

SPACE WEATHER INFORMATION AND FORECAST SERVICES

(SWIFtS)

WEEKLY SPACE WEATHER NEWS

Periode: January, 6th – 12th 2017

SOLAR ACTIVITY

Within the past week, the Sun was in quiet condition, even though there was a slight increase becoming eruptive due to activities of NOAA 2615 in the mid-week. Within this period, NOAA 2615 which currently is going to the backside have produced 5 C-class flares and several B-class flare. The most powerful flare was just C1.8 class, occurred on December 4th at 17:55 UT. No halo/partial halo CME as well as type II radio bursts were observed in the past few days. In addition to NOAA 2615, there were three other active regions (NOAA 2612, 2614, 2616) which were not eruptive.

Based on the current observations, there is no indication of the emergence of a new eruptive area from the far side of the sun. Thus, the solar activity next week is expected to remain at the level of quiet.

GEOMAGNETIC ACTIVITY

Geomagnetic activities during January, 6th –12th 2017 were in quiet level. The maximum value of K and Kp index was 2 and 3. The minimum Dst index was -26 nT on January, 6th 2017. In a week, substorm occurred continuously with maximum intensity was <1500 nT at 7th and 8th January 2017. Electron flux were in high and very high conditions. Very high conditions occurred at 9th and 10th January 2017 (based on geomagnetic checklist data).

IONOSPHERIC CONDITIONS

Ionosphere conditions in this week were in minor to strong disturbances level.

The strong level disturbances in the ionosphere was occurred due to the depression of critical frequencies of F/F2 layers (*foF2*) at 6th January 2017. The *foF2* depressions were impacted to the radiowave propagation over the ionosphere which known as the MUF Depression. Although the *foF2* experienced depression, the minimum frequencies (*fmin*) of the ionosphere in this week were in normal conditions. There was no increment of *fmin* that could be a source of disturbance in the HF radio communication which known as *Shortwave Fadeout* (SWF). The error positioning conditions were in normal to medium levels conditions with index W up to 2.

*For daily space weather information and forecast, please refer to our **Space Weather Information and Forecast Services (SWIFtS)** official website at swifts.sains.lapan.go.id or please e-mail us for request by facsimile*



Space Science Center
Deputy of Space and Atmospheric Science
Indonesian National Institute of Aeronautics and Space (LAPAN)
Jl. Dr. Djundjunaan 133 Bandung 40173
Ph../Fax. (022) 6012602/6014998
E-mail: swifts@lapan.go.id