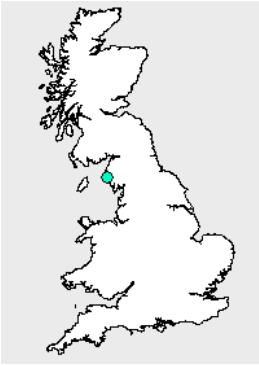


General Information

River Name	Calder	Catchment Area (km2)	45
Station Name	Calder Hall	SAAR (mm) 61-90	1844
Station Number	74006	Mean Annual Rain (mm) 62-91	1839
Grid Reference	NY035045	Mean Annual PE (mm) 62-91	489
EA Region	EA-NW	Observed flow record	1964 to 2005



Observed Data

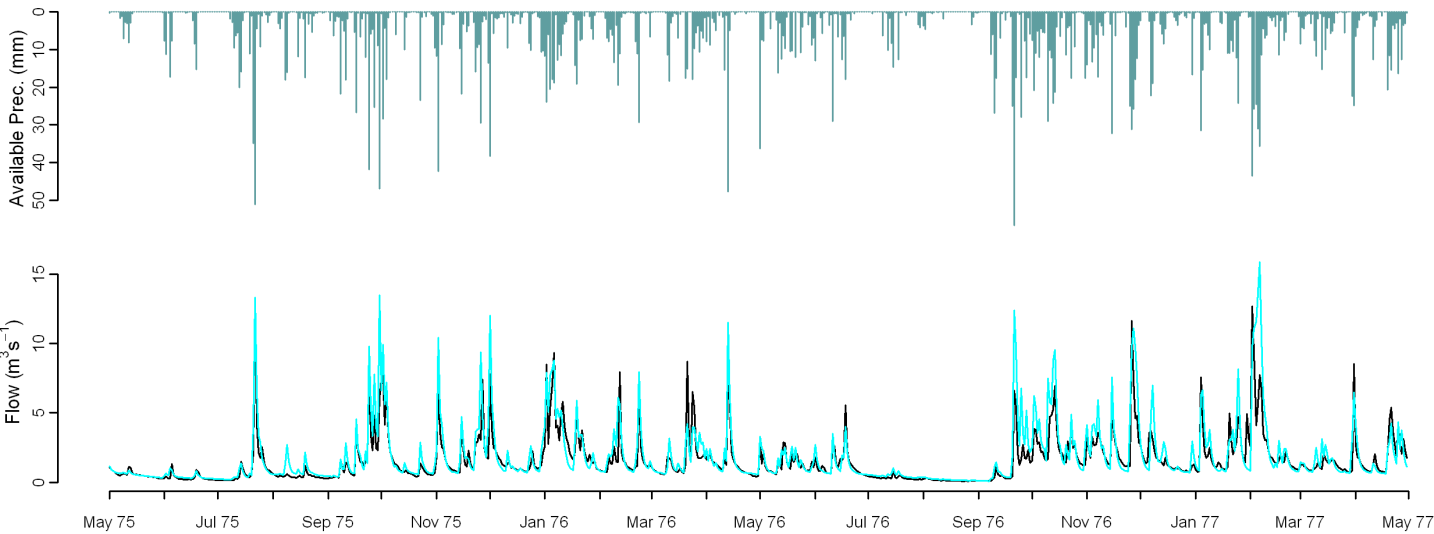
Comparison of gauged and simulated flow

Model used: CERF

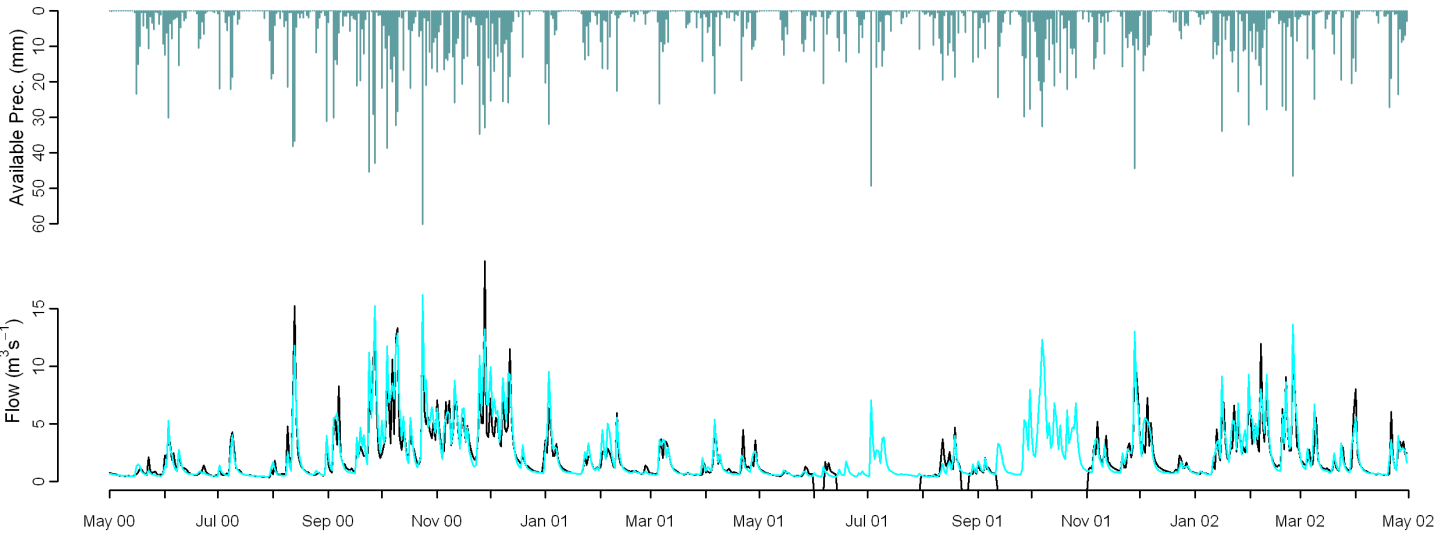
	Mean Annual	J	F	M	A	M	J	J	A	S	O	N	D	Nash Sutcliffe
MORECS (1971-2005)	10.5	15.5	13.9	8.6	-0.5	-5.9	-9.9	-7.0	2.0	12.2	18.7	18.1	15.7	0.71
Performance Band	1	2	1	2	1	1	1	1	1	1	2	2	2	2
MORECS (1962-1991)	10.1	18.8	17.1	14.1	-3.1	-2.0	-3.0	-6.1	3.0	11.0	17.4	14.5	17.1	0.51

	Q90	Q75	Q50	Q25	Q5	RP2	RP5	RP10	RP20
MORECS (1971-2005)	3.6	0.1	-8.6	11.6	16.6				
Performance Band	1	1	2	2	1				
MORECS (1962-1991)	2.4	-6.7	-9.5	13.5	14.3				

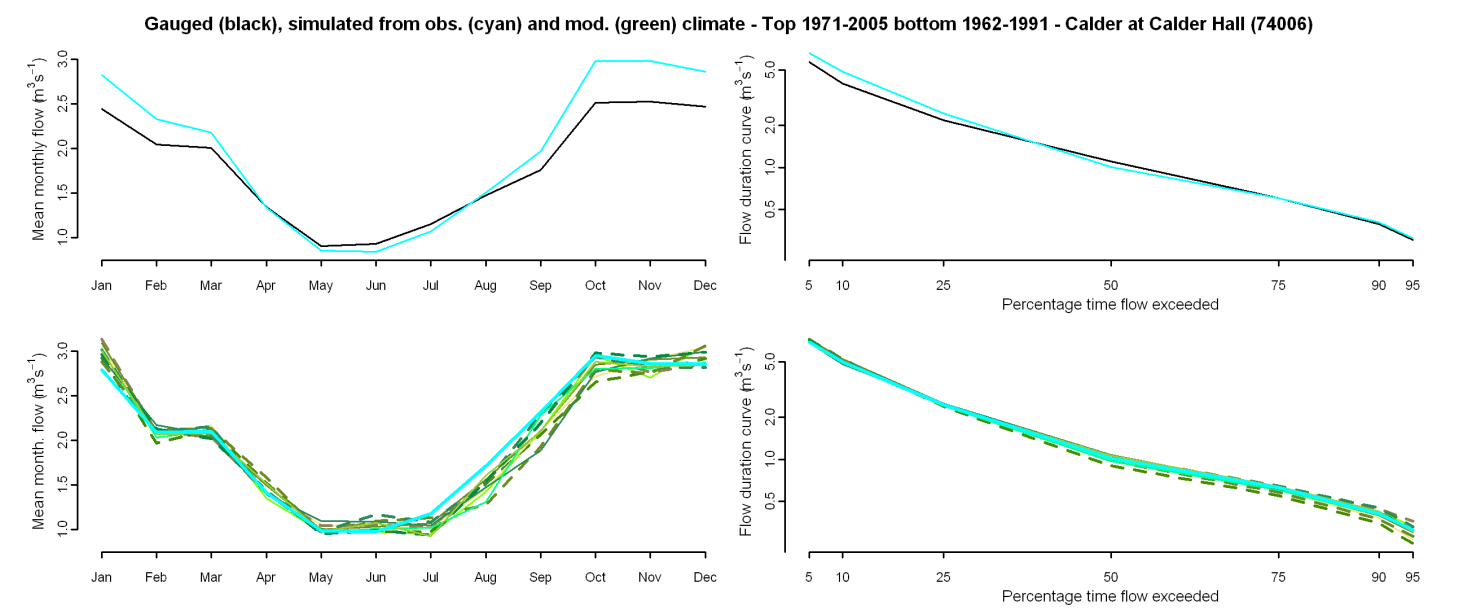
Gauged (black) and simulated (cyan) flows from observed climate - Calder at Calder Hall (74006)



Gauged (black) and simulated (cyan) flows from observed climate - Calder at Calder Hall (74006)



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	1	3	1	0	-1	2	-1	0	0
January	9	7	10	10	11	8	3	9	8	2	13
April	-4	4	-1	5	5	10	1	0	-6	2	3
July	-18	-13	-8	-7	-9	-6	-12	-7	-15	-21	-23
October	2	-2	-10	4	-4	-3	3	-2	-3	3	-1
Q90	3	-15	-9	9	-6	-10	-2	8	-2	-1	4
Q75	-2	-11	-5	2	-4	-7	-1	3	-3	-2	2
Q50	0	-11	-4	1	-2	-4	5	4	-4	2	5
Q25	-1	-2	1	1	1	2	2	3	-1	0	1
Q5	1	5	3	5	5	2	0	4	3	2	1
RP2	-3	-4	-2	0	-4	-5	-6	-4	0	3	-4
RP10	-16	-19	-18	-17	-11	-19	-21	-18	-21	-12	-20

Climate change graphs for 2050s

