

General Information

| | | | |
|----------------|------------|-----------------------------------|--------------|
| River Name | North Esk | Catchment Area (km ²) | 732 |
| Station Name | Logie Mill | SAAR (mm) 61-90 | 1074 |
| Station Number | 13007 | Mean Annual Rain (mm) 62-91 | 1113 |
| Grid Reference | NO699640 | Mean Annual PE (mm) 62-91 | 491 |
| EA Region | SEPA-NE | Observed flow record | 1976 to 2005 |



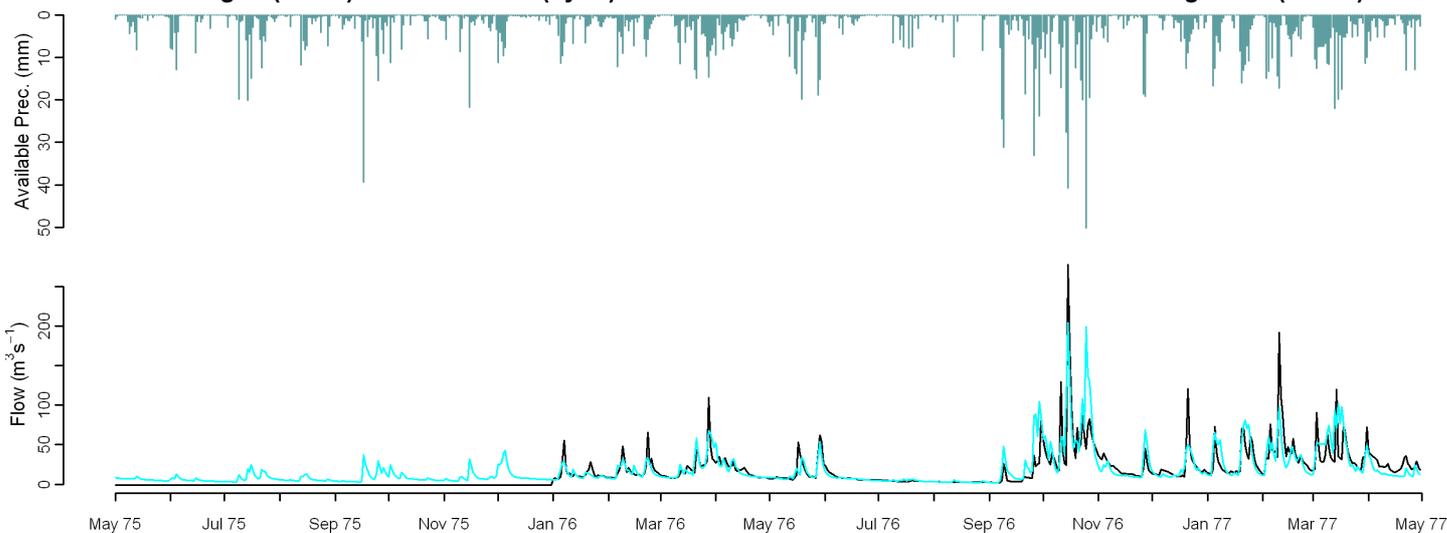
Observed Data

Comparison of gauged and simulated flow

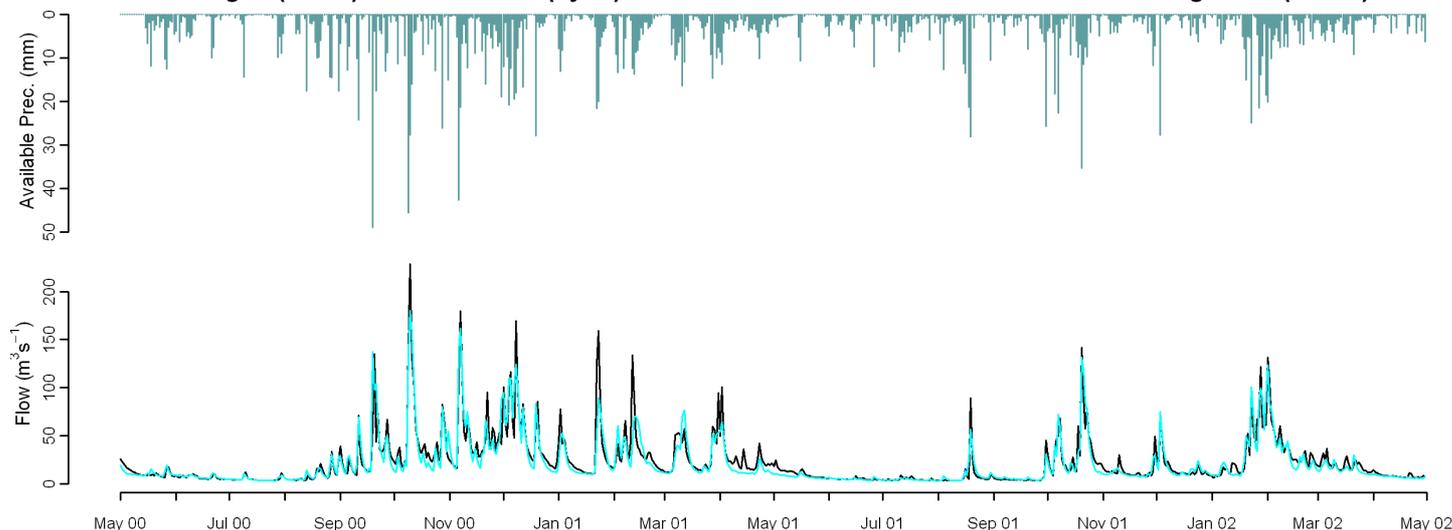
Model used: CERF

| | Mean Annual | J | F | M | A | M | J | J | A | S | O | N | D | Nash Sutcliffe |
|--------------------|-------------|------|-------|-------|-------|-------|------|-----|------|------|-----|------|------|----------------|
| MORECS (1971-2005) | -6.2 | -6.6 | -7.8 | -10.3 | -15.9 | -14.2 | -7.8 | 1.0 | -0.2 | 12.4 | 0.1 | -3.5 | -5.7 | 0.74 |
| Performance Band | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 |
| MORECS (1962-1991) | -5.1 | -3.8 | -4.9 | -7.4 | -20.4 | -13.9 | -4.8 | 0.2 | -2.0 | 16.2 | 3.0 | -1.7 | -4.0 | 0.67 |
| | Q90 | Q75 | Q50 | Q25 | Q5 | RP2 | | RP5 | | RP10 | | RP20 | | |
| MORECS (1971-2005) | 5.7 | 1.1 | -13.8 | -13.6 | 6.1 | | | | | | | | | |
| Performance Band | 1 | 1 | 1 | 1 | 1 | | | | | | | | | |
| MORECS (1962-1991) | 11.6 | 3.3 | -14.0 | -11.7 | 8.6 | | | | | | | | | |

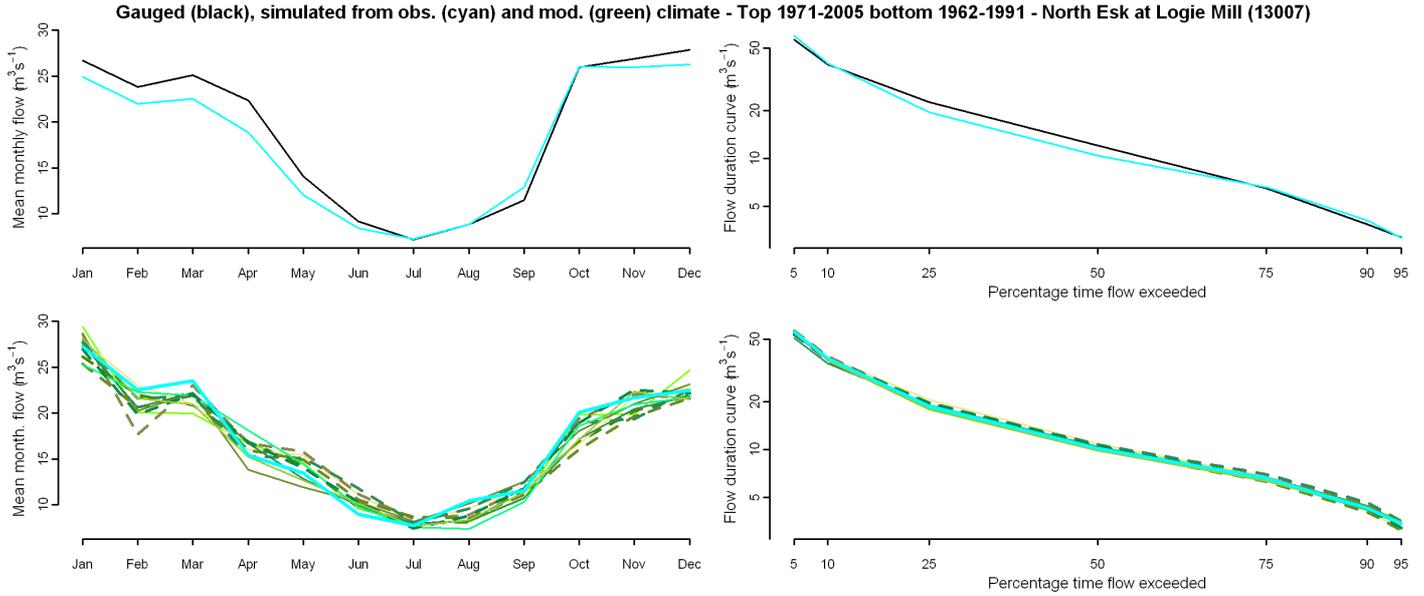
Gauged (black) and simulated (cyan) flows from observed climate - North Esk at Logie Mill (13007)



Gauged (black) and simulated (cyan) flows from observed climate - North Esk at Logie Mill (13007)



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 | -2 | 3 | 4 | -4 | -3 | -3 | 1 | -2 | 0 | -3 |
| January | 11 | -6 | 5 | 5 | 1 | -2 | -1 | 1 | -10 | 1 | 6 |
| April | 7 | 9 | 6 | 11 | -9 | 4 | 8 | 3 | 22 | 11 | -3 |
| July | 5 | 7 | 11 | 14 | 5 | -3 | 5 | 5 | -2 | -6 | -2 |
| October | 0 | -13 | -17 | 2 | -11 | -14 | -8 | -11 | -2 | -5 | -7 |
| Q90 | 2 | -3 | -4 | 7 | -3 | -7 | -4 | 5 | -4 | -5 | 0 |
| Q75 | 2 | -3 | 4 | 8 | -2 | -6 | -3 | 5 | -4 | -1 | -5 |
| Q50 | 3 | -2 | 7 | 5 | -2 | -1 | 3 | 5 | -2 | 3 | -4 |
| Q25 | 0 | -1 | 8 | 5 | -6 | -2 | 1 | 4 | -4 | 4 | -6 |
| Q5 | 0 | -4 | -3 | 2 | -4 | -3 | -6 | -3 | 0 | -3 | 0 |
| RP2 | -1 | 2 | -5 | -5 | 4 | -2 | 3 | 2 | 3 | -3 | 6 |
| RP10 | -12 | -11 | -15 | -15 | 0 | -15 | 4 | -11 | -6 | -6 | -5 |

Climate change graphs for 2050s

