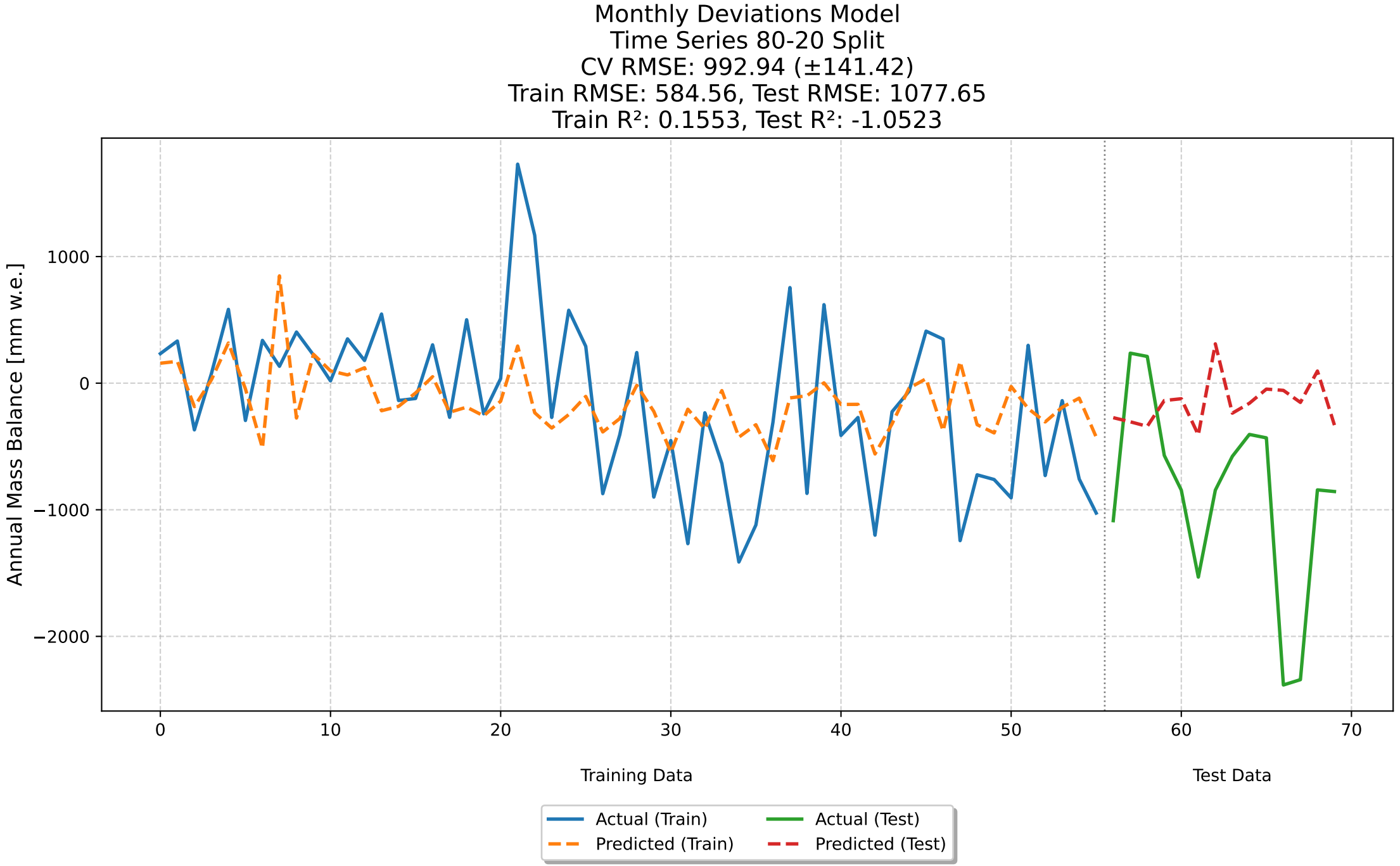
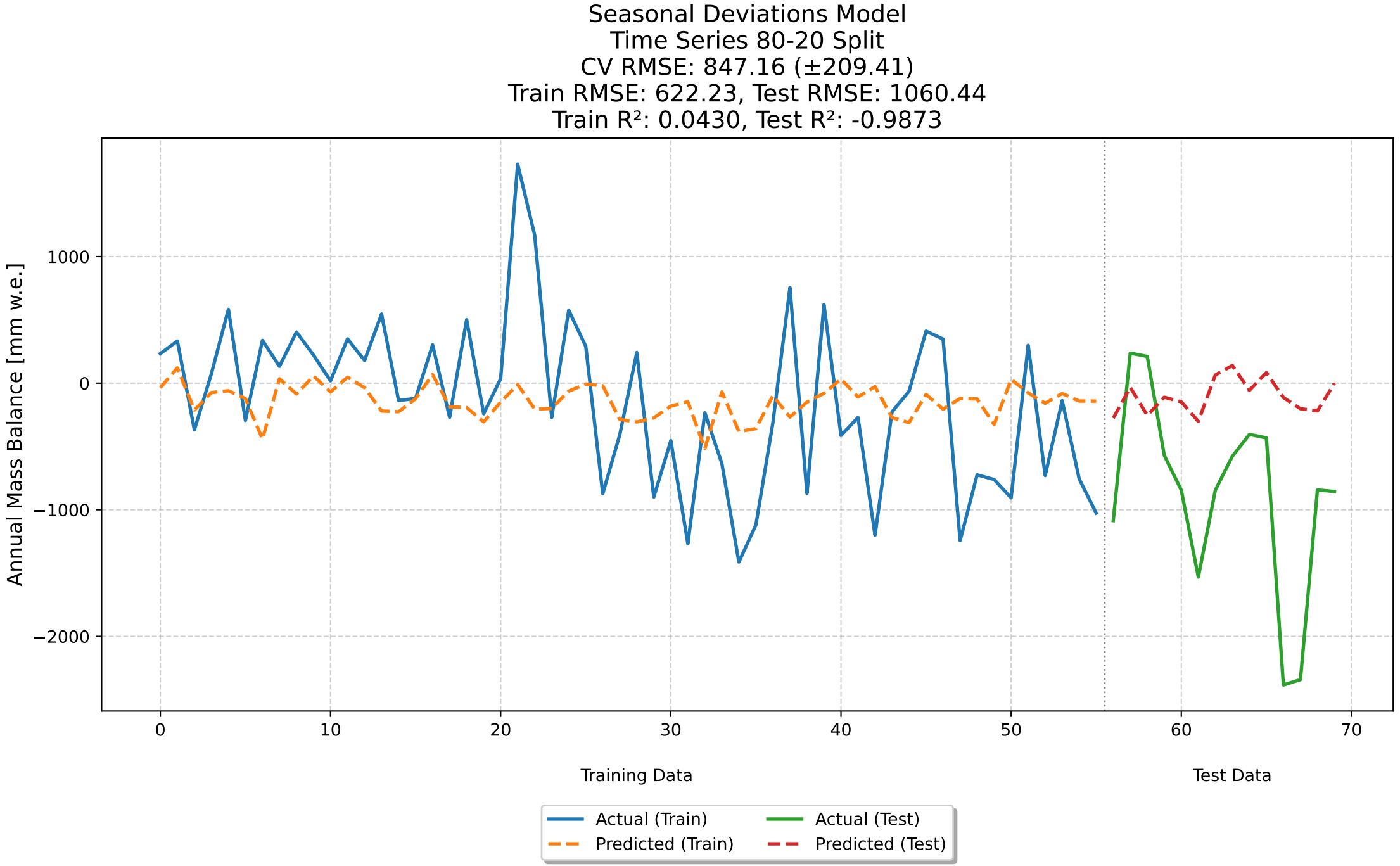
Glacier Mass Balance Model Results: Allalingletscher


Monthly Deviations Model
Time Series 80-20 Split
CV RMSE: 992.94 (±141.42)
Train RMSE: 584.56, Test RMSE: 1077.65
Train R²: 0.1553, Test R²: -1.0523
Annual Mass Balance [mm w.e.]
1000
0
−1000
−2000
0
10
20
30
40
50
60
70
Training Data
Test Data
Actual (Train)
Predicted (Train)
Actual (Test)
Predicted (Test)

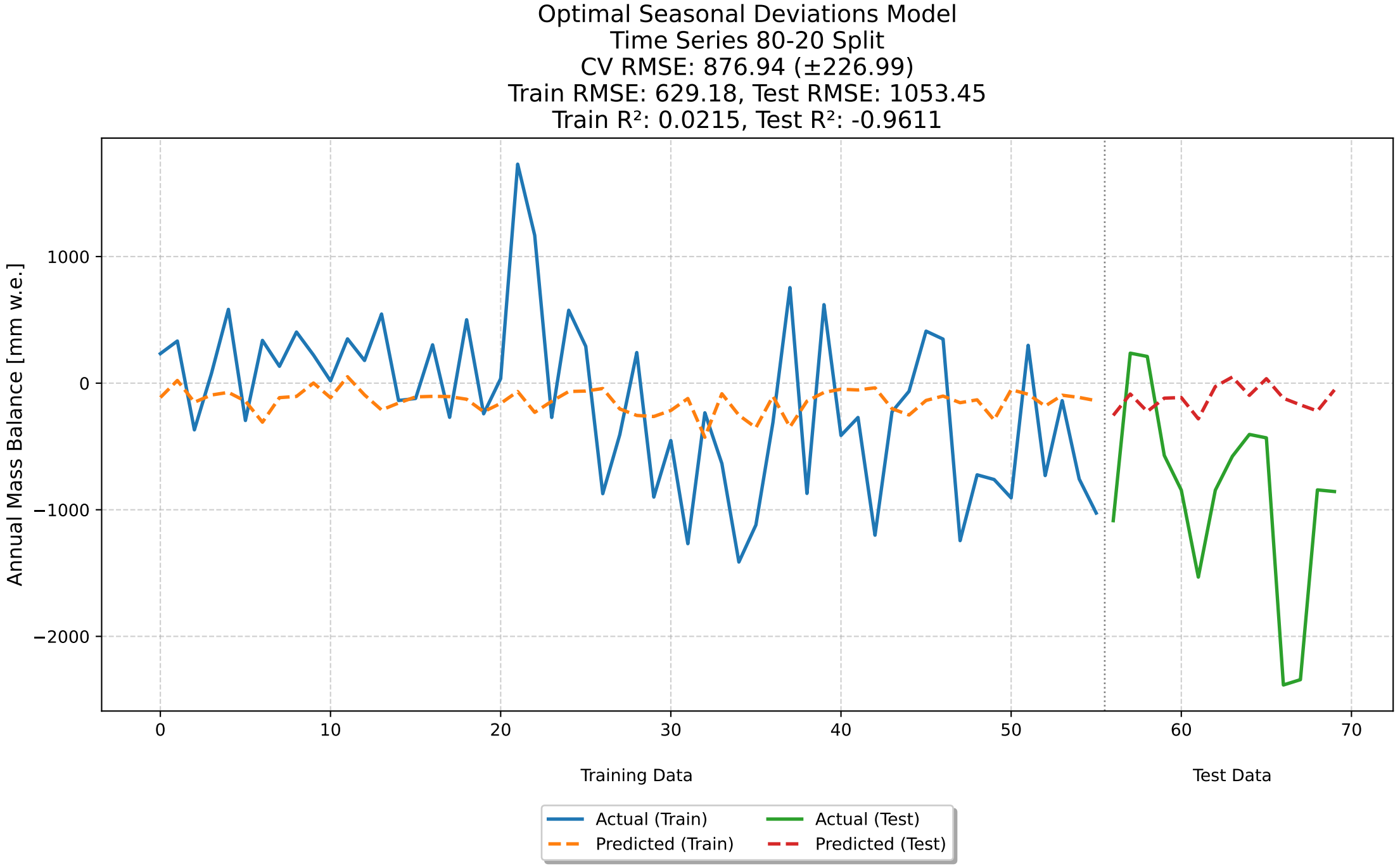
Monthly Deviations Model - Performance Metrics and Coefficients

Metric	Value
Cross-Validation RMSE	992.94 (±141.42)
Training RMSE	584.56
Training R^2	0.1553
Test RMSE	1077.65
Test R^2	-1.0523
Feature	Coefficient
may_td	43.7100
june_td	-35.1989
july_td	-67.0655
august_td	72.0017
september_td	-116.5208
october_pd	70.5365
november_pd	-85.7716
december_pd	102.3069
january_pd	30.7599
february_pd	-31.4612
march_pd	-2.6199
april_pd	144.7796
Intercept	-142.0893


Seasonal Deviations Model
Time Series 80-20 Split
CV RMSE: 847.16 (±209.41)
Train RMSE: 622.23, Test RMSE: 1060.44
Train R²: 0.0430, Test R²: -0.9873
Annual Mass Balance [mm w.e.]
1000
0
−1000
−2000
0
10
20
30
40
50
60
70
Training Data
Test Data
Actual (Train)
Predicted (Train)
Actual (Test)
Predicted (Test)

Seasonal Deviations Model - Performance Metrics and Coefficients

Metric	Value
Cross-Validation RMSE	847.16 (±209.41)
Training RMSE	622.23
Training R^2	0.0430
Test RMSE	1060.44
Test R^2	-0.9873
Feature	Coefficient
summer_temp_dev	-115.0097
winter_precip_dev	48.4992
Intercept	-142.0893


Optimal Seasonal Deviations Model
Time Series 80-20 Split
CV RMSE: 876.94 (±226.99)
Train RMSE: 629.18, Test RMSE: 1053.45
Train R²: 0.0215, Test R²: -0.9611
Annual Mass Balance [mm w.e.]
1000
0
−1000
−2000
0
10
20
30
40
50
60
70
Training Data
Test Data
Actual (Train)
Predicted (Train)
Actual (Test)
Predicted (Test)

Optimal Seasonal Deviations Model - Performance Metrics and Coefficients

Metric	Value
Cross-Validation RMSE	876.94 (±226.99)
Training RMSE	629.18
Training R^2	0.0215
Test RMSE	1053.45
Test R^2	-0.9611
Feature	Coefficient
optimal_summer_temp_dev	-89.0790
optimal_winter_precip_dev	18.5393
Intercept	-142.0893