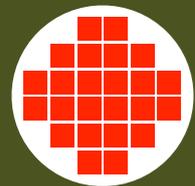


LOFAR MSSS

Multifrequency Snapshot Sky Survey



M * S * S * S

STATUS REPORT AND UPDATE

MULTIFREQUENCY SNAPSHOT SKY SURVEY

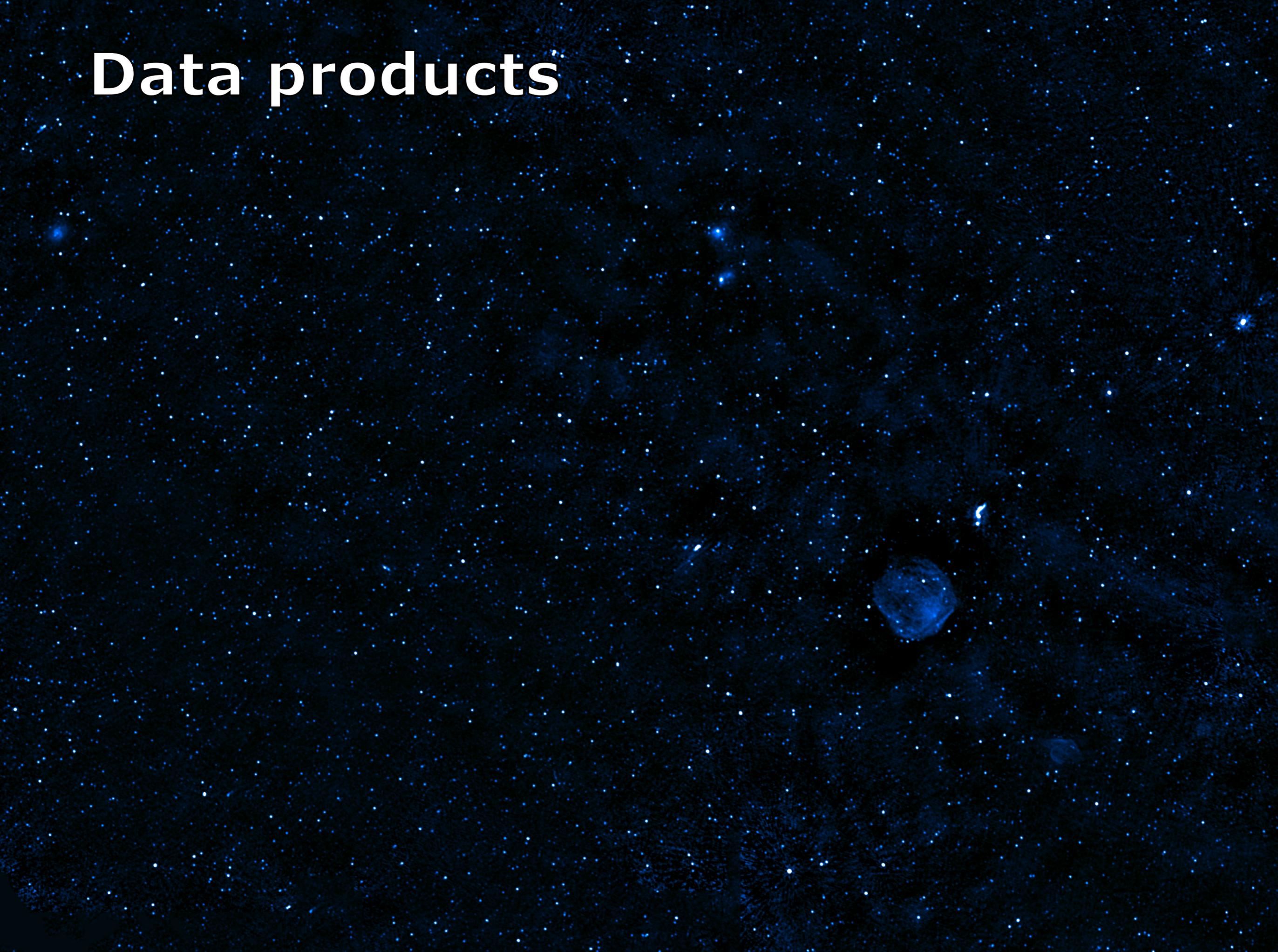
**George Heald (MSSS Project Leader)
(on behalf of the MSSS Team)**

LOFAR status meeting, 27/5/2015



LOFAR

Data products



- Initial versions of all mosaics in hand, with nominal flux scale corrections in place
- Initial combined HBA catalog in hand, including 137,724 sources using following filter:
 $\sqrt{\text{pow}(\$2-350.866417),2)+\text{pow}(\$4-58.811778),2)} > 10 \ \&\&$
 $\sqrt{\text{pow}(\$2-299.8681525),2)+\text{pow}(\$4-40.7339156),2)} > 10 \ \&\&$
 $\sqrt{\text{pow}(\$2-141.25),2)+\text{pow}(\$4-21.83),2)} > 2.4$
(Exclude 10 deg radius around Cas A and Cyg A, as well as 1 bad field)
- All fields and catalog loaded into MSSS VO server for use by initial group of testers (active MSSS participants and participants in MSSS Science Workshop) ... identifying bugs in system
 - Data products are password-protected before data release
 - MSSS Forum being used to collect issues

- Still initial image products - aim is to understand systematics before completing reprocessing scheme

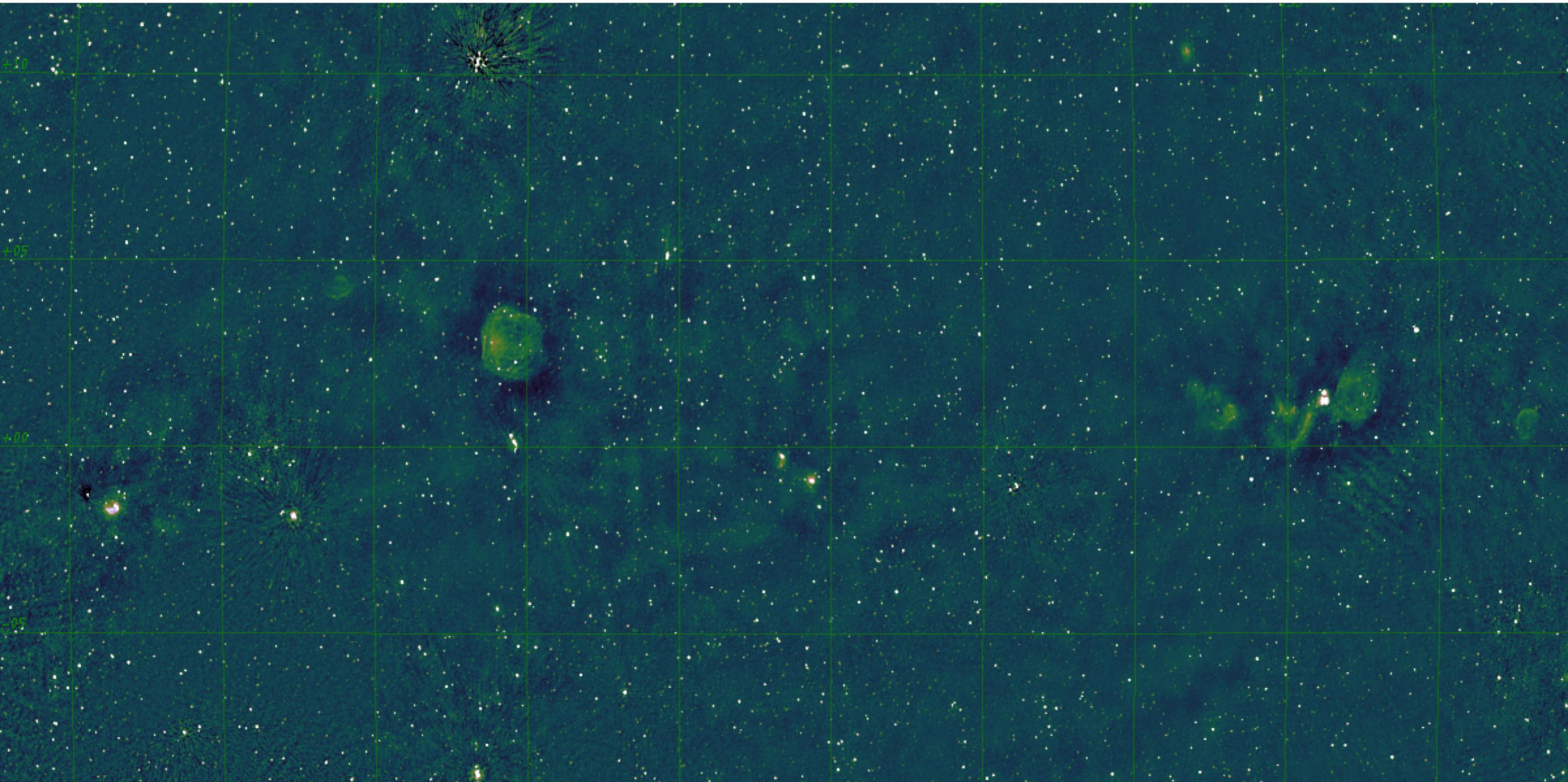
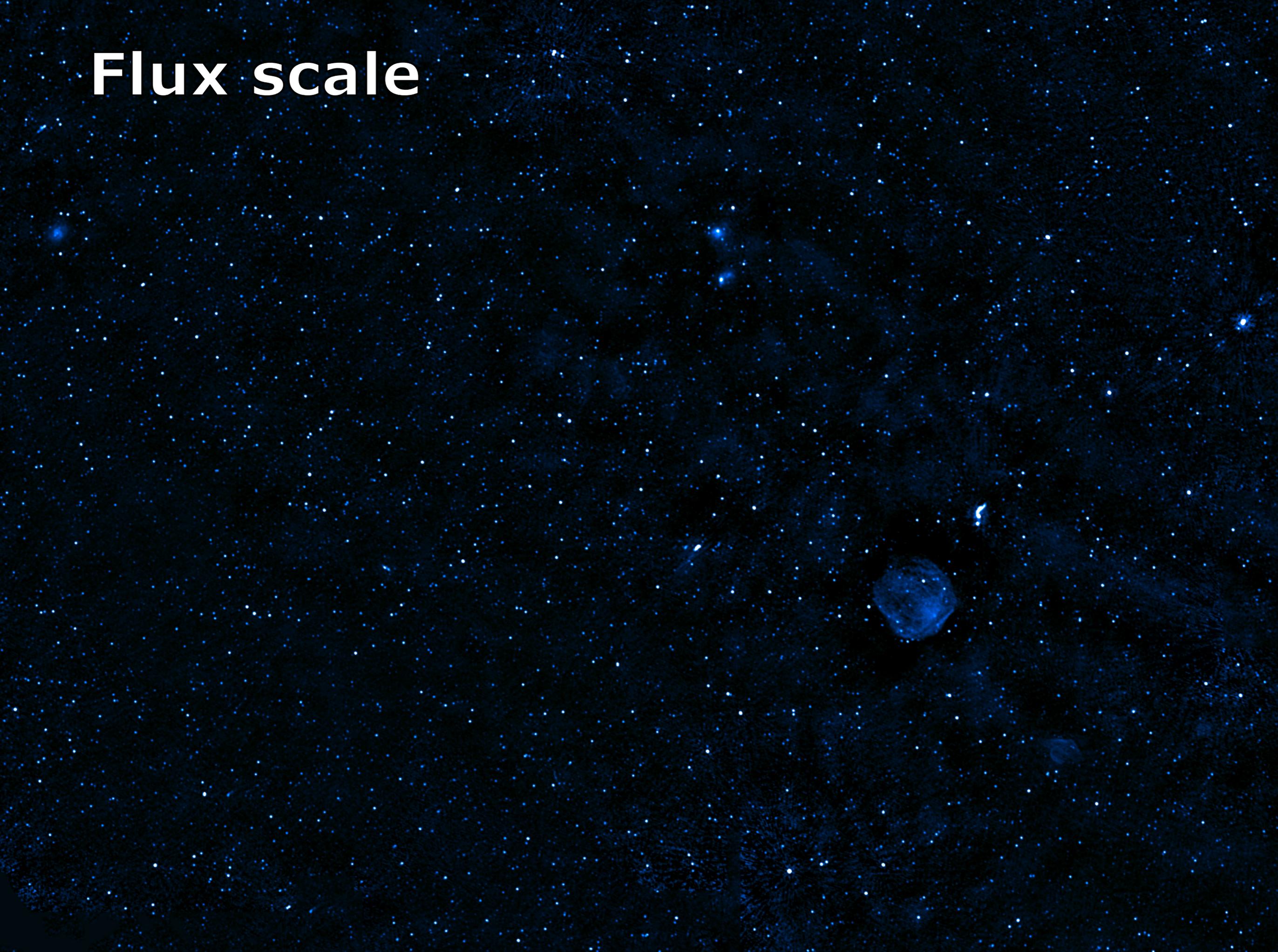
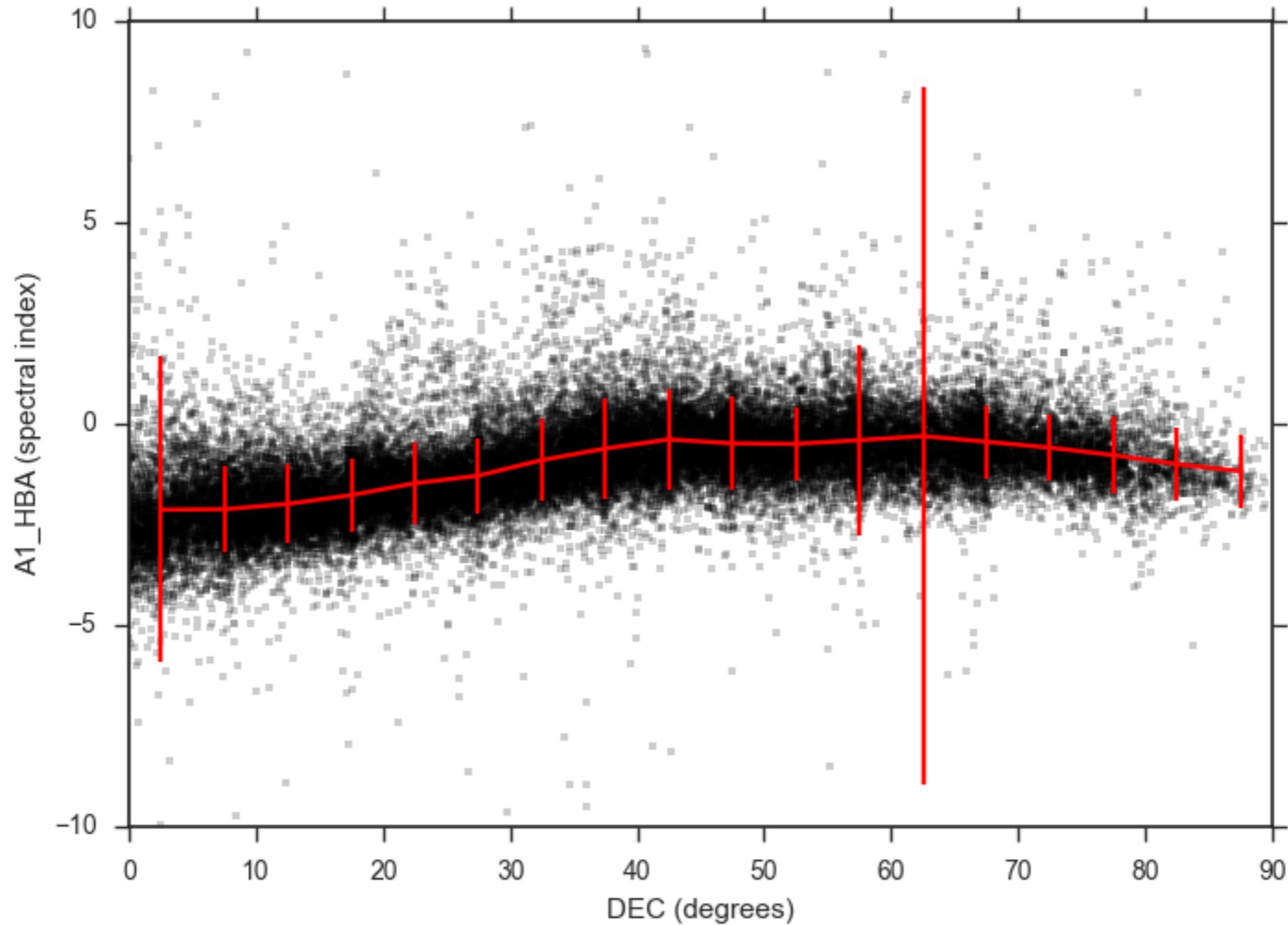


Image mosaic from DS9 courtesy Alex Clarke

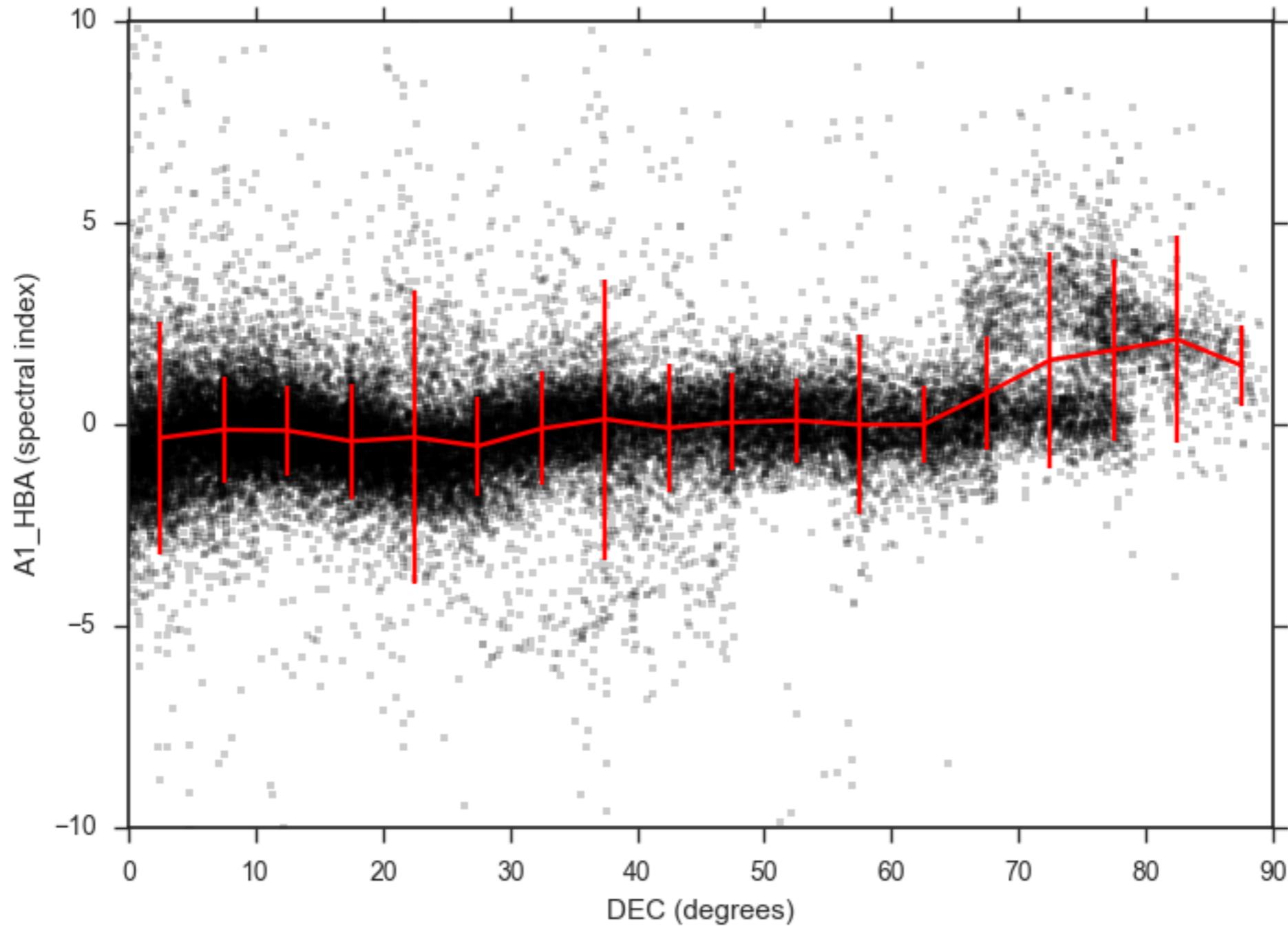
Flux scale



- Overall behavior now much closer to expectation



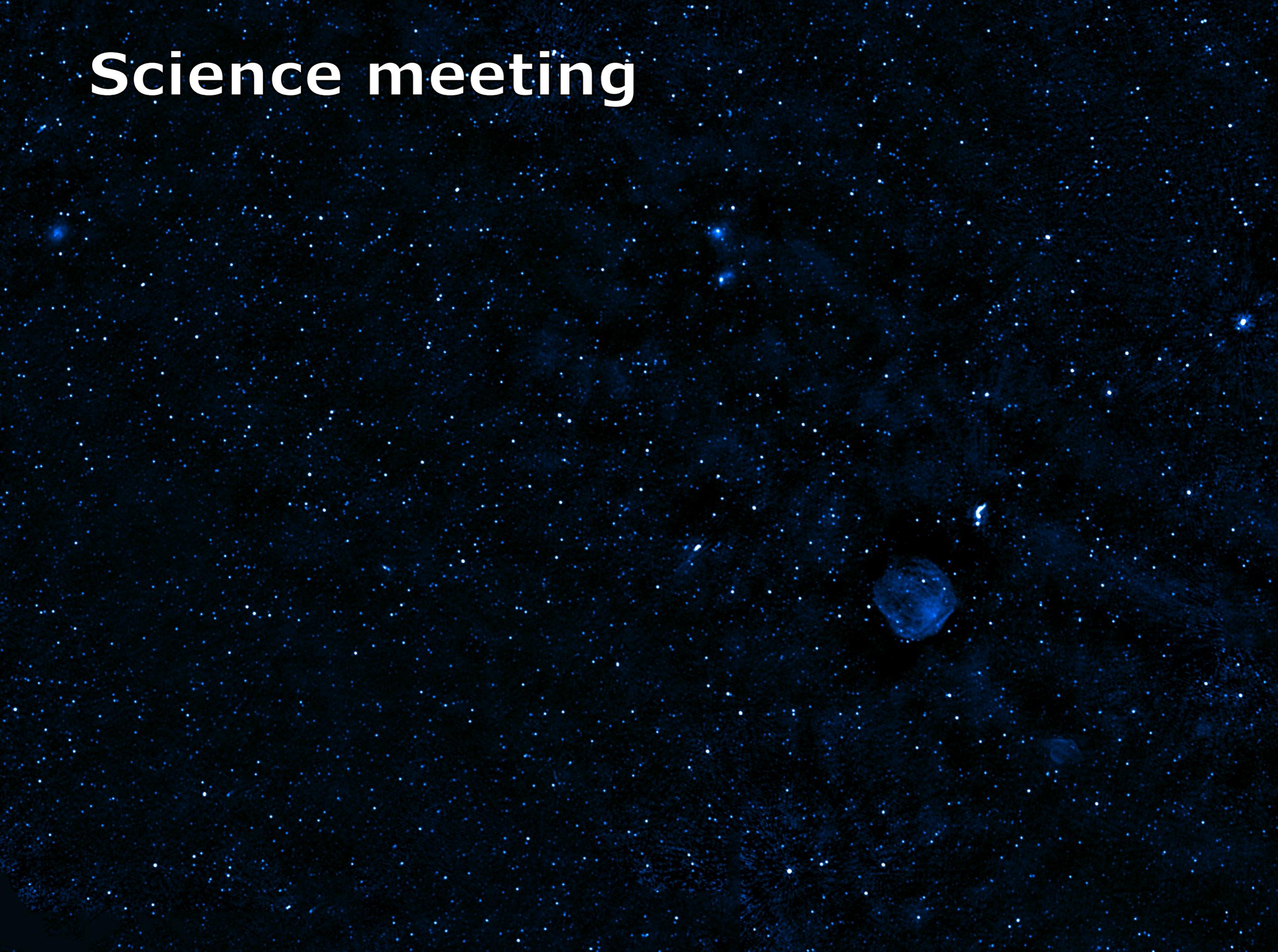
- Overall behavior now much closer to expectation



...but fluxes inconsistent

- Inconsistency in peak vs integrated fluxes
- ... investigation underway
- (affects A0, A1 values)

Science meeting



- MSSS meeting at ASTRON 4-5 June 2015

<http://www.astron.nl/msss2015>

- Schedule:
 - Thursday AM: overview talks (technical & scientific)
 - Thursday PM: discussion sessions (scientific & technical)
 - Friday AM: science working group splinter sessions
 - Friday PM: discussion session (data releases and publications)