

31 October 2011

Dear Fellow Sunspot Number Enthusiasts,

The SSN Workshop at Sunspot was a lively affair with vigorous discussion. Nearly all of the presentations can be found at the Workshop website (<http://ssnworkshop.wikia.com/wiki/Home>). The Workshop at Sunspot was the first step in our effort to recalibrate the SSN, in particular to address the well-documented "Waldmeier Discontinuity" in the International SSN around 1945 and the marked divergence of the Group and International SSNs before ~1880. Missing at the first Workshop were counterarguments to the use of geomagnetic observations as a calibration tool. Thus in the second workshop to be held at the Royal Observatory of Belgium during the week of 14 May 2012, we have identified a team to be led by Alexis Rouillard to probe this method, which was used by Wolf himself in the construction of the SSN for years before 1850, and has been championed by Leif Svalgaard in recent years.

A second key topic for discussion at Brussels will be the cause of the significant discrepancy between the International and group numbers that began around 1880 (going back in time). Rainer Arlt has agreed to lead this re-examination of the SSN during the period from 1750 and 1880, for which the first 100 years are largely based on the heroic observations of Staudacher and Schwabe.

At the end of the Workshop at Sunspot, both Frédéric Clette and Ed Cliver independently gave suggested "assignments" for the Brussels workshop. These presentations are given on the website. In an attachment labeled "SSN Workshop Assignments", we have collated these tentative taskings (which largely overlapped) and following the format of the first workshop identified Key Topics, Teams, and Topic Leaders (TL, in bold blue font). Each topic will be given a block of time for the TL's to organize as they see fit, making allowance for ample questioning/discussion both during and at the end of presentations. The Topics themselves fall under three main Headings, similar to those used in the first workshop, so the attached list of assignments is the first approximation of the workshop agenda. These are only suggestions and require your concurrence/assent. If there is something else you would rather work on or would like to work on in addition, please let us know. In any event, we are asking that all those who are planning to participate to respond to us by 15 November. This will give the TLs time to organize the work and the presentations.

It is anticipated that one or two more workshops beyond the meeting in Brussels will be needed to re-examine the calibration of the SSN back to the time of Galileo, with the third planned for Sunspot and the fourth (if necessary) returning to Belgium. Our end goal will be the publication of the reconciled SSN time series in a joint paper involving all workshop participants in a Topical Issue of Solar Physics along with all the necessary supporting papers.

Sincerely yours,
Ed Cliver, Frédéric Clette, Leif Svalgaard