

SPACE WEATHER INFORMATION AND FORECAST SERVICES

(SWIFtS)

WEEKLY SPACE WEATHER NEWS

Periode: October, 28th – November, 4th 2016

SOLAR ACTIVITY

For this whole week, Sun is quiet. No C-classes or larger flare occurred. For the whole week, three ARs appeared on the Sun (NOAA 2603, 2604 & 2605), but only with low activity for the whole week. No significant events occurred from the Sun, so the Sun activity tends to be quiet for this past week.

For the past week, flux of high energy proton was far below threshold so that the activity level is quiet.

GEOMAGNETIC ACTIVITY

Geomagnetic activities during October 28th – November 3rd, 2016 was tend to be in active condition, and experienced once disturbance level at minor storm which was continuation from last week disturbance. Dst index gradually decreased when recovery phase still on going. The minimum Dst index was -69 nT on 29 October 2016. Kp index maximum reached 5 and Maximum local K index from Agam Station reached 5 at the same time. From 30 October 2016 untill the end of the week, geomagnetic disturbance has weaken to active level. This geomagnetic disturbance which is contiunuation from last week disturbance was caused by fast stream from geoeffective coronal hole which lasted quite long. Substorm occurrence along this week, has a long duration with the highest intensity was 2000 nT on 3 November 2016.

IONOSPHERIC CONDITIONS

Ionosphere conditions in this week were quiet. There were no depression of critical frequencies of F/F_2 layers (f_oF_2). So, they were not impacted to the radiowave propagation over the ionosphere which known as the Radio Blackout. The minimum frequencies (f_{min}) of the ionosphere in this week were also in normal conditions. There were no increment of f_{min} that could be a source of disturbance in the HF radio communication which known as Shortwave Fadeout (SWF). The occurrences of *Spread-F* were noted appeared on October 28 and November 3, 2016 in high level. This occurrences of *Spread-F* could be a source of *Fading* disturbances for HF Radio communication. Beside the *Spread-F*, the *E-Sporadic* reported almost occurred every days in this week and with values of the critical frequency (f_oE_s) below and sometimes above the f_oF_2 values. Based on the observations using GISTM over Bandung, the scintillation (S_4) condition for this week were quiet. In this week the error positioning conditions were in slightly levels conditions and lost of lock were quiet.

*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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