Supplementary material

Table S1 Area covered by different aquifer types in Tamil Nadu (CGWB, 2012)

Figure S1: Scatter plots of measured and predicted fluoride by LOOCV
Figure S2: Scatter plots of measured and predicted fluoride by hold-out validation
Figure S3: Scatter plots of measured and predicted fluoride by validation with an independent dataset
Figure S4: Residual histograms for various aquifer types by IDW interpolation
Figure S5: Residual histograms for various aquifer types by LPI.

Table S1 Area covered by different aquifer types in Tamil Nadu (CGWB, 2012)

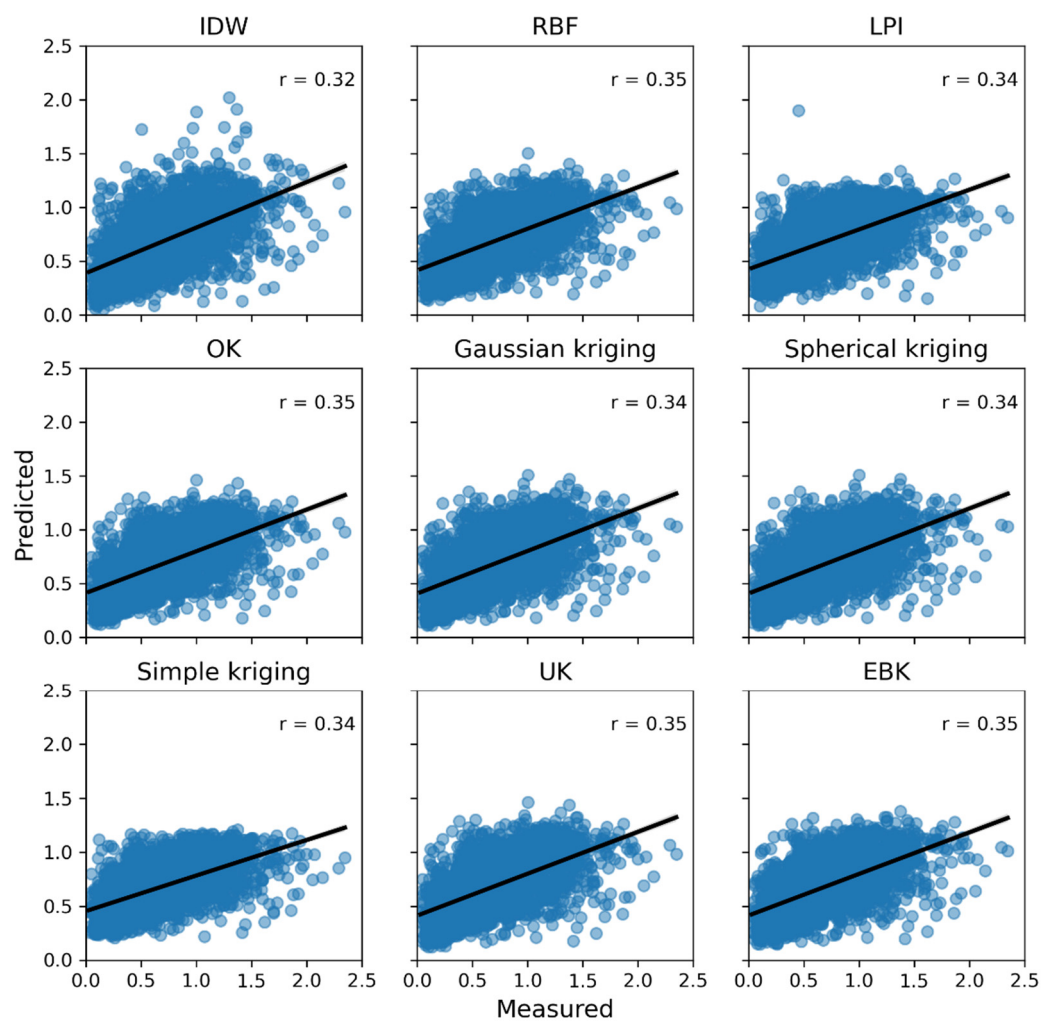| Aquifer type	Total area (%)
Alluvium	17.54
Laterite	1.85
Sandstone	6.26
Shale	0.19
Limestone	0.05
Granite	1.14
Schist	0.25
Quartzite	0.02
Charnockite	25.65
Khondalite	1.52
Banded Gneissic Complex	7.86
Gneiss	37.22
Intrusives	0.39

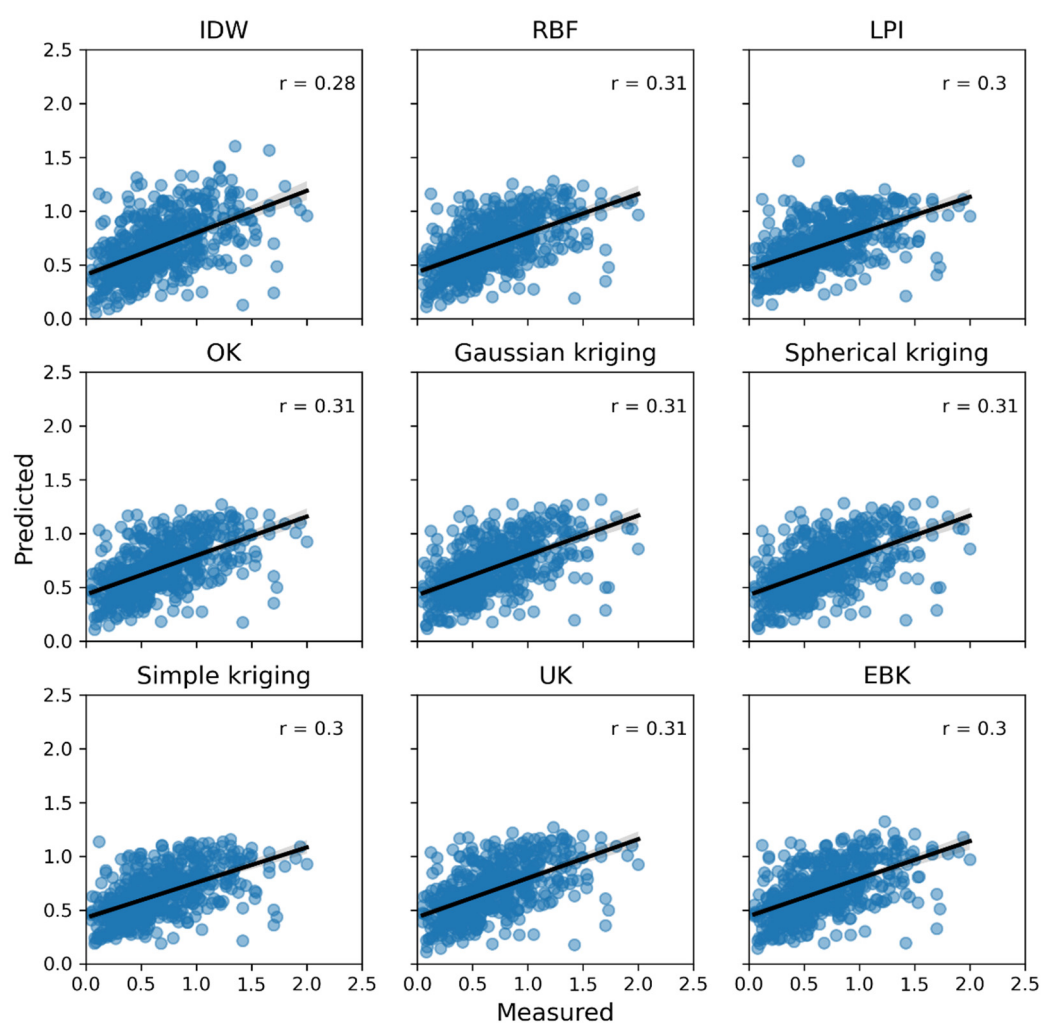Figure S1 Scatter plots of measured and predicted fluoride by LOOCV

Figure S2 Scatter plots of measured and predicted fluoride by hold-out validation
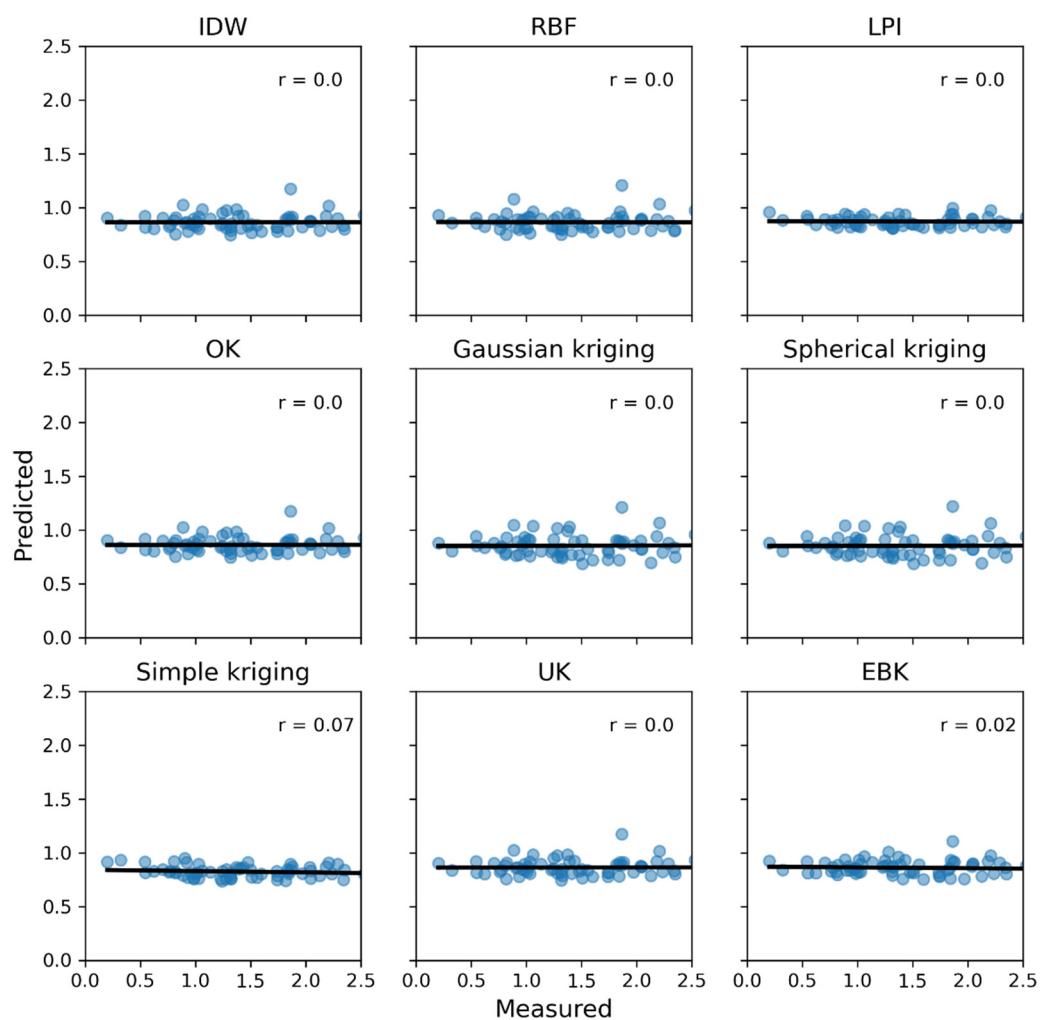
Figure S3 Scatter plots of measured and predicted fluoride by validation with an independent dataset
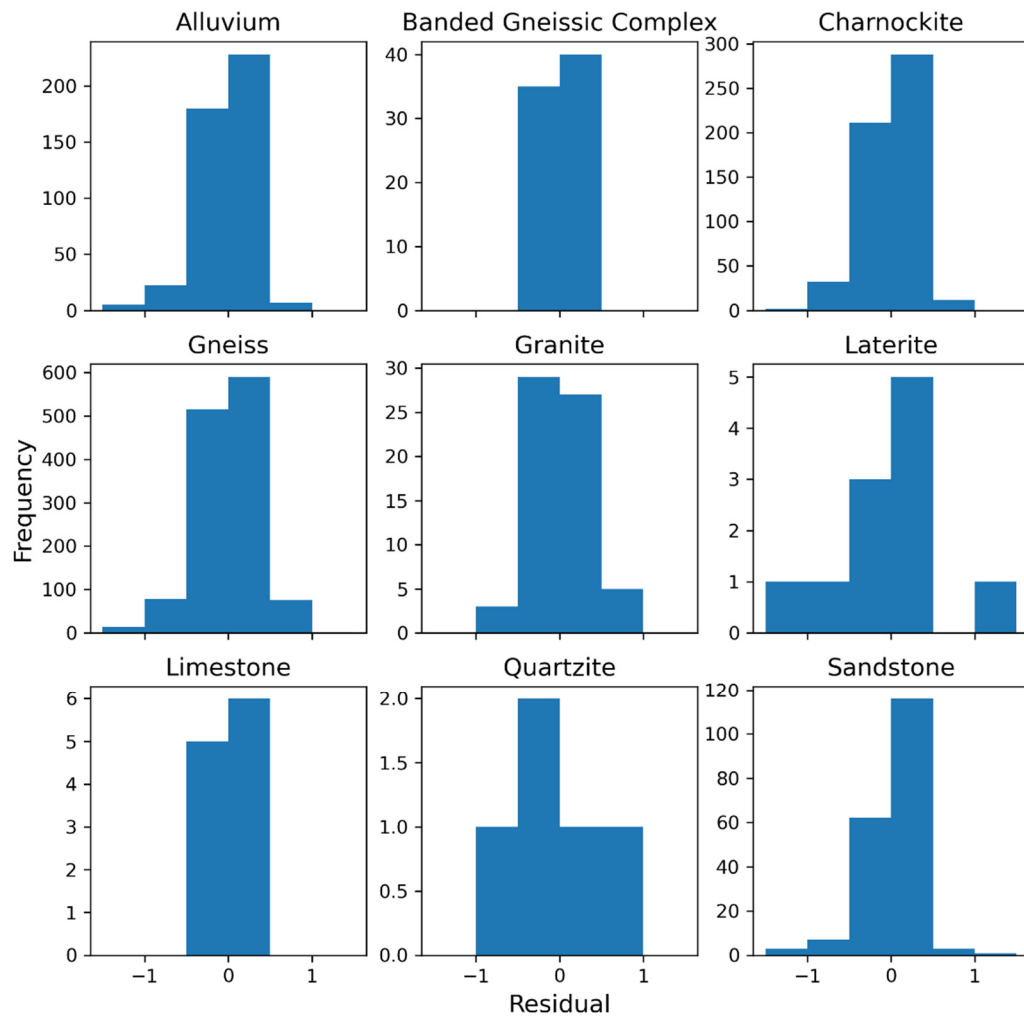
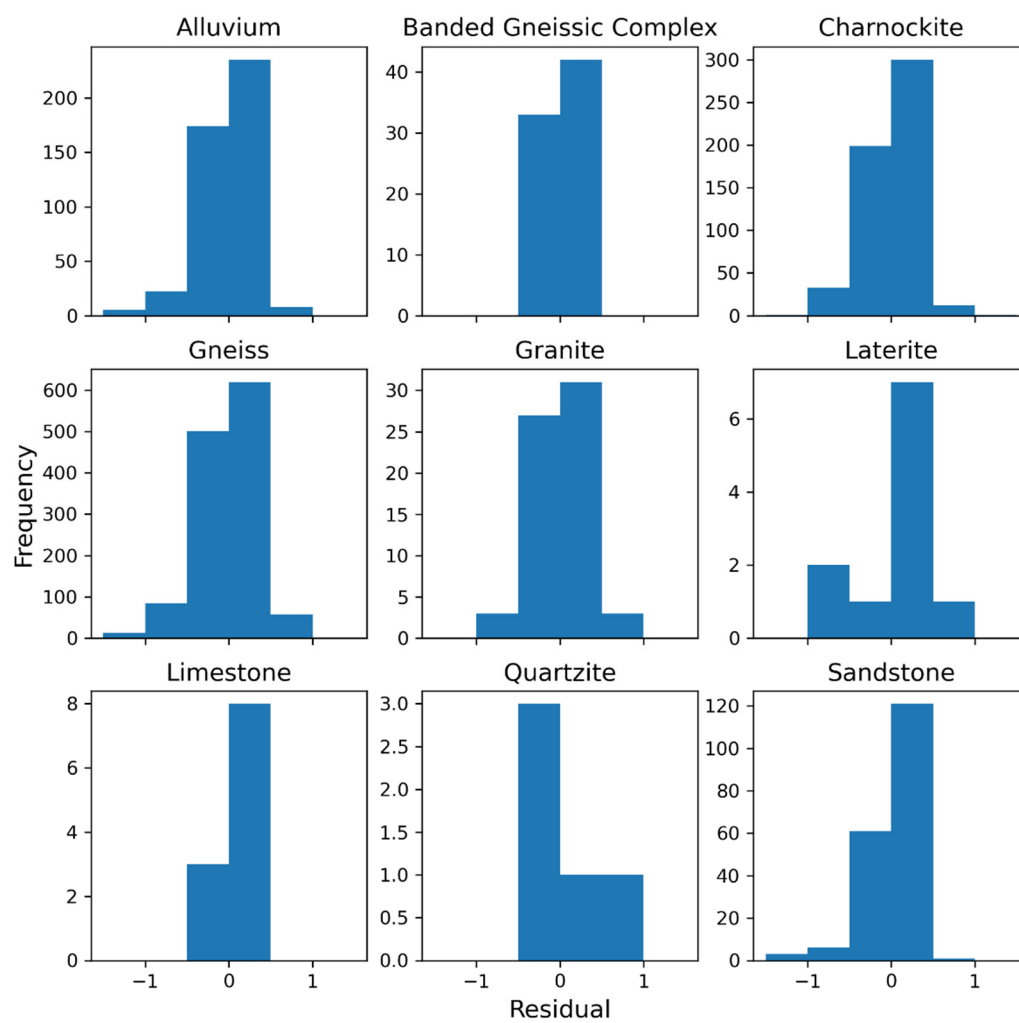Figure S4 Residual histograms for various aquifer types by IDW interpolation

Figure S5 Residual histograms for various aquifer types by LPI