Catchment Fact Sheet 28031 Future Flows and Groundwater Levels

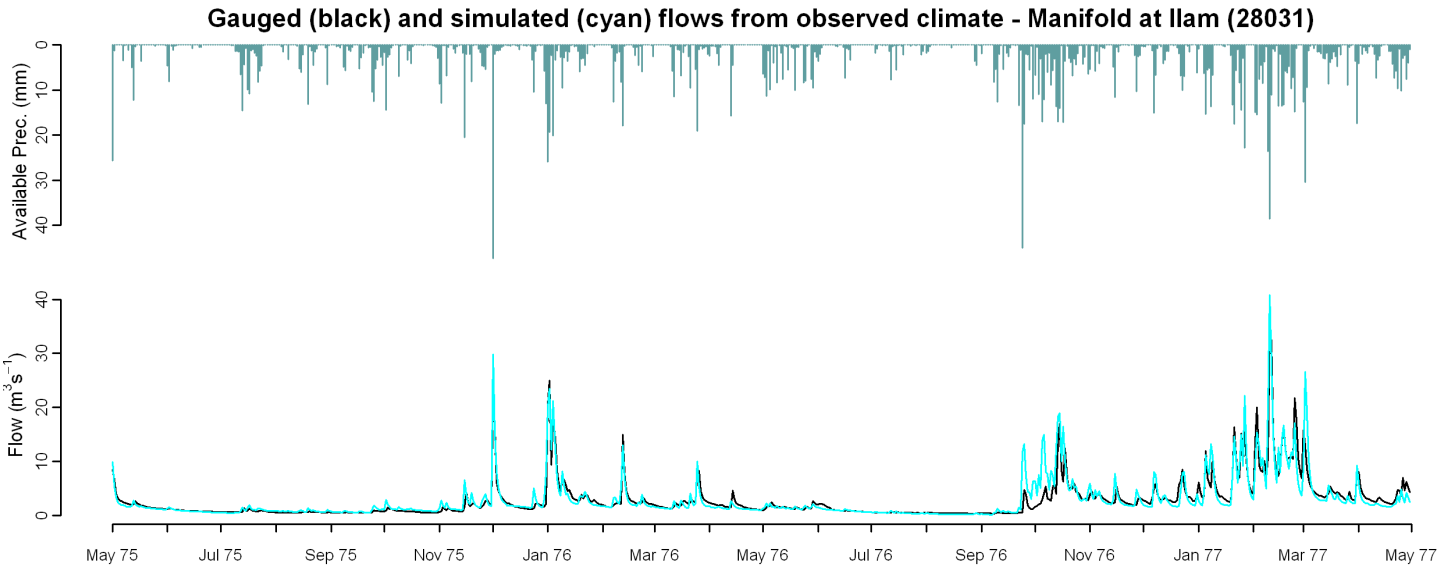
General Information

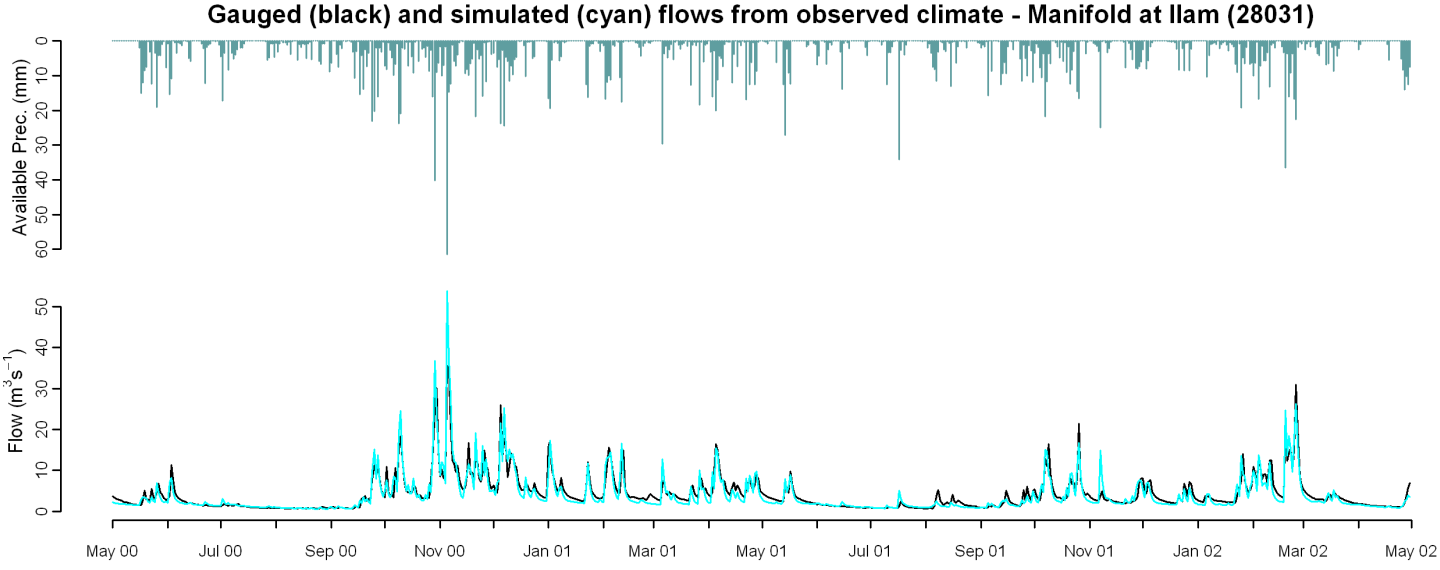
River Name	Manifold	Catchment Area (km2)	149
Station Name	Ilam	SAAR (mm) 61-90	1099
Station Number	28031	Mean Annual Rain (mm) 62-91	1103
Grid Reference	SK140507	Mean Annual PE (mm) 62-91	590
EA Region	EA-M	Observed flow record	1968 to 2005

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)	-6.2	-9.4	-12.3	-15.5	-20.8	-20.3	-3.0	8.0	8.0	13.0	9.2	0.6	-4.7	0.76
Performance Band	1	1	2	1	2	2	1	1	1	2	1	1	1	1
MORECS (1962-1991)	-7.0	-8.8	-13.9	-12.6	-19.6	-22.1	-6.4	-0.2	3.1	13.2	9.0	0.1	-4.8	0.72

	Q90	Q75	Q50	Q25	Q5	RP2	RP5	RP10	RP20
MORECS (1971-2005)	13.5	6.3	-17.9	-15.3	1.7				
Performance Band	1	1	1	1	1				
MORECS (1962-1991)	7.3	6.1	-18.6	-15.0	2.9				





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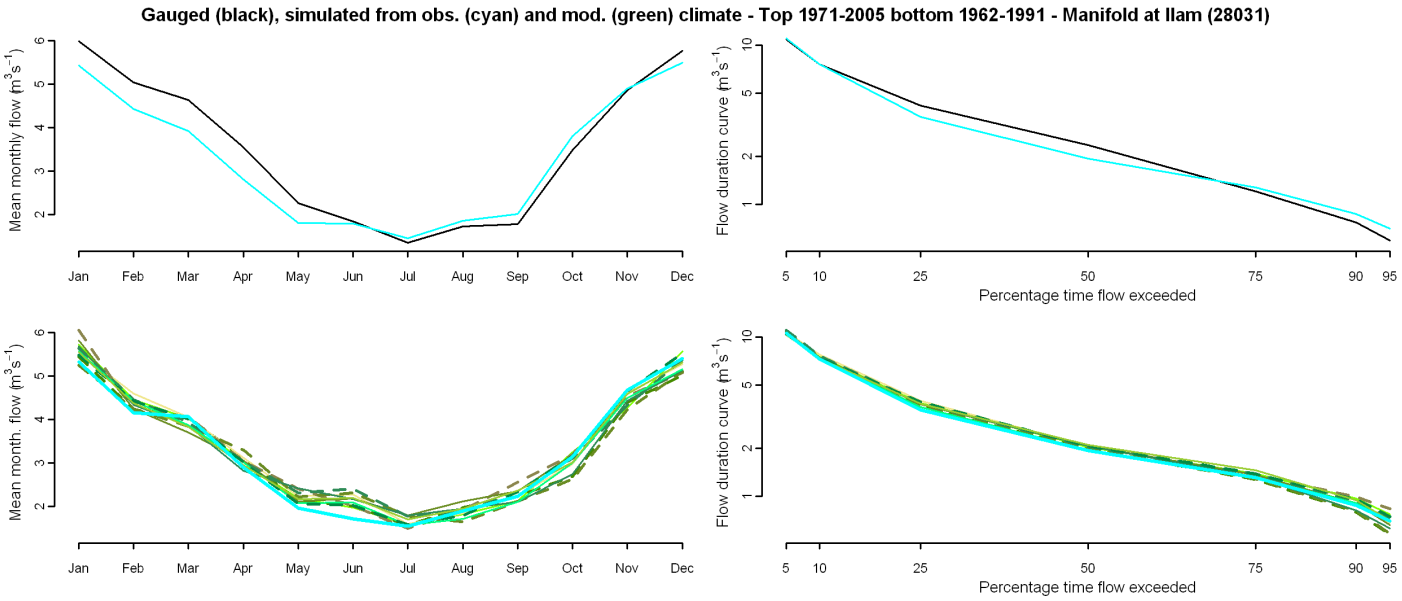
Comparison of gauged and simulated flow (observed and modelled climate)



Percentage difference between flow simulated from observed climate and Future Flows Climate

	afgcx	afixa	afixc	afixh	afixi	afixj	afixk	afixl	afixm	afixo	afixq
Annual	5	1	6	7	4	1	1	5	1	3	3
January	10	-1	8	11	9	1	5	8	4	0	4
April	5	2	11	11	4	15	-2	6	5	5	4
July	5	12	12	0	15	17	17	16	3	1	10
October	5	-9	-5	9	0	-12	-5	2	-4	2	-4
Q90	11	-9	3	14	-1	-9	-9	6	3	4	9
Q75	6	-1	3	5	3	-2	1	7	0	4	12
Q50	6	2	7	6	6	3	7	7	1	6	9
Q25	10	6	14	13	8	6	9	13	5	11	9
Q5	1	1	3	1	1	-1	-1	6	0	-2	-3
RP2	-5	0	-7	3	2	5	6	3	3	-2	-3
RP10	-10	5	-19	-1	-1	-3	-5	-5	13	-11	-5

Climate change graphs for 2050s