Summary of foF2 working team meeting on 09/14/2017

Participants: Ioanna Tsagouri, Larisa Goncharenko, Ja Soon Shim

Topics discussed and Work plans:

(1) 2013 March Storm event (03/16-03/20) study

- Focus on mid-latitudes in both northern and southern hemispheres in two longitude regions (0E~30E and 250E~300E).
- Add more stations (e.g., Grahamstown) in south Africa to the 9 stations (Idaho National Lab, Millstone Hill, Boulder, Eglin AFB, Port Stanley, Chilton, Pruhonice, Ebre, Athens) already considered.
- To calculate the storm impact, 30 day median (±15 days from the storm time) will be used as the quiet time reference.

Larisa:
1. Provide Grahamstown data (by Sep. 20, 2017).
2. Check data availability of other south African stations, and provide the data if they are available (by Sep. 20, 2017).

Ioanna:
1. Calculate monthly medians (centered on storm days +/- 15 days) (by the end of Sep., 2017).
2. Summarize study of quiet-time behavior in March 2013 (mid-Oct., 2017).

Ja Soon:
1. Make model/data comparisons and write a paper to be submitted to Space Wether (early Dec., 2017).

(2) Climatology Study for Year 2012:

- We will first focus on three stations in middle latitudes in three different longitude sectors (Chilton, Millstone Hill, Wakkanai).
- Consider first monthly median (1 hr resolution).

Larisa:
1. Provide Wakkanai and Millstone Hill data (Sep. 20, 2017).
2. Generate Larisa's empirical model for Chilton (end of Sep.).
3. Provide Larisa's empirical model output for 2012 for 3 stations and monthly medians (mid-Oct., 2017).

Ioanna:

1. Provide Chilton data for Larisa to generate her model for Chilton (Sep. 20, 2017).
2. Generate monthly medians for 3 stations from the data for 2012 with 1 hr resolution (end of Sep.).
3. Compare monthly medians from data to monthly medians from empirical models (mid Nov.).
4. Compare monthly medians vs. seasonal behavior (early Dec.).

Ja Soon:
1. Extract Nmf2 for the three locations for 2012 from physics-based IT models (e.g., CTIPe and TIE-GCM) (mid-Oct.).
2. Generate monthly median NmF2 for three locations from the models (end of Oct.).
3. Compare monthly medians from data and empirical models with the modeled values (early Dec.).