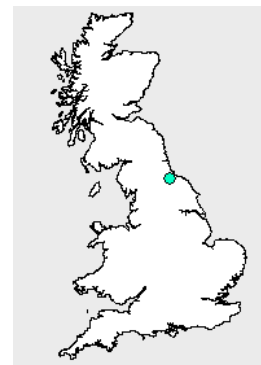


General Information

| | | | |
|----------------|--------------|-----------------------------|--------------|
| River Name | Leven | Catchment Area (km2) | 196 |
| Station Name | Leven Bridge | SAAR (mm) 61-90 | 726 |
| Station Number | 25005 | Mean Annual Rain (mm) 62-91 | 704 |
| Grid Reference | NZ445122 | Mean Annual PE (mm) 62-91 | 568 |
| EA Region | EA-NE | Observed flow record | 1961 to 2006 |



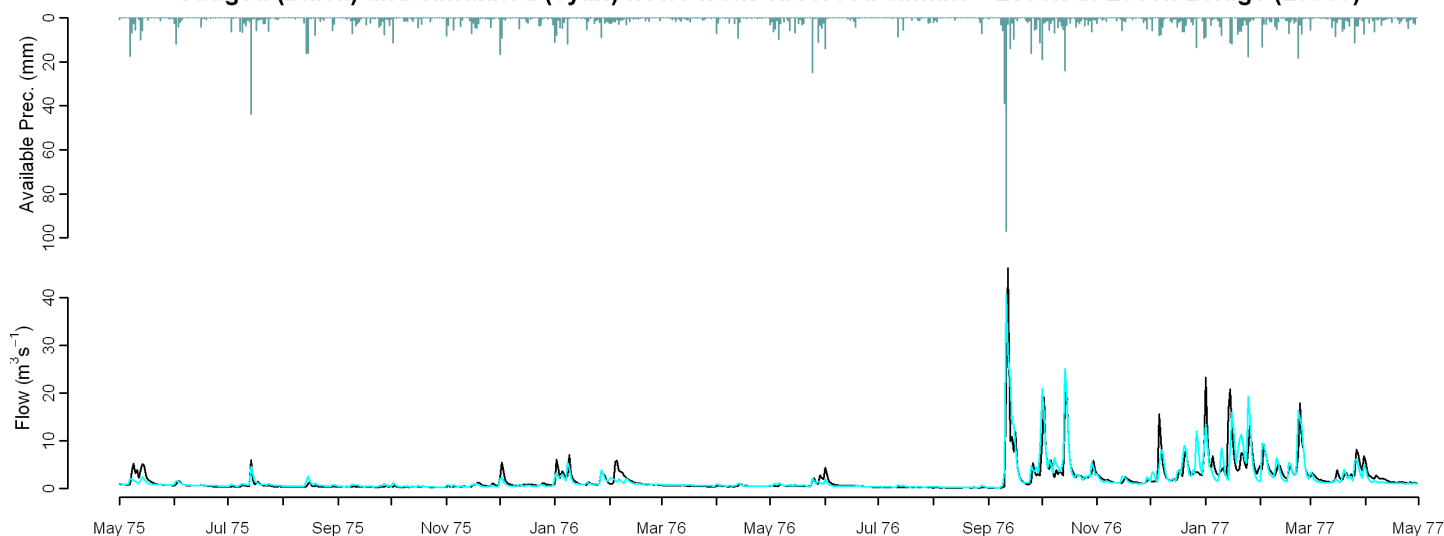
Observed Data

Comparison of gauged and simulated flow

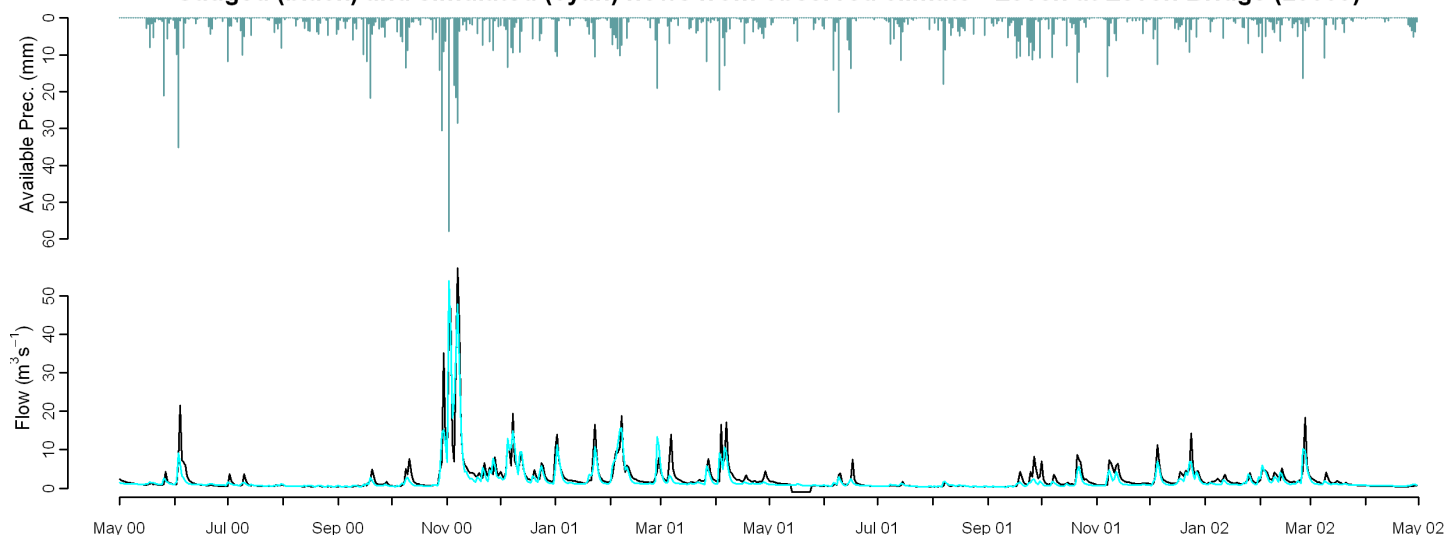
Model used: CERF

| | Mean Annual | J | F | M | A | M | J | J | A | S | O | N | D | Nash Sutcliffe |
|--------------------|-------------|-------|-------|-------|-------|-------|------|------|------|-----|-------|-------|-------|----------------|
| MORECS (1971-2005) | -11.0 | -8.0 | -9.1 | -20.8 | -22.7 | -12.9 | -2.4 | 15.7 | 0.6 | 9.3 | -19.2 | -17.8 | -12.8 | 0.72 |
| Performance Band | 2 | 2 | 2 | 2 | 3 | 2 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 1 |
| MORECS (1962-1991) | -13.9 | -10.1 | -10.4 | -23.2 | -23.7 | -21.3 | 6.5 | 12.4 | -4.1 | 2.4 | -19.3 | -20.2 | -17.2 | 0.67 |
| | Q90 | Q75 | Q50 | Q25 | Q5 | RP2 | RP5 | RP10 | RP20 | | | | | |
| MORECS (1971-2005) | 31.8 | 27.0 | 5.1 | -25.5 | -12.8 | | | | | | | | | |
| Performance Band | 1 | 1 | 2 | 2 | 2 | | | | | | | | | |
| MORECS (1962-1991) | 21.2 | 19.1 | -0.2 | -26.5 | -13.7 | | | | | | | | | |

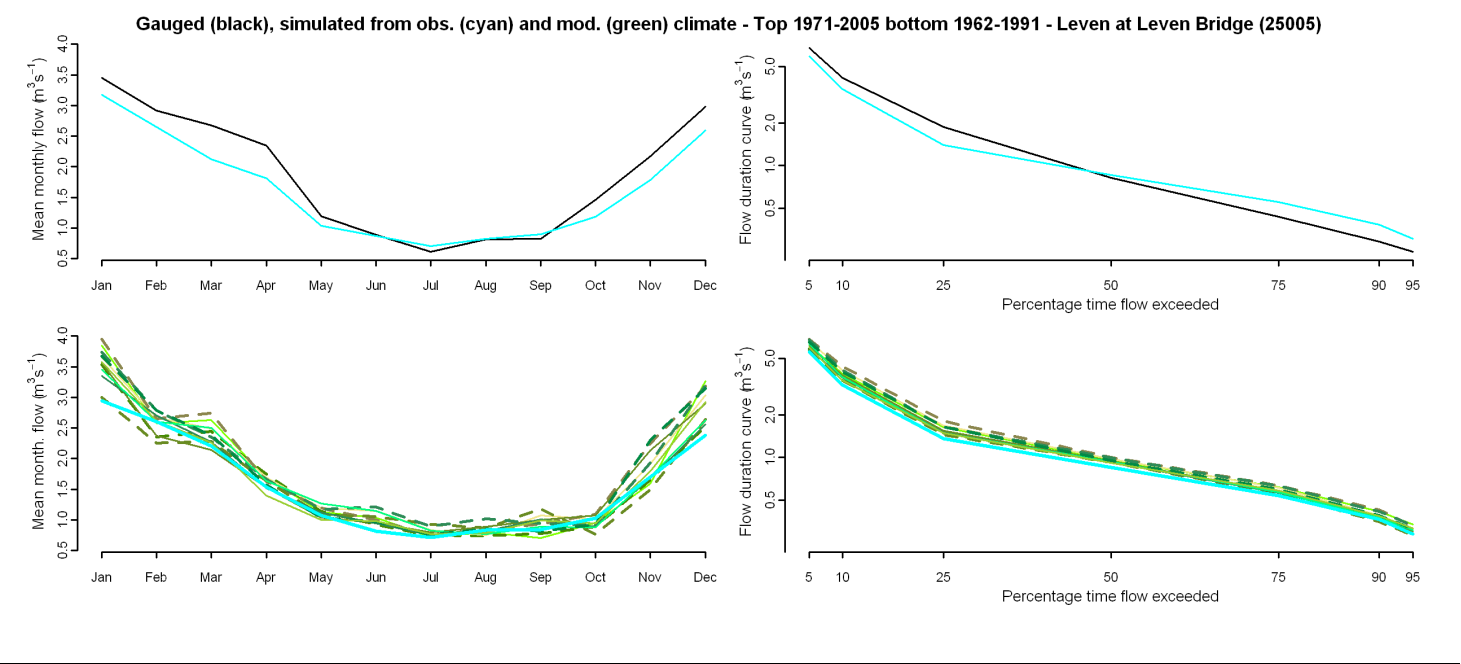
Gauged (black) and simulated (cyan) flows from observed climate - Leven at Leven Bridge (25005)



Gauged (black) and simulated (cyan) flows from observed climate - Leven at Leven Bridge (25005)



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 | 13 | 5 | 16 | 22 | 8 | 7 | 3 | 18 | 7 | 12 | 6 |
| January | 35 | 11 | 27 | 36 | 20 | 9 | 13 | 28 | 19 | 24 | 18 |
| April | 10 | -2 | 14 | 9 | 1 | 7 | -3 | 13 | 7 | 3 | -3 |
| July | 5 | 19 | 21 | 9 | 11 | 32 | 7 | 29 | 13 | 5 | 10 |
| October | -1 | -10 | -1 | 12 | 1 | -23 | -5 | -1 | -12 | -9 | -7 |
| Q90 | 15 | 5 | 6 | 22 | 0 | -4 | 4 | 15 | 3 | 5 | 7 |
| Q75 | 15 | 9 | 13 | 20 | 4 | 3 | 3 | 19 | 5 | 8 | 9 |
| Q50 | 14 | 11 | 16 | 20 | 9 | 9 | 8 | 19 | 9 | 11 | 8 |
| Q25 | 22 | 10 | 23 | 36 | 12 | 9 | 10 | 26 | 10 | 20 | 10 |
| Q5 | 12 | 4 | 18 | 25 | 7 | 4 | 3 | 27 | 11 | 17 | 5 |
| RP2 | 7 | -6 | 1 | 5 | -3 | 3 | -11 | 10 | 10 | 4 | 1 |
| RP10 | -4 | -12 | -12 | -16 | -12 | -3 | -14 | -13 | -10 | -18 | -4 |

Climate change graphs for 2050s

