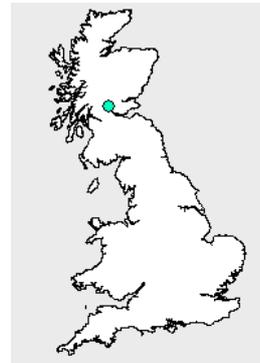


General Information

| | | | |
|----------------|-------------|-----------------------------------|--------------|
| River Name | Allan Water | Catchment Area (km ²) | 161 |
| Station Name | Kinbuck | SAAR (mm) 61-90 | 1376 |
| Station Number | 18001 | Mean Annual Rain (mm) 62-91 | 1386 |
| Grid Reference | NN792053 | Mean Annual PE (mm) 62-91 | 501 |
| EA Region | SEPA-SE | Observed flow record | 1961 to 2003 |



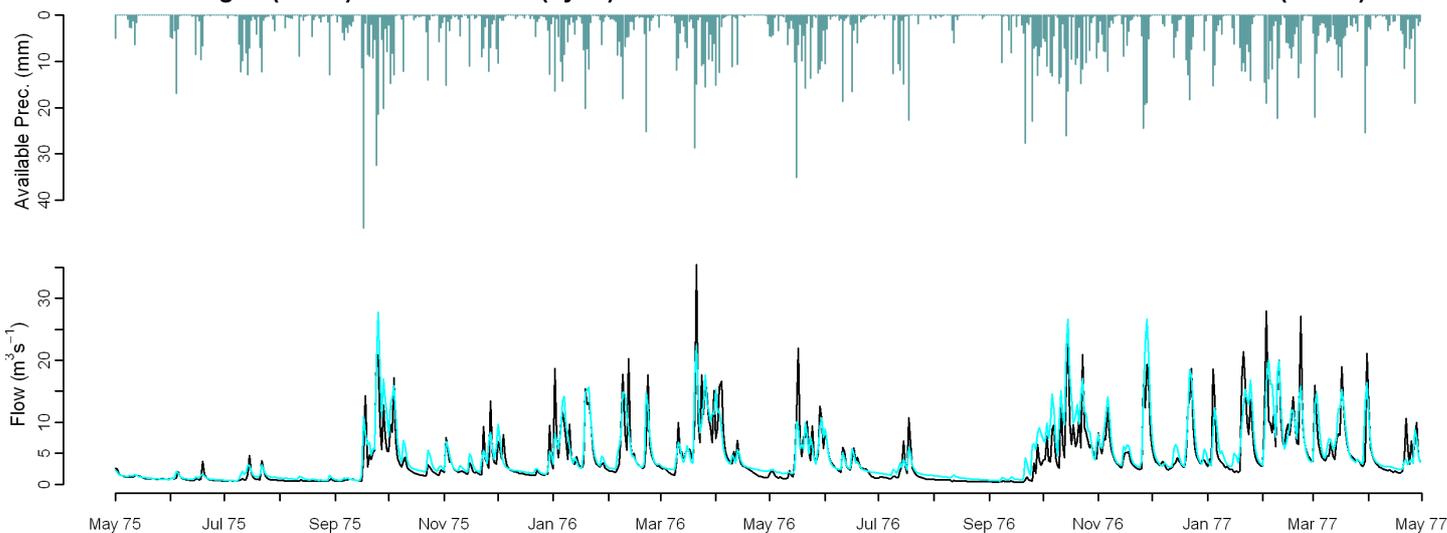
Observed Data

Comparison of gauged and simulated flow

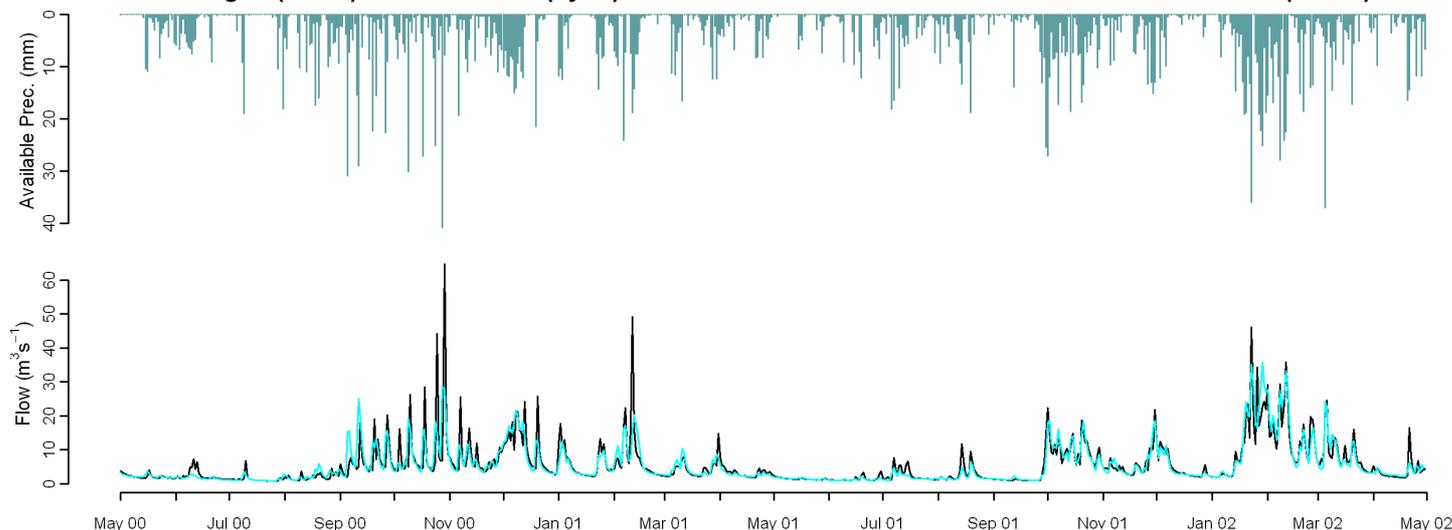
Model used: CERF

| | Mean Annual | J | F | M | A | M | J | J | A | S | O | N | D | Nash Sutcliffe |
|--------------------|-------------|------|------|------|------|------|------|-----|------|------|------|------|-----|----------------|
| MORECS (1971-2005) | 4.1 | 2.4 | 3.9 | -0.6 | -5.4 | -5.0 | -4.1 | 4.6 | 9.9 | 15.9 | 11.4 | 5.9 | 6.1 | 0.78 |
| Performance Band | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 |
| MORECS (1962-1991) | 3.0 | 2.6 | 3.1 | -2.6 | -6.4 | -9.1 | -0.8 | 7.1 | 10.6 | 10.9 | 9.3 | 5.9 | 3.0 | 0.76 |
| | Q90 | Q75 | Q50 | Q25 | Q5 | RP2 | | RP5 | | RP10 | | RP20 | | |
| MORECS (1971-2005) | 17.0 | 14.3 | -1.0 | 1.0 | 8.4 | | | | | | | | | |
| Performance Band | 1 | 1 | 1 | 1 | 1 | | | | | | | | | |
| MORECS (1962-1991) | 19.7 | 12.4 | -2.3 | 1.2 | 5.5 | | | | | | | | | |

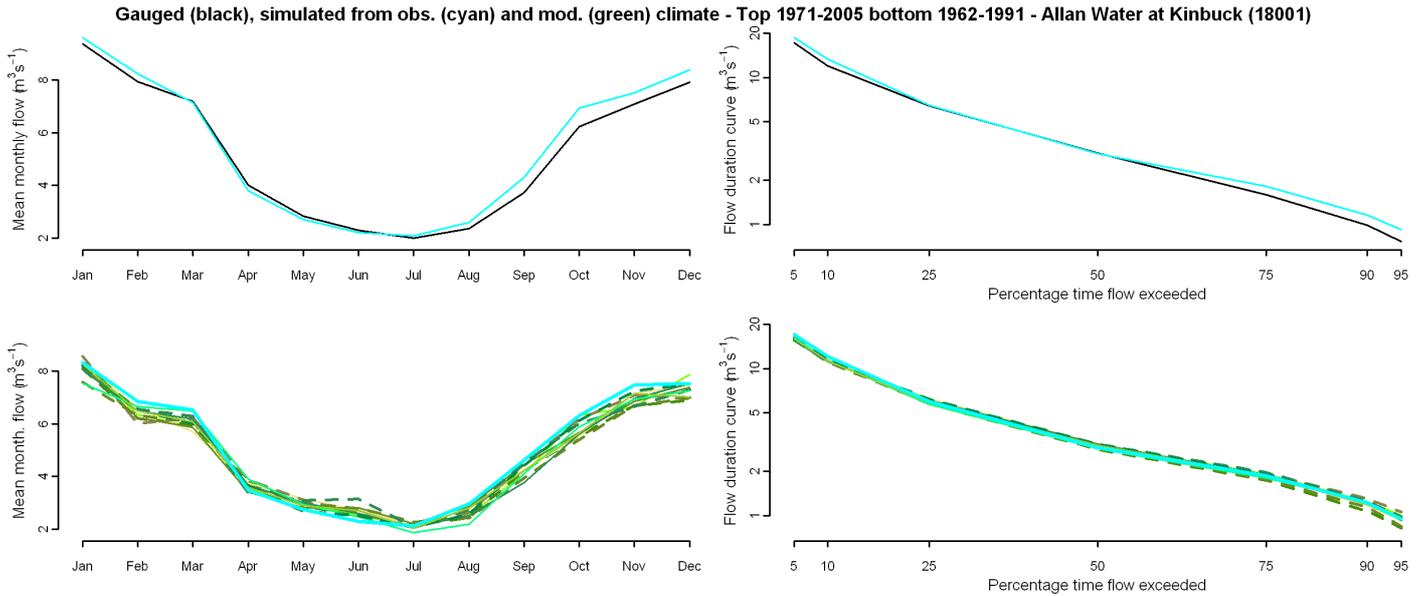
Gauged (black) and simulated (cyan) flows from observed climate - Allan Water at Kinbuck (18001)



Gauged (black) and simulated (cyan) flows from observed climate - Allan Water at Kinbuck (18001)



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 | -1 | 2 | -4 | -5 | -3 | 0 | -3 | -2 | -3 |
| January | 0 | -4 | 0 | 1 | -2 | -5 | -6 | -1 | -10 | -2 | 3 |
| April | 4 | 8 | 9 | 19 | 1 | 5 | 8 | 1 | 13 | 6 | 3 |
| July | 0 | 6 | 2 | 2 | 4 | -3 | 4 | -2 | -9 | -4 | -5 |
| October | -1 | -8 | -15 | 1 | -9 | -11 | -3 | -7 | -4 | -2 | -6 |
| Q90 | 1 | -10 | -4 | 8 | -5 | -8 | -2 | 1 | 1 | -5 | -5 |
| Q75 | 3 | -5 | -1 | 7 | -1 | -7 | -1 | 5 | -4 | 0 | -2 |
| Q50 | 5 | -2 | 4 | 7 | 0 | -1 | 6 | 5 | -2 | 4 | 2 |
| Q25 | 1 | -3 | 3 | 3 | -5 | -3 | 2 | 3 | -4 | 2 | -3 |
| Q5 | -6 | -6 | -7 | -5 | -7 | -8 | -9 | -4 | -5 | -9 | -7 |
| RP2 | -6 | -2 | -5 | 4 | 5 | 1 | -4 | 6 | 5 | -1 | 7 |
| RP10 | 2 | 2 | -1 | 4 | 11 | 7 | 4 | 9 | 12 | 8 | 10 |

Climate change graphs for 2050s

