

**Table 1.** Common sites in SOPAC and SCEC datasets that were used to calculate the three parameter transformation in order to rotate SOPAC data into the North America Fixed Reference Frame used by SCEC. The table contains the differences of the SOPAC vectors after the transformation and the SCEC vectors and relative errors. The average residual for the north component is  $(0.6 \pm 0.98) \text{mm/yr}$  with  $\text{rms} = 0.78 \text{mm/yr}$ . For the east component the average residual is  $(0.73 \pm 0.96) \text{mm/yr}$  with  $\text{rms} = 0.87 \text{mm/yr}$ .

Site	Lon [° E]	Lat [° N]	Res <sub>N</sub> [mm/yr]	σ <sub>N</sub> [mm/yr]	Res <sub>E</sub> [mm/yr]	σ <sub>E</sub> [mm/yr]
ALGO	-78.07	45.96	0.24	0.45	1.05	0.46
AOA1	-118.83	34.16	-0.08	0.89	-0.66	0.86
AVRY	-117.15	34.47	0.28	1.03	0.65	1.01
AZU1	-117.90	34.13	0.11	0.93	-1.20	0.90
BKMS	-118.09	33.96	-0.25	1.01	-0.95	0.99
BLYT	-114.71	33.61	-0.33	0.81	0.61	0.80
BRAN	-118.28	34.18	-0.62	0.89	-0.48	0.86
CAT1	-118.48	33.45	0.50	0.91	-0.34	0.88
CBHS	-118.63	34.14	-0.36	1.08	-0.04	1.06
CCCS	-117.86	33.86	-1.48	1.07	0.76	1.04
CHIL	-118.03	34.33	0.38	0.88	-0.66	0.84
CHMS	-117.83	34.64	0.40	1.15	-1.55	1.13
CHUR	-94.09	58.76	0.81	0.56	-0.17	0.57
CIC1	-116.67	31.87	-0.82	1.08	0.09	1.07
CIT1	-118.13	34.14	-0.11	0.87	-1.27	0.84
CLAR	-117.71	34.11	0.17	0.89	0.63	0.86
CMP9	-118.41	34.35	0.46	0.90	-1.12	0.87
CRFP	-117.10	34.04	-0.09	0.86	-1.07	0.83
CRHS	-118.27	33.82	0.21	1.14	1.25	1.12
CRRS	-115.73	33.07	-1.17	1.03	-0.27	1.02
CSDH	-118.26	33.86	-0.99	1.02	0.69	0.99
CSN1	-118.52	34.25	-1.18	0.93	-0.68	0.90
DHLG	-115.79	33.39	0.07	0.88	0.09	0.86
DSHS	-118.35	34.02	0.70	1.11	0.97	1.09
DVPB	-117.86	34.41	-0.26	1.14	-1.31	1.11
DYHS	-118.13	33.94	-0.06	1.01	-0.98	0.99
ECCO	-118.33	33.89	-0.18	1.12	0.15	1.09
ELSC	-118.21	34.03	-1.40	1.13	-1.39	1.11
FHFF	-118.61	34.51	0.94	1.19	1.01	1.17
FVPK	-117.94	33.66	0.95	1.02	1.44	0.99
FXHS	-118.36	34.08	-1.79	1.13	0.26	1.10
FZHS	-118.89	34.80	0.19	1.03	-0.05	1.01
GODE	-76.83	39.02	-0.05	0.52	1.01	0.53
GOL2	-116.89	35.43	-1.36	0.80	-0.89	0.77
GOLD	-116.89	35.43	-0.92	1.42	0.34	1.54
HARV	-120.68	34.47	-1.77	0.90	-0.65	0.85
HOLC	-117.85	34.46	0.30	0.88	0.15	0.85
ISLK	-118.47	35.66	-1.10	1.14	-0.86	1.11
KELY	-50.94	66.99	0.38	0.65	1.90	0.65
LAPC	-118.57	34.18	-0.54	1.15	0.47	1.13
LEEP	-118.32	34.13	-0.02	0.89	-0.35	0.86
LFRS	-118.41	34.10	-0.30	1.11	-1.41	1.08
LINJ	-118.14	34.66	0.52	0.97	0.25	0.95
LLAS	-117.84	34.59	-0.02	1.12	-1.58	1.10
LONG	-118.00	34.11	0.38	0.90	-0.78	0.87
LORS	-117.75	34.13	0.01	1.12	0.02	1.10
LVMS	-119.10	34.73	-0.95	1.17	-0.27	1.14
MDO1	-104.02	30.68	-0.54	0.62	0.56	0.64

Site	Lon [ $^{\circ}$ E]	Lat [ $^{\circ}$ N]	$\text{Res}_N$ [mm/yr]	$\sigma_N$ [mm/yr]	$\text{Res}_E$ [mm/yr]	$\sigma_E$ [mm/yr]
MLFP	-117.32	33.92	0.42	1.05	0.41	1.02
MONP	-116.42	32.89	0.04	0.81	0.14	0.79
MPWD	-118.88	34.30	-0.54	1.13	-0.45	1.11
MVFD	-116.53	33.21	0.75	1.10	0.82	1.08
NLIB	-91.57	41.77	0.08	0.49	1.23	0.51
NOPK	-118.35	33.98	0.06	1.16	-0.53	1.14
OAT2	-118.60	34.33	-1.31	0.84	0.37	0.81
OVLS	-119.14	34.33	0.29	1.14	-0.10	1.12
OXYC	-118.21	34.13	-0.35	1.17	-0.53	1.15
PHLB	-117.69	34.93	0.35	1.20	-1.19	1.18
PIE1	-108.12	34.30	-1.37	0.61	1.14	0.61
PIN1	-116.46	33.61	0.91	1.03	-0.19	1.05
PIN2	-116.46	33.61	0.66	1.08	-0.99	1.11
PMHS	-118.15	33.90	0.05	1.01	0.67	0.99
PMOB	-116.86	33.36	-0.16	1.02	0.16	1.00
PPBF	-117.18	33.84	-0.63	1.04	0.58	1.02
PVHS	-118.37	33.78	-0.77	1.14	0.89	1.12
PVRS	-118.32	33.77	-0.18	1.12	-0.96	1.08
QHTP	-118.24	34.63	-0.42	1.17	-1.44	1.15
RHCL	-118.03	34.02	0.38	1.09	0.62	1.07
ROCH	-116.61	33.61	0.08	1.55	0.19	1.61
ROCK	-118.68	34.24	1.00	0.91	-0.85	0.88
RSTP	-118.19	34.88	-0.36	1.14	-0.73	1.11
RTHS	-117.35	34.09	-0.82	0.99	-0.96	0.96
RYAN	-116.65	36.32	-1.21	1.03	-0.01	1.02
SCIA	-117.39	34.61	1.33	1.04	-2.20	1.02
SCIP	-118.49	32.91	-0.29	0.99	0.02	0.97
SGHS	-118.11	34.09	-0.25	1.21	1.62	1.19
SIO3	-117.25	32.86	-0.53	0.76	-0.07	0.73
SNHS	-117.93	33.93	0.17	1.11	-0.48	1.09
SNI1	-119.52	33.25	-0.22	0.94	-0.29	0.91
SPK1	-118.65	34.06	0.16	0.90	-0.19	0.87
SPMS	-117.85	33.99	1.11	1.01	0.47	0.99
SPMX	-115.47	31.05	0.32	1.05	0.85	1.04
STJO	-52.68	47.60	-0.92	0.62	1.14	0.62
TABL	-117.68	34.38	-0.22	0.89	-0.98	0.86
TORP	-118.33	33.80	0.57	0.94	-0.18	0.91
TOST	-118.84	34.25	-1.66	1.13	-0.63	1.10
TRAK	-117.80	33.62	0.21	0.88	1.17	0.85
TROY	-116.53	34.84	-1.58	1.04	1.21	1.01
UCLP	-118.44	34.07	0.43	0.89	-0.12	0.86
USC1	-118.29	34.02	1.47	0.88	-1.20	0.85
USGC	-116.09	33.03	-0.69	1.12	1.22	1.10
VNCX	-118.48	34.29	-1.78	1.08	-0.46	1.06
VNDP	-120.62	34.56	-0.52	0.89	0.30	0.84
VNPS	-118.12	34.50	-0.29	1.15	-1.31	1.12
VTIS	-118.29	33.71	-0.05	1.05	-0.16	1.02
VYAS	-117.99	34.03	2.23	1.01	1.40	0.99
WES2	-71.49	42.61	-0.15	0.49	0.54	0.50
WPKK	-118.74	34.57	-0.55	1.07	-1.57	1.05
WRHS	-118.43	33.96	-0.74	1.18	0.04	1.16
YELL	-114.48	62.48	1.64	0.58	-1.02	0.59