**Supplementary Table S 1.** Location and estimated surface displacement using DGPS, of the fixed observations (Bamboo stakes) points over the selected glaciers of Chandra basin.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S.No** | **Glacier** | **Lat** | **Long** | **Altitude** | **Velocity (ma-1)** |
| 1 | Batal | 744049 | 3582976 | 4420.1896 | 3.07 |
| 2 | Batal | 743132.5 | 3581815 | 4608.7298 | 6.84 |
| 3 | Batal | 742856.6 | 3581269 | 4783.2912 | 10.34 |
| 4 | Batal | 744272.4 | 3583312 | 4359.7647 | 4.8 |
| 5 | Batal | 743952.9 | 3583018 | 4431.0659 | 5.01 |
| 6 | Batal | 743832.6 | 3582641 | 4506.5567 | 8.69 |
| 7 | Batal | 743407.1 | 3582448 | 4545.4644 | 5.58 |
| 8 | Batal | 742936 | 3581452 | 4745.9207 | 9.59 |
| 9 | Batal | 742694.2 | 3581256 | 4801.3281 | 10.69 |
| 10 | Batal | 744687.6 | 3583685 | 4267.9587 | 3.32 |
| 11 | Batal | 744453.1 | 3583409 | 4323.8869 | 3.8 |
| 12 | Samudra Tapu | 737590.7 | 3598989 | 4212.6386 | 4.58 |
| 13 | Samudra Tapu | 737087.2 | 3599645 | 4235.0174 | 15.86 |
| 14 | Samudra Tapu | 736410 | 3599761 | 4288.6802 | 25.70 |
| 15 | Samudra Tapu | 735370.7 | 3599902 | 4355.4587 | 37.95 |
| 16 | Samudra Tapu | 734296.3 | 3599804 | 4412.1839 | 48.35 |
| 17 | Samudra Tapu | 733441.9 | 3599259 | 4469.4102 | 58.85 |
| 18 | Samudra Tapu | 731583.1 | 3598239 | 4579.6728 | 27.69 |
| 19 | Samudra Tapu | 730963.4 | 3597265 | 4665.2364 | 38.43 |
| 20 | Samudra Tapu | 730756 | 3595876 | 4753.4836 | 46.58 |
| 21 | Samudra Tapu | 730605.6 | 3595271 | 4805.8104 | 48.84 |
| 22 | Samudra Tapu | 730404.3 | 3594507 | 4849.4946 | 51.04 |
| 23 | Samudra Tapu | 730194.2 | 3593792 | 4873.2451 | 52.91 |
| 24 | Samudra Tapu | 730025.9 | 3593012 | 4905.8017 | 65.27 |
| 25 | Samudra Tapu | 731557.7 | 3599123 | 4616.0129 | 85.74 |
| 26 | Samudra Tapu | 730887.4 | 3599201 | 4654.6298 | 96.81 |
| 27 | Samudra Tapu | 729989.1 | 3599148 | 4745.2341 | 109.70 |
| 28 | Samudra Tapu | 729058.7 | 3598917 | 4822.0254 | 121.83 |
| 29 | Samudra Tapu | 728405.5 | 3598767 | 4861.5136 | 135.80 |
| 30 | Samudra Tapu | 727855.8 | 3598348 | 4963.5147 | 149.47 |
| 31 | Sutri Dhaka | 737531.4 | 3583445 | 4951.0174 | 52.75 |
| 32 | Sutri Dhaka | 737102.9 | 3582902 | 5013.5827 | 58.65 |
| 33 | Sutri Dhaka | 737005.1 | 3582457 | 5073.5617 | 82.05 |
| 34 | Sutri Dhaka | 736805.1 | 3582032 | 5137.3694 | 56.18 |
| 35 | Sutri Dhaka | 737027.7 | 3582157 | 5137.6155 | 70.35 |
| 36 | Sutri Dhaka | 737206.3 | 3581765 | 5186.6032 | 74.97 |
| 37 | Sutri Dhaka | 737396.3 | 3581586 | 5210.362 | 77.21 |
| 38 | Sutri Dhaka | 737112.6 | 3583183 | 4999.1469 | 57.28 |
| 39 | Sutri Dhaka | 738453.5 | 3584383 | 4852.9754 | 43.50 |
| 40 | Sutri Dhaka | 738101.8 | 3583913 | 4892.405 | 47.22 |
| 41 | Sutri Dhaka | 737834 | 3583437 | 4945.479 | 52.22 |
| 42 | Sutri Dhaka | 738550.3 | 3584930 | 4821.4022 | 32.72 |
| 43 | Sutri Dhaka | 738144.8 | 3584379 | 4861.6674 | 44.32 |
| 44 | Sutri Dhaka | 737709.6 | 3583758 | 4924.1071 | 60.46 |
| 45 | Sutri Dhaka | 737424.6 | 3583332 | 4960.101 | 65.40 |
| 46 | Sutri Dhaka | 736962.9 | 3582359 | 5096.3181 | 84.57 |
| 47 | Sutri Dhaka | 737261.2 | 3582943 | 5005.6709 | 68.19 |
| 48 | Sutri Dhaka | 738796 | 3585327 | 4789.8951 | 37.55 |
| 49 | Sutri Dhaka | 740781.8 | 3586945 | 4554.4906 | 15.35 |
| 50 | Sutri Dhaka | 739441.4 | 3586004 | 4709.8218 | 30.01 |
| 51 | Sutri Dhaka | 739165.7 | 3585716 | 4749.0018 | 33.69 |
| 52 | Sutri Dhaka | 740459.6 | 3586743 | 4592.9209 | 50.21 |
| 53 | Sutri Dhaka | 739860.8 | 3586357 | 4656.3847 | 53.61 |
| 54 | Sutri Dhaka | 739019.8 | 3585872 | 4744.7211 | 66.45 |
| 55 | Sutri Dhaka | 738644 | 3585476 | 4786.3726 | 57.90 |
| 56 | Sutri Dhaka | 736936.1 | 3582079 | 5142.3208 | 37.56 |
| 57 | Sutri Dhaka | 737258.2 | 3581700 | 5204.0598 | 61.20 |
| 58 | Sutri Dhaka | 737483.9 | 3581731 | 5213.1541 | 77.47 |
| 59 | Sutri Dhaka | 737511.3 | 3583128 | 4987.8176 | 61.23 |
| 60 | Sutri Dhaka | 737687.4 | 3583424 | 4956.3863 | 53.25 |
| 61 | Sutri Dhaka | 738296.7 | 3584172 | 4859.7793 | 28.56 |
| 62 | Sutri Dhaka | 737112.6 | 3583183 | 4999.1469 | 62.67 |
| 63 | Sutri Dhaka | 737332.1 | 3583541 | 4954.4273 | 56.61 |
| 64 | Sutri Dhaka | 737875.2 | 3584564 | 4864.9757 | 44.63 |
| 65 | Sutri Dhaka | 738289.5 | 3585130 | 4817.1493 | 40.12 |
| 66 | Sutri Dhaka | 738921.9 | 3585263 | 4782.7618 | 36.88 |
| 67 | Sutri Dhaka | 739407.6 | 3585789 | 4722.428 | 31.19 |
| 68 | Sutri Dhaka | 739819 | 3586085 | 4665.9195 | 25.86 |
| 69 | Sutri Dhaka | 739290.2 | 3586084 | 4713.7532 | 30.37 |
| 70 | Gepang Gath | 709411.5 | 3599827 | 4119.7881 | 17.69 |
| 71 | Gepang Gath | 709727.1 | 3599359 | 4152.0347 | 11.28 |
| 72 | Gepang Gath | 710121.8 | 3599018 | 4166.8922 | 20.45 |
| 73 | Gepang Gath | 710496.4 | 3598407 | 4228.3743 | 14.67 |
| 74 | Gepang Gath | 710772.3 | 3598059 | 4258.6676 | 33.26 |
| 75 | Gepang Gath | 710872.2 | 3597928 | 4295.3693 | 48.59 |
| 76 | Gepang Gath | 709322.6 | 3598054 | 4296.9342 | 34.36 |