SPACE WEATHER INFORMATION AND FORECAST SERVICES
(SWIFtS)
WEEKLY SPACE WEATHER NEWS
Periode: May 12th – May, 18th 2017

SOLAR ACTIVITY

Within the last week, solar activity was in quiet condition with no flare more than B class. Active regions on the solar disk (NOAA 2656-2658) had simple configuration and tend to stable along this week. CME events occurred several times with narrow angular width. Next week solar activity is predicted to remain quiet as the probability of very active sunspot region emerging from the east limb of the Sun is small.

GEOMAGNETIC ACTIVITY

Geomagnetic activity during May 12th -18th, 2017 was on quiet level. Dst index shows positive values, has reached +37nT, whilst its minimum was on the end of the week, May 18th 2017, was -28 nT. Kp index indicated that geomagnet activity was on quiet level as well, with its maximum was 3+. In May 15th -16th 2017, High speed solar wind stream triggered by geoeffective coronal hole has reached Earth, with maximum velocity of 650 km/s, but has not triggered geomagnetic disturbance due to Interplanetary Magnetic Field IMF Bz was fluctuating northward-southward. Solar wind's velocity was getting slower gradually and return to normal, ±400 km/s on the end of the week. Due to the fast stream, a substorm occurred with maximum intensity of index Ae was 1000 nT on May 18th 2017, but electron flux level was still on low level (<1,000 particles cm^{-2}s^{-1}sr^{-1})

IONOSPHERIC CONDITIONS

Ionosphere conditions in this week were dominantly in quiet level.
The Minor level disturbances in the ionosphere was occured only for one day due to the depression of critical frequencies of F/F2 layers (foF2) for more than 1 hours in 18th May 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) or Radio Blackout (RB). Based on the observations using GISTM over Bandung, Biak and Manado the scintillation (s4) condition for this week were quiet level. Similar to the s4 conditions, the error positioning conditions were between normal to medium levels conditions that determined by the index W values.

*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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