

General Information

Borehole Name	Furness Abbey	Grid Reference	SD 21697171
Borehole ID	SD27/6B	Mean Annual Rainfall (mm)	1027
Principal Aquifer	Sherwood Sandstone Group	Period of observed level data	1973 - 1994
EA Region	North West		



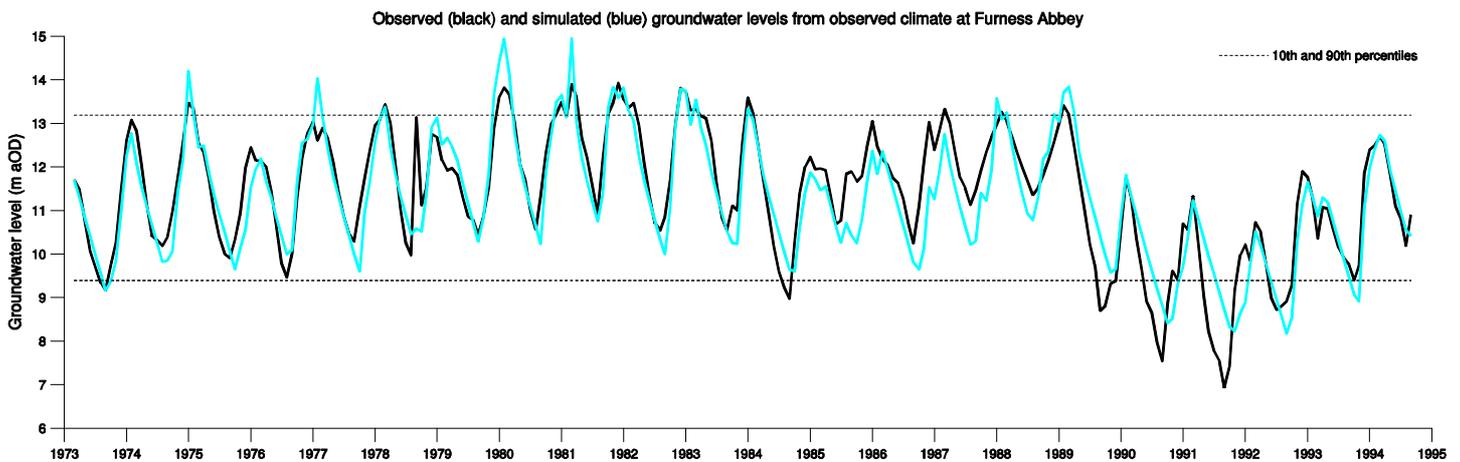
Observed Data

Comparison of observed and simulated levels (m)

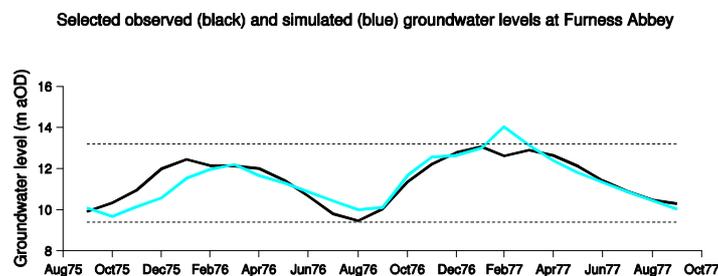
Model used: R-Groundwater

	Mean Annual	J	F	M	A	M	J	J	A	S	O	N	D	NSE	RMSE
1973 - 1994	-0.10	-0.17	-0.01	0.08	-0.12	0.00	0.17	0.20	0.13	-0.24	-0.42	-0.51	-0.40	0.78	0.67
Performance	1	1	1	1	1	1	1	1	1	1	1	1	1	1	

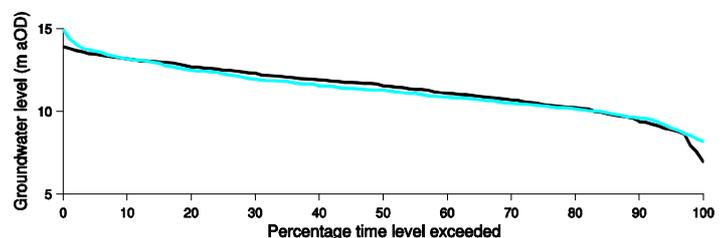
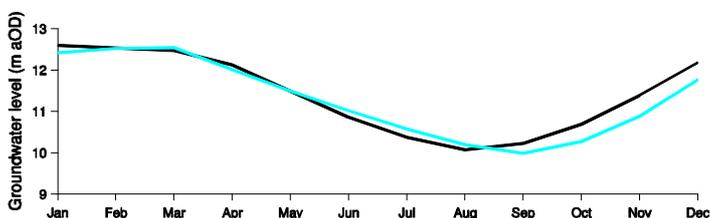
	L90	L75	L50	L25	L10		%
1973 - 1994	0.22	-0.10	-0.27	-0.25	0.00	Error (sim-obs) in range (max-min)	-2.89
Performance	1	1	1	1	1	Performance	1



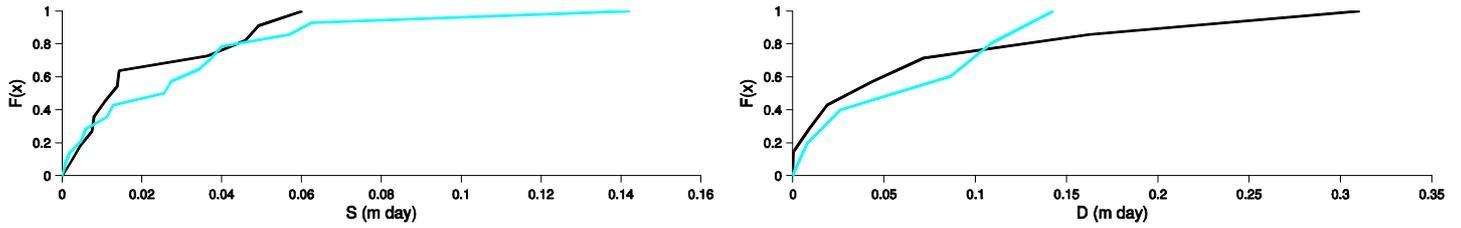
Comparison of observed and simulated levels (observed climate)



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

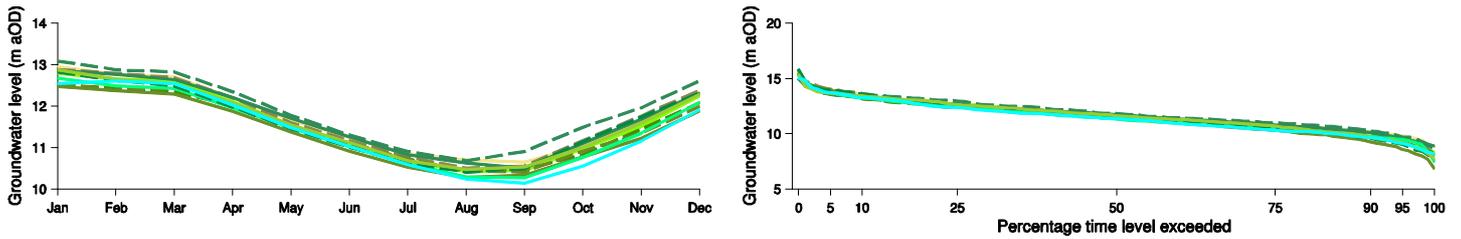


Surplus (S) and Deficit (D) distributions from observed (black) and simulated (blue) groundwater levels from observed climate at Furness Abbey



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	0.20	0.10	0.33	0.31	-0.03	0.09	0.32	0.50	0.06	0.20	0.23
Jan	0.24	-0.03	0.41	0.34	-0.07	-0.01	0.32	0.54	0.13	0.28	0.33
Feb	0.05	-0.18	0.16	0.18	-0.23	-0.23	0.16	0.27	-0.11	0.01	0.04
Mar	0.08	-0.20	0.16	0.14	-0.25	-0.13	0.10	0.27	-0.12	-0.06	0.01
Apr	0.07	-0.03	0.16	0.16	-0.16	-0.04	0.18	0.31	-0.08	-0.06	0.04
May	0.07	0.05	0.19	0.12	-0.11	0.00	0.23	0.30	-0.01	-0.02	0.07
Jun	0.07	0.04	0.22	0.14	-0.10	0.08	0.24	0.28	-0.01	-0.02	0.10
Jul	0.10	0.13	0.26	0.17	-0.07	0.14	0.24	0.31	0.03	0.02	0.09
Aug	0.18	0.18	0.46	0.26	0.04	0.20	0.38	0.44	0.04	0.17	0.23
Sep	0.31	0.31	0.50	0.40	0.19	0.26	0.36	0.76	0.12	0.34	0.38
Oct	0.43	0.28	0.49	0.62	0.23	0.36	0.56	0.94	0.22	0.60	0.46
Nov	0.35	0.28	0.43	0.59	0.06	0.18	0.52	0.80	0.18	0.57	0.43
Dec	0.33	0.18	0.40	0.48	-0.02	0.08	0.42	0.70	0.18	0.40	0.38

Climate change graphs for 2050s

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

