Table S6. Catchment characteristics, ranked by baseflow.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| catchment  code | size | form factor | mean HAND | mean rainfall | mean Aridity Index | baseflow | runoff efficiency | peak runoff | predominant land cover |
|  | (km2) | (-) | (m) | (mm y-1) | (-) | (%) | (%) | (mth) | (class %) |
| AUFR | 1363 | 0.191 | 32.4 | 433.3 | 0.14 | 3.8 | 1.6 | Jan. | shrublands 92 % |
| ZADE | 8288 | 0.125 | 28.6 | 357.4 | 0.18 | 7.1 | 0.5 | Feb. | grassland 85 % |
| ZAHH | 1507 | 0.122 | 63.2 | 228.9 | 0.11 | 9.3 | 5.1 | Jun. | grassland 47 % |
| AUNP | 6504 | 0.150 | 20.7 | 362.9 | 0.11 | 9.8 | 8.7 | Mar. | shrublands 50 % |
| ZABT | 811 | 0.138 | 165.5 | 503.9 | 0.30 | 14.1 | 1.8 | Nov. | shrublands 49 % |
| ZAT | 10898 | 0.097 | 12.2 | 515.3 | 0.26 | 14.1 | 0.6 | Feb. | grassland 63 % |
| AULT | 440 | 0.315 | 15.5 | 355.2 | 0.18 | 14.2 | 0.7 | Jul. | croplands 96 % |
| BRPR | 4258 | 0.096 | 39.4 | 801.2 | 0.52 | 20.2 | 4.1 | Apr. | shrublands 32 % |
| ZAO | 507 | 0.102 | 66.6 | 692.3 | 0.48 | 20.3 | 4.9 | Nov. | croplands 40 % |
| AUGD | 12620 | 0.187 | 14.1 | 472.8 | 0.18 | 21.7 | 10.9 | Jan. | grassland 77 % |
| ZAKK | 379 | 0.119 | 33.7 | 550.7 | 0.31 | 38.2 | 2.0 | Jul. | croplands 58 % |
| AUMS | 511 | 0.080 | 25.0 | 709.6 | 0.37 | 39.3 | 12.7 | Feb. | shrublands 80 % |
| ZASD | 9870 | 0.139 | 160.0 | 480.3 | 0.28 | 39.7 | 23.1 | Jul. | shrubland 30 % |
| ZAMB | 245 | 0.427 | 54.6 | 551.4 | 0.28 | 41.1 | 7.1 | Jul. | croplands 63 % |
| ZAAN | 37153 | 0.068 | 159.7 | 741.7 | 0.46 | 43.2 | 16.1 | Feb. | shrubland 45 % |
| ZADK | 1535 | 0.099 | 112.6 | 408.1 | 0.25 | 47.6 | 3.3 | Nov. | shrubland 67 % |
| ZAHE | 1047 | 0.286 | 73.3 | 513.1 | 0.28 | 51.0 | 5.9 | Feb. | woodland 69 % |
| USNP | 10533 | 0.118 | 58.7 | 415.2 | 0.22 | 53.3 | 4.0 | Jun. | forest 40 % |
| AUSJ | 1776 | 0.107 | 17.0 | 636.9 | 0.47 | 56.0 | 6.5 | Sept. | forest 42 % |
| BRMN | 17108 | 0.177 | 37.7 | 722.6 | 0.42 | 59.4 | 5.7 | Apr. | agriculture 34 % |
| AUMF | 4909 | 0.062 | 23.0 | 670.6 | 0.34 | 63.7 | 5.2 | Aug. | shrublands 50 % |
| ZAW | 5385 | 0.139 | 134.6 | 852.2 | 0.49 | 64.1 | 9.5 | Feb. | forest 54 % |
| USMH | 55067 | 0.096 | 75.3 | 465.3 | 0.46 | 64.9 | 22.3 | Jun. | forest 41 % |
| ZAOS | 119 | 0.271 | 81.6 | 614.9 | 0.33 | 66.5 | 9.3 | Jan. | croplands 45 % |
| USSC | 13298 | 0.280 | 146.6 | 383.0 | 0.35 | 70.0 | 34.1 | Apr. | forest 58 % |
| ZAMK | 640 | 0.125 | 65.3 | 605.1 | 0.33 | 74.6 | 18.4 | Feb. | croplands 74 % |
| ZAUL | 422 | 0.101 | 94.6 | 816.7 | 0.58 | 75.0 | 8.9 | Dec. | woodland 40 % |
| ILOB | 1469 | 0.160 | 154.3 | 624.8 | 0.39 | 87.5 | 47.4 | Mar. | cropland 53 % |