SPACE WEATHER INFORMATION AND FORECAST SERVICES
(SWIFtS)
WEEKLY SPACE WEATHER NEWS
Periode: 18 – 24 November 2016

SOLAR ACTIVITY

Over the past week, solar activity is at the quiet level. No C class flares and solar radio burst events detected. Only several B-class flares mostly produced by NOAA 2612 and six type III solar radio bursts detected. Within a week, there were only three active regions appeared on the solar disk, which NOAA 2610, 2611 and 2612. Several CME events with a narrow angular angle and hurled to the west are detected. The observations of high-energy protons in the past week also at the quiet level because of very low solar activity. It is predicted that solar activity during the next week will still be at quiet levels.

GEOMAGNETIC ACTIVITY

Geomagnetic activities on November 18th – November 24th , 2016 was in quiet condition at the beginning of the week, but change into active condition on weekend.The cause of this active condition was high speed stream from geoeffective coronal holes. Minimum Dst index reached -34 nT on 24 November 2016 at 15:00 UT, local K index maximum from Kototabang Station reached 3 with Kp index maximum reached 5 which means minor storm condition at high and mid latitude region. As for solar wind condition, the speed gradually increased started on 22 November 2016 at 08:00 UT and still increasing until now. Bigest substorm of the week also occurred on 24 November 2016 with intensity less than 2000 nT and duration around 11 hours.

IONOSPHERIC CONDITIONS

Ionospheric conditions for this week were dominant in quiet conditions.
The minimum frequencies (*fmin*) and the critical frequencies *F/F2* layers of ionosphere (*foF/F2*) were dominant in quiet conditions. There was one day that the foF/F2 experienced a depression for more than 2 hour which might be impacting to the radio wave propagations in the ionosphere. There onces was Spread-F events in this week in 22th November 2016 which could be a source of *Fading* disturbances. The *E-Sporadic* reported always occurred every days in this week and with values of the critical frequency (*foEs*) can reach above the *foF2* values. There was no increment of *fmin* that could be a source of disturbance in the HF radio communication which known as Shortwave Fadeout (SWF). Based on the observations using GISTM Biak and Bandungu, the scintillation (*s4*) condition for this week were quiet level. These conditions of scintillation could lead to the quiet levels of *loss of lock.* Similar to the s4 conditions, the error positioning conditions were in quiet levels conditions also with index W up to 1.

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*

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