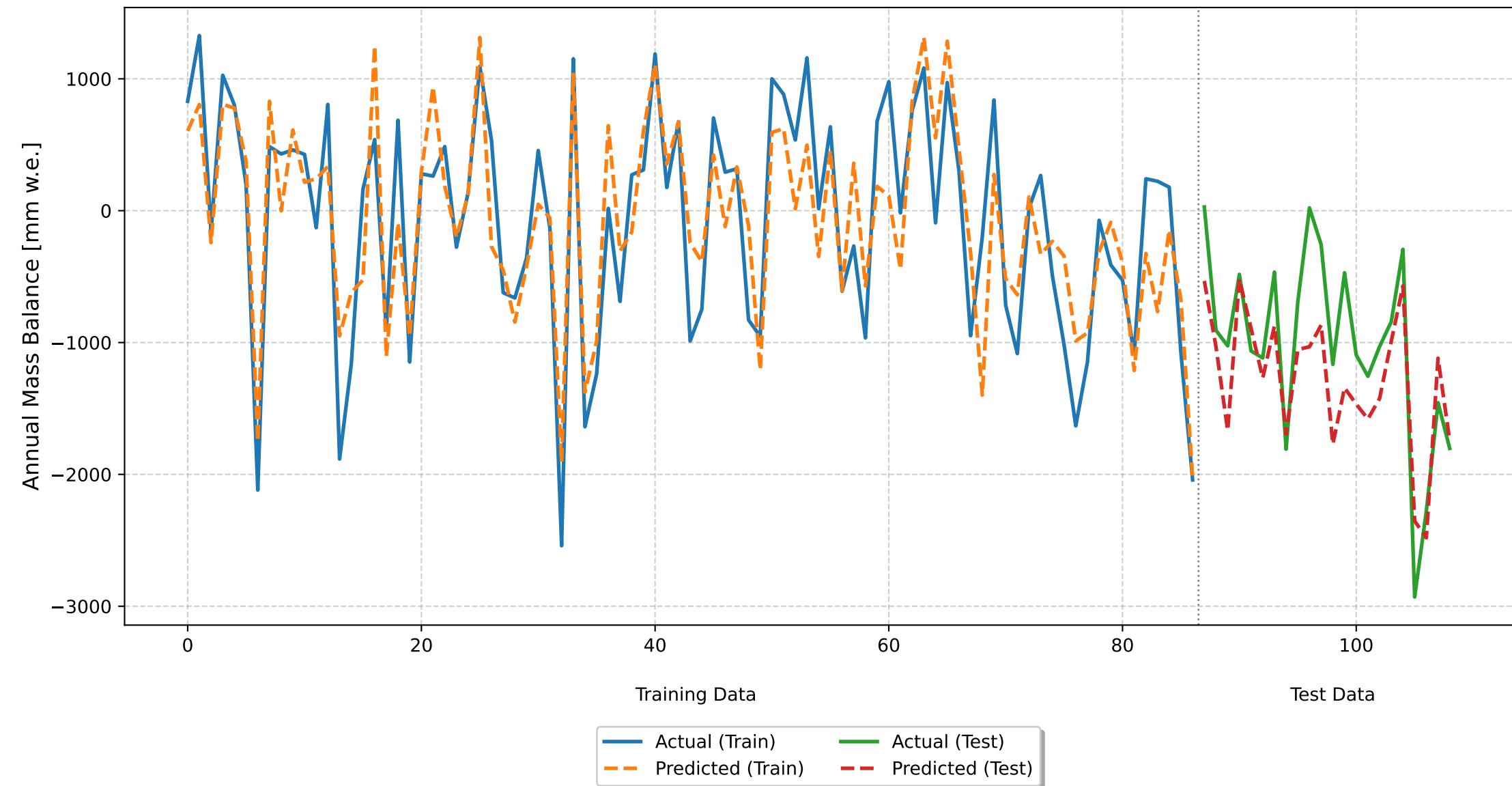


## Glacier Mass Balance Model Results: Claridenfirn

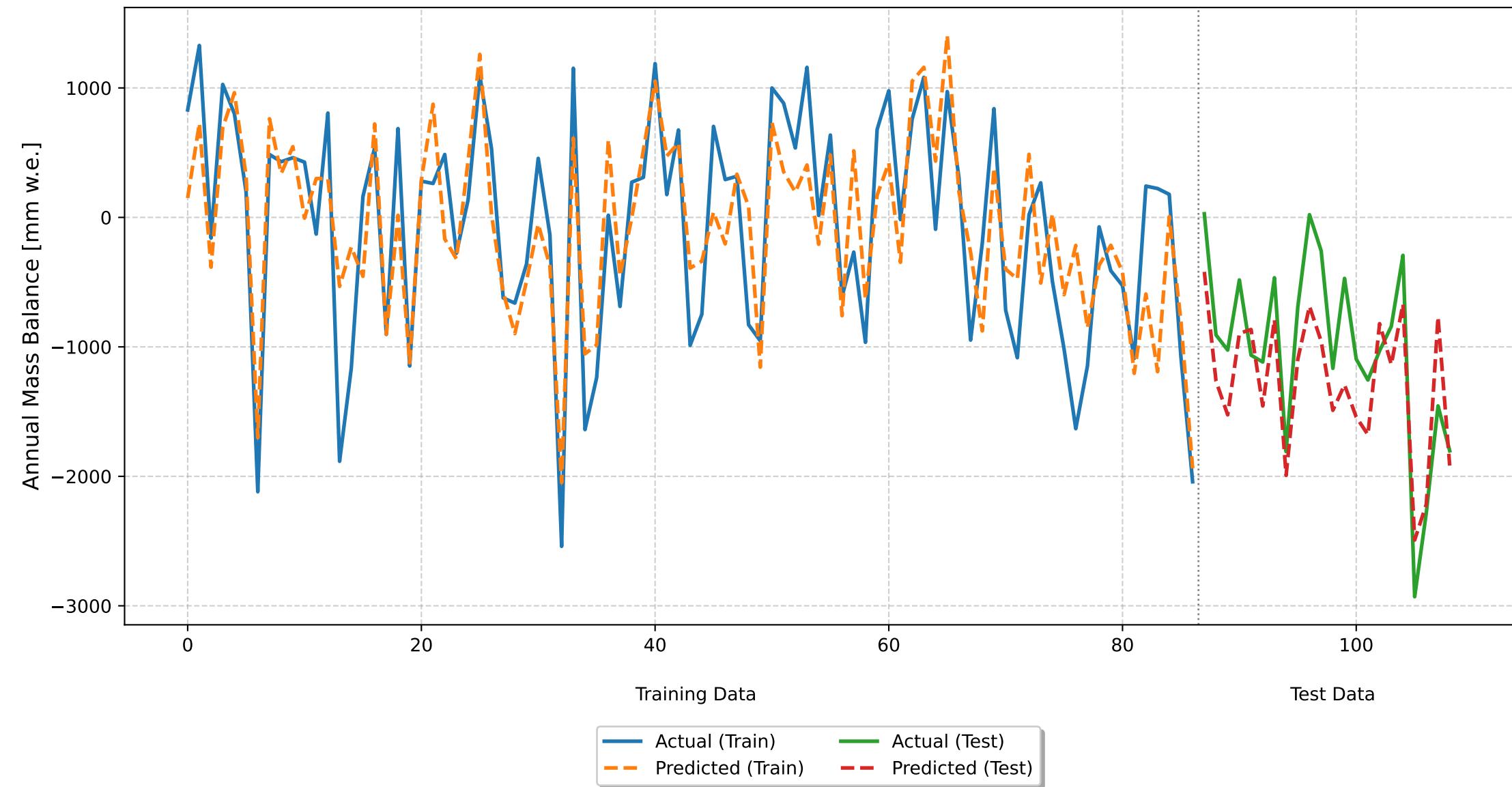
Monthly Deviations Model  
Time Series 80-20 Split  
CV RMSE: 700.69 ( $\pm 323.91$ )  
Train RMSE: 447.86, Test RMSE: 462.34  
Train R<sup>2</sup>: 0.7283, Test R<sup>2</sup>: 0.5760



## Monthly Deviations Model - Performance Metrics and Coefficients

Metric	Value
Cross-Validation RMSE	700.69 ( $\pm 323.91$ )
Training RMSE	447.86
Training R <sup>2</sup>	0.7283
Test RMSE	462.34
Test R <sup>2</sup>	0.5760
Feature	Coefficient
may_td	-104.7603
june_td	-167.2489
july_td	-313.6564
august_td	-252.6689
september_td	-221.0288
october_pd	173.0745
november_pd	137.9595
december_pd	119.7503
january_pd	107.4740
february_pd	217.2529
march_pd	111.5743
april_pd	-12.2298
Intercept	-72.3793

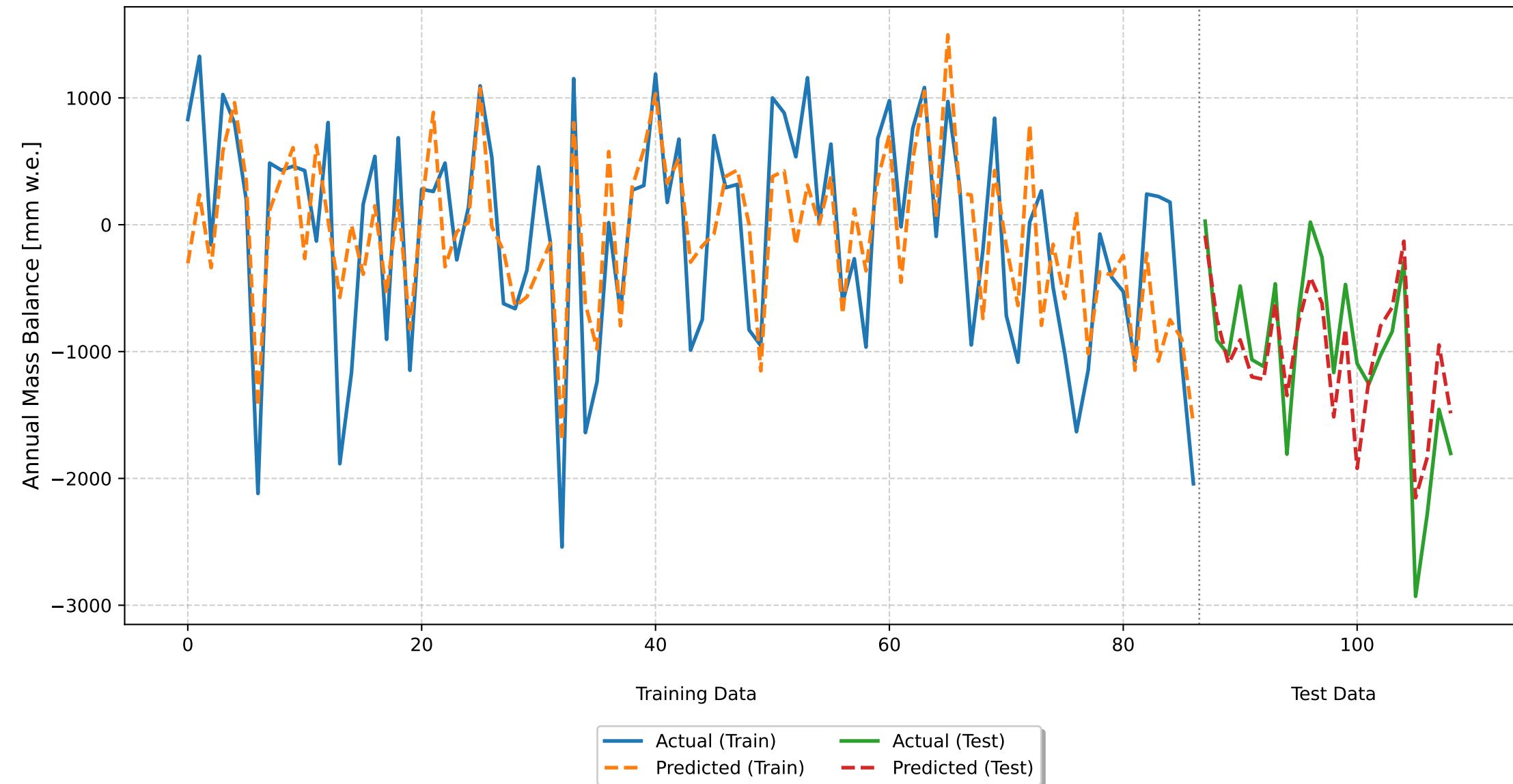
Seasonal Deviations Model  
Time Series 80-20 Split  
CV RMSE: 488.78 ( $\pm 81.98$ )  
Train RMSE: 499.79, Test RMSE: 442.46  
Train R<sup>2</sup>: 0.6617, Test R<sup>2</sup>: 0.6117



## Seasonal Deviations Model - Performance Metrics and Coefficients

Metric	Value
Cross-Validation RMSE	488.78 ( $\pm 81.98$ )
Training RMSE	499.79
Training R <sup>2</sup>	0.6617
Test RMSE	442.46
Test R <sup>2</sup>	0.6117
Feature	Coefficient
summer_temp_dev	-625.7358
winter_precip_dev	351.9757
Intercept	-72.3793

Optimal Seasonal Deviations Model  
Time Series 80-20 Split  
CV RMSE: 516.73 ( $\pm 92.94$ )  
Train RMSE: 583.67, Test RMSE: 370.83  
Train R<sup>2</sup>: 0.5386, Test R<sup>2</sup>: 0.7273



## Optimal Seasonal Deviations Model - Performance Metrics and Coefficients

Metric	Value
Cross-Validation RMSE	516.73 ( $\pm 92.94$ )
Training RMSE	583.67
Training R <sup>2</sup>	0.5386
Test RMSE	370.83
Test R <sup>2</sup>	0.7273
Feature	Coefficient
optimal_summer_temp_dev	-553.9525
optimal_winter_precip_dev	313.6396
Intercept	-72.3793