



# World Climate Service

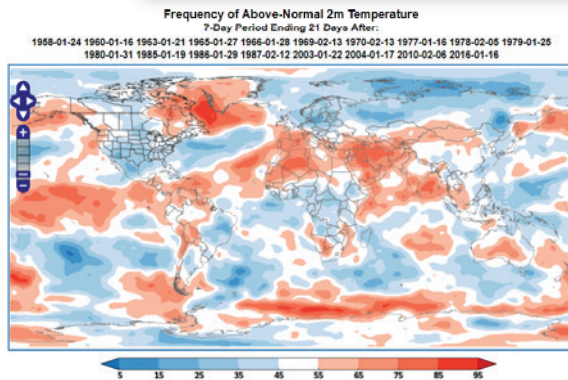
## CLIMATE ANALYSIS, MONITORING, AND PREDICTION

### Dynamical Models

- 1 CFSv2, ECWMF, and Multi-model ensemble subseasonal & seasonal forecasts
- 2 **Calibrated** to ensure accurate probabilities
- 3 Fixed normal and trend based analysis
- 4 Multiple time frames and model progression maps

#### Reason to Buy:

- Multi-model forecast is more accurate than individual models
- Calibration removes bias and creates reliable probabilities



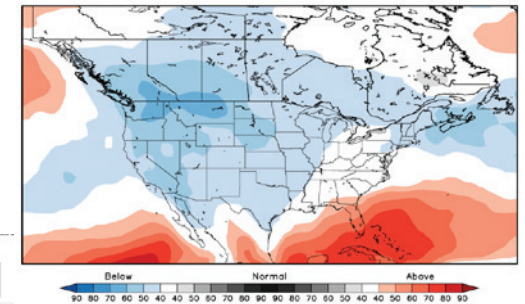
### Analog Analysis

- 1 Find and analyze conditions in the past similar to today
- 2 Many indices available
- 3 The progression of the past is a forecast for today
- 4 Seasonal and subseasonal analog forecast tools available

#### Reason to Buy:

- Quickly create unique analog forecasts
- Analogs are a critical component of any subjective S2S forecast

#### Analog Analysis



#### Subseasonal analog selectors



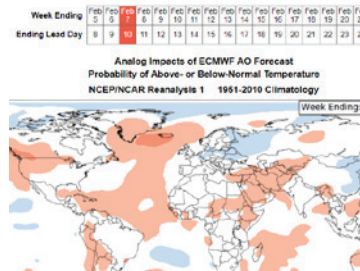
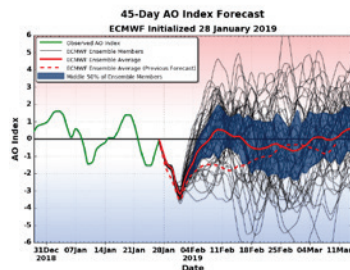
### Index Forecasts

- 1 Track climate modes with significant impacts on subseasonal, monthly, and seasonal climate
- 2 Analyze their impact on surface climate

#### Reason to Buy:

- Save time by having all indices at your finger tips
- Analyze impact of the indices

The World Climate Service calculates all widely used climate indices



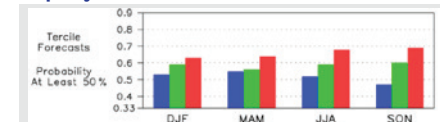
### Accuracy & Results

- 1 Long lead forecasts require a probabilistic context
- 2 Product transparently includes validation information

#### Reason to Buy:

- Transparent validation
- High confidence forecasts validate well above climatology

#### Frequency of Correct Tercile Forecasts



**Subseasonal**  
Week 4 high confidence forecast

#### WCS Seasonal Forecast Skill from 2008 to 2018 Binary Forecasts - Percentage Correct

Forecast Confidence	Temperature	
	North America	Europe
Low	55	51
Moderate	63	62
High	72	74

**Seasonal**  
Subjective forecast verification

"I buy your competitor because my competitor uses them. I buy WCS because you're more accurate. That gives me an advantage."



**World Climate Service**