## M Gmail

**Elizabeth Barnes <eabarnes.earth@gmail.com>**

---

# Hurricane ML project

---

**Mark DeMaria - NOAA Affiliate** <mark.demaria@noaa.gov>                     Fri, Aug 13, 2021 at 1:02 PM
To: eabarnes@colostate.edu

Libby:

As a follow-up to our discussion on Tuesday, attached is an ASCII file in column format with the training data for my TC intensity forecast neural network model. This includes Atlantic forecast cases from 2013-2020. The column headings are a little cryptic and I included all the forecast times in the same file. The forecast time is the first column, so you could just select one time for testing. If you do pick one, I would suggest 48 or 60 hr, since they are somewhat in the middle of the NHC official forecasts that go to 5 days.

The headings are as follows:

ftime (hr) - forecast time in hours

y01 (hr) - The dependent variable we are trying to predict (truth). It is the deviation of the observed intensity from the consensus model forecast, which is the vmxc column. All the intensities are in knots.

The next 10 variables are the independent variables (predictors).

DS02, LG02, HWFI and AVNI are the deviations from the consensus of the SHIPS, LGEM,HWRF and GFS models.

VMXC is the average maximum wind of the average of SHIPS, LGEM, HWRF and GFS, or the subset when some are missing.

DV12 is the intensity change in the previous 12 hours

SLAT is the storm latitude

SSTN is the sea surface temperature at the TC center

SHDC is the 850-200 hPa environmental wind shear

DTL is the distance to the nearest major landmass in km.

Let me know if you have any questions.

Thanks,

Mark

[Quoted text hidden]

---

📄 **nnfit_vlist.dat**
1308K