Table S1. Minimum, mean, and maximum monthly precipitation accumulations and the standard deviation for monthly, dry, wet, and annual data sets for in-situ and satellite-based estimates.

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| --- | --- | --- | --- | --- | --- |
|  | | Min (mm) | Mean (mm) | Max (mm) | Standard deviation (mm) |
| January | In-situ | 0.10 | 11.92 | 158.30 | 15.59 |
|  | TMPA | 0.09 | 9.37 | 98.79 | 13.41 |
|  | CHIRPS | 0.06 | 10.70 | 171.73 | 18.39 |
| February | In-situ | 0.10 | 16.13 | 486.00 | 26.91 |
|  | TMPA | 0.09 | 11.60 | 114.97 | 14.30 |
|  | CHIRPS | 0.06 | 14.70 | 148.25 | 16.85 |
| March | In-situ | 0.10 | 33.23 | 242.20 | 36.63 |
|  | TMPA | 0.09 | 28.87 | 500.70 | 46.52 |
|  | CHIRPS | 0.07 | 26.30 | 283.00 | 25.10 |
| April | In-situ | 0.10 | 49.40 | 343.60 | 47.12 |
|  | TMPA | 0.51 | 33.63 | 220.11 | 35.03 |
|  | CHIRPS | 0.10 | 39.50 | 391.96 | 34.55 |
| May | In-situ | 0.10 | 113.88 | 672.40 | 85.36 |
|  | TMPA | 0.90 | 95.28 | 546.42 | 71.46 |
|  | CHIRPS | 0.29 | 104.38 | 543.35 | 74.89 |
| June | In-situ | 0.10 | 146.45 | 1445.00 | 120.55 |
|  | TMPA | 0.90 | 146.27 | 704.38 | 102.28 |
|  | CHIRPS | 0.21 | 135.25 | 815.88 | 95.96 |
| July | In-situ | 0.10 | 169.11 | 1240.80 | 147.88 |
|  | TMPA | 0.42 | 168.83 | 1279.89 | 128.33 |
|  | CHIRPS | 0.12 | 165.12 | 1070.34 | 142.09 |
| August | In-situ | 3.30 | 198.72 | 1158.00 | 141.74 |
|  | TMPA | 0.81 | 183.29 | 869.67 | 111.67 |
|  | CHIRPS | 0.14 | 198.68 | 1134.75 | 143.71 |
| September | In-situ | 0.70 | 173.11 | 1227.30 | 129.69 |
|  | TMPA | 0.66 | 180.05 | 1136.13 | 126.13 |
|  | CHIRPS | 2.73 | 194.96 | 1256.04 | 125.02 |
| October | In-situ | 0.30 | 91.15 | 1715.80 | 135.86 |
|  | TMPA | 0.21 | 101.31 | 904.08 | 114.19 |
|  | CHIRPS | 0.16 | 130.69 | 1448.48 | 124.09 |
| November | In-situ | 0.10 | 38.72 | 1748.00 | 80.35 |
|  | TMPA | 0.09 | 44.52 | 629.58 | 67.14 |
|  | CHIRPS | 0.06 | 54.44 | 984.33 | 77.72 |
| December | In-situ | 0.10 | 18.95 | 320.00 | 36.73 |
|  | TMPA | 0.09 | 17.35 | 370.74 | 29.36 |
|  | CHIRPS | 0.06 | 19.39 | 473.78 | 30.40 |
| Dry Season | In-situ | 0.30 | 69.45 | 612.07 | 73.40 |
| TMPA | 0.17 | 31.09 | 292.85 | 32.39 |
| CHIRPS | 1.07 | 46.27 | 692.93 | 63.19 |
| Wet Season | In-situ | 170.25 | 850.78 | 2709.70 | 380.61 |
| TMPA | 86.46 | 627.24 | 1454.66 | 252.31 |
| CHIRPS | 110.99 | 649.69 | 2138.24 | 351.80 |
| Annually | In-situ | 4.00 | 1321.25 | 4551.50 | 535.83 |
| TMPA | 3.72 | 911.39 | 3029.82 | 401.02 |
| CHIRPS | 1376.9 | 1685.4 | 2136.4 | 202.89 |