

## General Information

River Name	Thurso	Catchment Area (km2)	413
Station Name	Halkirk	SAAR (mm) 61-90	1059
Station Number	97002	Mean Annual Rain (mm) 62-91	1072
Grid Reference	ND131595	Mean Annual PE (mm) 62-91	486
EA Region	SEPA-NW	Observed flow record	1972 to 2005



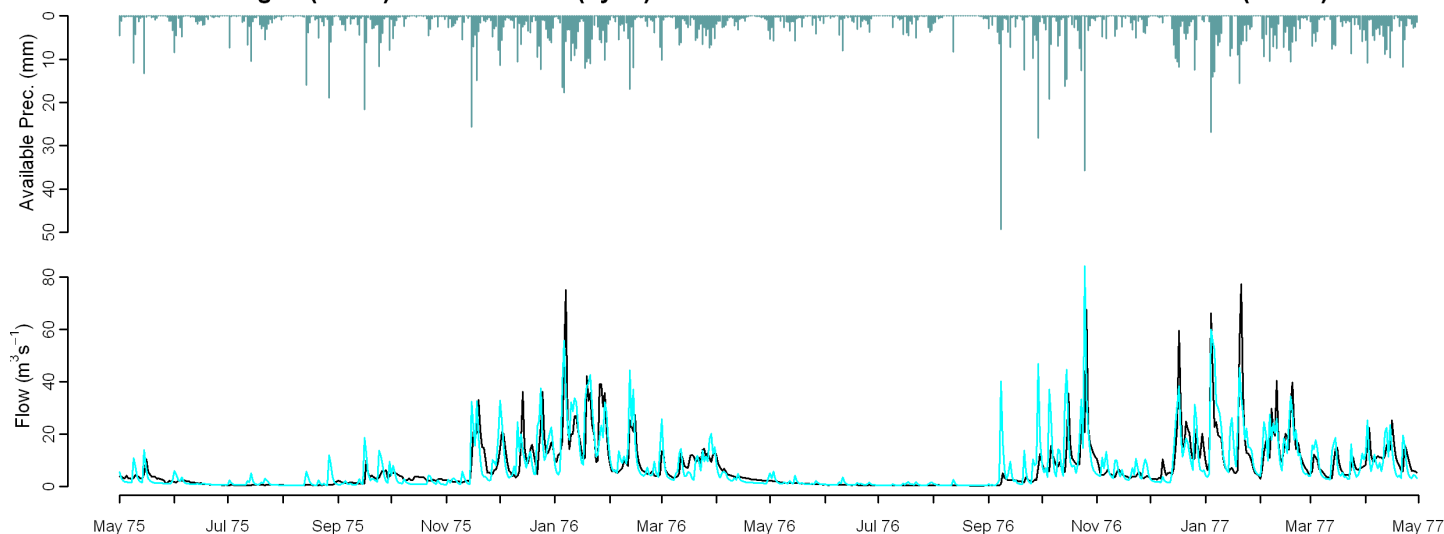
## Observed Data

## Comparison of gauged and simulated flow

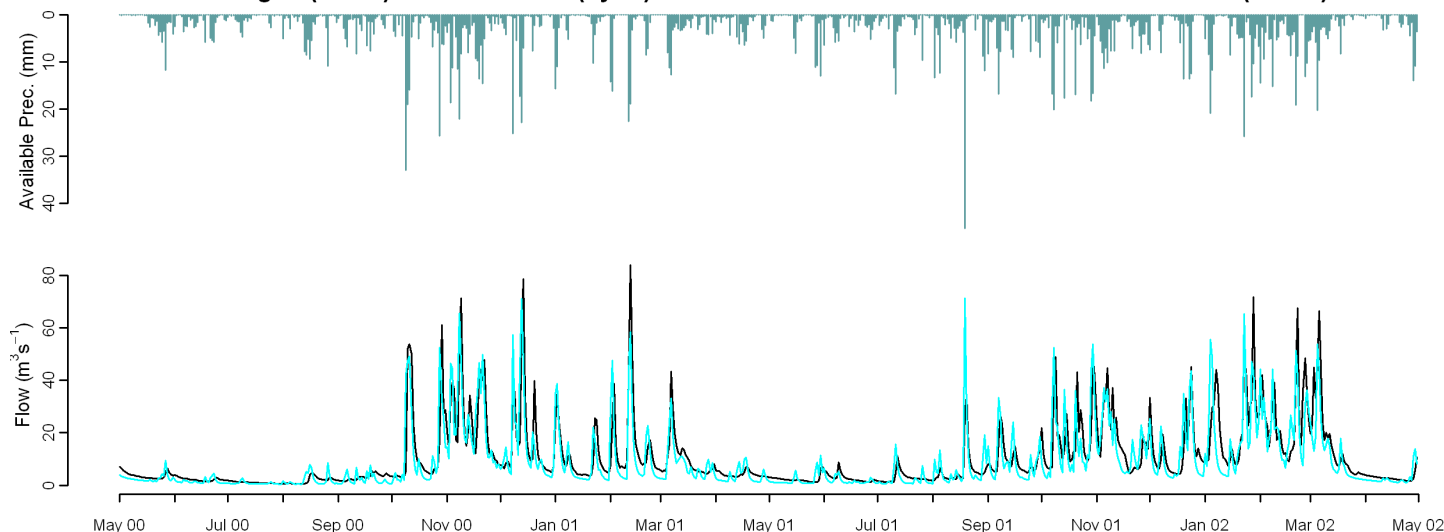
## Model used: PDM

	Mean Annual	J	F	M	A	M	J	J	A	S	O	N	D	Nash Sutcliffe
MORECS (1971-2005)	-3.8	1.4	-2.6	-8.5	-15.9	-24.1	-16.2	-11.2	-1.4	3.5	-5.7	1.1	1.4	0.55
Performance Band	1	1	1	1	2	2	2	2	1	1	1	1	1	2
FAO (1962-1991)	5.5	8.4	-0.6	0.8	-8.9	-7.9	-0.3	13.5	2.6	21.3	6.6	11.9	4.6	0.52
	Q90	Q75	Q50	Q25	Q5	RP2			RP5	RP10	RP20			
MORECS (1971-2005)	-12.5	-39.4	-21.1	-2.4	8.2	-6.4			-2.6	0.3	3.0			
Performance Band	1	2	2	1	1									
FAO (1962-1991)	8.0	-28.8	-12.0	6.8	18.5	-1.5			0.5	1.8	3.0			

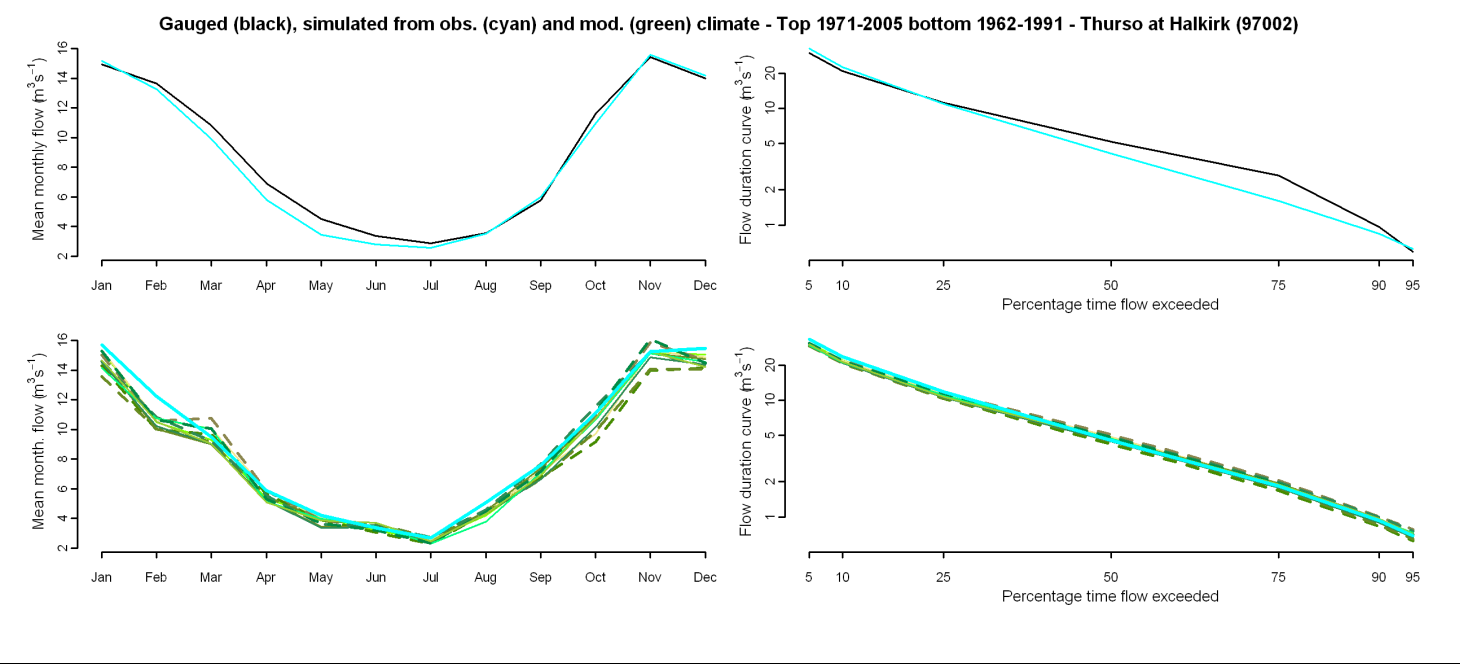
Gauged (black) and simulated (cyan) flows from observed climate - Thurso at Halkirk (97002)



Gauged (black) and simulated (cyan) flows from observed climate - Thurso at Halkirk (97002)



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	-9	-4	-1	-8	-10	-9	-5	-7	-4	-7
January	-2	-9	0	-3	-5	-11	-8	-7	-12	-2	-7
April	-6	-2	-3	3	-13	-9	-12	-6	-15	-6	-14
July	-4	-17	-5	0	-13	-11	-11	-5	-17	-14	-13
October	-2	-15	-12	2	-7	-14	-7	0	-6	-1	-7
Q90	1	-10	3	9	0	-9	-4	4	2	2	3
Q75	2	-7	4	12	2	-6	-3	5	-2	5	2
Q50	3	-7	7	11	0	-4	-2	6	2	5	-1
Q25	-6	-11	-3	-1	-8	-11	-10	-6	-7	-4	-9
Q5	-9	-8	-10	-8	-12	-13	-12	-8	-12	-8	-10
RP2	-6	-9	-10	-8	-8	-11	-16	-9	-11	-3	-12
RP10	-10	-10	-7	-13	-2	3	3	-9	-5	-2	-9

Climate change graphs for 2050s

