

## General Information

River Name	Derwent	Catchment Area (km <sup>2</sup> )	1586
Station Name	Buttercrambe	SAAR (mm) 61-90	765
Station Number	27041	Mean Annual Rain (mm) 62-91	763
Grid Reference	SE731587	Mean Annual PE (mm) 62-91	548
EA Region	EA-NE	Observed flow record	1973 to 2005



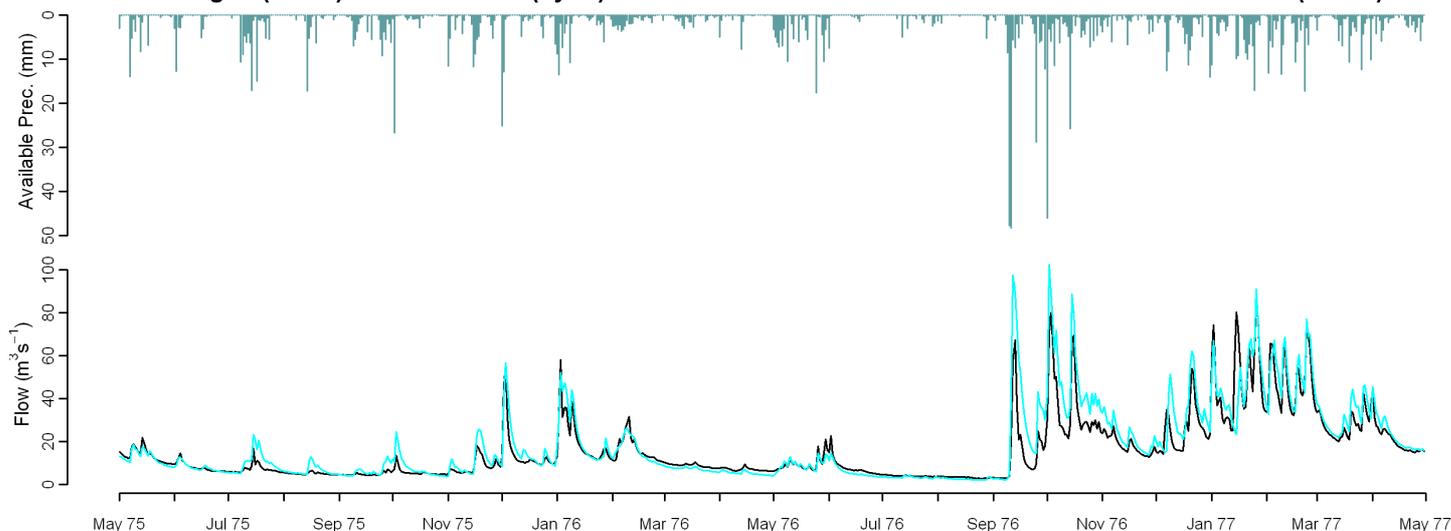
## Observed Data

## Comparison of gauged and simulated flow

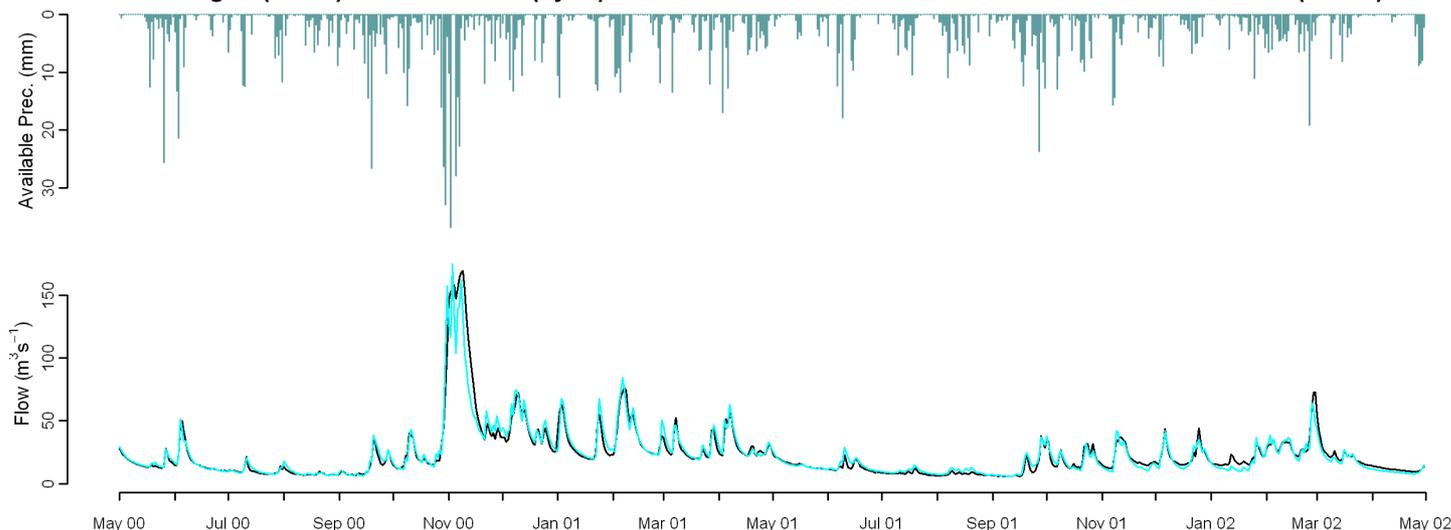
## Model used: CLASSIC

	Mean Annual	J	F	M	A	M	J	J	A	S	O	N	D	Nash Sutcliffe
MORECS (1971-2005)	5.4	0.5	3.0	0.8	0.3	-0.4	6.6	17.6	18.2	20.3	13.1	7.7	6.3	0.90
Performance Band	1	1	1	1	1	1	1	2	2	2	2	1	1	1
FAO (1962-1991)	13.4	6.6	7.0	6.9	7.2	8.4	15.8	24.8	24.0	33.2	26.7	27.6	13.3	0.86
	Q90	Q75	Q50	Q25	Q5	RP2	RP5	RP10	RP20					
MORECS (1971-2005)	3.8	5.6	3.6	7.5	2.8	2.0	-0.2	-2.6	-5.2					
Performance Band	1	1	1	1	1									
FAO (1962-1991)	8.8	11.9	13.3	15.3	7.9	4.0	0.9	-1.0	-2.6					

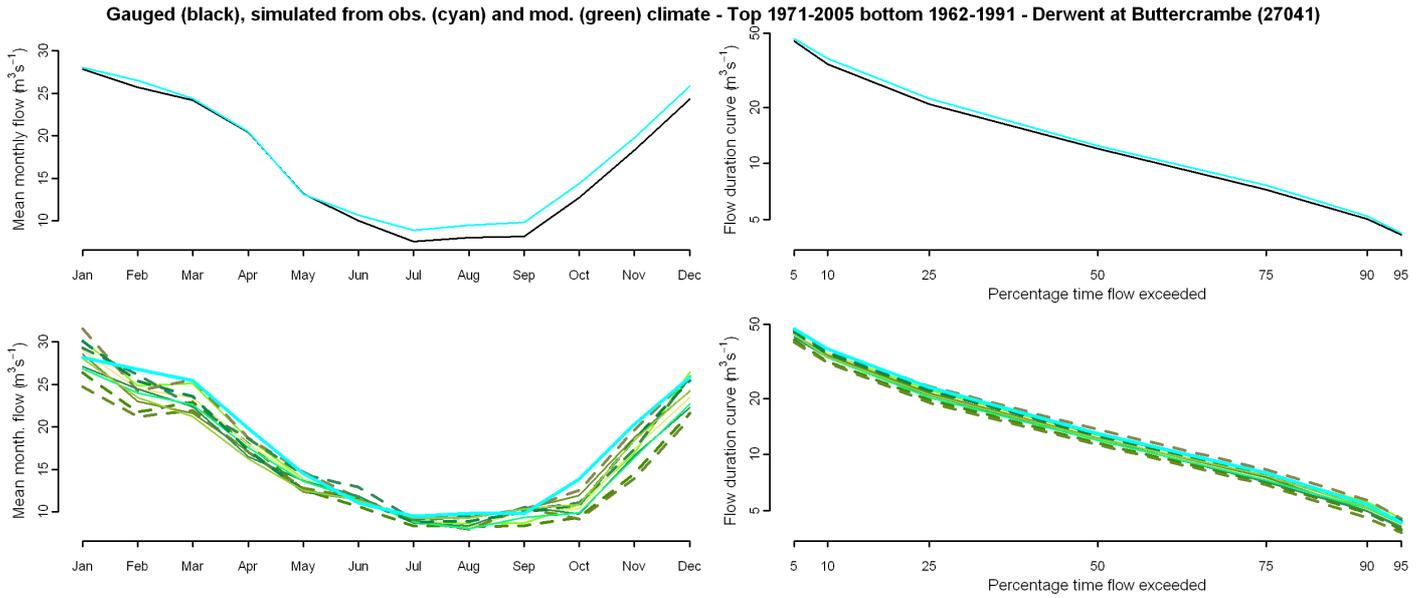
Gauged (black) and simulated (cyan) flows from observed climate - Derwent at Buttercrambe (27041)



Gauged (black) and simulated (cyan) flows from observed climate - Derwent at Buttercrambe (27041)



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	-2	-13	-6	3	-7	-13	-10	0	-9	-5	-7
January	11	-8	4	13	3	-9	-3	3	-2	8	0
April	-5	-17	-6	-2	-11	-12	-17	-2	-11	-13	-13
July	-4	-2	-2	0	-2	-5	-8	0	-6	-8	-2
October	-15	-29	-25	-5	-15	-30	-23	-13	-26	-21	-20
Q90	5	-10	-7	10	-8	-15	-9	-2	-5	-5	-4
Q75	1	-11	-8	7	-7	-13	-12	-1	-9	-6	-4
Q50	0	-11	-6	8	-7	-12	-8	2	-9	-4	-7
Q25	-3	-15	-7	4	-8	-15	-11	-1	-12	-5	-10
Q5	-6	-14	-4	-2	-8	-13	-11	1	-8	-5	-9
RP2	0	-8	-2	-2	1	-4	-9	1	2	-4	7
RP10	5	-3	-2	-5	6	2	2	-1	-1	0	13

Climate change graphs for 2050s

