



## Permanent Committee for GIS Infrastructure for Asia and the Pacific, 1997, 1998, 1999, 2000, 2001, 2002 GPS Campaign Analysis

John Dawson <sup>\*</sup>, Geoff Luton <sup>†</sup>, Ramesh Govind <sup>‡</sup>  
Geohazards Division, Geoscience Australia

August 31, 2004

This document contains the analysis results obtained from the annual and supplementary Asia Pacific Regional Geodetic Project (APRGP) Global Positioning System (GPS) campaigns undertaken in 1997, 1998, 1999, 2000, 2001 and 2002 for the Permanent Committee for GIS Infrastructure for Asia and the Pacific (PCGIAP) Regional Geodetic Project. All coordinates and velocities listed in this report have been aligned to the International Terrestrial Reference Frame (ITRF) 2000 [Altamimi et al., 2002].

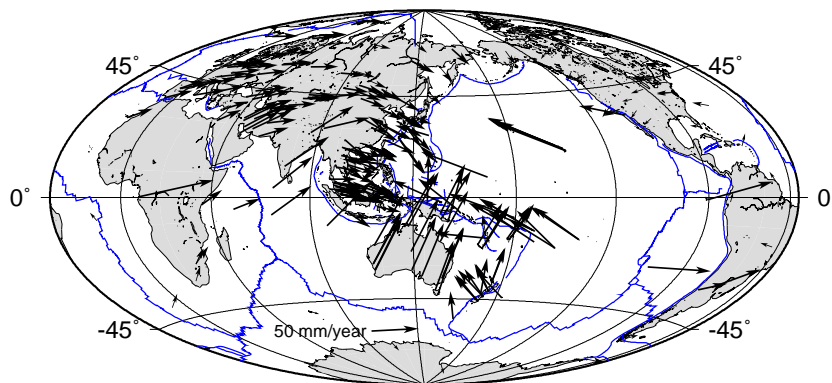


Figure 1: Computed velocity field. Sites include both PCGIAP campaign stations, global IGS stations and other available GPS data within the Asia Pacific region that were used in the PCGIAP analysis. Site velocities were estimated for all sites with a data span of 12 months or greater. Black arrows: computed PCGIAP velocities. Tectonic plate boundaries are shown in blue [NOAA, 1993]

---

<sup>\*</sup>tel +61 2 6249 9028, email John.Dawson@ga.gov.au

<sup>†</sup>tel +61 2 6249 9050, email Geoff.Luton@ga.gov.au

<sup>‡</sup>tel +61 2 6249 9033, email Ramesh.Govind@ga.gov.au

# 1 Geodetic Station Coordinates and Velocities

Station velocities, based on total station displacements, have been estimated for all stations with observation spans greater than 12 months. All geodetic coordinates are based on the GRS80 ellipsoid. All coordinates and velocities have been aligned to ITRF2000.

Table 1: Station geodetic coordinates

Site	longitude			Latitude			Height	Date	
0745	-----	127	49	34.2457	26	10	6.9997	97.2269	2000.1.1
0746	-----	131	17	26.4189	25	57	13.4182	72.6667	2000.1.1
2003	-----	142	11	4.4943	27	05	44.0952	208.7699	2000.1.1
2004	-----	130	52	42.8666	31	25	31.1202	134.5109	2000.1.1
3009	21701S007	140	39	33.2488	35	57	19.6396	65.8609	2000.1.1
4553	-----	120	57	47.6022	14	35	35.2152	45.3449	2000.1.1
6001	-----	139	22	20.7608	34	47	50.7222	143.7455	epoch
6002	-----	139	08	20.5454	35	09	20.9577	90.9017	epoch
6006	-----	135	56	13.0378	33	34	40.2793	97.5574	2000.1.1
8008	-----	128	21	0.7935	31	59	32.9822	140.9726	epoch
9003	-----	135	56	13.0379	33	34	40.2794	99.6437	epoch
9004	-----	138	53	10.7276	34	37	32.2832	46.8988	epoch
9005	-----	139	28	50.3896	34	04	2.5386	47.3741	epoch
9007	-----	139	07	58.2263	34	12	30.0366	47.7879	epoch
9801	-----	144	22	28.7653	42	58	6.2138	65.6423	epoch
9802	-----	144	17	26.1555	43	59	49.6323	74.7007	epoch
9803	-----	141	56	10.0192	45	31	15.2892	60.3588	epoch
9804	-----	140	28	0.1693	43	22	13.9245	153.6855	epoch
9805	-----	140	05	12.8379	41	25	19.9441	65.9562	epoch
9806	-----	132	02	19.9991	34	52	42.1031	119.0615	epoch
9807	-----	135	05	11.9461	35	44	19.5884	73.0739	epoch
9808	-----	136	55	13.2321	37	51	8.6546	47.9072	epoch
9809	-----	139	49	22.5320	38	56	46.3718	54.6420	epoch
9810	-----	141	27	46.0053	41	25	42.5332	52.1658	epoch
9811	-----	141	35	0.7363	38	16	35.8023	119.0203	epoch
9812	-----	140	52	7.3549	35	42	27.7087	63.2814	epoch
9813	-----	139	53	51.0151	35	37	1.7198	86.6869	epoch
9814	-----	139	40	29.2699	35	08	28.7417	73.9318	epoch
9815	-----	139	51	12.1487	33	04	46.2271	142.7323	epoch
9816	-----	136	50	46.1838	35	02	6.1122	119.3709	epoch
9817	-----	136	54	3.0600	34	16	42.0395	69.0533	epoch
9818	-----	134	10	36.2492	33	15	4.9401	225.0155	epoch
9819	-----	134	59	31.9268	34	35	53.0273	289.7341	epoch
9820	-----	132	59	28.0714	34	05	23.7988	80.1132	epoch
9821	-----	132	13	13.3829	33	26	2.2916	366.9253	epoch
9822	-----	129	41	11.7795	33	52	8.7269	145.9799	epoch
9823	-----	128	36	21.9986	32	37	1.0501	280.4568	epoch
9824	-----	131	20	4.8056	31	22	22.7023	326.1505	epoch
9825	-----	129	54	59.2030	29	49	19.5490	87.6098	epoch
9826	-----	128	09	6.8208	26	36	23.7705	62.5437	epoch
9827	-----	125	26	10.9885	24	43	49.4597	72.6600	epoch
AHVA	-----	48	41	3.9389	31	20	22.7214	12.5979	2000.1.1
AIRA	21742S001	130	35	58.5292	31	49	26.6245	314.6409	2000.1.1
ALGO	40104M002	-78	-04	-16.9215	45	57	20.8808	200.8974	2000.1.1
ALIC	50137M001	133	53	7.8553	-23	-40	-12.4352	603.2694	2000.1.1
ALO2	-----	150	27	19.7714	-10	-19	-0.9864	80.3666	2000.1.1
AMC2	40472S004	-104	-31	-28.5352	38	48	11.2480	1911.3829	2000.1.1
ANGS	-----	140	42	15.5300	-2	-30	-52.5021	443.6115	epoch

Table 1: Station geodetic coordinates

Site	longitude			Latitude			Height	Date
ANKR 20805M002	32	45	30.4917	39	53	14.5338	976.0467	2000.1.1
AOBS 50602M001	-171	-46	-50.8437	-13	-48	-52.8053	38.7781	epoch
AOML 49914S001	-80	-09	-43.9156	25	44	4.8892	0.0895	2000.1.1
ARAU 22701M001	100	16	47.0579	6	27	0.5707	18.0888	2000.1.1
AREQ 42202M005	-71	-29	-34.0551	-16	-27	-55.8538	2488.9418	2000.1.1
ARTU 12362M001	58	33	37.6371	56	25	47.3563	247.5836	2000.1.1
ARVA 24202M001	102	47	23.1926	46	15	33.3308	1769.2108	2000.1.1
ASC1 30602M001	-14	-24	-43.4598	-7	-57	-4.3710	105.1324	2000.1.1
ASPA -----	-170	-43	-20.7518	-14	-19	-33.9510	53.6908	2000.1.1
AUCK 50209M001	174	50	3.7877	-36	-36	-10.2403	132.7150	2000.1.1
AUST 50109S001	138	38	50.4413	-34	-43	-44.4034	38.0574	2000.1.1
BAHR 24901M002	50	36	29.3192	26	12	32.9037	-17.0827	2000.1.1
BAKO 23101M002	106	50	56.0741	-6	-29	-27.7954	158.1778	2000.1.1
BANH -----	99	04	32.2059	10	36	34.3430	-4.5766	epoch
BIKL -----	136	06	2.1312	-1	-10	-30.9930	121.5256	epoch
BILI 12363M001	166	26	16.6615	68	04	34.0702	456.1395	2000.1.1
BINT 22702M001	113	04	1.9911	3	15	41.4251	48.7911	2000.1.1
BIRP -----	87	16	1.2980	26	29	1.6807	13.2216	epoch
BJFS 21601M001	115	53	32.9406	39	36	30.9662	87.4150	2000.1.1
BLGA -----	113	47	3.6380	2	42	19.2512	98.3717	epoch
BLK5 -----	-175	-14	-0.4714	-21	-09	-53.0842	60.5755	epoch
BOGT 41901M001	-74	-04	-51.2807	4	38	24.2670	2578.3443	2000.1.1
BOR1 12205M002	17	04	24.4378	52	16	37.0419	124.3663	2000.1.1
BRAZ 41606M001	-47	-52	-40.3285	-15	-56	-50.9120	1106.0226	2000.1.1
BRMU 42501S004	-64	-41	-46.5809	32	22	13.4339	-11.6114	2000.1.1
BRUS 13101M004	4	21	33.1843	50	47	52.1422	149.6784	2000.1.1
BUKA 51004M001	154	40	8.4252	-5	-25	-34.3653	73.2377	2000.1.1
BUR1 50144M001	145	54	53.4465	-41	-03	-0.2355	3.0820	2000.1.1
CAGL 12725M003	8	58	21.9047	39	08	9.2800	238.3637	2000.1.1
CAS1 66011M001	110	31	10.9409	-66	-17	-0.0925	22.4654	2000.1.1
CASA 40437M002	-118	-53	-47.9830	37	38	40.6885	2390.5110	2000.1.1
CC06 21611M001	125	26	40.2516	43	47	26.1385	273.0736	2000.1.1
CCBS 22602M001	103	57	32.5022	1	20	31.2416	36.9319	2000.1.1
CEDU 50138M001	133	48	35.3829	-31	-52	-0.0057	144.7602	2000.1.1
CHAB 20405M001	60	41	37.5363	25	17	58.4875	45.1223	2000.1.1
CHAM -----	105	27	34.3869	11	59	54.2580	8.7071	epoch
CHAN -----	125	26	39.1124	43	47	26.4733	273.1109	epoch
CHAT 50207M001	-176	-33	-57.0228	-43	-57	-20.8324	57.9918	2000.1.1
CHJU 23905M001	126	31	47.3491	33	30	50.1381	45.4178	2000.1.1
CHOI 24203M001	114	34	58.2317	48	05	26.1723	730.9588	2000.1.1
CHON 21903M001	101	02	40.9586	13	07	13.9084	51.4573	2000.1.1
CHUL 21904M001	100	31	56.2609	13	44	7.6104	-14.0645	epoch
CHUM 25601M001	74	45	3.9489	42	59	54.6034	716.3390	2000.1.1
CHUR 40128M002	-94	-05	-19.4149	58	45	32.6803	-19.3952	2000.1.1
CKIS -----	-159	-48	-2.1851	-21	-12	-3.7039	18.4400	2000.1.1
CNJU -----	127	27	40.4170	36	37	36.8210	93.5055	epoch
CNMI -----	145	44	58.6601	15	12	29.7633	313.6049	2000.1.1
COCO 50127M001	96	50	2.2811	-12	-11	-18.0594	-35.2691	2000.1.1
COLO -----	113	33	40.5530	22	07	14.5550	168.7930	epoch
CORD 41511M001	-64	-28	-12.1750	-31	-31	-42.3679	746.8843	2000.1.1
CRO1 43201M001	-64	-35	-3.5532	17	45	24.8311	-31.9411	2000.1.1
D001 -----	115	11	7.1548	5	17	0.4084	113.4512	epoch
D004 -----	117	58	42.5924	4	15	4.7406	452.3062	epoch
D005 -----	116	29	9.8987	6	23	38.6699	195.2787	2000.1.1

Table 1: Station geodetic coordinates

Site	longitude			Latitude			Height	Date	
DAEJ	23902M002	127	22	28.1200	36	23	57.9453	116.8337	2000.1.1
DALN	24204M001	104	25	32.9040	43	35	13.0401	1409.1589	2000.1.1
DARW	50134M001	131	07	57.8554	-12	-50	-37.3474	125.1296	2000.1.1
DAV1	66010M001	77	58	21.4090	-68	-34	-38.3621	44.4147	2000.1.1
DE01	-----	115	11	7.1558	5	17	0.4080	114.7594	2000.1.1
DGAR	30802M001	72	22	12.8522	-7	-16	-10.8729	-64.9165	2000.1.1
DOP1	-----	101	26	44.8758	3	01	29.0972	61.0326	2000.1.1
DOP2	-----	103	36	29.4896	1	22	35.4818	91.5912	2000.1.1
DOP3	-----	102	37	18.9393	3	27	49.8913	269.2769	2000.1.1
DOP4	-----	102	19	14.6854	6	02	19.3075	107.6009	2000.1.1
DOP5	-----	100	23	6.5766	6	08	22.9884	-10.0743	2000.1.1
DRAO	40105M002	-119	-37	-29.9330	49	19	21.4298	541.8764	2000.1.1
DUNT	-----	170	37	45.8767	-45	-48	-51.5463	13.4616	2000.1.1
EISL	41703M003	-109	-22	-59.8550	-27	-08	-53.5533	114.5696	2000.1.1
FAIR	40408M001	-147	-29	-57.2605	64	58	40.8022	318.9818	2000.1.1
FALE	50601S001	-171	-59	-58.2866	-13	-49	-55.9750	47.5874	2000.1.1
FBM1	-----	-175	-11	-51.2831	-21	-07	-56.9442	55.3672	epoch
FOMO	-----	113	32	32.9590	22	11	50.6978	56.6367	epoch
FORT	41602M001	-38	-25	-32.2049	-3	-52	-38.8049	19.4642	2000.1.1
FTNA	92902S002	-178	-07	-15.3813	-14	-18	-28.1037	84.8848	2000.1.1
GALA	42005M001	-90	-18	-13.0361	0	-44	-33.7047	7.4559	2000.1.1
GETI	22703M001	102	06	19.6678	6	13	34.2928	-0.4638	2000.1.1
GIRM	-----	177	26	49.1600	-17	-36	-55.9457	74.0142	epoch
GLSV	12356M001	30	29	48.2306	50	21	51.0558	226.3160	2000.1.1
GODE	40451M123	-76	-49	-36.5855	39	01	18.2185	14.5212	2000.1.1
GOL2	40405S031	-116	-53	-21.2967	35	25	30.5621	986.6656	2000.1.1
GOLD	40405S031	-116	-53	-21.2967	35	25	30.5620	986.6561	2000.1.1
GOUG	30608M001	-9	-52	-50.5838	-40	-20	-55.8016	81.2411	2000.1.1
GRAS	10002M006	6	55	14.0588	43	45	17.0532	1319.3096	2000.1.1
GRAZ	11001M002	15	29	36.5236	47	04	1.6651	538.2913	2000.1.1
GUAM	50501M002	144	52	6.1014	13	35	21.5851	201.9303	2000.1.1
GUAD	21612M003	87	10	38.3011	43	28	15.9868	2028.6815	epoch
HARB	30302M009	27	42	26.0773	-25	-53	-13.0698	1558.0924	2000.1.1
HARK	30302M007	27	42	27.9297	-25	-53	-13.5910	1555.3925	2000.1.1
HERS	13212M007	0	20	10.5732	50	52	2.3267	76.4899	2000.1.1
HIL1	50141S001	115	44	18.8880	-31	-49	-31.8942	-27.2063	2000.1.1
HILO	49979S001	-155	-03	-9.6889	19	43	9.0518	29.2917	2000.1.1
HKFN	-----	114	08	17.4079	22	29	40.8697	41.1871	2000.1.1
HKKT	-----	114	03	59.6363	22	26	41.6615	34.5431	2000.1.1
HKKY	-----	114	04	34.5643	22	17	2.6500	113.9825	2000.1.1
HKLT	-----	113	59	47.8462	22	25	5.2823	125.9106	2000.1.1
HKQB	-----	114	12	47.6227	22	17	27.7169	4.9366	2000.1.1
HKSL	-----	113	55	40.7346	22	22	19.2166	95.2741	2000.1.1
HKST	-----	114	11	3.2720	22	23	42.9740	258.7016	2000.1.1
HMNB	-----	-175	-10	-38.2179	-21	-08	-26.0602	55.0280	epoch
HNLC	49970S001	-157	-51	-52.3530	21	18	11.8316	21.9660	2000.1.1
HOB2	50116M004	147	26	19.4406	-42	-48	-16.9749	41.0750	2000.1.1
HOFN	10204M002	-15	-11	-52.5187	64	16	2.2483	82.6456	2000.1.1
HOIF	-----	113	33	9.3462	22	12	4.5374	104.3471	epoch
HOKI	50211M001	170	59	3.5347	-42	-42	-46.4667	53.6644	2000.1.1
HOUA	24104M001	100	26	13.9492	20	15	42.6447	373.2580	epoch
HOVD	24205M001	91	37	28.6581	47	57	46.7692	1407.3136	2000.1.1
HRAO	30302M004	27	41	13.1262	-25	-53	-24.3809	1414.1699	2000.1.1
HTF2	-----	-175	-19	-25.4947	-21	-03	-50.2942	60.9585	epoch

Table 1: Station geodetic coordinates

Site	longitude			Latitude			Height	Date
IISC 22306M002	77	34	13.3458	13	01	16.1915	843.7088	2000.1.1
IPOH 22704M001	101	07	34.2374	4	35	18.4965	41.8609	2000.1.1
IRKT 12313M001	104	18	58.4588	52	13	8.4882	502.3313	2000.1.1
ISMD -----	80	57	40.8831	6	49	2.6814	1166.2055	epoch
JAB1 50136M001	132	53	38.0272	-12	-39	-31.8640	82.1561	2000.1.1
JINJ -----	128	02	58.8278	35	10	23.1140	122.0220	epoch
JUNJ -----	127	08	6.4496	35	50	36.4278	77.1536	epoch
KAND -----	104	56	35.5021	11	29	27.0851	-2.1204	epoch
KANR -----	128	52	5.6207	37	46	15.3395	57.0529	epoch
KARR 50139M001	117	05	49.8812	-20	-58	-53.1594	109.1530	2000.1.1
KELY 43005M001	-50	-56	-41.4104	66	59	14.7045	229.8592	2000.1.1
KERG 91201M002	70	15	19.8781	-49	-21	-5.2803	73.0331	2000.1.1
KGNI 21704S005	139	29	17.2352	35	42	37.2320	123.5433	2000.1.1
KHAJ 12361M001	135	02	46.1570	48	31	17.2365	130.5049	epoch
KHOK -----	101	05	48.3994	6	43	57.1894	40.6704	epoch
KHON 24102M001	105	51	8.1303	14	07	7.8855	74.0876	2000.1.1
KINA 22705M001	116	02	21.4721	5	54	16.5752	51.7451	2000.1.1
KING -----	178	25	29.0846	-18	-07	-53.4295	59.2801	epoch
KIRI 50305M001	172	55	22.4309	1	21	16.4920	36.1522	epoch
KIRU 10403M002	20	58	6.4040	67	51	26.4634	390.9395	2000.1.1
KIT3 12334M001	66	53	7.5974	39	08	5.1597	622.5011	2000.1.1
KOEP -----	123	39	47.0880	-10	-10	-38.4822	149.9045	epoch
KOKB 40424M004	-159	-39	-53.7295	22	07	34.5402	1167.3604	2000.1.1
KOSG 13504M003	5	48	34.7136	52	10	42.3337	96.8549	2000.1.1
KOUC 92727S001	164	17	14.4061	-20	-33	-31.3036	84.1597	2000.1.1
KOUR 97301M210	-52	-48	-21.4542	5	15	7.8502	-25.7546	2000.1.1
KRTM -----	-157	-26	-51.4756	2	02	47.6185	25.6595	epoch
KSMV 21701S007	140	39	27.6295	35	57	19.3449	57.8907	2000.1.1
KSTU 12349M002	92	47	37.7865	55	59	35.7002	210.0342	2000.1.1
KTPK 22706M001	101	43	3.3904	3	10	15.3978	99.8018	2000.1.1
KTTY -----	139	50	53.7389	34	56	12.6208	125.9213	epoch
KUAL 22707M001	103	08	20.9259	5	19	8.0018	54.9985	2000.1.1
KUAN 22708M001	103	21	1.2697	3	50	3.7612	25.4391	2000.1.1
KUCH 22709M001	110	11	42.3283	1	37	56.6367	79.4135	2000.1.1
KUMT -----	78	11	25.3872	41	51	48.6766	4012.8523	epoch
KUNM 21609M001	102	47	49.8986	25	01	46.3426	1986.2090	2000.1.1
KWJ1 50506M001	167	43	48.8735	8	43	19.9398	38.2397	2000.1.1
KWNJ -----	126	54	36.8525	35	10	42.1518	71.6329	epoch
LABG 23101M004	106	50	55.9780	-6	-29	-26.5360	157.7155	2000.1.1
LABU 22710M001	115	14	41.2320	5	16	57.6160	49.7561	2000.1.1
LADA -----	55	53	40.8278	28	17	38.4490	916.1171	2000.1.1
LAE1 51002M001	146	59	35.4718	-6	-40	-25.3560	140.3578	2000.1.1
LAKX 24105M001	104	59	1.8819	18	11	7.9638	499.7109	epoch
LAND -----	104	54	49.0243	11	32	56.0651	6.0483	epoch
LAUT 50804M002	177	26	47.6880	-17	-36	-31.7325	89.6701	epoch
LHAS 21613M001	91	06	14.3566	29	39	26.4237	3624.6509	2000.1.1
LHUE 49980S001	-159	-20	-21.3060	21	59	4.4178	45.9883	2000.1.1
LOWD -----	103	49	26.5421	1	16	29.6240	43.2160	epoch
LOYA -----	103	58	17.9432	1	22	21.5328	50.3795	epoch
LPGS 41510M001	-57	-55	-56.2782	-34	-54	-24.2851	29.8595	2000.1.1
LPIL 92732S001	167	15	49.6074	-20	-55	-4.7623	73.2089	2000.1.1
LYTT -----	172	43	20.0052	-43	-36	-21.0387	18.4486	2000.1.1
MAC1 50135M001	158	56	9.0001	-54	-29	-58.3147	-6.7650	2000.1.1
MADR 13407S012	-4	-14	-58.7761	40	25	44.9802	829.4508	2000.1.1

Table 1: Station geodetic coordinates

Site	longitude			Latitude			Height	Date	
MAGO	12354M001	150	46	12.0738	59	34	32.7160	361.8268	2000.1.1
MALD	22901S001	73	31	34.6248	4	11	19.2550	-91.9816	epoch
MALE	22901M001	73	30	40.2695	4	10	45.3586	-94.8517	2000.1.1
MALI	33201M001	40	11	39.8187	-2	-59	-45.2828	-23.3426	2000.1.1
MARC	-----	153	58	42.9770	24	17	24.8443	33.3067	epoch
MARI	-----	51	48	43.6880	35	43	49.2786	1813.9364	2000.1.1
MAS1	31303M002	-15	-37	-59.7956	27	45	49.4656	197.1587	2000.1.1
MAS2	51003M001	147	16	10.5675	-2	-01	-10.9531	80.2439	2000.1.1
MASH	20403M001	59	28	13.4130	36	18	31.8425	1159.8675	2000.1.1
MATE	12734M008	16	42	16.0488	40	38	56.8707	535.6472	2000.1.1
MAUI	40445S008	-156	-15	-25.2760	20	42	23.9502	3062.1012	2000.1.1
MAW1	66004M001	62	52	14.5765	-67	-36	-17.1593	59.1387	2000.1.1
MCM4	66001M003	166	40	9.5743	-77	-50	-18.0557	98.0144	2000.1.1
MDO1	40442M012	-104	00	-53.9727	30	40	49.8409	2004.5048	2000.1.1
MDVO	12309M002	37	13	24.9155	56	01	38.9262	254.8092	2000.1.1
METS	10503S011	24	23	43.1465	60	13	2.8975	94.5972	2000.1.1
MIAN	-----	46	09	43.6502	36	54	30.1305	1350.4791	2000.1.1
MIDW	-----	-177	-22	-11.1354	28	12	55.5374	6.2242	epoch
MIRI	22711M001	114	00	6.2713	4	22	19.5636	62.4152	2000.1.1
MIUR	-----	139	39	0.6916	35	12	26.9256	100.7615	epoch
MIZU	21702M002	141	07	58.1756	39	08	6.6129	116.9940	epoch
MKEA	40477M001	-155	-27	-22.8136	19	48	4.8679	3754.6938	2000.1.1
MMA8	22006M003	120	58	21.7616	14	35	53.5738	56.6697	epoch
MONP	40497M004	-116	-25	-20.4459	32	53	30.9796	1842.5439	2000.1.1
MORE	51001M002	147	11	12.2068	-9	-26	-2.7593	116.6691	2000.1.1
MQZG	-----	172	39	16.9382	-43	-42	-9.8497	154.6446	2000.1.1
MSHN	-----	59	28	47.3470	36	20	5.0066	1087.0955	2000.1.1
MTAW	22713M001	117	52	53.9307	4	15	45.9889	72.8965	2000.1.1
MURN	24206M001	100	05	42.8585	49	39	45.2787	1254.2561	2000.1.1
MUT1	-----	121	01	7.5446	14	22	26.6266	106.6848	epoch
MZSW	21702S011	141	12	14.1165	39	06	38.2492	172.1492	2000.1.1
NAGA	-----	85	31	16.3773	27	41	33.7956	2105.1317	2000.1.1
NAKH	-----	100	07	20.6959	15	40	23.4192	21.3283	epoch
NEPJ	-----	81	36	55.2622	28	02	57.6584	97.8262	epoch
NICO	14302M001	33	23	47.2016	35	08	27.5482	190.0298	2000.1.1
NILO	20407M001	48	20	8.9612	32	25	3.7432	135.8220	2000.1.1
NIUC	50210S001	-169	-55	-52.0609	-19	-03	-44.4713	56.4736	2000.1.1
NKLG	32809M002	9	40	19.6412	0	21	14.0601	31.6009	2000.1.1
NLIB	40465M001	-91	-34	-29.6197	41	46	17.7275	207.0397	2000.1.1
NNOR	50181M001	116	11	33.7812	-31	-02	-55.4517	234.8466	epoch
NOSH	-----	51	46	4.6677	36	35	8.3979	-20.5215	2000.1.1
NOUM	92701M003	166	24	36.7214	-22	-16	-11.4697	83.0867	2000.1.1
NRC1	40114M001	-75	-37	-25.7772	45	27	14.9843	82.4816	2000.1.1
NRIL	12364M001	88	21	35.2002	69	21	42.6002	47.8954	2000.1.1
NSSP	12312M001	44	30	10.5307	40	13	35.2356	1194.7533	2000.1.1
NTU0	22601M001	103	40	47.8377	1	20	44.8204	75.6030	2000.1.1
NTU2	-----	-175	-01	-54.2446	-21	-08	-52.9012	57.2541	epoch
NTUS	22601M001	103	40	47.8419	1	20	44.8878	75.4135	2000.1.1
NVSK	12319M001	83	14	7.5920	54	50	26.1998	123.0859	2000.1.1
NYAL	10317M001	11	51	54.3030	78	55	46.5032	78.4681	2000.1.1
OHIG	66008M001	-57	-54	-1.2240	-63	-19	-14.6036	30.6925	2000.1.1
OKNW	21744S001	127	46	8.1028	26	08	41.3371	127.5051	2000.1.1
ONSA	10402M004	11	55	31.8573	57	23	43.0735	45.5677	2000.1.1
OTRI	-----	99	22	16.3643	18	20	7.2269	240.0788	epoch

Table 1: Station geodetic coordinates

Site	longitude			Latitude			Height	Date	
OUS2	50212M002	170	30	39.3614	-45	-52	-10.1107	26.1243	epoch
OUSD	50212M001	170	30	39.3145	-45	-52	-10.2060	26.1844	2000.1.1
P072	-----	114	14	32.1224	22	18	22.5829	280.4495	2000.1.1
P075	23002M001	114	04	34.7059	22	17	2.5891	116.3584	2000.1.1
P086	-----	113	51	20.8179	22	15	29.9355	73.3475	2000.1.1
P096	-----	114	00	1.0816	22	29	8.7768	65.9942	2000.1.1
P430	23003M001	114	08	17.5188	22	29	40.9950	41.3010	2000.1.1
PALM	-----	-64	-03	-4.0465	-64	-46	-30.3263	31.0484	epoch
PARE	23103M001	119	39	0.0176	-3	-58	-41.0611	134.3197	2000.1.1
PBIT	23105M001	125	11	36.2938	1	26	30.0682	72.7173	epoch
PDAY	23106M001	106	52	40.6932	-6	-05	-51.0864	19.9289	epoch
PENH	23401M001	104	55	3.2813	11	34	25.7207	15.1836	2000.1.1
PERT	50133M001	115	53	6.8956	-31	-48	-7.0865	12.7534	2000.1.1
PETP	12355M002	158	36	25.4789	53	04	0.2355	210.3265	2000.1.1
PHON	24103M001	102	06	4.5451	21	41	4.0365	1373.3289	2000.1.1
PHUK	21905M001	98	18	12.9473	7	45	32.6472	-1.8539	2000.1.1
PHUT	24106M001	106	30	2.2111	16	36	52.4965	258.7483	epoch
PIE1	40456M001	-108	-07	-8.1349	34	18	5.4222	2347.7131	2000.1.1
PIMO	22003M001	121	04	39.8394	14	38	8.5898	95.5107	2000.1.1
PNGM	51006M001	147	21	57.6455	-2	-02	-35.6317	116.3542	epoch
POL2	12348M001	74	41	39.3481	42	40	47.1710	1714.2012	2000.1.1
POTS	14106M003	13	03	57.9236	52	22	45.4679	144.4208	2000.1.1
PPBS	22603M001	103	50	2.3041	1	26	0.9663	38.4668	epoch
PRDS	40124M001	-114	-17	-36.5850	50	52	16.8675	1247.9542	2000.1.1
PSOR	23107M001	131	14	50.4679	0	-52	-38.5654	78.2662	epoch
QT01	24302M001	103	01	44.3041	21	24	11.0989	457.6072	2000.1.1
QT02	24303M001	106	47	29.1967	20	41	44.8871	7.7893	2000.1.1
QT03	24304M001	108	13	13.3329	16	04	28.7152	8.3242	2000.1.1
QT04	24305M001	107	05	12.1720	10	21	10.4511	22.8482	2000.1.1
QUAR	-----	114	12	47.0424	22	17	28.0324	1.2965	epoch
RABM	50213M002	-159	-47	-58.6261	-21	-12	-4.4556	16.5095	2000.1.1
RAMO	20703S001	34	45	47.2972	30	35	51.3764	886.8270	2000.1.1
RARO	-----	-159	-48	-44.5833	-21	-12	-2.8163	22.0931	epoch
RART	50213M001	-159	-49	-49.6126	-21	-13	-9.3418	20.3826	epoch
REIH	20408M001	51	04	54.1566	28	55	8.3920	54.4236	2000.1.1
REYK	10202M001	-21	-57	-19.7450	64	08	19.6196	93.0461	2000.1.1
RIOG	41507M004	-67	-45	-4.0260	-53	-47	-7.7014	32.0209	2000.1.1
RIOP	42006M001	-78	-39	-3.9867	-1	-39	-2.1463	2817.1931	2000.1.1
RMBS	22604M001	103	49	26.5400	1	16	29.6244	43.2484	epoch
ROSE	20409M001	53	49	20.2011	32	18	46.9973	1224.1720	2000.1.1
ROTU	50805M001	177	00	55.4900	-12	-29	-49.4876	199.7412	epoch
RP01	22006M004	121	02	23.1276	14	32	13.8184	69.3218	2000.1.1
RTSD	21904M002	100	30	26.6738	13	45	37.1142	-17.9095	epoch
SAMN	24107M001	104	02	35.5082	20	25	22.7301	982.5970	epoch
SAMO	50603M001	-171	-44	-18.2989	-13	-50	-57.1645	76.7841	2000.1.1
SAMO	50603M001	-171	-44	-18.3051	-13	-50	-57.1648	76.8960	2000.1.1
SAMP	23104M001	98	42	52.9850	3	37	17.8002	2.0902	2000.1.1
SANC	51401S001	167	12	11.5316	-15	-26	-49.7058	127.0307	2000.1.1
SAND	22712M001	118	07	14.1017	5	50	32.6557	133.5244	2000.1.1
SANT	41705M003	-70	-40	-6.7989	-33	-09	-1.0405	723.0638	2000.1.1
SEGA	-----	102	43	55.3504	2	29	10.6703	25.1780	epoch
SELE	12352M001	77	01	0.8274	43	10	43.4347	1342.0015	2000.1.1
SEMB	-----	103	49	10.3595	1	28	11.1108	30.1616	epoch
SEOS	-----	126	29	39.1295	36	46	35.0733	52.2710	epoch

Table 1: Station geodetic coordinates

Site	longitude			Latitude			Height	Date	
SEY1	39801M001	55	28	45.8514	-4	-40	-25.3908	537.2254	2000.1.1
SFER	13402M004	-6	-12	-20.3275	36	27	51.6408	84.1686	2000.1.1
SHAO	21605M002	121	12	1.5935	31	05	58.7151	22.0626	2000.1.1
SHAS	-----	75	18	55.6853	42	37	14.5689	2171.4936	2000.1.1
SHEK	-----	113	53	44.3185	22	13	18.5326	0.0111	2000.1.1
SIBU	-----	111	50	33.9627	2	16	12.1346	46.7332	epoch
SIEM	23402M001	103	48	55.5982	13	24	33.3962	-2.1755	2000.1.1
SIHA	23403M001	103	31	24.6294	10	36	38.5483	-3.6596	epoch
SIMP	-----	84	59	1.7228	27	09	54.2785	70.5943	epoch
SMU1	22602M002	103	53	56.2427	1	20	26.4825	30.0293	epoch
SNJU	-----	128	08	40.1179	36	22	44.9926	111.6033	epoch
SOP1	-----	-175	-12	-51.4155	-21	-07	-33.7845	55.4225	epoch
SOUL	-----	127	04	47.0074	37	37	46.8976	59.1153	epoch
SRIS	-----	104	24	57.3921	14	54	4.0629	114.9516	epoch
STJO	40101M001	-52	-40	-39.8948	47	35	42.8613	152.8208	2000.1.1
STKW	21731S002	141	50	41.1947	43	31	43.7554	118.6016	2000.1.1
STR1	50119M002	149	00	36.1852	-35	-18	-55.9294	799.9486	2000.1.1
STUE	23404M001	105	58	15.5307	13	31	49.8900	37.5055	epoch
SUMK	-----	73	59	49.5803	44	12	29.2722	1012.1641	2000.1.1
SUTH	30314M002	20	48	37.6621	-32	-22	-48.7613	1799.7520	2000.1.1
SUVA	50801S001	178	25	30.8912	-18	-08	-45.3374	72.6643	2000.1.1
SUWN	23903M001	127	03	15.2616	37	16	31.8546	82.2561	2000.1.1
SVAY	23405M001	105	47	24.8193	11	05	31.3986	-3.5451	epoch
SYOG	66006S002	39	35	1.4783	-69	00	-25.0464	49.9943	2000.1.1
T012	-----	113	04	59.3198	3	13	7.4566	204.9134	2000.1.1
T030	-----	110	13	7.3611	1	35	9.9541	147.1708	2000.1.1
TABK	-----	128	58	32.1705	37	09	39.1282	763.2494	epoch
TAEJ	23902M001	127	21	57.8870	36	22	27.9170	77.4340	2000.1.1
TAHI	92201M006	-149	-36	-33.7642	-17	-34	-35.4599	74.0388	2000.1.1
TAIW	23601M001	121	32	11.5510	25	01	16.7928	43.9837	2000.1.1
TAKL	-----	174	46	11.6186	-36	-50	-36.9677	40.8979	2000.1.1
TALA	-----	72	12	37.6049	42	26	43.6732	1498.5172	2000.1.1
TAWA	-----	117	58	42.7949	4	15	4.6933	451.9122	2000.1.1
TBCH	-----	60	37	27.9550	25	18	50.6393	-25.1668	2000.1.1
TBRA	-----	56	04	23.7133	27	06	8.8335	-25.7847	2000.1.1
TBT1	-----	114	00	44.6550	22	29	11.5333	-0.9615	2000.1.1
TCMS	23604S002	120	59	14.6022	24	47	52.7501	77.2472	epoch
TEGN	-----	128	48	7.0827	35	54	22.7038	106.3820	epoch
TEHN	20404M001	51	20	2.7286	35	41	50.2118	1194.5925	2000.1.1
TEHR	20404M001	51	23	10.8148	35	44	47.4016	1426.5121	epoch
TG75	-----	103	54	11.3157	1	19	35.0726	60.4621	epoch
THTI	92201M009	-149	-36	-23.2042	-17	-34	-37.4294	98.0458	2000.1.1
THU1	43001M001	-68	-47	-16.8330	76	32	14.4137	55.0227	2000.1.1
TID2	50103M108	148	58	47.9898	-35	-23	-57.1462	665.3556	epoch
TIDB	50103M108	148	58	47.9900	-35	-23	-57.1459	665.3552	2000.1.1
TIXI	12360M001	128	51	59.1052	71	38	4.1065	47.0566	2000.1.1
TKIN	-----	116	05	36.9131	5	59	1.4482	51.6198	2000.1.1
TKLA	-----	101	21	31.2123	3	02	47.5105	-0.5931	epoch
TKLB	-----	101	21	31.0673	3	02	48.8626	-0.5446	2000.1.1
TKUC	-----	110	25	21.6468	1	34	59.4859	37.4009	2000.1.1
TKUD	-----	116	50	45.3222	6	52	40.5501	52.5814	epoch
TLSE	10003M009	1	28	51.2012	43	33	38.4987	207.1729	2000.1.1
TNML	23604S001	120	59	14.4392	24	47	52.6372	75.8713	epoch
TOHK	21743S001	133	41	56.4048	35	29	25.4391	72.4793	2000.1.1

Table 1: Station geodetic coordinates

Site	longitude		Latitude			Height	Date
TON1	-----	-175 -10	-43.6051	-21 -08	-25.3259	54.4338	epoch
TON3	-----	-175 -11	-2.0826	-21 -09	-1.1641	60.9674	epoch
TONG	-----	-175 -10	-45.2072	-21 -08	-40.9668	56.3065	epoch
TOW2	50140M001	147 03	20.4723	-19 -16	-9.4176	88.1384	2000.1.1
TRAB	20808M001	39 46	32.0161	40 59	40.9466	99.2822	2000.1.1
TRO1	10302M006	18 56	22.7205	69 39	45.7830	138.0628	2000.1.1
TROM	10302M003	18 56	17.9805	69 39	45.8927	132.4542	2000.1.1
TRUK	-----	151 53	14.0913	7 26	49.2784	113.5357	epoch
TSDL	-----	104 06	46.9408	1 55	43.9978	11.4738	epoch
TSIM	-----	114 00	44.3402	22 29	12.1964	-1.3651	2000.1.1
TSKB	21730S005	140 05	14.9881	36 06	20.4481	67.2528	2000.1.1
TTAW	-----	117 52	49.9266	4 14	43.5509	60.4000	2000.1.1
TUV1	-----	179 11	32.0747	-8 -31	-42.3432	37.7865	2000.1.1
TUVA	51101M001	179 11	47.6218	-8 -31	-31.0504	38.4021	epoch
UB01	-----	106 53	48.3578	47 54	59.4274	1268.8325	2000.1.1
UKUR	-----	114 55	41.7621	4 55	31.1356	74.7219	epoch
ULAB	24201M001	107 03	8.3645	47 51	54.2456	1575.5203	2000.1.1
ULUI	50803M001	179 24	45.6056	-16 -25	-55.9142	166.9835	2000.1.1
URM1	-----	87 37	54.5034	43 47	12.5095	863.6435	epoch
URUM	21612M001	87 36	2.3909	43 48	28.6161	858.8489	2000.1.1
USMP	-----	100 18	14.5372	5 21	28.0372	19.9094	2000.1.1
USNO	40451S003	-77 -03	-58.4073	38 55	8.2650	48.8828	2000.1.1
USUD	21729S007	138 21	43.3570	36 07	59.1989	1508.6201	2000.1.1
UTHA	-----	100 00	47.5486	15 23	1.5377	107.5998	epoch
UTMJ	22714M001	103 38	22.4304	1 33	56.9331	80.4553	2000.1.1
VANI	51005M001	141 18	15.6590	-2 -41	-5.2733	80.5616	2000.1.1
VANU	51492M001	168 18	54.5542	-17 -44	-38.2850	97.2115	2000.1.1
VESL	66009M001	-2 -50	-30.4174	-71 -40	-25.6683	862.3567	2000.1.1
VIEN	24101M001	102 30	56.1093	18 01	31.8514	192.4604	2000.1.1
VILA	51402S001	168 19	10.1954	-17 -43	-44.0008	114.2324	2000.1.1
VILL	13406M001	-3 -57	-7.1293	40 26	36.9330	647.3572	2000.1.1
VITI	50804M001	177 23	36.1148	-17 -39	-3.3199	86.8975	2000.1.1
VLAD	-----	131 55	33.3868	43 11	50.3356	87.3388	epoch
VTUS	-----	168 18	31.1547	-17 -42	-20.9415	75.7301	epoch
VY13	-----	168 18	27.8044	-17 -41	-32.9962	80.2218	epoch
WES2	40440S020	-71 -29	-35.9736	42 36	48.0073	85.0220	2000.1.1
WGTN	50208M003	174 48	21.2182	-41 -19	-24.4457	26.0637	2000.1.1
WGTT	-----	174 46	53.7441	-41 -17	-25.5823	43.0196	2000.1.1
WHIT	40136M001	-135 -13	-19.5999	60 45	1.8443	1427.3690	2000.1.1
WILL	40134M001	-122 -10	-4.1195	52 14	12.7258	1095.6714	2000.1.1
WINA	23108M002	124 50	20.5181	1 26	36.3091	197.4090	epoch
WNJU	-----	127 56	49.5185	37 20	13.9457	180.2216	epoch
WSRT	13506M005	6 36	16.2147	52 54	52.5970	82.2749	2000.1.1
WTZR	14201M010	12 52	44.0701	49 08	39.1117	666.0292	2000.1.1
WUHN	21602M001	114 21	26.1376	30 31	53.9516	25.8251	2000.1.1
WULJ	-----	129 24	46.7832	36 59	31.1154	80.7538	epoch
XIAN	21614M001	109 13	17.3715	34 22	7.2185	464.0007	2000.1.1
YAKA	12353M001	129 40	51.6233	62 01	51.6242	99.9289	2000.1.1
YAKT	12353M002	129 40	49.0834	62 01	51.4578	103.4160	2000.1.1
YAKZ	12353M001	129 40	51.6229	62 01	51.6243	99.9442	2000.1.1
YAR1	50107M004	115 20	49.1092	-29 -02	-47.6065	241.2938	2000.1.1
YAR2	50107M004	115 20	49.1092	-29 -02	-47.6065	241.2970	2000.1.1
YAS1	20406M002	58 27	48.9708	35 17	33.6278	1168.4047	2000.1.1
YELL	40127M003	-114 -28	-50.5197	62 28	51.2195	180.8733	2000.1.1

Table 1: Station geodetic coordinates

Site	longitude			Latitude			Height	Date
YSSK 12329M003	142	43	0.1891	47	01	47.0480	91.2789	2000.1.1
ZABO 20410M001	61	31	2.4998	31	02	57.8125	461.2209	2000.1.1
ZECK 12351M001	41	33	54.2327	43	47	18.2123	1166.2819	2000.1.1
ZIMM 14001M004	7	27	54.9916	46	52	37.5483	956.3415	2000.1.1
ZWEN 12330M001	36	45	31.0559	55	41	57.4177	204.9922	2000.1.1

Table 2: Station geodetic velocity

Site	East Velocity	North Velocity	Vertical Velocity
0745 -----	0.0322	-0.0390	-0.0117
0746 -----	-0.0409	0.0233	-0.0070
2003 -----	-0.0361	0.0097	0.0375
2004 -----	0.0293	-0.0269	-0.0226
3009 21701S007	-0.0051	-0.0078	-0.0027
4553 -----	-0.0213	-0.0214	-0.0115
6001 -----	-	-	-
6002 -----	-	-	-
6006 -----	-0.0061	-0.0057	0.0069
8008 -----	-	-	-
9003 -----	-	-	-
9004 -----	-	-	-
9005 -----	-	-	-
9007 -----	-	-	-
9801 -----	-	-	-
9802 -----	-	-	-
9803 -----	-	-	-
9804 -----	-	-	-
9805 -----	-	-	-
9806 -----	-	-	-
9807 -----	-	-	-
9808 -----	-	-	-
9809 -----	-	-	-
9810 -----	-	-	-
9811 -----	-	-	-
9812 -----	-	-	-
9813 -----	-	-	-
9814 -----	-	-	-
9815 -----	-	-	-
9816 -----	-	-	-
9817 -----	-	-	-
9818 -----	-	-	-
9819 -----	-	-	-
9820 -----	-	-	-
9821 -----	-	-	-
9822 -----	-	-	-
9823 -----	-	-	-
9824 -----	-	-	-
9825 -----	-	-	-
9826 -----	-	-	-
9827 -----	-	-	-
AHVA -----	0.0259	0.0251	0.0061
AIRA 21742S001	0.0251	-0.0227	-0.0009
ALGO 40104M002	-0.0160	0.0015	0.0045

ALIC	50137M001	0.0315	0.0575	0.0017
ALO2	-----	0.0141	0.0525	0.0140
AMC2	40472S004	-0.0102	-0.0019	-0.0053
ANGS	-----	-	-	-
ANKR	20805M002	-0.0034	0.0131	0.0008
AOBS	50602M001	-	-	-
AOML	49914S001	-0.0102	0.0034	-0.0052
ARAU	22701M001	0.0301	-0.0047	-0.0060
AREQ	42202M005	-0.1098	-0.0756	0.0048
ARTU	12362M001	0.0255	0.0054	-0.0026
ARVA	24202M001	0.0310	-0.0090	-0.0016
ASC1	30602M001	-0.0056	0.0093	-0.0030
ASPA	-----	-0.0672	0.0345	-0.0100
AUCK	50209M001	0.0031	0.0377	0.0011
AUST	50109S001	0.0240	0.0567	0.0007
BAHR	24901M002	0.0294	0.0283	0.0013
BAKO	23101M002	0.0218	-0.0077	-0.0118
BANH	-----	-	-	-
BIKL	-----	-	-	-
BILI	12363M001	0.0099	-0.0202	-0.0023
BINT	22702M001	0.0256	-0.0108	-0.0037
BIRP	-----	-	-	-
BJFS	21601M001	0.0284	-0.0125	0.0014
BLGA	-----	-	-	-
BLK5	-----	-	-	-
BOGT	41901M001	-1.1335	-0.0681	-0.5451
BOR1	12205M002	0.0214	0.0141	-0.0038
BRAZ	41606M001	-0.0145	0.0028	-0.0052
BRMU	42501S004	-0.0118	0.0081	-0.0001
BRUS	13101M004	0.0179	0.0141	0.0010
BUKA	51004M001	-0.0468	0.0344	0.0271
BUR1	50144M001	0.0165	0.0539	0.0017
CAGL	12725M003	0.0232	0.0149	-0.0005
CAS1	66011M001	0.0029	-0.0101	0.0022
CASA	40437M002	-0.0202	-0.0154	0.0065
CC06	21611M001	0.0254	-0.0135	0.0668
CCBS	22602M001	0.0364	-0.0069	0.0122
CEDU	50138M001	0.0288	0.0574	0.0055
CHAB	20405M001	0.0284	0.0115	0.0050
CHAM	-----	-	-	-
CHAN	-----	-	-	-
CHAT	50207M001	-0.0412	0.0313	0.0003
CHJU	23905M001	0.0279	-0.0162	-0.0083
CHOI	24203M001	0.0243	-0.0115	-0.0051
CHON	21903M001	0.0279	-0.0049	-0.0083
CHUL	21904M001	-	-	-
CHUM	25601M001	0.0281	-0.0002	-0.0011
CHUR	40128M002	-0.0119	-0.0056	-0.0016
CKIS	-----	-0.0686	0.0335	-0.0071
CNJU	-----	-	-	-
CNMI	-----	-0.0184	0.0199	-0.0009
COCO	50127M001	0.0528	0.0469	-0.0063
COLO	-----	-	-	-
CORD	41511M001	0.0271	0.0351	-0.0158
CR01	43201M001	0.0098	0.0140	-0.0082
D001	-----	-	-	-
D004	-----	-	-	-

D005	-----	0.0245	-0.0159	0.0063
DAEJ	23902M002	0.0251	-0.0134	-0.0038
DALN	24204M001	0.0259	-0.0083	-0.0129
DARW	50134M001	0.0341	0.0578	-0.0014
DAV1	66010M001	-0.0013	-0.0057	0.0032
DE01	-----	0.0263	-0.0111	0.0033
DGAR	30802M001	0.0461	0.0307	0.0021
DOP1	-----	0.0271	-0.0022	0.0124
DOP2	-----	0.0281	-0.0072	0.0014
DOP3	-----	0.0292	-0.0031	0.0075
DOP4	-----	0.0285	-0.0052	-0.0052
DOP5	-----	0.0370	-0.0037	-0.0158
DRAO	40105M002	-0.0136	-0.0105	0.0009
DUNT	-----	-0.0347	0.0286	0.0041
EISL	41703M003	0.0672	0.0016	0.0011
FAIR	40408M001	-0.0082	-0.0222	-0.0039
FALE	50601S001	-0.0578	0.0321	-0.0015
FBM1	-----	-	-	-
FOMO	-----	-	-	-
FORT	41602M001	-0.0049	0.0105	-0.0000
FTNA	92902S002	-0.0577	0.0304	-0.0064
GALA	42005M001	0.0698	0.0197	-0.0015
GETI	22703M001	0.0295	-0.0046	-0.0054
GIRM	-----	-	-	-
GLSV	12356M001	0.0221	0.0121	0.0042
GODE	40451M123	-0.0137	0.0033	-0.0017
GOL2	40405S031	-0.0202	-0.0049	-0.0002
GOLD	40405S031	-0.0215	-0.0067	-0.0033
GOUG	30608M001	0.0202	0.0185	-0.0082
GRAS	10002M006	0.0207	0.0153	-0.0027
GRAZ	11001M002	0.0216	0.0142	-0.0008
GUAM	50501M002	-0.0120	0.0024	0.0020
GUAO	21612M003	-	-	-
HARB	30302M009	0.0167	0.0179	-0.0020
HARK	30302M007	0.0240	0.0204	0.0004
HERS	13212M007	0.0152	0.0170	-0.0007
HIL1	50141S001	0.0379	0.0558	-0.0068
HILO	49979S001	-0.0621	0.0333	0.0068
HKFN	-----	0.0288	-0.0082	-0.0066
HKKT	-----	0.0286	-0.0099	-0.0058
HKKY	-----	0.0286	-0.0102	-0.0039
HKLT	-----	0.0301	-0.0095	-0.0106
HKQB	-----	0.0287	-0.0103	0.0139
HKSL	-----	0.0300	-0.0092	-0.0078
HKST	-----	0.0304	-0.0093	-0.0099
HMNB	-----	-	-	-
HNLC	49970S001	-0.0625	0.0315	0.0068
HOB2	50116M004	0.0137	0.0550	0.0036
HOFN	10204M002	0.0113	0.0189	0.0063
HOIF	-----	-	-	-
HOKI	50211M001	-0.0057	0.0408	-0.0028
HOUA	24104M001	-	-	-
HOVD	24205M001	0.0285	-0.0022	-0.0052
HRAO	30302M004	0.0179	0.0179	0.0001
HTF2	-----	-	-	-
IISC	22306M002	0.0409	0.0333	0.0012
IPOH	22704M001	0.0290	-0.0056	-0.0089

IRKT	12313M001	0.0240	-0.0086	0.0006
ISMD	-----	-	-	-
JAB1	50136M001	0.0340	0.0584	-0.0005
JINJ	-----	-	-	-
JUNJ	-----	-	-	-
KAND	-----	-	-	-
KANR	-----	-	-	-
KARR	50139M001	0.0382	0.0561	-0.0017
KELY	43005M001	-0.0176	0.0115	-0.0022
KERG	91201M002	0.0057	-0.0037	0.0048
KGNI	21704S005	-0.0017	-0.0044	-0.0149
KHAJ	12361M001	-	-	-
KHOK	-----	-	-	-
KHON	24102M001	0.0329	-0.0093	-0.0329
KINA	22705M001	0.0275	-0.0119	0.0119
KING	-----	-	-	-
KIRI	50305M001	-	-	-
KIRU	10403M002	0.0102	0.0141	0.0050
KIT3	12334M001	0.0275	0.0038	-0.0030
KOEP	-----	-	-	-
KOKB	40424M004	-0.0618	0.0316	0.0031
KOSG	13504M003	0.0185	0.0153	-0.0026
KOUC	92727S001	0.0217	0.0448	-0.0035
KOUR	97301M210	-0.0050	0.0108	0.0030
KRTM	-----	-	-	-
KSMV	21701S007	-0.0063	-0.0121	-0.0175
KSTU	12349M002	0.0241	-0.0059	-0.0015
KTPK	22706M001	0.0284	-0.0051	-0.0087
KTTY	-----	-	-	-
KUAL	22707M001	0.0273	-0.0049	-0.0006
KUAN	22708M001	0.0287	-0.0044	-0.0062
KUCH	22709M001	0.0286	-0.0101	0.0024
KUMT	-----	-	-	-
KUNM	21609M001	0.0302	-0.0212	-0.0034
KWJ1	50506M001	-0.0695	0.0273	-0.0026
KWNJ	-----	-	-	-
LABG	23101M004	0.0237	-0.0167	0.0412
LABU	22710M001	0.0294	-0.0118	0.0028
LADA	-----	0.0295	0.0239	0.0201
LAE1	51002M001	0.0256	0.0516	-0.0064
LAKX	24105M001	-	-	-
LAND	-----	-	-	-
LAUT	50804M002	-	-	-
LHAS	21613M001	0.0451	0.0137	-0.0031
LHUE	49980S001	-0.0615	0.0330	0.0045
LOWD	-----	-	-	-
LOYA	-----	-	-	-
LPGS	41510M001	-0.0012	0.0097	0.0021
LPIL	92732S001	0.0208	0.0434	-0.0033
LYTT	-----	-0.0301	0.0305	0.0020
MAC1	50135M001	-0.0109	0.0303	0.0008
MADR	13407S012	0.0106	0.0194	-0.0012
MAGO	12354M001	0.0121	-0.0182	-0.0030
MALD	22901S001	-	-	-
MALE	22901M001	0.0380	0.0334	-0.0308
MALI	33201M001	0.0231	0.0160	0.0001
MARC	-----	-	-	-

MARI	-----	0.0275	0.0171	0.0086
MAS1	31303M002	0.0163	0.0169	0.0017
MAS2	51003M001	-0.0539	0.0230	0.0063
MASH	20403M001	0.0258	0.0056	0.0163
MATE	12734M008	0.0244	0.0177	0.0008
MAUI	40445S008	-0.0619	0.0318	0.0078
MAW1	66004M001	-0.0024	-0.0028	0.0027
MCM4	66001M003	0.0096	-0.0117	0.0008
MDO1	40442M012	-0.0125	-0.0075	-0.0018
MDVO	12309M002	0.0225	0.0103	-0.0017
METS	10503S011	0.0207	0.0124	0.0018
MIAN	-----	-0.0302	-0.0618	-0.1561
MIDW	-----	-	-	-
MIRI	22711M001	0.0275	-0.0096	0.0016
MIUR	-----	-	-	-
MIZU	21702M002	-	-	-
MKEA	40477M001	-0.0646	0.0318	0.0034
MMA8	22006M003	-	-	-
MONP	40497M004	-0.0394	0.0170	-0.0021
MORE	51001M002	0.0307	0.0509	-0.0011
MQZG	-----	-0.0370	0.0296	0.0063
MSHN	-----	-0.1037	-0.0126	0.1110
MTAW	22713M001	0.0253	-0.0161	0.0021
MURN	24206M001	0.0273	-0.0081	-0.0026
MUT1	-----	-	-	-
MZSW	21702S011	-0.0105	-0.0033	-0.0292
NAGA	-----	0.0358	0.0315	-0.0124
NAKH	-----	-	-	-
NEPJ	-----	-	-	-
NICO	14302M001	0.0197	0.0126	-0.0035
NILO	20407M001	0.0220	0.0238	0.0141
NIUC	50210S001	-0.0558	0.0329	-0.0036
NKLG	32809M002	0.0888	0.0174	-0.0408
NLIB	40465M001	-0.0153	-0.0027	-0.0015
NNOR	50181M001	-	-	-
NOSH	-----	0.0322	0.1481	-0.3005
NOUM	92701M003	0.0203	0.0440	-0.0057
NRC1	40114M001	-0.0158	0.0025	0.0028
NRIL	12364M001	0.0202	-0.0041	0.0062
NSSP	12312M001	0.0303	0.0163	0.0023
NTU0	22601M001	0.0291	-0.0086	-0.0066
NTU2	-----	-	-	-
NTUS	22601M001	0.0282	-0.0068	-0.0041
NVSK	12319M001	0.0269	-0.0021	0.0058
NYAL	10317M001	0.0111	0.0147	0.0069
OHIG	66008M001	0.0149	0.0100	0.0072
OKNW	21744S001	0.0306	-0.0375	-0.0059
ONSA	10402M004	0.0172	0.0141	-0.0006
OTRI	-----	-	-	-
OUS2	50212M002	-	-	-
OUSD	50212M001	-0.0331	0.0289	-0.0041
P072	-----	0.0277	-0.0099	-0.0229
P075	23002M001	0.0324	-0.0108	-0.0082
P086	-----	0.0300	-0.0110	-0.0220
P096	-----	0.0314	-0.0128	-0.0129
P430	23003M001	0.0315	-0.0110	-0.0070
PALM	-----	-	-	-

PARE	23103M001	0.0266	-0.0067	-0.0069
PBIT	23105M001	-	-	-
PDAY	23106M001	-	-	-
PENH	23401M001	0.0086	-0.0160	-0.0510
PERT	50133M001	0.0390	0.0570	-0.0016
PETP	12355M002	-0.0027	-0.0085	-0.0013
PHON	24103M001	0.0373	-0.0144	-0.0399
PHUK	21905M001	0.0307	0.0004	-0.0420
PHUT	24106M001	-	-	-
PIE1	40456M001	-0.0130	-0.0100	0.0008
PIMO	22003M001	-0.0372	0.0040	0.0055
PNGM	51006M001	-	-	-
POL2	12348M001	0.0277	0.0036	-0.0016
POTS	14106M003	0.0190	0.0142	-0.0014
PPBS	22603M001	-	-	-
PRDS	40124M001	-0.0155	-0.0070	-0.0024
PSOR	23107M001	-	-	-
QT01	24302M001	0.0443	-0.0093	0.0088
QT02	24303M001	0.0316	-0.0133	-0.0115
QT03	24304M001	0.0311	-0.0105	0.0026
QT04	24305M001	0.0295	-0.0105	0.0006
QUAR	-----	-	-	-
RABM	50213M002	-0.0525	0.0399	-0.0819
RAMO	20703S001	0.0169	0.0159	0.0038
RARO	-----	-	-	-
RART	50213M001	-	-	-
REIH	20408M001	0.0272	0.0279	0.0183
REYK	10202M001	-0.0106	0.0219	-0.0068
RIOG	41507M004	0.0032	0.0113	0.0035
RIOP	42006M001	0.0021	0.0107	0.0343
RMBS	22604M001	-	-	-
ROSE	20409M001	0.0256	0.0195	0.0136
ROTU	50805M001	-	-	-
RP01	22006M004	-0.0423	0.0057	0.0080
RTSD	21904M002	-	-	-
SAMN	24107M001	-	-	-
SAMO	50603M001	-0.1680	0.0255	0.0479
SAMO	50603M001	-0.0708	0.0313	-0.0114
SAMP	23104M001	0.0351	-0.0010	-0.0116
SANC	51401S001	-0.0057	0.0195	-0.0038
SAND	22712M001	0.0275	-0.0171	0.0079
SANT	41705M003	0.0203	0.0153	0.0032
SEGA	-----	-	-	-
SELE	12352M001	0.0287	0.0025	-0.0024
SEMB	-----	-	-	-
SEOS	-----	-	-	-
SEY1	39801M001	0.0293	0.0112	0.0022
SFER	13402M004	0.0169	0.0169	0.0006
SHAO	21605M002	0.0306	-0.0146	-0.0007
SHAS	-----	0.0303	0.0015	-0.0010
SHEK	-----	0.0284	-0.0126	-0.0114
SIBU	-----	-	-	-
SIEM	23402M001	0.0265	-0.0138	0.0490
SIHA	23403M001	-	-	-
SIMP	-----	-	-	-
SMU1	22602M002	-	-	-
SNJU	-----	-	-	-

SOP1	-----	-	-	-
SOUL	-----	-	-	-
SRIS	-----	-	-	-
STJO	40101M001	-0.0147	0.0113	0.0014
STKW	21731S002	0.0013	-0.0110	-0.0234
STR1	50119M002	0.0188	0.0543	0.0046
STUE	23404M001	-	-	-
SUMK	-----	0.0266	0.0007	0.0150
SUTH	30314M002	0.0166	0.0185	-0.0021
SUVA	50801S001	0.0196	0.0328	-0.0093
SUWN	23903M001	0.0261	-0.0141	-0.0001
SVAY	23405M001	-	-	-
SYOG	66006S002	-0.0021	0.0007	0.0094
T012	-----	0.0208	-0.0141	0.0033
T030	-----	0.0252	-0.0097	-0.0066
TABK	-----	-	-	-
TAEJ	23902M001	0.0291	-0.0152	-0.0110
TAHI	92201M006	-0.0620	0.0352	-0.0159
TAIW	23601M001	0.0346	-0.0146	0.0020
TAKL	-----	0.0015	0.0365	-0.0040
TALA	-----	0.0264	0.0017	-0.0015
TAWA	-----	0.0251	-0.0165	-0.0012
TBCH	-----	0.0949	0.0949	1.0842
TBRA	-----	0.2153	0.2602	0.0204
TBT1	-----	0.0116	-0.0094	-0.0114
TCMS	23604S002	-	-	-
TEGN	-----	-	-	-
TEHN	20404M001	0.0282	0.0154	0.0013
TEHR	20404M001	-	-	-
TG75	-----	-	-	-
THTI	92201M009	-0.0564	0.0346	0.0091
THU1	43001M001	-0.0222	0.0048	0.0024
TID2	50103M108	-	-	-
TIDB	50103M108	0.0184	0.0545	0.0027
TIXI	12360M001	0.0168	-0.0108	-0.0031
TKIN	-----	0.0246	-0.0115	0.0027
TKLA	-----	-	-	-
TKLB	-----	0.0296	-0.0064	-0.0189
TKUC	-----	0.0253	-0.0102	-0.0057
TKUD	-----	-	-	-
TLSE	10003M009	0.0190	0.0107	0.0050
TNML	23604S001	-	-	-
TOHK	21743S001	0.0214	-0.0069	-0.0216
TON1	-----	-	-	-
TON3	-----	-	-	-
TONG	-----	-	-	-
TOW2	50140M001	0.0280	0.0543	-0.0003
TRAB	20808M001	0.0249	0.0117	-0.0005
TRO1	10302M006	0.0157	0.0157	0.0022
TROM	10302M003	0.0155	0.0146	0.0015
TRUK	-----	-	-	-
TSDL	-----	-	-	-
TSIM	-----	0.0300	-0.0170	-0.0233
TSKB	21730S005	-0.0046	-0.0088	-0.0001
TTAW	-----	0.0282	-0.0203	-0.0091
TUV1	-----	-0.0708	0.0252	0.0207
TUVA	51101M001	-	-	-

UB01	-----	0.0236	-0.0093	0.0121
UKUR	-----	-	-	-
ULAB	24201M001	0.0256	-0.0118	-0.0011
ULUI	50803M001	0.0119	0.0362	-0.0133
URM1	-----	-	-	-
URUM	21612M001	0.0301	0.0065	-0.0097
USMP	-----	0.0282	-0.0075	-0.0078
USNO	40451S003	-0.0149	0.0024	-0.0013
USUD	21729S007	0.0000	-0.0083	-0.0009
UTHA	-----	-	-	-
UTMJ	22714M001	0.0302	-0.0075	-0.0060
VANI	51005M001	0.0019	0.0517	0.0127
VANU	51492M001	-0.1092	-0.2898	0.1380
VESL	66009M001	0.0002	0.0094	0.0011
VIEN	24101M001	0.0345	-0.0069	-0.0177
VILA	51402S001	-0.0570	0.0048	-0.0096
VILL	13406M001	0.0192	0.0155	-0.0005
VITI	50804M001	0.0197	0.0359	-0.0159
VLAD	-----	-	-	-
VTUS	-----	-	-	-
VY13	-----	-	-	-
WES2	40440S020	-0.0152	0.0040	0.0010
WGTN	50208M003	-0.0244	0.0307	0.0008
WGTT	-----	-0.0258	0.0308	-0.0052
WHIT	40136M001	-0.0138	-0.0078	-0.0009
WILL	40134M001	-0.0146	-0.0128	0.0019
WINA	23108M002	-	-	-
WNJU	-----	-	-	-
WSRT	13506M005	0.0180	0.0153	0.0004
WTZR	14201M010	0.0201	0.0144	0.0002
WUHN	21602M001	0.0307	-0.0136	-0.0043
WULJ	-----	-	-	-
XIAN	21614M001	0.0329	-0.0165	-0.0013
YAKA	12353M001	0.0199	-0.0104	-0.0031
YAKT	12353M002	0.0283	-0.0124	-0.0093
YAKZ	12353M001	0.0163	-0.0066	0.0097
YAR1	50107M004	0.0392	0.0553	-0.0025
YAR2	50107M004	0.0385	0.0560	0.0030
YAS1	20406M002	0.0264	0.0111	0.0086
YELL	40127M003	-0.0171	-0.0119	0.0051
YSSK	12329M003	0.0128	-0.0135	0.0000
ZABO	20410M001	0.0293	0.0062	0.0207
ZECK	12351M001	0.0264	0.0103	0.0020
ZIMM	14001M004	0.0214	0.0146	-0.0059
ZWEN	12330M001	0.0231	0.0100	-0.0032