Table S5. The number of years of data used for the calibration and validation stages, together with the optimum transferral ratio parameter values used in the validation stage for each catchment.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  |  | **validation** | **validation** | **validation** | **validation** |
|  |  |  | **overland** | **overland** | **network** | **network** |
| **catchment code** | **# years calibration** | **# years validation** | **ko** | **po** | **kn** | **pn** |
| aufr | 20 | 19 | -5.50 | 5.50 | -5.50 | 5.50 |
| augd | 20 | 19 | -4.00 | 2.00 | -4.00 | 2.00 |
| ault | 19 | 18 | -4.00 | 3.50 | -4.00 | 3.50 |
| aumf | 19 | 18 | -0.05 | 0.05 | -0.05 | 0.05 |
| aums | 19 | 18 | -3.00 | 3.00 | -3.00 | 3.00 |
| aunp | 19 | 18 | -1.00 | 3.00 | -2.00 | 3.00 |
| ausj | 19 | 17 | -0.05 | 0.05 | -0.05 | 0.05 |
| brmn | 19 | 19 | -0.20 | 0.20 | -0.10 | 0.10 |
| brpr | 19 | 19 | -1.00 | 1.00 | -1.00 | 1.00 |
| ilob | 19 | 18 | -0.10 | 0.10 | -0.10 | 0.10 |
| usmh | 20 | 19 | -0.05 | 0.05 | -0.05 | 0.05 |
| usnp | 20 | 19 | -0.10 | 0.10 | -0.10 | 0.10 |
| ussc | 20 | 19 | -0.10 | 0.10 | -0.10 | 0.10 |
| zaan | 20 | 19 | -0.05 | 0.05 | -0.05 | 0.05 |
| zabt | 20 | 19 | -2.00 | 2.00 | -2.50 | 2.50 |
| zade | 20 | 19 | -0.27 | 0.27 | -0.27 | 0.27 |
| zadk | 20 | 19 | -2.00 | 2.00 | -2.00 | 2.00 |
| zahe | 20 | 19 | -0.40 | 2.00 | -0.40 | 2.00 |
| zahh | 20 | 19 | -0.50 | 0.50 | -0.50 | 0.50 |
| zakk | 20 | 19 | -0.50 | 0.50 | -0.50 | 0.50 |
| zamb | 20 | 19 | -0.10 | 0.10 | -0.10 | 0.10 |
| zamk | 20 | 19 | -0.10 | 0.10 | -0.10 | 0.10 |
| zao | 20 | 19 | -0.50 | 0.50 | -1.00 | 1.00 |
| zaos | 20 | 19 | -5.50 | 5.50 | -5.50 | 5.50 |
| zasd | 20 | 19 | -0.10 | 0.10 | -0.10 | 0.10 |
| zat | 20 | 19 | -1.00 | 1.00 | -1.00 | 1.00 |
| zaul | 20 | 19 | -0.30 | 1.00 | -0.50 | 1.00 |
| zaw | 20 | 19 | -0.30 | 1.00 | -0.30 | 1.00 |