CSIRO - DIVISION of RADIOPHYSICS

ALLOCATION OF TELESCOPE OBSERVING TIME AT PARKES RADIO OBSERVATORY for

THIRD QUARTER 1975

1. Duration

The quarter starts at 0800 hours on Tuesday 1 July 1975 and finishes at 0800 hours on Tuesday 7 October 1975

2. Receivers

The committee decided that the 6cm receiver would not be installed in the third quarter, and hence other receivers making use of the 6cm had to be omitted. The move enabled a start to be made on how to fit 164 days applied for into 97 days available in the quarter. In addition, the 21 cm and the 11 cm had to be programmed for a period each for Jupiter observations after 5 September 1975.

3. Day Observing

The committee points out that towards the end of the quarter no computer development time has been sought. It should therefore be relatively easy to obtain 'day' observing time by negotiating with the Officer-in-Charge, Parkes.

4. Maintenance and Development time

(a) Computer maintenance (c/m): 0800 - 1530 hours Mondays 0800 - 1400 hours Fridays

This rearrangement, made in consultation with the Station Manager, gives observers starting on these days the opportunity of making sure that the computer is in an operating condition before the local staff depart the scene.

- (b) The periods 0800-1300 hours on all Tuesdays, Wednesdays and Thursdays are allocated to the Officer-in-Charge, Parkes. Unless otherwise (privately) arranged Computer Program Development Time (in minimum periods of 4 hours) is allocated in these three periods each week.
- (c) Desk check (d/c): 0800-1300 hours Fridays
- (d) On changeover days 2 hours of PDP-9 computer time are reserved for D.J. Cooke immediately after he has finished installation or changes to the receiving equipment.

5. Completion of an observing night

Observers are expected to have organized their observations so that the telescope control desk, the computers and peripherals will be available for maintenance, testing or use at or before 0800 hours on every week day. Please cooperate on this one.

6. Modification of the Program

Any change to this program must be approved by the secretary, Program Planning Committee. He will notify the Officer-in-Charge and the Station Manager at Parkes.

7. Accommodation

Accommodation at the quarters is available from the night before an observing or installation session starts. Any person whose name has not been listed on the program must first obtain permission from the Group Leader before approaching the Administration Section for tickets and travel arrangements. It helps to make sure that the Administration Section has, in fact, advised the Observatory of your arrival time.

8. Time for Meals

Breakfast : 0730 - 0900) Please use the book in the dining room to let Mrs Harris and staff Lunch : 1230) know whether or not you require a meal.

Dinner : 1745)

9. Wind Instructions

Instructions for the operation of the telescope in wind are found on the Notice Board in the Control Room. The action to be taken is the responsibility of the telescope driver.

10. Daytime Driving

If observations are being made on weekdays in the times 0800-1640 hours telescope driving will be performed by the first half driver of the previous night. Observers must make the arrangements to obtain the driver's services.

11. Equipment Performance Survey

As part of an effort to improve operating conditions at the Observatory, the Station Manager has issued a form EQUIPMENT PERFORMANCE SUMMARY. In it he asks the observer: performance, time lost and other details of the receiver, cryogenics, correlator, PDP-9, control, mechanical operation and weather. It is in your own interests to fill in the form at the completion of your session.

12. 18 metre Telescope

The allocation of time on this telescope is attached. The requirements of 64m observations always take priority over those of the 18m observations.

R.X. McGee, Secretary Program Planning Committee

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	DATE 197 5	DAY	13 ^h -24 ^h -08 ^h	Feeds, Focal Plane	Receiv	ers	LO, Pumps Phase Locks	Test	Data	Computer	Installation,	Computer
	JULY	08 -13		Requirements Other	Front End	Back End	Multipliers	Equipment	Processing	Program	Driving Requirements Remarks	Program Development
	Mon 30	C/m										
	Tues 1	0-i-C	Installation and test	5 dual hybrid	5	Correlator Mk.II		Powermeter wavemeter	PDP-9	CORLAT		
	Wed 2	Danis i	BATCHELOR, McCULLOCH, SINCLAIR	& offset ref.		possible	Xtal Osc.	Sweeper,CRO		CORTRN LINE		COOKE
	Thur 3	Parkes	Line Search	5 offset	5 tuned to: 6-18 GHz	MK.II	·	C/r, CRO	PDP-9	LINE	Drivers for	***
	Fri 4	d/c,c/m	Sgr B2, Orion Neb.		6-39 GHz	100, 33 kHz Channel	L.O.		Plotter	LINRED	13 ^h -22 ^h -30 ^m	
	Sat 5		GODFREY, PORTER	feed	6-10 GHz	gains to be			paper tape	OPTY	01 ^h -09 ^h	
	Sum 6	(BROWN),	STOREY (Monash)	absorber	5-8 GHz	equalized			3 pen c/r		sidereal time	
	Mon 7	C/m										
	Tues 8	0-i - C										
	Wed 9		OH absorption	5	5	Correlator	"usual"	-	PDP-9	CORLAT		WRIGHT
	Thur 10	Parkes	survey	Absorber	total power	at least	two frequency			SPCTRA		
	Fri 11	d/c, c/m	(GARDNER) WHITEOAK	Absorber	mode, no unnecessary	two quad-	selector box					
	Sat 12			-	waveguide	rants						
	Sun 13				10-15K Cal.							
	Mon 14	c/m	OH sources	Great This	5	Correlator	H/p Synth.	-	PDP-9	SPCTRA		
	Tues 15	0-i-C	GOSS, KNOWLES,	"Standard"								COOKE
	Wed 16		CASWELL	AND INTERNA		e, i						
	Thur 17	Parkes	Pulsar Rotation	50 dual pol.	50	Own	H/p.Syn. as	CRO	PDP-9	own	Equal cable	SHIMMING
	Fri 18	d/c, c/m	Measures & Polarization	feed & cal.	Avantek	polarimeter	switchable LO computer con-	Chart rec			lengths from	
,	Sat 19	MANCHESTI	ER, McCULLOCH	injection sys-	transistor		trolled	etc.	·		focus to radio	•
**************************************	Sun 20	HAMILTON	, ABLES, FERRIS (Unitas)	tem (Uni.Tas.)	amplifiers		Rockland syn.				room for the	• •
							for pulsar			-	2 r.f. lines	

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DATE 1975	DAY	13 ^h -24 ^h -08 ^h	Feeds, Focal Plane	Recei	vers	LO, Pumps Phase Locks	Test	Data	Computer	Installation, Driving	Computer
JULY	08 -13		Requirements Other	Front End	Back End	Multipliers	Equipment	Processing	Program	Requirements Remarks	Program Developmen
Mon 21	C/m	Pulsar Rotation									
Tue 22		Measurement & Polariz-									
Wed 23		ation (continued)									(BUTLER)
Thur 24	Parkes	Installation COOKE	18 cm R _x								-
Fri 25	d/c, c/m	OH/IR stars in glob. clusters	18 dual	18-L	Correlator	H/p Synth.	-	PDP-9	SPCTRA		
Sat 26		n M Supergiants	linear								
Sun 27	BOWERS	, KERR (Uni.Maryland)	feed			A CONTRACTOR					٠.
Mon 28	c/m	OH Observations	18 orthogonal	18 dual	Correlator	H/p Synth.	_	PDP-9	CORLAT		
Tue 29	O-i-C	GARDIUM, WHITEOAK	probes absorber	10K cal.	2 channels	2 freq.sdecto	T	14	SPCTRA		
Wed 30		OH linear pol. KNOWLES	18 linear	18	Correlator	_	-	-	SPCTRA		COOKE
Thur 31	Parkes	OH H-Vel. KNOWLES, GOSS	polarization								
Fri 1	d/c, c/m	1667 Grid Survey	18-2 prob.W/G	18 dual	Correlator	"usual"	Sweeper	PDP-9	SPCTRA		
Sat 2	CASWELL,	HAYNES,	section (not turnstile	channel	2 mplers	2 attenuators	1	н/Р 45	(CORLAT)		
Sun 3		GOSS	hybrid) 0 pol.	initially tuned to	and IFs. 4 quadrants	with 0.1 dB steps at			STAKFL		
Mon 4	c/m		generated at IF rotatable	1666 MHz	l bit	correlator			CORCON		
Tues 5	0-i-C		dipole at vertex		0.5, 2 MHz mainly	input					
Wed 6	_	Installation <u>COOKE</u>	3.4 cm R		5.4						WRIGHT
Thur 7	Parkes	Search nitrogen compounds	3.4 beam	3.4 at	100 kHz fil	s Phase	CRO	PDP-9	LINE	Drivers	
Fri 8	d/c, c/m	ROBINSON	switch to	9.10 GHz	Correlator	locked		plotter,	LINRED	13 ^h - 22 ^h -30 ^m	
Sat 9	(BROWN),	OTTREY, GODFREY	offset feed	8.95 GHz	10 MHz	LO		paper tape	OPTY	01 ^h - 09 ^h	
Sun 10		(Monash)	absorber		(Filters to			mag. tape	CORLAT	sidereal time	
					be equalize	d)		3 pen c/r	(or equiv.)		

		er er									3.	
	DATE 1975 AUGUST	08 ^h -13 ^h	13 ^h -24 ^h -08 ^h	Feeds, Focal Plane Requirements Other	Receive Front End	Back End	LO, Pumps Phase Locks Multipliers	Test Equipment	Data Processing	Computer Program	Installation, Driving Requirements Remarks	Computer Program Development
	Mon 11	c/m	(cont.) Search nitrogen com.				٠		,	ar Ar		
	Tues 12	0-i-C	Flux density scale	3.4	3.4-c	2 cals	"normal"	"nil"	PDP-9	Own	Prime calib.	
	Wed 13		at 8.87 GHz	twin beam	tuned to	50, 5K		-		(STAKFL)	transits ~	WRIGHT
	Thur 14	Parkes	SHIMMINS		8.87 GHz	to check linearity				•	9hr solar - arrange with Oi	C
	Fri 15	d/c, c/m	ETELS	3 cm "close"	3.4 tuned to			5	PDP-9	NODDY	Cal ~ lK	
	Sat 16	WRIGHT,	ALLEN (AAO)	dual beam	highest freq	"usual"	"usual"	-	PDP-11	POINTX		
1			(1210)	with one beam	compatible		<		display if			
-	Sun 17			on axis	with max f/e				possible			
-	Mon 18	c/m	SNR Polarization	3.4 polariz-	3.4	Continuum	•	=	PDP-9	own	full	
-	Tues 19	0-i-C		ation switch	,				Disk		driving	
	Wed 20		MILNE									WRIGHT
and the same of	Thur 21	Parkes	Norma recomb. lines	3.4 2 HE	3.4 l+ c	Correlator	H/P, Schl.	Sweep gen.	PDP-9	SPCTRA		
-	Fri 22	d/c, c/m	SMC, LMC continuum	cold load	tuned to	256, 512	Phase locked	powermeter	Dectape	MAPING	a.	
entered negatives	Sat 23	McGEE, NI	EWTON, BUTLER	switch	8872.569 MHz	10 MHz	system	wavemeter	Houston	LINE	-	
	Sun 24			CV3 absorber		Mk.II backu	p counters	CRO	Plotter			
	Mon 25	с/п	Installation COOKE,		21 cm R _x	x3/	Le. from 4	-63 t 13	20 Das	· whedin	miser (7	Li Amountal
	Tues 26	O-i-C	Neutral Hydrogen in	21	21-L	Correlator	"Standard"	-	PDP-9	CORLAT		
	Wed 27		Southern galaxies	absorber	total		+ 2 frequency			SPCTRA	,	
	Thur 28	Farkes	van WOERDEN		power		selector box					
	Fri 29	d/c, c/m	GOSS, WHITEOAK		mode							
	Sat 30		+ Survey Southern		\$							
	Sun 31		late type galaxies		,	·	,					
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			13 ^h -24 ^h -08 ^h	Feeds, Focal Plane	Receive	ers	LO, Pumps Phase Locks	Test	Data	Computer	Installation, Driving	Computer
	. 1975	08 ^h -13 ^h	13 -24 -08	Requirements Other	Front End	Back End	Multipliers	Equipment	Processing	Program	Requirements Remarks	Program Development
	SEPTEMBE	R				. ,						
· · · · · · · · · · · · · · · · · · ·	Mon L	C/m	Neutral Hydrogen in								· .	
	Tues 2.	0-i-C	Southern galaxies					144		·		
	Wed 3.		(cont.)	·								BUTLER
	Thur 4	Parkes									1	
	Fri 5	d/c, c/m	HI mapping	21	21-L	Correlator	H/P Synth.	c/r	PDP-9	SPCTRA		
	Sat 6		of globules		frequency	·	multiplier					
	Sun 7	GOS			switch							
	Mon 8	c/m	Southern Milky Way MURRAY	21	21-l	Correlator	H/P Synth. 20 cm	Sweep gen.	PDP-9	SPCTRA	Gal. coord.	
	Tues 9	0-i-C	KERR, BOWERS, KERR (Uni.Maryland)	hybrid feed			multiplier	wavemeter			tracking	
	Wed 10		HI survey, inter-	21	21-l	Correlator	Freq.syn.	Sweep gen.	PDP-9	CORLAT		(BUTLER)
	Thur 11	Parkes	Magellanic Clouds	hybrid feed		e e	20 cm multi-	wavemeter				
	Fri 12	d/c, c/m	region				plier	etc.				
	Sat 13		MATHEWSON (ANU)								,	
•	Sun 14		MURRAY					1				
•	Mon 15	c/m										
	Tues 16	0-i-C	Circular polarization	21 circ.	21-c	IF band-	-	Vertex	PDP-9	POLAR 4		·
	Wed 17	;	Jupiter and other source	 es polarization 	100 MHz	width		radiator	Dectape,			(BUTLER)
	Thur 18	Parkes	KOMESAROFF,	ferrite	bandwidth	100 MHz		linear +	pushbutton		:	
	Fri 19	d/c, c/m	ROBERTS	switch				circular	box			
	Sat 20			partially								
	Sun 21			polarized								
		:		cal.								

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	DATE	DAY h h	lah ash ooh	Feeds, Focal Plane	Receiv	/ers	LO, Pumps Phase Locks	Test	Data	Computer	Installation,	Computer
	SEPT.	08 ^h -13 ^h	13 -23	Requirements Other	Front End	Back End	Multipliers	Equipment	Processing	Program	Driving Requirements Remarks	Program Development
	Mon 22	c/m	Position calibration of	ll twin	11:	"standard"	"standard"	-	PDP-9	own	·	
	Tues 23	0-i-C	64m telescope	beam		1		,	PDP-11/40			
	Wed 24		Source Survey						Houston			(BUTLER)
	Thur 25	Parkes	δ - 45°65°						Plotter		+	
	Fri 26	d/c, c/m	α 22 ^h - 6 ^h			1						
	Sat 27		OLTON) WRIGHT			1						
	Sun 28		VAGE ←									
	Mon 29	<u> </u>	[JAUNCEY]					!				
	Tues 30	0-i-C			1			<u> </u>				. :
I	OCTOBER		1	!								
·	Wed 1		Jupiter 11 cm polariz-	11	11	Continuum	"standard"	1	PDP-9	own	first and	(BUTLER)
	Thur 2	Parkes	ation McCULLOCH (Uni.Tas)	polarization	1				1		second half	
	Fri 3	d/c, c/m		1			!				drivers reqd	
I	Sat 4	K	KOMESAROFF					1			_	
·	Sun 5		<u> </u>	1	1							
	Mon 6	c/m		1								
	Tues 7											
	Wed 8				END OF QU	UARTER						
	Thur 9											
	Fri 10			1	1		4-					
·	Sat 11		.	1	1		-				· · · · · · · · · · · · · · · · · · ·	
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18 metre TELESCOPE PROGRAM

THIRD QUARTER - 1975

Date 1975 (inclusive)	Project	Persons
Tuesday 1 July - Tuesday 8 July	Unavailable for observations	
Wednesday 9 July - Monday 11 August	Reserved for modifications, maintenance etc. under supervision of	McAlister, Wellington
Tuesday 12 August – Sunday 17 August	Southern Milky Way 21cm Survey Requires 10 kHz filters, H/P 8660 Syn. Schl. Sun. crystal oscillators Multiplier chains, chart recorder. R1,R2, DATOS, paper tape punch Not to be moved without consultation	KERR, MURRAY, BOWERS, KERR (University of Maryland)
Monday 18 August - Monday 25 August	Intergalactic Gas Clouds Mark II back end	MATHEWSON, MURRAY, SCHWARZ (ANU)
Tuesday 26 August - Monday 1 September	NIL	
Tuesday 2 September - Monday 15 September	Galactic Structure Mark II back end	CLEARY (ANU)
Monday 22 September - Monday 6 October	Southern Milky Way 21cm Survey (cont) (as above)	BOWERS (Uni.Maryland) MURRAY (KERR)