

Netherlands Institute for Radio Astronomy

LOFAR

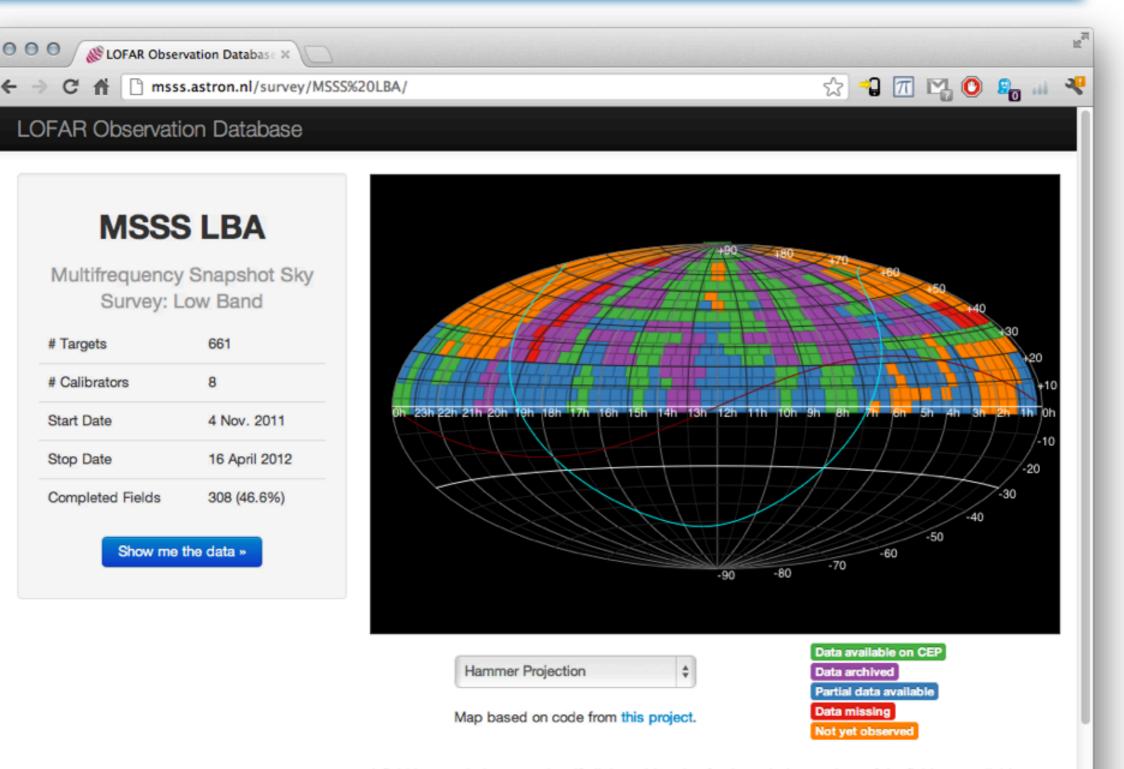
MSSS Update

George Heald (on behalf of the MSSS Team) LSM, 12 September 2012

ASTRON is part of the Netherlands Organisation for Scientific Research (NWO)

MSSS Observing Status

 $\leftarrow \rightarrow$



A field is regarded as complete if all the subbands of at least 9 observations of the field are available on CEP and/or in the archive. Otherwise, it is marked as "partially available".

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For those fields where a complete data set is available both in CEP and in the archive, the above map gives priority to the former.

Webpage in progress

Details



	s.astron.nl/field/597/				<u>☆</u> 🕄 📶 🗈	4 O s
FAR Observa	tion Database					
		Observation	Beam	Date	Duration	Status
L135+63		L41211	1	2011-12-31 20:33:00	660 s	*
		L41219	1	2011-12-31 21:33:00	660 s	*
Right Ascension	8 ^h 59 ^m 60.0 ^s	L41227	1	2011-12-31 22:33:00	660 s	*
Declination	+63° 28′ 12.0″	L41235	1	2011-12-31 23:33:00	660 s	*
Decimation		L41243	1	2012-01-01 00:33:00	660 s	*
Survey	MSSS LBA	L41251	1	2012-01-01 01:33:00	660 s	*
# Observations	18	L41259	1	2012-01-01 02:33:00	660 s	*
Status	≡ ★	L41267	1	2012-01-01 03:33:00	660 s	*
	- 0	L41275	1	2012-01-01 04:33:00	660 s	*
	1	L43464	1	2012-01-21 19:03:00	660 s	
		L43472	1	2012-01-21 20:03:00	660 s	a
		L43480	1	2012-01-21 21:03:00	660 s	
		L43488	1	2012-01-21 22:03:00	660 s	Î
		L43496	1	2012-01-21 23:03:00	660 s	
		L43504	1	2012-01-22 00:03:00	660 s	Ê
		L43512	1	2012-01-22 01:03:00	660 s	
		L43520	1	2012-01-22 02:03:00	660 s	i
		L43528	1	2012-01-22 03:03:00	660 s	

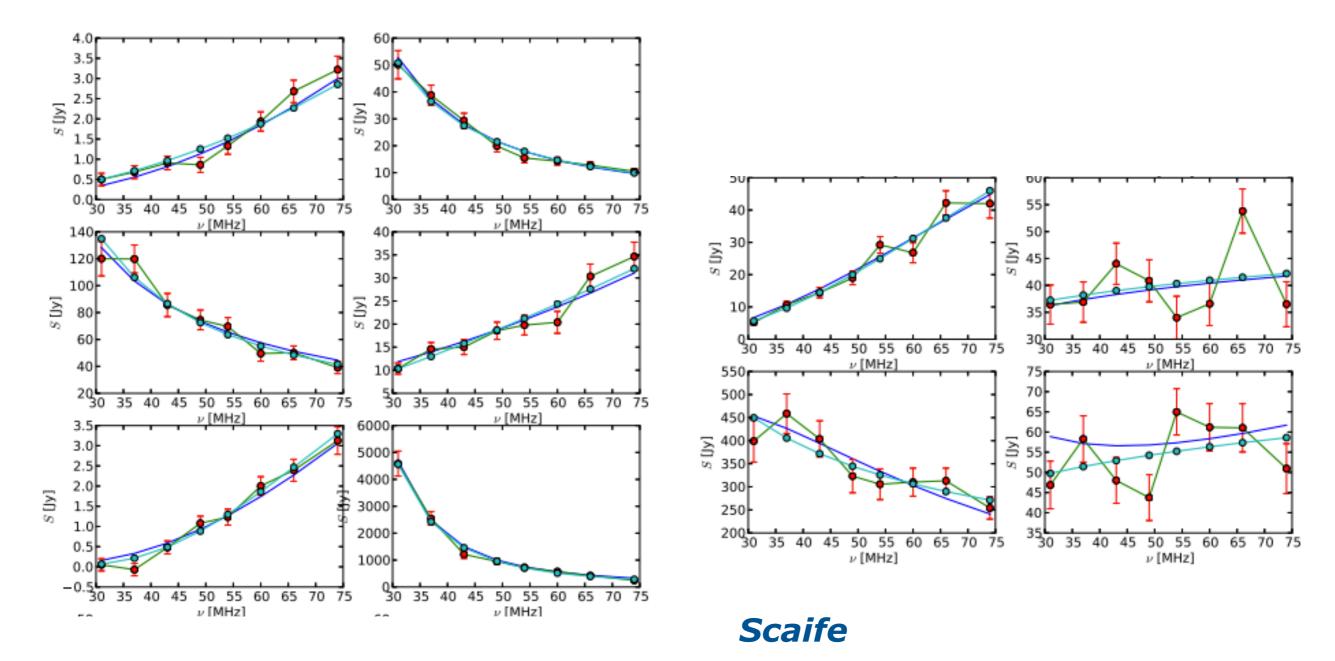
Built by John Swinbank. Code available on GitHub. Feedback welcome.

Webpage in progress

SED fitting



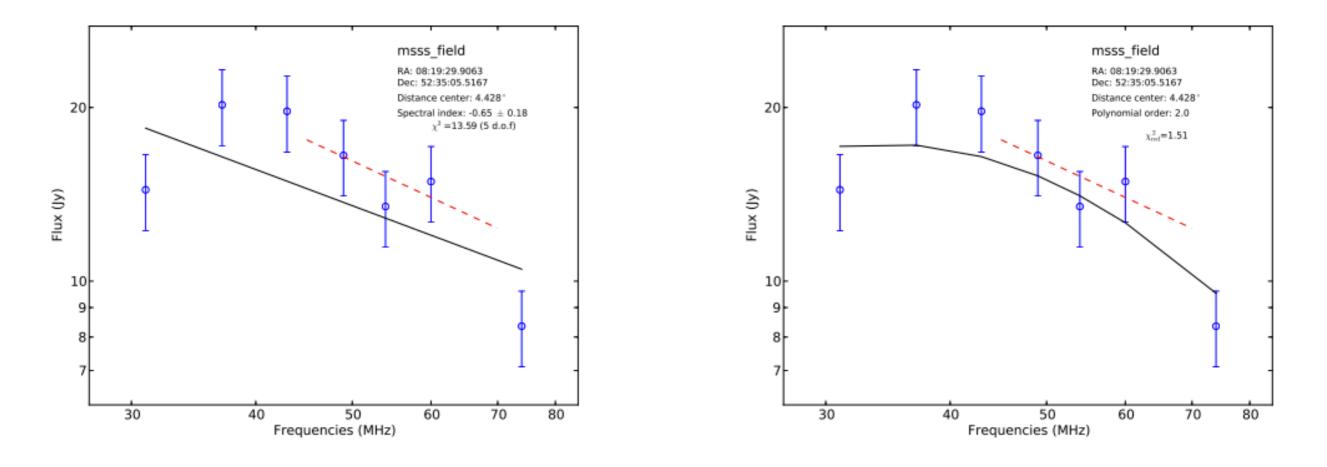
Fitting SEDs with polynomial terms to the MSSS data



Higher orders needed?



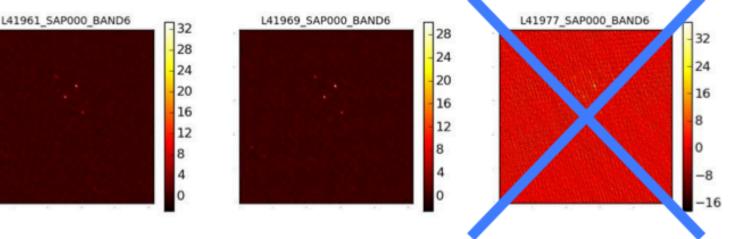
Only one source out of 93 in 3C196 field needed nonlinear fit...



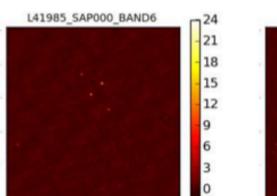
Scaife

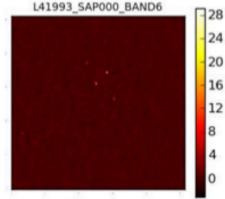
MSSS summer project

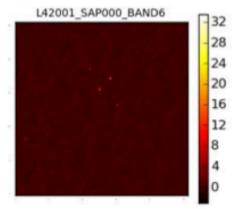
- MSSS summer student (Patti Carroll, UW) worked on source characterization in 10 MSSS fields
- First: data quality checks...
- Patti's guide is on wiki:
 MSSS > Useful scripts

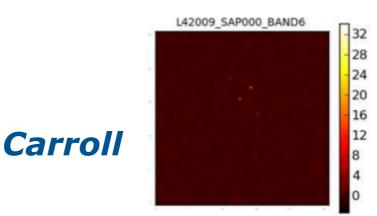


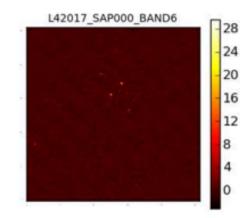
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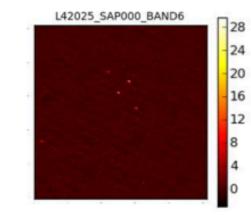






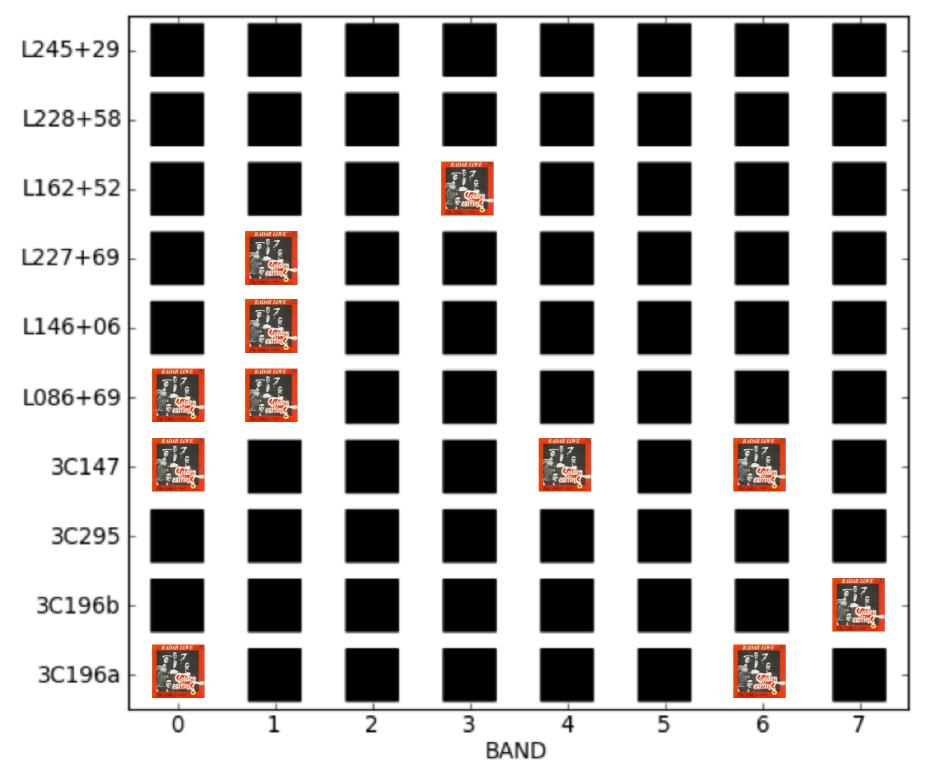






Ten MSSS fields

Many fields have at least one "bad band"





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Bad band

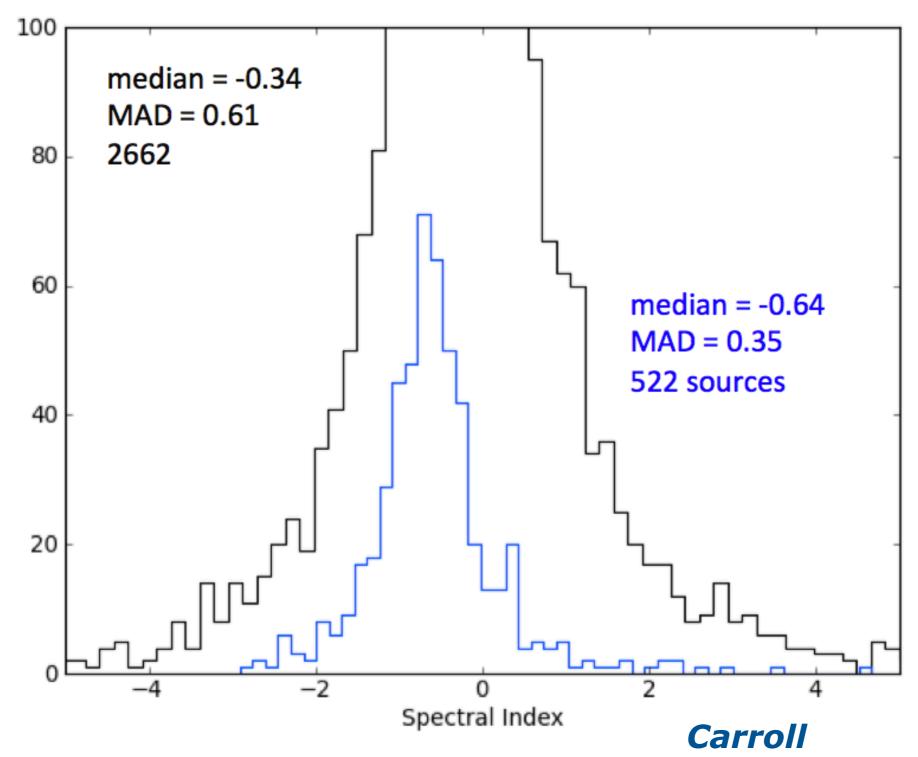
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Source histogram

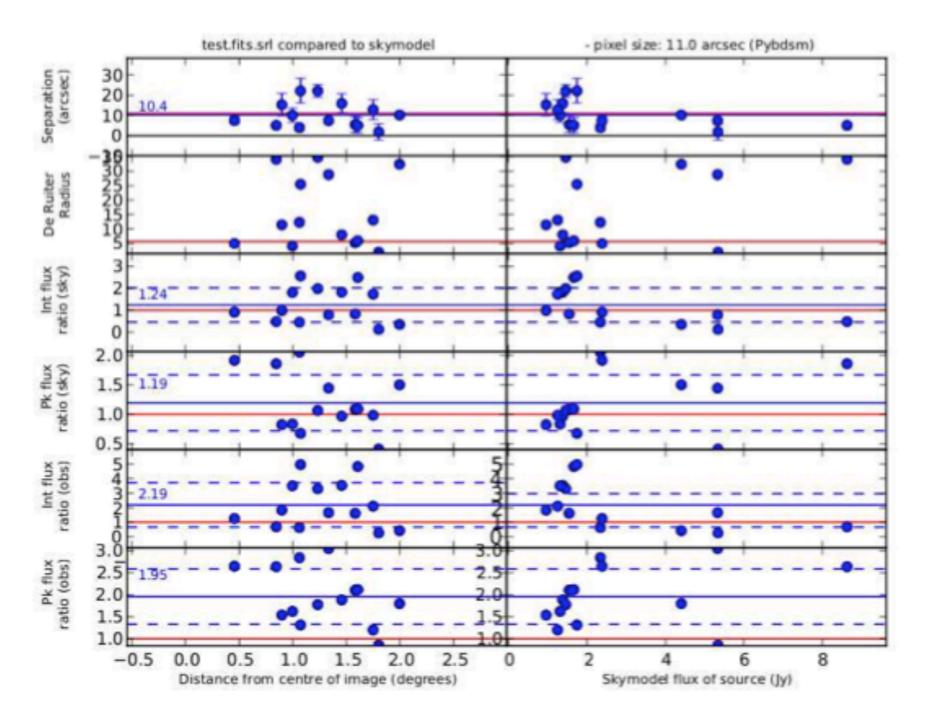


Need to apply extra selection criteria to get reliable statistics



Quality control: work in progress

Work by Antonia Rowlinson being merged with TKP effort



Rowlinson

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