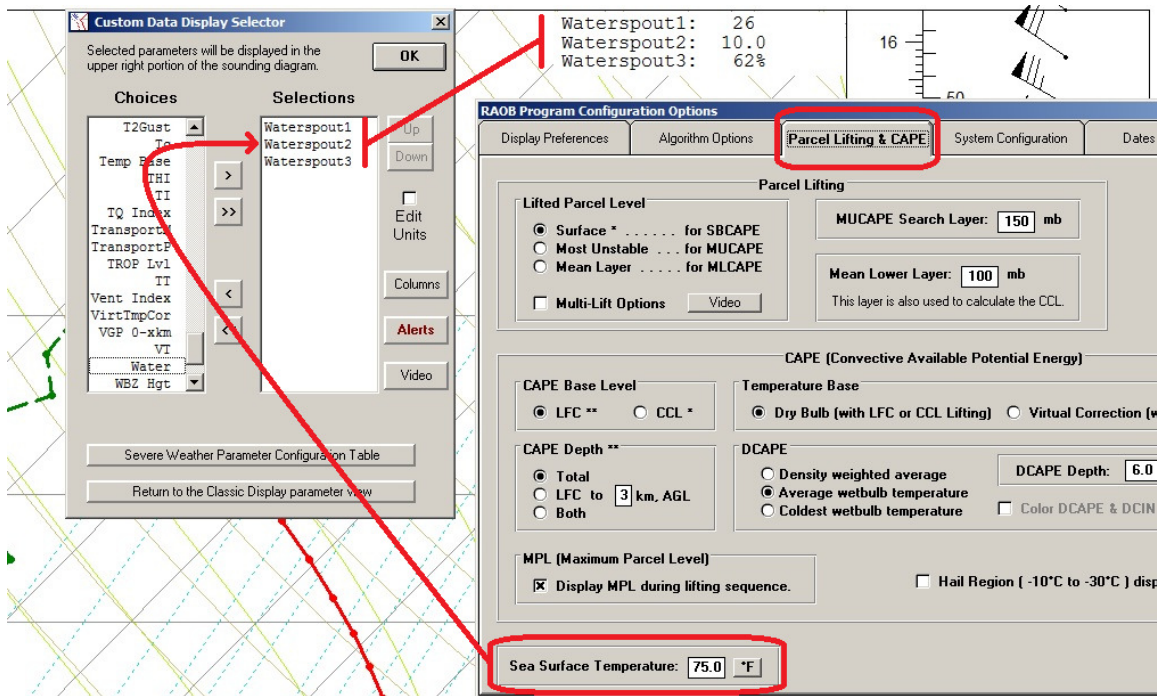# RAOB Waterspout Parameters

Waterspout-1. RAOB initially only had one Waterspout index, and it was called the "Waterspout" parameter. It is now labeled as "Waterspout1". It was developed by Pete Mohlin of the Charleston NWS office and was developed for the oceanic southeastern US. No external variables are required for input. This index is composed of 18 different variables and output ranges from 0 to 86.

Waterspout-2. The Szilagyi Waterspout Index (or SWI) is primarily used around the Great Lakes region of the United States, but can be used elsewhere. It requires input of the sea surface temperature, which is user-defined, and it is entered on the "Parcel-Lifting & CAPE" tab of the Program Options configuration panels. SWI values range between 0 and +10.

Waterspout-3. The Key West (NWS) Florida probability index. This index was developed by Andrew Devanas (Science & Operations Officer at NWS Key West) and Dr. Lydia Stefanova (FSU COAPS). RAOB calculates this index using the following parameters: Total-Totals, Corfidi Downwind speed vector, 3,000 foot layer mean wind, 1000-700 mb lapse-rate, 100 mb wind, and the surface wind. Output values range from 0 to 100% probability of the "estimate" of occurrence. This index is published in Weather and Forecasting, April 2018 (https://journals.ametsoc.org/waf/article/33/2/389/40514/Statistical-Prediction-of-Waterspout-Probability).