

SPACE WEATHER INFORMATION AND FORECAST SERVICES

(SWIFtS)

WEEKLY SPACE WEATHER NEWS

Periode: 11 – 17 March 2016

SOLAR ACTIVITY

For the last seven days, solar activities is in the eruptive level with only three C-class flares and numerous B-class flares detected. Two C-class flares came from NOAA 2521 and one from NOAA 2522 with the strongest flare was C2.2 on March, 16 peaked at 06:46 UT from NOAA 2522. There was eleven active regions in the solar disk in the past week, ie. NOAA2511, 2512, 2513, 2518, 2819, 2820, 2821, 2822, 2823, 2824, and 2425. All of the active regions was very small in area with not exceed more than 100 SMH. The magnetic configurations of all active regions were alpha and beta. There was three CME events with very wide angular width occurred on March 13 and March 16. Solar activity is predicted still in eruptive level for the next week

GEOMAGNETIC ACTIVITY

Geomagnetic activity during the week, from 11 to 17 March 2016 has encountered active level that was followed by minor storm on 16 March 2016 thta peaked at 24:00 UT. The condition was preceeded by shock that appeared on 14 March 2016 on 17:00 UT was showed by sudden increase in the Dst index which reached 47 nT. The Dst index continuously decreased until it reached minimum at – 49 nT on 15 March 2016, 08:00UT. Kp index at that time was 5, which means disturbance on minor storm level, but K index from Station Sumedang value at 4 means the regional condition still in active level. Then, at 16 March 2016 the geomagnetic condition dropping back to minor storm level peaked at 24:00 UT, with Dst index reached -55 nT. The Kp and K index at that time showed the same value which was 5. This active condition and then followed by minor storm condition may be caused by CME on 6 March 2016 and high speed stream from geoeffective coronal holes. During the week, there were quite intense substorm occurances with long duration and Ae index value reach <1500 nT.

IONOSPHERIC CONDITIONS

Ionosphere were in quiet conditions. Radio Blackout, SWF, and Fading disturbances were occured for only one day, which is 11th March 2016. Although the geomagnetic conditions were fluctuated, the response of ionosphere in Indonesia regions were in quiet conditions. The similar conditions shown also by the observation of Scintillation (s4) and Total Electron Content (TEC). There was no Scintillation occurances neither the increment of TEC, which might impacted to the navigation systems. The error positioning disturbances were in medium conditions and the Loss of lock disturbances were in quiet 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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