

## EarlyScienceFieldDetails

## Tuning Band Selection

Note that the frequency coverage of 700–1800 MHz will be done with 3x 300 MHz tunings, and that there will be a gap of 200 MHz between 1300–1500 MHz. You might hear these referred to as 'bands' as in the following table:

Band 1	700-1000 MHz
Band 2	1000-1300 MHz
Band 3	1500-1800 MHz

## Field Selection

[\(see list of early science projects here\)](#)

After the provisional ranking of projects, we have now grouped the projects into fields, and have now provisionally ranked the fields as shown below. "Provisional" means this ranking is still open for discussion, and may be changed if circumstances change. However, fields which are listed at "A" priority below will be observed if possible. Note that all ASKAP Early Science observations are shared risk, and so no observation is guaranteed.

A subsequent step will decide the optimum order in which these fields should be observed.

Priority has been assigned taking into account:

1. the number and quality of science projects using the field
2. the extent to which the observation will help debug and commission ASKAP
3. the extent to which the projects use ASKAPs unique capability, and in particular the wide field of view
4. the extent to which the projects helps drive an EMU key science project

Single-project fields are generally assigned only one pointing at high priority. For projects that requested more than one pointing, the high-priority pointing has been chosen fairly arbitrarily, with preference given to low-declination fields. The choice of which field is given priority within a project can be changed if necessary on request..

A total of 680+ hours has been assigned priority "A".

[illegible]

Shapley(1)	13:27:57	-31.30.09	1	30	30	all	20	A	
Shapley(2)	12:54:18 13:47:28	-29.01.16 -32.50.59	2	60	60	all	20	B	3
Low-z clusters(1)	22:49:57	-64.25.46	1	30	30	all	19	A	
Low-z clusters(2)	21:52:19	-19.34.42	1	30	30	all	19	B	
CDFS	03:31:00	-28.00.00	1	30	30	all	6,11,12,17	A	
ELAIS	00:34:00	-43.40.00	1	30	30	all	6,12,17	A	
COSMOS	10:00:00	02:10:00	1	30	30	all	11	A	
SPARCS-N	15:30:00	29:00:00	1	30	30	all	11	A	
SCORPIO	17:00:00	-41.30.00	1	30	30	all	10	A	
Galactic-2	15:54:21	-53.43.19	1	30	30	all	9	A	
SMC	00:53:00	-72:50:00	1	30	30	all	21	A	
LMC	05:23:00	-69:45:00	4	120	120	all	21	B	
early polarisation	TBD	TBD	1	30	30	all	POSSUM	A	

#### Notes

1. The cosmology field has been provisionally chosen to include MWA EOR field, and some of the DES deep field, and some of the SPT deep field. However, it does not cover the proposed deep SPT field observation, does not go as deep, and only covers one band. However, the precise RA and dec range is still open for discussion.
2. The choice of the first GAMA field will depend on how well ASKAP-12 performs at equatorial declination. If it works well, then the zero-dec fields have the best ancillary data and should be observed first. If not, then the -32 degree field will be observed initially. If ASKAP high-declination performance warrants, and if there is sufficient time available, it is hoped to cover the other GAMA fields.
3. To achieve the science goals, two clusters need to be observed. The 12:54 field will also be observed in time permits.