

# **SLED HOSTING AT LSO – A DRAFT OF PLAN**

v.1, 2020/09/25

## **STEPS OF THE PLAN:**

1. development of the SLED including adaptation for the LSO ZEISS coronagraph
2. functional tests of the SLED in a lab and/or at the Bialkow Observatory
3. the SLED testing at the LSO
4. the SLED and the LSO preparations for hosting
5. an official agreement on the hosting between the SLED consortium and the AISAS
6. the SLED hosting at the LSO and SLED data analysis

## **DESCRIPTION OF THE PLAN STEPS:**

### **1. development of the SLED including adaptation for the LSO ZEISS coronagraph:**

- a) the AISAS/LSO group will provide to the SLED consortium all technical details inevitable for adaptation of the original SLED instrument to the LSO ZEISS coronagraph together with critical LSO coronagraph, mount, and dome limitations. Suggestions on LSO instrumentation from which the SLED could profit will be also delivered.
- b) the SLED consortium will try to adapt the SLED as much as possible to the ZEISS coronagraph and the LSO coronagraph, mount, and dome limitations. The critical limitations have to be met for testing and hosting of the SLED at the LSO.
- c) The adapted SLED instrument plan will be checked physically at the LSO as much as possible using a dummy SLED box (weight, momentum and its balance, dimensions, operation during year).
- d) the final adapted SLED technical plan has to be finally approved on both sides.

### **2. functional tests of the SLED in a lab and/or at the Bialkow Observatory:**

- a) we propose that the all inevitable optical, mechanical, and data acquisition tests should be performed in a lab and/or at the Bialkow Observatory preparing the SLED for the mounting at the LSO ZEISS coronagraph for testing purposes.

### **3. the SLED testing at the LSO**

- a) only completely functional SLED instrument will be mounted at the left ZEISS coronagraph at the LSO for testing purposes for a period inevitable to finish the needed tests. No real observations are expected, just test checking of all mechanical, optical, data acquisition, and data quality issues.
- b) the SLED consortium members and a supporting LSO staff will be available at

the LSO for this purpose.

c) the final report on the SLED testing will be prepared with a list of the SLED mechanical, optical, and data acquisition related issues to be solved/improved and a list of issues, related to the ZEISS coronagraph instrumentation and the LSO infrastructure adaptations.

d) this final report with the technical plans has to be approved on both sides.

**4. the SLED and the LSO preparations for the hosting:**

a) expecting that additional changes/adaptations of the SLED and/or ZEISS coronagraph and/or the LSO instrumentation will be required we have to reserve time and manpower to perform those action on both sides.

**5. an official agreement on the hosting between the SLED consortium and the AISAS:**

a) although the steps 1/-4/ can be realized on a gentleman's agreement only, the hosting has to covered by the official agreement on operation of the SLED at the LSO.

**6. the SLED hosting at the LSO and the SLED data analysis:**

a) the LSO group is expecting to operate the SLED attached to the left ZEISS coronagraph most of the time of the specified period having a right to exchange the SLED by another instrument just for some short periods. These periods will be announced to the SLED consortium in advance.

b) the AISAS/LSO will operate the SLED instrument on his own expenses using AISAS staff manpower and covering the required operational costs of the LSO.

c) the SLED consortium can use the SLED instrument for total solar eclipse expeditions dismounting it from the LSO for the inevitable time.

d) both the SLED consortium and the AISAS/LSO group will merge their manpower and facilities for SLED data reduction and analysis.

e) because of support summarized in the item 6b/, the LSO group/AISAS insists that publications, based on the SLED observations taken at the LSO, will include the AISAS staff involved in the SLED testing, hosting, and operation as co-authors, namely: J. Ambroz, M. Hutar, M. Trembac, P. Schwartz, J. Rybak and P. Gomory.