

Solar Physics in The Netherlands — 1996

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Solar physics is done in the Netherlands at Estec, Utrecht and Nieuwegein.

At the *Sterrekundig Instituut Utrecht* solar physics is currently done by Rob Rutten with graduate students Nick Hoekzema and Mandy Hagenaar (the latter in close collaboration with Karel Schrijver at the Lockheed Martin Palo Alto Research Laboratories), Bert van den Oord (postdoc) with Max Kuperus and graduate student Nick Schutgens, and Kostas Tziotziou (graduate student of Tony Hearn). Kees Zwaan (emeritus) remains active as well. Current interests include granular and magnetic patterning (Hoekzema, Hagenaar), chromospheric dynamics (Rutten), prominences (Schutgens and Kuperus), loop diagnostics (van den Oord), coronal heating (Tziotziou), and magnetic activity (Zwaan).

Rob Hammerschlag, with coworkers Felix Bettonvil and Piet Hoogendoorn, spent most of 1996 on La Palma erecting his 45 cm open telescope. It was officially named the *Dutch Open Telescope* in a ceremony on June 29. The photographs show the DOT with its canopy closed and open, respectively, and its location downslope from the SVST. Thanks to splendid hospitality of our Swedish colleagues, the DOT will be operated from the latter.

At the *Utrecht Space Research Institute*, a non-University institute funded by the Dutch science foundation NWO, partial interests in solar physics are retained by Peter Hoyng (dynamo theory), Rolf Mewe and Jelle Kaastra (plasma diagnostics).

At the *Institute for Plasmaphysics* at Nieuwegein (also non-University and funded by NWO) Hans Goedbloed leads a plasma physics group that in 1996 included Stefan Poedts, Rony Keppens and Sander Belien and concentrates on MHD of laboratory and astrophysical plasmas. Comparison between the two leads to fruitful analogies and new applications, like resonant heating of coronal plasmas with “line-tying”, MHD spectroscopy, waves in rotating plasmas, break-up of resonant layers by Kelvin-Helmholtz instabilities. In addition, there are efforts in parallel computing techniques and plasma dynamics visualization.

At *ESTEC* (Noordwijk) there is an international (and rather transient) ESA solar physics group that is involved, among other projects, in SOHO and Ulysses. In 1996 the group at ESTEC consisted of Martin Huber (head ESA Space Science Division), Peter Wenzel (head of the Solar Physics Department; Ulysses data), Bernard Foing (solar and stellar spectroscopy), Thierry Appourchaux (helioseismology, SOHO), Richard Marsden (Ulysses), Trevor Sanderson (Ulysses), Lyndsay Fletcher (postdoc; flares, SOHO data), Karin Muglach (postdoc; SOHO/GCT data) and Mihir Desai (postdoc; Ulysses data).

Finally, the *SOHO Project Scientist Team* consisting of Vicente Domingo (SOHO Project Scientist; irradiance variations), Luis Sanchez (SOHO Science Data Coordinator; helioseismology), Bernard Fleck (SOHO Deputy Project Scientist; chromospheric oscillations) and Piet Martens (SOHO Science Operations Coordinator; coronal heating and flares) currently resides at Goddard and reports on SOHO elsewhere in this volume.



Figure 1. The DOT on La Palma, October 1996. The upper picture shows the skyline from the Roque de los Muchachos, looking down towards the East. From left to right: William Herschel Telescope, Dutch Open Telescope, Swedish Vacuum Solar Telescope, Isaac Newton Telescope and Jacobus Kapteyn Telescope. The LEST site is also a bit downslope from the SVST, but on the other side of the ridge. Currently the US NSO operates a Seykora scintillometer on the LEST site, in order to compare its seeing with Sac Peak, Big Bear and Hawaii. The lower picture was taken from the Caldeira rim trail and illustrates, with its canopy folded down, the “open” character of the DOT.