

## General Information

River Name	Duddon	Catchment Area (km2)	86
Station Name	Duddon Hall	SAAR (mm) 61-90	2268
Station Number	74001	Mean Annual Rain (mm) 62-91	2294
Grid Reference	SD196896	Mean Annual PE (mm) 62-91	489
EA Region	EA-NW	Observed flow record	1968 to 2005



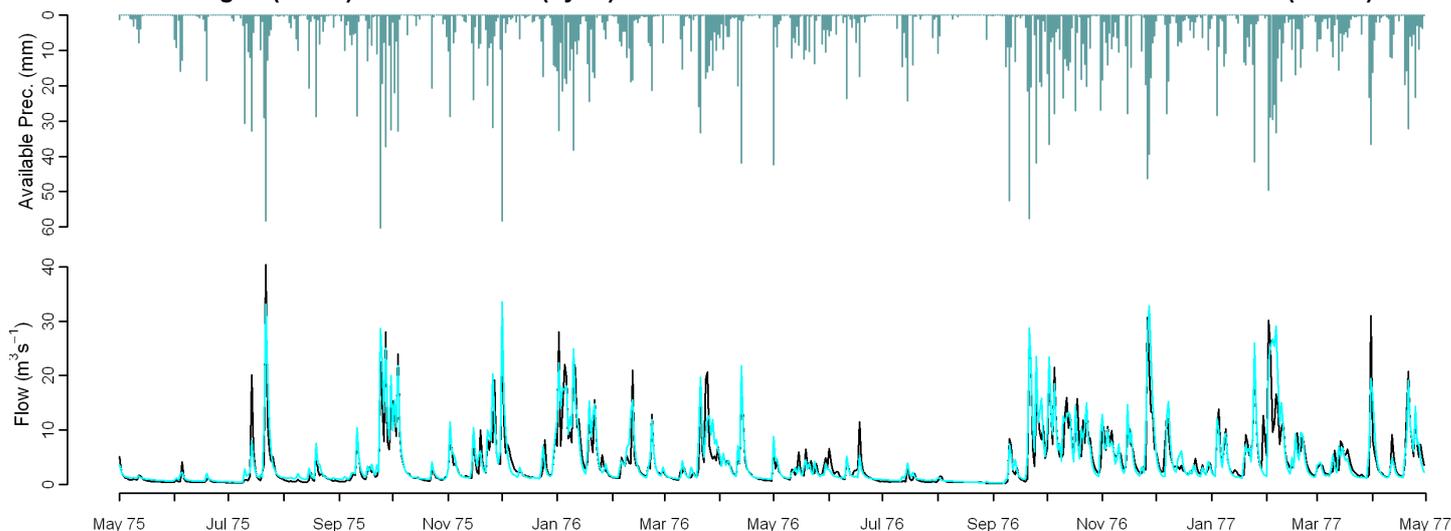
## Observed Data

## Comparison of gauged and simulated flow

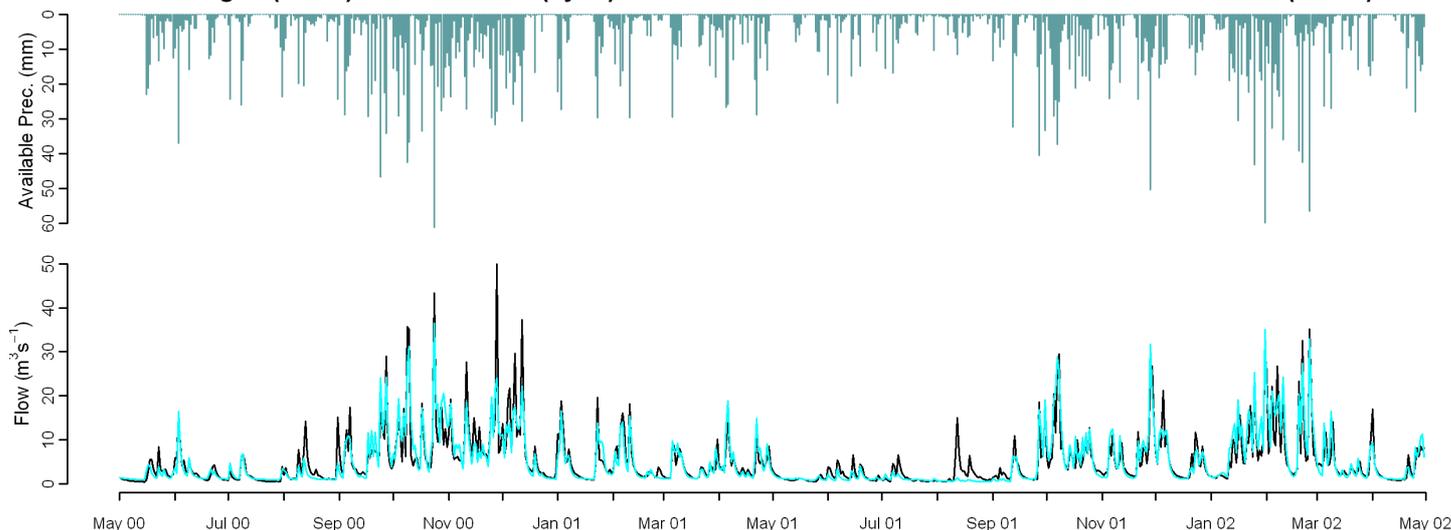
## Model used: CERF

	Mean Annual	J	F	M	A	M	J	J	A	S	O	N	D	Nash Sutcliffe
MORECS (1971-2005)	3.4	6.1	7.6	5.3	-0.3	-7.2	-8.9	-5.1	-3.4	3.5	6.0	8.1	6.3	0.80
Performance Band	1	1	1	1	1	2	2	1	1	1	1	1	1	1
MORECS (1962-1991)	3.5	4.1	8.2	7.3	2.7	-7.1	-10.6	-4.3	-1.0	3.3	2.1	9.5	5.9	0.81
	Q90	Q75	Q50	Q25	Q5	RP2		RP5		RP10		RP20		
MORECS (1971-2005)	41.1	7.0	-10.9	11.7	8.9									
Performance Band	1	1	2	1	1									
MORECS (1962-1991)	44.5	9.9	-9.1	8.1	7.0									

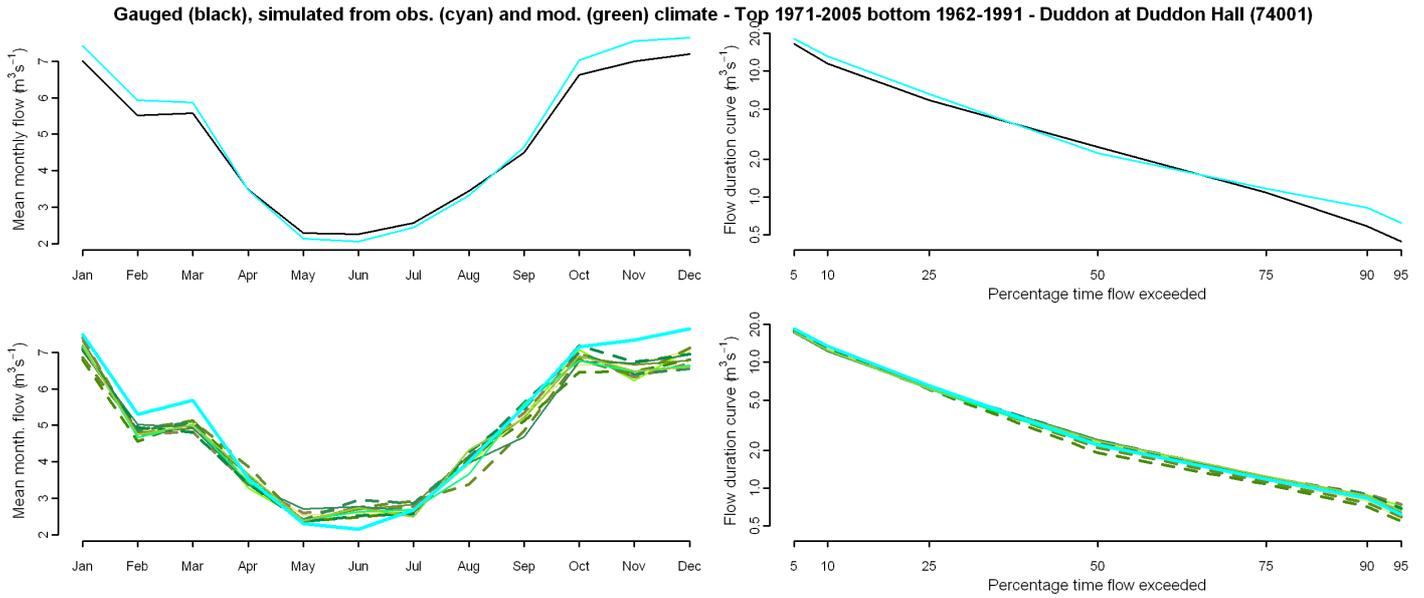
Gauged (black) and simulated (cyan) flows from observed climate - Duddon at Duddon Hall (74001)



Gauged (black) and simulated (cyan) flows from observed climate - Duddon at Duddon Hall (74001)



## 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
<b>Annual</b>	-4	-5	-3	-1	-3	-4	-5	-2	-4	-3	-3
<b>January</b>	-4	-7	-2	-3	-2	-4	-8	-3	-4	-9	0
<b>April</b>	-8	1	-4	1	1	6	-3	-4	-9	-4	-1
<b>July</b>	2	4	5	10	6	8	-1	8	-1	-5	-7
<b>October</b>	1	-1	-9	2	-5	-2	3	-4	-3	3	-3
<b>Q90</b>	7	-14	-6	11	-2	-9	-1	6	3	4	6
<b>Q75</b>	2	-9	-2	4	-2	-5	1	3	0	1	5
<b>Q50</b>	4	-12	-2	4	-1	-6	9	6	-1	6	8
<b>Q25</b>	-5	-6	-4	-4	-5	-2	-4	-4	-5	-4	-5
<b>Q5</b>	-6	-3	-3	-3	-2	-4	-6	-3	-5	-6	-6
<b>RP2</b>	-3	-3	-1	3	-1	-4	-4	-1	0	3	-5
<b>RP10</b>	-4	-10	-9	1	-4	-3	-10	-7	-8	-2	-9

## Climate change graphs for 2050s

