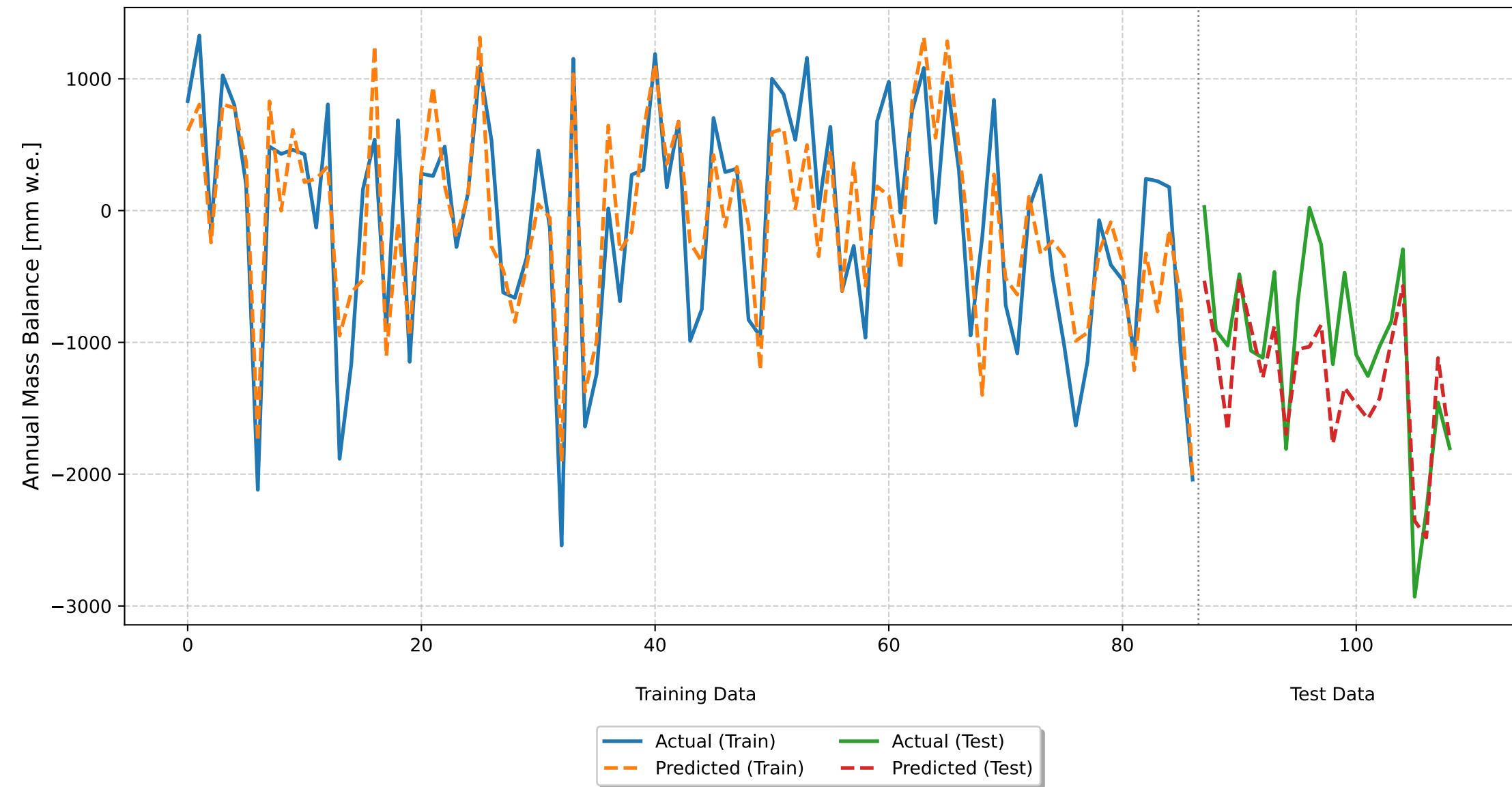


Glacier Mass Balance Model Results: Claridenfirn

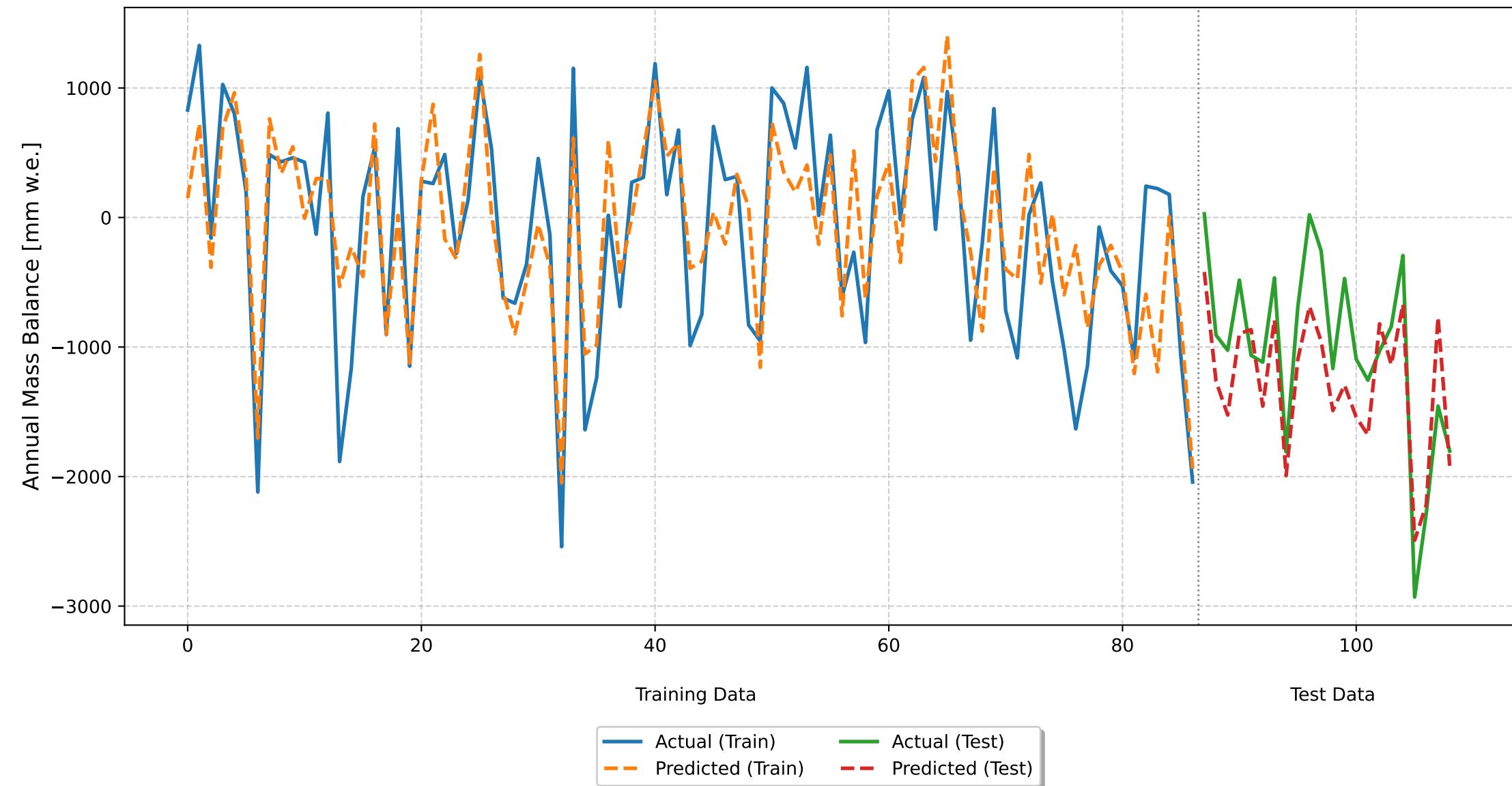
Monthly Deviations Model
Time Series 80-20 Split
CV RMSE: 700.69 (± 323.91)
Train RMSE: 447.86, Test RMSE: 462.34
Train R²: 0.7283, Test R²: 0.5760



Monthly Deviations Model - Performance Metrics and Coefficients

| Metric | Value |
|-------------------------|-------------------------|
| Cross-Validation RMSE | 700.69 (± 323.91) |
| Training RMSE | 447.86 |
| Training R ² | 0.7283 |
| Test RMSE | 462.34 |
| Test R ² | 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 |

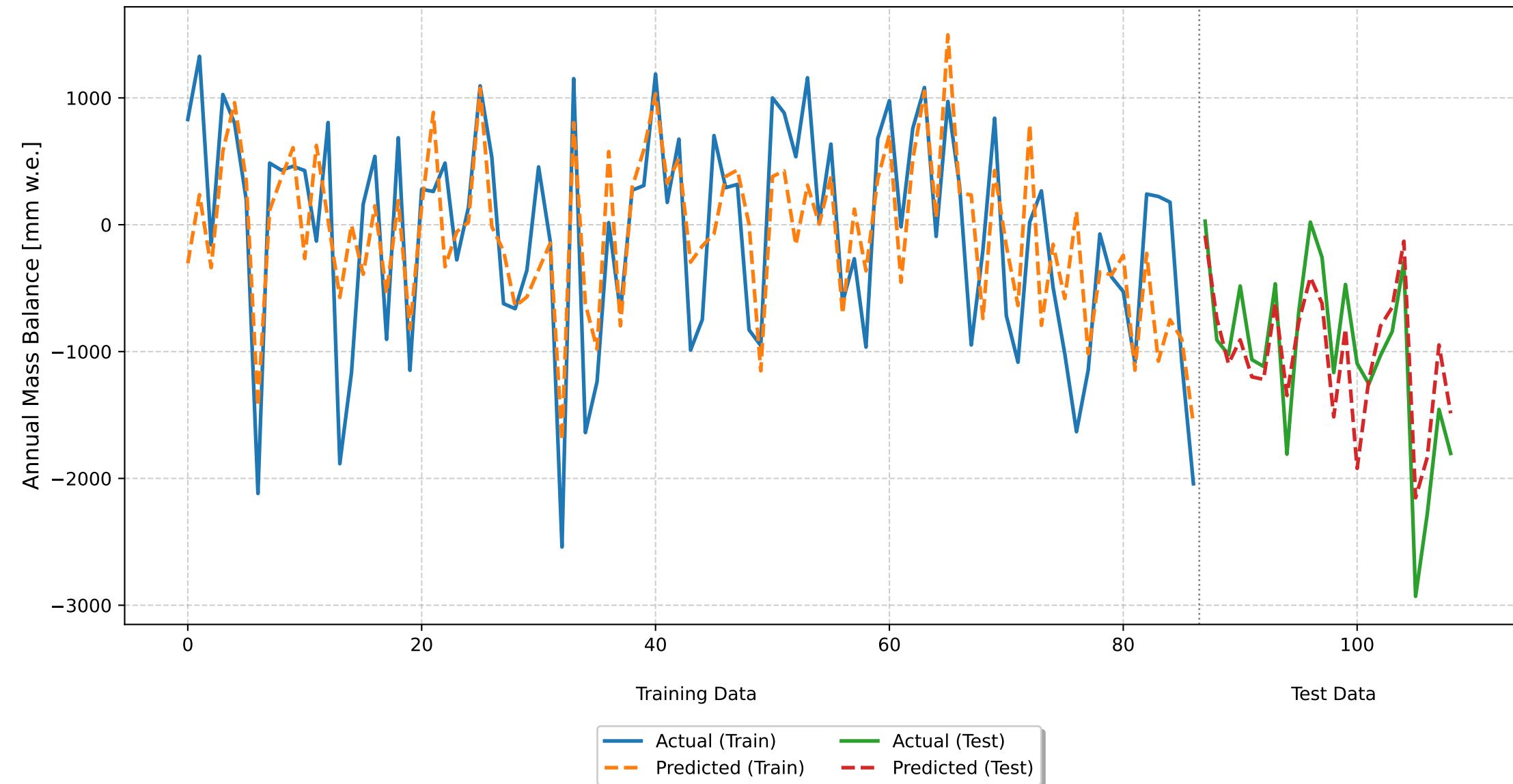
Seasonal Deviations Model
Time Series 80-20 Split
CV RMSE: 488.78 (± 81.98)
Train RMSE: 499.79, Test RMSE: 442.46
Train R²: 0.6617, Test R²: 0.6117



Seasonal Deviations Model - Performance Metrics and Coefficients

| Metric | Value |
|-------------------------|------------------------|
| Cross-Validation RMSE | 488.78 (± 81.98) |
| Training RMSE | 499.79 |
| Training R ² | 0.6617 |
| Test RMSE | 442.46 |
| Test R ² | 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 (± 92.94)
Train RMSE: 583.67, Test RMSE: 370.83
Train R²: 0.5386, Test R²: 0.7273



Optimal Seasonal Deviations Model - Performance Metrics and Coefficients

| Metric | Value |
|---------------------------|------------------------|
| Cross-Validation RMSE | 516.73 (± 92.94) |
| Training RMSE | 583.67 |
| Training R ² | 0.5386 |
| Test RMSE | 370.83 |
| Test R ² | 0.7273 |
| | |
| Feature | Coefficient |
| optimal_summer_temp_dev | -553.9525 |
| optimal_winter_precip_dev | 313.6396 |
| Intercept | -72.3793 |