

# SPACE WEATHER INFORMATION AND FORECAST SERVICES

(SWIFtS)

## WEEKLY SPACE WEATHER SUMMARY

Periods: 26 February – 3 March 2016

### SOLAR ACTIVITY

In general, solar activity last week was at the quiet level with only one C class flare was detected. These flare was C3.3 peaked at 05:55 UT of 27 February 2016, came from NOAA 2506. There were nine active regions observed: NOAA 2501, 2506, 2507, 2508, 2509, 2510, 2511, 2512, and 2513. Among those regions, NOAA 2506 has the highest activity record with magnetic class beta-gamma. Three of type three radio bursts occurred lately. From the coronal observation, several mass ejection with narrow angular width were detected by CACTUS. Solar activity is predicted to be at the quiet level for the next week.

### GEOMAGNETIC ACTIVITY

Geomagnetic activities for this week, from February, 26<sup>th</sup> – March, 3<sup>rd</sup>, 2016 in quiet condition. Dst index during this week reached its minimum at -13 nT on February, 26<sup>th</sup> 2016 at 06:00 UT, with Kp index reached at the same day. The local K index at the same time also reached 3. The Ae index showed a few times enhancement that reached <1000 nT but the duration were short. Geoeffective coronal hole since 26 February 2016 had not make significant effect on Earth environment.

### IONOSPHERIC CONDITIONS

Ionospheric conditions for this week were dominant in quiet conditions.

The minimum frequencies (*fmin*) and the critical frequencies *F*/*F*2 layers of ionosphere (*foF*/*F*2) were dominant in normal conditions. There was occurrence of Spread-F which could be a source of *Fading* disturbances on February 27 and March 1, 2016 in high category. Based on the observations using GPS Ionospheric Scintillation and TEC Monitor (GISTM) over Biak, ionospheric scintillation were dominant in quiet conditions. But the strong category of Scintillation occurred on February 27, 2016. The peaks of TEC values for this week were between 54 to 62 TECU. Those values could affecting to the Error positioning parameters into the medium scale of 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](http://swifts.sains.lapan.go.id) or please e-mail us for request by facsimile*



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