



## Predictive System

### Aim 1: Forecast

From preceding conditions can we forecast a value ahead of time? This requires us to learn the relationship between the previous conditions and the current conditions.

**Goal:** Predictive Accuracy

**Challenge:** Are we reproducing / competing with physically based models?





Predictive  
System

## Aim 2: Identify Correlations

Can we use the high dimensional fields (SST, SLP) to identify connections between remote regions in space and time.

**Goal:** Identify climate drivers of variability from data

**Challenge:** Crazy high dimensions (atmospheric levels  $[z]$ , geographic regions  $[x,y]$ , lagged in time, multiple variables - 5D space)

