

## 1. Capacity Axis (Structure)

Changing these requires  
retraining (Developmental  
time).

RNN Hidden Units (Width) 15

RNN Layers (Depth) 3

Training Epochs 346

Learning Rate 0.05

Build & Train Model

# 🧠 State & Capacity: The Two-Axis Explorer

Interactive Supplement for: *State and Capacity in Neural Models of Cognition* This app demonstrates the dissociation between **Structural Capacity** (hardware/training) and **Computational State** (dynamic tuning).

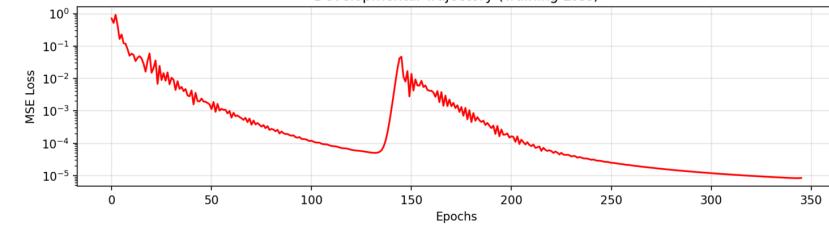
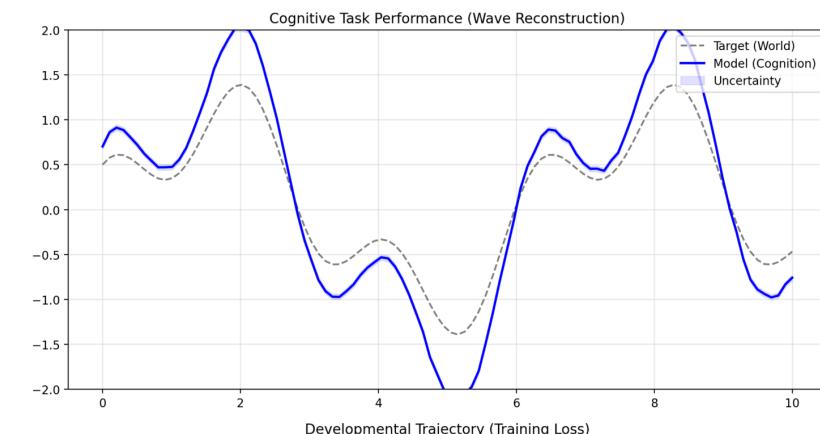
## 2. State Axis (Dynamics)

### Behavioral & Neural Output

Tuning these is instant  
(Inference time).

Global Gain (Arousal) 1.50

Internal Noise (Stochasticity) 0.03



## Current Architecture:

15 Units, 3 Layers

## Diagnostic Interpretation

 **Capacity Sufficient:** The model successfully learned the ontology (Loss: 0.000).

 **Optimal Alignment:** The model is operating in a high-fidelity regime.