

Offshore Riser ML Prediction System

Executive Summary | Run ID: 20251208_145702

1. Key Performance Indicators

Metric	Test Result	Target / Status
Circular MAE	1.5171°	Lower is better
Accuracy @ 5°	94.60%	> 90% (Target)

2. Performance Narrative

The optimized **ExtraTreesRegressor** architecture achieved a test CMAE of **1.5171°**. The model shows **strong performance**, suitable for general operational guidance, though edge cases may require review. Please refer to the Technical Deep Dive document for granular error distribution analysis and hyperparameter sensitivity plots.

3. Critical Diagnostics

