



# Tools for Verifying Seasonal Forecasts

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# Excel

- A template and detailed documentation are available on how to calculate some of the procedures recommended in the CCI verification guidance.
- Note that even some of the apparently simpler scores are not very easy to calculate in CPT, especially if there are missing values. A version of Office 2010 or later is recommended.

# CPT

The Probabilistic Forecast Verification (PFV) view option within the Climate Predictability Tool (CPT) uses CPT's retroactive verification tools to assess the quality of past probabilistic forecasts, such as those issued through the Regional Climate Outlook Forums.

# Results

Climate Predictability Tool 13 - Probabilistic Forecast Verification

File Edit Actions Tools Options View Help

Validation  
Verification  
Contingency Tables  
Modes  
Climatological Maps  
Forecasts

Attributes Diagrams  
ROC Diagrams  
Scores  
Skill Maps  
Tendency Diagram  
Ranked Hits Diagram  
Weather Roulette

Input Files

Response (Y) Variables: browse

Forecast Variables: browse

File name: GPCC6\_JAS.tsv  
First data: JAS 1961  
Last data: JAS 2010  
Start at: 1998

File name: PRESAO\_JAS.txt  
First data: JAS 1998  
Last data: JAS 2010  
Start at: 2010

Number of fields	1	Number of fields	1	Number of fields	1
Number of lags	1	Number of lags	1	Number of lags	1
Number of gridpoints	144	Number of gridpoints	160	Number of gridpoints	144
Number used	90	Number used	148	Number used	0

Training data

Length of training period: 13  
Length of cross-validation window: 5  
Number of forecasts: 1

To see the results go to the menu **Tools ~ Verification:**

**Attributes Diagrams:** one for each category, and one for all categories combined

**ROC Diagrams:** one curve for each category

**Scores:** a table of scores for probabilistic forecasts

**Skill Maps:** maps of scores for probabilistic forecasts

**Tendency Diagram:** graphs showing unconditional biases

**Ranked Hits Diagram:** graphs showing frequencies of observed categories having the highest probability

**Weather Roulette:** graphs showing estimates of forecast value

# R Forecast Verification Package

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