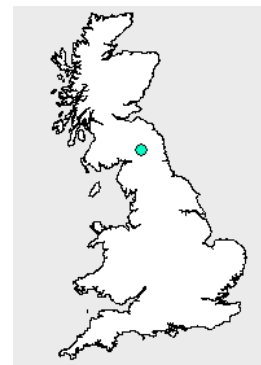


General Information

River Name	Kielder Burn	Catchment Area (km2)	59
Station Name	Kielder	SAAR (mm) 61-90	1199
Station Number	23011	Mean Annual Rain (mm) 62-91	1207
Grid Reference	NY644946	Mean Annual PE (mm) 62-91	488
EA Region	EA-NE	Observed flow record	1970 to 2005



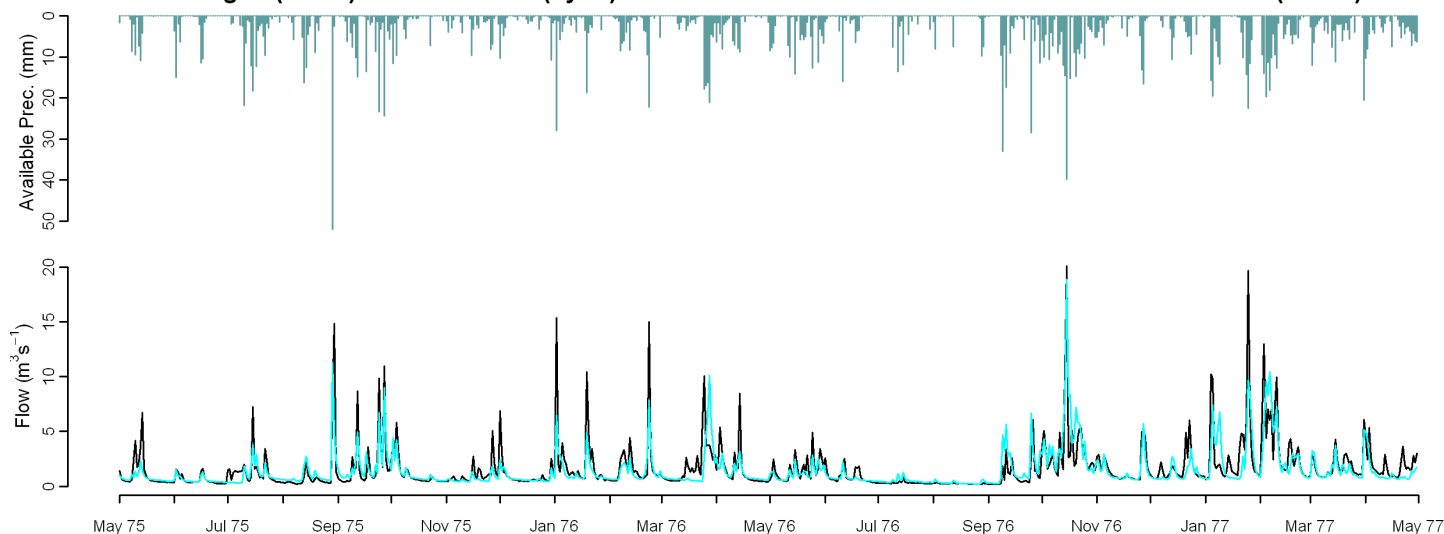
Observed Data

Comparison of gauged and simulated flow

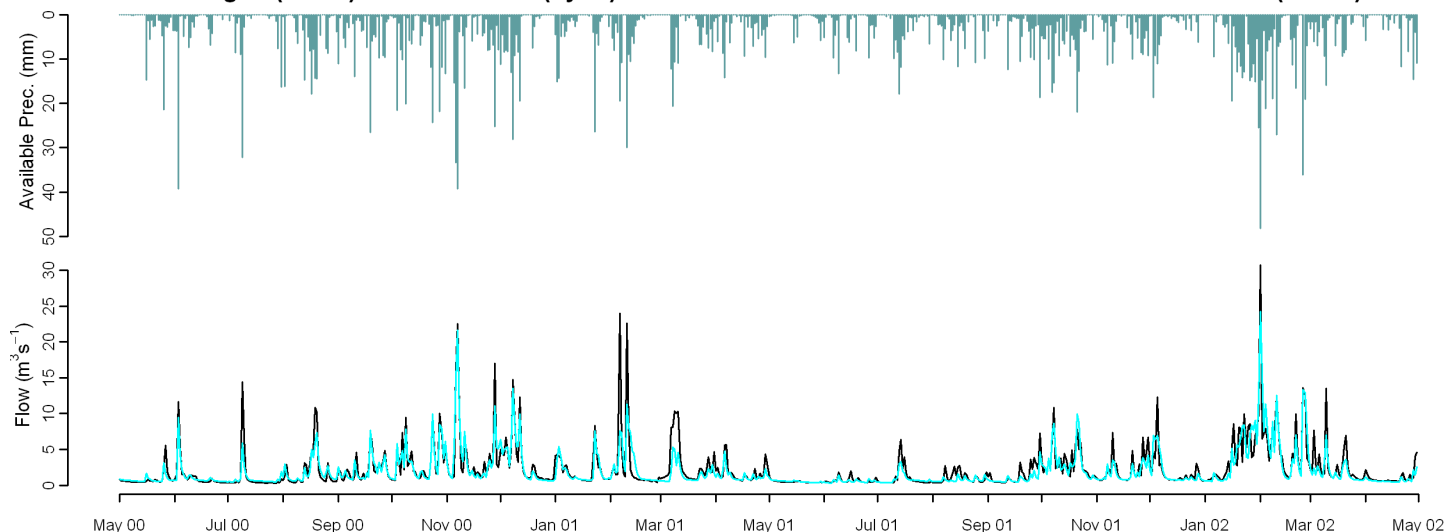
Model used: CERF

	Mean Annual	J	F	M	A	M	J	J	A	S	O	N	D	Nash Sutcliffe
MORECS (1971-2005)	-10.2	-12.9	-7.3	-18.2	-17.3	-18.5	-13.8	-7.2	-6.0	-5.0	-2.0	-7.4	-8.0	0.67
Performance Band	2	2	2	2	2	2	2	1	2	1	2	1	1	1
MORECS (1962-1991)	-12.1	-17.0	-11.8	-16.9	-20.3	-21.5	-15.4	-5.0	-3.4	-3.5	-5.6	-7.6	-9.3	0.65
	Q90	Q75	Q50	Q25	Q5	RP2	RP5	RP10	RP20					
MORECS (1971-2005)	18.7	13.0	-12.7	-13.1	-10.8									
Performance Band	1	1	1	1	1									
MORECS (1962-1991)	19.4	14.7	-11.5	-14.5	-15.4									

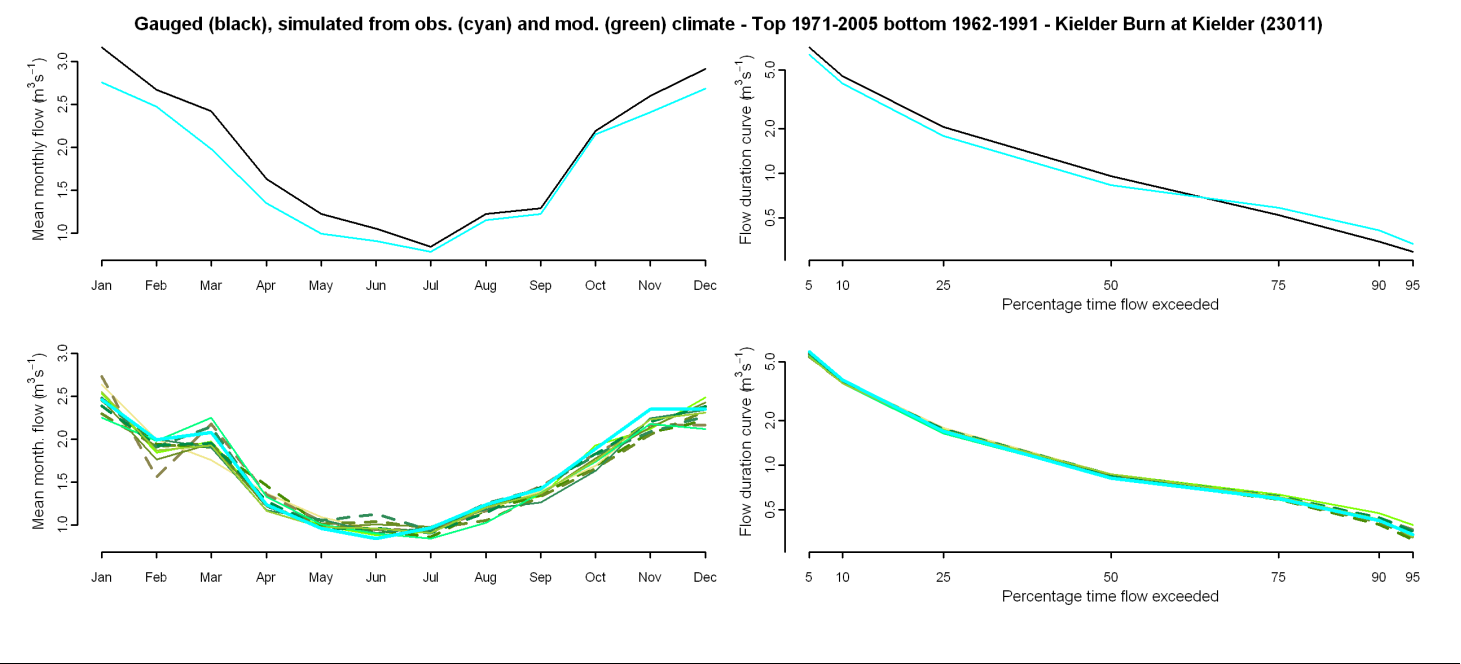
Gauged (black) and simulated (cyan) flows from observed climate - Kielder Burn at Kielder (23011)



Gauged (black) and simulated (cyan) flows from observed climate - Kielder Burn at Kielder (23011)



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

Climate change graphs for 2050s

