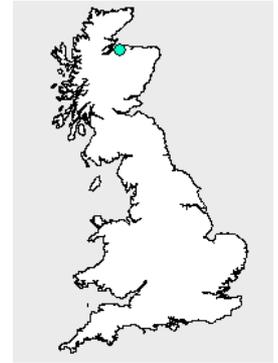


## General Information

|                |                |                                   |              |
|----------------|----------------|-----------------------------------|--------------|
| River Name     | Mosset Burn    | Catchment Area (km <sup>2</sup> ) | 28           |
| Station Name   | Wardend Bridge | SAAR (mm) 61-90                   | 806          |
| Station Number | 7009           | Mean Annual Rain (mm) 62-91       | 820          |
| Grid Reference | NJ039558       | Mean Annual PE (mm) 62-91         | 553          |
| EA Region      | SEPA-NW        | Observed flow record              | 1998 to 2005 |



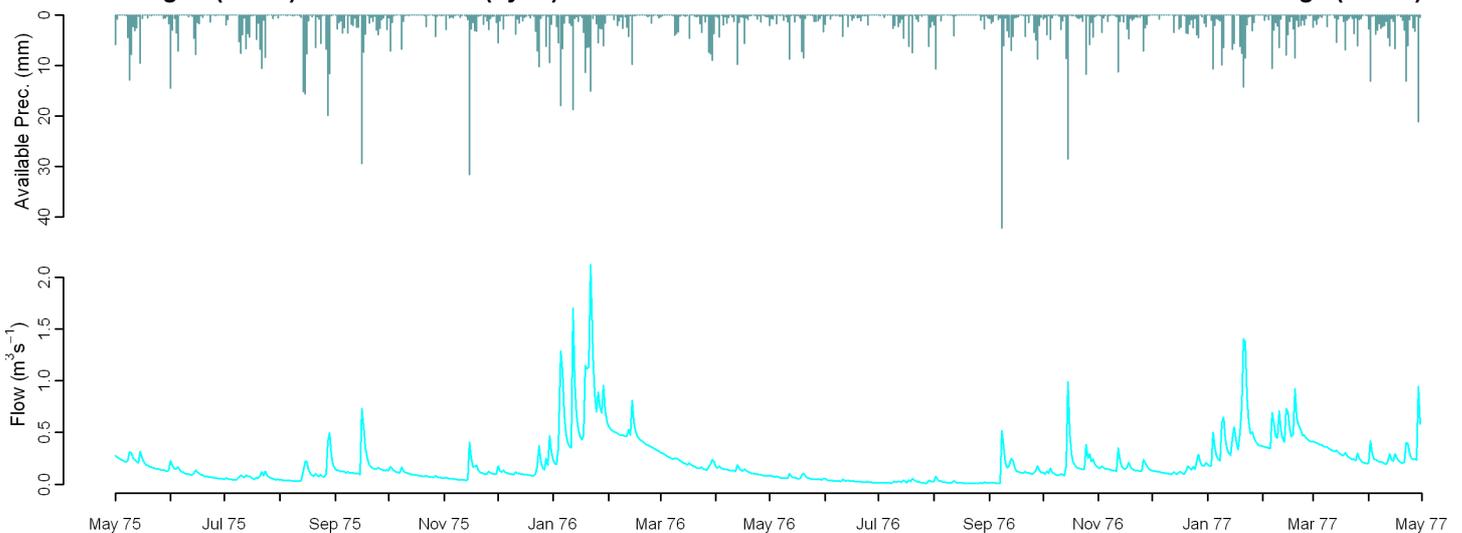
## Observed Data

## Comparison of gauged and simulated flow

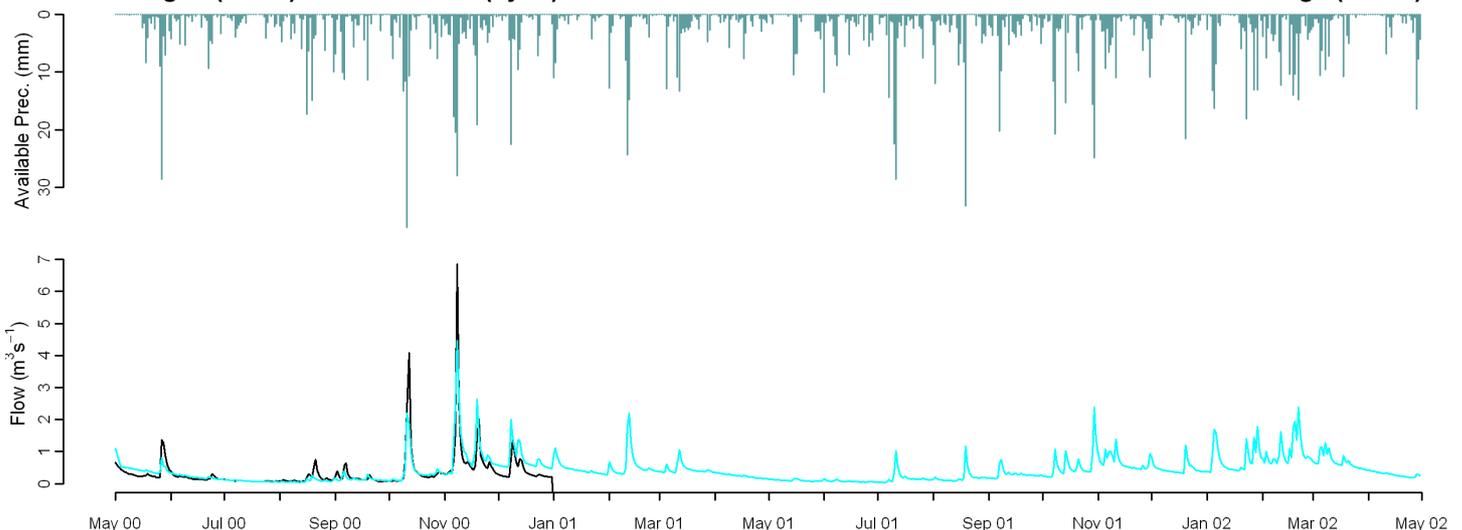
## Model used: CERF

|                    | Mean Annual | J    | F    | M    | A     | M    | J    | J    | A    | S    | O     | N   | D    | Nash Sutcliffe |
|--------------------|-------------|------|------|------|-------|------|------|------|------|------|-------|-----|------|----------------|
| MORECS (1971-2005) | 6.1         | 13.5 | 12.5 | 17.9 | -9.1  | -1.0 | -3.5 | 49.8 | -4.5 | -7.0 | -23.2 | 5.7 | 38.4 | 0.68           |
| Performance Band   | 1           | 2    | 2    | 1    | 3     | 2    | 3    | 3    | 3    | 2    | 3     | 1   | 3    | 1              |
| MORECS (1962-1991) |             |      |      |      |       |      |      |      |      |      |       |     |      |                |
|                    | Q90         | Q75  | Q50  | Q25  | Q5    | RP2  | RP5  | RP10 | RP20 |      |       |     |      |                |
| MORECS (1971-2005) | 5.3         | 24.6 | 34.7 | 18.8 | -11.7 |      |      |      |      |      |       |     |      |                |
| Performance Band   | 1           | 1    | 1    | 1    | 1     |      |      |      |      |      |       |     |      |                |
| MORECS (1962-1991) |             |      |      |      |       |      |      |      |      |      |       |     |      |                |

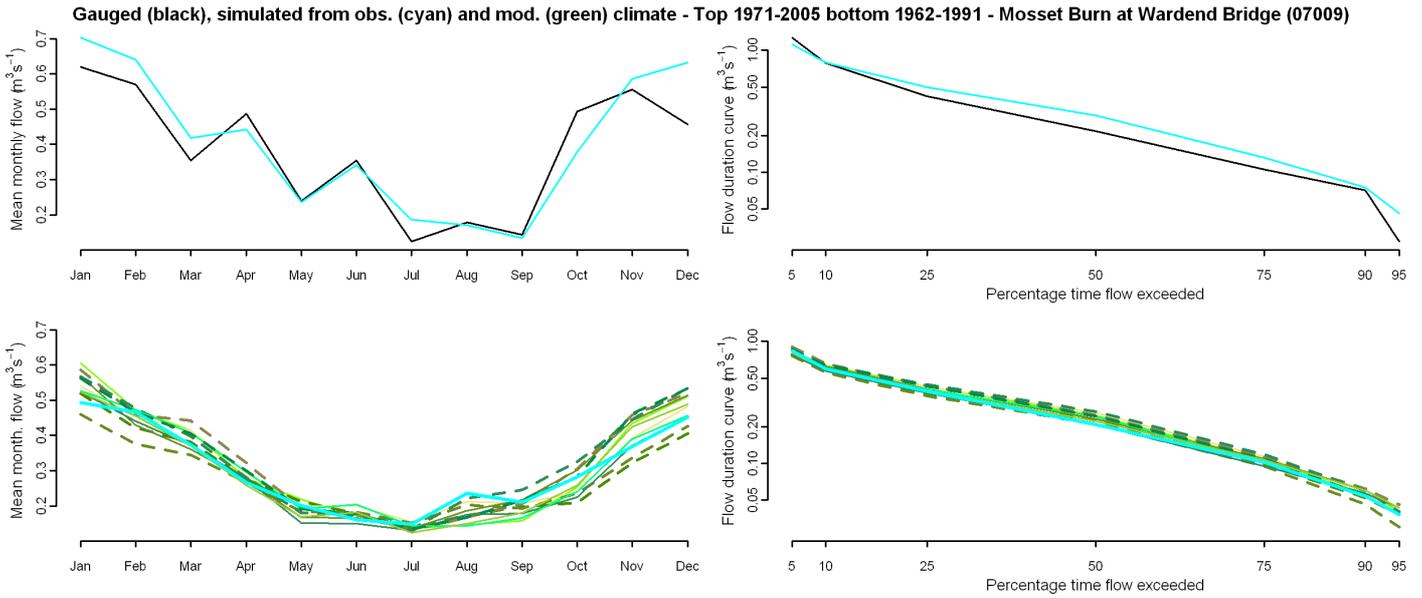
Gauged (black) and simulated (cyan) flows from observed climate - Mosset Burn at Wardend Bridge (07009)



Gauged (black) and simulated (cyan) flows from observed climate - Mosset Burn at Wardend Bridge (07009)



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  | 4     | -1    | 8     | 9     | 0     | -8    | -5    | 10    | 0     | 9     | 1     |
| January | 22    | 9     | 10    | 19    | 14    | -3    | 5     | 13    | 7     | 13    | 9     |
| April   | 6     | 8     | 10    | 21    | 4     | -1    | 2     | 15    | 8     | 12    | -5    |
| July    | -7    | -3    | 9     | -11   | -8    | -11   | -7    | -8    | -9    | -11   | -16   |
| October | -7    | -21   | -12   | 17    | -4    | -19   | -18   | 11    | -13   | -2    | 2     |
| Q90     | 7     | 1     | 5     | 15    | 5     | -16   | 4     | 8     | -4    | -4    | 12    |
| Q75     | 6     | 4     | 15    | 9     | 3     | -9    | -6    | 15    | -3    | 1     | 4     |
| Q50     | 19    | 10    | 29    | 21    | 10    | -1    | 2     | 28    | 12    | 15    | 7     |
| Q25     | 9     | -3    | 9     | 10    | 1     | -9    | -2    | 13    | 2     | 8     | 2     |
| Q5      | -1    | -4    | -2    | 8     | -3    | -10   | -7    | 3     | -3    | 3     | -3    |
| RP2     | -16   | -23   | -13   | -7    | -6    | -11   | -17   | -20   | -14   | -10   | -16   |
| RP10    | -17   | -25   | -23   | -18   | -11   | -16   | -12   | -8    | -17   | -3    | -15   |

Climate change graphs for 2050s

