

TRIBHUWAN UNIVERSITY
INSTITUTE OF ENGINEERING
PULCHOWK CAMPUS
DEPARTMENT OF CIVIL ENGINEERING

SURVEY INSTRUCTION COMMITTEE
Detailing of Bridge

		X	Y	Z
station	D	1041.607	1010.187	1301.239

Station	Sighted To	Signal Height	HCR observation			int. clk angle	bearing	Hz dist	Vt dist	Consecutive Co-ordinate		Independent Coordinate (point)		RL (point)
			d	m	s					departure	latitude	Easting	Northing	
D	B	1.3	0	0	0	0°0'0"	313°33'22"	60.610	4.016	-53.764	51.120			
1.348	1	1.9	186	55	6	186°55'6"	140°28'28"	7.480	1.014	4.760	-5.770	1046.368	1004.417	1299.673
	2	1.3	148	9	19	148°9'19"	101°42'41"	3.852	-0.324	3.772	-0.782	1045.379	1009.405	1301.611
	3	1.3	112	49	16	112°49'16"	66°22'38"	3.523	-0.552	3.228	1.412	1044.835	1011.599	1301.839
	4	1.3	95	24	13	95°24'13"	48°57'35"	4.548	-0.859	3.430	2.986	1045.038	1013.173	1302.146
	5	1.3	86	28	11	86°28'11"	40°1'33"	5.311	-1.472	3.416	4.067	1045.023	1014.254	1302.759
	6	1.3	81	45	56	81°45'56"	35°19'18"	6.391	-1.984	3.695	5.215	1045.303	1015.402	1303.271
	7	2.15	73	41	8	73°41'8"	27°14'30"	8.242	-1.393	3.773	7.328	1045.380	1017.515	1301.83
	8	2.15	69	5	3	69°5'3"	22°38'25"	10.841	-1.954	4.173	10.006	1045.781	1020.193	1302.391
	9	2.15	63	45	2	63°45'2"	17°18'24"	12.967	-2.515	3.858	12.380	1045.465	1022.567	1302.952
	10	2.15	59	45	43	59°45'43"	13°19'5"	15.244	-3.207	3.512	14.834	1045.119	1025.021	1303.644
	11	2.15	59	51	14	59°51'14"	13°24'36"	17.374	-3.484	4.029	16.900	1045.637	1027.087	1303.921
	12	2.15	61	36	16	61°36'16"	15°9'38"	18.834	-3.703	4.926	18.179	1046.533	1028.366	1304.14
	13	2.15	62	2	28	62°2'28"	15°35'50"	21.100	-4.002	5.673	20.323	1047.281	1030.510	1304.439
	14	2.15	61	50	17	61°50'17"	15°23'39"	21.622	-4.724	5.740	20.846	1047.347	1031.033	1305.161
	15	2.15	62	37	33	62°37'33"	16°10'55"	22.424	-5.187	6.249	21.536	1047.857	1031.723	1305.624
	16	2.15	63	3	19	63°3'19"	16°36'41"	23.357	-4.079	6.677	22.382	1048.285	1032.569	1304.516
	17	1.3	237	20	31	237°20'31"	190°53'53"	4.395	0.766	-0.831	-4.316	1040.777	1005.871	1300.521
	18	1.3	60	37	49	60°37'49"	14°11'11"	32.934	-4.639	8.071	31.930	1049.679	1042.117	1305.926
	19	1.3	242	51	5	242°51'5"	196°24'27"	1.161	0.065	-0.328	-1.114	1041.280	1009.073	1301.222
	20	2.15	50	36	50	50°36'50"	4°10'12"	37.085	-3.258	2.697	36.987	1044.304	1047.174	1303.695
	21	2.15	27	59	29	27°59'29"	341°32'51"	2.466	-0.360	-0.781	2.339	1040.827	1012.526	1300.797
	22	1.3	51	32	41	51°32'41"	5°6'3"	42.381	-2.924	3.768	42.213	1045.376	1052.400	1304.211
	23	1.3	50	45	1	50°45'1"	4°18'23"	46.055	-1.634	3.458	45.925	1045.066	1056.112	1302.921
	24	1.3	50	29	9	50°29'9"	4°2'31"	49.666	-0.403	3.501	49.542	1045.108	1059.730	1301.69
	25	2.15	40	54	6	40°54'6"	354°27'28"	4.234	-0.524	-0.409	4.214	1041.199	1014.401	1300.961
	26	1.3	50	0	5	50°0'5"	3°33'27"	51.591	0.015	3.201	51.492	1044.809	1061.679	1301.272
	27	2.15	38	19	46	38°19'46"	351°53'8"	6.602	-0.742	-0.932	6.536	1040.676	1016.723	1301.179
	28	1.3	50	16	15	50°16'15"	3°49'37"	53.900	0.918	3.597	53.780	1045.205	1063.967	1300.369
	29	2.15	39	49	54	39°49'54"	353°23'16"	9.766	-1.444	-1.125	9.701	1040.483	1019.888	1301.881
	30	2.15	47	42	50	47°42'50"	1°16'12"	62.248	3.305	1.380	62.233	1042.987	1072.420	1297.132
	31	2.15	42	47	50	42°47'50"	356°21'12"	14.599	-2.758	-0.929	14.569	1040.679	1024.757	1303.195
	32	2.15	39	5	29	39°5'29"	352°38'51"	68.761	4.725	-8.800	68.196	1032.808	1078.383	1295.712
	33	2.15	44	16	33	44°16'33"	357°49'55"	16.588	-3.388	-0.628	16.576	1040.980	1026.763	1303.825
	34	2.15	32	24	6	32°24'6"	345°57'28"	76.497	6.471	-18.561	74.211	1023.047	1084.398	1293.966

	35	2.15	44	52	4	44°52'4"	358°25'26"	28.739	-3.607	-0.790	28.728	1040.817	1038.915	1304.044
	36	2.15	46	2	28	46°2'28"	359°35'50"	36.898	-3.241	-0.259	36.897	1041.348	1047.084	1303.678
	37	2.15	49	41	7	49°41'7"	3°14'29"	40.320	-2.538	2.280	40.255	1043.887	1050.443	1302.975
	38	2.15	36	9	34	36°9'34"	349°42'56"	36.220	-2.843	-6.467	35.638	1035.141	1045.825	1303.28
	39	2.15	37	21	10	37°21'10"	350°54'32"	42.881	-2.025	-6.775	42.342	1034.832	1052.529	1302.462
	40	2.15	33	18	52	33°18'52"	346°52'14"	44.266	-1.629	-10.055	43.109	1031.552	1053.296	1302.066
	41	2.15	34	35	8	34°35'8"	348°8'30"	49.399	-0.258	-10.151	48.345	1031.456	1058.532	1300.695
	42	2.15	34	0	46	34°0'46"	347°34'8"	54.538	0.381	-11.740	53.259	1029.867	1063.446	1300.056
	43	2.15	24	31	13	24°31'13"	338°4'35"	52.703	1.321	-19.678	48.892	1021.930	1059.079	1299.116
	44	2.15	270	51	12	270°51'12"	224°24'34"	7.584	2.315	-5.307	-5.418	1036.300	1004.769	1298.122
	45	1.3	256	52	52	256°52'52"	210°26'14"	13.975	3.357	-7.080	-12.049	1034.528	998.138	1297.93
	46	2.15	256	41	41	256°41'41"	210°15'3"	18.243	4.562	-9.191	-15.759	1032.417	994.428	1295.875
A		2.15	302	53	53	302°53'53"	256°14'33"	62.434	3.537	-41.607	-10.187			

		X	Y	Z
station	A	1000.000	1000.000	1304.866

A	D	1.3	0	0	0	0°0'0"	76°14'33"	62.434	-3.534	41.607	10.187			
1.32	47	1.3	83	37	45	83°37'45"	159°52'18"	11.527	1.730	3.967	-10.823	1003.967	989.177	1303.156
	48	1.3	81	47	31	81°47'31"	158°2'4"	9.320	0.843	3.486	-8.643	1003.486	991.357	1304.043
	49	1.3	80	9	35	80°9'35"	156°24'8"	8.580	0.366	3.435	-7.863	1003.435	992.137	1304.52
	50	1.3	351	59	58	351°0'59'58"	68°14'31"	2.361	-0.323	2.193	0.875	1002.193	1000.875	1305.209
	51	1.3	0	9	48	0°9'48"	76°24'21"	26.005	-1.820	25.276	6.112	1025.276	1006.112	1306.706
	52	1.3	309	19	20	309°19'20"	25°33'53"	4.495	-0.979	1.940	4.055	1001.940	1004.055	1305.865
	53	1.3	17	45	52	17°45'52"	94°0'25"	23.149	-0.237	23.092	-1.618	1023.092	998.382	1305.123
	54	2.15	297	43	7	297°43'7"	13°57'40"	6.997	-1.763	1.688	6.790	1001.688	1006.790	1305.799
	55	2.15	288	19	47	288°19'47"	4°34'20"	10.421	-1.957	0.831	10.388	1000.831	1010.388	1305.993
	56	1.3	26	3	15	26°3'15"	102°1'748"	24.059	0.318	23.507	-5.124	1023.507	994.876	1304.568
	57	2.15	287	50	32	287°50'32"	4°5'5"	21.801	-5.566	1.553	21.746	1001.553	1021.746	1309.602
	58	2.15	287	34	16	287°34'16"	3°48'49"	25.150	-5.801	1.673	25.094	1001.673	1025.094	1309.837
	59	2.15	290	52	21	290°52'21"	7°6'54"	27.225	-6.325	3.372	27.015	1003.372	1027.015	1310.361
	60	2.15	289	21	54	289°21'54"	5°36'27"	27.876	-7.458	2.724	27.743	1002.724	1027.743	1311.494
	61	2.15	284	57	56	284°57'56"	1°12'29"	28.370	-6.301	0.598	28.364	1000.598	1028.364	1310.337
	62	2.15	283	26	33	283°26'33"	359°41'6"	39.383	-6.146	-0.217	39.382	999.783	1039.382	1310.182
	63	2.15	283	4	54	283°4'54"	359°19'27"	43.918	-5.031	-0.518	43.915	999.482	1043.915	1309.067
	64	2.15	271	25	35	271°25'35"	347°40'8"	42.319	-4.812	-9.038	41.343	990.962	1041.343	1308.848
	65	2.15	264	17	41	264°17'41"	340°32'14"	36.414	-5.807	-12.133	34.333	987.867	1034.333	1309.843
	66	1.55	269	58	57	269°58'57"	346°1'3'30"	21.291	-6.145	-5.070	20.679	994.930	1020.679	1310.781
	67	1.3	357	59	20	357°59'20"	74°13'53"	19.768	-1.796	19.024	5.372	1019.024	1005.372	1306.682
	68	1.58	267	53	44	267°53'44"	344°8'17"	18.760	-5.360	-5.127	18.046	994.873	1018.046	1309.966
	69	2.15	262	27	50	262°27'50"	338°42'23"	25.073	-7.071	-9.105	23.361	990.895	1023.361	1311.107
	70	1.3	349	11	48	349°11'48"	65°26'21"	20.080	-3.089	18.263	8.346	1018.263	1008.346	1307.975
	71	1.3	330	48	0	330°48'0"	47°2'33"	20.725	-3.985	15.168	14.123	1015.168	1014.123	1308.871
	72	1.3	258	55	43	258°55'43"	335°10'16"	17.411	-4.183	-7.311	15.802	992.689	1015.802	1309.069
	73	2.15	318	12	2	318°12'2"	34°26'35"	19.739	-3.768	11.164	16.279	1011.164	1016.279	1307.804
	74	1.3	279	29	1	279°29'1"	355°43'34"	16.222	-4.694	-1.209	16.177	998.791	1016.177	1309.58
	75	2.15	260	29	35	260°29'35"	336°44'8"	14.725	-3.369	-5.816	13.528	994.184	1013.528	1307.405
	76	2.15	310	20	4	310°20'4"	26°34'37"	22.009	-4.805	9.847	19.683	1009.847	1019.683	1308.841
	77	1.3	277	43	20	277°43'20"	353°57'53"	12.893	-3.729	-1.356	12.822	998.644	1012.822	1308.615
	78	1.3	261	3	11	261°3'11"	337°17'44"	11.566	-3.091	-4.464	10.670	995.536	1010.670	1307.977

	79	1.3	283	0	21	283°0'21"	359°14'54"	10.203	-2.863	-0.134	10.202	999.866	1010.202	1307.749
	80	2.15	605	56	10	605°56'10"	322°10'43"	26.521	-5.906	-16.263	20.950	983.737	1020.950	1309.942
	81	1.3	293	16	51	293°16'51"	9°31'24"	7.310	-2.765	1.209	7.209	1001.209	1007.209	1307.651
	82	1.5	261	23	26	261°23'26"	337°37'59"	6.330	-2.143	-2.409	5.854	997.591	1005.854	1306.829
	83	1.3	159	18	42	159°18'42"	235°33'15"	16.746	0.366	-13.810	-9.472	986.190	990.528	1304.52
	84	1.3	254	23	18	254°23'18"	330°37'51"	1.292	-0.227	-0.634	1.126	999.366	1001.126	1305.113
	85	1.3	151	3	52	151°3'52"	227°18'25"	17.005	1.499	-12.499	-11.531	987.501	988.469	1303.387
	86	2.15	294	32	36	294°32'36"	10°47'9"	46.200	-5.988	8.646	45.384	1008.646	1045.384	1310.024
	87	1.3	291	11	23	291°11'23"	7°25'56"	52.979	-3.192	6.853	52.534	1006.853	1052.534	1308.078
	88	1.3	179	56	24	179°56'24"	256°10'57"	14.775	-1.140	-14.347	-3.529	985.653	996.471	1306.026
	89	2.15	290	19	37	290°19'37"	6°34'10"	57.825	-1.521	6.616	57.445	1006.616	1057.445	1305.557
	90	1.3	212	8	40	212°8'40"	288°23'13"	18.757	-3.936	-17.799	5.917	982.201	1005.917	1308.822
	91	1.3	286	9	43	286°9'43"	2°24'16"	61.690	-0.898	2.588	61.636	1002.588	1061.636	1305.784
	92	1.3	223	18	13	223°18'13"	299°32'46"	23.625	-5.023	-20.553	11.650	979.447	1011.650	1309.909
	93	1.3	229	6	29	229°6'29"	305°21'2"	29.636	-6.089	-24.172	17.147	975.828	1017.147	1310.975
	94	2.15	230	3	32	230°3'32"	306°18'5"	34.868	-5.964	-28.101	20.643	971.899	1020.643	1310
	95	1.3	209	6	38	209°6'38"	285°21'11"	24.700	-5.114	-23.819	6.540	976.181	1006.540	1310
	96	1.3	206	35	1	206°35'1"	282°49'34"	27.107	-4.265	-26.431	6.018	973.569	1006.018	1309.151
	97	1.3	203	40	7	203°40'7"	279°54'40"	26.927	-4.471	-26.525	4.635	973.475	1004.635	1309.357
	98	1.3	192	38	16	192°38'16"	268°52'49"	24.727	-3.167	-24.722	-0.483	975.278	999.517	1308.053
	99	2.15	192	16	11	192°16'11"	268°30'44"	22.290	-3.687	-22.282	-0.579	977.718	999.421	1307.723
	100	1.3	192	6	12	192°6'12"	268°20'45"	19.445	-2.841	-19.437	-0.561	980.563	999.439	1307.727
B		1.3	272	30	31	272°30'31"	348°47'4"	28.565	0.470	-12.156	61.307			
C(101)		1.3	184	58	53	184°58'53"	261°15'19"	0.000	-0.399	-48.545	-7.467			

		X	Y	Z
station	C	951.455	992.533	1304.492379

C	A	1.3	0	0	0	0°0'0"	81°15'19"	0.000	0.214	48.545	7.467			
1.431	102	1.3	296	21	45	296°21'45"	17°37'4"	2.011	-0.410	0.609	1.917	952.064	994.450	1305.03338
	103	1.3	84	43	7	84°43'7"	165°58'26"	5.480	1.497	1.328	-5.317	952.783	987.216	1303.12638
	104	1.3	269	25	42	269°25'42"	350°41'1"	4.477	-1.086	-0.725	4.418	950.731	996.951	1305.70938
	105	1.3	334	46	37	334°46'37"	56°1'56"	7.648	-1.539	6.343	4.273	957.798	996.806	1306.16238
	106	1.3	258	24	13	258°24'13"	339°39'32"	6.404	-1.526	-2.226	6.005	949.229	998.537	1306.14938
	107	1.3	317	54	20	317°54'20"	39°9'39"	11.269	-2.466	7.116	8.738	958.572	1001.271	1307.08938
	108	1.3	250	19	22	250°19'22"	331°34'41"	7.690	-1.719	-3.660	6.763	947.795	999.296	1306.34238
	109	1.3	308	0	5	308°0'5"	29°15'24"	15.495	-3.529	7.573	13.518	959.028	1006.051	1308.15238
	110	1.3	238	31	42	238°31'42"	319°47'1"	6.349	-1.217	-4.099	4.848	947.356	997.381	1305.84038
	111	1.3	291	2	46	291°2'46"	12°18'5"	16.866	-3.891	3.593	16.479	955.049	1009.012	1308.51438
	112	1.3	239	55	3	239°55'3"	321°10'22"	8.048	-1.691	-5.046	6.270	946.409	998.803	1306.31438
	113	1.3	286	41	47	286°41'47"	7°57'6"	18.130	-4.399	2.508	17.956	953.963	1010.489	1309.02238
	114	1.3	238	45	28	238°45'28"	320°0'47"	10.494	-2.327	-6.744	8.040	944.712	1000.573	1306.95038
	115	1.3	284	2	58	284°2'58"	5°18'17"	20.314	-5.196	1.878	20.227	953.333	1012.760	1309.81938
	116	1.3	239	52	38	239°52'38"	321°7'57"	12.907	-2.978	-8.099	10.049	943.356	1002.582	1307.60138
	117	1.3	239	4	55	239°4'55"	320°20'14"	16.216	-3.620	-10.350	12.483	941.105	1005.016	1308.24338
	118	1.3	291	28	7	291°28'7"	12°43'26"	22.936	-5.339	5.052	22.373	956.507	1014.906	1309.96238
	119	1.3	289	13	27	289°13'27"	10°28'46"	25.846	-5.344	4.701	25.415	956.156	1017.948	1309.96738
	120	2.15	239	12	14	239°12'14"	320°27'33"	20.552	-3.721	-13.084	15.849	938.371	1008.382	1307.49438
	121	1.3	289	22	46	289°22'46"	10°38'5"	28.647	-5.496	5.287	28.155	956.742	1020.688	1310.11938
	122	1.9	242	15	29	242°15'29"	323°30'48"	23.510	-3.979	-13.980	18.902	937.475	1011.435	1308.00238

123	1.3	285	10	38	285°10'38"	6°25'57"	29.792	-5.452	3.338	29.604	954.793	1022.137	1310.07538
124	1.75	241	41	5	241°41'5"	322°56'24"	25.741	-4.078	-15.513	20.541	935.942	1013.074	1308.25138
125	1.75	242	43	54	242°43'54"	323°59'13"	28.764	-4.148	-16.912	23.267	934.543	1015.800	1308.32138
126	1.3	283	1	13	283°1'13"	4°16'32"	30.732	-5.534	2.291	30.646	953.746	1023.179	1310.15738
127	1.75	252	20	47	252°20'47"	333°36'6"	8.442	-1.487	-3.753	7.562	947.702	1000.095	1305.66038
128	1.3	280	37	2	280°37'2"	1°52'21"	35.307	-5.326	1.154	35.288	952.609	1027.821	1309.94938
129	1.3	281	53	37	281°53'37"	3°8'56"	35.491	-5.041	1.950	35.437	953.405	1027.970	1309.66438
130	2.15	280	54	47	280°54'47"	2°10'6"	36.830	-5.503	1.393	36.804	952.849	1029.336	1309.27638
131	1.3	199	17	19	199°17'19"	280°32'38"	6.647	-0.509	-6.535	1.216	944.921	993.749	1305.13238
132	1.3	199	19	31	199°19'31"	280°34'50"	8.957	-0.910	-8.805	1.645	942.651	994.177	1305.53338
133	1.3	206	22	42	206°22'42"	287°38'1"	10.709	-1.546	-10.206	3.244	941.249	995.777	1306.16938
134	1.3	203	28	7	203°28'7"	284°43'26"	12.671	-1.658	-12.255	3.220	939.200	995.753	1306.28138
135	1.3	206	42	24	206°42'24"	287°57'43"	14.850	-2.080	-14.126	4.580	937.329	997.112	1306.70338
136	1.3	313	36	20	313°36'20"	34°51'39"	18.834	-3.979	10.765	15.454	962.221	1007.987	1308.60238
137	1.3	212	10	27	212°10'27"	293°25'46"	15.730	-2.482	-14.433	6.255	937.022	998.787	1307.10538
138	1.3	213	13	2	213°13'2"	294°28'21"	18.142	-2.758	-16.512	7.515	934.943	1000.048	1307.38138
139	1.3	215	18	1	215°18'1"	296°33'20"	20.448	-2.900	-18.291	9.142	933.165	1001.674	1307.52338
140	2.15	30	29	9	30°29'9"	111°44'28"	11.528	0.731	10.708	-4.270	962.163	988.263	1303.04238
141	1.3	37	41	35	37°41'35"	118°56'54"	12.762	0.823	11.167	-6.177	962.623	986.356	1303.80038
142	2	218	33	45	218°33'45"	299°49'4"	22.458	-2.590	-19.485	11.167	931.970	1003.700	1306.51338
143	1.3	4	18	30	4°18'30"	85°33'49"	8.959	-0.990	8.932	0.693	960.387	993.226	1305.61338
144	1.3	3	7	44	3°7'44"	84°23'3"	12.772	-1.267	12.711	1.250	964.166	993.783	1305.89038
145	1.3	5	31	57	5°31'57"	86°47'16"	19.149	-1.002	19.119	1.073	970.574	993.606	1305.62538
146	1.3	359	27	43	359°27'43"	80°43'2"	19.732	-1.622	19.474	3.183	970.929	995.716	1306.24538
147	1.3	19	14	6	19°14'6"	100°29'25"	20.796	-0.507	20.448	-3.786	971.904	988.747	1305.13038
148	1.3	24	55	17	24°55'17"	106°10'36"	22.292	0.702	21.409	-6.211	972.865	986.322	1303.92138
149	1.3	31	39	4	31°39'4"	112°54'23"	22.998	1.531	21.184	-8.951	972.640	983.581	1303.09238
150	1.442	36	49	3	36°49'3"	118°4'22"	23.886	2.474	21.076	-11.241	972.531	981.292	1302.00738
151	1.3	45	26	22	45°26'22"	126°41'41"	19.501	2.381	15.637	-11.653	967.092	980.880	1302.24238
152	1.3	41	30	0	41°30'0"	122°45'19"	16.890	1.385	14.204	-9.138	965.660	983.394	1303.23838
153	1.3	39	23	53	39°23'53"	120°39'12"	12.084	0.795	10.395	-6.161	961.851	986.372	1303.82838
154	1.3	223	37	8	223°37'8"	304°52'27"	14.155	-2.873	-11.613	8.093	939.842	1000.626	1307.49638
155	1.3	223	34	12	223°34'12"	304°49'31"	19.768	-3.498	-16.227	11.289	935.228	1003.822	1308.12138
156	1.3	221	24	18	221°24'18"	302°39'37"	22.026	-3.443	-18.543	11.886	932.912	1004.419	1308.06638
157	1.3	222	57	4	222°57'4"	304°12'23"	23.441	-3.566	-19.386	13.178	932.069	1005.711	1308.18938
158	2.15	217	8	46	217°8'46"	298°24'5"	51.594	-2.809	-45.384	24.540	906.071	1017.073	1306.58238
159	2.15	208	37	5	208°37'5"	289°52'24"	52.740	-2.812	-49.599	17.929	901.856	1010.461	1306.58538
160	2.15	206	9	59	206°9'59"	287°25'18"	55.318	-2.613	-52.780	16.562	898.675	1009.095	1306.38638
161	1.3	121	22	26	121°22'26"	202°37'45"	5.701	1.666	-2.194	-5.262	949.262	987.271	1302.95738
162	1.3	171	4	28	171°4'28"	252°19'47"	10.582	-0.216	-10.083	-3.212	941.373	989.321	1304.83938
163	1.3	164	4	32	164°4'32"	245°19'51"	10.677	0.520	-9.703	-4.456	941.753	988.076	1304.10338
164	1.3	167	53	33	167°53'33"	249°8'52"	13.336	0.141	-12.463	-4.747	938.993	987.786	1304.48238
165	1.3	173	46	26	173°46'26"	255°1'45"	15.403	0.162	-14.880	-3.979	936.575	988.554	1304.46138
166	1.3	168	0	22	168°0'22"	249°15'41"	15.571	0.892	-14.562	-5.514	936.893	987.019	1303.73138
167	2.15	162	24	46	162°24'46"	243°40'5"	15.882	1.929	-14.234	-7.045	937.221	985.488	1301.84438
168	1.3	237	57	11	237°57'11"	319°12'30"	26.870	-4.542	-17.554	20.343	933.901	1012.876	1309.16538
169	2	155	13	29	155°13'29"	236°28'48"	14.534	2.511	-12.117	-8.026	939.338	984.507	1301.41238
170	2	161	20	33	161°20'33"	242°35'52"	12.048	1.770	-10.696	-5.545	940.759	986.988	1302.15338
171	1.3	140	38	43	140°38'43"	221°54'2"	4.102	0.726	-2.739	-3.053	948.716	989.480	1303.89738
172	1.3	128	55	11	128°55'11"	210°10'30"	3.910	1.158	-1.965	-3.380	949.490	989.153	1303.46538
173	1.3	90	20	53	90°20'53"	171°36'12"	5.369	1.531	0.784	-5.311	952.239	987.221	1303.09238

	174	1.3	103	58	0	103°58'0"	185°13'19"	5.786	1.689	-0.527	-5.762	950.929	986.771	1302.93438
	175	1.3	287	49	28	287°49'28"	9°44'7"	66.643	1.689	10.517	65.808	961.972	1058.341	1302.93438
	176	12.15	312	46	2	312°46'2"	34°1'21"	50.497	-5.254	28.254	41.853	979.709	1034.386	1299.02738
	177	2.15	287	29	7	287°29'7"	8°44'26"	60.637	0.950	9.214	59.933	960.670	1052.466	1302.82338
	178	2.15	287	15	13	287°15'13"	8°30'32"	57.300	0.445	8.478	56.669	959.934	1049.202	1303.32838
	179	1.3	284	57	19	284°57'19"	6°12'38"	55.475	0.010	6.001	55.149	957.457	1047.682	1304.61338
F		2.08	186	59	58	186°59'58"	268°19'36"	0.000	-0.259	-47.062	-1.375			

		X	Y	Z
station	F	904.393	991.158	1303.476361

F	C	1.3	0	0	0	0°0'0"	88°19'36"	0.000	0.756	47.062	1.375			
1.503	180	1.3	116	23	45	116°23'45"	204°43'21"	4.006	0.616	-1.675	-3.639	902.718	987.519	1303.06336
	181	1.3	357	41	11	357°41'11"	86°0'47"	21.214	0.278	21.163	1.475	925.556	992.633	1303.40136
	182	1.3	358	54	46	358°54'46"	87°14'22"	21.354	-0.156	21.329	1.028	925.722	992.186	1303.83536
	183	1.3	1	15	51	1°15'51"	89°35'27"	21.067	0.998	21.066	0.150	925.460	991.308	1302.68136
	184	1.3	2	40	52	2°40'52"	91°0'28"	19.550	1.357	19.547	-0.344	923.940	990.814	1302.32236
	185	1.55	6	46	8	6°46'8"	95°5'44"	22.676	2.319	22.586	-2.014	926.980	989.144	1301.11036
	186	1.7	11	48	38	11°48'38"	100°8'14"	20.744	2.643	20.420	-3.651	924.813	987.507	1300.63636
	187	1.3	22	46	57	22°46'57"	111°6'33"	14.068	1.318	13.124	-5.067	917.517	986.092	1302.36136
	188	1.3	6	25	48	6°25'48"	94°45'24"	13.177	0.727	13.132	-1.093	917.525	990.065	1302.95236
	189	1.3	357	24	56	357°24'56"	85°44'32"	12.597	0.143	12.562	0.935	916.955	992.093	1303.53636
	190	1.3	1	44	5	1°44'5"	90°3'41"	11.042	-0.300	11.042	-0.012	915.435	991.146	1303.97936
	191	1.3	10	21	59	10°21'59"	98°41'35"	10.818	0.024	10.694	-1.635	915.087	989.523	1303.65536
	192	1.3	8	0	4	8°0'4"	96°19'40"	8.914	-0.921	8.860	-0.982	913.253	990.176	1304.60036
	193	1.3	26	4	18	26°4'18"	114°23'54"	5.757	-0.096	5.243	-2.378	909.636	988.780	1303.77536
	194	1.3	47	18	49	47°18'49"	135°38'25"	7.667	0.684	5.360	-5.482	909.754	985.676	1302.99536
	195	1.3	48	27	25	48°27'25"	136°47'1"	13.390	1.825	9.169	-9.758	913.562	981.400	1301.85436
	196	1.3	119	45	28	119°45'28"	208°5'4"	2.436	0.246	-1.147	-2.149	903.246	989.009	1303.43336
	197	1.3	292	36	0	292°36'0"	20°55'36"	57.840	1.000	20.659	54.025	925.052	1045.183	1302.67936
	198	1.3	295	55	12	295°55'12"	24°14'48"	2.707	-0.768	1.112	2.468	905.505	993.626	1304.44736
	199	1.3	208	52	26	208°52'26"	297°12'2"	10.854	-1.125	-9.654	4.961	894.739	996.120	1304.80436
	200	1.3	298	10	11	298°10'11"	26°29'47"	6.284	-1.454	2.804	5.624	907.197	996.782	1305.13336
	201	1.3	218	46	32	218°46'32"	307°6'8"	11.028	-1.561	-8.795	6.653	895.598	997.811	1305.24036
	202	1.3	314	1	9	314°1'9"	42°20'45"	6.407	-1.401	4.316	4.735	908.709	995.893	1305.08036
	203	1.3	226	22	13	226°22'13"	314°41'49"	12.691	-1.804	-9.021	8.926	895.372	1000.084	1305.48336
	204	1.7	296	9	16	296°9'16"	24°28'52"	8.360	-1.360	3.464	7.608	907.857	998.766	1304.63936
	205	1.3	233	9	12	233°9'12"	321°28'48"	13.916	-2.209	-8.667	10.888	895.726	1002.046	1305.88836
	206	1.3	318	43	14	318°43'14"	47°2'50"	9.376	-1.894	6.862	6.389	911.256	997.547	1305.57336
	207	1.3	235	10	17	235°10'17"	323°29'53"	15.063	-2.369	-8.960	12.108	895.433	1003.266	1306.04836
	208	2	294	12	32	294°12'32"	22°32'8"	10.058	-1.248	3.855	9.290	908.248	1000.448	1304.22736
	209	2.15	245	49	17	245°49'17"	334°8'53"	18.460	-1.736	-8.049	16.613	896.344	1007.771	1304.56536
	210	2.15	310	59	53	310°59'53"	39°19'29"	12.702	-1.704	8.049	9.826	912.443	1000.984	1304.53336
	211	2.15	246	59	17	246°59'17"	335°18'53"	23.888	-1.719	-9.976	21.705	894.417	1012.863	1304.54836
	212	2.15	311	27	42	311°27'42"	39°47'18"	14.087	-1.970	9.015	10.825	913.408	1001.983	1304.79936
	213	2.15	314	53	57	314°53'57"	43°13'33"	14.577	-1.887	9.983	10.622	914.377	1001.780	1304.71636
	214	2.15	305	28	53	305°28'53"	33°48'29"	27.885	-1.657	15.516	23.170	919.909	1014.328	1304.48636
	215	2.15	302	46	44	302°46'44"	31°6'20"	15.593	-2.173	8.056	13.351	912.449	1004.509	1305.00236
	216	2.15	291	34	17	291°34'17"	19°53'53"	16.169	-2.172	5.503	15.204	909.896	1006.362	1305.00136
	217	2.15	245	54	37	245°54'37"	334°14'13"	29.676	-1.626	-12.899	26.726	891.494	1017.884	1304.45536

218	2.15	307	28	32	307°28'32"	35°48'8"	16.931	-2.265	9.904	13.732	914.298	1004.890	1305.09436
219	2.15	243	46	6	243°46'6"	332°5'42"	31.935	-1.717	-14.946	28.222	889.447	1019.380	1304.54636
220	2.15	297	45	56	297°45'56"	26°5'32"	19.365	-2.186	8.517	17.391	912.910	1008.550	1305.01536
221	2.15	251	31	48	251°31'48"	339°51'24"	30.033	-1.848	-10.342	28.196	894.051	1019.354	1304.67736
222	2.15	311	10	0	311°10'0"	39°29'36"	26.968	-2.387	17.151	20.811	921.545	1011.969	1305.21636
223	2.15	315	40	35	315°40'35"	44°0'11"	26.633	-2.398	18.502	19.157	922.895	1010.315	1305.22736
224	2.15	254	27	43	254°27'43"	342°47'19"	31.944	-1.656	-9.452	30.514	894.941	1021.672	1304.48536
225	2.15	298	57	6	298°57'6"	27°16'42"	27.927	-2.515	12.799	24.821	917.192	1015.979	1305.34436
226	2.15	291	20	16	291°20'16"	19°39'52"	29.430	-2.367	9.904	27.714	914.297	1018.872	1305.19636
227	2.15	287	14	49	287°14'49"	15°34'25"	25.899	-2.137	6.953	24.948	911.346	1016.106	1304.96636
228	2.15	263	37	13	263°37'13"	351°56'49"	31.768	-1.778	-4.450	31.455	899.943	1022.613	1304.60736
229	2.15	276	37	23	276°37'23"	4°56'59"	20.440	-1.937	1.764	20.364	906.157	1011.522	1304.76636
230	2.15	263	42	2	263°42'2"	352°1'38"	33.883	-1.914	-4.700	33.555	899.694	1024.714	1304.74336
231	2.15	311	7	2	311°7'2"	39°26'38"	25.546	-1.853	16.230	19.728	920.623	1010.886	1304.68236
232	2.15	298	13	24	298°13'24"	26°33'0"	40.336	-1.851	18.029	36.082	922.423	1027.240	1304.68036
233	2.15	306	27	30	306°27'30"	34°47'6"	25.578	-1.847	14.592	21.007	918.985	1012.165	1304.67636
234	2.15	298	12	20	298°12'20"	26°31'56"	40.338	-1.863	18.019	36.090	922.412	1027.248	1304.69236
235	1.3	262	36	47	262°36'47"	350°56'23"	34.558	-2.473	-5.442	34.127	898.951	1025.285	1306.15236
236	1.3	261	31	52	261°31'52"	349°51'28"	35.888	-2.044	-6.320	35.327	898.074	1026.485	1305.72336
237	1.3	294	28	55	294°28'55"	22°48'31"	40.160	-2.516	15.568	37.020	919.961	1028.178	1306.19536
238	1.3	259	50	49	259°50'49"	348°10'25"	37.288	-1.532	-7.642	36.497	896.751	1027.655	1305.21136
239	2.15	298	55	32	298°55'32"	27°15'8"	42.987	-2.034	19.684	38.215	924.077	1029.373	1304.86336
240	2.15	255	33	54	255°33'54"	343°53'30"	39.377	0.018	-10.925	37.831	893.468	1028.989	1302.81136
241	2.15	296	33	7	296°33'7"	24°52'43"	42.387	-2.605	17.832	38.454	922.225	1029.612	1305.43436
242	2.15	255	16	25	255°16'25"	343°36'1"	42.567	0.502	-12.018	40.835	892.375	1031.993	1302.32736
243	2.15	294	17	53	294°17'53"	22°37'29"	44.264	-1.411	17.028	40.858	921.421	1032.016	1304.24036
244	2.15	297	33	40	297°33'40"	25°53'16"	46.035	-1.189	20.099	41.415	924.493	1032.573	1304.01836
245	2.15	296	6	7	296°6'7"	24°25'43"	46.653	-1.107	19.294	42.476	923.687	1033.635	1303.93636
246	1.3	256	7	50	256°7'50"	344°27'26"	43.842	-0.016	-11.748	42.239	892.645	1033.397	1303.69536
247	2.15	294	17	3	294°17'3"	22°36'39"	47.892	-0.610	18.413	44.211	922.806	1035.369	1303.43936
248	1.3	255	46	11	255°46'11"	344°5'47"	45.025	0.187	-12.338	43.302	892.055	1034.460	1303.49236
249	2.15	296	15	23	296°15'23"	24°34'59"	51.782	0.202	21.542	47.088	925.935	1038.246	1302.62736
250	2.15	293	41	59	293°41'59"	22°1'35"	50.863	0.063	19.075	47.151	923.469	1038.309	1302.76636
251	2.15	294	51	18	294°51'18"	23°10'54"	52.951	0.362	20.844	48.676	925.237	1039.834	1302.46736
252	2.15	292	7	32	292°7'32"	20°27'8"	53.818	0.927	18.806	50.425	923.199	1041.584	1301.90236
253	2.17	308	5	22	308°5'22"	36°24'58"	52.917	-0.950	31.414	42.584	935.807	1033.742	1303.75936
254	2.17	309	27	25	309°27'25"	37°47'1"	54.663	-1.003	33.491	43.202	937.884	1034.360	1303.81236
255	2.15	299	12	9	299°12'9"	27°31'45"	55.049	1.687	25.444	48.816	929.837	1039.974	1301.14236
256	2.17	309	26	40	309°26'40"	37°46'16"	55.254	-2.024	33.844	43.676	938.237	1034.834	1304.83336
257	2.17	312	59	7	312°59'7"	41°18'43"	49.074	-2.977	32.397	36.861	936.790	1028.019	1305.78636
258	2.15	299	23	21	299°23'21"	27°42'57"	53.710	1.137	24.980	47.548	929.373	1038.706	1301.69236
259	2.17	306	47	11	306°47'11"	35°6'47"	47.120	-2.023	27.103	38.545	931.496	1029.703	1304.83236
260	2.15	299	21	41	299°21'41"	27°41'17"	36.529	-2.655	16.974	32.346	921.367	1023.504	1305.48436
261	2.15	306	5	25	306°5'25"	34°25'1"	32.991	-3.036	18.647	27.216	923.040	1018.374	1305.86536
262	2.15	308	0	14	308°0'14"	36°19'50"	30.215	-2.615	17.901	24.342	922.294	1015.500	1305.44436
G	1.3	211	20	46	211°20'46"	299°37'48"	0.000	-2.245	-24.834	14.125			

		X	Y	Z
station	G	879.559	1005.283	1301.532946

G	F	1.3	0	0	0	0°0'0"	119°37'48"	0.000	1.938	24.834	-14.125			
1.368	263	1.3	147	34	37	147°34'37"	267°12'25"	14.145	0.284	-14.128	-0.689	865.431	1004.594	1301.31695
	264	1.3	213	20	22	213°20'22"	332°58'10"	5.325	-0.058	-2.420	4.743	877.139	1010.026	1301.65895
	265	1.3	208	44	37	208°44'37"	328°22'25"	7.483	0.057	-3.924	6.372	875.635	1011.655	1301.54395
	266	1.3	140	45	36	140°45'36"	260°23'24"	15.830	0.378	-15.608	-2.643	863.951	1002.640	1301.22295
	267	1.3	221	37	28	221°37'28"	341°15'16"	9.867	-0.016	-3.171	9.344	876.388	1014.627	1301.61695
	268	1.3	135	49	13	135°49'13"	255°27'1"	16.666	0.492	-16.132	-4.187	863.427	1001.096	1301.10895
	269	1.3	223	8	13	223°8'13"	342°46'1"	12.022	0.409	-3.562	11.482	875.997	1016.765	1301.19195
	270	1.3	213	0	8	213°0'8"	332°37'56"	16.782	0.153	-7.715	14.904	871.844	1020.187	1301.44795
	271	1.3	132	33	14	132°33'14"	252°11'2"	18.318	0.684	-17.440	-5.605	862.119	999.678	1300.91695
	272	1.3	131	17	55	131°17'55"	250°55'43"	18.856	0.551	-17.821	-6.161	861.738	999.122	1301.04995
	273	2.15	280	32	3	280°32'3"	40°9'51"	40.408	20.792	26.062	30.880	905.621	1036.163	1279.95895
	274	2.15	280	8	33	280°8'33"	39°46'21"	36.746	2.431	23.508	28.243	903.067	1033.526	1298.31995
	275	2.15	123	18	40	123°18'40"	242°56'28"	20.477	1.299	-18.236	-9.315	861.323	995.968	1299.45195
	276	1.3	113	19	55	113°19'55"	232°57'43"	18.746	1.457	-14.964	-11.292	864.595	993.991	1300.14395
	277	1.3	112	6	31	112°6'31"	231°44'19"	20.123	2.359	-15.800	-12.461	863.759	992.822	1299.24195
	278	1.3	104	33	5	104°33'5"	224°10'53"	17.755	1.945	-12.374	-12.733	867.185	992.550	1299.65595
	279	2.15	255	13	23	255°13'23"	14°51'11"	23.897	2.826	6.126	23.099	885.685	1028.382	1297.92495
	280	1.3	92	2	35	92°2'35"	211°40'23"	19.135	3.675	-10.047	-16.285	869.512	988.998	1297.92595
	281	1.8	234	15	17	234°15'17"	353°53'5"	21.556	3.619	-2.296	21.433	877.263	1026.716	1297.48195
	282	1.3	87	2	28	87°2'28"	206°40'16"	21.226	5.225	-9.528	-18.968	870.031	986.315	1296.37595
	283	2.15	76	42	41	76°42'41"	196°20'29"	20.653	6.958	-5.811	-19.819	873.748	985.464	1293.79295
	284	2.15	88	51	42	88°51'42"	208°29'30"	25.574	7.304	-12.200	-22.477	867.359	982.806	1293.44695
	285	2.15	257	35	32	257°35'32"	17°13'20"	23.229	2.615	6.878	22.188	886.437	1027.471	1298.13595
	286	2.15	80	5	36	80°5'36"	199°43'24"	25.321	7.692	-8.545	-23.836	871.014	981.447	1293.05895
	287	2.15	285	18	21	285°18'21"	44°56'9"	27.640	6.414	19.522	19.566	899.081	1024.849	1294.33695
	288	1.3	168	31	44	168°31'44"	288°9'32"	15.563	0.627	-14.788	4.850	864.771	1010.133	1300.97395
	289	1.3	281	1	24	281°1'24"	40°39'12"	2.485	-0.297	1.619	1.885	881.178	1007.168	1301.89795
	290	1.3	15	28	25	15°28'25"	135°6'13"	10.647	0.805	7.515	-7.542	887.074	997.741	1300.79595
	291	1.3	356	7	0	356°7'0"	115°44'48"	9.909	0.446	8.925	-4.304	888.484	1000.979	1301.15495
	292	1.3	172	4	54	172°4'54"	291°42'42"	16.379	1.225	-15.217	6.059	864.342	1011.342	1300.37595
E		1.3	286	46	54	286°46'54"	46°35'20"	0.000	3.846	45.362	42.914			

		X	Y	Z
station	B	987.844	1061.307	1304.370833

B	A	1.3	0	0	0	0°0'0"	168°47'4"	28.565		12.156	-61.307			
1.3	293	1.5	193	17	9	193°17'9"	2°4'13"	31.522	5.996	1.139	31.501	988.982	1092.809	1298.17483
	294	1.5	189	35	37	189°35'37"	358°22'41"	31.824	6.310	-0.901	31.811	986.943	1093.119	1297.86083
	295	1.5	224	26	2	224°26'2"	33°13'6"	32.922	4.291	18.036	27.542	1005.879	1088.850	1299.87983
	296	1.5	186	27	36	186°27'36"	355°14'40"	32.979	6.458	-2.734	32.865	985.109	1094.173	1297.71283
	297	1.5	242	34	30	242°34'30"	51°21'34"	27.136	2.227	21.195	16.945	1009.039	1078.252	1301.94383
	298	1.5	186	10	9	186°10'9"	354°57'13"	29.865	5.925	-2.627	29.749	985.217	1091.057	1298.24583
	299	1.5	257	59	43	257°59'43"	66°46'47"	24.075	0.824	22.125	9.492	1009.968	1070.799	1303.34683
	300	1.5	191	37	5	191°37'5"	0°24'9"	29.554	5.549	0.208	29.553	988.051	1090.861	1298.62183
	301	1.5	269	1	22	269°1'22"	77°48'26"	23.867	-0.468	23.329	5.041	1011.172	1066.348	1304.63883
	302	1.5	188	4	13	188°4'13"	356°51'17"	27.270	5.331	-1.496	27.229	986.347	1088.536	1298.83983
	303	1.5	285	50	40	285°50'40"	94°37'44"	22.574	-2.431	22.500	-1.822	1010.344	1059.486	1306.60183
	304	1.5	297	7	4	297°7'4"	105°54'8"	24.349	-3.757	23.417	-6.672	1011.261	1054.636	1307.92783

305	2.15	303	48	4	303°48'4"	112°35'8"	27.557	-4.756	25.444	-10.584	1013.287	1050.724	1308.27683
306	2.15	312	37	59	312°37'59"	121°25'3"	30.951	-6.507	26.413	-16.134	1014.257	1045.174	1310.02783
307	1.5	194	26	18	194°26'18"	3°13'22"	26.006	5.036	1.462	25.965	989.306	1087.272	1299.13483
308	1.5	186	28	37	186°28'37"	355°15'41"	23.786	4.961	-1.965	23.705	985.879	1085.012	1299.20983
309	1.5	182	43	22	182°43'22"	351°30'26"	23.299	4.993	-3.441	23.044	984.403	1084.351	1299.17783
310	1.5	176	25	23	176°25'23"	345°12'27"	23.878	5.100	-6.097	23.087	981.747	1084.394	1299.07083
311	1.5	175	42	34	175°42'34"	344°29'38"	21.068	4.644	-5.632	20.301	982.211	1081.609	1299.52683
312	1.5	184	1	43	184°1'43"	352°48'47"	20.221	4.462	-2.530	20.062	985.314	1081.370	1299.70883
313	1.5	194	55	25	194°55'25"	3°42'29"	21.005	4.339	1.358	20.961	989.202	1082.268	1299.83183
314	1.5	204	0	11	204°0'11"	12°47'15"	20.949	4.037	4.637	20.429	992.480	1081.737	1300.13383
315	1.5	219	35	19	219°35'19"	28°22'23"	22.491	3.486	10.688	19.789	998.531	1081.097	1300.68483
316	1.5	206	47	45	206°47'45"	15°34'49"	17.419	3.461	4.679	16.779	992.522	1078.086	1300.70983
317	1.5	195	5	10	195°5'10"	3°52'14"	15.545	3.530	1.049	15.510	988.893	1076.817	1300.64083
318	1.5	229	14	15	229°14'15"	38°1'19"	17.035	2.391	10.493	13.420	998.336	1074.727	1301.77983
319	1.5	177	57	47	177°57'47"	346°44'51"	15.308	3.594	-3.509	14.900	984.334	1076.208	1300.57683
320	1.5	251	27	40	251°27'40"	60°14'44"	12.829	0.750	11.138	6.367	998.981	1067.674	1303.42083
321	1.5	164	23	0	164°22'60"	333°10'4"	14.460	3.334	-6.527	12.903	981.317	1074.211	1300.83683
322	1.5	147	57	39	147°57'39"	316°44'43"	12.738	2.803	-8.729	9.277	979.115	1070.585	1301.36783
323	1.5	291	19	53	291°19'53"	100°6'57"	12.529	-1.912	12.334	-2.201	1000.178	1059.107	1306.08283
324	2.15	307	25	41	307°25'41"	116°12'45"	14.185	-2.210	12.726	-6.266	1000.570	1055.042	1305.73083
325	1.5	156	40	36	156°40'36"	325°27'40"	27.095	5.284	-15.362	22.319	972.482	1083.627	1298.88683
326	1.5	165	13	55	165°13'55"	334°0'59"	25.526	5.319	-11.183	22.946	976.660	1084.253	1298.85183
327	2.8	321	50	40	321°50'40"	130°37'44"	15.154	-2.217	11.501	-9.868	999.345	1051.440	1305.08783
328	1.5	180	38	0	180°37'60"	349°25'4"	11.293	2.829	-2.074	11.101	985.770	1072.408	1301.34183
329	1.5	199	22	57	199°22'57"	8°10'1"	8.885	2.207	1.262	8.795	989.106	1070.102	1301.96383
330	1.5	156	21	17	156°21'17"	325°8'21"	26.637	5.257	-15.225	21.857	972.618	1083.164	1298.91383
331	1.5	186	20	39	186°20'39"	355°7'43"	6.613	1.882	-0.562	6.589	987.282	1067.896	1302.28883
332	1.5	206	53	36	206°53'36"	15°40'40"	6.069	1.526	1.640	5.843	989.484	1067.151	1302.64483
333	2	162	16	1	162°16'1"	331°3'5"	30.531	6.493	-14.778	26.716	973.066	1088.024	1297.17783
334	1.5	233	27	8	233°27'8"	42°14'12"	5.410	0.790	3.637	4.005	991.480	1065.313	1303.38083
335	1.5	128	54	34	128°54'34"	297°41'38"	15.264	2.634	-13.515	7.094	974.328	1068.401	1301.53683
336	1.5	261	28	56	261°28'56"	70°15'60"	5.318	0.170	5.006	1.796	992.849	1063.103	1304.00083
337	1.5	181	27	12	181°27'12"	350°14'16"	6.275	1.657	-1.064	6.184	986.780	1067.492	1302.51383
338	1.5	204	27	37	204°27'37"	13°14'41"	4.252	0.876	0.974	4.139	988.818	1065.446	1303.29483
339	1.5	248	11	57	248°11'57"	56°59'1"	3.977	0.243	3.335	2.167	991.178	1063.474	1303.92783
340	1.5	97	31	18	97°31'18"	266°18'22"	13.379	1.162	-13.351	-0.862	974.492	1060.445	1303.00883
341	1.5	78	59	33	78°59'33"	247°46'37"	14.208	-0.176	-13.153	-5.374	974.691	1055.934	1304.34683
342	1.5	67	22	1	67°22'1"	236°9'5"	16.200	-0.856	-13.454	-9.023	974.389	1052.284	1305.02683
343	1.3	59	28	35	59°28'35"	228°15'39"	15.003	-1.389	-11.195	-9.988	976.649	1051.319	1305.75983
344	2.15	53	21	0	53°21'0"	222°8'4"	16.363	-1.588	-10.977	-12.134	976.866	1049.173	1305.10883
345	2.15	37	45	23	37°45'23"	206°32'27"	20.189	-3.640	-9.021	-18.061	978.822	1043.246	1307.16083
346	2.15	28	12	47	28°12'47"	196°59'51"	24.766	-5.379	-7.240	-23.684	980.604	1037.623	1308.89983
347	1.5	174	14	21	174°14'21"	343°1'25"	6.006	1.820	-1.754	5.744	986.090	1067.052	1302.35083
348	1.5	181	35	55	181°35'55"	350°22'59"	4.059	1.237	-0.678	4.002	987.165	1065.309	1302.93383
349	1.5	216	14	22	216°14'22"	25°1'26"	2.831	0.693	1.198	2.565	989.041	1063.873	1303.47783
350	2.15	27	49	13	27°49'13"	196°36'17"	28.007	-5.986	-8.003	-26.839	979.840	1034.468	1309.50683
351	2.15	25	34	12	25°34'12"	194°21'16"	33.280	-5.985	-8.251	-32.241	979.593	1029.066	1309.50583
352	1.5	282	37	50	282°37'50"	91°24'54"	4.747	-0.363	4.746	-0.117	992.589	1061.190	1304.53383
353	1.5	294	3	26	294°3'26"	102°50'30"	7.127	-1.431	6.949	-1.584	994.792	1059.723	1305.60183
354	1.5	283	8	50	283°8'50"	91°55'54"	8.653	-0.850	8.648	-0.292	996.492	1061.016	1305.02083
355	1.5	310	29	55	310°29'55"	119°16'59"	5.342	-1.265	4.659	-2.613	992.503	1058.694	1305.43583

	356	1.3	346	46	21	346°46'21"	155°33'25"	4.441	-1.560	1.838	-4.043	989.681	1057.264	1305.93083
	357	1.3	31	41	30	31°41'30"	200°28'34"	3.072	-0.917	-1.075	-2.878	986.769	1058.429	1305.28783
	358	1.3	13	55	20	13°55'20"	182°42'24"	5.782	-1.724	-0.273	-5.776	987.570	1055.532	1306.09483
	359	2.15	150	12	4	150°12'4"	318°59'8"	40.815	7.713	-26.785	30.797	961.059	1092.104	1295.80783
	360	1.3	48	1	4	48°1'4"	216°48'8"	11.146	-1.473	-6.677	-8.925	981.166	1052.383	1305.84383
	361	2.15	134	52	20	134°52'20"	303°39'24"	31.064	5.500	-25.857	17.216	961.987	1078.524	1298.02083
	362	1.3	57	52	36	57°52'36"	226°39'40"	14.390	-1.467	-10.466	-9.876	977.378	1051.431	1305.83783
	363	2.15	108	44	46	108°44'46"	277°31'50"	23.492	3.070	-23.289	3.079	964.554	1064.386	1300.45083
	364	2.15	88	26	54	88°26'54"	257°13'58"	21.883	1.272	-21.342	-4.836	966.502	1056.471	1302.24883
	365	2.15	80	22	40	80°22'40"	249°9'44"	21.853	0.193	-20.424	-7.774	967.420	1053.534	1303.32783
	366	2.15	73	12	56	73°12'56"	242°0'0"	23.769	-0.091	-20.987	-11.159	966.857	1050.149	1303.61183
	367	1.3	69	14	20	69°14'20"	238°1'24"	25.201	-1.586	-21.377	-13.346	966.466	1047.962	1305.95683
D		1.3	324	46	27	324°46'27"	133°33'22"	60.610	-4.135	53.764	-51.120			
C		1.35	39	5	5	39°5'5"	207°52'59"	0.000	-0.802	-36.388	-68.775			

		X	Y	Z
station	E	924.921	1048.197	1304.669278

E	B	2.15	0	0	0	0°0'0"	78°13'49"	0.000	0.693	62.922	13.110			
1.317	368	1.3	319	50	15	319°50'15"	38°4'4"	34.054	4.364	20.997	26.810	945.919	1075.007	1300.32228
	369	1.3	324	5	52	324°5'52"	42°19'41"	34.194	3.994	23.025	25.280	947.947	1073.477	1300.69228
	370	1.3	322	49	8	322°49'8"	41°2'57"	31.571	3.805	20.733	23.809	945.654	1072.006	1300.88128
	371	1.3	319	30	41	319°30'41"	37°44'30"	29.820	3.789	18.253	23.581	943.174	1071.778	1300.89728
	372	1.3	312	29	14	312°29'14"	30°43'3"	27.087	3.852	13.836	23.287	938.758	1071.484	1300.83428
	373	1.3	345	5	19	345°5'19"	63°19'8"	29.578	1.611	26.429	13.281	951.350	1061.478	1303.07528
	374	1.3	317	18	56	317°18'56"	35°32'45"	26.917	3.447	15.648	21.901	940.570	1070.098	1301.23928
	375	1.3	351	17	56	351°17'56"	69°31'45"	28.672	0.841	26.861	10.027	951.783	1058.224	1303.84528
	376	1.3	325	46	1	325°46'1"	43°59'50"	28.333	3.124	19.681	20.382	944.602	1068.579	1301.56228
	377	1.3	351	11	25	351°11'25"	69°25'14"	32.890	1.265	30.791	11.561	955.713	1059.758	1303.42128
	378	1.3	317	52	50	317°52'50"	36°6'39"	25.450	2.988	14.999	20.561	939.920	1068.757	1301.69828
	379	1.3	357	47	12	357°47'12"	76°1'1"	31.403	0.220	30.472	7.588	955.394	1055.785	1304.46628
	380	1.3	325	6	34	325°6'34"	43°20'23"	24.477	2.619	16.799	17.802	941.721	1065.999	1302.06728
	381	1.3	357	42	47	357°42'47"	75°56'36"	31.423	0.224	30.482	7.632	955.404	1055.829	1304.46228
	382	1.3	322	16	13	322°16'13"	40°30'2"	23.116	2.509	15.013	17.577	939.934	1065.774	1302.17728
	383	1.3	357	59	1	357°59'1"	76°12'50"	28.018	-0.071	27.211	6.677	952.132	1054.874	1304.75728
	384	1.3	316	47	48	316°47'48"	35°1'37"	24.084	3.163	13.823	19.722	938.745	1067.919	1301.52328
	385	1.3	0	3	27	0°3'27"	78°17'16"	35.413	0.103	34.676	7.189	959.597	1055.386	1304.58328
	386	2	310	33	17	310°33'17"	28°47'6"	23.891	4.087	11.504	20.939	936.426	1069.136	1299.89928
	387	1.3	1	15	57	1°15'57"	79°29'46"	39.600	0.037	38.936	7.219	963.858	1055.416	1304.64928
	388	2	311	40	40	311°40'40"	29°54'29"	20.940	3.476	10.441	18.151	935.362	1066.348	1300.51028
	389	2	352	14	50	352°14'50"	70°28'39"	22.857	0.836	21.543	7.638	946.464	1055.835	1303.15028
	390	2	311	28	50	311°28'50"	29°42'39"	18.550	3.068	9.194	16.111	934.115	1064.308	1300.91828
	391	2	353	54	31	353°54'31"	72°8'20"	22.008	0.380	20.947	6.750	945.869	1054.947	1303.60628
	392	2	319	54	52	319°54'52"	38°8'41"	19.080	2.809	11.785	15.006	936.706	1063.202	1301.17728
	393	2.15	328	39	59	328°39'59"	46°53'48"	19.436	2.635	14.191	13.281	939.112	1061.478	1301.20128
	394	1.3	322	55	48	322°55'48"	41°9'37"	6.488	0.716	4.270	4.885	929.192	1053.082	1303.97028
	395	1.3	341	5	23	341°5'23"	59°19'12"	20.417	1.051	17.559	10.418	942.481	1058.615	1303.63528
	396	1.3	9	1	7	9°1'7"	87°14'56"	6.788	0.063	6.780	0.326	931.702	1048.523	1304.62328
	397	1.3	344	39	45	344°39'45"	62°53'34"	19.709	0.751	17.544	8.981	942.466	1057.178	1303.93528
	398	1.3	56	16	16	56°16'16"	134°30'5"	10.409	-0.956	7.424	-7.296	932.345	1040.901	1305.64228

	399	1.3	343	47	26	343°47'26"	62°1'15"	15.988	0.912	14.119	7.501	939.041	1055.698	1303.77428
	400	2.18	57	31	13	57°31'13"	135°45'2"	13.033	-0.963	9.094	-9.336	934.016	1038.861	1304.76928
	401	1.3	355	33	45	355°33'45"	73°47'34"	13.559	-0.107	13.020	3.784	937.942	1051.981	1304.79328
	402	2.18	51	36	30	51°36'30"	129°50'19"	14.703	-1.140	11.290	-9.419	936.211	1038.778	1304.94628
	403	1.3	28	43	2	28°43'2"	106°56'51"	3.260	-0.193	3.118	-0.950	928.040	1047.247	1304.87928
	404	1.3	72	23	12	72°23'12"	150°37'1"	8.130	-0.725	3.989	-7.084	928.910	1041.113	1305.41128
	405	1.3	94	58	37	94°58'37"	173°12'26"	4.072	-1.257	0.482	-4.043	925.403	1044.154	1305.94328
	406	1.3	123	7	15	123°7'15"	201°21'4"	5.000	-1.107	-1.820	-4.657	923.101	1043.540	1305.79328
	407	1.3	101	55	37	101°55'37"	180°9'26"	8.348	-2.402	-0.023	-8.348	924.899	1039.849	1307.08828
	408	1.3	105	20	17	105°20'17"	183°34'6"	12.452	-3.190	-0.775	-12.428	924.146	1035.769	1307.87628
	409	2.15	106	38	48	106°38'48"	184°52'37"	15.428	-3.210	-1.312	-15.372	923.610	1032.825	1307.04628
	410	2.15	103	54	26	103°54'26"	182°8'15"	19.124	-3.961	-0.713	-19.111	924.208	1029.086	1307.79728
	411	2.15	109	28	5	109°28'5"	187°41'54"	21.378	-4.405	-2.864	-21.185	922.058	1027.012	1308.24128
	412	2.15	110	22	31	110°22'31"	188°36'20"	24.888	-4.409	-3.724	-24.608	921.197	1023.589	1308.24528
	413	2.15	114	17	59	114°17'59"	192°31'48"	36.153	-4.144	-7.843	-35.292	917.078	1012.905	1307.98028
	414	2.15	111	24	11	111°24'11"	189°37'60"	33.000	-4.226	-5.522	-32.535	919.399	1015.662	1308.06228
	415	1.3	201	46	20	201°46'20"	280°0'9"	1.482	-0.061	-1.459	0.257	923.462	1048.454	1304.74728
	416	1.3	219	51	51	219°51'51"	298°5'40"	4.780	-0.583	-4.217	2.251	920.705	1050.448	1305.26928
	417	1.3	164	48	34	164°48'34"	243°2'23"	24.680	-1.443	-21.998	-11.189	902.924	1037.008	1306.12928
	418	2.15	174	3	10	174°3'10"	252°16'59"	19.267	0.274	-18.353	-5.863	906.568	1042.334	1303.56228
	419	2.15	215	47	56	215°47'56"	294°1'45"	7.658	-1.447	-6.994	3.118	917.927	1051.315	1305.28328
	420	2.15	164	39	45	164°39'45"	242°53'34"	16.966	-0.295	-15.102	-7.731	909.819	1040.466	1304.13128
	421	1.3	213	8	32	213°8'32"	291°22'21"	9.486	-0.782	-8.834	3.457	916.088	1051.654	1305.46828
	422	2.15	145	53	33	145°53'33"	224°7'22"	14.352	-1.902	-9.992	-10.303	914.930	1037.894	1305.73828
	423	2.15	132	37	53	132°37'53"	210°51'42"	4.054	-0.839	-2.080	-3.480	922.842	1044.717	1304.67528
	424	1.3	153	57	9	153°57'9"	232°10'58"	5.392	-1.586	-4.260	-3.306	920.662	1044.891	1306.27228
	425	2.15	142	28	31	142°28'31"	220°42'20"	18.939	-2.234	-12.351	-14.357	912.570	1033.840	1306.07028
	426	1.3	154	20	38	154°20'38"	232°34'27"	6.497	-2.353	-5.160	-3.948	919.762	1044.249	1307.03928
	427	1.3	155	55	2	155°55'2"	234°8'51"	10.365	-2.590	-8.401	-6.071	916.520	1042.126	1307.27628
	428	1.3	166	42	48	166°42'48"	244°56'37"	13.021	-1.600	-11.796	-5.515	913.126	1042.682	1306.28628
	429	1.3	155	36	26	155°36'26"	233°50'15"	19.220	-1.935	-15.517	-11.341	909.404	1036.856	1306.62128
	430	2	154	52	25	154°52'25"	233°6'14"	22.738	-1.673	-18.184	-13.651	906.737	1034.546	1305.65928
	431	1.3	166	37	34	166°37'34"	244°51'23"	26.490	-1.169	-23.980	-11.255	900.941	1036.942	1305.85528
G		1.3	148	31	37	148°31'37"	226°35'20"	0.000	-3.970	-45.362	-42.914			
F		1.3	121	44	44	121°44'44"	199°47'38"	0.000	1.973	-20.528	-57.039			
C		1.3	76	23	31	76°23'31"	154°30'50"	0.000	-0.777	26.534	-55.664			