

SPACE WEATHER INFORMATION AND FORECAST SERVICES

(SWIFtS)

WEEKLY SPACE WEATHER NEWS

Periode: June, 30th – July, 6th 2017

SOLAR ACTIVITY

Solar activity in the past week was active with one M1.3 flare from unknown region. That region emerged near west limb at 3rd July. Several hours after produce, M, C and several B flares, this unknown region has been move to the farside. Within a week, only two active regions with low complexity (NOAA 2664 and 2665) appeared on the disk. A geoeffective coronal mass ejection detected but not significantly disturbed space weather on Earth. Next week, Solar activity is expected to be on quiet level.

GEOMAGNETIC ACTIVITY

Geomagnet activity during June 30th – July 6th, 2017 was on quiet level. Dst index almost always shows positive values. Dst index minimum was -10 nT on July 6th, 2017 at 23:00 UT. It also been confirmed by Kp index which its maximum reached 3 at high and mid latitude. Meanwhile K index at Kupang recorded 3 on 2-3 July 2017. During the week, there was substorm occurrence on 1 and July 2017 with intensity less than 1500 nT. Ae index increment also occurred on 6 July 2017 with lower intensity around 500 nT. Solar wind speed increased from 300 km/sec to 600 km/sec on 2 to 3 July 2017 simultaneously with the arrival of solar wind plasma from geoeffective coronal hole located around solar equator

IONOSPHERIC CONDITIONS

Ionosphere conditions in this week were between quiet to minor disturbance level.

The Moderate disturbances level in the ionosphere was occurred only for one day due to the depression of critical frequencies of $F/F2$ layers ($foF2$) for more than 1.5 hours in 3th July 2017. The $foF2$ depressions were impacted to the radiowave propagation over the ionosphere which known as the *MUF Depression*. Although the $foF2$ experienced a 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 a *Shortwave Fadeout* (SWF) or *Radio Blackout* (RB). Based on the ionospheric observations using GISTM over Bandung, Biak and Manado the scintillation ($s4$) condition for this week were in quiet level. Similar to the $s4$ conditions, the error positioning conditions were between normal to slight 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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