Evaluation Results: FCNN Lag-3 NLL truth EKF 0.05 2σ CI Log Return 0.00 -0.05-0.102020 2021 2022 2023 2024 2025 0.07 truth r,  $\bar{r} = 0.0110$ ,  $\sigma_r = 0.0149$ res  $\varepsilon$ ,  $\bar{\varepsilon} = 0.0111$ ,  $\sigma_{\varepsilon} = 0.0149$ 0.06 0.02 0.01 0.00 2023 2020 2021 2022 2024 2025 truth 0.5 EKF Normalized Log Return 0.0 -0.5 -1.0-1.52021 2020 2022 2023 2024 2025 HV60 0.7 Implied Vol 0.6 Volatility 7.0 Volatility 0.3 0.2 2021 2022 2023 2024 2025 2020