

SPACE WEATHER INFORMATION AND FORECAST SERVICES

(SWIFtS)

WEEKLY SPACE WEATHER NEWS

Periode: January 8th – 14th 2016

SOLAR ACTIVITY

Solar activity within last week was very quiet with no flare event observed. There were seven active regions (NOAA 12476, 12477, 12480, 12481, 12482, 12483, dan 12484), with simple magnetic configuration alpha or beta. All the active regions look quiet and stable. There was no significant CME on the last week. According to far side observation, 2 bright regions are expected to emerge in the east limb and expected to influence solar activity next week. So the activity of the Sun is predicted to be eruptive.

GEOMAGNETIC ACTIVITY

Geomagnetic activity during this week, from January, 8th -14th 2016 was in quiet level. The minimum Dst index was -31 nT on January, 12th 2016. K and Kp index reached 2 and 4, for Kp index value stated that the geomagnetic activity was on active level on January, 12th -13th 2016 at high latitude. Ae index showed the substorm event reached <1000 nT at this week. The coronal holes in this week at near equator, northern, and southern of Sun area were not geoeffective. There was no CME with angular width > 90^o in this week and electron flux was on 1000 particles cm⁻²s⁻¹sr⁻².

IONOSPHERIC CONDITIONS

Ionospheric conditions for this week were in quiet conditions.

The minimum frequencies and the critical frequencies of Ionosphere were in normal variations. This conditions occurred due to the quiet solar and geomagnetic activity. Although the fmin and foF2 in a quiet conditions, there were Spread-F events and E-Sporadic occurrences also. The Spread-F occurred for several days with duration up to 30 minutes and might be a source of fading. For the Sporadic-E, the maximum value of the critical frequencies (foEs) were up to 10.7 MHz.

Based on the observations using GISTM in Bandung, it was noted that the scintillation was in quiet condition also. The quiet conditions related to the quiet levels of Loss of Lock. The peak of TEC values for this week were between 40 to 60 TECU with the maximum peak value was 65.45 TECU. Those value could affect the Error positioning parameters into the moderate disturbance conditions.

*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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