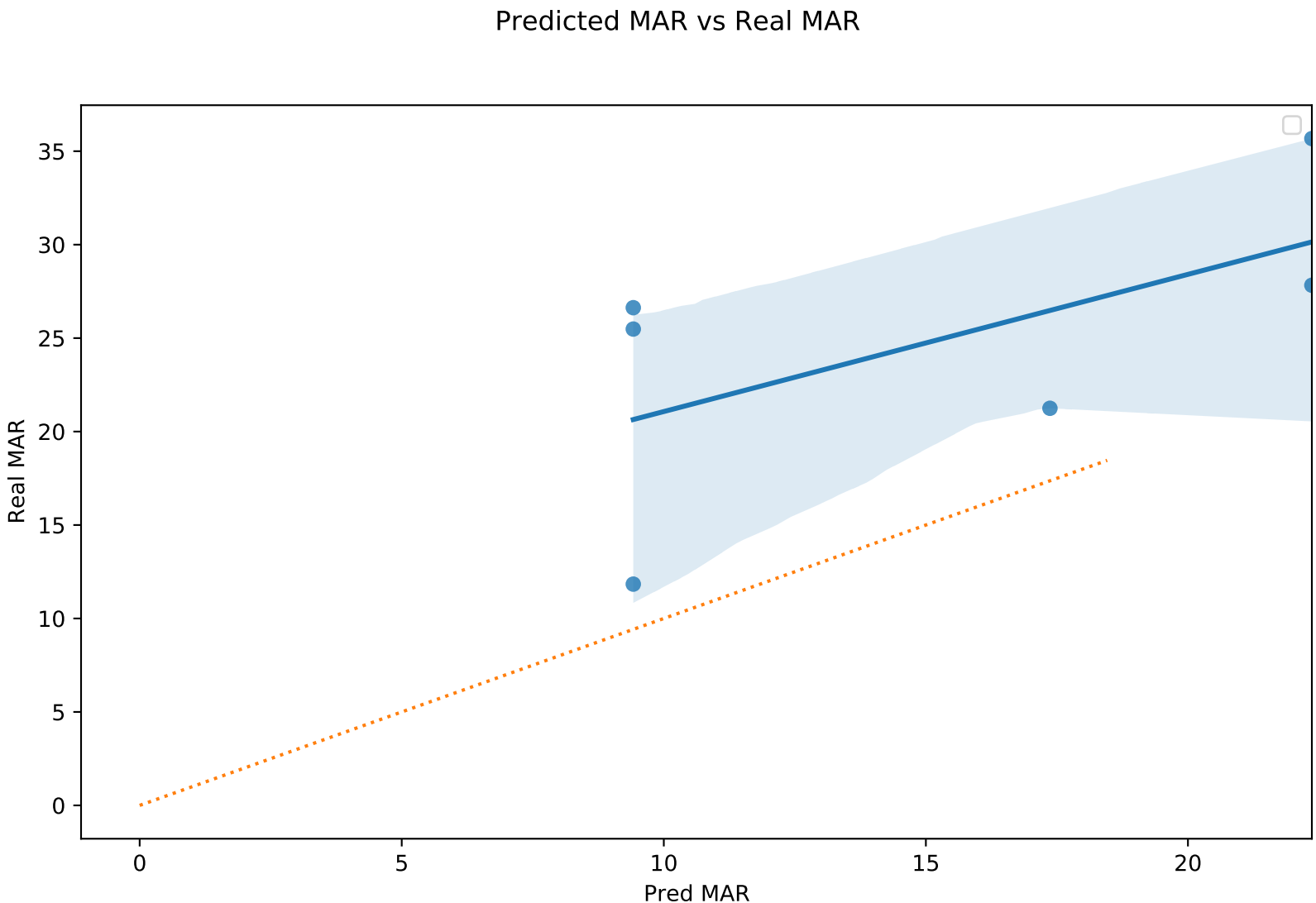
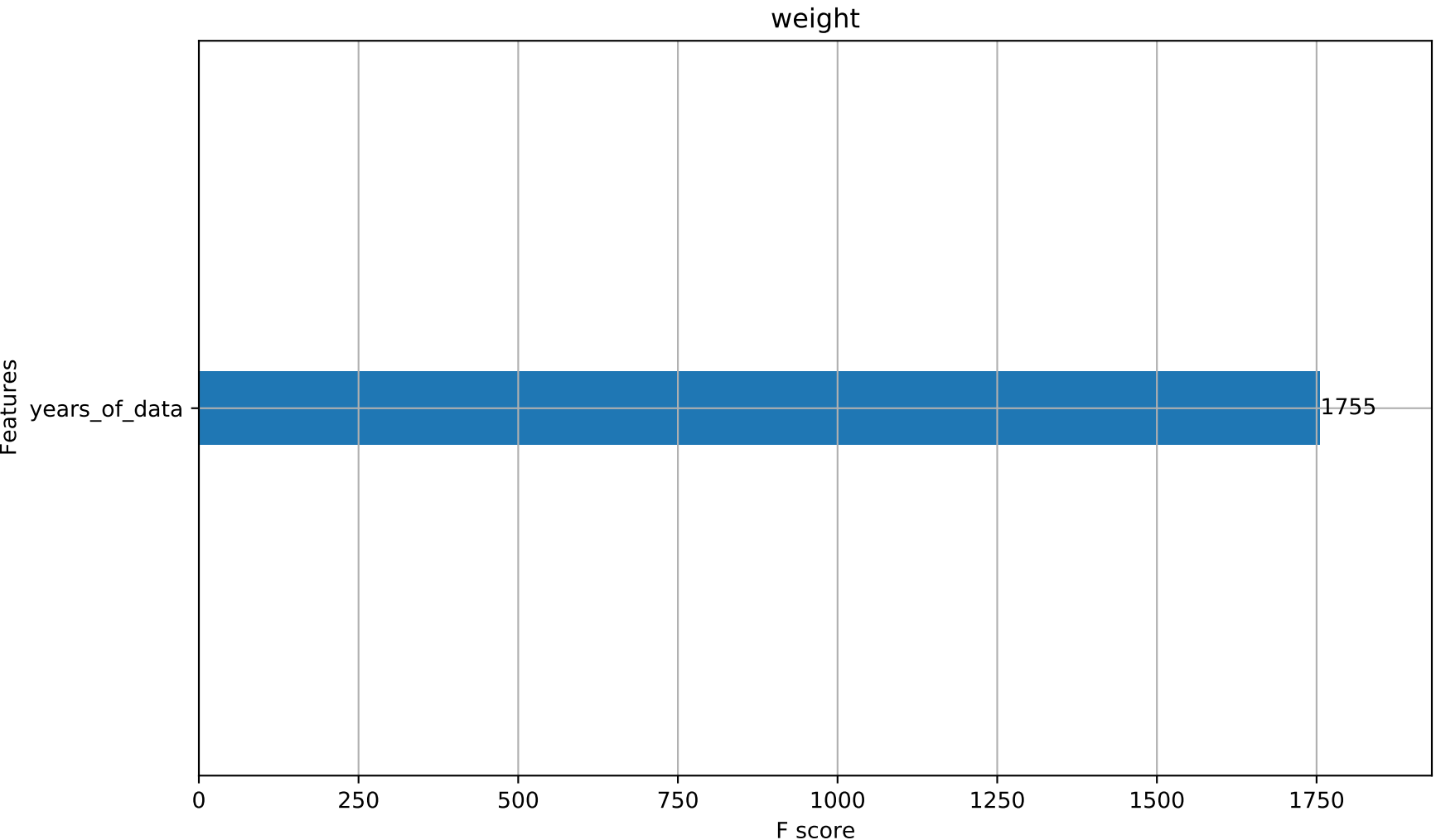
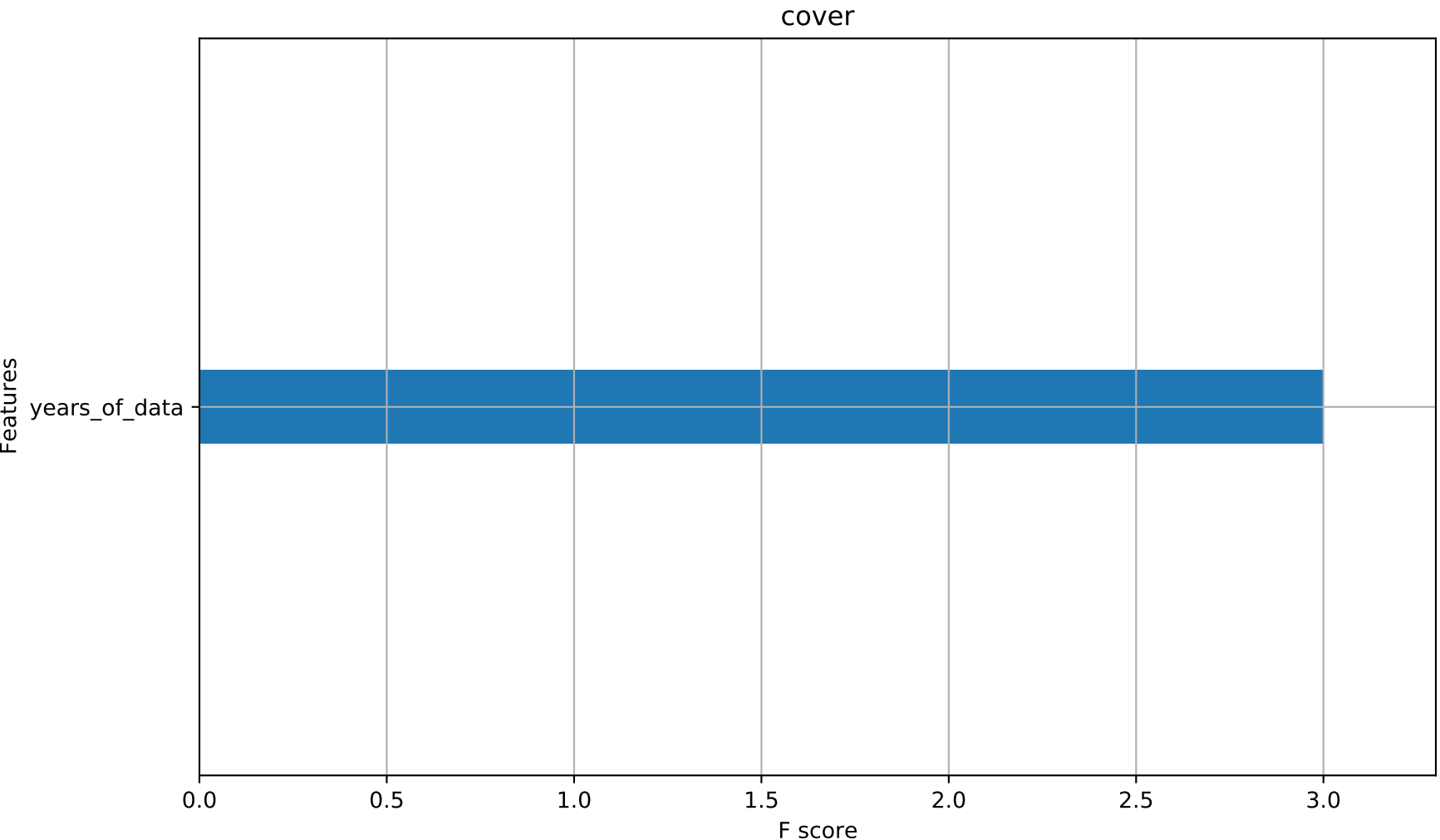
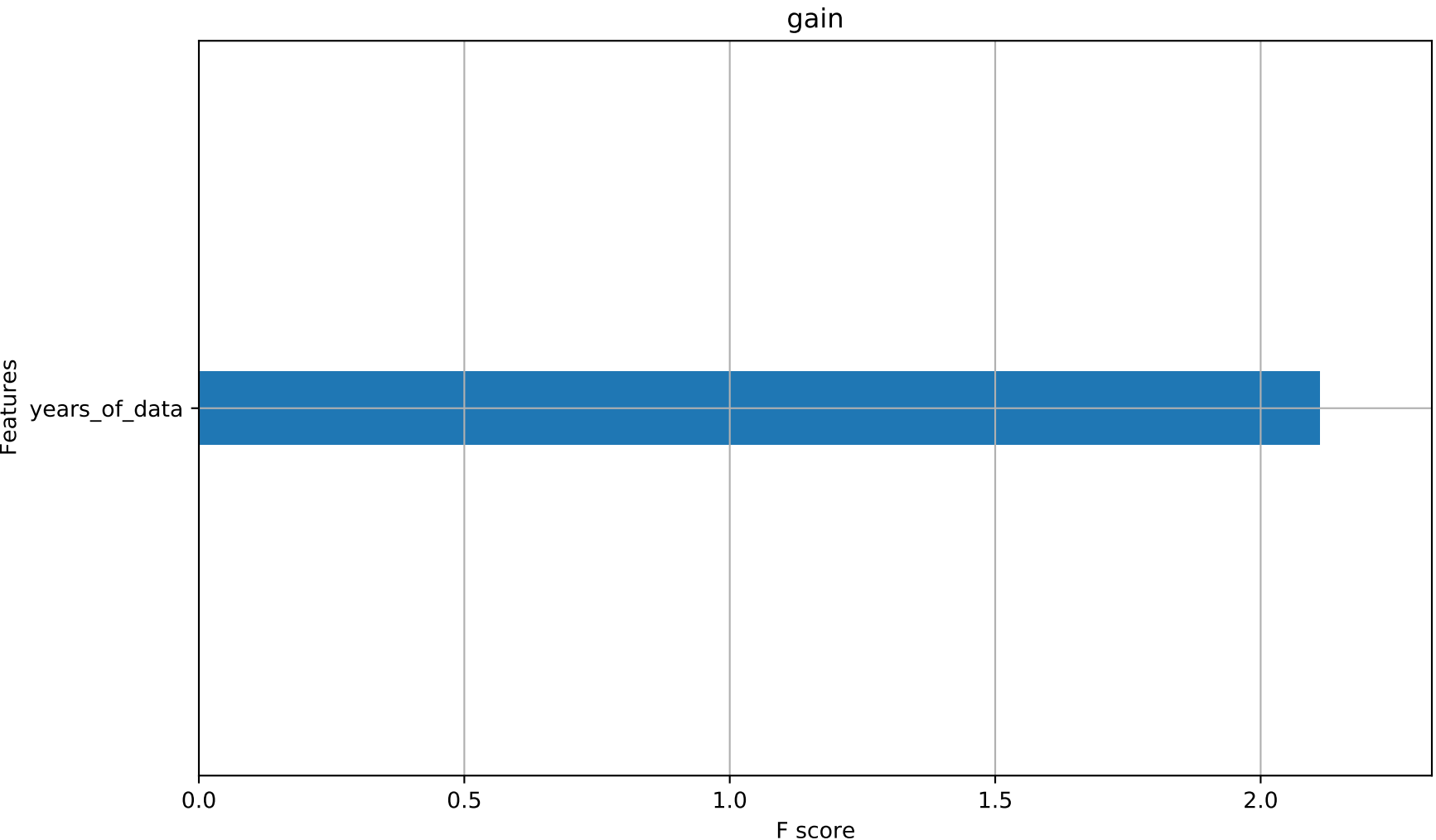
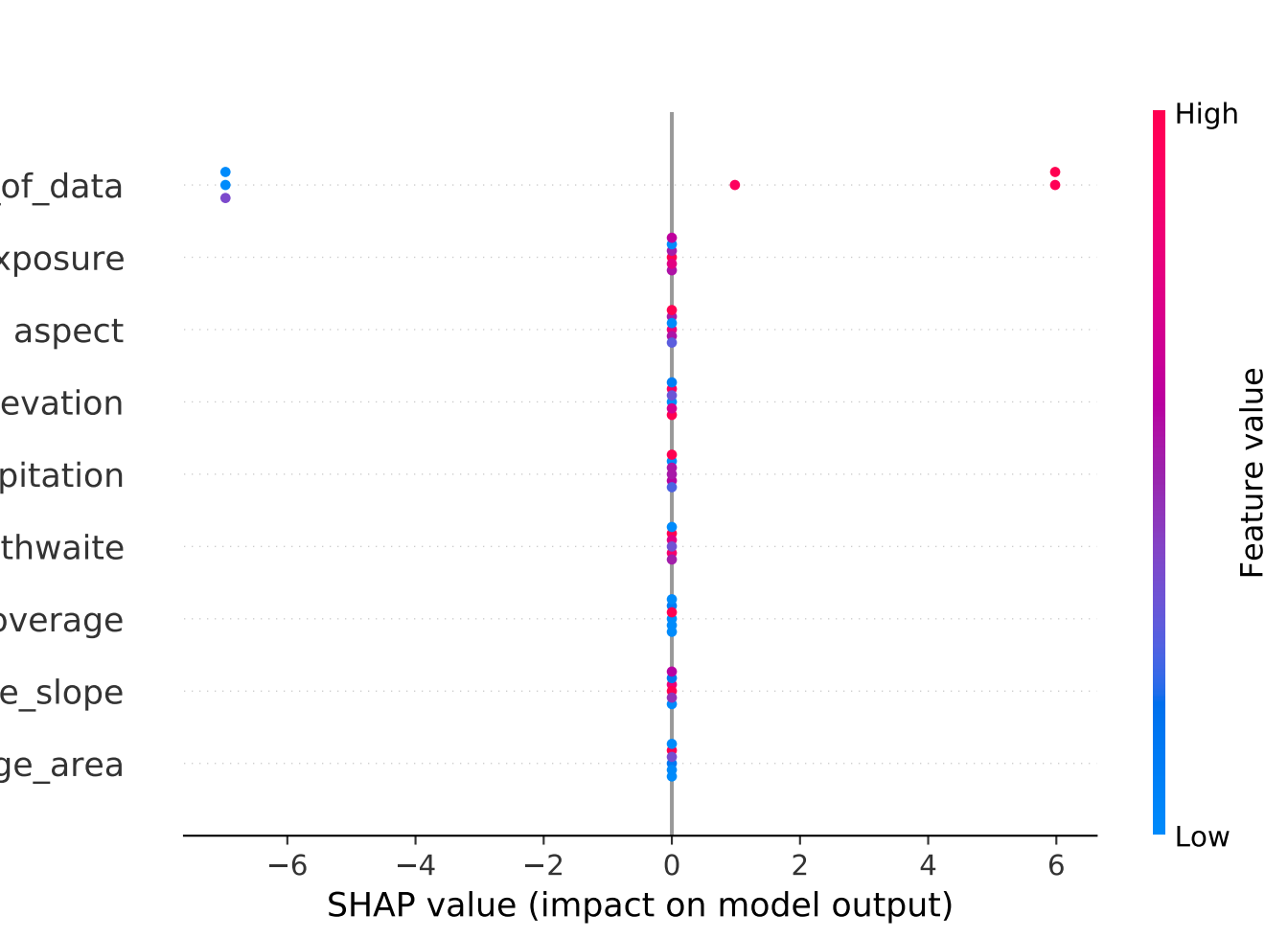

Predicted MAR vs Real MAR
Real MAR
Pred MAR
0
5
10
15
20
25
30
35

Feature Correlations
years_of_data
drainage_area
average_slope
glacial_coverage
ential_evapotranspiration_thornthwaite
annual_precipitation
median_elevation
aspect
solar_exposure
1.00
0.75
0.50
0.25
0.00
−0.25
−0.50
−0.75
−1.00

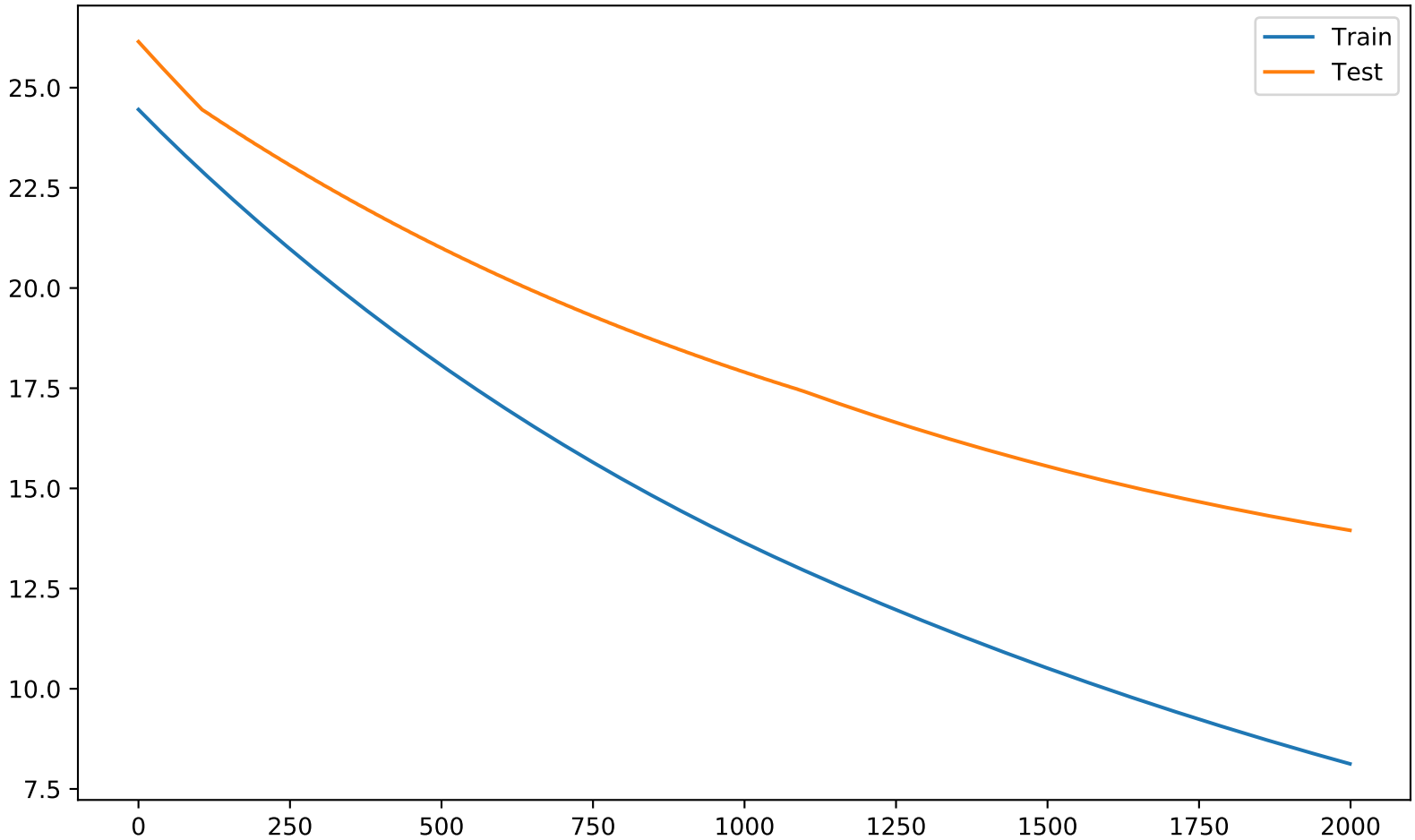

weight
Features
years_of_data
1755
0
250
500
750
1000
1250
1500
1750
F score

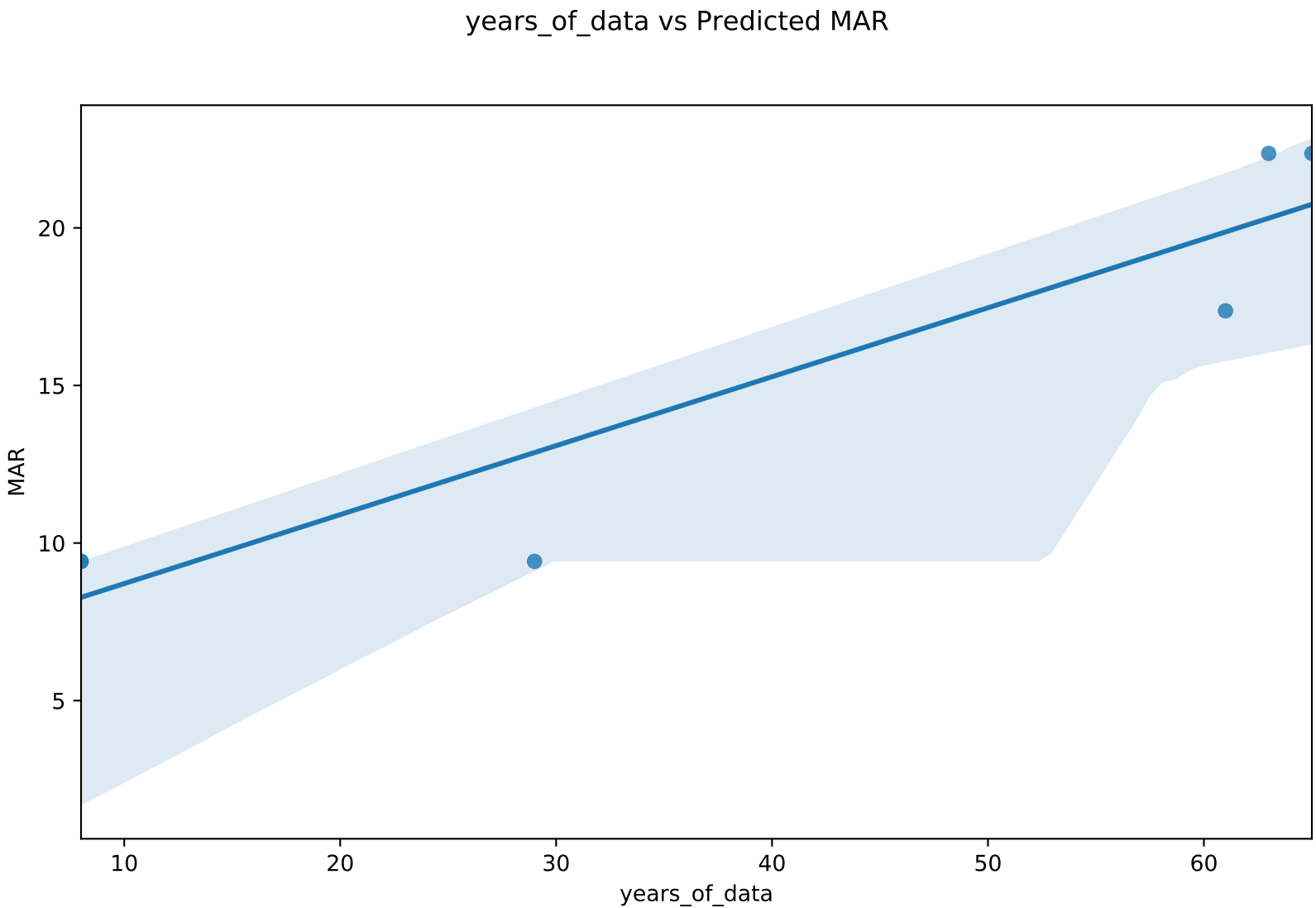

cover
Features
years_of_data
0.0
0.5
1.0
1.5
2.0
2.5
3.0
F score

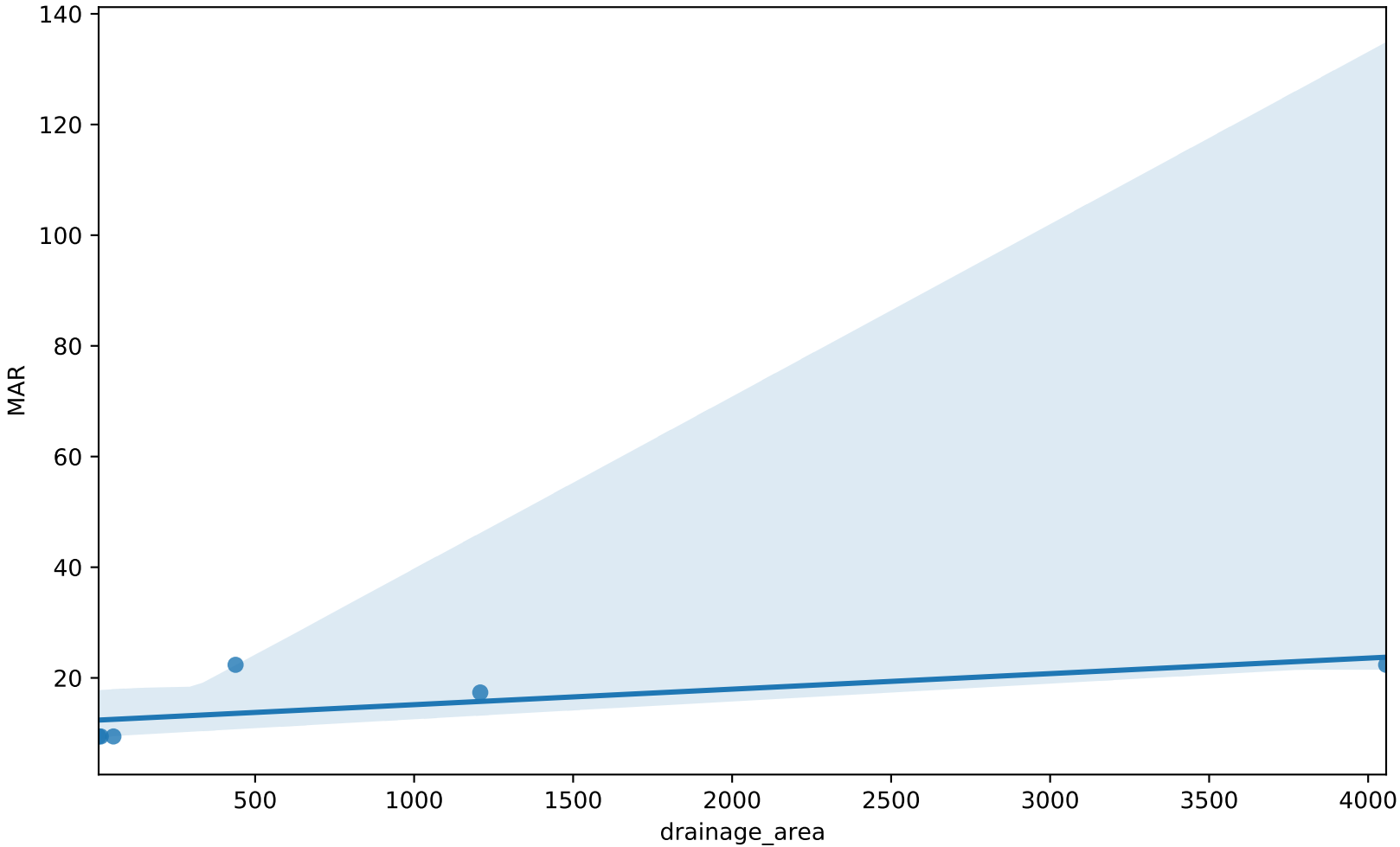

gain
Features
years_of_data
0.0
0.5
1.0
1.5
2.0
F score

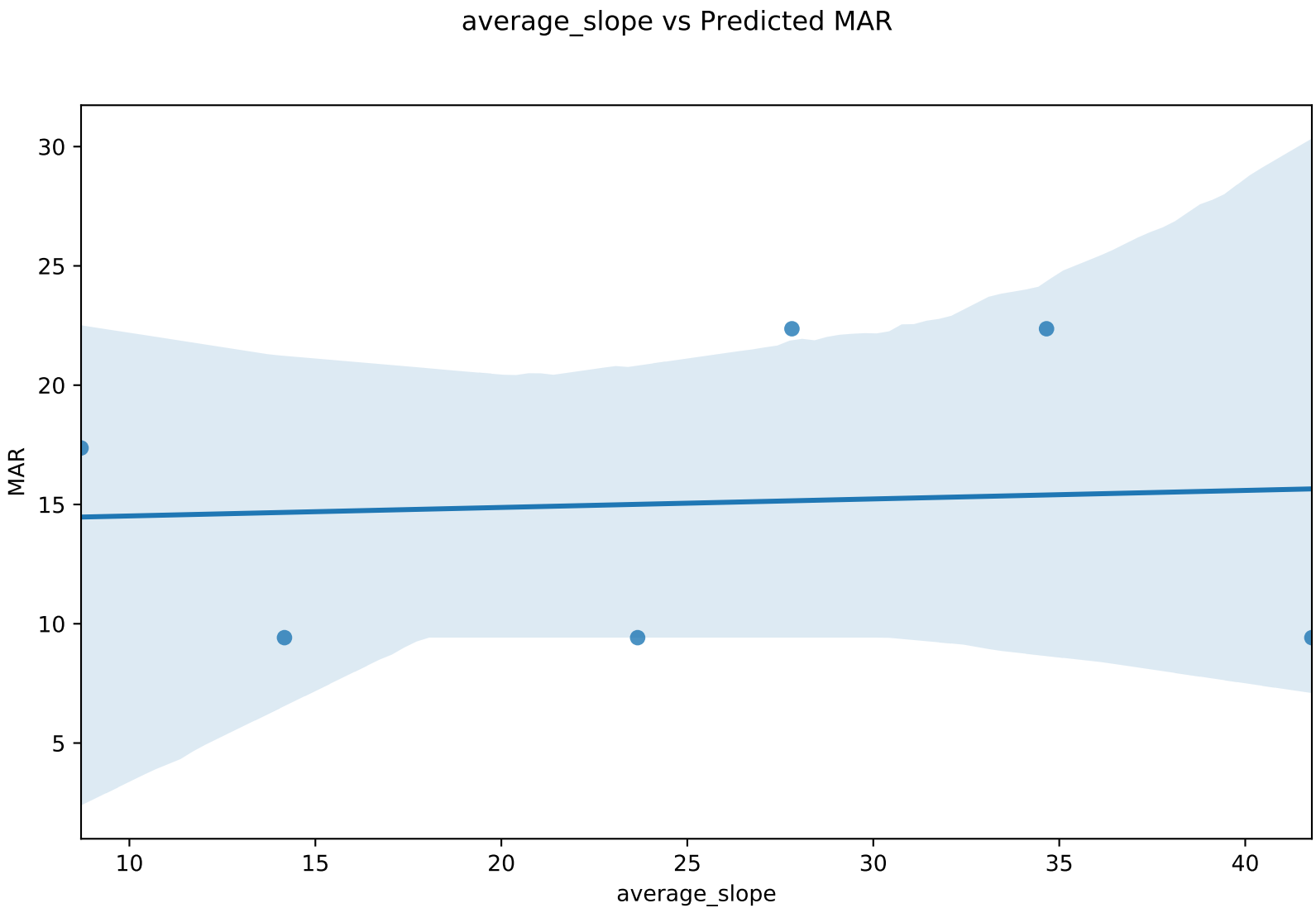

of_data
xposure
aspect
evation
pitation
thwaite
overage
e_slope
ge_area
−6
−4
−2
0
2
4
6
SHAP value (impact on model output)
High
Feature value
Low

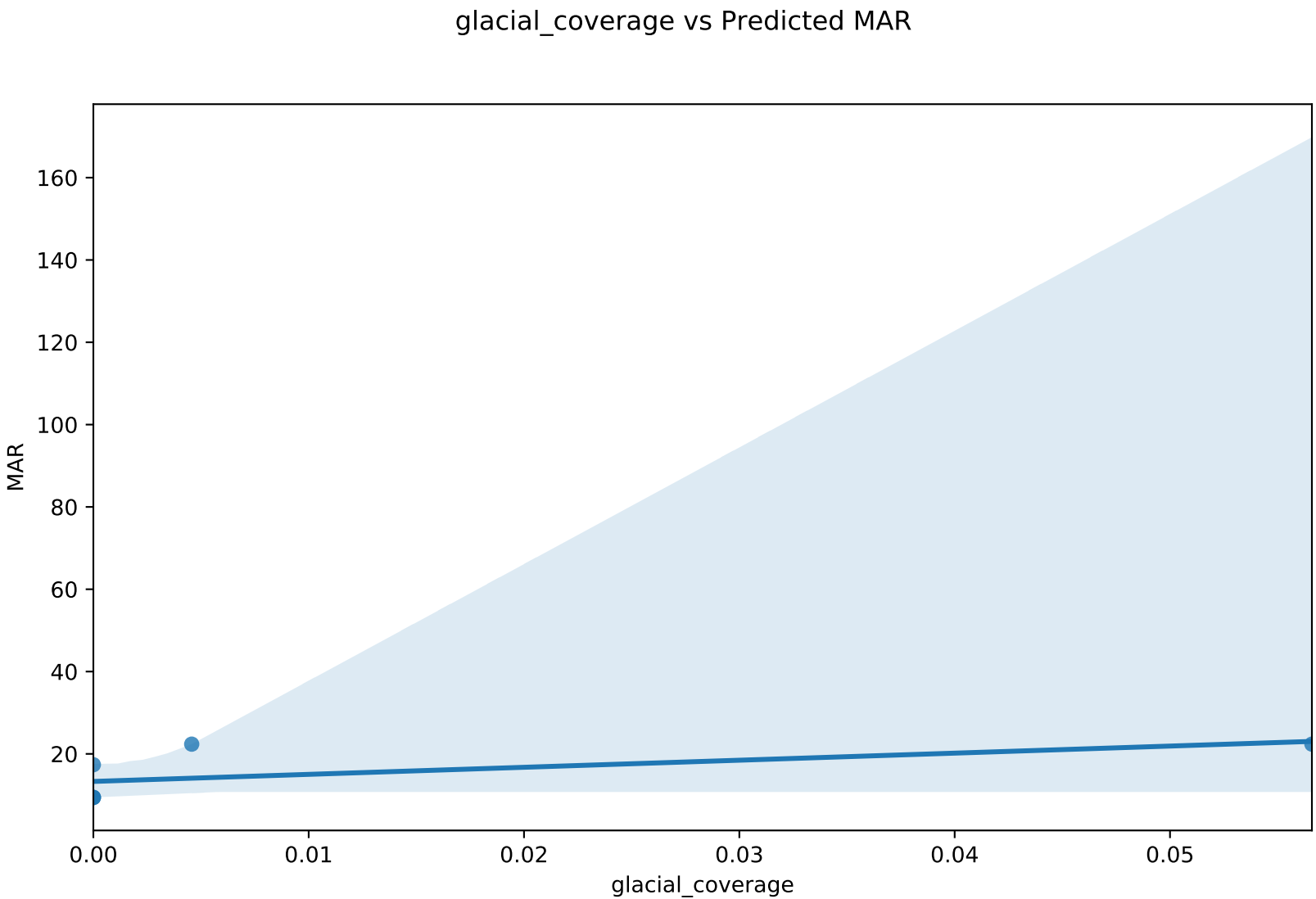
RMSE: 11.418245786800309 R2: -1.5079416175915985

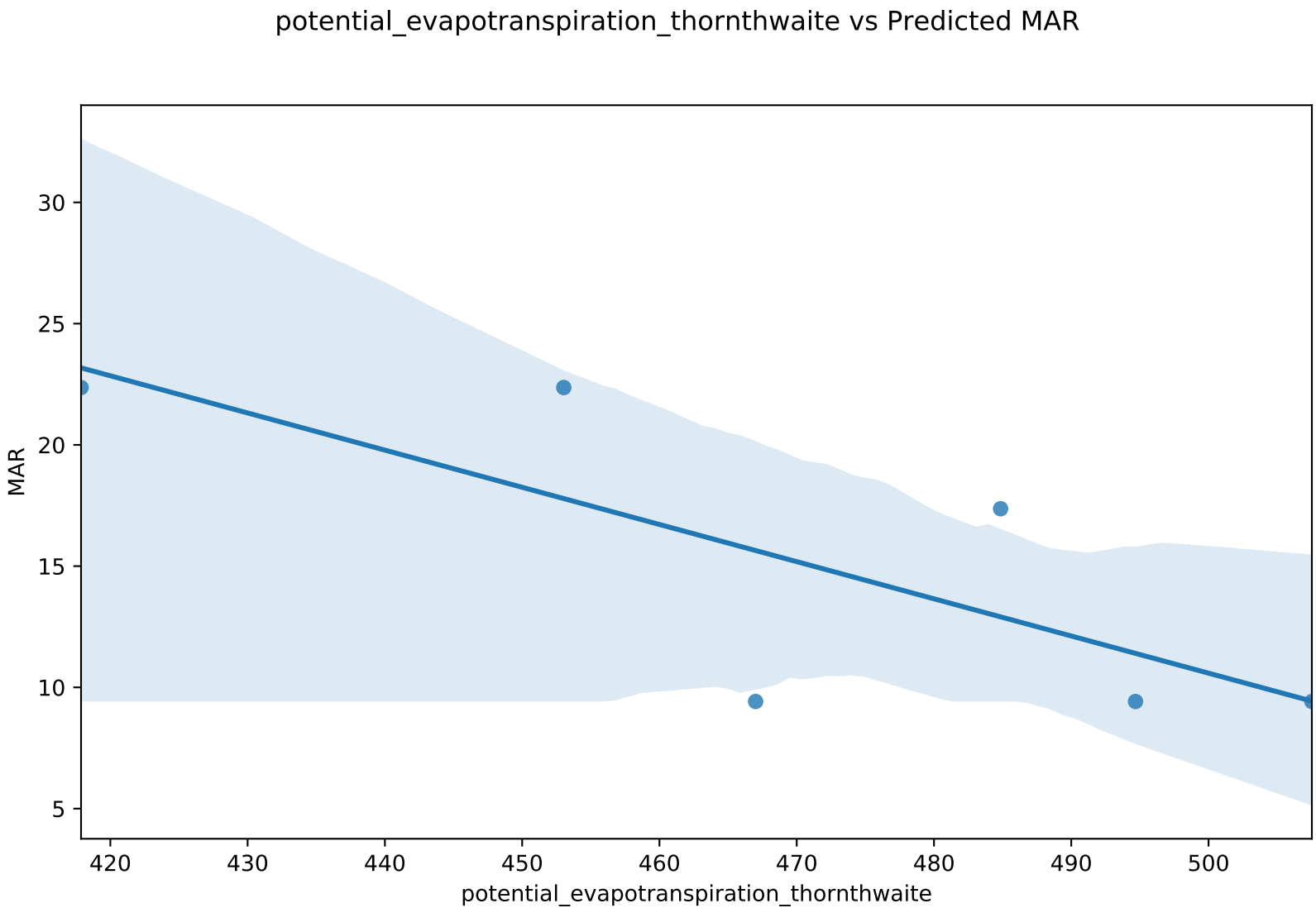


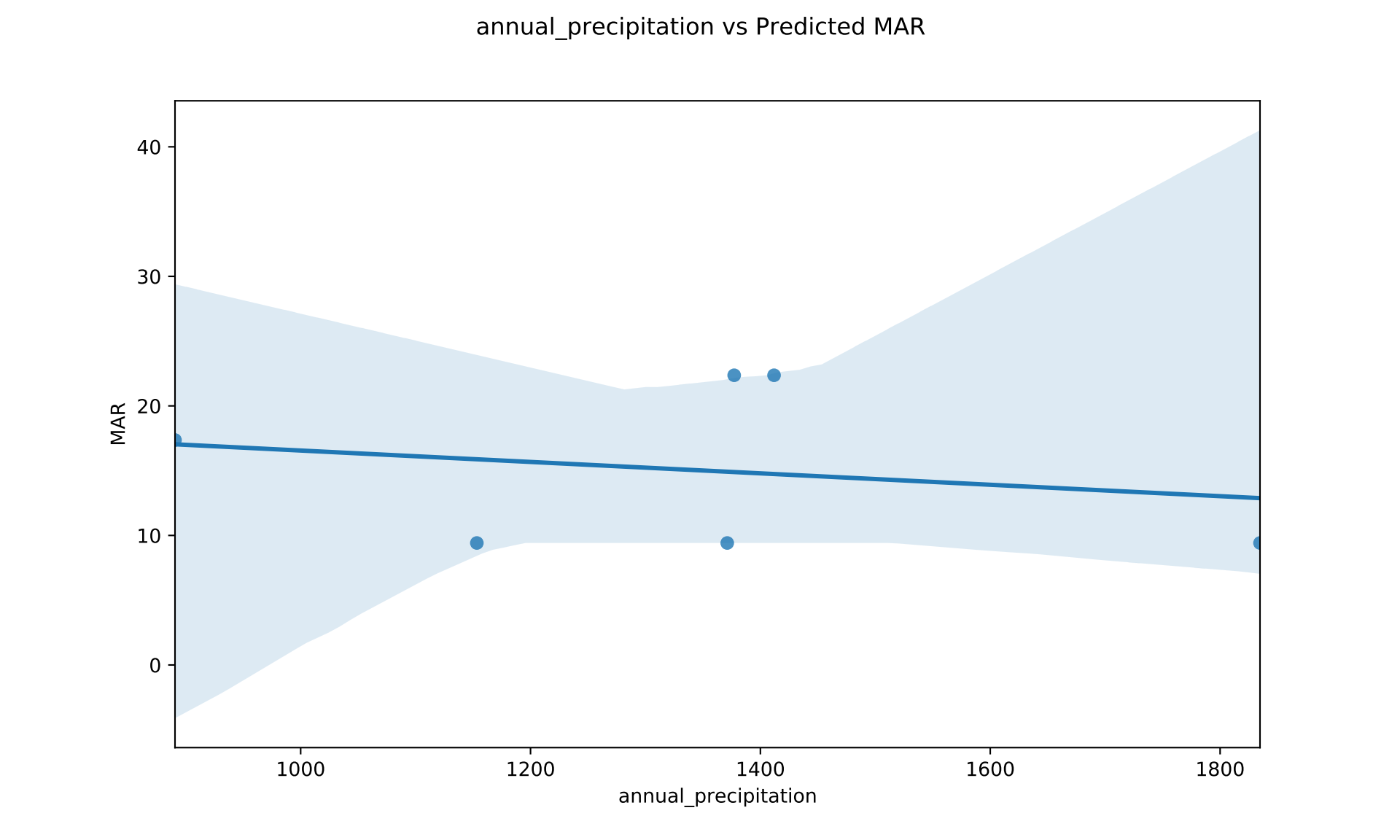

years_of_data vs Predicted MAR
MAR
20
15
10
5
10
20
30
40
50
60
years_of_data

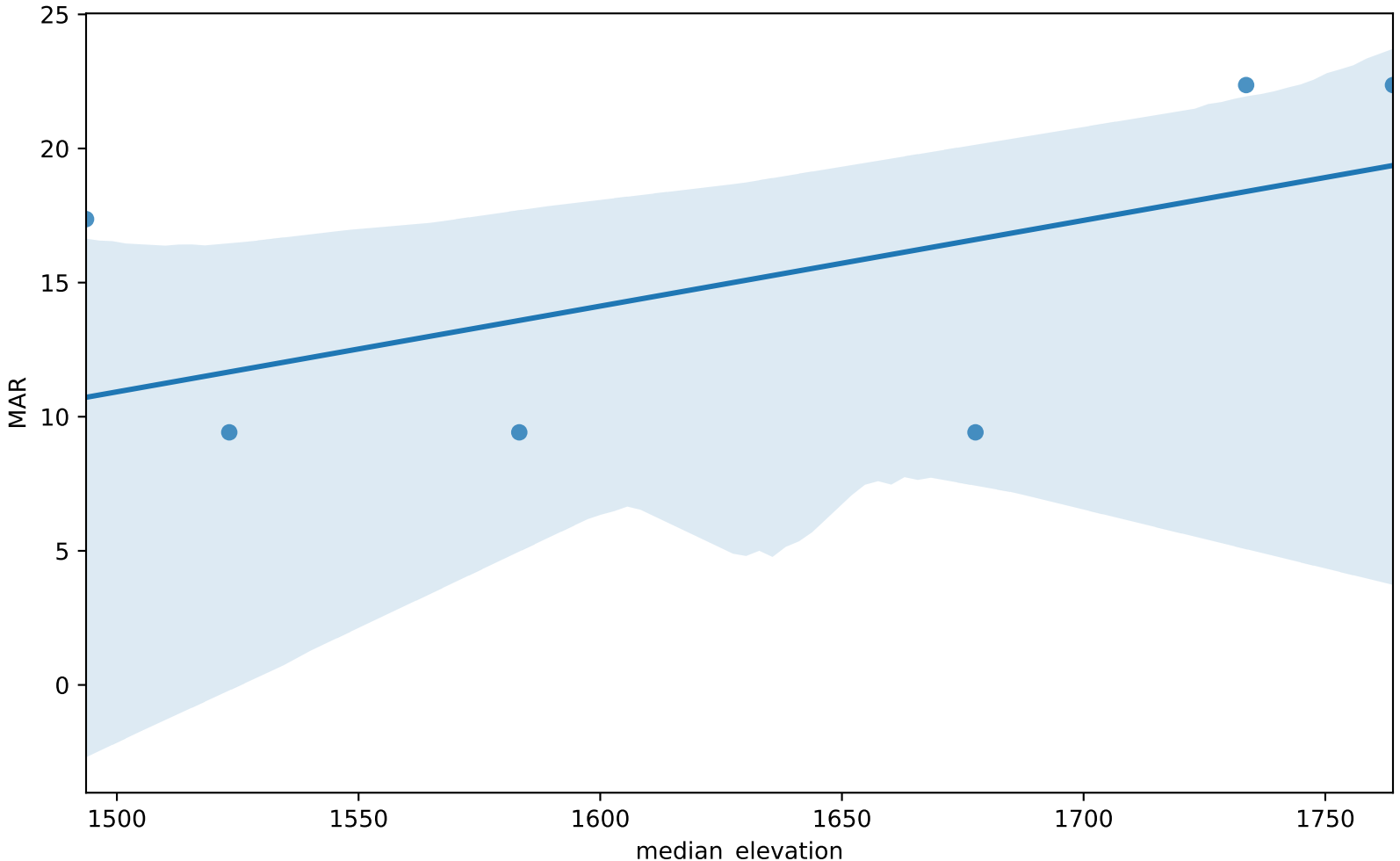

drainage_area vs Predicted MAR
MAR
drainage_area
140
120
100
80
60
40
20
500
1000
1500
2000
2500
3000
3500
4000

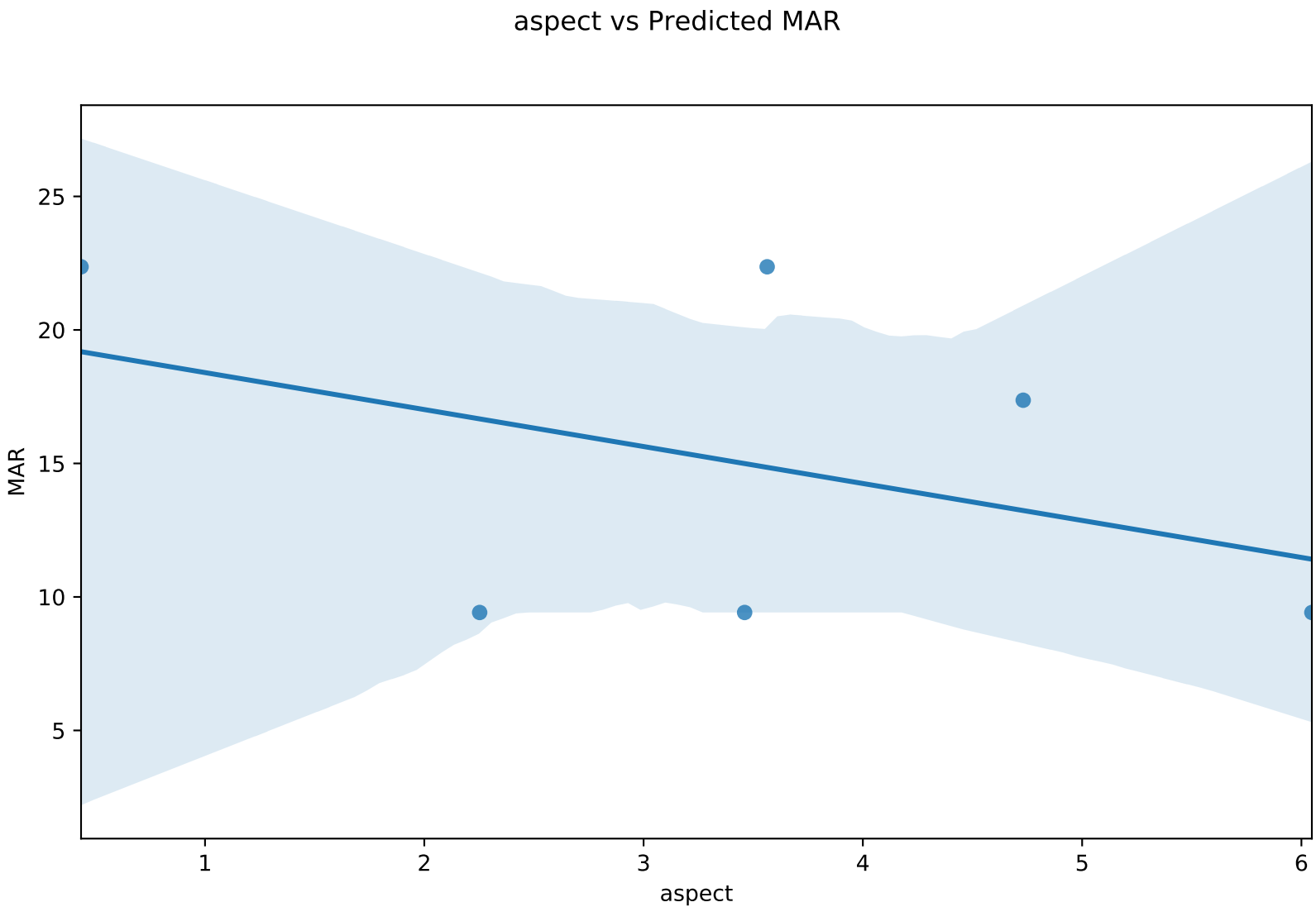

average_slope vs Predicted MAR
MAR
30
25
20
15
10
5
10
15
20
25
30
35
40
average_slope

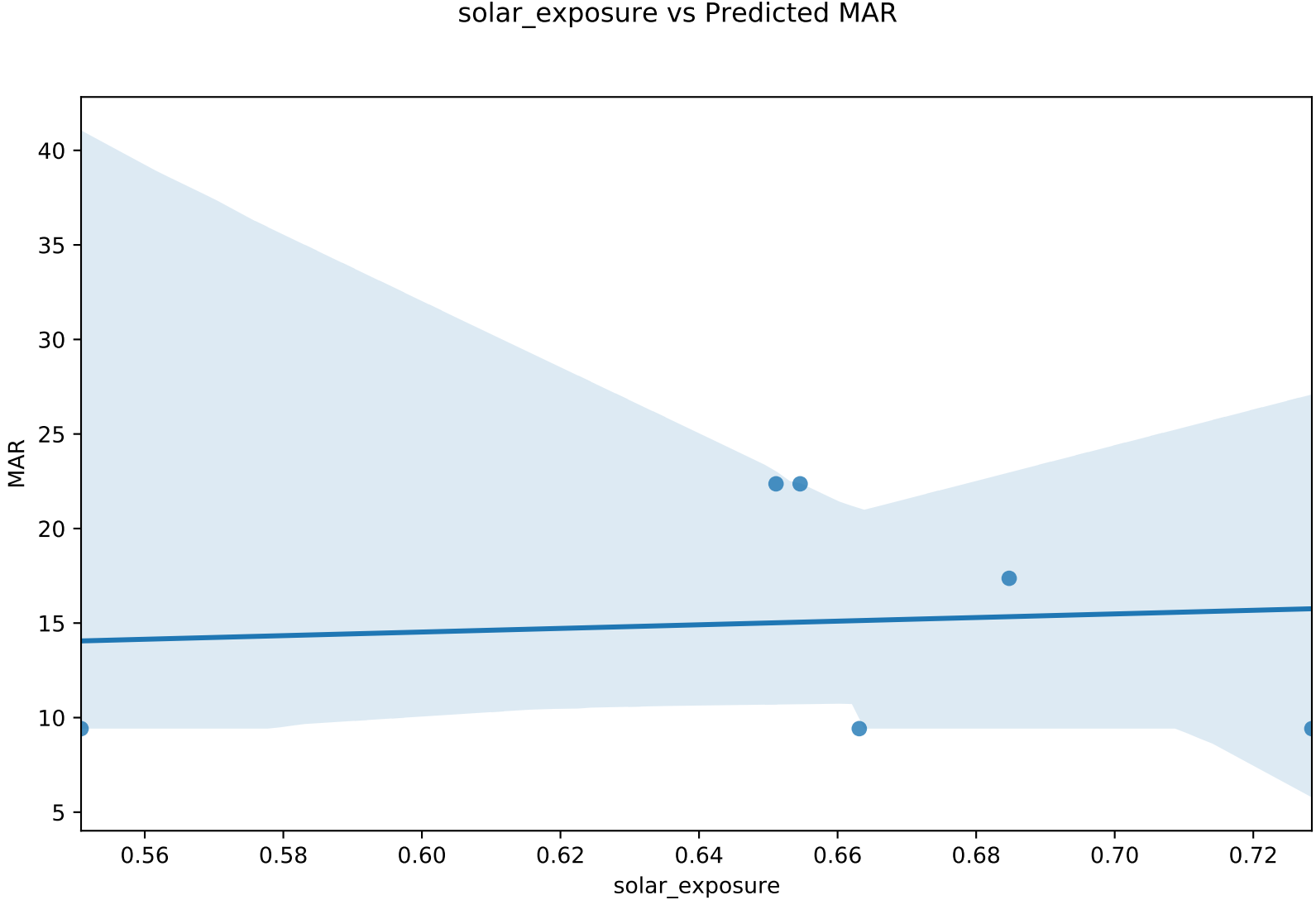

glacial_coverage vs Predicted MAR
MAR
160
140
120
100
80
60
40
20
0.00
0.01
0.02
0.03
0.04
0.05
glacial_coverage


potential_evapotranspiration_thornthwaite vs Predicted MAR
MAR
potential_evapotranspiration_thornthwaite
30
25
20
15
10
5
420
430
440
450
460
470
480
490
500


annual_precipitation vs Predicted MAR
MAR
40
30
20
10
0
1000
1200
1400
1600
1800
annual_precipitation


median_elevation vs Predicted MAR
MAR
median_elevation
25
20
15
10
5
0
1500
1550
1600
1650
1700
1750


aspect vs Predicted MAR
MAR
25
20
15
10
5
1
2
3
4
5
6
aspect


solar_exposure vs Predicted MAR
MAR
40
35
30
25
20
15
10
5
0.56
0.58
0.60
0.62
0.64
0.66
0.68
0.70
0.72
solar_exposure