Table S1: Site velocities with respect to the Eurasia plate (\* IGS stations having tight constraints in the velocity solution)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Site ID** | **Lon. (E°)** | **Lat. (N°)** | **First Obs.** | **Last Obs.** | **VE (mm/yr)** | **VN (mm/yr)** | **σE (mm/yr)** | **σN, (mm/yr)** |
| ABAK | 36.465 | 36.531 | 2002.539 | 2015.460 | -6.58 | 10.06 | 1.23 | 1.21 |
| AKAB | 36.598 | 36.736 | 2004.707 | 2015.457 | -7.04 | 10.50 | 1.30 | 1.30 |
| ANDR | 36.329 | 37.572 | 2002.556 | 2015.394 | -11.77 | 6.61 | 1.21 | 1.19 |
| CEYH | 35.839 | 37.054 | 2003.523 | 2015.358 | -12.56 | 8.01 | 1.24 | 1.22 |
| CKRH | 37.886 | 37.541 | 2002.523 | 2019.213 | -6.18 | 13.17 | 1.12 | 1.11 |
| CRAK | 36.460 | 36.842 | 2004.693 | 2020.516 | -7.06 | 10.54 | 1.09 | 1.08 |
| DORT | 36.137 | 36.899 | 2004.707 | 2015.501 | -11.15 | 8.86 | 1.30 | 1.30 |
| ELLK | 36.402 | 37.219 | 2003.534 | 2015.375 | -11.52 | 7.63 | 1.24 | 1.23 |
| FEVZ | 36.643 | 37.087 | 2002.547 | 2015.432 | -7.90 | 9.64 | 1.22 | 1.21 |
| GAZ1 | 37.574 | 36.901 | 2004.693 | 2017.334 | -6.67 | 12.37 | 1.20 | 1.19 |
| HASA | 36.523 | 36.787 | 2003.528 | 2020.513 | -7.40 | 9.97 | 1.05 | 1.03 |
| ISKE | 36.180 | 36.539 | 2002.556 | 2015.490 | -8.26 | 9.20 | 1.22 | 1.21 |
| KART | 35.340 | 36.542 | 2003.528 | 2016.404 | -11.64 | 7.81 | 1.20 | 1.18 |
| KBSK | 35.369 | 37.560 | 2004.707 | 2015.356 | -15.83 | 6.80 | 1.48 | 1.40 |
| KILI | 37.106 | 36.685 | 2002.556 | 2015.443 | -4.36 | 12.41 | 1.21 | 1.19 |
| KMAS | 36.995 | 37.521 | 2002.556 | 2015.383 | -9.18 | 10.23 | 1.20 | 1.18 |
| KOZA | 35.685 | 37.376 | 2003.534 | 2015.353 | -11.93 | 7.15 | 1.24 | 1.22 |
| KRHY | 35.075 | 37.220 | 2002.630 | 2016.385 | -12.75 | 7.10 | 1.18 | 1.16 |
| KZH1 | 37.305 | 37.024 | 2004.715 | 2017.334 | -7.04 | 12.87 | 1.21 | 1.20 |
| MANS | 35.631 | 37.851 | 2003.515 | 2015.424 | -13.03 | 8.39 | 1.24 | 1.23 |
| SERI | 36.216 | 36.378 | 2003.515 | 2020.535 | -5.68 | 10.70 | 1.07 | 1.04 |
| SLCH | 35.018 | 36.823 | 2003.528 | 2016.407 | -15.95 | 6.08 | 1.19 | 1.18 |
| YIZK | 36.072 | 37.394 | 2006.520 | 2015.372 | -12.83 | 7.13 | 1.40 | 1.39 |
| YUMU | 35.795 | 36.807 | 2003.515 | 2015.367 | -12.16 | 9.05 | 1.26 | 1.25 |
| PT01 | 35.685 | 36.943 | 2009.715 | 2019.707 | -11.05 | 6.49 | 1.33 | 1.32 |
| PT02 | 35.648 | 36.857 | 2009.715 | 2019.707 | -11.97 | 7.00 | 1.33 | 1.31 |
| PT04 | 35.866 | 36.935 | 2009.720 | 2011.688 | -13.55 | 11.61 | 3.05 | 3.06 |
| PT05 | 35.941 | 36.896 | 2009.720 | 2019.707 | -11.35 | 8.16 | 1.33 | 1.31 |
| PT07 | 36.269 | 36.114 | 2009.742 | 2011.704 | -4.43 | 12.31 | 2.98 | 2.98 |
| PT08 | 36.191 | 36.166 | 2009.742 | 2019.696 | -5.36 | 10.76 | 1.33 | 1.31 |
| PT09 | 36.341 | 36.017 | 2009.745 | 2019.696 | -6.77 | 11.21 | 1.33 | 1.31 |
| PT12 | 36.019 | 35.941 | 2009.745 | 2019.696 | -7.87 | 11.38 | 1.33 | 1.31 |
| PT24 | 36.063 | 36.296 | 2009.737 | 2011.710 | 0.90 | 4.88 | 3.03 | 3.04 |
| PT26 | 36.101 | 36.243 | 2009.737 | 2019.696 | -7.52 | 9.37 | 1.33 | 1.31 |
| PT30 | 36.232 | 36.741 | 2009.732 | 2019.693 | -12.60 | 10.78 | 1.36 | 1.34 |
| PT31 | 36.257 | 36.654 | 2009.732 | 2019.701 | -4.20 | 11.09 | 1.33 | 1.31 |
| PT33 | 36.339 | 36.577 | 2009.726 | 2019.701 | -7.67 | 8.93 | 1.33 | 1.31 |
| PT34 | 36.374 | 36.535 | 2009.726 | 2019.701 | -7.26 | 10.46 | 1.33 | 1.31 |
| PT35 | 37.009 | 36.812 | 2009.762 | 2019.701 | -6.41 | 11.73 | 1.33 | 1.31 |
| PT36 | 36.929 | 36.895 | 2003.515 | 2019.701 | -7.20 | 11.91 | 1.07 | 1.05 |
| PT37 | 36.829 | 36.992 | 2009.759 | 2019.701 | -6.99 | 10.47 | 1.33 | 1.32 |
| PT38 | 36.734 | 37.009 | 2009.753 | 2019.701 | -8.00 | 10.00 | 1.33 | 1.31 |
| PT39 | 36.598 | 37.114 | 2009.753 | 2019.710 | -8.20 | 9.40 | 1.33 | 1.32 |
| PT40 | 36.502 | 37.158 | 2009.753 | 2019.710 | -7.68 | 8.88 | 1.33 | 1.31 |
| PT42 | 36.105 | 37.227 | 2009.704 | 2019.685 | -13.13 | 7.05 | 1.33 | 1.32 |
| PT43 | 36.179 | 37.162 | 2009.704 | 2019.710 | -12.45 | 7.39 | 1.33 | 1.31 |
| PT46 | 35.506 | 37.162 | 2009.710 | 2011.682 | -11.18 | 9.64 | 3.01 | 3.01 |
| PT47 | 35.599 | 37.031 | 2009.710 | 2019.707 | -12.30 | 7.22 | 1.33 | 1.31 |
| TIXI\* | 128.866 | 71.634 | 2002.523 | 2020.535 | -0.12 | -0.02 | 0.97 | 0.87 |
| NVSK\* | 83.235 | 54.840 | 2002.523 | 2020.535 | 0.30 | -0.04 | 0.92 | 0.89 |
| ZECK\* | 41.565 | 43.788 | 2002.523 | 2020.535 | -0.48 | 0.74 | 1.28 | 1.24 |
| GLSV\* | 30.496 | 50.364 | 2002.523 | 2020.535 | -0.55 | -0.70 | 1.33 | 1.32 |
| ISTA\* | 29.019 | 41.104 | 2002.523 | 2020.535 | 0.13 | -1.14 | 0.95 | 0.94 |
| BUCU\* | 26.125 | 44.463 | 2002.523 | 2020.535 | -0.19 | -1.02 | 1.16 | 1.15 |
| JOZE\* | 21.031 | 52.097 | 2002.523 | 2020.535 | 0.21 | 0.00 | 1.12 | 1.12 |
| TRO1\* | 18.939 | 69.662 | 2002.523 | 2020.535 | -0.91 | 0.92 | 1.20 | 1.23 |
| BOR1\* | 17.073 | 52.276 | 2002.523 | 2020.535 | 0.21 | -0.08 | 1.05 | 1.05 |
| MATE\* | 16.704 | 40.649 | 2002.523 | 2020.535 | 1.15 | 4.52 | 1.34 | 1.36 |
| GRAZ\* | 15.493 | 47.067 | 2002.523 | 2020.535 | 1.08 | 0.28 | 1.54 | 1.54 |
| GOPE\* | 14.785 | 49.913 | 2002.523 | 2020.535 | 0.28 | 0.07 | 1.22 | 1.22 |
| WTZR\* | 12.878 | 49.144 | 2002.523 | 2020.535 | 0.21 | 0.38 | 1.24 | 1.24 |
| ONSA\* | 11.925 | 57.395 | 2002.523 | 2020.535 | -0.49 | -0.46 | 0.93 | 0.94 |
| ZIMM\* | 7.465 | 46.877 | 2002.523 | 2020.535 | 0.06 | 0.52 | 0.94 | 0.93 |
| WSRT\* | 6.604 | 52.914 | 2002.523 | 2020.535 | 0.21 | 0.77 | 1.04 | 1.04 |
| BRUS\* | 4.359 | 50.797 | 2002.523 | 2020.535 | 0.29 | 0.30 | 1.39 | 1.38 |
| TLSE\* | 1.480 | 43.560 | 2002.523 | 2020.535 | -0.19 | -0.30 | 1.58 | 1.57 |
| HERS\* | 0.336 | 50.867 | 2002.523 | 2020.535 | -0.18 | 0.38 | 1.23 | 1.22 |