

Correspondence

A comment on the paper ‘Solar activity and its influence on climate’

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Published in Netherlands Journal of Geosciences – Geologie en Mijnbouw, 87-3, pp 207-213, 2008.

The purpose of this comment is not to criticise the results obtained by Dr C. de Jager, and we agree for example with his prediction of the next sunspot cycle amplitude $\sim 68 \pm 17$.

We just want to recall the necessity to keep scientific memory in order to maintain the common knowledge. We consider that the work of Dr C. de Jager is based on the results obtained by Ohl, Legrand and Simon:

1. Ohl (1966) who pointed out the empirical connection that allows to predict the amplitude of the next sunspot solar cycle from the values of the aa index (Mayaud 1972) at the time of the magnetic minima which appears during the minima of the sunspot solar cycle or one year later.
2. Legrand and Simon (1980-1992) who analyzed the data of ten solar cycles in order to study the relation between solar and geomagnetic activities and explain Ohl’s results. Among other facts, they showed that recurrent magnetic activity (related to the divergence of the poloidal solar field) at the end of the solar sunspot cycles produced by stable solar wind jets was connected to the maximum of the following sunspot solar cycle. This is another aspect of Ohl’s relation.

We think it is of essential importance that articles using the above results should contain references to the three following papers:

- Ohl, A.I.**, 1966. Forecast of sunspot maximum number of cycle 20, Solnice Danie, 12: 84-85.
- Legrand, J.P. & Simon, P.A.**, 1981. Ten Cycles of Solar Geomagnetic Activity, Solar Physics, 70: 173-195.
- Legrand J-P. & Simon, P.A.**, 1989. Solar cycle and geomagnetic activity: A review for Geophysicists. Part I. The contributions to geomagnetic activity of shock waves and of the solar wind, Annales Geophysicae, 7 (6): 565-578.
- Simon P.A. & Legrand, J-P.**, 1989. Solar cycle and geomagnetic activity: A review for Geophysicists. Part II. The solar sources of geomagnetic activity and their links with sunspot cycle activity, Annales Geophysicae, 7, (6), 579-594.

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