

A comment on the paper 'Solar activity and its influence on climate' Author C. de Jager Published in Netherlands Journal of Geosciences-Geologie en Mijnbouw, 87-3, pp 207213, 3 2008

Christine Amory-Mazaudier, J.P. Legrand

▶ To cite this version:

Christine Amory-Mazaudier, J.P. Legrand. A comment on the paper 'Solar activity and its influence on climate' Author C. de Jager Published in Netherlands Journal of Geosciences-Geologie en Mijnbouw, 87-3, pp 207213, 3 2008. NETHERLANDS JOURNAL OF GEOSCIENCES-GEOLOGIE EN MIJNBOUW, 2009, [88-3] 177, pp.[88-3] 177. hal-00979620

HAL Id: hal-00979620

https://hal.sorbonne-universite.fr/hal-00979620v1

Submitted on 16 Apr 2014

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

1	A comment on the paper 'Solar activity and its influence on climate'
2	Author C. de Jager
3	Published in Netherlands Journal of Geosciences-Geologie en Mijnbouw, 87-3, pp 207213,
4	2008
5	
6	by Christine Amory-Mazaudier and J-P. Legrand
7	Netherlands Journal of Geosciences-Geologie en Mijnbouw, [88-3] 177, 2009
8	
9	The purpose of this comment is not to criticize the results obtained by Dr C. de Jager, and
10	we agree for example with his prediction of the next sunspot cycle amplitude - 68 with
11	σ= 17.
12	We just want to recall the necessity to keep scientific memory in order to maintain the
13	common knowledge. We consider that the work of Dr C. de Jager is based on the results
14	obtained by Ohm, legrand and Simon:
15	1. Ohl (1966) who pointed out the empirical connection that allows to predict the
16	amplitude of the next sunspot solar cycle from the values of the aa index (Mayaud
17	1972) at the time of the magnetic minima which appears during the minima of the
18	sunspot solar cycle or one year later.
19	2. 2. Legrand and Simon (1980-1992) who analyzed the data of ten solar cycles in
20	order to study the relation between solar and geomagnetic activities and explain
21	Ohl's results. Among other facts, they showed that recurrent magnetic activity
22	(related to the divergence of the poloidal solar field) at the end of the sunspot cycles
23	produced by stable solar wind jets was connected to the maximum of the following
24	sunspot solar cycle. This is another aspect of the Ohl's relation.
25	We think it is of essential importance that articles using the above results should contain
26	references to these following papers:
27	Ohl, A., T., 1966, Forecast of sunspot maximum number of cycle 20, Solnice Danie, 12:84-
28	85.
29	Legrand, J.P. and Simon, P.A., 1981, Ten Cycles of Solar geomagnetic Activity, Solar
30	Physics, 70/173-195.

Geophysicists, Part I. The contributions to geomagnetic activity of shock waves and of the

Legrand, J.P. and Simon, P.A., 1989, Solar cycle and geomagnetic activity: A review for

Legrand, J.P. and Simon, P.A., 1989, Solar cycle and geomagnetic activity: A review for

35 Geophysicists, Part II. The solar sources of geomagnetic activity and their links with

sunspot cycle activity, Annales Geophysicae, 7 (6):579-596.

solar wind, Annales Geophysicae, 7 (6):565-578.

37

31

33