

THE STRENGTH OF THE EARTH MAGNETIC FIELD AROUND THE CRETACEOUS NORMAL SUPERCHRON: PRELIMINARY DATA FROM COSTA RICA

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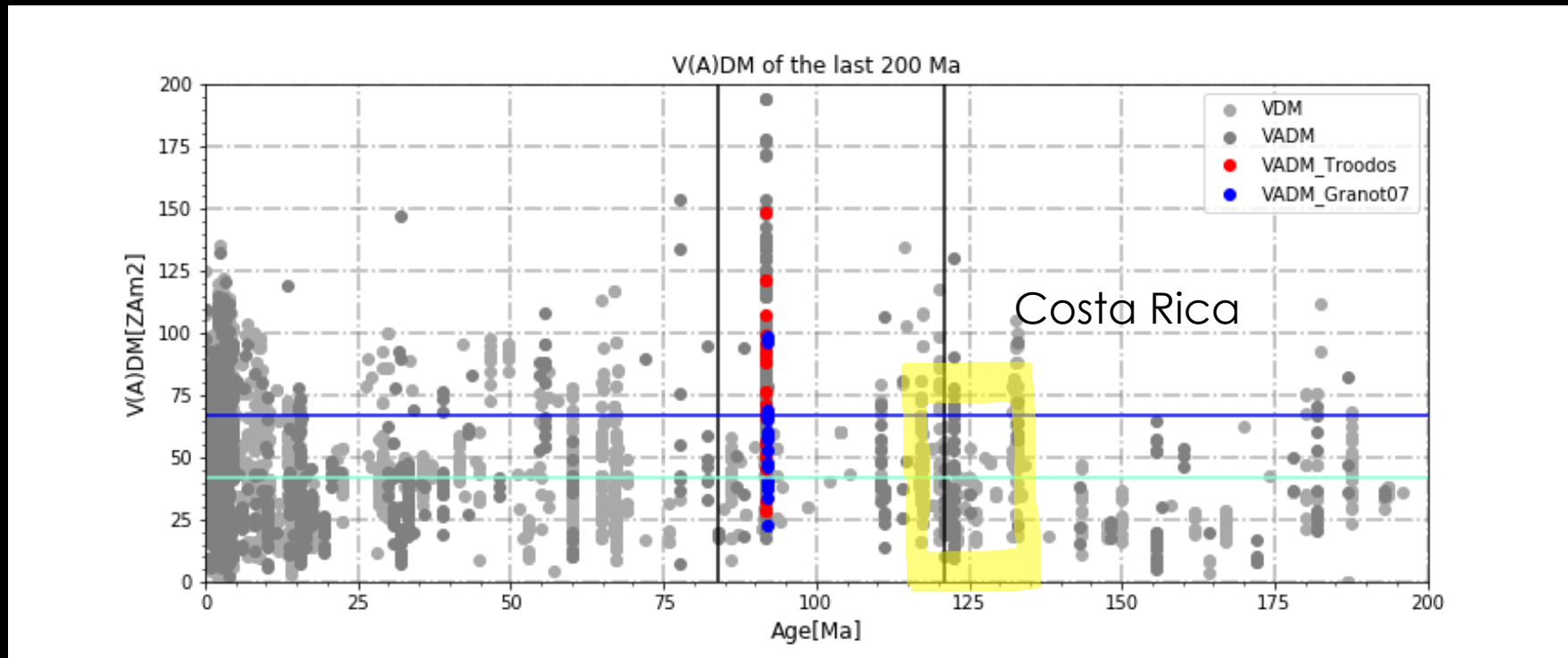


LOCATION

- Constraining of the average and long-term variability of the magnetic field strength are fundamental to better understand the characteristics and behavior of the geomagnetic dipole field, but open questions remain:
- ?what is the average dipole field?
- ?what is the relation between dipole strength and excursion reversal?
- Here, we investigate the paleointensity before and during the Cretaceous Normal Superchron (CNS, 123-82 Ma), a long period of normal and stable polarity
- We investigate Submarine Basaltic Glass (SBG) from Costa Rica

GEOMAGNETIC FIELD STRENGTH OF THE LAST 200 MA

Plot of the VADM intensities from the MagIC database (EarthRef.org) and detail of the CNS and SBG studies from the Troodos Ophiolite. Yellow box indicates the time interval of Costa Rica data (this study)



OPEN QUESTIONS

- What is the average geomagnetic field strength (GFS) after reinterpreting all data available on the MagIC database using modern and strict criteria?
- What is the best set of criteria to assess the quality of the published studies?
- Is a precursor of the CNS present in the Costa Rica and MagIC data?
- Is the geomagnetic field strength consistently high during the CNS?