

USGS Geomag Data Users:

This is a notification of an impending modification to the Fresno Geomagnetic Observatory (FRN) data.

Geomag Observatory: **FRN**

Start Date/Time: **02/13/2018 – 16:00:00 UTC**

This modification is: **planned**

NOTES: The fluxgate sensor at the FRN observatory, near Fresno, CA, will be replaced. This requires a break in real time data continuity, and may result in a brief interval of corrupted raw data in the archive (this will be flagged and removed in subsequent definitive processing, as per usual).

More relevant to real-time data users is that certain derived products cannot be reliably generated until the new instrument has stabilized magnetically, and several absolute calibration measurements have been performed over the course of a few days to weeks following this operation.

The table below details the effects and timelines of this modification on various geomagnetic data and geomagnetic data products.

Product	Effect	Estimated Start Date/Time:	Estimated End Date/Time:	Notes:
Raw	Offsets/Drift/ Disturbance	2/13/2018 16:00 UTC	2/14/2018 01:00 UTC	allow ample time for hardware swap-out
Quasi Definitive	Possible Outage	2/13/2018 16:00 UTC	2/15/2018 01:00 UTC	reliable calibration required
Definitive	Possible Outage	2/13/2018 16:00 UTC	2/15/2018 01:00 UTC	reliable calibration required
Adjusted	Outage	2/13/2018 16:00 UTC	2/20/2018 00:00 UTC	multiple stable calibrations required
XYZ	Offsets	2/13/2018 16:00 UTC	2/20/2018 00:00 UTC	multiple stable calibrations required
SQ	Offsets/ Drift	2/13/2018 16:00 UTC	3/15/2018 00:00 UTC	~30 Day filter within algorithm
SV	Offsets/ Drift	2/13/2018 16:00 UTC	3/15/2018 00:00 UTC	~30 Day filter within algorithm
DIST	Offsets/ Drift	2/13/2018 16:00 UTC	3/15/2018 00:00 UTC	~30 Day filter within algorithm
DST	NA			Not a DST Station

Additional notification will be sent once real-time data products have been fully restored to normal operation. Please direct any questions or concerns to geomag-data@geohazards.usgs.gov.