PROPOSAL FOR A NEW OBSERVATORY DATA PRODUCT: QUASI-DEFINITIVE DATA

ARNAUD CHULLIAT, Aline Peltier, François Truong, Danielle Fouassier

Institut de Physique du Globe de Paris, France, email: chulliat@ipgp.jussieu.fr

Magnetic observatories currently distribute two types of data products: preliminary data, which are made available in less than 72 hrs in the case of INTERMAGNET observatories; definitive data, which are produced only once a year, typically a few months after the end of the civil year. Yet fully calibrated data of magnetic satellites such as Oersted and CHAMP are available within only a few days (after the commissioning phase). This is why many users of satellite data have expressed the need for baseline corrected observatory data produced in a continuous manner. Such data would be useful for main field modeling based on a combination of observatory and satellite data and for quickly detecting geomagnetic jerks. They could also be used for the validation of level 2 products within the context of the upcoming Swarm mission, to be launched in 2011. One practical solution to this problem would be to produce a third type of observatory data: quasi-definitive data, defined as data corrected using temporary baselines shortly after their acquisition and very near to being the final data of the observatory. In this presentation we will make the case for quasi-definitive data and propose practical ways for producing and distributing them based on a prototype implementation.

Quasi-definitive data, observatories, baseline

Arnaud Chulliat, Equipe de Géomagnétisme, Institut de Physique du Globe de Paris, 4 place Jussieu, 75252 Paris cedex 05, France,
e-mail: chulliat@ipgp.jussieu.fr