

Session:

Title: Data from the magnetic observatory of Vassouras and global models for a century (1915-2015).

Preference: Oral presentation

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The Vassouras Magnetic Observatory is the oldest institution in Brazil that has been doing research related to Earth's magnetism. This observatory was created in 1913, but only in 1915 that the measurements of elements of geomagnetic field, such as declination, inclination and intensity were taken systematically. Knowing and monitoring these elements of magnetic field, the Vassouras Magnetic Observatory helped on maps creation to navigation and also to compass calibration. Today with the spread over of global navigation satellite systems, the observatory goals have been modifying, thus the observatory has been cooperating with your partners on models construction to understand the Earth's magnetic field, its changes to long of time and also the core dynamic. In other hand, it has been supporting to geophysical sector on prospection of metals and hydrocarbons. These services are possible, because the observatory is part of a magnetic observatories net, called INTERMAGNET, where the quality, stored and streaming of the data are priority requirements to do part of this net. So, this work will present the history of this institution as well as the one hundred data years (1915-2015) of elements of geomagnetic field and such data will be compared with global models to analyze the quality them.

Keywords: Vassouras Magnetic Observatory, Earth's magnetic field, global models.





