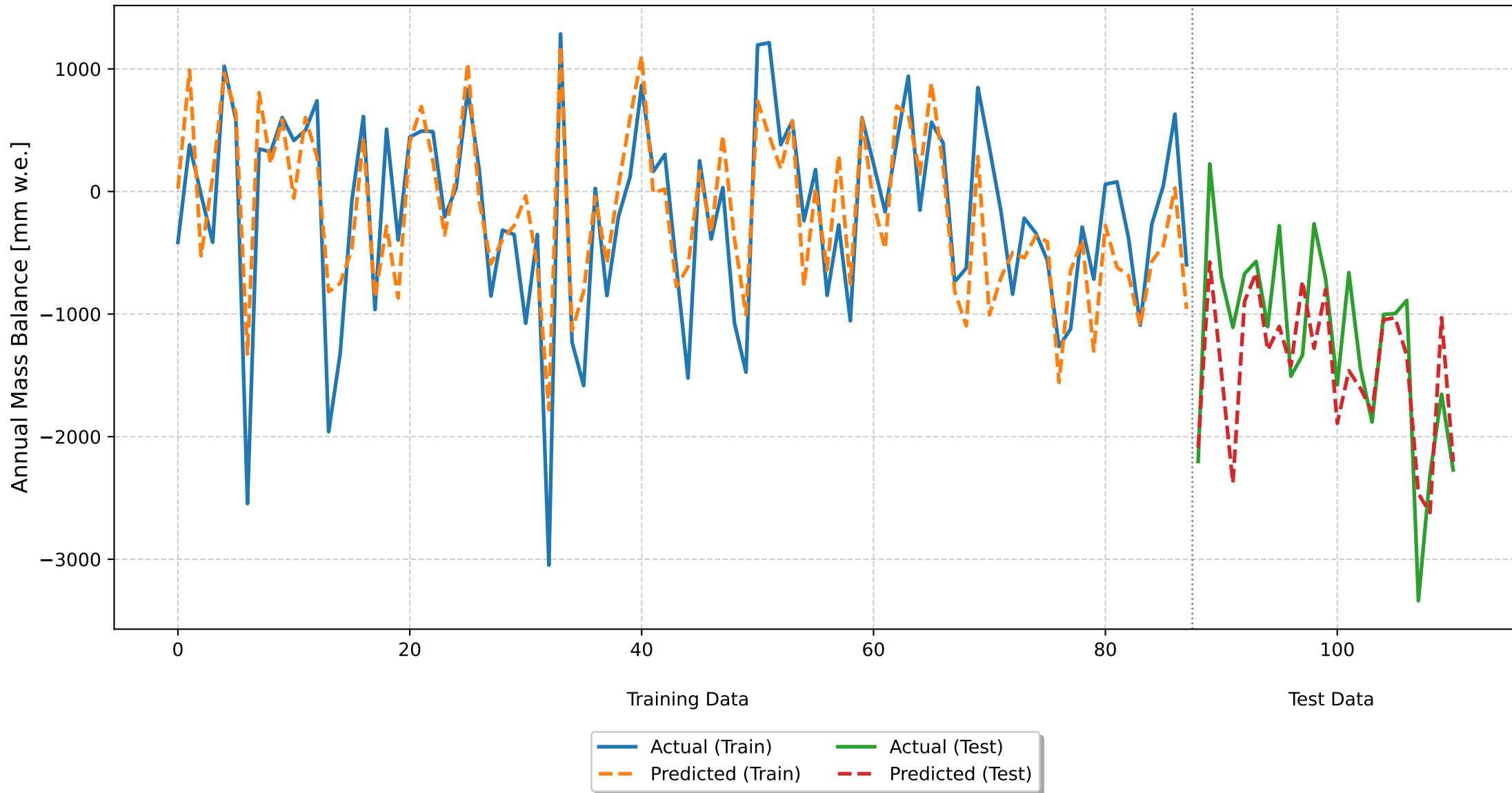


## Glacier Mass Balance Model Results: Silvretta Tagletscher

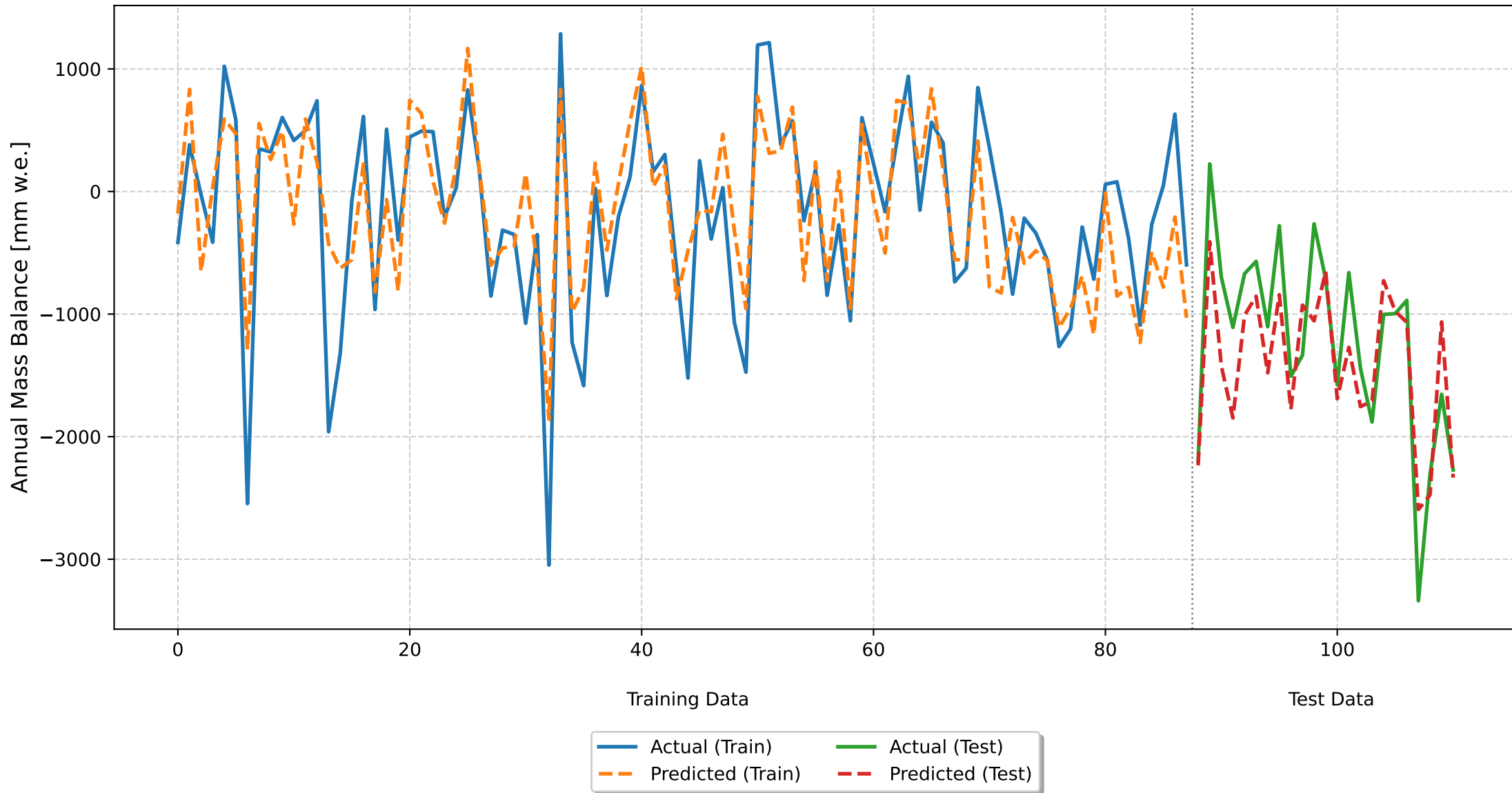
Monthly Deviations Model  
Time Series 80-20 Split  
CV RMSE: 685.36 ( $\pm 140.08$ )  
Train RMSE: 466.89, Test RMSE: 562.58  
Train  $R^2$ : 0.6644, Test  $R^2$ : 0.4920



## Monthly Deviations Model - Performance Metrics and Coefficients

Metric	Value
Cross-Validation RMSE	685.36 ( $\pm 140.08$ )
Training RMSE	466.89
Training R <sup>2</sup>	0.6644
Test RMSE	562.58
Test R <sup>2</sup>	0.4920
Feature	Coefficient
may_td	-107.0820
june_td	-195.7864
july_td	-326.4757
august_td	-119.5710
september_td	-276.4520
october_pd	114.9650
november_pd	113.5602
december_pd	190.1502
january_pd	126.8063
february_pd	161.7662
march_pd	109.0023
april_pd	65.1257
Intercept	-170.2614

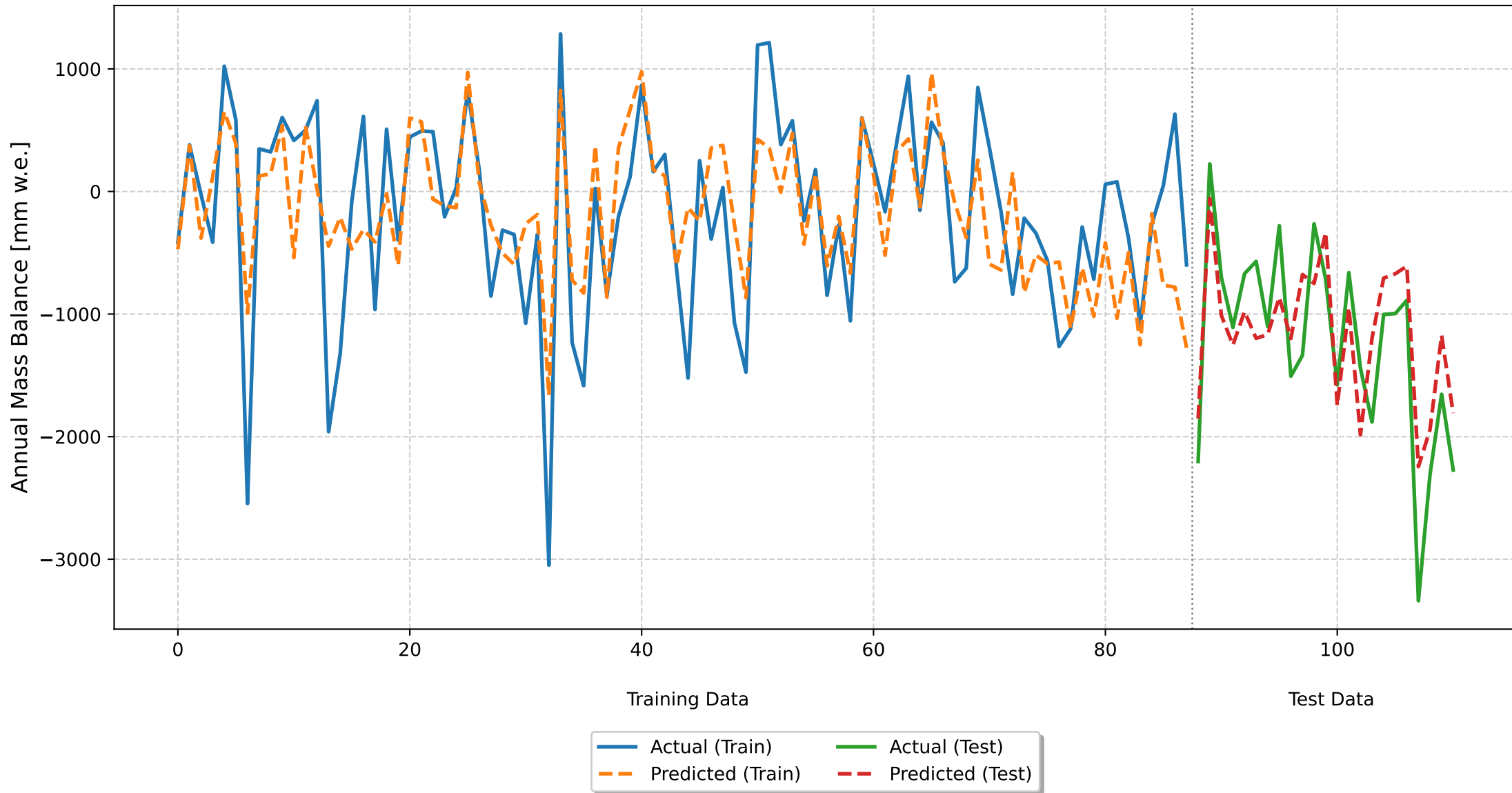
Seasonal Deviations Model  
Time Series 80-20 Split  
CV RMSE: 505.85 ( $\pm 105.15$ )  
Train RMSE: 500.84, Test RMSE: 445.11  
Train  $R^2$ : 0.6138, Test  $R^2$ : 0.6820



## Seasonal Deviations Model - Performance Metrics and Coefficients

Metric	Value
Cross-Validation RMSE	505.85 ( $\pm 105.15$ )
Training RMSE	500.84
Training R <sup>2</sup>	0.6138
Test RMSE	445.11
Test R <sup>2</sup>	0.6820
Feature	Coefficient
summer_temp_dev	-543.5564
winter_precip_dev	344.1323
Intercept	-170.2614

Optimal Seasonal Deviations Model  
Time Series 80-20 Split  
CV RMSE: 569.48 ( $\pm 125.24$ )  
Train RMSE: 581.20, Test RMSE: 465.72  
Train  $R^2$ : 0.4800, Test  $R^2$ : 0.6518



## Optimal Seasonal Deviations Model - Performance Metrics and Coefficients

Metric	Value
Cross-Validation RMSE	569.48 ( $\pm 125.24$ )
Training RMSE	581.20
Training R <sup>2</sup>	0.4800
Test RMSE	465.72
Test R <sup>2</sup>	0.6518
Feature	Coefficient
optimal_summer_temp_dev	-458.2590
optimal_winter_precip_dev	298.7673
Intercept	-170.2614