

# Millstone Hill experiment choices

67 meter zenith antenna and a 46 meter fully steerable antenna

17-02 local  
21-06 UT



Latitude:  $42.61^\circ$   
Longitude:  $288.51^\circ$

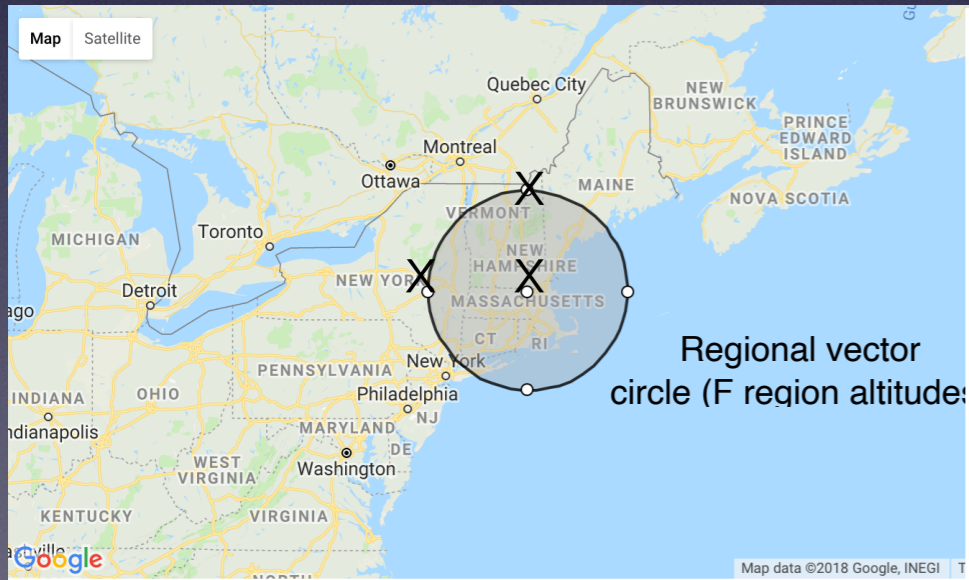
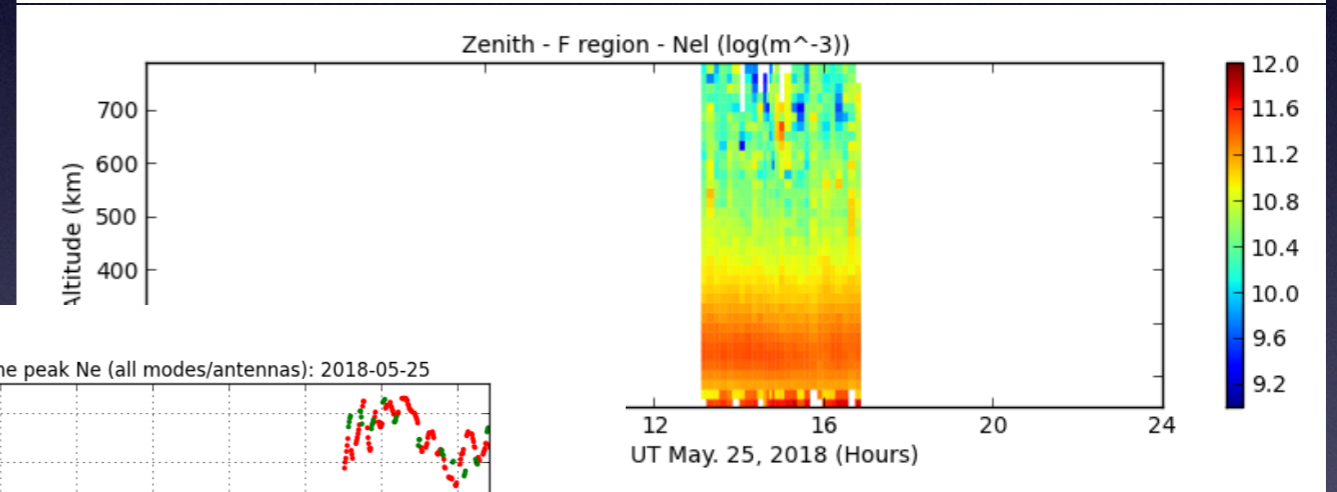
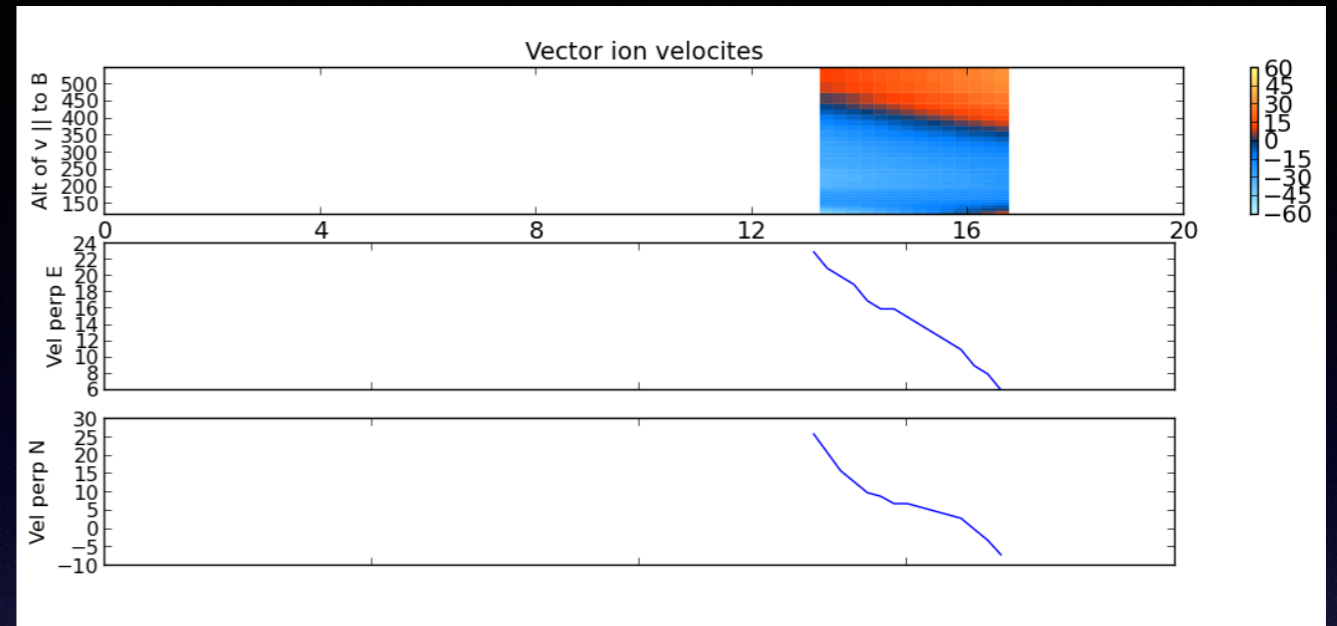
# Experiment Type A: Regional Vector

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

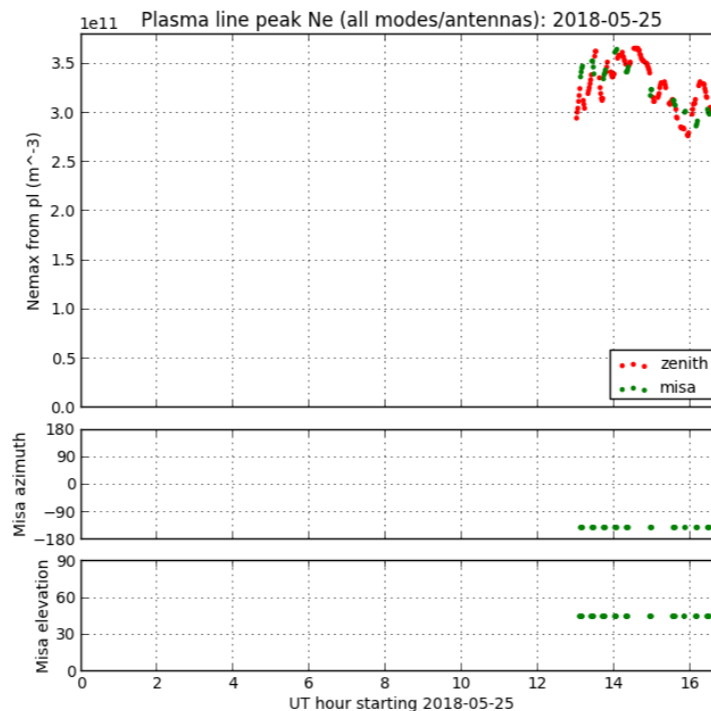
E, F region ionosphere

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

Experiment cycle time = ~24 minutes



Zenith: 6 minutes  
MISA fixed positions: 6 minutes  
(Currently MISA motion is limited)



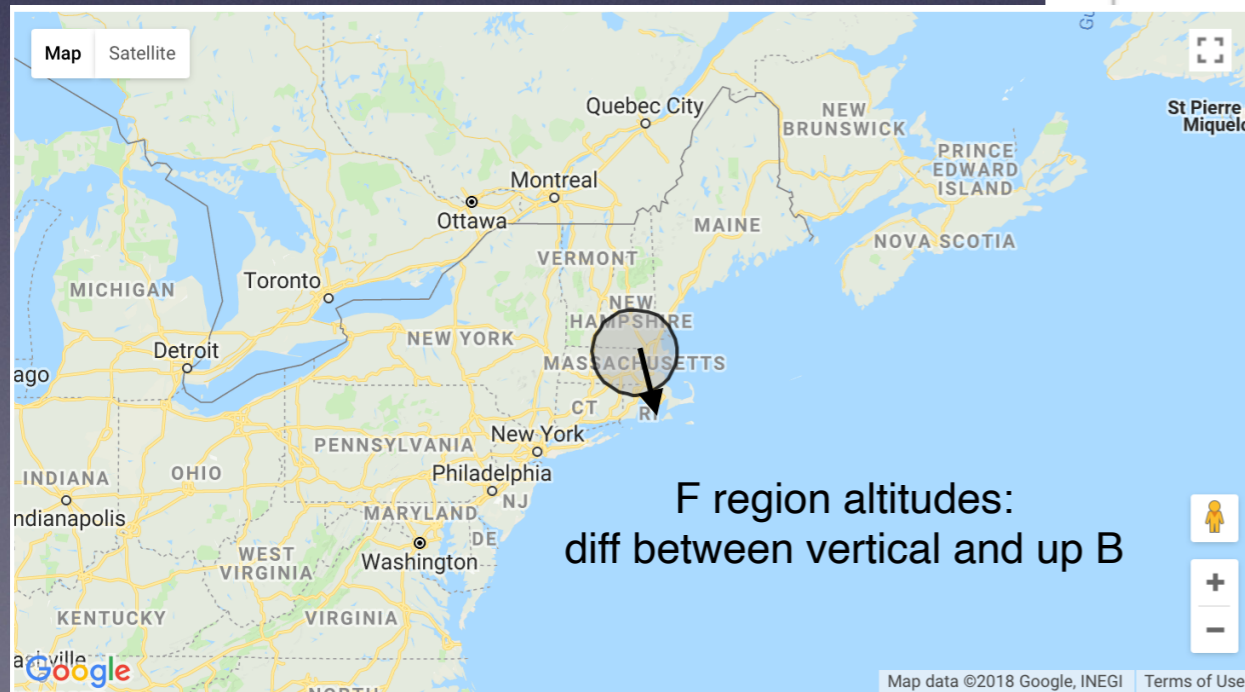
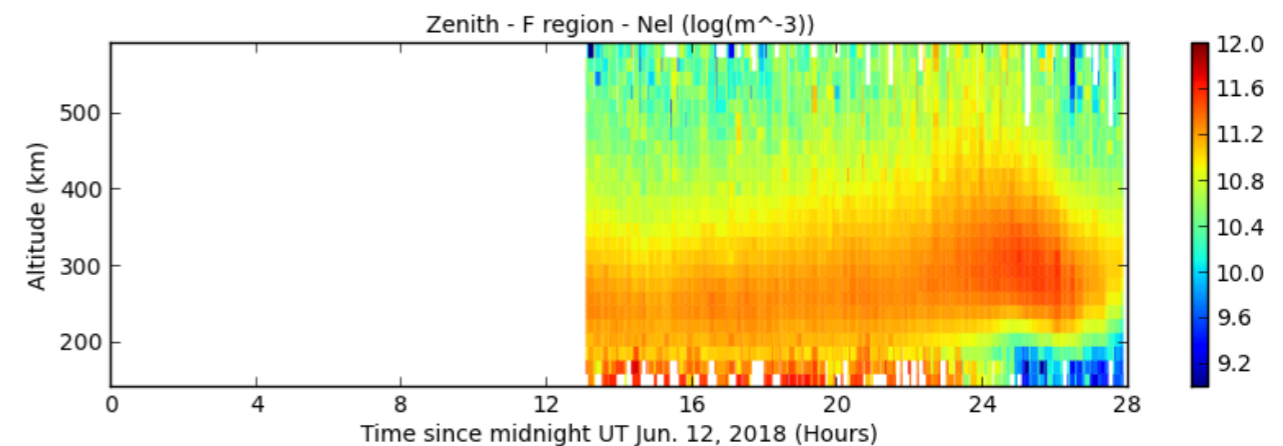
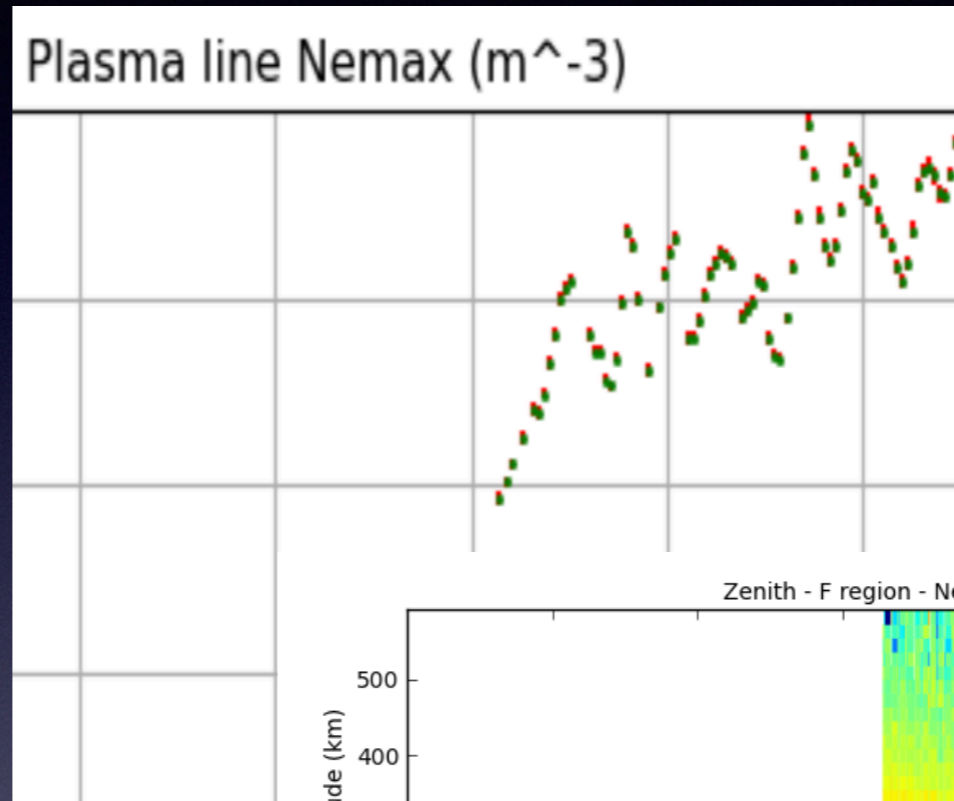
# Experiment Type B: Vertical + Up B

Vertical profiles [zenith; 1.5 minutes],  
fixed pointing up B [MISA; 1.5 minutes]

E, F region ionosphere

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

**Experiment cycle time = ~3 minutes**



Zenith: 1.5 minutes  
MISA up B: 1.5 minutes