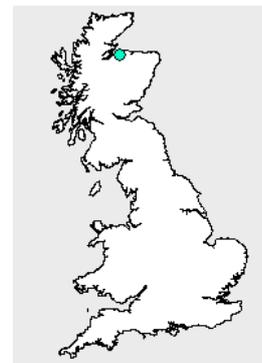


## General Information

|                |          |                                   |              |
|----------------|----------|-----------------------------------|--------------|
| River Name     | Findhorn | Catchment Area (km <sup>2</sup> ) | 782          |
| Station Name   | Forres   | SAAR (mm) 61-90                   | 1064         |
| Station Number | 7002     | Mean Annual Rain (mm) 62-91       | 1094         |
| Grid Reference | NJ018583 | Mean Annual PE (mm) 62-91         | 493          |
| EA Region      | SEPA-NW  | Observed flow record              | 1961 to 2005 |



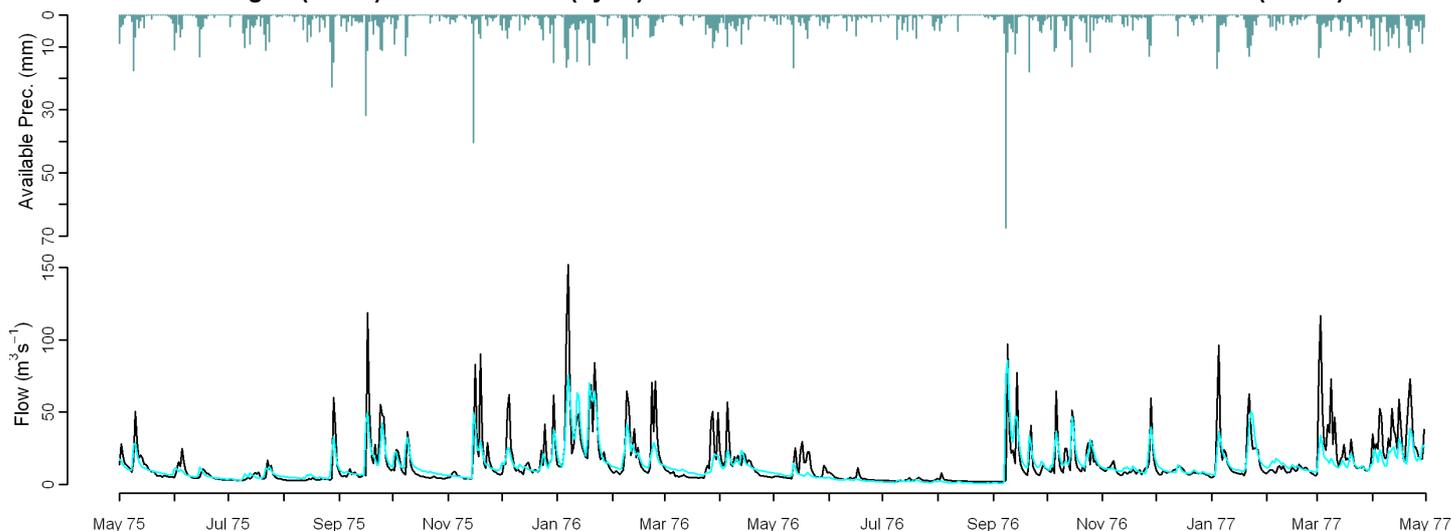
## Observed Data

## Comparison of gauged and simulated flow

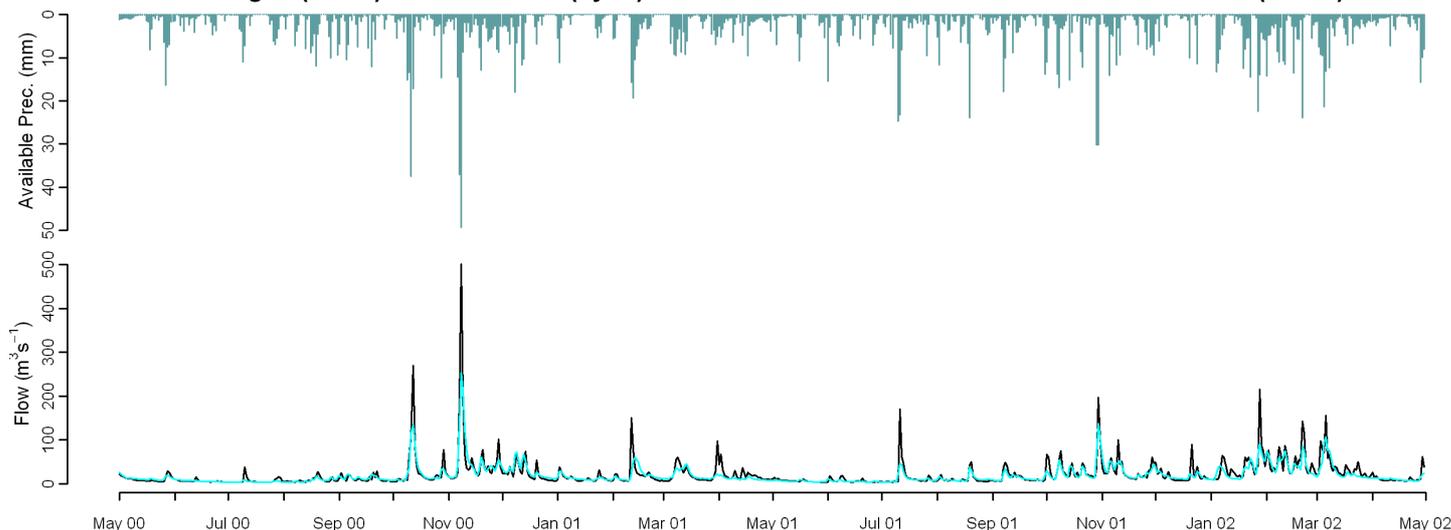
## Model used: CERF

|                    | Mean Annual | J    | F    | M     | A     | M     | J     | J    | A   | S    | O    | N    | D    | Nash Sutcliffe |
|--------------------|-------------|------|------|-------|-------|-------|-------|------|-----|------|------|------|------|----------------|
| MORECS (1971-2005) | -9.3        | -6.8 | -6.8 | -18.7 | -27.3 | -25.8 | -12.6 | -4.5 | 0.8 | -0.4 | -3.5 | -1.4 | -0.8 | 0.66           |
| Performance Band   | 2           | 2    | 2    | 2     | 2     | 2     | 2     | 1    | 1   | 1    | 1    | 1    | 1    | 1              |
| MORECS (1962-1991) | -9.2        | -4.7 | -2.5 | -20.5 | -30.4 | -29.6 | -8.8  | -0.1 | 1.1 | -2.1 | -3.0 | 1.4  | -2.7 | 0.64           |
|                    | Q90         | Q75  | Q50  | Q25   | Q5    | RP2   |       | RP5  |     | RP10 |      | RP20 |      |                |
| MORECS (1971-2005) | 2.6         | 17.8 | 2.9  | -10.7 | -14.8 |       |       |      |     |      |      |      |      |                |
| Performance Band   | 1           | 1    | 2    | 2     | 2     |       |       |      |     |      |      |      |      |                |
| MORECS (1962-1991) | 6.8         | 17.4 | 2.6  | -10.9 | -13.4 |       |       |      |     |      |      |      |      |                |

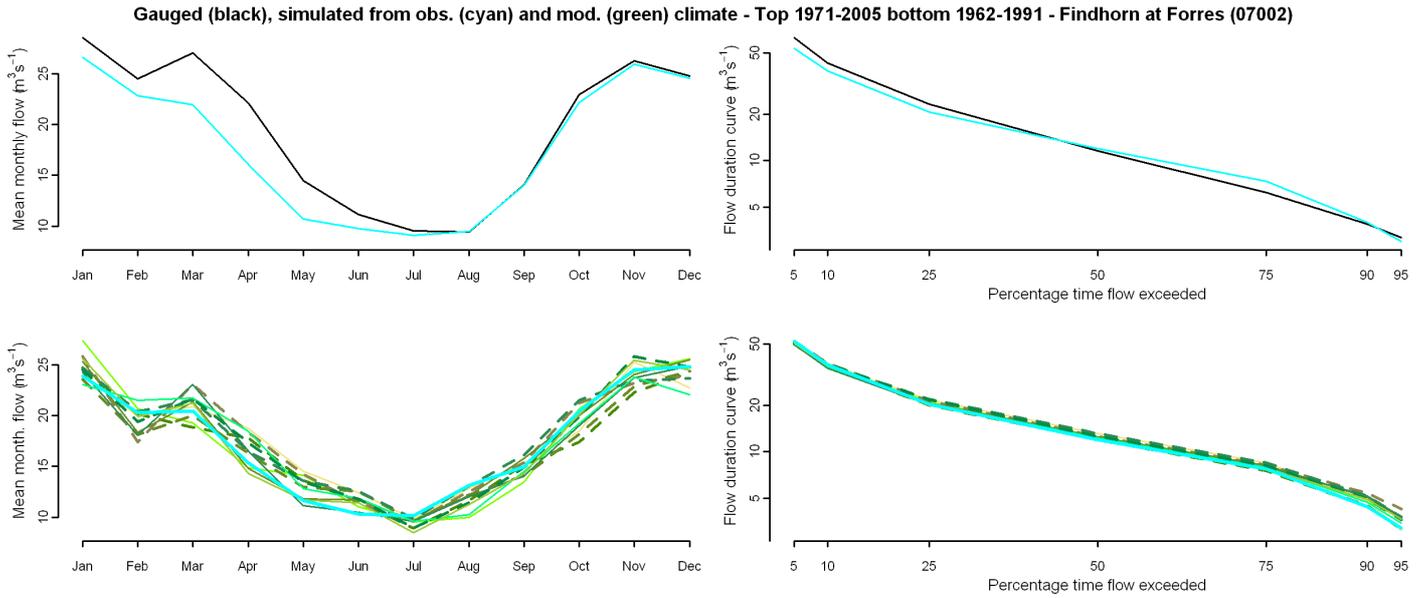
Gauged (black) and simulated (cyan) flows from observed climate - Findhorn at Forres (07002)



Gauged (black) and simulated (cyan) flows from observed climate - Findhorn at Forres (07002)



## 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  | 2     | 2     | 6     | 5     | 0     | -1    | 0     | 5     | 0     | 4     | 2     |
| January | 13    | 8     | 1     | 8     | 6     | 2     | 0     | 1     | -7    | 2     | 11    |
| April   | -5    | 17    | 24    | 18    | -3    | 5     | 6     | 12    | 19    | 18    | -7    |
| July    | -5    | -10   | 2     | -2    | -3    | -8    | -2    | -3    | -6    | -11   | -15   |
| October | 1     | -10   | -8    | 11    | 0     | -12   | -2    | 3     | -3    | -2    | 7     |
| Q90     | 9     | 2     | 7     | 23    | 10    | 0     | 13    | 16    | 3     | 10    | 13    |
| Q75     | 3     | 0     | 11    | 8     | 4     | -1    | 2     | 10    | 1     | 4     | 1     |
| Q50     | 4     | 1     | 10    | 5     | 4     | 1     | 0     | 10    | 2     | 5     | 1     |
| Q25     | 3     | 2     | 7     | 4     | 1     | -2    | -1    | 7     | -1    | 5     | -1    |
| Q5      | -4    | -2    | -4    | -1    | -6    | -5    | -4    | -3    | -3    | -5    | -4    |
| RP2     | 2     | 9     | 5     | 10    | 17    | 4     | 8     | -5    | 7     | 7     | 16    |
| RP10    | 5     | 3     | -2    | -6    | 8     | -8    | 8     | 3     | -4    | 5     | 18    |

## Climate change graphs for 2050s

