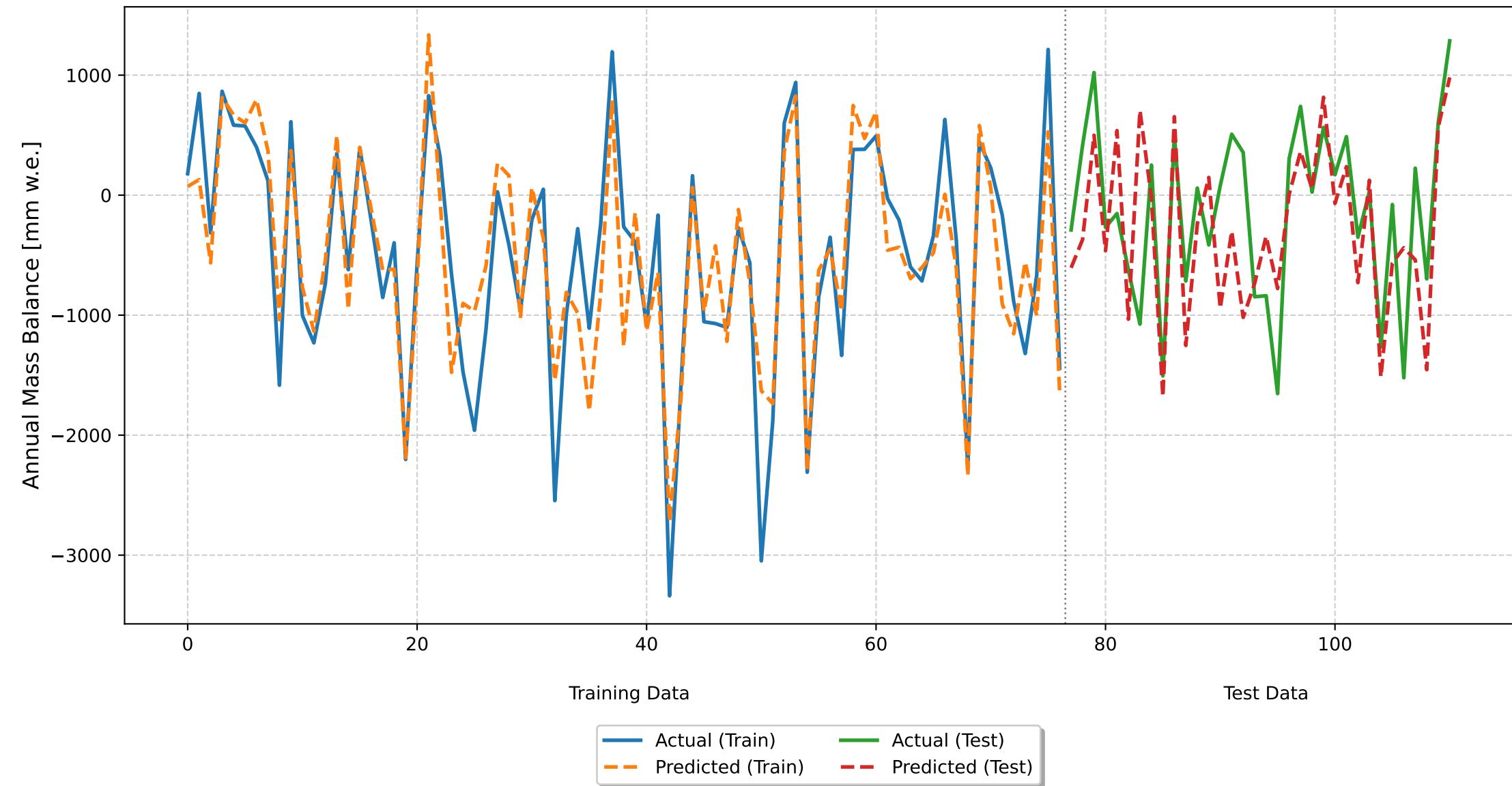


# Glacier Mass Balance Model Results: Silvrettagletscher

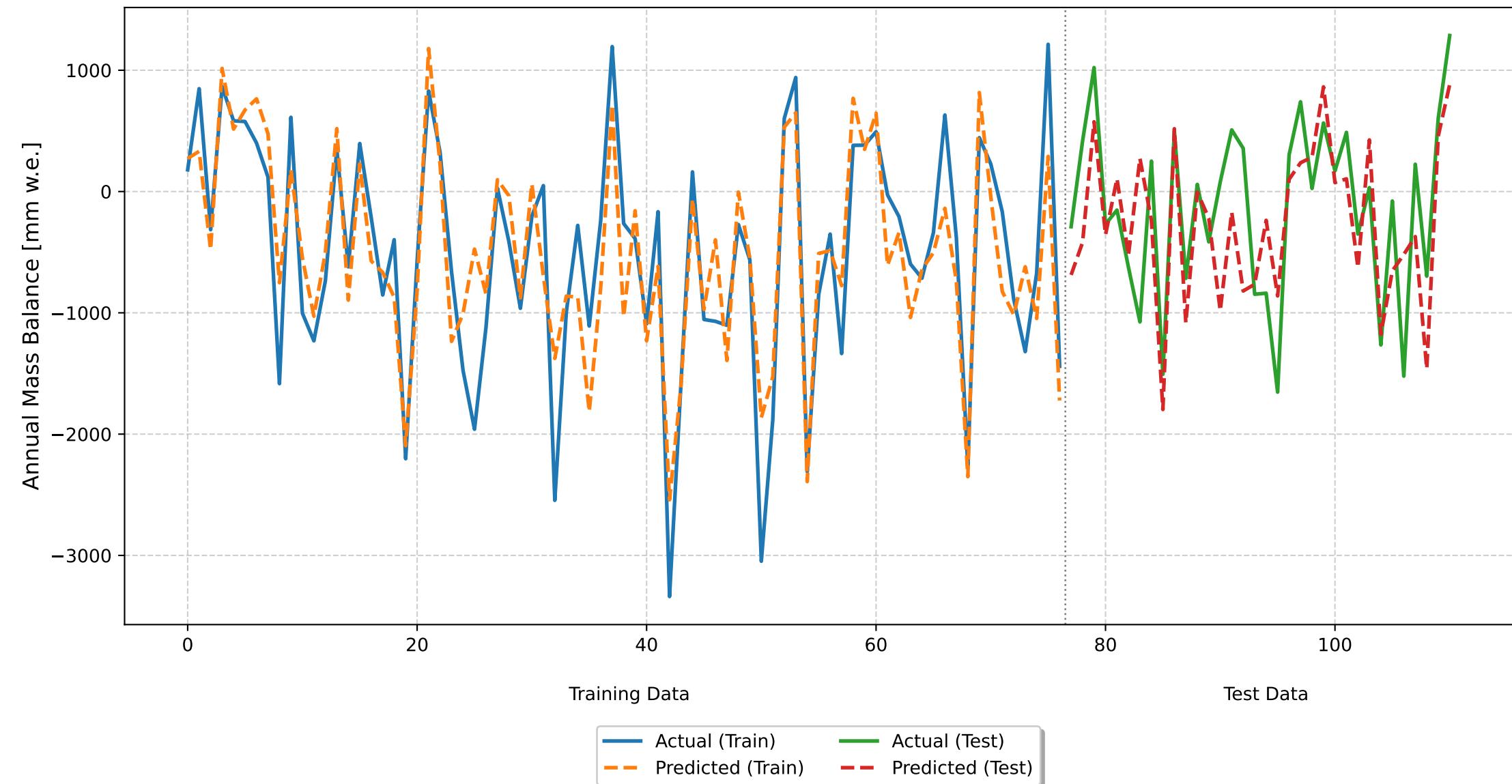
Monthly Deviations Model  
Random 70-30 Split  
CV RMSE: 561.44 ( $\pm 87.57$ )  
Train RMSE: 435.15, Test RMSE: 631.79  
Train R<sup>2</sup>: 0.7942, Test R<sup>2</sup>: 0.2438



## Monthly Deviations Model - Performance Metrics and Coefficients

Metric	Value
Cross-Validation RMSE	561.44 ( $\pm 87.57$ )
Training RMSE	435.15
Training R <sup>2</sup>	0.7942
Test RMSE	631.79
Test R <sup>2</sup>	0.2438
Feature	Coefficient
may_td	-104.5543
june_td	-234.0647
july_td	-275.0702
august_td	-274.1060
september_td	-216.3138
october_pd	192.9427
november_pd	158.2720
december_pd	174.9385
january_pd	128.2533
february_pd	150.4201
march_pd	248.0949
april_pd	61.7895
Intercept	-500.7662

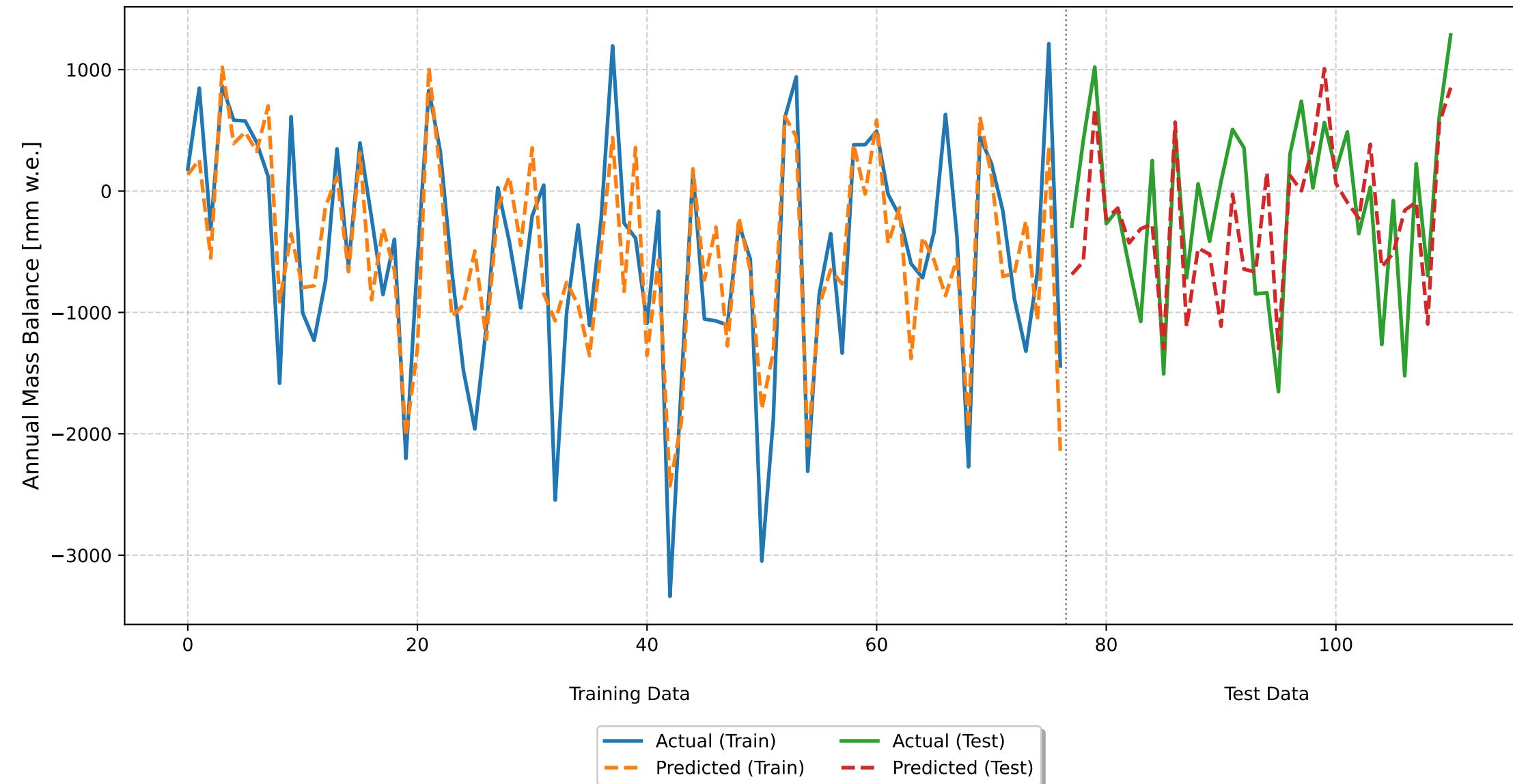
Seasonal Deviations Model  
Random 70-30 Split  
CV RMSE: 513.03 ( $\pm 70.66$ )  
Train RMSE: 467.50, Test RMSE: 561.80  
Train R<sup>2</sup>: 0.7625, Test R<sup>2</sup>: 0.4021



## Seasonal Deviations Model - Performance Metrics and Coefficients

Metric	Value
Cross-Validation RMSE	513.03 ( $\pm 70.66$ )
Training RMSE	467.50
Training R <sup>2</sup>	0.7625
Test RMSE	561.80
Test R <sup>2</sup>	0.4021
Feature	Coefficient
summer_temp_dev	-744.7485
winter_precip_dev	375.4958
Intercept	-500.7662

Optimal Seasonal Deviations Model  
Random 70-30 Split  
CV RMSE: 583.52 ( $\pm 57.42$ )  
Train RMSE: 555.16, Test RMSE: 563.66  
Train R<sup>2</sup>: 0.6650, Test R<sup>2</sup>: 0.3981



## Optimal Seasonal Deviations Model - Performance Metrics and Coefficients

Metric	Value
Cross-Validation RMSE	583.52 ( $\pm 57.42$ )
Training RMSE	555.16
Training R <sup>2</sup>	0.6650
Test RMSE	563.66
Test R <sup>2</sup>	0.3981
Feature	Coefficient
optimal_summer_temp_dev	-713.5326
optimal_winter_precip_dev	309.0850
Intercept	-500.7662