

Statistical Test for Threshold Significance

Method: F-test comparing nested GAM models with tensor product smooths

F-statistic: 2.81

p-value:

Significant at $\alpha=0.05$:

A significant test indicates that modeling separate moisture–DOM thermodynamics interactions before and after the threshold is statistically preferred.

Deviance explained (single model): 77.3%

Deviance explained (threshold model): 86.2%