



## **Is there a planetary influence on solar activity?**

Jose A. Abreu (1,2), Jürg Beer (2), Antonio Ferriz-Mas (3,4), Kenneth G. McCracken (5), and Friedhelm Steinhilber (2)

(1) ETH Zürich Institut für Geophysik, 8092 Zürich, Switzerland(jose.abreu@erdw.ethz.ch), (2) Eawag, Swiss Federal Institute of Aquatic Science and Technology, Postfach 611, 8600 Dübendorf, Switzerland, (3) Departamento de Física Aplicada, Universidade de Vigo, Spain, (4) Instituto de Astrofísica de Andalucía (IAA/CSIC), Granada, Spain, (5) University of Maryland, USA

Recently Abreu et al. have put forward the hypothesis of a planetary influence on solar activity.

They developed a simple physical model for describing the time dependent torque exerted by the planets on a non-spherical tachocline and compared the corresponding power spectrum with the one obtained from a 9300 y long reconstruction of solar activity.

They found an excellent agreement between the long-term cycles in proxies of solar activity and the periodicities in the planetary torque

If correct, this hypothesis has important implications for solar physics and the solar terrestrial relationship.