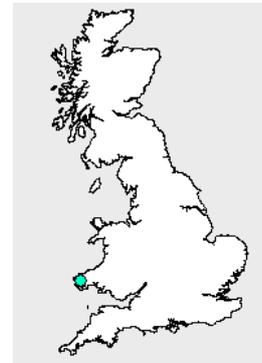


## General Information

|                |                  |                                   |              |
|----------------|------------------|-----------------------------------|--------------|
| River Name     | Western Cleddau  | Catchment Area (km <sup>2</sup> ) | 198          |
| Station Name   | Prendergast Mill | SAAR (mm) 61-90                   | 1275         |
| Station Number | 61001            | Mean Annual Rain (mm) 62-91       | 1274         |
| Grid Reference | SM954177         | Mean Annual PE (mm) 62-91         | 616          |
| EA Region      | EA-W             | Observed flow record              | 1965 to 2005 |



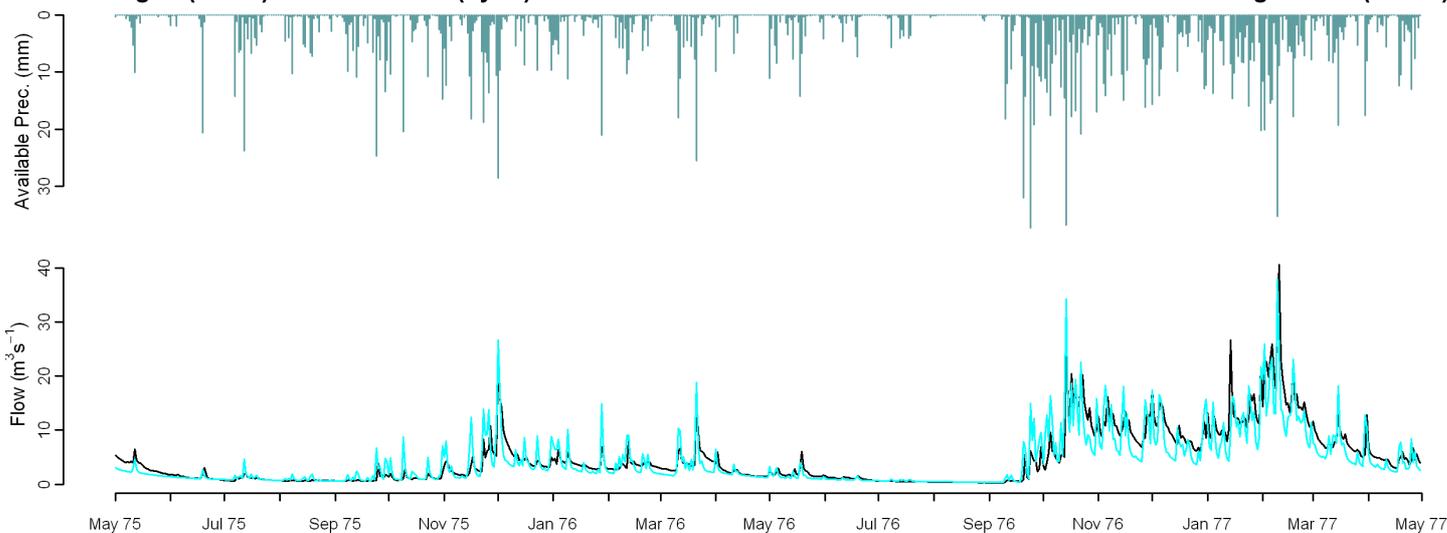
## Observed Data

## Comparison of gauged and simulated flow

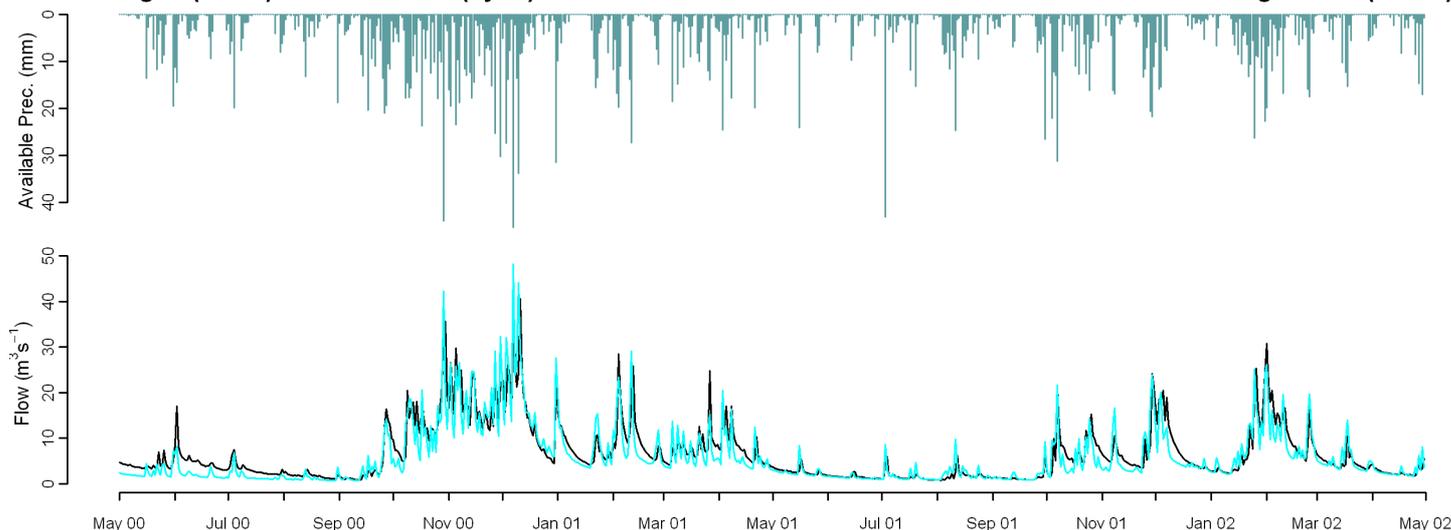
## Model used: PDM

|                    | Mean Annual | J    | F     | M     | A     | M     | J     | J    | A     | S    | O    | N    | D    | Nash Sutcliffe |
|--------------------|-------------|------|-------|-------|-------|-------|-------|------|-------|------|------|------|------|----------------|
| MORECS (1971-2005) | -7.2        | -9.2 | -7.7  | -11.5 | -12.6 | -16.1 | -15.8 | 0.1  | 10.2  | 16.7 | -3.6 | -8.4 | -8.1 | 0.73           |
| Performance Band   | 1           | 1    | 1     | 2     | 2     | 2     | 2     | 1    | 2     | 2    | 1    | 1    | 1    | 1              |
| FAO (1962-1991)    | -2.1        | -5.9 | -8.0  | -10.3 | -8.7  | -16.4 | -12.8 | 9.4  | 16.4  | 35.0 | 9.2  | 0.5  | -2.0 | 0.70           |
|                    | Q90         | Q75  | Q50   | Q25   | Q5    | RP2   | RP5   | RP10 | RP20  |      |      |      |      |                |
| MORECS (1971-2005) | -2.8        | -8.7 | -14.1 | -12.2 | -0.7  | -3.7  | -6.3  | -8.5 | -10.8 |      |      |      |      |                |
| Performance Band   | 1           | 1    | 1     | 1     | 1     |       |       |      |       |      |      |      |      |                |
| FAO (1962-1991)    | 8.1         | -0.6 | -12.2 | -9.9  | 5.2   | 2.2   | -1.6  | -4.9 | -8.3  |      |      |      |      |                |

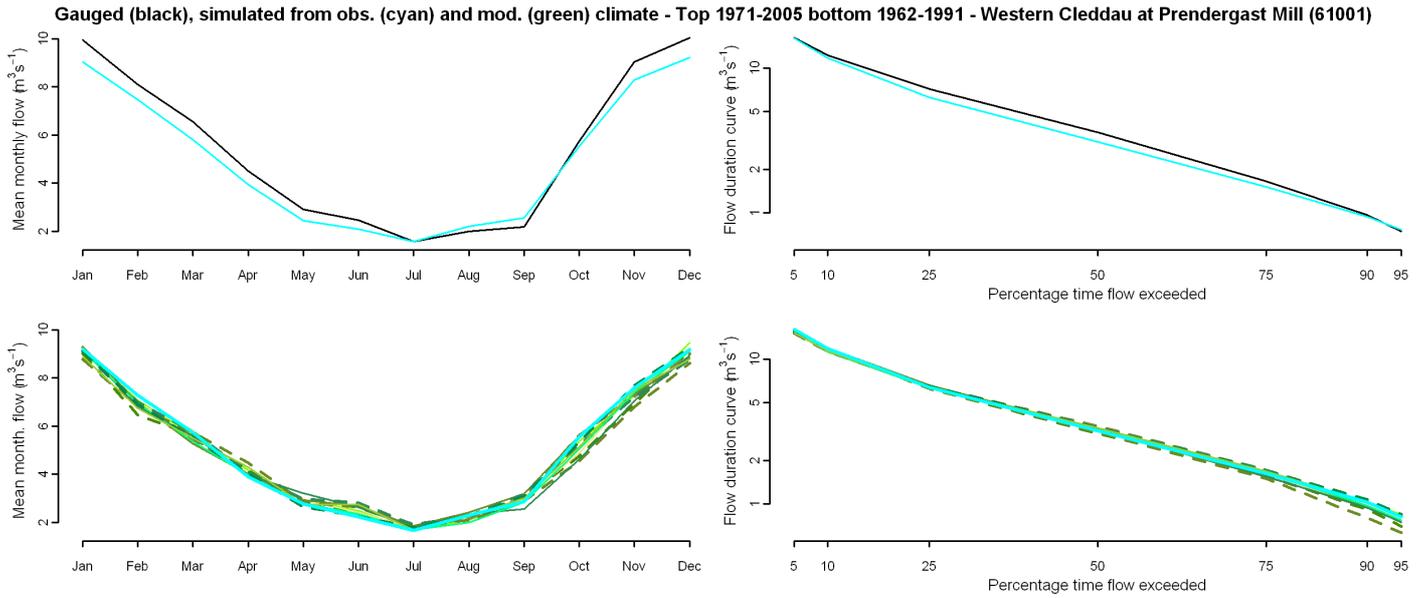
Gauged (black) and simulated (cyan) flows from observed climate - Western Cleddau at Prendergast Mill (61001)



Gauged (black) and simulated (cyan) flows from observed climate - Western Cleddau at Prendergast Mill (61001)



## 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  | 0     | -3    | -1    | 2     | -1    | -4    | -2    | 1     | -3    | -2    | -2    |
| January | 1     | -1    | 3     | 3     | 5     | -2    | 2     | 2     | 1     | -1    | -1    |
| April   | 7     | 4     | 3     | 8     | 3     | 12    | 3     | 4     | 1     | 2     | 9     |
| July    | 0     | 7     | 4     | 7     | 5     | 4     | 5     | 10    | 1     | 3     | -2    |
| October | -4    | -14   | -15   | 4     | -6    | -17   | -16   | -7    | -11   | -5    | -2    |
| Q90     | 1     | -12   | -7    | 2     | -9    | -23   | -8    | 0     | -5    | 2     | 0     |
| Q75     | 2     | -4    | -2    | 6     | -7    | -11   | -4    | 5     | 0     | 3     | 3     |
| Q50     | 4     | -4    | 1     | 9     | -1    | -4    | 4     | 5     | -1    | 4     | 3     |
| Q25     | 3     | -2    | 2     | 4     | 1     | -1    | 0     | 2     | -2    | 1     | -1    |
| Q5      | -5    | -3    | -3    | -3    | 0     | -3    | -4    | -2    | -4    | -5    | -4    |
| RP2     | -5    | -10   | -7    | 1     | -6    | -13   | -7    | -5    | -3    | -4    | -7    |
| RP10    | -8    | -11   | -9    | 6     | -3    | -2    | -2    | -7    | 4     | -1    | -1    |

## Climate change graphs for 2050s

