

**A PRELIMINARY REPORT ON PREDICTION OF POSSIBLE STORNG EARTHQUAKE
AROUND 1000 KM OF COOCHBEHAR STATION BY MONITORING VERY LOW
FREQUENCY SIGNAL ANOMALY IN VTX-COOCHBEHAR, VTX-IERC; NWC-
ICSP, NWC-IERC AND JJI-IERC PROPAGATION PATHS**

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We have been monitoring VLF signals from VTX (16.3 kHz kHz) and NWC (19.8.kHz) from three of our receivers: Coochbehar, IERC at Sitapur, West Midnapur and ICSP at Kolkata.

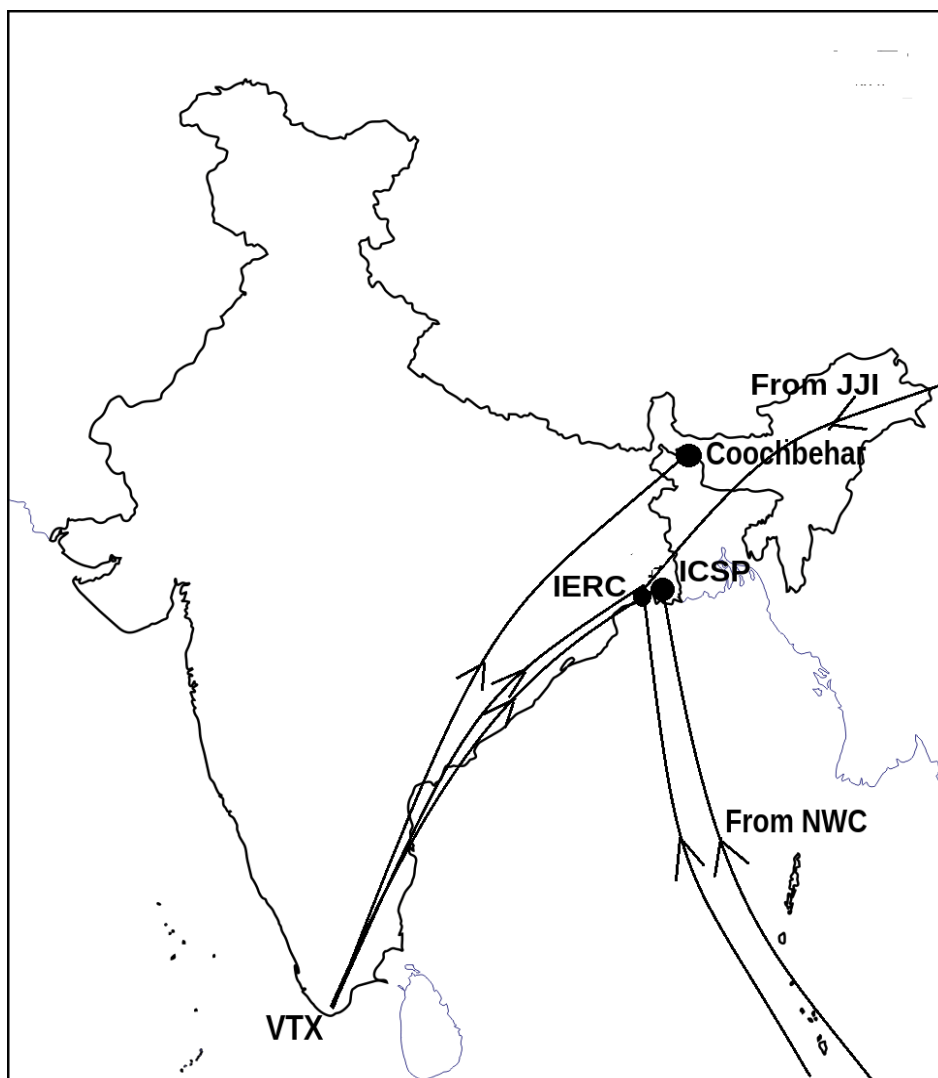


Figure 1: The VLF receiving stations and propagation paths.

Updated on 10th May Morning:

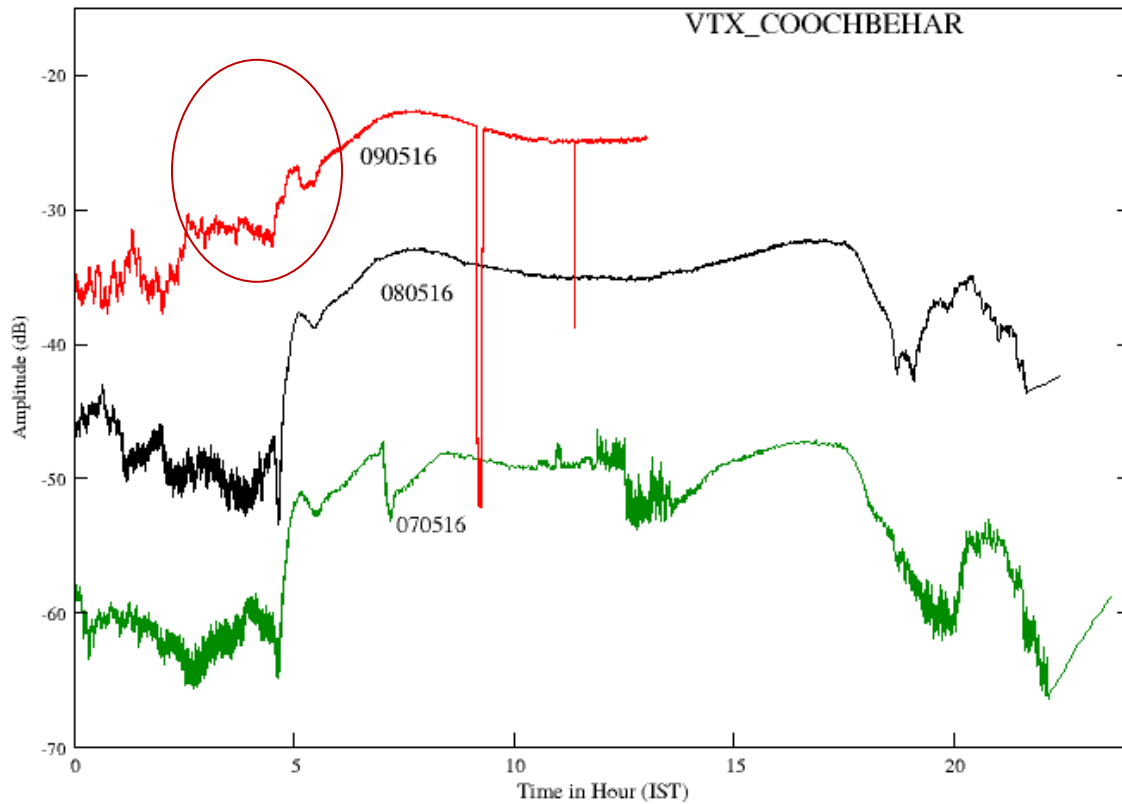


Figure 2: Anomalous sunrise terminator time and D-layer Preparation Time (DLPT) in VLF signal on 09/05/2016 for VTX-Koochbehar propagation indicates major earthquake within 72 to 96 hours.

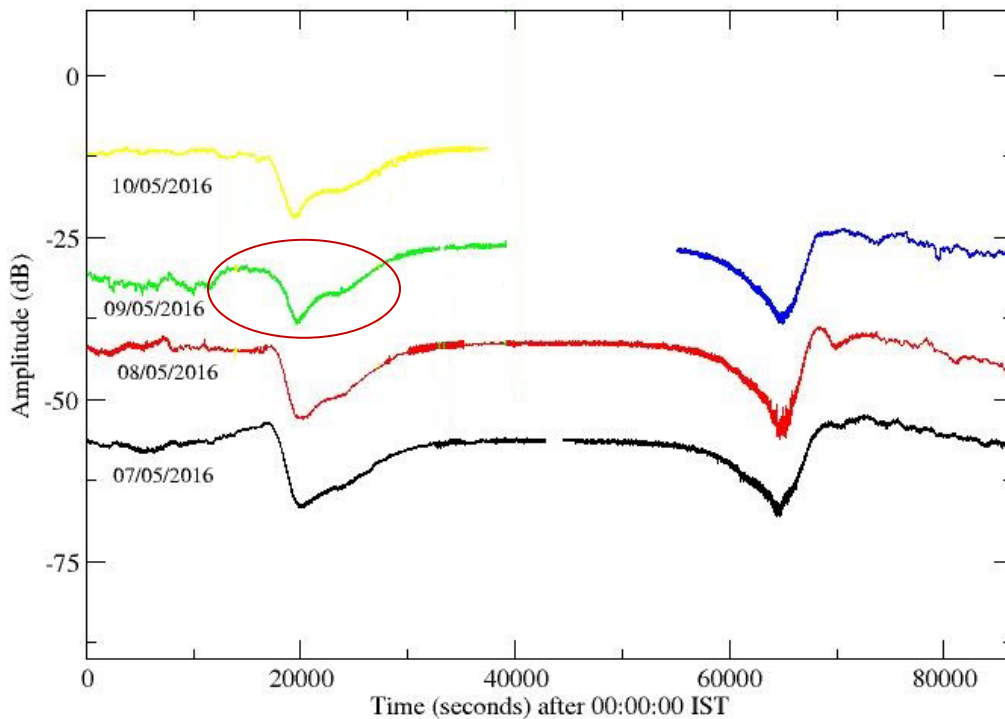


Figure 3: Anomalous sunrise terminator time and D-layer Preparation Time (DLPT) in VLF signal for VTX-ICSP propagation path indicates major earthquake within 72 to 96 hours.

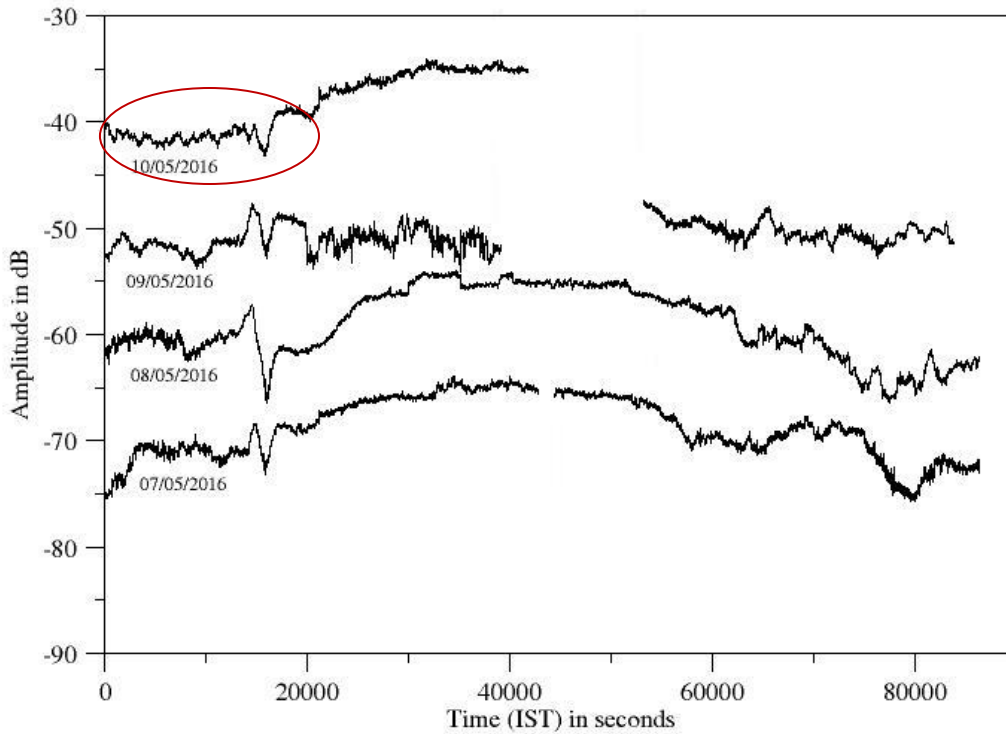


Figure 4: Variation of NWC-ICSP signal amplitude. The sunrise terminator and night time signal amplitude is unusual on 10/05/2016 in comparison to earlier two days.

Prediction: VTX and NWC signal contains anomalies indicating chances of earthquake in the next 72 hours.

Updated on 11th May Morning:

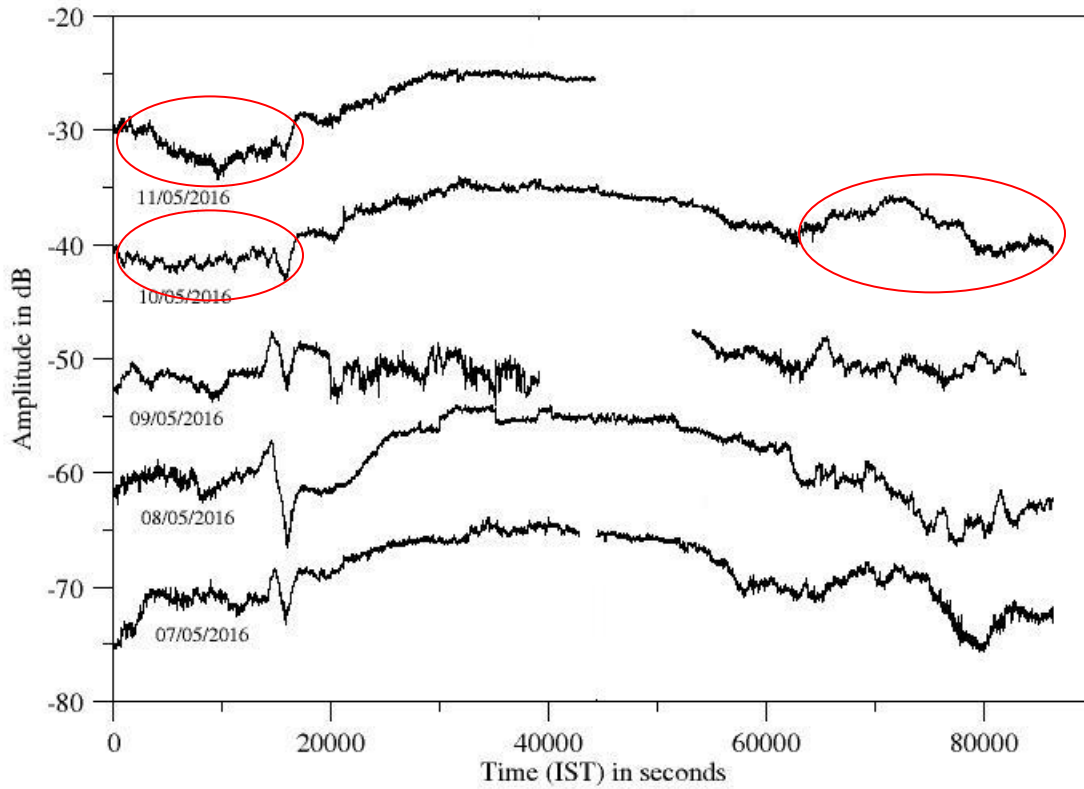


Figure 5: Variation of NWC-ICSP signal amplitude. The sunrise terminator and night time signal amplitude is unusual on 10/05/2016 and 11/05/2016 in comparison to earlier three days. Also the nighttime amplitude on 10/05/2016 is higher in comparison to earlier days.

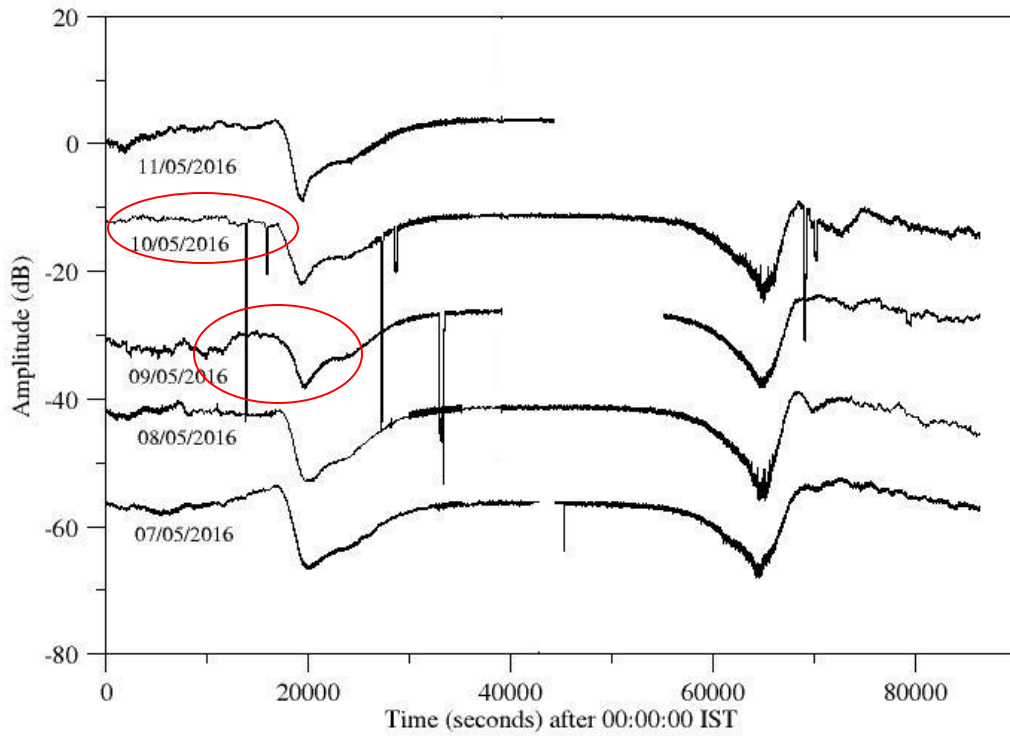


Figure 6: Anomalous sunrise terminator time and D-layer Preparation Time (DLPT) in VLF signal for VTX-ICSP propagation path indicates major earthquake within 72 to 96 hours. Anomalous nighttime signal variation can be observed on 10/05/2016.

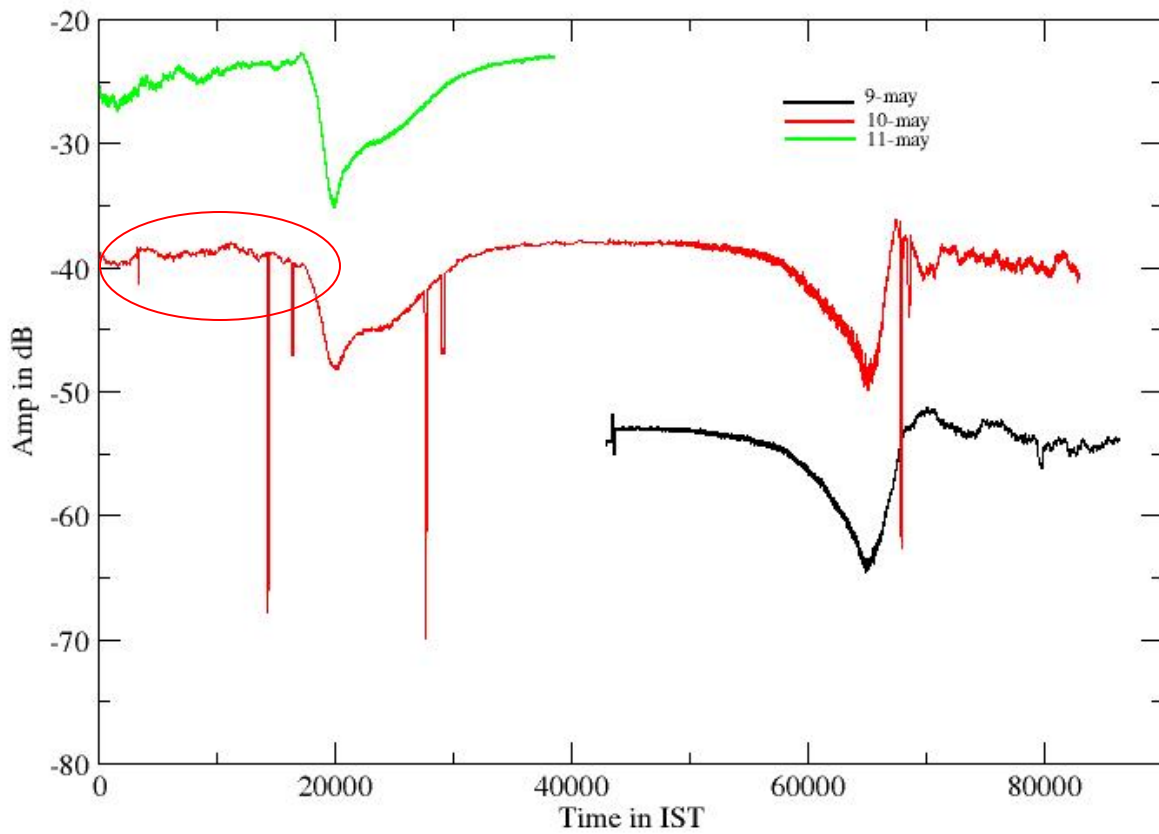


Figure 7: VTX-IERC signal variation for three days from 09/05/2016. Anomalous nighttime signal variation can be seen on 10/05/2016. Possibility of earthquake in next 72 hours cannot be overruled.

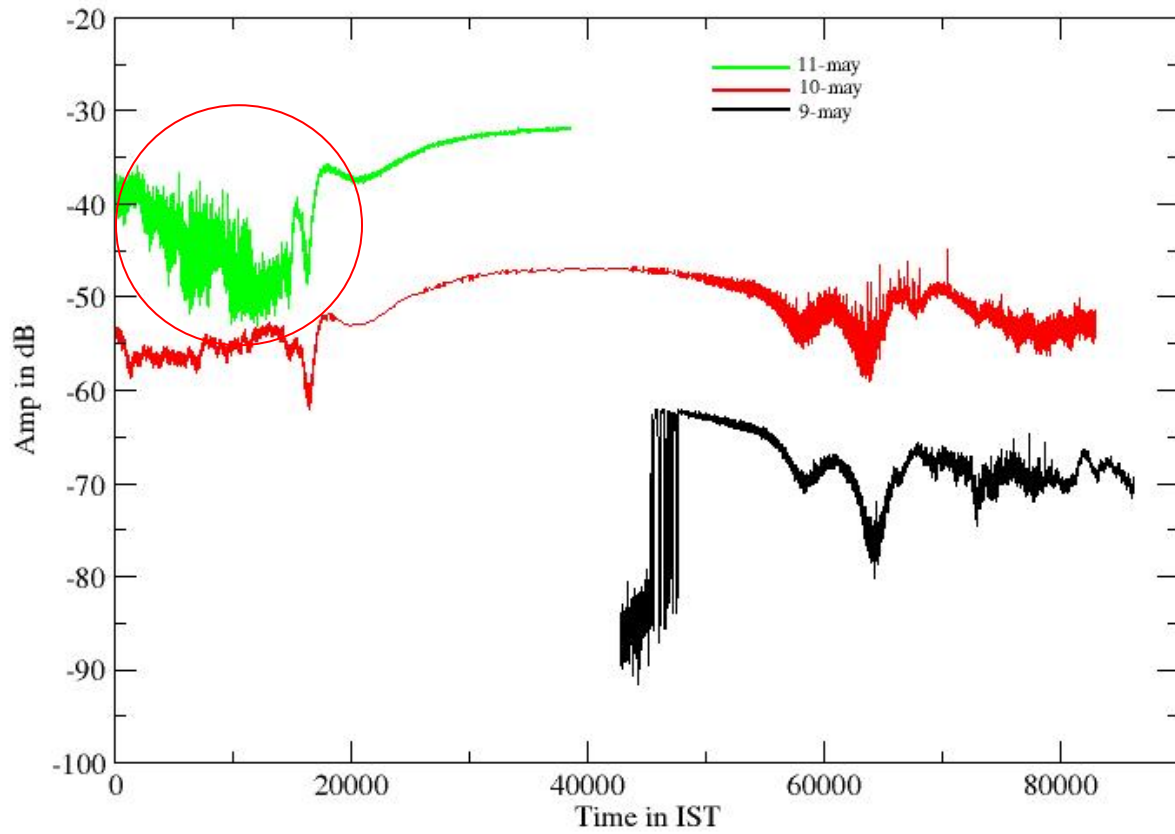


Figure 8: NWC-IERC signal variation for three days from 09/05/2016. Strong nighttime signal fluctuations can be clearly seen on 11/05/2016. This indicates a possibility of earthquake in next 72 hours.

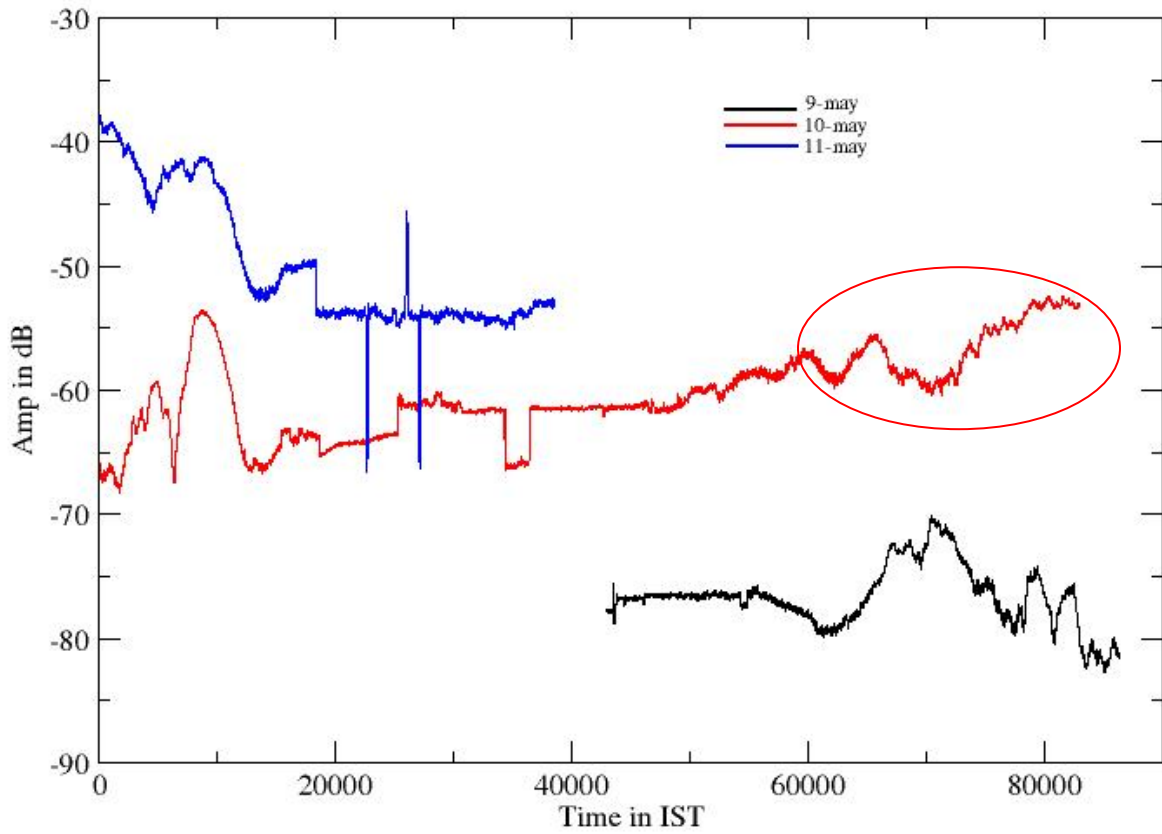


Figure 9: JJI-IERC signal variation for three days from 09/05/2016. On 10/05/2016 the sunset terminator (SST) is not so prominent relative to the previous day. This can be a precursory sign of earthquake in next 72 hours.

Updates on 12th May Morning

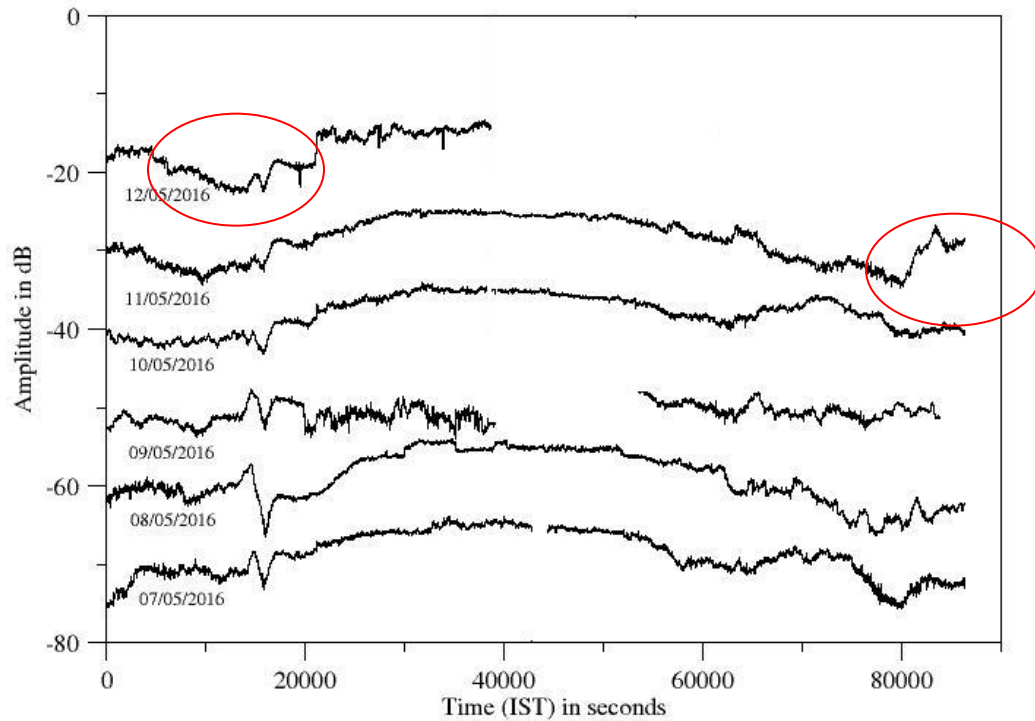


Figure 10: Variation of NWC-ICSP signal amplitude. The sunrise terminator and night time signal amplitude is unusual on 11/05/2016 and 12/05/2016 in comparison to earlier three days. Also the nighttime amplitude on 11/05/2016 is higher in comparison to earlier days.

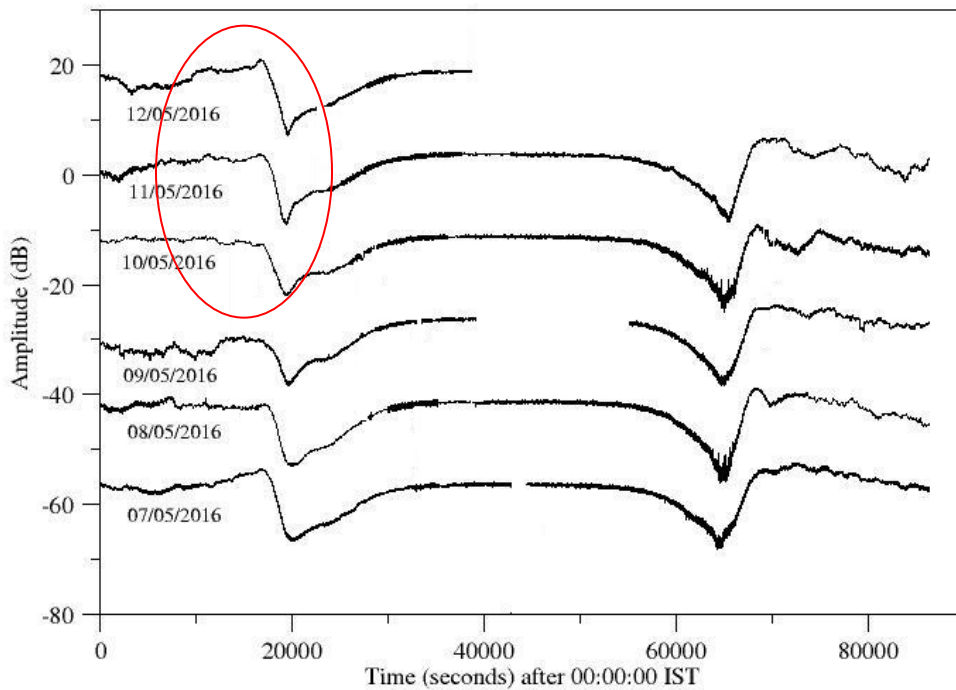


Figure 11: Sunrise terminator time and D-layer Preparation Time (DLPT) in VLF signal for VTX-ICSP propagation is less anomalous than previous days but still chances of earthquake within 72 to 96 hours cannot be ruled out.

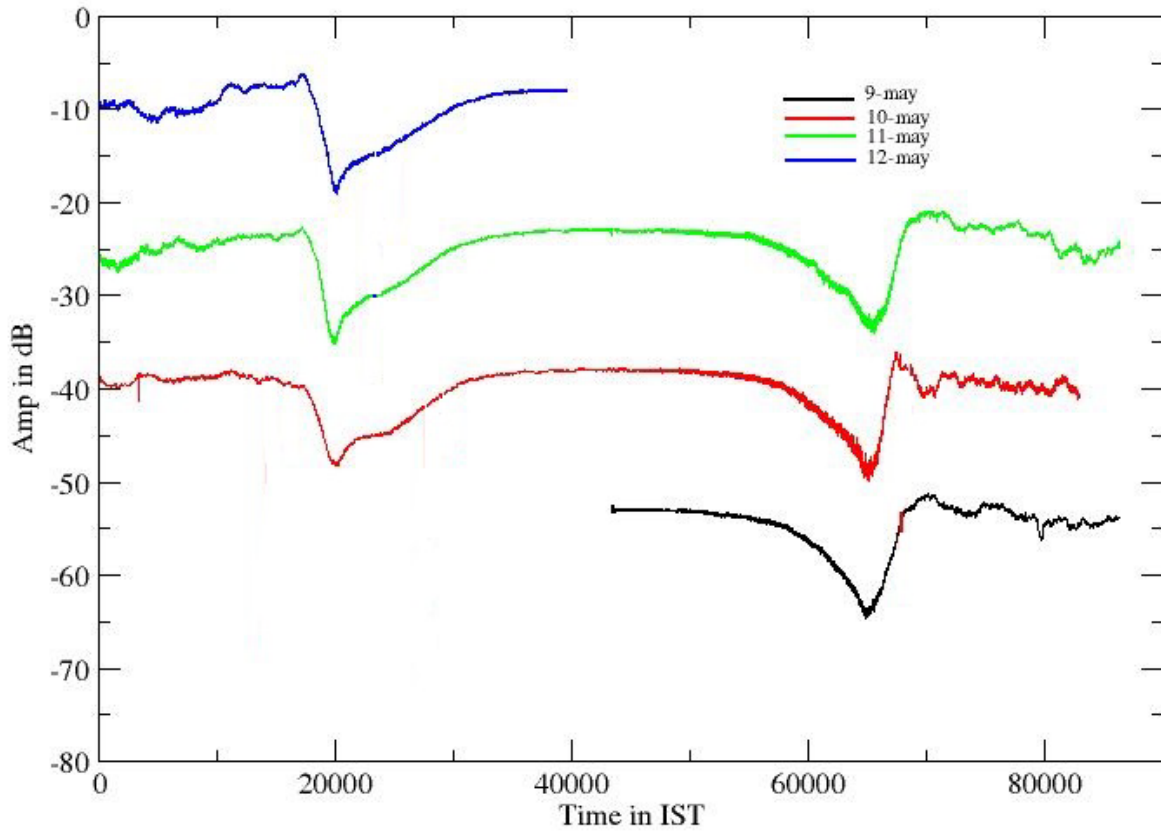


Figure 12: VTX-IERC signal variation for three days from 09/05/2016. Night-time signal is less anomalous than previous days but still chances of earthquake within 72 to 96 hours cannot be ruled out.

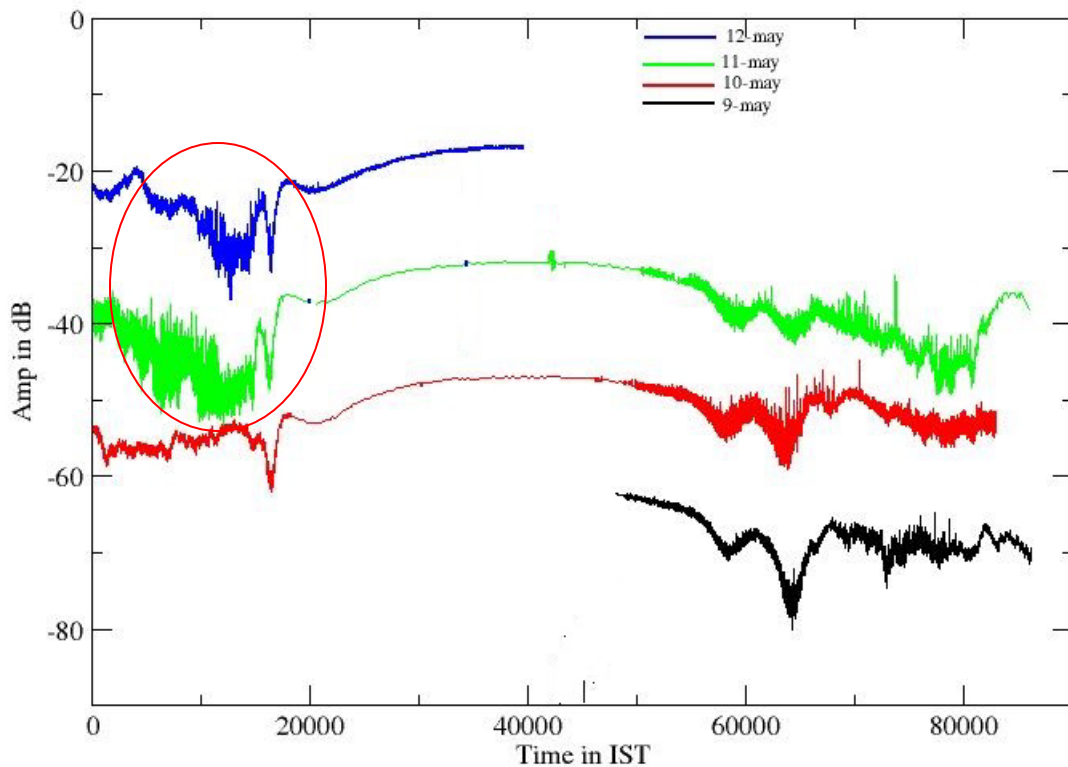


Figure 13: NWC-IERC signal variation for three days from 09/05/2016. Strong nighttime signal fluctuations can be clearly seen on 11/05/2016 and 12/05/2016. This indicates a possibility of earthquake in next 72 hours.

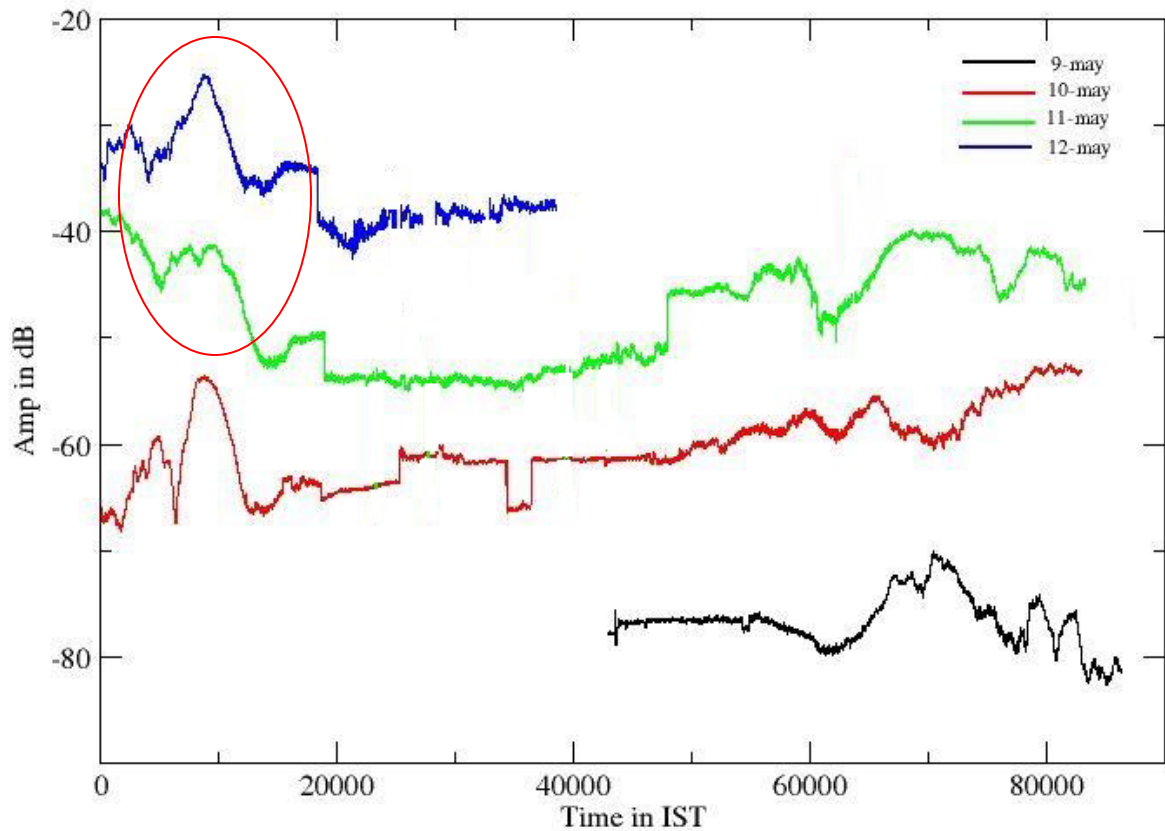


Figure 14: JJI-IERC signal variation for three days from 09/05/2016. On 10/05/2016 the sunset terminator (SST) is not so prominent relative to the previous day. The nighttime fluctuation is also high on 12/05/2016. This can be a precursory sign of earthquake in next 72 hours.

Prediction: VTX, NWC and JJI signal contains anomalies indicating chances of earthquake in the next 72 hours.

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