

DSS Predicted Weather Requirements
07 October, 2007
V 1.1

This document lays out the basic requirements for the weather prediction database and the interface to that database. This requirements document is as complete as we can make it for the time. As work on the Dynamic Scheduling System progresses, this requirements document will be updated. Note that all work to date with the DSS has been done with Ron Maddelena's CLEO tool.

Predicted weather data, database, and database interface requirements:

- All weather data needs to be provided for all available predictions (0-12hr, 12-24hr, 24-36hr, 36-48hr, 48-60hr predictions, more if available) and at all useful sites (currently Elkins, WV, Lewisburg, WV, and Hot Springs, VA). ;
- All weather data needs to be provided at 2, 5, 9, 14, 20, 22, 25, 30, 35, 40, 45, and 50 GHz, with higher frequencies desired (roughly every 5 GHz through 110 GHz, but skipping the unusable 55-65GHz range);
- The needed data are: opacity, ground wind speed, effective atmospheric temperature (See DSS memos 1 & 2);
- A memo describing both the data taken from the NOAA database (describing exactly what the data is) and describing all interpretations, assumptions, and changes made to the data before it is used ;
- Interface must be a documented API (application programming interface), made with input from the GB SDD;
- The data, any interpretations and/or assumptions, database, and interface must follow the same rules as all other GBT operational software:
 - Be changeable by the GB SDD
 - Under revision control
 - Under the same release cycle as the DSS and any other software which uses the data, interface, etc.
 - All changes must go through the GB CCC