Zach has and awesome tool called "ADCIRCModules". It's a free tool in his Github. Although you may compile it by your own, he had created a module to load it in Rougarou. So, if you have an account in Rougarou, you may load the module and use the binaries that it includes. One of the binaries is interpolateAdcircStations which is the program that we use to make the extractions from fort.63.nc file, for the water surface elevation in the Amite points that you give me before.

You may use the same program to create the extractions for the list of points that you want and to put them in NetCDF file. It would work with fort.74.nc too, but, with some additional requirement. The fort.74.nc have two variables information (u and v components of the wind). The program can only interpolate and output one variable at a time. So, you have to run the command line twice, one to extract --magnitude and one to extract --direction

So, here is what you need to do:

1. In Rougarou, load the adcircmodules module:  
   module load adcircmodules/0.5.0/gcc/10.2.0
2. Create a folder were you want to do the extractions. I suggest to put there the file with the list of stations in this format:  
   Text

   Description automatically generated
3. If you want to extract WSE from fort.63.ncfile, you may run:  
   interpolateAdcircStations --station AmiteDS\_Coordinates.csv --global ./fort.63.nc --output AmiteDS\_Coordinates\_Katrina\_fort.63.nc\_LWI\_v55.01.nc --coldstart 20050802000000
4. To get the coldstart date open the fort.15 folder in notepad (last six 0’s are from 00:00:00)
5. if you want to extract from fort.74.nc you need to run the same command as above but, extraction first the magnitude and then the direction.
   1. For magnitude:  
      interpolateAdcircStations --station AmiteDS\_Coordinates.csv --global ./fort.74.nc --output AmiteDS\_Coordinates\_Katrina\_fort.74.nc\_LWI\_v55.01\_magnitude.nc --coldstart 20050802000000 --magnitude
   2. For direction:  
      interpolateAdcircStations --station AmiteDS\_Coordinates.csv --global ./fort.74.nc --output AmiteDS\_Coordinates\_Katrina\_fort.74.nc\_LWI\_v55.01\_direction.nc  --coldstart 20050802000000  --direction

you will have two files for each fort.74.nc, one with the magnitude, and one with the direction. You can easily load them in Vortex to convert it to DSS format.

you may run: interpolateAdcircStations --help for more help

In picture, same thing:

Graphical user interface, text

Description automatically generated

Graphical user interface, text, application

Description automatically generated