

Query parameters used by the GSD soundings display

These are the query parameters used by the data-getter script at http://rucsoundings.noaa.gov/get_soundings.cgi?. All of these parameters are used by the java display, and by the text output. But only some parameters are passed on to the GWT display. Those are indicated in red below.

All parameters are listed after the “?” in the form:

<parameter name>=<parameter value>&

The “&” at the end is critical. Some parameters take precedence over others, as described below.

Time window:

specify that you want n_hrs of soundings starting with the latest analysis time:

start=latest&

n_hrs=<nn.n>& where nn.n is a number of hours, such as 3.5. n_hrs defaults to ‘1’.
(Other time window information will be ignored if this is present.)

OR, specify a start and end time:

startSecs=<seconds since 1/1/1970>&

endSecs=<seconds since 1/1/1970>&

(these will be ignored if “start=latest” is present)

OR, specify a start time and number of hours, e.g.,

start_year=2016&

start_month_name=Jan&

start_mday=12&

start_hour=20&

start_min=0&

n_hrs=1.0& (n_hrs defaults to ‘1’)

(these will be ignored if the parameters startSecs and endSecs are present, or if “start=latest” is present.)

Model type:

data_source=<model name>& “Op40” is the default that will be used if this parameter isn’t present. “Op40” is the operational RAP on a 40km grid. From our perspective, this is the best model to use; models on finer grids take longer to generate soundings from, and this puts a much larger load on our web server.

Airport:

airport=<site name>& The default site name is 'DEN', which will be used if this parameter isn't present. Otherwise, the site name can be an airport name, a WMOID, or "<lat>,<lon>" where <lat> and <lon> are in decimal, with N and E being positive, separated by a comma--such as 40.1,-105.6 would give a sounding from a grid point near Boulder, CO.

Forecast length:

fcst_len=<length>& where <length> can be "shortest" (the default), or a number such as n, to require that each sounding presented be an n-hour model forecast. Generally, users want the most accurate forecast, so 'shortest' is the appropriate value, and this parameter can be left out.

A minimal query:

http://rucsoundings.noaa.gov/get_soundings.cgi?start=latest&

This will give you a single sounding from the Op40 model for the latest analysis time, for airport 'DEN'. For another location, use, e.g.,

http://rucsoundings.noaa.gov/get_soundings.cgi?start=latest&airport=gjt&

or, if you want 4 hours of soundings starting with the latest analysis time, use, e.g.,

http://rucsoundings.noaa.gov/get_soundings.cgi?start=latest&airport=gjt&n_hrs=4