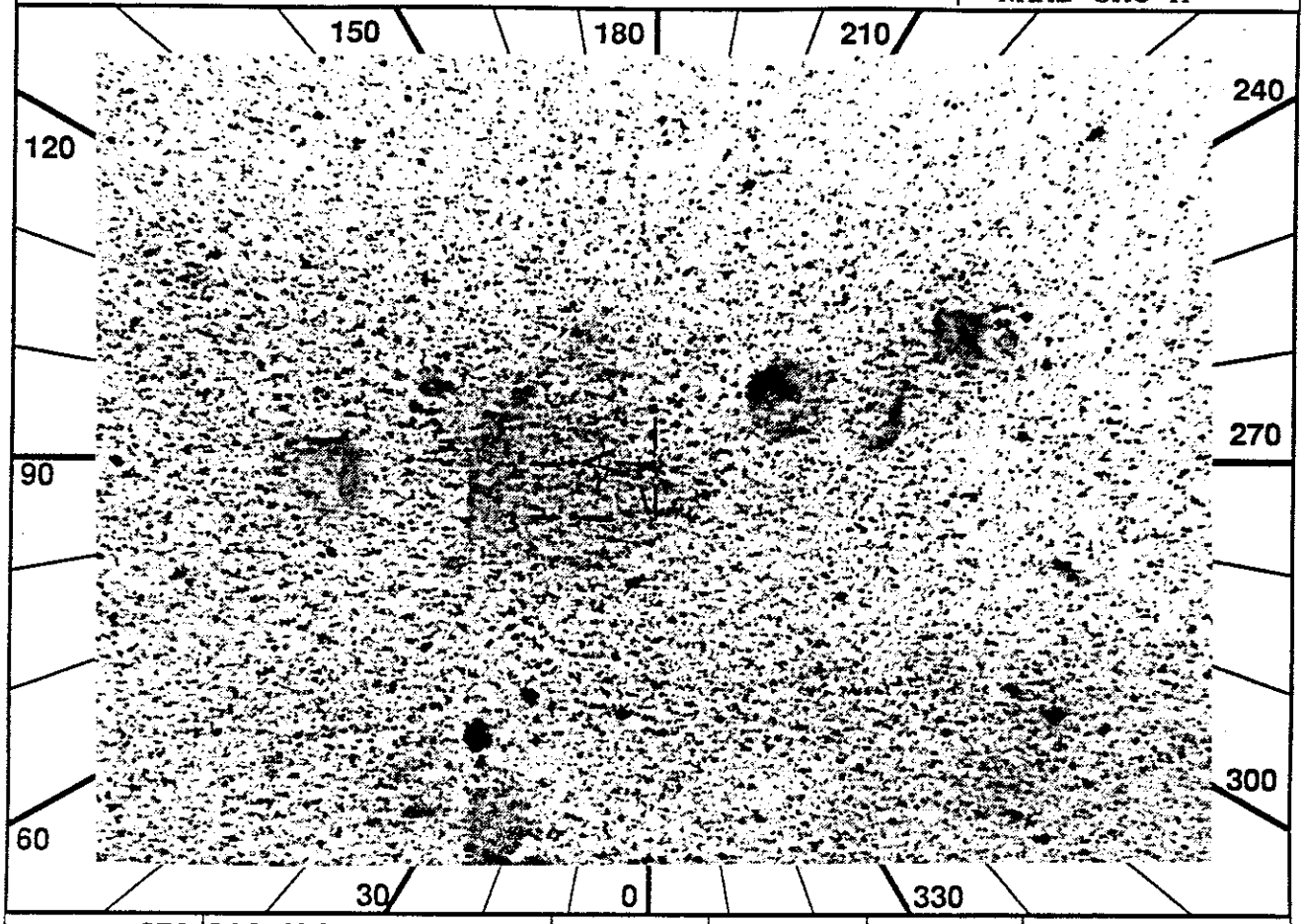
1 RA 11.3454 DEC -73.4036 ROLL 23.00 | ID 6106-10

2 TIME 1416 | NAME SMC-A



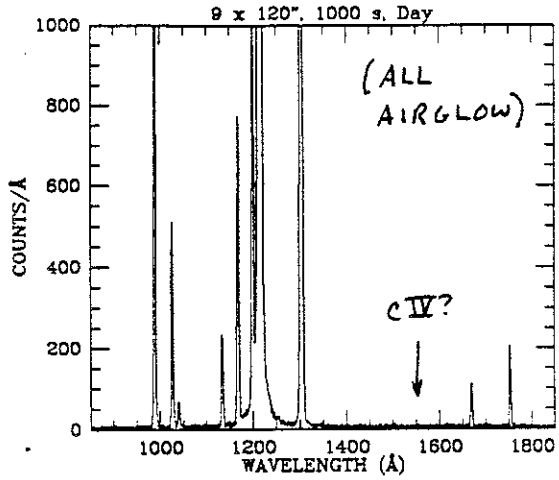
	SEQ	LOC OBS MAG LGR D	A FM OF	A FM OF	A FM OF	ALT1 ALT2
3	H 74	gde sim 14 14 3.7 5	2 1 ---	- - ---	- - ---	LCDATA
4	W 245	nlc ngd 15 12 1.0	6 4 ---	-- - ---	-- - ---	NOLOC
5	P U 212	DT - T F 31 a2 31 a4 31 a5 31 b5 - -				AST4SC

6	H HOP	ITEM 90_5_1 (loc=obs ap)	16		HUT ITEM 5
7	I	CMD WRI 3900	17		All BEGIN
8	I	_F007F0010FA0 (4s upd)	18	JOB	Observe
9	I IMC	Chk AST WAC incr once/4s	19	JAC	All PREVIEW
10	JAC	ITEM 16_0	20		All QUIT
11		Config H W U	21		----------
12		----------	22	JAC	ITEM 16_1
13	JAC	All SETUP	23	I	CMD ISS 3908 (1s upd)
14	W	Chk Stat -LOC -PAU RDY	24	H HOP	ITEM 90_5_0 (restore)
15		IMC BEGIN			

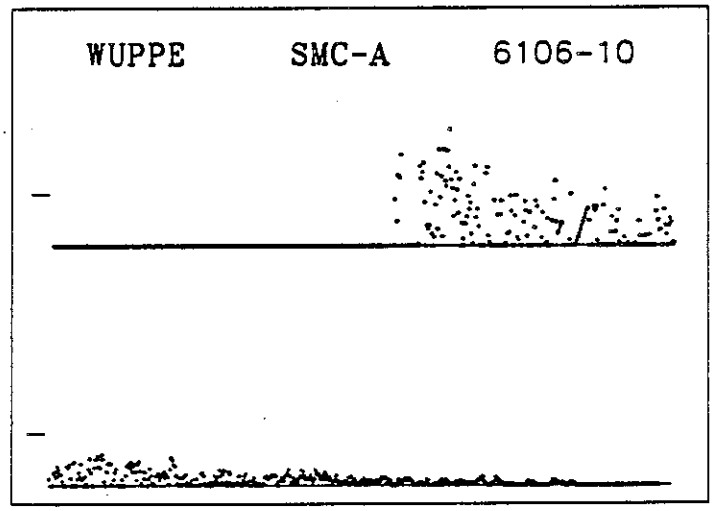
SNR

2 (low priority)

OBJECT: 6106 SMC-A
KEYWORDS: Faint SMC SN Remnant
COMMENTS:
The spectrum shown is that of airglow only. If anything else is seen, especially C IV 1550 or C III 977, it would be very interesting.



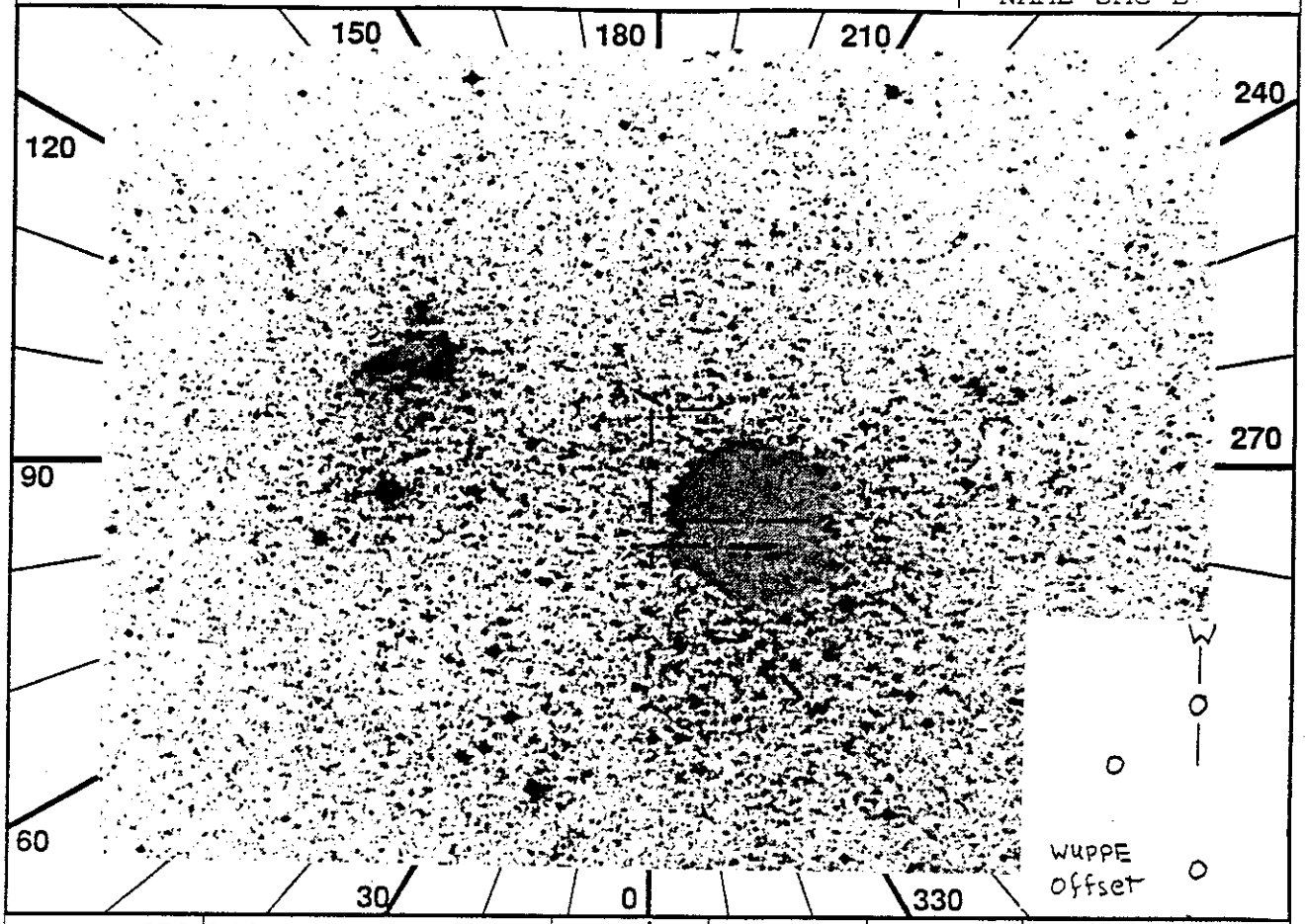
ID: 6106-10
Names: SMC-A SMCSNR
Type:
% Pol:
Pol Var:
Pos Ang:
Mechanism: synchrotron; resonance scattering
Comments: Low continuum expected; lines could be polarized.
IUE data used for simulated spectrum is that of 1E0102SNR.



UIT
Observation Description

1 RA 15.6138 DEC -72.3019 ROLL 60.44 | ID 6112-10

2 TIME 187 MANOPS | NAME SMC-B

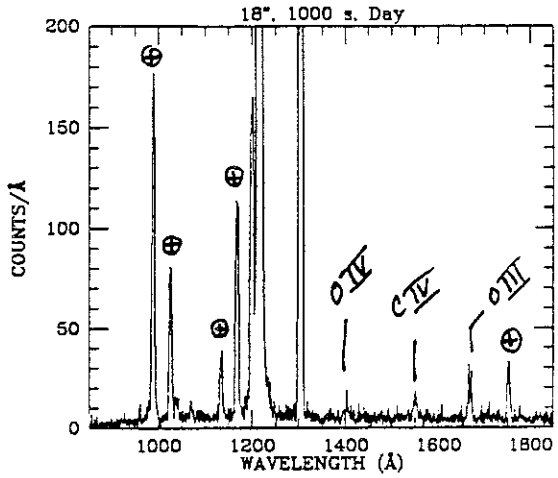


	SEQ	LOC OBS MAG LGR D	A FM OF	A FM OF	A FM OF	ALT1 ALT2
3	H 244	gde sim 15 14 3.2 5	7 4 ---	- - ---	- - ---	LCDATA
4	W 224	fld aut 12 9 3.7	2 2 314	-- - ---	-- - ---	FLDLOC OFFTGT
5	S U 13	DT - T F 31 a4	- - - -	- - - -		AST4SC

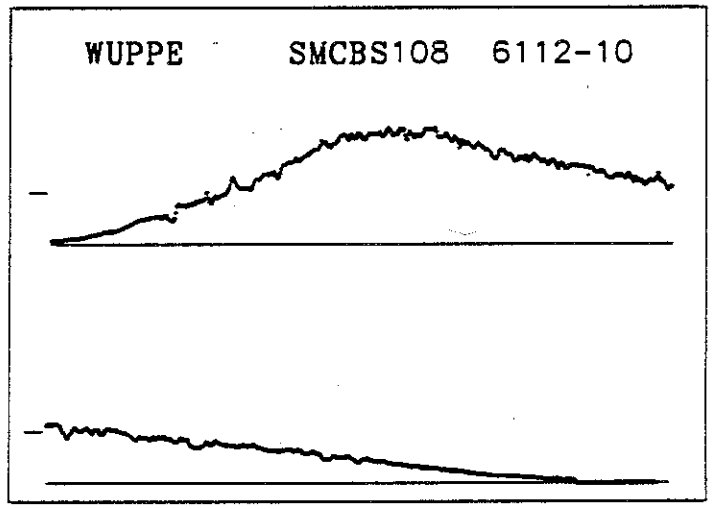
```
 6 H HOP ITEM 90_5_1 (loc=obs ap)      19 W     * WUP PFK cur to target
 7 I     CMD WRI_3900                  20 W     * WUP ITEM 6  (Cntr)
 8 I       _F007F0010FA0  (4s upd)     21 W     WUP ITEM 4  (Cur off)
 9 I IMC Chk AST WAC incr once/4s      22 W     WUP ITEM 11_Z  (Zoom)
10   JAC ITEM 16_0                     23 W     Chk WUP Stat -LOC
11       Config H W U                  24       All BEGIN
12       ----------------------        25   JOB Observe
13   JAC All SETUP                     26   JAC All PREVIEW
14 W     Chk Stat  -LOC CUR RDY        27       All QUIT
15       IMC BEGIN                     28       ----------------------
16       HUT ITEM 5                    29   JAC ITEM 16_1
17 W     WUP tgt is offset star        30 I     CMD ISS_3908  (1s upd)
18 W JAC *IF WUP acq incorrect         31 H HOP ITEM 90_5_0 (restore)
```

2

OBJECT: 6112 SMC-B
KEYWORDS: SMC O-rich SN Remnant
COMMENTS:
Emission line object, dominated by dayglow, but faint lines from SNR may be detectable at C IV 1550 and O IV 1400. Any O VI 1035? Object name is 1E0102-7219.

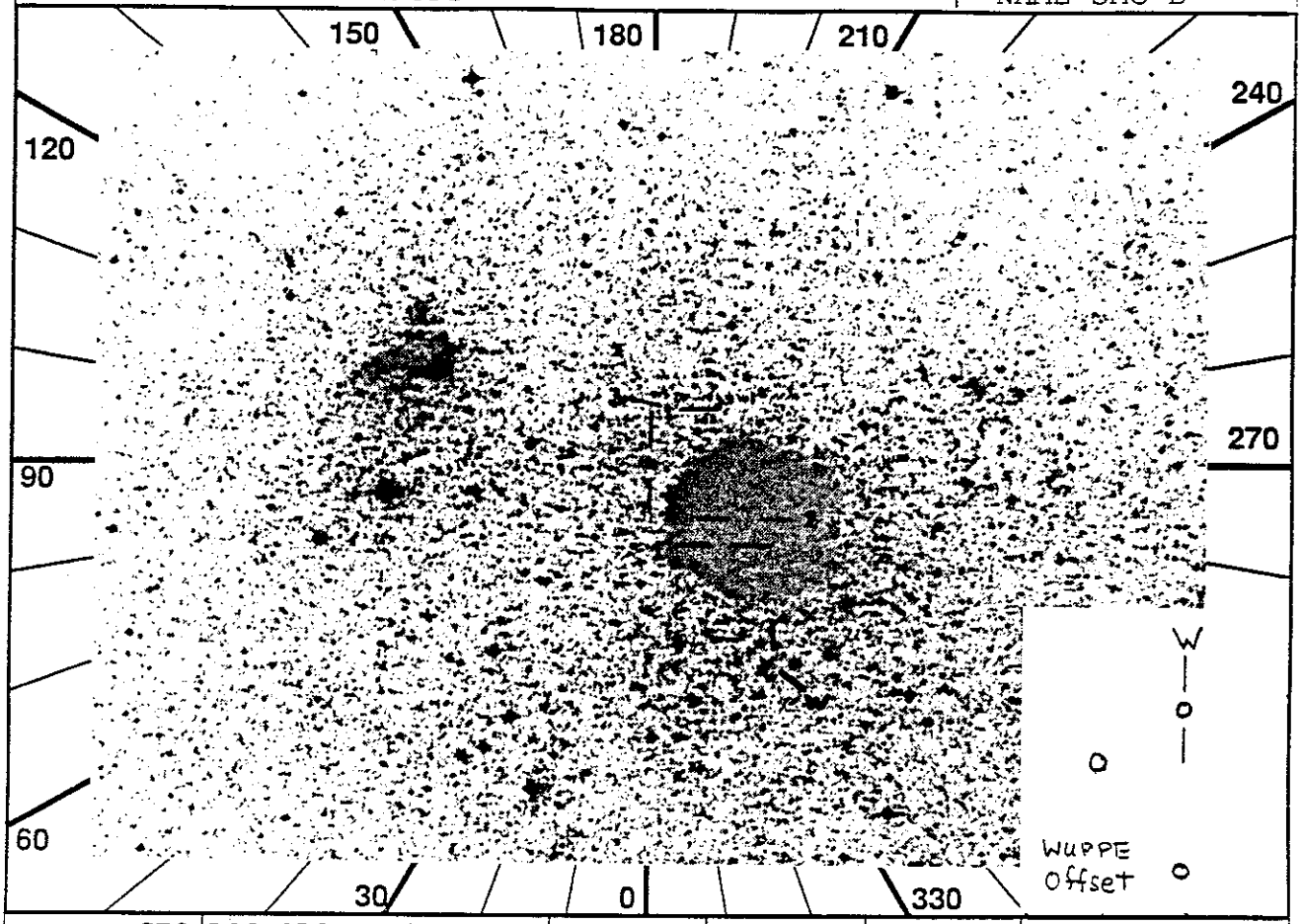


ID: 6112-10
Names: SMC-B SK108
Type:
% Pol: 0.4
Pol Var: 0.1
Pos Ang: 102
Mechanism:
Comments: WUPPE is offsetting to AB6/SK108; Sp WN3+O7Ia; <V>=12.4; Phase locked variations with binary phase; Period=6.5d



UIT
Observation Description

1 RA 15.6138 DEC -72.3019 ROLL 60.44	ID 6112-11
2 TIME 857 MANOPS	NAME SMC-B

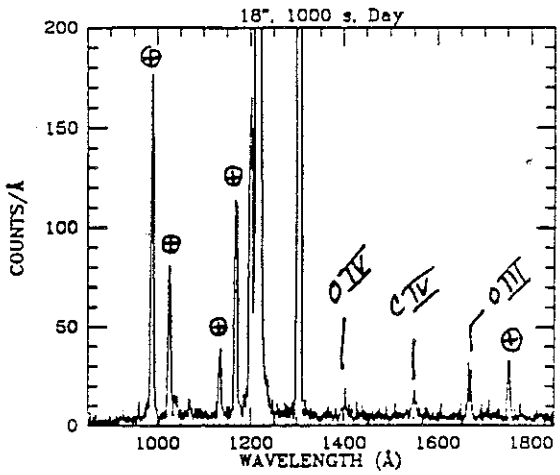


	SEQ	LOC OBS MAG LGR D	A FM OF	A FM OF	A FM OF	ALT1 ALT2
3	H 344	gde sim 15 14 3.2 5	7 4 ---	- - ---	- - ---	LCDATA
4	W 224	fld aut 12 9 3.7	2 2 314	-- - ---	-- - ---	FLDLOC OFFTGT
5	S U 213	DT -	T F 31 a2	31 a5	31 b5 - - - -	AST4SC

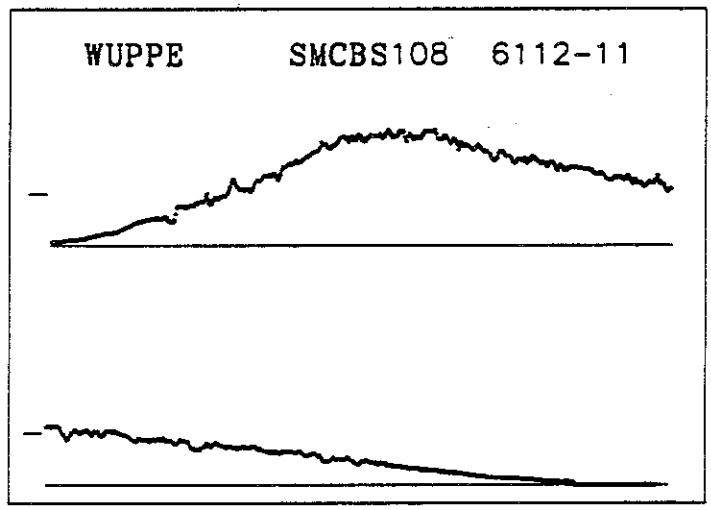
```
 6 H HOP ITEM 90_5_1 (loc=obs ap)
 7 I     CMD WRI_3900
 8 I       F007F0010FA0  (4s upd)
 9 I IMC Chk AST WAC incr once/4s
10   JAC ITEM 16_0
11       Config H W U
12       ------------------------
13   JAC All SETUP
14 W     Chk Stat  -LOC CUR RDY
15       IMC BEGIN
16       HUT ITEM 5
17 W     WUP tgt is offset star
18 W JAC *IF WUP acq incorrect
19 W     * WUP PFK cur to target
20 W     * WUP ITEM 6  (Cntr)
21 W     WUP ITEM 4  (Cur off)
22 W     WUP ITEM 11_Z  (Zoom)
23 W     Chk WUP Stat -LOC
24       All BEGIN
25   JOB Observe
26   JAC All PREVIEW
27       All QUIT
28       ------------------------
29   JAC ITEM 16_1
30 I     CMD ISS_3908  (1s upd)
31 H HOP ITEM 90_5_0 (restore)
```

2

OBJECT: 6112 SMC-B
KEYWORDS: SMC O-rich SN Remnant
COMMENTS:
Emission line object, dominated by dayglow, but faint lines from SNR may be detectable at C IV 1550 and O IV 1400. Any O VI 1035? Object name is 1E0102-7219.



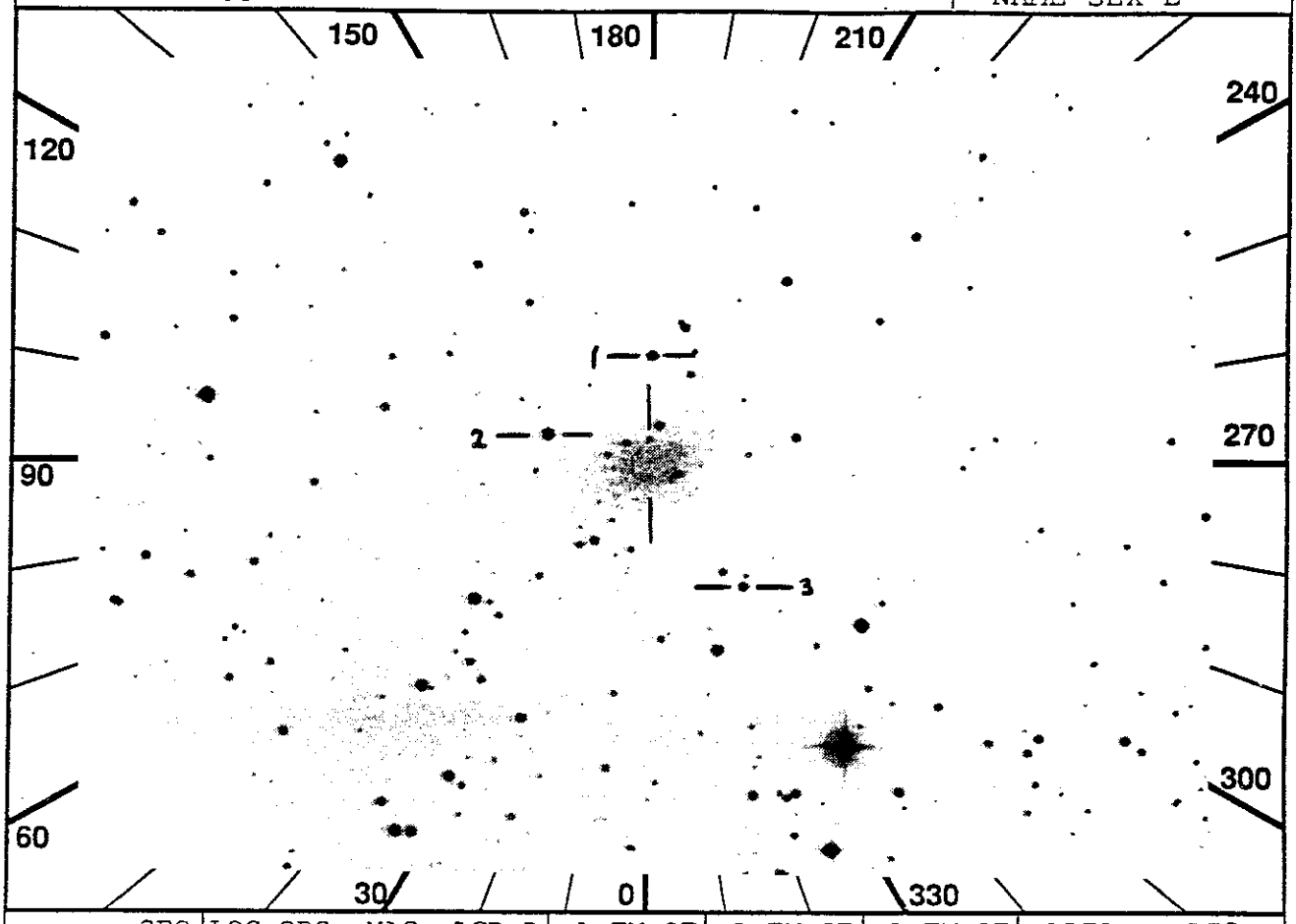
ID: 6112-11
Names: SMC-B SK108
Type:
% Pol: 0.4
Pol Var: 0.1
Pos Ang: 102
Mechanism:
Comments: WUPPE is offsetting to AB6/SK108; Sp WN3+O7Ia; <V>=12.4; Phase locked variations with binary phase; Period=6.5d



UIT
Observation Description

1 RA 149.3500 DEC 5.5667 ROLL 255.00 | ID 6133-10

2 TIME 1765 | NAME SEX-B

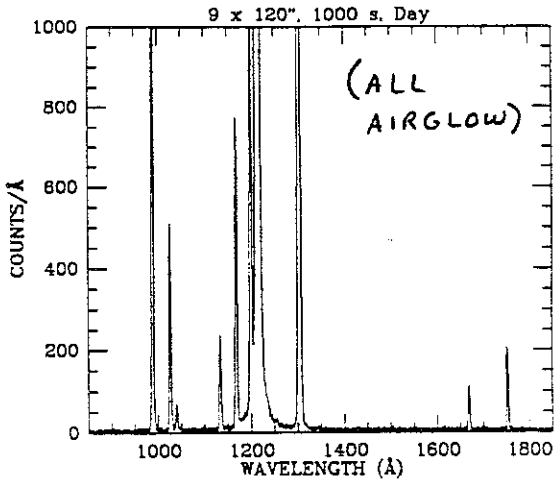


	SEQ	LOC OBS MAG LGR D	A FM OF	A FM OF	A FM OF	ALT1 ALT2
3	H 164	gde sim 15 15 3.6 5	1 4 ---	- - ---	- - ---	SAA 3M
4	W 8	nlc ngd 15 15 1.0	7 4 300	-- - ---	-- - ---	NOLOC
5	P U 253	DT -	T F 50 a2	50 a5	50 b5	31 b1 31 a1

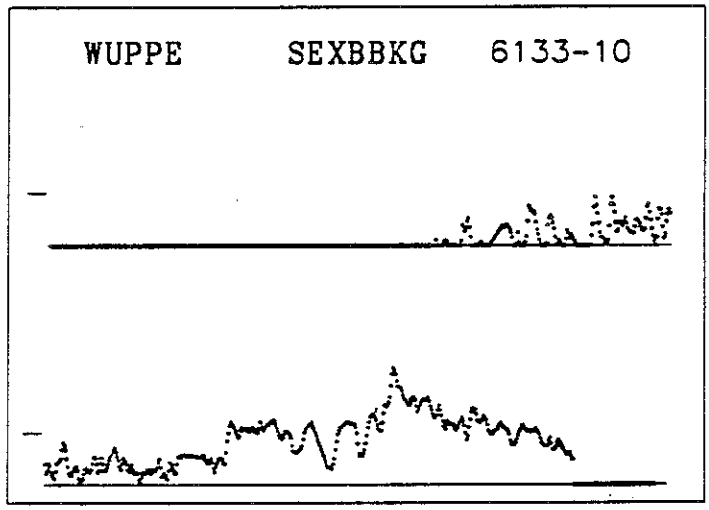
```
 6 H -   VIP ON until SAA exit          16 H JAC ITEM 16_0
 7   JAC Config H W U                   17 H     HUT SETUP
 8       ------------------------       18 H     Chk HUT Stat -LOC
 9 H -   Note: Acquisition in SAA       19       All BEGIN
10   JAC All SETUP                      20   JOB Observe
11 J     Chk  Stat -    -PAU RDY        21   JAC All PREVIEW
12 H TV  Verify HUT acq on TV           22       All QUIT
13   JAC IMC BEGIN                      23       ------------------------
14       HUT ITEM 5                     24   JAC ITEM 16_1
15 H -   After SAA exit
```

3 (airglow)

OBJECT: 6133 SEX-B
KEYWORDS: Dwarf Irr. Galaxy
COMMENTS:
The spectrum shown is that of airglow only. If anything else is seen, it will be surprising.

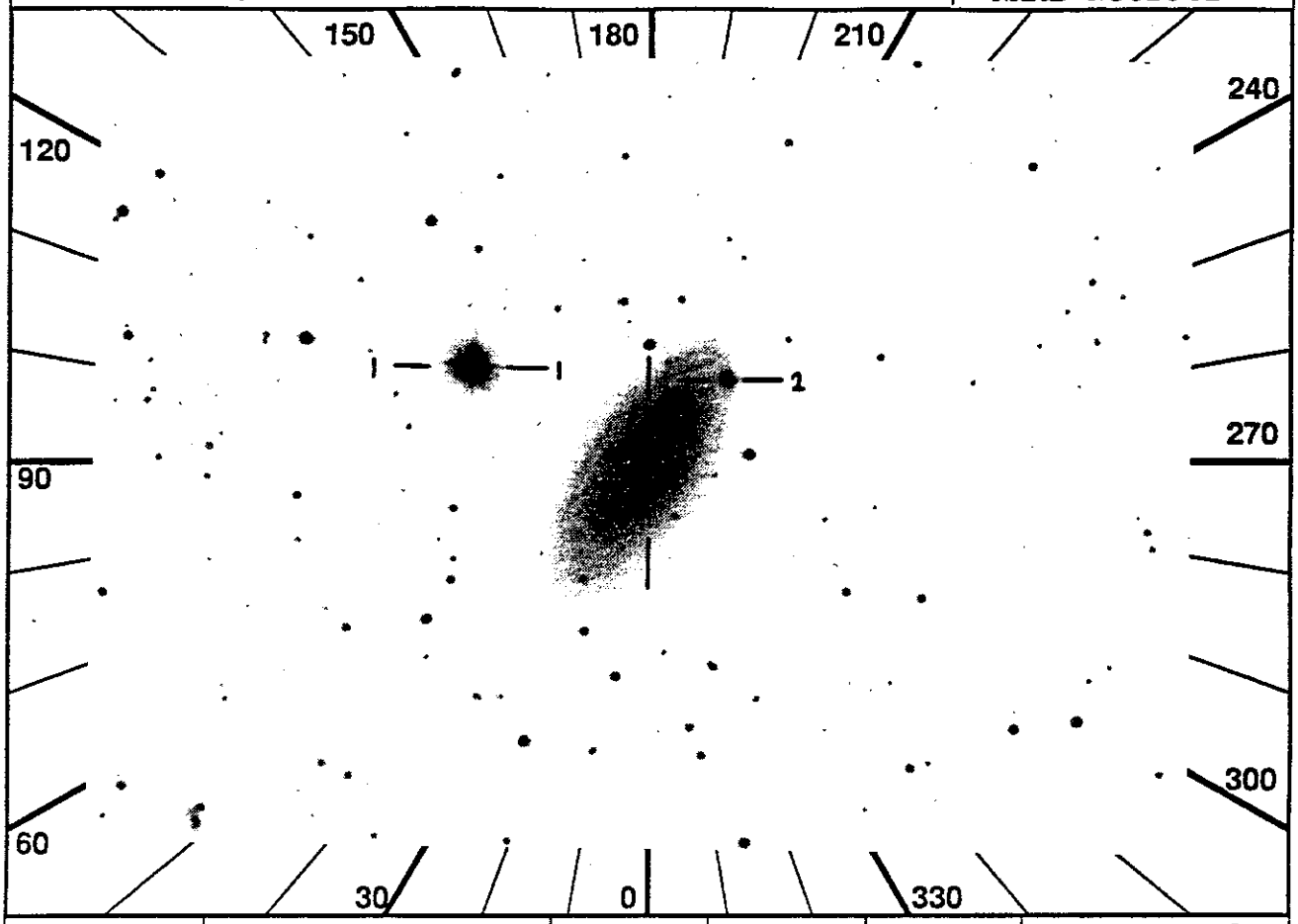


ID: 6133-10
Names: SEX-B
Type:
% Pol:
Pol Var:
Pos Ang:
Mechanism: none expected
Comments: BKG observation only, offset 300" in dec.



UIT
Observation Description

1 RA 139.6454 DEC 51.1886 ROLL 286.10	ID 6202-11
2 TIME 773	NAME NGC2841



	SEQ	LOC OBS MAG LGR D	A FM OF	A FM OF	A FM OF	ALT1 ALT2
3	H 94	gde sim 15 11 3.6 5	1 4 ---	- - ---	- - ---	SAA AC LCDATA
4	W 228	ncn ngd 15 15 1.8	7 4 ---	-- - ---	-- - ---	NUCLOC DFLD
5	P U 213	DT - T F 31 a2 31 a5 31 b5		- - - -		

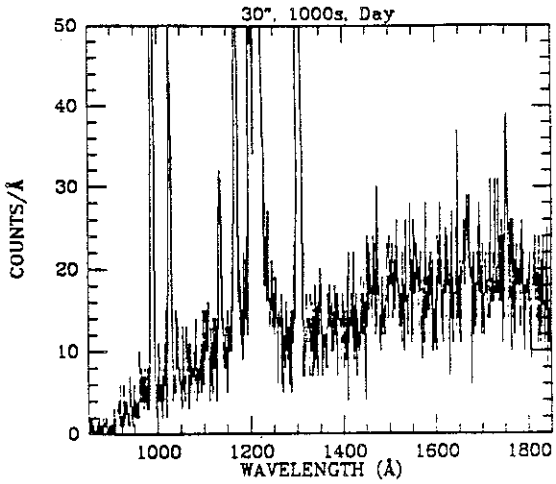
```
 6 H HOP  ITEM 90_5_1 (loc=obs ap)
 7 H -    VIP ON until SAA exit
 8   JAC  Config H W U
 9        ------------------------
10 H -    Note: Acquisition in SAA
11   JAC  All SETUP
12 J      Chk  Stat -    -CUR RDY
13 H TV   Verify HUT acq on TV
14   JAC  IMC BEGIN
15        HUT ITEM 5
16 W      WUP tgt is gal nucleus
17 W      *IF WUP target visible
18 W      * WUP PFK cur to target
19 W      * WUP ITEM 6  (Cntr)
20 W      * WUP ITEM 4  (Cur off)
21 W      *ELSE
22 W      * Config without WUP
23 H -    After SAA exit
```

3 (won't see in acquisition)

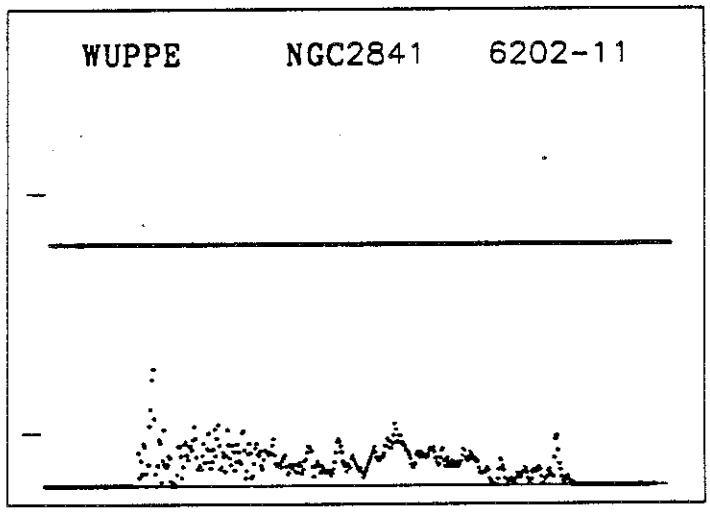
```
24 H JAC  ITEM 16_0
25 H      HUT SETUP
26 H      Chk HUT Stat -LOC
27 W      WUP ITEM 11_DF
28 W      WUP wait CAM MODE ZOOM
29        All BEGIN
30 W      *IF WUP Deconfig
31 W      *  WUP ITEM 11_F_+1
32 W      *  Cur/ITEM 6 In_fld, zm
33 W      * WUP ITEM 4  (Cur off)
34 W      * WUP ITEM 7  (Begin)
35 W      * Config with WUP
36   JOB  Observe
37   JAC  All PREVIEW
38        All QUIT
39        ------------------------
40   JAC  ITEM 16_1
41 H HOP  ITEM 90_5_0 (restore)
```

OBJECT: 6202 NGC2841
KEYWORDS: Sb Galaxy Nucleus
COMMENTS:
Pointing at nucleus.
Galaxy probably won't be visible on TV

Simulation is a very crude guess



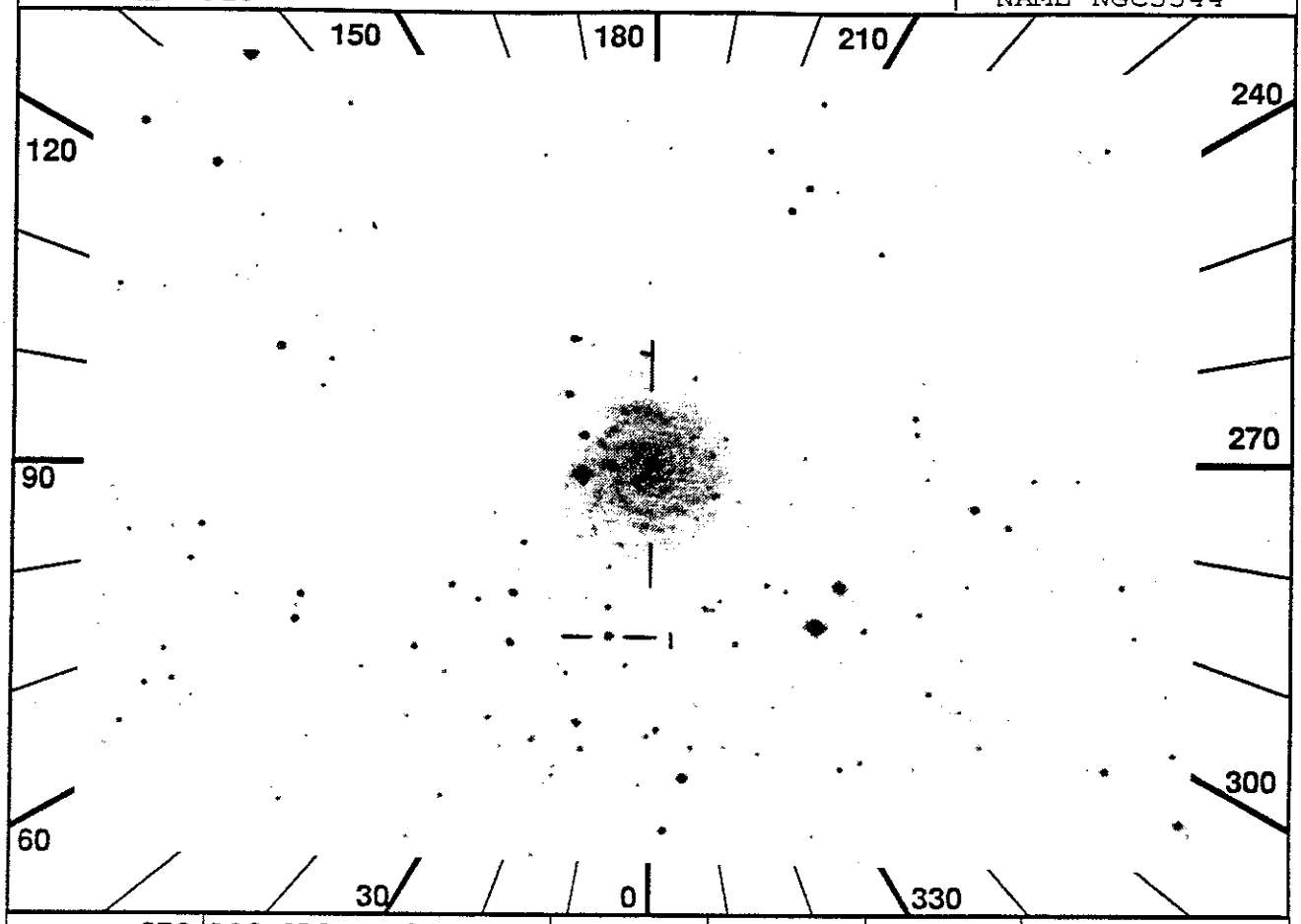
ID: 6202-11
Names: NGC2841
Type: Spiral galaxy
% Pol:
Pol Var:
Pos Ang:
Mechanism: none expected
Comments: nuclear spectrum, large aperture, low res Lyot.



UIT
Observation Description

1 RA 160.1958 DEC 25.1850 ROLL 270.16 | ID 6208-10

2 TIME 919 | NAME NGC3344



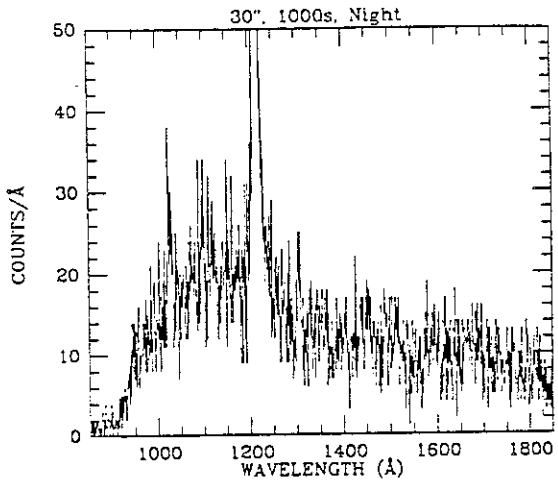
	SEQ	LOC OBS MAG LGR D	A FM OF	A FM OF	A FM OF	ALT1 ALT2
3	H 226	gde sim 18 15 ~~2.8~~ 3.6 5	1 4 ---	- - ---	- - ---	MANUAL
4	W 229	ncn ngd 15 15 1.8	7 4 ---	-- - ---	-- - ---	NUCLOC DFLD
5	P U 185	DT - T F 47 b5 31 b1 31 a1		- - - -		AST4SC

```
 6 I      CMD WRI_3900
 7 I        F007F0010FA0  (4s upd)
 8 I IMC  Chk AST WAC incr once/4s
 9   JAC  ITEM 16_0
10        Config H W U
11        ------------------------
12   JAC  All SETUP
13 H      *IF HUT src visible
14 H      * HUT ITEM 4
15 H      * HUT PFK cur to src
16 W      Chk Stat  -LOC -CUR RDY
17        IMC BEGIN
18        HUT ITEM 5
19 W      WUP tgt is gal nucleus
20 W      *IF WUP target visible
21 W      * WUP PFK cur to target
22 W      * WUP ITEM 6  (Cntr)
23 W      * WUP ITEM 4  (Cur off)
24 W      *ELSE
25 W      * Config without WUP
26 W      WUP ITEM 11_DF
27 W      WUP wait CAM MODE ZOOM
28        All BEGIN
29 W      *IF WUP Deconfig
30 W      *  WUP ITEM 11_F_+1
31 W      *  Cur/ITEM 6 in_fld, zm
32 W      * WUP ITEM 4  (Cur off)
33 W      * WUP ITEM 7  (Begin)
34 W      * Config with WUP
35   JOB  Observe
36   JAC  All PREVIEW
37        All QUIT
38        ------------------------
39   JAC  ITEM 16_1
40 I      CMD ISS_3908  (1s upd)
```

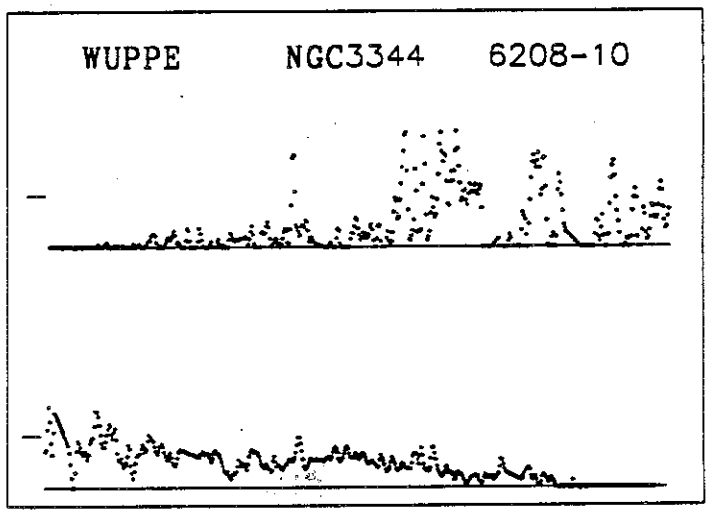
Nucleus
3

OBJECT: 6208 NGC3344
KEYWORDS: Spiral Galaxy nucleus
COMMENTS:
Sbc(rs)I.2 galaxy
Pointing at the nucleus
Galaxy probably won't be visible in TV

Simulation is a very crude guess



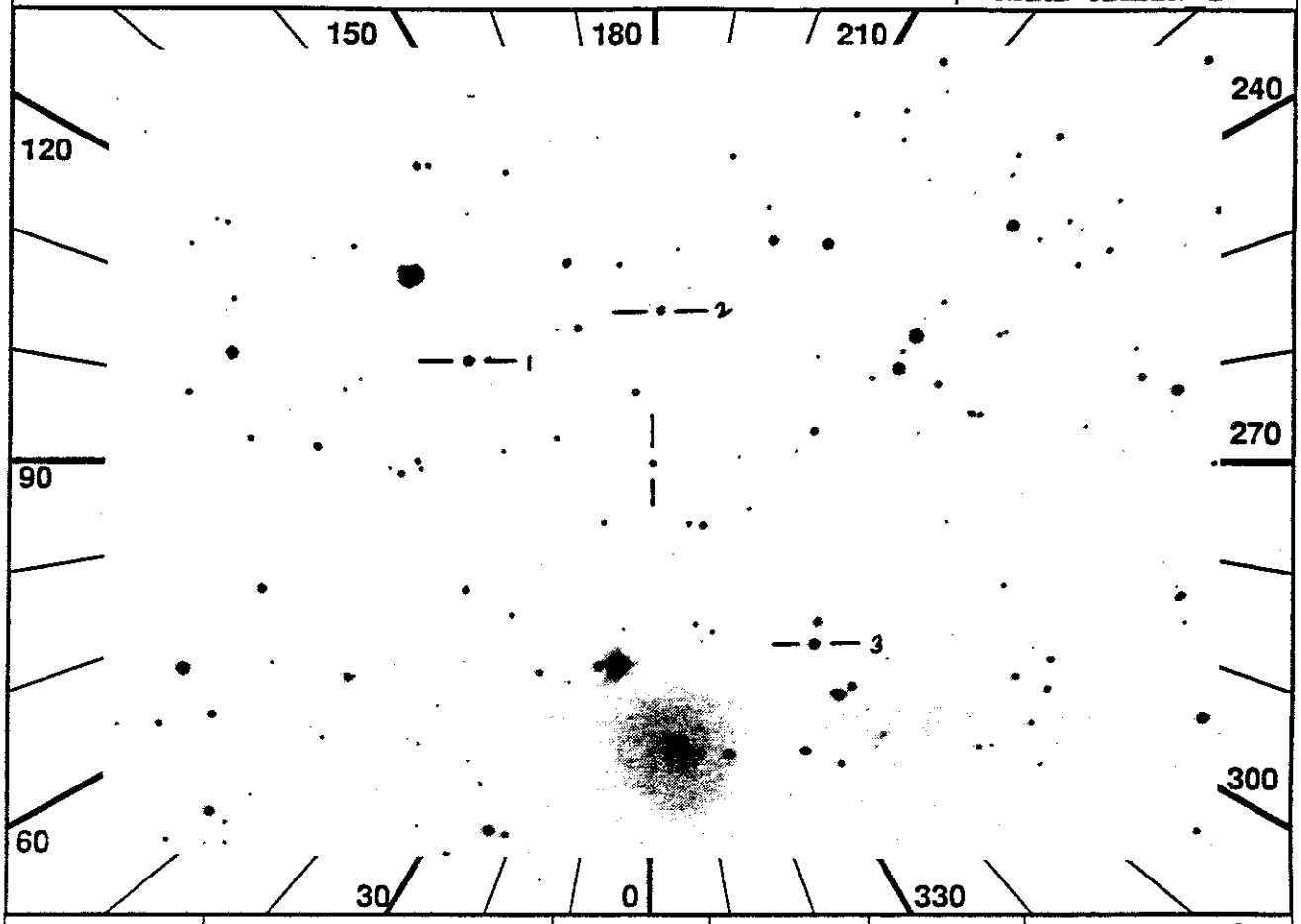
ID: 6208-10
Names: NGC3344
Type: Spiral galaxy
% Pol:
Pol Var:
Pos Ang:
Mechanism: none expected
Comments: nuclear spectrum, large aperture, low res Lyot.
IUE data used for simulated spectrum is that of M101A.



UIT
Observation Description

1 RA 188.6177 DEC 14.6048 ROLL 183.68 | ID 6210-10

2 TIME 1791 | NAME MALIN 1

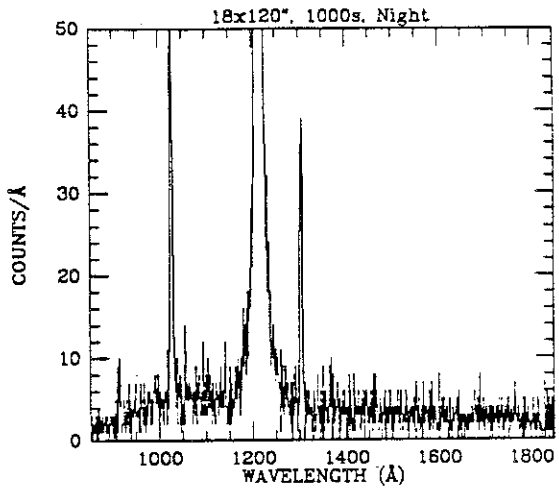


	SEQ	LOC OBS MAG LGR D	A FM OF	A FM OF	A FM OF	ALT1 ALT2
3	H 220	gde sim 19 15 3.2 5	6 1 ---	- - ---	- - ---	LCDATA
4	W 8	nlc ngd 15 15 1.0	7 4 300	-- - ---	-- - ---	NOLOC
5	P U 225	DT - T F 7 b5 31 b1 31 a1		- - - -		AST4SC

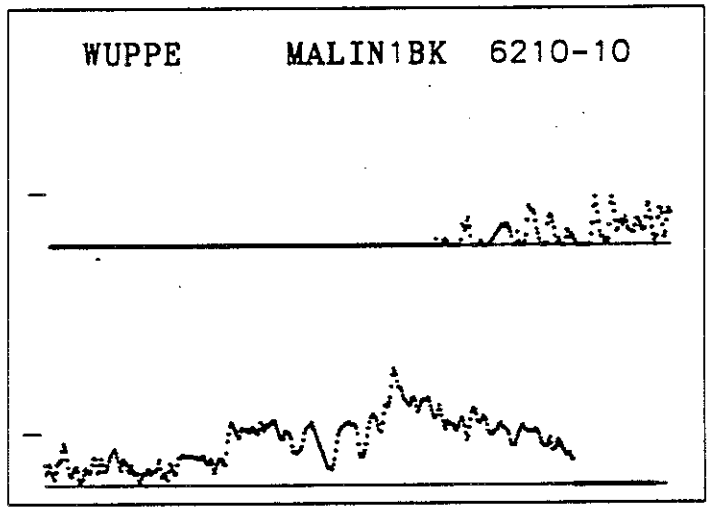
6	H	HOP	ITEM 90_5_1 (loc=obs ap)	16		HUT ITEM 5
7	I		CMD WRI 3900	17		All BEGIN
8	I		F007F0010FA0 (4s upd)	18	JOB	Observe
9	I	IMC	Chk AST WAC incr once/4s	19	JAC	All PREVIEW
10		JAC	ITEM 16_0	20		All QUIT
11			Config H W U	21		----------
12			----------	22	JAC	ITEM 16_1
13		JAC	All SETUP	23	I	CMD ISS_3908 (1s upd)
14	W		Chk Stat -LOC -PAU RDY	24	H HOP	ITEM 90_5_0 (restore)
15			IMC BEGIN			

airglow
but perfect subtraction for M60
2

OBJECT: 6210 Malin-1
KEYWORDS: Low Surface Brightness Galaxy
COMMENTS:
Galaxy will not be visible in TV
Pointing at nucleus with big slit
Mostly to get a good nightglow spectrum
in the direction of Virgo for subtraction
from the elliptical galaxy spectra
Simulation assumes a V=20.0 O star
(Optimistic, flux-wise)



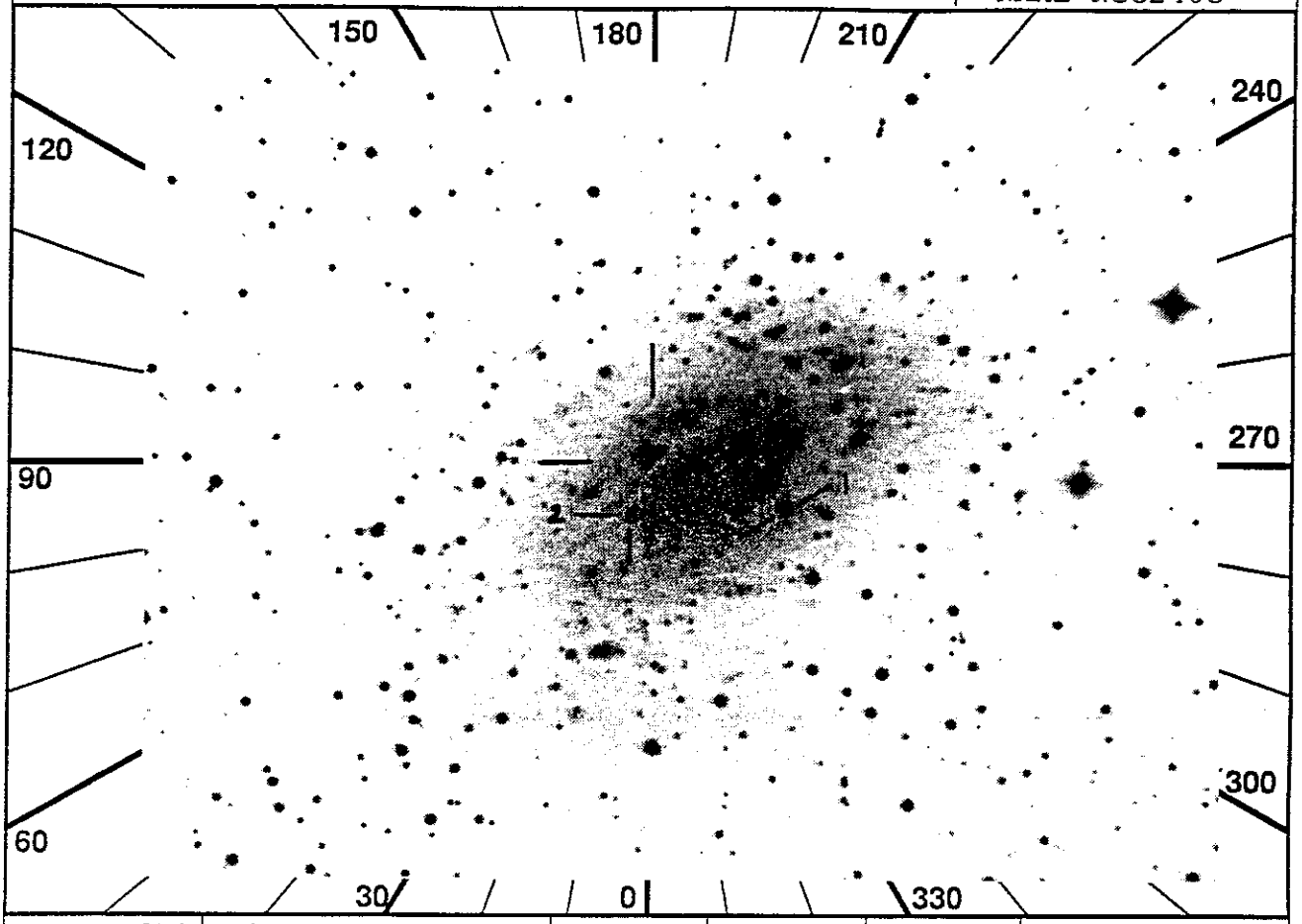
ID: 6210-10
Names: MALIN_1
Type:
% Pol:
Pol Var:
Pos Ang:
Mechanism: none expected
Comments: BKG observation
only, offset 300" in dec.



UIT
Observation Description

1 RA 113.0739 DEC 65.7224 ROLL 291.22 | ID 6215-10

2 TIME 1244 | NAME NGC2403



	SEQ	LOC OBS MAG LGR D	A FM OF	A FM OF	A FM OF	ALT1 ALT2
3	H 193	gde sim 16 12 3.6 5	1 4 ---	- - ---	- - ---	SAA AC LCDATA
4	W 231	ncn ngd 12 15 1.3	6 4 28	-- - ---	-- - ---	HIILOC DFLD
5	P U 213	DT -	T F 31 a2	31 a5	31 b5	- - - -

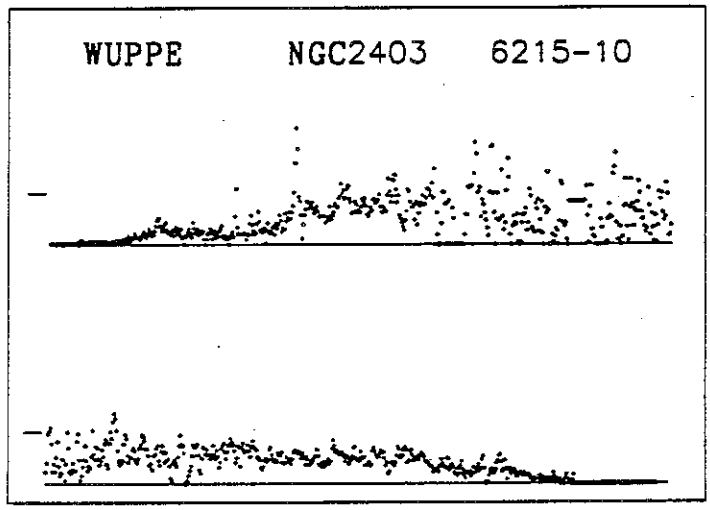
```
 6 H HOP ITEM 90_5_1 (loc=obs ap)      24 H JAC ITEM 16_0
 7 H -   VIP ON until SAA exit         25 H     HUT SETUP
 8   JAC Config H W U                  26 H     Chk HUT Stat -LOC
 9       ------------------------      27 W     WUP ITEM 11_DF
10 H -   Note: Acquisition in SAA      28 W     WUP wait CAM MODE ZOOM
11   JAC All SETUP                     29       All BEGIN
12 J     Chk  Stat -    -CUR RDY       30 W     *IF WUP Deconfig
13 H TV  Verify HUT acq on TV          31 W     *  WUP ITEM 11_F_+1
14   JAC IMC BEGIN                     32 W     *  Cur/ITEM 6 in fld, zm
15       HUT ITEM 5                    33 W     * WUP ITEM 4  (Cur off)
16 W     WUP tgt= offset HII rgn       34 W     * WUP ITEM 7  (Begin)
17 W     *IF WUP target visible        35 W     * Config with WUP
18 W     * WUP PFK cur to target       36   JOB Observe
19 W     * WUP ITEM 6  (Cntr)          37   JAC All PREVIEW
20 W     * WUP ITEM 4  (Cur off)       38       All QUIT
21 W     *ELSE                         39       ------------------------
22 W     * Config without WUP          40   JAC ITEM 16_1
23 H -   After SAA exit                41 H HOP ITEM 90_5_0 (restore)
```

HII region (not visible)

3

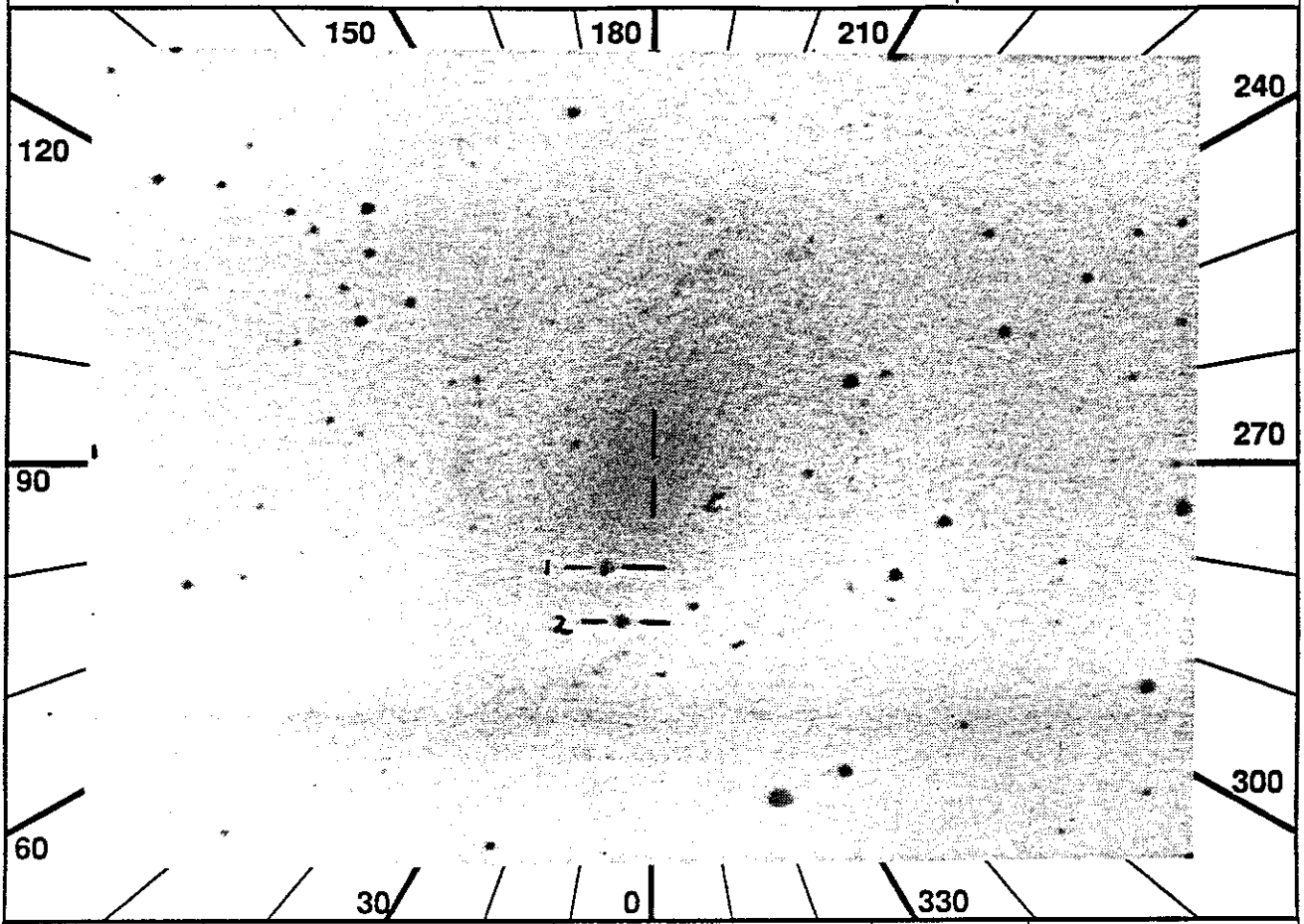
OBJECT: 6215 NGC2403
KEYWORDS: Spiral Galaxy HII region
COMMENTS:
Pointing at the brightest HII region
2.5 arcmin ESE of nucleus
30" aperture

ID: 6215-10
Names: NGC2403
Type: Spiral galaxy
% Pol:
Pol Var:
Pos Ang:
Mechanism: dust scattering?
Comments: Observing HUT HII region.



UIT
Observation Description

1 RA 147.8651 DEC 69.3036 ROLL 252.69		ID 6216-11
2 TIME 960		NAME M81



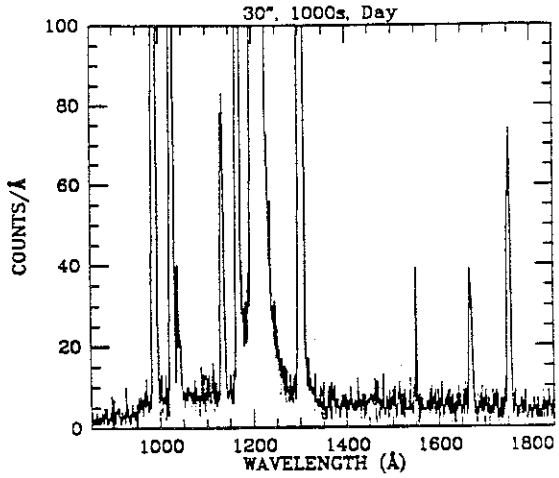
	SEQ	LOC OBS MAG LGR D	A FM OF	A FM OF	A FM OF	ALT1 ALT2
3	H 143	~~src~~ gde sim 14 13 3.6 5	1 4 ---	- - ---	- - ---	~~LCDATA~~ MANUAC
4	W 232	ncn ngd 15 15 1.0	7 4 300	7 4 ---	-- - ---	NUCLOC BKG1
5	S U 211	DT - T F 248 b5 31 b1 31 a1		- - - -		AST4SC

6	H	HOP	ITEM 90_5_1 (loc=obs ap)	23	W	* Config without WUP
7	I		CMD WRI_3900	24		All BEGIN
8	I		_F007F0010FA0 (4s upd)	25	W	*IF WUP Deconfig
9	I	IMC	Chk AST WAC incr once/4s	26	W	* WUP ITEM 11_F_+1
10		JAC	ITEM 16_0	27	W	* Cur/ITEM 6 in fld, zm
11			Config H W U	28	W	* WUP ITEM 4 (Cur off)
12			----------	29	W	* WUP ITEM 7 (Begin)
13		JAC	All SETUP	30	W	* Config with WUP
14	W		Chk Stat -LOC -CUR RDY	31	W	NOTE: WUP 1st seq = BKG
15			IMC BEGIN	32		JOB Observe
16			HUT ITEM 5	33		JAC All PREVIEW
17	W		WUP tgt is gal nucleus	34		All QUIT
18	W		*IF WUP target visible	35		----------
19	W		* WUP PFK cur to target	36		JAC ITEM 16_1
20	W		* WUP ITEM 6 (Cntr)	37	I	CMD ISS_3908 (1s upd)
21	W		* WUP ITEM 4 (Cur off)	38	H	HOP ITEM 90_5_0 (restore)
22	W		*ELSE			

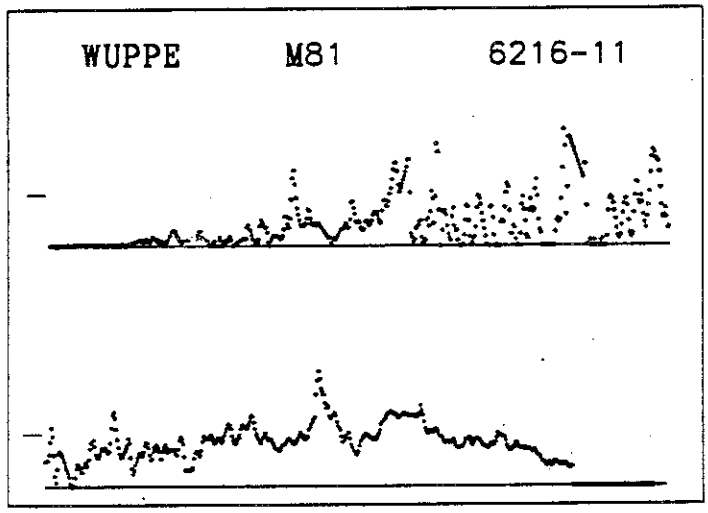
nucleus SRC + LCDATA incompatible fix how? gde + MANUAL, not LCDATA

2

OBJECT: 6216 M81 (NGC3031)
KEYWORDS: Spiral Galaxy nucleus
COMMENTS:
Slit should be centered on nucleus
IUE sees some emission lines:
CIV 1550Å and NIII]? 1750Å
in HUT range.
Look for NV, OVI, CIII in addition



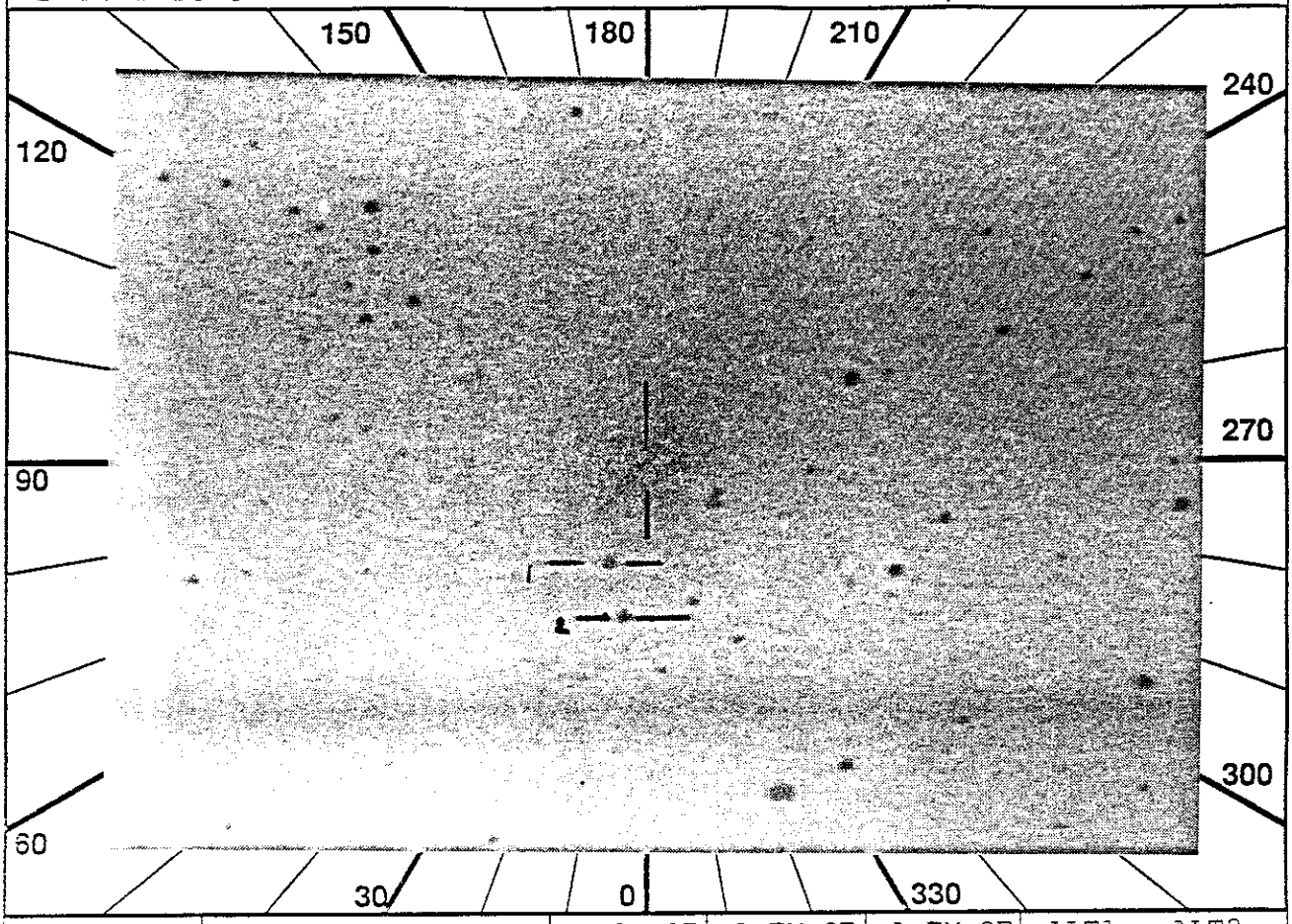
ID: 6216-11
Names: M81 NGC3031
Type: Spiral galaxy
% Pol:
Pol Var:
Pos Ang:
Mechanism: none expected
Comments: nuclear spectrum.
Background obs first,
offsetting 300" in dec.
Co-pointing with BBXRT.



UIT
Observation Description

1 RA 147.8651 DEC 69.3036 ROLL 252.69 | ID 6216-12

2 TIME 1379 | NAME M81



		SEQ	LOC OBS MAG LGR D	A FM OF	A FM OF	A FM OF	ALT1 ALT2
3		H 314	~~gde~~ ~~SEQ~~ sim 14 13 3.6 5	1 4 ---	- - ---	- - ---	~~LCDATA~~ MANUAL
4		W 232	ncn ngd 15 15 1.0	7 4 300	7 4 ---	-- - ---	NUCLOC BKG1
5	S	U 209	DT - T F 31 a2 31 a5	- -	- -	- -	AST4SC

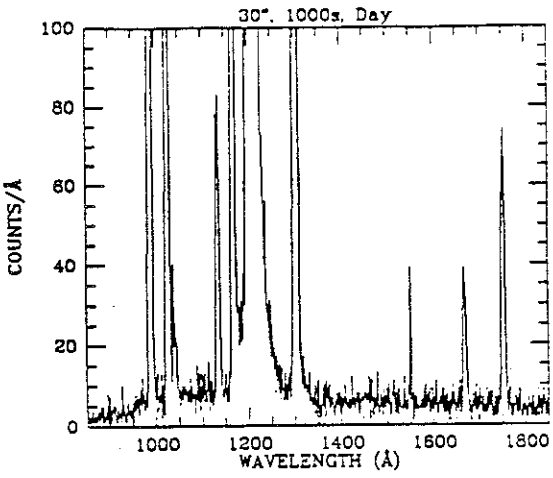
6	H	HOP	ITEM 90_5_1 (loc=obs ap)
7	I		CMD WRI_3900
8	I		F007F0010FA0 (4s upd)
9	I	IMC	Chk AST WAC incr once/4s
10		JAC	ITEM 16_0
11			Config H X U
12			----------
13		JAC	All SETUP
14	W		Chk Stat -LOC -CUR RDY
15			IMC BEGIN
16			HUT ITEM 5
17	W		WUP tgt is gal nucleus
18	W		*IF WUP target visible
19	W		* WUP PFK cur to target
20	W		* WUP ITEM 6 (Cntr)
21	W		* WUP ITEM 4 (Cur off)
22	W		*ELSE
23	W		* Config without WUP
24			All BEGIN
25	W		*IF WUP Deconfig
26	W		* WUP ITEM 11_F_+1
27	W		* Cur/ITEM 6 In fld, zm
28	W		* WUP ITEM 4 (Cur off)
29	W		* WUP ITEM 7 (Begin)
30	W		* Config with WUP
31	W		NOTE: WUP 1st seq = BKG
32		JOB	Observe
33		JAC	All PREVIEW
34			All QUIT
35			----------
36		JAC	ITEM 16_1
37	I		CMD ISS_3908 (1s upd)
38	H	HOP	ITEM 90_5_0 (restore)

nucleus

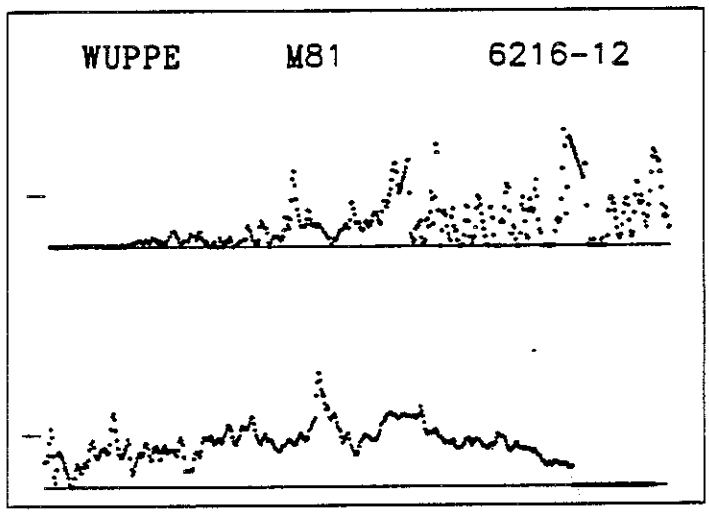
2

gde MANUAL, not LCDATA

OBJECT: 6216 M81 (NGC3031)
KEYWORDS: Spiral Galaxy nucleus
COMMENTS:
Slit should be centered on nucleus
IUE sees some emission lines:
CIV 1550Å and NIII]? 1750Å
in HUT range.
Look for NV, OVI, CIII in addition



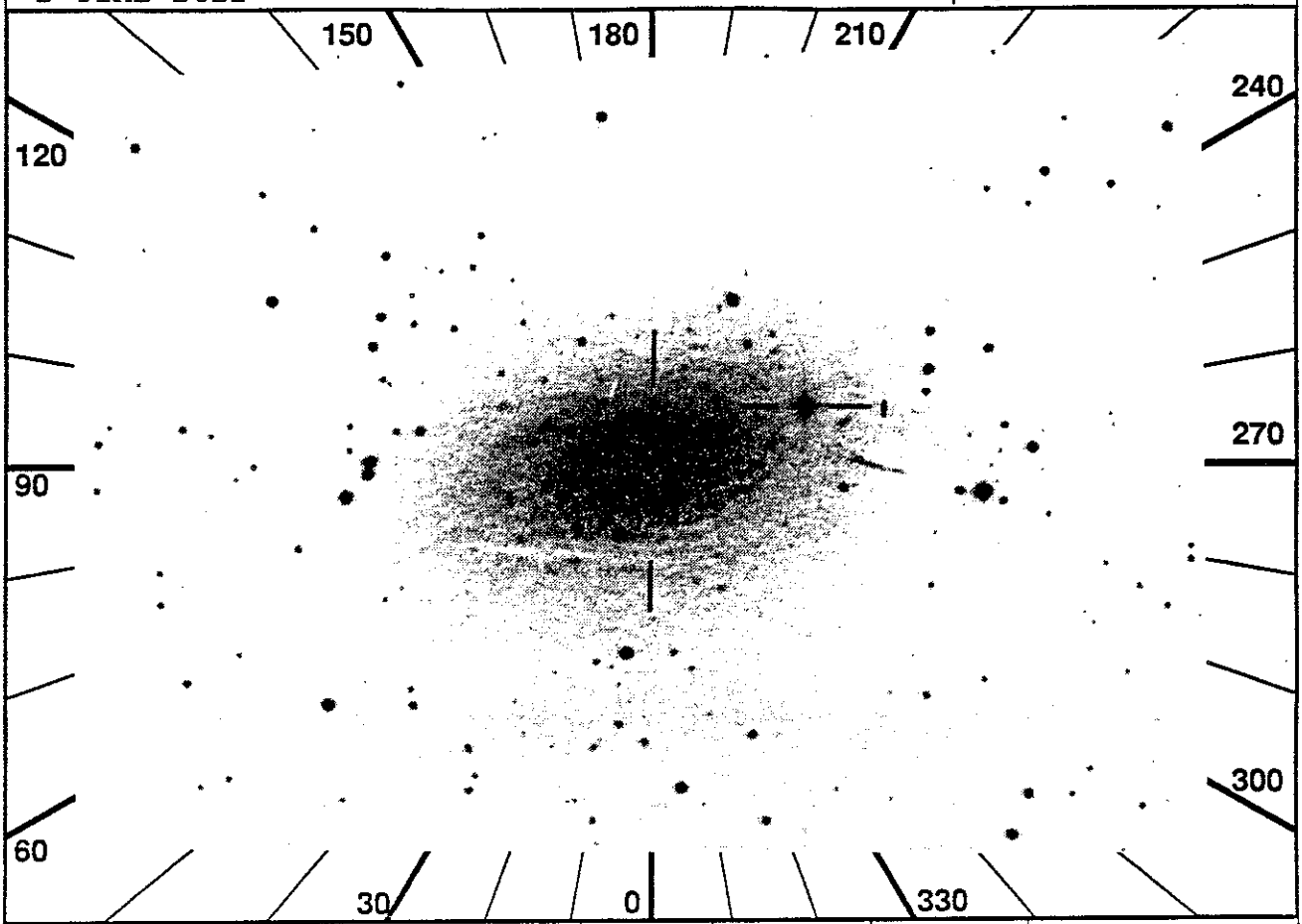
ID: 6216-12
Names: M81 NGC3031
Type: Spiral galaxy
% Pol:
Pol Var:
Pos Ang:
Mechanism: none expected
Comments: nuclear spectrum.
Background obs first,
offsetting 300" in dec.
Co-pointing with BBXRT.



UIT
Observation Description

1 RA 198.3954 DEC 42.2986 ROLL 142.83 | ID 6232-10

2 TIME 2622 | NAME M63



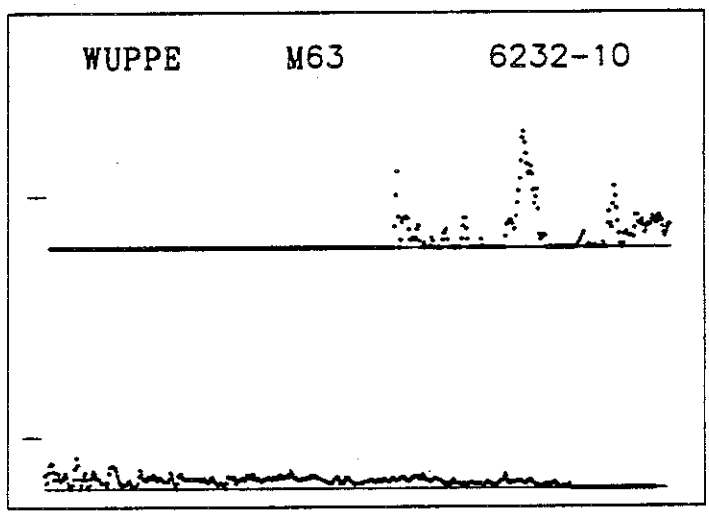
	SEQ	LOC OBS MAG LGR D	A FM OF	A FM OF	A FM OF	ALT1 ALT2
3	H 166	gde sim 15 10 3.6 5	1 4 ---	- - ---	- - ---	MANUAL
4	W 233	ncn ngd 15 15 1.8	7 4 ---	-- - ---	-- - ---	NUCLOC DFLD
5	P U 204	DT - T F 24 b5 31 b1 31 a1		- - - -		LTSTRT

```
 6    JAC ITEM 16_0
 7        Config H W U
 8        ------------------------
 9    JAC All SETUP
10 H      *IF HUT src visible
11 H      * HUT ITEM 4
12 H      * HUT PFK cur to src
13 W      Chk Stat  -LOC -CUR RDY
14        IMC BEGIN
15        HUT ITEM 5
16 W      WUP tgt is gal nucleus
17 W      *IF WUP target visible
18 W      * WUP PFK cur to target
19 W      * WUP ITEM 6  (Cntr)
20 W      * WUP ITEM 4  (Cur off)
21 W      *ELSE
22 W      * Config without WUP
23 W      WUP ITEM 11_DF
24 W      WUP wait CAM MODE ZOOM
25 U      Config without UIT
26        All BEGIN
27 W      *IF WUP Deconfig
28 W      *  WUP ITEM 11_F_+1
29 W      *  Cur/ITEM 6 in fld, zm
30 W      * WUP ITEM 4  (Cur off)
31 W      * WUP ITEM 7  (Begin)
32 W      * Config with WUP
33 U JOB  Wait for TIME AVAIL 2184
34 U      UIT BEGIN
35 U JAC  Config with UIT
36   JOB  Observe
37   JAC  All PREVIEW
38        All QUIT
39        ------------------------
40   JAC  ITEM 16_1
```

3 nuclear

OBJECT: 6232 M63
KEYWORDS: Spiral Galaxy nucleus
COMMENTS:
Sbc(rs)I–II galaxy
Pointing at the nucleus
30" aperture

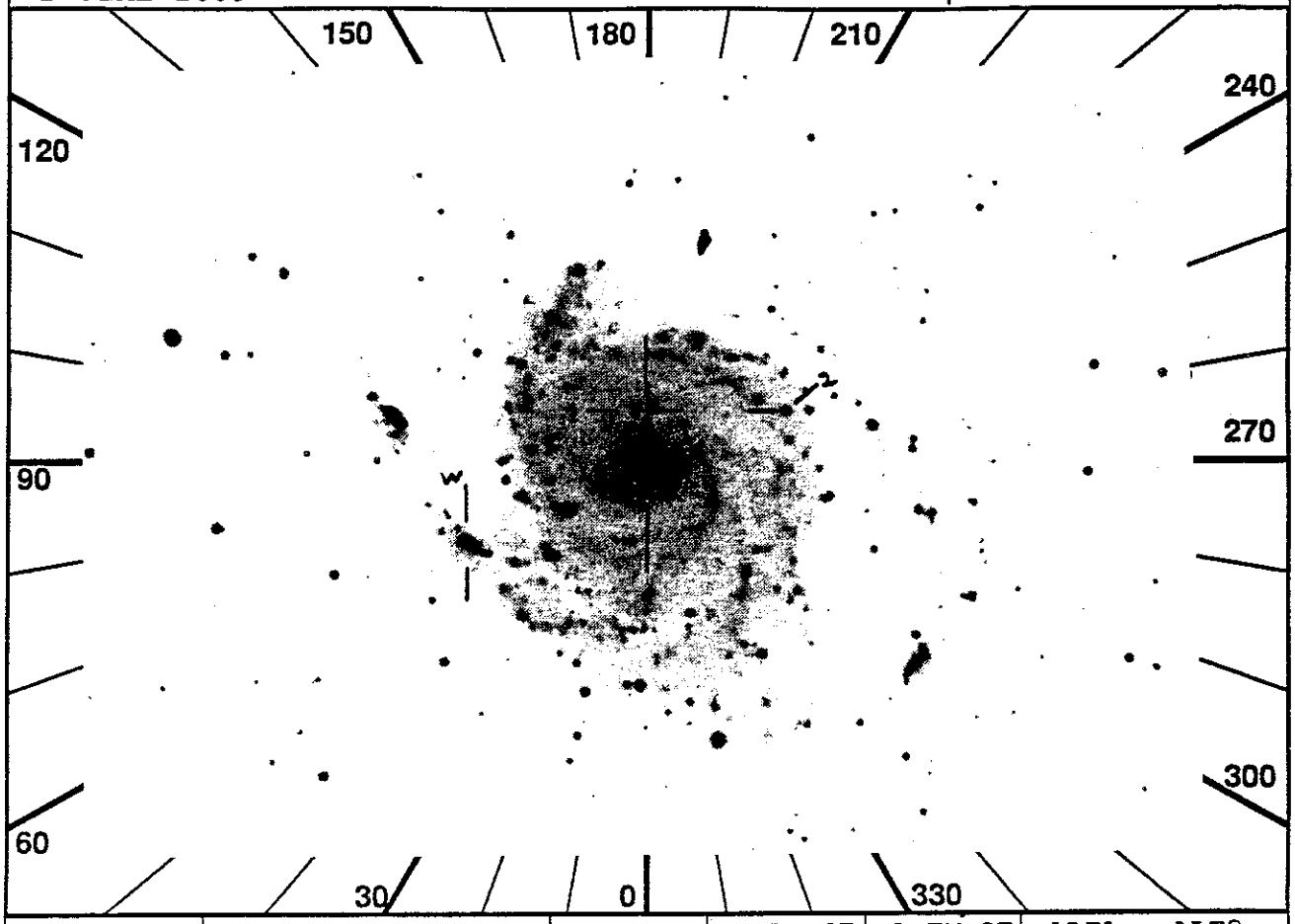
ID: 6232-10
Names: M63 NGC5055
Type: EmLn Gal
% Pol:
Pol Var:
Pos Ang:
Mechanism: none expected
Comments: nucleus spectrum



UIT
Observation Description

1 RA 210.3608 DEC 54.5883 ROLL 172.64 | ID 6235-10

2 TIME 1689 | NAME M101A



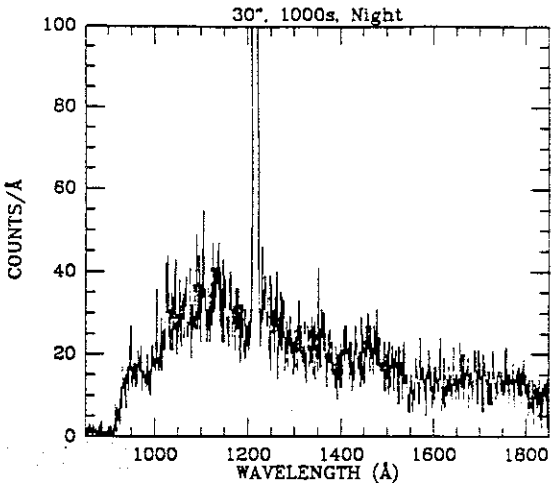
	SEQ	LOC OBS MAG LGR D	A FM OF	A FM OF	A FM OF	ALT1 ALT2
3	H 174	gde sim 16 14 2.8 5	1 4 ---	- - ---	- - ---	LCDATA
4	W 234	ncn ngd 9 15 1.8	6 4 547	-- - ---	-- - ---	HIILOC DFLD
5	P U 203	DT - T F 31 a1	31 b1	31 b5	- - - -	

```
 6 H HOP ITEM 90_5_1 (loc=obs ap)
 7   JAC ITEM 16_0
 8       Config H W U
 9       ------------------------
10   JAC All SETUP
11 W     Chk Stat  -LOC -CUR RDY
12       IMC BEGIN
13       HUT ITEM 5
14 W     WUP tgt= offset HII rgn
15 W     *IF WUP target visible
16 W     * WUP PFK cur to target
17 W     * WUP ITEM 6  (Cntr)
18 W     * WUP ITEM 4  (Cur off)
19 W     *ELSE
20 W     * Config without WUP
21 W     WUP ITEM 11_DF
22 W     WUP wait CAM MODE ZOOM
23       All BEGIN
24 W     *IF WUP Deconfig
25 W     *  WUP ITEM 11_F_+1
26 W     *  Cur/ITEM 6 In fld, zm
27 W     * WUP ITEM 4  (Cur off)
28 W     * WUP ITEM 7  (Begin)
29 W     * Config with WUP
30   JOB Observe
31   JAC All PREVIEW
32       All QUIT
33       ------------------------
34   JAC ITEM 16_1
35 H HOP ITEM 90_5_0 (restore)
```

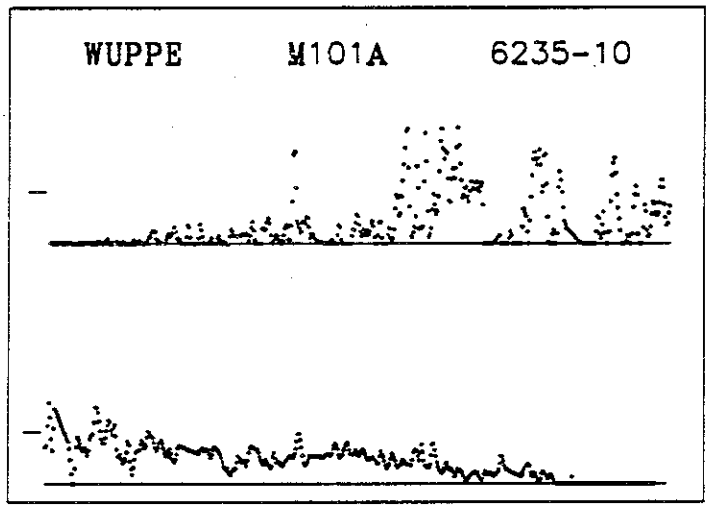
HII region 5" off nucleus

3

OBJECT: 6235 M101A (NGC5457)
KEYWORDS: Spiral galaxy HII region
COMMENTS:
Pointing at nearest HII region to nucleus
Centering on nucleus is okay if you
can see it.
Simulation assumes 16.5 Mag B2 star
Matches IUE spectrum of a different
M101 HII region.



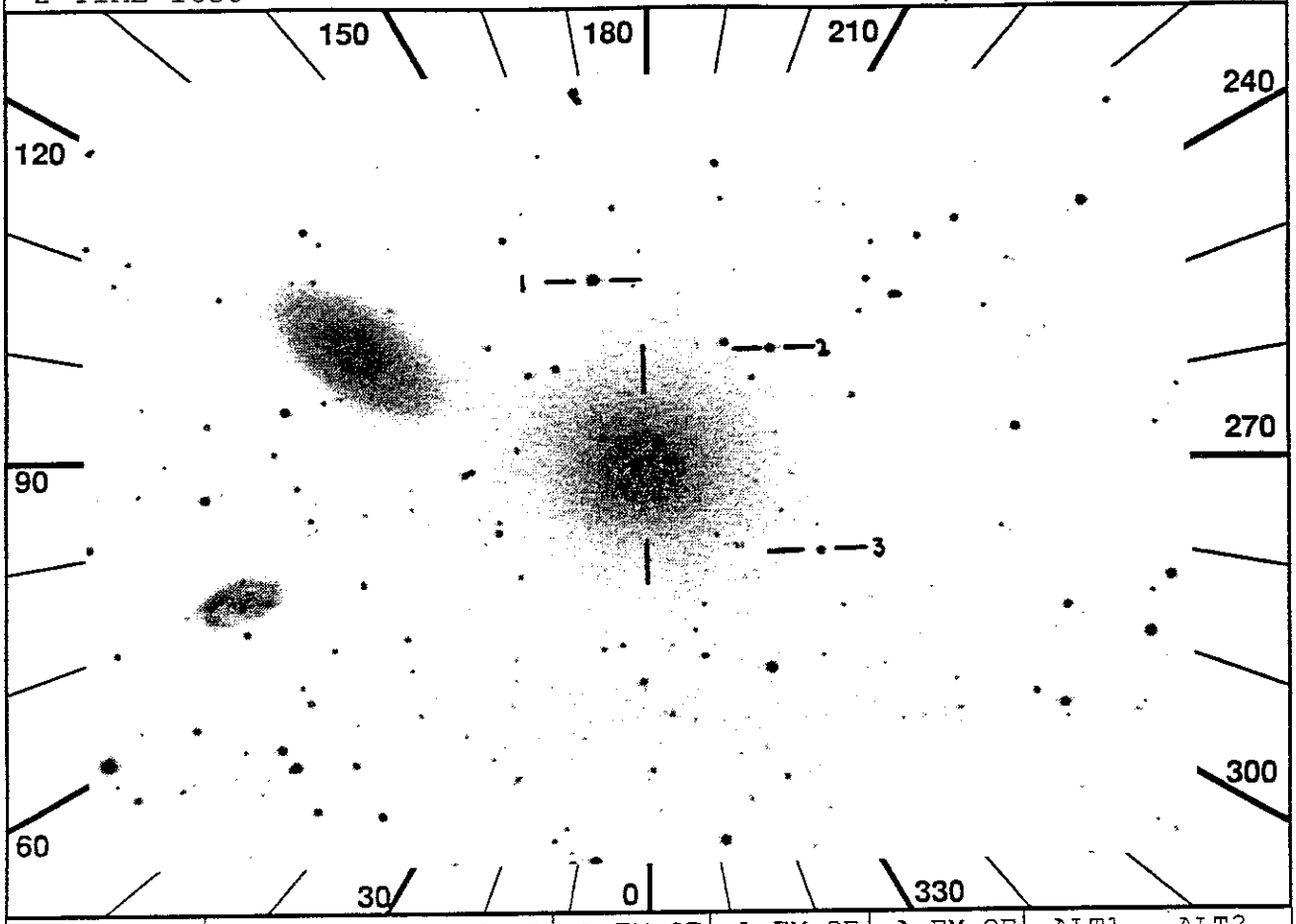
ID: 6235-10
Names: M101A NGC5457
Type: Spiral galaxy
% Pol:
Pol Var:
Pos Ang:
Mechanism: dust scattering?
Comments: offsetting to an
HII region. Also doing an
offset background.



UIT
Observation Description

1 RA 161.2971 DEC 12.8467 ROLL 140.40 | ID 6306-10

2 TIME 1638 | NAME NGC3379



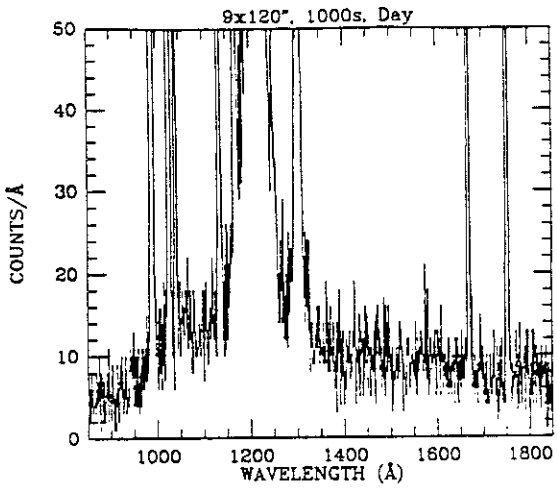
	SEQ	LOC OBS MAG LGR D	A FM OF	A FM OF	A FM OF	ALT1 ALT2
3	H 157	src sim 15 15 ~~3.7~~ 3.8 5	2 1 ---	- - ---	- - ---	SAA 3M
4	W 235	ncn ngd 15 15 1.0	7 4 120	7 4 ---	-- - ---	NUCLOC BKG1
5	S U 248	DT - T F 62 a2 62 a5 62 b5 18 b1 18 a1				

```
 6 H -   VIP ON until SAA exit
 7   JAC Config H W U
 8       ------------------------
 9 H -   Note: Acquisition in SAA
10   JAC All SETUP
11 J     Chk  Stat -    -CUR RDY
12 H TV  Verify HUT acq on TV
13   JAC IMC BEGIN
14       HUT ITEM 5
15 W     WUP tgt is gal nucleus
16 W     *IF WUP target visible
17 W     * WUP PFK cur to target
18 W     * WUP ITEM 6  (Cntr)
19 W     * WUP ITEM 4  (Cur off)
20 W     *ELSE
21 W     * Config without WUP
22 H -   After SAA exit
23 H JAC ITEM 16_0
24 H     HUT SETUP
25 H     Chk HUT Stat -LOC
26       All BEGIN
27 W     *IF WUP Deconfig
28 W     *  WUP ITEM 11_F_+1
29 W     *  Cur/ITEM 6 in fld, zm
30 W     * WUP ITEM 4  (Cur off)
31 W     * WUP ITEM 7  (Begin)
32 W     * Config with WUP
33 W     NOTE: WUP 1st seq = BKG
34   JOB Observe
35   JAC All PREVIEW
36       All QUIT
37       ------------------------
38   JAC ITEM 16_1
```

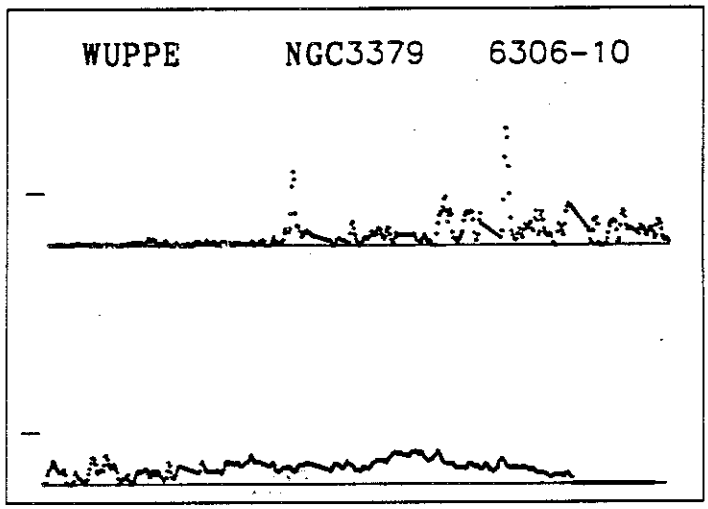
nuclear

OBJECT: 6306 NGC3379 (M105)
KEYWORDS: elliptical galaxy
COMMENTS:
Pointing at nucleus

Simulation assumes B3V star spectrum
(Matches slope of IUE continuum)
Scaled for expected flux through
9x120" aperture



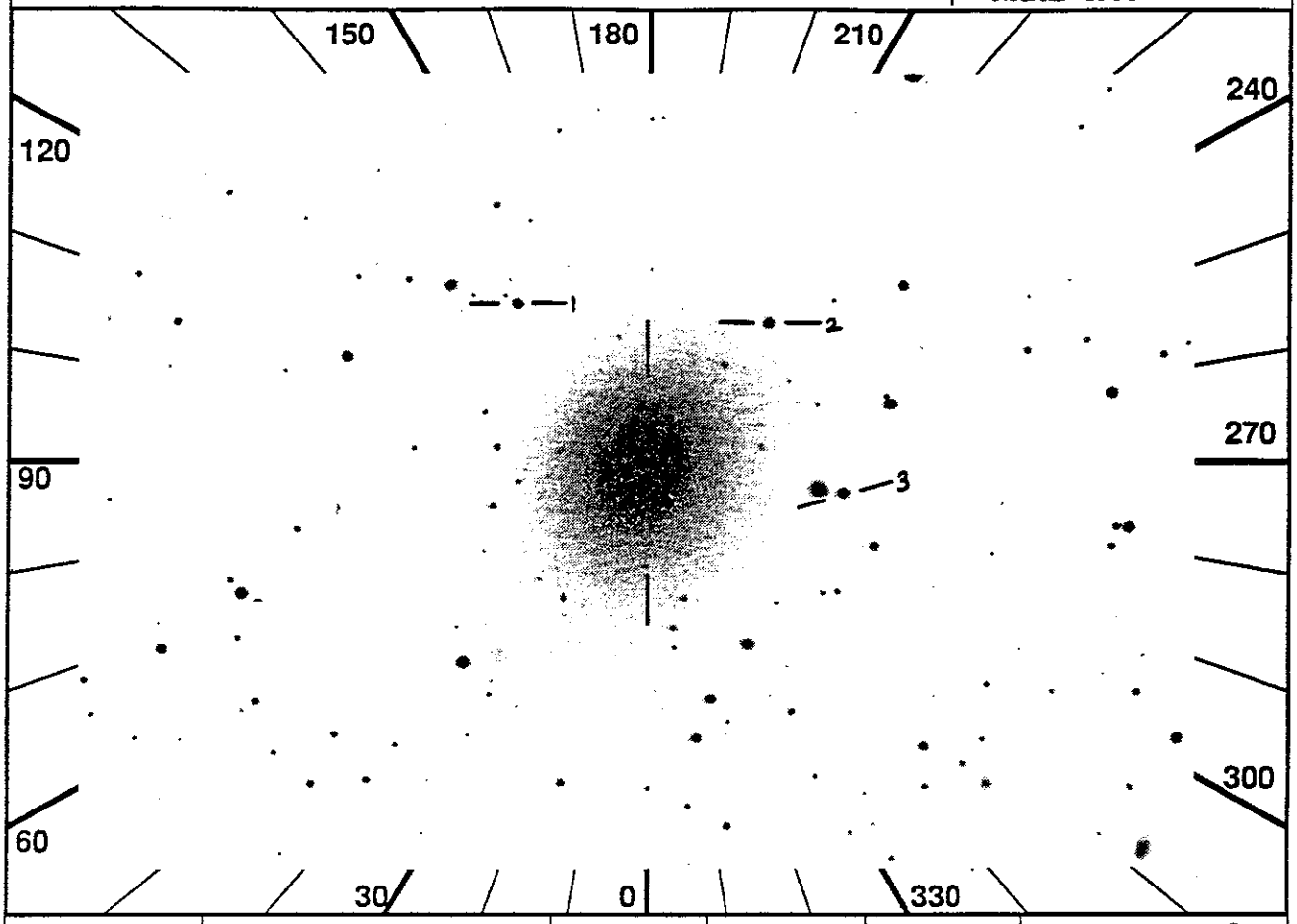
ID: 6306-10
Names: NGC3379 M105
Type: Elliptical galaxy
% Pol:
Pol Var:
Pos Ang:
Mechanism: none expected
Comments: nucleus spectrum



UIT
Observation Description

1 RA 186.8079 DEC 8.2756 ROLL 227.36 | ID 6308-10

2 TIME 2007 | NAME M49



	SEQ	LOC OBS MAG LGR D	A FM OF	A FM OF	A FM OF	ALT1 ALT2
3	H 69	src sim 16 15 3.9 5	6 1 ---	- - ---	- - ---	
4	W 236	ncn ngd 15 15 1.5	7 4 ---	-- - ---	-- - ---	NUCLOC DFLD
5	P U 244	DT - T F 62 b5 187 a1	- -	- -	- -	

```
 6    JAC ITEM 16_0                    20 W     WUP ITEM 11_DF
 7        Config H W U                 21 W     WUP wait CAM MODE ZOOM
 8        ------------------------     22       All BEGIN
 9    JAC All SETUP                    23 W     *IF WUP Deconfig
10 W      Chk Stat  -LOC -CUR RDY      24 W     *  WUP ITEM 11_F_+1
11        IMC BEGIN                    25 W     *  Cur/ITEM 6 in fld, zm
12        HUT ITEM 5                   26 W     * WUP ITEM 4  (Cur off)
13 W      WUP tgt is gal nucleus       27 W     * WUP ITEM 7  (Begin)
14 W      *IF WUP target visible       28 W     * Config with WUP
15 W      * WUP PFK cur to target      29   JOB Observe
16 W      * WUP ITEM 6  (Cntr)        30   JAC All PREVIEW
17 W      * WUP ITEM 4  (Cur off)     31       All QUIT
18 W      *ELSE                        32       ------------------------
19 W      * Config without WUP         33   JAC ITEM 16_1
```

nucleus

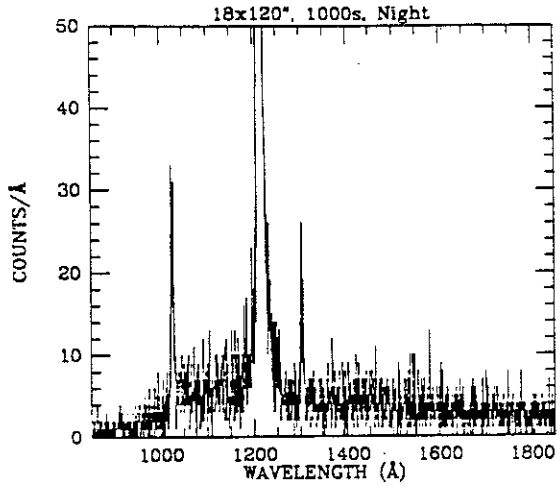
1

(probably being planned over)

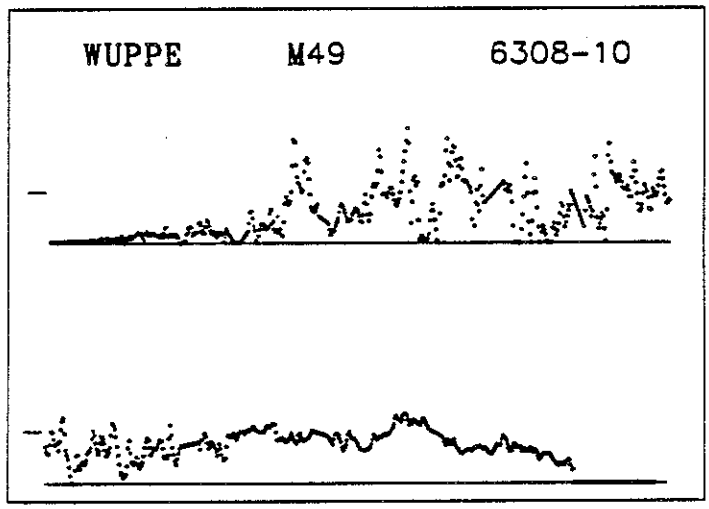
OBJECT: 6308 M49 (NGC4472)
KEYWORDS: Elliptical galaxy
COMMENTS:
Pointing at nucleus

Simulation assumes B3V star spectrum
(Matches slope of IUE continuum)
Scaled for expected HUT flux

Look for emission lines



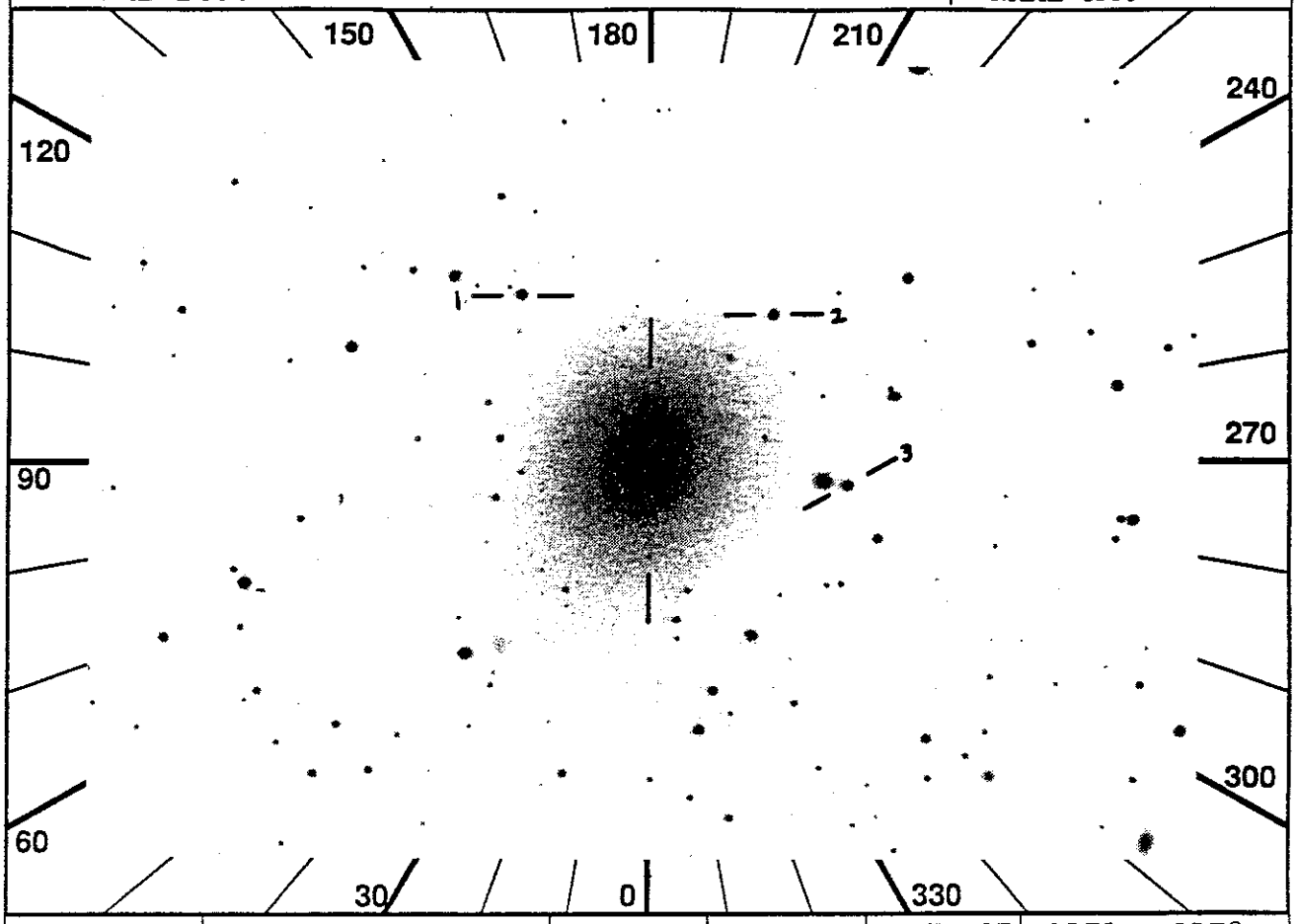
ID: 6308-10
Names: M49 NGC4472
Type: Ell Gal
% Pol: 1.33
Pol Var:
Pos Ang: 150.0
Mechanism:
Comments:
Co-pointing with BBXRT.



UIT
Observation Description

1 RA 186.8079 DEC 8.2756 ROLL 90.00 | ID 6308-20

2 TIME 2406 | NAME M49



	SEQ	LOC OBS MAG LGR D	A FM OF	A FM OF	A FM OF	ALT1 ALT2
3	H 330	src sim 16 15 3.9 5	6 1 ---	- - ---	- - ---	
4	W 236	ncn ngd 15 15 1.5	7 4 ---	-- - ---	-- - ---	NUCLOC
5	P U 245	DT -	T F 62 b5 187 b1	- -	- -	LTSTRT

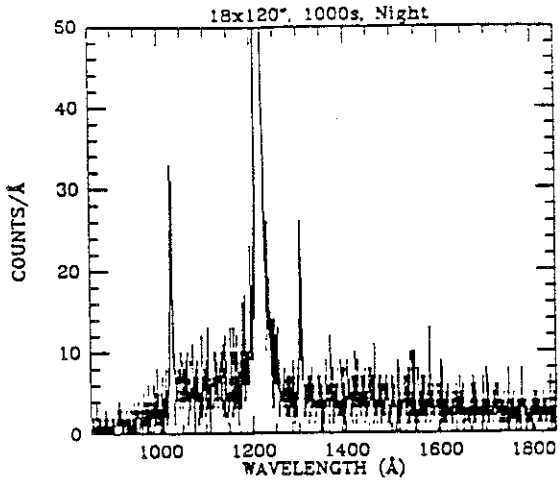
```
 6    JAC ITEM 16_0
 7        Config H W U
 8        ------------------------
 9    JAC All SETUP
10 W      Chk Stat  -LOC -CUR RDY
11        IMC BEGIN
12        HUT ITEM 5
13 W      WUP tgt is gal nucleus
14 W      *IF WUP target visible
15 W      * WUP PFK cur to target
16 W      * WUP ITEM 6  (Cntr)
17 W      * WUP ITEM 4  (Cur off)
18 W      *ELSE
19 W      * Config without WUP
20 U      Config without UIT
21        All BEGIN
22 W      *IF WUP Deconfig
23 W      *  WUP ITEM 11_F_+1
24 W      *  Cur/ITEM 6 in fld, zm
25 W      * WUP ITEM 4  (Cur off)
26 W      * WUP ITEM 7  (Begin)
27 W      * Config with WUP
28 U JOB Wait for TIME AVAIL 2184
29 U      UIT BEGIN
30 U JAC Config with UIT
31   JOB Observe
32   JAC All PREVIEW
33       All QUIT
34       ------------------------
35   JAC ITEM 16_1
```

nucleus

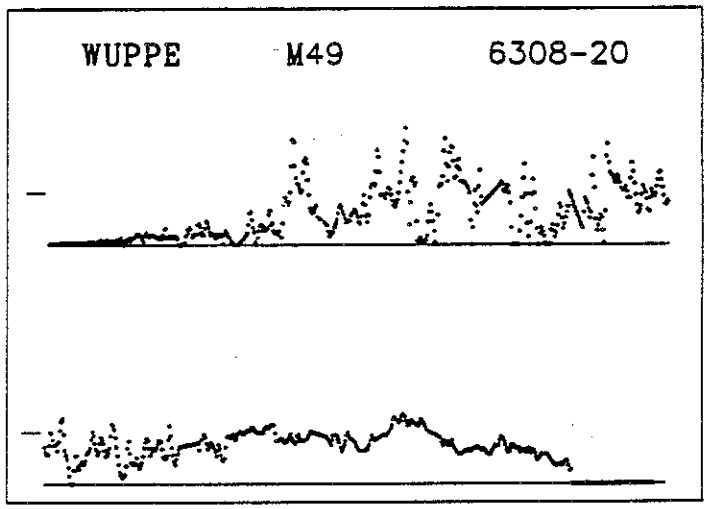
OBJECT: 6308 M49 (NGC4472)
KEYWORDS: Elliptical galaxy
COMMENTS:
Pointing at nucleus

Simulation assumes B3V star spectrum
(Matches slope of IUE continuum)
Scaled for expected HUT flux

Look for emission lines

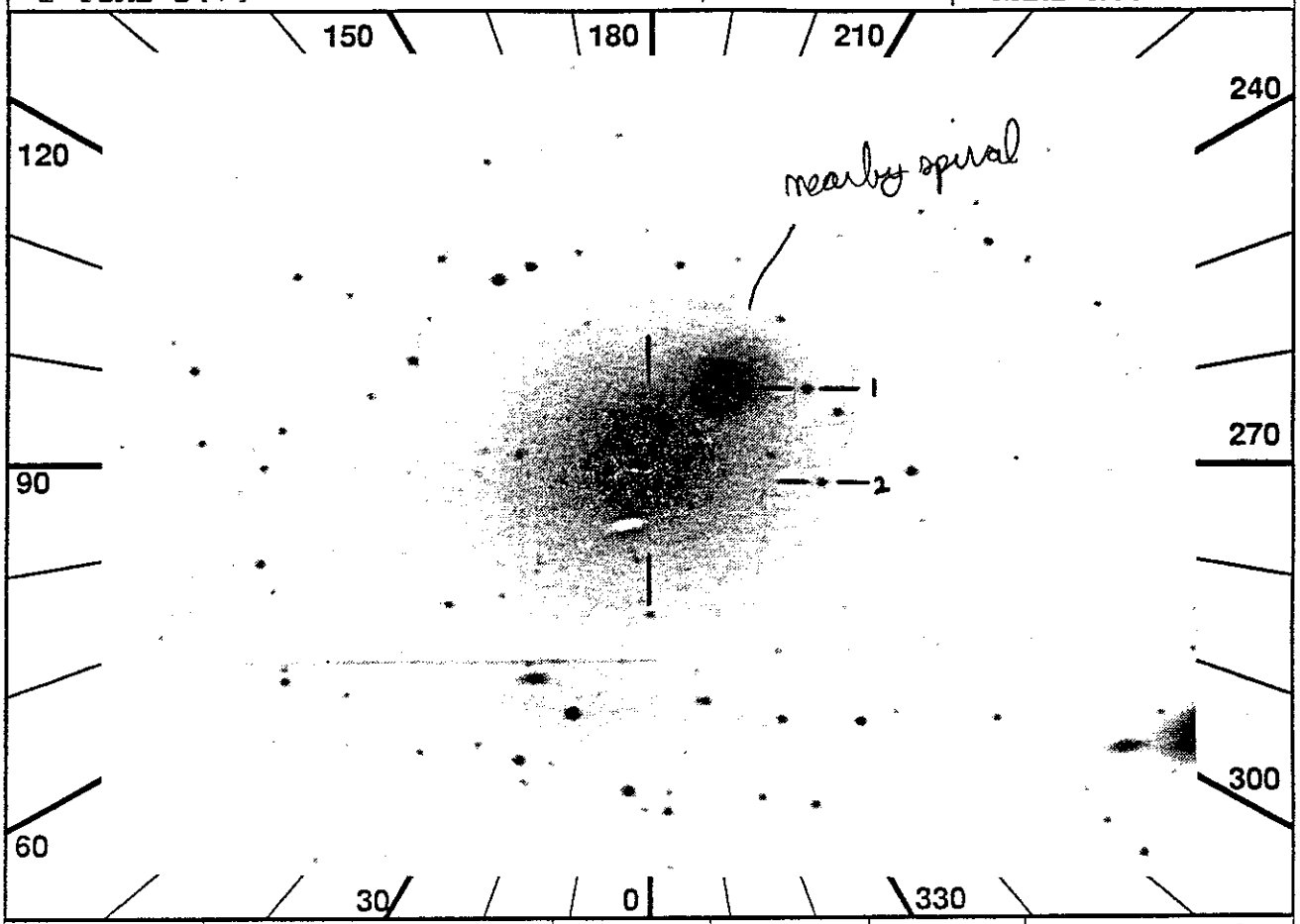


ID: 6308-20
Names: M49 NGC4472
Type: Ell Gal
% Pol: 1.33
Pol Var:
Pos Ang: 150.0
Mechanism: none expected
Comments: nucleus spectrum
Co-pointing with BBXRT.



UIT
Observation Description

1 RA 190.2875 DEC 11.8231 ROLL 189.99	ID 6310-11
2 TIME 2474	NAME M60



	SEQ	LOC OBS MAG LGR D	A FM OF	A FM OF	A FM OF	ALT1 ALT2
3	P H 176	src sim 16 16 3.9 5	6 1 ---	- - ---	- - ---	
4	W 237	ncn ngd 15 14 1.6	7 4 ---	-- - ---	-- - ---	NUCLOC DFLD
5	U 228	DT - T F 31 b5 93 a2	- -	- -	- -	LTSTRT

```
 6    JAC ITEM 16_0
 7        Config H W U
 8        ------------------------
 9    JAC All SETUP
10 W      Chk Stat  -LOC -CUR RDY
11        IMC BEGIN
12        HUT ITEM 5
13 W      WUP tgt is gal nucleus
14 W      *IF WUP target visible
15 W      * WUP PFK cur to target
16 W      * WUP ITEM 6  (Cntr)
17 W      * WUP ITEM 4  (Cur off)
18 W      *ELSE
19 W      * Config without WUP
20 W      WUP ITEM 11_DF
21 W      WUP wait CAM MODE ZOOM
22 U      Config without UIT
23        All BEGIN
24 W      *IF WUP Deconfig
25 W      *  WUP ITEM 11_F_+1
26 W      *  Cur/ITEM 6 In_fld, zm
27 W      * WUP ITEM 4  (Cur off)
28 W      * WUP ITEM 7  (Begin)
29 W      * Config with WUP
30 U JOB  Wait for TIME AVAIL 2184
31 U      UIT BEGIN
32 U JAC  Config with UIT
33   JOB  Observe
34   JAC  All PREVIEW
35        All QUIT
36        ------------------------
37   JAC  ITEM 16_1
```

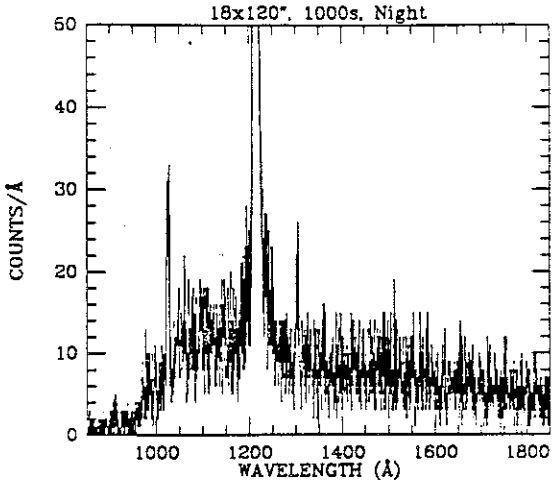
nucleus top elliptical

1

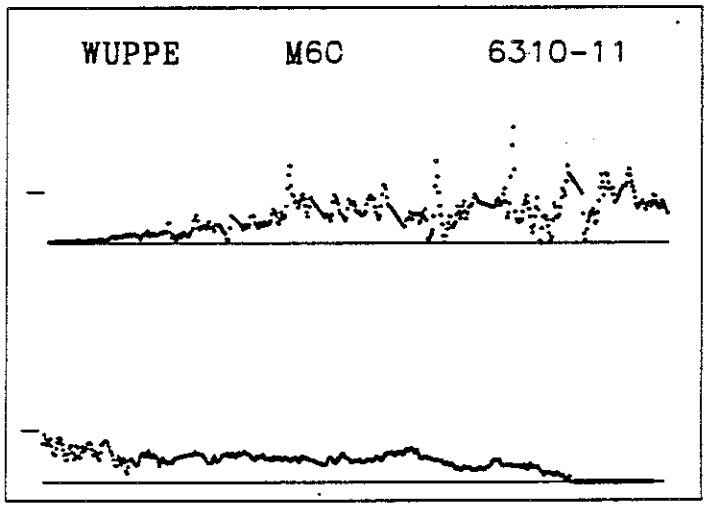
OBJECT: 6310 M60 (NGC4649)
KEYWORDS: Elliptical Galaxy
COMMENTS:
Pointing at nucleus

Simulation assumes B3V star spectrum
(Matches slope of IUE continuum)
Scaled for expected HUT flux

Look for emission lines

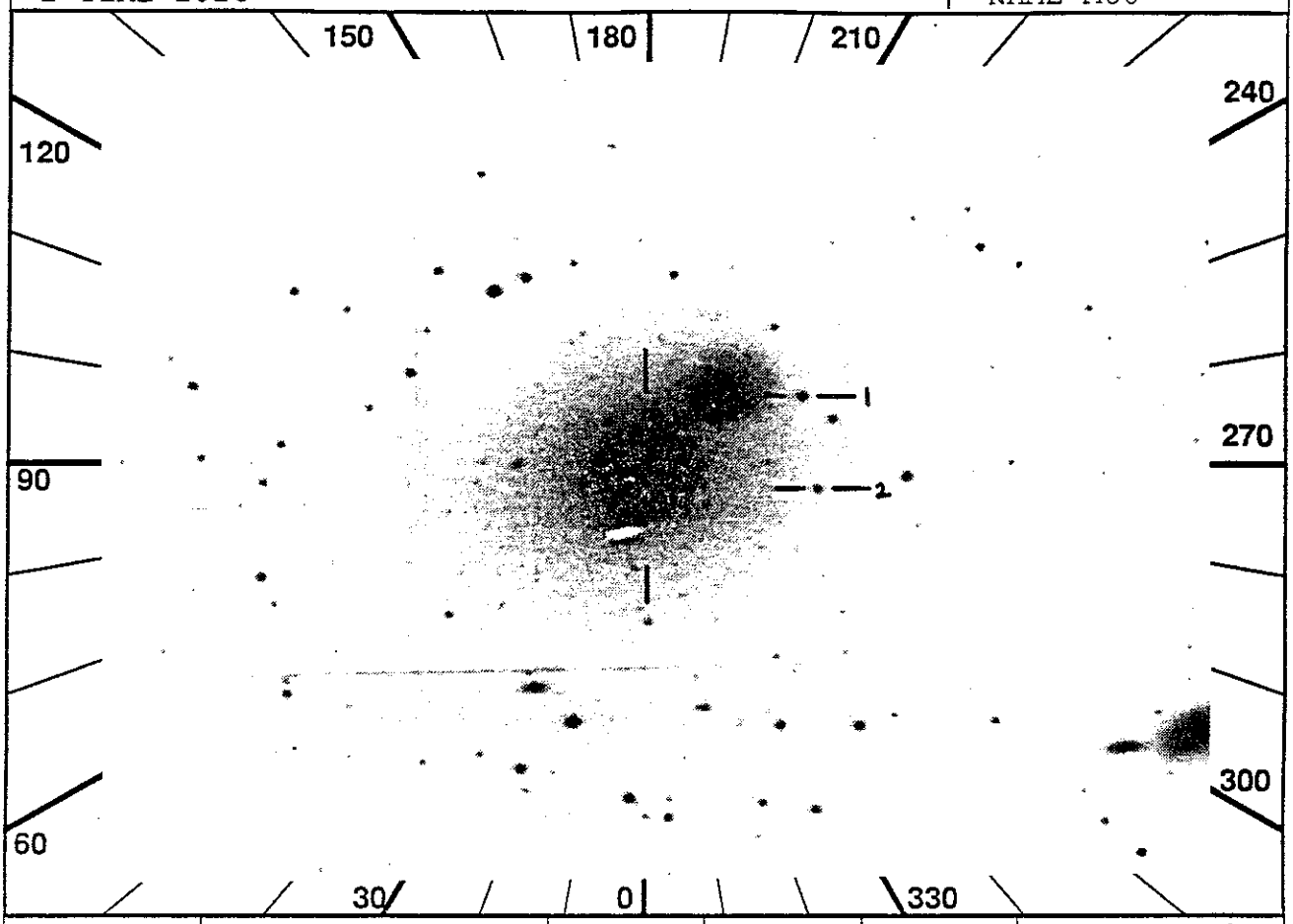


ID: 6310-11
Names: M60 NGC4649
Type: Elliptical galaxy
% Pol:
Pol Var:
Pos Ang:
Mechanism:
Comments: nucleus
Co-pointing with BBXRT.



UIT
Observation Description

1 RA 190.2875 DEC 11.8231 ROLL 189.99	ID 6310-12
2 TIME 2026	NAME M60



	SEQ	LOC OBS MAG LGR D	A FM OF	A FM OF	A FM OF	ALT1 ALT2
3	P H 178	src sim 16 16 3.9 5	6 1 ---	- - ---	- - ---	W DARK
4	W 237	ncn ngd 15 14 1.6	7 4 ---	-- - ---	-- - ---	NUCLOC
5	U 229	DT - T F 31 b5 186 a5	- -	- -	- -	

```
 6    JAC ITEM 16_0
 7        Config H W U
 8        ------------------------
 9    JAC All SETUP
10 H -    Note:  faint target--if
11 H       necessary wait until
12 H       night to acquire.
13 W JAC Chk Stat  -LOC -CUR RDY
14        IMC BEGIN
15        HUT ITEM 5
16 W      WUP tgt is gal nucleus
17 W      *IF WUP target visible
18 W      * WUP PFK cur to target
19 W      * WUP ITEM 6  (Cntr)
20 W      * WUP ITEM 4  (Cur off)
21 W      *ELSE
22 W      * Config without WUP
23        All BEGIN
24 W      *IF WUP Deconfig
25 W      *  WUP ITEM 11_F_+1
26 W      *  Cur/ITEM 6 in fld, zm
27 W      * WUP ITEM 4  (Cur off)
28 W      * WUP ITEM 7  (Begin)
29 W      * Config with WUP
30    JOB Observe
31    JAC All PREVIEW
32        All QUIT
33        ------------------------
34    JAC ITEM 16_1
```

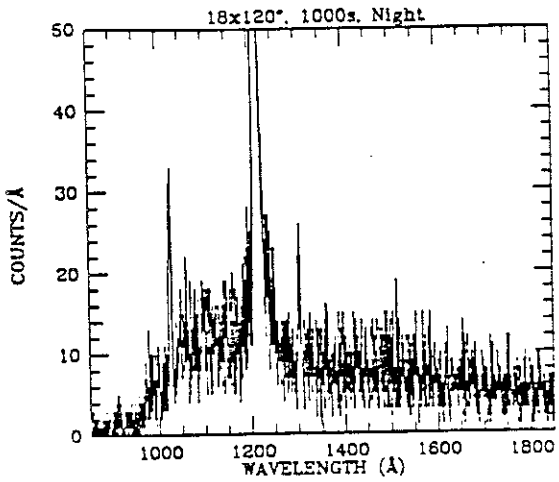
nucleus

1

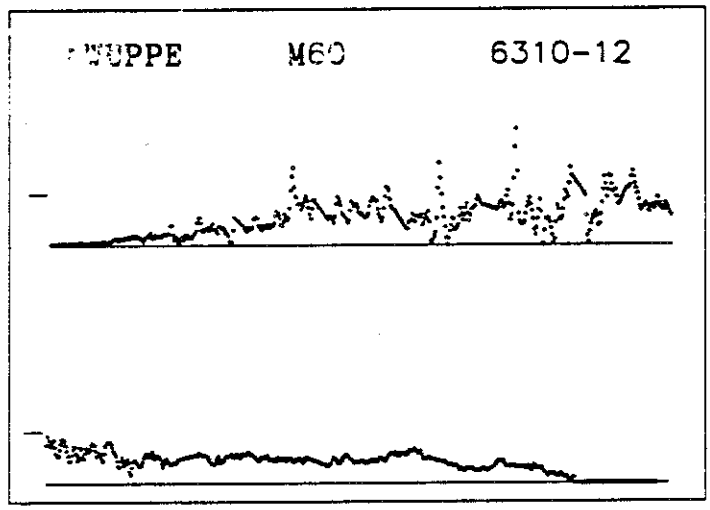
OBJECT: 6310 M60 (NGC4649)
KEYWORDS: Elliptical Galaxy
COMMENTS:
Pointing at nucleus

Simulation assumes B3V star spectrum
(Matches slope of IUE continuum)
Scaled for expected HUT flux

Look for emission lines

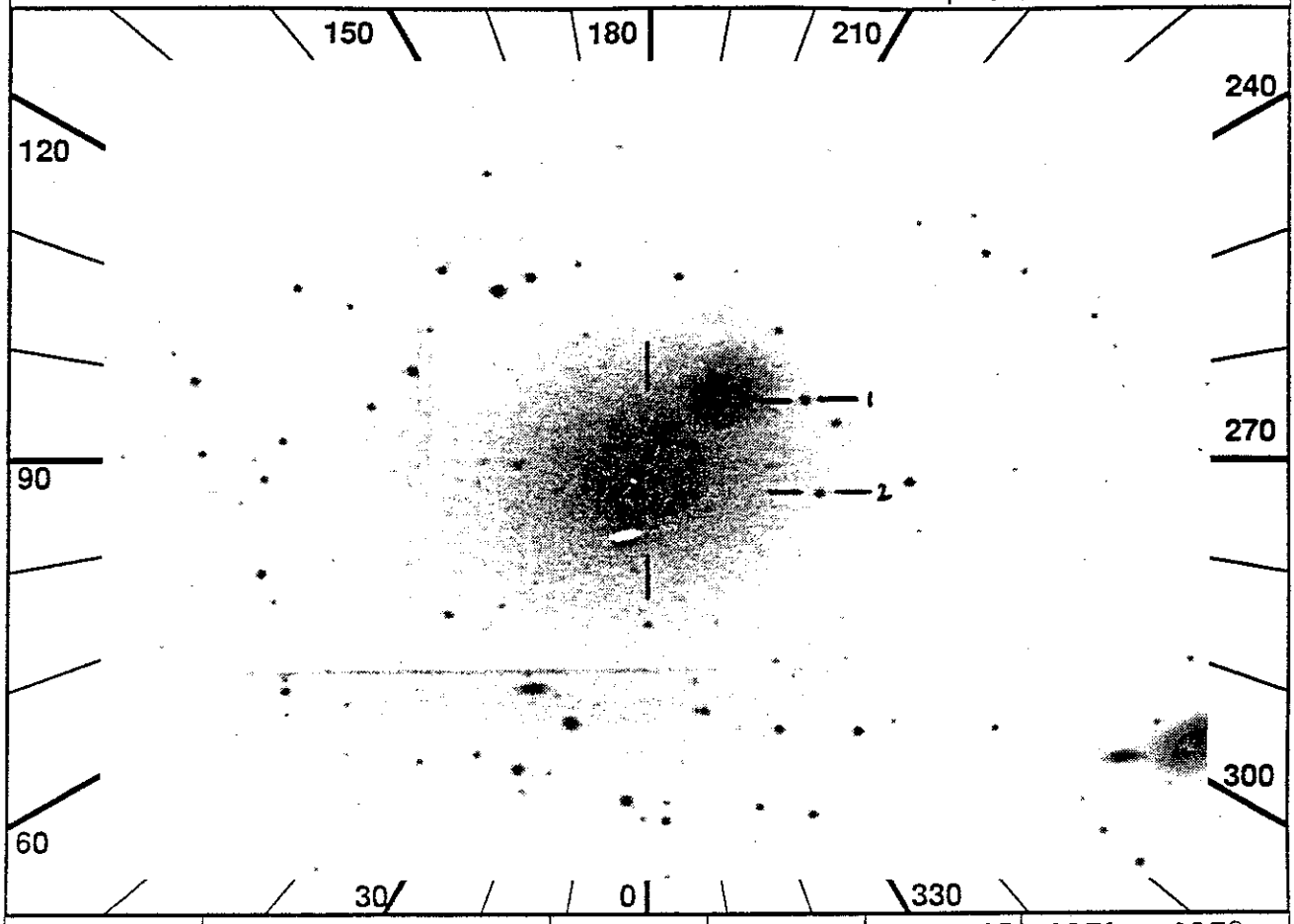


ID: 6310-12
Names: M60 NGC4649
Type: Elliptical galaxy
% Pol:
Pol Var:
Pos Ang:
Mechanism:
Comments: nucleus
Co-pointing with BBXRT.



UIT
Observation Description

1 RA 190.2875 DEC 11.8231 ROLL 189.99	ID 6310-21
2 TIME 1635	NAME M60



	SEQ	LOC OBS MAG LGR D	A FM OF	A FM OF	A FM OF	ALT1 ALT2
3	P H 90	src sim 16 16 3.2 5	6 1 ---	- - ---	- - ---	W_DARK
4	W 237	ncn ngd 15 14 1.6	7 4 ---	-- - ---	-- - ---	NUCLOC
5	U 201	DT - T F 156 a1	- - - -	- - - -		

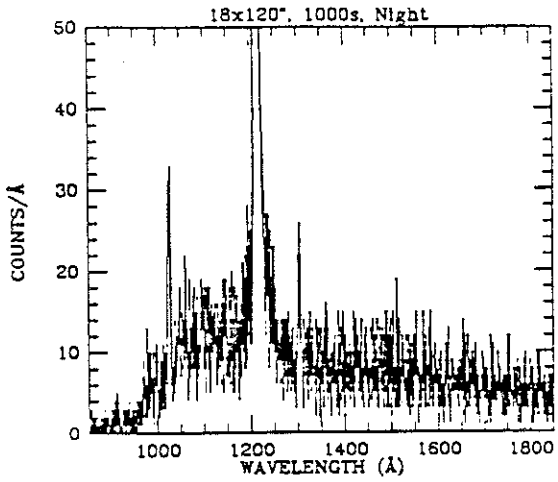
```
 6    JAC ITEM 16_0
 7        Config H W U
 8        ------------------------
 9    JAC All SETUP
10 W      Chk Stat  -LOC -CUR RDY
11        IMC BEGIN
12        HUT ITEM 5
13 W      WUP tgt is gal nucleus
14 W      *IF WUP target visible
15 W      * WUP PFK cur to target
16 W      * WUP ITEM 6  (Cntr)
17 W      * WUP ITEM 4  (Cur off)
18 W      *ELSE
19 W      * Config without WUP
20        All BEGIN
21 W      *IF WUP Deconfig
22 W      *  WUP ITEM 11_F_+1
23 W      *  Cur/ITEM 6 in fld, zm
24 W      * WUP ITEM 4  (Cur off)
25 W      * WUP ITEM 7  (Begin)
26 W      * Config with WUP
27    JOB Observe
28    JAC All PREVIEW
29        All QUIT
30        ------------------------
31    JAC ITEM 16_1
```

nucleus

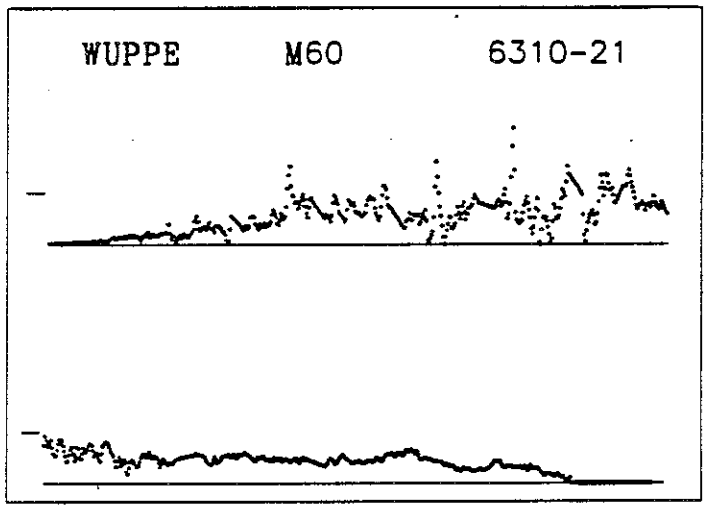
OBJECT: 6310 M60 (NGC4649)
KEYWORDS: Elliptical Galaxy
COMMENTS:
Pointing at nucleus

Simulation assumes B3V star spectrum
(Matches slope of IUE continuum)
Scaled for expected HUT flux

Look for emission lines



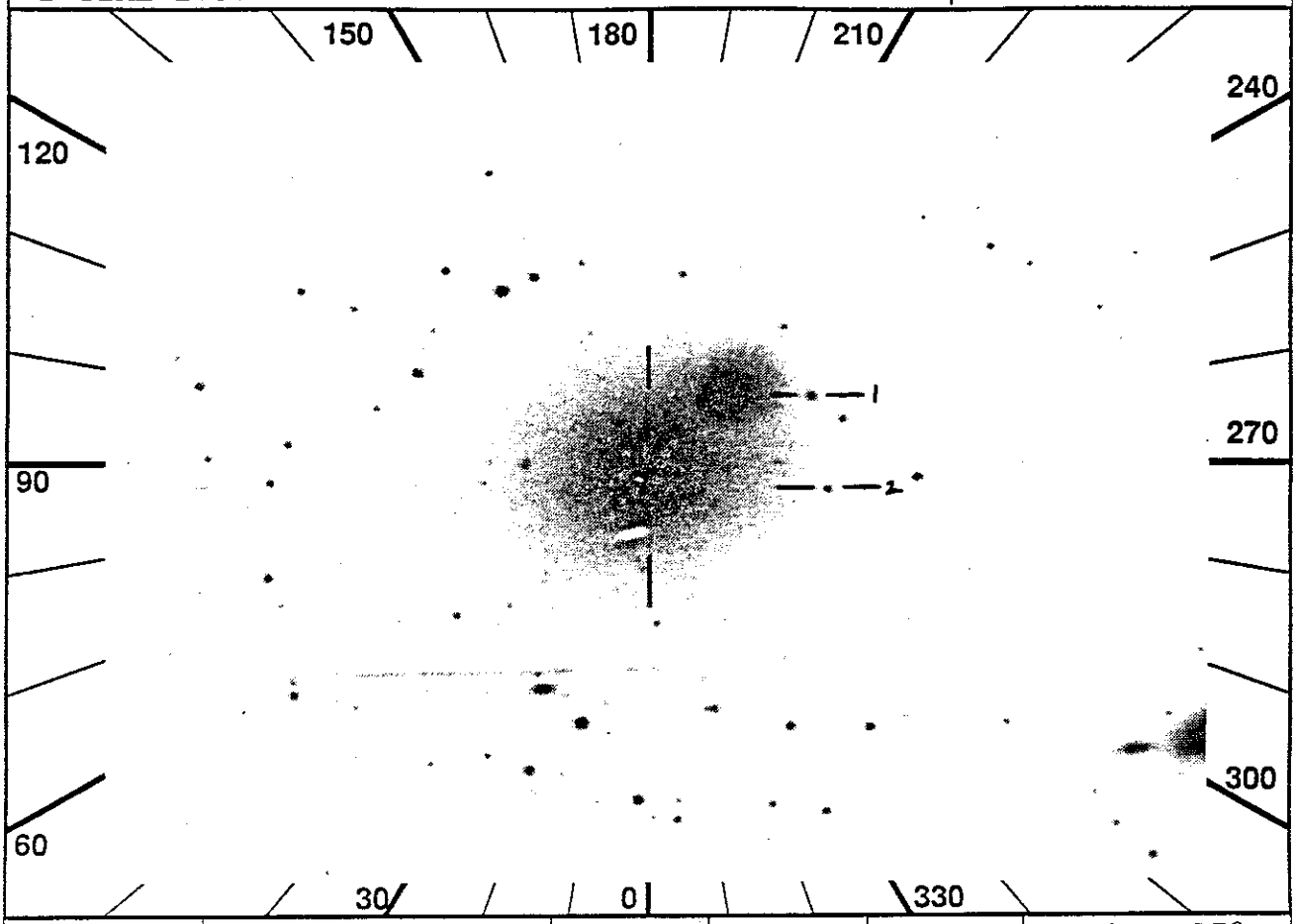
ID: 6310-21
Names: M60 NGC4649
Type: Elliptical galaxy
% Pol:
Pol Var:
Pos Ang:
Mechanism:
Comments: nucleus



UIT
Observation Description

1 RA 190.2875 DEC 11.8231 ROLL 189.99 | ID 6310-22

2 TIME 1707 | NAME M60



	SEQ	LOC OBS MAG LGR D	A FM OF	A FM OF	A FM OF	ALT1 ALT2
3	P H 104	src sim 16 16 3.2 5	6 1 ---	- - ---	- - ---	W DARK
4	W 237	ncn ngd 15 14 1.6	7 4 ---	-- - ---	-- - ---	NUCLOC
5	U 202	DT - T F 156 b1	- - - -	- - - -		

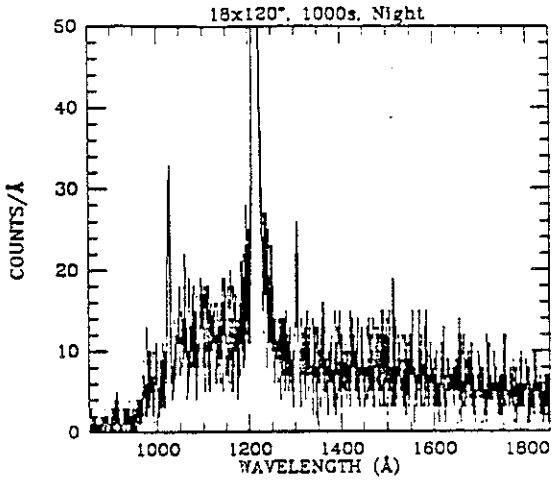
```
 6    JAC ITEM 16_0
 7        Config H W U
 8        ------------------------
 9    JAC All SETUP
10 H -    Note:  faint target--if
11 H       necessary wait until
12 H       night to acquire.
13 W JAC Chk Stat  -LOC -CUR RDY
14        IMC BEGIN
15        HUT ITEM 5
16 W      WUP tgt is gal nucleus
17 W      *IF WUP target visible
18 W      * WUP PFK cur to target
19 W      * WUP ITEM 6  (Cntr)
20 W      * WUP ITEM 4  (Cur off)
21 W      *ELSE
22 W      * Config without WUP
23        All BEGIN
24 W      *IF WUP Deconfig
25 W      *  WUP ITEM 11_F_+1
26 W      *  Cur/ITEM 6 in fld, zm
27 W      * WUP ITEM 4  (Cur off)
28 W      * WUP ITEM 7  (Begin)
29 W      * Config with WUP
30    JOB Observe
31    JAC All PREVIEW
32        All QUIT
33        ------------------------
34    JAC ITEM 16_1
```

nucleus

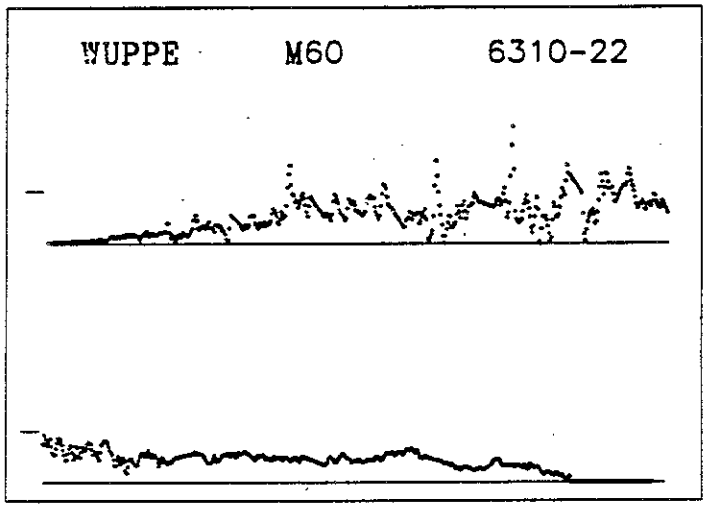
OBJECT: 6310 M60 (NGC4649)
KEYWORDS: Elliptical Galaxy
COMMENTS:
Pointing at nucleus

Simulation assumes B3V star spectrum
(Matches slope of IUE continuum)
Scaled for expected HUT flux

Look for emission lines



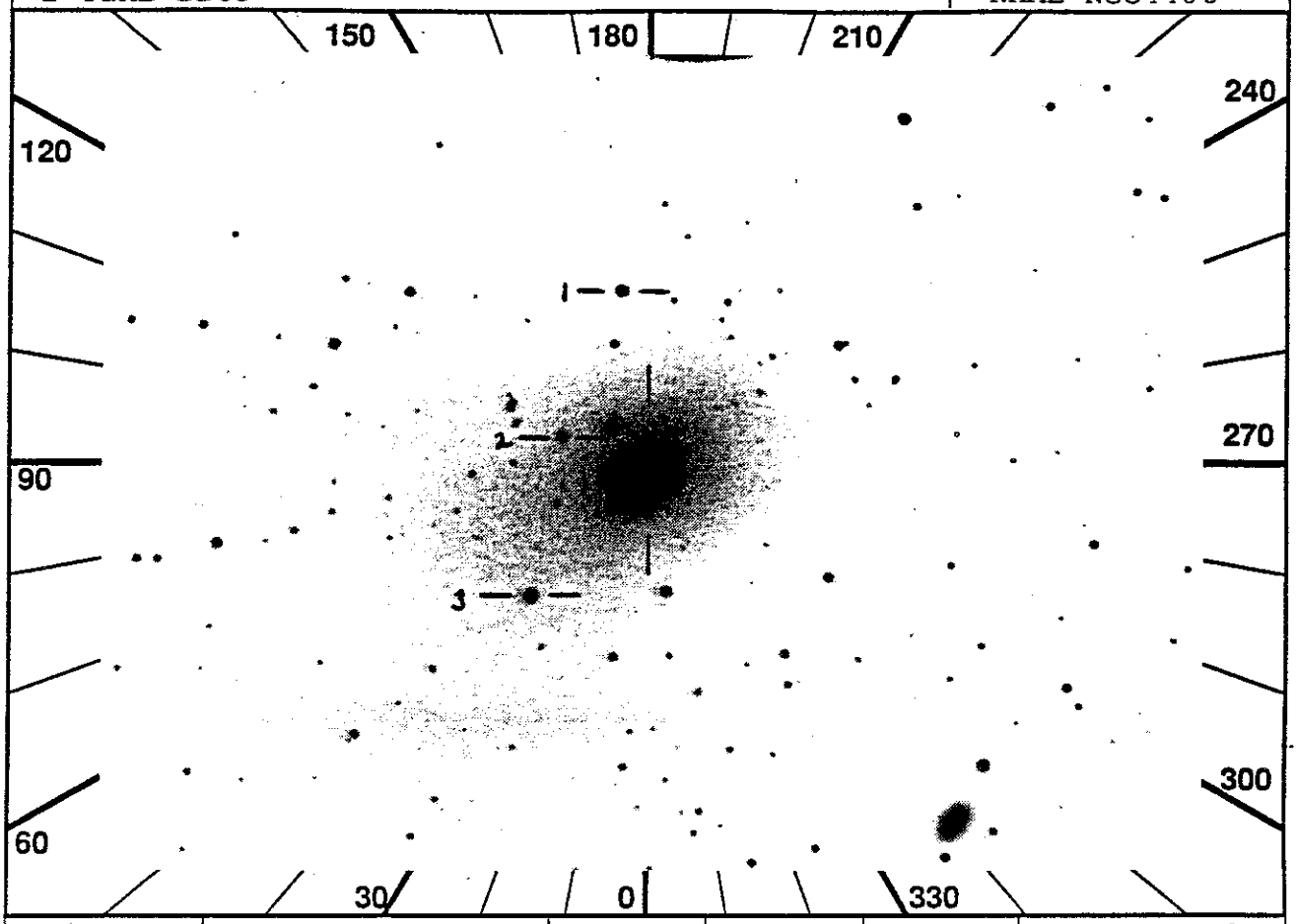
ID: 6310-22
Names: M60 NGC4649
Type: Elliptical galaxy
% Pol:
Pol Var:
Pos Ang:
Mechanism:
Comments: nucleus



UIT
Observation Description

1 RA 185.9154 DEC 13.2236 ROLL 55.00 | ID 6332-10

2 TIME 2265 | NAME NGC4406



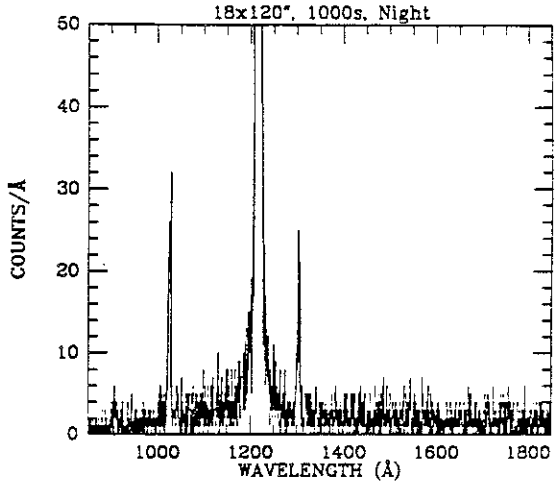
	SEQ	LOC OBS MAG LGR D	A FM OF	A FM OF	A FM OF	ALT1 ALT2
3	H 236	src sim 16 15 3.9 5	6 1 ---	- - ---	- - ---	
4	W 238	ncn ngd 15 15 1.3	7 4 ---	-- - ---	-- - ---	NUCLOC DFLD
5	P U 204	DT - T F 24 b5 31 b1 31 a1		- - - -		LTSTRT AST4SC

```
 6 I      CMD WRI 3900                      24 W      WUP wait CAM MODE ZOOM
 7 I        F007F0010FA0  (4s upd)          25 U      Config without UIT
 8 I IMC  Chk AST WAC incr once/4s          26        All BEGIN
 9   JAC  ITEM 16 0                         27 W      *IF WUP Deconfig
10        Config H W U                      28 W      *  WUP ITEM 11 F +1
11        ------------------------          29 W      *  Cur/ITEM 6 In fld, zm
12   JAC  All SETUP                         30 W      * WUP ITEM 4  (Cur off)
13 W      Chk Stat  -LOC -CUR RDY           31 W      * WUP ITEM 7  (Begin)
14        IMC BEGIN                         32 W      * Config with WUP
15        HUT ITEM 5                        33 U JOB  Wait for TIME AVAIL 2184
16 W      WUP tgt is gal nucleus            34 U      UIT BEGIN
17 W      *IF WUP target visible            35 U JAC  Config with UIT
18 W      * WUP PFK cur to target           36   JOB  Observe
19 W      * WUP ITEM 6  (Cntr)              37   JAC  All PREVIEW
20 W      * WUP ITEM 4  (Cur off)           38        All QUIT
21 W      *ELSE                             39        ------------------------
22 W      * Config without WUP               40   JAC  ITEM 16 1
23 W      WUP ITEM 11 DF                    41 I      CMD ISS 3908  (1s upd)
```

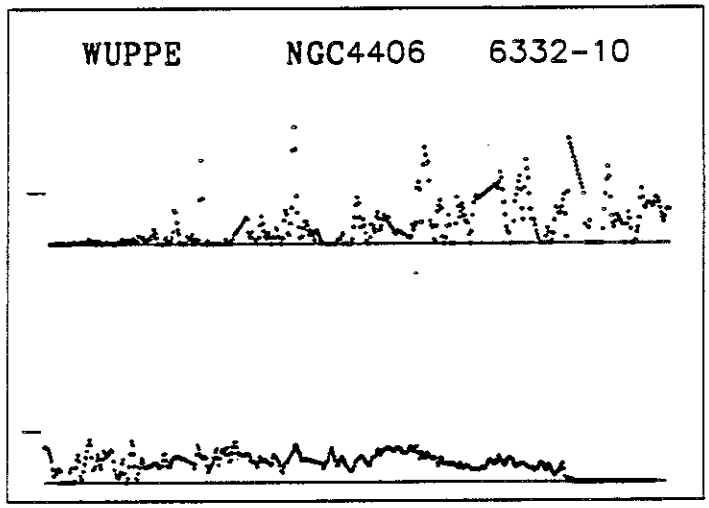
elliptical nucleus

OBJECT: 6332 NGC4406 (M86)
KEYWORDS: Elliptical Galaxy
COMMENTS:
Pointing at nucleus

Simulation assumes B3V star spectrum
(Matches slope of IUE continuum)
Scaled for expected flux through
18x120" aperture



ID: 6332-10
Names: NGC4406 M86
Type: Elliptical galaxy
% Pol:
Pol Var:
Pos Ang:
Mechanism: none expected
Comments: nucleus spectrum
Co-pointing with BBXRT.



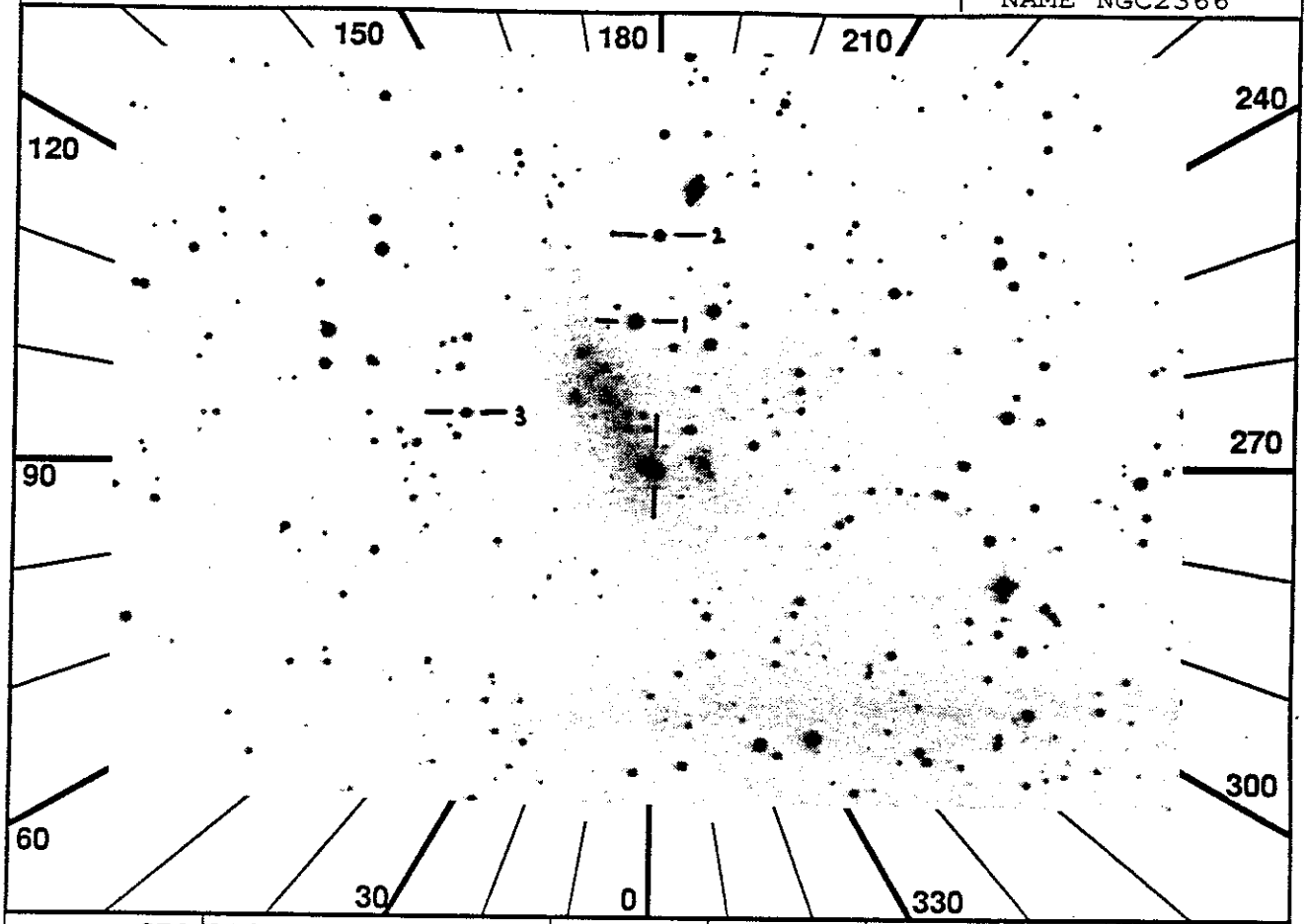
UIT
Observation Description

1 RA 110.8553 DEC 69.2915 ROLL 60.00

2 TIME 820

ID 6402-10

NAME NGC2366



	SEQ	LOC OBS MAG LGR D	A FM OF	A FM OF	A FM OF	ALT1 ALT2
3	H 111	gde sim 15 14 3.7 5	1 4 ---	- - ---	- - ---	MANUAL
4	W 239	ncn ngd 10 9 2.3	6 4 522	-- - ---	-- - ---	HIILOC DFLD
5	P U 213	DT - T F 31 a2 31 a5 31 b5			- - - -	

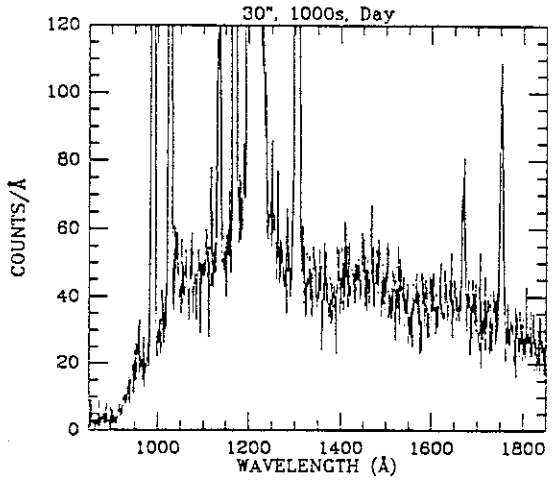
```
 6    JAC ITEM 16_0
 7        Config H W U
 8        ------------------------
 9    JAC All SETUP
10 H     *IF HUT src visible
11 H     * HUT ITEM 4
12 H     * HUT PFK cur to src
13 W     Chk Stat  -LOC -CUR RDY
14       IMC BEGIN
15       HUT ITEM 5
16 W     WUP tgt= offset HII rgn
17 W     *IF WUP target visible
18 W     * WUP PFK cur to target
19 W     * WUP ITEM 6  (Cntr)
20 W     * WUP ITEM 4  (Cur off)
21 W     *ELSE
22 W     * Config without WUP
23 W     WUP ITEM 11_DF
24 W     WUP wait CAM MODE ZOOM
25       All BEGIN
26 W     *IF WUP Deconfig
27 W     *  WUP ITEM 11_F_+1
28 W     *  Cur/ITEM 6 In_fld, zm
29 W     * WUP ITEM 4  (Cur off)
30 W     * WUP ITEM 7  (Begin)
31 W     * Config with WUP
32   JOB Observe
33   JAC All PREVIEW
34       All QUIT
35       ------------------------
36   JAC ITEM 16_1
```

HII region

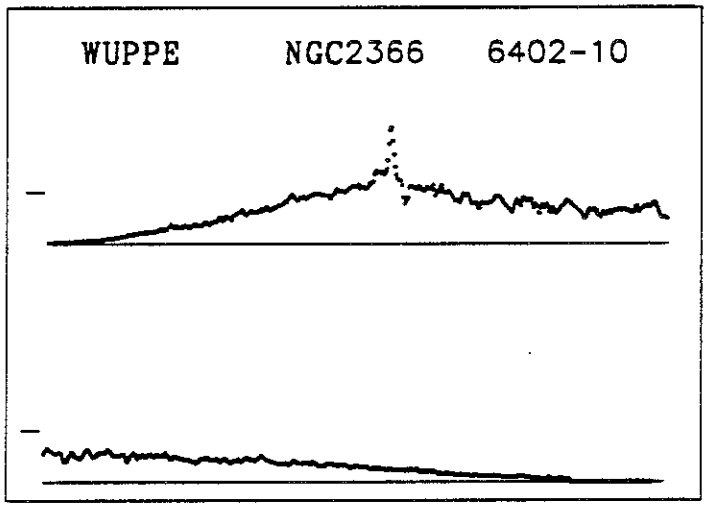
2

OBJECT: 6402 NGC2366
KEYWORDS: Irregular Galaxy HII region
COMMENTS:
SBmIV-V galaxy
Pointing at the brightest HII region
Might just be visible in TV

Simulation is a very crude guess



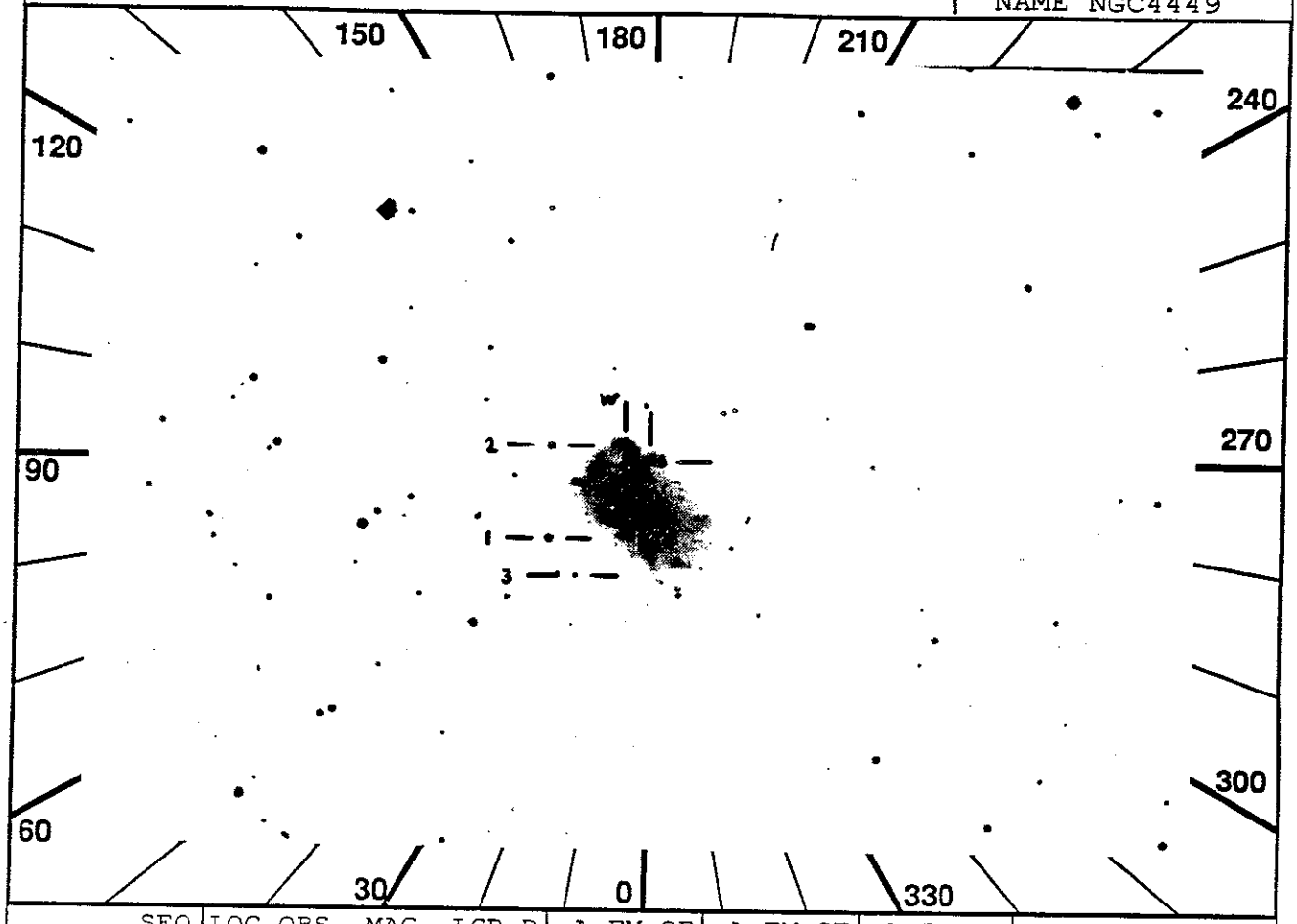
ID: 6402-10
Names: NGC2366
Type: HII Reg
% Pol:
Pol Var:
Pos Ang:
Mechanism: dust scattering
Comments: Observing HUT HII region.



UIT
Observation Description

1 RA 186.4369 DEC 44.3897 ROLL 211.76 | ID 6406-11

2 TIME 1997 | NAME NGC4449



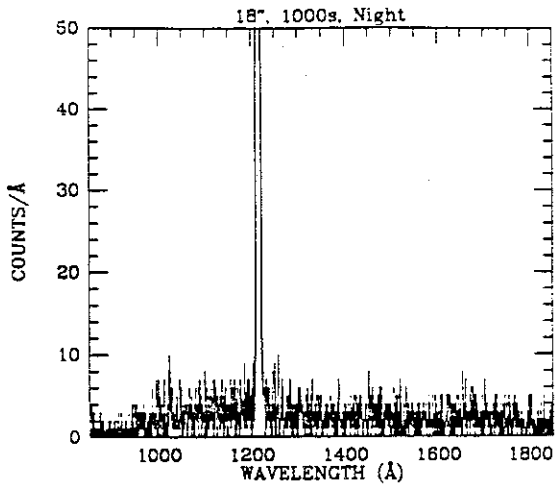
	SEQ	LOC OBS MAG LGR D	A FM OF	A FM OF	A FM OF	ALT1 ALT2
3	H 201	gde sim 16 16 3.2 5	7 4 ---	- - ---	- - ---	W DARK
4	W 240	ncn ngd 10 9 3.8	6 4 95	-- - ---	-- - ---	HIILOC DFLD
5	P U 204	DT -	T F 24 b5 31 b1 31 a1		- - - -	AS2DFH

```
 6 I      CMD WRI_3900_F0022599
 7    JAC ITEM 16_0
 8        Config H W U
 9        ------------------------
10    JAC All SETUP
11 H -    Note:  faint target--if
12 H       necessary wait until
13 H       night to acquire.
14 W JAC Chk Stat  -LOC -CUR RDY
15        IMC BEGIN
16        HUT ITEM 5
17 W      WUP tgt= offset HII rgn
18 W      *IF WUP target visible
19 W      * WUP PFK cur to target
20 W      * WUP ITEM 6  (Cntr)
21 W      * WUP ITEM 4  (Cur off)
22 W      *ELSE
23 W      * Config without WUP
24 W      WUP ITEM 11_DF
25 W      WUP wait CAM MODE ZOOM
26        All BEGIN
27 W      *IF WUP Deconfig
28 W      *  WUP ITEM 11_F_+1
29 W      *  Cur/ITEM 6 In_fld, zm
30 W      * WUP ITEM 4  (Cur off)
31 W      * WUP ITEM 7  (Begin)
32 W      * Config with WUP
33    JOB Observe
34    JAC All PREVIEW
35        All QUIT
36        ------------------------
37    JAC ITEM 16_1
38 I      CMD ISS_3928
```

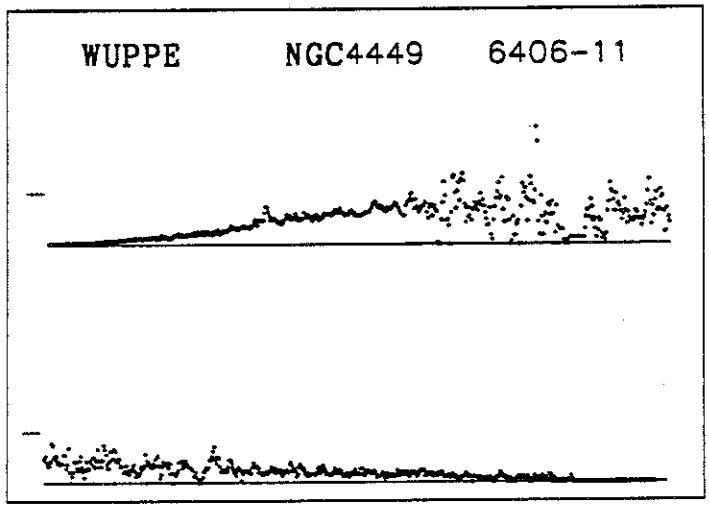
O-rich SNR in HII region

3

OBJECT: 6406 NGC4449
KEYWORDS: Irregular galaxy SNR
COMMENTS:
Pointing at Oxygen-rich SNR within the brightest HII region
Expect O star spectrum with a few emission lines



ID: 6406-11
Names: NGC4449
Type: Irregular galaxy
% Pol:
Pol Var:
Pos Ang:
Mechanism: dust scattering
Comments: offset to HII region.



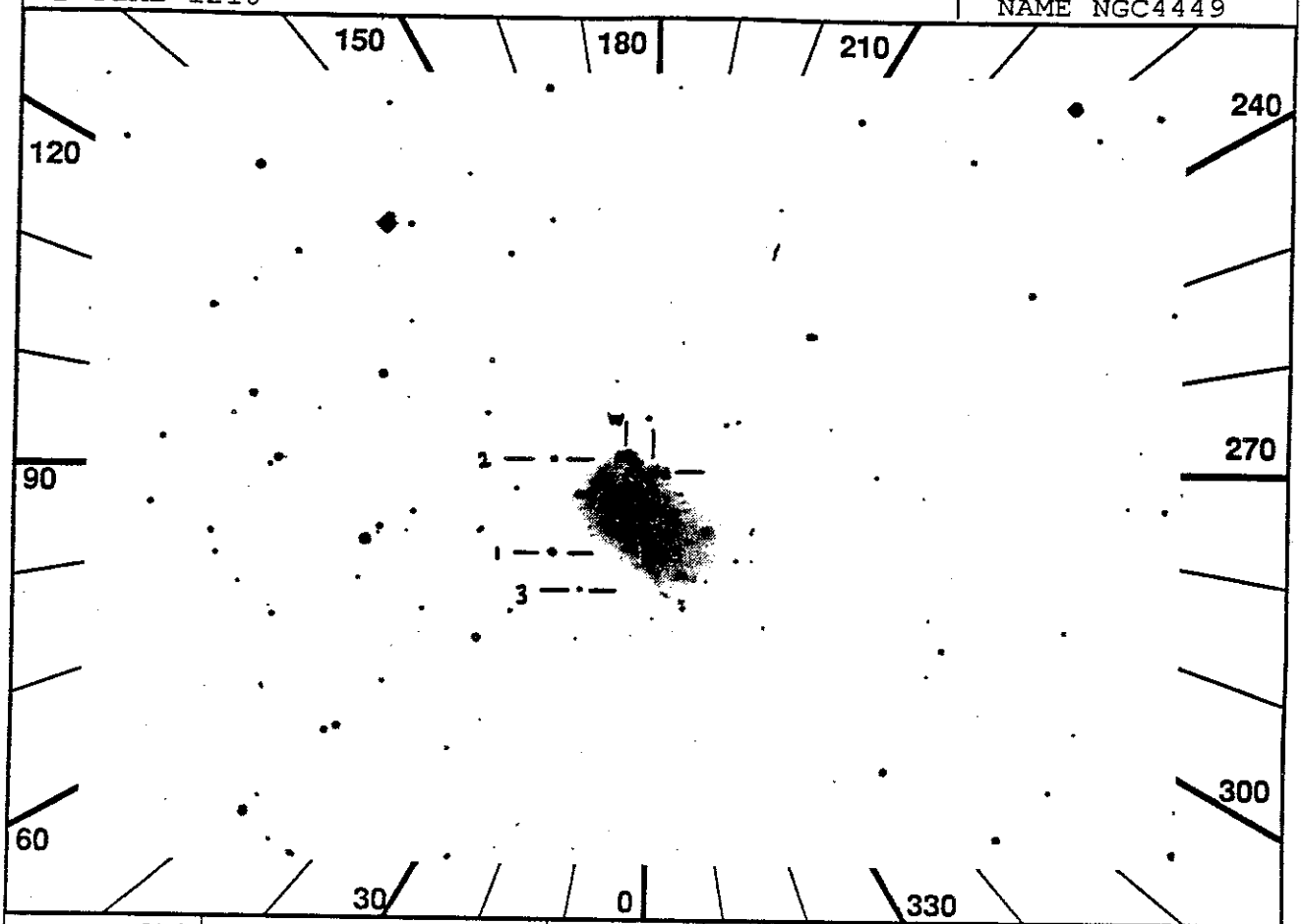
UIT
Observation Description

1 RA 186.4369 DEC 44.3897 ROLL 211.76

2 TIME 1210

ID 6406-12

NAME NGC4449



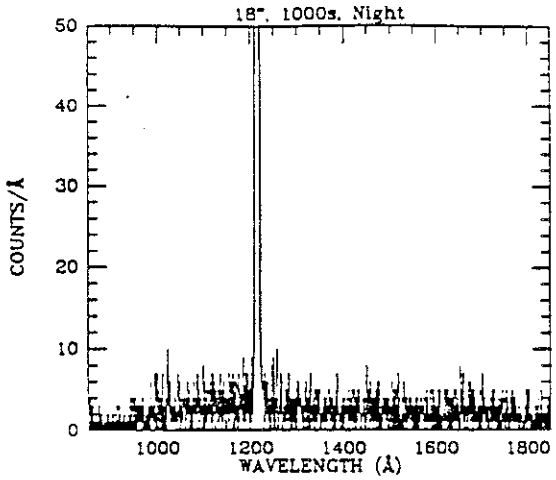
	SEQ	LOC OBS MAG LGR D	A FM OF	A FM OF	A FM OF	ALT1 ALT2
3	H 290	gde sim 16 16 2.3 5	7 4 ---	- - ---	- - ---	
4	W 240	ncn ngd 10 9 3.8	6 4 95	-- - ---	-- - ---	HIILOC
5	P U 205	DT - T F 6 a2	6 a5	6 a4	6 b3 - -	AS2DFH

```
 6 I      CMD WRI_3900_F0022599
 7    JAC ITEM 16_0
 8        Config H W U
 9        ------------------------
10    JAC All SETUP
11 W     Chk Stat  -LOC -CUR RDY
12       IMC BEGIN
13       HUT ITEM 5
14 W     WUP tgt= offset HII rgn
15 W     *IF WUP target visible
16 W     * WUP PFK cur to target
17 W     * WUP ITEM 6  (Cntr)
18 W     * WUP ITEM 4  (Cur off)
19 W     *ELSE
20 W     * Config without WUP
21       All BEGIN
22 W     *IF WUP Deconfig
23 W     *  WUP ITEM 11_F_+1
24 W     *  Cur/ITEM 6 in fld, zm
25 W     * WUP ITEM 4  (Cur off)
26 W     * WUP ITEM 7  (Begin)
27 W     * Config with WUP
28    JOB Observe
29    JAC All PREVIEW
30       All QUIT
31       ------------------------
32    JAC ITEM 16_1
33 I     CMD ISS_3928
```

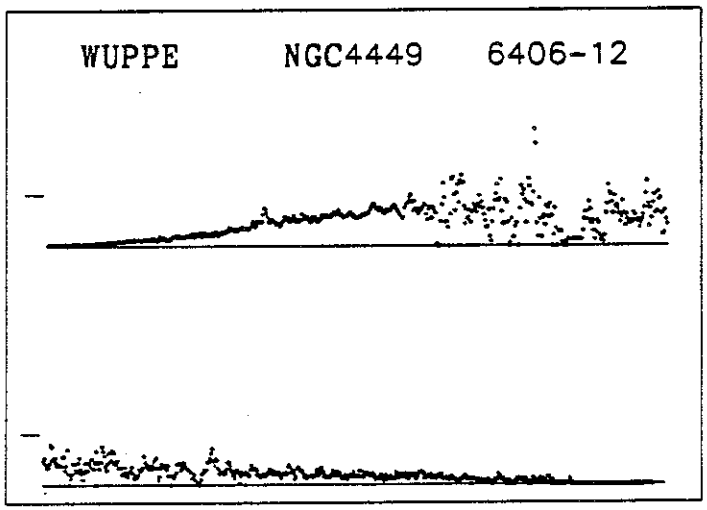
O-rich SNR in HII region

3

OBJECT: 6406 NGC4449
KEYWORDS: Irregular galaxy SNR
COMMENTS:
Pointing at Oxygen-rich SNR within the brightest HII region
Expect O star spectrum with a few emission lines



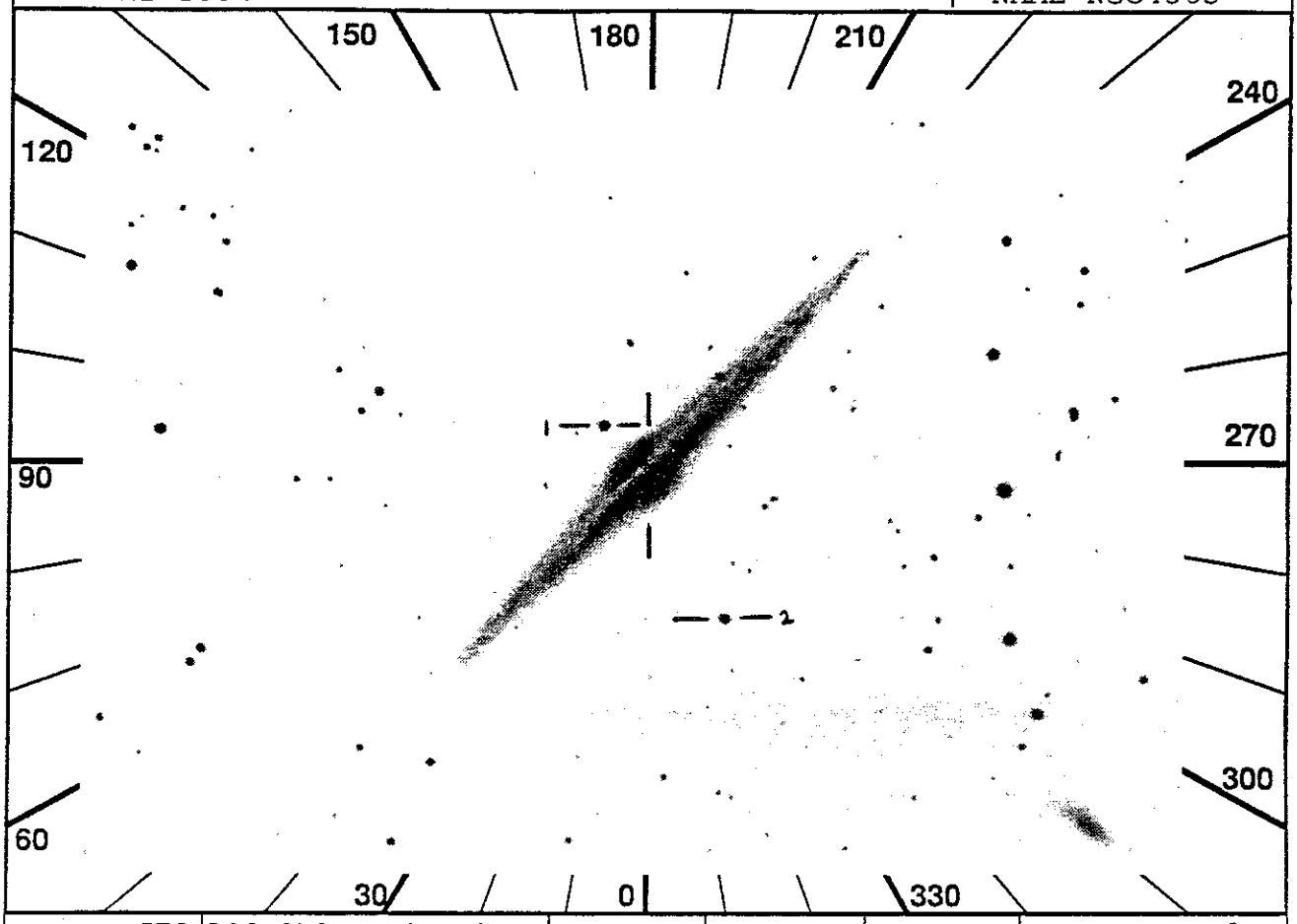
ID: 6406-12
Names: NGC4449
Type: Irregular galaxy
% Pol:
Pol Var:
Pos Ang:
Mechanism: dust scattering
Comments: offset to HII region.



UIT
Observation Description

1 RA 188.4658 DEC 26.2639 ROLL 312.00 | ID 6607-10

2 TIME 1854 | NAME NGC4565



	SEQ	LOC OBS MAG LGR D	A FM OF	A FM OF	A FM OF	ALT1 ALT2
3	H 135	gde off 15 14 ~~2.4~~ 3.2 5	6 ↗ 4 0	6 ↗ 4 ~~85~~ 60	6 ↗ 4 ~~127~~ 90	MANUAL W DARK
4	W 241	nlc ngd 15 15 1.8	7 4 ---	-- - ---	-- - ---	NOLOC DFLD
5	P U 225	DT - T F 7 b5 31 b1 31 a1		- - - -		AST4SC

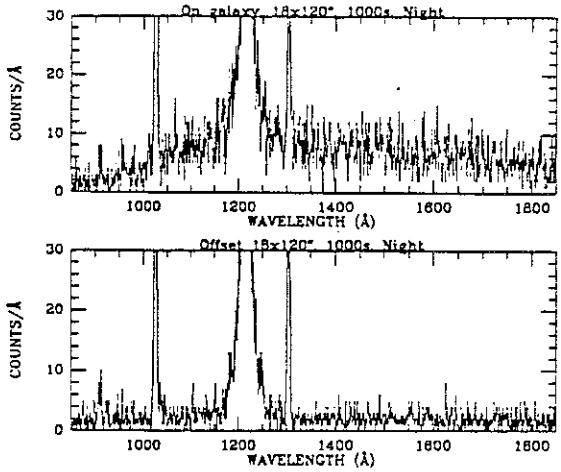
6	I		CMD WRI 3900	19	W		Chk Stat -LOC -PAU RDY
7	I		F007F0010FA0 (4s upd)	20			IMC BEGIN
8	I	IMC	Chk AST WAC incr once/4s	21			HUT ITEM 5
9		JAC	ITEM 16 0	22	W		WUP ITEM 11 DF
10			Config H W U	23	W		WUP wait CAM MODE ZOOM
11			----------	24			All BEGIN
12		JAC	All SETUP	25		JOB	Observe
13	H	-	Note: faint target--if	26		JAC	All PREVIEW
14	H		necessary wait until	27			All QUIT
15	H		night to acquire.	28			----------
16	H	JAC	*IF HUT src visible	29		JAC	ITEM 16_1
17	H		* HUT ITEM 4	30	I		CMD ISS_3908 (1s upd)
18	H		* HUT PFK cur to src				

offset from disk to [redacted] 60" (change from 85")

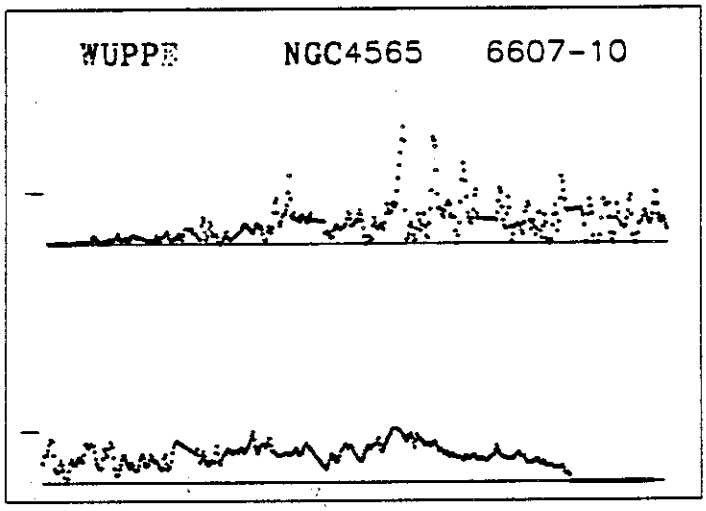
2 if see guide, start

OBJECT: 6607 NGC4565
KEYWORDS: Edge on spiral galaxy
COMMENTS:
Looking for halo emission lines
(CIV, OVI in particular)
Slit is aligned with the disk

Observation starts on the disk
and moves 60" above it



ID: 6607-10
Names: NGC4565
Type: Edge on
% Pol:
Pol Var:
Pos Ang:
Mechanism: none expected
Comments: nucleus spectrum
IUE data used for simulated
spectrum is that of M104.



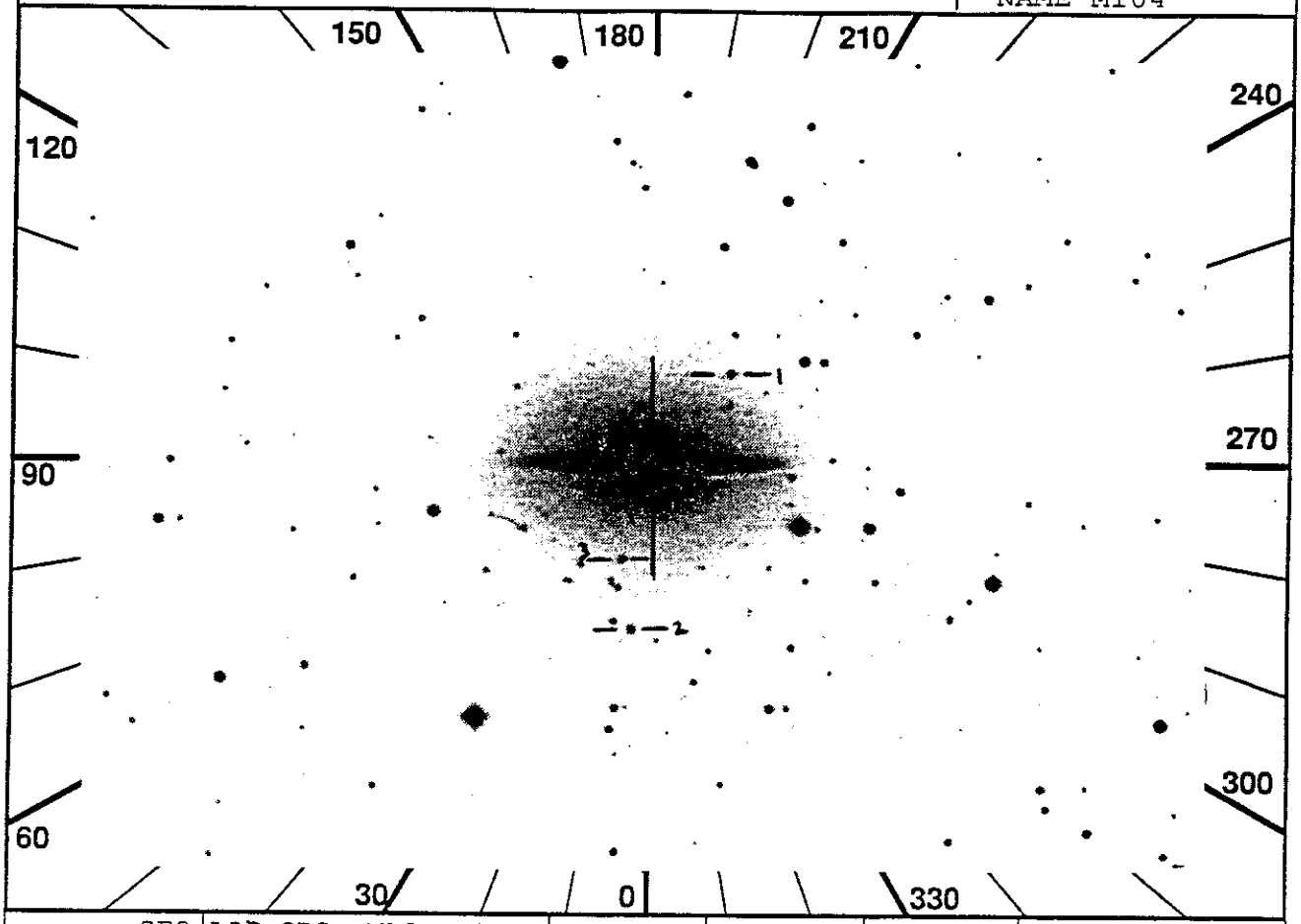
UIT
Observation Description

1 RA 189.3475 DEC -11.3485 ROLL 0.

2 TIME 2039

ID 6608-10

NAME M104



	SEQ	LOC OBS MAG LGR D	A FM OF	A FM OF	A FM OF	ALT1 ALT2
3	H 199	gde sim 15 15 ~~2.3~~ 3.2 5	6 7 4 ---	- - ---	- - ---	MANUAL W DARK
4	W 242	nlc ngd 15 15 1.8	7 4 10	-- - ---	-- - ---	NOLOC DFLD
5	S U 204	DT - T F 24 b5 31 b1 31 a1		- - - -		

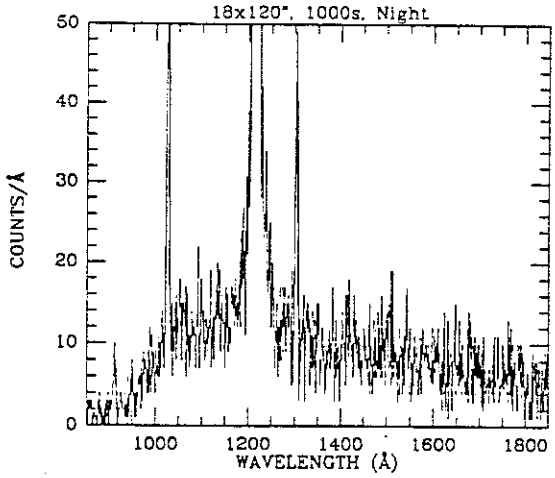
```
 6    JAC ITEM 16_0                    17        IMC BEGIN
 7        Config H W U                 18        HUT ITEM 5
 8        ------------------------     19 W      WUP ITEM 11_DF
 9    JAC All SETUP                    20 W      WUP wait CAM MODE ZOOM
10 H -    Note:  faint target--if      21        All BEGIN
11 H       necessary wait until        22    JOB Observe
12 H       night to acquire.           23    JAC All PREVIEW
13 H JAC *IF HUT src visible           24        All QUIT
14 H     * HUT ITEM 4                  25        ------------------------
15 H     * HUT PFK cur to src          26    JAC ITEM 16_1
16 W     Chk Stat  -LOC -PAU RDY
```

nucleus - if ace guide, start

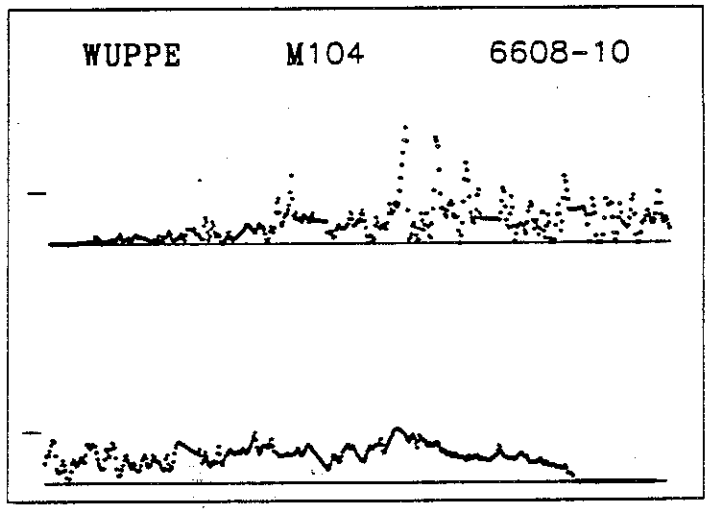
2

OBJECT: 6608 M104 (NGC4594)
KEYWORDS: Edge on spiral galaxy
COMMENTS:
Goal is to study stellar populations
and look for halo emission lines

The Slit is parallel to the major axis and
should be above the disk of the galaxy



ID: 6608-10
Names: M104 NGC4594
Type: Edge on
% Pol:
Pol Var:
Pos Ang:
Mechanism: dust scattering
Comments: offsetting with long slit parallel to famous dust lane, just above it by 10".



UIT
Observation Description