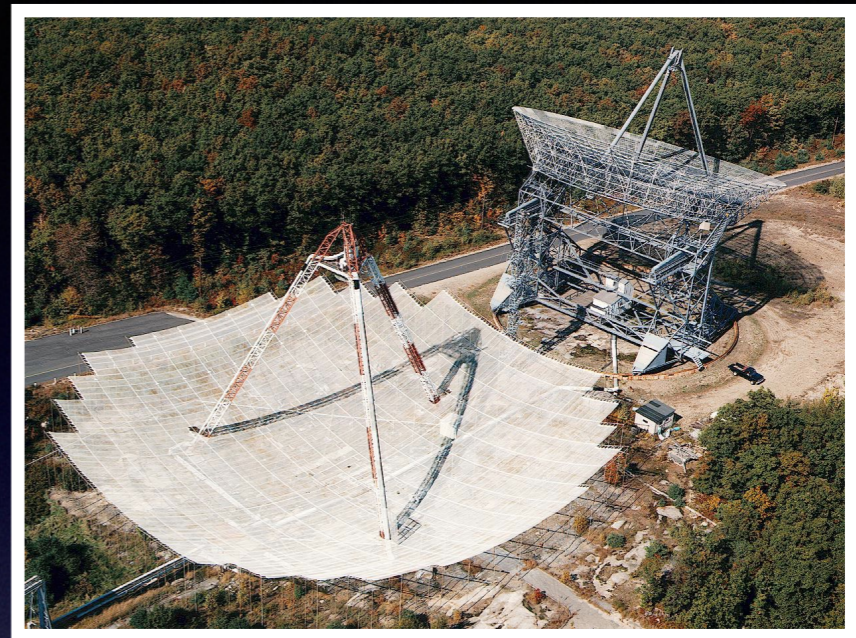


# Instructions to Groups

We have access to the Millstone Hill radar from 1900 LT to 0800 LT.

5 Blocks of time are available:

- 1900 - 2100 LT
- 2100 - 2300 LT
- 2300 - 0100 LT
- 0400 - 0600 LT
- 0600 - 0800 LT



Each group should:

- Discuss and decide on a science topic you want to study with Millstone Hill.
- Decide on what mode to run to accomplish your science goals and when to run it.
- Write a request for radar time (describing your science and plans) and email it to Elizabeth
- Get the request approved by Elizabeth.

Get ready to be awake and ready to run your experiment at the time assigned to you

Deadline for experiment submission = 1800 LT today.  
[elizabeth.kendall@sri.com](mailto:elizabeth.kendall@sri.com)

Group should assemble in the hotel lobby 30 minutes before the run begins.

Millstone staff will be available at the radar site in the Geospace Sciences Center during the run.



# Experiment Type A: Wide Field Scanning

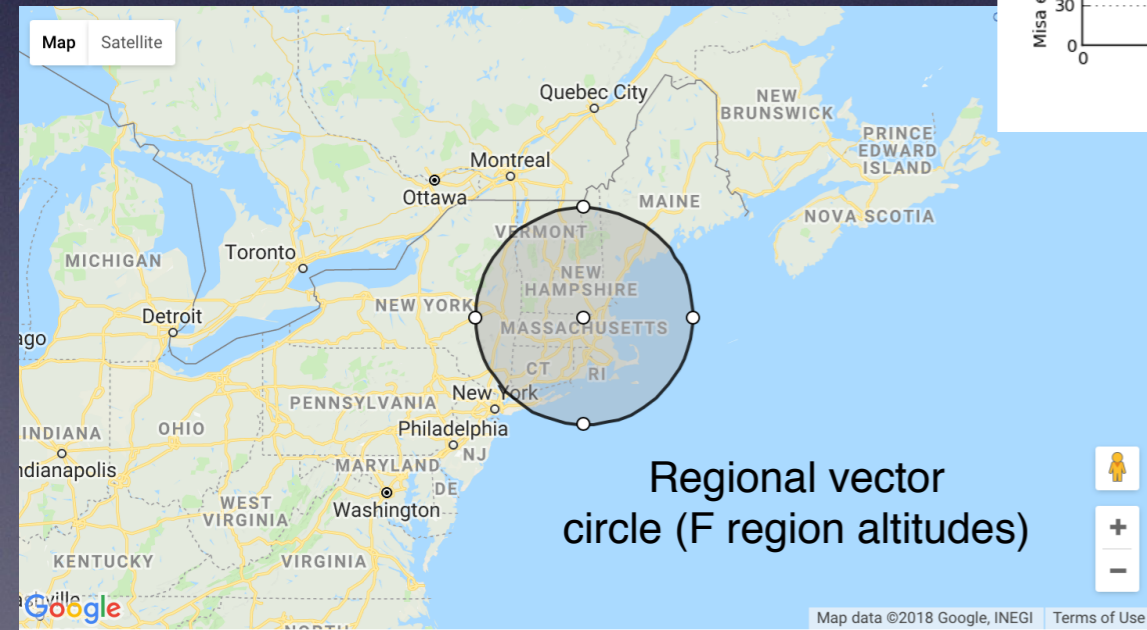
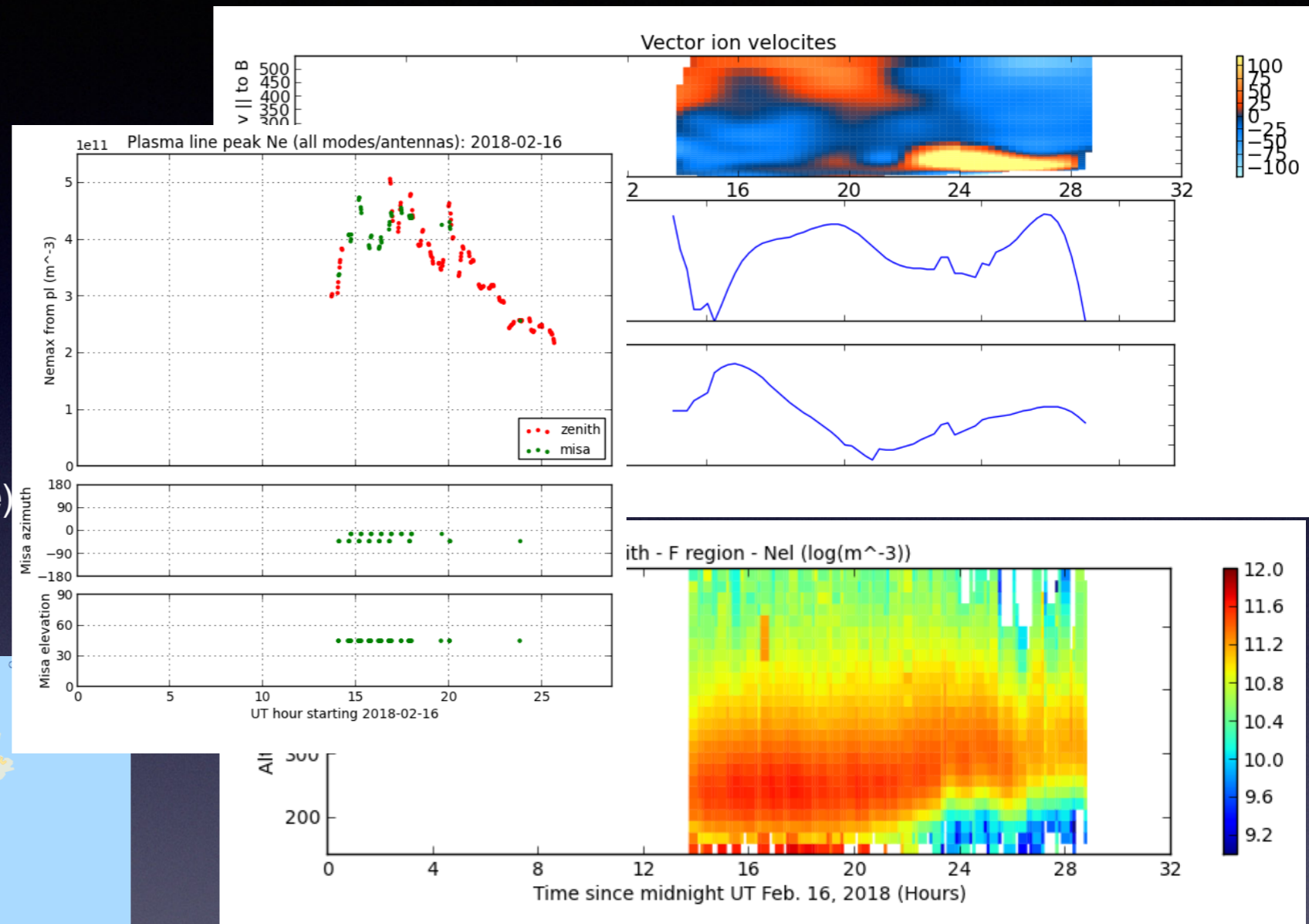
Vertical profiles [zenith],  
 regional vectors [45 deg elevation],  
 wide field scans [6 deg elevation]

MISA fixed positions on either side of  
 magnetic meridian

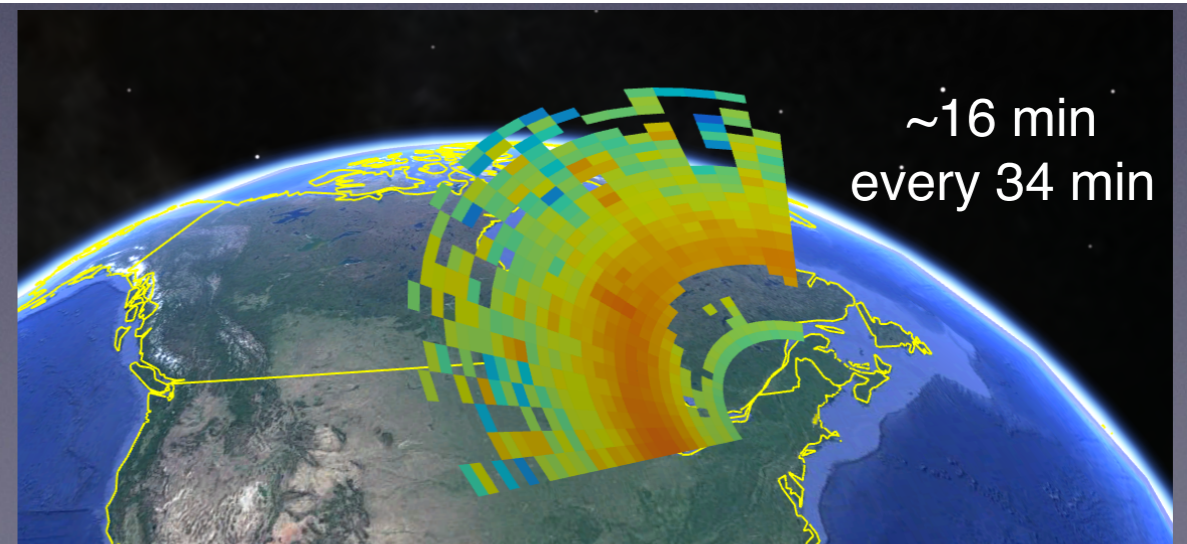
E, F region

F2 peak high accuracy Langmuir mode  
 electron density available (daytime ionosphere)

Experiment cycle time = ~34 minutes



Zenith: 3 minutes  
 MISA scans: 35 seconds / 5 degrees  
 MISA fixed positions: 3 minutes





# Experiment Type B: Regional Vector + Topside

Vertical profiles [zenith],  
regional measurements [45 deg elevation]

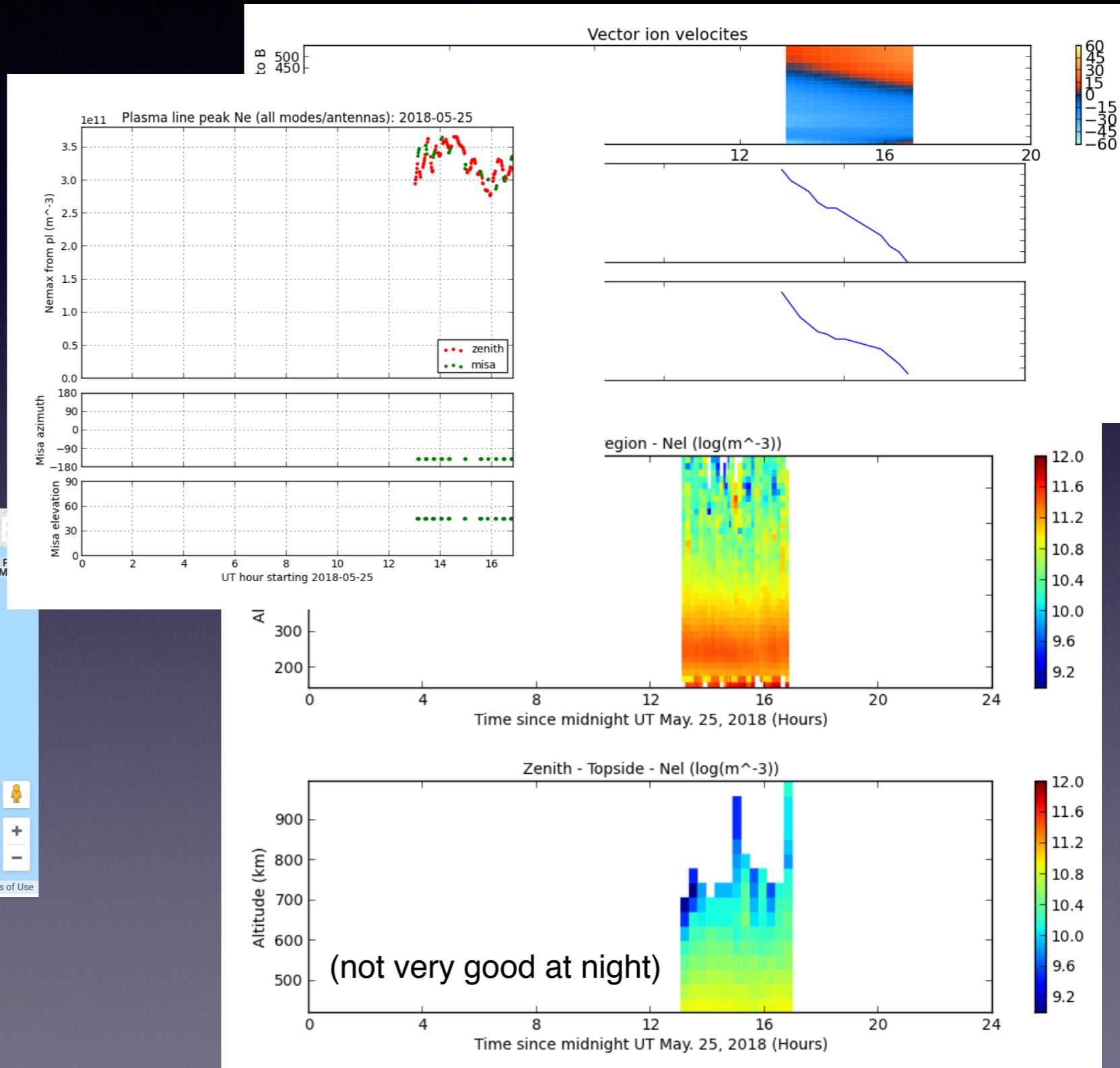
E, F region, topside ionosphere

F2 peak high accuracy Langmuir mode  
electron density available (daytime ionosphere)

Experiment cycle time = ~18 minutes



Zenith: 3 minutes  
MISA fixed positions: 3 minutes





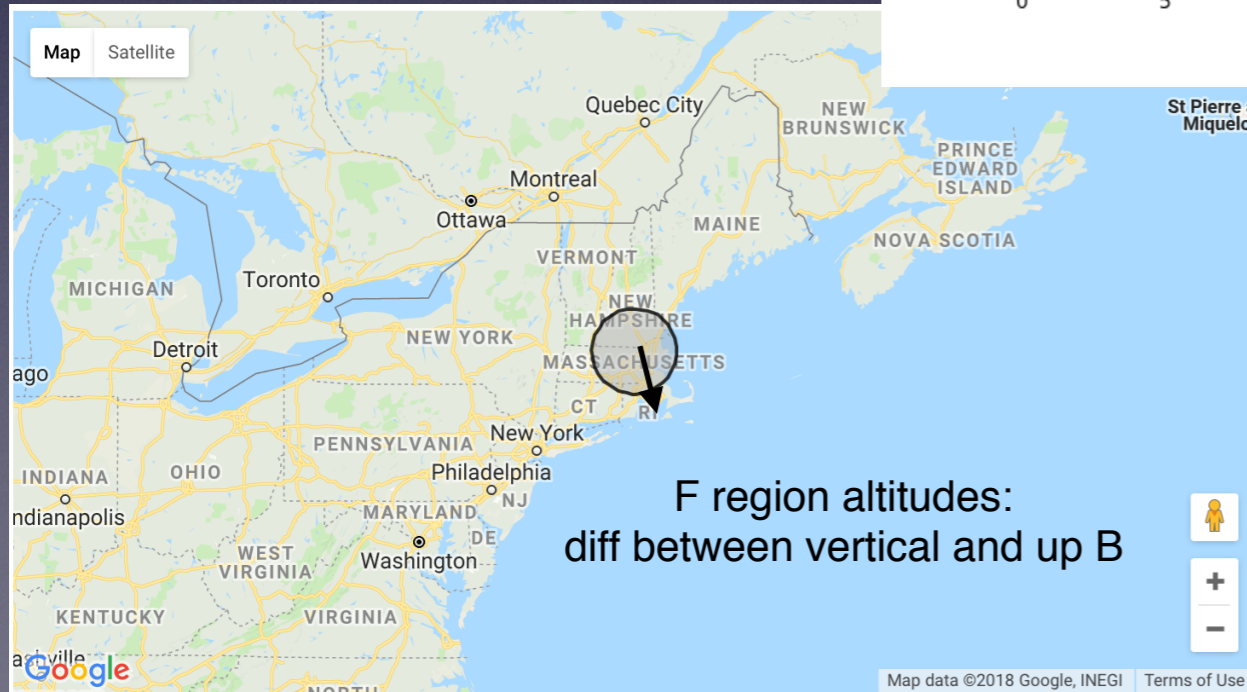
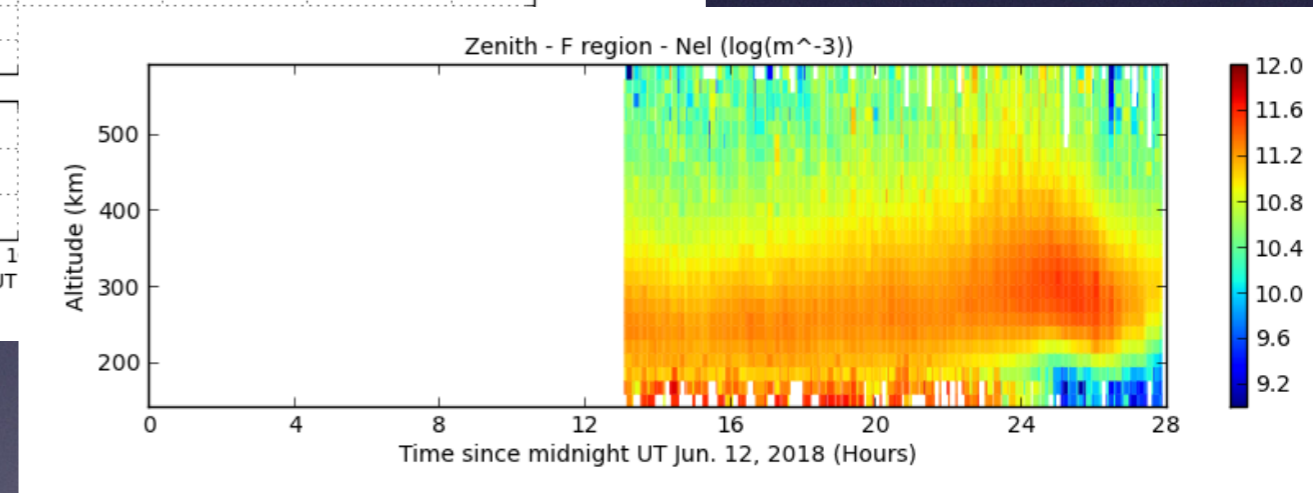
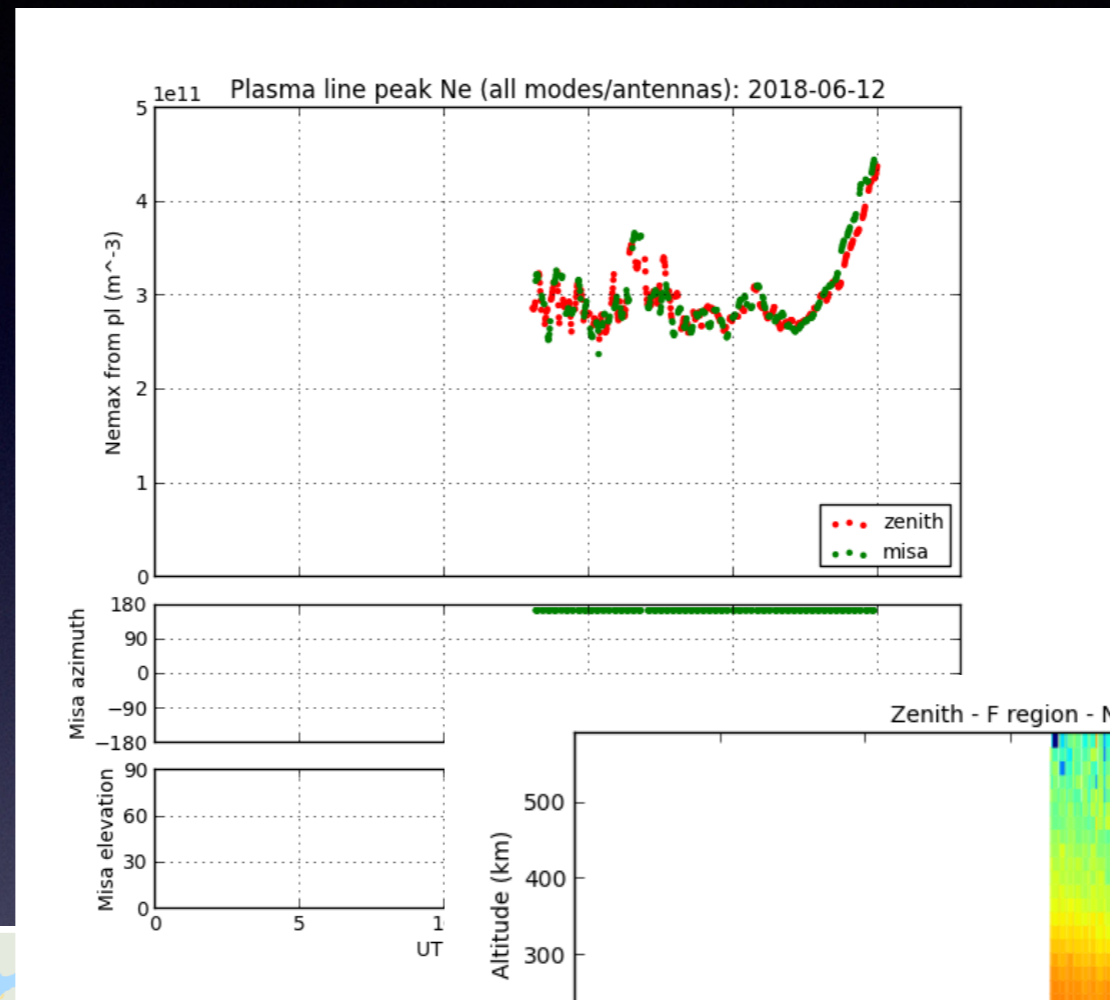
# Experiment Type C: Vertical + Up B

Vertical profiles [zenith; 3 minutes],  
fixed pointing up B [MISA; 3 minutes]

E, F region ionosphere

F2 peak high accuracy Langmuir mode  
electron density available (daytime)

Experiment cycle time = ~6.3 minutes



Zenith: 3 minutes  
MISA up B: 3 minutes