

SPACE WEATHER INFORMATION AND FORECAST SERVICES

(SWIFtS)

WEEKLY SPACE WEATHER NEWS

Periode: January, 20th – 26th 2017

SOLAR ACTIVITY

Within the past week, solar activities in general were low, even though one day on January, 21st 2016 it became eruptive. This enhancement was recorded on GOES X-Ray due to activities of NOAA 2615 which was erupting 6 C-class flares. The largest was C9.3 peaking at 07:26 UT. Within this period, there were four active regions on the solar hemisphere, NOAA 2625 – 2629. No halo/partial halo CME as well as type II radio bursts were observed in the past few days. However, a filament eruption was seen on the west limb on January, 24th 2016 at around 20:00 UT. 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, 20th – 26th 2017 were in quiet level. The maximum value of K and Kp index was 3. The minimum Dst index was -20 nT on January, 22nd 2017. In a week, substorm occurred continuously with maximum intensity was <1000 nT at 22nd and 23rd January 2017. Electron flux were in high conditions.

IONOSPHERIC CONDITIONS

Ionosphere conditions in this week generally were in quiet condition. Only one day was strong disturbances level on January 15, 2017.

The strong level disturbances in the ionosphere was occurred due to the depression of critical frequencies of F/F2 layers (*foF2*) for up to 3 hours duration. 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 slight level condition with W index 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*



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