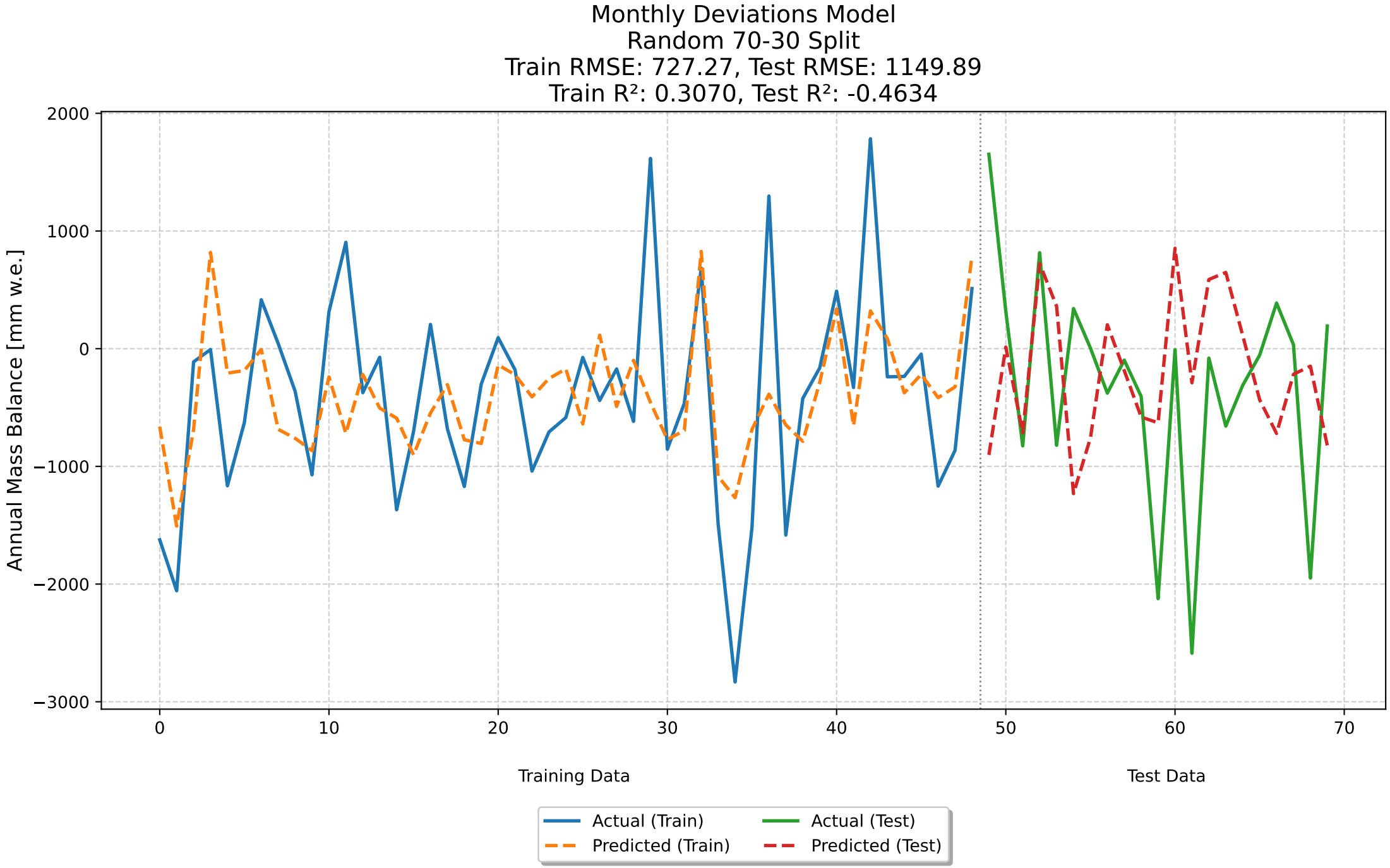
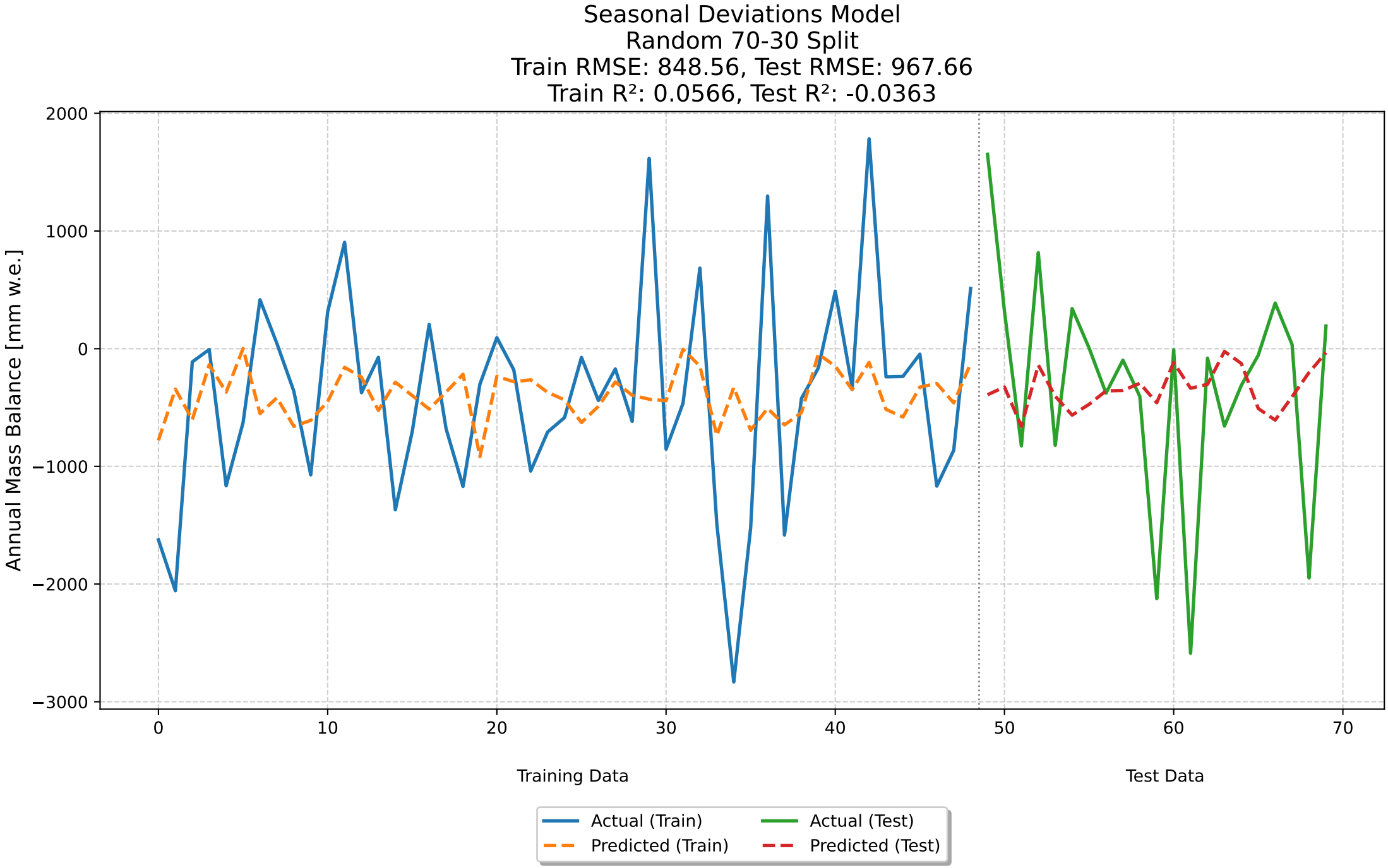
Glacier Mass Balance Model Results: Hohlaubgletscher


Monthly Deviations Model
Random 70-30 Split
Train RMSE: 727.27, Test RMSE: 1149.89
Train R²: 0.3070, Test R²: -0.4634
Annual Mass Balance [mm w.e.]
2000
1000
0
−1000
−2000
−3000
0
10
20
30
40
50
60
70
Training Data
Test Data
Actual (Train)
Predicted (Train)
Actual (Test)
Predicted (Test)

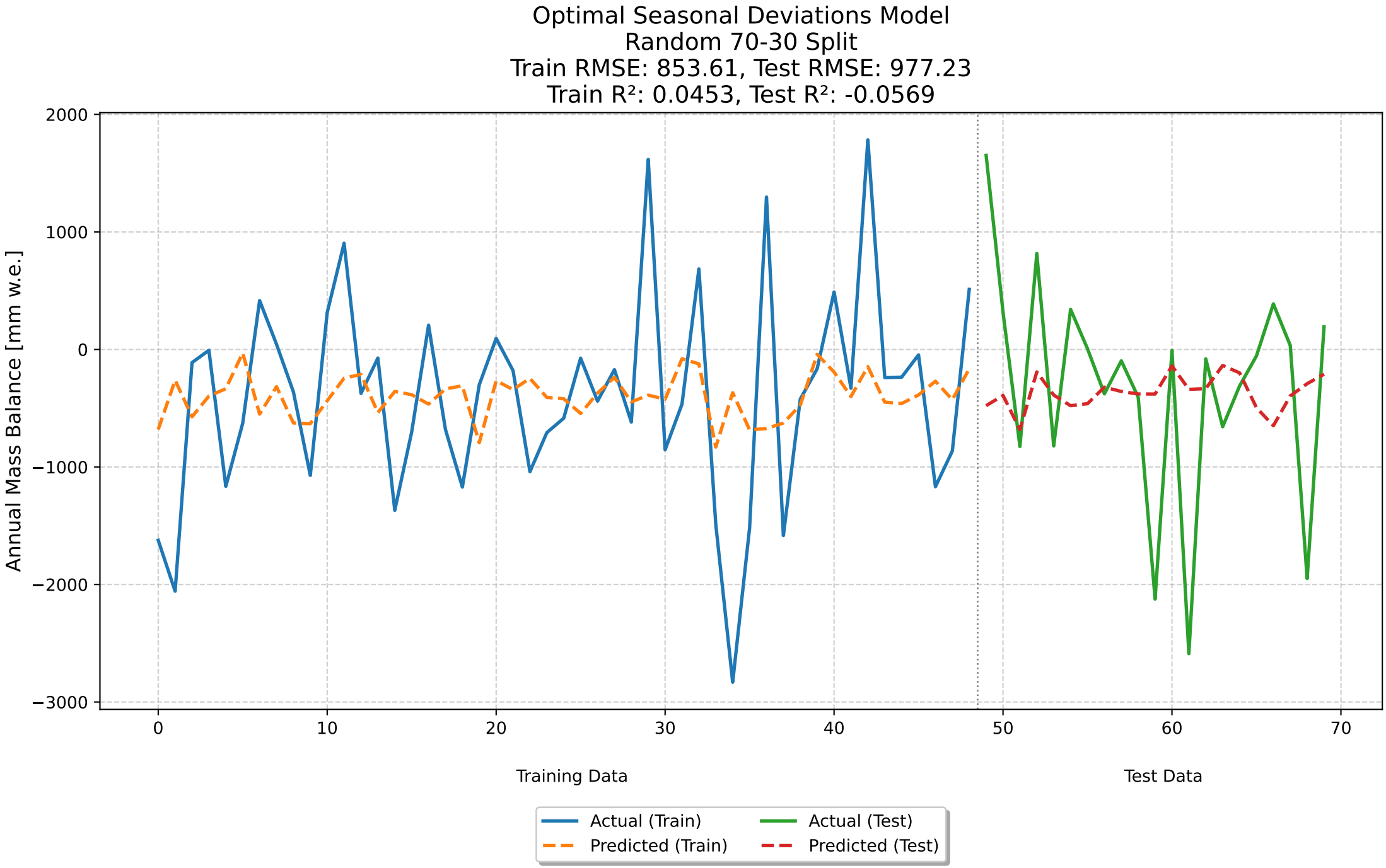
Monthly Deviations Model - Performance Metrics and Coefficients

Metric	Value
Training RMSE	727.27
Training R^2	0.3070
Test RMSE	1149.89
Test R^2	-0.4634
Feature	Coefficient
may_td	-22.5009
june_td	-58.1790
july_td	-55.1187
august_td	-52.9645
september_td	-57.8574
october_pd	-165.8417
november_pd	56.7444
december_pd	334.1376
january_pd	58.4965
february_pd	-171.0531
march_pd	-72.6443
april_pd	232.9299
Intercept	-395.3061


Seasonal Deviations Model
Random 70-30 Split
Train RMSE: 848.56, Test RMSE: 967.66
Train R²: 0.0566, Test R²: -0.0363
Annual Mass Balance [mm w.e.]
2000
1000
0
−1000
−2000
−3000
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
Training RMSE	848.56
Training R^2	0.0566
Test RMSE	967.66
Test R^2	-0.0363
Feature	Coefficient
summer_temp_dev	-96.3778
winter_precip_dev	151.9799
Intercept	-395.3061


Optimal Seasonal Deviations Model
Random 70-30 Split
Train RMSE: 853.61, Test RMSE: 977.23
Train R²: 0.0453, Test R²: -0.0569
Annual Mass Balance [mm w.e.]
2000
1000
0
−1000
−2000
−3000
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
Training RMSE	853.61
Training R^2	0.0453
Test RMSE	977.23
Test R^2	-0.0569
Feature	Coefficient
optimal_summer_temp_dev	-110.2984
optimal_winter_precip_dev	113.4997
Intercept	-395.3061