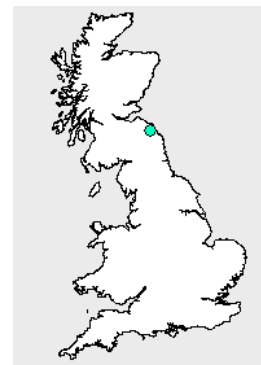


## General Information

River Name	Tweed	Catchment Area (km2)	4390
Station Name	Norham	SAAR (mm) 61-90	955
Station Number	21009	Mean Annual Rain (mm) 62-91	970
Grid Reference	NT898477	Mean Annual PE (mm) 62-91	487
EA Region	SEPA-SE	Observed flow record	1962 to 2006



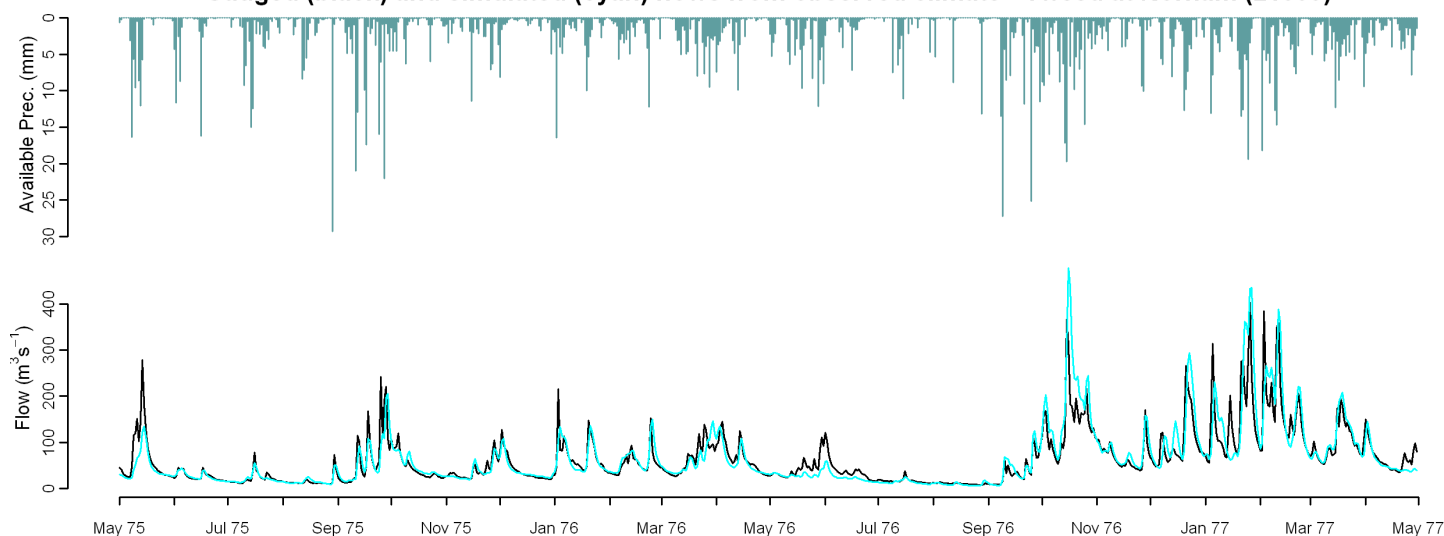
## Observed Data

## Comparison of gauged and simulated flow

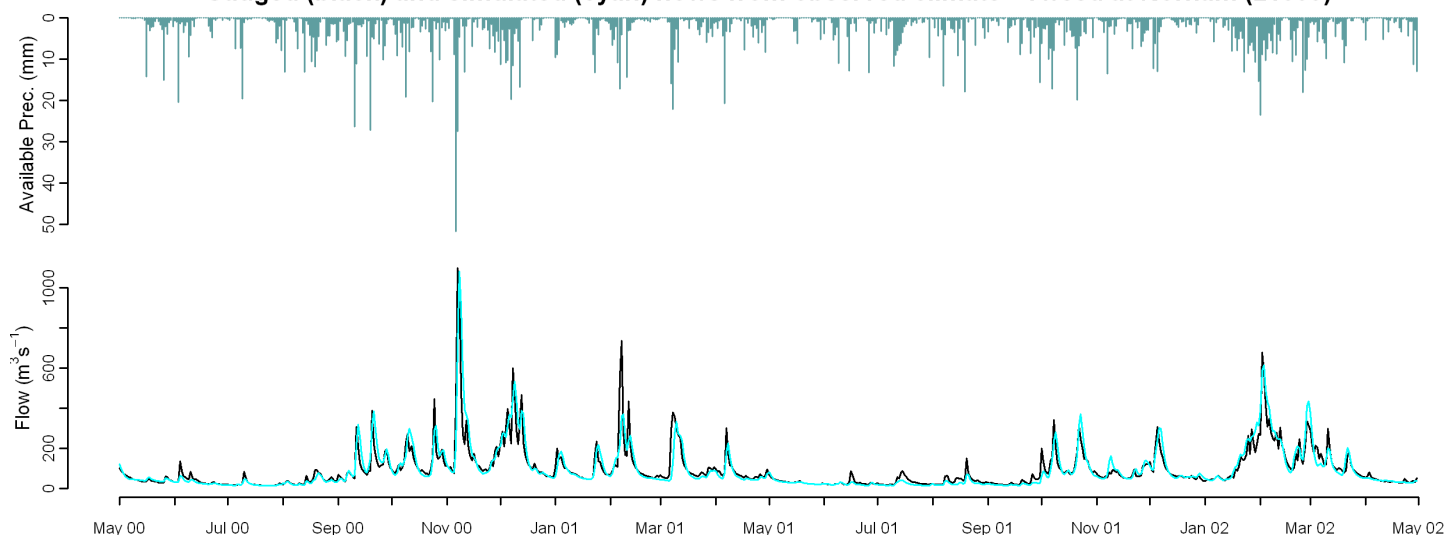
## Model used: CERF

	Mean Annual	J	F	M	A	M	J	J	A	S	O	N	D	Nash Sutcliffe
MORECS (1971-2005)	0.1	3.7	2.8	-2.9	-4.8	-18.5	-17.5	-13.9	-9.3	-7.2	3.5	10.4	8.7	0.73
Performance Band	1	1	1	1	1	2	2	2	2	1	1	1	1	1
MORECS (1962-1991)	-2.2	3.4	1.9	-3.6	-8.3	-19.8	-18.3	-15.9	-7.1	-7.4	-0.9	7.5	3.4	0.68
	Q90	Q75	Q50	Q25	Q5	RP2	RP5	RP10	RP20					
MORECS (1971-2005)	-13.8	-10.9	-9.6	-3.8	13.2									
Performance Band	1	1	1	1	1									
MORECS (1962-1991)	-11.4	-9.5	-11.4	-6.8	10.2									

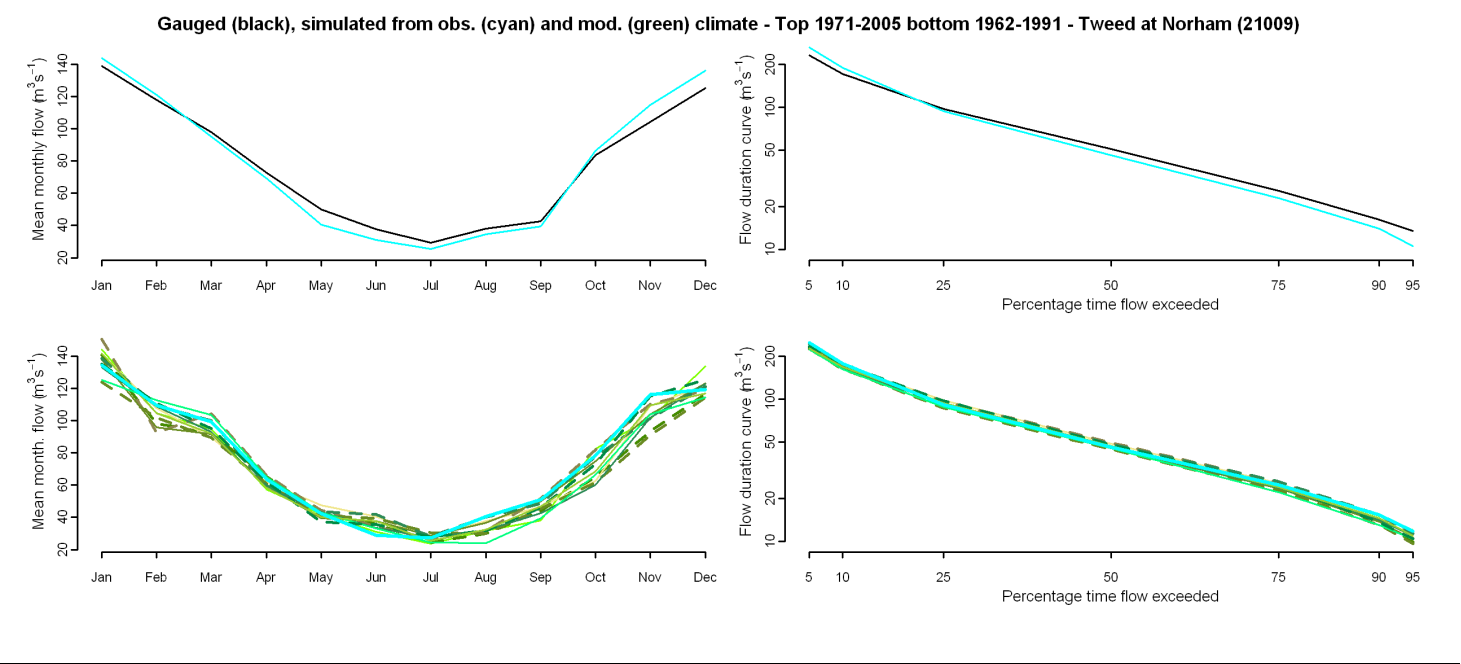
Gauged (black) and simulated (cyan) flows from observed climate - Tweed at Norham (21009)



Gauged (black) and simulated (cyan) flows from observed climate - Tweed at Norham (21009)



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	-4	1	4	-3	-6	-5	2	-5	0	-4
January	8	2	6	11	3	-4	-4	5	-6	-1	8
April	-8	-5	2	11	-6	-3	-5	2	3	1	-6
July	-10	0	5	-1	4	1	3	3	-11	2	-6
October	6	-15	-21	8	-7	-21	-12	-5	-16	-6	-10
Q90	1	-8	-6	-1	-15	-16	-9	0	-15	-14	-5
Q75	-1	-3	1	5	-9	-11	-5	6	-13	-1	-4
Q50	0	-2	5	8	-3	-4	0	6	-2	3	1
Q25	2	-2	7	6	-1	-3	2	7	-3	6	1
Q5	-6	-10	-8	0	-6	-8	-9	-1	-10	-7	-10
RP2	-3	2	0	1	6	-4	-4	0	0	0	-2
RP10	-11	1	-7	-11	10	-9	-13	1	1	-5	3

Climate change graphs for 2050s

