



Observing Application

Date: Apr 9, 2007
 Proposal ID: VLA/07B-262
Legacy ID: AW711
 PI: Friedrich Wyrowski
 Type: Rapid Response
 Exploratory Time
 Category: Galactic
 Total time: 10.0 hour

Methanol maser towards a new population of massive high extinction clouds

Abstract:

We propose to search for methanol masers toward a new sample of possible massive star formation sites. These sites have been found using a new method, which is based on the mid-infrared extinction of background stars, allowing to select the high mass end of clouds partly missed by previous surveys. With the currently ongoing dust continuum survey of these clouds we are finding compact cores, which are likely to harbor the initial phases of massive star formation. Observations of methanol masers in the clouds will be crucial to assess the evolutionary status of the clouds.

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Joint:

Not a Joint Proposal

Observing type(s):

Spectroscopy, *

Resources:

Resource name	Tele. Conf.	Frontend & Backend	Set up
Darray	VLA D	C Band 6 cm 4500 - 5000 MHz VLA Correlator - Spectral Line	IF mode: 1 Bandwidth: 1.5625 MHz Number of channels: 256 Spectral resolution: 6.104 kHz Rest frequencies: 6668.518 MHz

Sources:

Source name	RA / RA Range	DEC / DEC Range	System	Velocity/z	Group name
G11.09-0.54	18:12:01. 00:00:00.0	-19:36:07.2 00:00:00	J2000	0 km/s	mygroup
G12.54-0.35	18:14:15. 00:00:00.0	-18:14:11.0 00:00:00	J2000	0 km/s	mygroup
G12.76-0.58	18:15:33. 00:00:00.0	-18:08:44.6 00:00:00	J2000	0 km/s	mygroup
G13.28-0.34	18:15:40. 00:00:00.0	-17:34:31.5 00:00:00	J2000	0 km/s	mygroup
G13.91-0.51	18:17:34. 00:00:00.0	-17:06:07.4 00:00:00	J2000	0 km/s	mygroup
G13.97-0.45	18:17:27. 00:00:00.0	-17:01:34.1 00:00:00	J2000	0 km/s	mygroup
G14.39-0.75	18:19:24. 00:00:00.0	-16:47:33.9 00:00:00	J2000	0 km/s	mygroup
G14.63-0.57	18:19:13. 00:00:00.0	-16:29:55.5 00:00:00	J2000	0 km/s	mygroup
G14.72-0.21	18:18:04. 00:00:00.0	-16:14:47.0 00:00:00	J2000	0 km/s	mygroup
G15.51-0.42	18:20:23. 00:00:00.0	-15:39:21.6 00:00:00	J2000	0 km/s	mygroup
G16.93+0.24	18:20:46. 00:00:00.0	-14:05:27.9 00:00:00	J2000	0 km/s	mygroup
G17.19+0.81	18:19:12. 00:00:00.0	-13:35:18.0 00:00:00	J2000	0 km/s	mygroup
G18.26-0.24	18:25:05. 00:00:00.0	-13:08:25.5 00:00:00	J2000	0 km/s	mygroup
G18.84-0.49	18:27:05. 00:00:00.0	-12:44:30.1 00:00:00	J2000	0 km/s	mygroup
G22.06+0.21	18:30:40. 00:00:00.0	-09:34:11.3 00:00:00	J2000	0 km/s	mygroup
G23.38-0.12	18:34:19. 00:00:00.0	-08:32:52.7 00:00:00	J2000	0 km/s	mygroup
G24.37-0.15	18:36:16. 00:00:00.0	-07:40:56.0 00:00:00	J2000	0 km/s	mygroup
G24.61-0.33	18:37:21. 00:00:00.0	-07:33:08.2 00:00:00	J2000	0 km/s	mygroup
G24.94-0.15	18:37:19. 00:00:00.0	-07:10:33.9 00:00:00	J2000	0 km/s	mygroup
G25.79+0.81	18:35:26. 00:00:00.0	-05:58:56.7 00:00:00	J2000	0 km/s	mygroup
G30.90+0.00	18:47:43. 00:00:00.0	-01:48:23.7 00:00:00	J2000	0 km/s	mygroup
G34.03-0.33	18:54:36. 00:00:00.0	+00:49:43.0 00:00:00	J2000	0 km/s	mygroup

G34.34-0.90	18:57:12. 00:00:00.0	+00:50:40.3 00:00:00	J2000	0 km/s	mygroup
G34.71-0.63	18:56:55. 00:00:00.0	+01:17:43.7 00:00:00	J2000	0 km/s	mygroup
G34.77-0.81	18:57:39. 00:00:00.0	+01:15:57.3 00:00:00	J2000	0 km/s	mygroup
G34.85+0.43	18:53:23. 00:00:00.0	+01:54:06.5 00:00:00	J2000	0 km/s	mygroup
G35.49-0.30	18:57:10. 00:00:00.0	+02:08:26.8 00:00:00	J2000	0 km/s	mygroup
G37.44+0.14	18:59:09. 00:00:00.0	+04:04:17.7 00:00:00	J2000	0 km/s	mygroup
G50.06+0.0	19:23:13. 00:00:00.0	+15:13:27.6 00:00:00	J2000	0 km/s	mygroup
G53.81-0.0	19:30:54. 00:00:00.0	+18:29:31.8 00:00:00	J2000	0 km/s	mygroup

Sessions:

Session Name	Session Time	Repeat	Separation	LST Minimum	LST Maximum	Elevation Minimum
Darray	5.0 hours	2	0 day	15:00:00	20:00:00	0

Session Constraints:

Session Name	Constraint	Comments
Darray		

Session Source/Resource Pairs:

Session Name	Source	Resource	Time	Figure of Merit
Darray	G11.09-0.54/mygro up	Darray	0.16666666 hour	30mJy/bm
Darray	G12.54-0.35/mygro up	Darray	0.16666666 hour	30mJy/bm
Darray	G12.76-0.58/mygro up	Darray	0.16666666 hour	30mJy/bm
Darray	G13.28-0.34/mygro up	Darray	0.16666666 hour	30mJy/bm
Darray	G13.91-0.51/mygro up	Darray	0.16666666 hour	30mJy/bm
Darray	G13.97-0.45/mygro up	Darray	0.16666666 hour	30mJy/bm
Darray	G14.39-0.75/mygro up	Darray	0.16666666 hour	30mJy/bm
Darray	G14.63-0.57/mygro up	Darray	0.16666666 hour	30mJy/bm
Darray	G14.72-0.21/mygro up	Darray	0.16666666 hour	30mJy/bm
Darray	G15.51-0.42/mygro up	Darray	0.16666666 hour	30mJy/bm
Darray	G16.93+0.24/mygro up	Darray	0.16666666 hour	30mJy/bm
Darray	G17.19+0.81/mygro up	Darray	0.16666666 hour	30mJy/bm
Darray	G18.26-0.24/mygro up	Darray	0.16666666 hour	30mJy/bm
Darray	G18.84-0.49/mygro up	Darray	0.16666666 hour	30mJy/bm
Darray	G22.06+0.21/mygro up	Darray	0.16666666 hour	30mJy/bm
Darray	G23.38-0.12/mygro up	Darray	0.16666666 hour	30mJy/bm
Darray	G24.37-0.15/mygro up	Darray	0.16666666 hour	30mJy/bm
Darray	G24.61-0.33/mygro up	Darray	0.16666666 hour	30mJy/bm
Darray	G24.94-0.15/mygro up	Darray	0.16666666 hour	30mJy/bm
Darray	G25.79+0.81/mygro up	Darray	0.16666666 hour	30mJy/bm
Darray	G30.90+0.00/mygro up	Darray	0.16666666 hour	30mJy/bm
Darray	G34.03-0.33/mygro up	Darray	0.16666666 hour	30mJy/bm

Darray	G34.34-0.90/mygro up	Darray	0.16666666 hour	30mJy/bm
Darray	G34.71-0.63/mygro up	Darray	0.16666666 hour	30mJy/bm
Darray	G34.77-0.81/mygro up	Darray	0.16666666 hour	30mJy/bm
Darray	G34.85+0.43/mygro up	Darray	0.16666666 hour	30mJy/bm
Darray	G35.49-0.30/mygro up	Darray	0.16666666 hour	30mJy/bm
Darray	G37.44+0.14/mygro up	Darray	0.16666666 hour	30mJy/bm
Darray	G50.06+0.0/mygrou p	Darray	0.16666666 hour	30mJy/bm
Darray	G53.81-0.0/mygrou p	Darray	0.16666666 hour	30mJy/bm

Total Time per Configuration:

Configuration	Total Time
D	10.0

Present for observation: no Staff support: None