

SPACE WEATHER INFORMATION AND FORECAST SERVICES

(SWIFtS)

WEEKLY SPACE WEATHER NEWS

Periode: June, 9th – 15th 2017

SOLAR ACTIVITY

For the past week, Solar activity was quiet with two weak active regions reported. Active region NOAA 2661 already decayed for the early of the week, and disappeared to the west limb by mid of the week. New active region NOAA 2662 appeared afterward with simple magnetic configuration and did not produce significant events. There was no other significant events reported than those two active regions that affecting Solar activity for this past week.

GEOMAGNETIC ACTIVITY

Geomagnet activity during June 9th – 15th, 2017 was on quiet level. Dst index almost always shows positive values, has reached +34 nT. Minimum Dst Index was on June 11th, 2017 has reached -6 nT. Kp index showed different activity level, on June 11th, Kp index has reached 5-, which means minor geomagnetic storm was on the process on middle and high latitude. Maximum Kp index during the minor storm has come about as substorm occurrence on polar region. The substorm has taken ± 9 hours of duration with intensity greater than 500 nT. The geomagnetic storm has been triggered by high speed stream with maximum velocity of 550 km/s and density enhancement until it reached 36 particles/cm³. Due to the storm, the electron flux on radiation belt region has been fluctuating but still on low level (<1000 electron/cm²s.sr).

IONOSPHERIC CONDITIONS

Ionosphere conditions in this week were dominantly in quiet level.

The Moderate level disturbances in the ionosphere was occurred only for one day due to the depression of critical frequencies of *F/F2* layers (*foF2*) for more than 5 hours in 11th June 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*



Space Science Center
Deputy of Space and Atmospheric Science
Indonesian National Institute of Aeronautics and Space (LAPAN)
Jl. Dr. Djundjunaan 133 Bandung 40173
Ph../Fax. (022) 6012602/6014998
E-mail: swifts@lapan.go.id