Evaluation: LSTM PINN NLL VI Truth 0.04 Prediction 0.02 0.00 -0.02-0.042024-01 2024-03 2024-05 2024-07 2024-09 2024-11 2025-01 0.15 **Cumulative Truth** 0.10 **Cumulative Prediction** 0.05 0.00 -0.05-0.102024-01 2024-05 2024-07 2024-09 2024-11 2025-01 2024-03 HV60 Inferred Volatility 0.25 0.20 0.15 2024-05 2024-01 2024-03 2024-07 2024-09 2024-11 2025-01 Remain Noise 0.04 0.02 0.00 -0.02-0.042024-05 2025-01 2024-01 2024-03 2024-07 2024-09 2024-11