|  |  |  |
| --- | --- | --- |
| **TABLE S1. GPS STATION LOCATIONS** | | |
| Longitude | Latitude | Station name |
| (ºW) | (ºN) |  |
| 243.69201 | 33.85417 | 0181 |
| 243.68194 | 33.8266 | 0184 |
| 243.52541 | 33.92512 | 0358 |
| 243.35805 | 33.92486 | 0822 |
| 244.03611 | 33.67719 | 1113 |
| 244.75691 | 33.68069 | 1114 |
| 243.32918 | 34.14902 | 3SIS |
| 243.54227 | 34.09028 | 5297 |
| 242.60385 | 34.03831 | 6106 |
| 242.65801 | 34.21237 | 6108 |
| 243.02618 | 34.28081 | 7211 |
| 243.75007 | 33.88582 | 8252 |
| 242.72681 | 34.18351 | AWHD |
| 244.06612 | 33.92529 | BLOY |
| 243.80558 | 34.19314 | BOUR |
| 242.86079 | 34.01379 | BRIN |
| 243.40187 | 34.20348 | BRNS |
| 242.73444 | 34.06319 | BRYN |
| 243.22447 | 33.9159 | CABZ |
| 243.04816 | 34.00275 | CHER |
| 243.43589 | 34.14986 | CHPA |
| 242.61961 | 34.00363 | CLSA |
| 243.21048 | 34.23378 | DEAD |
| 244.59963 | 33.71513 | DESO |
| 242.66114 | 34.21705 | DEVL |
| 243.0308 | 34.07802 | DIVD |
| 243.18805 | 33.97558 | DVID |
| 244.00138 | 33.97409 | F726 |
| 242.83932 | 33.96366 | FATL |
| 243.24704 | 34.11977 | FSCR |
| 243.44958 | 33.99537 | G011 |
| 243.26815 | 33.93785 | G021 |
| 242.77897 | 34.00515 | G068 |
| 242.86122 | 33.94723 | G069 |
| 243.20384 | 33.66916 | G076 |
| 243.36096 | 33.57211 | G078 |
| 242.77997 | 34.28624 | GVWP |
| 243.80185 | 34.15429 | HI65 |
| 242.83073 | 34.13393 | HIGH |
| 243.45538 | 33.93544 | INA3 |
| 243.48461 | 34.00404 | INA5 |
| 243.96622 | 34.07442 | JT01 |
| 243.92231 | 34.02462 | JT02 |
| 243.86675 | 34.02648 | JT03 |
| 243.8362 | 33.97294 | JT04 |
| 243.81792 | 34.02489 | JT05 |
| 243.6713 | 33.9165 | JT06 |
| 243.74318 | 34.08836 | JT07 |
| 243.85065 | 34.10792 | JT08 |
| 243.69368 | 34.01079 | JT09 |
| 243.65088 | 34.02949 | JT10 |
| 243.77568 | 33.97772 | JT11 |
| 244.3237 | 33.87362 | JT12 |
| 244.23589 | 33.83415 | JTRE |
| 242.79692 | 34.10776 | K526 |
| 242.95048 | 34.19589 | KELL |
| 243.80923 | 34.08266 | KEY2 |
| 243.00555 | 33.87118 | LACY |
| 242.69075 | 33.83737 | LAST |
| 244.41597 | 34.08797 | LITE |
| 243.55981 | 33.96129 | LNGC |
| 242.78319 | 34.01823 | LS35 |
| 243.11805 | 34.4395 | LUCS |
| 242.87194 | 34.34404 | LUNE |
| 243.34823 | 33.98367 | MATX |
| 243.1722 | 34.17817 | MEAD |
| 243.38257 | 34.25791 | MEEK |
| 242.76829 | 33.79638 | METB |
| 242.98937 | 34.09072 | MILL |
| 243.72048 | 34.21934 | MNA2 |
| 243.4138 | 33.98801 | MOGO |
| 243.16434 | 34.34094 | MONA |
| 242.43904 | 33.93436 | NORC |
| 243.66542 | 34.17841 | NWAL |
| 243.29051 | 34.19257 | ONYX |
| 244.15222 | 33.90569 | PB15 |
| 244.31772 | 33.97193 | PB21 |
| 243.07404 | 34.16055 | PITS |
| 242.93205 | 34.45384 | PT65 |
| 243.4558 | 33.96159 | RC67 |
| 243.53112 | 34.26411 | RICU |
| 242.98324 | 33.73655 | RYN6 |
| 242.48694 | 34.01818 | SANO |
| 243.17504 | 34.09924 | SGPK |
| 243.32055 | 33.81472 | SJPK |
| 243.52467 | 34.14976 | SKYL |
| 242.6966 | 34.11215 | U471 |
| 243.47152 | 34.1048 | ULMO |
| 242.98547 | 34.35101 | WMTN |
| 242.90681 | 34.11641 | 7ODM |
| 242.55511 | 33.27427 | ACSX |
| 243.57062 | 34.59428 | AGMT |
| 241.3052 | 34.82449 | ALPP |
| 242.67507 | 33.34185 | AR27 |
| 242.52349 | 33.38114 | AR53 |
| 241.08958 | 35.20125 | ARM1 |
| 241.08944 | 35.20126 | ARM2 |
| 242.84603 | 34.4683 | AVRY |
| 243.3703 | 33.54007 | AZRY |
| 242.10351 | 34.12602 | AZU1 |
| 243.11576 | 34.26428 | BBRY |
| 244.00181 | 34.00053 | BEMT |
| 241.92591 | 35.87839 | BEPK |
| 241.8403 | 33.96712 | BGIS |
| 242.9354 | 33.57824 | BILL |
| 243.91958 | 35.28705 | BKAP |
| 241.9053 | 33.96226 | BKMS |
| 245.28515 | 33.61042 | BLYT |
| 243.94702 | 34.25145 | BMHL |
| 243.0153 | 33.96268 | BMRY |
| 244.2703 | 33.36463 | BOMG |
| 241.72295 | 34.18489 | BRAN |
| 241.42319 | 34.68228 | BRPK |
| 242.98801 | 34.91861 | BSRY |
| 241.81177 | 34.29281 | BTDM |
| 244.01005 | 33.65514 | CACT |
| 242.59602 | 33.45535 | CASE |
| 241.51699 | 33.44577 | CAT1 |
| 241.66618 | 33.31162 | CAT2 |
| 241.51699 | 33.44576 | CAT3 |
| 241.37019 | 34.13856 | CBHS |
| 242.32883 | 35.56531 | CCCC |
| 241.7888 | 33.87626 | CCCO |
| 243.66407 | 34.82947 | CDMT |
| 242.03505 | 34.24399 | CGDM |
| 241.974 | 34.33342 | CHIL |
| 242.1723 | 34.64046 | CHMS |
| 243.33424 | 31.87068 | CIC1 |
| 241.0627 | 34.10955 | CIRX |
| 241.87271 | 34.13671 | CIT1 |
| 242.57554 | 34.2712 | CJMG |
| 242.52062 | 34.3138 | CJMS |
| 241.85577 | 34.53032 | CJVG |
| 242.29119 | 34.10993 | CLAR |
| 242.68902 | 33.13539 | CLBD |
| 241.58858 | 34.35318 | CMP9 |
| 242.39108 | 33.85763 | CNPP |
| 242.19111 | 35.98234 | COSO |
| 243.61311 | 33.73249 | COTD |
| 242.42698 | 35.07173 | CPBN |
| 242.90032 | 34.03905 | CRFP |
| 241.72723 | 33.8235 | CRHS |
| 244.26496 | 33.06981 | CRRS |
| 241.74328 | 33.86148 | CSDH |
| 241.47619 | 34.25355 | CSN1 |
| 241.38679 | 34.51655 | CTDM |
| 243.62957 | 34.1241 | CTMS |
| 242.09828 | 34.08201 | CVHS |
| 241.60314 | 34.33484 | DAM2 |
| 241.60253 | 34.33399 | DAM3 |
| 244.21197 | 33.38981 | DHLG |
| 242.69278 | 33.43059 | DLUZ |
| 241.65146 | 34.02393 | DSHS |
| 242.75046 | 33.03648 | DSME |
| 243.28791 | 33.73333 | DSSC |
| 242.15412 | 35.26747 | DTPG |
| 242.13987 | 34.41341 | DVPB |
| 241.87254 | 33.93832 | DYH2 |
| 241.87402 | 33.93799 | DYHS |
| 241.67098 | 33.88675 | ECCO |
| 242.58831 | 33.64768 | ECFS |
| 241.16959 | 34.94619 | EDPP |
| 241.87121 | 33.5835 | ELLY |
| 241.79157 | 34.02973 | ELSC |
| 242.57398 | 33.64914 | ELSG |
| 241.57427 | 34.70312 | ELTN |
| 241.54624 | 34.59929 | ELTS |
| 244.17727 | 33.11645 | ERRG |
| 242.47441 | 34.1042 | EWPP |
| 243.06413 | 34.09355 | FHOG |
| 241.10586 | 34.40986 | FMTP |
| 241.11597 | 34.35634 | FMVT |
| 241.7595 | 34.73391 | FOXG |
| 241.64052 | 34.0806 | FXHS |
| 241.10662 | 34.80019 | FZHS |
| 242.60211 | 34.20389 | GHRP |
| 244.47863 | 33.27481 | GLRS |
| 243.61743 | 34.29144 | GMAG |
| 245.17265 | 33.05109 | GMPK |
| 244.33977 | 34.784 | GMRC |
| 243.11075 | 35.42516 | GOLD |
| 241.88711 | 34.04745 | GVRS |
| 242.70079 | 35.01154 | HAR7 |
| 241.71421 | 33.78365 | HBCO |
| 243.56992 | 34.75477 | HCMN |
| 242.20055 | 34.75992 | HIVI |
| 242.9985 | 33.7081 | HMTG |
| 244.36466 | 33.70501 | HNPS |
| 242.15487 | 34.45816 | HOL3 |
| 242.15484 | 34.45819 | HOLC |
| 241.83183 | 33.92454 | HOLP |
| 245.1553 | 34.06496 | HW62 |
| 244.08855 | 34.72733 | I40A |
| 243.77849 | 33.7968 | IDOG |
| 243.76102 | 33.76797 | IDQG |
| 244.8549 | 34.15756 | IMPS |
| 241.5257 | 35.66227 | ISLK |
| 242.04456 | 34.44907 | JNHG |
| 243.8266 | 33.92537 | KYVW |
| 241.42535 | 34.18192 | LAPC |
| 241.6935 | 33.92794 | LASC |
| 241.86282 | 33.83207 | LBC1 |
| 241.82676 | 33.79161 | LBC2 |
| 241.79666 | 33.78777 | LBCH |
| 243.5672 | 34.26734 | LDES |
| 243.79086 | 34.69943 | LDSW |
| 241.67825 | 34.1346 | LEEP |
| 241.58717 | 34.09507 | LFRS |
| 242.23555 | 33.6406 | LGWD |
| 241.8608 | 34.66202 | LINJ |
| 241.13226 | 34.80752 | LJRN |
| 243.24123 | 33.23601 | LKHG |
| 242.16504 | 34.48546 | LL01 |
| 242.16207 | 34.58598 | LLAS |
| 242.60872 | 33.7442 | LMHG |
| 242.55493 | 33.8174 | LMSG |
| 243.06035 | 35.0902 | LNMT |
| 241.99659 | 34.1119 | LONG |
| 242.24593 | 34.13333 | LORS |
| 242.45364 | 34.31486 | LPCG |
| 242.04328 | 34.02677 | LPHS |
| 241.97001 | 34.52706 | LRRG |
| 242.5633 | 33.85676 | MAT2 |
| 241.75587 | 33.93906 | MHMS |
| 241.87374 | 34.13683 | MILK |
| 242.68204 | 33.9184 | MLFP |
| 241.12198 | 34.29551 | MPWD |
| 242.11831 | 34.17523 | MRDM |
| 243.35204 | 34.0385 | MSCG |
| 242.78987 | 34.23084 | MSOB |
| 241.7545 | 34.05522 | MTA1 |
| 243.35277 | 33.19916 | MTGG |
| 243.85183 | 34.50862 | NBPS |
| 245.38137 | 34.76769 | NDAP |
| 242.43042 | 33.91971 | NOCO |
| 241.65199 | 33.97974 | NOPK |
| 244.84249 | 35.96982 | NVBM |
| 244.50439 | 35.95628 | NVPO |
| 243.93226 | 34.14101 | OAES |
| 242.65326 | 33.24067 | OCSD |
| 244.08194 | 34.36988 | OPBL |
| 243.69454 | 34.42772 | OPCL |
| 243.91663 | 34.36713 | OPCP |
| 243.85052 | 34.43008 | OPCX |
| 243.70772 | 34.53303 | OPRD |
| 243.18491 | 34.6749 | ORMT |
| 241.79268 | 34.12881 | OXYC |
| 242.60611 | 34.46241 | P470 |
| 242.45913 | 33.56213 | P471 |
| 242.75131 | 33.35519 | P474 |
| 242.81032 | 33.43965 | P476 |
| 242.88663 | 33.5028 | P477 |
| 242.92841 | 33.23572 | P478 |
| 243.21707 | 33.49332 | P479 |
| 243.32859 | 33.24018 | P482 |
| 243.43067 | 33.05916 | P483 |
| 243.37916 | 33.37559 | P484 |
| 243.59096 | 33.21021 | P485 |
| 243.67771 | 33.26019 | P486 |
| 243.81693 | 33.21353 | P487 |
| 243.92119 | 33.20102 | P488 |
| 243.88839 | 33.29621 | P489 |
| 243.5741 | 33.52346 | P490 |
| 243.77318 | 33.57468 | P491 |
| 244.37161 | 33.04496 | P495 |
| 244.23415 | 33.51641 | P504 |
| 244.313 | 33.42387 | P505 |
| 244.4898 | 33.08143 | P506 |
| 244.3876 | 33.19998 | P507 |
| 244.5713 | 33.24778 | P508 |
| 244.65667 | 33.14357 | P510 |
| 244.7039 | 33.88694 | P511 |
| 241.82243 | 34.37637 | P517 |
| 241.12103 | 34.83509 | P553 |
| 241.15197 | 34.7923 | P554 |
| 241.33058 | 34.69499 | P555 |
| 241.45455 | 34.77111 | P556 |
| 241.34441 | 34.94439 | P557 |
| 241.38835 | 35.13861 | P558 |
| 241.3824 | 34.83891 | P559 |
| 241.45913 | 34.82181 | P560 |
| 241.60094 | 34.61846 | P561 |
| 241.81126 | 34.98213 | P562 |
| 241.24642 | 35.42095 | P567 |
| 241.87349 | 35.25431 | P568 |
| 241.87623 | 35.37797 | P569 |
| 241.73996 | 35.66735 | P570 |
| 242.36611 | 34.28677 | P574 |
| 242.45784 | 34.21551 | P575 |
| 242.68109 | 34.30461 | P577 |
| 241.99423 | 35.03876 | P579 |
| 242.80777 | 35.62095 | P580 |
| 242.271 | 34.50974 | P581 |
| 242.45114 | 34.63426 | P582 |
| 242.45661 | 34.987 | P583 |
| 243.04836 | 33.8926 | P584 |
| 243.45425 | 34.01935 | P585 |
| 242.71948 | 34.53484 | P586 |
| 241.96866 | 34.33223 | P587 |
| 242.7324 | 34.78544 | P588 |
| 242.88981 | 34.62067 | P589 |
| 242.63525 | 35.11678 | P590 |
| 242.69677 | 35.23855 | P592 |
| 242.79494 | 35.38787 | P593 |
| 242.60987 | 35.89671 | P594 |
| 242.59716 | 35.69756 | P595 |
| 243.11048 | 35.99818 | P596 |
| 243.1116 | 35.7106 | P597 |
| 243.28973 | 34.19246 | P598 |
| 243.46254 | 34.21717 | P599 |
| 243.78812 | 33.86585 | P600 |
| 243.91977 | 33.9593 | P601 |
| 243.9705 | 34.71691 | P603 |
| 243.32855 | 34.93683 | P604 |
| 242.06333 | 34.34113 | P605 |
| 243.12038 | 34.46206 | P606 |
| 244.17935 | 33.74104 | P607 |
| 244.3134 | 33.99408 | P608 |
| 243.10718 | 34.06269 | P609 |
| 244.23628 | 34.42575 | P610 |
| 244.35019 | 35.20477 | P611 |
| 242.68448 | 34.18738 | P612 |
| 242.95004 | 34.19619 | P613 |
| 244.74974 | 34.73179 | P614 |
| 243.23709 | 35.20461 | P615 |
| 242.10667 | 35.42456 | P616 |
| 243.42836 | 35.32064 | P617 |
| 243.89607 | 35.14189 | P618 |
| 243.8782 | 35.52595 | P619 |
| 243.85508 | 35.78536 | P620 |
| 244.45605 | 35.47276 | P621 |
| 244.63414 | 35.16299 | P622 |
| 245.4006 | 34.18893 | P623 |
| 245.03486 | 34.84444 | P625 |
| 244.76172 | 35.29112 | P626 |
| 243.40402 | 33.5982 | P740 |
| 243.46898 | 33.55747 | P741 |
| 243.39743 | 33.49554 | P742 |
| 243.85187 | 34.50812 | P795 |
| 243.40747 | 33.53729 | P797 |
| 241.69365 | 33.92765 | P799 |
| 241.65093 | 34.02169 | P800 |
| 241.37855 | 34.83602 | P808 |
| 241.98339 | 35.15243 | P811 |
| 241.98347 | 35.1525 | P812 |
| 242.96822 | 33.38902 | PALG |
| 242.07743 | 34.50823 | PBPP |
| 242.30552 | 34.92542 | PHLB |
| 251.88107 | 34.30151 | PIE1 |
| 241.7671 | 34.07156 | PKRD |
| 241.84631 | 33.90263 | PMHS |
| 243.07625 | 33.68713 | POBG |
| 242.81791 | 33.83573 | PPBF |
| 243.50601 | 33.81924 | PSAP |
| 242.19291 | 34.09177 | PSDM |
| 241.59574 | 33.7433 | PVE3 |
| 241.62784 | 33.77945 | PVHS |
| 241.67941 | 33.77386 | PVRS |
| 241.75519 | 34.62868 | QHTP |
| 243.84854 | 34.68314 | RAGG |
| 242.31665 | 35.33871 | RAMT |
| 242.41352 | 33.44414 | RCSC |
| 243.37531 | 34.64394 | RDMT |
| 241.98665 | 34.0009 | RHCG |
| 241.97383 | 34.01905 | RHCL |
| 242.39057 | 33.67413 | RKMG |
| 242.44468 | 33.48581 | RMVJ |
| 241.32357 | 34.23567 | ROCK |
| 241.80707 | 34.87508 | RSTP |
| 242.64667 | 34.08915 | RTHS |
| 242.33851 | 33.553 | SBCC |
| 242.6117 | 34.60745 | SCIA |
| 243.7211 | 34.25501 | SDHL |
| 241.24549 | 34.45981 | SFDM |
| 242.1383 | 34.20563 | SGDM |
| 241.89102 | 34.08863 | SGHS |
| 243.30431 | 33.91254 | SGPS |
| 243.70102 | 35.97135 | SHOS |
| 243.98442 | 34.62426 | SIBE |
| 241.73613 | 34.10286 | SILK |
| 241.52137 | 34.43862 | SKYB |
| 243.74594 | 33.19262 | SLHG |
| 244.02216 | 33.29223 | SLMS |
| 243.19221 | 34.03521 | SNOG |
| 242.43974 | 33.38075 | SONG |
| 241.35384 | 34.05934 | SPK1 |
| 242.15122 | 33.99265 | SPMS |
| 242.32172 | 34.38185 | TABL |
| 241.58543 | 35.15818 | THCP |
| 243.92275 | 33.65064 | THMG |
| 242.2332 | 33.54964 | THMS |
| 243.83954 | 33.64125 | TMAP |
| 241.6694 | 33.7978 | TORP |
| 241.16334 | 34.24796 | TOST |
| 242.23511 | 35.80856 | TOWG |
| 241.77143 | 34.87886 | TPOG |
| 243.46946 | 34.8386 | TROY |
| 242.27448 | 33.97246 | TWMS |
| 241.55809 | 34.06912 | UCLP |
| 241.71489 | 34.02395 | USC1 |
| 241.72267 | 34.01952 | USC2 |
| 243.91467 | 33.03006 | USGC |
| 241.78 | 34.17857 | VDCY |
| 241.48559 | 34.12645 | VIMT |
| 241.51546 | 34.29319 | VNCX |
| 241.87884 | 34.50148 | VNPS |
| 241.70618 | 33.71264 | VTIS |
| 242.80681 | 33.22502 | VTOR |
| 242.00795 | 34.03092 | VYAS |
| 241.44302 | 35.73839 | WASG |
| 242.08889 | 34.0619 | WCHS |
| 241.01631 | 35.01085 | WGPP |
| 241.96883 | 33.97989 | WHC1 |
| 241.64805 | 35.69505 | WHFG |
| 243.60822 | 33.93476 | WIDC |
| 241.25848 | 34.5685 | WKPK |
| 241.94409 | 34.22612 | WLSN |
| 241.58571 | 34.25942 | WMAP |
| 244.41811 | 33.03832 | WMDG |
| 241.94074 | 34.04324 | WNRA |
| 243.06833 | 34.66901 | WOMT |
| 241.75761 | 35.69557 | WORG |
| 241.57239 | 33.95815 | WRHS |
| 244.42122 | 33.27884 | WWFG |
| 243.34614 | 33.95531 | WWMT |
| 241.91611 | 34.60352 | ZLA1 |