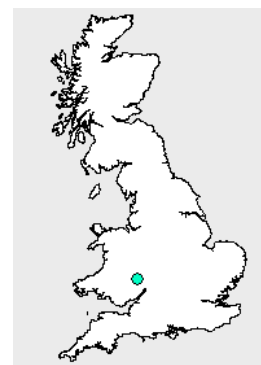


## General Information

River Name	Lugg	Catchment Area (km2)	886
Station Name	Lugwardine	SAAR (mm) 61-90	812
Station Number	55003	Mean Annual Rain (mm) 62-91	823
Grid Reference	SO548405	Mean Annual PE (mm) 62-91	563
EA Region	EA-M	Observed flow record	1962 to 2005



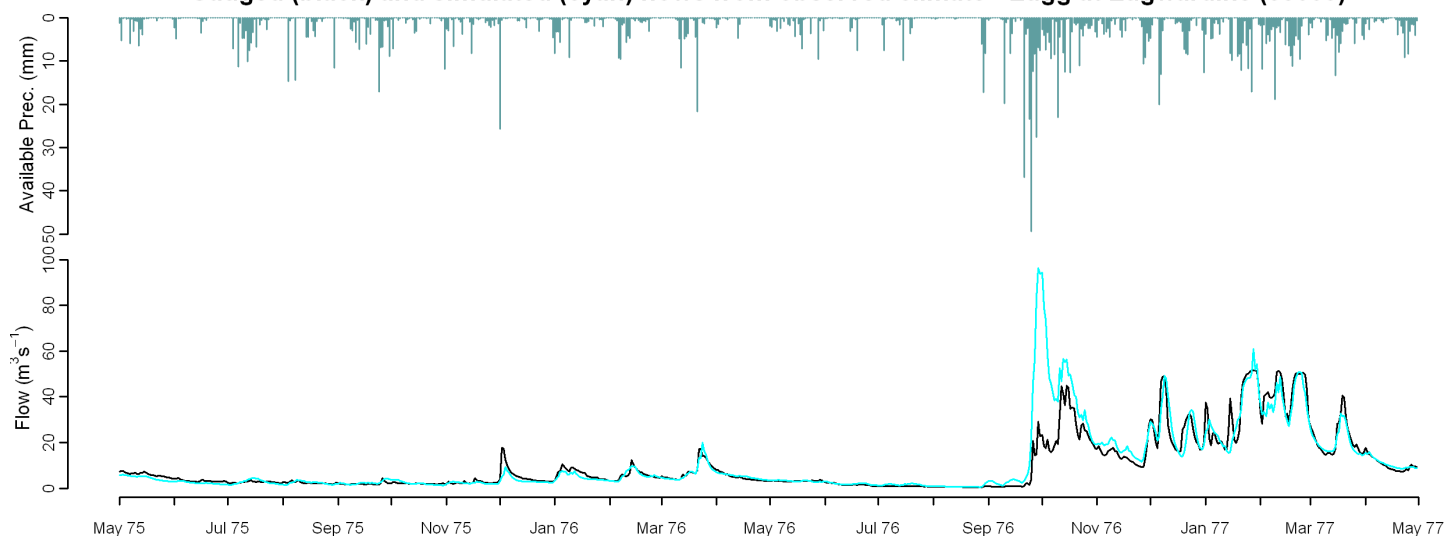
## Observed Data

## Comparison of gauged and simulated flow

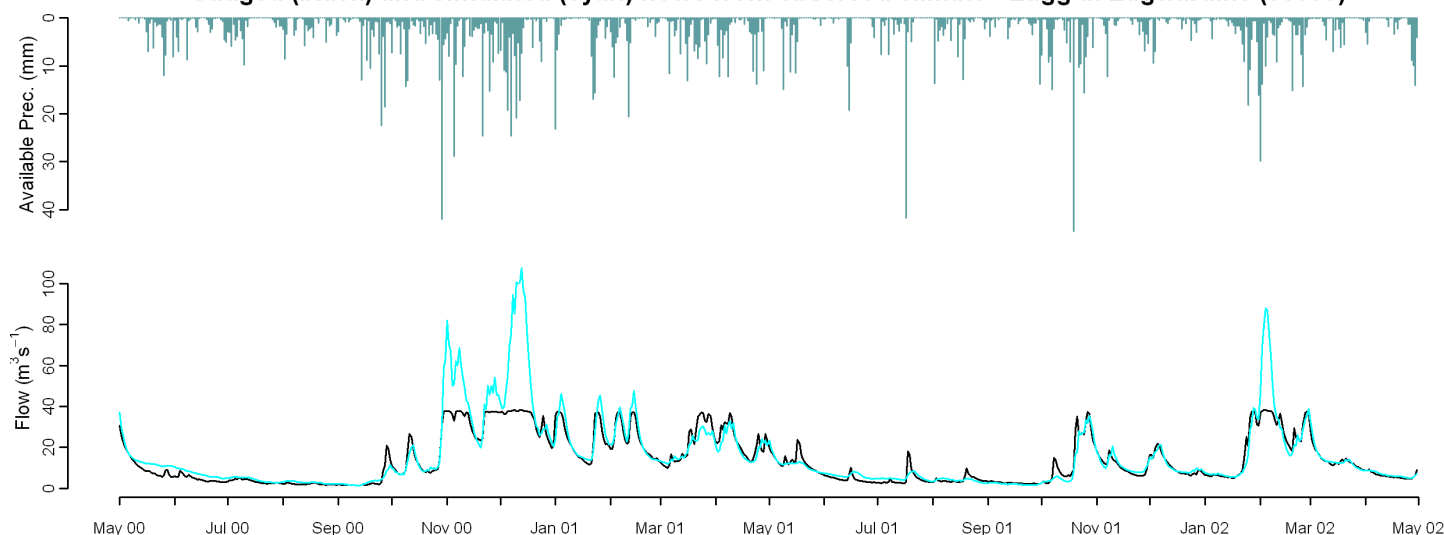
## Model used: CERF

	Mean Annual	J	F	M	A	M	J	J	A	S	O	N	D	Nash Sutcliffe
MORECS (1971-2005)	-0.6	1.0	0.4	-5.5	-4.7	-3.9	-2.8	-2.4	-3.0	10.8	2.1	10.1	2.4	0.78
Performance Band	1	1	1	1	1	2	1	1	1	1	1	1	1	1
MORECS (1962-1991)	-8.5	1.2	-3.6	-9.2	-6.4	-22.1	-8.0	-11.2	-4.0	-1.5	-5.9	-9.1	-6.1	0.81
	Q90	Q75	Q50	Q25	Q5	RP2	RP5	RP10	RP20					
MORECS (1971-2005)	14.4	5.3	3.6	1.9	-0.7									
Performance Band	1	1	1	1	1									
MORECS (1962-1991)	4.6	-2.6	-3.4	-4.9	-14.6									

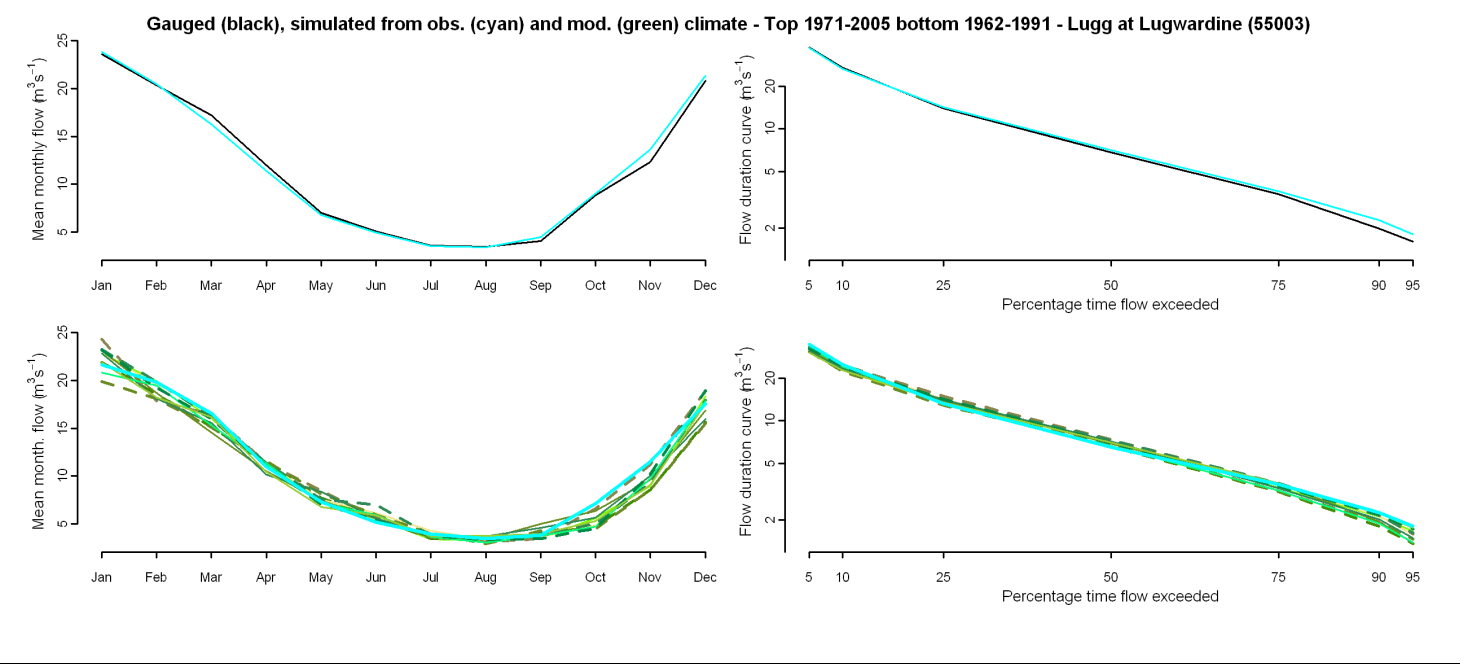
Gauged (black) and simulated (cyan) flows from observed climate - Lugg at Lugwardine (55003)



Gauged (black) and simulated (cyan) flows from observed climate - Lugg at Lugwardine (55003)



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	-6	0	4	-3	-7	-4	1	-4	-3	-4
January	7	-2	7	12	8	-7	4	9	-3	5	3
April	2	-1	8	9	-4	6	-7	7	4	1	-3
July	-9	-9	13	-4	-13	3	-1	0	-6	-5	-6
October	-19	-32	-31	-4	-15	-34	-16	-25	-31	-35	-26
Q90	-6	-21	-5	-3	-18	-14	-9	-3	-15	-4	-1
Q75	-5	-13	-1	3	-5	-11	-5	3	-10	-3	0
Q50	10	-1	6	15	2	4	9	13	3	6	5
Q25	7	1	8	14	3	-3	6	9	-1	7	0
Q5	-6	-12	-6	-4	-9	-12	-12	-2	-5	-8	-13
RP2	-7	-6	-1	0	-6	-9	1	0	-1	-7	-8
RP10	-21	-15	-12	-8	-12	-18	-8	-12	-3	-12	-5

Climate change graphs for 2050s

