

Development of Solar Research – Entwicklung der Sonnenforschung (*Acta Historica Astronomiae* Vol. 25, 2005).

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This publication contains the Proceedings of a Colloquium on the development of solar research, supplemented with a number of papers which were written especially for this book. The volume contains 14 papers dealing with archeo-astronomy related to the Sun, solar cults, and (mainly) solar research. Ten papers are written in English, the remaining four are in German, but all papers have a quite extensive Abstract in both languages. The volume closes with a comprehensive Name Index. I found this book most pleasant to read with many useful illustrations (more than 120 photographs and reproductions of which about 100 cover truly historic material, quite often from authors' private archives).

The first three papers (by A. Hänel, W. Schlosser and R. Hansen) deal with very ancient information: megalithic tombs as solar observatories, the Nebra sky-disk (showing Sun, Moon, Pleiades and other stars), and solar cults. These papers (adding up to about 90 pages) are not only descriptive, but also contain an analysis based on quantitative facts.

One paper deals with letters exchanged by astronomers serving as data sources for the counting of sunspots during the Maunder minimum. More specifically, several hundreds of letters by Gottfried Kirch (1639–1710) are being edited and analysed by Klaus-Dieter Herbst.

Medieval solar-eclipse maps with totality paths are reproduced in an interesting paper by Robert van Gent, who presents eclipse cartography of as early as 1699 – at least 15 years prior to the generally accepted first such map by Edmond Halley.

R. Schielicke's paper on the 1851 Königsberg daguerrotype photograph of the solar corona gives interesting details on the history of daguerrotype photography, and has a number of very useful basic references, including OCR-based transcripts of a 1851-dated document describing an early corona daguerrotype (in German).

Three consecutive papers (one by H.W. Duerbeck, followed by papers by G. Wolfschmidt and M.P. Seiler) not only reveal scientific history, but also crucial information on how governmental sponsorship, from the 1860s till the end of WWII, modulated the development of solar research. This paper reveals lots of cross-references on scientists and government agents, and also offers insight on the interplay between political actors and scientific researchers. The last paper covers

very dense time lines, and also vividly illustrates the military value of basic fundamental research – that is, the forecast of radio propagation disturbances caused by solar flares. This element is also dealt with in the subsequent paper by Hubertus Wöhl, on the spectroheliogram archives of the Fraunhofer (now Kiepenheuer) Institute.

Accounts of pioneering episodes are given in Axel Wittmann's paper on site testing at La Palma in the early seventies, as well as in the subsequent paper on solar research with stratospheric balloons (by Manuel Vázquez and Axel Wittmann). These authors sketch a very concise but detailed history of civil ballooning, and illustrate this with several images from private archives.

Alltogether, this book is well-edited, and offers lots of historical facts for the money.

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