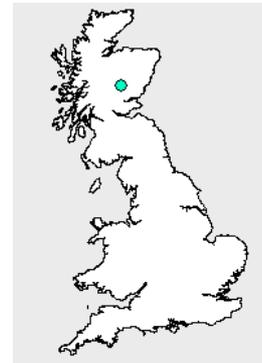


General Information

| | | | |
|----------------|-----------|-----------------------------|--------------|
| River Name | Ardle | Catchment Area (km2) | 103 |
| Station Name | Kindrogan | SAAR (mm) 61-90 | 1142 |
| Station Number | 15014 | Mean Annual Rain (mm) 62-91 | 1167 |
| Grid Reference | NO056631 | Mean Annual PE (mm) 62-91 | 443 |
| EA Region | SEPA-NE | Observed flow record | 1985 to 2005 |



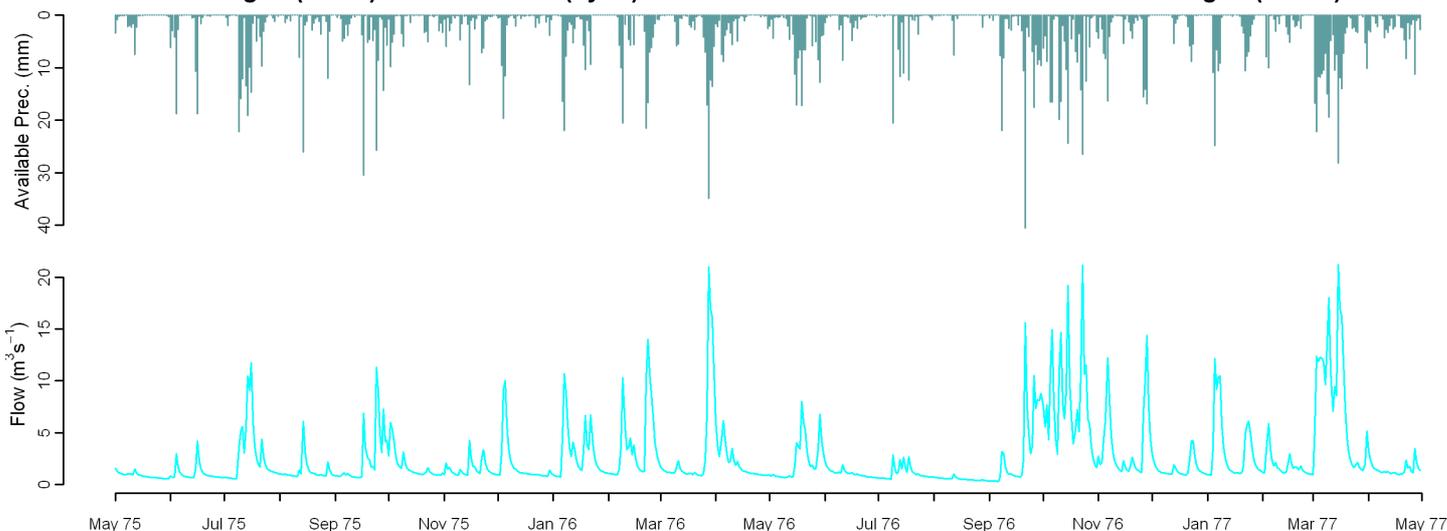
Observed Data

Comparison of gauged and simulated flow

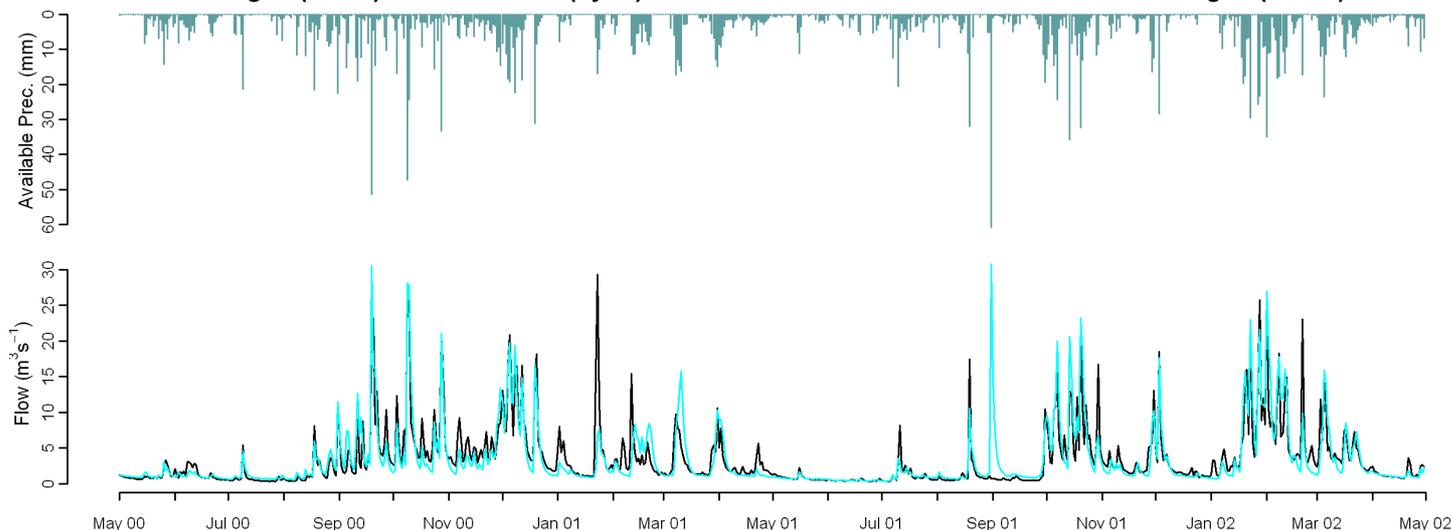
Model used: CERF

| | Mean Annual | J | F | M | A | M | J | J | A | S | O | N | D | Nash Sutcliffe |
|--------------------|-------------|------|-------|------|-------|-------|------|------|------|------|-----|------|-------|----------------|
| MORECS (1971-2005) | -1.9 | -9.7 | -7.2 | -7.5 | -6.8 | -8.9 | -0.6 | 16.5 | 21.5 | 14.3 | 7.4 | -3.2 | -11.1 | 0.67 |
| Performance Band | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 2 | 1 | 1 | 2 | 1 |
| MORECS (1962-1991) | -2.3 | -8.4 | 5.4 | -7.1 | -20.2 | -18.3 | 0.8 | 13.4 | 10.6 | -2.7 | 6.7 | -4.1 | -8.2 | 0.66 |
| | Q90 | Q75 | Q50 | Q25 | Q5 | RP2 | | RP5 | | RP10 | | RP20 | | |
| MORECS (1971-2005) | 24.3 | -0.2 | -19.7 | -4.0 | 4.4 | | | | | | | | | |
| Performance Band | 1 | 1 | 1 | 1 | 1 | | | | | | | | | |
| MORECS (1962-1991) | 7.1 | -6.4 | -20.7 | -7.2 | 8.6 | | | | | | | | | |

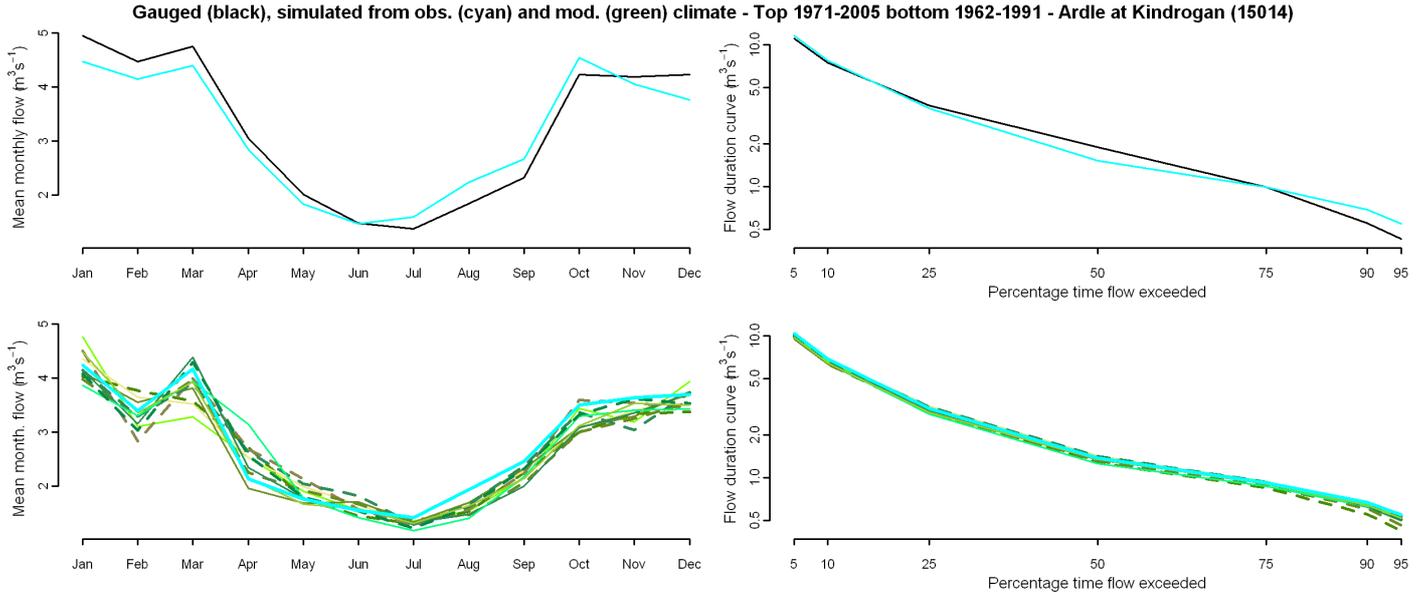
Gauged (black) and simulated (cyan) flows from observed climate - Ardle at Kindrogan (15014)



Gauged (black) and simulated (cyan) flows from observed climate - Ardle at Kindrogan (15014)



Comparison of gauged and simulated flow (observed and modelled climate)



Percentage difference between flow simulated from observed climate and Future Flows Climate

| | afgcx | afixa | afixc | afixh | afixi | afixj | afixk | afixl | afixm | afixo | afixq |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Annual | -1 | -4 | 0 | 3 | -5 | -5 | -3 | -1 | -4 | -2 | -4 |
| January | 15 | -2 | 5 | 5 | -3 | -3 | -4 | -4 | -15 | -3 | 11 |
| April | 18 | 26 | 19 | 30 | -6 | 5 | 8 | 25 | 50 | 23 | -4 |
| July | -3 | -3 | -2 | -5 | -6 | -13 | 1 | -9 | -13 | -14 | -8 |
| October | -1 | -11 | -13 | 7 | -12 | -10 | -5 | -7 | -3 | -3 | -5 |
| Q90 | -3 | -15 | -7 | 0 | -3 | -10 | -7 | -3 | -6 | -6 | -6 |
| Q75 | 2 | -7 | -1 | 2 | -2 | -6 | -2 | 1 | -6 | 0 | -3 |
| Q50 | 3 | -6 | 3 | 3 | -4 | -6 | 0 | 3 | -8 | 1 | -3 |
| Q25 | 1 | -6 | 3 | 2 | -7 | -7 | -1 | 3 | -8 | -1 | -6 |
| Q5 | -7 | -3 | -5 | 1 | -9 | -5 | -5 | -4 | -1 | -4 | -6 |
| RP2 | 3 | 7 | -7 | 8 | 11 | 6 | 6 | 4 | 13 | -4 | 12 |
| RP10 | 3 | -1 | -9 | 11 | 10 | -6 | 3 | -2 | 2 | -7 | 2 |

Climate change graphs for 2050s

