ASTRON

Netherlands Institute for Radio Astronomy

MSSS Update

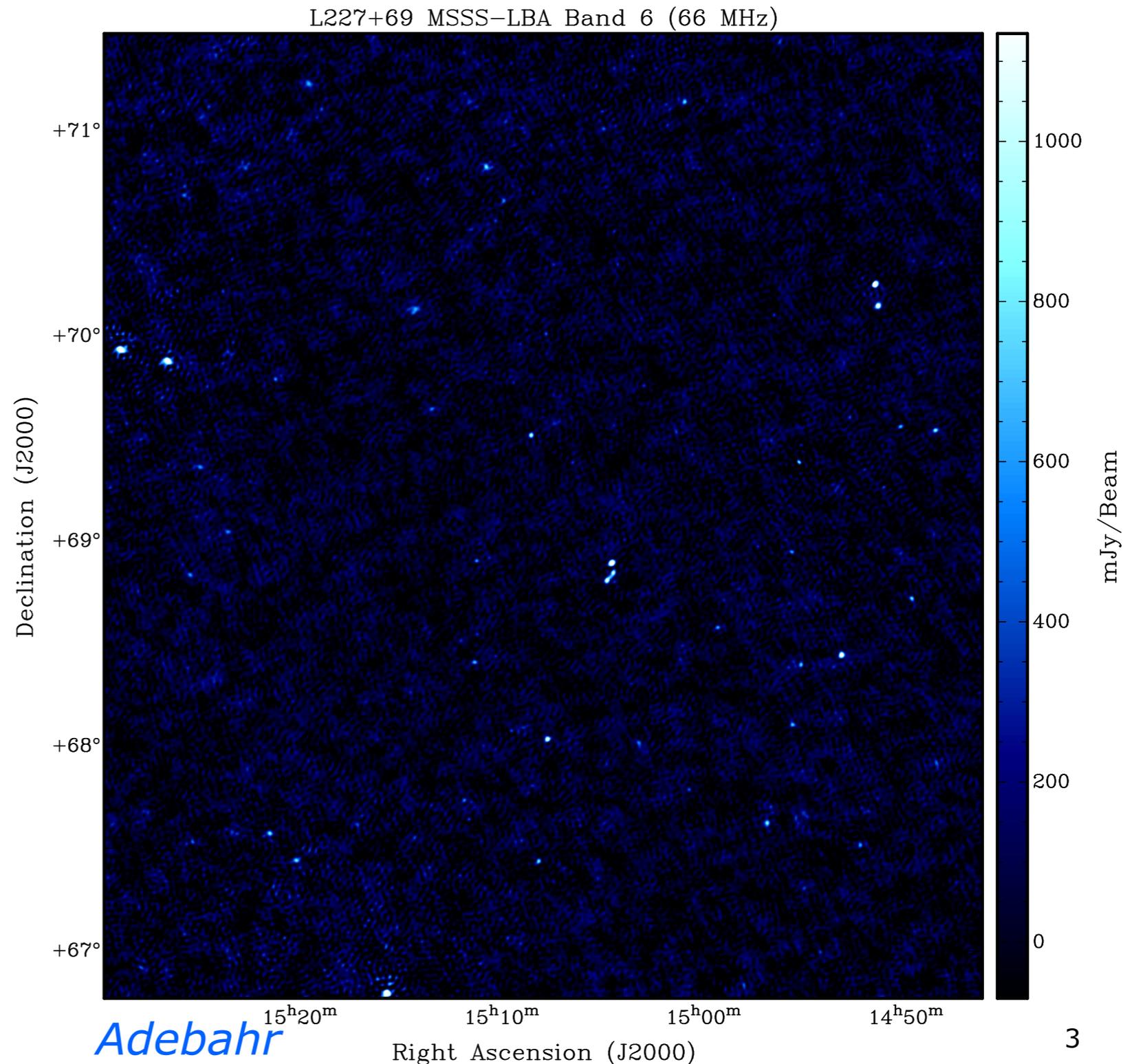George Heald
(on behalf of the MSSS Team)
LSM, 18 April 2012

LOFAR

MSSS Observing Status

- MSSS-LBA: 516/660 fields observed = 78% complete
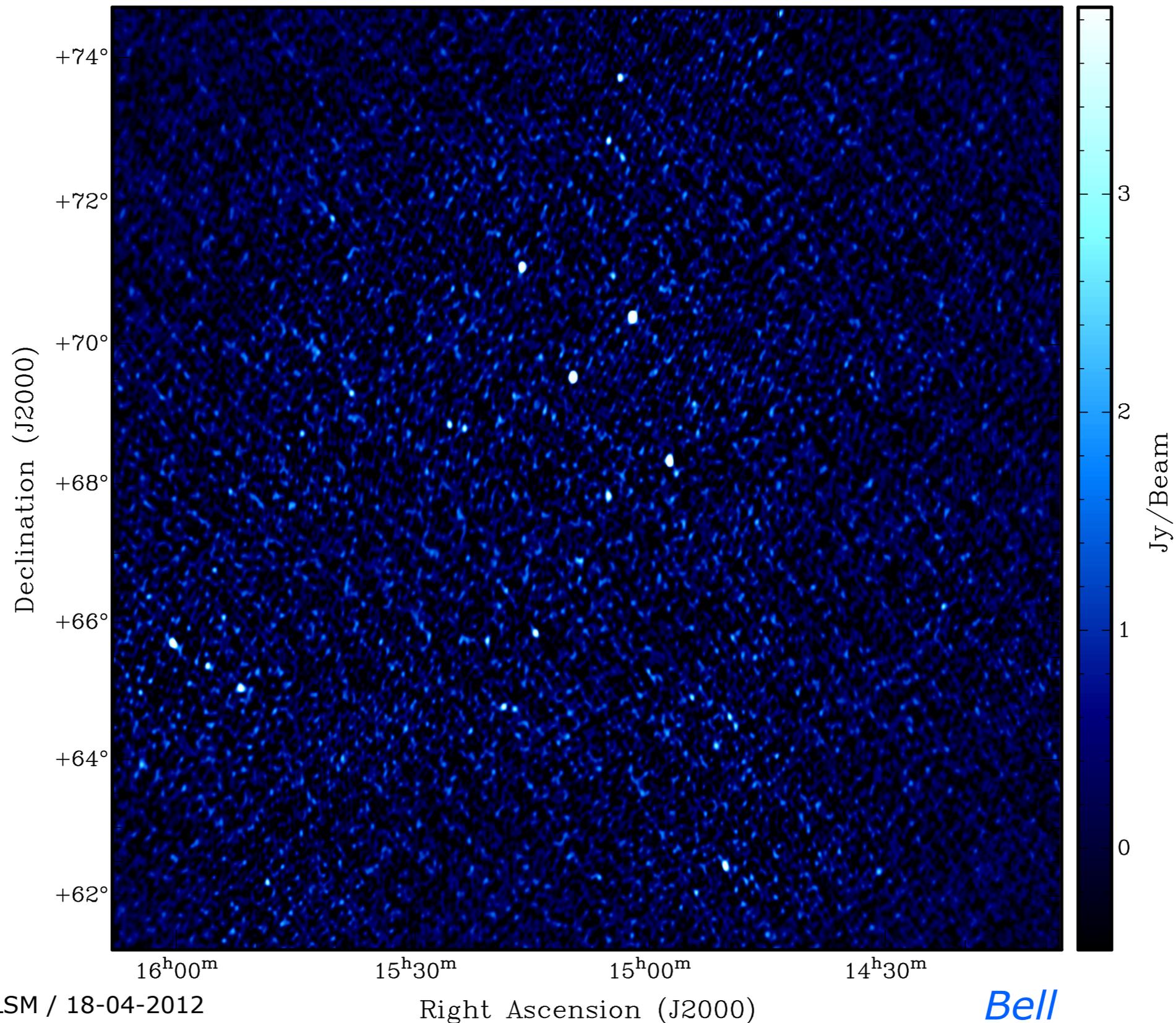
Direction-dependent solutions
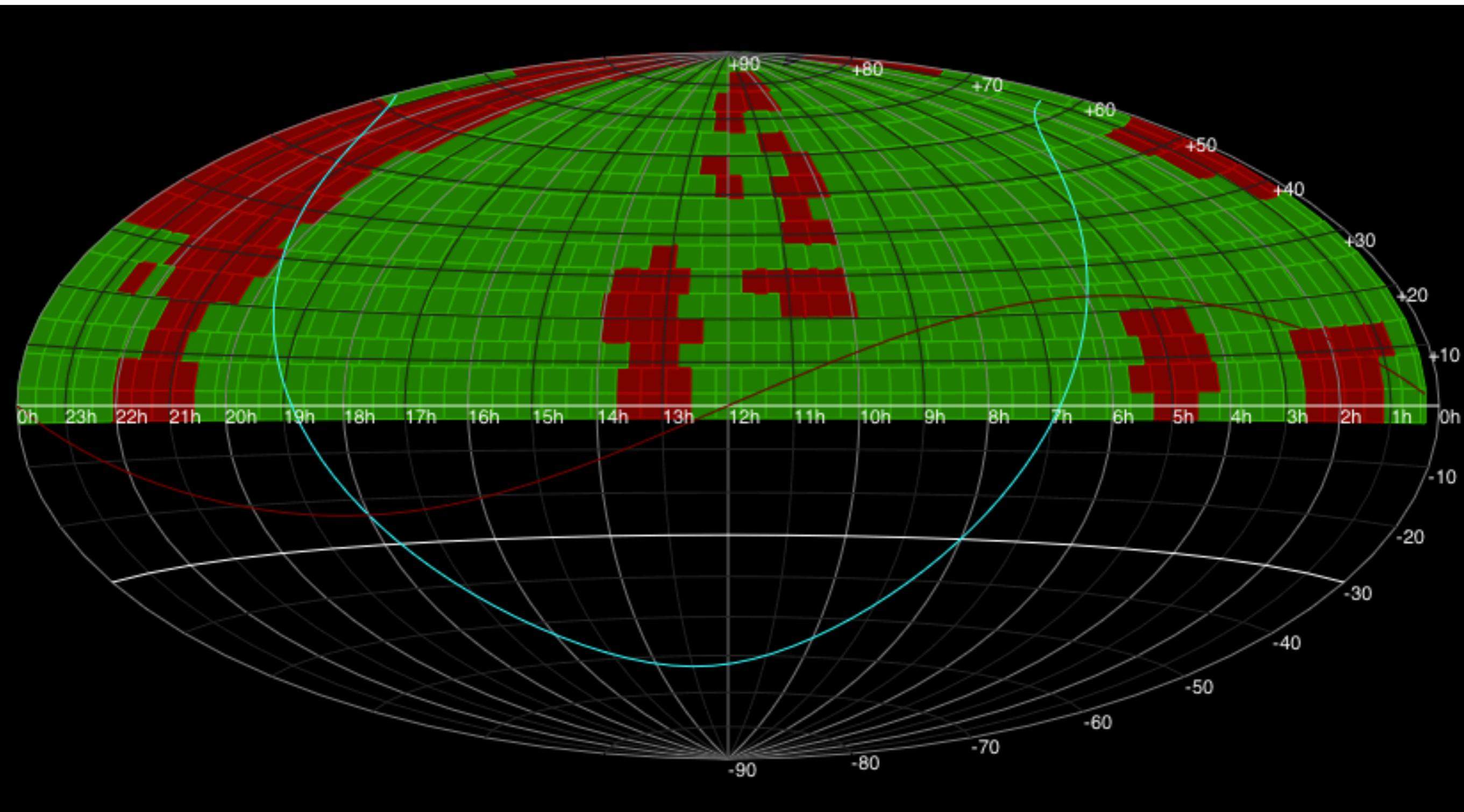
- Tried in both BBS and sagecal, with intriguing results
  - Need to consider both runtime and flux scale....

Image noise 85 mJy/beam

Resolution 70"
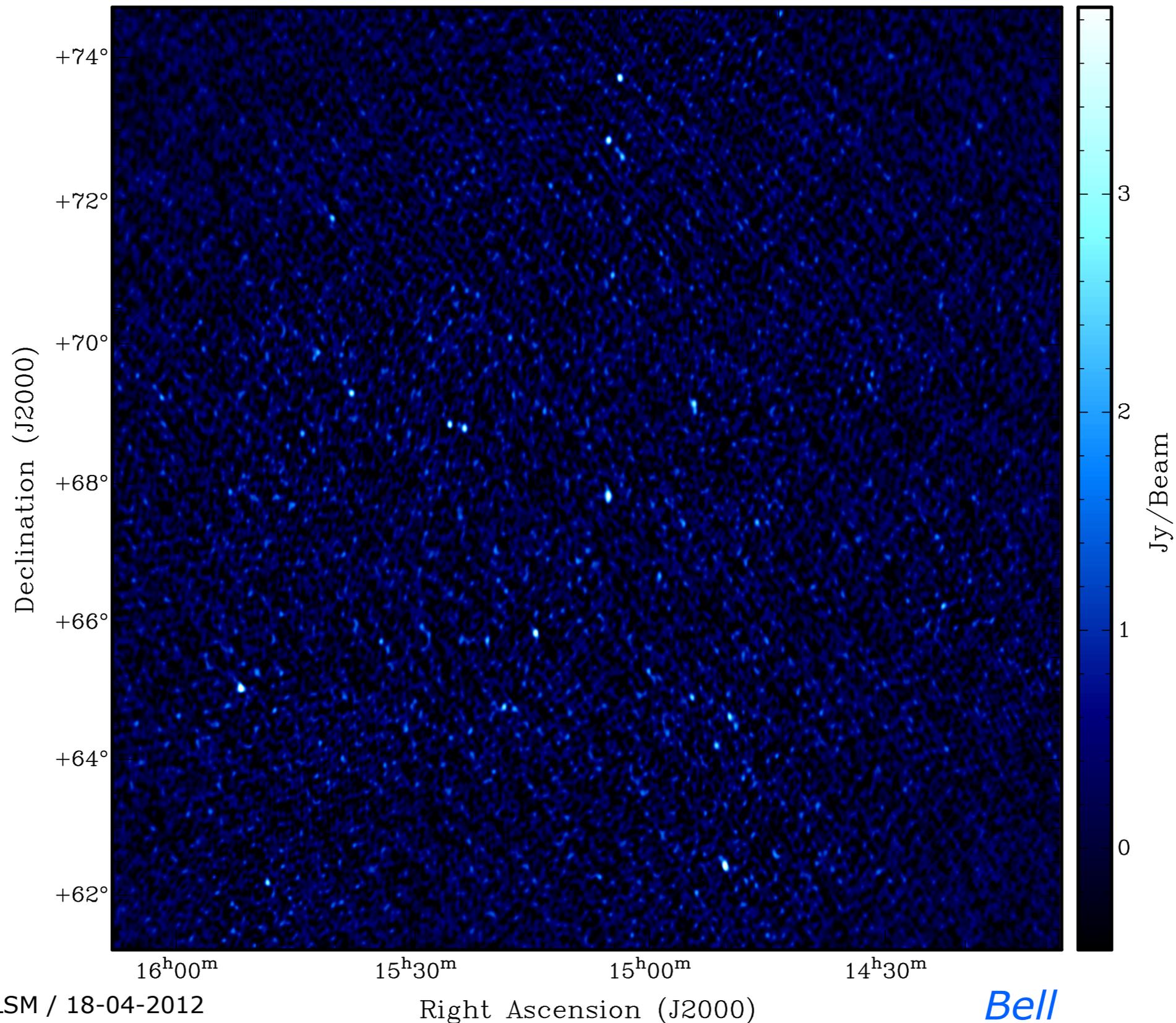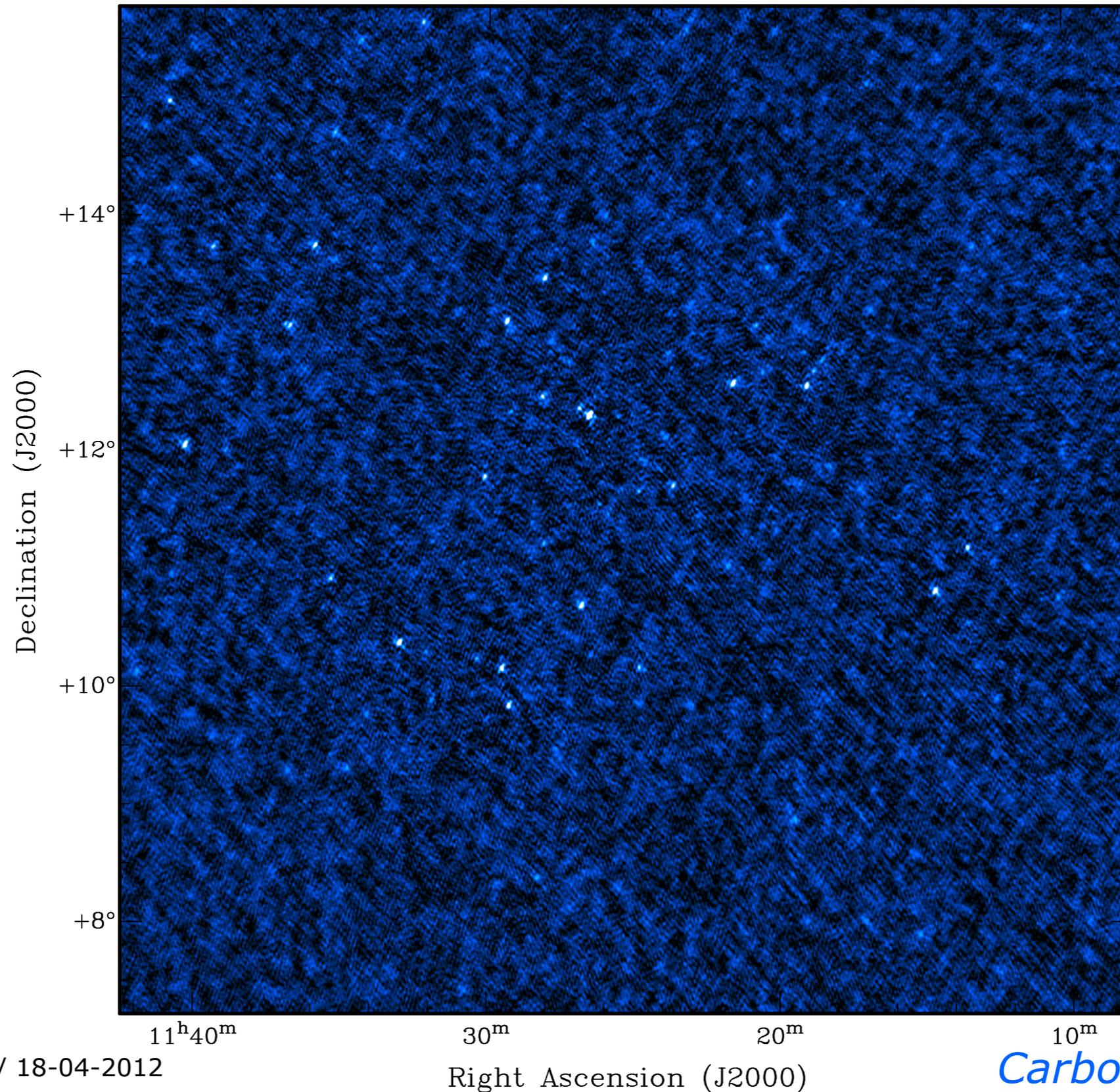

L227+69 MSSS−LBA Band 6 (66 MHz)

Adebahr

Results of peeling

- (Pre-BBS-speedup) runtime ~30 min for peeling 5 directions

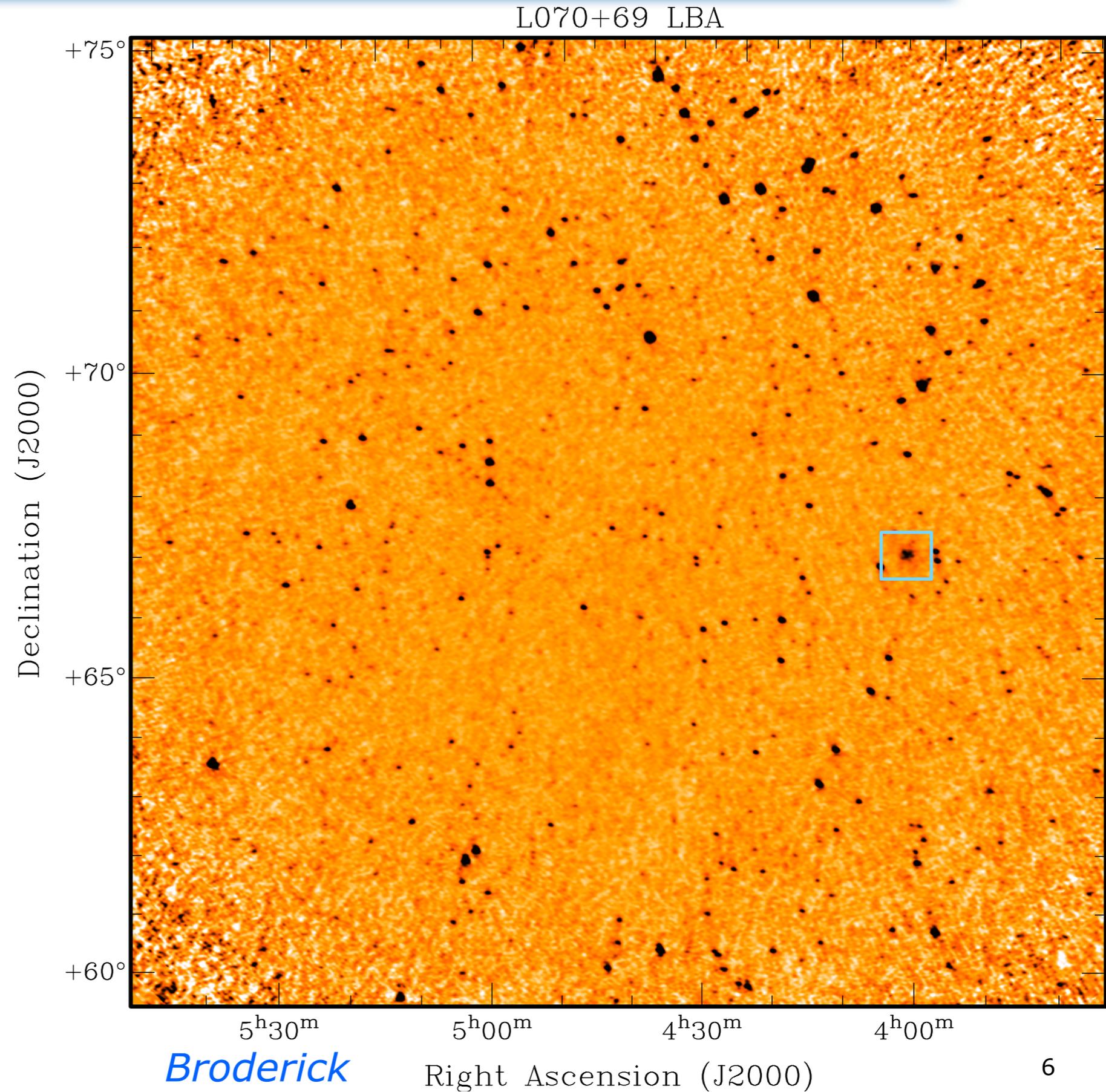# Results of peeling

- (Pre-BBS-speedup) runtime ~30 min for peeling 5 directions

Bell

Exploration of new fields continues

LOFAR ASTRON
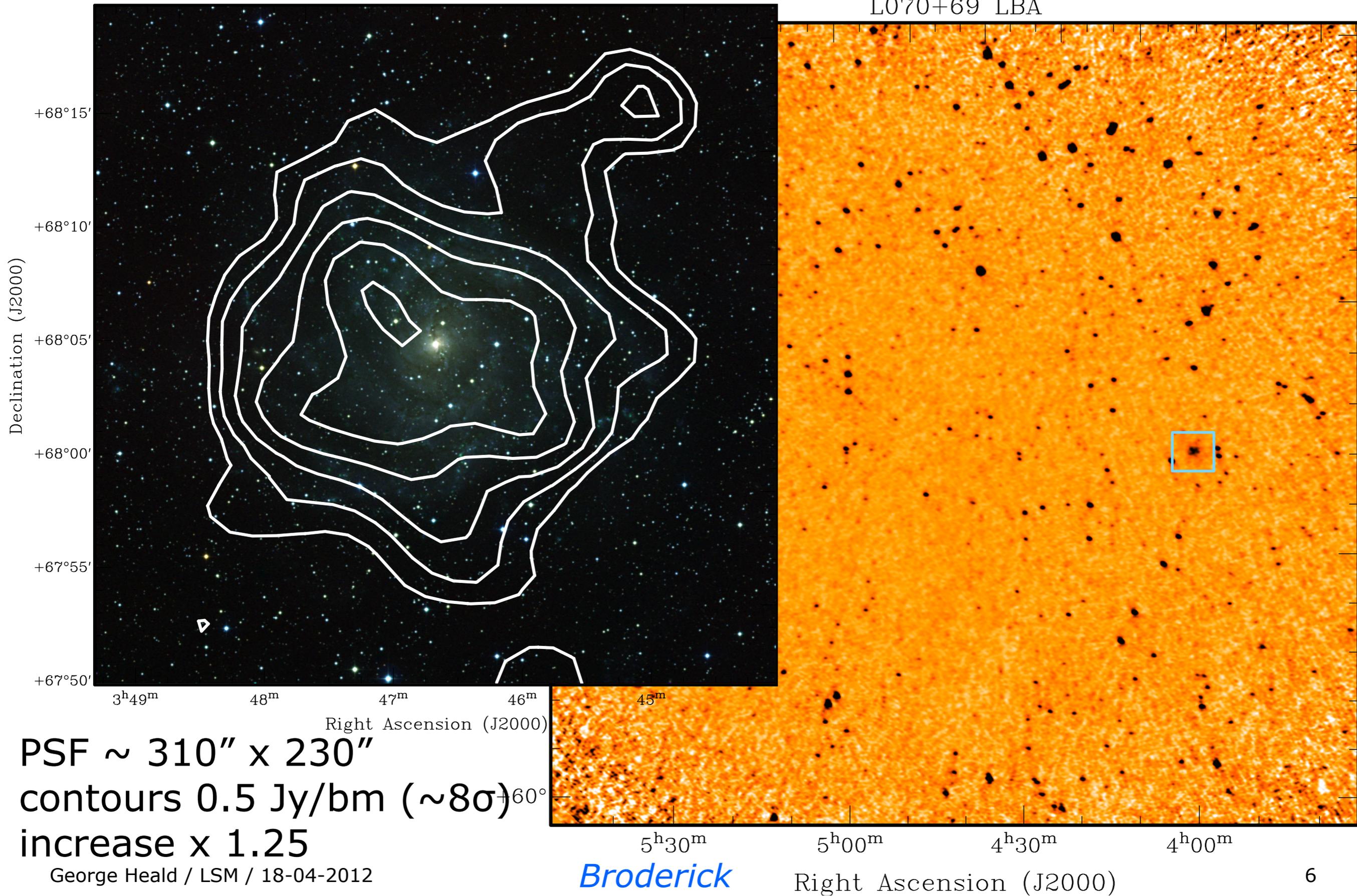
- Low dec field, image noise ~0.1 Jy/beam, using baselines <10km
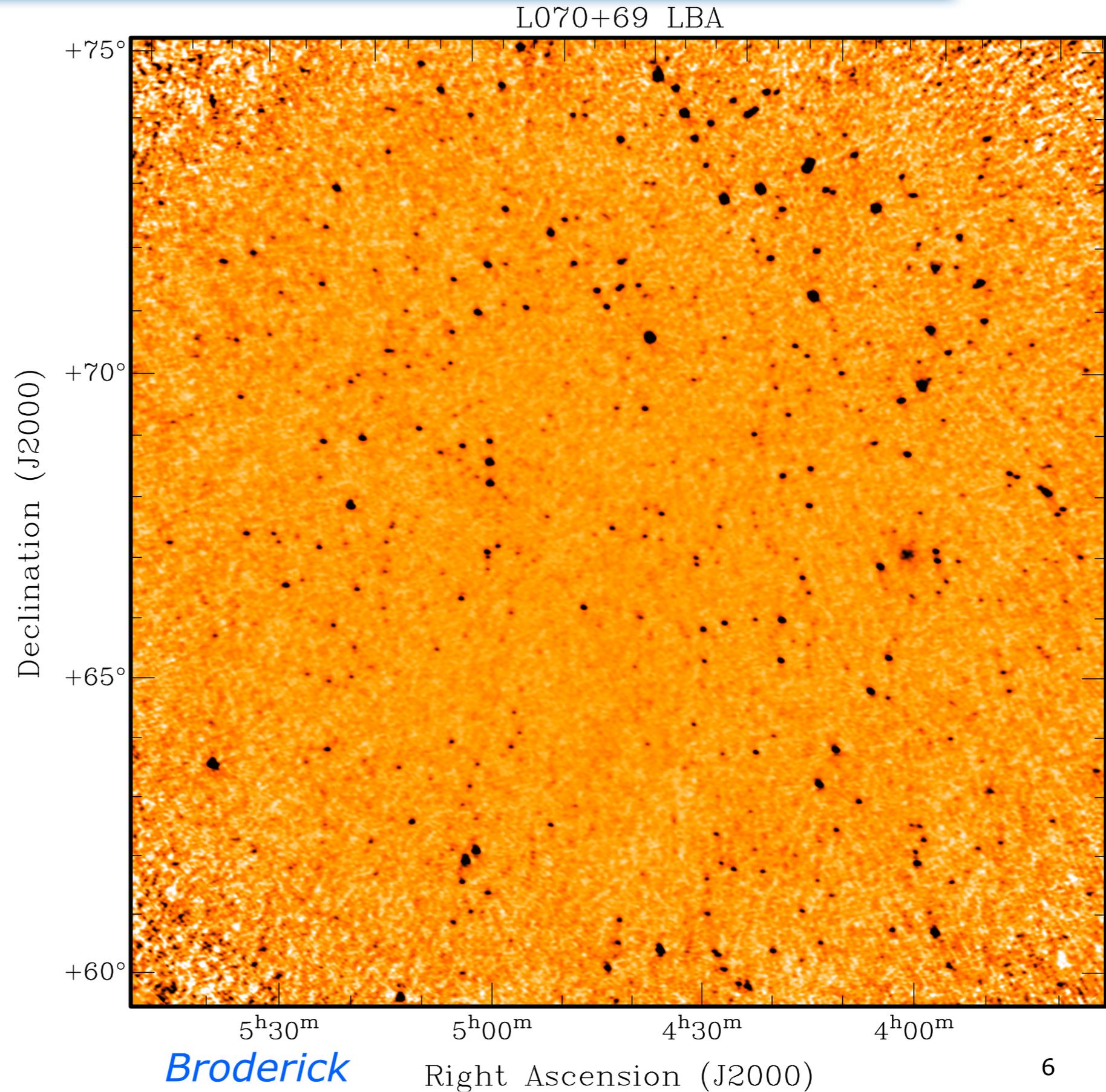
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Carbone

Well-known sources appearing…

L070+69 LBA

Broderick

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L070+69 LBA

L070+69 LBA

PSF ~ 310" x 230"
contours 0.5 Jy/bm (~8σ)
increase x 1.25
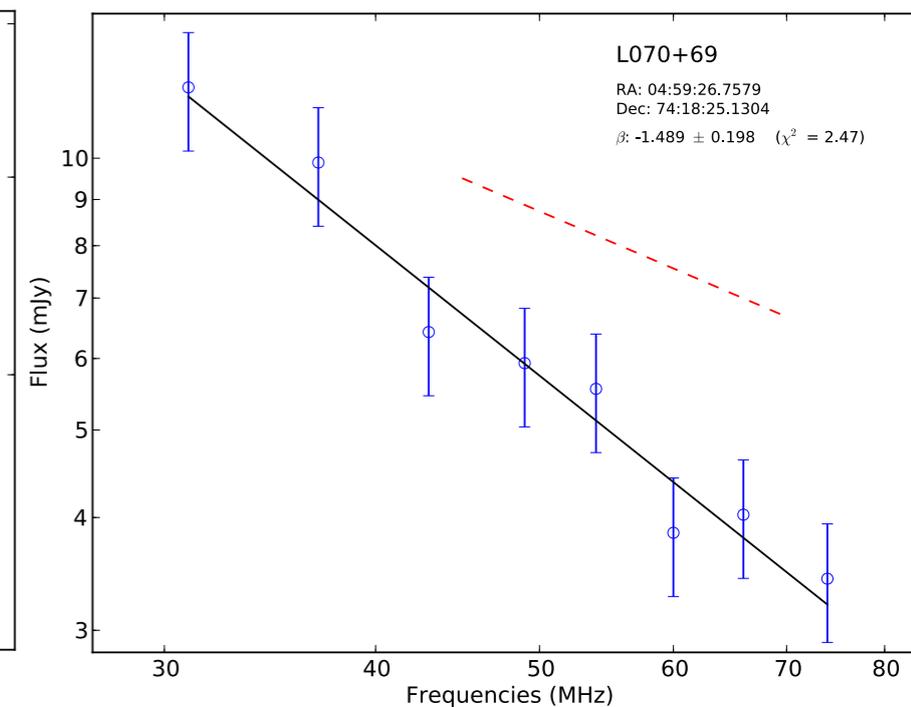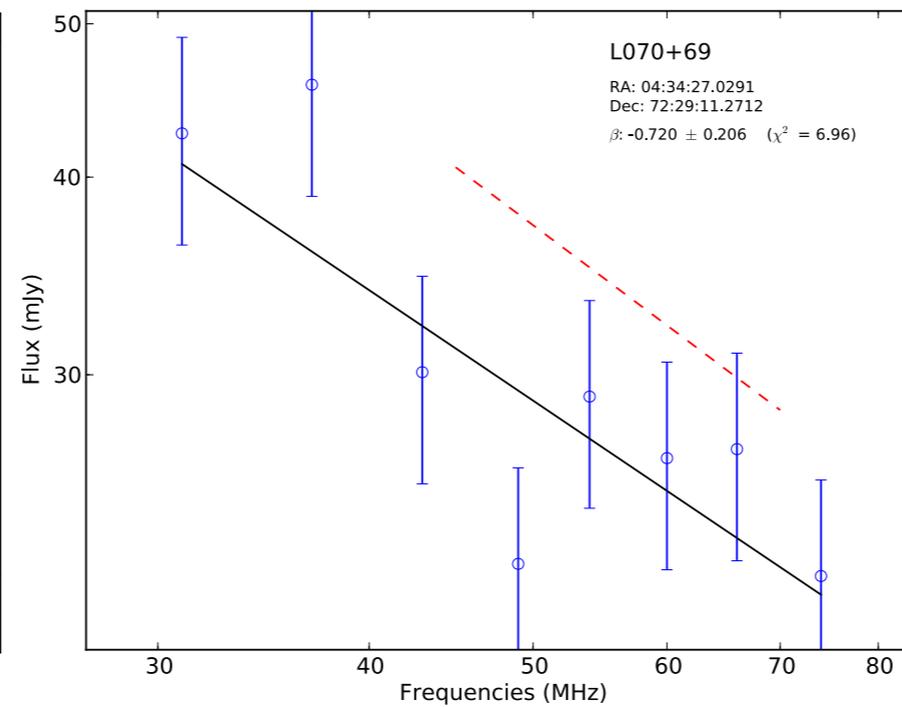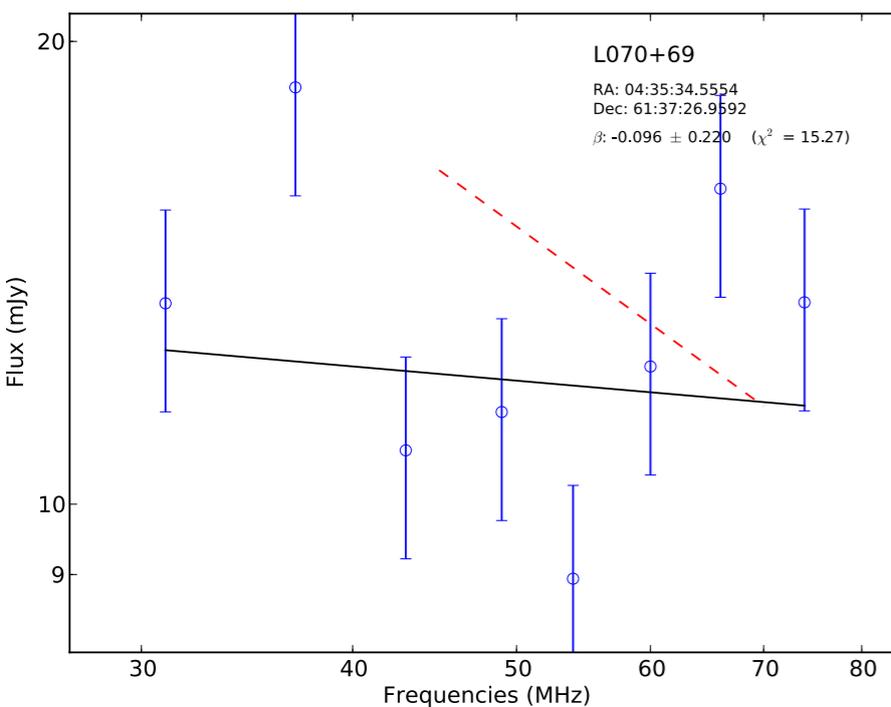
George Heald / LSM / 18-04-2012

Broderick

6

MSSS source spectra

- Considering cross-matches between 8 simultaneous LBA bands
- errors estimated at ~15% based on fit statistics

Breton

MSSS source spectra

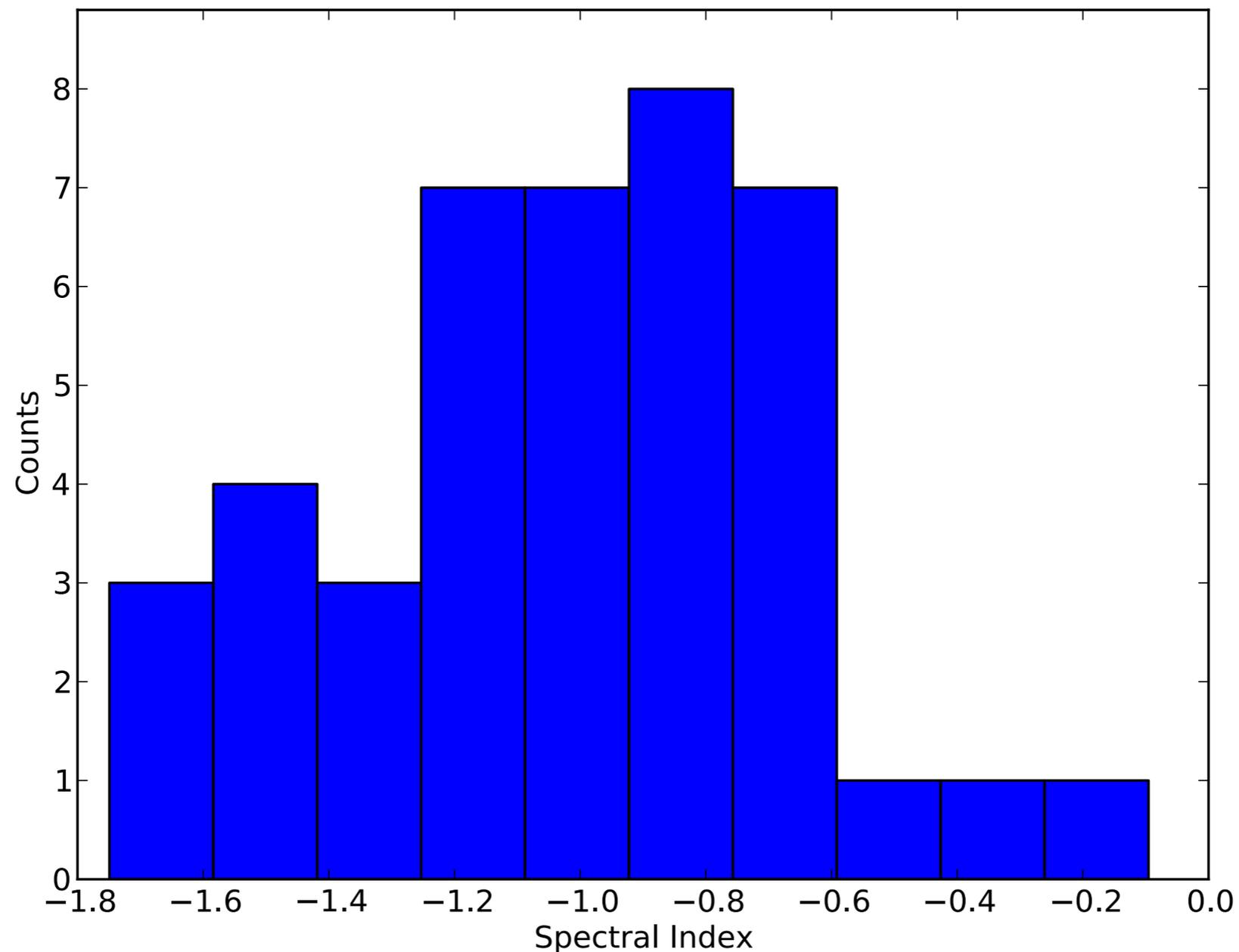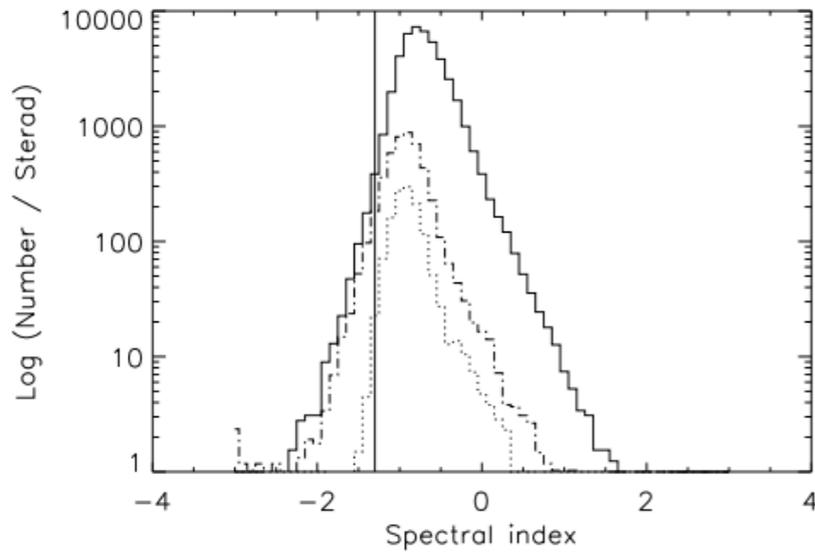- Considering cross-matches between 8 simultaneous LBA bands

- errors estimated at ~15% based on fit statistics

Breton

- Considering cross-matches between 8 simultaneous LBA bands
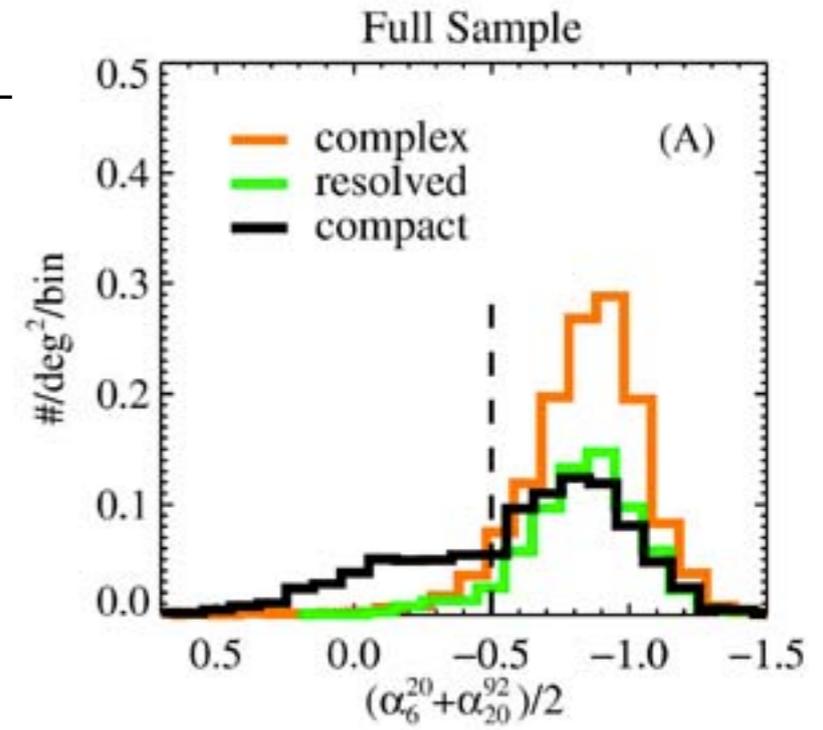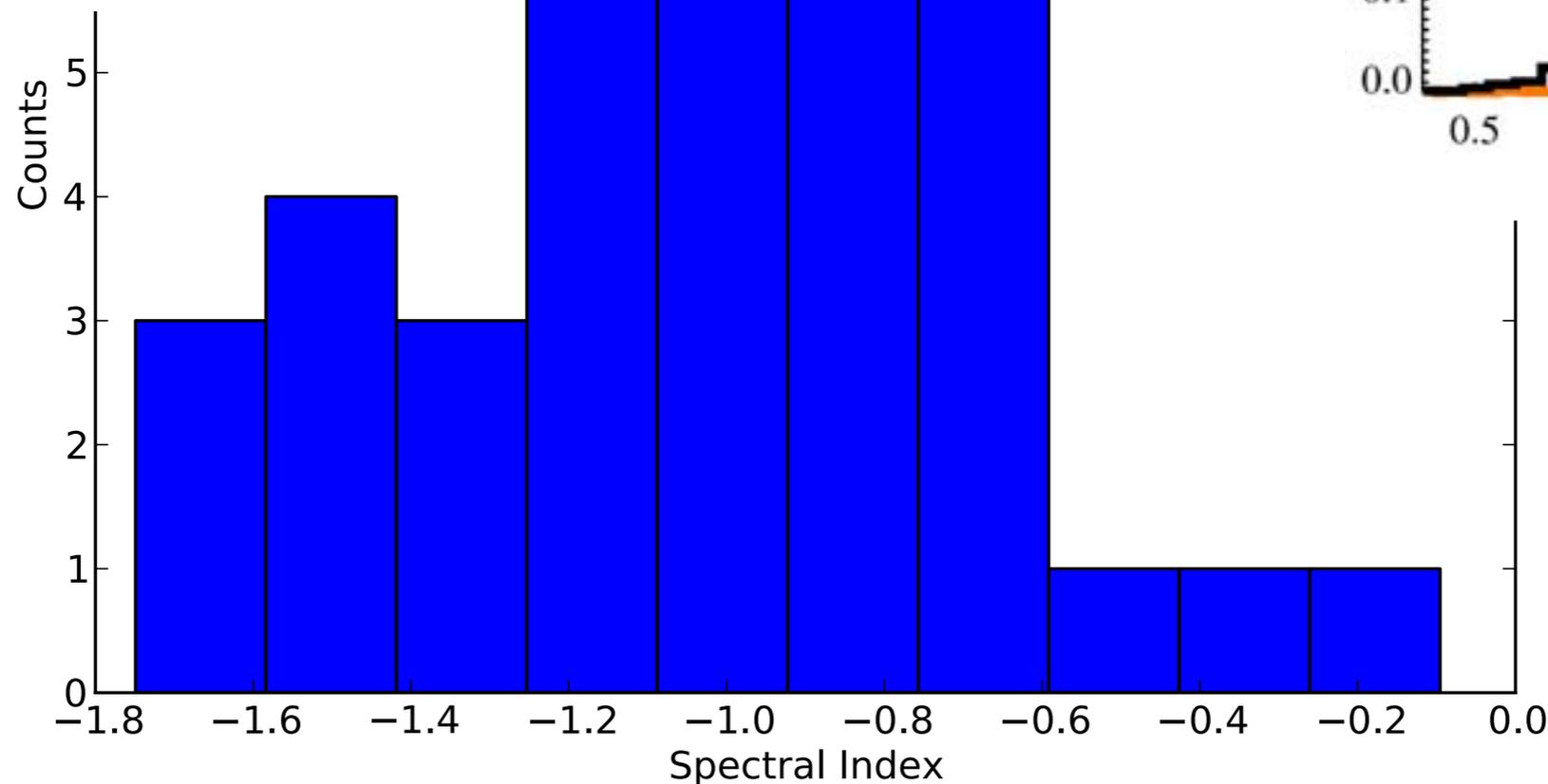
- errors estimated at ~15% based on fit statistics

De Breuck+ (2000)
- from combo NVSS+WENSS +TEXAS +MRC+PMN

Kimball & Ivezić (2008)
- from combo NVSS+FIRST +GB6+WENSS

Breton