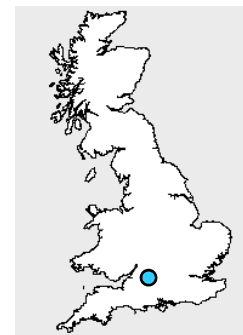


### General Information

Borehole Name	Rockley	Grid Reference	SU 16537176
Borehole ID	SU17/57	Mean Annual Rainfall (mm)	797
Principal Aquifer	Chalk Group	Period of observed level data	1961 - 2005
EA Region	Thames		



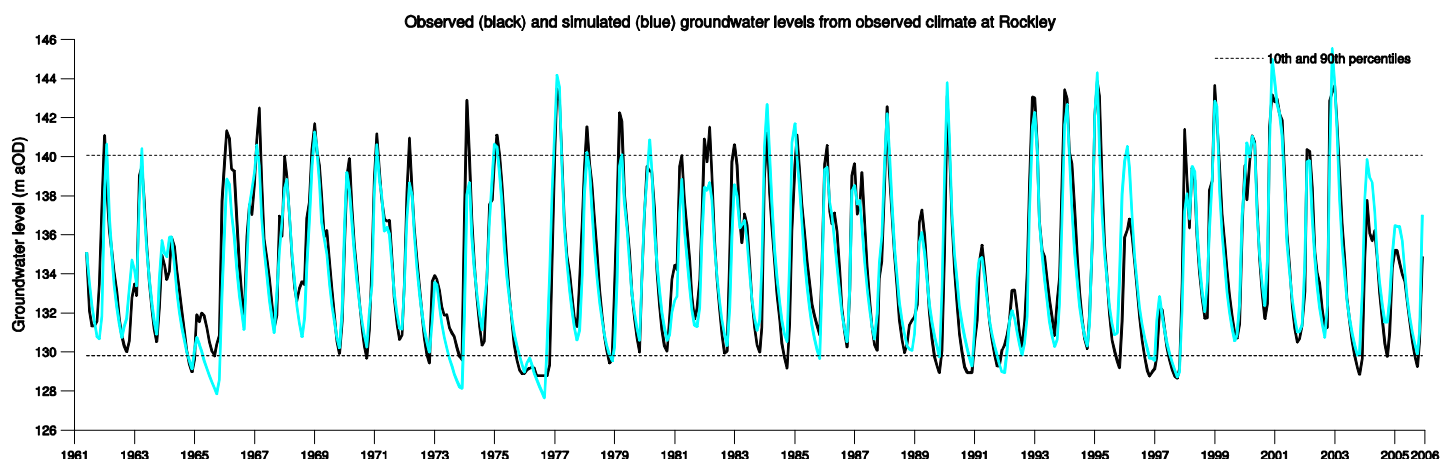
### Observed Data

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

### Model used: R-Groundwater

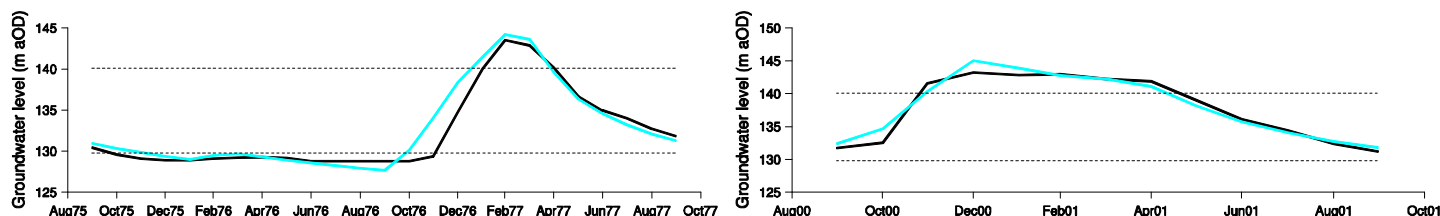
	Mean Annual	J	F	M	A	M	J	J	A	S	O	N	D	NSE	RMSE
1961 - 2005	-0.17	-0.22	-0.06	-0.34	-0.50	-0.66	-0.53	-0.31	-0.06	0.16	0.25	0.03	0.17	0.87	1.41
Performance	1	1	1	1	1	1	1	1	1	1	1	1	1	1	

	L90	L75	L50	L25	L10		%
1961 - 2005	0.32	0.03	-0.17	-0.17	-0.34	Error (sim-obs) in range (max-min)	17.37
Performance	1	1	1	1	1	Performance	2

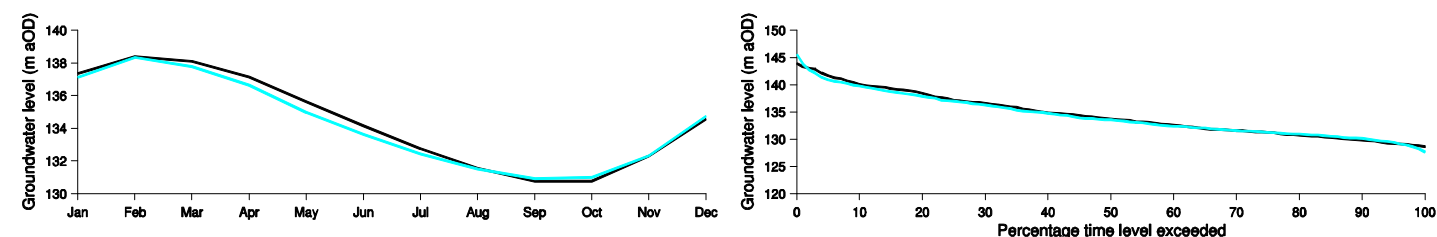


### Comparison of observed and simulated levels (observed climate)

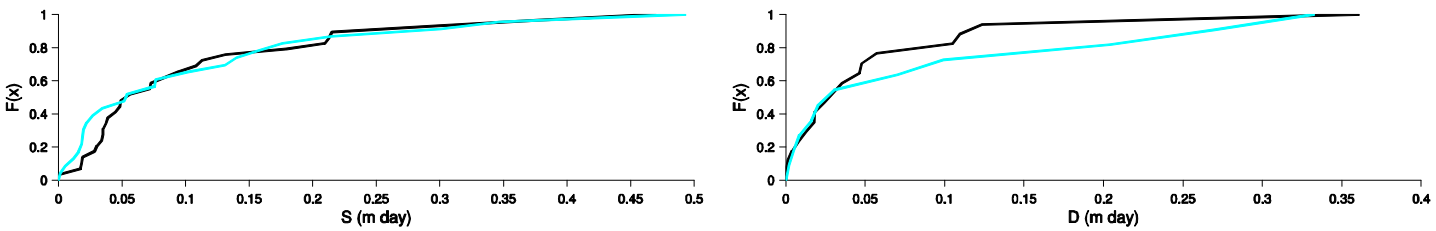
Selected observed (black) and simulated (blue) groundwater levels at Rockley



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

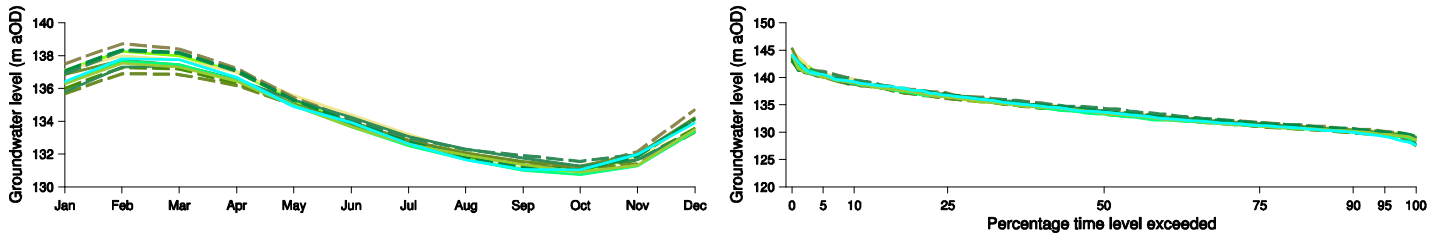


Surplus (S) and Deficit (D) distributions from observed (black) and simulated (blue) groundwater levels from observed climate at Rockley



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	0.21	-0.11	0.35	0.52	0.17	-0.21	0.06	0.44	-0.18	0.29	-0.12
Jan	0.69	-0.43	0.68	1.09	0.42	-0.74	-0.63	0.48	-0.15	0.65	-0.15
Feb	0.47	-0.52	0.19	0.95	-0.07	-0.88	-0.50	0.50	-0.14	0.57	-0.26
Mar	0.25	-0.55	0.01	0.66	-0.33	-0.89	-0.37	0.40	-0.29	0.44	-0.46
Apr	0.35	-0.39	0.34	0.57	-0.14	-0.48	-0.12	0.37	-0.18	0.42	-0.21
May	0.35	0.07	0.65	0.54	0.16	0.09	0.40	0.40	0.06	0.38	0.04
Jun	-0.09	-0.08	0.47	0.19	-0.09	0.02	0.29	0.13	-0.29	0.01	-0.28
Jul	-0.02	0.07	0.57	0.28	0.15	0.24	0.44	0.37	-0.12	0.12	-0.03
Aug	0.06	0.25	0.48	0.30	0.44	0.36	0.67	0.63	0.03	0.20	0.29
Sep	0.05	0.39	0.35	0.22	0.47	0.45	0.69	0.85	-0.04	0.16	0.31
Oct	-0.07	0.15	0.19	0.10	0.24	0.08	0.24	0.54	-0.29	0.01	-0.13
Nov	-0.21	-0.36	-0.19	0.16	0.01	-0.57	-0.34	-0.01	-0.69	-0.11	-0.66
Dec	0.23	-0.34	0.09	0.80	0.31	-0.58	-0.50	0.23	-0.53	0.21	-0.39

Climate change graphs for 2050s

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

