

SPACE WEATHER INFORMATION AND FORECAST SERVICES

(SWIFtS)

WEEKLY SPACE WEATHER NEWS

Periode: April, 28th – May 4th 2017

SOLAR ACTIVITY

Earlier of the week, several small CMEs occurred with simple active regions (NOAA 2651, 2653 and 2654 spotless region 2652) with no flare detected. No new region returned for the past week. NOAA 2654 was developing into simple and stable active region without flaring activity. NOAA 2651 and 2652 were already on the west limb and disappeared in the middle of the week. Two active regions left NOAA 2653 and NOAA 2654 remain stable for the past week. Based on farside observation, no new region returned for the whole week from the east solar limb. The solar activity for the whole week between April 28th - May 5th remain quiet.

GEOMAGNETIC ACTIVITY

Geomagnetic activities during April, 28th – May 4th 2017 were generally in quiet level. There was one active condition on April, 28th 2017 with minimum Dst index was -29 nT. Maximum Kp index was 2. Substorm occurred several times but with small intensity dan onlu a few hours, the Ae index intensity was ≤ 500 nT. The electron flux on April 28th -29th 2017 were at very high conditions around 10000 [$\text{cm}^2/\text{sec}/\text{sr}$] and the rest were at high conditions around 1000 [$\text{cm}^2/\text{sec}/\text{sr}$].

IONOSPHERIC CONDITIONS

Ionosphere conditions in this week were in moderate condition (April 28 – 30, 2017) and quiet (May 1 – 4, 2017).

The moderate level disturbances in the ionosphere was occurred due to the depression of critical frequencies of F/F2 layers (foF2). The foF2 depressions were impacted to the radiowave propagation over the ionosphere which known as the MUF Depression. MUF depression occurred due to minor storm on geomagnetic activity. Although the foF2 experienced depression, the minimum frequencies (fmin) of the ionosphere in this week were in quiet condition. 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 over Bandung and Biak, the scintillation (S4) condition for this week were quiet level. The error positioning conditions were generally in 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 by facsimile*



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