

### General Information

Borehole Name	Hucklow South	Grid Reference	SK 17767758
Borehole ID	SK17/13	Mean Annual Rainfall (mm)	1098
Principal Aquifer	Carboniferous Limestone	Period of observed level data	1969 - 2005
EA Region	Midlands		



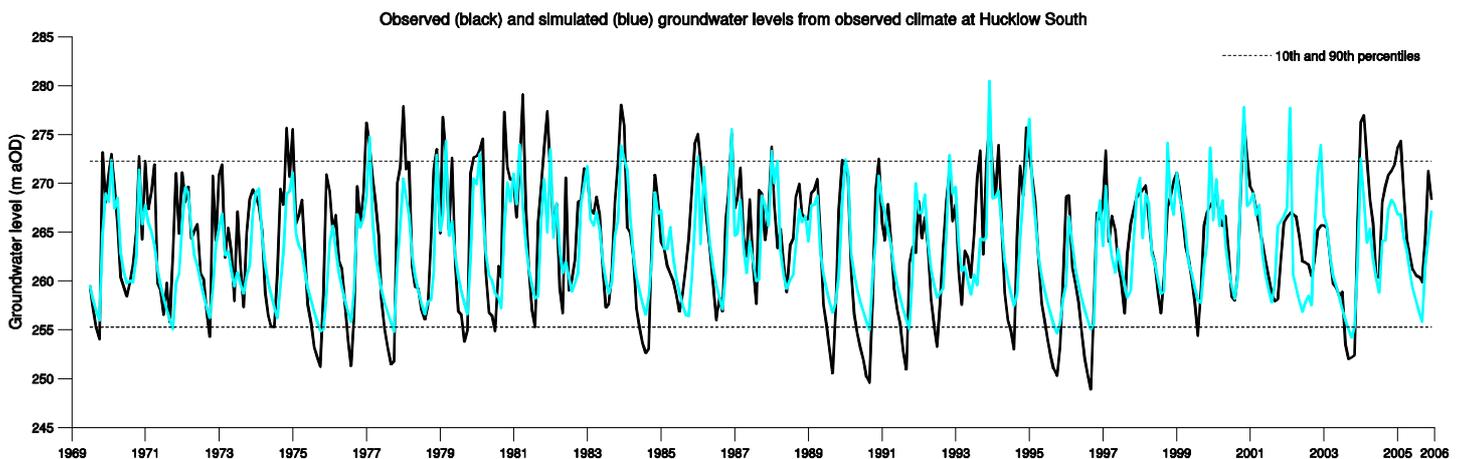
### Observed Data

### Comparison of observed and simulated levels (m)

### Model used: R-Groundwater

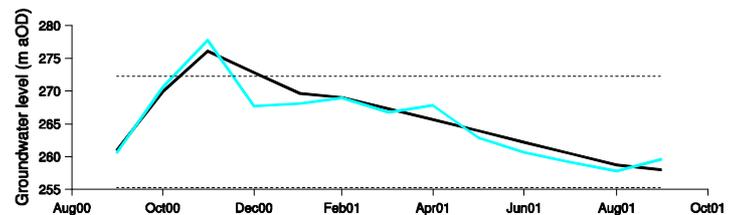
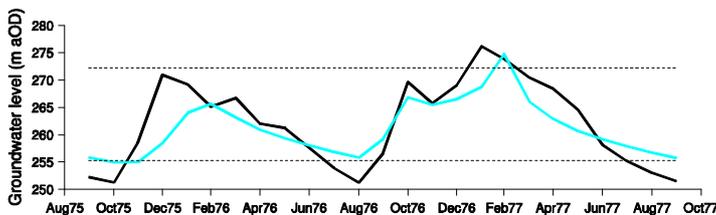
	Mean Annual	J	F	M	A	M	J	J	A	S	O	N	D	NSE	RMSE
1969 - 2005	-0.82	-1.95	-0.84	-1.05	-0.68	-0.32	0.56	1.25	0.67	-0.76	-1.87	-3.24	-1.56	0.62	3.99
Performance	1	1	1	1	1	1	1	1	1	1	1	1	1	2	

	L90	L75	L50	L25	L10		%
1969 - 2005	1.83	0.34	-1.96	-2.05	-2.29	Error (sim-obs) in range (max-min)	-13.13
Performance	1	1	1	1	1	Performance	2

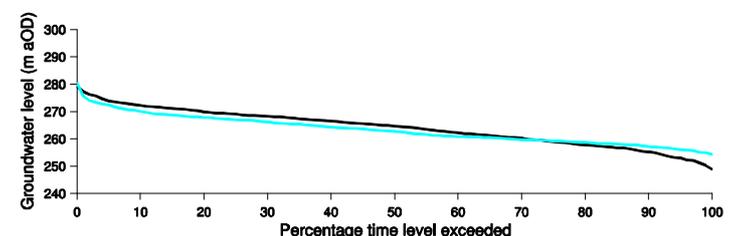
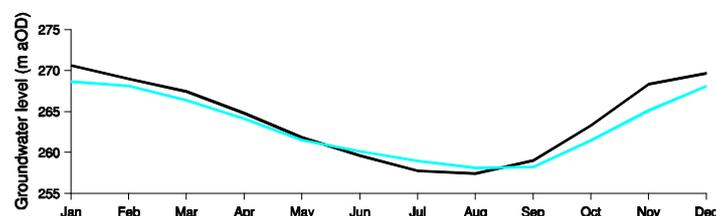


### Comparison of observed and simulated levels (observed climate)

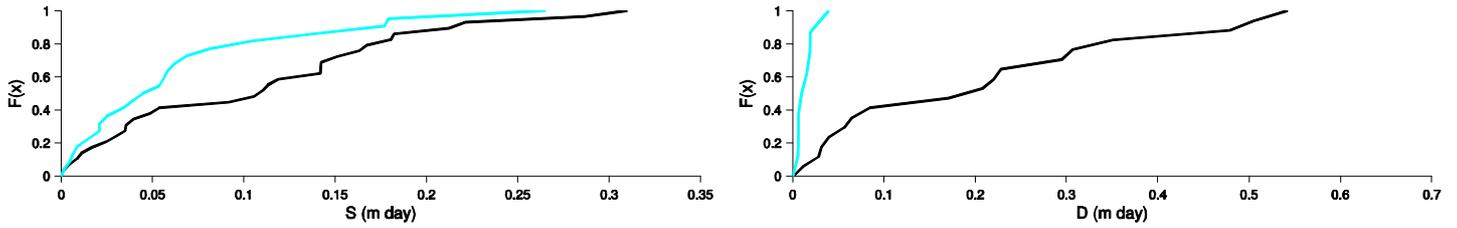
Selected observed (black) and simulated (blue) groundwater levels at Hucklow South



Statistics from observed (black) and simulated (blue) groundwater levels from observed climate at Hucklow South

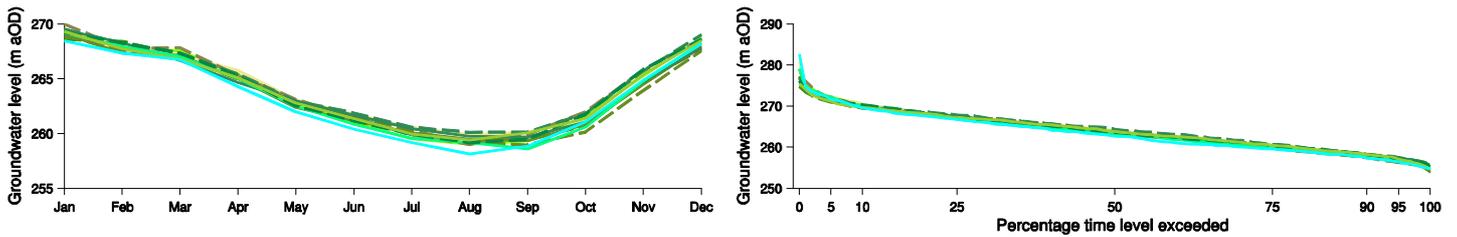


Surplus (S) and Deficit (D) distributions from observed (black) and simulated (blue) groundwater levels from observed climate at Hucklow South



### Difference (m) between levels simulated from observed climate and Future Flows Climate

Comparison of groundwater levels simulated using observed climate (blue) and Future Flows Climate (green)



(m)	afgcx	afixa	afixc	afixh	afixi	afixj	afixk	afixl	afixm	afixo	afixq
Annual	0.69	0.50	0.90	0.95	0.43	0.33	0.68	1.13	0.37	0.80	0.72
Jan	1.05	0.16	0.88	1.52	0.64	0.44	0.97	1.07	0.68	0.75	0.82
Feb	0.49	1.05	0.81	0.40	0.01	0.24	0.96	0.87	0.61	0.96	0.41
Mar	0.80	0.36	0.43	1.11	0.39	0.01	-0.08	0.57	0.26	0.61	0.01
Apr	1.07	0.68	1.48	0.94	0.72	1.12	0.37	1.11	0.75	0.96	0.80
May	0.69	0.77	1.04	1.13	0.38	0.79	0.98	0.99	0.50	0.54	0.77
Jun	0.58	0.76	1.35	1.06	0.74	1.17	1.25	1.45	0.43	0.80	0.95
Jul	0.39	0.87	1.41	0.73	0.93	1.09	1.28	1.45	0.44	0.76	0.83
Aug	0.93	1.30	1.75	0.90	1.35	1.08	1.66	2.00	1.03	1.06	1.27
Sep	0.44	0.57	1.24	1.04	0.48	0.11	0.81	1.29	-0.26	0.63	1.21
Oct	0.52	-0.35	0.21	0.92	-0.23	-0.91	0.00	0.73	-0.49	0.64	0.31
Nov	0.40	-0.14	-0.07	0.90	-0.40	-0.94	-0.14	0.85	-0.04	1.01	0.57
Dec	0.52	-0.51	-0.18	0.33	-0.24	-0.67	-0.39	0.81	0.08	0.40	0.28

### Climate change graphs for 2050s

Change between future (2041–2070) and control (1961–1990) simulated levels at Hucklow South

