

# SPACE WEATHER INFORMATION AND FORECAST SERVICES

(SWIFtS)

## WEEKLY SPACE WEATHER NEWS

Periode: February, 28<sup>th</sup> – March, 3<sup>rd</sup> 2017

### SOLAR ACTIVITY

The Sun is entering the quiet activity for the past week, regardless there were several B-class flares were detected around February 28 – to March 3, also reported three type III radio-burst. Those flares were mostly erupted from the active region NOAA 2641 which was a new region that emerged almost at the center of Solar disk, slightly to the east. Within a week there were six active regions with low complexity with stable tendencies reported, i.e. NOAA 2638, 2639, 2639, 2640, 2641 dan 2642. There was no significant geoeffective coronal mass ejection that significantly disturbed space weather on Earth.

### GEOMAGNETIC ACTIVITY

Geomagnetic activities in Indonesia during February 24th – March 2nd were in active level. The minimum value of Dst index on March 2nd was -53 nT. While Kp index has reached 6 on March 1st 2017. At high latitudes, fluctuation of AE index with intensity of 1000nT has started on March 1st ,2017 at 10 UT. The geomagnetic disturbance at the end of the week has been triggered by high speed solar wind stream, with maximum speed reached around 750 km/s. Due to the fast stream, electron flux was on very high level on March 2nd, 2017.

### IONOSPHERIC CONDITIONS

Ionosphere conditions in this week were dominantly in quiet level.

The Quiet level disturbances in the ionosphere was due to no 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. There was no increment of fmin that could be a source of disturbance in the HF radio communication which known as Shortwave Fadeout (SWF) or Radio Blackout (RB). Based on the observations using GISTM over Bandung, Biak and Manado the scintillation (s4) condition for this week were 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](http://swifts.sains.lapan.go.id) or please e-mail us for request*



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