Note: This python script was written by Andrew Janiszeski of UIUC (janszsk2@illinois.edu). In order to use the script, first copy the text below into a new file with a .py extension and make the file executable.

The purpose of this code is to print out a table of the data in a netCDF file to make it easier to read

You'll need to use numpy, astropy, netCDF4, and pandas

import numpy as np import pandas as pd import netCDF4 as nc import astropy

from astropy.table import Table from netCDF4 import Dataset as NetCDFFile

Read in the file nc= NetCDFFile('path to file/filename', 'r')

Extract the data arrays

temp=nc.variables['TC'][:]
rh=nc.variables['RH'][:]
time=nc.variables['Time'][:]
hagl=nc.variables['HAGL'][:]
windspd=nc.variables['WINDSPD'][:]
winddrn=nc.variables['WINDDRN'][:]
press=nc.variables['PRESS'][:]

Define a new varible to organize and cluster all the data that was extracted together.

data=time,press,hagl,temp,rh,windspd,winddrn

Using Table from astropy.table, a simple and neatly ordered table is made with the data extracted from the netCDF file.

Table(data, names=('Time','Pressure','Height AGL','Temperature','Relative Humidity','Wind Speed','Wind Direction'))