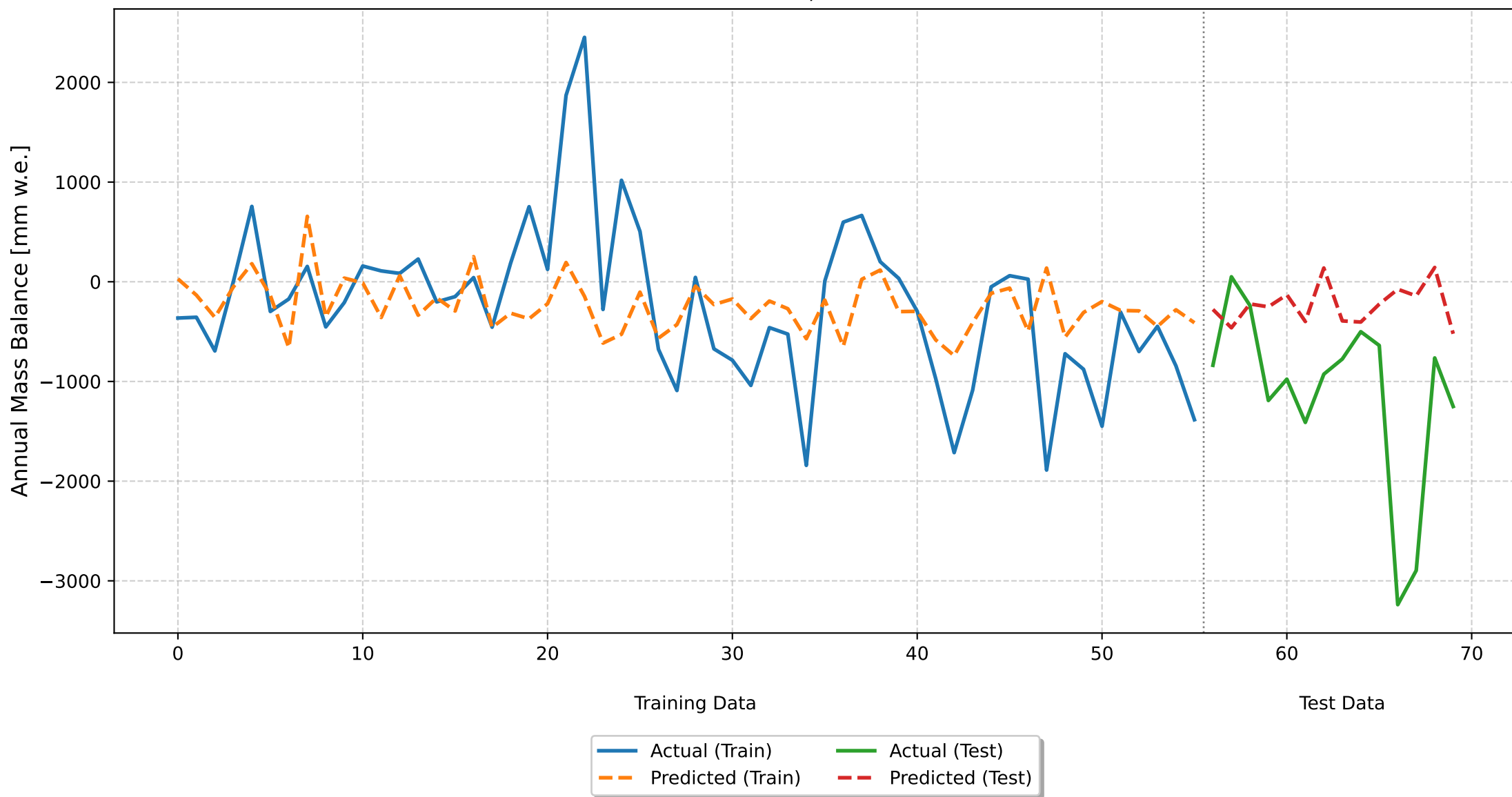


## Glacier Mass Balance Model Results: Schwarzberggletscher

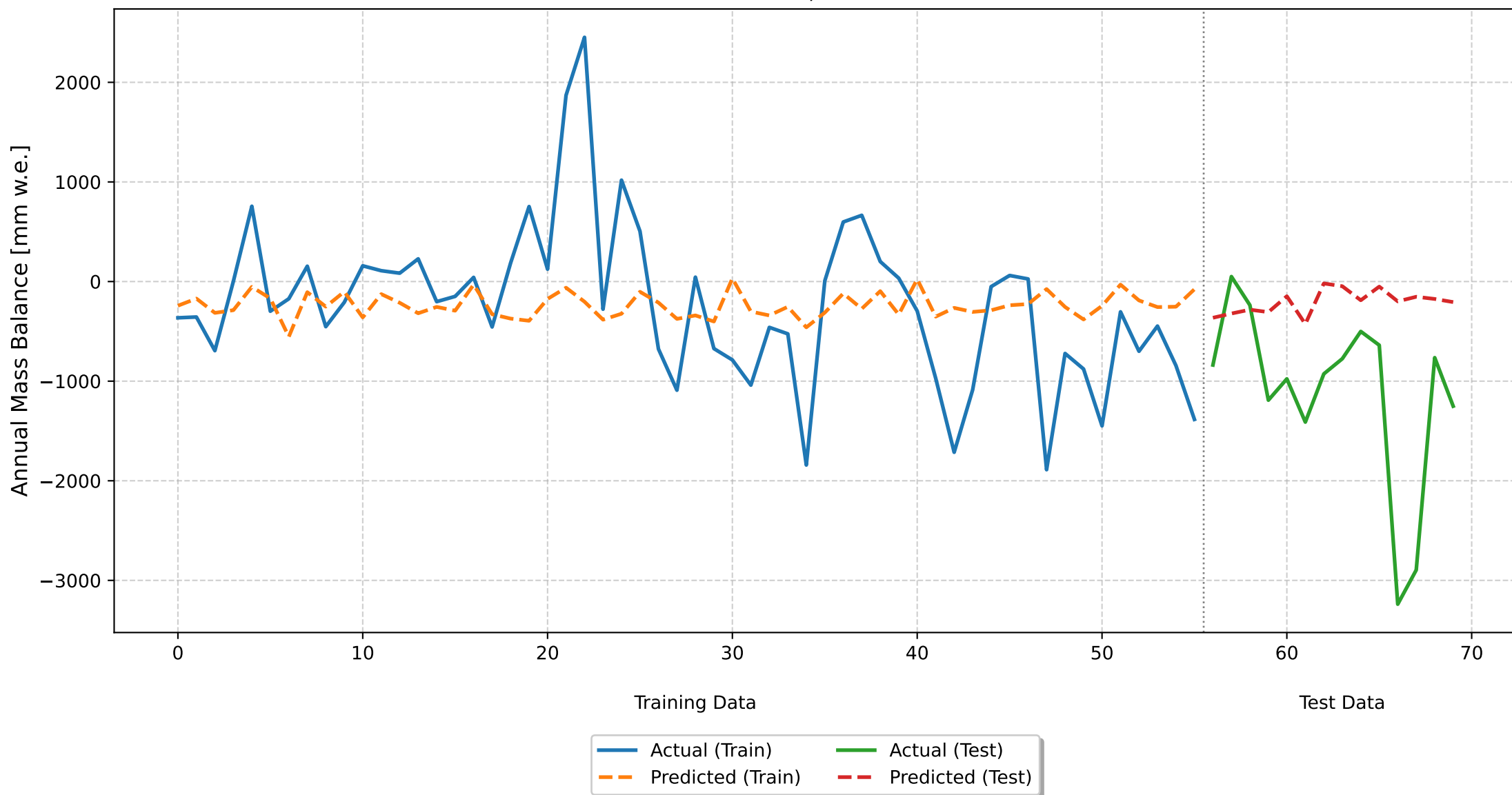
Monthly Deviations Model  
Time Series 80-20 Split  
CV RMSE: 1272.58 ( $\pm 232.55$ )  
Train RMSE: 738.99, Test RMSE: 1298.75  
Train  $R^2$ : 0.1115, Test  $R^2$ : -1.1671



## Monthly Deviations Model - Performance Metrics and Coefficients

Metric	Value
Cross-Validation RMSE	1272.58 ( $\pm 232.55$ )
Training RMSE	738.99
Training R <sup>2</sup>	0.1115
Test RMSE	1298.75
Test R <sup>2</sup>	-1.1671
Feature	Coefficient
may_td	103.5986
june_td	12.3596
july_td	-26.0454
august_td	128.8276
september_td	-132.5056
october_pd	131.5305
november_pd	-22.2900
december_pd	100.9363
january_pd	22.5604
february_pd	8.7359
march_pd	13.8959
april_pd	147.3402
Intercept	-239.0357

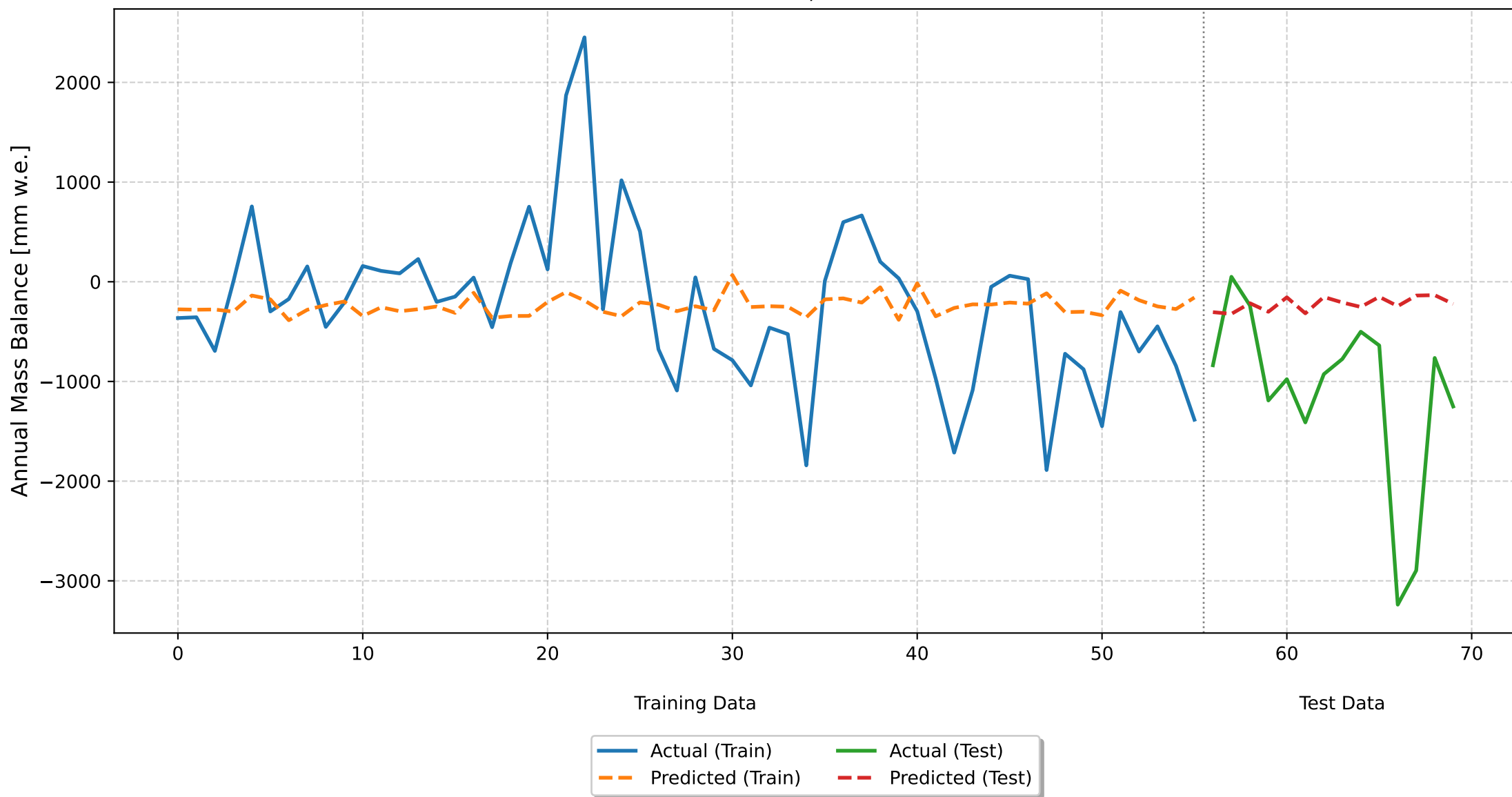
Seasonal Deviations Model  
Time Series 80-20 Split  
CV RMSE: 1071.43 ( $\pm 231.62$ )  
Train RMSE: 774.24, Test RMSE: 1276.31  
Train  $R^2$ : 0.0247, Test  $R^2$ : -1.0929



## Seasonal Deviations Model - Performance Metrics and Coefficients

Metric	Value
Cross-Validation RMSE	1071.43 ( $\pm 231.62$ )
Training RMSE	774.24
Training R <sup>2</sup>	0.0247
Test RMSE	1276.31
Test R <sup>2</sup>	-1.0929
Feature	Coefficient
summer_temp_dev	-18.8851
winter_precip_dev	118.8340
Intercept	-239.0357

Optimal Seasonal Deviations Model  
Time Series 80-20 Split  
CV RMSE: 1087.79 ( $\pm 250.43$ )  
Train RMSE: 778.65, Test RMSE: 1263.02  
Train  $R^2$ : 0.0136, Test  $R^2$ : -1.0495



## Optimal Seasonal Deviations Model - Performance Metrics and Coefficients

Metric	Value
Cross-Validation RMSE	1087.79 ( $\pm 250.43$ )
Training RMSE	778.65
Training R <sup>2</sup>	0.0136
Test RMSE	1263.02
Test R <sup>2</sup>	-1.0495
Feature	Coefficient
optimal_summer_temp_dev	27.2477
optimal_winter_precip_dev	90.7799
Intercept	-239.0357