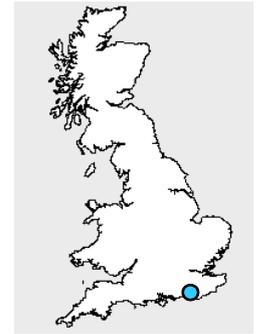


### General Information

Borehole Name	Lower Barn Cottage	Grid Reference	SJ 13745556
Borehole ID	TQ41/82	Mean Annual Rainfall (mm)	857
Principal Aquifer	Lower Greensand Group	Period of observed level data	1975 - 2005
EA Region	Southern		



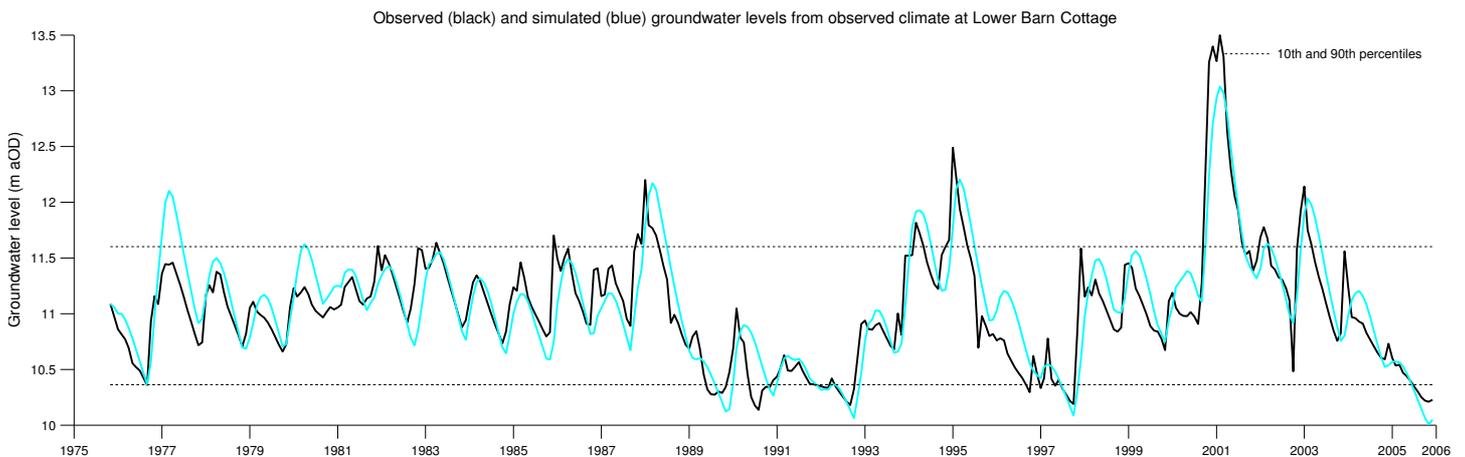
### Observed Data

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

### Model used: R-Groundwater

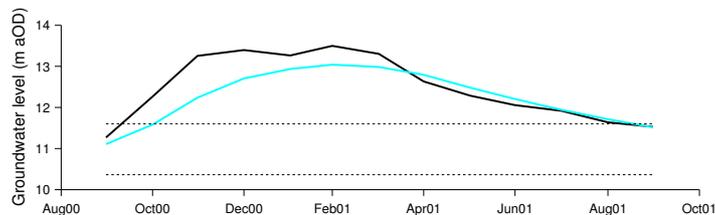
	Mean Annual	J	F	M	A	M	J	J	A	S	O	N	D	NSE	RMSE
1975 - 2005	0.03	-0.12	0.03	0.10	0.16	0.20	0.20	0.16	0.14	0.04	-0.07	-0.17	-0.25	0.75	0.26
Performance	1	1	1	1	1	1	1	1	1	1	1	1	1	1	

	L90	L75	L50	L25	L10		%
1975 - 2005	0.05	-0.01	0.08	0.04	0.11	Error (sim-obs) in range (max-min)	-9.85
Performance	1	1	1	1	1	Performance	1

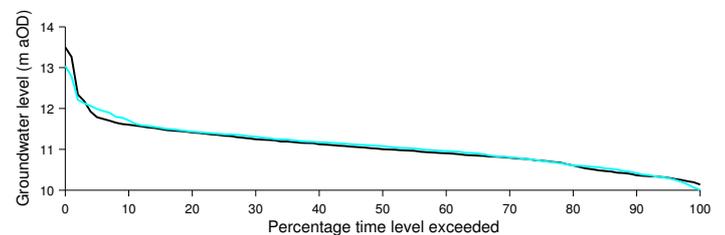
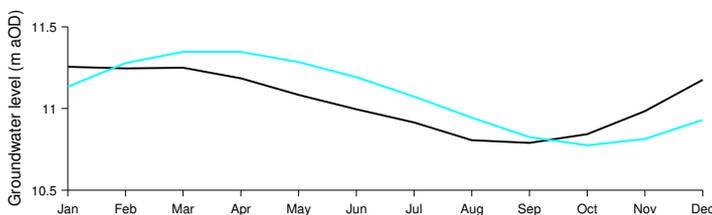


### Comparison of observed and simulated levels (observed climate)

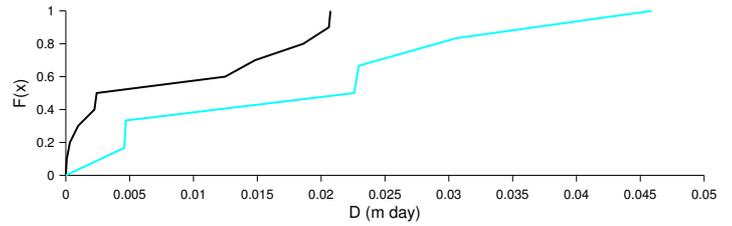
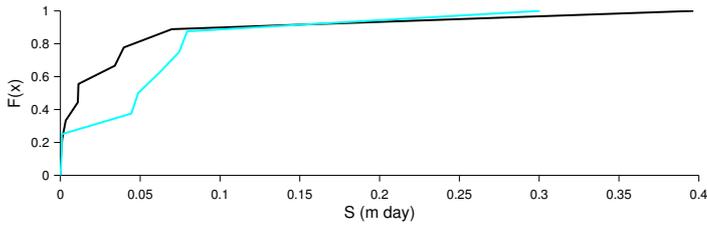
Selected observed (black) and simulated (blue) groundwater levels at Lower Cottage



Statistics from observed (black) and simulated (blue) groundwater levels from observed climate at Lower Barn Cottage

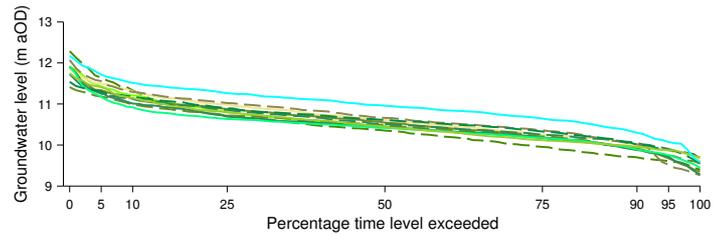
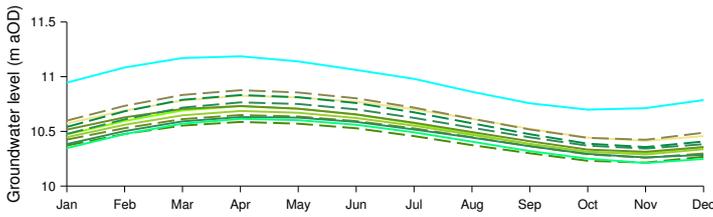


Surplus (S) and Deficit (D) distributions from observed (black) and simulated (blue) groundwater levels from observed climate at Lower Barn Cottage



## 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	-0.43	-0.54	-0.31	-0.29	-0.41	-0.48	-0.49	-0.39	-0.52	-0.34	-0.45
Jan	-0.47	-0.57	-0.37	-0.35	-0.43	-0.52	-0.56	-0.47	-0.60	-0.40	-0.50
Feb	-0.49	-0.61	-0.39	-0.35	-0.45	-0.55	-0.58	-0.47	-0.61	-0.40	-0.52
Mar	-0.48	-0.62	-0.39	-0.34	-0.47	-0.56	-0.58	-0.45	-0.60	-0.38	-0.52
Apr	-0.46	-0.60	-0.36	-0.31	-0.45	-0.54	-0.56	-0.42	-0.57	-0.35	-0.50
May	-0.43	-0.57	-0.33	-0.28	-0.43	-0.50	-0.51	-0.39	-0.54	-0.33	-0.47
Jun	-0.41	-0.53	-0.29	-0.26	-0.41	-0.47	-0.48	-0.36	-0.50	-0.30	-0.44
Jul	-0.41	-0.52	-0.28	-0.26	-0.40	-0.45	-0.46	-0.36	-0.49	-0.31	-0.43
Aug	-0.38	-0.49	-0.25	-0.25	-0.37	-0.41	-0.42	-0.33	-0.46	-0.29	-0.39
Sep	-0.37	-0.46	-0.23	-0.24	-0.35	-0.39	-0.39	-0.31	-0.44	-0.28	-0.37
Oct	-0.39	-0.47	-0.26	-0.26	-0.37	-0.41	-0.40	-0.33	-0.45	-0.31	-0.38
Nov	-0.41	-0.50	-0.30	-0.29	-0.40	-0.45	-0.45	-0.37	-0.50	-0.36	-0.42
Dec	-0.43	-0.52	-0.33	-0.30	-0.43	-0.49	-0.50	-0.40	-0.54	-0.38	-0.45

## Climate change graphs for 2050s

Change between future (2041–2070) and control (1961–1990) simulated levels at Lower Barn Cottage

