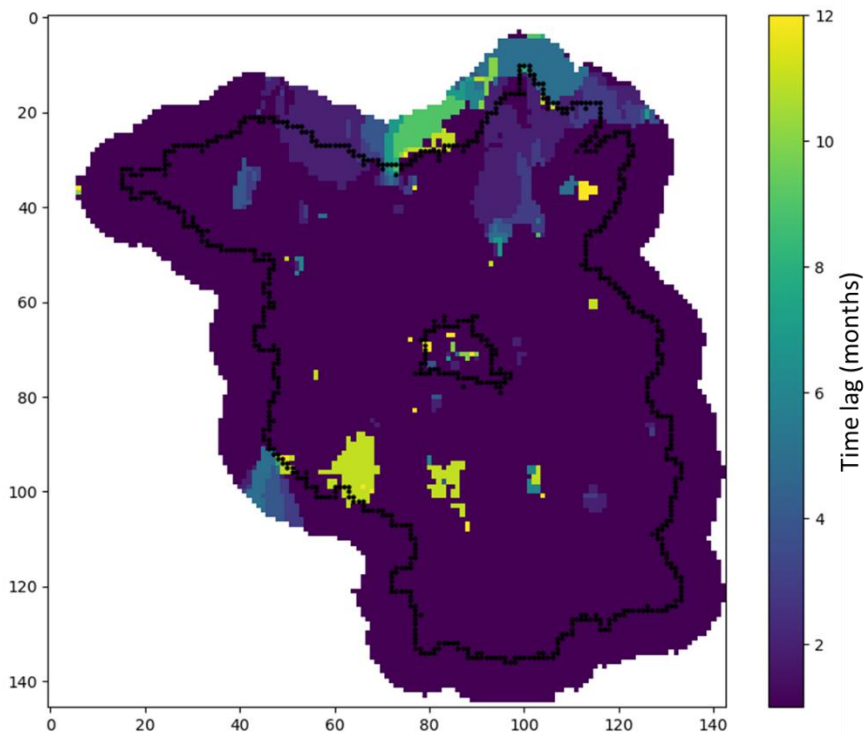
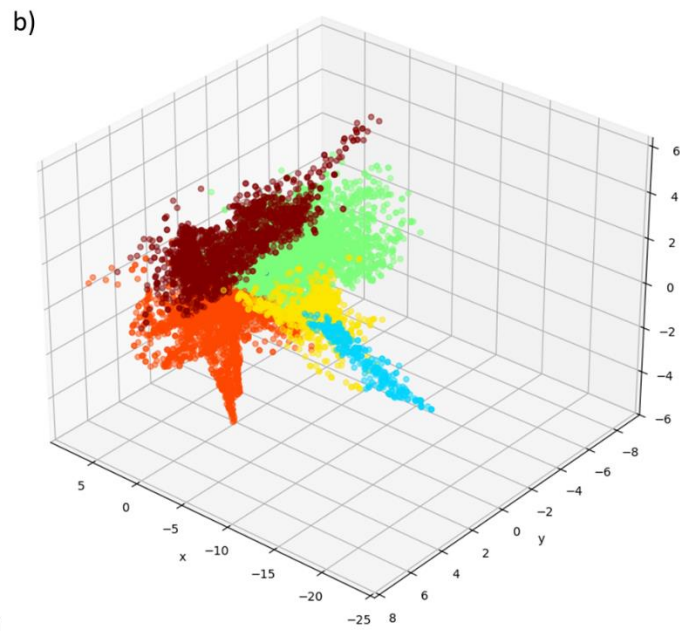
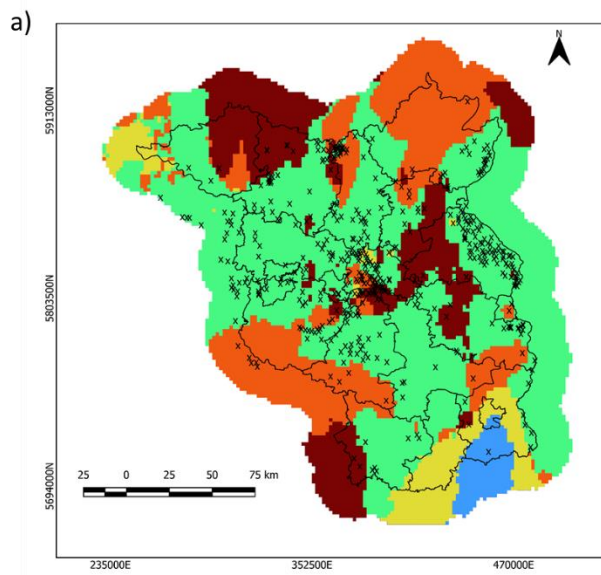
Supplements

Time-lag analysis

Supplementary figure S1.

Supplementary figure S1 was created by trying out different time lags between the climate forcing and the groundwater level change timeseries, pixel-by-pixel. The selection of the best fit was done via evaluating the r2score of the water availability and groundwater change timeseries. The lag with the highest r^2 score is selected. The map shows that almost everywhere in Brandenburg the optimal time lag is 1 month.

Note that all the wells used in this study are screened in the top aquifer.

Supplementary figure S2. Clustering the point cloud: a) spatial distribution of the identified clusters on a map, b) distribution of the clusters within the point cloud (in feature space).

Supplementary figure S2 shows the clustering results, both mapped out spatially (S2a) and over the 3-D point cloud (S2b).