPLAZA, HONG KONG (MODIFIED MODEL)

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
240	2405	.067	.092	.263	.404	250	2101	.035	.103	.403	.387	250	2202	.050	.087	.219	.373
240	2406	.066	.091	.208	.368	250	2102	.038	.099	.352	.443	250	2203	.052	.081	.214	.324
240	2901	.041	.107	.657	.278	250	2103	.043	.100	.253	.522	250	2204	.049	.092	.296	.334
240	2902	.053	.098	.314	.354	250	2104	.050	.107	.238	.546	250	2205	.040	.087	.223	.320
240	2903	.060	.102	.308	.412	250	2105	.036	.096	.223	.367	250	2206	.043	.083	.243	.334
240	2904	.013	.102	.370	.354	250	2106	.044	.094	.239	.430	250	2207	.034	.094	.311	.323
240	2905	.049	.096	.250	.383	250	2107	.045	.093	.306	.438	250	2208	.033	.089	.266	.374
240	2906	.044	.088	.268	.343	250	2108	.056	.087	.328	.438	250	2209	.035	.099	.294	.445
240	2907	.081	.094	.268	.429	250	2109	.051	.099	.298	.367	250	2210	.034	.090	.243	.337
240	2908	.063	.097	.222	.400	250	2110	.050	.091	.326	.335	250	2211	.037	.081	.253	.297
240	2909	.057	.088	.228	.302	250	2111	.054	.090	.239	.453	250	2212	.038	.094	.250	.428
240	2910	.068	.095	.268	.349	250	2112	.057	.095	.255	.490	250	2213	.032	.087	.272	.319
240	2911	.073	.094	.241	.423	250	2113	.059	.090	.215	.389	250	2214	.030	.087	.253	.284
240	2912	.069	.095	.221	.418	250	2114	.059	.099	.233	.455	250	2215	.032	.087	.277	.304
240	2913	.057	.095	.323	.354	250	2115	.061	.088	.218	.332	250	2216	.038	.086	.262	.347
240	2914	.074	.100	.284	.441	250	2116	.059	.093	.294	.371	250	2217	.036	.092	.251	.341
240	2915	.072	.097	.223	.401	250	2117	.057	.088	.205	.333	250	2218	.034	.080	.205	.280
240	2916	.080	.082	.197	.321	250	2118	.037	.087	.272	.353	250	2219	.033	.088	.259	.323
240	2917	.076	.088	.175	.343	250	2119	.037	.086	.245	.313	250	2401	.053	.087	.210	.399
240	2918	.078	.083	.228	.345	250	2120	.047	.088	.276	.344	250	2402	.053	.090	.280	.338
240	2919	.088	.091	.191	.532	250	2121	.053	.086	.220	.367	250	2403	.053	.094	.261	.397
240	2920	.089	.092	.267	.356	250	2122	.058	.091	.232	.346	250	2404	.053	.089	.289	.373
240	2921	.081	.085	.180	.442	250	2123	.058	.082	.169	.338	250	2405	.054	.088	.236	.352
240	2922	.071	.088	.178	.366	250	2124	.053	.089	.236	.333	250	2406	.054	.086	.319	.338
240	2923	.074	.090	.220	.404	250	2125	.059	.087	.196	.422	250	2901	.007	.095	.399	.306
240	2924	.087	.094	.219	.383	250	2126	.036	.090	.399	.322	250	2902	.043	.092	.262	.373
240	2925	.087	.097	.226	.428	250	2127	.033	.095	.282	.353	250	2903	.046	.087	.232	.367
240	2926	.075	.088	.251	.356	250	2128	.049	.090	.385	.372	250	2904	.033	.093	.272	.327
240	2927	.072	.091	.200	.373	250	2129	.048	.089	.236	.321	250	2905	.043	.084	.190	.317
240	2928	.071	.090	.212	.411	250	2130	.056	.087	.317	.342	250	2906	.039	.089	.272	.312
240	2929	.081	.088	.164	.415	250	2131	.054	.087	.209	.332	250	2907	.048	.089	.232	.446
240	2930	.083	.093	.288	.376	250	2132	.053	.093	.253	.360	250	2908	.044	.091	.274	.330
240	2931	.070	.085	.256	.338	250	2133	.050	.089	.251	.347	250	2909	.047	.095	.275	.379
240	2932	.066	.086	.262	.338	250	2134	.036	.088	.252	.301	250	2910	.059	.091	.297	.379
240	2933	.070	.092	.253	.439	250	2135	.039	.094	.329	.373	250	2911	.068	.089	.222	.366
240	2934	.074	.096	.250	.371	250	2136	.040	.090	.265	.380	250	2912	.051	.090	.323	.353
240	2935	.081	.088	.209	.436	250	2137	.048	.086	.256	.301	250	2913	.045	.089	.227	.353
240	2936	.072	.091	.211	.349	250	2138	.049	.090	.242	.389	250	2914	.052	.090	.233	.321
240	2937	.071	.084	.242	.349	250	2139	.052	.083	.208	.343	250	2915	.058	.084	.201	.325
240	2938	.070	.092	.253	.370	250	2140	.054	.094	.304	.363	250	2916	.059	.080	.253	.278
240	2939	.070	.093	.208	.388	250	2141	.051	.089	.211	.440	250	2917	.060	.091	.280	.430
240	2940	.067	.084	.226	.300	250	2142	.053	.087	.229	.344	250	2918	.062	.088	.253	.407
240	2941	.066	.091	.242	.338	250	2143	.042	.095	.309	.330	250	2919	.063	.080	.244	.301
240	2942	.065	.091	.243	.397	250	2144	.043	.091	.242	.376	250	2920	.060	.086	.218	.358
240	2943	.068	.092	.202	.377	250	2145	.050	.100	.277	.434	250	2921	.062	.080	.192	.314
240	2944	.063	.100	.265	.417	250	2146	.052	.088	.217	.363	250	2922	.061	.091	.280	.363
240	2945	.065	.099	.232	.415	250	2147	.055	.095	.296	.372	250	2923	.059	.086	.200	.328
240	2946	.067	.087	.245	.326	250	2148	.053	.091	.248	.346	250	2924	.060	.083	.209	.352
240	2947	.063	.088	.209	.326	250	2149	.053	.085	.259	.350	250	2925	.065	.092	.245	.369
240	2948	.062	.082	.238	.323	250	2201	.055	.083	.271	.394	250	2926	.058	.088	.215	.386

APPENDIX A -- PRESSURE DATA ; CONFIGURATION C : TAIKOO SHING CITYPLAZA , HONG KONG (MODIFIED MODEL)

UD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	UD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	UD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
250	2927	-0.62	0.98	253	-4.28	260	2129	-0.36	0.85	285	-311	260	2905	-0.44	0.88	221	-3.06
250	2928	-0.61	0.86	204	-3.46	260	2130	-0.61	0.90	216	-319	260	2906	-0.41	0.91	253	-4.02
250	2929	-0.64	0.90	292	-3.52	260	2131	-0.61	0.89	198	-341	260	2907	-0.42	0.89	221	-3.95
250	2930	-0.58	0.87	233	-3.43	260	2132	-0.61	0.88	249	-363	260	2908	-0.47	0.92	291	-3.96
250	2931	-0.40	0.85	269	-3.33	260	2133	-0.60	0.92	278	-404	260	2909	-0.52	0.89	227	-3.56
250	2932	-0.43	0.85	236	-3.01	260	2134	-0.29	0.91	259	-379	260	2910	-0.57	0.92	274	-4.06
250	2933	-0.63	0.89	263	-3.43	260	2135	-0.26	0.89	268	-296	260	2911	-0.63	0.86	256	-3.29
250	2934	-0.59	0.85	209	-3.49	260	2136	-0.35	0.92	241	-389	260	2912	-0.47	0.94	249	-3.22
250	2935	-0.60	0.90	231	-3.40	260	2137	-0.41	0.98	334	-351	260	2913	-0.44	0.91	211	-3.28
250	2936	-0.58	0.80	174	-3.03	260	2138	-0.48	0.92	272	-354	260	2914	-0.41	0.82	246	-3.41
250	2937	-0.52	0.88	257	-3.33	260	2139	-0.55	0.89	220	-389	260	2915	-0.53	0.85	237	-3.94
250	2938	-0.57	0.86	204	-4.25	260	2140	-0.56	0.86	304	-359	260	2916	-0.53	0.84	258	-4.12
250	2939	-0.52	0.89	297	-3.31	260	2141	-0.59	0.95	243	-381	260	2917	-0.49	0.86	235	-3.99
250	2940	-0.60	0.93	259	-3.80	260	2142	-0.66	0.97	282	-378	260	2918	-0.58	0.90	192	-4.08
250	2941	-0.47	0.89	291	-3.72	260	2143	-0.34	0.90	227	-331	260	2919	-0.50	0.93	292	-4.48
250	2942	-0.46	0.87	239	-3.18	260	2144	-0.30	0.96	304	-360	260	2920	-0.44	0.96	272	-4.09
250	2943	-0.58	0.88	303	-3.55	260	2145	-0.44	0.99	297	-402	260	2921	-0.48	0.85	238	-4.49
250	2944	-0.53	0.91	268	-3.26	260	2146	-0.49	0.90	220	-351	260	2922	-0.47	0.82	295	-4.06
250	2945	-0.53	0.88	251	-3.42	260	2147	-0.53	0.93	249	-389	260	2923	-0.46	0.92	241	-3.77
250	2946	-0.55	0.85	275	-3.04	260	2148	-0.49	0.93	252	-367	260	2924	-0.49	0.93	273	-4.33
250	2947	-0.53	0.91	307	-3.70	260	2149	-0.54	0.85	326	-301	260	2925	-0.50	0.85	190	-4.11
250	2948	-0.51	0.87	261	-3.60	260	2201	-0.53	0.93	271	-345	260	2926	-0.48	0.95	301	-4.39
260	2101	-0.01	1.14	465	-4.02	260	2202	-0.55	0.98	266	-359	260	2927	-0.24	0.99	266	-3.99
260	2102	-0.02	1.11	365	-4.38	260	2203	-0.62	0.89	215	-465	260	2928	-0.39	0.88	202	-4.23
260	2103	-0.02	1.18	451	-5.02	260	2204	-0.37	0.84	311	-311	260	2929	-0.53	0.90	240	-3.33
260	2104	-0.09	1.19	414	-3.89	260	2205	-0.32	0.93	266	-350	260	2930	-0.48	0.89	244	-4.44
260	2105	-0.17	1.11	325	-3.63	260	2206	-0.36	0.94	302	-373	260	2931	-0.24	0.85	336	-3.55
260	2106	-0.21	1.10	361	-4.09	260	2207	-0.31	0.86	207	-320	260	2932	-0.28	0.89	252	-4.04
260	2107	-0.28	1.18	401	-4.88	260	2208	-0.28	0.94	273	-343	260	2933	-0.57	0.98	275	-4.89
260	2108	-0.49	1.13	294	-7.56	260	2209	-0.28	0.98	322	-363	260	2934	-0.47	0.88	256	-3.77
260	2109	-0.33	0.95	358	-3.72	260	2210	-0.31	0.90	264	-311	260	2935	-0.48	0.80	220	-3.92
260	2110	-0.46	1.05	281	-5.33	260	2211	-0.29	0.80	217	-294	260	2936	-0.57	0.87	232	-3.79
260	2111	-0.53	1.04	294	-5.85	260	2212	-0.37	0.94	229	-366	260	2937	-0.49	0.87	224	-3.97
260	2112	-0.55	0.92	224	-3.61	260	2213	-0.32	0.86	372	-271	260	2938	-0.55	0.87	223	-3.77
260	2113	-0.51	0.95	297	-3.54	260	2214	-0.28	0.90	285	-279	260	2939	-0.27	0.89	289	-3.33
260	2114	-0.58	0.98	238	-4.18	260	2215	-0.29	0.98	295	-350	260	2940	-0.61	0.87	212	-4.45
260	2115	-0.53	0.90	210	-3.80	260	2216	-0.33	0.90	281	-308	260	2941	-0.26	0.93	313	-3.19
260	2116	-0.51	0.93	261	-4.11	260	2217	-0.31	0.83	242	-334	260	2942	-0.33	0.91	279	-3.89
260	2117	-0.50	0.91	236	-3.61	260	2218	-0.33	0.91	235	-327	260	2943	-0.54	0.83	238	-3.28
260	2118	-0.29	0.87	330	-2.69	260	2219	-0.36	0.91	248	-352	260	2944	-0.53	0.85	224	-4.06
260	2119	-0.33	0.95	271	-3.28	260	2401	-0.58	0.88	208	-423	260	2945	-0.58	0.87	260	-4.02
260	2120	-0.40	0.99	298	-3.41	260	2402	-0.58	0.91	271	-353	260	2946	-0.59	0.89	246	-3.66
260	2121	-0.49	0.92	248	-3.40	260	2403	-0.56	0.90	221	-364	260	2947	-0.61	0.91	236	-3.39
260	2122	-0.64	0.81	190	-3.09	260	2404	-0.60	0.90	278	-311	260	2948	-0.61	0.91	191	-3.33
260	2123	-0.67	0.89	219	-3.30	260	2405	-0.61	0.85	266	-331	270	2101	-0.07	1.06	466	-4.04
260	2124	-0.66	0.90	210	-3.69	260	2406	-0.61	0.89	224	-327	270	2102	-0.03	1.04	492	-4.43
260	2125	-0.68	0.89	210	-3.90	260	2901	-0.23	0.93	266	-321	270	2103	-0.18	1.01	421	-4.04
260	2126	-0.30	0.93	288	-3.37	260	2902	-0.46	0.99	304	-347	270	2104	-0.16	1.09	438	-4.44
260	2127	-0.26	0.91	248	-3.25	260	2903	-0.48	0.92	244	-341	270	2105	-0.06	0.99	563	-3.71
260	2128	-0.37	0.94	322	-3.15	260	2904	-0.40	0.83	255	-309	270	2106	-0.10	0.91	340	-3.96

APPENDIX A -- PRESSURE DATA ; CONFIGURATION C : TAIKOO SHING CITYPLAZA, HONG KONG (MODIFIED MODEL)

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
270	2107	017	104	381	382	270	2208	023	086	220	379	270	2933	038	086	238	361
270	2108	031	096	310	382	270	2209	019	087	279	310	270	2934	035	082	260	318
270	2109	020	093	312	341	270	2210	021	086	310	319	270	2935	036	081	236	341
270	2110	026	087	246	382	270	2211	019	072	189	265	270	2936	035	089	277	336
270	2111	031	091	315	333	270	2212	028	096	278	419	270	2937	035	083	322	301
270	2112	033	088	238	382	270	2213	022	092	321	306	270	2938	035	081	266	302
270	2113	046	089	209	415	270	2214	019	082	231	315	270	2939	011	085	256	362
270	2114	041	087	265	365	270	2215	020	087	232	320	270	2940	035	084	246	348
270	2115	047	086	306	395	270	2216	024	082	310	303	270	2941	014	085	250	301
270	2116	035	084	209	303	270	2217	016	083	230	350	270	2942	017	088	267	341
270	2117	036	095	272	329	270	2218	019	090	308	320	270	2943	027	083	233	315
270	2118	019	095	289	310	270	2219	023	088	349	370	270	2944	047	082	261	323
270	2119	018	086	263	316	270	2401	041	084	262	339	270	2945	040	083	285	304
270	2120	029	091	261	370	270	2402	037	081	220	282	270	2946	040	079	265	366
270	2121	037	086	291	310	270	2403	040	087	248	335	270	2947	039	088	278	324
270	2122	042	081	212	332	270	2404	046	084	235	337	270	2948	043	081	215	415
270	2123	041	091	270	347	270	2405	041	086	232	346	280	2101	093	142	668	349
270	2124	042	084	308	303	270	2406	036	079	210	272	280	2102	086	124	581	229
270	2125	041	082	258	317	270	2901	013	084	290	311	280	2103	071	146	603	410
270	2126	010	084	268	283	270	2902	030	089	240	348	280	2104	044	136	654	342
270	2127	015	089	239	317	270	2903	036	086	281	339	280	2105	148	143	802	304
270	2128	032	087	225	331	270	2904	028	085	255	343	280	2106	115	152	718	279
270	2129	025	091	270	354	270	2905	029	093	294	310	280	2107	082	135	840	272
270	2130	036	079	209	271	270	2906	026	086	378	334	280	2108	033	114	493	308
270	2131	041	083	259	378	270	2907	023	085	287	326	280	2109	054	101	518	276
270	2132	041	088	268	326	270	2908	028	083	263	278	280	2110	039	093	399	256
270	2133	036	088	284	312	270	2909	037	089	263	369	280	2111	010	096	445	263
270	2134	017	085	306	354	270	2910	044	087	239	352	280	2112	009	092	313	313
270	2135	013	090	302	332	270	2911	041	088	239	363	280	2113	061	090	201	460
270	2136	024	089	254	402	270	2912	017	083	243	278	280	2114	040	095	317	304
270	2137	028	084	266	334	270	2913	024	087	294	344	280	2115	090	131	258	762
270	2138	033	094	313	388	270	2914	029	086	280	335	280	2116	032	093	263	388
270	2139	039	089	239	374	270	2915	036	084	267	272	280	2117	025	083	247	344
270	2140	042	088	237	353	270	2916	037	074	263	355	280	2118	066	096	344	647
270	2141	041	083	268	323	270	2917	033	085	274	302	280	2119	001	092	335	326
270	2142	041	083	257	300	270	2918	042	080	244	412	280	2120	027	098	334	427
270	2143	011	090	259	353	270	2919	037	080	257	315	280	2121	027	100	346	565
270	2144	021	088	239	380	270	2920	037	092	294	361	280	2122	034	087	303	338
270	2145	027	090	310	443	270	2921	037	084	231	341	280	2123	033	092	252	353
270	2146	038	087	285	337	270	2922	038	085	238	352	280	2124	031	092	290	288
270	2147	037	085	208	304	270	2923	040	080	213	309	280	2125	032	092	260	345
270	2148	039	097	272	322	270	2924	033	083	280	329	280	2126	020	094	296	317
270	2149	042	097	279	315	270	2925	033	080	298	471	280	2127	018	094	385	309
270	2201	033	078	248	331	270	2926	033	084	197	379	280	2128	003	098	308	305
270	2202	030	094	292	307	270	2927	023	089	279	362	280	2129	005	086	287	305
270	2203	035	086	223	371	270	2928	029	083	284	309	280	2130	032	079	262	345
270	2204	028	088	264	340	270	2929	036	082	208	312	280	2131	029	082	229	312
270	2205	021	083	275	303	270	2930	031	093	273	311	280	2132	026	089	248	294
270	2206	021	086	316	312	270	2931	013	092	306	303	280	2133	025	087	243	314
270	2207	019	083	252	306	270	2932	015	083	237	319	280	2134	005	099	339	382

APPENDIX A -- PRESSURE DATA :

CONFIGURATION C : TAIKOO SHING CITYPLAZA, HONG KONG (MODIFIED MODEL)

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
280	2135	.014	.100	.441	.286	280	2911	.010	.087	.303	.333	290	2113	.058	.105	.292	.438
280	2136	.016	.097	.315	.346	280	2912	.064	.110	.621	.258	290	2114	.043	.099	.315	.336
280	2137	.002	.092	.317	.347	280	2913	.041	.095	.412	.293	290	2115	.104	.142	.294	.395
280	2138	.018	.099	.415	.347	280	2914	.001	.089	.299	.315	290	2116	.019	.090	.277	.323
280	2139	.021	.089	.332	.297	280	2915	.050	.089	.219	.379	290	2117	.014	.088	.294	.327
280	2140	.024	.085	.259	.287	280	2916	.035	.089	.270	.309	290	2118	.027	.113	.427	.462
280	2141	.022	.085	.247	.287	280	2917	.028	.091	.396	.314	290	2119	.021	.107	.400	.495
280	2142	.030	.086	.275	.273	280	2918	.028	.088	.230	.309	290	2120	.010	.099	.360	.379
280	2143	.015	.092	.360	.333	280	2919	.033	.096	.309	.444	290	2121	.010	.100	.347	.338
280	2144	.010	.089	.296	.381	280	2920	.044	.107	.247	.631	290	2122	.033	.089	.236	.344
280	2145	.003	.094	.326	.343	280	2921	.029	.085	.324	.324	290	2123	.022	.096	.271	.344
280	2146	.013	.094	.265	.349	280	2922	.019	.080	.263	.281	290	2124	.020	.089	.282	.382
280	2147	.025	.091	.300	.349	280	2923	.022	.086	.287	.384	290	2125	.023	.086	.271	.297
280	2148	.027	.085	.248	.344	280	2924	.022	.086	.270	.295	290	2126	.020	.100	.421	.366
280	2149	.023	.085	.234	.344	280	2925	.032	.086	.280	.349	290	2127	.044	.095	.437	.264
280	2201	.006	.086	.304	.344	280	2926	.013	.082	.280	.409	290	2128	.032	.096	.399	.355
280	2202	.002	.095	.341	.355	280	2927	.074	.124	.652	.331	290	2129	.028	.091	.339	.377
280	2203	.005	.086	.358	.355	280	2928	.024	.094	.374	.354	290	2130	.025	.101	.289	.360
280	2204	.001	.085	.320	.355	280	2929	.040	.083	.257	.322	290	2131	.019	.087	.232	.393
280	2205	.018	.084	.326	.355	280	2930	.024	.081	.232	.337	290	2132	.014	.085	.279	.381
280	2206	.007	.090	.302	.355	280	2931	.019	.088	.289	.347	290	2133	.018	.086	.334	.287
280	2207	.048	.089	.283	.355	280	2932	.005	.084	.289	.296	290	2134	.009	.097	.373	.376
280	2208	.047	.083	.250	.355	280	2933	.030	.092	.276	.372	290	2135	.045	.105	.400	.291
280	2209	.034	.089	.232	.355	280	2934	.027	.091	.314	.360	290	2136	.036	.105	.731	.296
280	2210	.040	.095	.228	.355	280	2935	.033	.089	.304	.352	290	2137	.016	.104	.424	.321
280	2211	.048	.071	.205	.355	280	2936	.035	.093	.251	.346	290	2138	.001	.088	.330	.304
280	2212	.063	.086	.221	.355	280	2937	.035	.084	.286	.316	290	2139	.012	.094	.304	.307
280	2213	.046	.085	.244	.355	280	2938	.033	.090	.264	.368	290	2140	.018	.089	.252	.351
280	2214	.039	.083	.225	.355	280	2939	.021	.096	.334	.378	290	2141	.019	.098	.327	.357
280	2215	.045	.086	.236	.355	280	2940	.033	.084	.242	.335	290	2142	.019	.078	.208	.301
280	2216	.055	.083	.268	.355	280	2941	.027	.101	.403	.322	290	2143	.037	.097	.382	.356
280	2217	.045	.089	.268	.355	280	2942	.002	.086	.290	.366	290	2144	.043	.103	.366	.274
280	2218	.055	.093	.251	.355	280	2943	.020	.088	.286	.390	290	2145	.012	.096	.342	.288
280	2219	.068	.087	.217	.355	280	2944	.029	.095	.279	.536	290	2146	.000	.092	.342	.297
280	2220	.051	.095	.284	.355	280	2945	.031	.088	.235	.349	290	2147	.012	.085	.273	.365
280	2221	.021	.096	.279	.355	280	2946	.031	.095	.283	.341	290	2148	.017	.093	.293	.333
280	2222	.024	.093	.263	.355	280	2947	.031	.095	.397	.298	290	2149	.017	.092	.296	.333
280	2223	.027	.093	.275	.355	280	2948	.027	.088	.229	.292	290	2201	.013	.097	.306	.291
280	2224	.031	.084	.283	.355	290	2101	.100	.156	.719	.333	290	2202	.019	.087	.359	.249
280	2225	.031	.079	.247	.355	290	2102	.105	.155	.666	.349	290	2203	.015	.091	.324	.273
280	2226	.031	.084	.283	.355	290	2103	.166	.171	.785	.264	290	2204	.018	.093	.390	.345
280	2227	.029	.088	.290	.355	290	2104	.136	.166	.770	.319	290	2205	.031	.098	.431	.306
280	2228	.021	.087	.305	.355	290	2105	.153	.140	.824	.262	290	2206	.022	.085	.273	.292
280	2229	.021	.090	.301	.355	290	2106	.209	.149	.923	.195	290	2207	.056	.091	.235	.410
280	2230	.019	.094	.282	.355	290	2107	.173	.142	.751	.163	290	2208	.047	.092	.239	.443
280	2231	.011	.087	.262	.355	290	2108	.125	.145	.691	.305	290	2209	.031	.095	.303	.467
280	2232	.032	.097	.389	.355	290	2109	.078	.103	.407	.303	290	2210	.036	.089	.296	.315
280	2233	.027	.099	.427	.355	290	2110	.070	.113	.483	.279	290	2211	.049	.071	.166	.264
280	2234	.042	.094	.248	.355	290	2111	.051	.091	.325	.240	290	2212	.067	.092	.250	.288
280	2235	.034	.099	.257	.355	290	2112	.017	.100	.386	.276	290	2213	.047	.093	.261	.380

APPENDIX A -- PRESSURE DATA ; CONFIGURATION C : TAIKOO SHING CITYPLAZA, HONG KONG (MODIFIED MODEL)

WD	TAP	CPMEAN	CPRMS	CPHAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPHAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPHAX	CPMIN
290	2214	.039	.083	212	330	290	2939	.043	.100	405	321	300	2141	.014	.087	252	262
290	2215	.044	.083	311	344	290	2940	.021	.079	276	268	300	2142	.017	.087	273	266
290	2216	.061	.088	256	378	290	2941	.061	.110	609	317	300	2143	.078	.091	493	272
290	2217	.045	.090	211	380	290	2942	.027	.086	325	249	300	2144	.089	.102	441	266
290	2218	.061	.096	288	379	290	2943	.002	.104	369	448	300	2145	.070	.090	465	248
290	2219	.072	.091	231	382	290	2944	.020	.093	295	420	300	2146	.038	.093	306	297
290	2401	.022	.097	272	360	290	2945	.028	.091	273	595	300	2147	.025	.091	361	255
290	2402	.029	.100	394	372	290	2946	.024	.086	271	292	300	2148	.005	.093	306	345
290	2403	.012	.089	281	353	290	2947	.024	.091	275	295	300	2149	.013	.083	279	323
290	2404	.029	.090	272	370	290	2948	.021	.082	281	279	300	2201	.012	.085	298	265
290	2405	.027	.087	258	302	300	2101	.060	.134	735	451	300	2202	.003	.094	312	316
290	2406	.022	.100	288	333	300	2102	.020	.142	685	438	300	2203	.000	.093	403	346
290	2901	.024	.087	250	314	300	2103	.027	.158	654	458	300	2204	.060	.095	384	219
290	2902	.036	.085	276	330	300	2104	.041	.179	038	451	300	2205	.092	.101	489	186
290	2903	.032	.089	273	348	300	2105	.208	.168	010	241	300	2206	.085	.095	384	184
290	2904	.012	.096	286	382	300	2106	.132	.133	708	248	300	2207	.088	.097	238	584
290	2905	.015	.104	314	352	300	2107	.099	.129	730	277	300	2208	.080	.107	247	514
290	2906	.016	.093	317	338	300	2108	.071	.128	903	381	300	2209	.072	.099	215	469
290	2907	.068	.103	473	243	300	2109	.168	.136	846	208	300	2210	.070	.090	235	428
290	2908	.078	.112	657	283	300	2110	.122	.115	569	219	300	2211	.091	.086	161	438
290	2909	.044	.090	279	410	300	2111	.069	.102	454	216	300	2212	.112	.112	200	292
290	2910	.045	.095	339	383	300	2112	.024	.090	367	264	300	2213	.079	.091	250	454
290	2911	.013	.090	308	280	300	2113	.012	.104	366	326	300	2214	.064	.087	206	341
290	2912	.102	.124	619	249	300	2114	.008	.084	251	318	300	2215	.073	.091	251	376
290	2913	.086	.105	464	288	300	2115	.004	.140	333	718	300	2216	.088	.084	203	432
290	2914	.029	.091	363	390	300	2116	.037	.097	365	294	300	2217	.061	.086	214	356
290	2915	.046	.089	267	448	300	2117	.002	.087	278	330	300	2218	.087	.091	242	392
290	2916	.027	.081	306	314	300	2118	.150	.129	701	218	300	2219	.100	.097	229	364
290	2917	.019	.089	261	259	300	2119	.131	.137	675	587	300	2401	.003	.100	335	490
290	2918	.020	.083	278	281	300	2120	.095	.121	624	362	300	2402	.023	.099	370	347
290	2919	.043	.145	449	713	300	2121	.053	.108	511	287	300	2403	.015	.096	322	296
290	2920	.039	.104	329	525	300	2122	.020	.081	238	253	300	2404	.026	.087	236	337
290	2921	.015	.092	303	305	300	2123	.019	.086	297	283	300	2405	.026	.089	256	323
290	2922	.002	.086	232	321	300	2124	.021	.090	359	328	300	2406	.022	.096	275	398
290	2923	.013	.101	356	342	300	2125	.021	.086	244	330	300	2901	.060	.091	211	367
290	2924	.004	.079	238	260	300	2126	.137	.110	527	193	300	2902	.065	.088	208	416
290	2925	.020	.085	272	272	300	2127	.133	.110	685	219	300	2903	.049	.083	202	384
290	2926	.011	.091	322	308	300	2128	.078	.114	651	296	300	2904	.070	.101	275	373
290	2927	.132	.125	767	281	300	2129	.077	.102	535	272	300	2905	.057	.101	229	420
290	2928	.063	.095	365	220	300	2130	.025	.095	276	375	300	2906	.026	.097	368	379
290	2929	.031	.079	205	297	300	2131	.020	.084	309	303	300	2907	.061	.099	454	303
290	2930	.014	.088	282	312	300	2132	.023	.088	273	338	300	2908	.032	.102	436	295
290	2931	.031	.097	369	328	300	2133	.026	.090	273	335	300	2909	.079	.102	255	491
290	2932	.028	.086	292	262	300	2134	.053	.110	386	405	300	2910	.033	.096	284	577
290	2933	.023	.094	316	377	300	2135	.099	.112	455	277	300	2911	.022	.092	365	262
290	2934	.013	.086	264	311	300	2136	.098	.106	591	176	300	2912	.063	.104	559	608
290	2935	.028	.088	235	322	300	2137	.058	.101	402	298	300	2913	.054	.100	466	316
290	2936	.020	.096	257	392	300	2138	.024	.103	427	466	300	2914	.020	.105	391	428
290	2937	.030	.090	286	348	300	2139	.006	.098	405	379	300	2915	.045	.093	223	372
290	2938	.022	.086	269	297	300	2140	.013	.085	270	306	300	2916	.020	.091	258	345

APPENDIX A -- PRESSURE DATA : CONFIGURATION C : TAIKOO SHING CITYPLAZA, HONG KONG (MODIFIED MODEL)

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
300	2917	009	081	261	315	310	2119	235	134	759	353	310	2401	157	125	663	240
300	2918	012	082	369	300	310	2120	234	125	696	184	310	2402	159	111	491	267
300	2919	021	107	366	368	310	2121	192	125	777	196	310	2403	145	117	518	217
300	2920	027	109	406	421	310	2122	009	097	314	340	310	2404	043	132	514	767
300	2921	012	091	301	307	310	2123	000	093	303	313	310	2405	011	105	451	373
300	2922	009	079	281	235	310	2124	008	089	292	291	310	2406	010	110	459	430
300	2923	022	099	396	318	310	2125	013	086	294	405	310	2901	118	109	211	588
300	2924	024	088	359	251	310	2126	261	119	719	129	310	2902	123	100	162	665
300	2925	003	080	275	255	310	2127	245	108	747	107	310	2903	087	093	248	420
300	2926	007	095	312	391	310	2128	230	112	567	250	310	2904	180	118	193	696
300	2927	110	135	611	470	310	2129	181	120	535	170	310	2905	132	110	252	610
300	2928	053	088	329	298	310	2130	002	105	399	391	310	2906	047	094	312	406
300	2929	020	085	250	351	310	2131	007	092	294	354	310	2907	127	101	540	195
300	2930	010	085	245	347	310	2132	001	082	337	257	310	2908	045	110	559	385
300	2931	126	101	536	212	310	2133	001	090	290	316	310	2909	135	122	225	665
300	2932	091	101	475	226	310	2134	056	120	413	439	310	2910	014	105	319	422
300	2933	018	106	387	428	310	2135	140	126	545	496	310	2911	072	110	631	267
300	2934	015	086	338	279	310	2136	178	110	572	208	310	2912	171	124	642	191
300	2935	012	087	284	380	310	2137	171	119	735	271	310	2913	139	124	682	395
300	2936	019	087	304	301	310	2138	139	119	722	221	310	2914	061	125	460	508
300	2937	018	090	353	321	310	2139	108	117	566	292	310	2915	036	098	301	506
300	2938	016	085	255	323	310	2140	053	110	457	280	310	2916	001	087	281	261
300	2939	148	115	601	197	310	2141	010	105	440	385	310	2917	010	094	326	267
300	2940	018	081	239	319	310	2142	005	093	361	349	310	2918	002	085	296	284
300	2941	125	122	846	330	310	2143	126	096	427	186	310	2919	152	125	539	296
300	2942	125	122	846	330	310	2143	126	096	427	186	310	2919	152	125	539	296
300	2943	085	097	493	309	310	2144	183	105	575	108	310	2920	156	124	650	354
300	2944	040	113	427	448	310	2145	171	107	585	257	310	2921	103	107	737	215
300	2945	022	110	493	465	310	2146	148	103	499	197	310	2922	073	090	336	237
300	2946	048	100	232	473	310	2147	099	100	527	197	310	2923	157	129	608	254
300	2947	035	102	300	402	310	2148	048	107	554	325	310	2924	126	109	505	255
300	2948	027	084	262	327	310	2149	013	110	454	384	310	2925	079	102	402	209
300	2949	022	082	338	316	310	2201	073	093	381	231	310	2926	082	098	435	382
310	2101	115	136	751	285	310	2202	060	101	392	238	310	2927	295	162	553	357
310	2102	083	135	555	420	310	2203	090	098	410	221	310	2928	198	118	660	130
310	2103	040	147	736	370	310	2204	197	104	507	115	310	2929	002	087	303	331
310	2104	031	156	715	661	310	2205	216	111	603	143	310	2930	018	090	356	302
310	2105	357	170	672	141	310	2206	206	105	585	137	310	2931	237	123	665	184
310	2106	290	176	274	252	310	2207	179	123	219	723	310	2932	218	108	578	098
310	2107	212	159	895	257	310	2208	183	124	264	574	310	2933	158	120	551	392
310	2108	156	138	792	225	310	2209	168	129	264	692	310	2934	115	110	622	275
310	2109	370	143	943	067	310	2210	167	113	190	775	310	2935	069	104	412	323
310	2110	309	148	859	122	310	2211	177	094	166	657	310	2936	008	100	362	411
310	2111	220	137	759	280	310	2212	173	115	174	038	310	2937	007	109	429	303
310	2112	126	122	560	217	310	2213	138	113	263	517	310	2938	001	085	307	331
310	2113	056	119	542	322	310	2214	113	105	211	541	310	2939	274	125	887	132
310	2114	067	108	442	336	310	2215	121	098	301	445	310	2940	000	081	246	260
310	2115	168	149	714	537	310	2216	158	102	154	490	310	2941	245	109	588	201
310	2116	140	112	590	208	310	2217	097	101	234	459	310	2942	185	114	530	150
310	2117	056	097	561	257	310	2218	142	098	203	465	310	2943	173	122	560	217
310	2118	229	142	736	311	310	2219	165	095	128	509	310	2944	074	121	470	529

APPENDIX A -- PRESSURE DATA ;

CONFIGURATION C : TAIKOO SHING CITYPLAZA, HONG KONG (MODIFIED MODEL)

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
310	2945	.015	.128	.491	-.602	320	2147	.245	.100	.377	-.047	320	2923	.318	.109	.704	-.032
310	2946	-.019	.107	.369	-.389	320	2148	.220	.119	.628	-.166	320	2924	.284	.105	.635	-.066
310	2947	-.024	.106	.339	-.422	320	2149	.155	.130	.527	-.328	320	2925	.251	.105	.674	-.095
310	2948	.001	.078	.300	-.278	320	2201	.229	.098	.573	-.046	320	2926	.233	.104	.636	-.245
320	2101	.061	.139	.529	-.388	320	2202	.193	.102	.526	-.340	320	2927	.374	.126	.931	-.027
320	2102	.053	.127	.548	-.335	320	2203	.212	.105	.616	-.221	320	2928	.327	.112	.701	-.064
320	2103	.071	.130	.675	-.367	320	2204	.246	.100	.627	-.028	320	2929	.195	.098	.489	-.214
320	2104	.010	.129	.592	-.489	320	2205	.268	.095	.617	-.061	320	2930	.169	.109	.502	-.163
320	2105	.344	.153	.908	-.133	320	2206	.260	.098	.556	-.091	320	2931	.291	.105	.805	-.069
320	2106	.348	.138	.848	-.127	320	2207	-.288	.126	.256	-.685	320	2932	.264	.096	.604	-.132
320	2107	.333	.152	.960	-.079	320	2208	-.275	.130	.134	-.931	320	2933	.283	.102	.683	-.147
320	2108	.312	.150	.898	-.105	320	2209	-.246	.117	.194	-.716	320	2934	.273	.107	.598	-.102
320	2109	.384	.134	.804	-.011	320	2210	-.248	.119	.235	-.631	320	2935	.245	.104	.581	-.143
320	2110	.393	.127	.930	-.026	320	2211	-.271	.092	.016	-.703	320	2936	.214	.118	.581	-.201
320	2111	.378	.141	.877	-.008	320	2212	-.257	.120	.262	-.931	320	2937	.258	.136	.748	-.217
320	2112	.300	.135	.978	-.061	320	2213	-.216	.099	.168	-.612	320	2938	.206	.121	.546	-.190
320	2113	.255	.122	.632	-.253	320	2214	-.162	.100	.251	-.502	320	2939	.300	.106	.694	-.124
320	2114	.240	.114	.668	-.122	320	2215	-.187	.099	.172	-.559	320	2940	.211	.114	.635	-.107
320	2115	.288	.116	.738	-.173	320	2216	-.253	.101	.058	-.635	320	2941	.273	.110	.679	-.112
320	2116	.300	.114	.819	-.026	320	2217	-.145	.101	.168	-.526	320	2942	.262	.104	.616	-.018
320	2117	.244	.127	.778	-.082	320	2218	-.227	.099	.122	-.577	320	2943	.261	.104	.574	-.164
320	2118	.262	.122	.786	-.282	320	2219	-.243	.104	.117	-.627	320	2944	.239	.108	.587	-.133
320	2119	.245	.123	.733	-.154	320	2401	-.338	.129	.940	-.035	320	2945	.216	.130	.623	-.601
320	2120	.285	.124	.837	-.166	320	2402	-.307	.114	.669	-.049	320	2946	.194	.123	.598	-.273
320	2121	.299	.129	.774	-.075	320	2403	-.325	.124	.821	-.088	320	2947	.201	.133	.598	-.279
320	2122	.209	.126	.764	-.256	320	2404	-.243	.175	.771	-.620	320	2948	.168	.134	.601	-.259
320	2123	.211	.132	.709	-.255	320	2405	.209	.125	.658	-.311	330	2101	.063	.131	.596	-.478
320	2124	.204	.142	.695	-.251	320	2406	.244	.125	.734	-.227	330	2102	.020	.132	.459	-.424
320	2125	.224	.131	.673	-.169	320	2901	-.111	.098	.204	-.437	330	2103	.030	.126	.488	-.320
320	2126	.307	.109	.693	-.072	320	2902	-.136	.095	.156	-.539	330	2104	.041	.123	.466	-.477
320	2127	.294	.117	.859	-.072	320	2903	-.114	.093	.220	-.419	330	2105	.343	.159	.931	-.155
320	2128	.291	.112	.728	-.031	320	2904	-.135	.120	.215	-.678	330	2106	.312	.144	.924	-.068
320	2129	.270	.110	.646	-.028	320	2905	-.164	.105	.198	-.604	330	2107	.296	.149	.832	-.142
320	2130	.227	.121	.620	-.219	320	2906	-.123	.108	.222	-.474	330	2108	.269	.149	.820	-.245
320	2131	.214	.123	.616	-.195	320	2907	-.231	.121	.710	-.107	330	2109	.395	.146	.977	-.053
320	2132	.188	.121	.550	-.254	320	2908	-.073	.123	.489	-.393	330	2110	.398	.131	.791	-.025
320	2133	.198	.140	.625	-.254	320	2909	-.063	.146	.286	-.860	330	2111	.367	.143	.847	-.035
320	2134	-.025	.160	.390	-.740	320	2910	-.036	.100	.398	-.372	330	2112	.309	.140	.885	-.060
320	2135	.149	.120	.568	-.271	320	2911	.139	.103	.639	-.180	330	2113	.253	.107	.741	-.597
320	2136	.223	.112	.549	-.199	320	2912	.291	.112	.693	-.091	330	2114	.274	.124	.761	-.107
320	2137	.247	.109	.720	-.186	320	2913	.269	.120	.700	-.115	330	2115	.277	.109	.609	-.109
320	2138	.263	.111	.760	-.214	320	2914	.139	.148	.677	-.537	330	2116	.303	.115	.736	-.072
320	2139	.264	.116	.636	-.138	320	2915	.095	.116	.449	-.323	330	2117	.292	.129	.880	-.049
320	2140	.229	.129	.780	-.274	320	2916	.113	.100	.485	-.249	330	2118	.261	.129	.668	-.168
320	2141	.204	.135	.653	-.231	320	2917	.143	.103	.492	-.224	330	2119	.266	.131	.711	-.141
320	2142	.115	.161	.808	-.404	320	2918	.172	.114	.544	-.273	330	2120	.281	.118	.702	-.164
320	2143	.142	.105	.522	-.170	320	2919	.304	.114	.769	-.246	330	2121	.302	.122	.711	-.071
320	2144	.246	.108	.629	-.159	320	2920	.303	.115	.741	-.602	330	2122	.276	.111	.840	-.042
320	2145	.242	.096	.608	-.128	320	2921	.284	.113	.701	-.021	330	2123	.291	.127	1.098	-.263
320	2146	.249	.097	.564	-.212	320	2922	.213	.098	.531	-.090	330	2124	.337	.131	.842	-.105

APPENDIX A -- PRESSURE DATA ; CONFIGURATION C : TAIKOO SHING CITYPLAZA, HONG KONG (MODIFIED MODEL)

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
330	2125	.342	.122	.802	-.178	330	2901	-.165	.101	.138	-.476	340	2103	.013	.129	.493	-.473
330	2126	.318	.120	.732	-.023	330	2902	-.189	.095	.149	-.545	340	2104	-.061	.121	.342	-.406
330	2127	.309	.118	.800	-.103	330	2903	-.165	.104	.184	-.566	340	2105	.336	.148	.893	-.153
330	2128	.301	.118	.687	-.097	330	2904	-.166	.116	.288	-.723	340	2106	.289	.142	.782	-.137
330	2129	.277	.113	.651	-.035	330	2905	-.212	.104	.071	-.615	340	2107	.261	.136	.795	-.122
330	2130	.307	.130	.811	-.127	330	2906	-.216	.110	.130	-.563	340	2108	.243	.137	.797	-.164
330	2131	.293	.106	.699	-.044	330	2907	-.221	.122	.630	-.294	340	2109	.402	.136	.980	-.051
330	2132	.324	.121	.858	-.029	330	2908	-.071	.118	.469	-.329	340	2110	.386	.133	.020	-.038
330	2133	.337	.132	.980	-.050	330	2909	-.036	.127	.316	-.737	340	2111	.360	.127	.945	-.081
330	2134	.017	.183	.545	-.878	330	2910	.038	.103	.365	-.282	340	2112	.312	.136	.845	-.046
330	2135	.174	.123	.607	-.325	330	2911	.138	.101	.440	-.173	340	2113	.244	.097	.626	-.068
330	2136	.237	.110	.609	-.177	330	2912	.308	.120	.679	-.124	340	2114	.272	.118	.715	-.084
330	2137	.256	.092	.577	-.189	330	2913	.250	.121	.751	-.210	340	2115	.287	.113	.693	-.046
330	2138	.270	.109	.740	-.144	330	2914	.163	.123	.582	-.301	340	2116	.325	.122	.776	-.053
330	2139	.266	.104	.730	-.138	330	2915	.133	.111	.523	-.235	340	2117	.257	.110	.676	-.029
330	2140	.287	.113	.736	-.055	330	2916	.149	.108	.551	-.182	340	2118	.314	.126	.758	-.226
330	2141	.292	.129	.713	-.421	330	2917	.179	.101	.544	-.126	340	2119	.291	.130	.718	-.166
330	2142	.246	.157	.881	-.512	330	2918	.233	.101	.543	-.058	340	2120	.310	.119	.785	-.172
330	2143	.151	.104	.534	-.200	330	2919	.317	.106	.742	-.016	340	2121	.298	.105	.753	-.003
330	2144	.236	.096	.564	-.065	330	2920	.300	.112	.752	-.110	340	2122	.262	.115	.701	-.218
330	2145	.248	.098	.571	-.067	330	2921	.297	.109	.724	-.077	340	2123	.312	.109	.738	-.043
330	2146	.256	.100	.593	-.120	330	2922	.237	.101	.580	-.111	340	2124	.334	.128	.901	-.001
330	2147	.266	.100	.629	-.069	330	2923	.332	.117	.747	-.045	340	2125	.382	.123	.834	-.026
330	2148	.289	.108	.815	-.041	330	2924	.289	.108	.614	-.045	340	2126	.327	.106	.788	-.033
330	2149	.270	.115	.719	-.072	330	2925	.270	.101	.741	-.061	340	2127	.330	.106	.777	-.007
330	2201	.232	.092	.577	-.092	330	2926	.222	.097	.562	-.108	340	2128	.312	.121	.841	-.076
330	2202	.208	.105	.570	-.160	330	2927	.356	.140	.860	-.302	340	2129	.282	.103	.658	-.062
330	2203	.201	.102	.617	-.168	330	2928	.308	.110	.636	-.126	340	2130	.323	.104	.701	-.012
330	2204	.262	.101	.613	-.053	330	2929	.217	.098	.561	-.124	340	2131	.299	.121	.736	-.096
330	2205	.283	.100	.614	-.030	330	2930	.172	.127	.565	-.442	340	2132	.358	.127	.896	-.020
330	2206	.266	.100	.574	-.057	330	2931	.292	.112	.614	-.087	340	2133	.380	.130	.945	-.040
330	2207	.315	.120	.126	-.814	330	2932	.257	.106	.629	-.083	340	2134	.078	.159	.545	-.607
330	2208	.299	.115	.111	-.806	330	2933	.274	.101	.680	-.128	340	2135	.221	.128	.695	-.278
330	2209	.272	.120	.204	-.862	330	2934	.287	.104	.629	-.016	340	2136	.266	.103	.698	-.094
330	2210	.271	.116	.173	-.697	330	2935	.278	.100	.668	-.036	340	2137	.269	.107	.727	-.041
330	2211	.279	.101	.053	-.761	330	2936	.204	.117	.650	-.177	340	2138	.267	.097	.615	-.056
330	2212	.281	.124	.159	-.772	330	2937	.339	.128	.789	-.010	340	2139	.282	.097	.684	-.092
330	2213	.245	.097	.093	-.690	330	2938	.329	.109	.714	-.072	340	2140	.274	.110	.713	-.198
330	2214	.197	.101	.127	-.544	330	2939	.314	.118	.735	-.013	340	2141	.288	.115	.751	-.236
330	2215	.221	.100	.217	-.608	330	2940	.317	.111	.747	-.056	340	2142	.315	.146	.889	-.058
330	2216	.296	.105	.030	-.670	330	2941	.282	.119	.733	-.137	340	2143	.189	.103	.515	-.196
330	2217	.182	.103	.193	-.503	330	2942	.271	.108	.606	-.029	340	2144	.249	.094	.561	-.092
330	2218	.260	.104	.087	-.613	330	2943	.276	.107	.625	-.175	340	2145	.263	.099	.629	-.092
330	2219	.284	.108	.095	-.641	330	2944	.261	.101	.649	-.022	340	2146	.279	.104	.635	-.020
330	2401	.336	.129	.881	-.075	330	2945	.256	.114	.624	-.122	340	2147	.289	.106	.731	-.054
330	2402	.308	.110	.702	-.002	330	2946	.212	.117	.562	-.204	340	2148	.289	.102	.679	-.005
330	2403	.329	.117	.796	-.042	330	2947	.291	.100	.613	-.145	340	2149	.284	.108	.815	-.053
330	2404	.315	.136	.828	-.333	330	2948	.304	.116	.788	-.153	340	2201	.223	.105	.609	-.095
330	2405	.309	.114	.722	-.067	340	2101	.045	.135	.573	-.458	340	2202	.210	.099	.559	-.104
330	2406	.323	.135	.830	-.119	340	2102	.009	.123	.461	-.404	340	2203	.217	.101	.540	-.201

APPENDIX A -- PRESSURE DATA ; CONFIGURATION C : TAIKOO SHING CITYPLAZA, HONG KONG (MODIFIED MODEL)

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
340	2204	.283	.107	.621	-.050	340	2929	.234	.104	.614	-.122	350	2131	.315	.123	.756	-.064
340	2205	.295	.109	.703	-.015	340	2930	.148	.134	.542	-.377	350	2132	.356	.119	.777	-.057
340	2206	.282	.109	.797	-.083	340	2931	.317	.107	.699	-.048	350	2133	.363	.110	.819	-.043
340	2207	.327	.109	.019	-.809	340	2932	.286	.104	.625	-.023	350	2134	.117	.159	.694	-.648
340	2208	.286	.101	.052	-.665	340	2933	.292	.102	.639	-.050	350	2135	.244	.113	.654	-.481
340	2209	.273	.108	.149	-.670	340	2934	.278	.088	.649	-.013	350	2136	.268	.097	.587	-.060
340	2210	.269	.113	.229	-.735	340	2935	.274	.101	.646	-.095	350	2137	.278	.092	.654	-.034
340	2211	.283	.097	.063	-1.141	340	2936	.191	.103	.541	-.247	350	2138	.279	.101	.638	-.041
340	2212	.277	.133	.193	-1.279	340	2937	.321	.125	.851	-.010	350	2139	.278	.095	.710	-.053
340	2213	.247	.096	.124	-.597	340	2938	.353	.105	.731	-.022	350	2140	.289	.106	.817	-.143
340	2214	.207	.100	.132	-.507	340	2939	.320	.115	.700	-.027	350	2141	.315	.117	.743	-.164
340	2215	.223	.095	.092	-.571	340	2940	.347	.115	.882	-.061	350	2142	.303	.137	.868	-.472
340	2216	.315	.098	.026	-.640	340	2941	.306	.122	.875	-.061	350	2143	.200	.099	.573	-.105
340	2217	.200	.094	.085	-.589	340	2942	.277	.099	.621	-.085	350	2144	.263	.103	.739	-.073
340	2218	.258	.095	.068	-.593	340	2943	.276	.100	.609	-.068	350	2145	.278	.094	.694	-.048
340	2219	.272	.102	.079	-.614	340	2944	.261	.110	.655	-.027	350	2146	.275	.090	.613	-.007
340	2401	.317	.119	.817	-.025	340	2945	.264	.103	.695	-.075	350	2147	.275	.088	.603	-.018
340	2402	.304	.116	.803	-.056	340	2946	.196	.138	.637	-.530	350	2148	.285	.096	.616	-.056
340	2403	.320	.109	.711	-.025	340	2947	.316	.105	.723	-.006	350	2149	.286	.096	.598	-.029
340	2404	.307	.111	.890	-.031	340	2948	.330	.112	.792	-.009	350	2201	.230	.098	.584	-.083
340	2405	.315	.107	.780	-.058	350	2101	.015	.135	.456	-.470	350	2202	.222	.112	.649	-.077
340	2406	.348	.111	.742	-.005	350	2102	.042	.120	.387	-.495	350	2203	.214	.108	.593	-.061
340	2901	.216	.103	.203	-.587	350	2103	.005	.117	.391	-.541	350	2204	.302	.115	.704	-.080
340	2902	.237	.095	.041	-.632	350	2104	.070	.105	.366	-.369	350	2205	.305	.107	.669	-.002
340	2903	.216	.104	.106	-.778	350	2105	.257	.136	.826	-.087	350	2206	.287	.095	.572	-.091
340	2904	.237	.116	.137	-.713	350	2106	.257	.131	.840	-.112	350	2207	.308	.124	.141	-.919
340	2905	.271	.095	.061	-.628	350	2107	.242	.140	.737	-.140	350	2208	.291	.145	.422	-.544
340	2906	.266	.107	.079	-.616	350	2108	.210	.128	.671	-.172	350	2209	.269	.141	.328	-.525
340	2907	.181	.110	.605	-.134	350	2109	.394	.138	.889	-.001	350	2210	.242	.120	.241	-.644
340	2908	.033	.118	.492	-.328	350	2110	.367	.132	.904	-.011	350	2211	.249	.118	.075	-.880
340	2909	.059	.126	.338	-.786	350	2111	.333	.127	.823	-.039	350	2212	.279	.157	.160	-.327
340	2910	.024	.099	.365	-.301	350	2112	.278	.129	.806	-.069	350	2213	.240	.124	.212	-.191
340	2911	.118	.095	.403	-.207	350	2113	.242	.109	.733	-.152	350	2214	.206	.120	.264	-.203
340	2912	.284	.105	.621	-.083	350	2114	.259	.114	.733	-.092	350	2215	.221	.108	.206	-.824
340	2913	.212	.131	.625	-.224	350	2115	.268	.101	.762	-.004	350	2216	.301	.106	.114	-.650
340	2914	.115	.124	.517	-.398	350	2116	.300	.099	.640	-.005	350	2217	.198	.100	.146	-.560
340	2915	.127	.100	.452	-.250	350	2117	.264	.117	.849	-.118	350	2218	.232	.094	.090	-.623
340	2916	.146	.114	.564	-.344	350	2118	.325	.118	.754	-.056	350	2219	.251	.098	.029	-.659
340	2917	.170	.103	.521	-.182	350	2119	.302	.116	.795	-.116	350	2401	.315	.118	.752	-.016
340	2918	.235	.096	.551	-.086	350	2120	.312	.124	.863	-.109	350	2402	.287	.109	.683	-.081
340	2919	.293	.109	.652	-.073	350	2121	.301	.115	.729	-.043	350	2403	.305	.108	.712	-.022
340	2920	.298	.098	.729	-.016	350	2122	.267	.102	.695	-.037	350	2404	.320	.109	.785	-.022
340	2921	.295	.102	.677	-.005	350	2123	.293	.106	.804	-.050	350	2405	.318	.106	.843	-.016
340	2922	.233	.098	.531	-.103	350	2124	.362	.123	.862	-.024	350	2406	.317	.100	.710	-.033
340	2923	.314	.113	.714	-.023	350	2125	.366	.114	.892	-.029	350	2901	.231	.092	.099	-.619
340	2924	.295	.102	.837	-.039	350	2126	.330	.116	.761	-.102	350	2902	.271	.091	-.021	-.570
340	2925	.286	.098	.630	-.023	350	2127	.312	.105	.747	-.020	350	2903	.255	.102	.074	-.742
340	2926	.210	.094	.506	-.171	350	2128	.314	.109	.740	-.076	350	2904	.270	.119	.071	-.658
340	2927	.353	.130	.829	-.097	350	2129	.313	.111	.720	-.036	350	2905	.289	.098	-.004	-.682
340	2928	.317	.112	.707	-.003	350	2130	.299	.095	.677	-.034	350	2906	.316	.110	.064	-.771

APPENDIX A -- PRESSURE DATA ; CONFIGURATION C : TAIKOO SHING CITYPLAZA, HONG KONG (MODIFIED MODEL)

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
350	2907	.167	.107	.620	-.169	350	2921	.282	.101	.704	-.017	350	2935	.275	.093	.646	-.012
350	2908	.010	.103	.365	-.345	350	2922	.251	.109	.600	-.144	350	2936	.198	.114	.675	-.191
350	2909	-.063	.115	.265	-.576	350	2923	.318	.112	.762	-.052	350	2937	.345	.119	.838	-.010
350	2910	.010	.093	.376	-.313	350	2924	.289	.100	.628	-.088	350	2938	.346	.104	.691	-.067
350	2911	.121	.097	.504	-.234	350	2925	.270	.101	.679	-.028	350	2939	.329	.117	.776	-.112
350	2912	.265	.096	.617	-.042	350	2926	.220	.111	.663	-.148	350	2940	.322	.108	.790	-.026
350	2913	.212	.127	.641	-.207	350	2927	.332	.132	.757	-.159	350	2941	.306	.109	.771	-.015
350	2914	.103	.121	.506	-.406	350	2928	.266	.099	.725	-.008	350	2942	.303	.104	.650	-.042
350	2915	.122	.097	.481	-.218	350	2929	.224	.094	.552	-.109	350	2943	.274	.095	.619	-.092
350	2916	.122	.112	.625	-.234	350	2930	.162	.153	.589	-.540	350	2944	.262	.102	.603	-.097
350	2917	.152	.099	.490	-.202	350	2931	.322	.101	.640	-.070	350	2945	.266	.101	.653	-.120
350	2918	.224	.089	.540	-.078	350	2932	.285	.098	.640	-.011	350	2946	.247	.131	.609	-.392
350	2919	.285	.104	.700	-.125	350	2933	.284	.107	.679	-.153	350	2947	.299	.095	.696	-.029
350	2920	.300	.109	.720	-.065	350	2934	.280	.098	.626	-.019	350	2948	.309	.098	.723	-.040

APPENDIX A -- PRESSURE DATA :

CONFIGURATION D : TAIKOO CITYPLAZA, HONG KONG (MODIFIED MODEL)

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
0	2207	- .272	.178	.354	-1.339	10	2210	- .159	.163	.414	-1.453	20	2214	- .151	.133	.256	- .872
0	2208	- .259	.168	.280	-1.240	10	2212	- .170	.139	.282	- .767	20	2215	- .151	.135	.266	- .831
0	2209	- .239	.173	.225	-2.006	10	2213	- .222	.206	.282	-1.944	3550	2207	- .312	.148	.346	-1.267
0	2210	- .296	.191	.247	-1.188	10	2214	- .177	.155	.211	- .996	3550	2208	- .292	.150	.355	-1.719
0	2212	- .205	.128	.183	- .941	10	2215	- .170	.149	.238	- .926	3550	2209	- .269	.156	.216	-1.600
0	2213	- .245	.180	.193	-1.369	12	2207	- .219	.203	.372	-1.032	3550	2210	- .364	.170	.207	-1.446
0	2214	- .198	.140	.225	-1.131	12	2208	- .199	.187	.434	-1.511	3550	2212	- .273	.150	.145	-1.231
0	2215	- .198	.133	.244	- .980	12	2209	- .178	.186	.323	-1.630	3550	2213	- .251	.130	.241	-1.413
2	2207	- .263	.204	.450	-1.141	12	2210	- .137	.149	.365	-1.082	3550	2214	- .207	.115	.237	- .889
2	2208	- .242	.194	.460	-1.303	12	2212	- .151	.133	.275	- .819	3550	2215	- .215	.116	.256	- .731
2	2209	- .215	.182	.321	-1.940	12	2213	- .192	.166	.283	-1.116	3552	2207	- .288	.166	.341	-1.525
2	2210	- .220	.181	.288	-1.076	12	2214	- .157	.132	.228	- .883	3552	2208	- .278	.162	.327	-1.477
2	2212	- .204	.150	.294	-1.301	12	2215	- .157	.136	.201	- .846	3552	2209	- .255	.161	.269	-1.442
2	2213	- .241	.199	.278	-1.523	14	2207	- .213	.199	.391	-1.177	3552	2210	- .351	.189	.204	-1.477
2	2214	- .195	.160	.331	-1.090	14	2208	- .196	.182	.363	-1.553	3552	2212	- .271	.151	.160	-1.096
2	2215	- .188	.158	.234	-1.366	14	2209	- .164	.162	.350	-2.158	3552	2213	- .249	.139	.219	-1.382
4	2207	- .256	.210	.446	-1.668	14	2210	- .127	.138	.317	-1.211	3552	2214	- .209	.117	.201	- .968
4	2208	- .238	.203	.393	-1.335	14	2212	- .144	.123	.303	- .763	3552	2215	- .214	.121	.219	- .970
4	2209	- .216	.194	.316	-2.503	14	2213	- .191	.172	.328	-1.142	3554	2207	- .301	.160	.339	-1.452
4	2210	- .206	.174	.357	-1.720	14	2214	- .161	.131	.298	- .775	3554	2208	- .281	.168	.347	-1.757
4	2212	- .186	.140	.236	-1.587	14	2215	- .156	.129	.292	- .749	3554	2209	- .264	.177	.199	-1.752
4	2213	- .224	.178	.298	-1.669	16	2207	- .176	.188	.577	-1.004	3554	2210	- .348	.174	.194	-1.451
4	2214	- .192	.142	.258	-1.013	16	2208	- .179	.186	.371	-1.483	3554	2212	- .251	.149	.203	-1.219
4	2215	- .186	.145	.238	-1.038	16	2209	- .163	.163	.296	-1.272	3554	2213	- .246	.150	.278	-1.300
6	2207	- .229	.205	.390	-1.239	16	2210	- .115	.126	.284	-1.010	3554	2214	- .200	.124	.234	-1.260
6	2208	- .228	.199	.396	-1.354	16	2212	- .131	.129	.348	- .705	3554	2215	- .202	.125	.200	- .967
6	2209	- .206	.206	.258	-1.754	16	2213	- .176	.174	.385	-1.500	3556	2207	- .287	.183	.425	-1.299
6	2210	- .172	.157	.354	-1.353	16	2214	- .149	.146	.335	- .994	3556	2208	- .268	.188	.282	-1.661
6	2212	- .181	.127	.232	-1.086	16	2215	- .151	.149	.364	-1.155	3556	2209	- .247	.184	.296	-1.688
6	2213	- .231	.181	.283	-1.278	18	2207	- .126	.170	.526	-1.238	3556	2210	- .313	.195	.326	-1.172
6	2214	- .190	.142	.232	- .923	18	2208	- .146	.165	.466	-1.011	3556	2212	- .236	.140	.237	- .877
6	2215	- .188	.140	.213	- .917	18	2209	- .145	.160	.324	-1.459	3556	2213	- .234	.148	.198	-1.254
8	2207	- .256	.223	.679	-1.458	18	2210	- .098	.138	.381	- .896	3556	2214	- .190	.119	.167	- .765
8	2208	- .231	.208	.388	-1.401	18	2212	- .122	.130	.322	- .766	3556	2215	- .193	.121	.251	- .677
8	2209	- .201	.202	.328	-1.928	18	2213	- .157	.170	.304	-1.872	3558	2207	- .292	.194	.402	-1.516
8	2210	- .177	.162	.341	-1.076	18	2214	- .143	.137	.255	- .722	3558	2208	- .273	.190	.489	-1.515
8	2212	- .181	.137	.288	-1.316	18	2215	- .141	.142	.302	-1.281	3558	2209	- .255	.188	.358	-1.841
8	2213	- .219	.188	.300	-1.630	20	2207	- .105	.175	.438	- .979	3558	2210	- .317	.189	.267	-1.096
8	2214	- .172	.142	.276	-1.115	20	2208	- .134	.169	.448	- .900	3558	2212	- .220	.143	.316	-1.114
8	2215	- .169	.142	.298	- .882	20	2209	- .150	.156	.399	-1.109	3558	2213	- .239	.188	.280	-2.061
10	2207	- .232	.204	.515	-1.371	20	2210	- .088	.126	.350	- .719	3558	2214	- .196	.142	.266	- .994
10	2208	- .225	.191	.324	-1.734	20	2212	- .124	.125	.290	- .822	3558	2215	- .195	.136	.233	- .803
10	2209	- .200	.186	.423	-1.826	20	2213	- .163	.160	.323	-1.006						

DATA FOR PROJECT 5040 CONFIGURATION E WIND DIR. 358 TUBING NO. 10

TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN
2208	-.262	.216	.446	-2.279	2210	-.204	.179	.355	-1.960	2214	-.191	.151	.308	-1.095
2209	-.227	.228	.350	-2.503	2213	-.239	.196	.275	-1.617	2215	-.183	.132	.234	-1.294

DATA FOR PROJECT 5040 CONFIGURATION E WIND DIR. 0 TUBING NO. 10

TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN
2208	-.247	.221	.455	-1.535	2210	-.194	.179	.346	-1.432	2214	-.192	.156	.232	-1.676
2209	-.223	.239	.371	-2.607	2213	-.233	.183	.243	-1.536	2215	-.182	.134	.184	-.979

DATA FOR PROJECT 5040 CONFIGURATION E WIND DIR. 2 TUBING NO. 10

TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN
2208	-.250	.230	.411	-2.637	2210	-.185	.154	.286	-1.261	2214	-.188	.149	.278	-1.211
2209	-.217	.225	.337	-2.163	2213	-.243	.192	.232	-1.347	2215	-.184	.136	.225	-1.047

PREC : W04 TAP 2208 TROUBLE= 10.371

DATA FOR PROJECT 5040 CONFIGURATION E WIND DIR. 4 TUBING NO. 10

TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN
2208	-.242	.244	.578	-1.943	2210	-.183	.184	.277	-1.750	2214	-.182	.175	.400	-1.235
2209	-.186	.222	.299	-2.312	2213	-.216	.187	.288	-1.290	2215	-.162	.131	.208	-1.010

DATA FOR PROJECT 5040 CONFIGURATION E WIND DIR. 6 TUBING NO. 10

TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN
2208	-.172	.204	.425	-1.559	2210	-.169	.155	.269	-1.028	2214	-.127	.146	.229	-1.087
2209	-.179	.197	.355	-2.243	2213	-.211	.167	.327	-1.537	2215	-.163	.122	.242	-.804

PREC : W04 TAP 2209 TROUBLE= 10.489

DATA FOR PROJECT 5040 CONFIGURATION E WIND DIR. 8 TUBING NO. 10

TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN
2208	-.233	.222	.594	-1.696	2210	-.175	.164	.358	-1.364	2214	-.180	.164	.308	-1.597
2209	-.198	.232	.392	-2.500	2213	-.222	.194	.329	-1.499	2215	-.173	.152	.220	-1.307

DATA FOR PROJECT 5040 CONFIGURATION E WIND DIR. 10 TUBING NO. 10

TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN
2208	-.218	.214	.449	-1.571	2210	-.170	.161	.305	-1.128	2214	-.169	.159	.386	-.998
2209	-.176	.196	.457	-2.205	2213	-.213	.183	.429	-1.143	2215	-.166	.127	.208	-.781

PRESC : W04 TAP 2209 TROUBLE= 10.334

DATA FOR PROJECT 5040 CONFIGURATION F WIND DIR. 358 TUBING NO. 10

TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN
2208	-.270	.214	.512	-2.045	2210	-.213	.193	.350	-2.058	2214	-.188	.152	.268	-1.752
2209	-.249	.239	.408	-2.345	2213	-.258	.204	.282	-1.947	2215	-.197	.139	.237	-.970

PRESC : W04 TAP 2210 TROUBLE= 10.082
 PRESC : W04 TAP 2214 TROUBLE= 10.268

DATA FOR PROJECT 5040 CONFIGURATION F WIND DIR. 0 TUBING NO. 10

TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN
2208	-.287	.229	.423	-2.010	2210	-.195	.167	.314	-1.971	2214	-.192	.152	.260	-1.136
2209	-.232	.226	.477	-2.164	2213	-.245	.182	.336	-1.183	2215	-.198	.137	.243	-1.034

PRESC : W04 TAP 2210 TROUBLE= 10.612

DATA FOR PROJECT 5040 CONFIGURATION F WIND DIR. 2 TUBING NO. 10

TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN
2208	-.256	.221	.596	-1.843	2210	-.194	.160	.217	-1.210	2214	-.188	.147	.263	-1.189
2209	-.217	.237	.444	-2.388	2213	-.241	.193	.241	-1.655	2215	-.197	.140	.227	-.974

PRESC : W04 TAP 2210 TROUBLE= 10.261

DATA FOR PROJECT 5040 CONFIGURATION F WIND DIR. 4 TUBING NO. 10

TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN
2208	-.240	.224	.451	-1.588	2210	-.181	.176	.285	-1.935	2214	-.183	.160	.282	-1.253
2209	-.200	.224	.401	-2.497	2213	-.234	.191	.292	-1.464	2215	-.179	.138	.204	-.966

PRESC : W04 TAP 2209 TROUBLE= 10.261

DATA FOR PROJECT 5040 CONFIGURATION F WIND DIR. 6 TUBING NO. 10

TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN
2208	-.235	.226	.403	-1.981	2210	-.173	.162	.330	-1.575	2214	-.160	.160	.253	-1.302
2209	-.191	.214	.373	-2.423	2213	-.226	.187	.289	-1.543	2215	-.166	.132	.220	-.982

PRESC : W04 TAP 2209 TROUBLE= 10.430

DATA FOR PROJECT 5040 CONFIGURATION F WIND DIR. 8 TUBING NO. 10

TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN
2208	-.233	.233	.400	-1.815	2210	-.181	.175	.279	-1.702	2214	-.186	.171	.292	-1.745
2209	-.195	.239	.456	-2.206	2213	-.220	.196	.211	-1.311	2215	-.171	.154	.253	-1.054

DATA FOR PROJECT 5040 CONFIGURATION F WIND DIR. 10 TUBING NO. 10

TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN
2208	-.217	.219	.636	-1.754	2210	-.163	.163	.384	-1.423	2214	-.166	.156	.419	-1.973
2209	-.193	.221	.436	-2.247	2213	-.224	.199	.278	-1.425	2215	-.172	.149	.279	-1.134

DATA FOR PROJECT 5040 CONFIGURATION G WIND DIR. 358 TUBING NO. 10

TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN
2208	-.269	.226	.490	-1.512	2210	-.218	.188	.218	-1.646	2214	-.196	.162	.197	-1.149
2209	-.236	.241	.324	-2.361	2213	-.241	.183	.226	-1.582	2215	-.191	.135	.152	-.991

DATA FOR PROJECT 5040 CONFIGURATION G WIND DIR. 0 TUBING NO. 10

TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN
2208	-.252	.221	.498	-2.196	2210	-.200	.176	.452	-1.291	2214	-.188	.160	.281	-1.182
2209	-.222	.239	.287	-2.347	2213	-.231	.191	.340	-1.403	2215	-.181	.141	.187	-.895

DATA FOR PROJECT 5040 CONFIGURATION G WIND DIR. 2 TUBING NO. 10

TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN
2208	-.247	.223	.395	-1.921	2210	-.187	.173	.336	-1.622	2214	-.189	.165	.228	-1.588
2209	-.211	.230	.395	-2.283	2213	-.238	.197	.281	-1.502	2215	-.179	.140	.258	-.936

DATA FOR PROJECT 5040 CONFIGURATION G WIND DIR. 4 TUBING NO. 10

TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN
2208	-.248	.233	.576	-1.758	2210	-.175	.152	.250	-1.197	2214	-.184	.153	.295	-1.117
2209	-.200	.222	.312	-2.342	2213	-.230	.184	.246	-1.613	2215	-.176	.134	.253	-.852

DATA FOR PROJECT 5040 CONFIGURATION G WIND DIR. 6 TUBING NO. 10

TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN
2208	-.234	.236	.390	-2.355	2210	-.172	.171	.315	-1.935	2214	-.172	.163	.270	-1.061
2209	-.186	.219	.441	-1.921	2213	-.221	.192	.255	-1.406	2215	-.166	.141	.281	-1.030

PRESC : W04 TAP 2210 TROUBLE= 10.311

DATA FOR PROJECT 5040 CONFIGURATION G WIND DIR. 8 TUBING NO. 10

TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN
2208	-.222	.221	.516	-1.628	2210	-.162	.151	.327	-1.003	2214	-.169	.157	.306	-1.056
2209	-.193	.229	.367	-1.948	2213	-.219	.196	.284	-1.604	2215	-.173	.151	.292	-1.117

DATA FOR PROJECT 5040 CONFIGURATION G WIND DIR. 10 TUBING NO. 10

TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN
2208	-.213	.210	.527	-1.453	2210	-.157	.155	.306	-1.172	2214	-.164	.156	.249	-1.012
2209	-.182	.229	.393	-2.267	2213	-.211	.194	.334	-1.486	2215	-.160	.142	.256	-.942

DATA FOR PROJECT 5040 CONFIGURATION H WIND DIR. 358 TUBING NO. 10

TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN
2208	-.260	.191	.316	-1.327	2210	-.208	.162	.220	-1.364	2214	-.189	.144	.204	-1.293
2209	-.228	.227	.404	-2.327	2213	-.235	.184	.257	-1.512	2215	-.184	.133	.211	-1.112

DATA FOR PROJECT 5040 CONFIGURATION H WIND DIR. 0 TUBING NO. 10

TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN
2208	-.260	.233	.467	-2.411	2210	-.195	.171	.307	-1.463	2214	-.188	.156	.242	-1.088
2209	-.224	.219	.335	-2.414	2213	-.235	.179	.249	-1.235	2215	-.185	.132	.212	-.845

PRESC : W04 TAP 2209 TROUBLE= 10.017

DATA FOR PROJECT 5040 CONFIGURATION H WIND DIR. 2 TUBING NO. 10

TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN
2208	-.234	.210	.445	-2.030	2210	-.184	.158	.355	-1.331	2214	-.184	.147	.220	-1.186
2209	-.214	.230	.449	-2.318	2213	-.235	.196	.257	-1.489	2215	-.178	.137	.254	-1.113

DATA FOR PROJECT 5040 CONFIGURATION H WIND DIR. 4 TUBING NO. 10

TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN
2208	-.247	.233	.479	-2.379	2210	-.175	.152	.264	-1.432	2214	-.183	.158	.302	-1.526
2209	-.192	.206	.403	-2.374	2213	-.228	.189	.203	-1.862	2215	-.170	.130	.223	-.894

PRESC : W04 TAP 2209 TROUBLE= 10.596

DATA FOR PROJECT 5040 CONFIGURATION H WIND DIR. 6 TUBING NO. 10

TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN
2208	-.233	.231	.457	-1.567	2210	-.170	.161	.367	-1.529	2214	-.177	.163	.337	-1.313
2209	-.196	.222	.454	-2.385	2213	-.219	.181	.382	-1.479	2215	-.171	.140	.387	-.975

DATA FOR PROJECT 3040 CONFIGURATION H WIND DIR. 8 TUBING NO. 10

TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN
2208	-.225	.230	.385	-1.712	2210	-.167	.168	.284	-1.365	2214	-.174	.167	.269	-1.107
2209	-.180	.220	.435	-2.359	2213	-.215	.196	.271	-1.558	2215	-.162	.142	.259	-1.110

DATA FOR PROJECT 3040 CONFIGURATION H WIND DIR. 10 TUBING NO. 10

TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN
2208	-.235	.233	.528	-1.826	2210	-.174	.152	.371	-1.966	2214	-.180	.162	.346	-1.032
2209	-.177	.217	.369	-2.366	2213	-.206	.185	.287	-1.465	2215	-.158	.137	.282	-.852

PRESC : W04 TAP 2209 TROUBLE= 10.095

DATA FOR PROJECT 5040 CONFIGURATION I WIND DIR. 358 TUBING NO. 10

TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN
2208	-.264	.218	.382	-1.677	2210	-.203	.175	.275	-1.195	2214	-.188	.143	.210	-1.072
2209	-.239	.217	.303	-2.367	2213	-.245	.177	.222	-1.456	2215	-.189	.129	.218	-.977

DATA FOR PROJECT 5040 CONFIGURATION I WIND DIR. 0 TUBING NO. 10

TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN
2208	-.248	.198	.393	-1.492	2210	-.193	.155	.345	-1.202	2214	-.191	.148	.260	-1.292
2209	-.217	.210	.357	-2.306	2213	-.226	.164	.247	-1.337	2215	-.189	.120	.236	-.805

DATA FOR PROJECT 5040 CONFIGURATION I WIND DIR. 2 TUBING NO. 10

TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN
2208	-.258	.227	.577	-1.820	2210	-.191	.172	.391	-1.572	2214	-.188	.151	.382	-1.097
2209	-.221	.223	.310	-2.320	2213	-.238	.192	.294	-1.552	2215	-.185	.134	.223	-.953

DATA FOR PROJECT 5040 CONFIGURATION I WIND DIR. 4 TUBING NO. 10

TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN
2208	-.233	.213	.311	-1.590	2210	-.182	.164	.319	-1.225	2214	-.186	.156	.254	-1.302
2209	-.195	.213	.370	-1.960	2213	-.229	.190	.250	-1.476	2215	-.173	.137	.219	-1.095

DATA FOR PROJECT 5040 CONFIGURATION I WIND DIR. 6 TUBING NO. 10

TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN
2208	-.240	.213	.415	-1.748	2210	-.188	.165	.296	-1.617	2214	-.188	.156	.262	-.971
2209	-.194	.219	.331	-2.355	2213	-.226	.189	.245	-1.536	2215	-.174	.143	.187	-1.256

DATA FOR PROJECT 5040 CONFIGURATION I WIND DIR. 8 TUBING NO. 10

TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN
2208	-.224	.229	.590	-1.586	2210	-.164	.152	.311	-1.107	2214	-.169	.152	.269	-.926
2209	-.190	.219	.382	-2.308	2213	-.216	.189	.273	-1.652	2215	-.168	.138	.248	-.871

DATA FOR PROJECT 5040 CONFIGURATION I WIND DIR. 10 TUBING NO. 10

TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN	TAP	MEAN	RMS	MAX	MIN
2208	-.215	.216	.487	-1.684	2210	-.157	.150	.363	-1.290	2214	-.164	.150	.397	-1.246
2209	-.179	.211	.342	-2.220	2213	-.210	.186	.301	-1.092	2215	-.162	.138	.238	-.889

APPENDIX C

SELECTION OF LOCAL PEAK PRESSURE COEFFICIENTS FOR WIND TUNNEL STUDIES OF BUILDINGS

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SUMMARY

It has been recognized that the probability distribution of the largest peak pressure achieved during a design storm at a particular location on a building is skewed with a long tail extending toward higher loadings. Several procedures have been suggested in the literature for determining the statistical characteristics of the peak pressure. This paper provides an optimized method for prediction of the peak pressure from wind-tunnel model studies.

1. INTRODUCTION

Most large buildings are currently designed with the aid of tests in a boundary-layer wind tunnel. One result of these tests is the distribution over the building surface of local peak pressures to be used for design of the cladding. It has been recognized for some time that the probability distribution of the largest peak pressure achieved during a design storm at a particular location on a building is skewed with a long tail extending toward higher loadings. This distribution is sufficiently broad at some locations on the building, that the peak pressure within the distribution predicted from the single largest pressure measured during a single one hour record may vary by 950 Pa (20 psf) or more at a site with reasonably strong design winds. A case is shown in Figure 1 in which the variation of peak pressure within the distribution leaving 0.5 percent of the area remaining at each end is 950 Pa (20 psf).

The development of the experimental understanding of fluctuating pressure probability distributions has occurred primarily in the last decade. Probability histograms of pressure fluctuations at several locations on a full-scale structure were reported by Dalglish [1]. Peterka and Cermak [2] showed that probability distributions of pressure fluctuations on high-rise buildings could be separated into two classifications -- one nearly Gaussian in positive-pressure areas and one highly skewed in negative-pressure areas. Peterka et al. [3] showed that skewing of the distribution is reduced, almost to a Gaussian distribution, in the presence of strong vortex action. Stathopoulos [4] showed that fluctuating pressures skew to higher pressures for both positive and negative pressures on low-rise buildings. Lou [5] found that skewing can occur also on high-rise buildings in positive-pressure areas.

Several techniques have been proposed for prediction of probability distributions of peak pressures. Davenport [6] proposed a peak value theory for Gaussian processes based, in part, on earlier developments by Cartwright and

Longuet-Higgins [7] and Rice [8]. This method was developed for integral loads on a structure but is applicable for any Gaussian or near-Gaussian process. Sockel [9] proposed a method to predict the probability distribution of the largest peak from the parent distribution for a family of distributions. Mayne and Cook [10] proposed to obtain the probability distribution of largest peak by fitting the largest peak from a series of time intervals to a Type I extreme value distribution. Dalglish and Templin [11] proposed a method for determining the extreme value distribution by fitting an exponential distribution to a parent population consisting only of large amplitude "spikes" in the data record. Grigoriu [12] proposed a method based on use of the parent distribution in which the theory of extremes for Markovian sequences was applied.

All of the various methods described above have shortcomings that make them impractical for implementation in volume in wind-tunnel tests for cladding pressures. One of the most-used methods to date has been the Mayne and Cook method (10). In that method, 16 largest peaks are fit to a Type I distribution, each peak being the largest in a 15-minute record (full-scale time). The resulting distribution is then adjusted from a 15-minute record length to a one-hour record length by shifting the distribution along the pressure axis. In an effort to reduce the time involved for the wind-tunnel measurements from the 4 full-scale hours required by the Mayne and Cook method, the writer has proposed a method [13,14] which is based on using most or all independent peaks in a single one hour record for prediction of the probability distribution of largest peak. That method did not work as consistently as was desirable. The method has since been optimized to obtain maximum accuracy with minimum experimental time. The results of that investigation are presented herein.

2. THEORY

The theoretical approach has been presented previously [13], but is summarized here in slightly different form for clarity. Let C_{pp} represent all negative peaks (minima) in the pressure fluctuation record. Change sign on the C_{pp} values for simplicity so that Type I analysis may be applied in the usual sense with extremes increasing on the positive axis.

Let $p(C_{pp})$ be the probability density of all independent peaks in the record. Then $P(C_{pp})$, the probability density of the largest of the peaks, will be

$$P(C_{pp}) = N[1 - p(C_{pp})]^{N-1} p(C_{pp}) \quad (1)$$

if the peaks of $p(C_{pp})$ are independent. In this equation, N is the number of independent peaks in time T and

$$q(C_{pp}) = \int_{C_{pp}}^{\infty} p(C_{pp}) dC_{pp}, \quad (2)$$

the complementary cumulative distribution of all peaks.

From theoretical considerations [15,16] and from empirical experience [5], $q(C_{pp})$ may be an extreme value distribution of Type I:

$$q(C_{pp}) = 1 - e^{-e^{-y}}, \quad y = a(C_{pp} - U) \quad (3)$$

where U and $1/a$ are the mode and dispersion of the distribution. The expression, y , is the "reduced variate."

$$\text{Thus } p(C_{pp}) = -\frac{dq}{dC_{pp}} = a(e^{-y}) \left(e^{-e^{-y}} \right) \quad (4)$$

$$\text{and } P(C_{pp}) = aN(e^{-y}) \left(e^{-e^{-y}} \right)^N. \quad (5)$$

$P(C_{pp})$ has the same shape as $p(C_{pp})$ but is shifted along the C_{pp} axis to larger values. The mode U_o of $P(C_{pp})$, from the maximum of (5), is

$$U_o = U + \frac{1}{a} \ln N \quad (6)$$

The form of $P(C_{pp})$ is that of an extreme value distribution of Type I:

$$P(C_{pp}) = a_o (e^{-y_o}) \left(e^{-e^{-y_o}} \right), \quad y_o = a_o(C_{pp} - U_o) \quad (7)$$

where U_o , $1/a_o$ are the mode and dispersion of $P(C_{pp})$. Equating (5) and (7) at a particular point, say $C_{pp} = U_o$, and incorporating (6) for the value of U_o ,

$$a_o = a. \quad (8)$$

The cumulative distribution for the largest peak is then

$$Q(C_{pp}) = 1 - e^{-e^{-y_o}} \quad (9)$$

The preceding analysis shows that the probability distribution of the largest peak in time T can be represented by an extreme value distribution of Type I whose mode and dispersion are functions only of the mode and dispersion of the Type I extreme value distribution and the number, N , of independent peaks in T .

N can be represented by

(10)

$$N = \nu T$$

where ν is the number of independent peaks per unit time. Rice [8] showed that the number of extrema per unit time could be found from ratios of moments of the spectral distribution of the parent time series. Because this technique requires a large amount of computer time if many cases are to be studied, an alternate scheme was used to estimate the value of ν . The autocorrelation, R_k , of the sequence of peaks was formed, where k is the delay in peaks. The peaks become essentially uncorrelated, and hence independent, when $R_k < r$, a small value. k_c is the count of peaks from one independent peak to the next and T_M is the length of the record to obtain M peaks. Then

$$\nu \cong \frac{M}{k_c T_M} \quad (11)$$

Two factors act to make (11) an acceptable estimate for ν : 1) the probability distribution $P(C_{pp})$ is not highly sensitive to the value of ν , and 2) peaks become uncorrelated rapidly so that a small number of terms of R_k need be computed with a reasonably small sample, M , of peaks.

3. APPLICATION AND OPTIMIZATION OF THE METHOD

Early use of the method of predicting peak pressure distributions using N independent peaks in one record showed mixed results. Some one-hour pressure records showed good agreement with results using the method suggested by Mayne and Cook, described above, but others were not as satisfactory [13]. A series of pressure measurements were made on several model buildings placed in the boundary-layer wind tunnels at the Fluid Dynamics and Diffusion Laboratory at Colorado State University. Details of the modeling procedure, which space limitations prohibit here, are available in several sources [17]. Fluctuating pressure records with negative means were stored in digital form on the laboratory data-acquisition system and subsequently analyzed as described above.

The criteria for selecting peaks was that a peak had to be at least 0.05 in C_p away from the adjacent valley to qualify. Correlations of pressure peaks, a typical example of which is shown in Figure 2, showed some variation in shape but were reasonably consistent in number of peaks to be skipped to obtain independent peaks. Results reported in [13] used a value of correlation coefficient of 0.2-0.3 to indicate independence of peaks. On this basis, a value of k_c of 2 or 3 was used so that 1/3 to 1/2 of all detectable peaks were used in the analysis. A Type I fit to these peaks fit well in some cases, Figure

3a, but failed to fit well in other cases, Figure 3b. Cases where the Type I fit was good tended to provide better predictions of peak pressure probability distributions than those with poor fits, but goodness of fit of peaks to the Type I distribution could not be used reliably as a basis for how well the resulting probability distribution of largest peak would compare to the actual distribution.

Analysis of results indicate three possible difficulties: 1) that correlation coefficients must be closer to zero than 0.2 to guarantee independence of peaks, 2) that lower-amplitude peaks did not always have the same statistical character as the larger peaks, thus distorting the prediction of the distribution of largest peak, and 3) that a single one-hour record is insufficient to reduce sampling errors to acceptable levels. An experimental program was executed to isolate and examine these problems.

A set of 100 time records, each one full-scale hour in length, was obtained from 12 randomly selected pressure taps (with negative means) on building models under study in the Fluid Dynamics and Diffusion Laboratory. A Type I distribution was fit to 100 peaks representing the largest negative peak from each record. This distribution was used as the "exact" answer for comparison. For each of the 100 records, a prediction of mode and dispersion for the peak pressure distribution was made from the analysis of this paper using N independent peaks and 100, 50, 20 and 10 largest peaks. The 100 predictions provided a data base for statistical analysis of the reliability of each prediction method.

To provide a single value for comparison between methods, an effective peak pressure coefficient, proposed by Cook and Mayne [18], was calculated for each case described above. This coefficient is defined as

$$C_p^* = U_o + 1.4(1/a_o) \quad (12)$$

The effect of record length was investigated by averaging values of C_p^* for the above cases for 2, 3, 4 and 5 records. This provided 50, 33, 25 and 20 values of averaged C_p^* respectively to use for analysis of consistency.

Finally, for comparison the method of Mayne and Cook [10] was applied to 25 sets of 4 records splitting the 4-record length into 16 shorter records and selecting the largest peak in each of the 16 short records for application of the Type I distribution.

Results of the various experiments are shown in Figures 4 through 7. Figure 4 shows the average difference between 100 predictions of C_p^* and the "exact" value of C_p^* , for 12 taps for 1, 10, 20, 50, 100 and N independent peaks per

one-hour record. For the 1 peak per record case, the single peak itself was assumed to be the prediction for C_p^* . The range of individual differences between the 100-record average for each of the 12 taps and the exact C_p^* is also shown. Plotted for comparison is the average and range of the average of 25 predictions for 12 taps for the Mayne and Cook method. All methods provide an average prediction within 0.06 in C_p^* ; however, a variation in consistency of prediction values can be seen in the range of the differences. The range of the 1, 10, 20, 50 and 100 point calculations using a single record were generally acceptable in consistency as was the Mayne-Cook method. Use of all N independent peaks provides a much poorer consistency.

Figure 5 shows the difference between the largest and smallest C_p^* in a set of predictions at a tap, averaged across 8 taps used for the optimization with $C_p^* > 1.0$. Data for 1, 10, 20, 50 and 100 peaks per one hour record are presented for cases where C_p^* values were unaveraged (1-record prediction) and averaged over 2, 3, 4 and 5 one-hour records. Also shown for comparison is the result of the Mayne-Cook procedure. Conclusions to be drawn from this graph are: 1) that a significant increase in consistency of prediction is obtained over a one-record prediction of C_p^* by averaging two one-record predictions of C_p^* , 2) that averaging more than two C_p^* values together provides increasingly small improvements in prediction consistency, 3) that averaging two values of C_p^* using 50 or 100 peaks for each C_p^* provides a comparable or improved level of consistency in prediction of C_p^* to the Mayne-Cook method with 1/2 the experimental time, 4) that either of these procedures (100 peaks per record for 2 records and Mayne-Cook) provide an acceptable level of uncertainty in prediction of C_p^* , and 5) an average of two values of C_p^* where each C_p^* is assumed to be the single largest peak in one record provides an acceptable consistency with an average prediction about 6 percent low in pressure (See Fig. 4).

Use of a single peak in a record to approximate C_p^* should predict the mean of the distribution $P(C_{pp})$ (equal to $U_o + 0.577 (1/a_o)$) instead of $C_p^* = U_o + 1.4 (1/a_o)$. The ratio of the mean of $P(C_{pp})$ to C_p^* for the "exact" distribution was 0.93 compared to 0.94 for the single peak averages.

Selection of an optimum method for prediction of C_p^* is somewhat subjective depending on the tradeoff between accuracy of prediction, wind-tunnel time available and computational capabilities in the data acquisition system. A reasonable selection of technique is to average two single peak estimates of C_p^* with the average increased by 7 percent. For an improved precision, 50 or 100 largest peaks per record can be used to predict C_p^* with C_p^* averaged over 2 one-hour records. Where neither wind-tunnel time nor computational resources are limited, 100 highest peaks per record averaging C_p^* for 4 or 5 records will

provide further improvement in accuracy. Because the range of variation is somewhat larger for larger pressures, the 2-record or 4-record analysis is only needed for larger pressure areas on the building. A single-peak, single record estimate of C_p^* can be used for small or moderate pressure areas.

Figures 6 and 7 show how well a single-peak, single-record prediction of C_p^* and an optimized technique using 100 peaks per record averaging C_p^* over 2 records compare to the "exact" C_p^* value. Shown are the average, the standard deviation and the range of 50 predictions. Prediction capability is quite good for the optimized technique, particularly in comparison with the single peak method.

4. CONCLUSIONS

On the basis of the preceding analysis, the following conclusions can be made:

- Variation in design pressure for local cladding loads can be large at some locations on a building in wind-tunnel tests which use a single sample of largest peak in a one-hour record to obtain design pressures.
- Use of multiple peaks in a single one-hour record can significantly improve design pressure prediction.
- Use of the average of 2 single-peak estimates of peak pressure with the average increased by 7 percent can also significantly improve prediction precision.
- Use of 100 largest peaks per one-hour record with design pressure averaged for 2 records provides an optimum precision in determination of design pressure.
- Previous recommended procedure with similar precision to the optimum method required 4 records or twice as much experimental time.
- Increased precision over a single peak determination of design pressure is only necessary for areas on a structure with larger pressures.

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REFERENCES

1. W. A. Dalgliesh, Statistical Treatment of Peak Gusts on Cladding, Jl. Structural Division, ASCE, 97 (1971) pp. 2173-2187.
2. J. A. Peterka and J. E. Cermak, Wind Pressures on Buildings--Probability Densities, Jl. Structural Division, ASCE, 101 (1975) pp. 1255-1267.
3. J. A. Peterka, T. G. Zambrano, and J. E. Cermak, Probabilities of Peak Wind Pressures on Buildings, Proceedings, ASCE Conference on Probabilistic Mechanics and Structural Reliability, Univ. of Arizona, 1979, pp. 260-265.
4. T. Stathopoulos, PDF of Wind Pressures on Low Rise Buildings, Jl. Structural Division, ASCE, 106 (1980) pp. 973-990.

5. J. J. Lou, Extreme Value Analysis of Peak Wind pressures on Buildings, M. S. Thesis, Fluid Dynamics and Diffusion Laboratory, Colorado State University, Fort Collins, CO, 1981.
6. A. G. Davenport, Note on the Distribution of the Largest Value of a Random Function with Application to Gust Loading, Proceedings Inst. of Civil Engineers, Vol. 28, 1964, pp. 187-196.
7. D. E. Cartwright and M. S. Longuet-Higgins, The Statistical Distribution of the Maxima of a Random Function, Proceedings, Royal Society of London, Vol. 237, 1956, pp. 212-232.
8. S. O. Rice, Mathematical Analysis of Random Noise, Bell System Technical Journal, Vol. 23, 1944, pp. 282-332 and Vol. 24, 1945, pp. 46-157.
9. H. Sockel, Local Pressure Fluctuations, Wind Engineering, Proceedings Fifth Int. Conf., J. E. Cermak, ed., Pergamon Press, 1980.
10. J. R. Mayne and N. J. Cook, Acquisition, Analysis and Application of Wind Loading Data, Wind Engineering, Proceedings Fifth Int. Conf., J. E. Cermak, ed., Pergamon Press 1980.
11. W. A. Dalgliesh and J. T. Templin, Comparisons of Wind Tunnel and Full-Scale Building Surface Pressures with Emphasis on Peaks, Wind Engineering, Proceedings Fifth Int. Conf., J. E. Cermak, ed., Pergamon Press, 1980.
12. M. Grigoriu, Estimates of Design Wind From Short Records, Jl. Structural Division, ASCE, 109 ST5 (1982) pp. 1034-1048.
13. J. A. Peterka, Probability Distributions of Local Peak Pressures, Proceedings of the Fourth U.S. National Conference on Wind Engineering Research, Seattle, Washington, July 1981.
14. J. A. Peterka, Predicting Peak Pressures vs. Direct Measurement, Proceedings, Workshop on Wind Tunnel Modeling, Gaithersburg, Maryland, April 1982.
15. E. J. Gumbel, Statistical Theory of Extreme Values and Some Practical Applications, U. S. Dept. of Commerce, Nat. Bur. Stand. Applied Mathematics Series 33, 1954.
16. J. R. Mayne and N. J. Cook, On Design Procedures for Wind Loading, Building Research Establishment Current Paper, CP25/78, 1978.
17. J. E. Cermak, Aerodynamics of Buildings, Annual Review of Building Mechanics, Vol. 8, 1976, pp. 75-106.
18. N. J. Cook and J. R. Mayne, A Refined Working Approach to the Assessment of Wind Loads for Equivalent Static Design, Jl. Wind Engrng. and Indust. Aerodyn., 6 (1980) pp. 125-137.

FIGURES

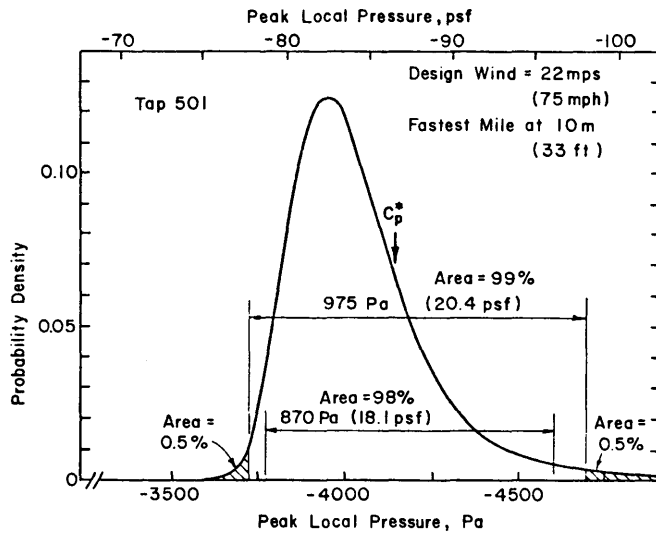


Figure 1. Probability Density for a Typical High-Pressure Area on a High-Rise Building

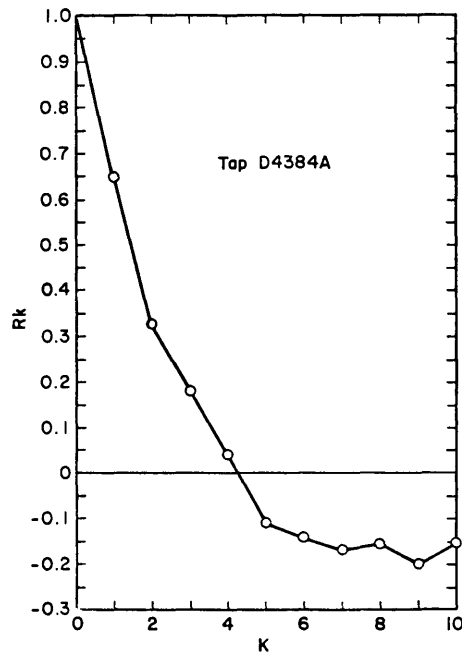


Figure 2. Correlation Coefficient for 100 Peaks in Sequence

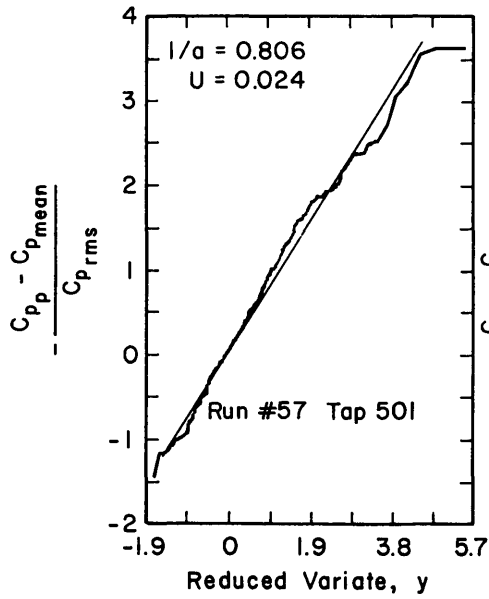


Figure 3a. Type I Extreme Value
Fit to 265 Peaks

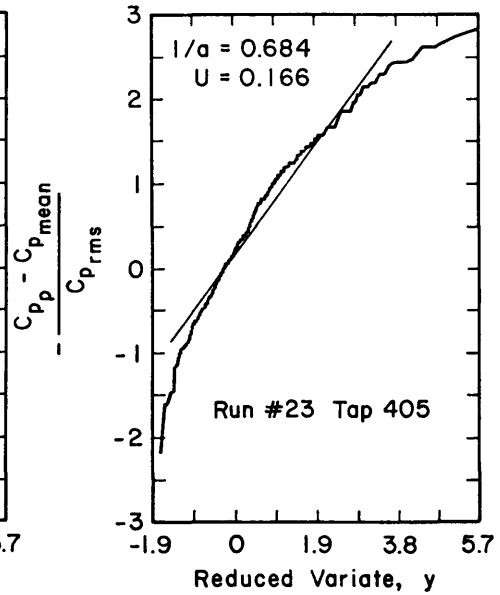


Figure 3b. Type I Extreme Value
Fit to 333 Peaks

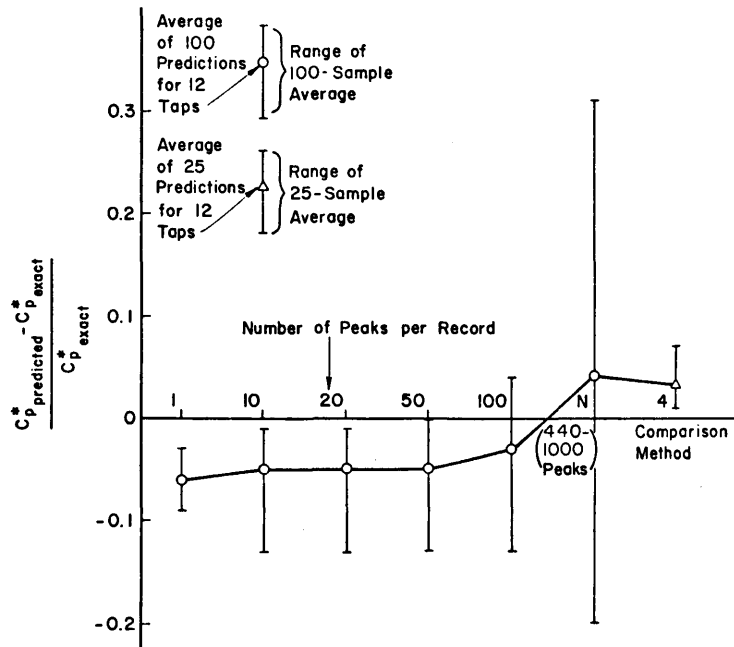


Figure 4. Mean Differences between Predicted and Exact C_p^*

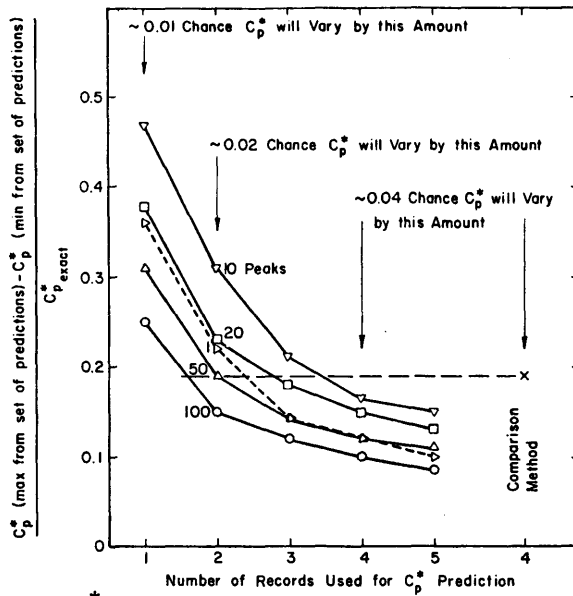


Figure 5. Range of C_p^* as Function of Number of Peaks per Record and Number of Records Used in Prediction of C_p^* (Each Data Point Average of 8 taps with $C_p^* 71.0$)

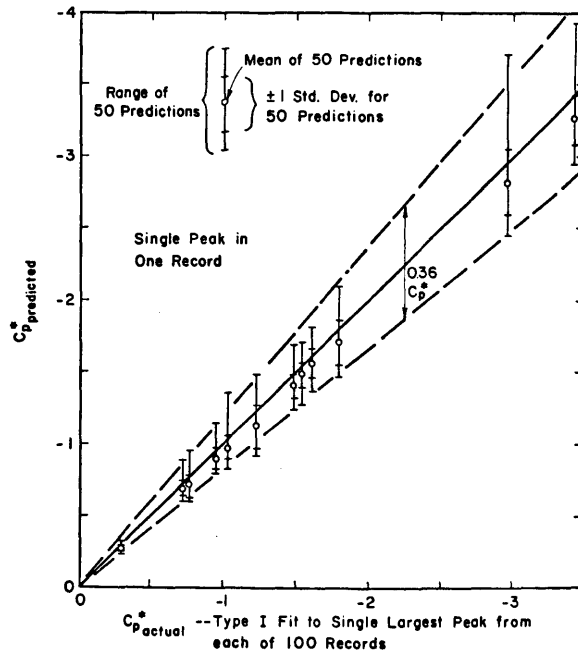


Figure 6. Prediction of C_p^* From Single Largest Peak in a Single Record

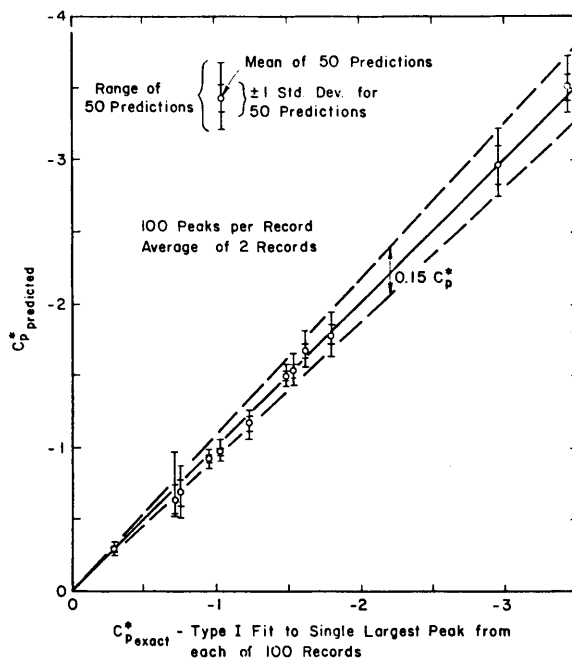


Figure 7. Prediction of C_p^* From 100 Largest Peaks per Record Using Two Records--Results for 50 Independent Predictions