Catchment Fact Sheet　　10002　　Future Flows and Groundwater Levels

General Information

| River Name	Ugie	Catchment Area (km2)	325
Station Name	Inverugie	SAAR (mm) 61-90	812
Station Number	10002	Mean Annual Rain (mm) 62-91	829
Grid Reference	NK101485	Mean Annual PE (mm) 62-91	573
EA Region	SEPA-NE	Observed flow record	1971 to 2005
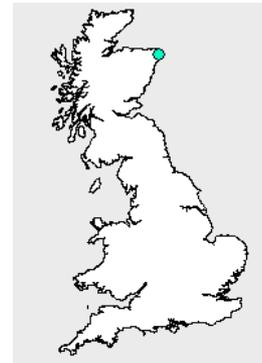
## Observed Data　　Comparison of gauged and simulated flow　　Model used: PDM

	Mean Annual	J	F	M	A	M	J	J	A	S	O	N	D	Nash Sutcliffe
MORECS (1971-2005)	-6.2	-11.0	-13.7	-16.4	-16.8	-15.6	4.5	10.1	20.4	27.5	4.2	-3.3	-11.5	0.28
Performance Band	1	2	2	2	2	2	1	2	2	2	1	1	2	3
FAO (1962-1991)	-0.8	-10.9	-11.7	-8.6	-9.4	-10.6	12.0	26.4	41.0	48.9	11.5	1.7	-9.9	0.24

|	Q90	Q75	Q50	Q25	Q5	RP2	RP5	RP10	RP20
MORECS (1971-2005)	-4.3	-9.6	-16.8	-13.6	9.1	-1.3	-5.9	-3.6	1.1
Performance Band	1	1	2	1	1				
FAO (1962-1991)	4.9	0.6	-10.2	-7.3	14.2	-1.5	-6.7	-3.9	1.5

Gauged (black) and simulated (cyan) flows from observed climate - Ugie at Inverugie (10002)
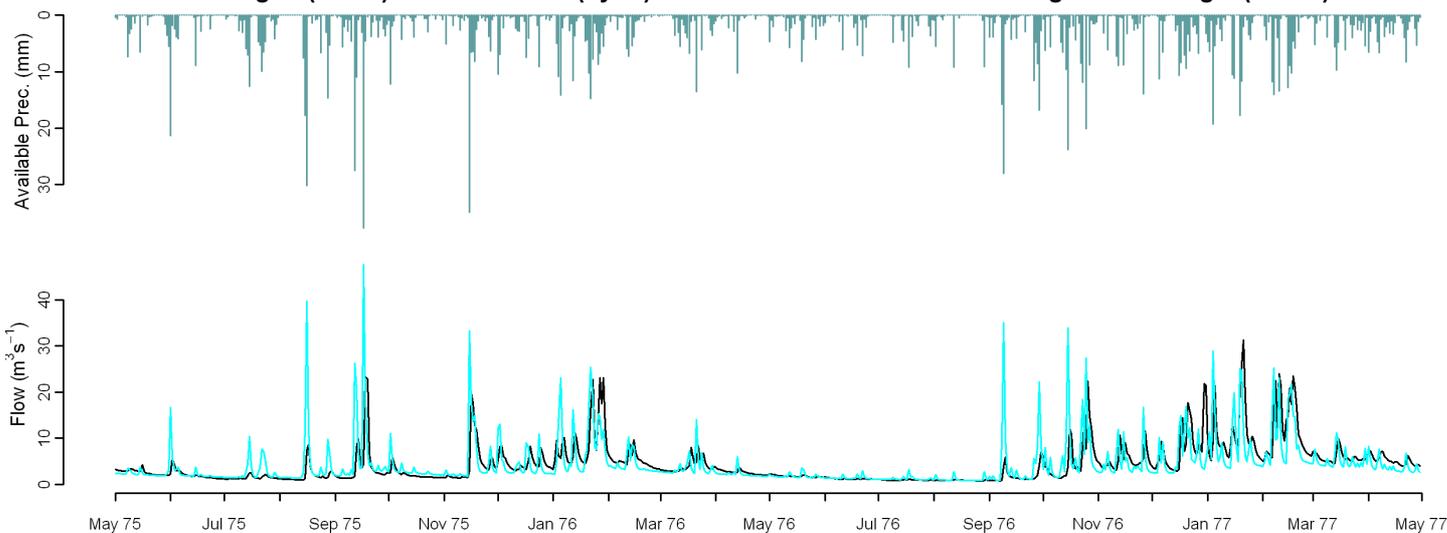
Gauged (black) and simulated (cyan) flows from observed climate - Ugie at Inverugie (10002)
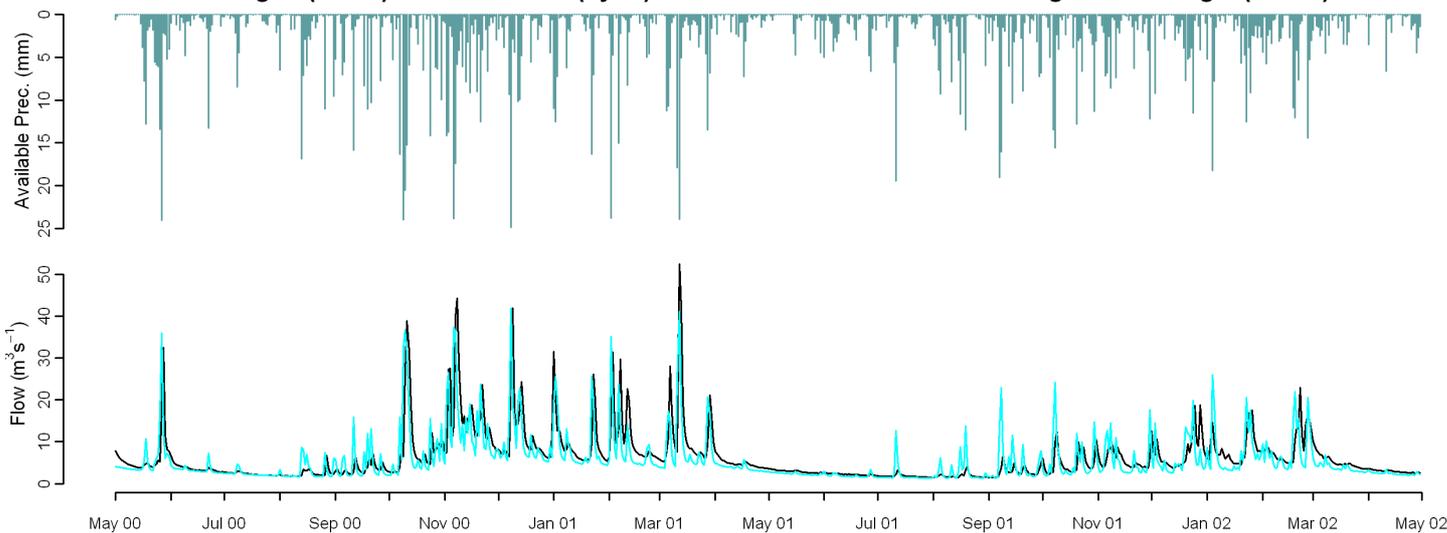
Comparison of gauged and simulated flow (observed and modelled climate)

Gauged (black), simulated from obs. (cyan) and mod. (green) climate - Top 1971-2005 bottom 1962-1991 - Ugie at Inverugie (10002)
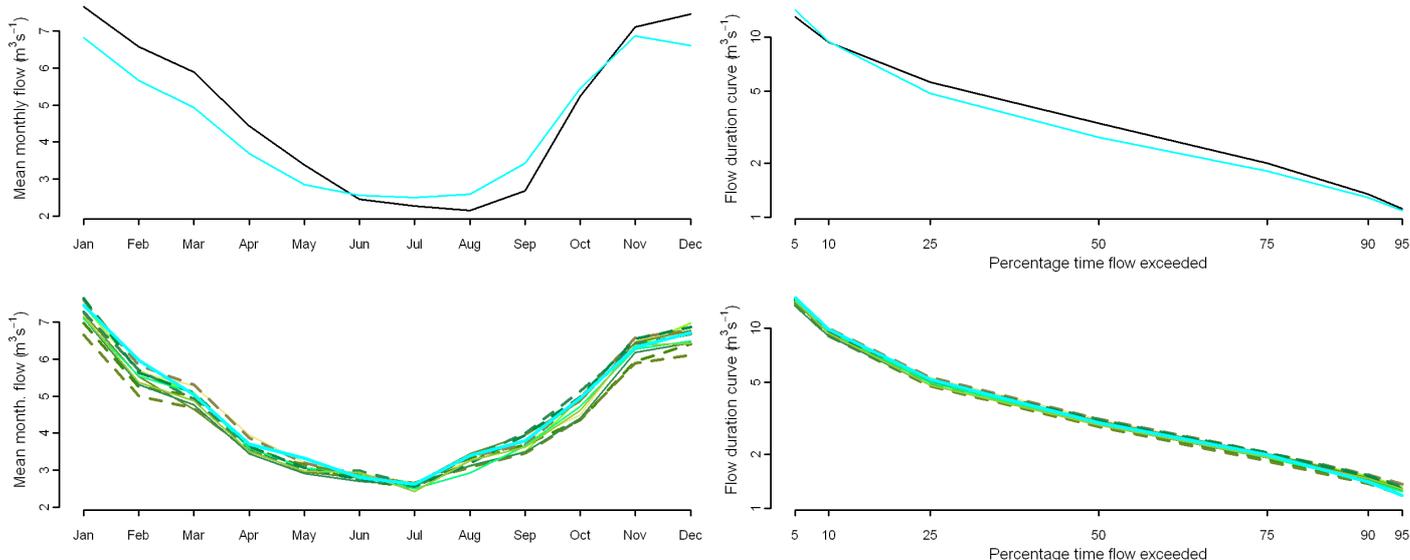
Percentage difference between flow simulated from observed climate and Future Flows Climate

	afgcx	afixa	afixc	afixh	afixi	afixj	afixk	afixl	afixm	afixo	afixq
Annual	-1	-5	0	2	-4	-9	-6	-1	-5	-1	-5
January	1	-6	4	4	-3	-8	-4	-2	-5	4	-5
April	-2	-2	3	4	-9	-8	-7	-2	-6	-2	-8
July	1	-5	1	-2	-2	-7	-1	-4	-5	-3	-9
October	1	-11	-7	3	-5	-12	-11	-1	-8	0	-5
Q90	8	-2	2	9	3	-4	3	7	1	6	4
Q75	2	-5	1	3	-1	-8	-3	1	-4	2	-3
Q50	3	-3	5	6	1	-6	-2	4	-2	2	-3
Q25	-1	-5	3	5	-5	-9	-6	-2	-5	1	-7
Q5	-1	-5	-3	-2	-8	-9	-9	-4	-6	-2	-4
RP2	-6	-7	1	2	-3	-6	-6	-3	-8	-7	-6
RP10	-11	-13	-3	-3	-2	-7	-4	-8	-4	-10	-6

Climate change graphs for 2050s

Change between future (2040-2069) and control (1961-1990) simulated flow (green) - Ugie at Inverugie (10002)