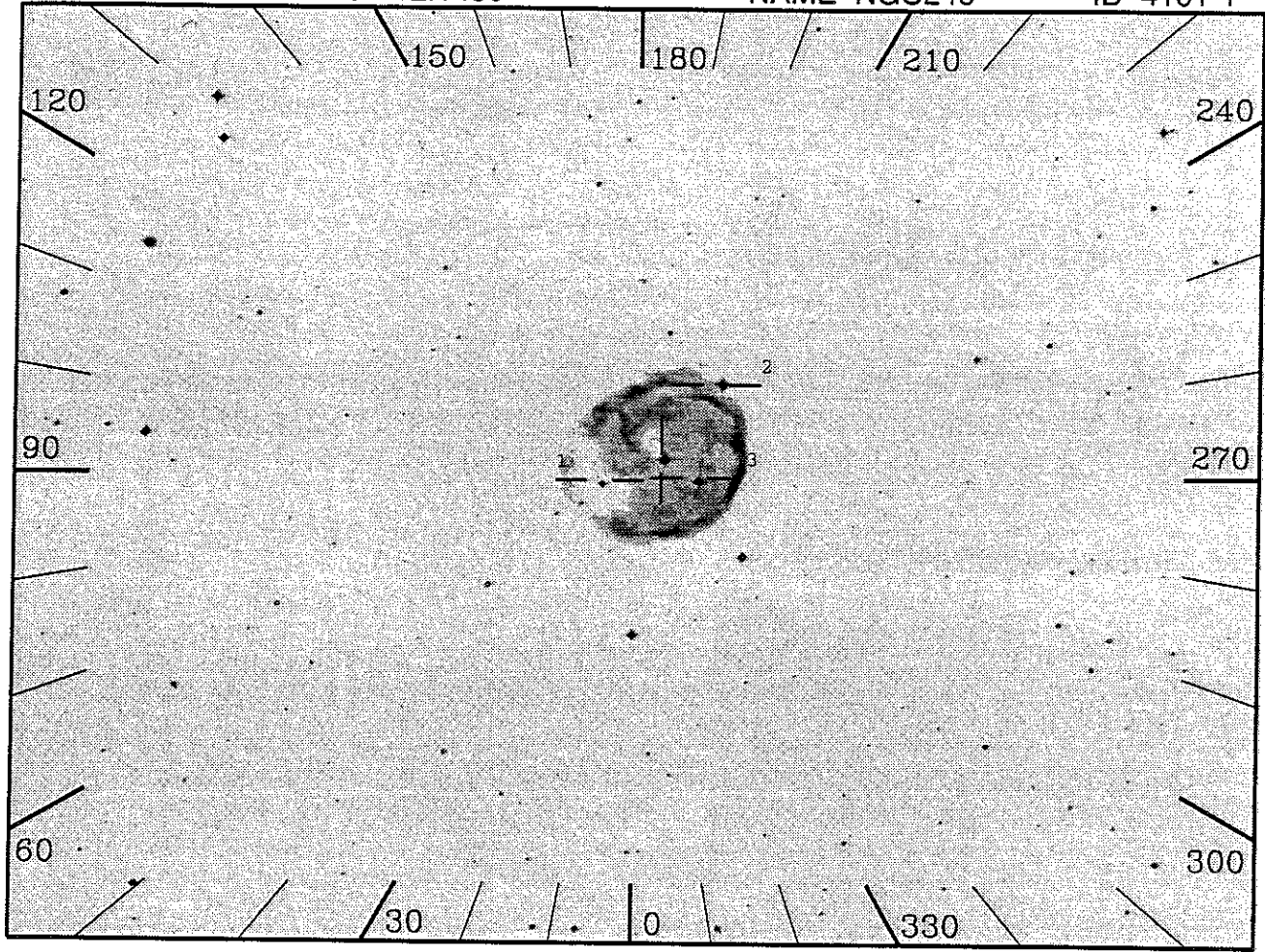
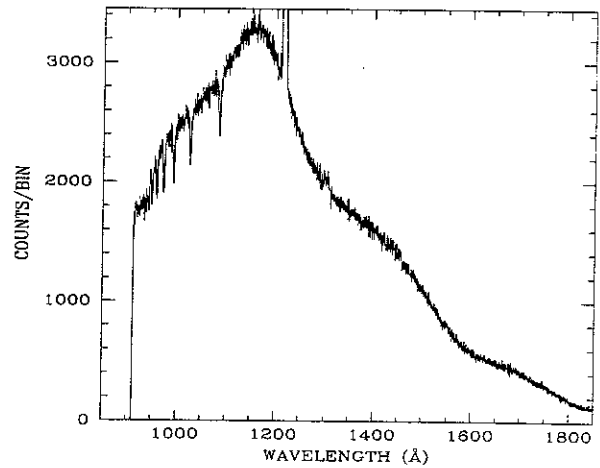


RA 11.1350    DEC -12.1450    NAME NGC246    ID 4101-1



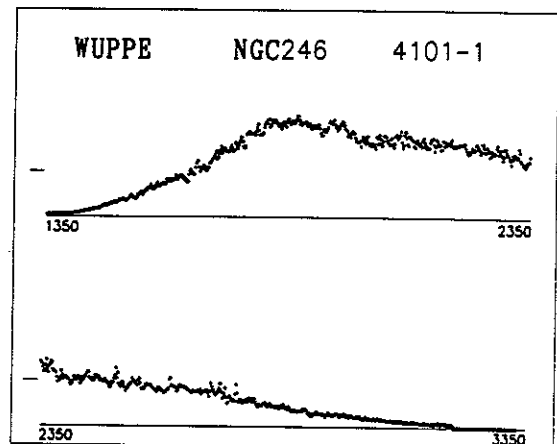
20", 1000(s), Day

OBJECT: 4101-10 NGC246  
 KEYWORDS: O VI Central Star of PN  
 COMMENTS:  
 Hutsim: Lanz NLTE model, normalized to IUE

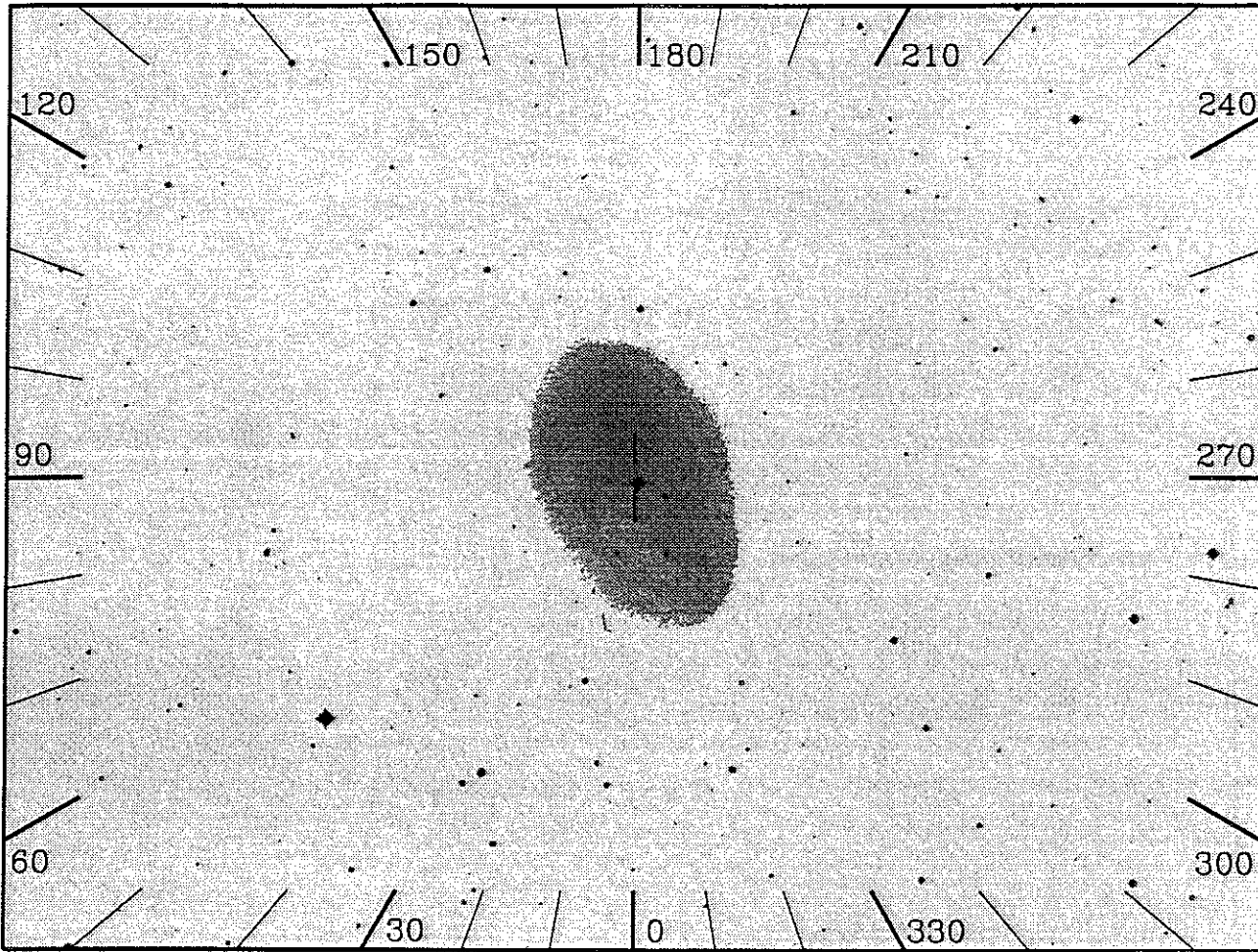


ID: 4101-1    H=Prime    SciPgm= H01  
 Names: NGC246  
 Info: OVI    V=11.89    Wupmag=7.56  
 % Pol:  
 Pos Ang:  
 Mechanism:  
 Comments:

WUP looking at central star; spectrum to be combined with HUT's. IUE spectrum rises to blue; rather featureless except for some faint absorption lines.

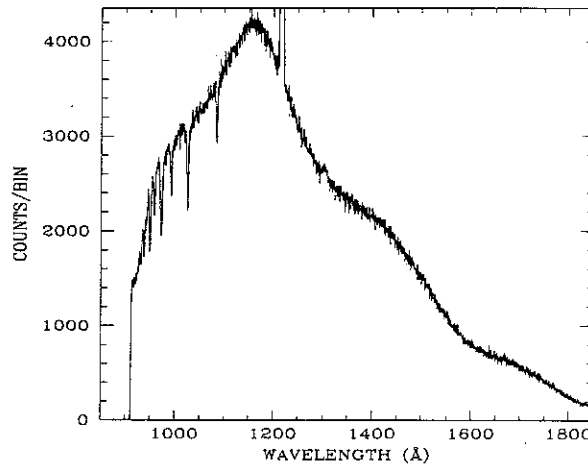


TGT/ASTRO2/FIN A



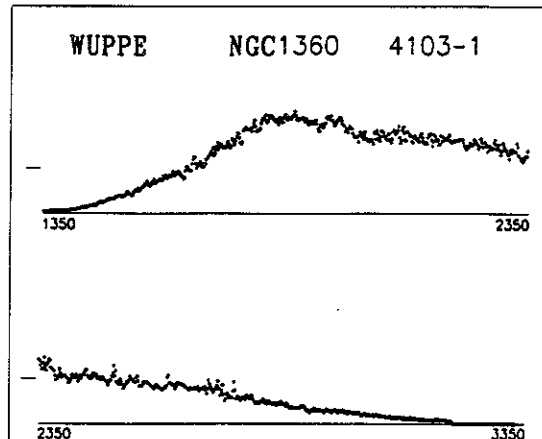
20", 1000(s), Day

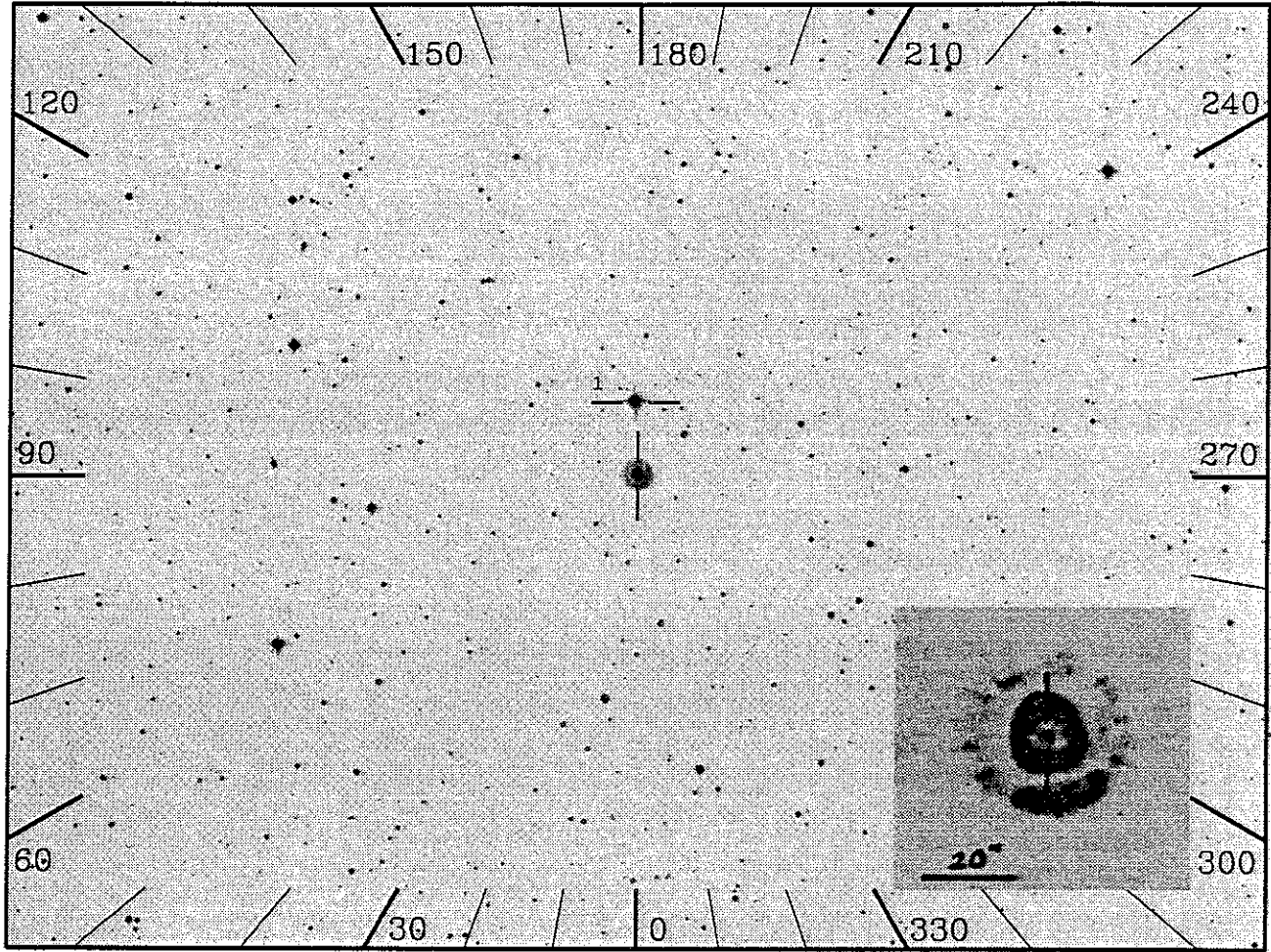
OBJECT: 4103-10 NGC1360  
 KEYWORDS: sdO Central Star of PN  
 COMMENTS:  
 Hutsim: Lanz NLTE model, normalized to IUE



ID: 4103-1 H=Prime SciPgm= H01  
 Names: NGC1360 PHL1556  
 Info: sdO V=11.33 Wupmag=  
 % Pol:  
 Pos Ang:  
 Mechanism:  
 Comments:

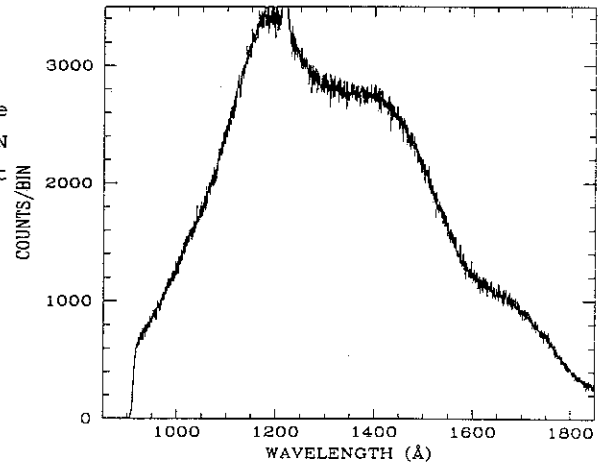
WUP looking at central star; spectrum to be combined with HUT's. IUE spectrum shows steep rise to blue, some absorption lines. IUE data used for simulated spectrum is that of NGC246 (4104).





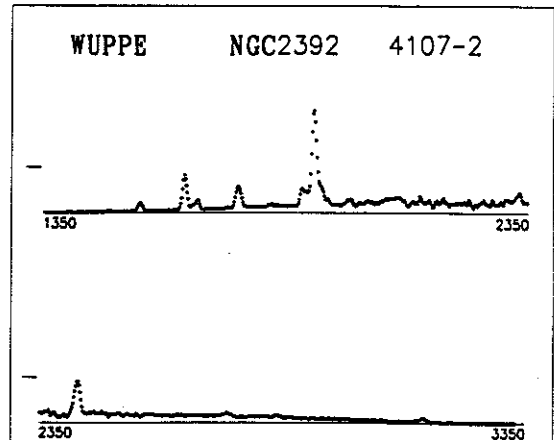
12, 2000(s), Night

OBJECT: 4107 NGC2392  
 KEYWORDS: Planetary Nebula with Double shell  
 COMMENTS:  
 Bright Inner PN ring close by a few arcsec to star: use 12" slit to obtain stellar spectrum. Then offset to PN  
 Dim outer PN ring well separated from star: 10x56" slit



ID: 4107-2    W=Prime    SciPgm= W34  
 Names: NGC2392    ESKIMO  
 Info:            V=10.4    Wupmag=8.47  
 % Pol:        0.24  
 Pos Ang:      72.  
 Mechanism: Dust scattering in nebula  
 Comments:

IUE spectrum shows many strong emission lines, slight rise to blue. Desired PI roll of 95 deg (IPS obj roll=-5) to maximize light coming in and pol. Observe central star first, then offset to south part of nebula.

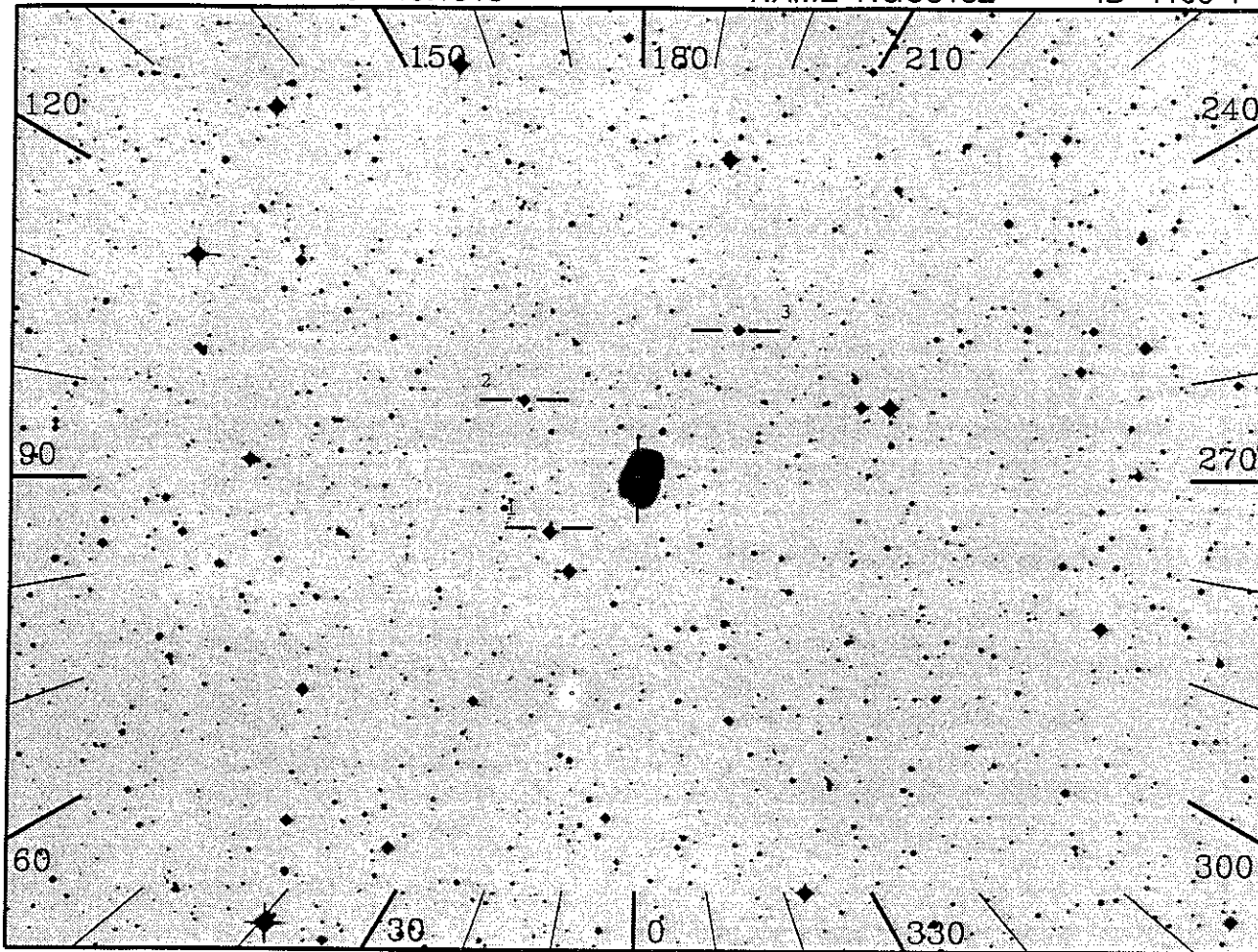


RA 151.2300

DEC -40.1918

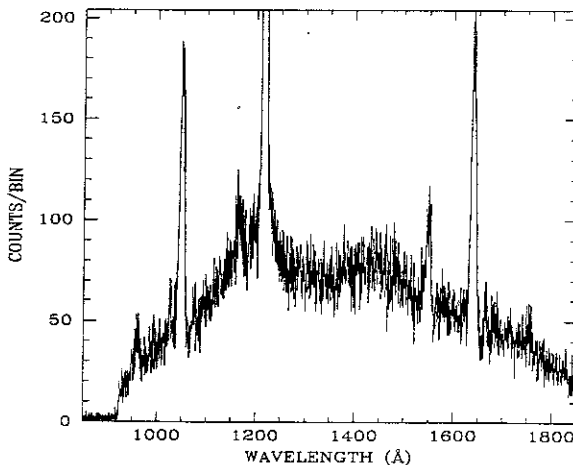
NAME NGC3132

ID 4109-1



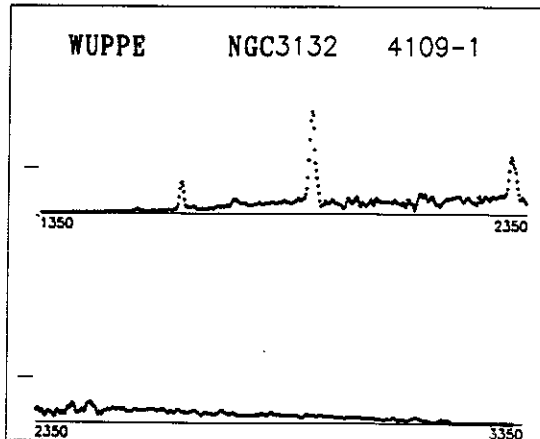
OBJECT: 4109 NGC 3132  
 KEYWORDS: Young Planetary Nebula  
 COMMENTS:  
 Central hot star has binary A0-type companion.  
 Molecular Hydrogen ring at offset to EAST.  
 Observe Nebula 10x56" slit; A0 binary through 12" slit.  
 Field A8 star coincident with shell to South-West.

11x60, 2000(s), Night



ID: 4109-1 W=Prime SciPgm= W34  
 Names: NGC3132  
 Info: V=10.1 Wupmag=10.5  
 % Pol:  
 Pos Ang:  
 Comments:

Desired PI roll of 140 deg (IPS obj roll=-50) follows major axis of nebula. Avoid central star. IUE spectrum of central star is flat, some em and abs lines. IUE spectrum of neb shows mostly em lines. Expect some pol since physically similar to other highly polz'd bipolar nebulae. Offset 17 arcsec from central star to SW part of nebula.

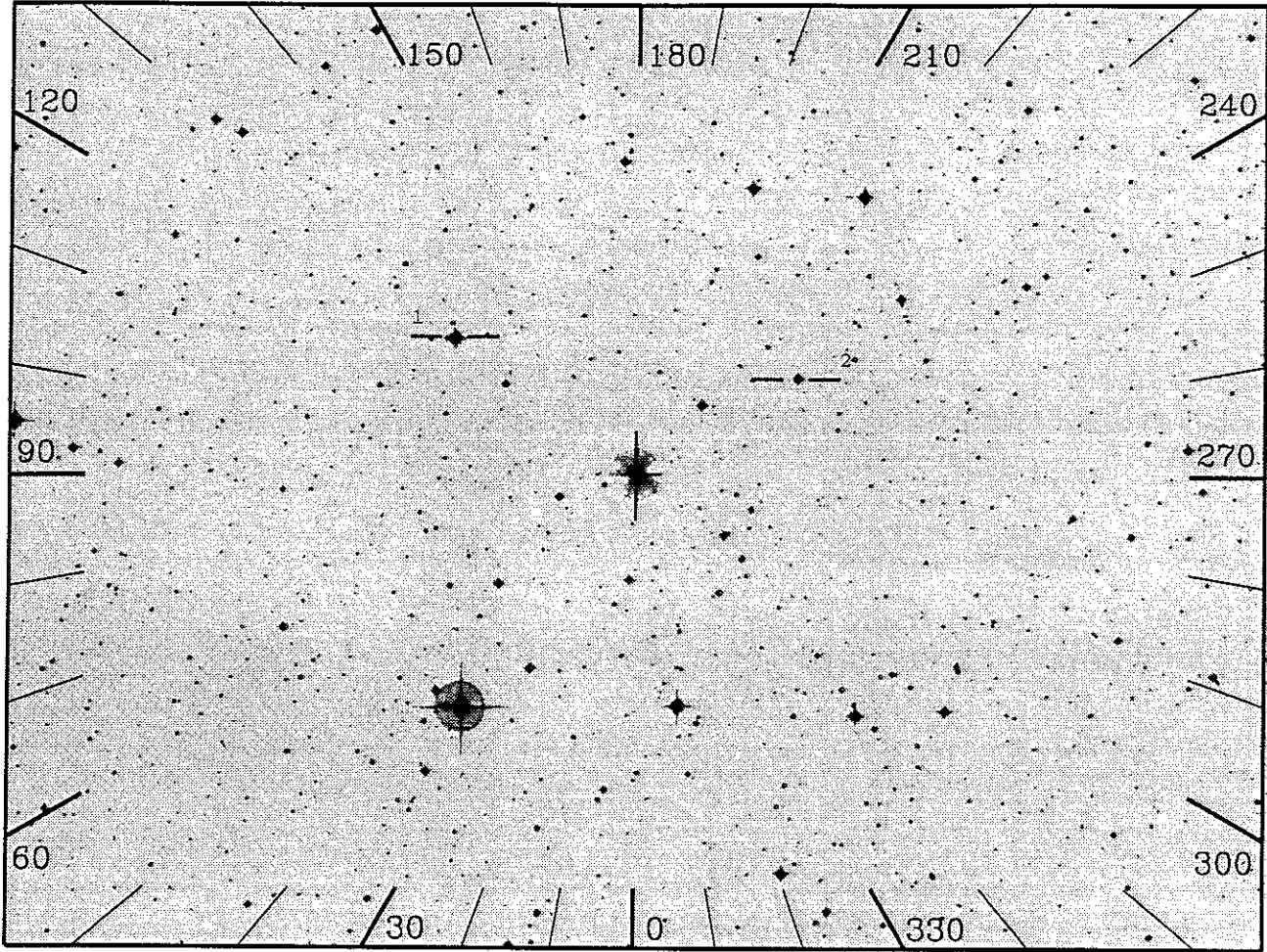


RA 94.4040

DEC -10.6148

NAME HD44179

ID 4204-1



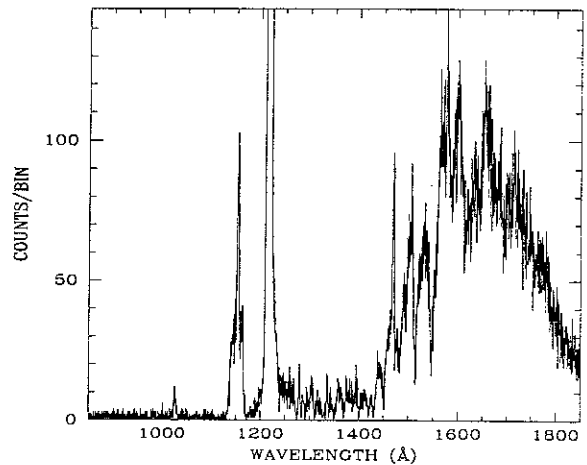
12, 2000(s), Night

OBJECT: 4204 HD44179

KEYWORDS: A-type star in molecular gas outflow nebula

COMMENTS:

New emission lines from complex unidentified molecules might appear below 1200 Angstroms. Nebular spectrum will contain scattered light from star. Observe star through 12" slit, then offset North and observe nebula through 10x56" slit. Small offset makes observation tricky if pointing unstable.



ID: 4204-1 W=Prime SciPgm= W22

Names: HD44179 REDRECTGL

Info: B9II-IIIP V= 8.8 Wupmag=10.9

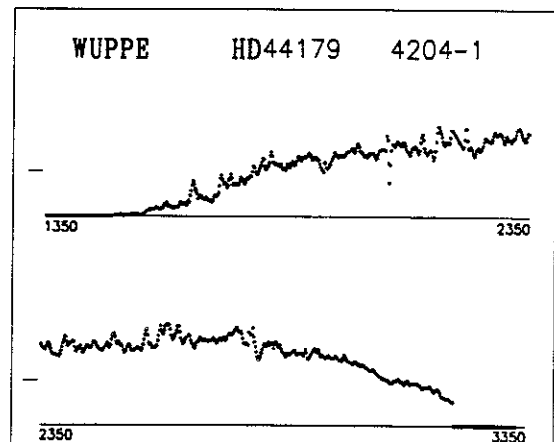
% Pol: 20.

Pos Ang: 35.0

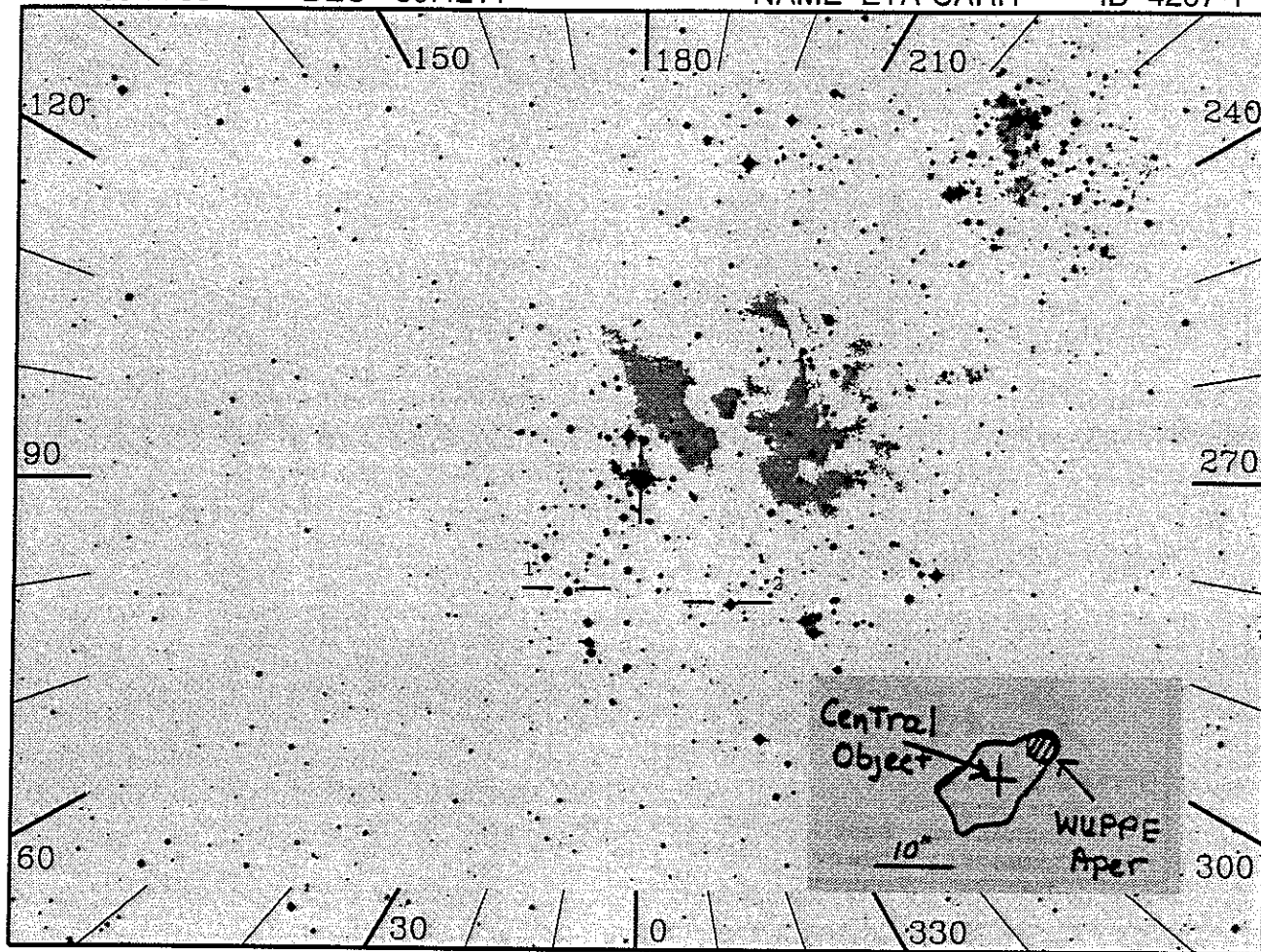
Mechanism: Dust scattering in nebula

Comments:

Desired PI roll of 80 deg (IPS obj roll=+10) chosen to align with nebula and avoid central star. Offset to cusp of nebula.



TGT/ASTRO2/FIN A



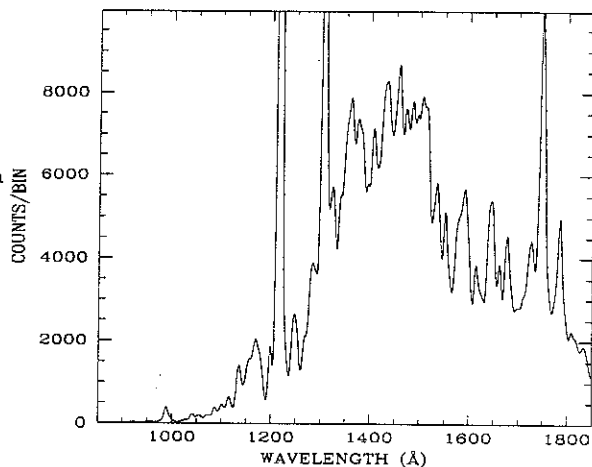
10x56, 2000(s), Day

OBJECT: 4207 ETA-CARH

KEYWORDS: Luminous unstable variable star with nebula

COMMENTS:

Star is a member of OB Cluster Tr 16. Highly unpredictable variable star. Illuminates reflection nebula NGC 3372, as well as "homunculus" ejecta nebula. Keep slit small to avoid straying onto cluster stars. After positioning on Eta Car, offset at brightest part of NGC 3372. Door states safe if Eta-Car brightens but not in an extreme outburst.



ID: 4207-1 W=Prime SciPgm= W22

Names: ETA-CARH HD93308

Info: B1 V= 6.2 Wupmag=10.8

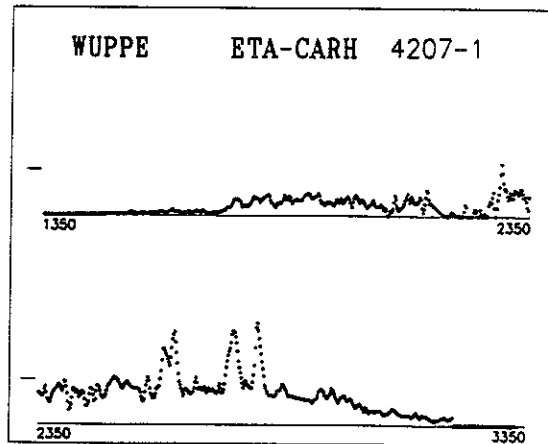
% Pol: 35.

Pos Ang: 45.3

Mechanism: Dust scattering in nebula

Comments:

Desired PI roll of 135 deg (IPS obj roll = -45) chosen to maximize incoming light by aligning w/ Homunculus. Very large visible pol indicates scat angle near 90 deg observation will give Pmax in pol scattering law. Offset to head of Homunculus.

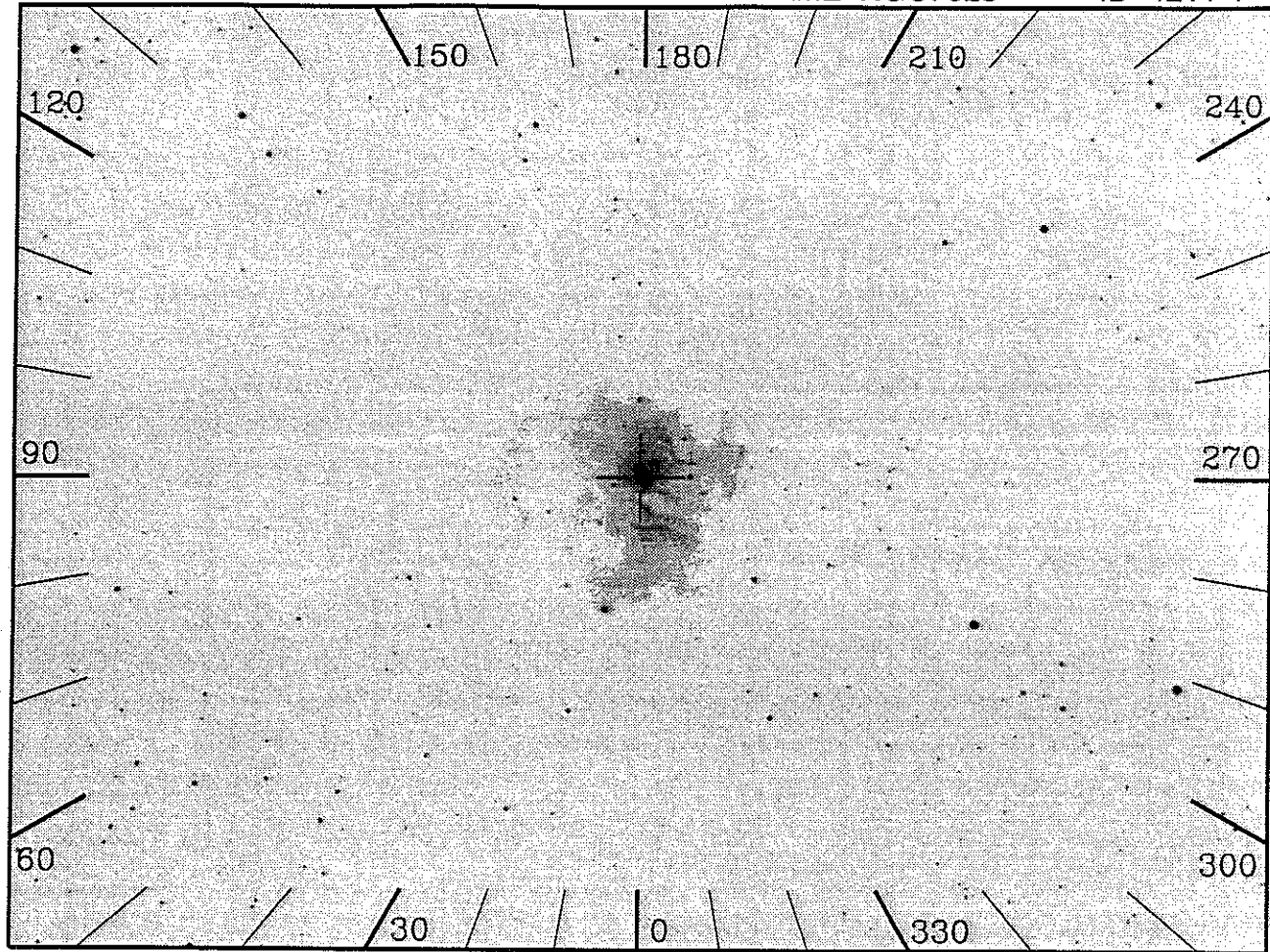


RA 315.2487

DEC 67.9654

NAME NGC7023

ID 4211-1



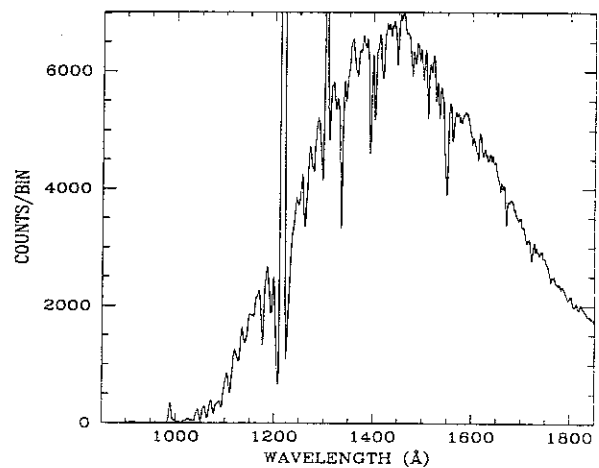
20, 2000(s), Day

OBJECT: 4211 NGC7023

KEYWORDS: B star in Reflection Nebula

COMMENTS:

Molecular hydrogen excited by star imbedded in cloud.  
 Observe star in day through door 3, slit 7; offset to  
 nebula at night through door 5, slit 6. More  
 important to observe nebula than star. Only bright  
 guide star is the central star, which will be useful  
 only after the offset!



ID: 4211-1 W=Prime SciPgm= W22

Names: NGC7023 HD200775

Info: B2VE V= 7.2 Wupmag=12.7

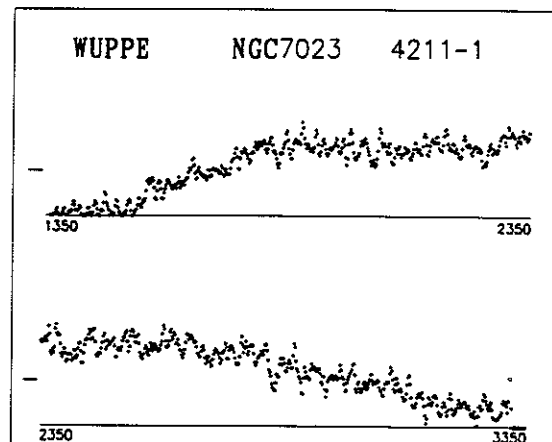
% Pol: 7.

Pos Ang: 149.

Mechanism: Dust scattering in nebula

Comments:

Observed during Astro-1. Desired PI roll  
 of 50 deg (IPS obj roll=+40) chosen to  
 maximize incoming light. Avoid  
 central star when observing nebula.  
 Offset 45 arcsec to NE part of Nebula.

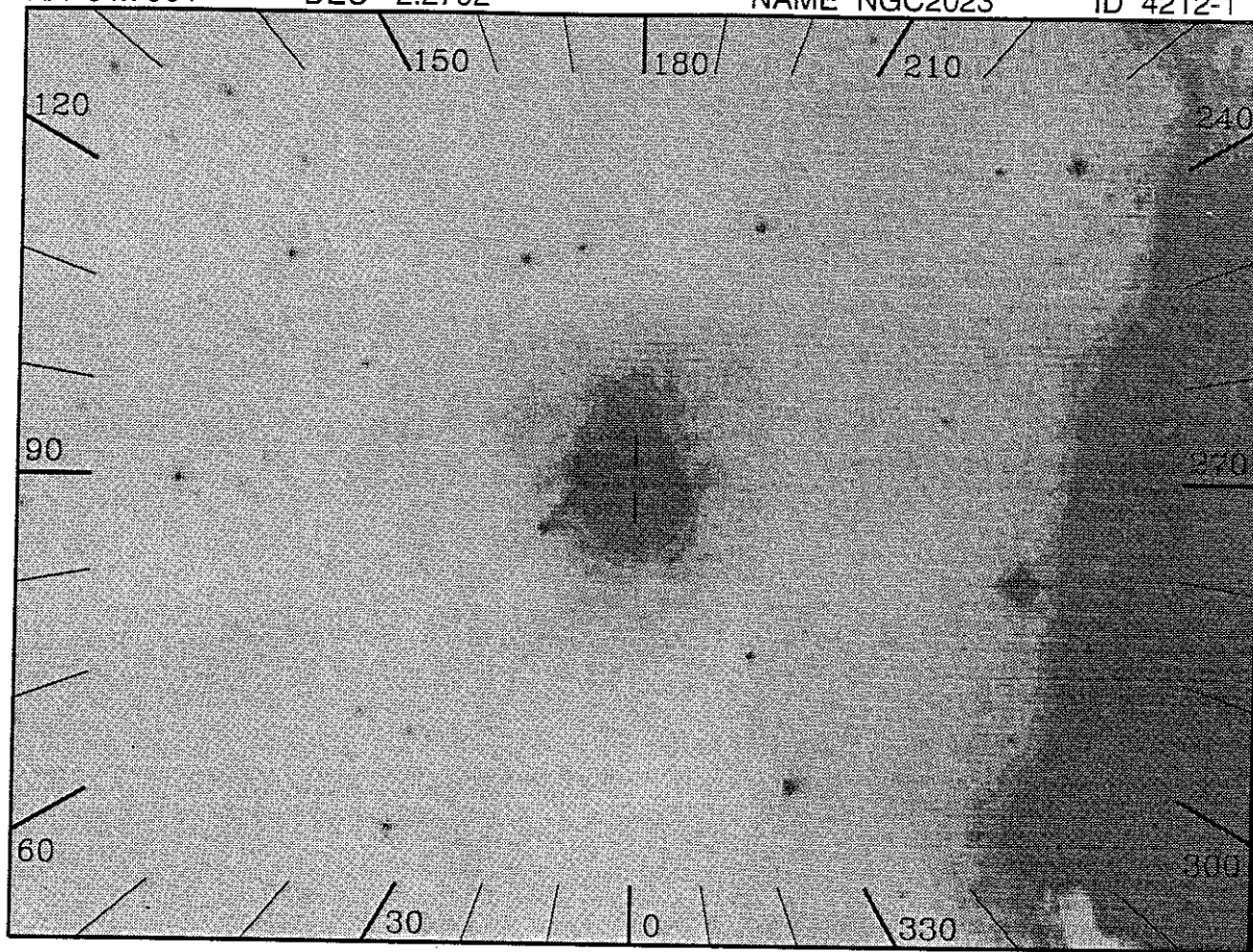


RA 84.7904

DEC -2.2792

NAME NGC2023

ID 4212-1



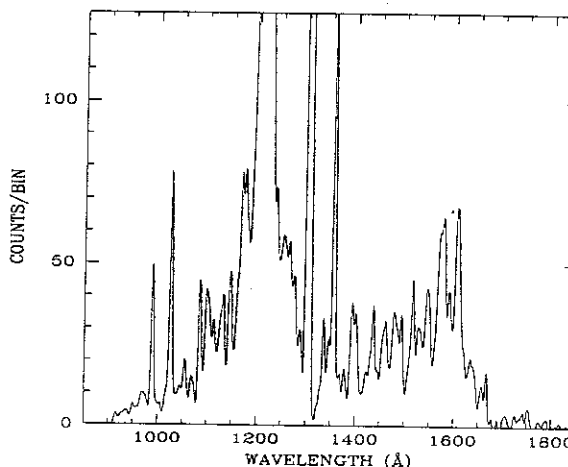
20, 2000(s), Day

OBJECT: 4212 NGC2023

KEYWORDS: Reflection Nebula excited by B star

COMMENTS:

Molecular hydrogen excited by star imbedded in cloud.  
 Observe star in day through partial door 2 (750 cm<sup>2</sup>),  
 slit 7; offset to nebula at night door 5, slit 6.  
**MAKE SURE STAR DOES NOT ACCIDENTALLY ENTER SLIT**  
 after door 5 is opened! More important to observe  
 nebula than star. Only bright guide star is the central  
 star, which will be useful only after the offset!



ID: 4212-1 H=Prime SciPgm= H12

Names: NGC2023

Info: V=13. Wupmag=13.0

% Pol:

Mechanism:

Comments:

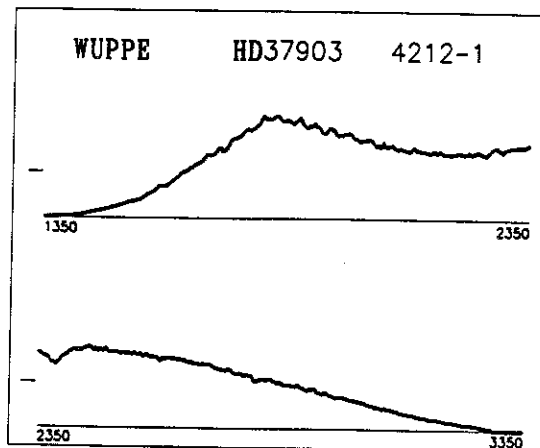
HUT to point at HD37903 (4518), then offset  
 to nebula. WUPPE will obs HD37903 (observed  
 during ASTRO-1).

Info: B1.5V V=7.8 Wupmag=6.24

% Pol: 0.41 (ASTRO-1)

Pos Ang: 120. (ASTRO-1)

UV pol in agreement with predicted Serkowski Law.



TGT/ASTRO2/FIN A

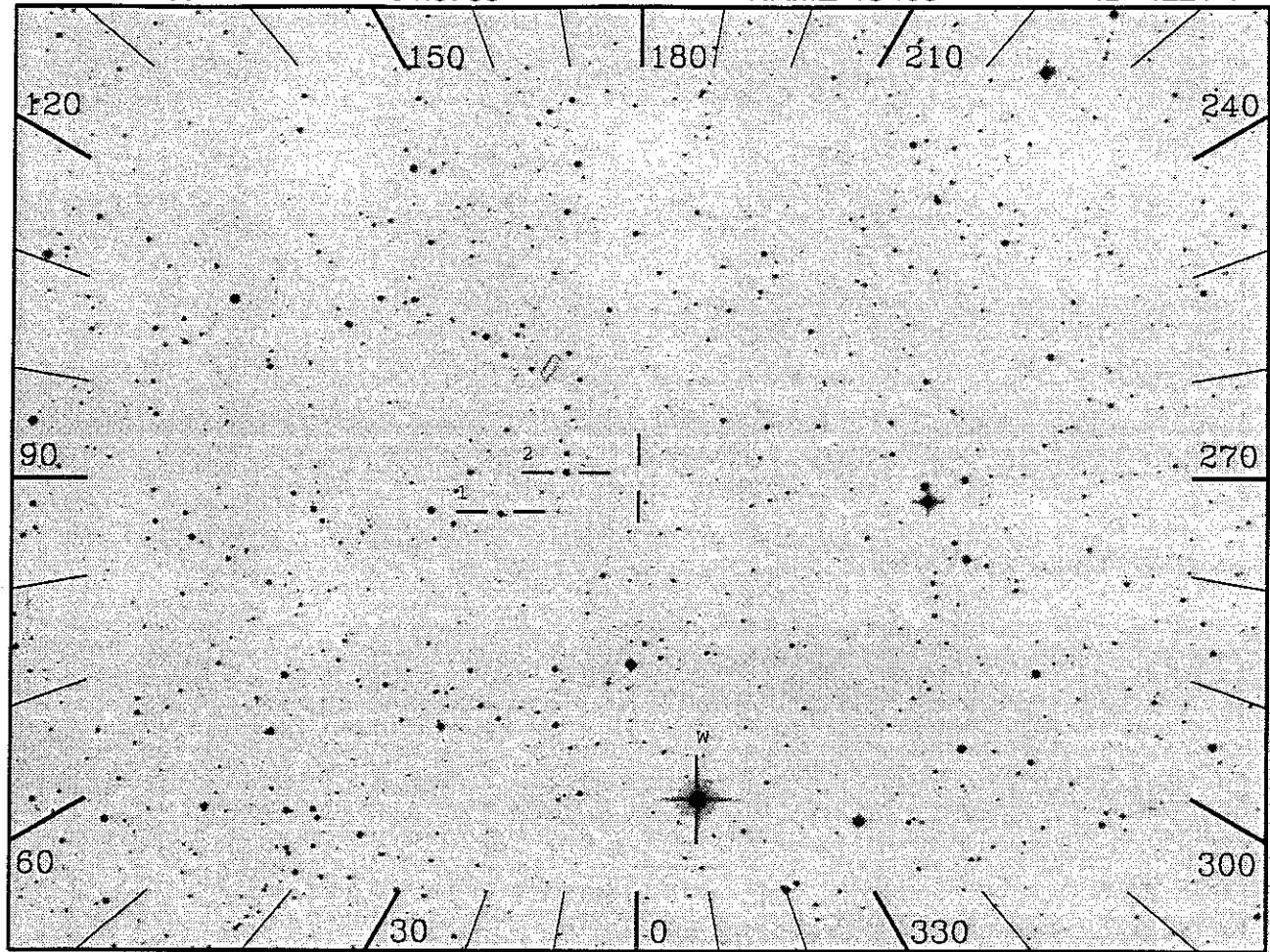


RA 78.2763

DEC 34.3783

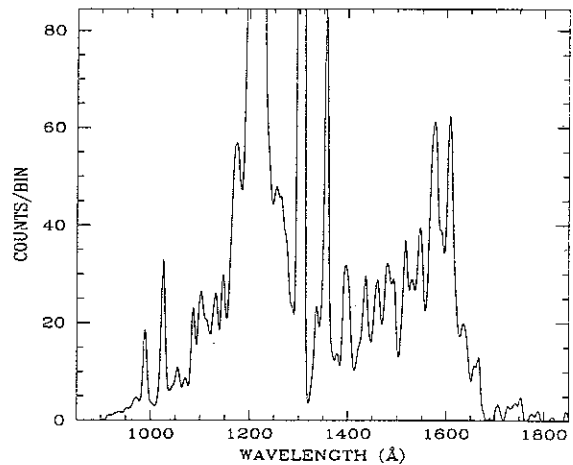
NAME IC405

ID 4221-1

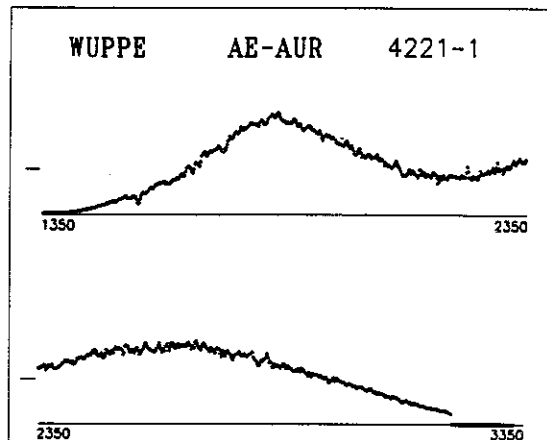


19x197, 2000(s), Night

OBJECT: 4221 IC405  
 KEYWORDS: Reflection nebula by AE-AUR, object ID 2248  
 COMMENTS:  
 Molecular hydrogen excited by star imbedded in cloud.  
 Nebula Paired with star AE-AUR. Nebula observed thru  
 slit 5 during night. MUST CLOSE Slit 5 to Slit 6,  
 2 minutes BEFORE end of night!



ID: 4221-1 H=Prime SciPgm= H12  
 Names: IC405 VDB34  
 Info: V=10. Wupmag=11.4  
 % Pol:  
 Pos Ang:  
 Comments:  
 NOTE: WUPPE OFFSET TARGET.  
 WUP offsetting to central star, AE-Aur (2248).  
 Info: O9.5Ve V=5.94 Wupmag=4.89  
 % Pol: 1.66  
 Pos Ang: 153.0

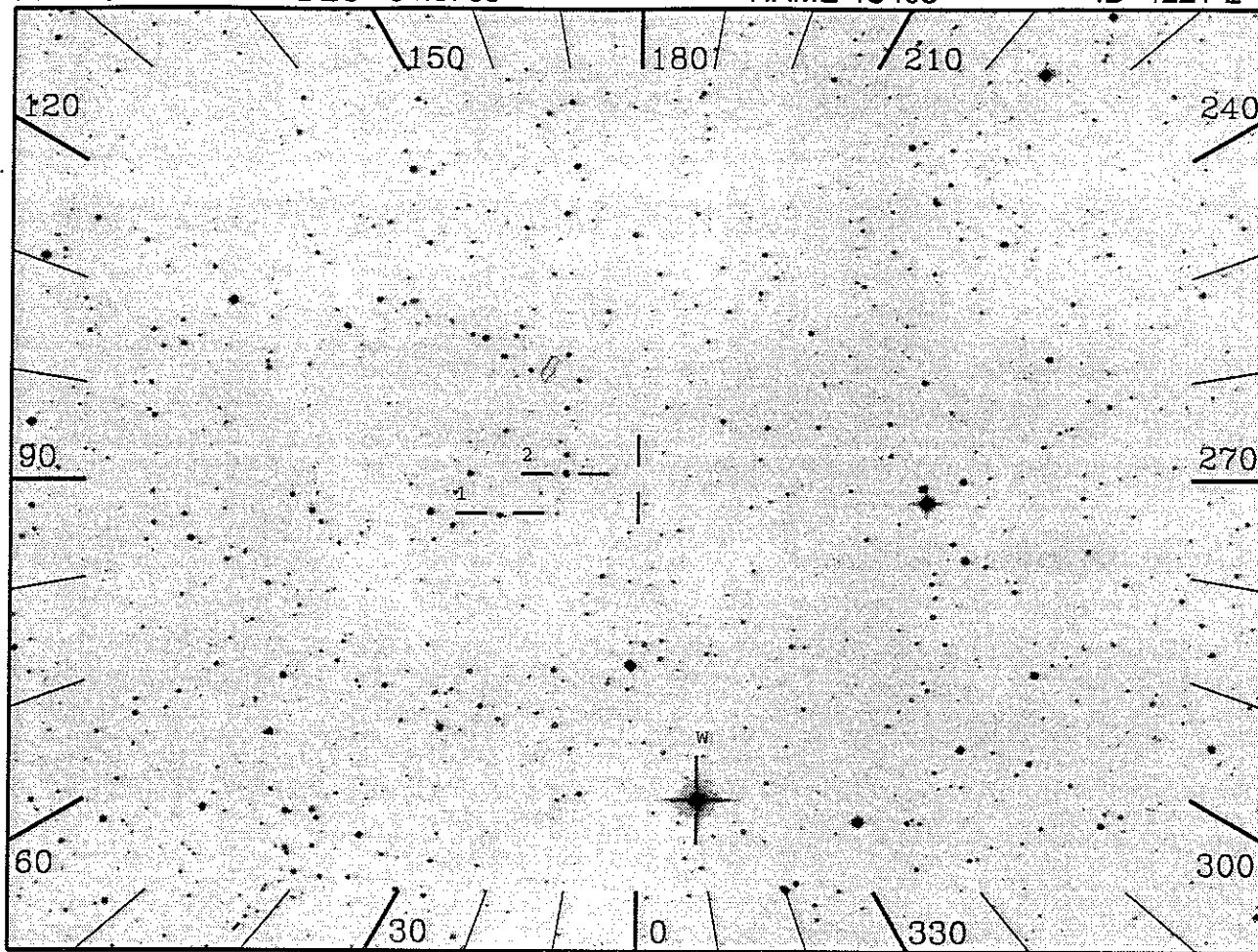


RA 78.2763

DEC 34.3783

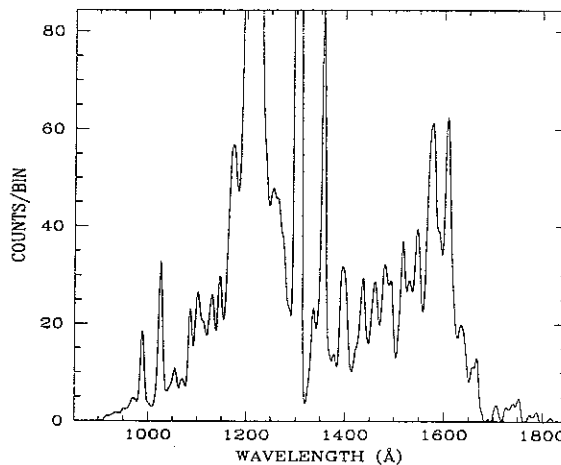
NAME IC405

ID 4221-2

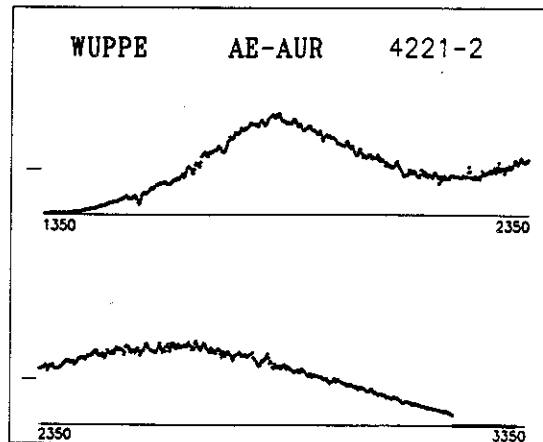


19x197, 2000(s), Night

OBJECT: 4221 IC405  
 KEYWORDS: Reflection nebula by AE-AUR, object ID 2248  
 COMMENTS:  
 Molecular hydrogen excited by star imbedded in cloud.  
 Nebula Paired with star AE-AUR. Nebula observed thru  
 slit 5 during night. MUST CLOSE Slit 5 to Slit 6,  
 2 minutes BEFORE end of night!



ID: 4221-2 H=Prime SciPgm= H12  
 Names: IC405 VDB34  
 Info: V=10. Wupmag=11.4  
 % Pol:  
 Pos Ang:  
 Comments:  
 NOTE: WUPPE OFFSET TARGET.  
 WUP offsetting to central star, AE-Aur (2248).  
 Info: O9.5Ve V=5.94 Wupmag=4.89  
 % Pol: 1.66  
 Pos Ang: 153.0



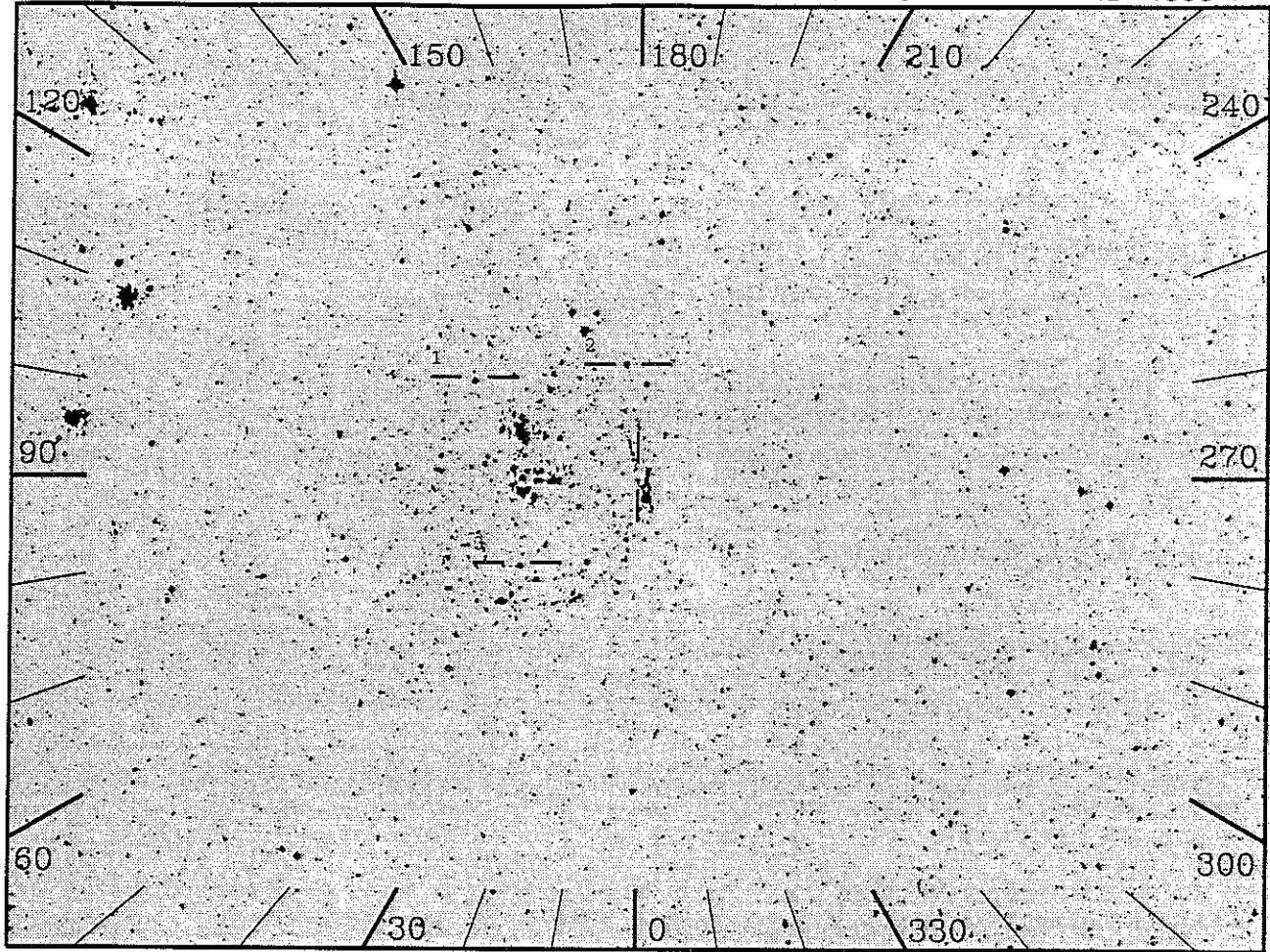
TGT/ASTRO2/FIN A

RA 85.7396

DEC -67.8676

NAME N70

ID 4305-1



10"x56", 1000(s), Day

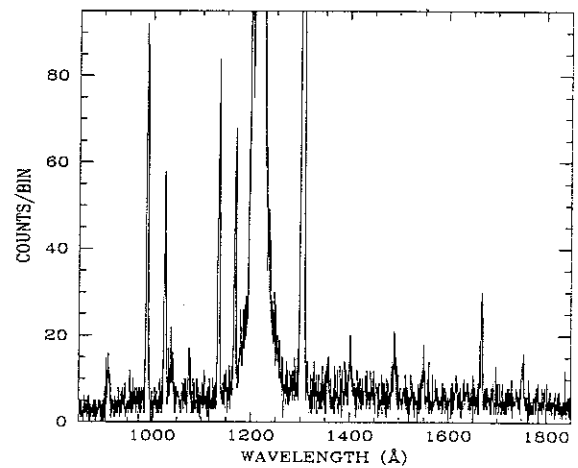
OBJECT: 4305 N70

KEYWORDS: LMC, Stellar Wind Bubble

COMMENTS:

UIT pointing at stellar association surrounded by emission ring N70 in the LMC. HUT is pointing at the western limb of the emission ring to search for shock heating effects from stellar winds. Look for faint emission lines.

Emission ring is LARGE, so exact positioning of HUT slit is not crucial.



ID: 4305-1 U=Prime SciPgm= U04

Names: N70 DEM301

Info: V= Wupmag=

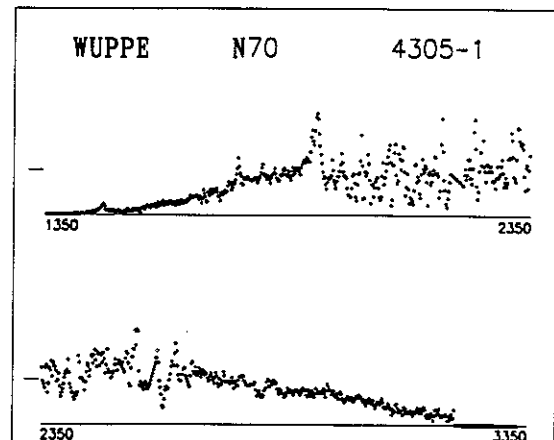
% Pol:

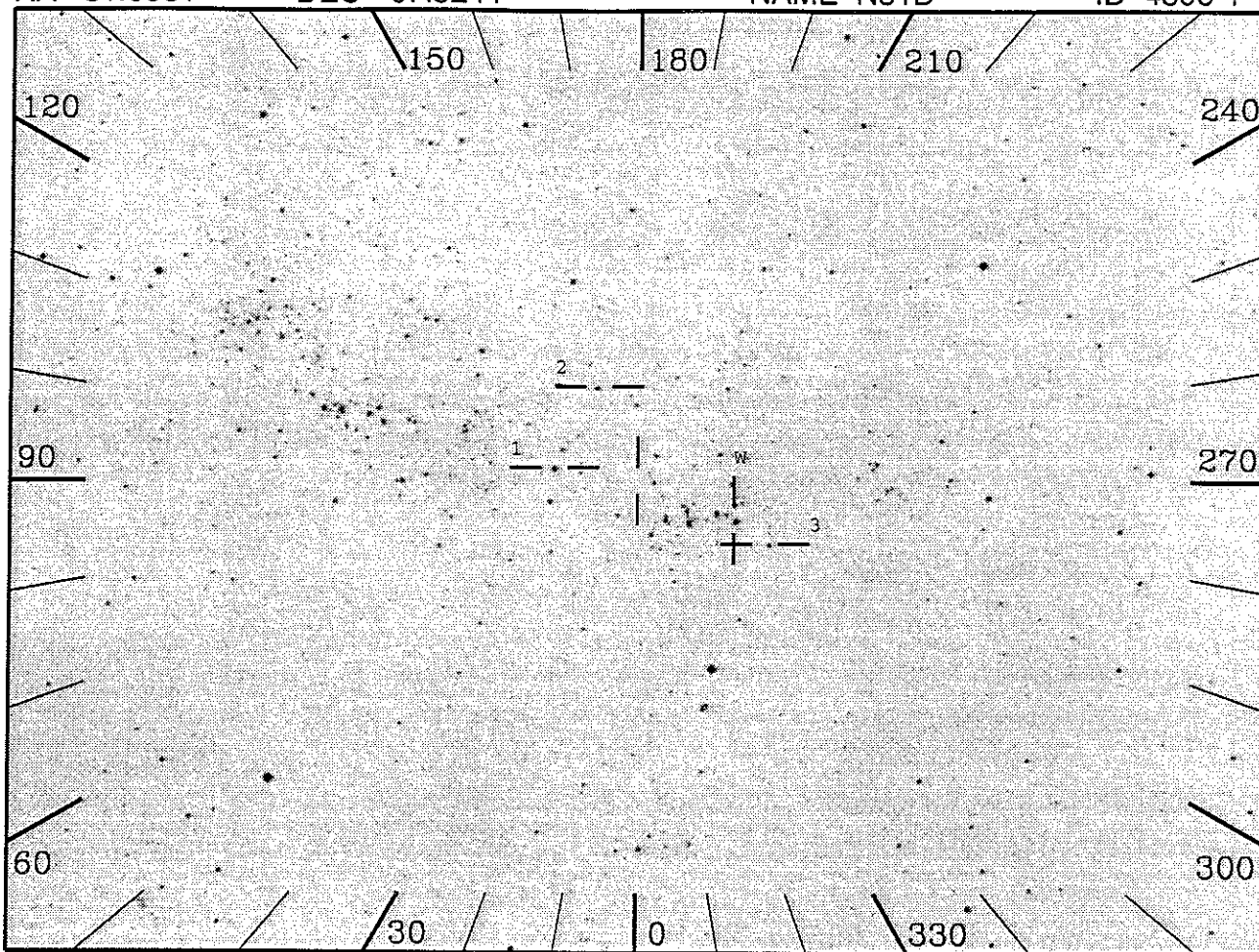
Pos Ang:

Mechanism:

Comments:

IUE data used for simulated spectrum is that of NGC2070 (4302).





10"x56", 1000(s), Day

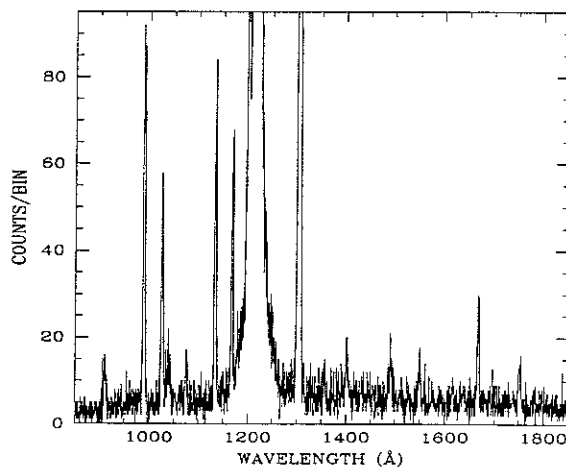
OBJECT: 4306 N51D

KEYWORDS: LMC, Stellar Wind Bubble

COMMENTS:

UIT pointing at stellar association surrounded by emission ring N51D in the LMC. HUT is pointing at the western limb of the emission ring to search for shock heating effects from stellar winds. Look for faint emission lines.

Emission ring is LARGE, so exact positioning of HUT slit is not crucial.



ID: 4306-1 U=Prime SciPgm= U04

Names: N51D DEM192

Info: V= Wupmag=

% Pol:

Pos Ang:

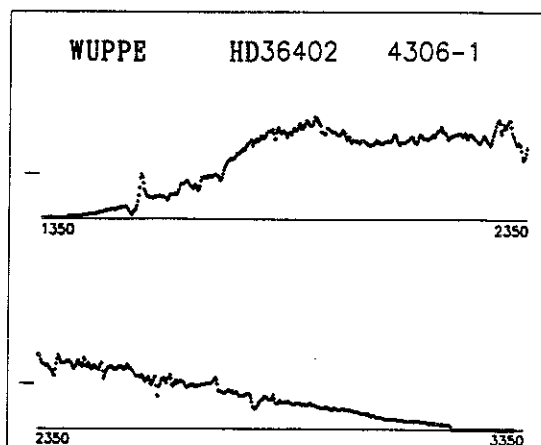
Mechanism:

Comments:

NOTE: WUPPE OFFSET TARGET

WUP offsetting to HD36402=Brey 31.

Info: WC V=11.44 Wupmag= 8.27

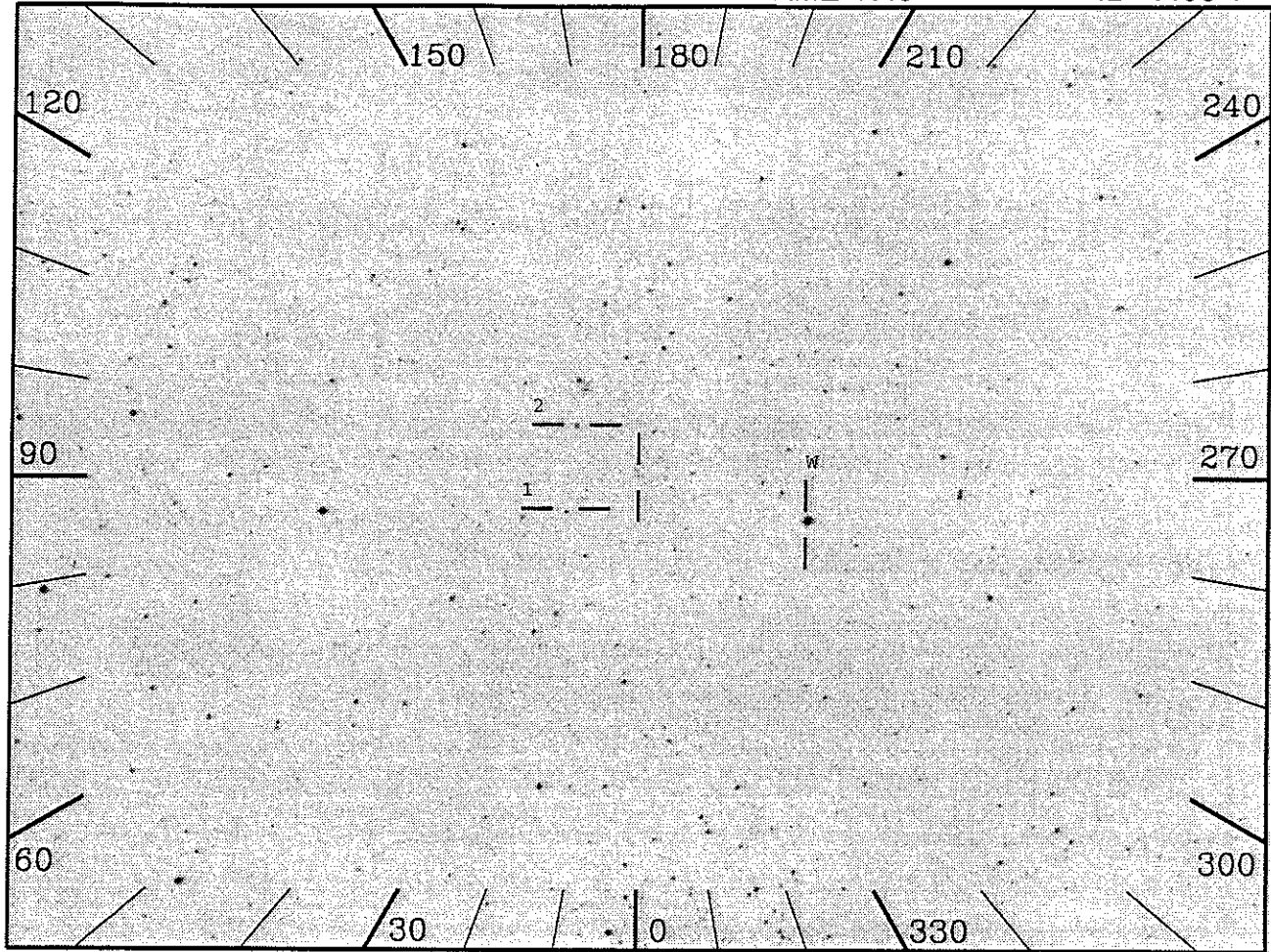


RA 81.4983

DEC -66.1277

NAME N49

ID 4406-1



10"x56", 1000(s), Day

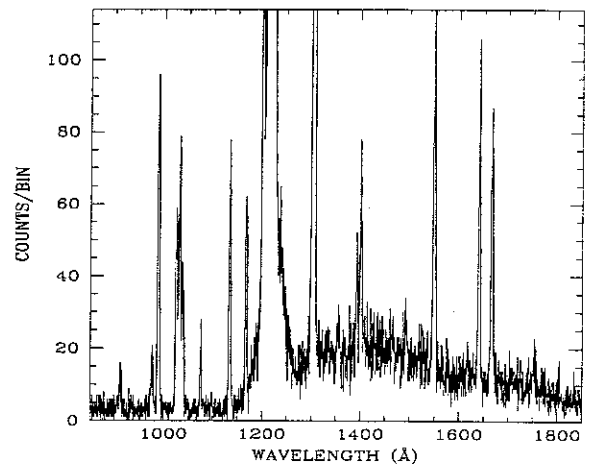
OBJECT: 4406 N49

KEYWORDS: Supernova Remnant, LMC

COMMENTS:

Bright, radiative LMC supernova remnant. Target was observed on Astro-1, but HUT desires a better measurement of O VI 1035 and a deeper search for N V 1240 from the remnant.

One star on TV will bloom to provide access to fainter guide stars. Even though the object is a bright emission line source, it will not be visible on HUT CCTV, so acquire with guide stars.



ID: 4406-1 H=Prime SciPgm= H10

Names: N49 0525-66

Info: V=12. Wupmag=

% Pol:

Pos Ang:

Mechanism:

Comments:

NOTE: WUPPE OFFSET TARGET

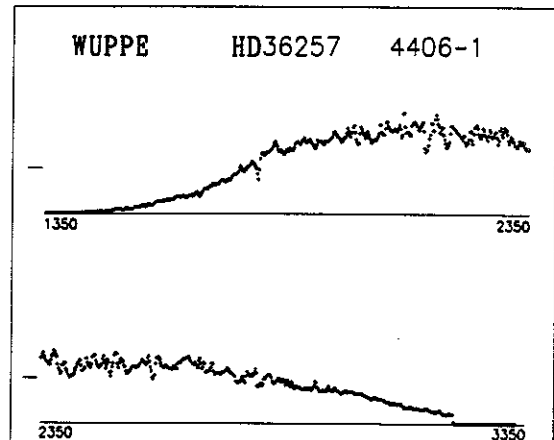
WUP offsetting to HD36257.

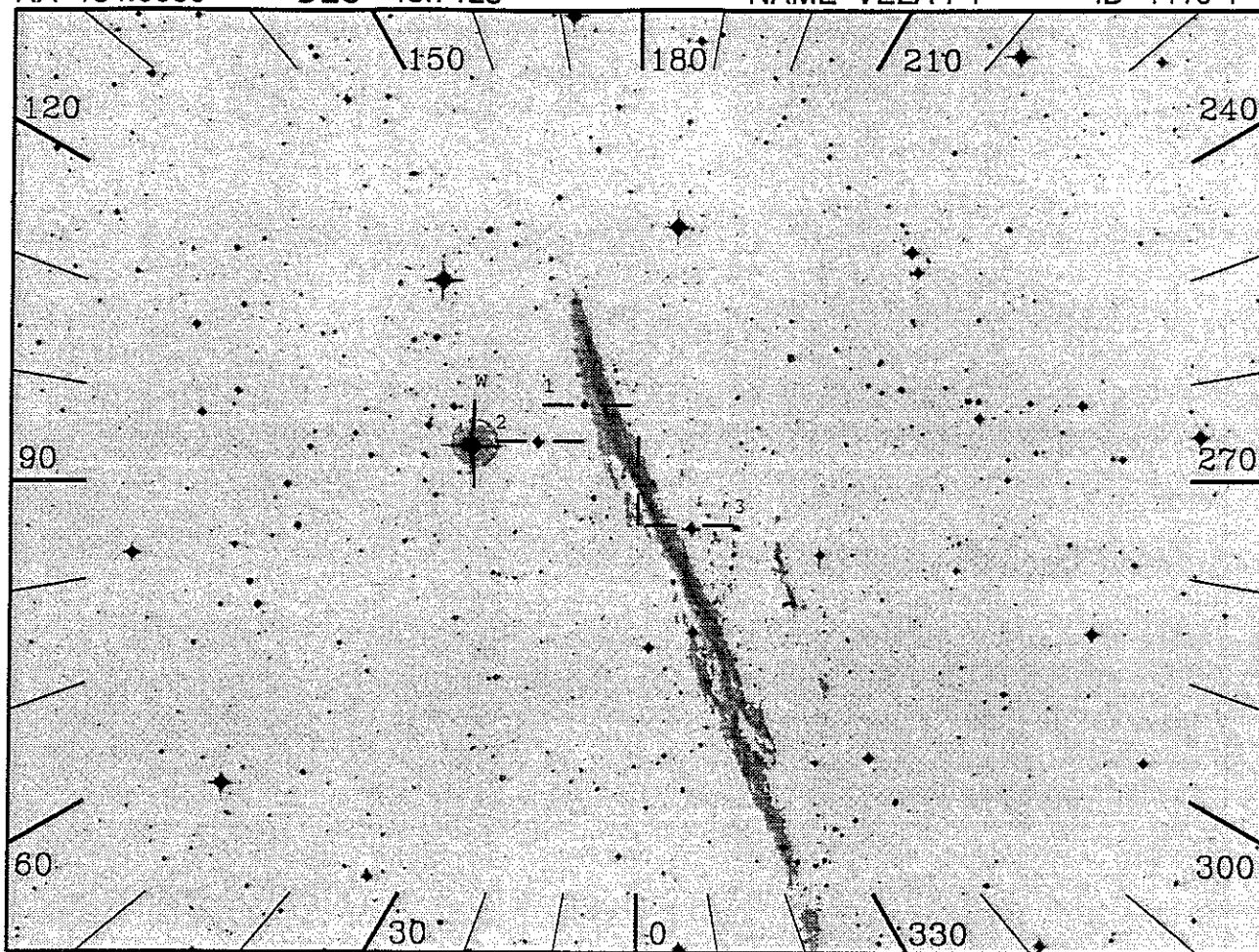
Info: A2Vn V=9.0 Wupmag=

% Pol: 0.4

IUE data used for simulated spectrum

is that of Bet-UMa (0608).





10"x56", 1000(s), Night

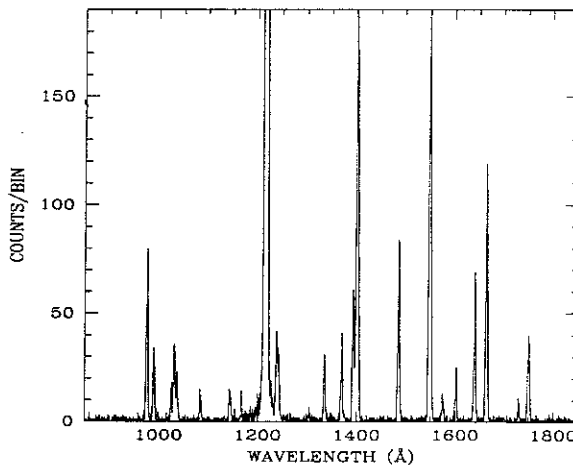
OBJECT: 4410 VELA-P1

KEYWORDS: Supernova Remnant, Radiative Position

COMMENTS:

Position on extreme SE edge of Vela SNR. Corresponds to a small "blow-out" in the X-ray shell. Bright radiative filaments show a range of shock completeness. Offset part way through observation is to sample a region that shows different optical line intensities.

Bright star on TV may bloom somewhat to allow access to fainter guide stars.



ID: 4410-1 H=Prime SciPgm= H10

Names: VELA-P1 SEFIL

Info: V= Wupmag=12.9

% Pol:

Pos Ang:

Mechanism:

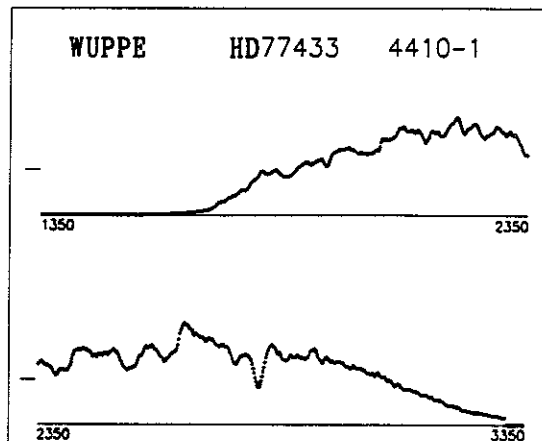
Comments:

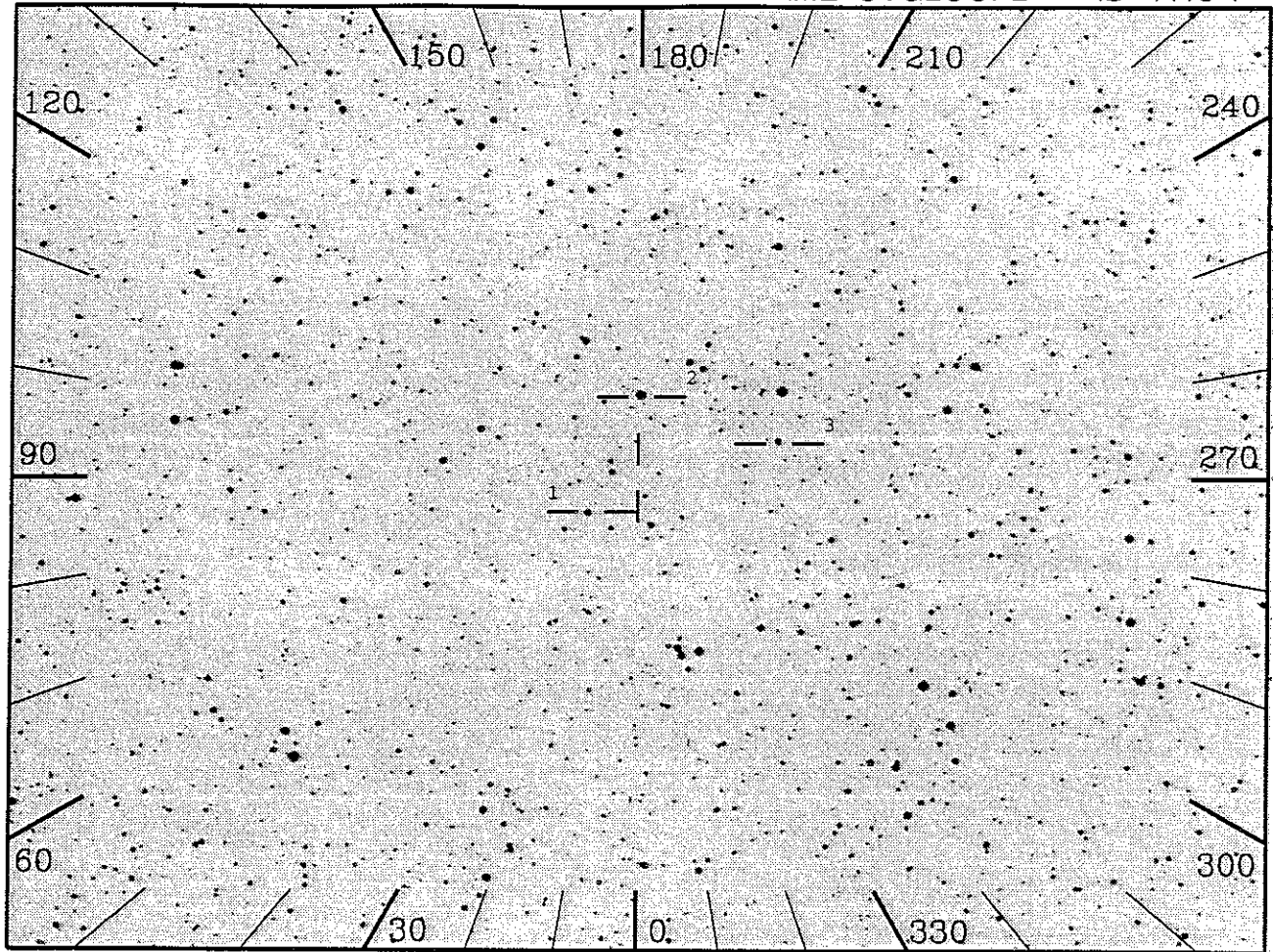
NOTE: WUPPE OFFSET TARGET

WUP offsetting to HD77433.

Info: A5V V= 8.33 Wupmag=

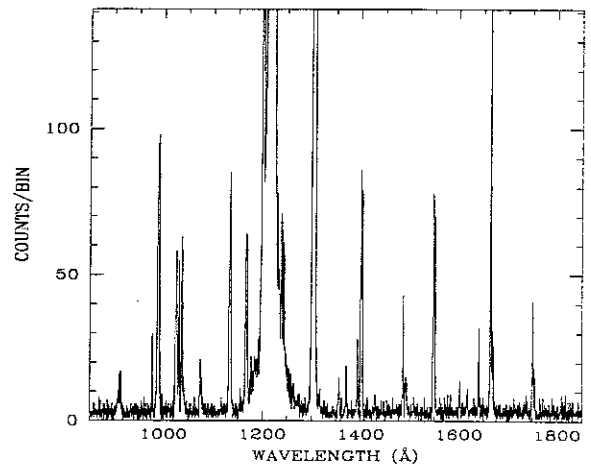
ASTRO-1 data used for simulated spectrum is that of Eta-Hor (2402).



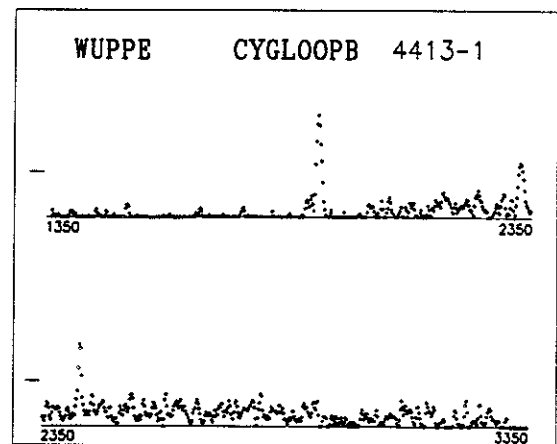


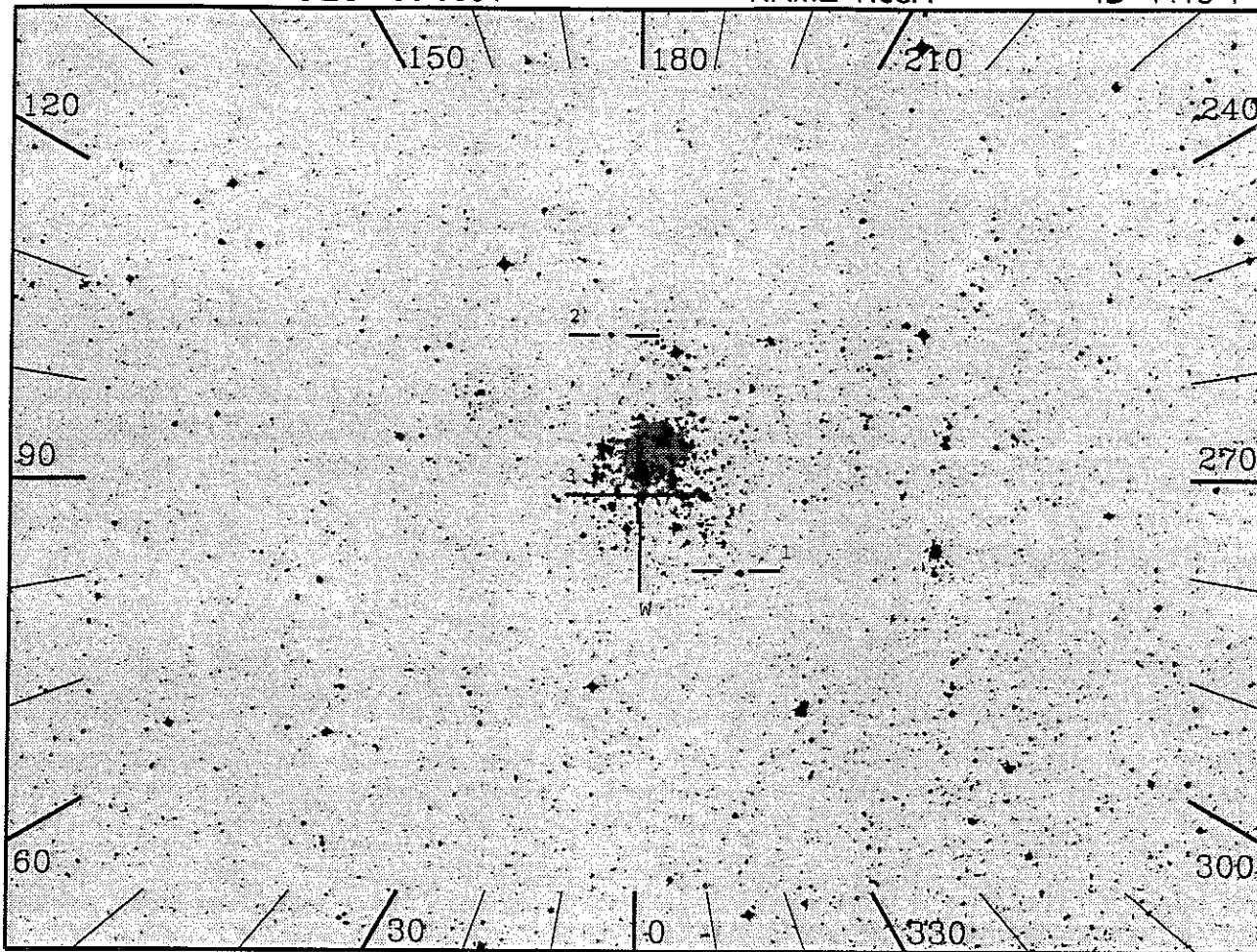
12", 1000(s), Day

OBJECT: 4413 CYGLOOPB  
 KEYWORDS: Supernova Remnant, Radiative Filament  
 COMMENTS:  
 This is a bright, radiative (but incomplete) shock position on the eastern side of the Cygnus Loop. This position was observed on Astro-1 with a 9"x120" aperture. HUT desires observations at two positions with a smaller aperture to diagnose line intensity variations within the Astro-1 aperture position. Hence, the offset part way through the observation.



ID: 4413-1 H=Prime SciPgm= H10  
 Names: CYGLOOPB  
 Info: V=14. Wupmag=12.2  
 % Pol:  
 Pos Ang:  
 Mechanism:  
 Comments:  
 CygLoopB observed during Astro-1.  
 Spectrum to be combined with HUT's.





20", 1000(s), Day

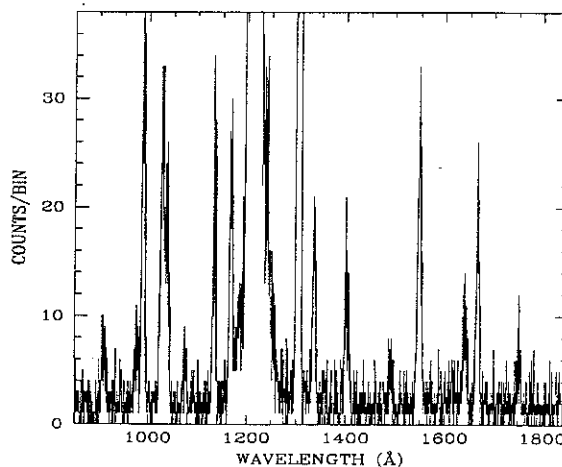
OBJECT: 4415 N63A

KEYWORDS: Supernova Remnant, LMC

COMMENTS:

Second brightest optical SNR in the LMC. Prime example of a shock interaction with an interstellar cloud. Velocities over 200 km/s expected, and so O VI line should be detectable.

Optical object consists of a three-lobed "cloverleaf" of emission. Only the Northern and SouthEastern lobes are shock heated; the SouthWestern lobe is photoionized and should be kept out of the aperture if possible. Object will probably not be visible, so use GS Loc. Observation plan calls for offset to sky and back to object. Guidestar #3 is identical to WUPPE offset target.



ID: 4415-1 H=Prime SciPgm= H10

Names: N63A 0535-66

Info: V=14. Wupmag=11.7

% Pol:

Pos Ang:

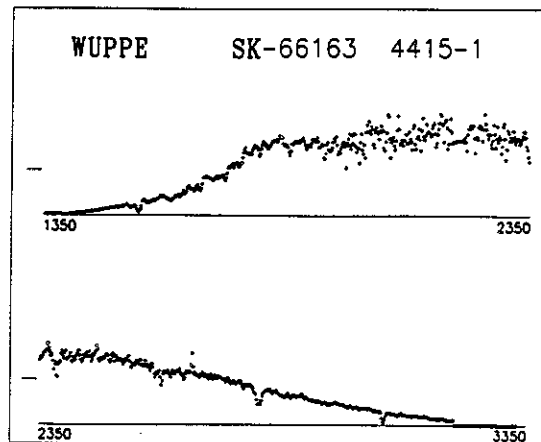
Mechanism:

Comments:

NOTE: WUPPE OFFSET TARGET

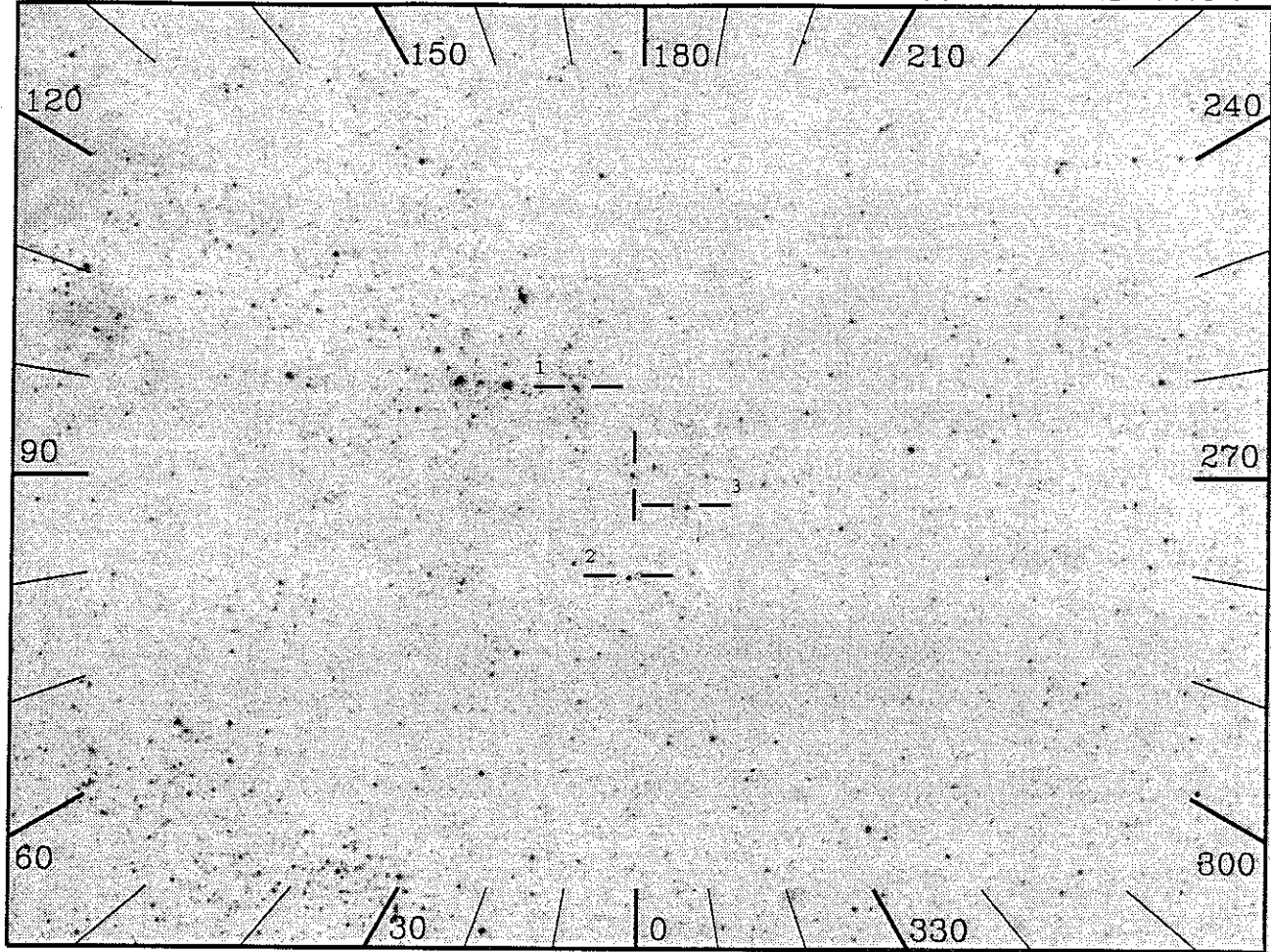
WUP offsetting to SK-66 163.

Info: B0Iab V=12.32 Wupmag=9.39



TGT/ASTRO2/FIN A





20", 1000(s), Night

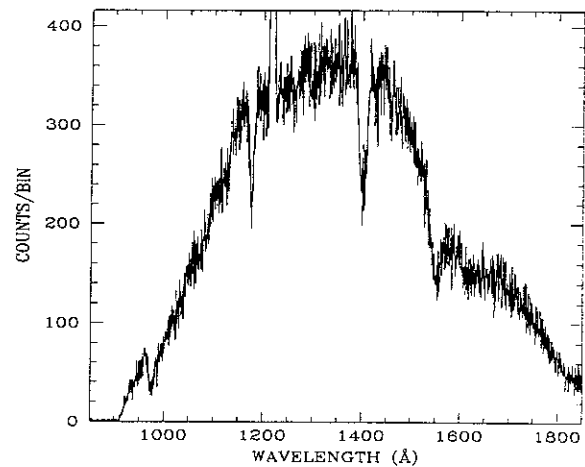
OBJECT: 4416 SN1987A

KEYWORDS: SK -69 203, B star, LMC

COMMENTS:

The pointing is centered in actuality on the star SK -69 203 (at WUPPE's request) and not on the SN itself, which is about 4' farther south. HUT should see a faint B-star continuum from this star.

SIM assumes a Kurucz model with  $T=30000$  K,  $\log g=3.5$ , and  $E(B-V)=0.25$ .



ID: 4416-1    U=Prime    SciPgm= U07

Names: SN1987A    LMC

Info:            V=            Wupmag=12.2

% Pol:

Pos Ang:

Mechanism: Electron and resonance scattering

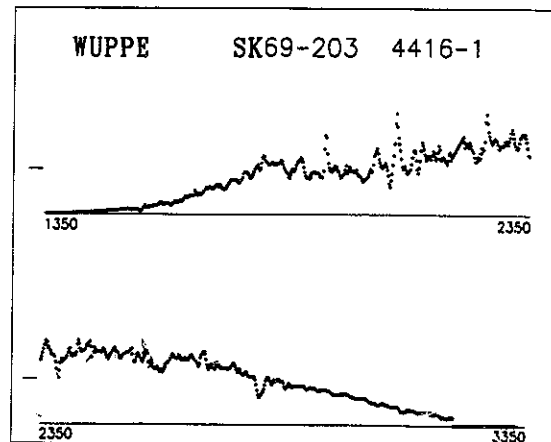
Comments:

SN1987A observed during Astro-1. Has shown intrinsic pol (1-3%) in the optical.

(WUP observes SK69-203, B0.7Ia,  $V=12.29$ ,

$E(B-V)=.19$ ,  $B-V=.01$ . IUE data used for

simulated spectrum is that of SK280-69 (4587).



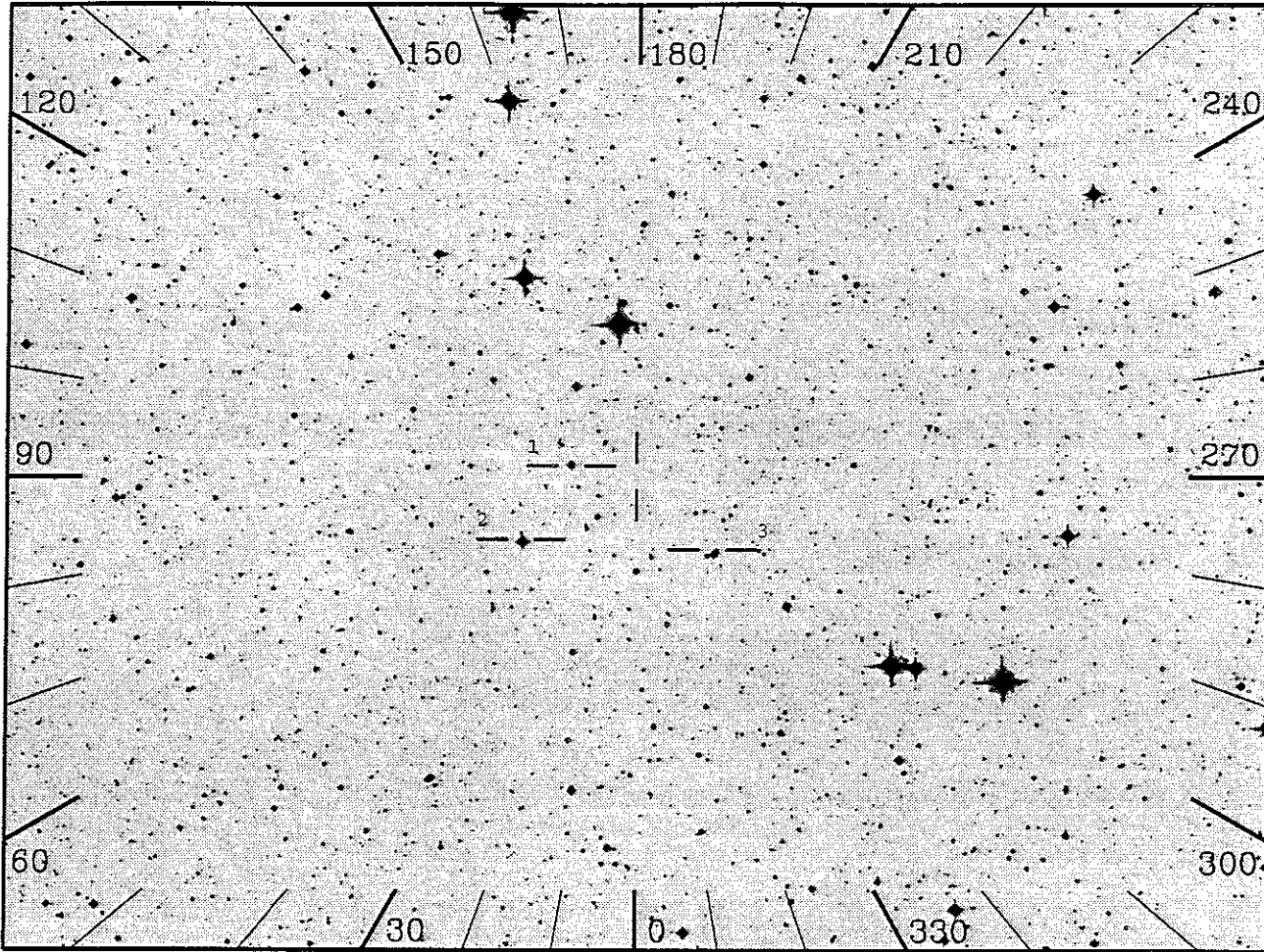
TGT/ASTRO2/FIN A

RA 224.7637

DEC -41.5511

NAME SN1006

ID 4429-1



OBJECT: 4429 SN1006

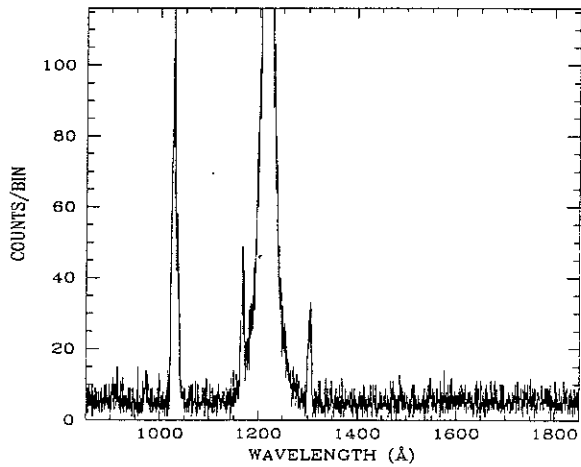
KEYWORDS: Supernova Remnant, Fast Non-radiative Shock

COMMENTS:

The spectrum should show only the OVI emission line at 1034 in addition to airglow, though lines as 1240, 1550 and 1640 are possible.

Change from Slit 5 to slit 6 before the end of night.

Bright star on TV will bloom to allow access to fainter guide stars closer to slit.



ID: 4429-1 H=Prime SciPgm= G14

Names: SN1006 G327.6

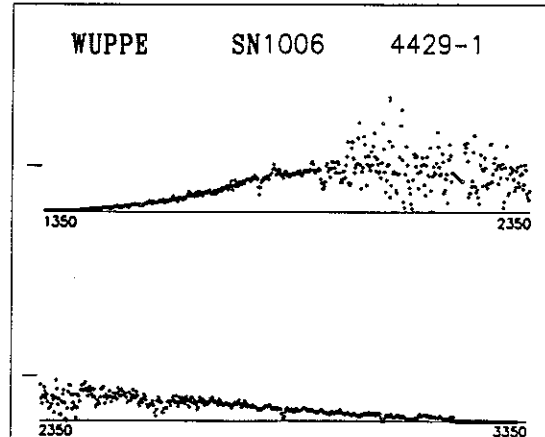
Info: S V= Wupmag=12.5

% Pol:

Pos Ang:

Mechanism:

Comments:

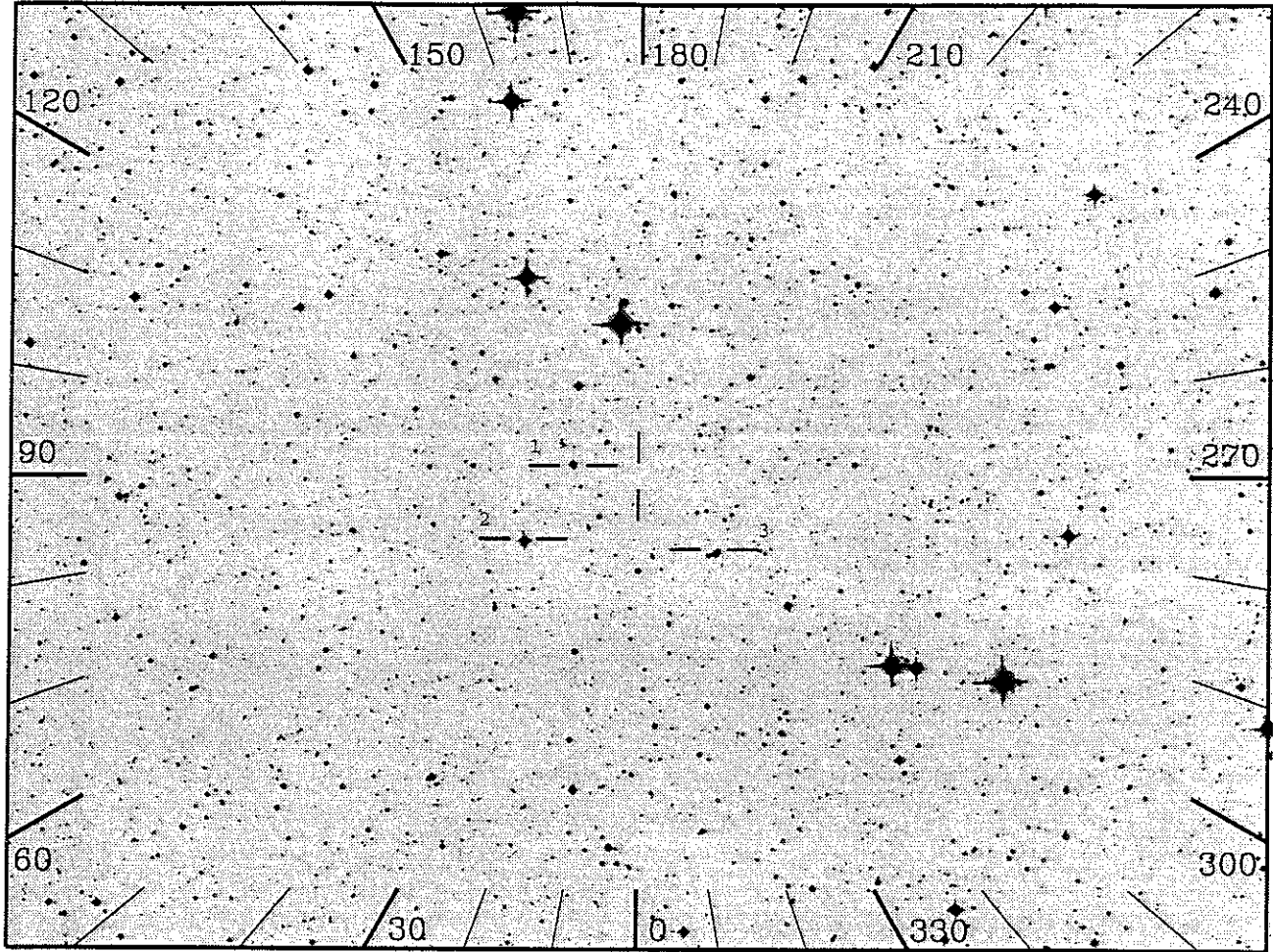


RA 224.7637

DEC -41.5511

NAME SN1006

ID 4429-2



19"x197", 2000(s), Night

OBJECT: 4429 SN1006

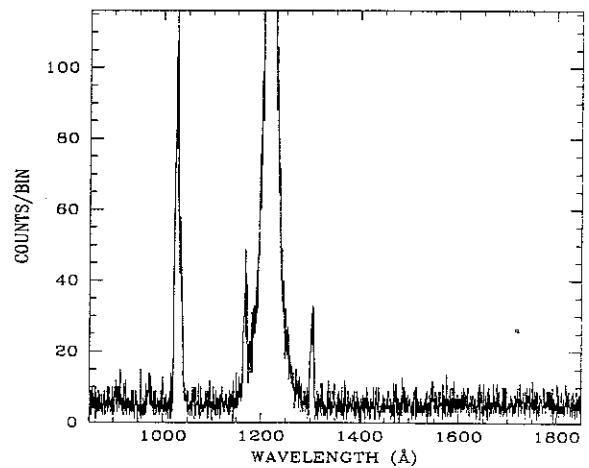
KEYWORDS: Supernova Remnant, Fast Non-radiative Shock

COMMENTS:

The spectrum should show only the OVI emission line at 1034 in addition to airglow, though lines as 1240, 1550 and 1640 are possible.

Change from Slit 5 to slit 6 before the end of night.

Bright star on TV will bloom to allow access to fainter guide stars closer to slit.



ID: 4429-2 H=Prime SciPgm= G14

Names: SN1006 G327.6

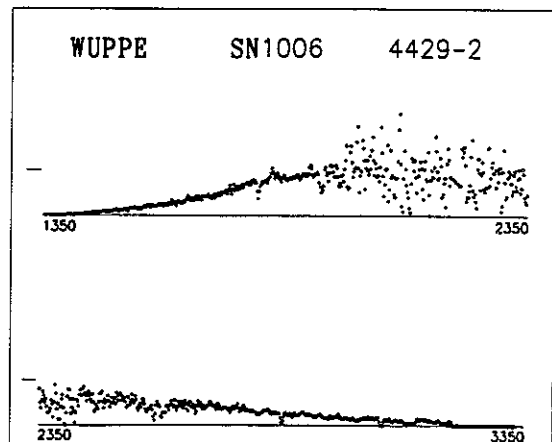
Info: S V= Wupmag=12.5

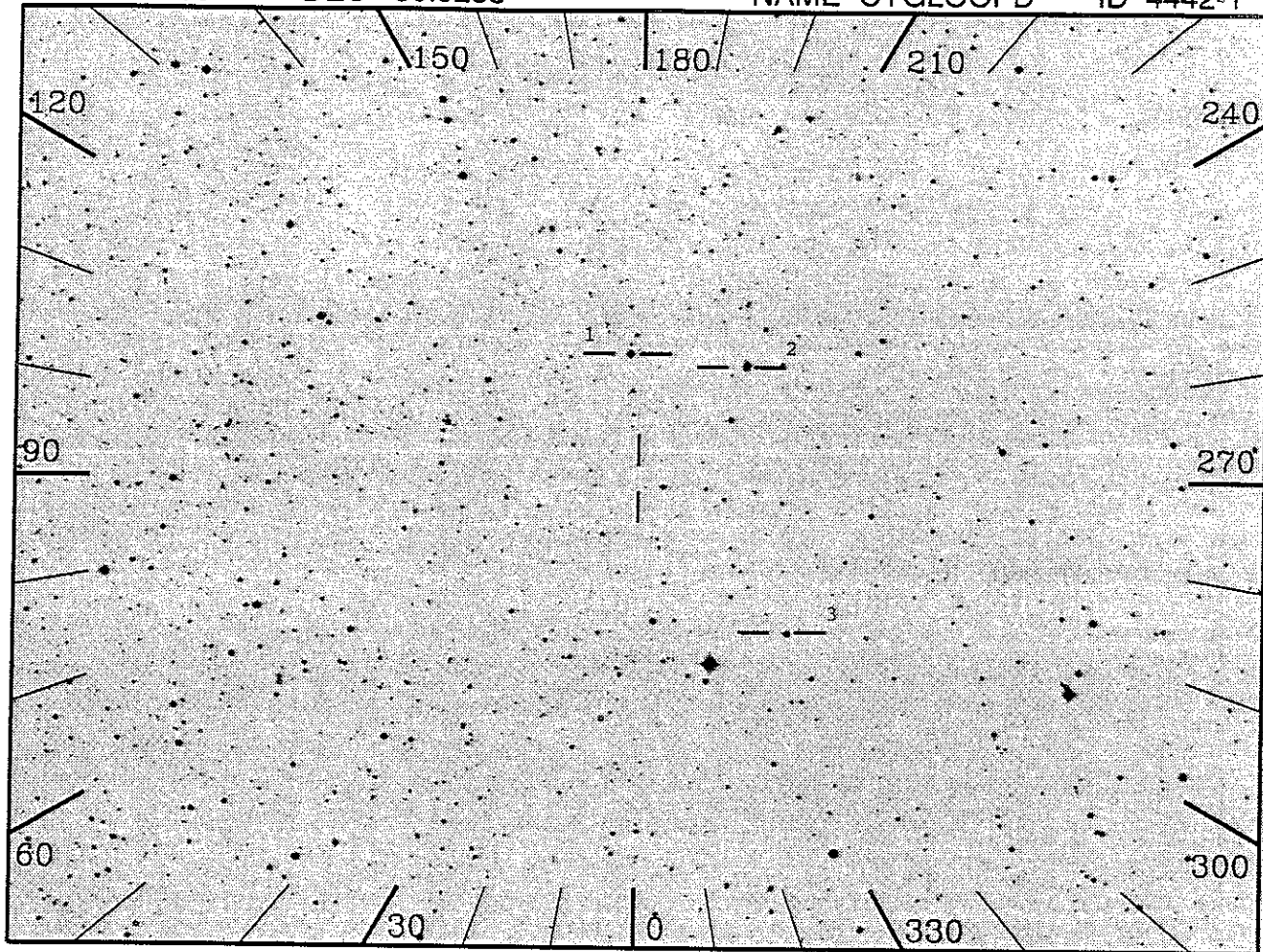
% Pol:

Pos Ang:

Mechanism:

Comments:





10"x56", 1000(s), Day

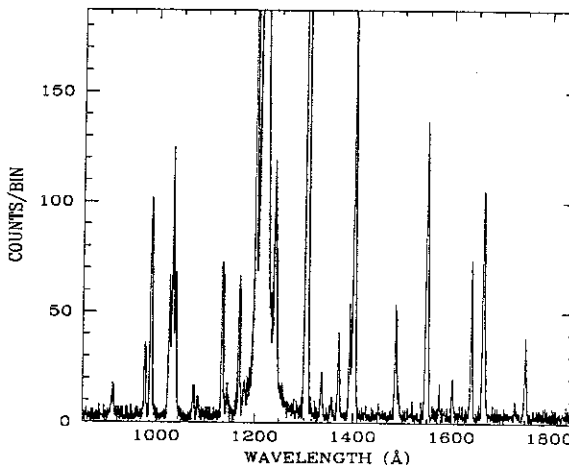
OBJECT: 4442 CYGLOOPD

KEYWORDS: Supernova Remnant, Radiative, Incomplete

COMMENTS:

This filament, also known as Miller's Position 3, is a very bright, radiative filament on the western edge of the Cygnus Loop. The filament shows very strong optical [O III] emission, indicating a very "incomplete" shock. HUT is looking for O VI, which would imply a shock velocity >160 km/s for this filament.

Observation plan includes an offset to sky at the end of the observation.



ID: 4442-1 H=Prime SciPgm= H10

Names: CYGLOOPD MILP3

Info: V=14. m(1500)=13.9

% Pol:

Pos Ang:

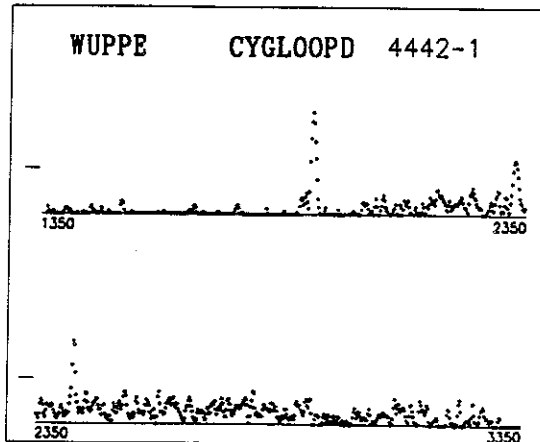
Mechanism:

Comments:

Probably too faint for pol.

Will combine spectrum with HUT's.

Astro-1 data used for simulated spectrum is that of CygLoopB (4413).

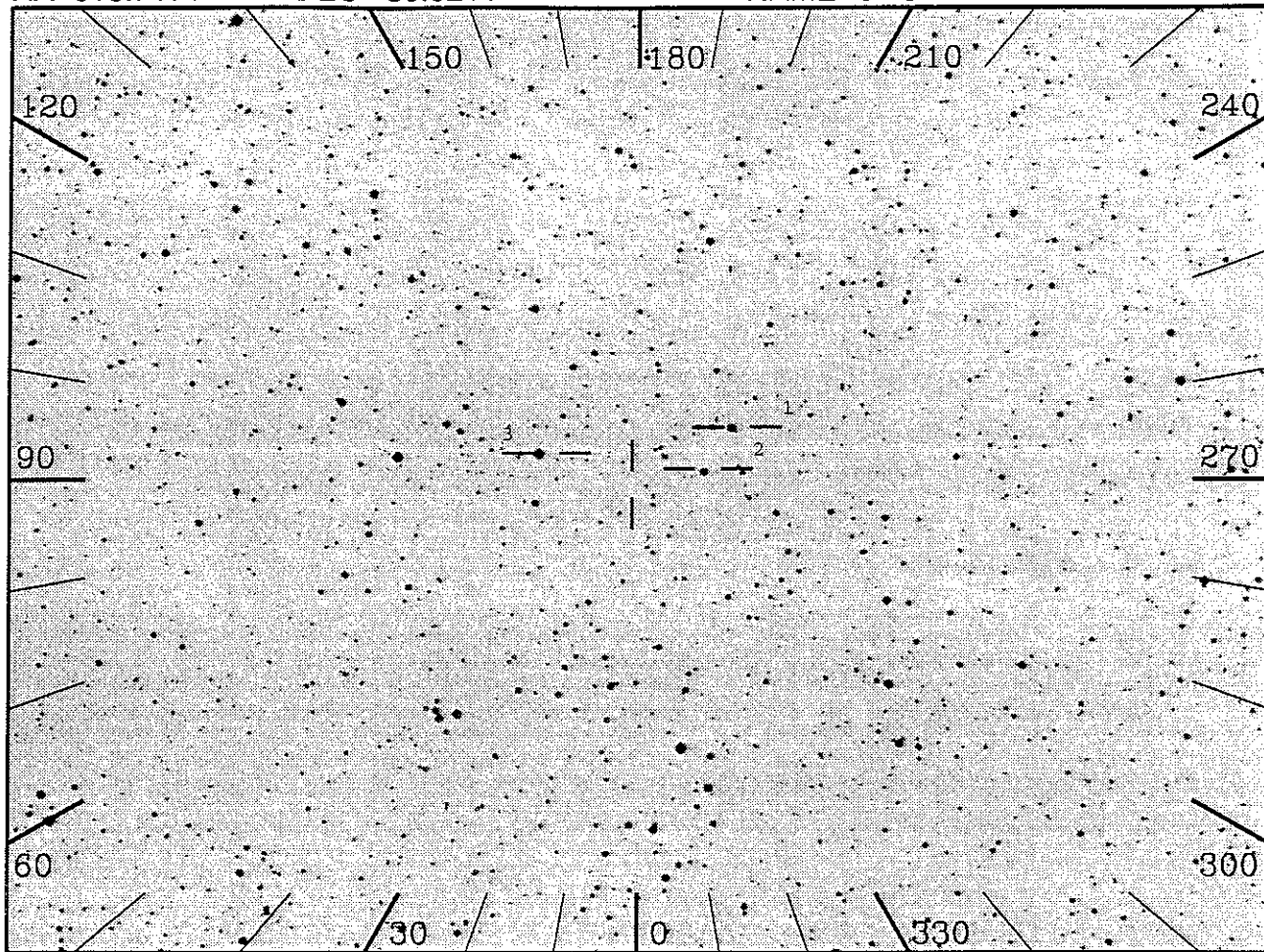


RA 313.7171

DEC 30.9211

NAME CYGLP-P2

ID 4445-1



20", 1000(s), Day

OBJECT: 4445 CYGLP-P2

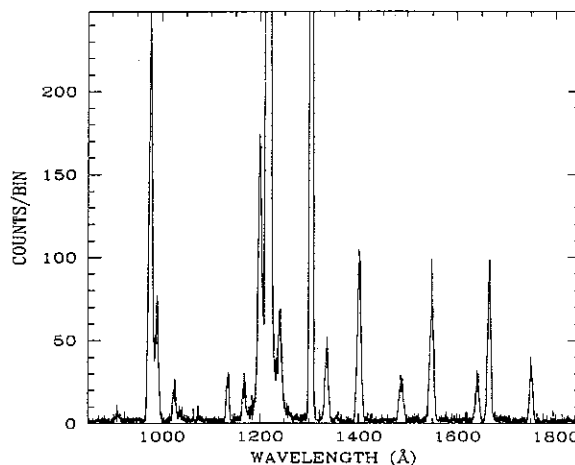
KEYWORDS: Supernova Remnant, Resonance scattering

COMMENTS:

This bright, linear radiative filament in the east-central Cygnus Loop has been studied extensively with IUE, HST, Einstein, and Rosat. HUT will observe two positions to study resonance line scattering and variation of shock velocity along the filament.

Sim shows expected spectrum at initial (SE) position, before offset to NW. Look for any O VI emission.

Filament will not be visible on HUT CCTV, so position aperture with GS Loc.



ID: 4445-1 H=Prime SciPgm= H10

Names: CYGLP-P2 SPUR

Info: V=14. Wupmag=11.9

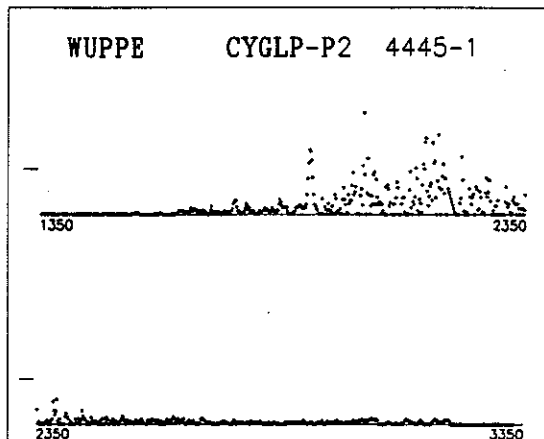
% Pol:

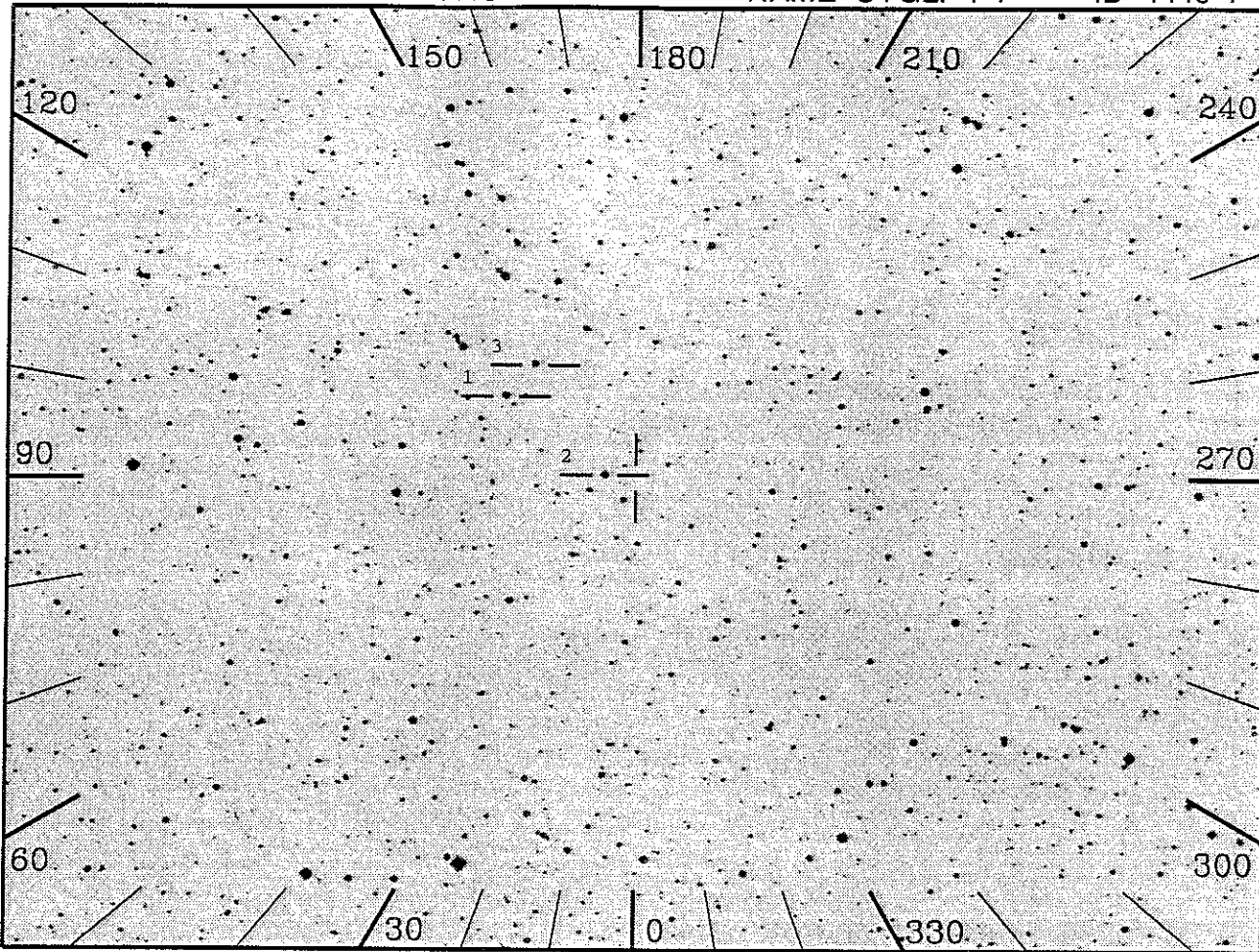
Pos Ang:

Mechanism:

Comments:

Probably too faint for pol. Will combine spectrum with HUT's.





10"x56", 1000(s), Day

OBJECT: 4449 CYGLP-P1

KEYWORDS: Supernova Remant, Nonradiative shock

COMMENTS:

This is a new nonradiative shock position in the SE Cygnus Loop, with a higher shock velocity than the one observed on Astro-1. Optical echelle data indicates  $V(\text{shock}) > 220 \text{ km/s}$ , and so O VI 1035 should be the strongest intrinsic spectral feature. However, the filament is faint optically, and airglow contamination may be a problem. Offsets to "sky" at end to permit first order correction for airglow.

Acquire using GS Locate.

ID: 4449-1 H=Prime SciPgm= H10

Names: CYGLP-P1 NEWNR

Info: V= m(1500)=9.8

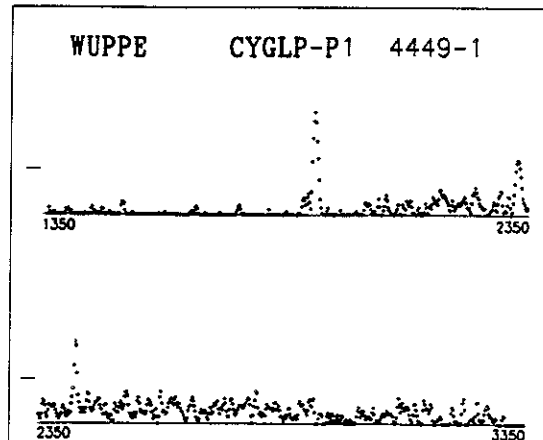
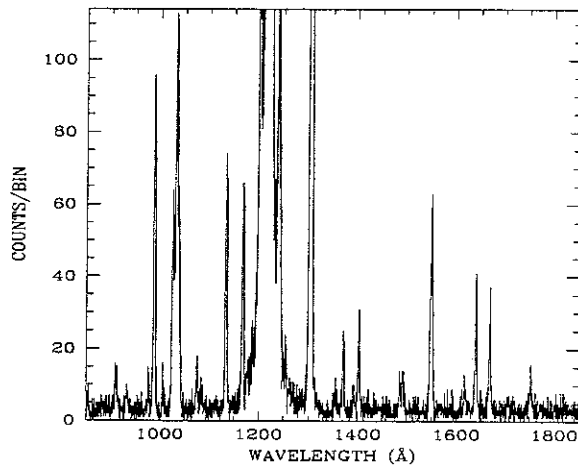
% Pol:

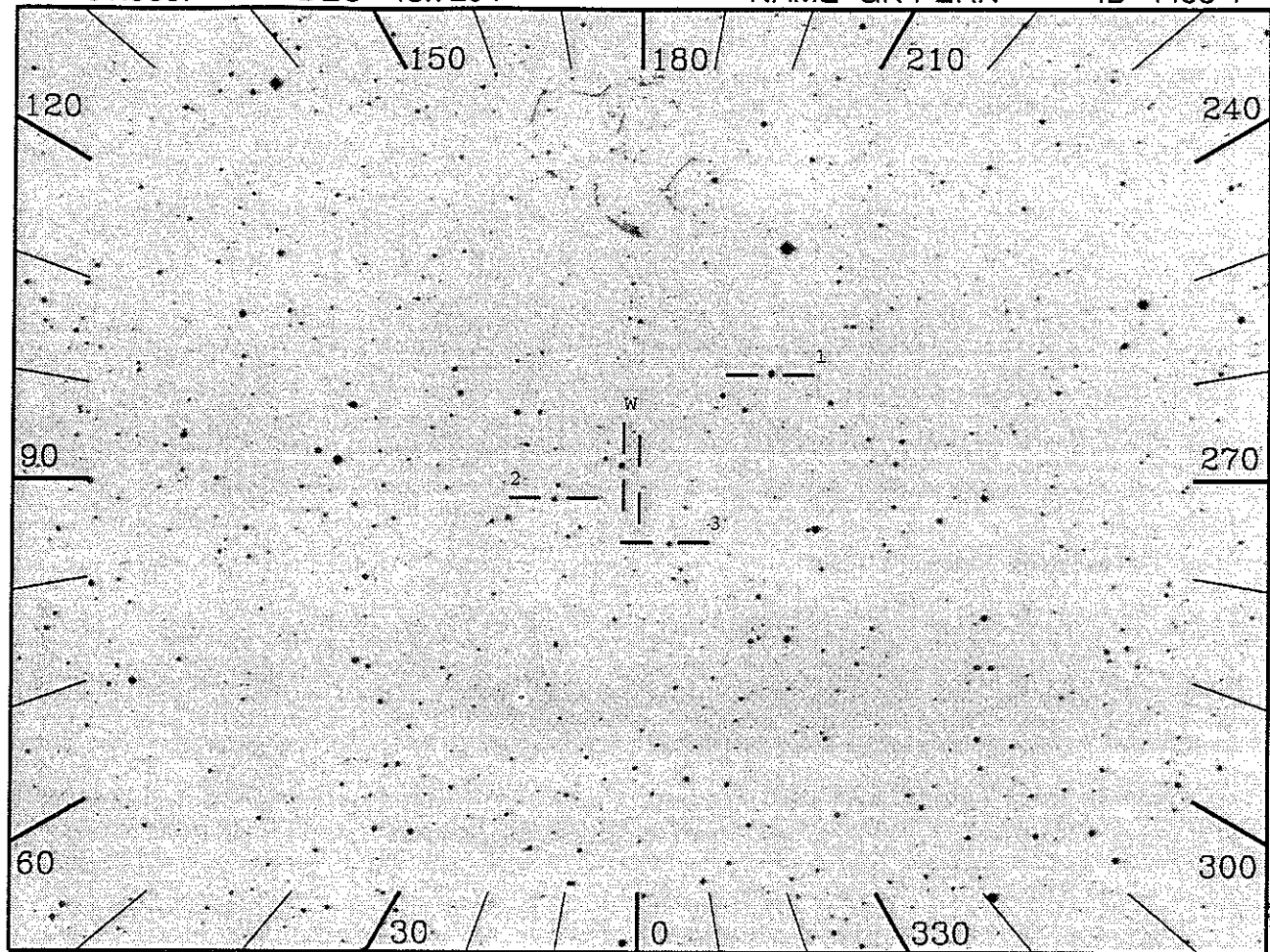
Pos Ang:

Mechanism:

Comments:

Astro-1 data used for simulated spectrum is that of CygLoopB (4413).





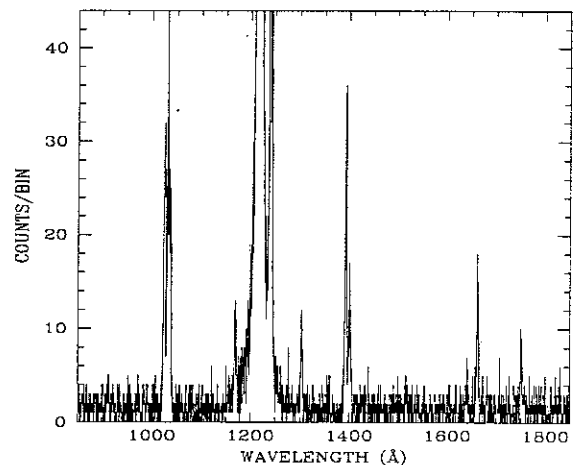
11"x60", 2000(s), Night

OBJECT: 4453 GK-PERN

KEYWORDS: Nova Shell

COMMENTS:

The target position is 20" south of the old nova GK Per. Slit orientation is E-W. Faint UV emission lines have been detected with IUE. They suggest a shock in gas with enhanced nitrogen and depleted carbon. Emission lines at 1034, 1240, 1486, 1662 and 1750 Angstroms are expected. GK Per itself is faint in the UV unless it is in outburst.



ID: 4453-1 H=Prime SciPgm= G14

Names: GK-PERN NEBULA

Info: sd:Be+ V=16. Wupmag=13.2

% Pol:

Pos Ang:

Mechanism:

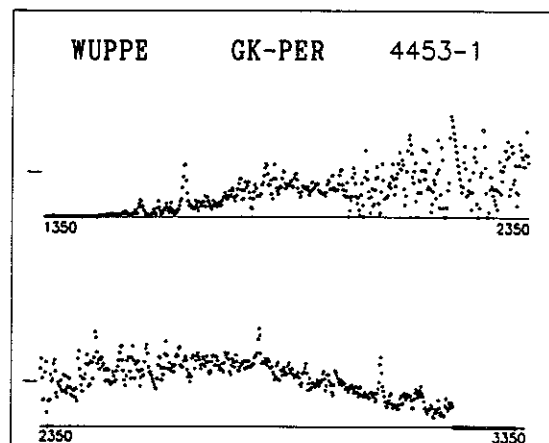
Comments:

NOTE: WUPPE OFFSET TARGET

WUP is offsetting from the nebula to GK-Per.

Info: V=13. Wupmag=12.3

IUE spectrum shows em lines; may be too faint to detect pol.

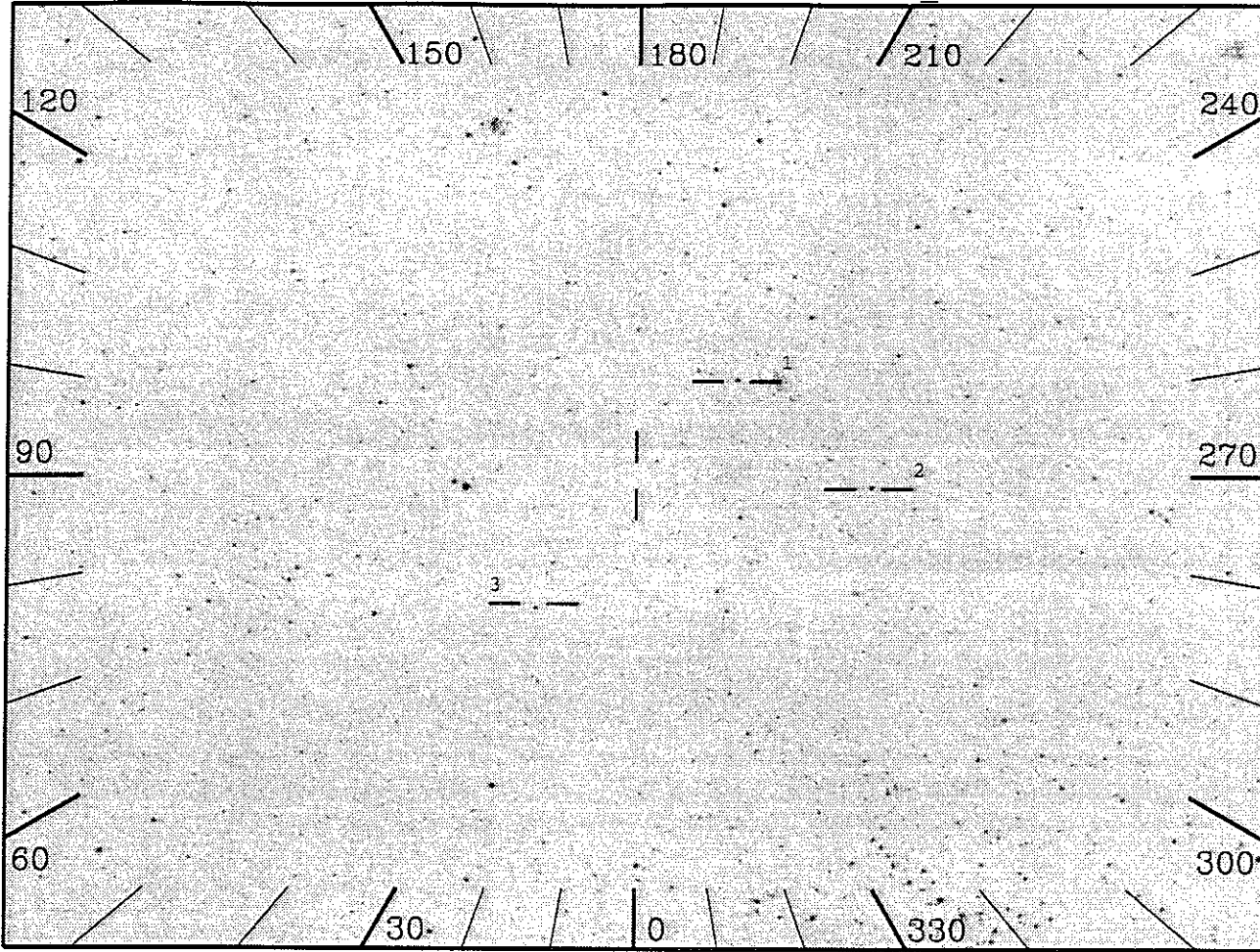


RA 79.9810

DEC -69.0845

NAME LMC\_0519

ID 4455-1



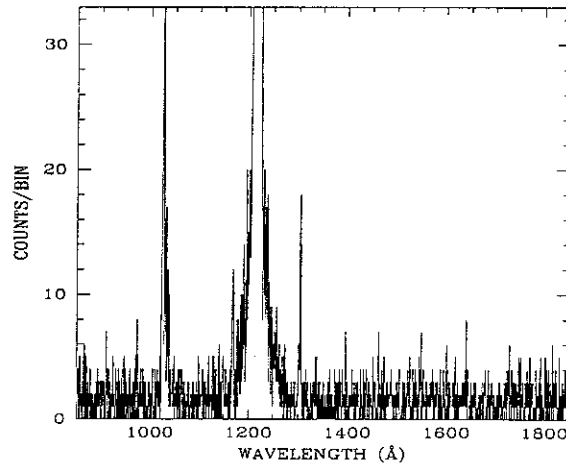
11"x60", 2000(s), Night

OBJECT: 4455 LMC\_0519

KEYWORDS: Supernova Remnant

COMMENTS:

Spectrum should show emission lines at 1032, 1037, and possibly 1240, 1550, and 1640 Angstroms. The position angle of the slit has been chosen to cover the brightest H alpha emission. The lines will be very faint, and two orbits are planned.



ID: 4455-1 H=Prime SciPgm= G14

Names: LMC\_0519

Info: V= m(1500)=13.9

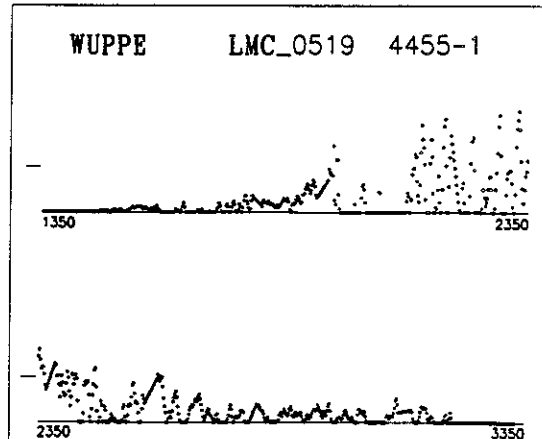
% Pol:

Pos Ang:

Mechanism:

Comments:

IUE data used for simulated spectrum is that of N49LMCSNR (4406).



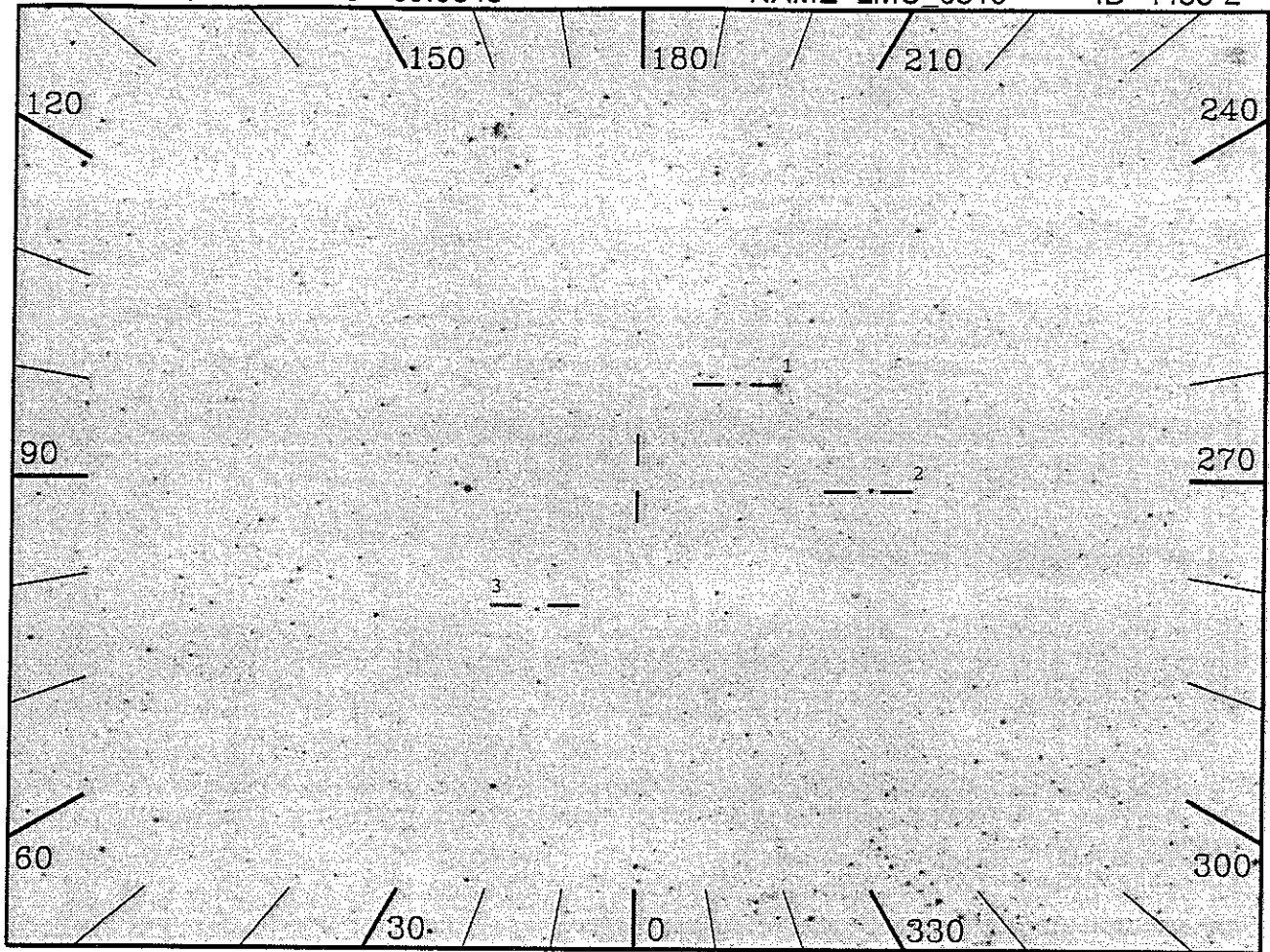


RA 79.9810

DEC -69.0845

NAME LMC 0519

ID 4455-2



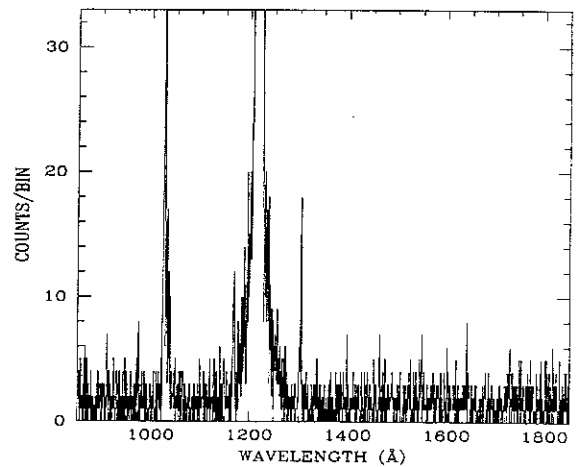
11"x60", 2000(s), Night

OBJECT: 4455 LMC\_0519

KEYWORDS: Supernova Remnant

COMMENTS:

Spectrum should show emission lines at 1032, 1037, and possibly 1240, 1550, and 1640 Angstroms. The position angle of the slit has been chosen to cover the brightest H alpha emission. The lines will be very faint, and two orbits are planned.



ID: 4455-2 H=Prime SciPgm= G14

Names: LMC\_0519

Info: V= m(1500)=13.9

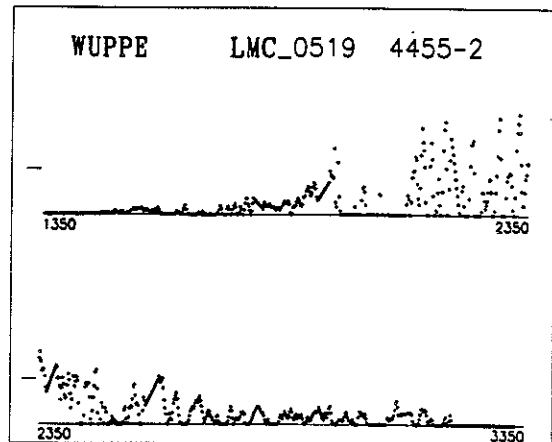
% Pol:

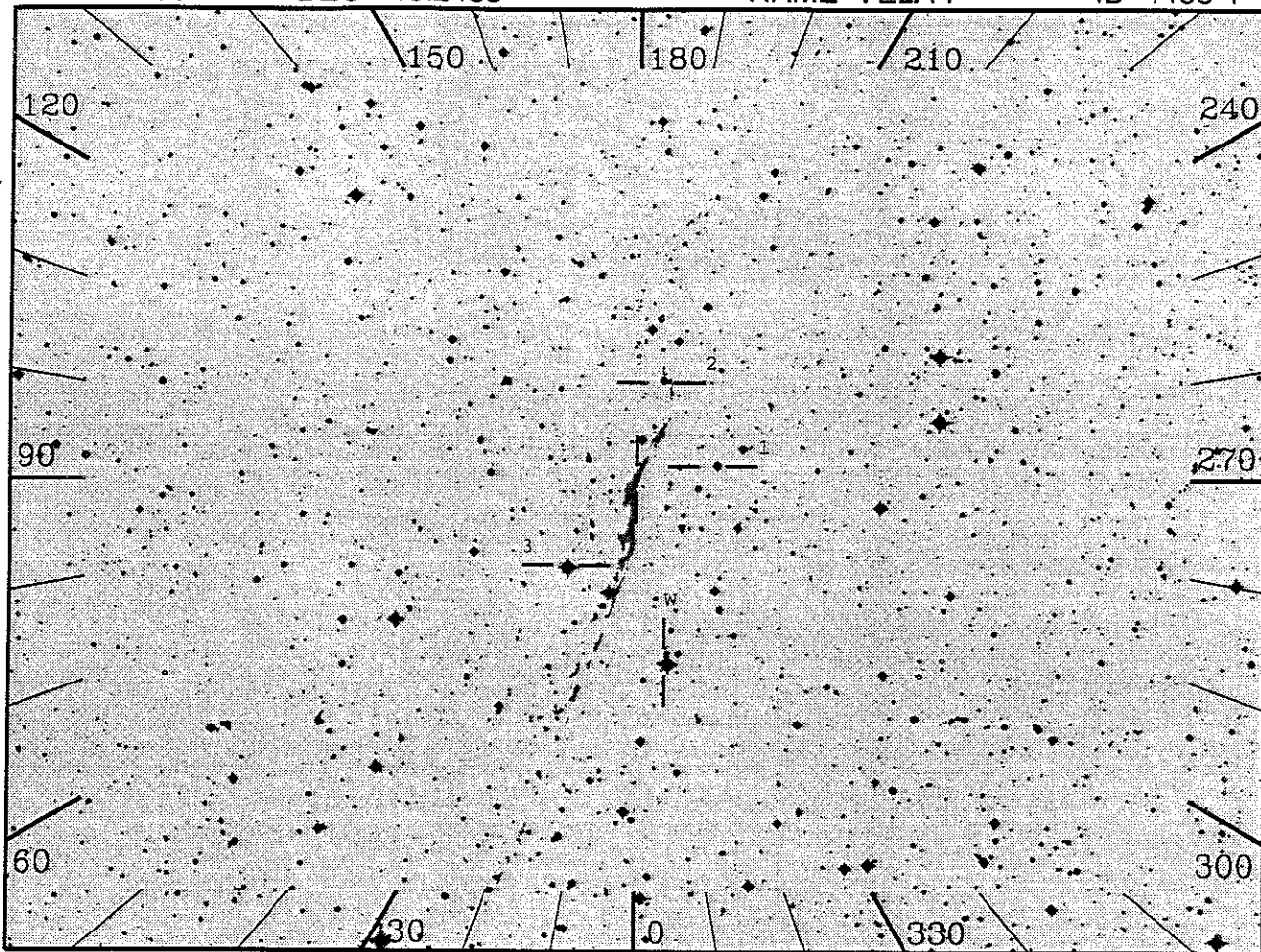
Pos Ang:

Mechanism:

Comments:

IUE data used for simulated spectrum is that of N49LMCSNR (4406).





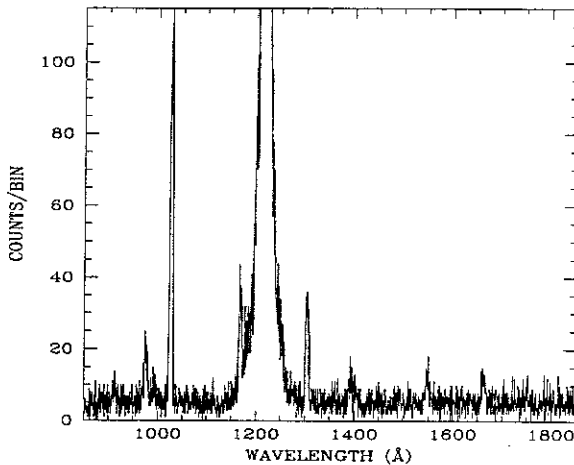
19"x197", 2000(s), Night

OBJECT: 4458 VELA-F

KEYWORDS: Supernova Remnant

COMMENTS:

The observing plan calls for the 19"x197" aperture for the night part of the orbit, switching to 10"x56" for the day. The goal is to detect faint O VI 1034 emission. The C III 977 Angstrom line may be much brighter than O VI.



ID: 4458-1 H=Prime SciPgm= G14

Names: VELA-F SLOW-SH

Info: V= Wupmag=11.5

% Pol:

Pos Ang:

Mechanism:

Comments:

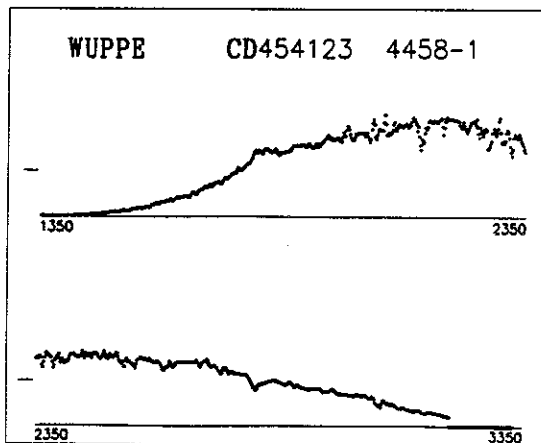
NOTE: WUPPE OFFSET TARGET

WUP is offsetting to CD-45 4123

Info: A0 V=10. Wupmag=

IUE data used for simulated spectrum

is that of 109-Vir (2408).

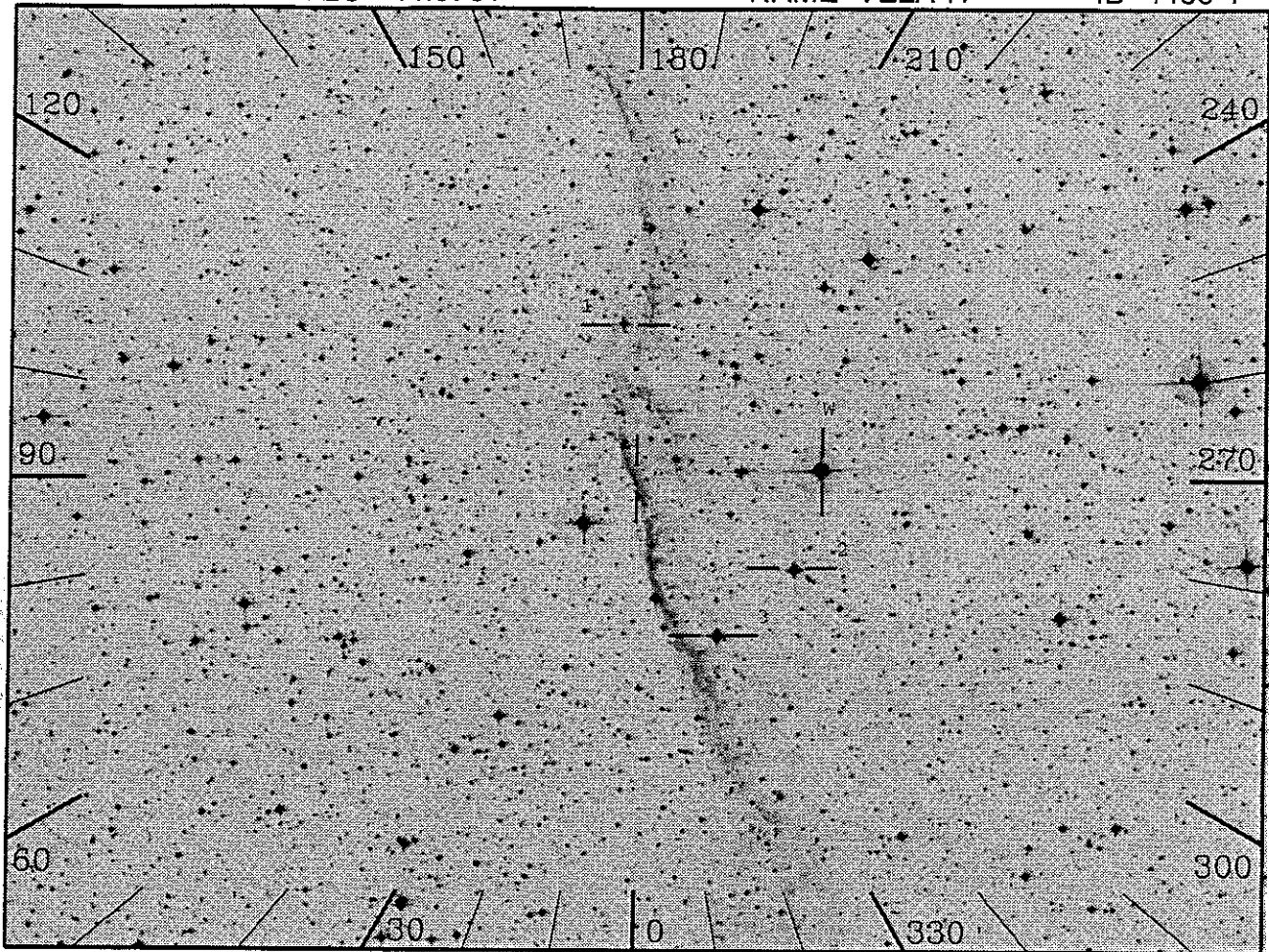


RA 129.8822

DEC -44.5731

NAME VELA-H

ID 4460-1



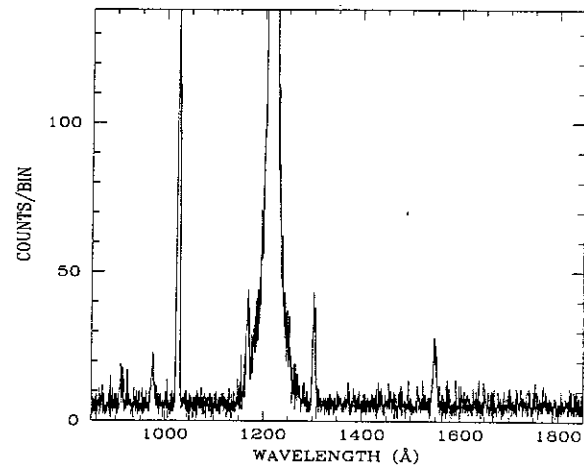
19"x197", 2000(s), Night

OBJECT: 4460 VELA-H

KEYWORDS: Supernova Remnant

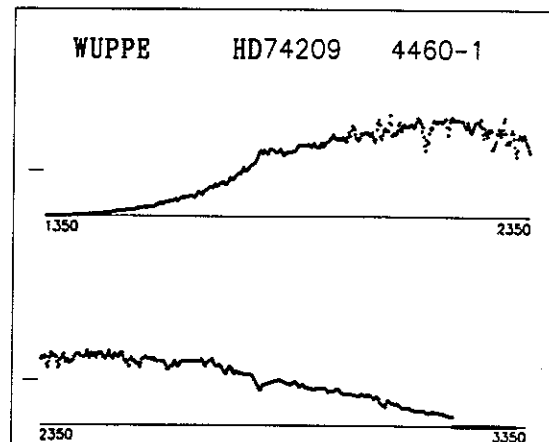
COMMENTS:

The observing plan calls for the 19"x197" aperture for the night part of the orbit, switching to 10"x56" and moving to a bright filament for the day. The goal is to detect faint C IV 1550 emission. The O VI 1034 Angstrom line may be much brighter than predicted by the simulation.



ID: 4460-1 H=Prime SciPgm= G14  
 Names: VELA-H GRAIN  
 Info: V= m(1500)=11.4  
 % Pol:  
 Pos Ang:  
 Mechanism:  
 Comments:

NOTE: WUPPE OFFSET TARGET  
 WUP is offsetting to HD74209  
 Info: A0V V=9.25 Wupmag=  
 IUE data used for simulated spectrum  
 is that of 109-Vir (2408).

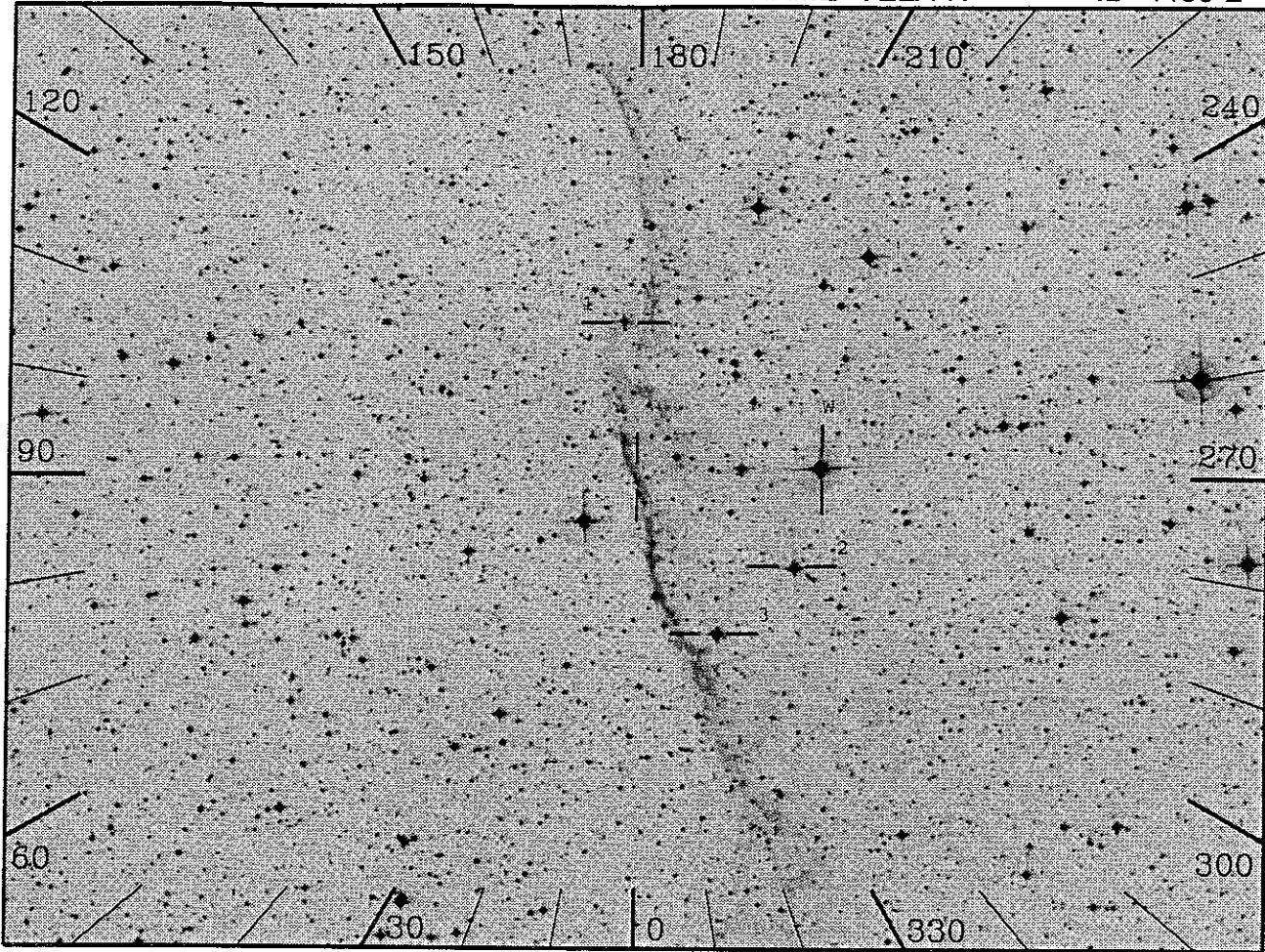


RA 129.8822

DEC -44.5731

NAME VELA-H

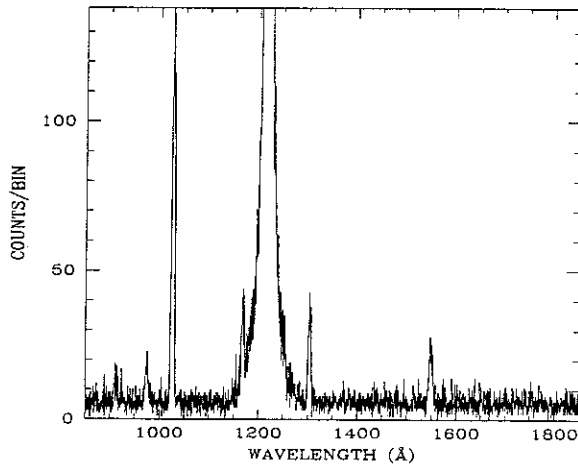
ID 4460-2



19"x197", 2000(s), Night

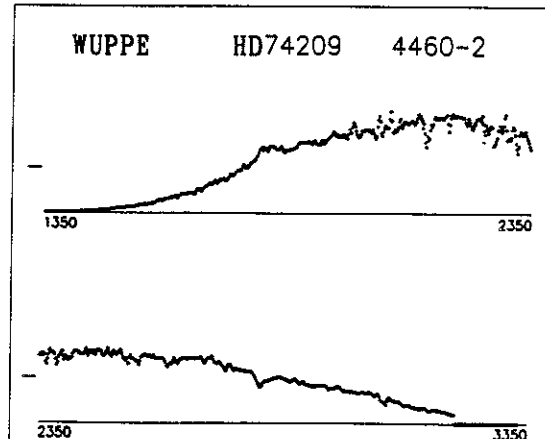
OBJECT: 4460 VELA-H  
 KEYWORDS: Supernova Remnant  
 COMMENTS:

The observing plan calls for the 19"x197" aperture for the night part of the orbit, switching to 10"x56" and moving to a bright filament for the day. The goal is to detect faint C IV 1550 emission. The O VI 1034 Angstrom line may be much brighter than predicted by the simulation.



ID: 4460-2 H=Prime SciPgm= G14  
 Names: VELA-H GRAIN  
 Info: V= m(1500)=11.4  
 % Pol:  
 Pos Ang:  
 Mechanism:  
 Comments:

NOTE: WUPPE OFFSET TARGET  
 WUP is offsetting to HD74209  
 Info: A0V V=9.25 Wupmag=  
 IUE data used for simulated spectrum  
 is that of 109-Vir (2408).

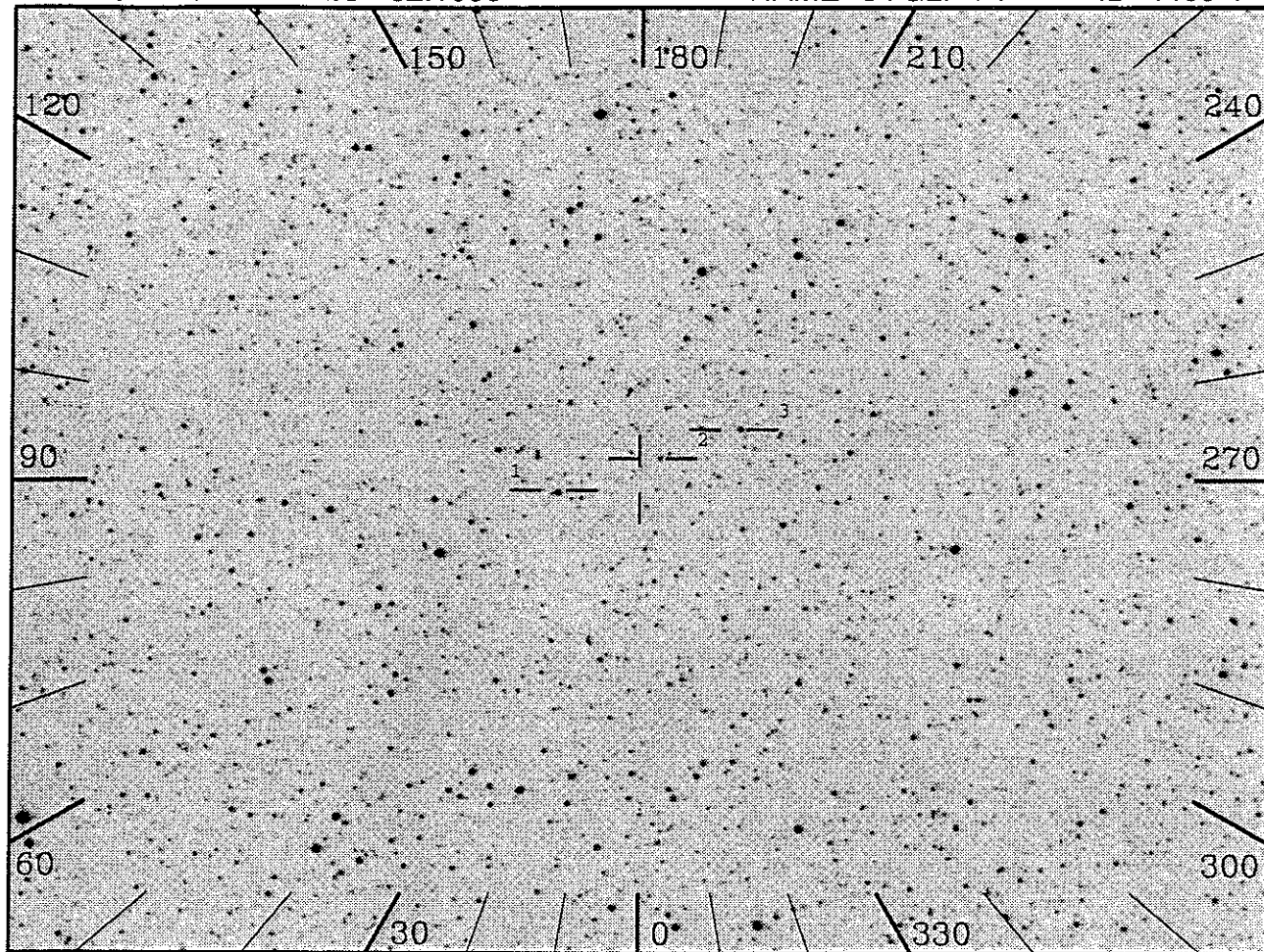


RA 313.1429

DEC 32.1058

NAME CYGLP-P7

ID 4469-1

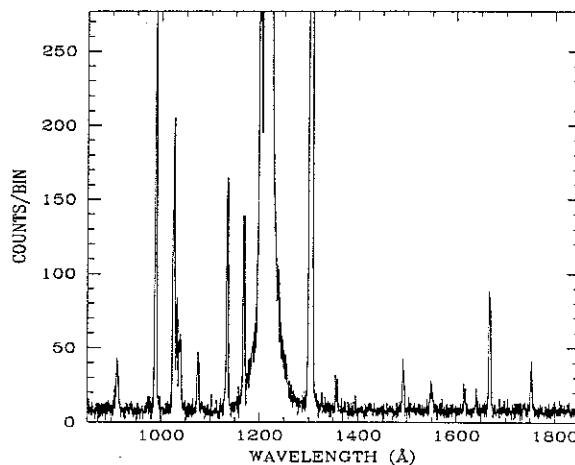


OBJECT: 4469 CYGLP-P7

KEYWORDS: Supernova Remnant

COMMENTS:

The spectrum should show only emission lines at 1034, 1240, 1550 and 1640 Angstroms. Position angle is 135 degrees.



ID: 4469-1 H=Prime SciPgm= G14

Names: CYGLP-P7 NON-RAD

Info: V= 14. Wupmag=

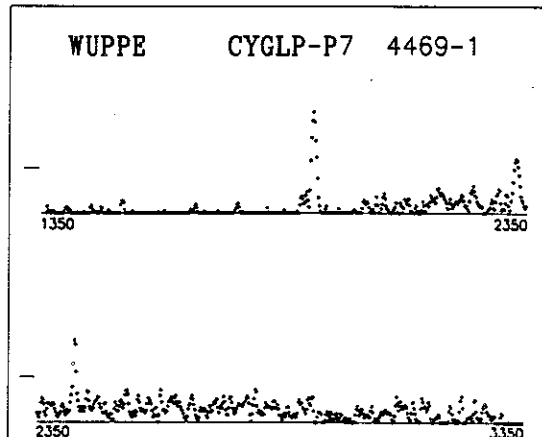
% Pol:

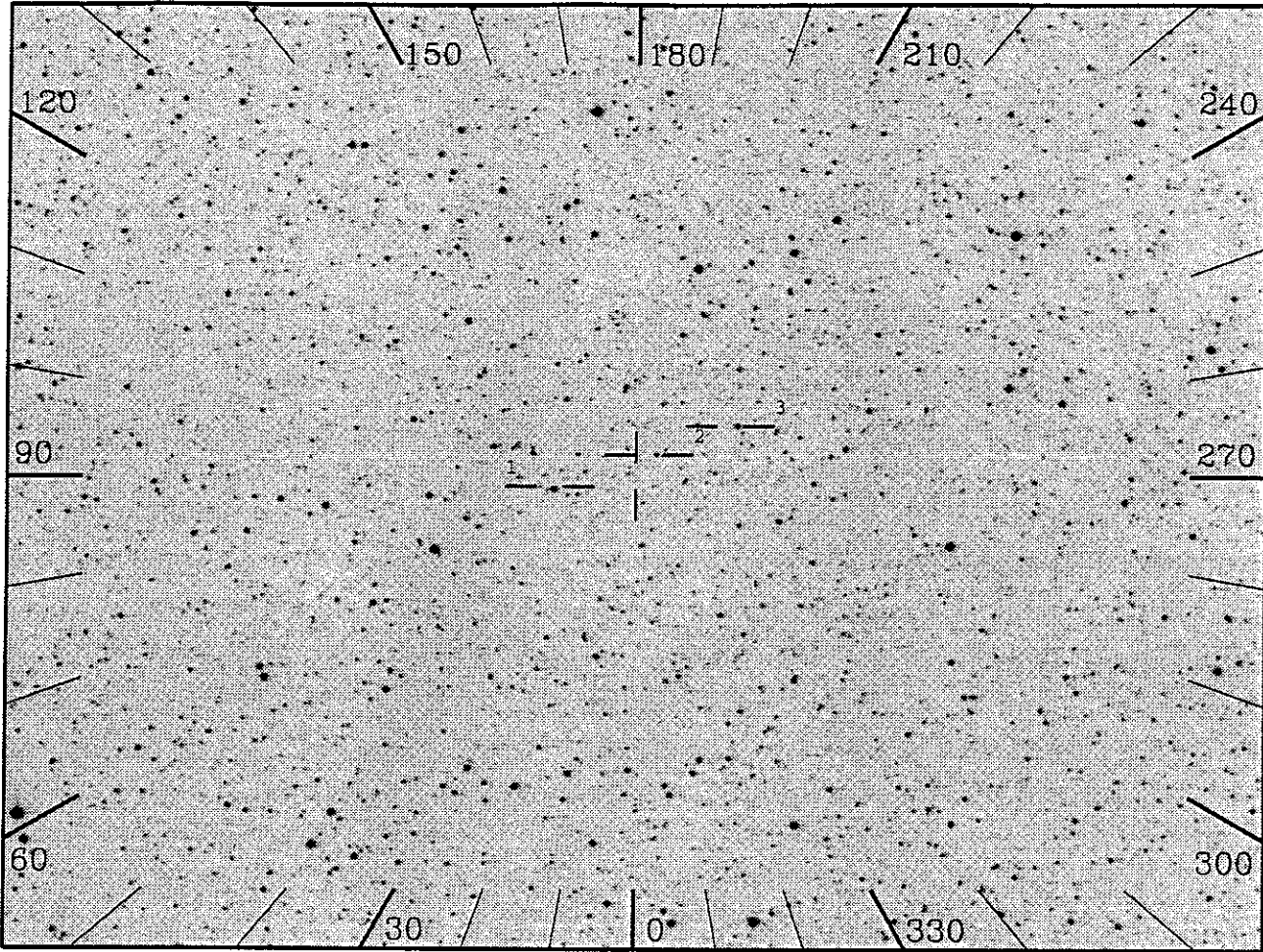
Pos Ang:

Mechanism:

Comments:

Probably too faint for pol. Will combine spectrum with HUT's. Astro-1 data used for simulated spectrum is that of CygLoopB (4413).





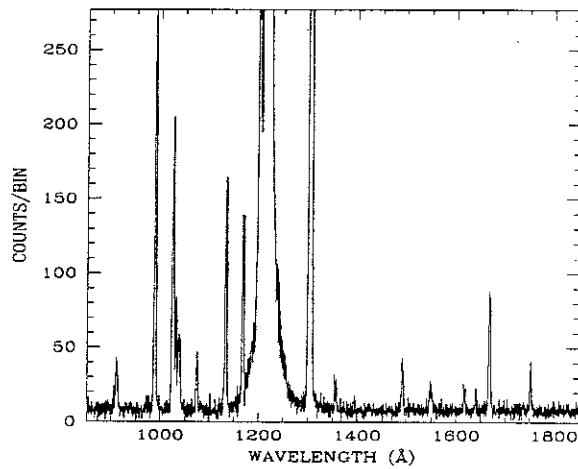
11"x60", 2000(s), Day

OBJECT: 4469 CYGLP-P7

KEYWORDS: Supernova Remnant

COMMENTS:

The spectrum should show only emission lines at 1034, 1240, 1550 and 1640 Angstroms. Position angle is 135 degrees.



ID: 4469-2 H=Prime SciPgm= G14

Names: CYGLP-P7 NON-RAD

Info: V= 14. Wupmag=

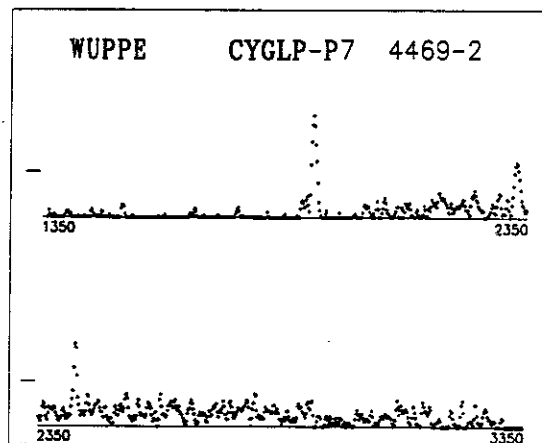
% Pol:

Pos Ang:

Mechanism:

Comments:

Probably too faint for pol. Will combine spectrum with HUT's. Astro-1 data used for simulated spectrum is that of CygLoopB (4413).

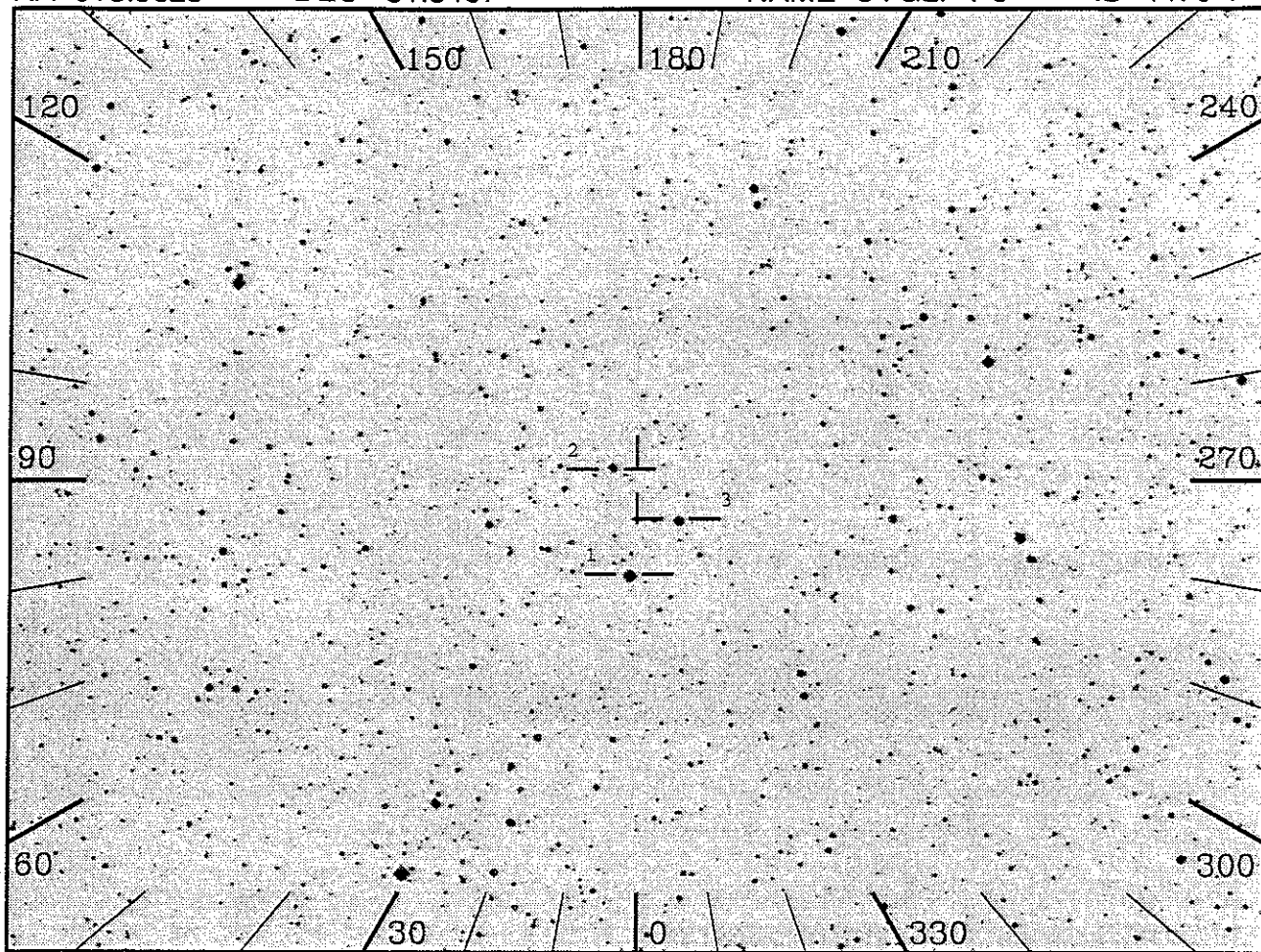


RA 313.5625

DEC 31.5467

NAME CYGLP-P8

ID 4470-1



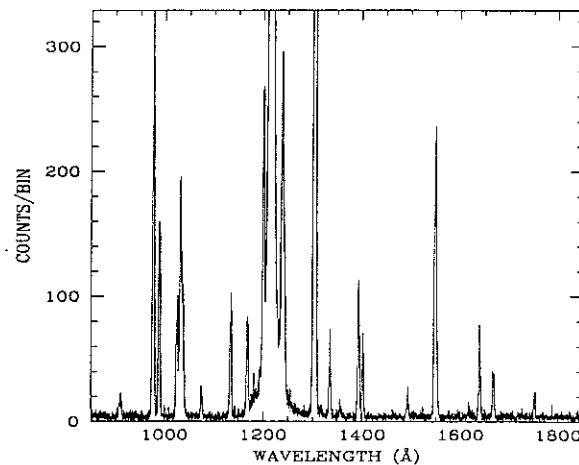
11"x60", 1000(s), Day

OBJECT: 4470 CYGLP-P8

KEYWORDS: Supernova Remnant

COMMENTS:

The spectrum should show emission lines at 977, 1034, 1240, 1400, 1486, 1550 and 1640 Angstroms. Two integrations with E-W slits will sample high and low excitation gas.



ID: 4470-1 H=Prime SciPgm= G14

Names: CYGLP-P8 MILLER 1

Info: V= 14. Wupmag=11.7

% Pol:

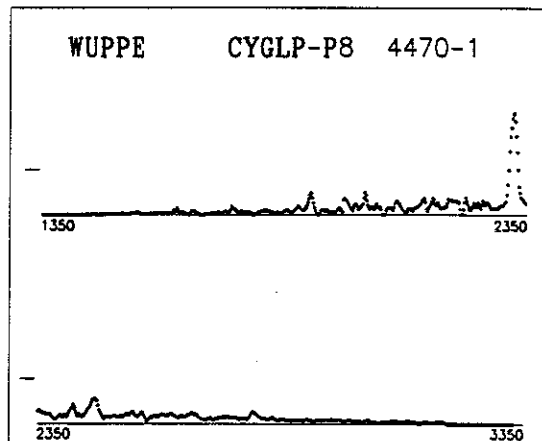
Pos Ang:

Mechanism:

Comments:

Probably too faint for pol.

Will combine spectrum with HUT's.

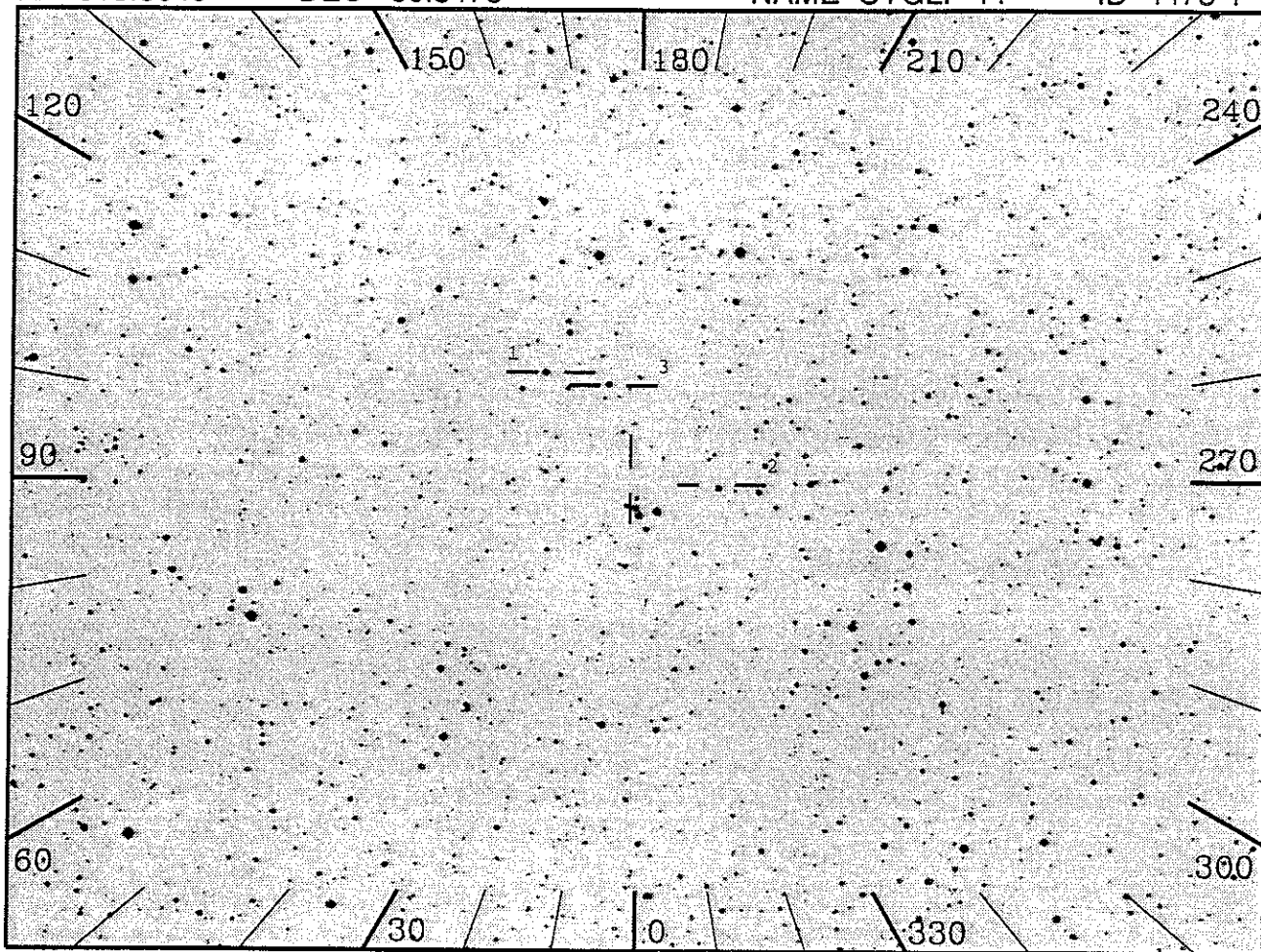


RA 313.8040

DEC 30.8478

NAME CYGLP-11

ID 4473-1



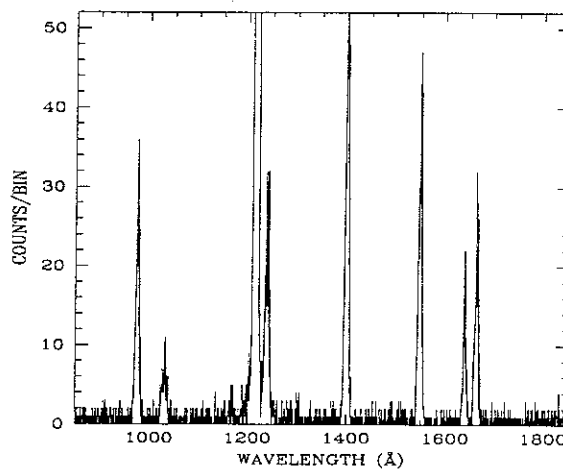
11"x60", 1000(s), Day

OBJECT: 4473 CYGLP-11

KEYWORDS: Supernova Remnant

COMMENTS:

Spectrum should show emission lines at 977, 1034, 1240, 1400, and 1550 Angstroms. A set of three integrations with N-S slits will map the tip of this region.



ID: 4473-1 H=Prime SciPgm= G14

Names: CYGLP-11 XA TIP

Info: V= 14. m(1500)=13.9

% Pol:

Pos Ang:

Mechanism:

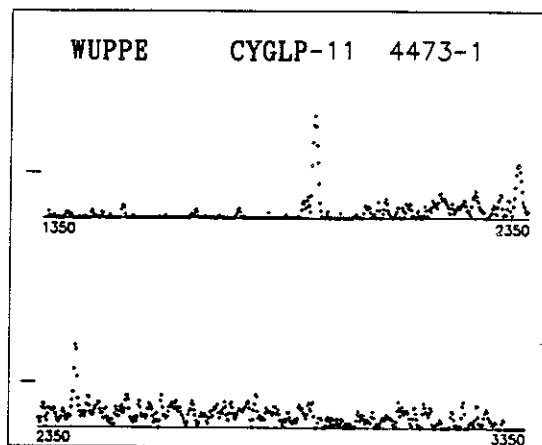
Comments:

Probably too faint for pol.

Will combine spectrum with HUT's.

Astro-1 data used for simulated

spectrum is that of CygLoopB (4413).



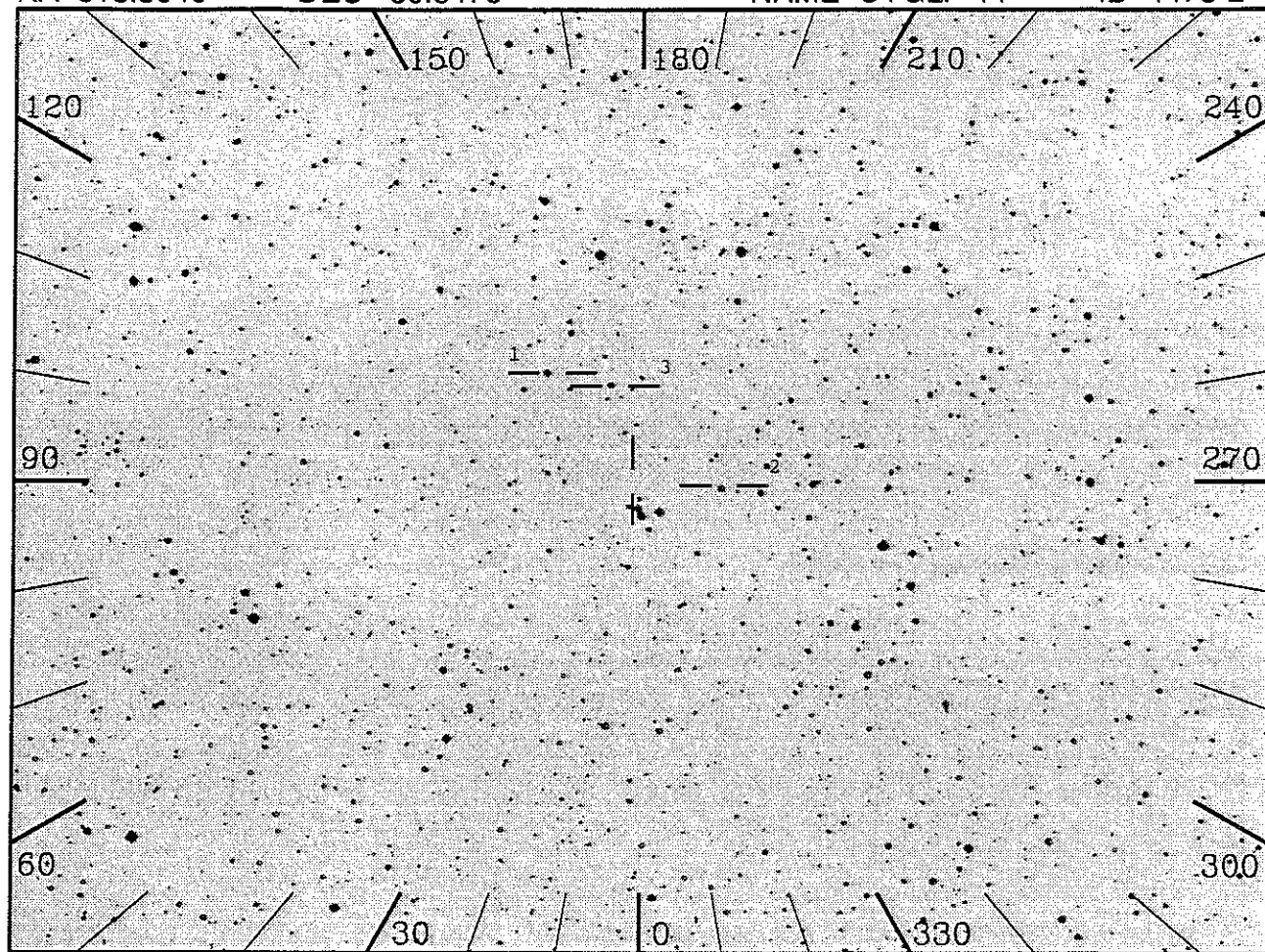


RA 313.8040

DEC 30.8478

NAME CYGLP-11

ID 4473-2



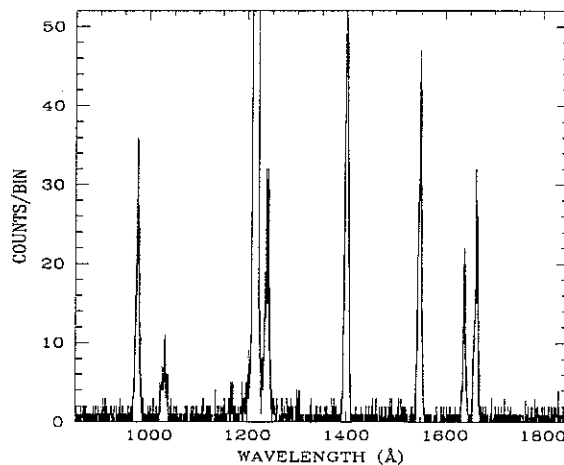
11"x60", 1000(s), Day

OBJECT: 4473 CYGLP-11

KEYWORDS: Supernova Remnant

COMMENTS:

Spectrum should show emission lines at 977, 1034, 1240, 1400, and 1550 Angstroms. A set of three integrations with N-S slits will map the tip of this region.



ID: 4473-2 H=Prime SciPgm= G14

Names: CYGLP-11 XA TIP

Info: V= 14. m(1500)=13.9

% Pol:

Pos Ang:

Mechanism:

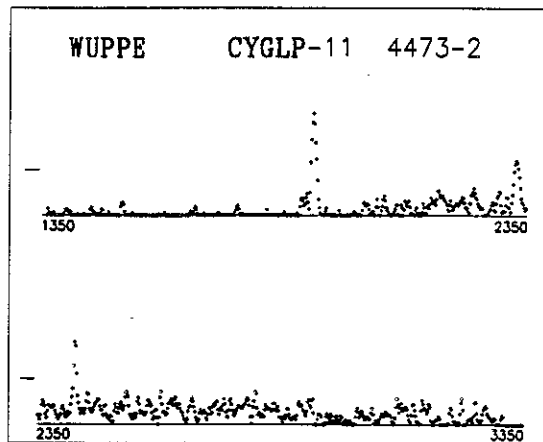
Comments:

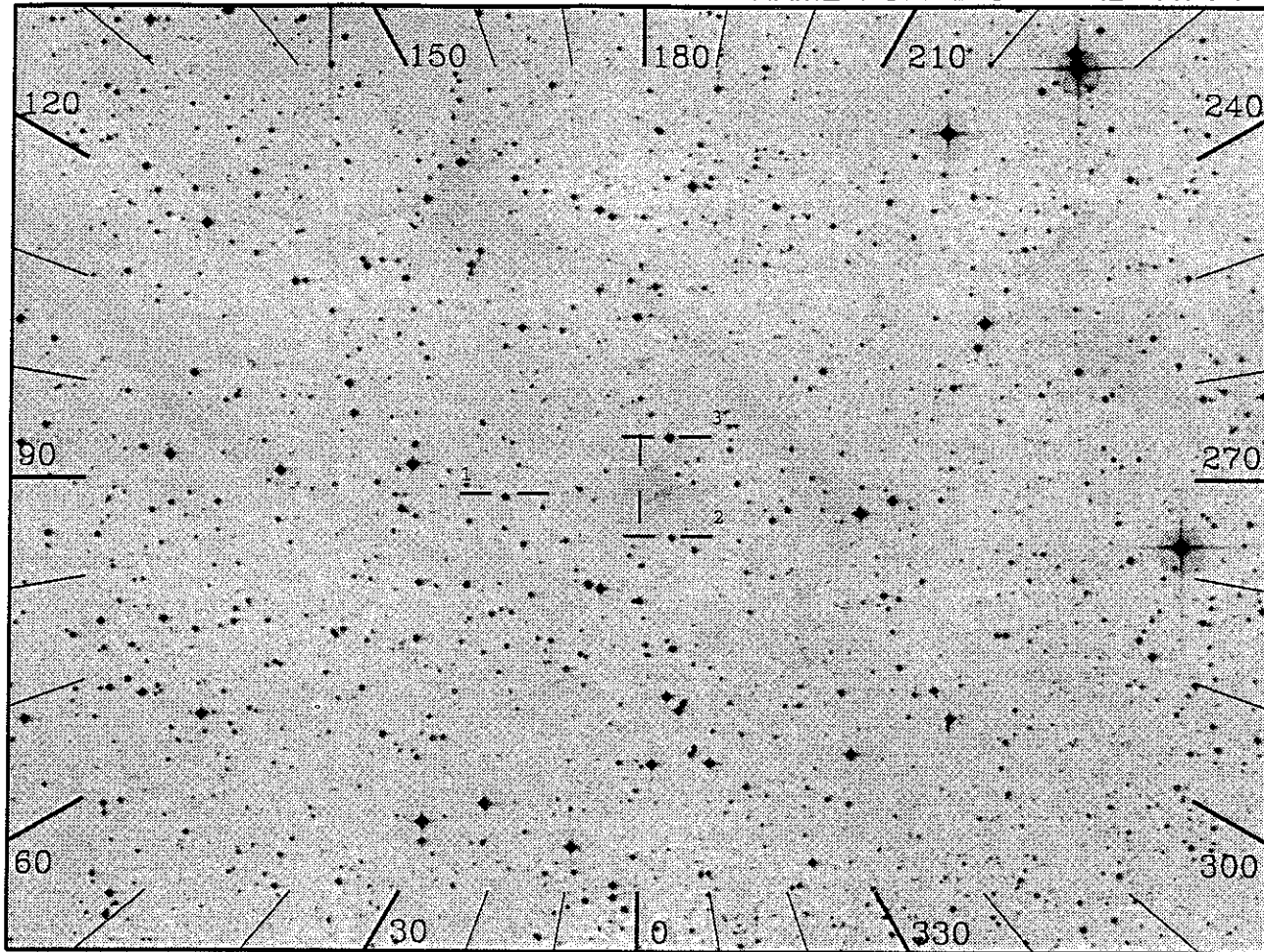
Probably too faint for pol.

Will combine spectrum with HUT's.

Astro-1 data used for simulated

spectrum is that of CygLoopB (4413).





OBJECT: 4474 PUPAEAST  
 KEYWORDS: Supernova Remnant  
 COMMENTS:

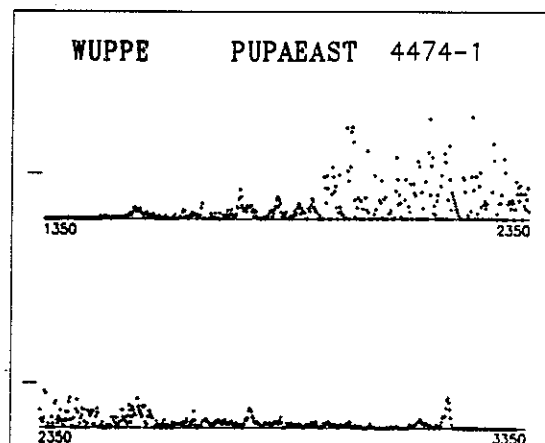
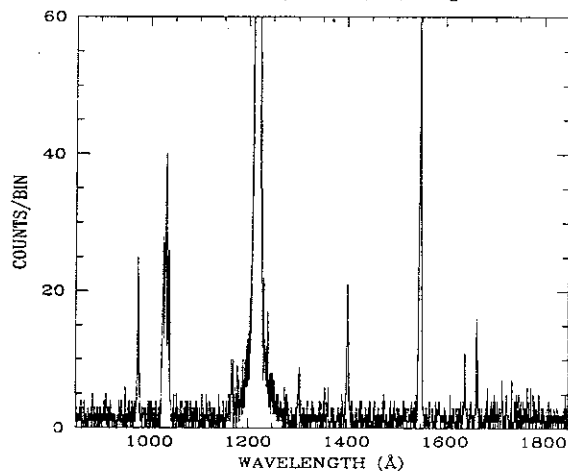
This position is on the Eastern limb of the galactic supernova remnant Puppis A. This filament apparently represents an interaction between the SNR blast wave and an interstellar cloud, and is roughly coincident with the brightest X-ray region of the remnant.

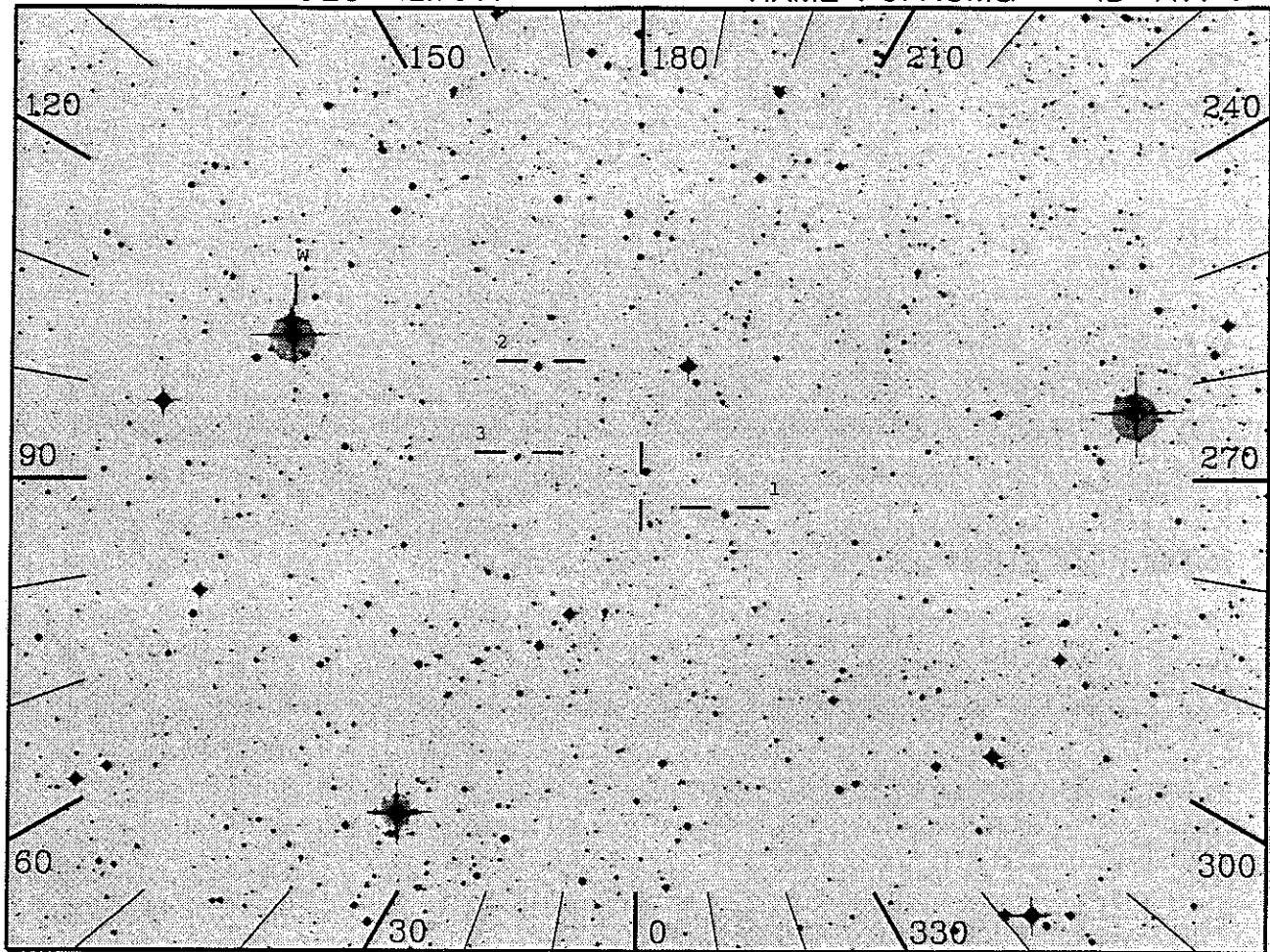
The filament has not been observed by IUE and its actual UV flux levels are unknown. Expect faint emission line spectrum, but lines may be different than shown in the SIM at right.

ID: 4474-1 H=Prime SciPgm= H10  
 Names: PUPAEAST E-KNOT  
 Info: S V= Wupmag=  
 % Pol: ,  
 Pos Ang:  
 Mechanism:  
 Comments:

Look for polarization in brightest continuum spot. IUE data used for simulated spectrum is that of PupA Omg (4477).

10"x56", 1000(s), Night





10"x56", 1000(s), Night

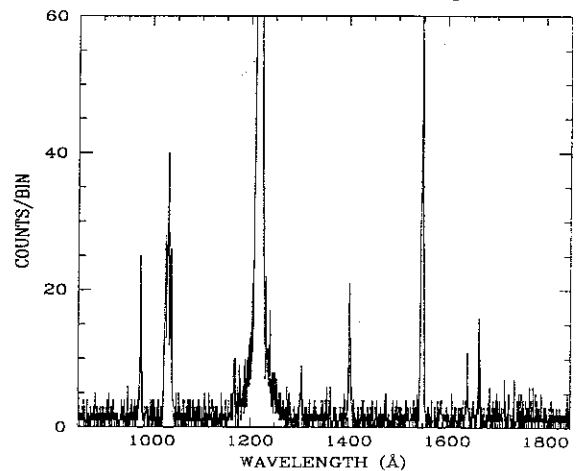
OBJECT: 4477 PUPAOMG

KEYWORDS: Supernova Remnant, O-rich

COMMENTS:

This position is the so-called "Omega" filament in the galactic supernova remnant Puppis A. This filament apparently represents processed material from the star that exploded to create the supernova. The filament is faint, and no IUE spectra are available. HUT data will provide a direct test of nucleosynthesis in the precursor star.

Several bright stars nearby, but nominally outside, the HUT CCTV field necessitates the use of TP BR\_OUT. Once TV is brought up sufficiently, a straight GS Loc should be possible.



ID: 4477-1 H=Prime SciPgm= H10

Names: PUPAOMG O-RICH

Info: V= Wupmag=13.9

% Pol:

Pos Ang:

Mechanism:

Comments:

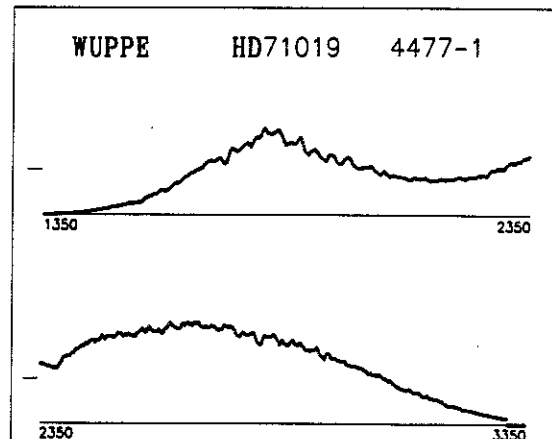
NOTE: WUPPE OFFSET TARGET

WUP is offsetting to HD71019

Info: B3II/III V=8.3 Wupmag=7.87

Astro-1 data used for simulated

spectrum is that of HD197770 (4557).

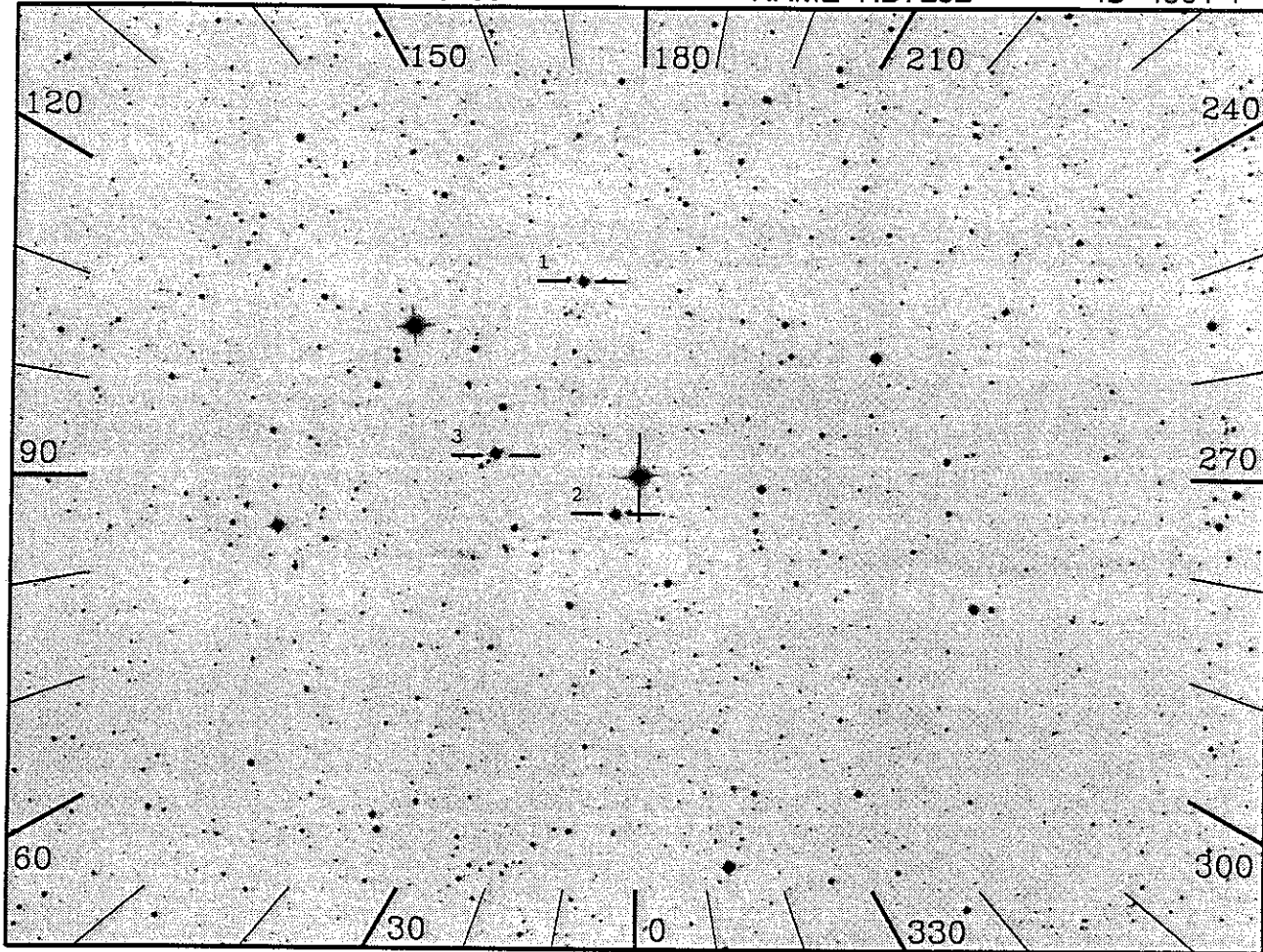


RA 17.7192

DEC 60.6189

NAME HD7252

ID 4501-1



20", 1000(s), Day

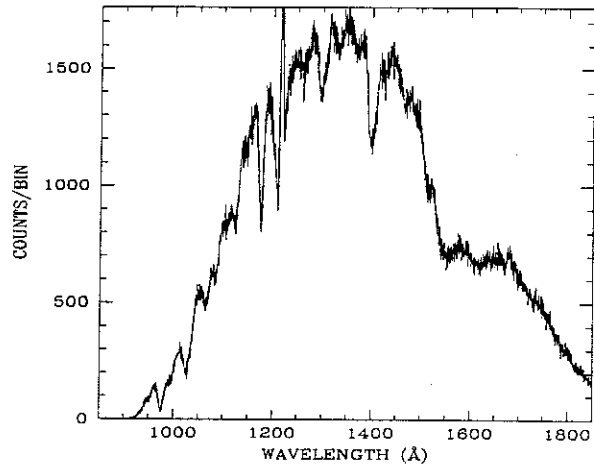
OBJECT: 4501 HD7252

KEYWORDS: Extinction

COMMENTS:

Extincted B1 V star.

Partial door 1 vs. door 2 calibration, change to door 2 after 600 s.



ID: 4501-1 W=Prime SciPgm= W11

Names: HD7252

Info: B1V V= 7.1 Wupmag=6.69

% Pol: 3.40

Pos Ang: 96.0

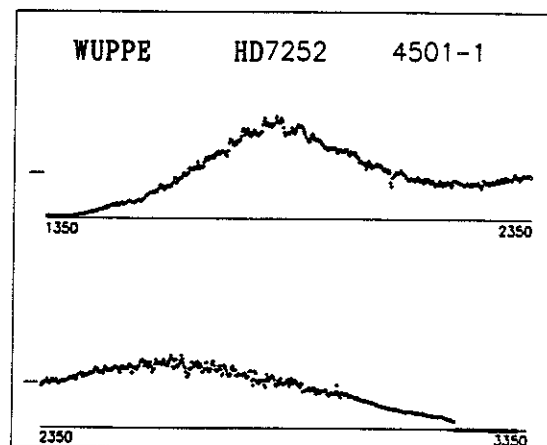
Pmax: 3.74 Lmax: 5000A

Mechanism: Interstellar dust

Comments:

This object was observed by HST FOS and found to have pol in excess of that which was predicted by the extrapolation of the Serkowski law from the optical/IR regions.

IUE data used for simulated spectrum is that of HD154445 (0655).

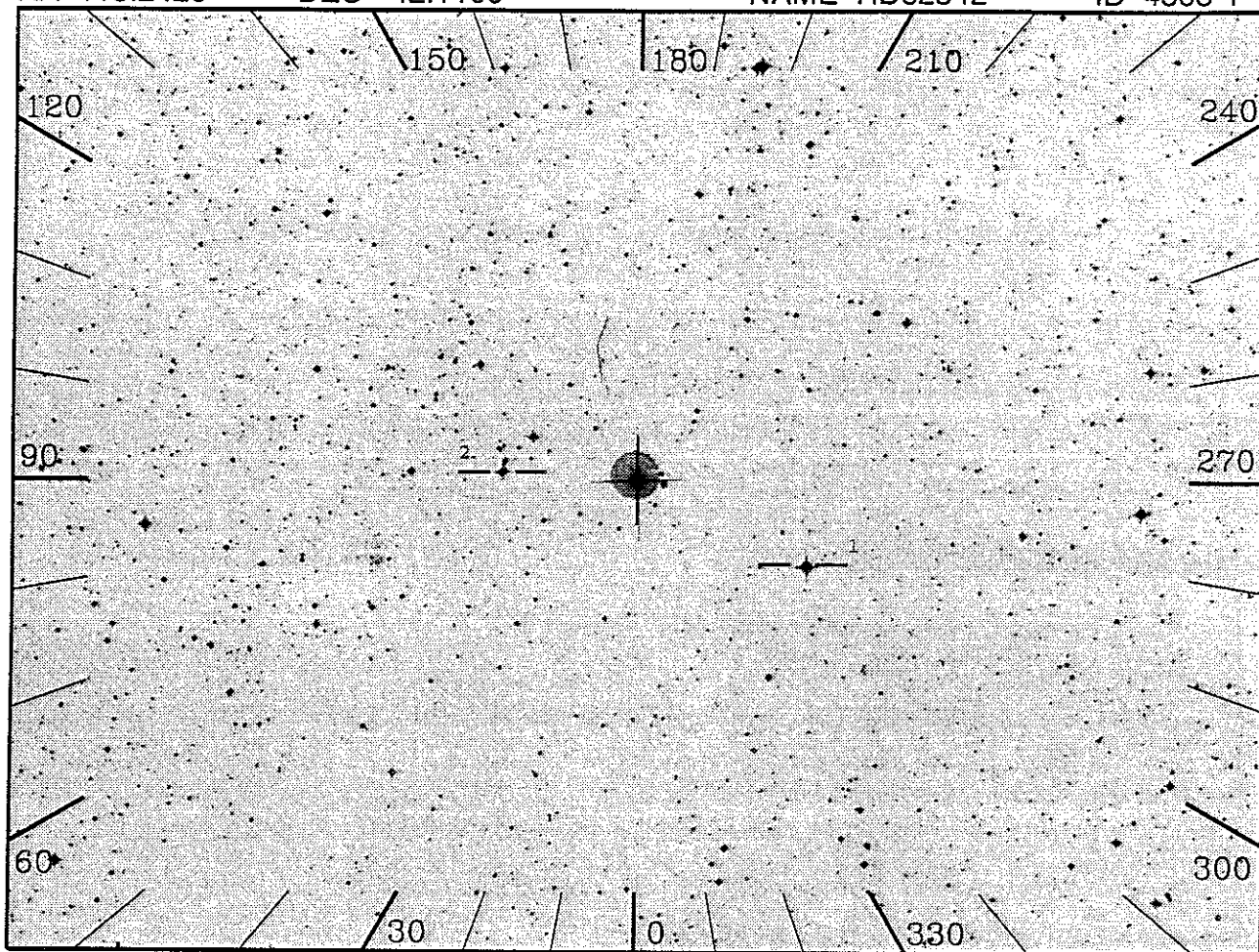


RA 115.2420

DEC -42.1100

NAME HD62542

ID 4503-1



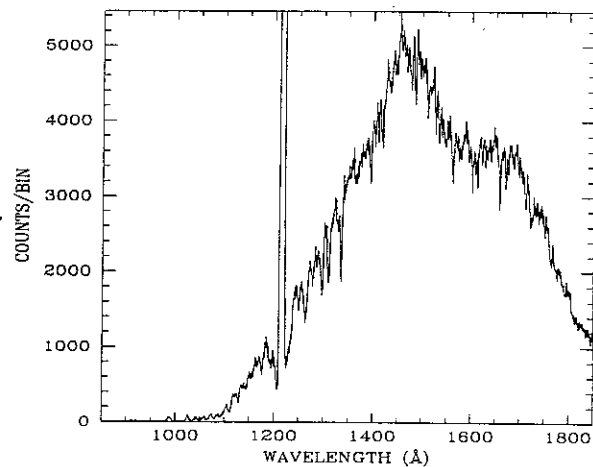
20, 2000(s), Day

OBJECT: 4503 HD62542

KEYWORDS: Hot Star in Molecular Cloud

COMMENTS:

Winner of the most unusual Galactic extinction!  
 Extremely steep FUV extinction eats into spectrum.  
 Important to extract every photon at short lambda.



ID: 4503-1 W=Prime SciPgm= W11

Names: HD62542

Info: B5V V= 8.0 Wupmag=7.28

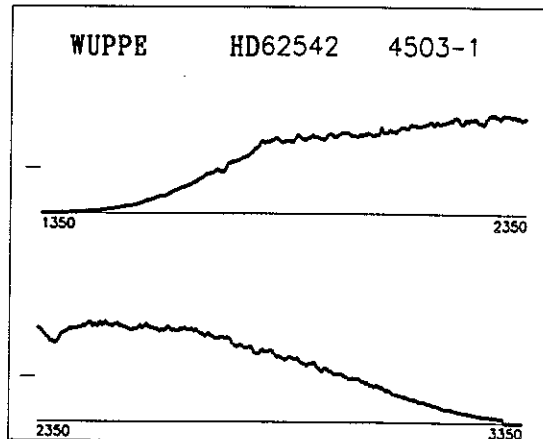
% Pol: 0.70 (Astro-1)

Pos Ang: 28.7 (Astro-1)

Mechanism: Interstellar polarization

Comments:

Observed during Astro-1. Very weak CH+,  
 CN approximately equal to CH.

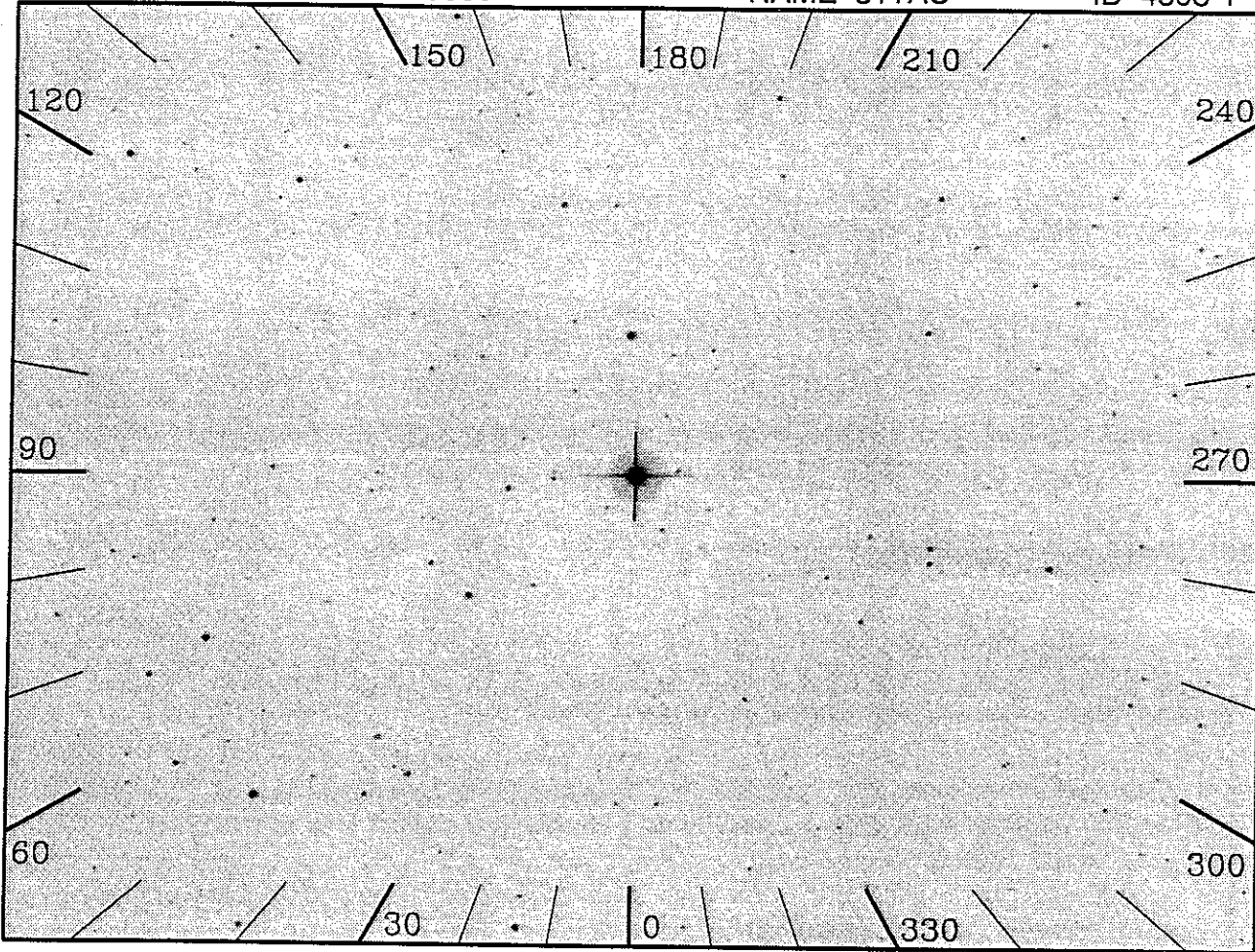


RA 57.3336

DEC 6.3860

NAME 31TAU

ID 4508-1



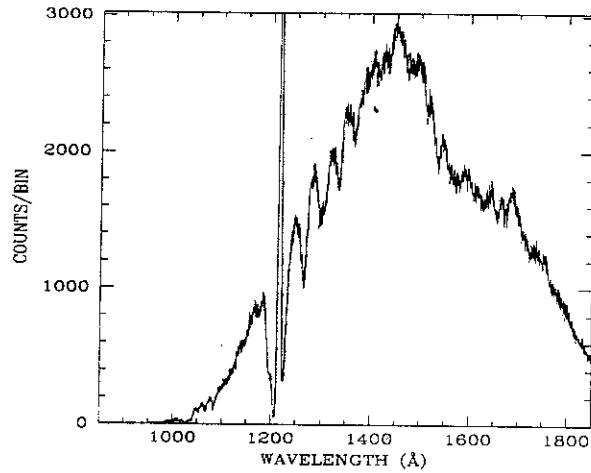
7, 1000(s), Day

OBJECT: 4508 31TAU

KEYWORDS: Hot star behind high lat. molecular cloud

COMMENTS:

Molecular hydrogen absorption forest expected below 1108 Ang., but FUV flux declining in that region.  
 High-latitude absorption important because Galactic clouds could form/dissipate above the Galactic plane.



ID: 4508-1 W=Prime SciPgm= W11

Names: 31TAU HD24263

Info: B5II V= 5.7 Wupmag=4.56

% Pol: 5.25%

Pos Ang:

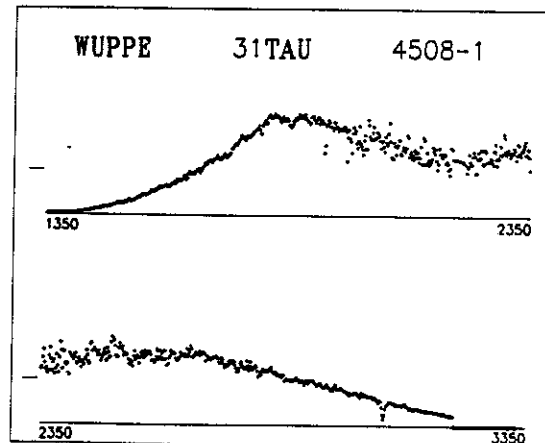
Pmax:

Lmax: 5000A

Mechanism: Interstellar

Comments:

High galactic latitude probe.

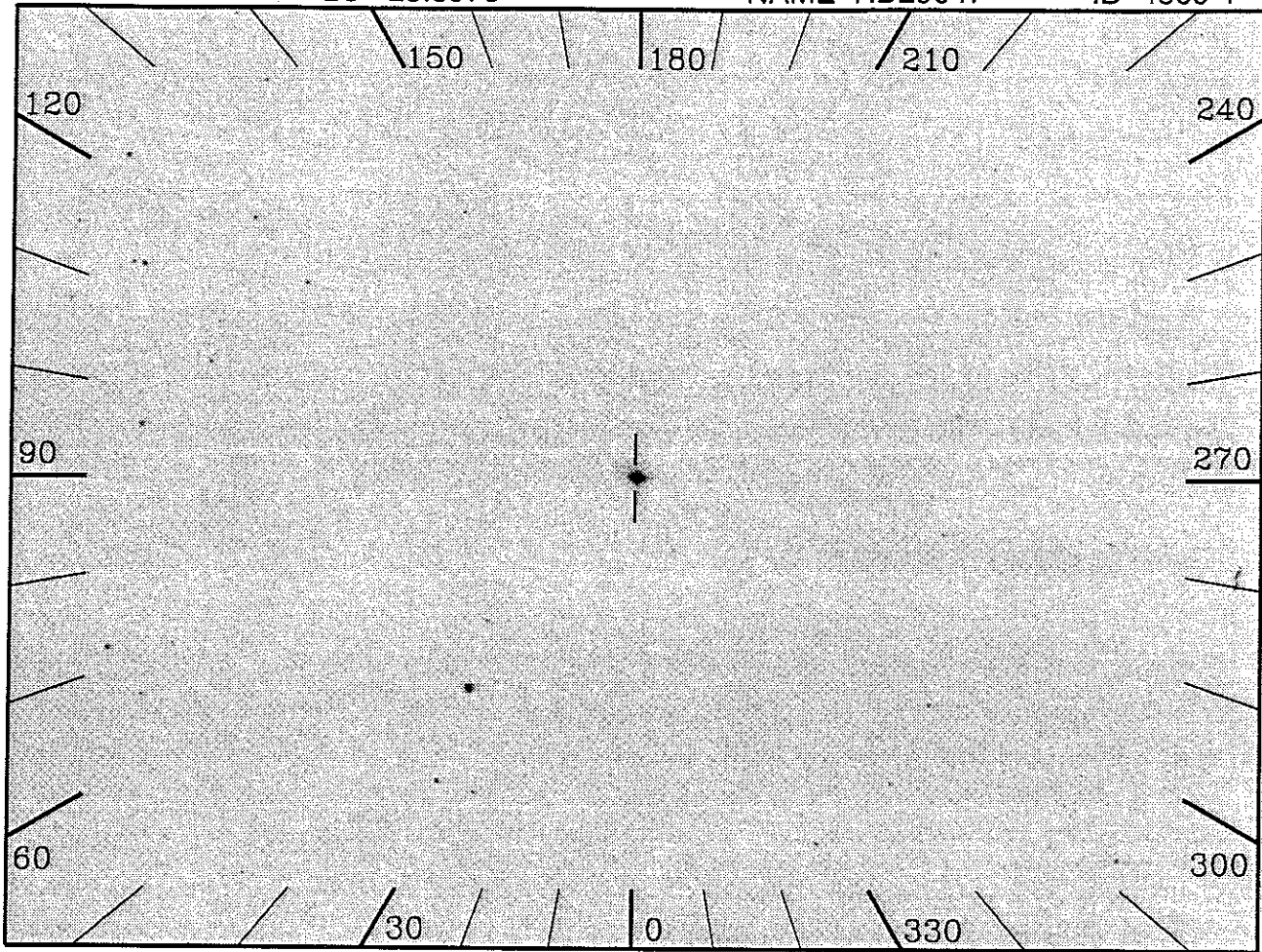


RA 69.5156

DEC 25.8973

NAME HD29647

ID 4509-1



20", 1000(s), Day

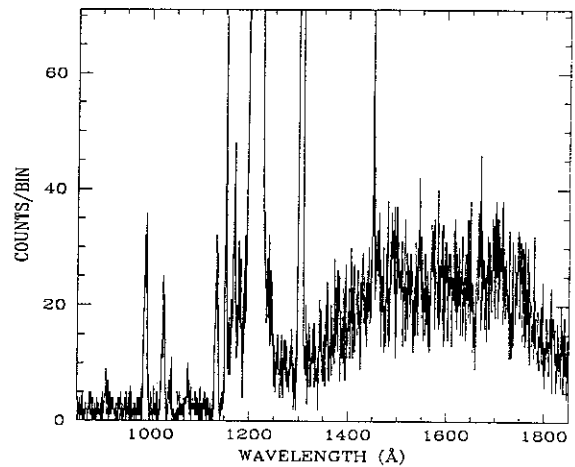
OBJECT: 4509 HD29647

KEYWORDS: Extinction

COMMENTS:

B8III star with unusual extinction.

(E(B-V)=1.01, R\_V = 3.6).



ID: 4509-1 W=Prime SciPgm= W12

Names: HD29647

Info: B8V V= 8.3 Wupmag=11.2

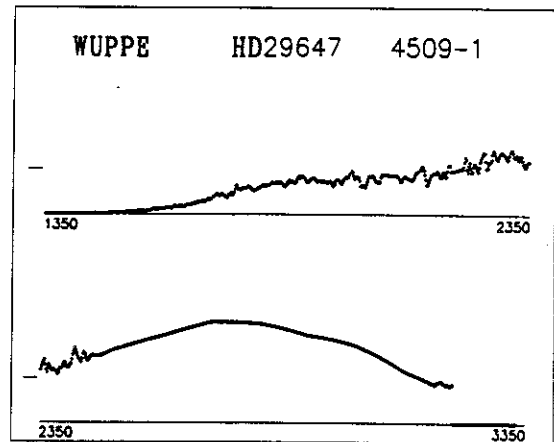
% Pol: 2.00

Pos Ang: 69.0

Mechanism: Interstellar dust

Comments:

This object has a particularly large lambda-max (8600A; Serkowski Law) and also shows strong CN lines in the optical.

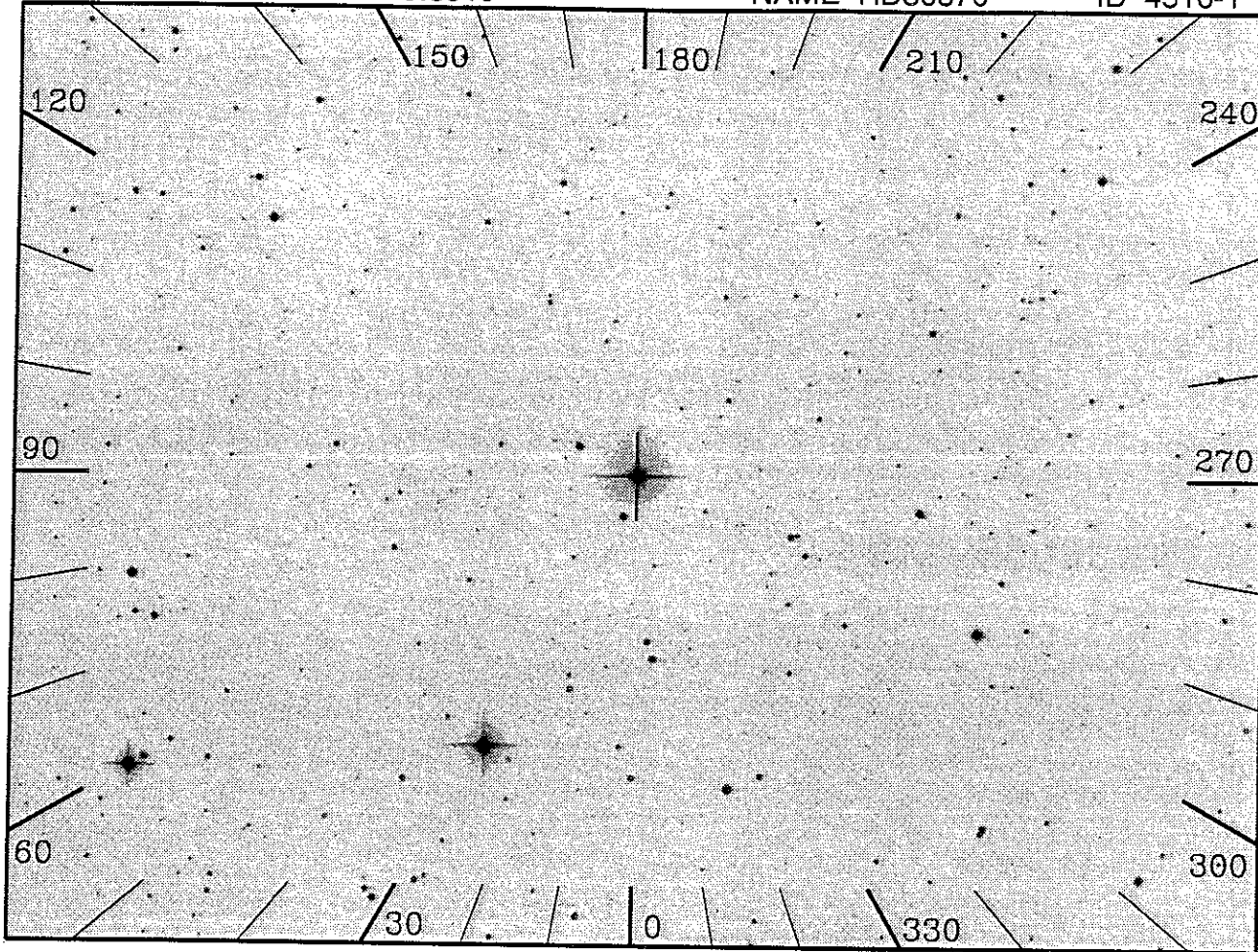


RA 72.2436

DEC 9.8919

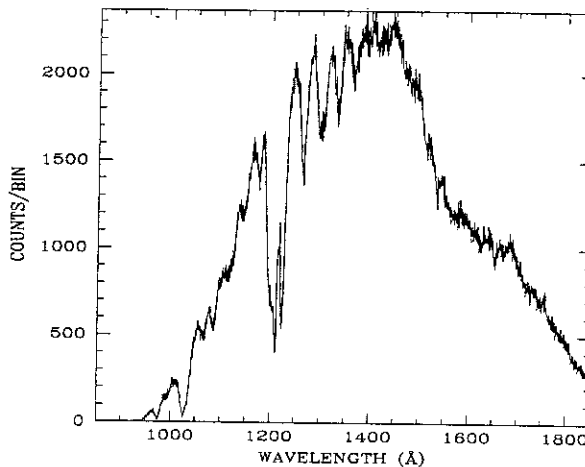
NAME HD30870

ID 4510-1



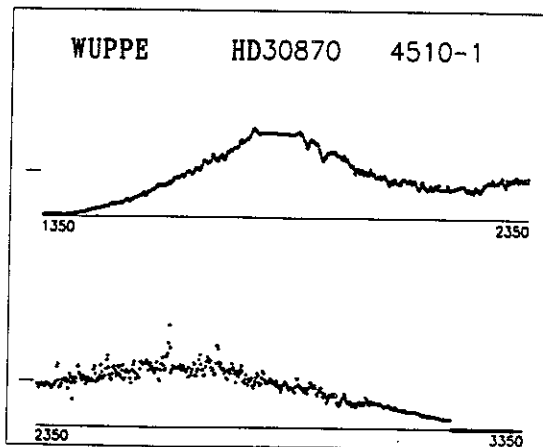
20", 1000(s), Day

OBJECT: HD30870  
 KEYWORDS: Extinction  
 COMMENTS:  
 Extincted B5 V star.  
 E(B-V) = 0.23



ID: 4510-1 W=Prime SciPgm= W11  
 Names: HD30870  
 Info: B5V V= 6.1 Wupmag=5.23  
 % Pol: 1.34  
 Pos Ang: 66.0  
 Pmax: 1.38  
 Lmax: 5400A  
 Mechanism: Interstellar  
 Comments:

IUE data used for simulated spectrum is  
 that of HD147888 (4543).



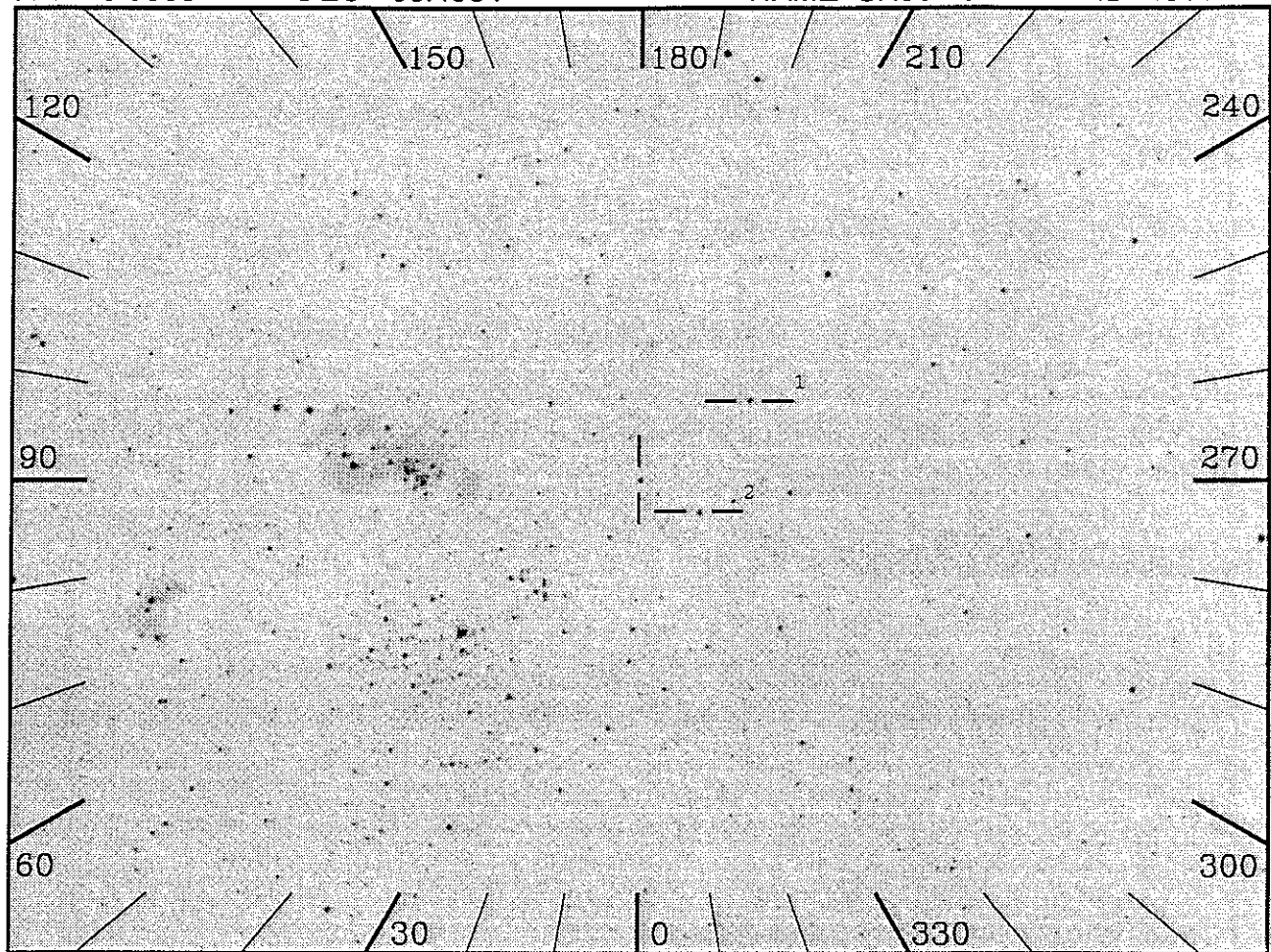


RA 73.9508

DEC -66.4934

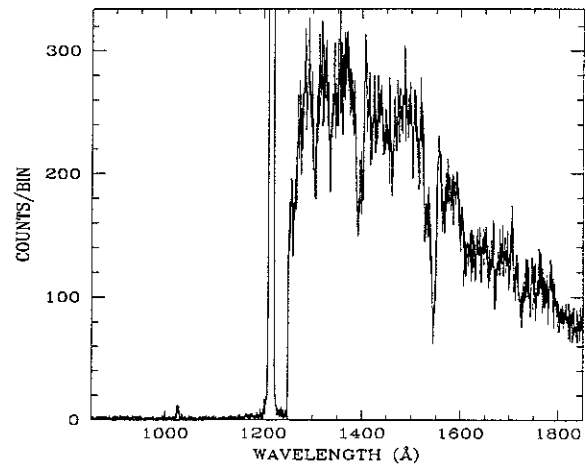
NAME SK66-19

ID 4511-1

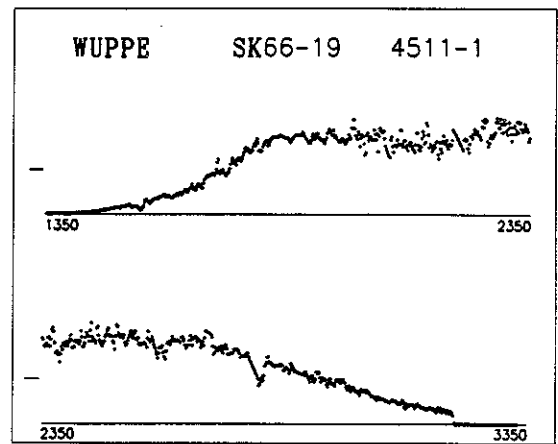


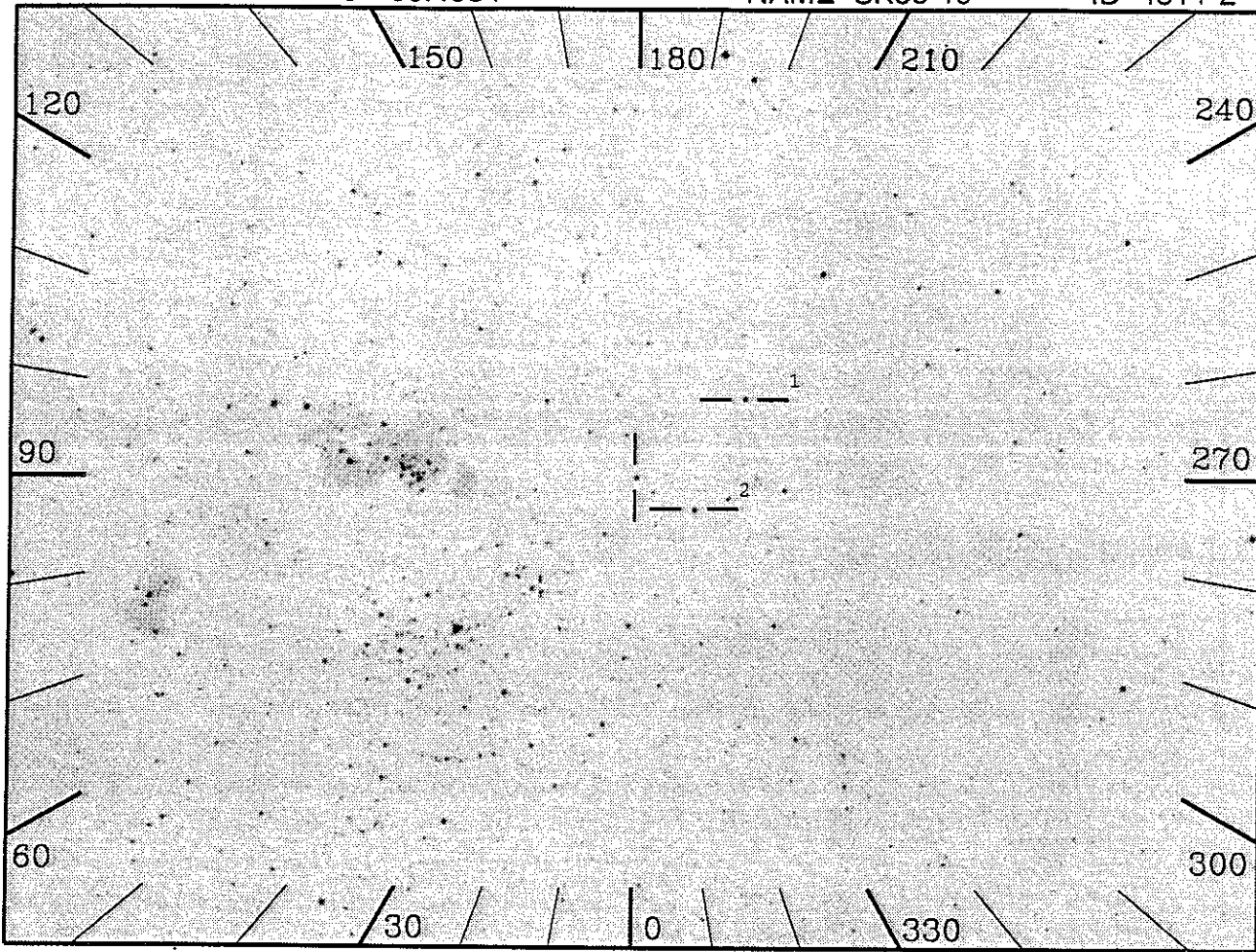
20", 2000(s), Night

OBJECT: 4511 SK66-19  
 KEYWORDS: LMC dust, polarization, extinction  
 COMMENTS:  
 LMC supergiant. Part of program to study interstellar polarization and extinction in the LMC with HUT and WUPPE.



ID: 4511-1 W=Prime SciPgm= G31  
 Names: SK66-19  
 Info: B0I V=12.8 Wupmag=11.2  
 % Pol: 2.50  
 Pos Ang: 70  
 Pmax: 2.50 Lmax: 5800A  
 Mechanism: Dust scattering  
 Comments:  
 LMC star. Part of GI program to study ISP and extinction in the LMC. Also, being observed by HUT for far-UV extinction. Behavior of pol across the 2175A bump is of particular interest.





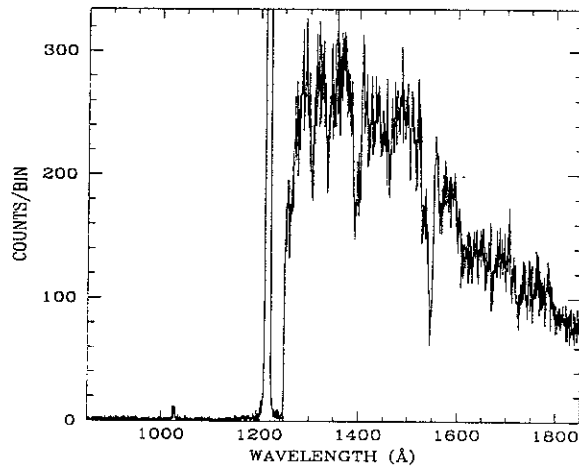
20", 2000(s), Night

OBJECT: 4511 SK66-19

KEYWORDS: LMC dust, polarization, extinction

COMMENTS:

LMC supergiant. Part of program to study interstellar polarization and extinction in the LMC with HUT and WUPPE.



ID: 4511-2 W=Prime SciPgm= G31

Names: SK66-19

Info: B0I V=12.8 Wupmag=11.2

% Pol: 2.50

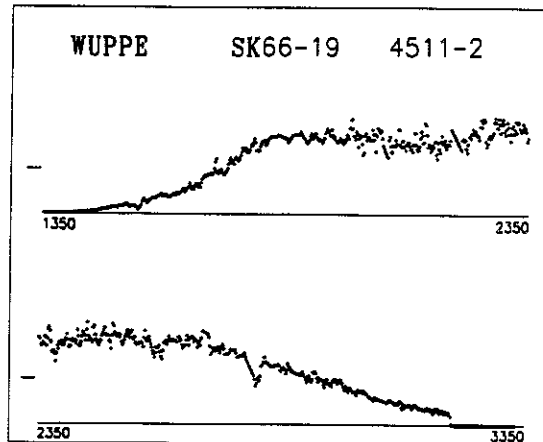
Pos Ang: 70

Pmax: 2.50 Lmax: 5800A

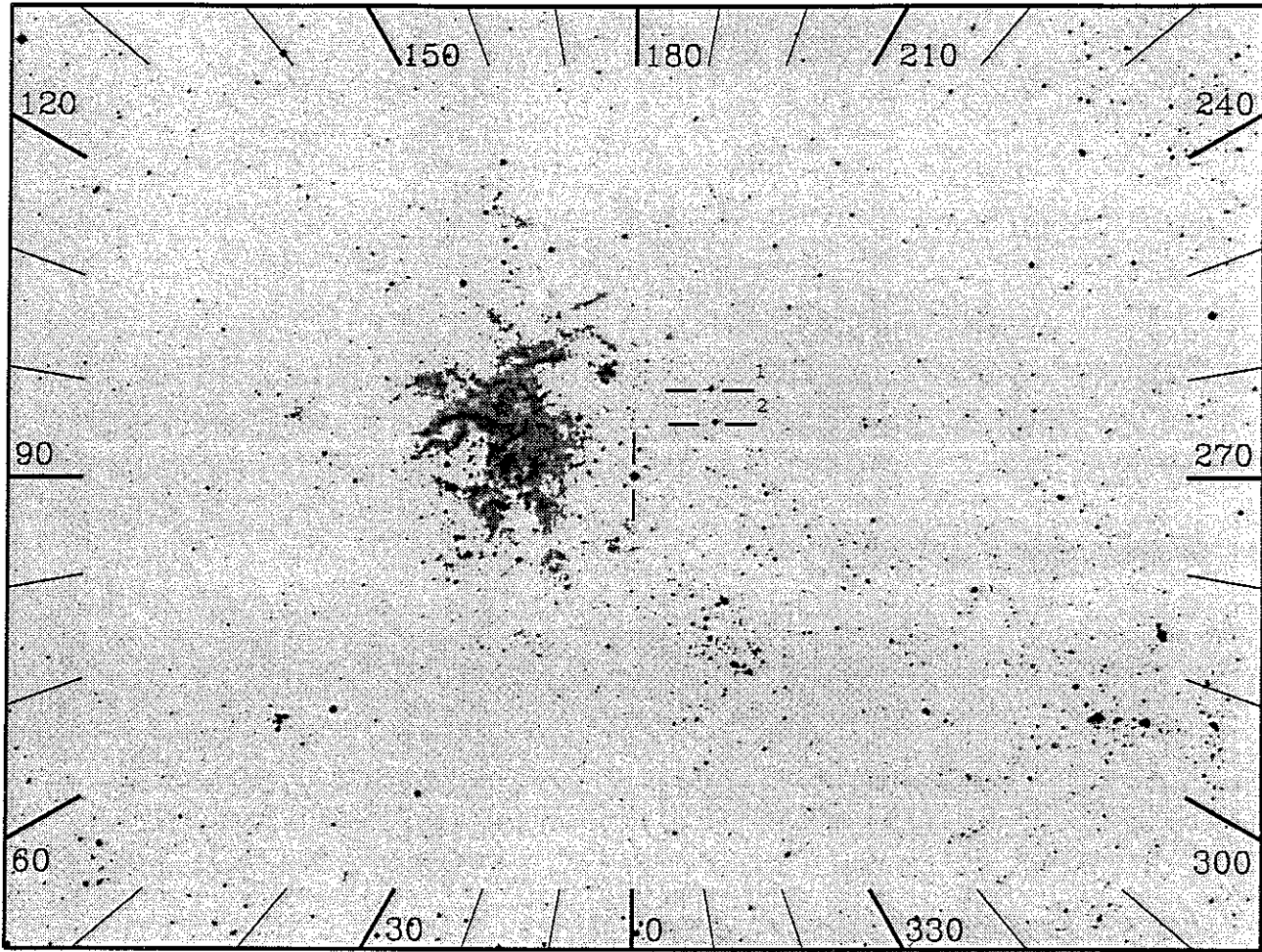
Mechanism: Dust scattering

Comments:

LMC star. Part of GI program to study ISP and extinction in the LMC. Also, being observed by HUT for far-UV extinction. Behavior of pol across the 2175A bump is of particular interest.

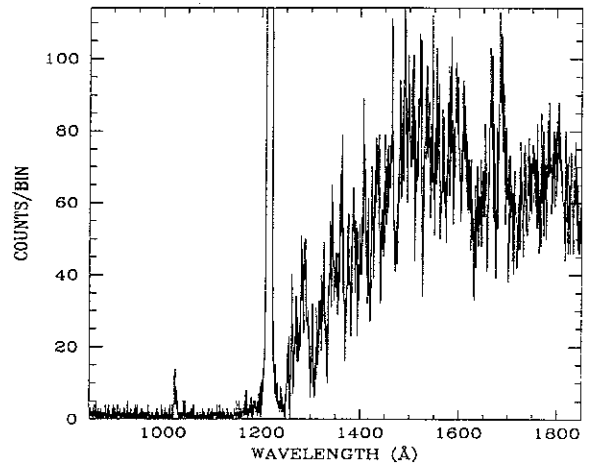


TGT/ASTRO2/FIN A



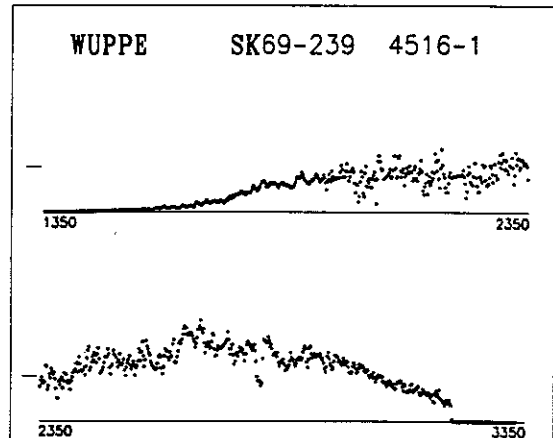
20", 2000(s), Night

OBJECT: 4516 SK69-239  
 KEYWORDS: LMC dust, polarization, extinction  
 COMMENTS:  
 LMC supergiant. Part of program to study interstellar polarization and extinction in the LMC with HUT and WUPPE.



ID: 4516-1 W=Prime SciPgm= G31  
 Names: SK69-239 HD269902  
 Info: AOI V=10.2 Wupmag=10.4  
 % Pol: 3.36  
 Pos Ang: 86  
 Pmax: 3.36  
 Lmax: 5300A  
 Mechanism: Dust scattering  
 Comments:

Observed during Astro-1. LMC star. Part of program to study ISP and extinction in the LMC. Also being observed by HUT for far-UV extinction. Looking for behavior across LMC's weaker 2200A feature.

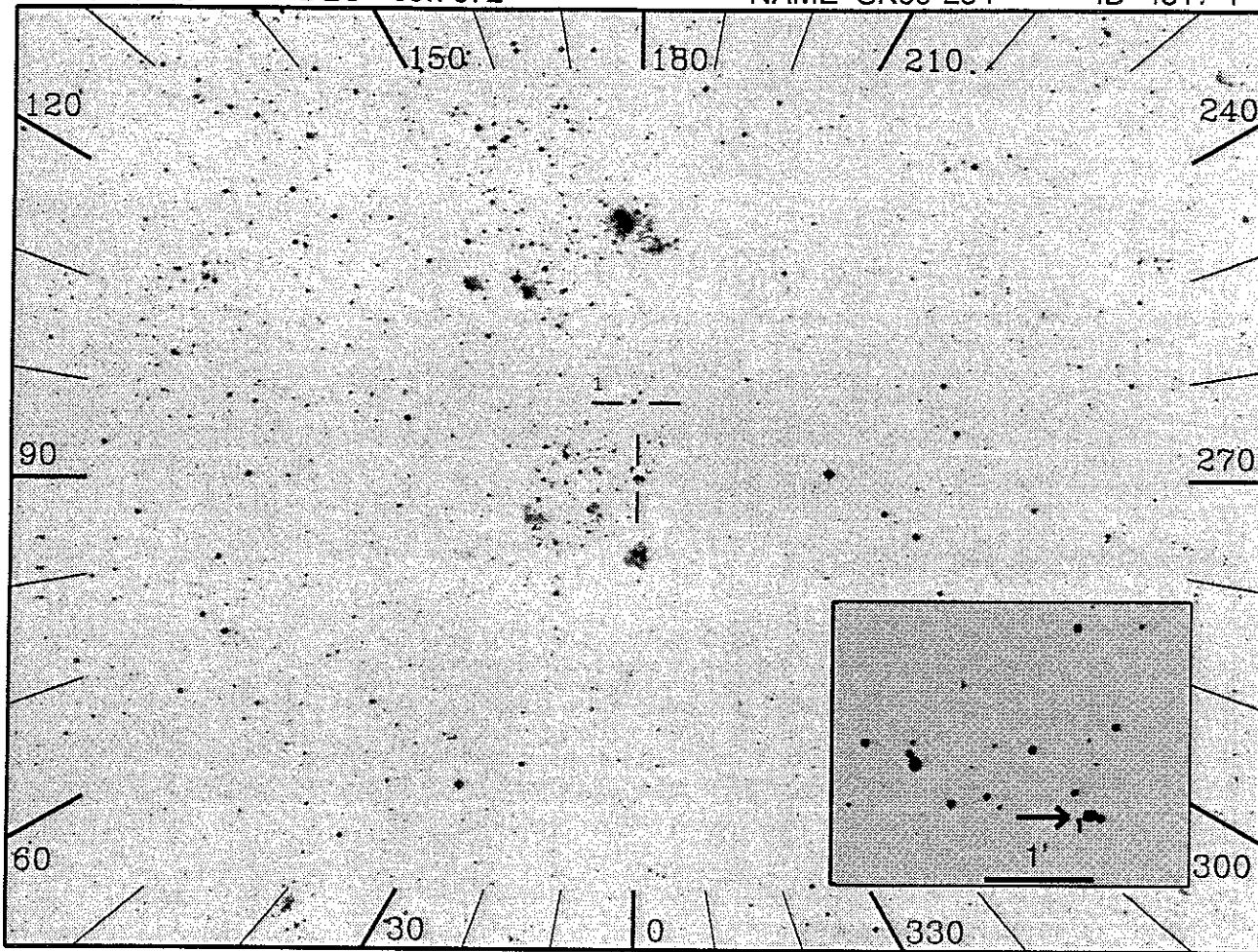


RA 85.0285

DEC -69.7672

NAME SK69-254

ID 4517-1



20", 2000(s), Night

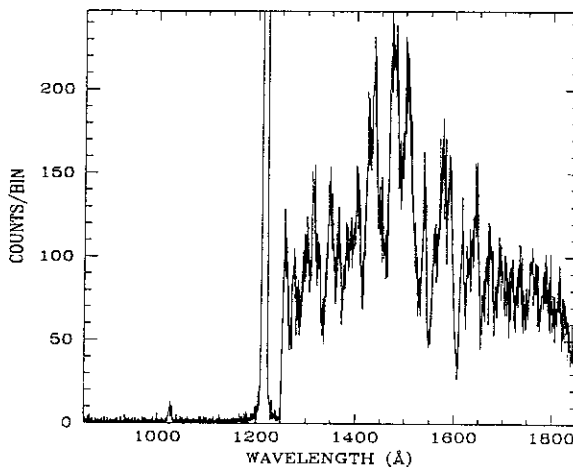
OBJECT: 4517 SK69-254

KEYWORDS: LMC dust, polarization, extinction

COMMENTS:

LMC supergiant. Part of program to study interstellar polarization and extinction in the LMC with HUT and WUPPE.

The target is the brighter of the two stars pointed to in the image inset, and is labeled #1.



ID: 4517-1 W=Prime SciPgm= G31

Names: SK69-254 CD-69474

Info: B5I V=12.1 Wupmag=11.2

% Pol: 4.09

Pos Ang: 61

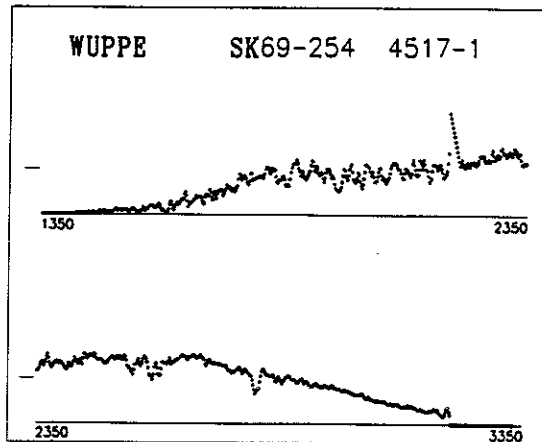
Pmax: 4.09

Lmax: 6500A

Mechanism: Dust scattering

Comments:

LMC star. Part of GI program to study ISP and extinction in the LMC. Also, being observed by HUT for far-UV extinction.



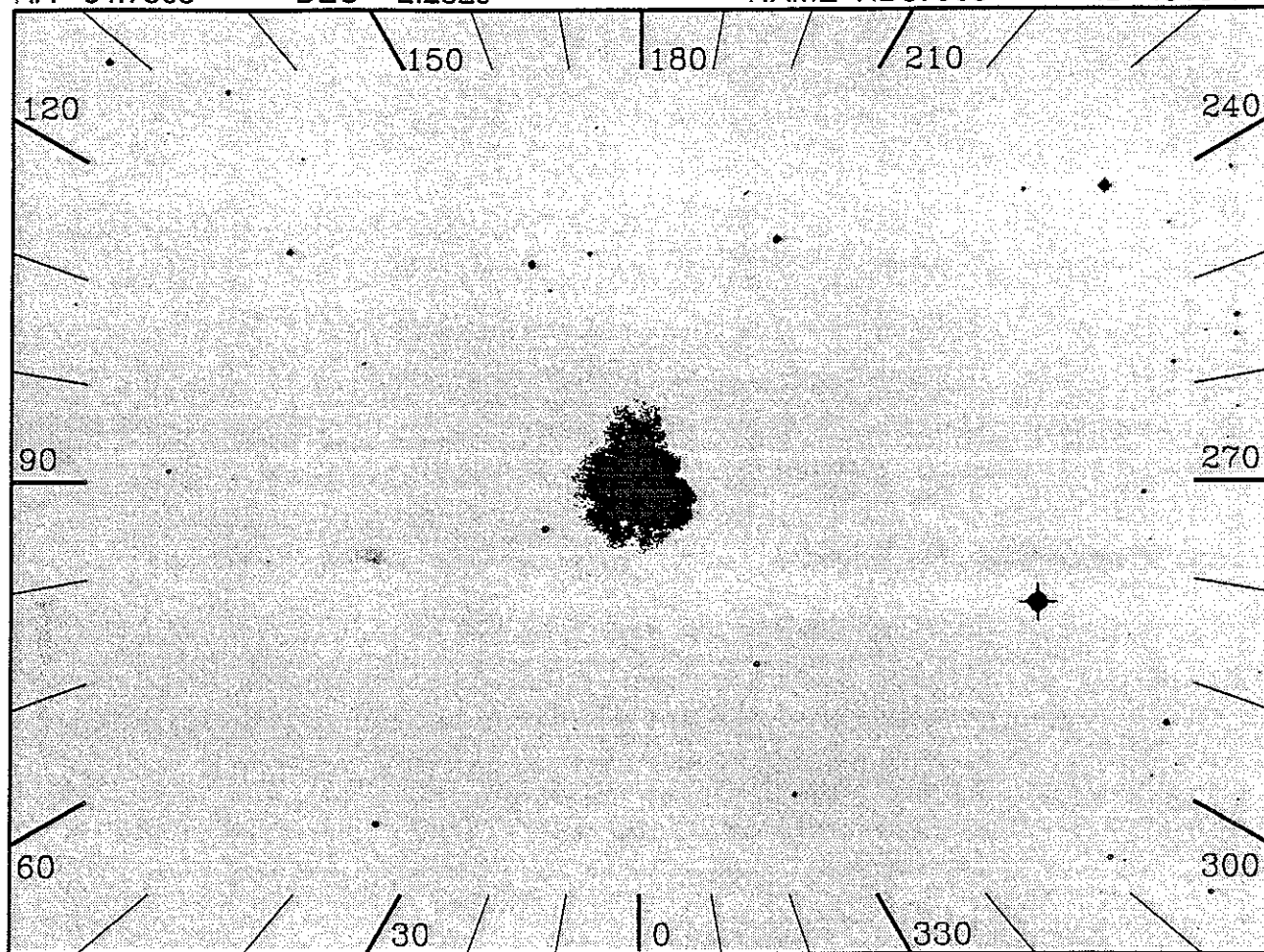
TGT/ASTRO2/FIN A

RA 84.7803

DEC -2.2829

NAME HD37903

ID 4518-1



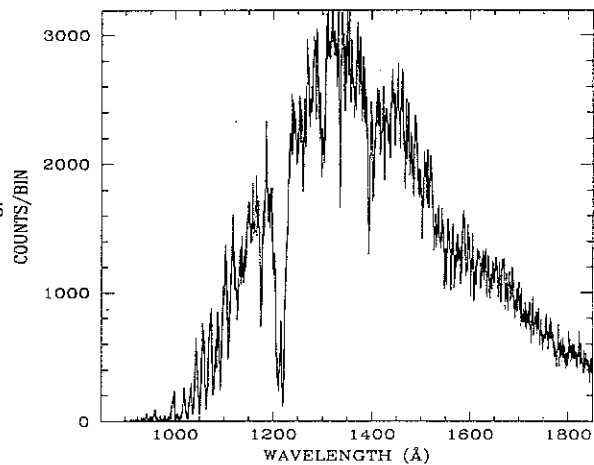
20, 600(s), Day

OBJECT: 4518 HD37903

KEYWORDS: B Star in Reflection Nebula

COMMENTS:

Molecular hydrogen excited by star imbedded in cloud.  
 Observe star in day through partial door 2 (750 cm<sup>2</sup>),  
 slit 7; offset to nebula at night door 5, slit 6. MAKE  
 SURE STAR DOES NOT ACCIDENTALLY ENTER SLIT after door 5  
 is opened! Only bright guide star is the central  
 star, which will be useful only after the offset!



ID: 4518-1 H=Prime SciPgm= H12

Names: HD37903 S132464

Info: B1.5V V= 7.8 Wupmag=6.24

% Pol: 0.41 (Astro-1)

Pos Ang: 120.00 (Astro-1)

Pmax: 2.04

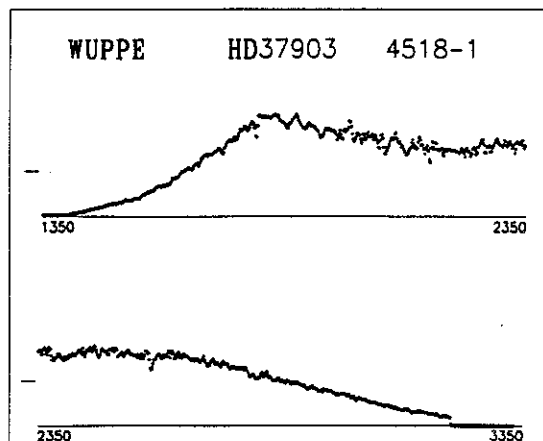
Lmax: 7100A

Mechanism: Interstellar

Comments:

Astro-1 target. Horse Head Nebula.

CN&gt;CH, CH+ is strong!



JA-1782

4-47

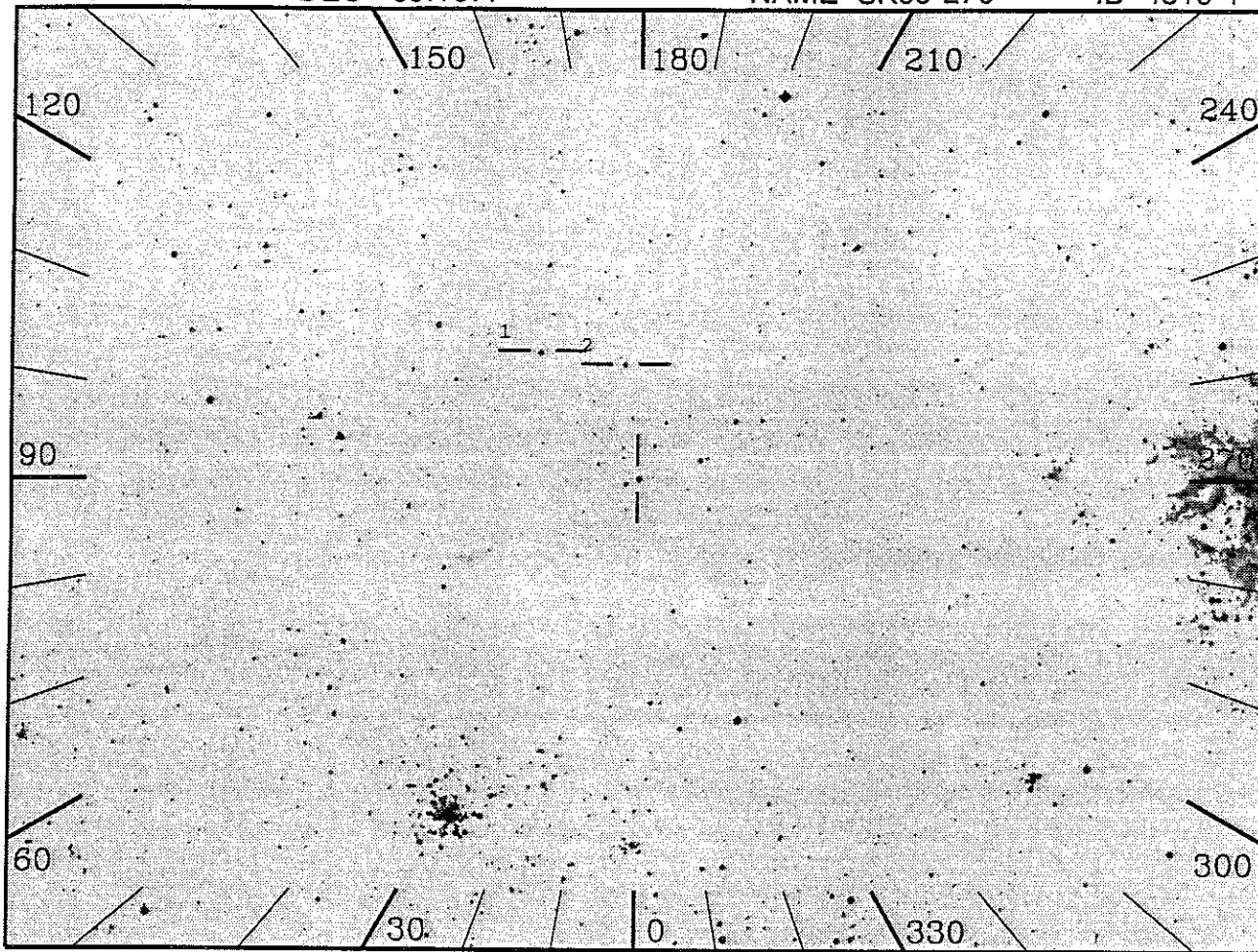
TGT/ASTRO2/FIN A

RA 85.4229

DEC -69.1077

NAME SK69-270

ID 4519-1



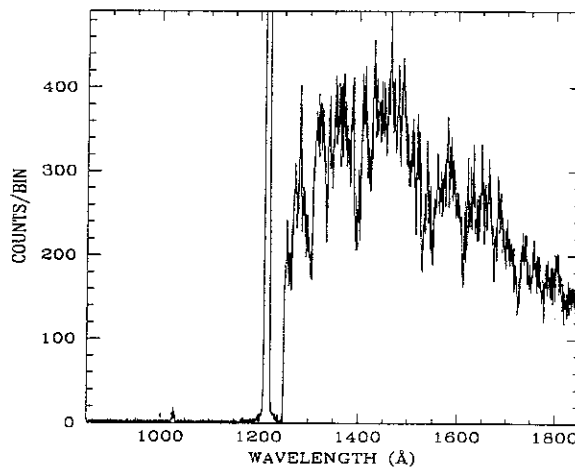
20", 2000(s), Night

OBJECT: 4519 SK69-270

KEYWORDS: LMC dust, polarization, extinction

COMMENTS:

LMC supergiant. Part of program to study interstellar polarization and extinction in the LMC with HUT and WUPPE.



ID: 4519-1 W=Prime SciPgm= G31

Names: SK69-270 HD269997

Info: B3IA V=11.3 Wupmag=10.0

% Pol: 2.74

Pos Ang: 85

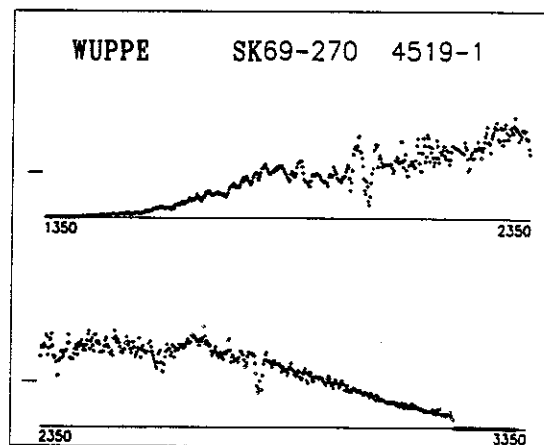
Fmax: 2.74

Lmax: 5200A

Mechanism: Dust scattering

Comments:

LMC star. Part of GI program to study ISP and extinction in the LMC. Also, being observed by HUT for far-UV extinction. Looking for possible behavior across LMC's weaker 2200A feature.

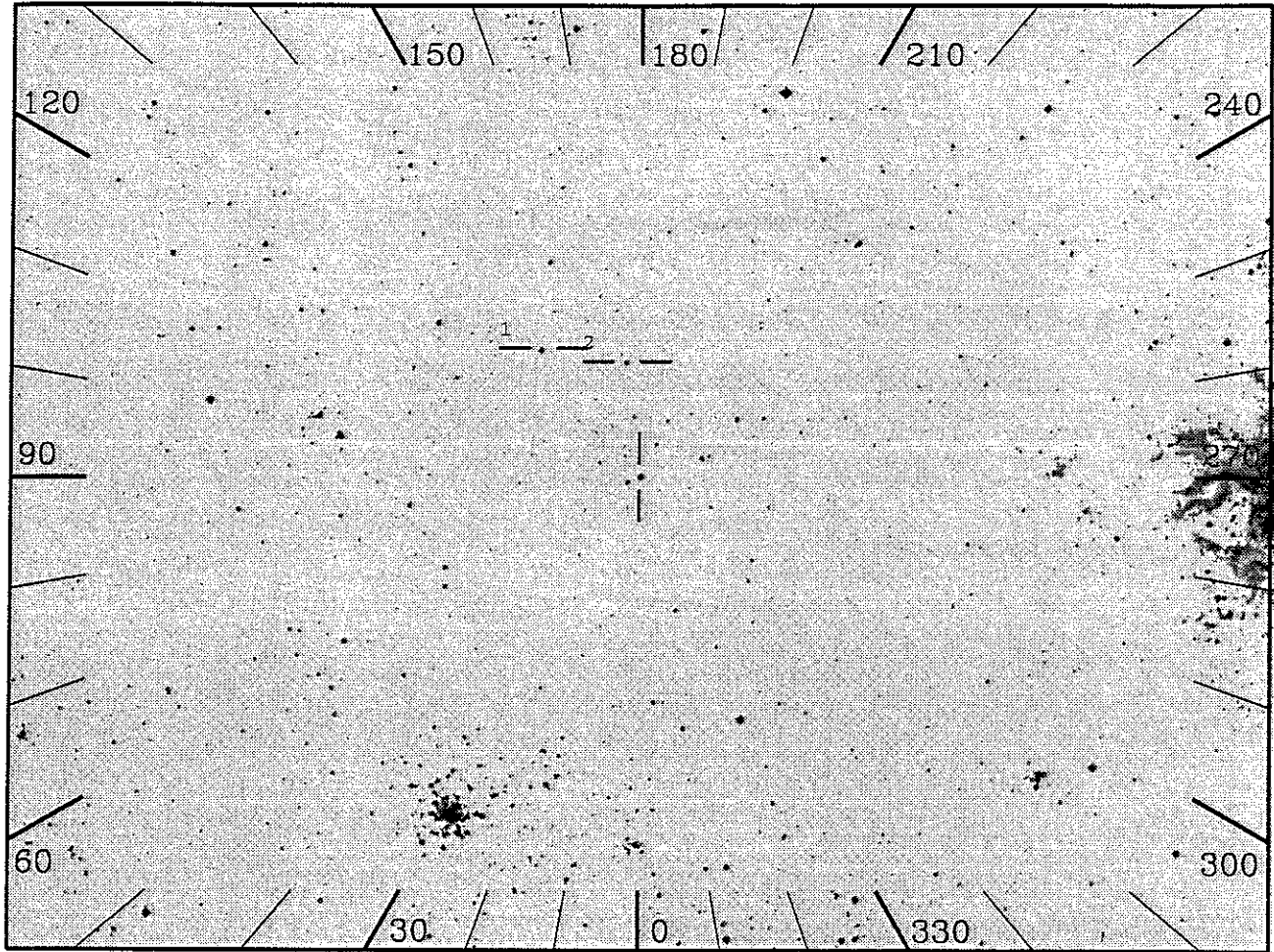


RA 85.4229

DEC -69.1077

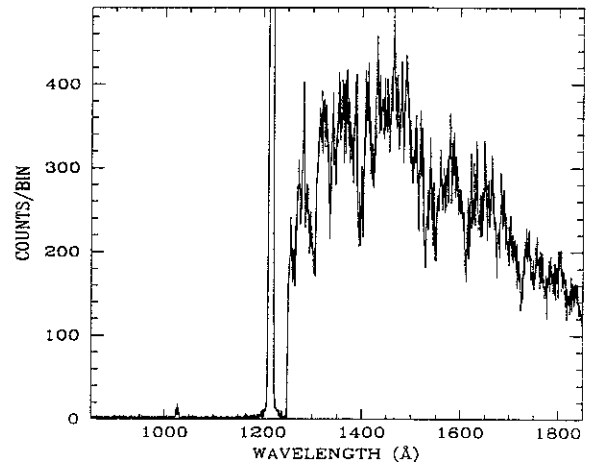
NAME SK69-270

ID 4519-2

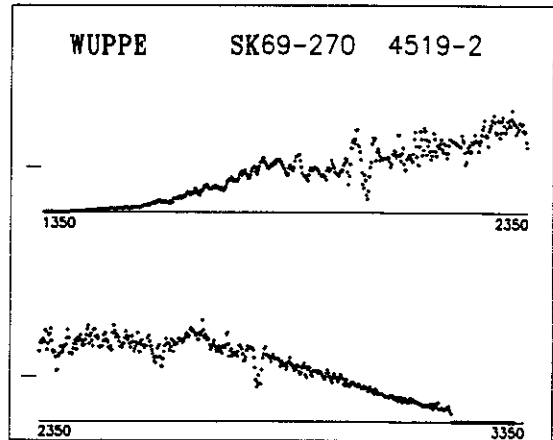


20", 2000(s), Night

OBJECT: 4519 SK69-270  
 KEYWORDS: LMC dust, polarization, extinction  
 COMMENTS:  
 LMC supergiant. Part of program to study interstellar polarization and extinction in the LMC with HUT and WUPPE.



ID: 4519-2 W=Prime SciPgm= G31  
 Names: SK69-270 HD269997  
 Info: B3IA V=11.3 Wupmag=10.0  
 % Pol: 2.74  
 Pos Ang: 85  
 Pmax: 2.74  
 Lmax: 5200A  
 Mechanism: Dust scattering  
 Comments:  
 LMC star. Part of GI program to study ISP and extinction in the LMC. Also, being observed by HUT for far-UV extinction. Looking for possible behavior across LMC's weaker 2200A feature.

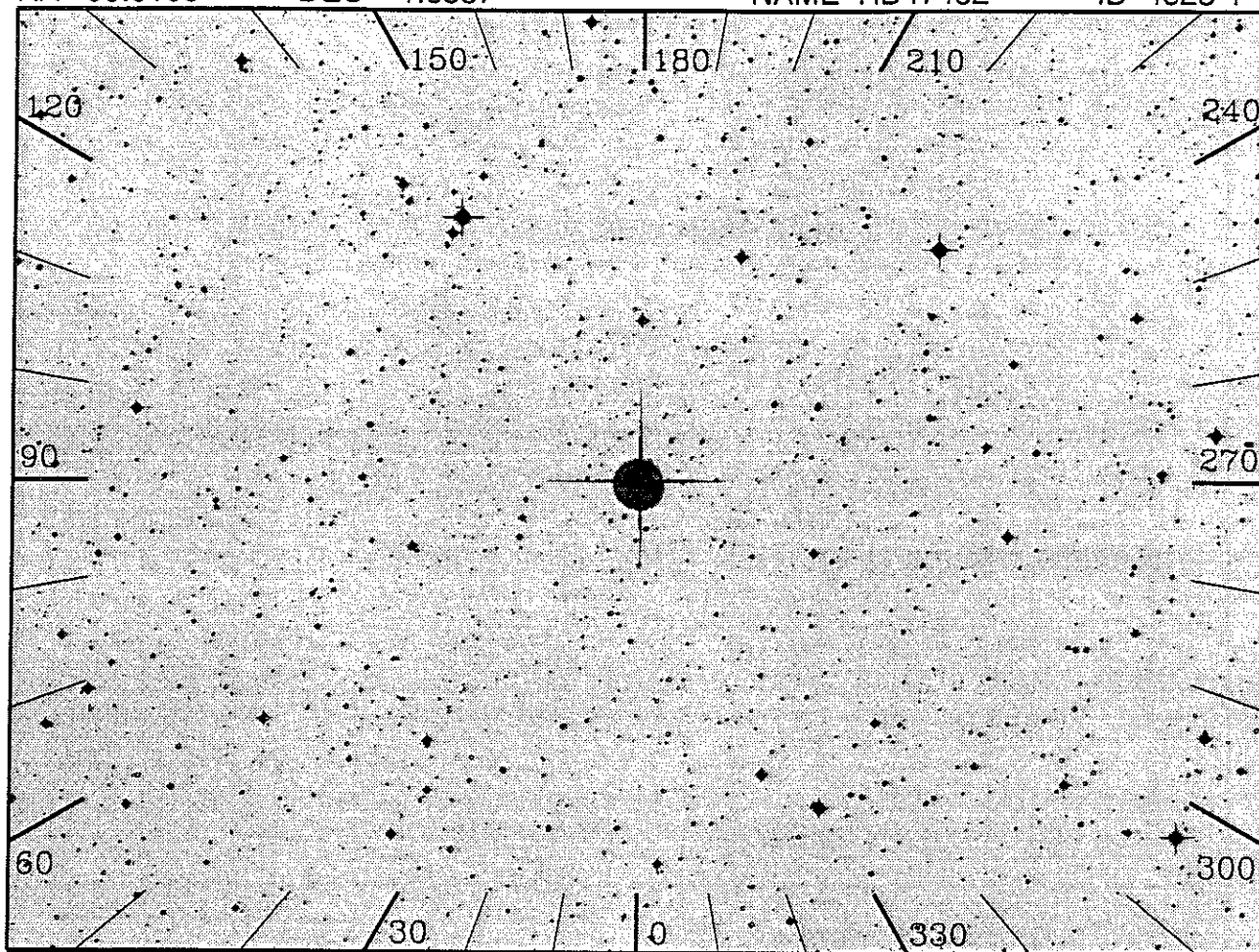


RA 99.0106

DEC 1.6587

NAME HD47432

ID 4523-1



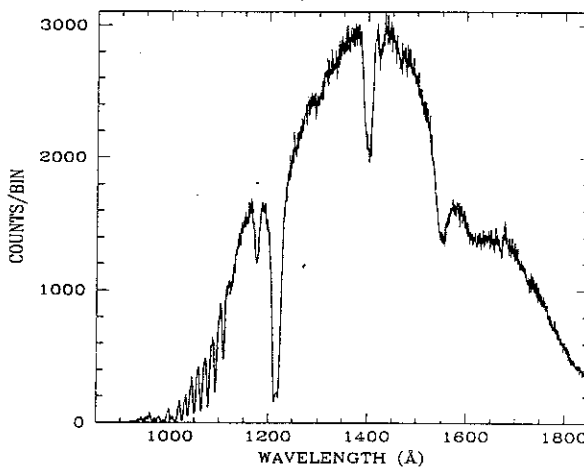
20, 1000(s), Day

OBJECT: 4523 HD47432

KEYWORDS: Hot O star in HII region

COMMENTS:

Imbedded O star probes molecular cloud/HII region.  
 Variable by 0.2 mag in V. Heavily reddened and  
 interesting because uncommon star/cloud combination  
 for achievable HUT observations. Full integration on  
 star, not nebula.



ID: 4523-1 W=Prime SciPgm= W11

Names: HD47432

Info: O9.5III V= 6.1 Wupmag=4.86

% Pol: 1.40

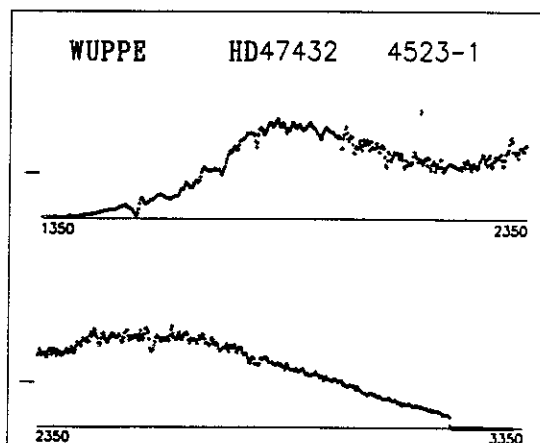
Pos Ang: 154.7

Pmax: 1.48

Lmax: 5600A

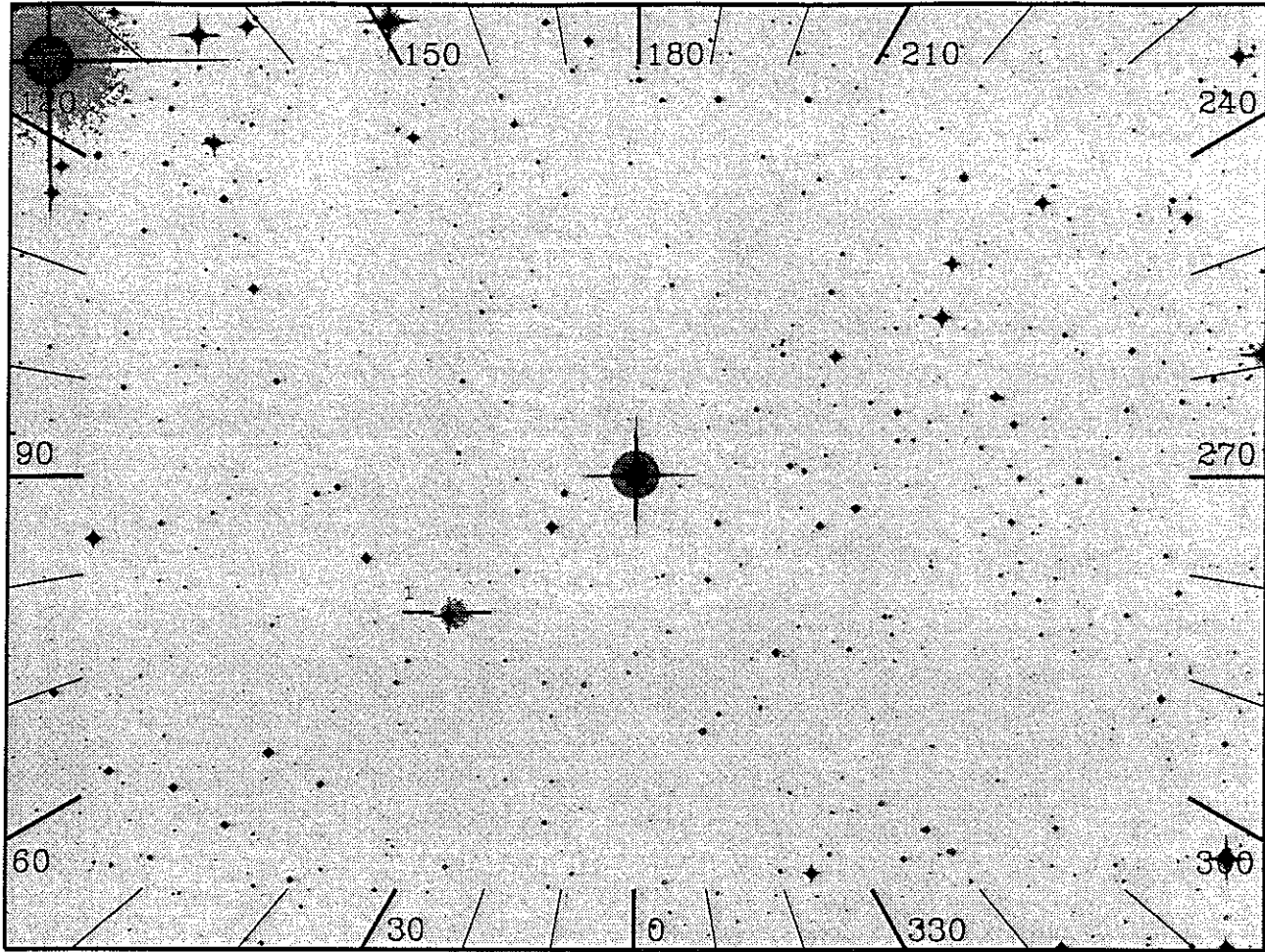
Mechanism: Interstellar

Comments:



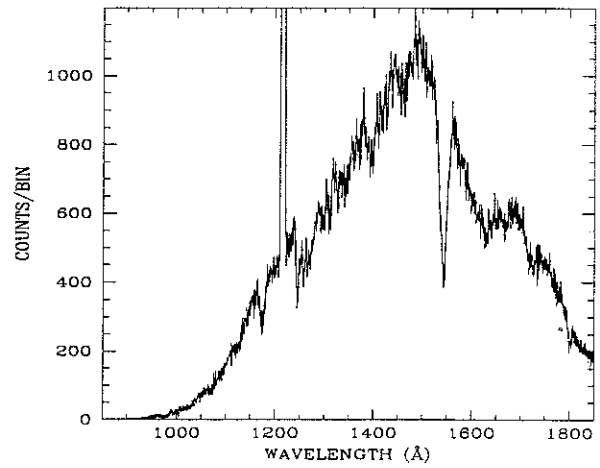


RA 129.3311    DEC -40.2421    NAME HD73882    ID 4526-1

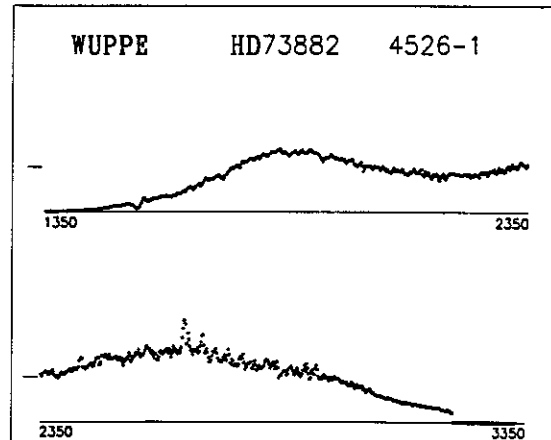


20", 1000(s), Day

OBJECT: HD73882  
 KEYWORDS: Extinction  
 COMMENTS:  
 Extincted O9 III star.  
 $E(B-V) = 0.71$



ID: 4526-1    W=Prime    SciPgm= W12  
 Names: HD73882  
 Info: O8V    V= 7.2    Wupmag=6.40  
 % Pol: 1.89  
 Pos Ang: 165.0  
 Pmax: 2.15  
 Lmax: 7500A  
 Mechanism: Interstellar  
 Comments:

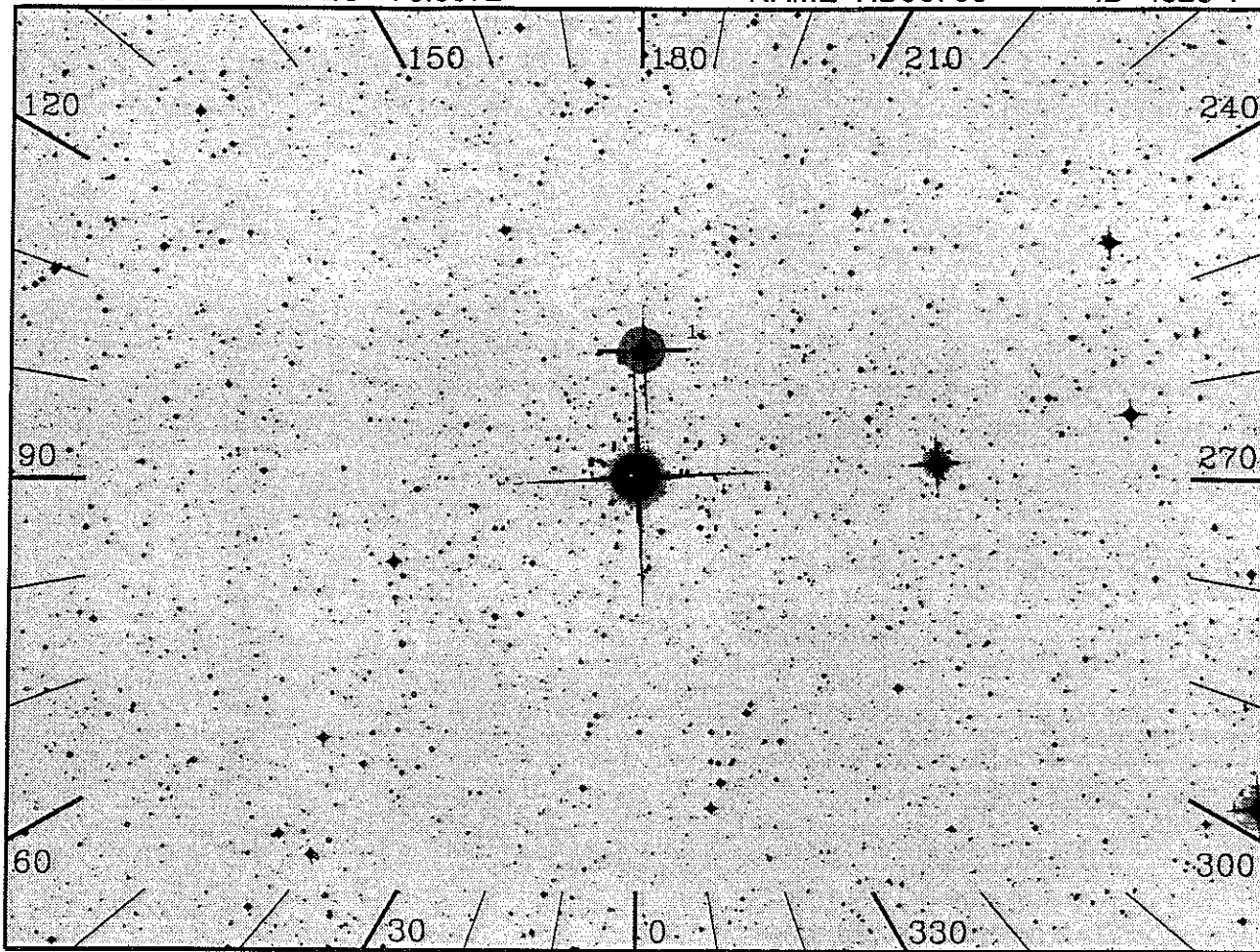


RA 166.2547

DEC -70.6072

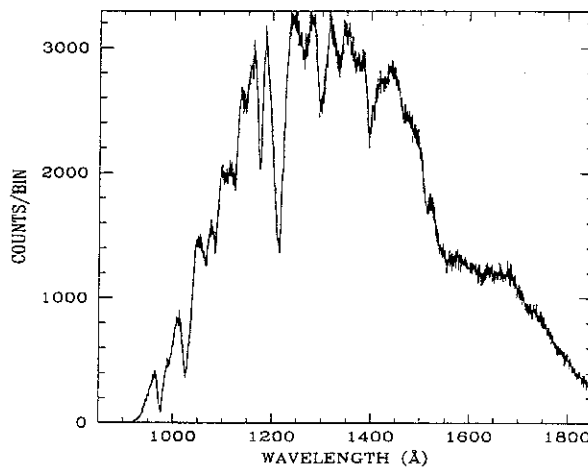
NAME HD96706

ID 4528-1



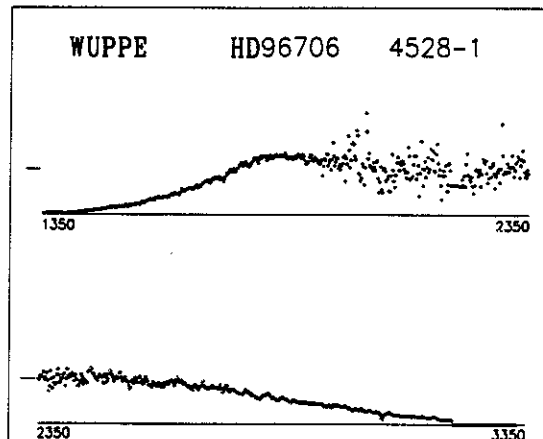
20", 1000(s), Day

OBJECT: 4528 HD96706  
 KEYWORDS: Extinction  
 COMMENTS:  
 Extincted B2 V star.



ID: 4528-1 W=Prime SciPgm= W11  
 Names: HD96706  
 Info: B2V V= 5.6 Wupmag=4.10  
 % Pol: 1.37  
 Pos Ang: 121.6  
 Pmax: 1.58  
 Lmax: 6100A  
 Mechanism: Interstellar dust  
 Comments:

IUE data used for simulated spectrum is that of HD37356 (4514).

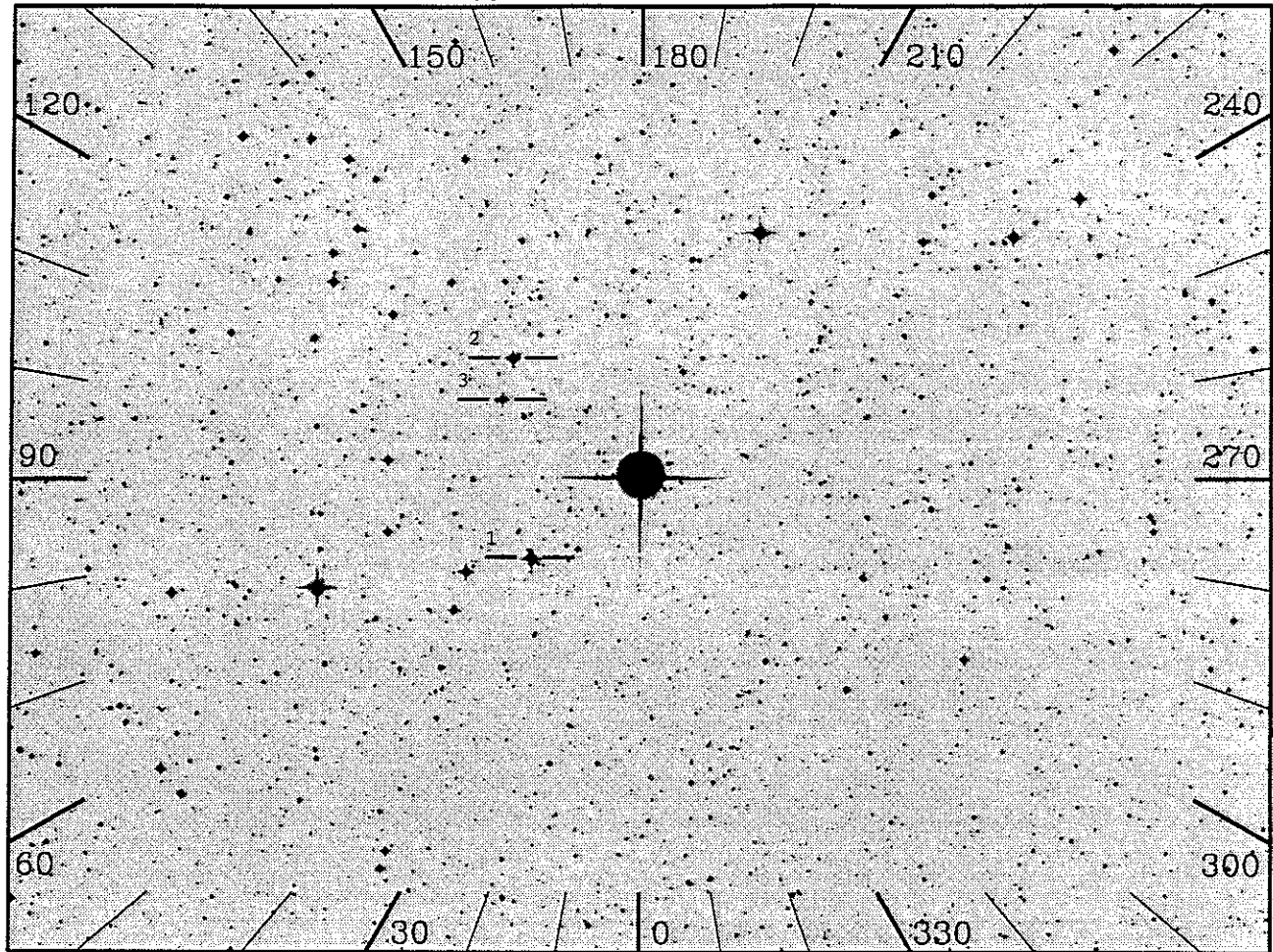


RA 169.5284

DEC -71.7203

NAME HD98695

ID 4529-1



20", 1000(s), Day

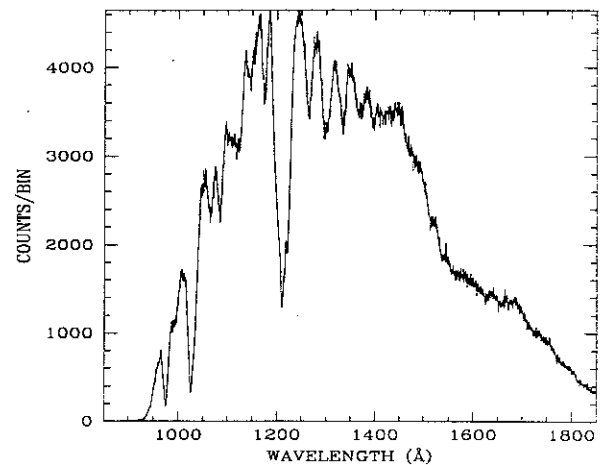
OBJECT: 4529 HD98695

KEYWORDS: Extinction

COMMENTS:

B4 V star with flat UV extinction.

Partial door 1 vs. door 2 calibration, change to door 2 after 600 sec.



ID: 4529-1 W=Prime SciPgm= W11

Names: HD98695

Info: B4V V= 6.4 Wupmag=5.08

% Pol: 1.90

Pos Ang: 117.4

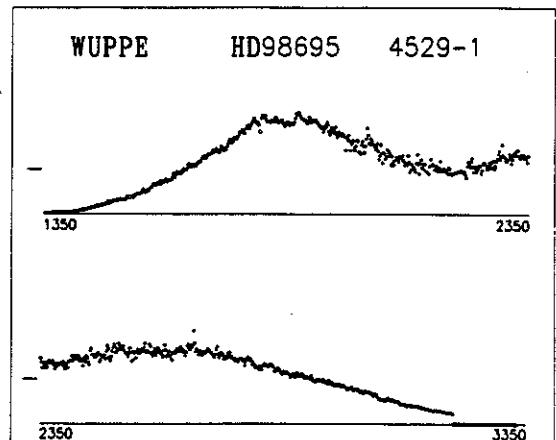
Pmax: 2.2

Lmax: 6000A

Mechanism: Interstellar dust

Comments:

This object was observed by HST FOS. It has a rather flat UV extinction curve. IUE data used for simulated spectrum is that of HD99872 (4531).

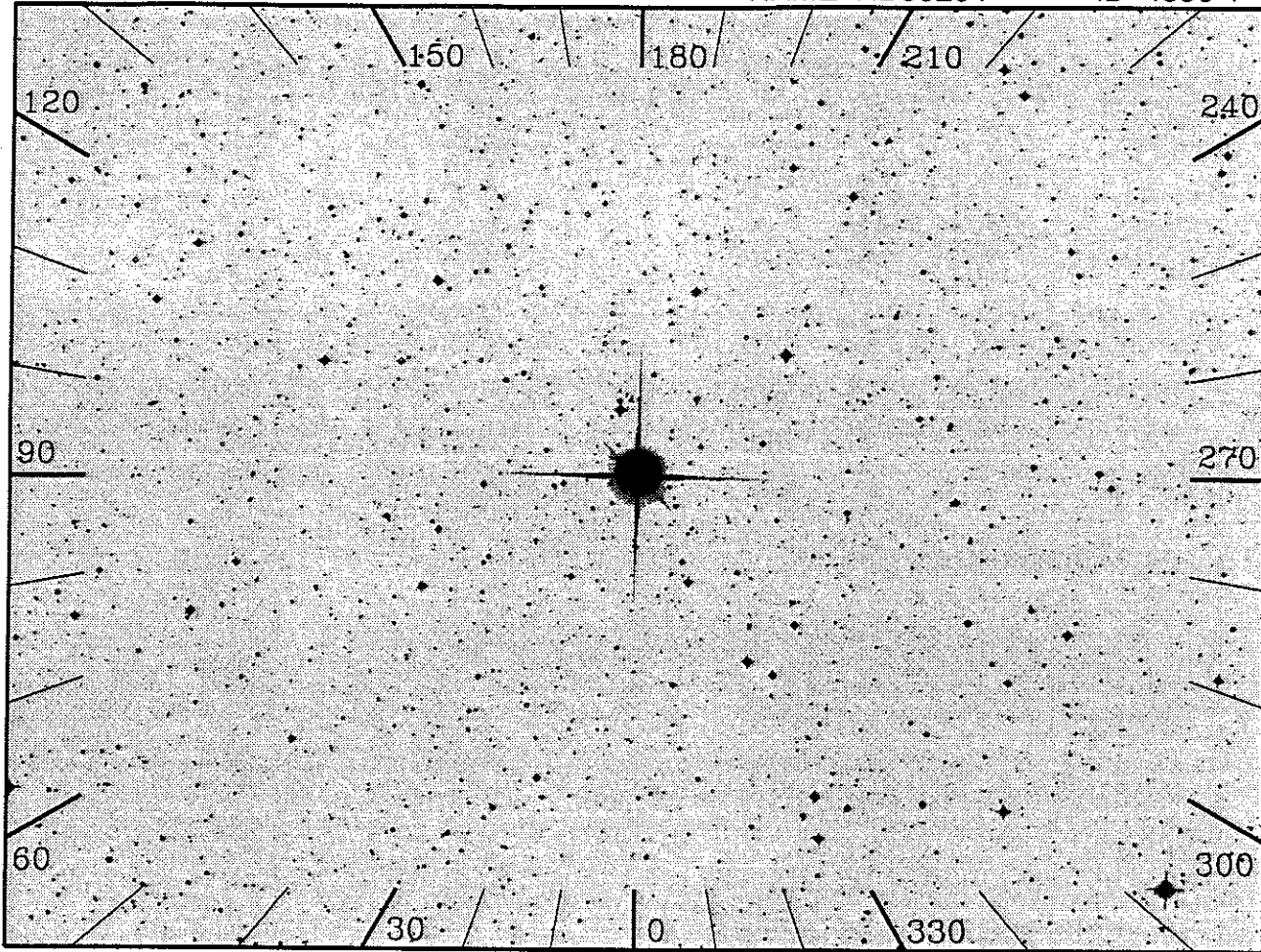


RA 170.5450

DEC -71.9817

NAME HD99264

ID 4530-1



20", 1000(s), Day

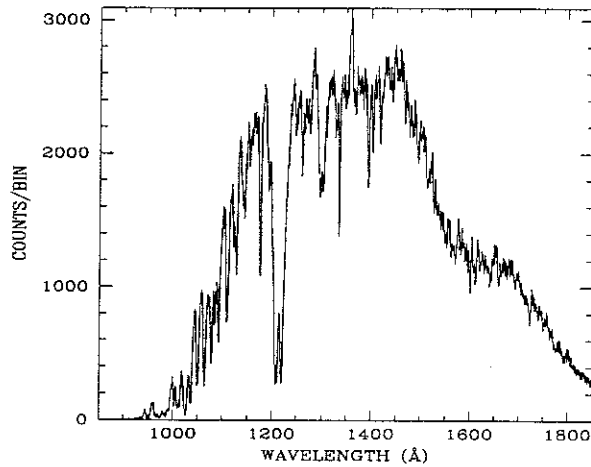
OBJECT: 4530 HD99264

KEYWORDS: Extinction

COMMENTS:

Extincted B3 III star, observed on Astro-1.

Change to single scan for 300 sec after 1000 sec of observation.



ID: 4530-1 W=Prime SciPgm= W11

Names: HD99264

Info: B2IV-V V= 5.6 Wupmag=3.90

% Pol: 1.08 (Astro-1)

Pos Ang: 122.0 (Astro-1)

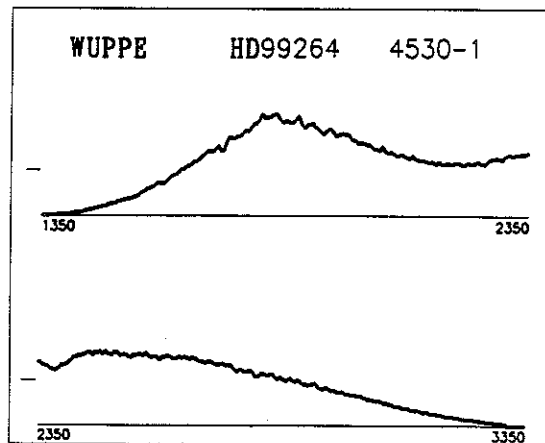
Pmax: 2.6

Lmax: 5500A

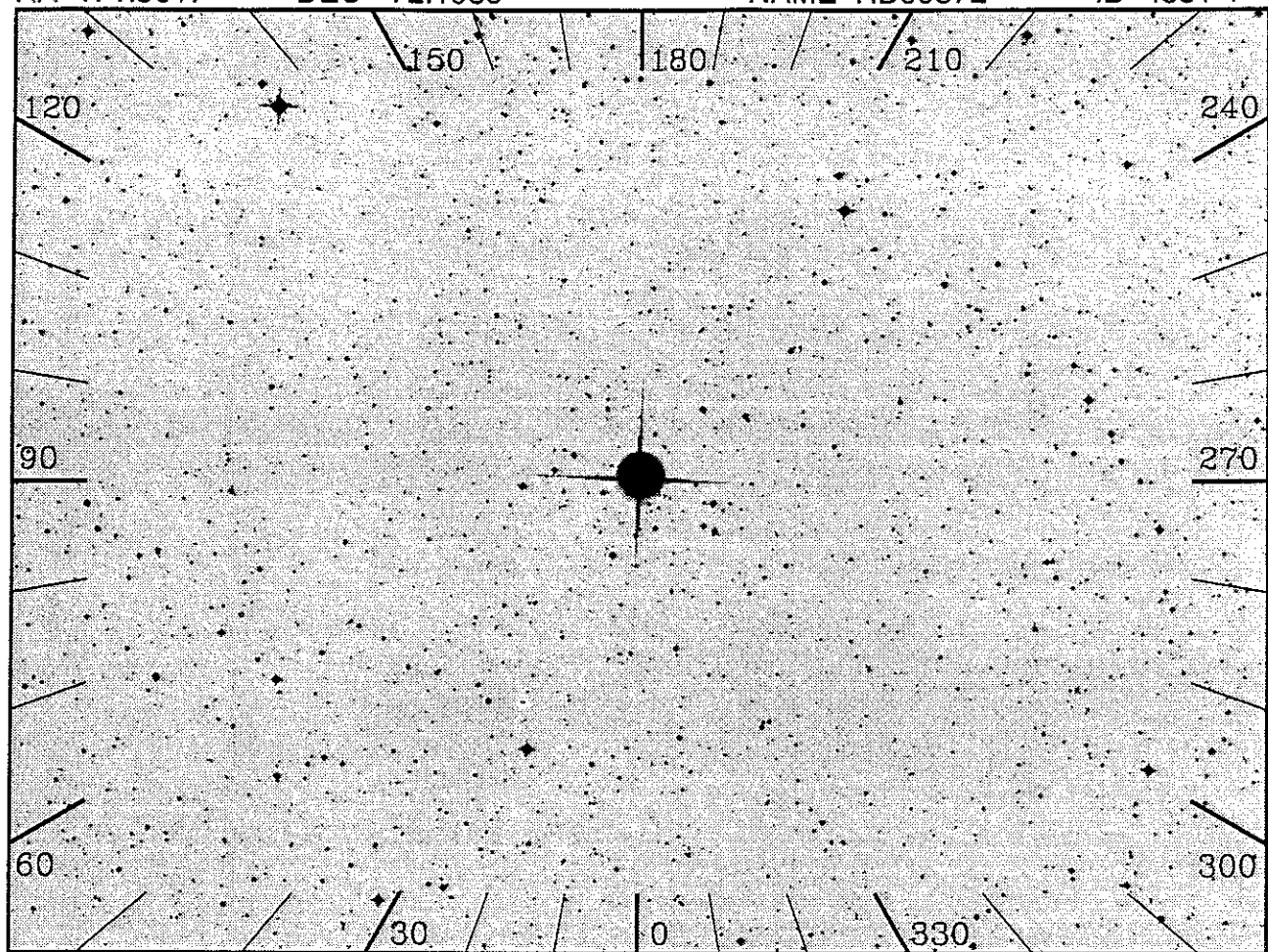
Mechanism: Interstellar dust

Comments:

UV pol observed during Astro-1 in agreement with that predicted by the extrapolation of the Serkowski Law.

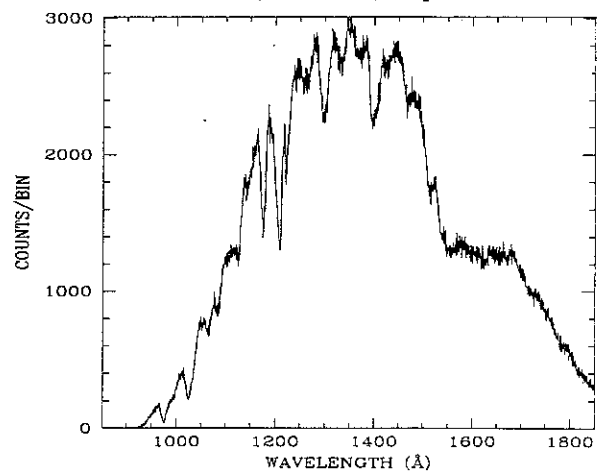


RA 171.5617    DEC -72.1986    NAME HD99872    ID 4531-1

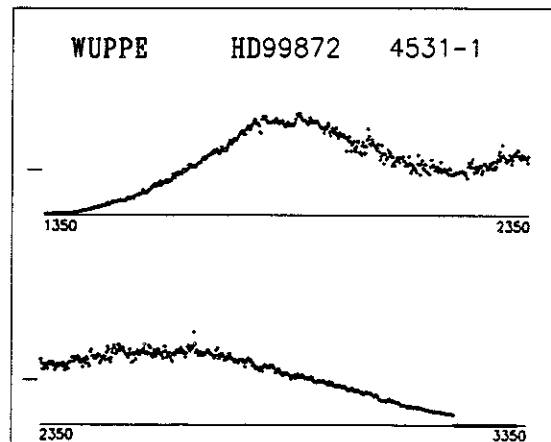


20", 1000(s), Day

OBJECT: 4531 HD99872  
 KEYWORDS: Extinction  
 COMMENTS:  
 Extincted B3 V star.



ID: 4531-1    W=Prime    SciPgm= W11  
 Names: HD99872  
 Info: B3V    V= 6.1    Wupmag=5.06  
 % Pol: 3.03  
 Pos Ang: 117.6  
 Pmax: 3.2  
 Lmax: 5600A  
 Mechanism: Interstellar dust  
 Comments:

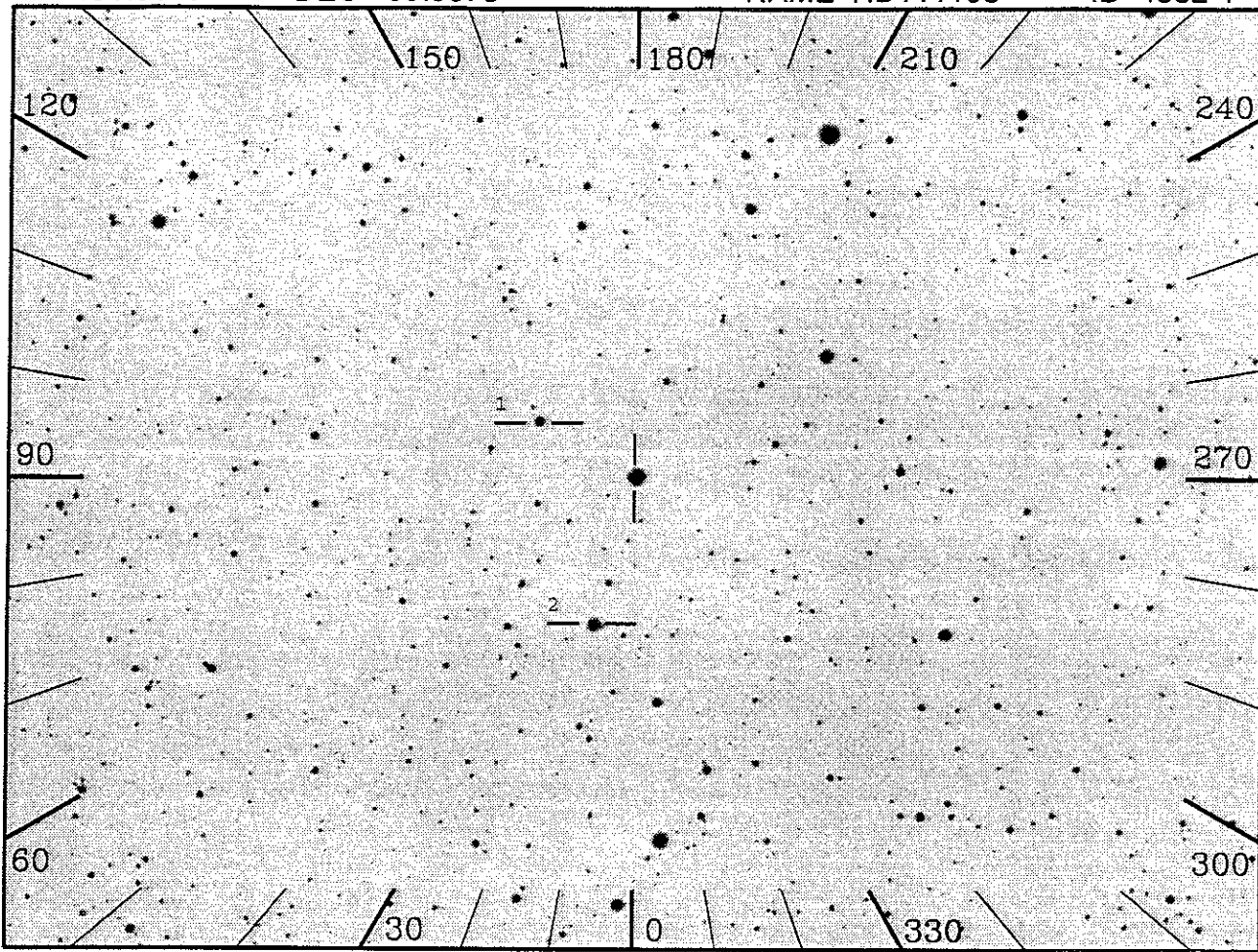


RA 191.3049

DEC -59.9373

NAME HD111193

ID 4532-1



20", 1000(s), Day

OBJECT: 4532 HD111193.398

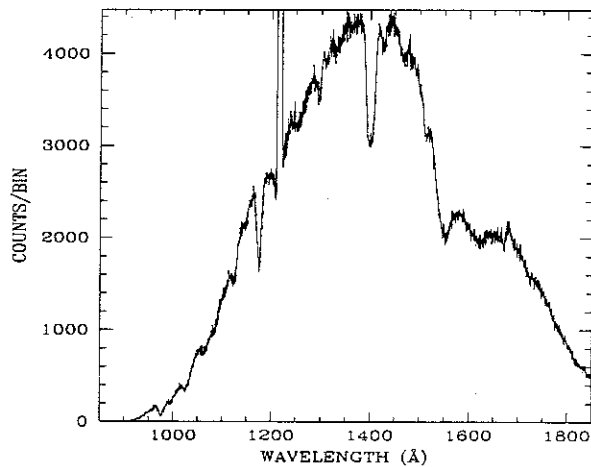
KEYWORDS: Extinction

COMMENTS:

Extincted B0.5 Ia star.

Variable V mag of amplitude 0.11.

We will dither to single scan after 1000 sec.



ID: 4532-1 W=Prime SciPgm= W11

Names: HD111193

Info: B0 V= 8.0 Wupmag=6.92

% Pol: 3.36

Pos Ang: 80.0

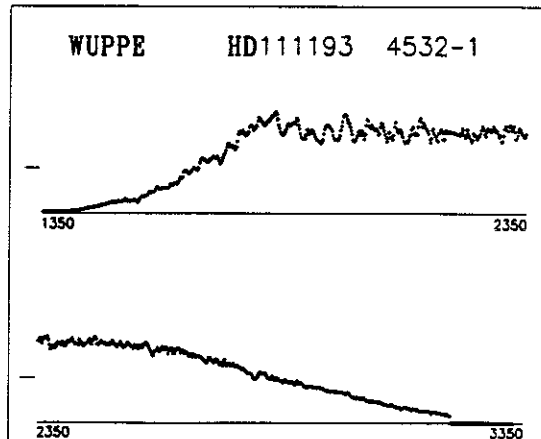
Pmax: 3.75

Lmax: 5800A

Mechanism: Interstellar dust

Comments:

IUE data used for simulated spectrum is that of HD119159 (4534).

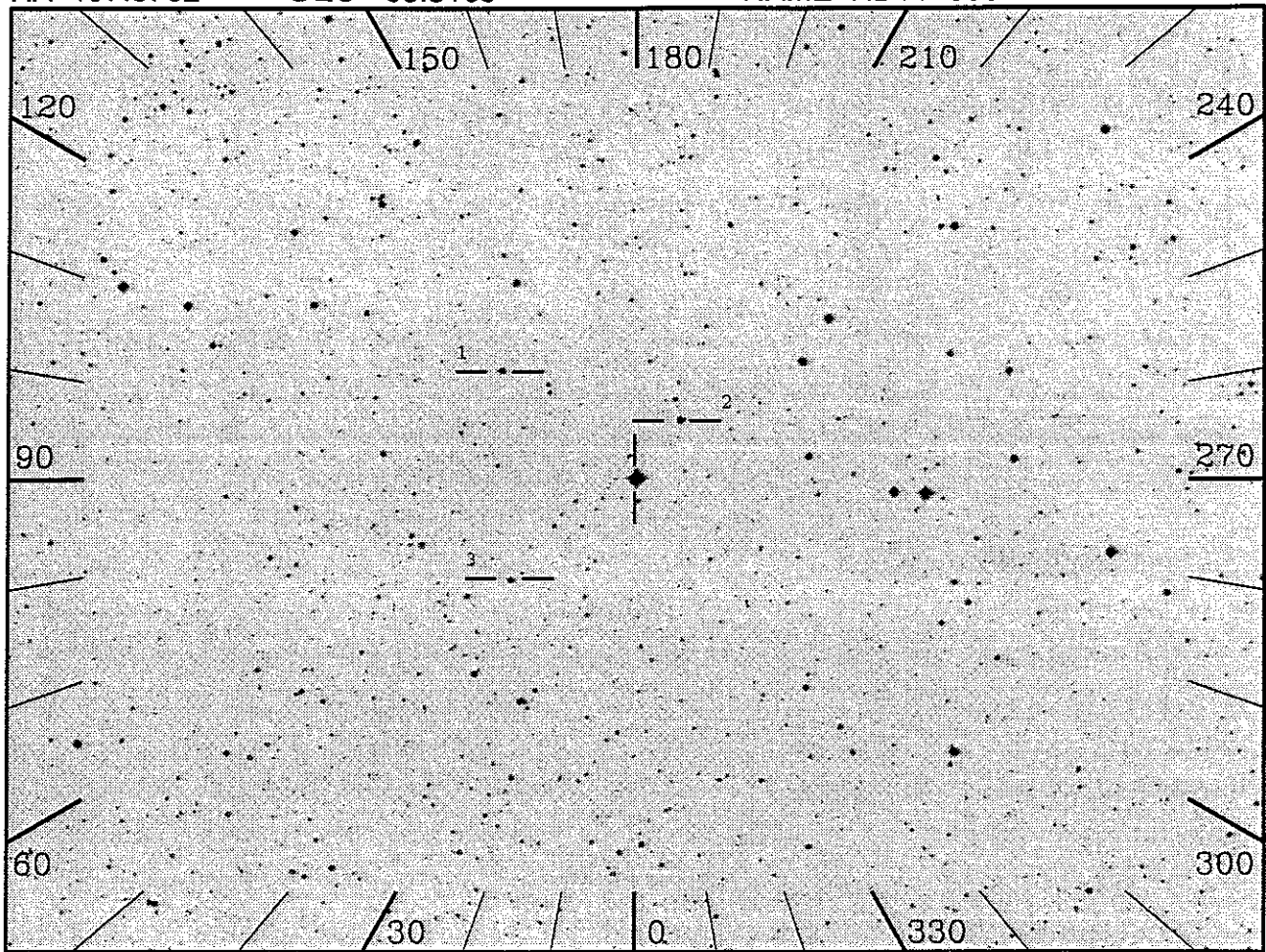


RA 197.8702

DEC -63.3165

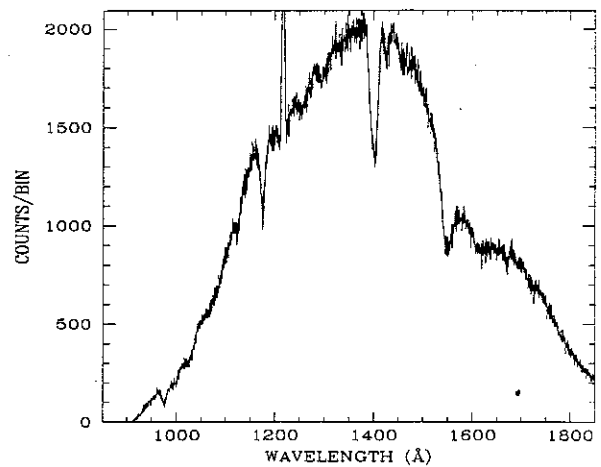
NAME HD114886

ID 4533-1

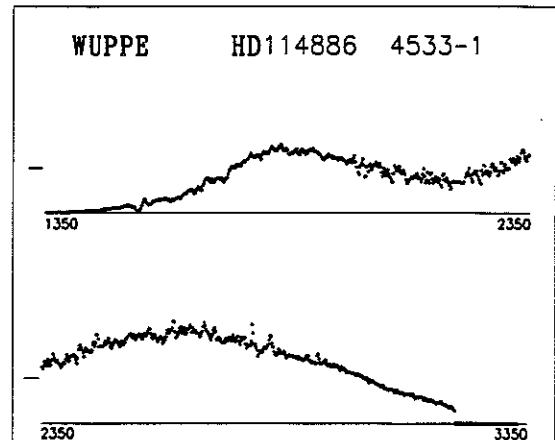


20", 1000(s), Day

OBJECT: 4533 HD114886  
 KEYWORDS: Extinction  
 COMMENTS:  
 O9V star with normal extinction.  
 We will dither to single scan for 300 sec, after  
 1000 sec.



ID: 4533-1 W=Prime SciPgm= W11  
 Names: HD114886  
 Info: O9II-III V= 6.9 Wupmag=6.16  
 % Pol: 1.99  
 Pos Ang: 74.0  
 Pmax: 2.03  
 Lmax: 5600A  
 Mechanism: Interstellar dust  
 Comments:  
 IUE data used for simulated spectrum is  
 that of HD207198 (4560).

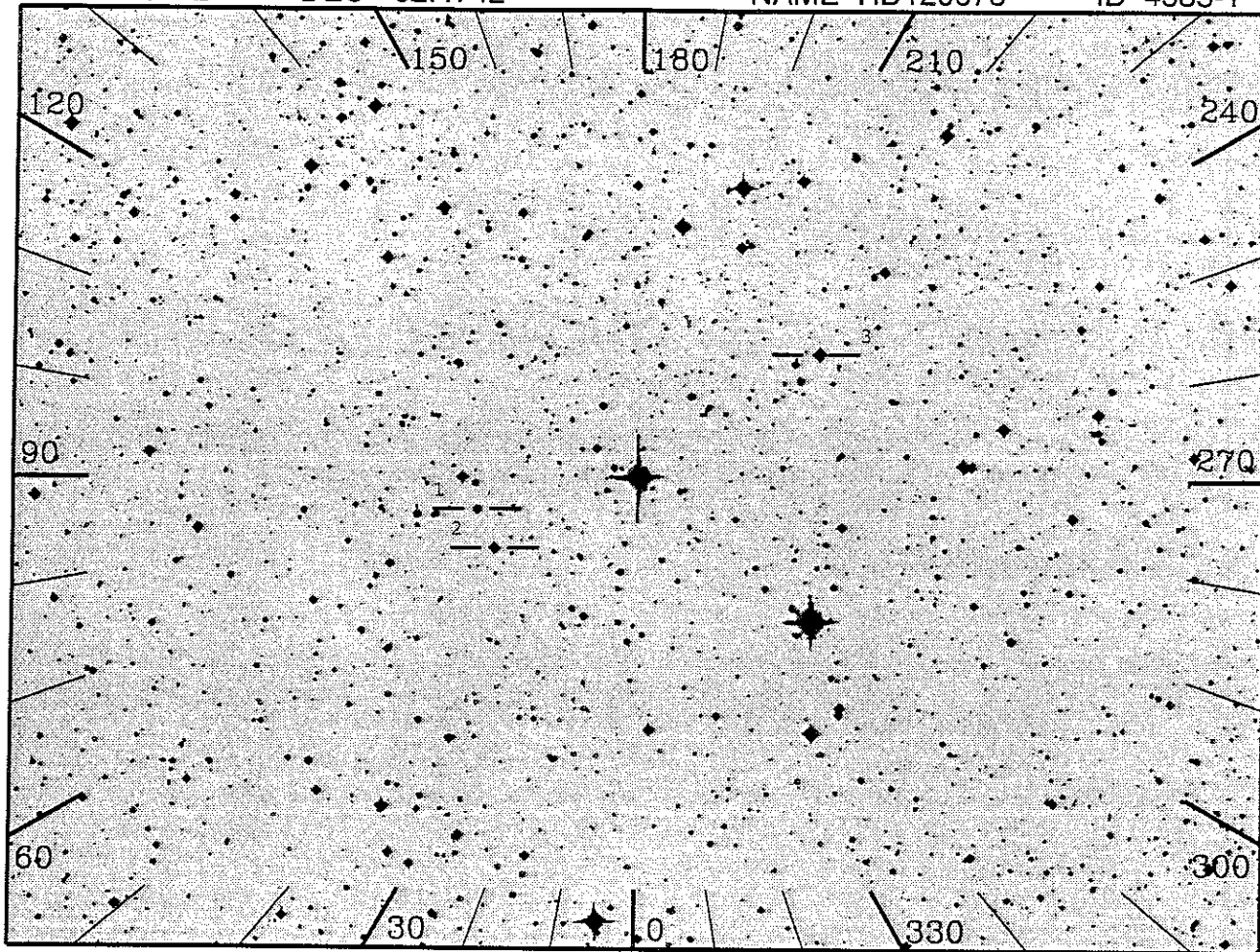


RA 207.3442

DEC -62.4742

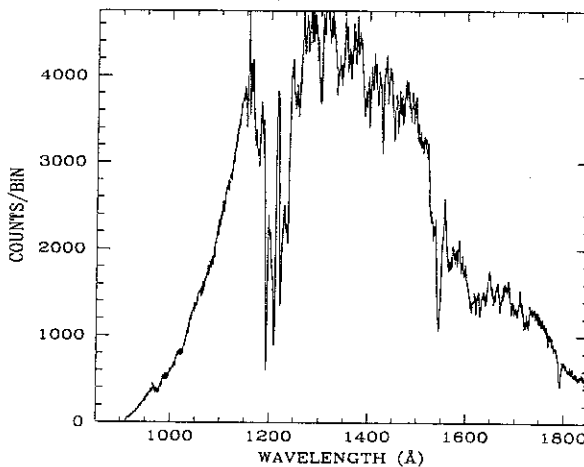
NAME HD120678

ID 4535-1

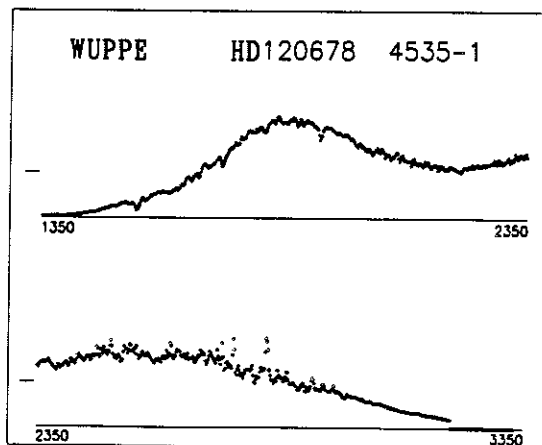


20", 1000(s), Day

OBJECT: 4535 HD120678  
 KEYWORDS: Extinction  
 COMMENTS:  
 O8III star with normal extinction.



ID: 4535-1 W=Prime SciPgm= W12  
 Names: HD120678  
 Info: OE V= 7.9 Wupmag=5.93  
 % Pol: 1.82  
 Pos Ang: 74.0  
 Pmax: 1.9  
 Lmax: 5300A  
 Mechanism: Interstellar dust  
 Comments:



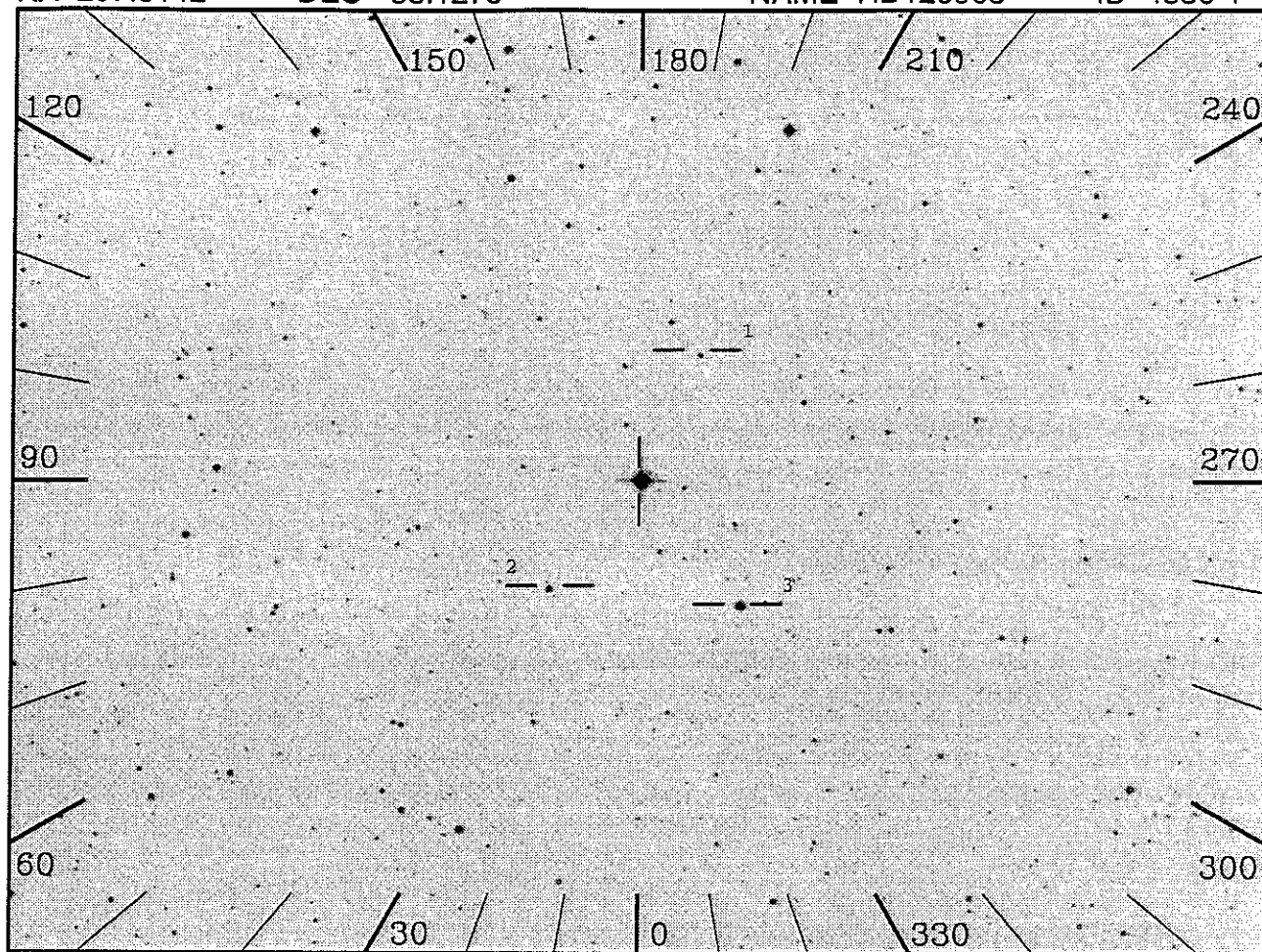


RA 207.6142

DEC -53.1275

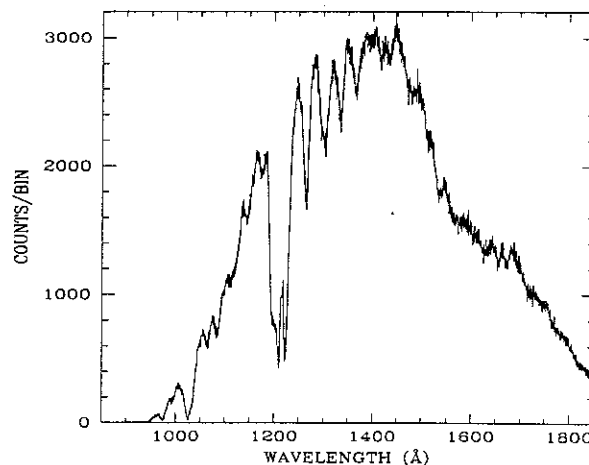
NAME HD120908

ID 4536-1

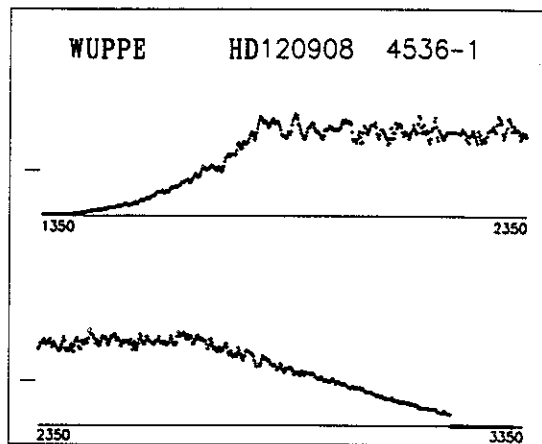


20", 1000(s), Day

OBJECT: 4536 HD120908  
 KEYWORDS: Extinction  
 COMMENTS:  
 Extincted B5 III star.



ID: 4536-1 W=Prime SciPgm= W11  
 Names: HD120908  
 Info: B5III V= 5.9 Wupmag=4.78  
 % Pol: 1.07  
 Pos Ang: 107.7  
 Pmax: 1.18  
 Lmax: 6000A  
 Mechanism: Interstellar dust  
 Comments:  
 IUE data used for simulated spectrum is  
 that of HD83183 (4527).

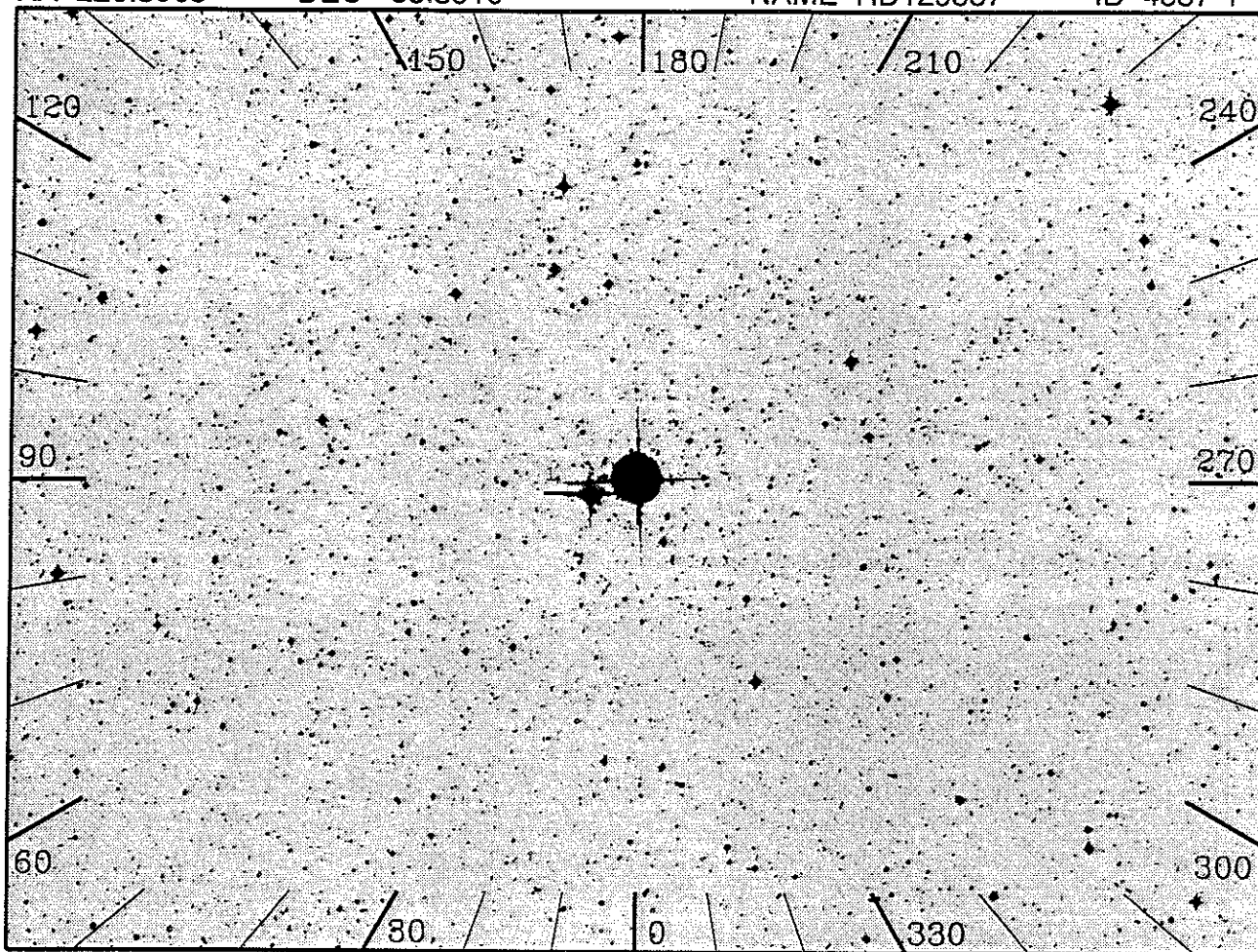


RA 220.3903

DEC -55.3910

NAME HD129557

ID 4537-1



20", 1000(s), Day

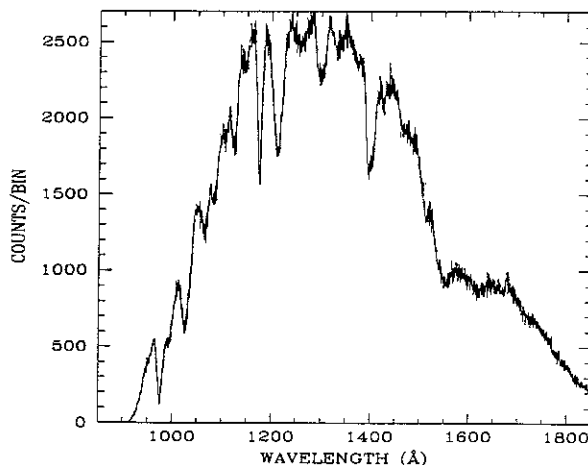
OBJECT: 4537 HD129557

KEYWORDS: Extinction, Beta Cep

COMMENTS:

Beta Cep variable, V amplitude of 0.02, period 0.135d.

Flat UV extinction.



ID: 4537-1 W=Prime SciPgm= W11

Names: HD129557

Info: B2III V= 6.1 Wupmag=3.86

% Pol: 1.43

Pos Ang: 83.6

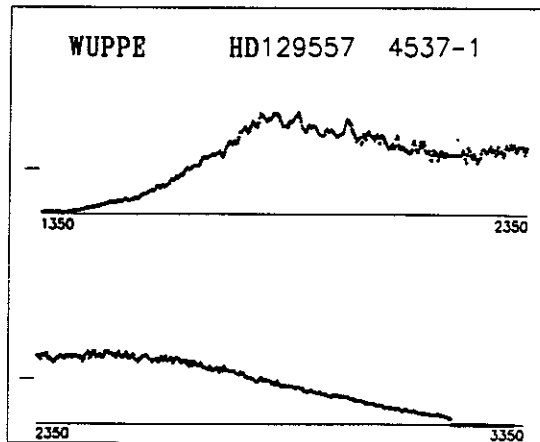
Pmax: 1.43

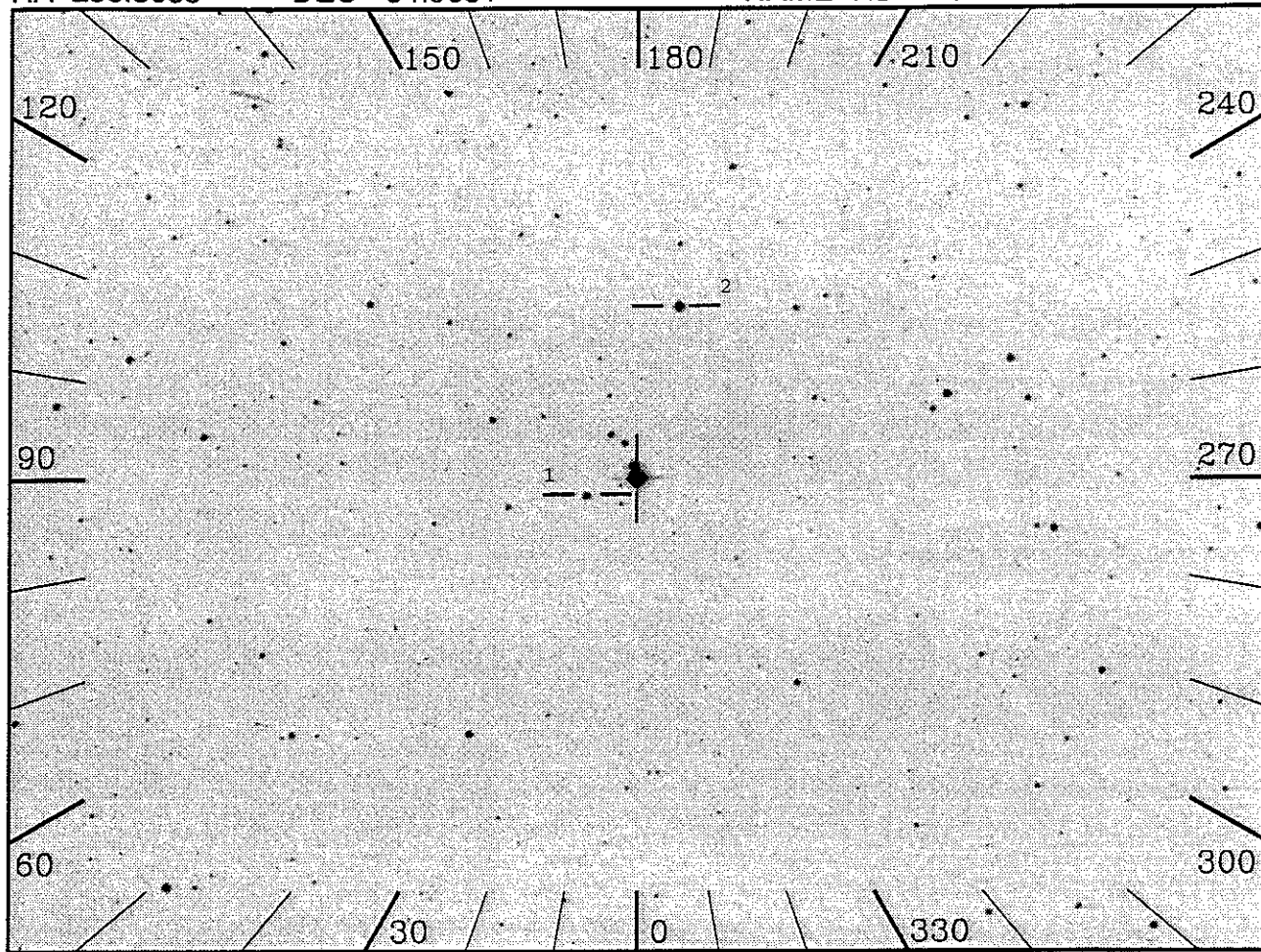
Lmax: 6000A .

Mechanism: Interstellar dust

Comments:

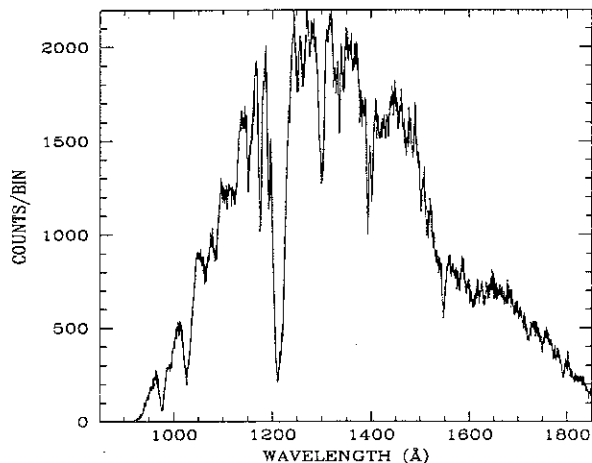
This object has a particularly high ratio of 2175A-bump-depth to overall UV extinction. Has extreme extinction properties.



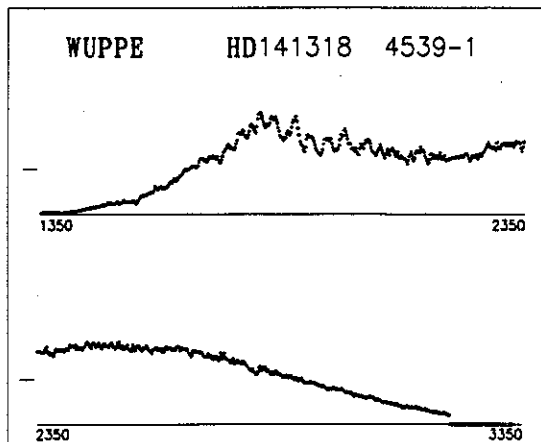


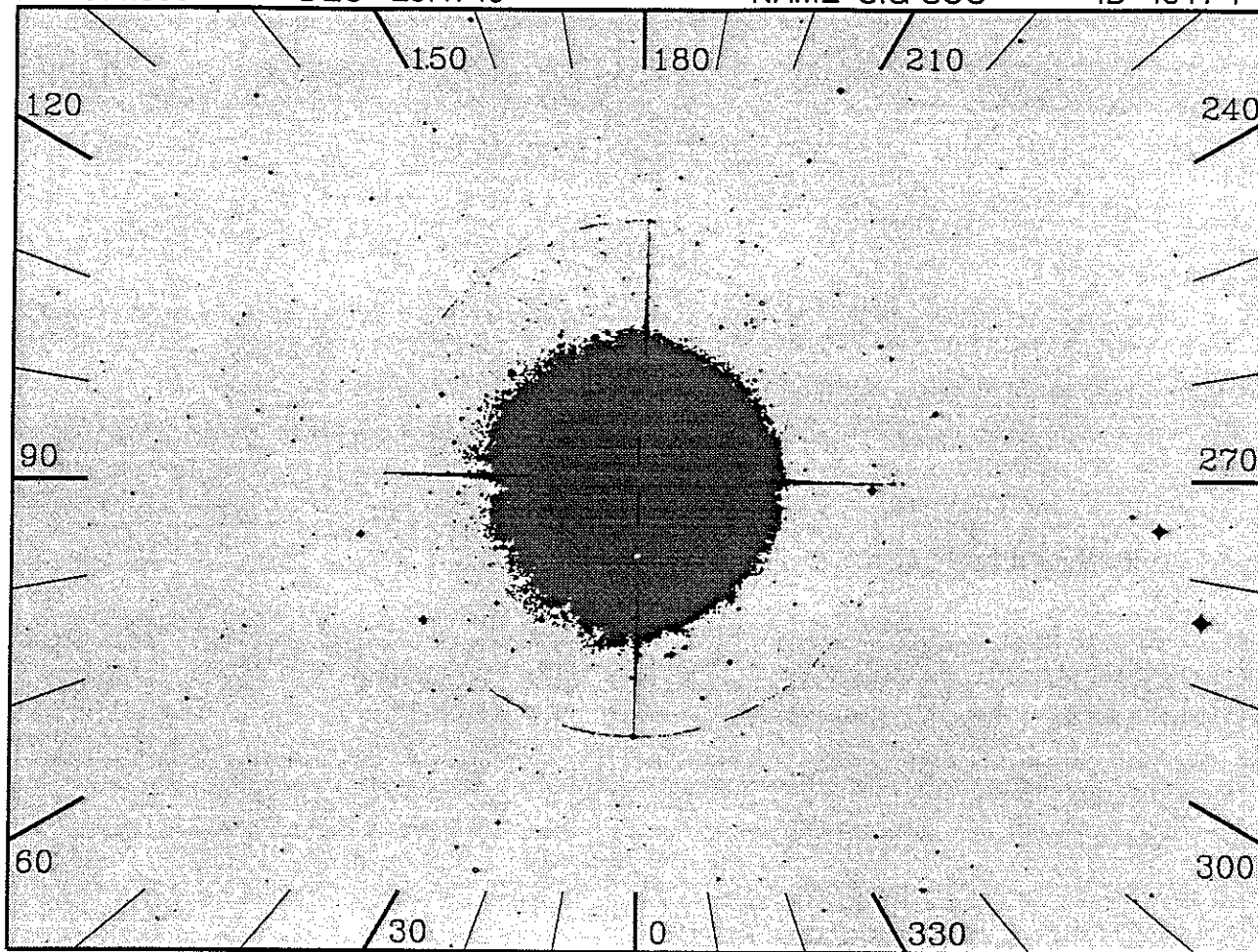
20", 1000(s), Day

OBJECT: 4539 HD141318  
 KEYWORDS: H<sub>2</sub> probe  
 COMMENTS:  
 Extincted B2 II star, good H<sub>2</sub> absorption probe.



ID: 4539-1    W=Prime    SciPgm= W11  
 Names: HD141318  
 Info: B2II    V= 5.7    Wupmag=4.05  
 % Pol: 2.19  
 Pos Ang: 51.0  
 Pmax: 2.42  
 Lmax: 5700A  
 Mechanism: Interstellar dust  
 Comments:





OBJECT: 4541 SIG-SCO

KEYWORDS: Bright Star

COMMENTS:

Unobservable because star too bright. No spectrum given for target book.

HUT Spectrum  
NOT AVAILABLE

ID: 4541-1 W=Prime SciPgm= W11

Names: SIG-SCO HD147165

Info: B2III V= 2.9 Wupmag=1.75

% Pol: 1.49

Pos Ang: 179.0

Pmax: 1.55

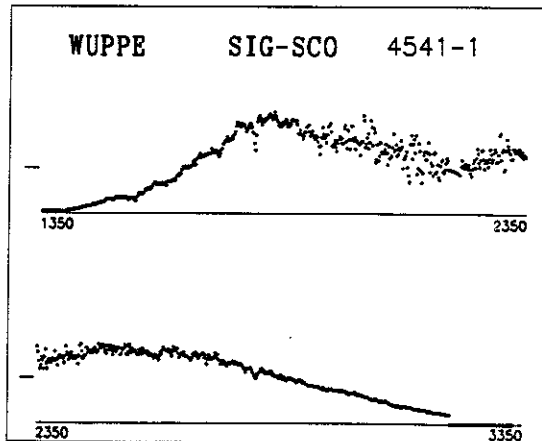
Lmax: 5600A

Mechanism: Interstellar dust

Comments:

This object has very weak CN lines, and the CH and CH+ lines are roughly equal.

NOTE: DETECTOR IN FAST MODE-  
DO NOT EXPECT ON-LINE SPECTRUM.

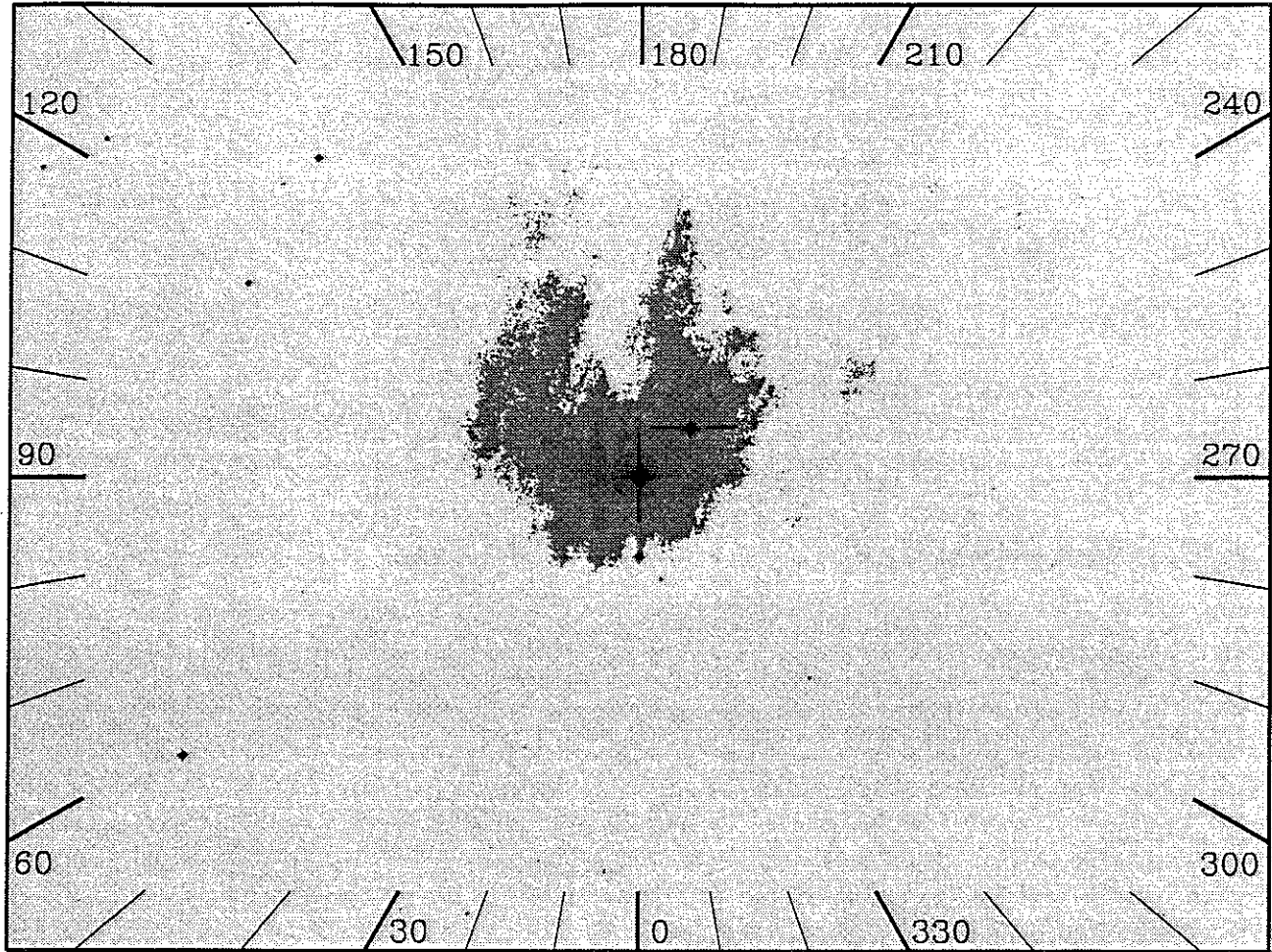


RA 245.5951

DEC -24.3520

NAME HD147889

ID 4542-1



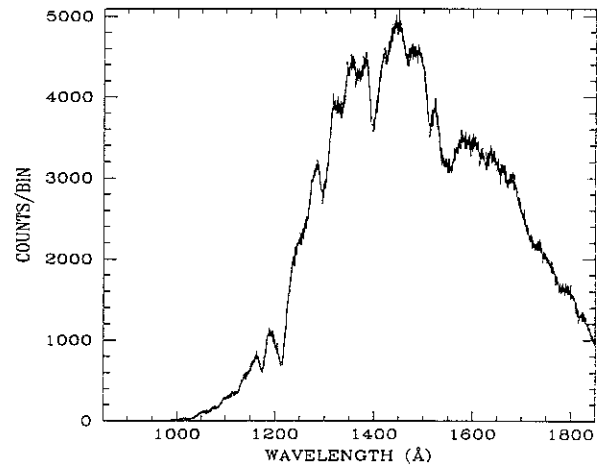
20, 2000(s), None

OBJECT: 4542 HD147889

KEYWORDS: Star probes deeply into dark cloud.

COMMENTS:

Important for measuring dark cloud dust; flux declining rapidly shortward of 1100 Angstroms. Observe star full observation. Airglow contributes negligibly.



ID: 4542-1 W=Prime SciPgm= W12

Names: HD147889

Info: B2V V= 8.0 Wupmag=8.68

% Pol: 3.23

Pos Ang: 178.0

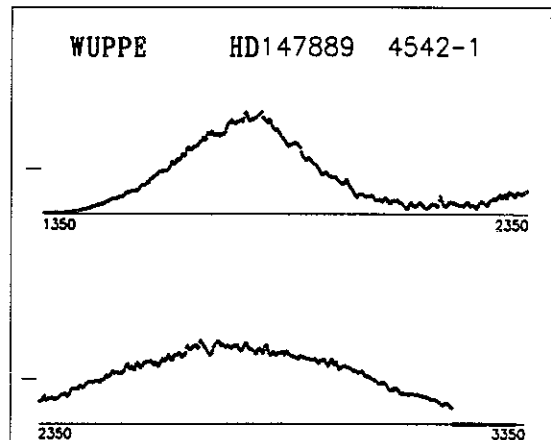
Pmax: 4.06

Lmax: 8100A

Mechanism: Interstellar dust

Comments:

This object has a large value of lambda max 8100A.

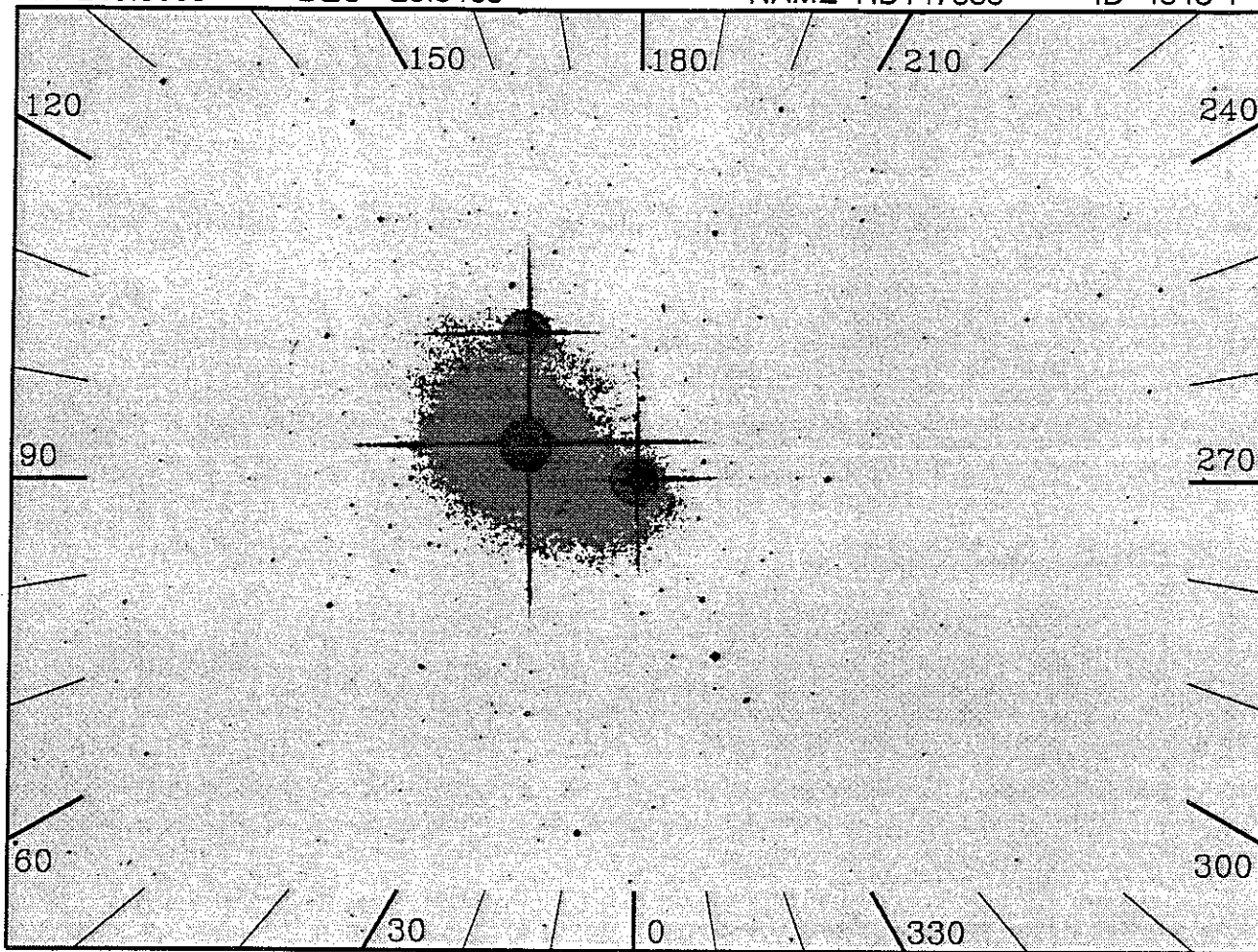


RA 245.6003

DEC -23.3468

NAME HD147888

ID 4543-1



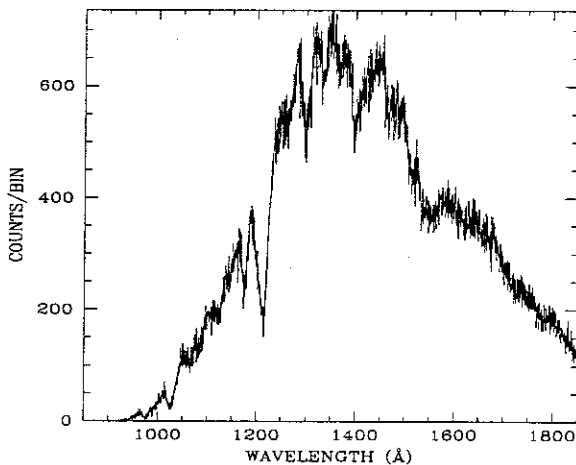
20, 2000(s), None

OBJECT: 4543 HD147888

KEYWORDS: Star probes deeply into dark cloud

COMMENTS:

Airglow contributes negligibly.



ID: 4543-1 W=Prime SciPgm= W11

Names: HD147888

Info: BSV V= 6.7 Wupmag=5.91

% Pol: 3.10

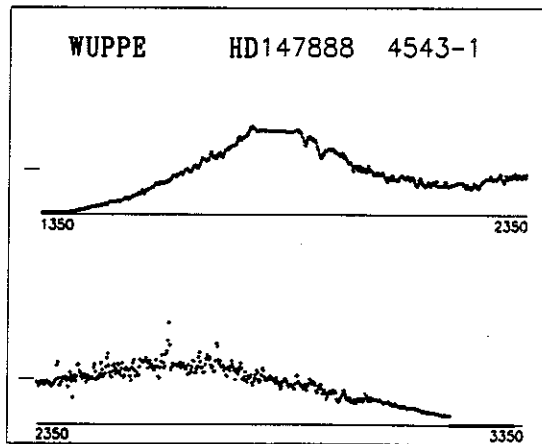
Pos Ang: 52.0

Pmax: 3.71

Lmax: 7300A

Mechanism: Interstellar dust

Comments:

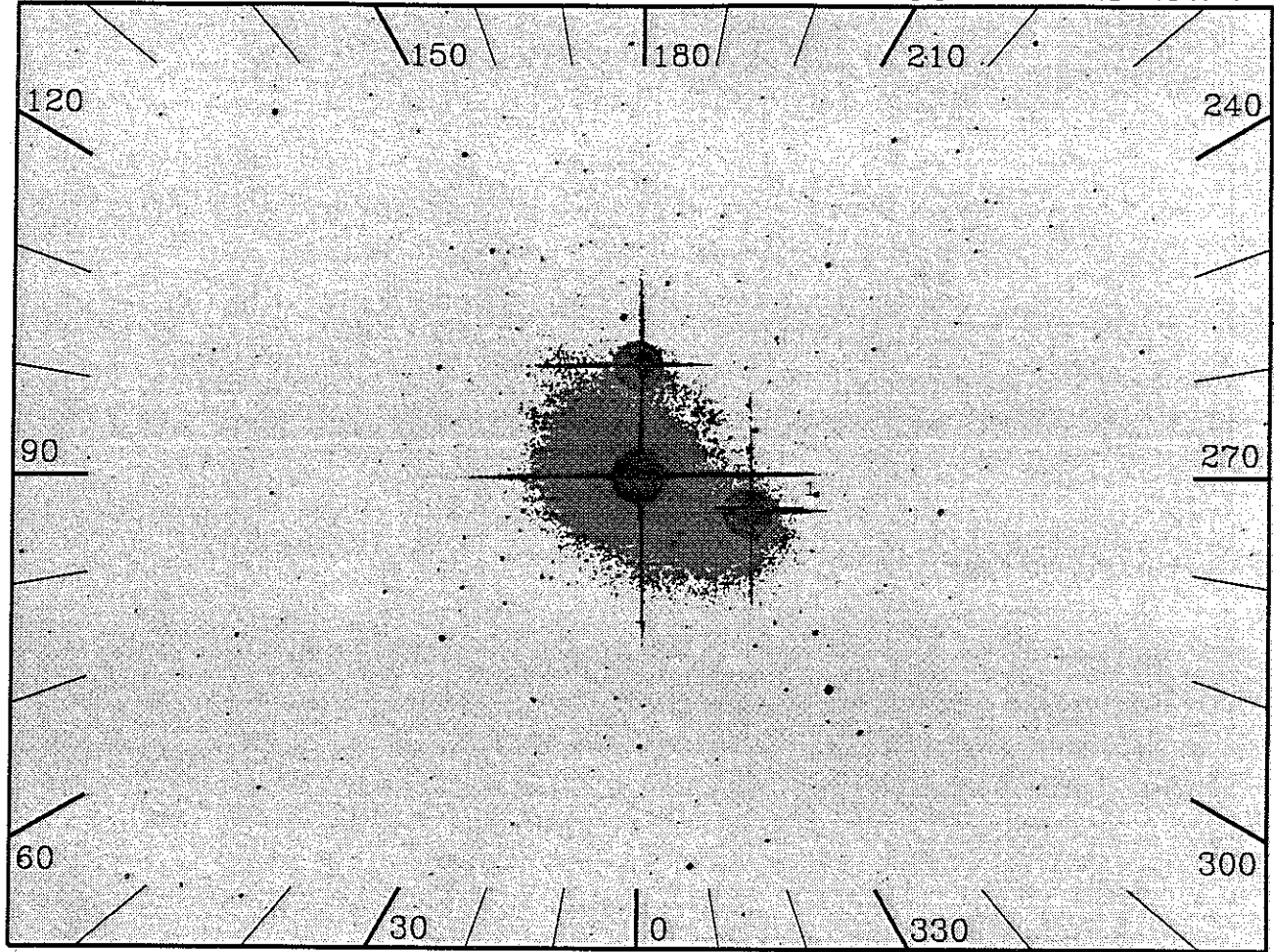


RA 245.6457

DEC -23.3337

NAME RHOOPHAB

ID 4547-1



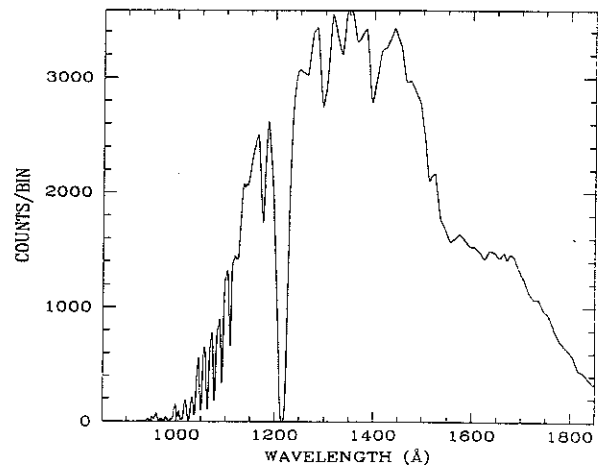
10x56, 2000(s), None

OBJECT: 4547 RHOOPHAB

KEYWORDS: Binary Star in Reflection Nebula

COMMENTS:

Molecular hydrogen excited by star imbedded in cloud.  
 More important to observe nebula than star system.  
 Observe nebula at offset to EAST of star with slit 6  
 and door 5. MAKE SURE STAR DOES NOT FALL INTO SLIT  
 when door 5 is open, or detector will be destroyed!  
 If pointing is worse than 15", offset should be raised  
 to 60" to avoid accidental stellar contamination.  
 Two other bright stars appear several arcmin North and  
 West of target; do NOT offset in these directions.



ID: 4547-1 W=Prime SciPgm= W11

Names: RHOOPHAB HD147933

Info: B2IV-V V= 5.4 Wupmag=3.17

% Pol: 2.40

Pos Ang: 48.0

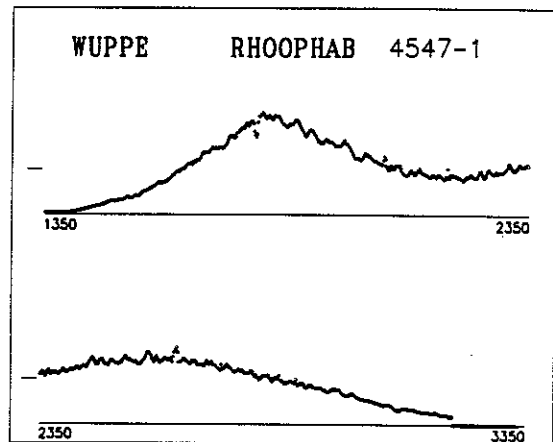
Mechanism: Interstellar dust

Comments:

This object has a large R value  
 (total to selective extinction) in  
 the visual.

NOTE: DETECTOR IN FAST MODE-

DO NOT EXPECT ON-LINE SPECTRUM.

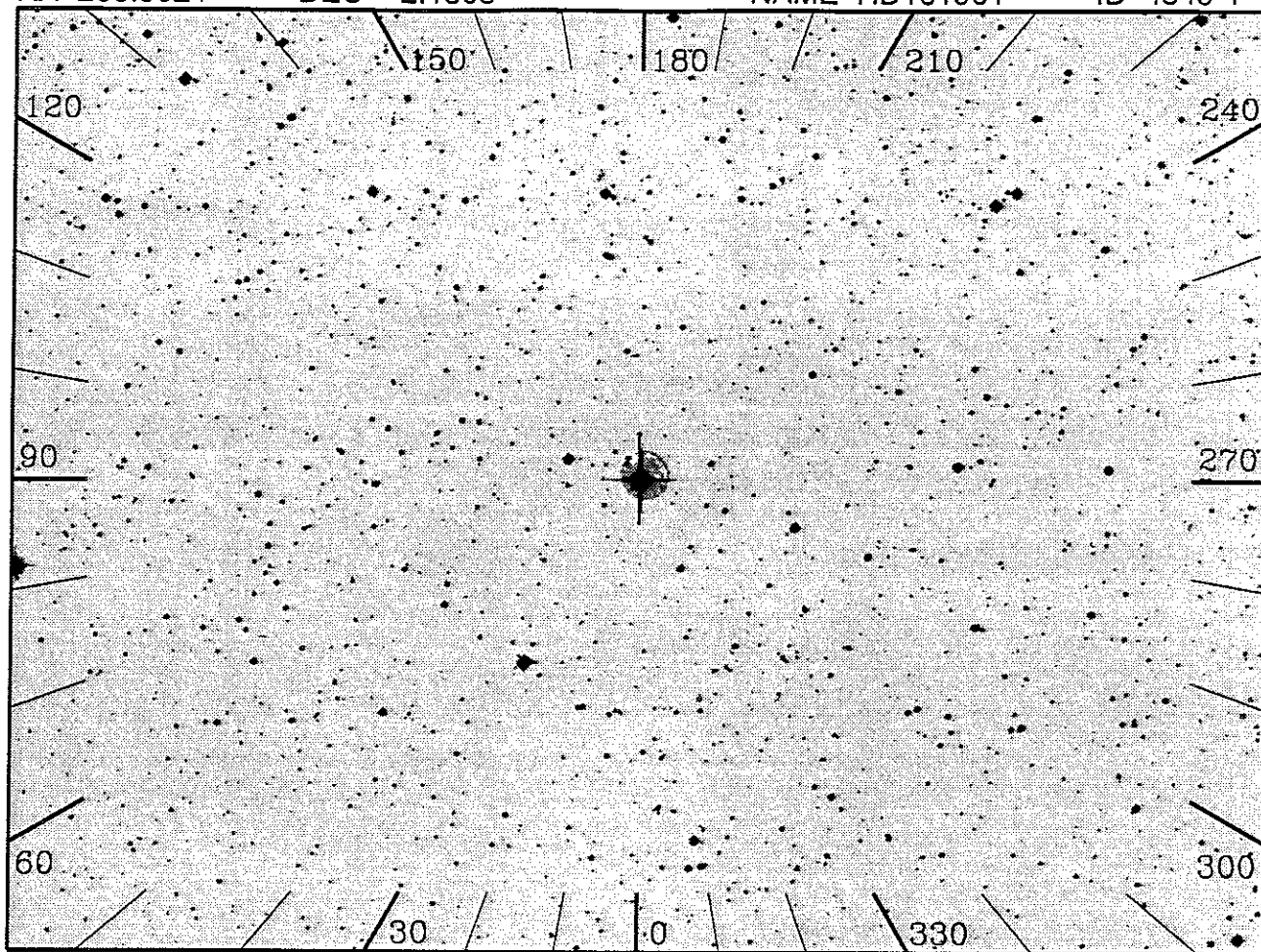


RA 266.5024

DEC -2.1808

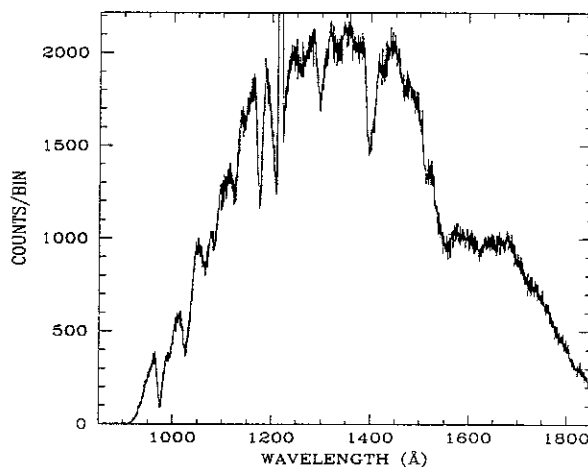
NAME HD161961

ID 4549-1



20", 1000(s), Day

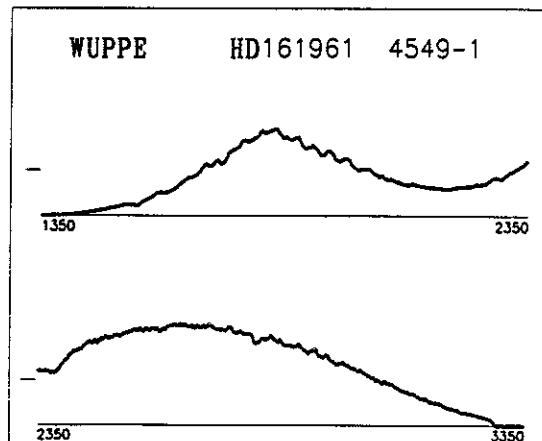
OBJECT: HD161961  
 KEYWORDS: Extinction  
 COMMENTS:  
 Extincted B0.5 III star.



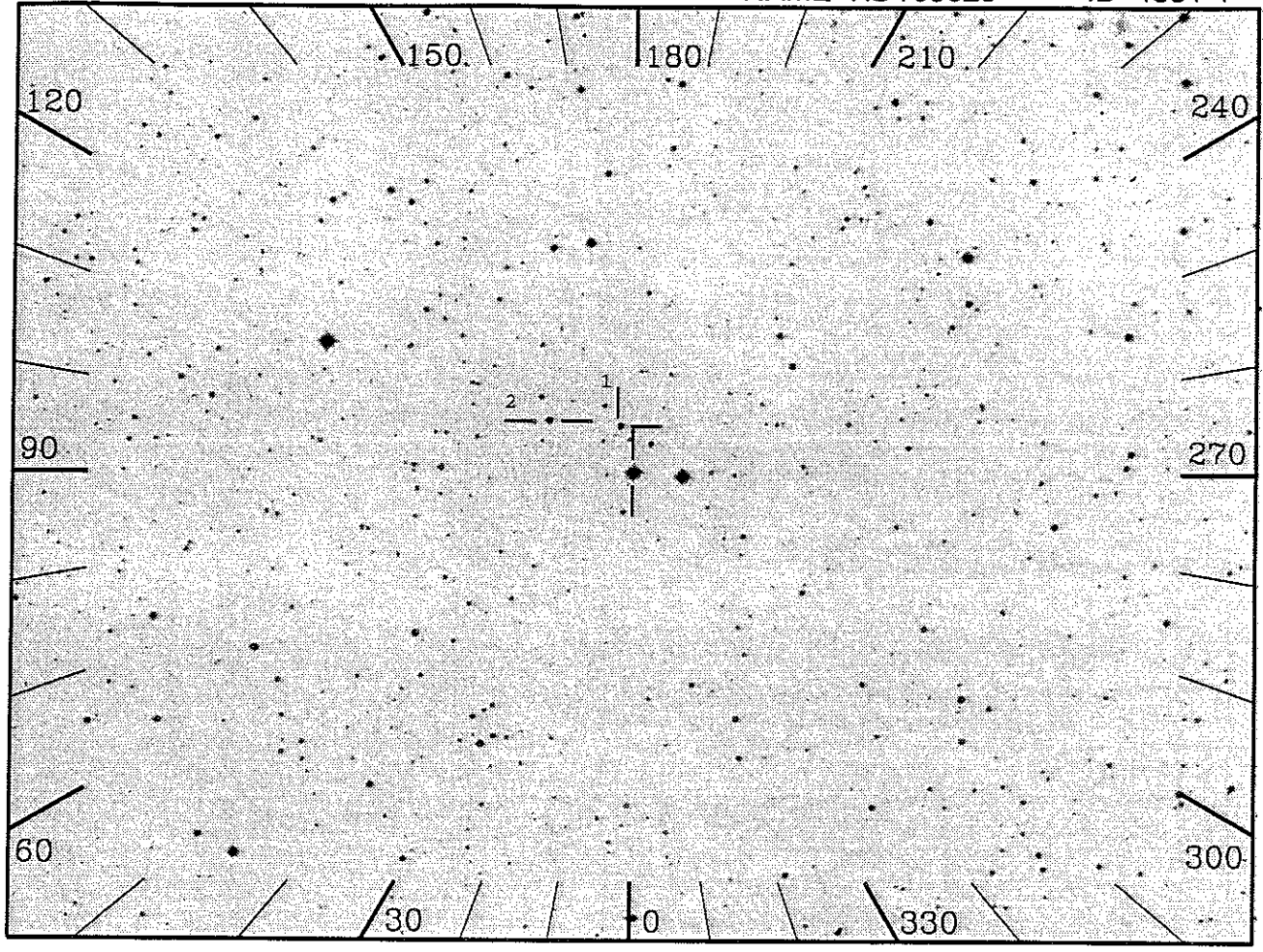
ID: 4549-1 W=Prime SciPgm= W11  
 Names: HD161961  
 Info: B0III V= 7.9 Wupmag=7.00  
 % Pol: 2.30  
 Pos Ang: 75.0  
 Mechanism: Interstellar

Comments:

Astro-1 data used for simulated spectrum  
 is that of HD25443 (0658).

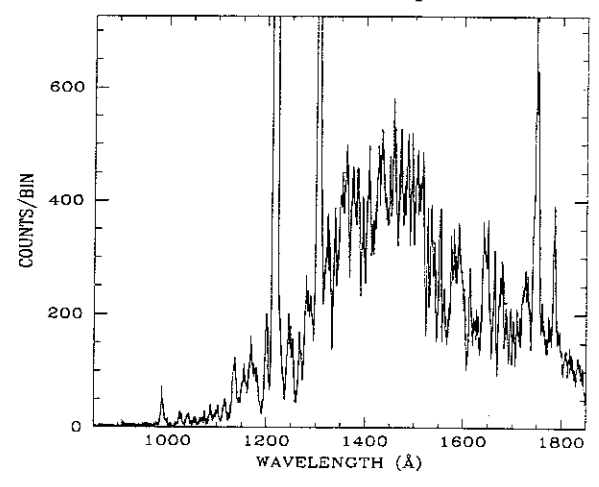




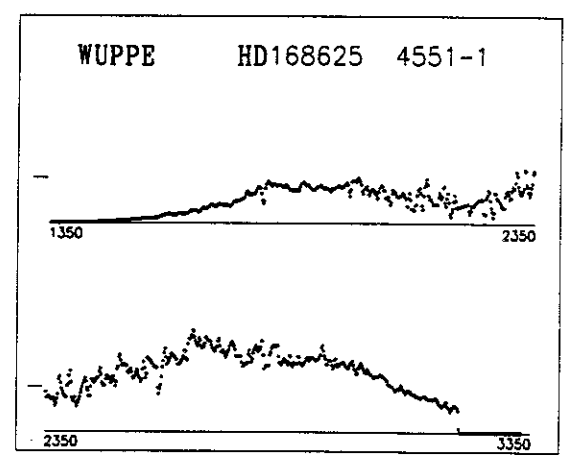


20", 1000(s), Day

OBJECT: HD168625  
 KEYWORDS: LBV nebula.  
 COMMENTS:  
 LBV star and nebula. Nebula is about 20" in diameter.  
 Star E(B-V) = 1.61



ID: 4551-1    W=Prime    SciPgm= W11  
 Names: HD168625  
 Info: B8IAE    V= 8.4    Wupmag=  
 % Pol: 4.42  
 Pos Ang: 12.0  
 Mechanism: Interstellar  
 Comments:  
 CH weaker than CH+. IUE data used for simulated spectrum is that of HD21291 (4585).



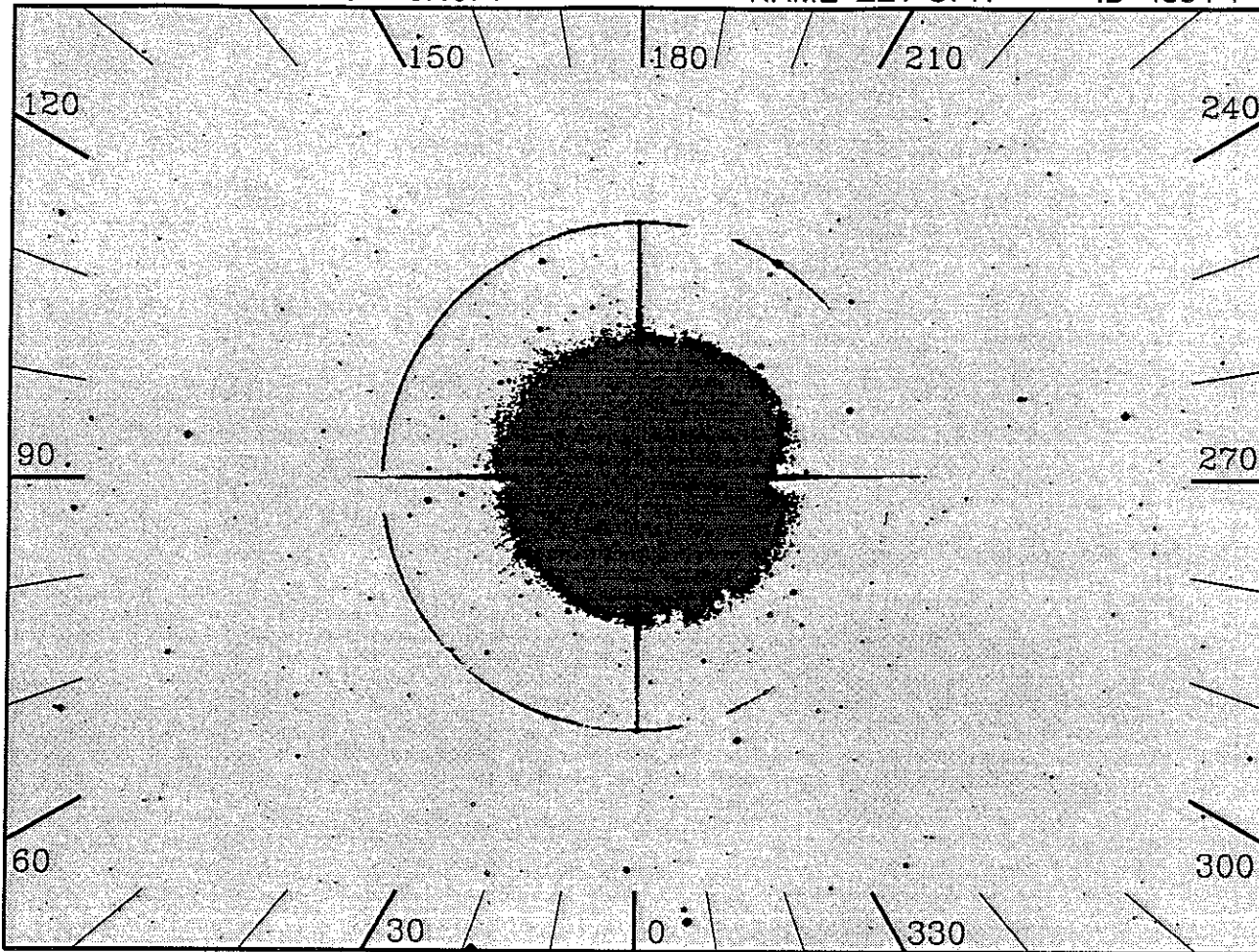
TGT/ASTRO2/FIN A

RA 248.6006

DEC -10.4674

NAME ZET-OPH

ID 4554-1



OBJECT: 4554 ZET-OPH

KEYWORDS: Bright Star

COMMENTS:

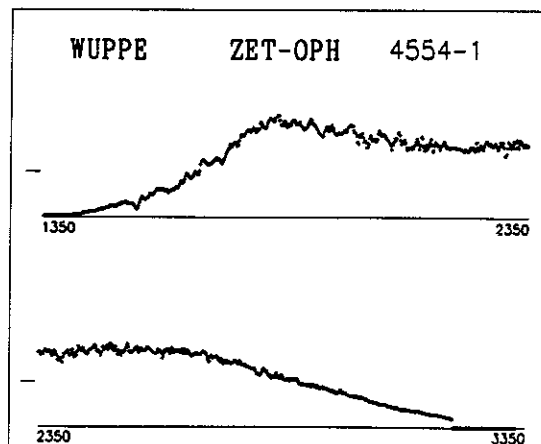
Do not observe; star too bright.

HUT Spectrum  
NOT AVAILABLE

ID: 4554-1 W=Prime SciPgm= W11  
 Names: ZET-OPH HD149757  
 Info: O9.5Vn V= 2.6 Wupmag=0.70  
 % Pol: 1.36  
 Pos Ang: 124.0  
 Pmax: 1.43 Lmax: 5900A  
 Mechanism: Interstellar dust  
 Comments:

The neutral CH interstellar lines are weaker than those of ionized CH+. Pol previously measured in UV during balloon launch.

NOTE: DETECTOR IN FAST MODE-  
 DO NOT EXPECT ON-LINE SPECTRUM.

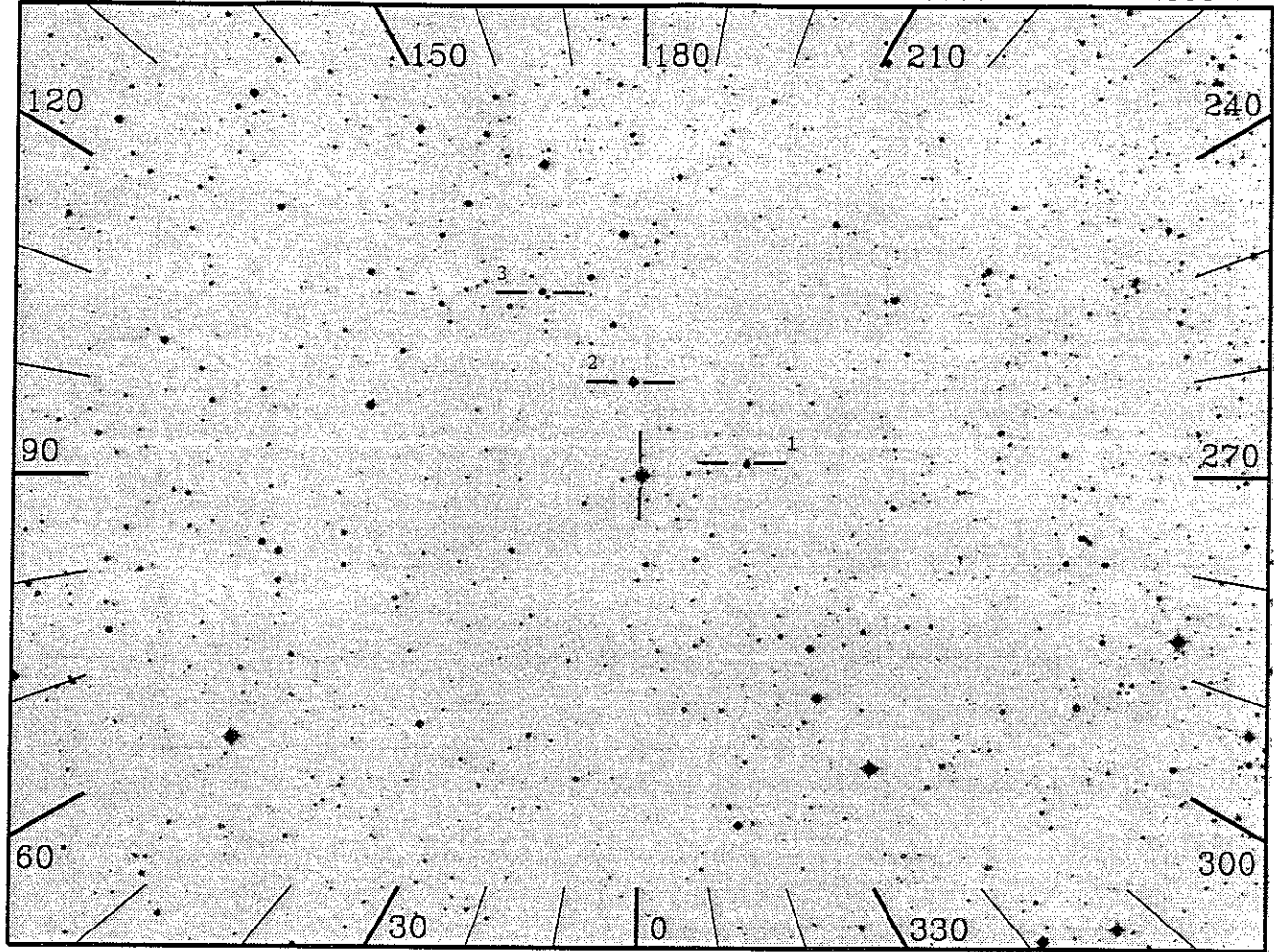


RA 304.5738

DEC 37.6722

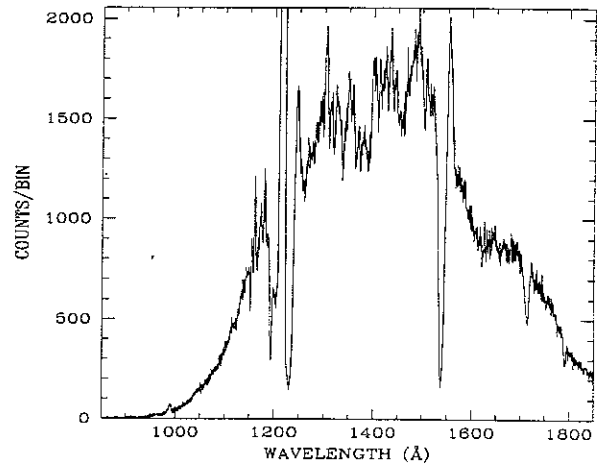
NAME HD193682

ID 4555-1

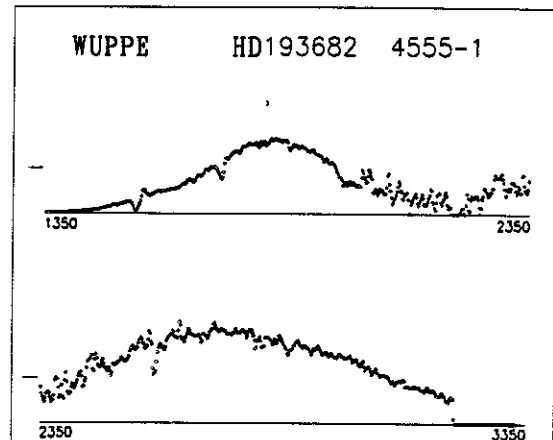


20", 1000(s), Day

OBJECT: 4555 HD193682  
 KEYWORDS: H<sub>2</sub>, extinction  
 COMMENTS:  
 Extincted O5 star, good H<sub>2</sub> and extinction probe.  
 E(B-V) = 0.83



ID: 4555-1 W=Prime SciPgm= W12  
 Names: HD193682  
 Info: O5E V= 8.4 Wupmag=8.51  
 % Pol: 0.61  
 Pos Ang: 70.0  
 Mechanism: Interstellar dust  
 Comments:

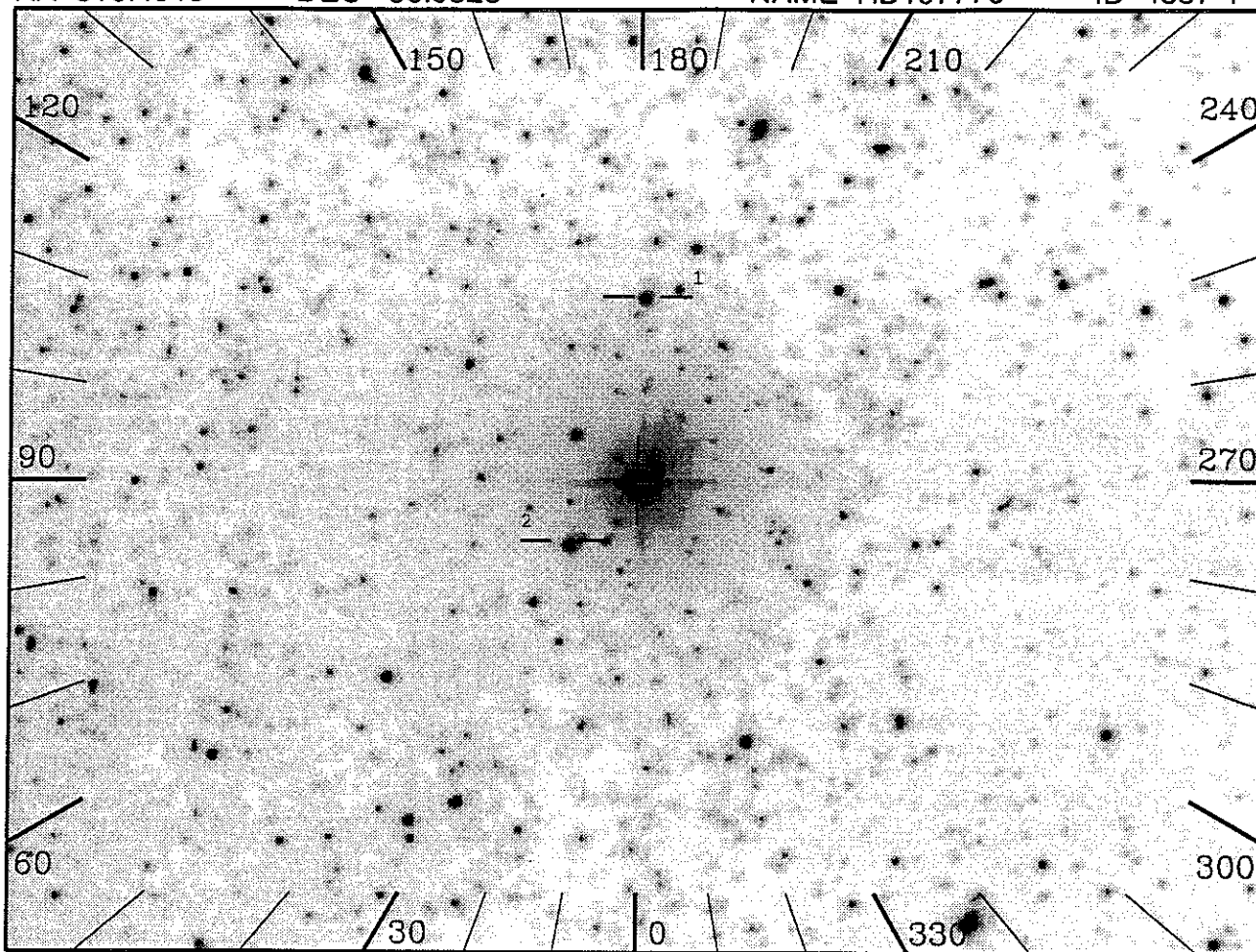


RA 310.4915

DEC 56.9328

NAME HD197770

ID 4557-1



20", 1000(s), Day

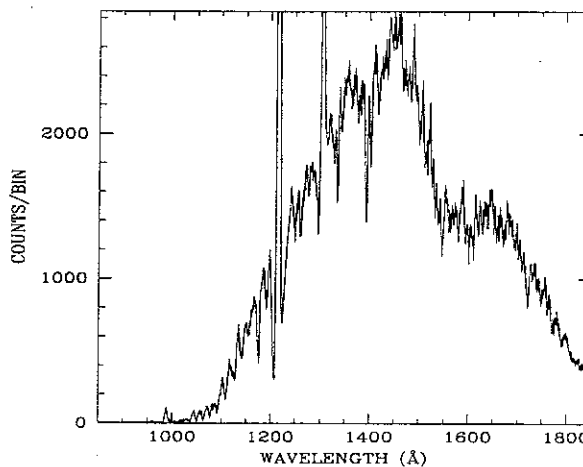
OBJECT: 4557 HD197770

KEYWORDS: Extinction

COMMENTS:

Extincted B2 III star, observed on Astro-1.

E(B-V) = 0.58



ID: 4557-1 W=Prime SciPgm= W11

Names: HD197770

Info: B2III V= 6.4 Wupmag=5.96

% Pol: 2.65 (Astro-1)

Pos Ang: 129.0 (Astro-1)

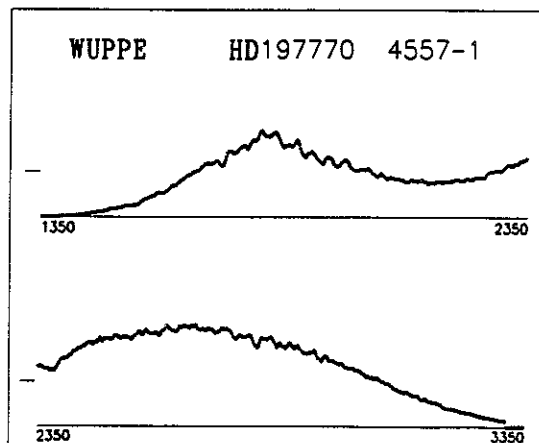
Pmax: 3.83

Lmax: 5100A

Mechanism: Interstellar dust

Comments:

Observed during Astro-1; suggested enhancement of the pol in the wavelength region of the 2175A extinction bump.

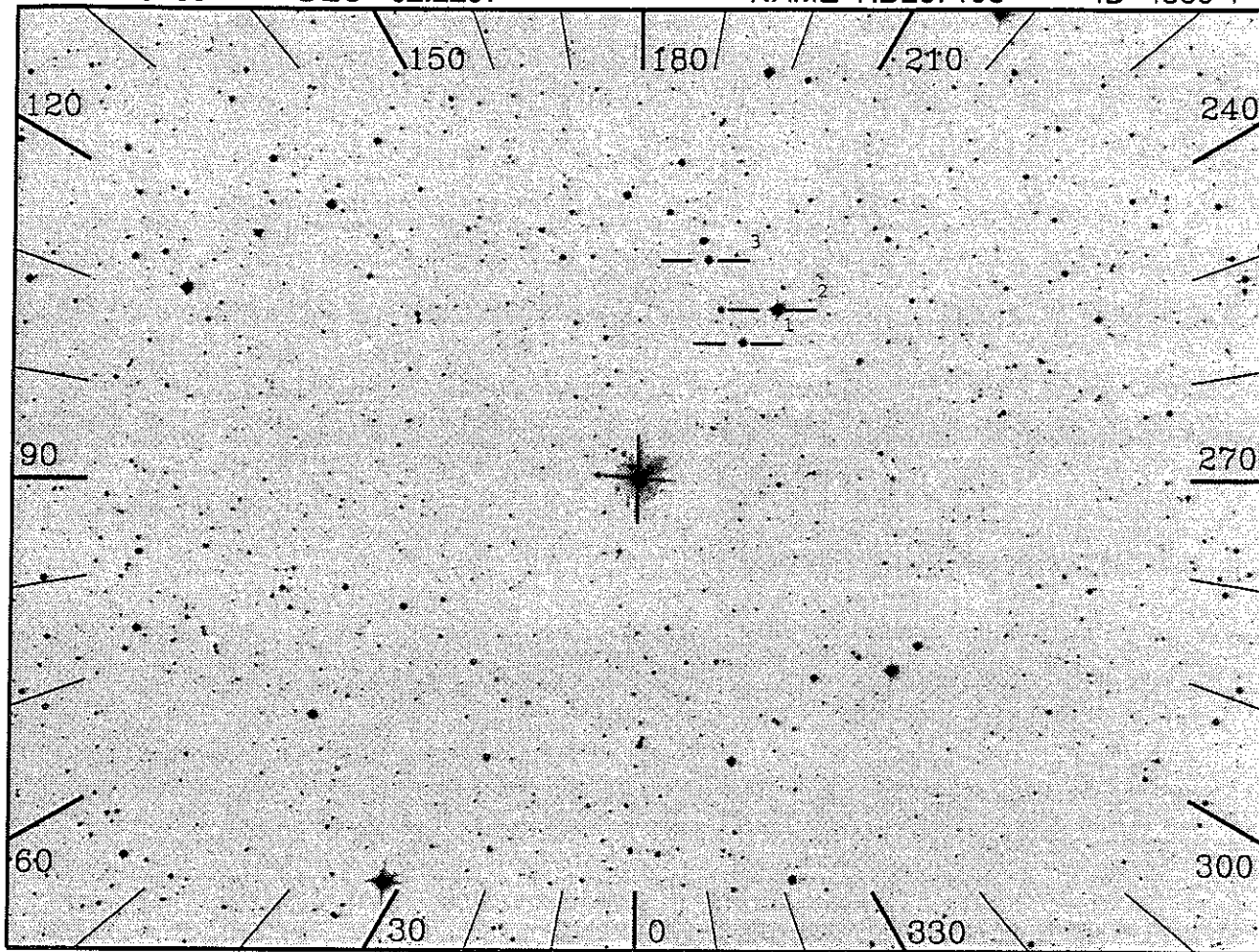


RA 325.8780

DEC 62.2297

NAME HD207198

ID 4560-1



20", 1000(s), Day

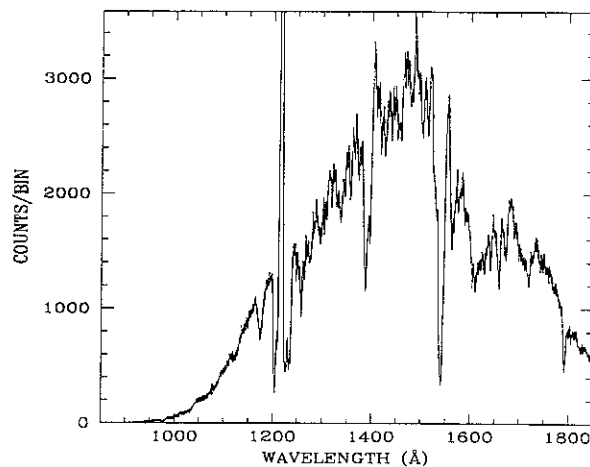
OBJECT: 4560 HD207198

KEYWORDS: Extinction

COMMENTS:

O9II star with unusual extinction ( $R_V = 2.6$ ).

$E(B-V) = 0.59$



ID: 4560-1 W=Prime SciPgm= W12

Names: HD207198

Info: O9IIE V= 6.0 Wupmag=5.27

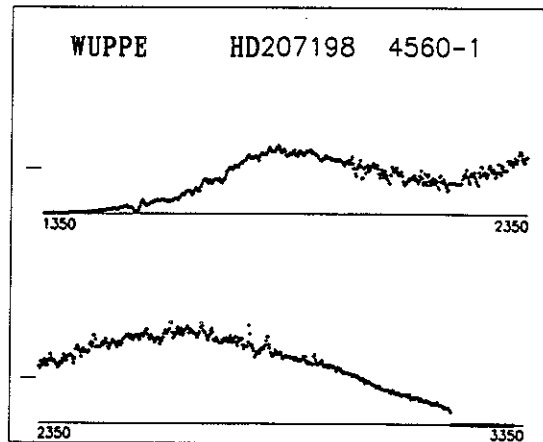
% Pol: 1.15

Pos Ang: 26.0

Mechanism: Interstellar dust

Comments:

This object is a particularly well-studied object in so far as the extinction and IS chemical abundances along the sight line are concerned.

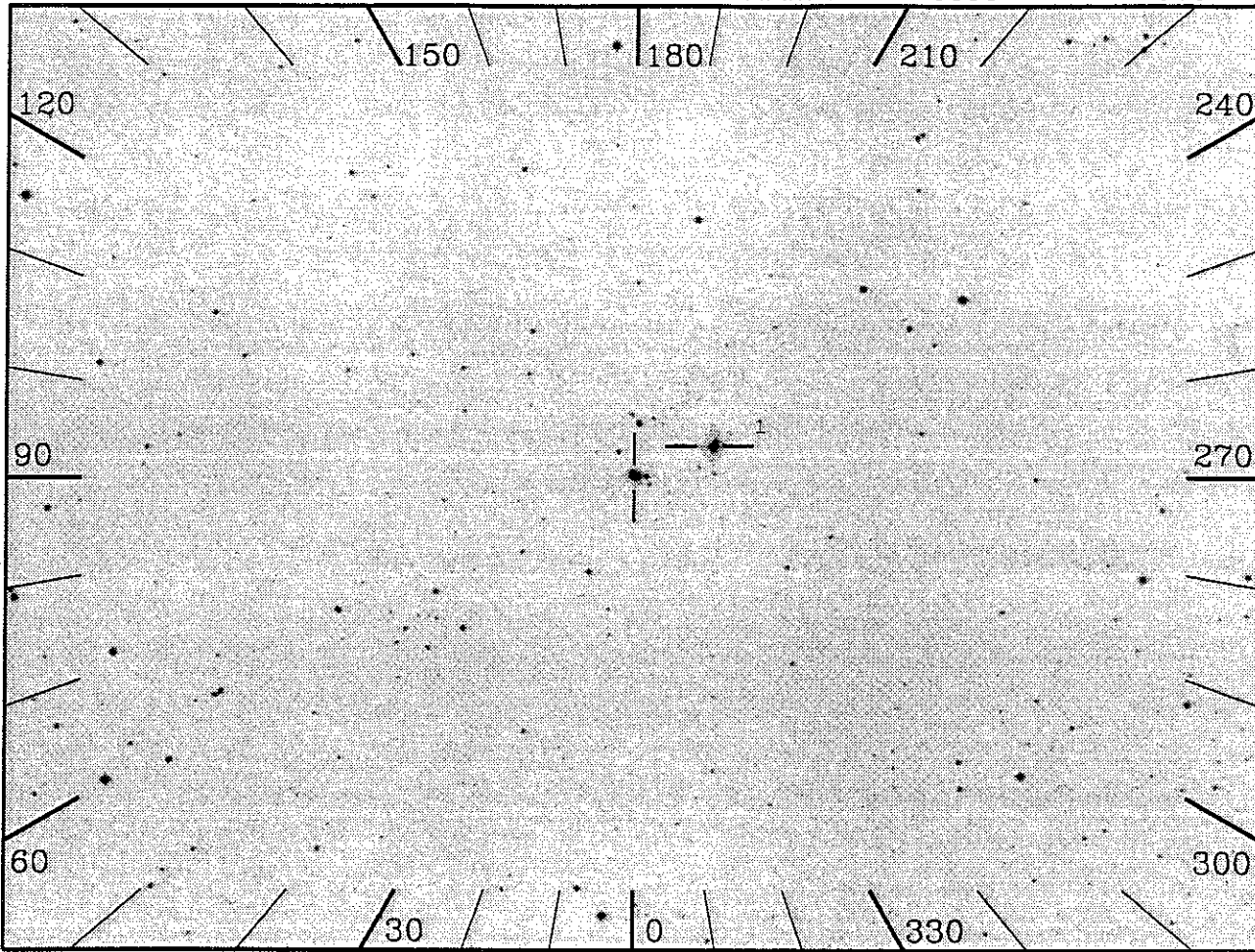


RA 342.8892

DEC 61.8685

NAME HD216658

ID 4563-1



20", 1000(s), Day

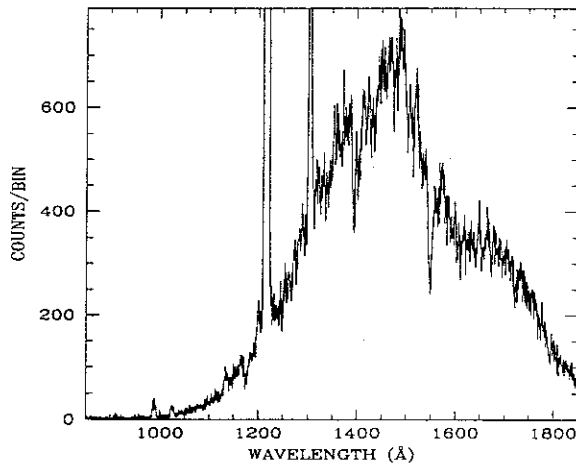
OBJECT: HD216658

KEYWORDS: Extinction

COMMENTS:

B0.5 V star behind Cep A cloud.

E(B-V) = 0.98



ID: 4563-1 W=Prime SciPgm= W11

Names: HD216658

Info: B0V V= 8.9 Wupmag=9.42

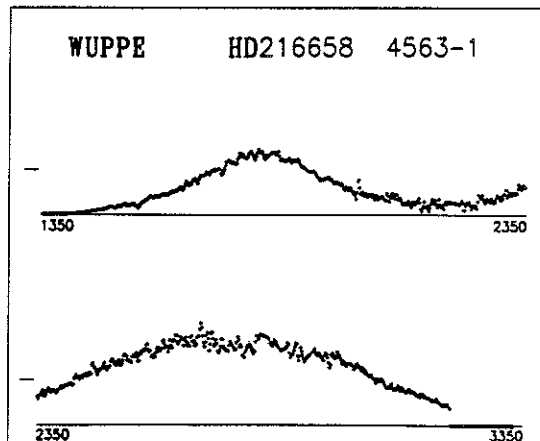
% Pol: 5.50

Pos Ang: 103.0

Mechanism: Interstellar

Comments:

Strong CN, CH stronger than CH+.

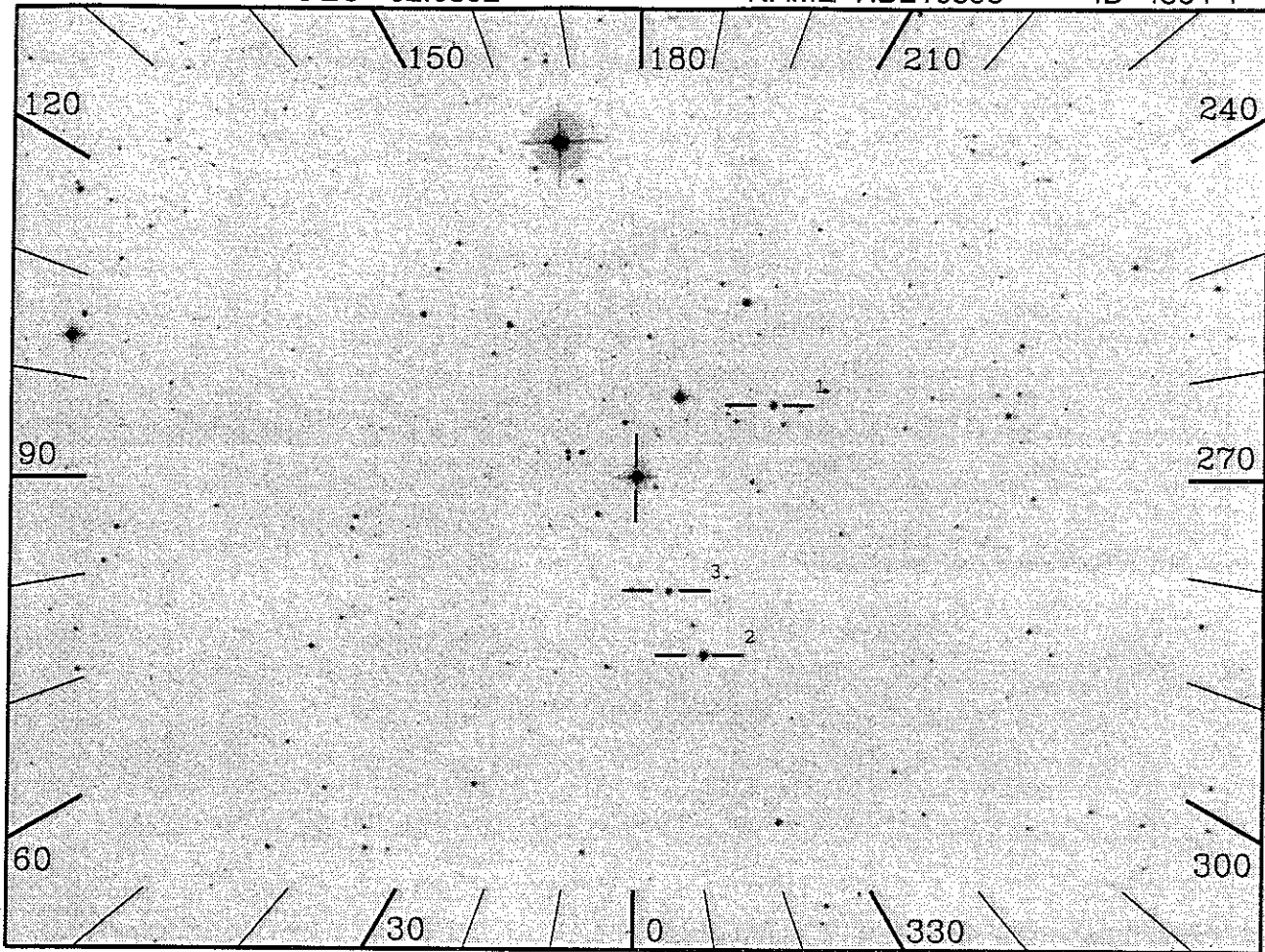


RA 343.4341

DEC 62.0392

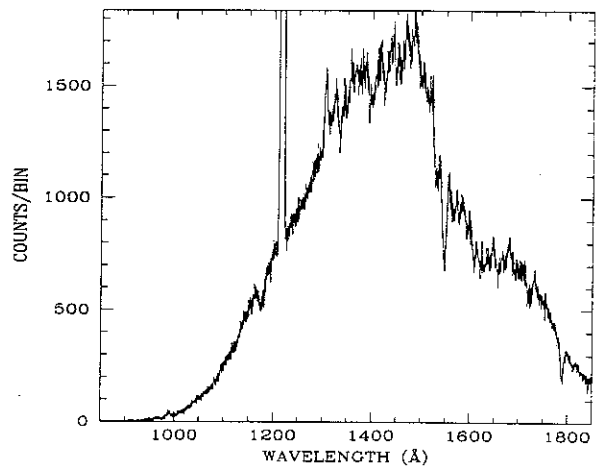
NAME HD216898

ID 4564-1

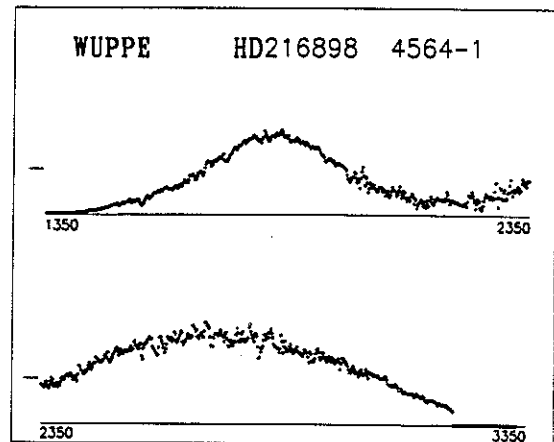


20", 1000(s), Day

OBJECT: HD216898  
 KEYWORDS: Extinction  
 COMMENTS:  
 O8.5 V star behind Cep A cloud.  
 E(B-V) = 0.85



ID: 4564-1 W=Prime SciPgm= W13  
 Names: HD216898  
 Info: O8 V= 8.0 Wupmag=7.98  
 % Pol: 3.84  
 Pos Ang: 87.0  
 Mechanism: Interstellar  
 Comments:  
 Well-studied sight line. CH = CH+.  
 CN strong.

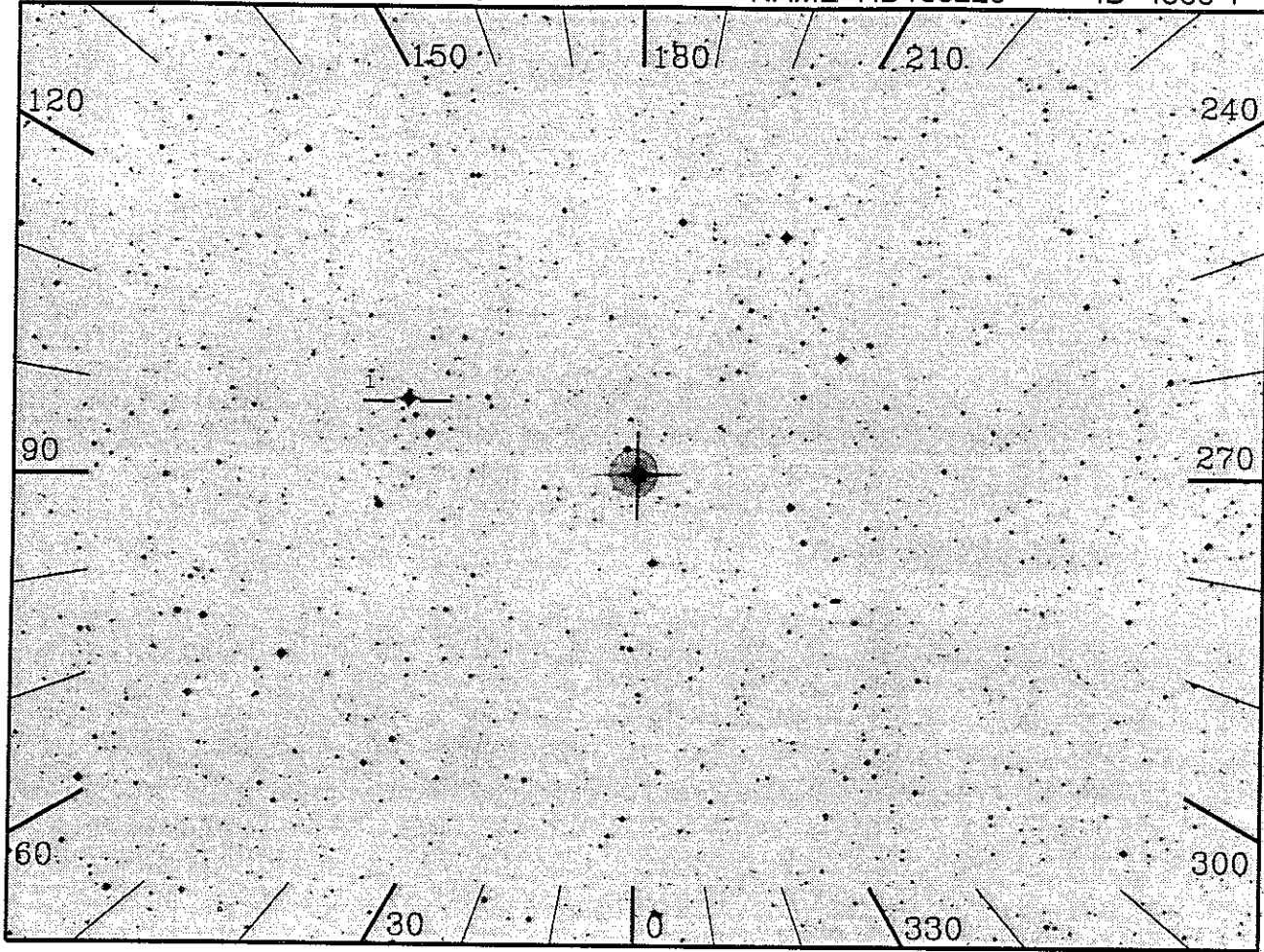


RA 297.9596

DEC -16.0454

NAME HD188220

ID 4566-1



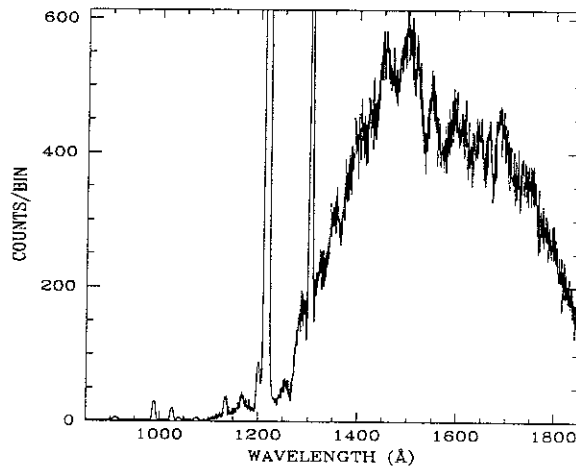
20, 1000(s), Day

OBJECT: 4566 HD188220

KEYWORDS: Hot star behind high lat. molecular cloud

COMMENTS:

Molecular hydrogen absorption forest expected below 1108 Ang., but late type means weak FUV flux in that region. High-latitude absorption important because Galactic clouds could form/dissipate above the Galactic plane.



ID: 4566-1 W=Prime SciPgm= W11

Names: HD188220

Info: B9V V= 8.0 Wupmag=8.38

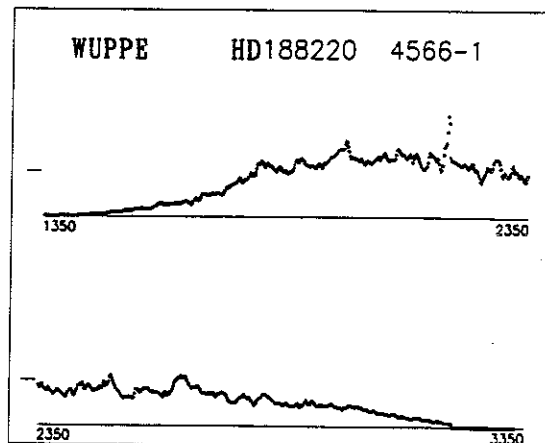
% Pol:

Pos Ang:

Mechanism: Interstellar

Comments:

High galactic latitude probe. CH+ strong. IUE data used for simulated spectrum is that of 28-Tau (2236).



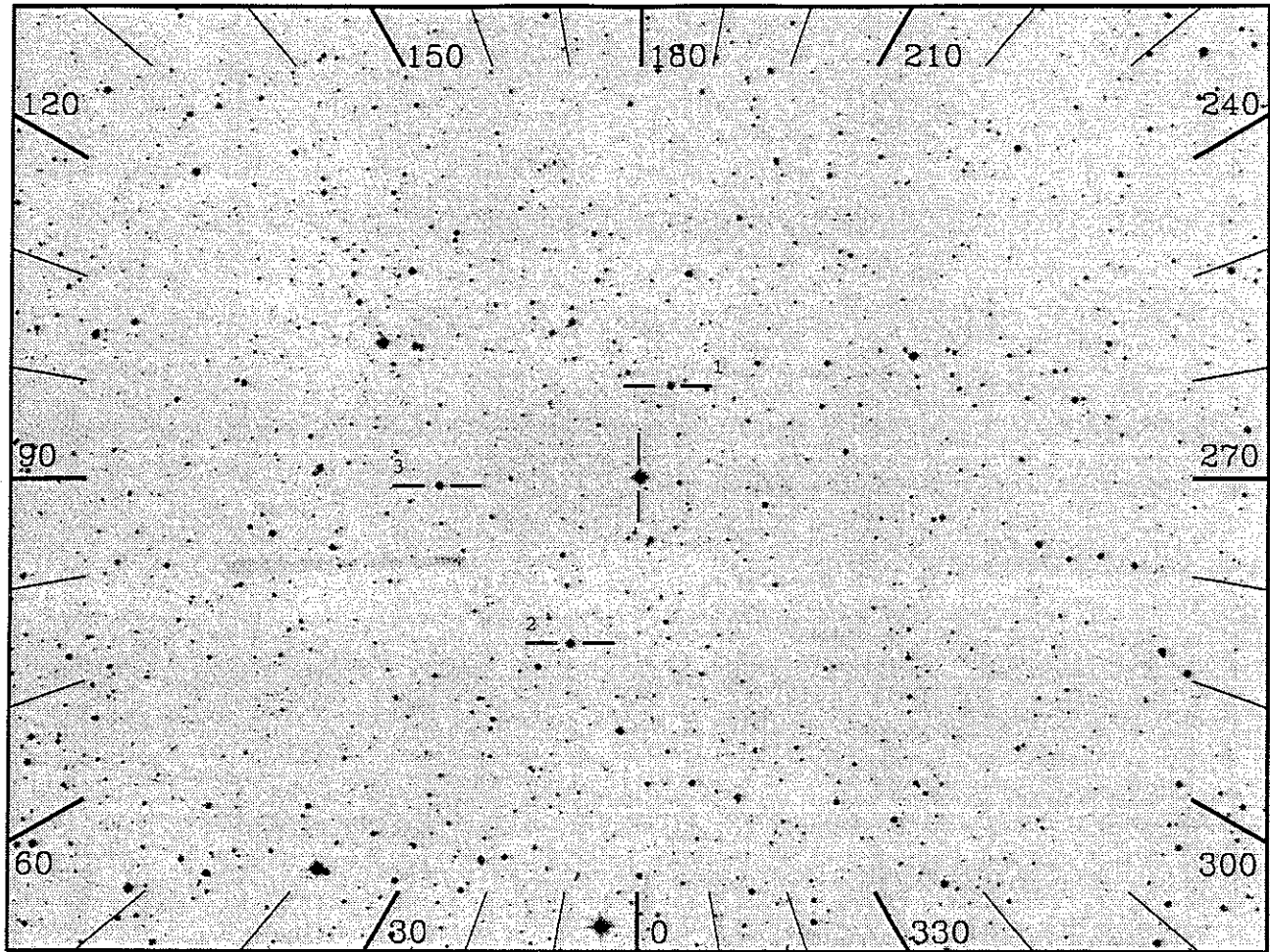


RA 344.5210

DEC 59.3514

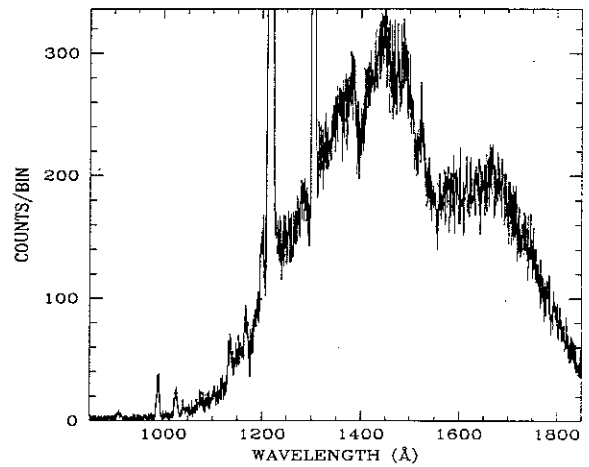
NAME HD217490

ID 4569-1



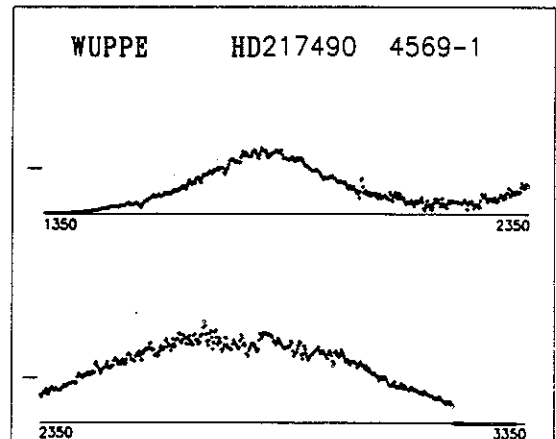
20", 1000(s), Day

OBJECT: 4569 HD217490  
 KEYWORDS: Extinction  
 COMMENTS:  
 Extincted B0.5 Ia star ( $E(B-V) = 1.02$ ).



ID: 4569-1 W=Prime SciPgm= W11  
 Names: HD217490  
 Info: B0.5IA V= 8.7 Wupmag=  
 % Pol: 3.60  
 Pos Ang: 50.0  
 Pmax: 4.04%  
 Lmax: 3600A  
 Mechanism: Interstellar dust  
 Comments:

This object has the shortest known  
 Serkowski Law lambda max, 3600A.  
 $E(B-V)=1.02$ . Cluster contains dust.  
 IUE data used for simulated spectrum  
 is that of HD216658 (4563).

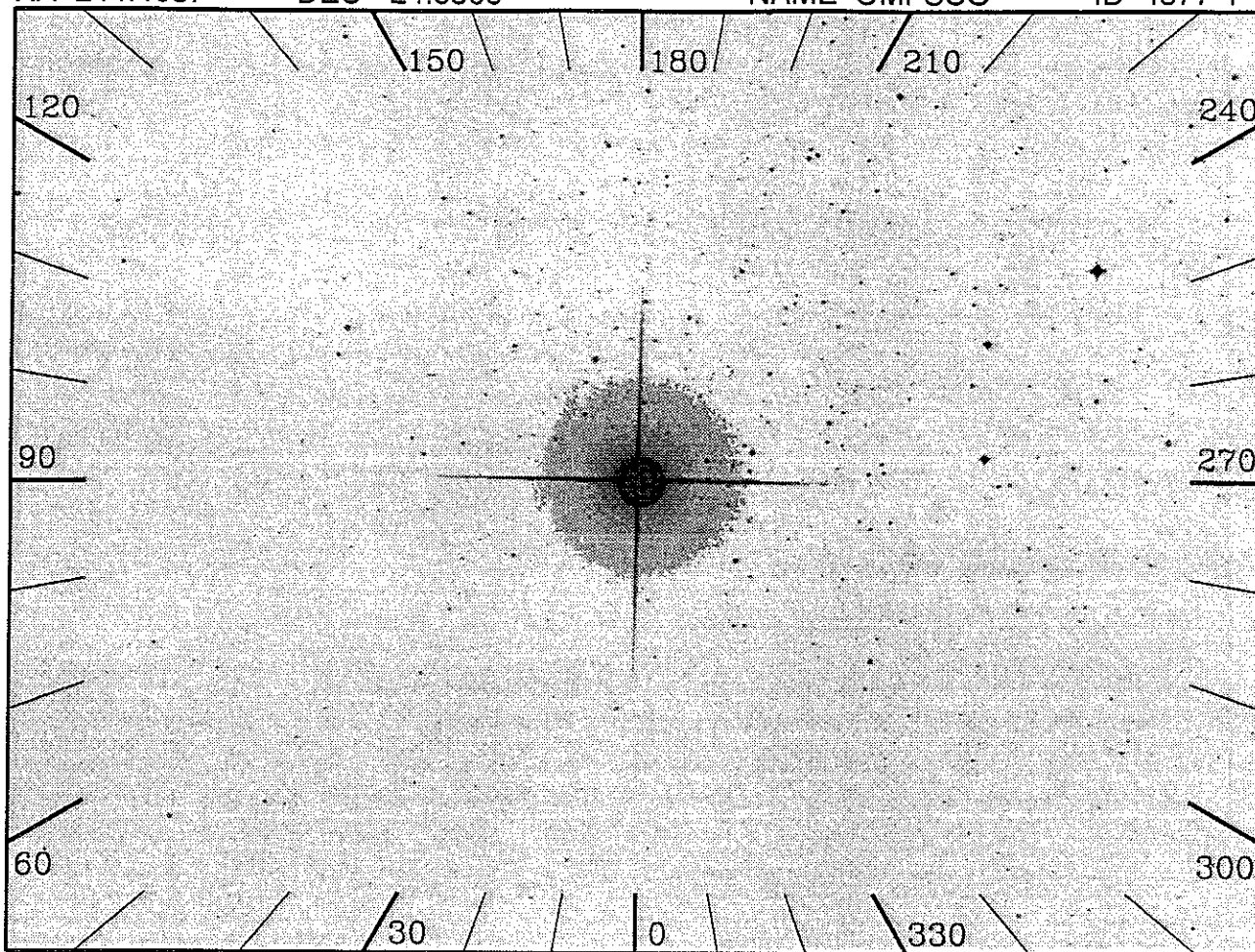


RA 244.4057

DEC -24.0506

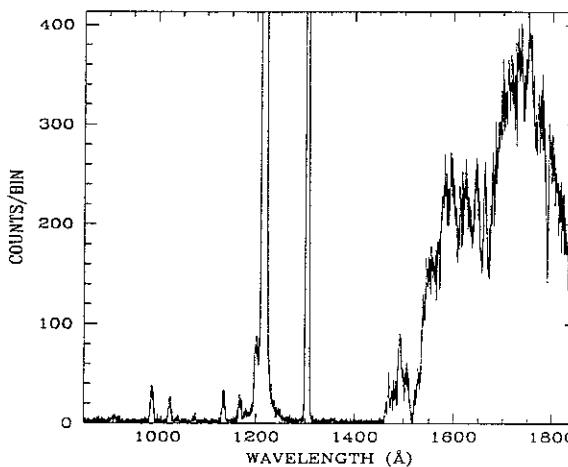
NAME OMI-SCO

ID 4577-1

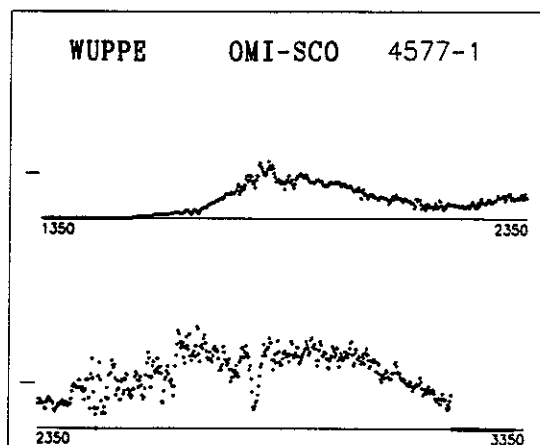


20", 1000(s), Day

OBJECT: OMI-SCO  
 KEYWORDS: Extinction  
 COMMENTS:  
 Extincted A4 III star.  
 E(B-V) = 0.74



ID: 4577-1 W=Prime SciPgm= W11.  
 Names: OMI-SCO HD147084  
 Info: A5II V= 4.5 Wupmag=8.23  
 % Pol: 4.11  
 Pos Ang: 30.0  
 Mechanism: Interstellar  
 Comments:

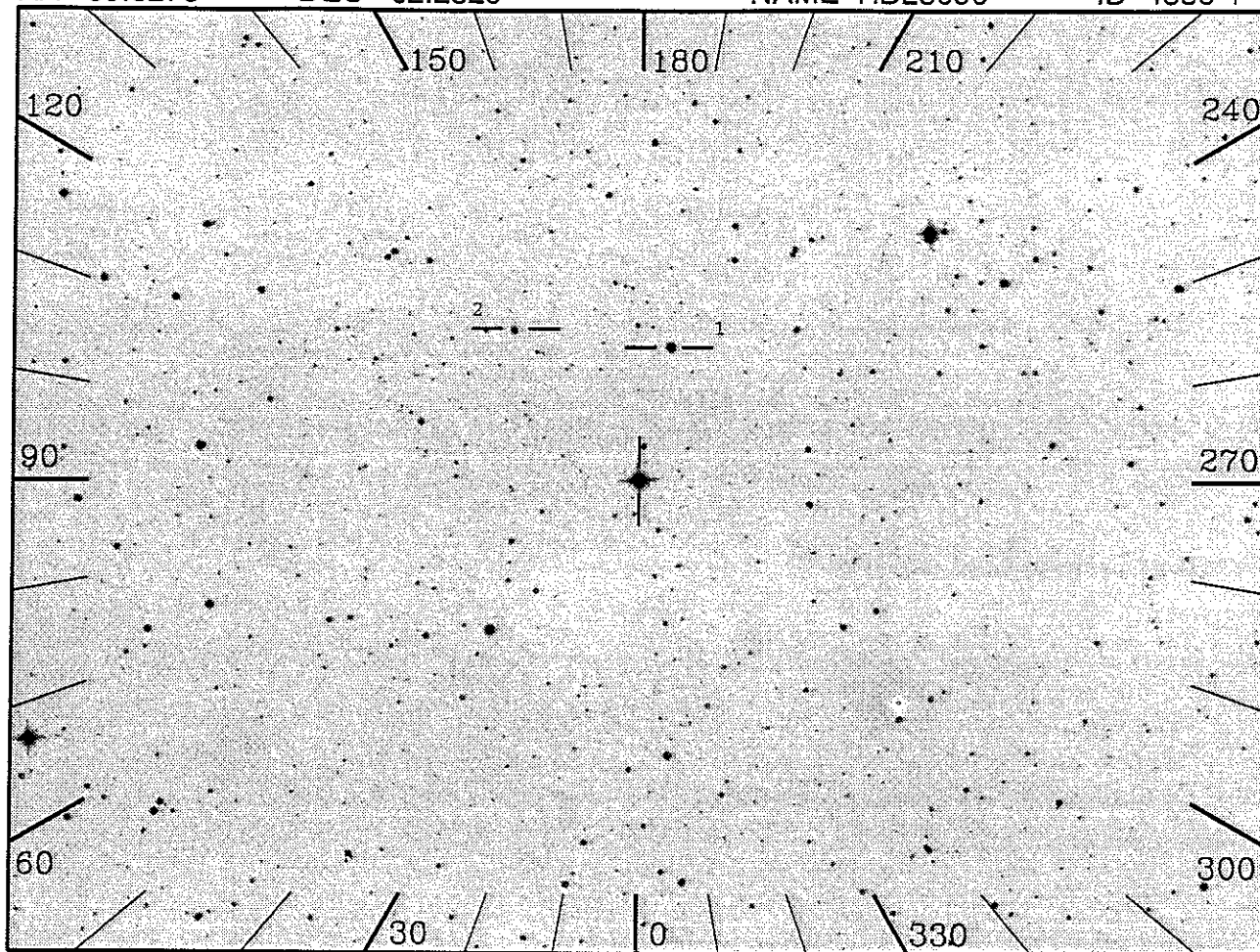


RA 59.6278

DEC 62.2829

NAME HD25090

ID 4586-1



20", 1000(s), Day

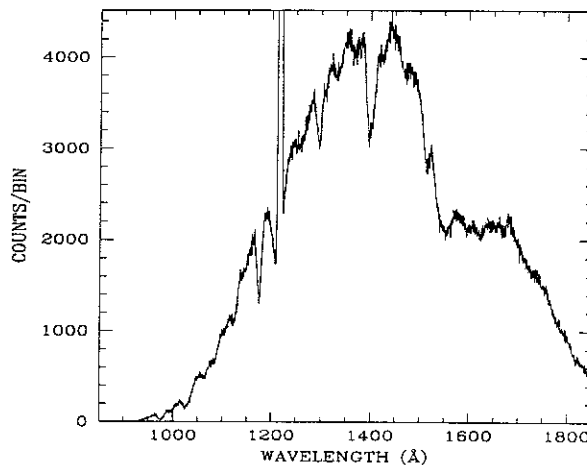
OBJECT: 4586 HD25090

KEYWORDS: Extinction

COMMENTS:

Extincted B0.5 III star.

E(B-V) = 0.62



ID: 4586-1 W=Prime SciPgm= W11

Names: HD25090

Info: B1Ib V= 7.3 Wupmag=7.35

% Pol: 5.71

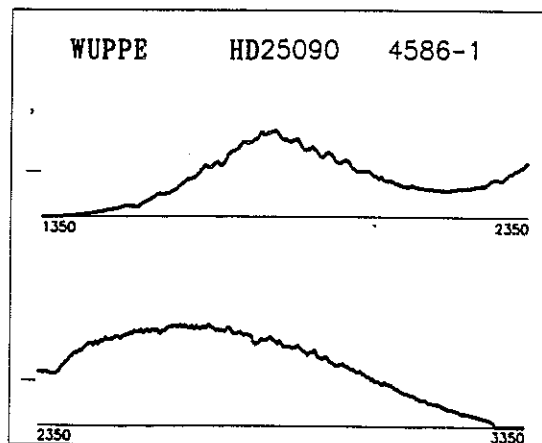
Pos Ang: 137.0

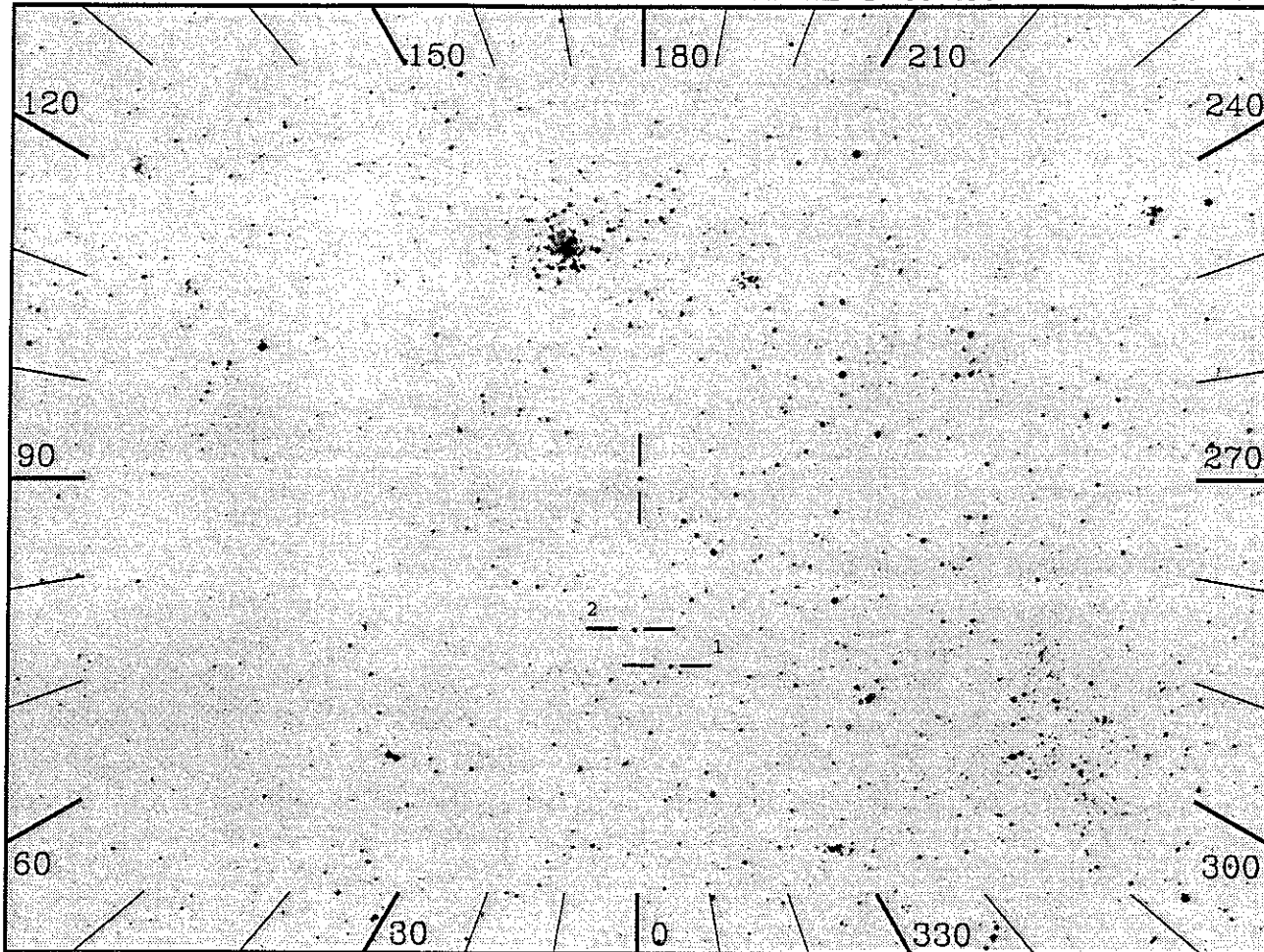
Mechanism: Interstellar dust

Comments:

This star is in the cluster NGC1502 in the vicinity of which WUPPE/ASTRO-1 observed UV pol in excess of that predicted by the extrapolation of the Serkowski Law (=HD25443).

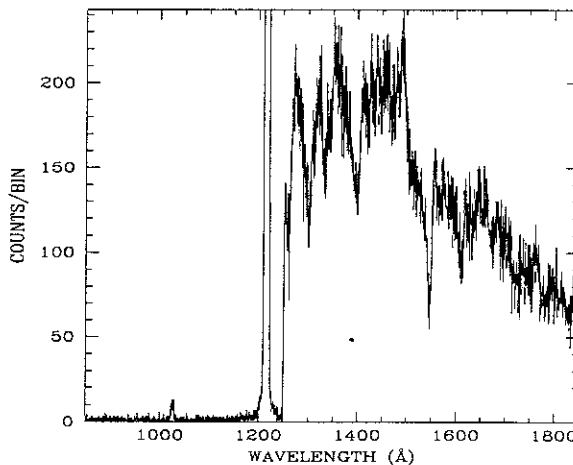
Astro-1 data used for simulated spectrum is that of HD25443 (0658).





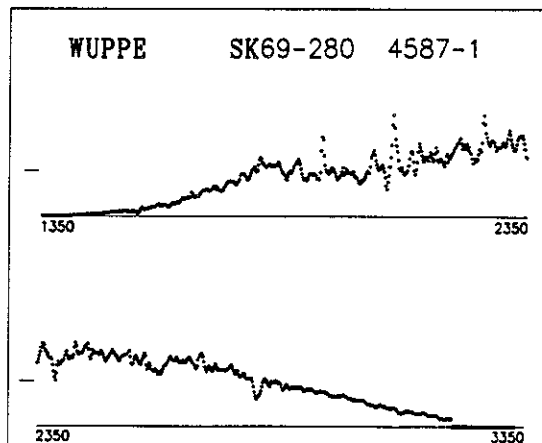
20", 2000(s), Night

OBJECT: 4587 SK69-280  
 KEYWORDS: LMC dust, polarization, extinction  
 COMMENTS:  
 LMC supergiant. Part of program to study interstellar polarization and extinction in the LMC with HUT and WUPPE.



ID: 4587-1 W=Prime SciPgm= G31  
 Names: SK69-280  
 Info: B1I V=12.7 Wupmag=10.8  
 % Pol: 1.88  
 Pos Ang: 93  
 Pmax: 1.88  
 Lmax: 6000A  
 Mechanism: Dust scattering  
 Comments:

LMC star. Part of GI program to study ISP and extinction in the LMC. Also, being observed by HUT for far-UV extinction.



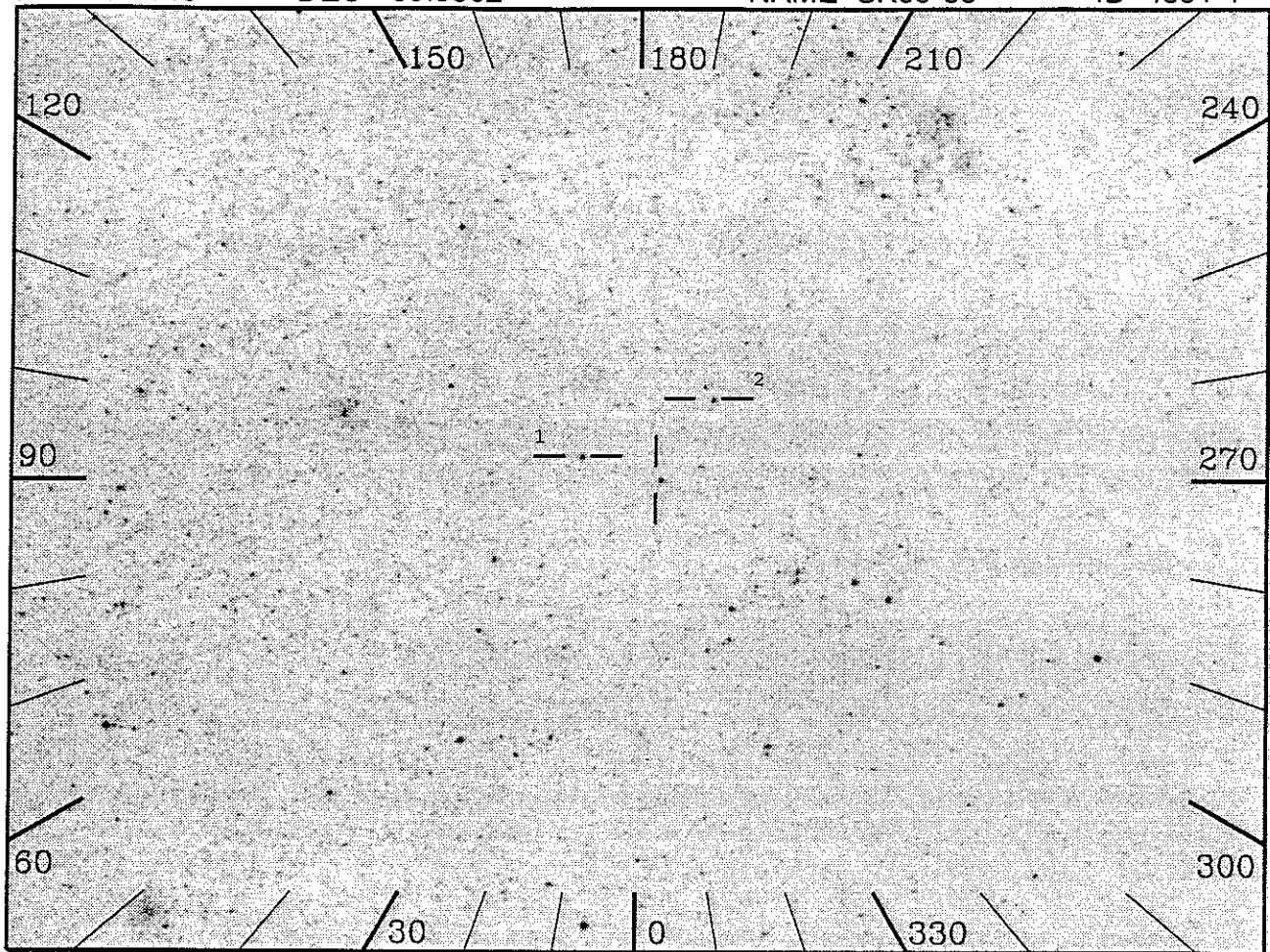
TGT/ASTRO2/FIN A

RA 78.7146

DEC -69.5502

NAME SK69-83

ID 4591-1



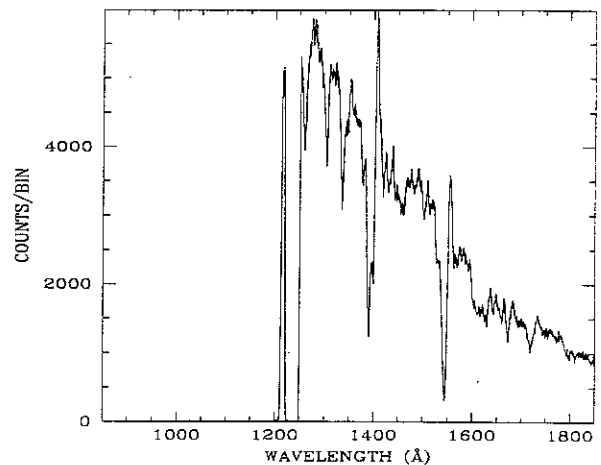
20", 2000(s), Night

OBJECT: 4591 SK69-83

KEYWORDS: LMC dust, polarization, extinction

COMMENTS:

Unreddened LMC supergiant. Part of program to study interstellar polarization and extinction in the LMC with HUT and WUPPE.



ID: 4591-1 W=Prime SciPgm= G31

Names: SK69-83 HD269244

Info: BOI V=11.7 Wupmag=8.63

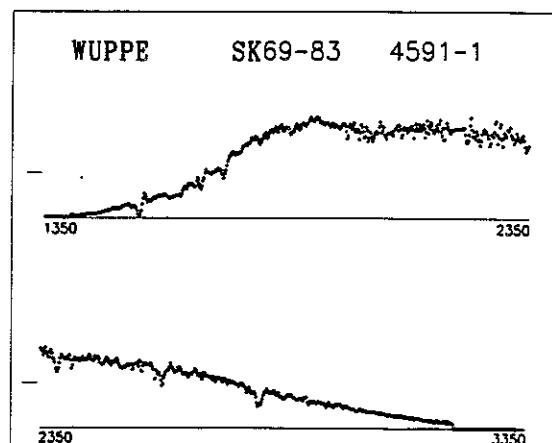
% Pol:

Pos Ang:

Mechanism:

Comments:

Unreddened LMC star. Part of GI program to study ISP and extinction in the LMC. Also, being observed by HUT for far-UV extinction.

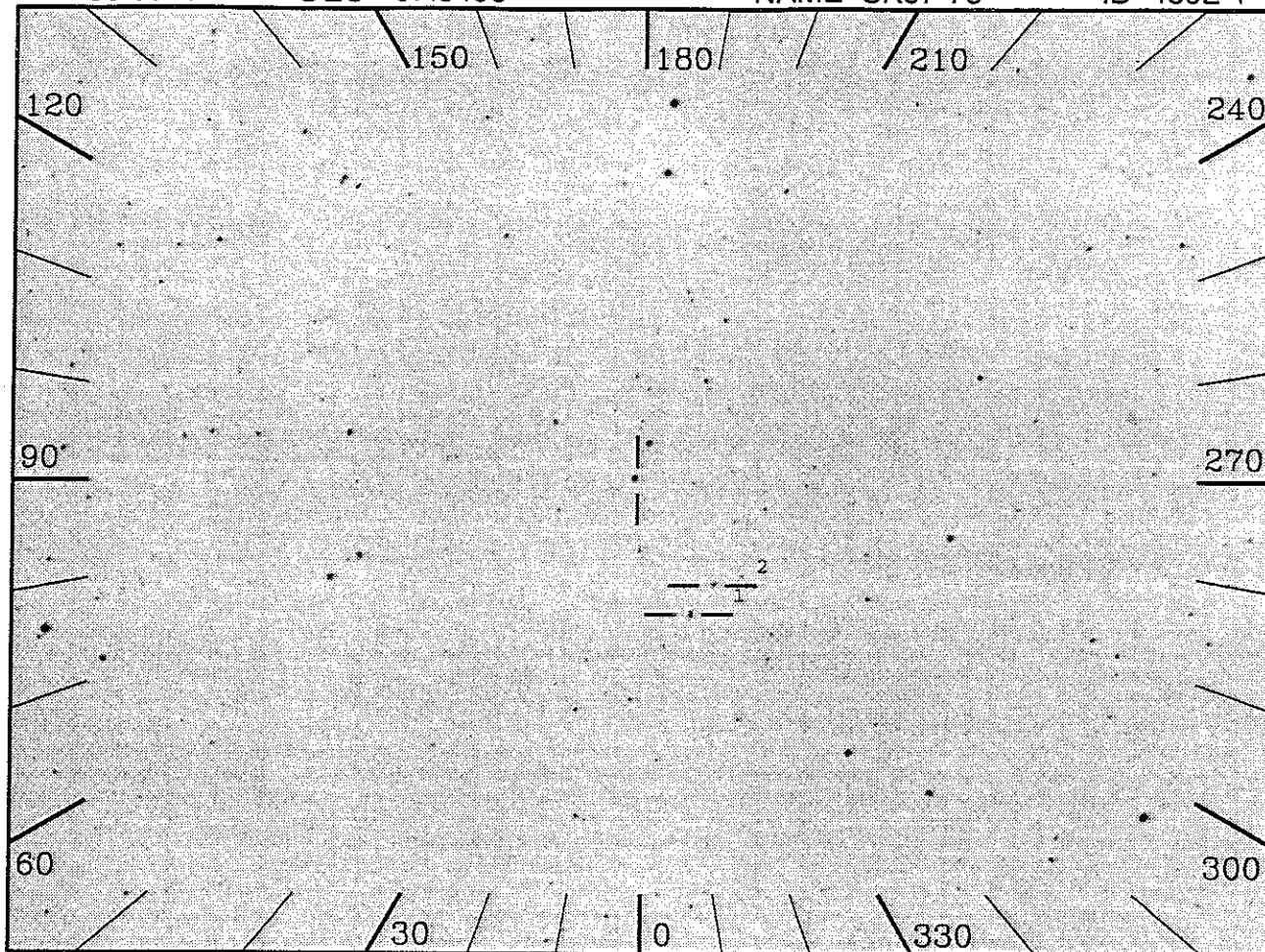


RA 80.0959

DEC -67.3496

NAME SK67-78

ID 4592-1



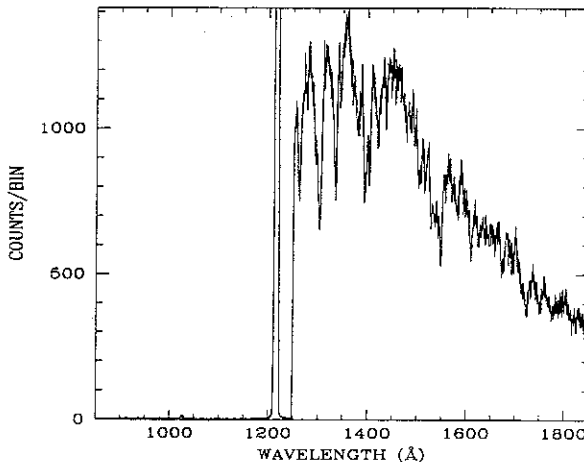
20", 2000(s), Night

OBJECT: 4592 SK67-78

KEYWORDS: LMC dust, polarization, extinction

COMMENTS:

Unreddened LMC supergiant. Part of program to study interstellar polarization and extinction in the LMC with HUT and WUPPE.



ID: 4592-1 W=Prime SciPgm= G31

Names: SK67-78 HD269371

Info: B3Ia V=11.3 Wupmag=9.50

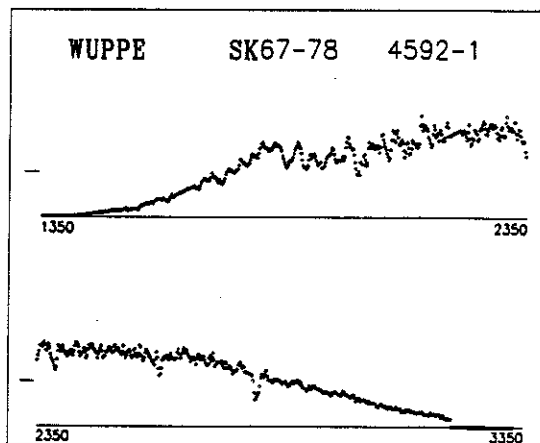
% Pol:

Pos Ang:

Mechanism:

Comments:

Unreddened LMC star. Part of GI program to study ISP and extinction in the LMC. Also being observed by HUT for far-UV extinction.

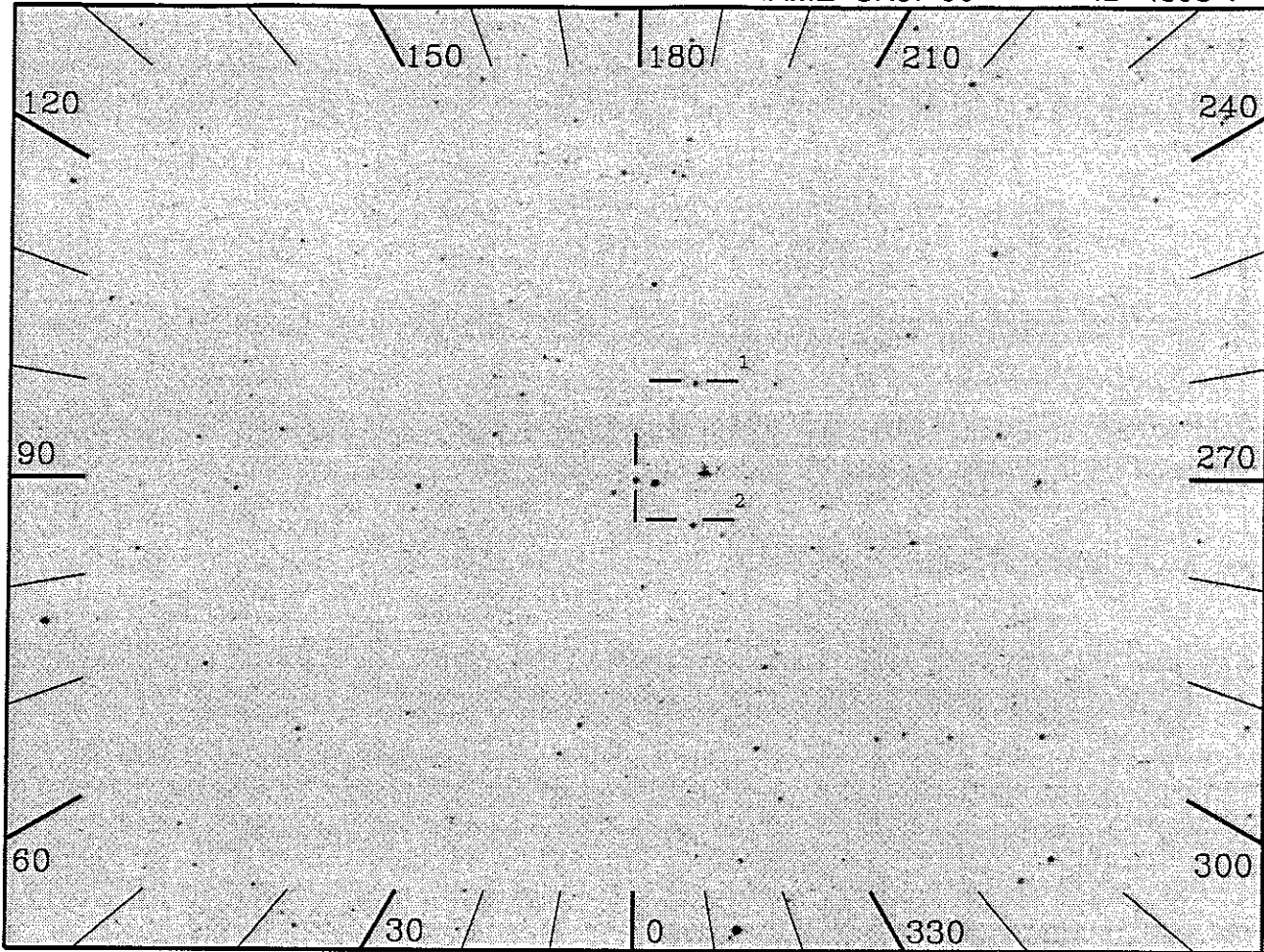


RA 80.7668

DEC -67.2341

NAME SK67-90

ID 4593-1



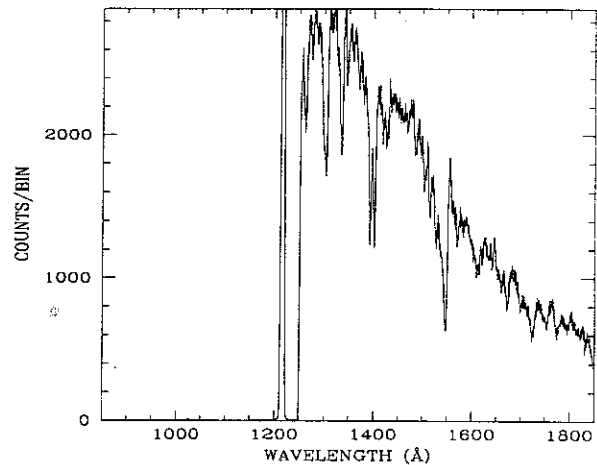
20", 2000(s), Night

OBJECT: 4593 SK67-90

KEYWORDS: LMC dust, polarization, extinction

COMMENTS:

unreddened LMC supergiant. Part of program to study interstellar polarization and extinction in the LMC with HUT and WUPPE.



ID: 4593-1 W=Prime SciPgm= G31

Names: SK67-90 HD269440

Info: B1Ia V=11.3 Wupmag=8.91

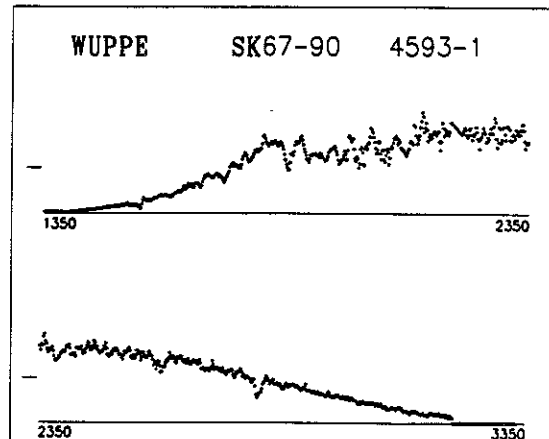
% Pol:

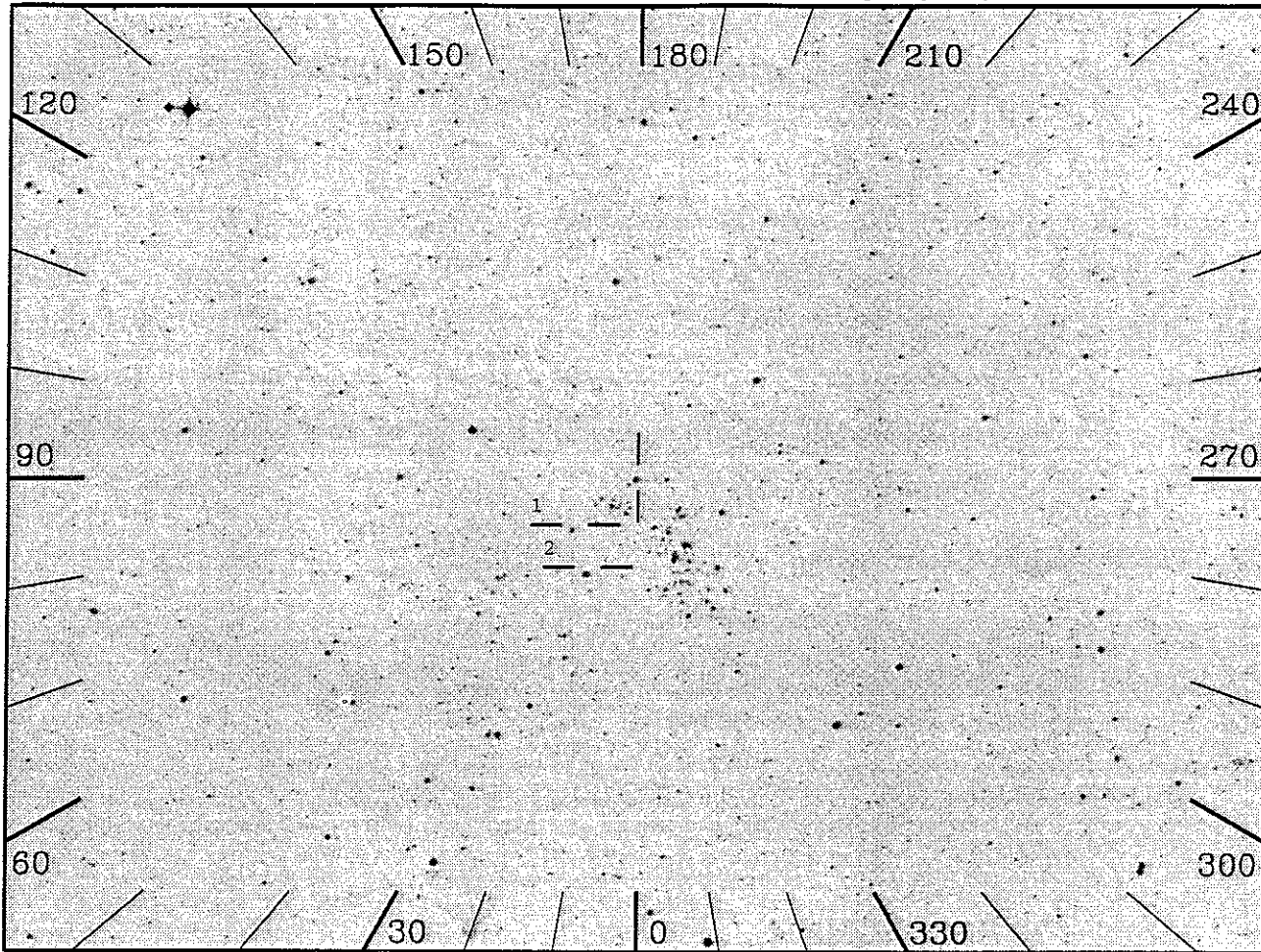
Pos Ang:

Mechanism:

Comments:

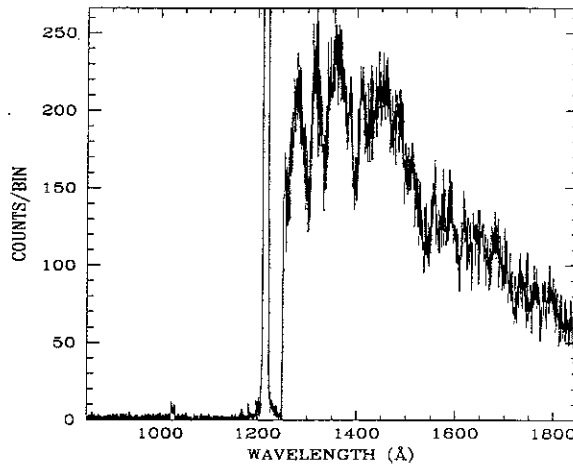
Unreddened LMC star. Part of program to study ISP and extinction in the LMC. Also, being observed by HUT for far-UV extinction.





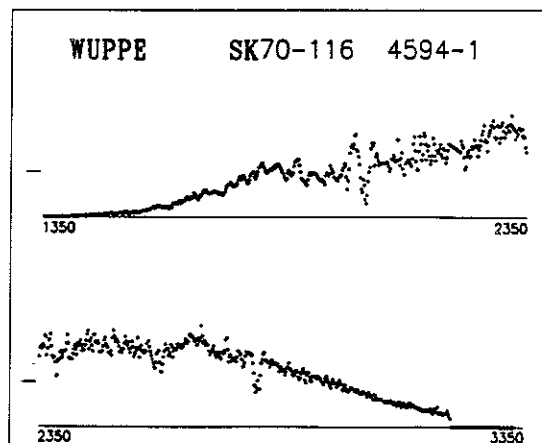
20", 2000(s), Night

OBJECT: 4594 SK70-116  
 KEYWORDS: LMC dust, polarization, extinction  
 COMMENTS:  
 LMC supergiant. Part of program to study interstellar polarization and extinction in the LMC with HUT and WUPPE.



ID: 4594-1 W=Prime SciPgm= G31  
 Names: SK70-116 HD270151  
 Info: B2Ia V=12.1 Wupmag=10.3  
 % Pol: 1.91 '  
 Pos Ang: 88  
 Pmax: 1.91 Lmax: 6300A  
 Mechanism: Dust scattering  
 Comments:

LMC star. Part of GI program to study ISP and extinction in the LMC. Also, being observed by HUT for far-UV extinction.  
 IUE data used for simulated spectrum is that of SK69-270 (4519).



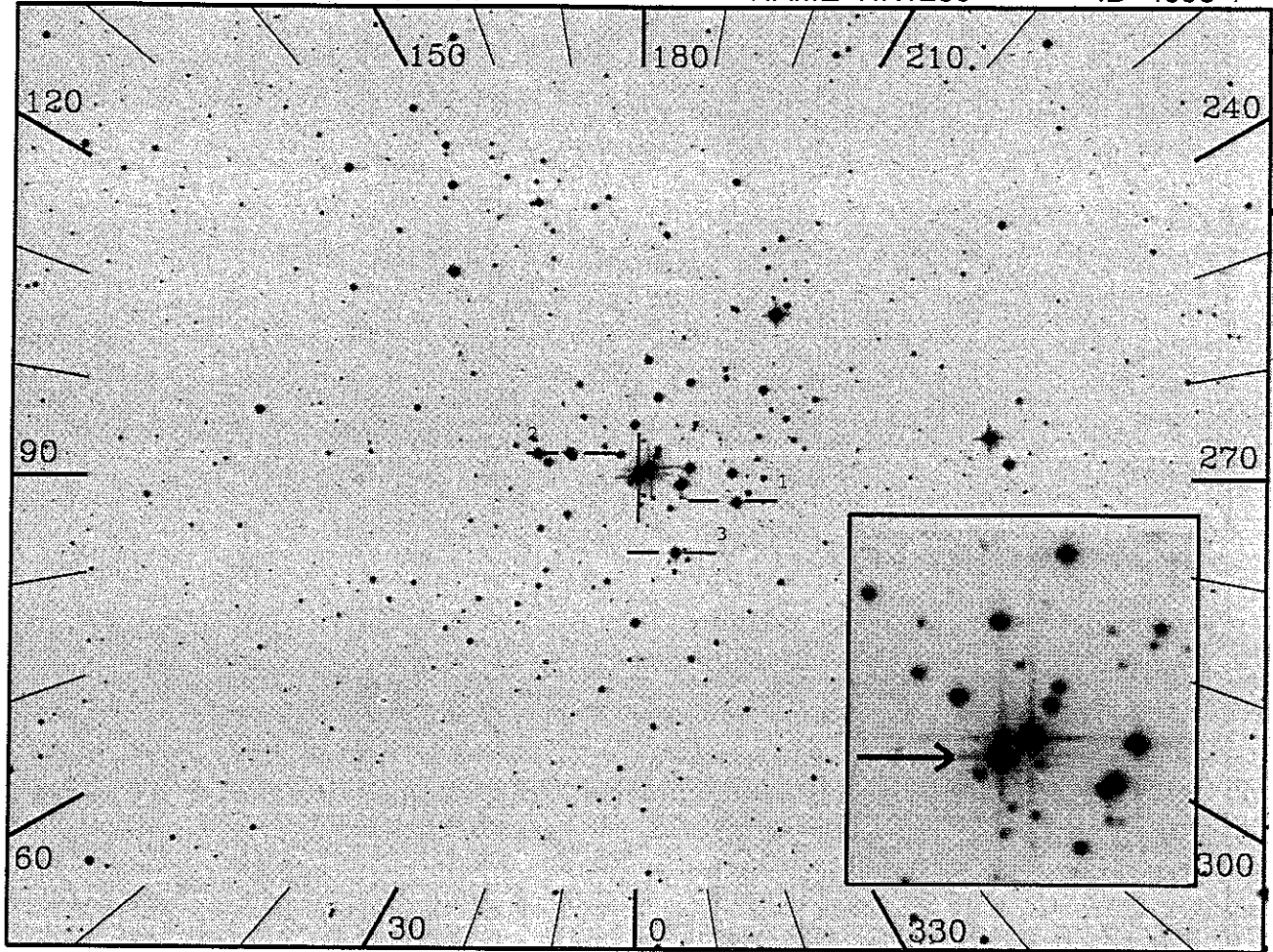


RA 60.8580

DEC 62.1968

NAME HR1260

ID 4595-1



20", 1000(s), Day

OBJECT: 4595 HR1260

KEYWORDS: Extinction

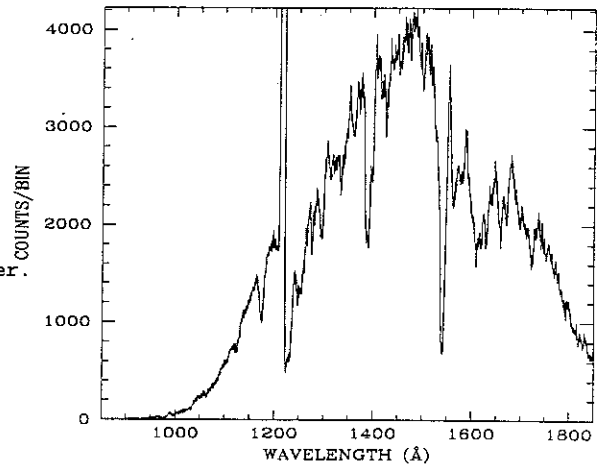
COMMENTS:

Spectroscopic binary, period 2.698d.

E(B-V) = 0.76

There is another bright star nearby,  
about -20" in Ra, +15" in Dec.

The target is the lower left of the pair near the center.

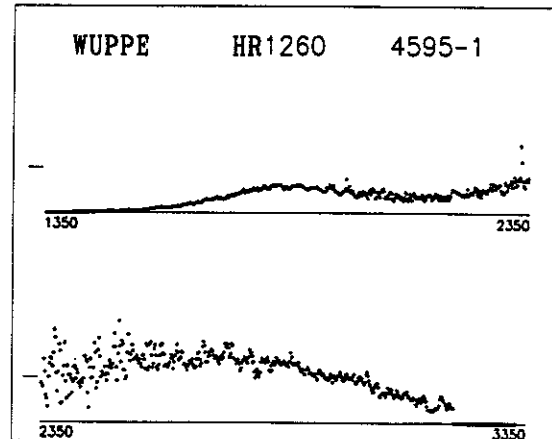


ID: 4595-1 W=Prime SciPgm= W11  
 Names: HR1260 HD25638  
 Info: BOIII V= 7.0 Wupmag= 6.98  
 % Pol: 5.00  
 Pos Ang: 135.0

Mechanism: Interstellar dust

Comments:

This star is in the cluster NGC1502 in the vicinity of which WUPPE/ASTRO-1 observed UV pol in excess of that predicted by the extrapolation of the Serkowski Law (=HD25443).

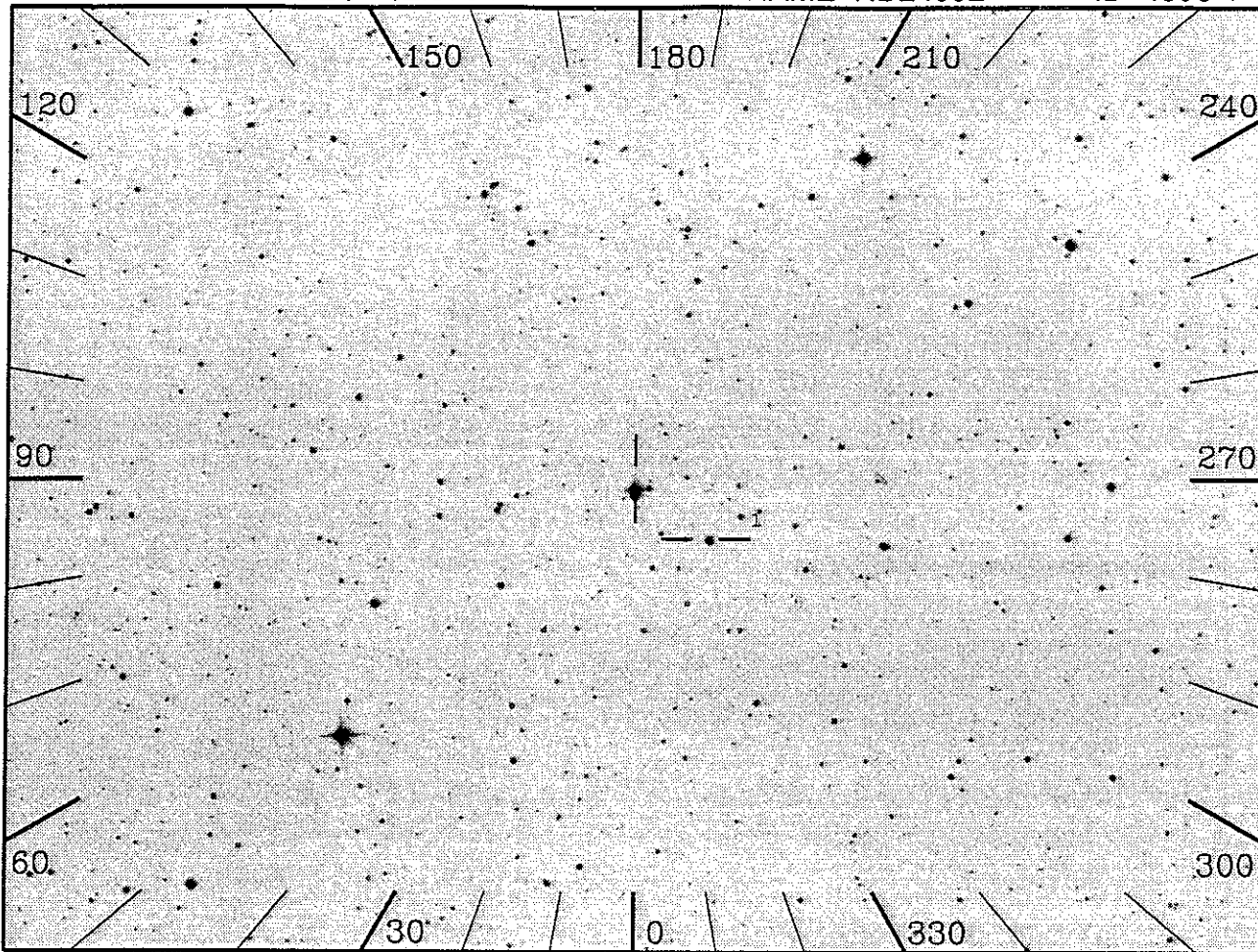


RA 59.3896

DEC 62.3794

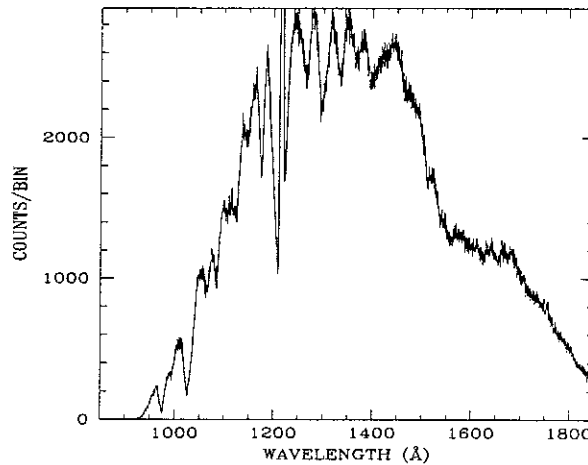
NAME HD24992

ID 4596-1



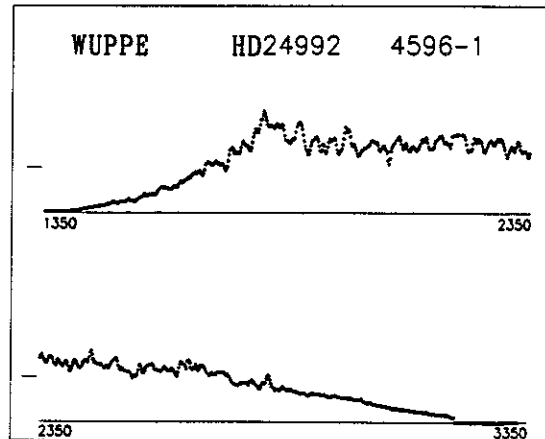
20", 1000(s), Day

OBJECT: HD24992  
 KEYWORDS: Ap star, extinction  
 COMMENTS:  
 Extincted B3III/B4V binary star.  
 E(B-V) = 0.25



ID: 4596-1 W=Prime SciPgm= W11  
 Names: HD24992  
 Info: B3III V= 7.9 Wupmag=  
 % Pol:  
 Pos Ang:  
 Mechanism: Interstellar  
 Comments:

This star is in the cluster NGC1502 in the vicinity of which WUPPE/ASTRO-1 observed UV pol in excess of that predicted by the extrapolation of the Serkowski Law (=HD25443). IUE data used for simulated spectrum is that of EW-Lac (2231).

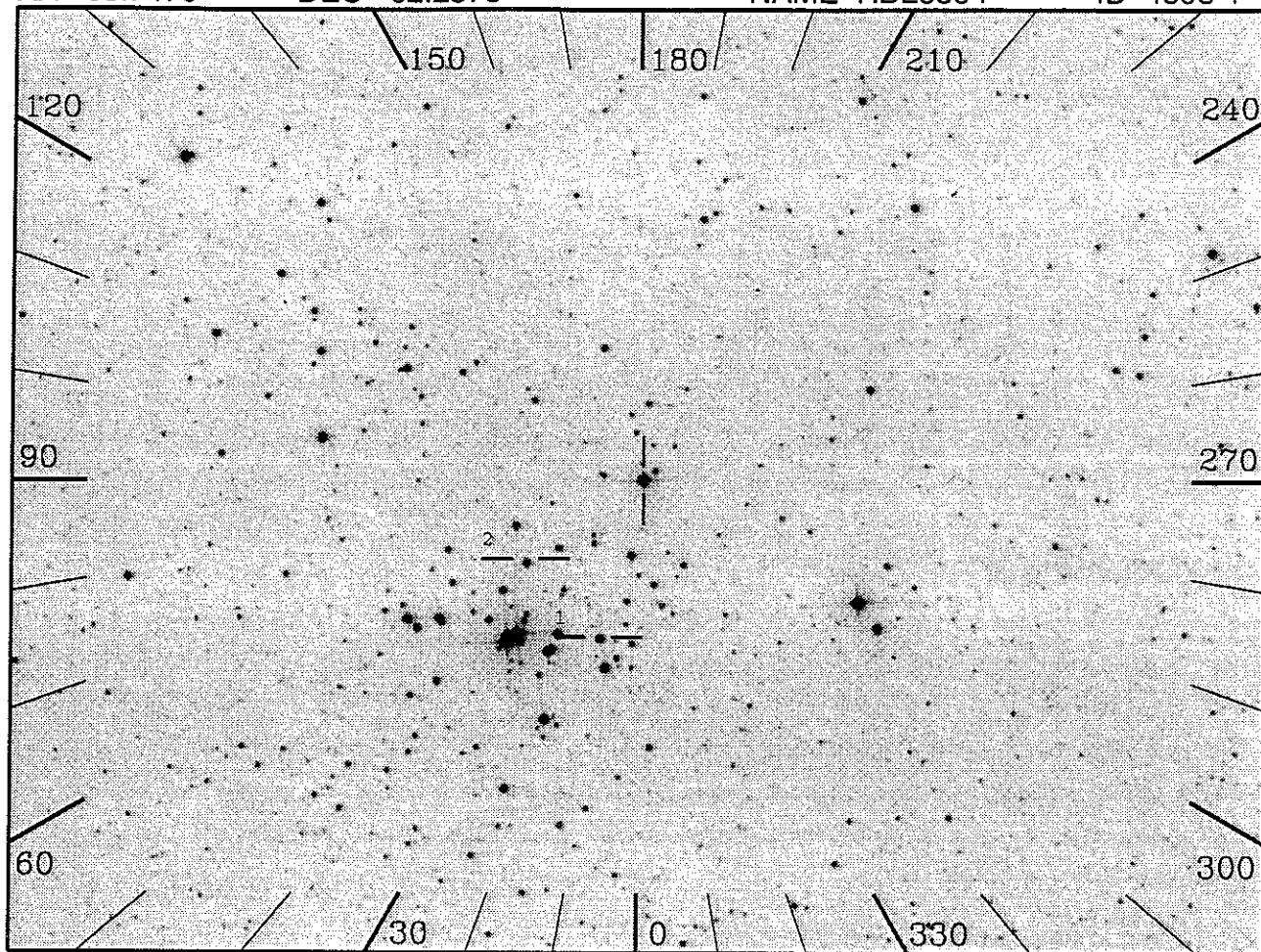


RA 60.7470

DEC 62.2573

NAME HD25594

ID 4598-1



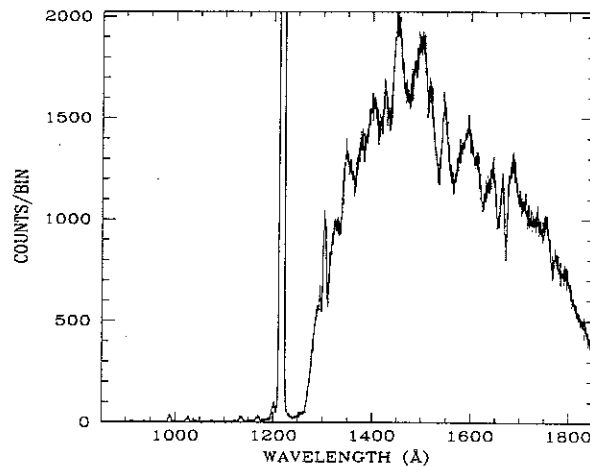
20", 1000(s), Day

OBJECT: 4598 HD25594

KEYWORDS: psf.5

COMMENTS:

psf.5 - offset 30" after 800 sec.. Watch for companion star within 15".



ID: 4598-1 W=Prime SciPgm= W11

Names: HD25594 PPM14655

Info: A0 V= 7.9 Wupmag=

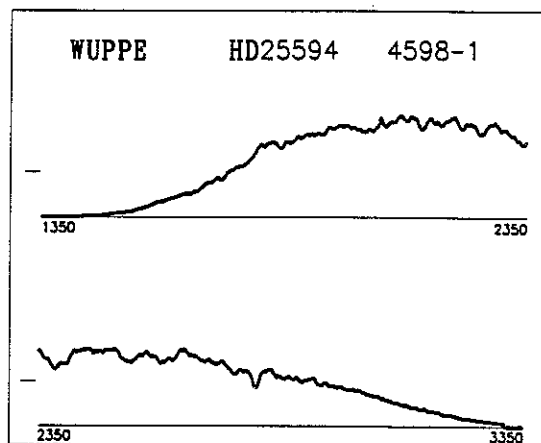
% Pol: 0.27

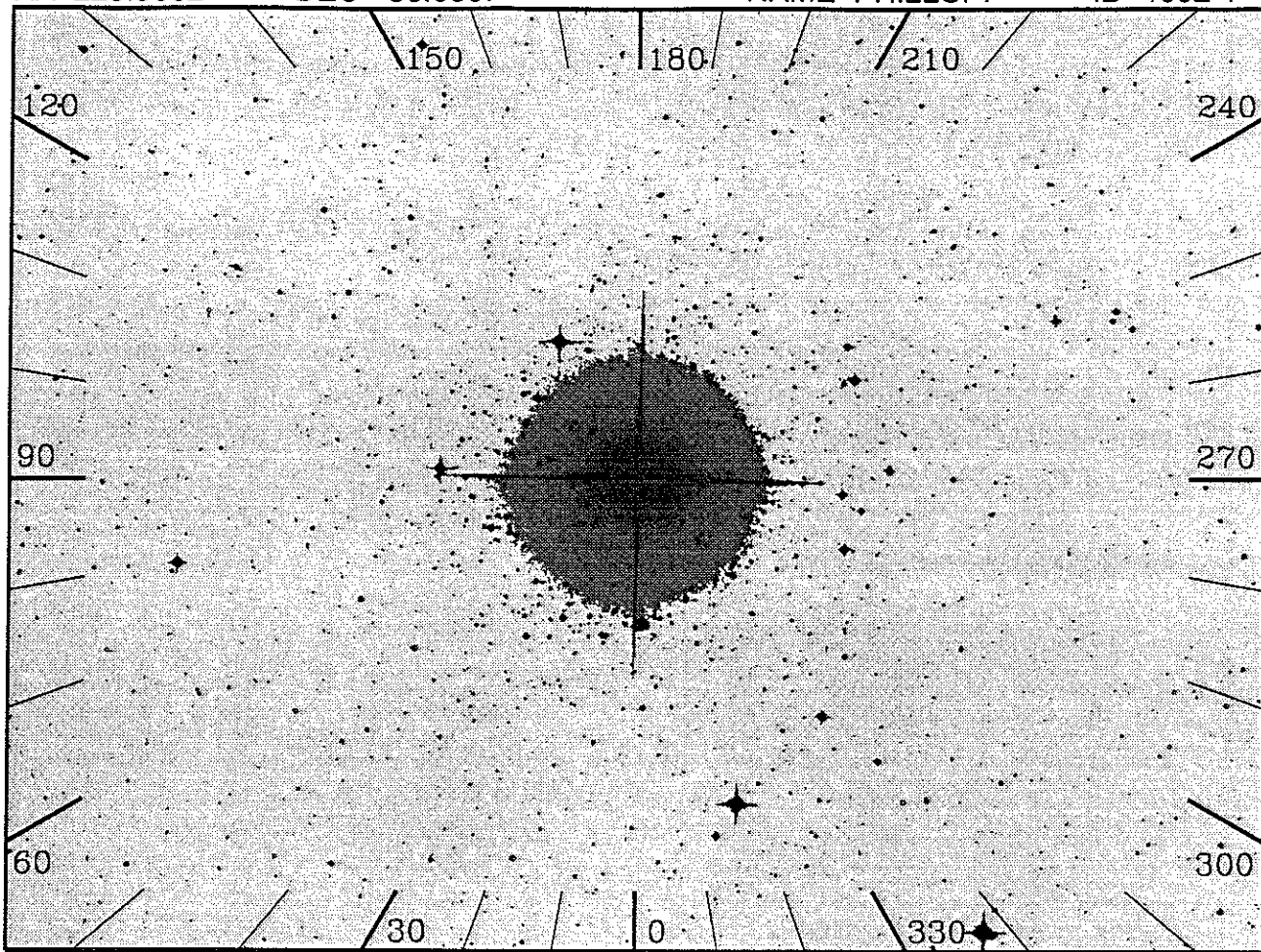
Pos Ang: 154.0

Mechanism: Interstellar dust

Comments:

This star is in the foreground of the cluster NGC1502 in the vicinity of which WUPPE/ASTRO-1 observed UV pol in excess of that predicted by the Serkowski Law. It provides depth sampling. Astro-1 data used for simulated spectrum is that of Gam-Gem (0606).





20", 1000(s), Day

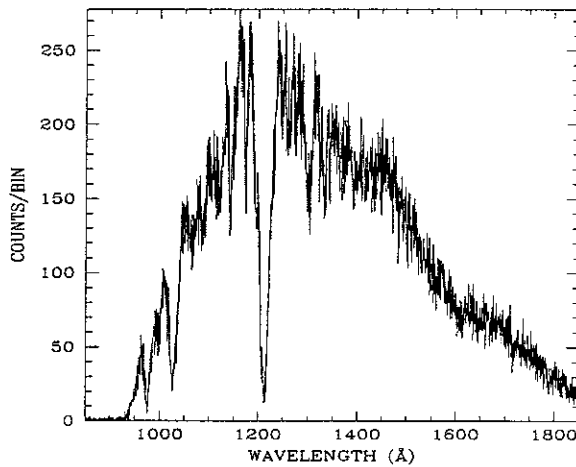
OBJECT: 4602 PHI2LUPI

KEYWORDS:

COMMENTS:

Door state 1 observation.

If we decide to observe this B3 V star, we will use slit 6 and offset 5" every 550 sec, otherwise we will use this observation for dark count.



ID: 4602-1 W=Prime SciPgm= W11

Names: PHI2LUPI HR5712

Info: B4V V= 4.5 Wupmag=1.91

% Pol:

Pos Ang:

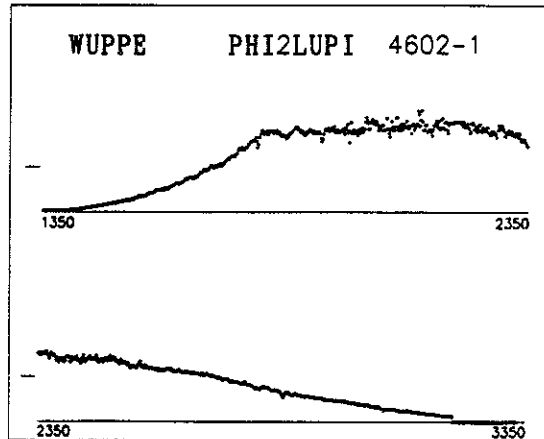
Mechanism:

Comments:

Reddening very small, so ISM pol should be negligible.

NOTE: DETECTOR IN FAST MODE-

DO NOT EXPECT ON-LINE SPECTRUM.

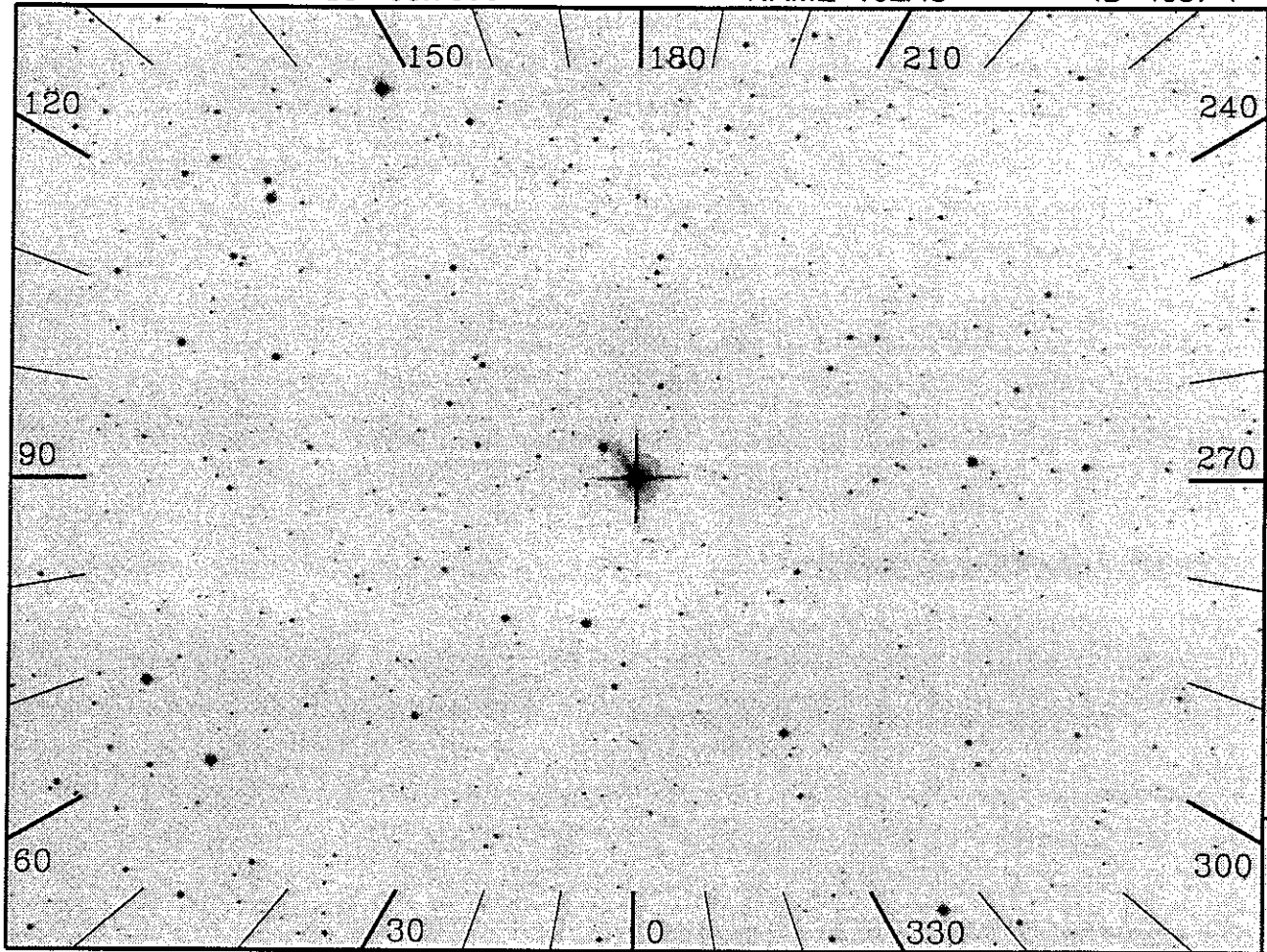


RA 339.2532

DEC 38.7896

NAME 10LAC

ID 4687-1



10"x56", 1000(s), Day

OBJECT: 10LAC

KEYWORDS: Visual binary

COMMENTS:

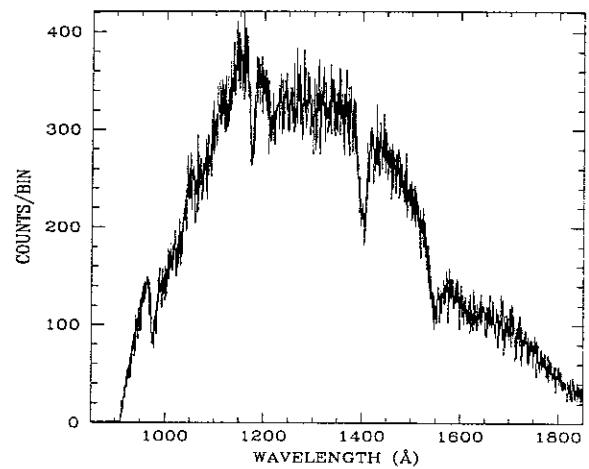
V=4.88 B-V=-0.20 E(B-V)=0.11 spectype=O9V

Flux\_1275 = 2.1e-9

1 sq cm: 3 Offesets along +Y axis of slit

Initial\_expected\_rate = 368 cts/sec

Companion star is V=8.4 mag and unseen in spectrum



ID: 4687-1 H=Prime SciPgm= H14

Names: 10LAC HD214680

Info: O9V V= 4.88 Wupmag=1.72

% Pol: 0.49% Pos Ang: 90

Comments:

Instrumental scattered light calibration for specific obs of Refl Neb and PNS.

Aper Offset Support Obs

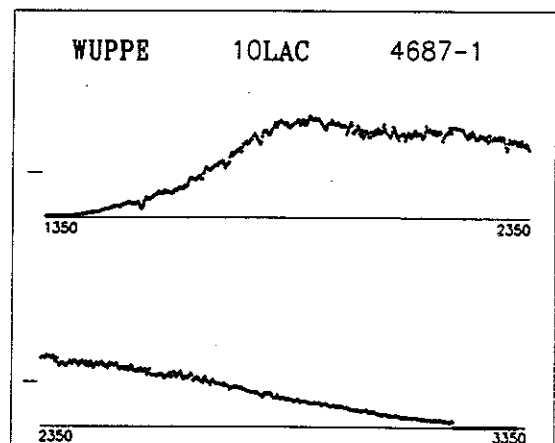
8 -16,-6 HD44179 (4204)

2 0,10 EtaCarH (4207)

8 0,-45 NGC7023 (4211)

8 0 (on star)

AP MAP FO MUST BE PERFORMED BEFORE THIS.

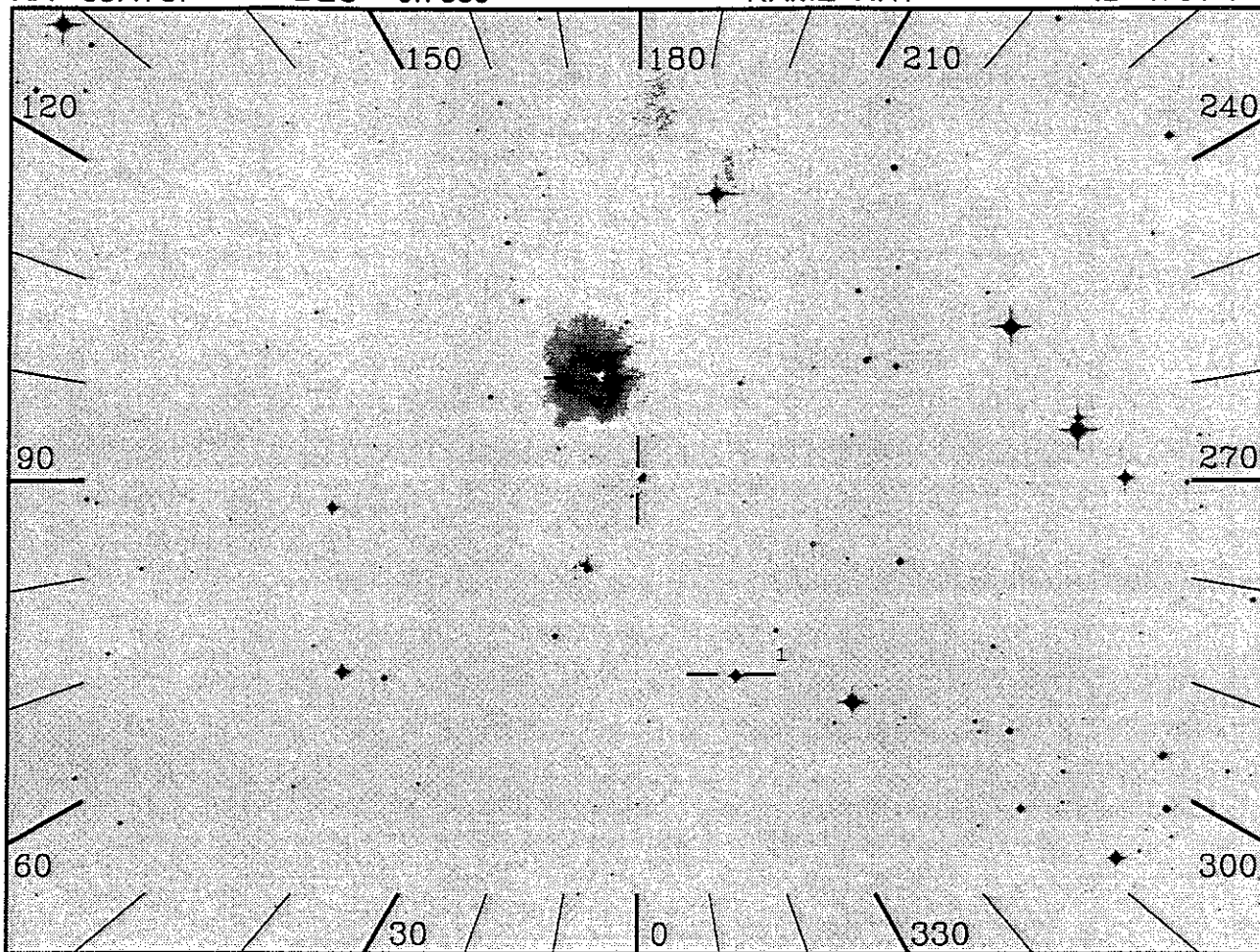


RA 83.4787

DEC -6.7839

NAME HH1

ID 4701-1



20", 2000(s), Night

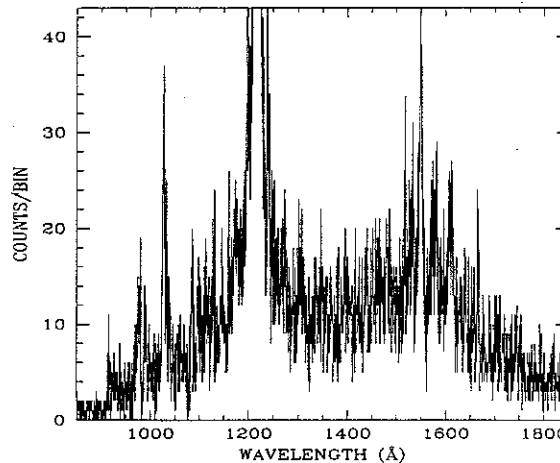
OBJECT: 4701 HH1

KEYWORDS: Herbig-Haro Object, High Excitation

COMMENTS:

Faint, high excitation HH Object. HUT is looking for any sign of O VI 1035, and evidence of any H<sub>2</sub> fluorescence in the sub-Lyman-alpha region.

Brightest Guide Star is actually embedded in nebulosity, which may (or may not) be visible on HUT CCTV. This is a tough GS locate with only two stars, neither of which is very close to the object position.



ID: 4701-1 H=Prime SciPgm= H11

Names: HH1

Info: V=15.5 Wupmag=12.9

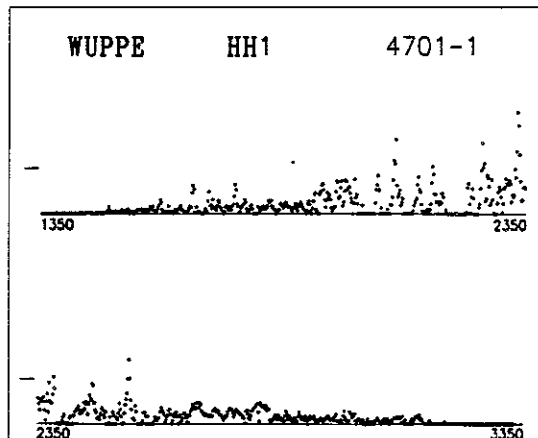
% Pol:

Pos Ang:

Mechanism: Dust? and reflection nebula

Comments:

May be too faint for WUP. Some em lines around 1900 Angstroms but only 2-3X continuum (requires 12-14 hour obs with IUE). Em lines typically unpolz'd. Weak ISP.

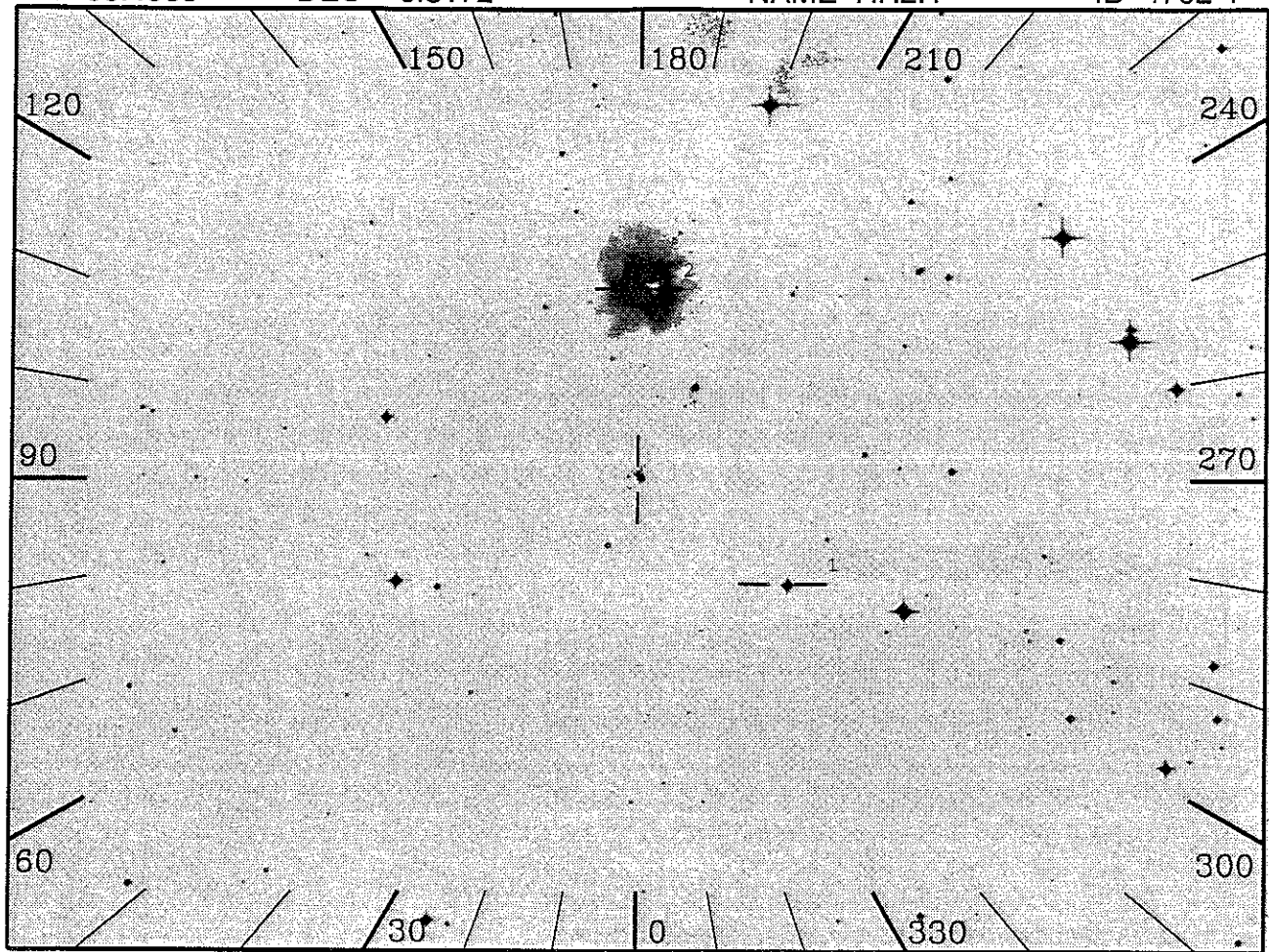


RA 83.4988

DEC -6.8172

NAME HH2H

ID 4702-1



20", 2000(s), Night

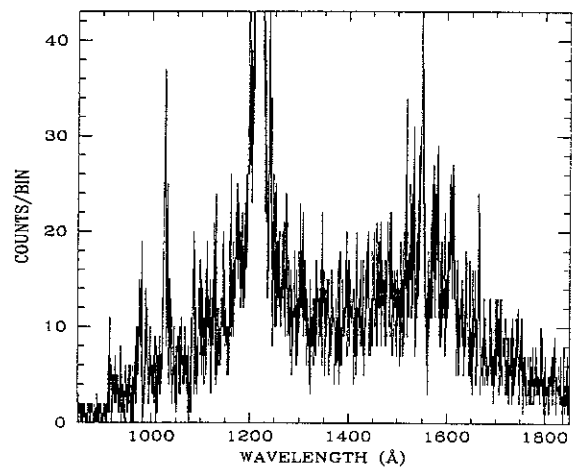
OBJECT: 4702 HH2H

KEYWORDS: Herbig-Haro Object, High Excitation

COMMENTS:

Faint, high excitation HH Object. HUT is looking for any sign of O VI 1035, and evidence of any H<sub>2</sub> fluorescence in the sub-Lyman-alpha region.

Brightest Guide Star is actually embedded in nebulosity, which may (or may not) be visible on HUT CCTV. This is a tough GS locate with only two stars, neither of which is very close to the object position.



ID: 4702-1 H=Prime SciPgm= H11

Names: HH2H

Info: V=15.9 Wupmag=12.9

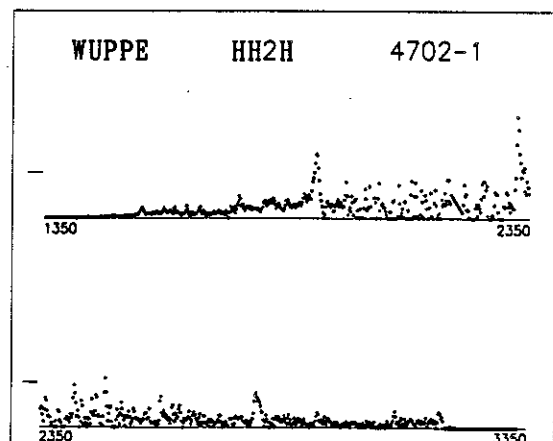
% Pol:

Pos Ang:

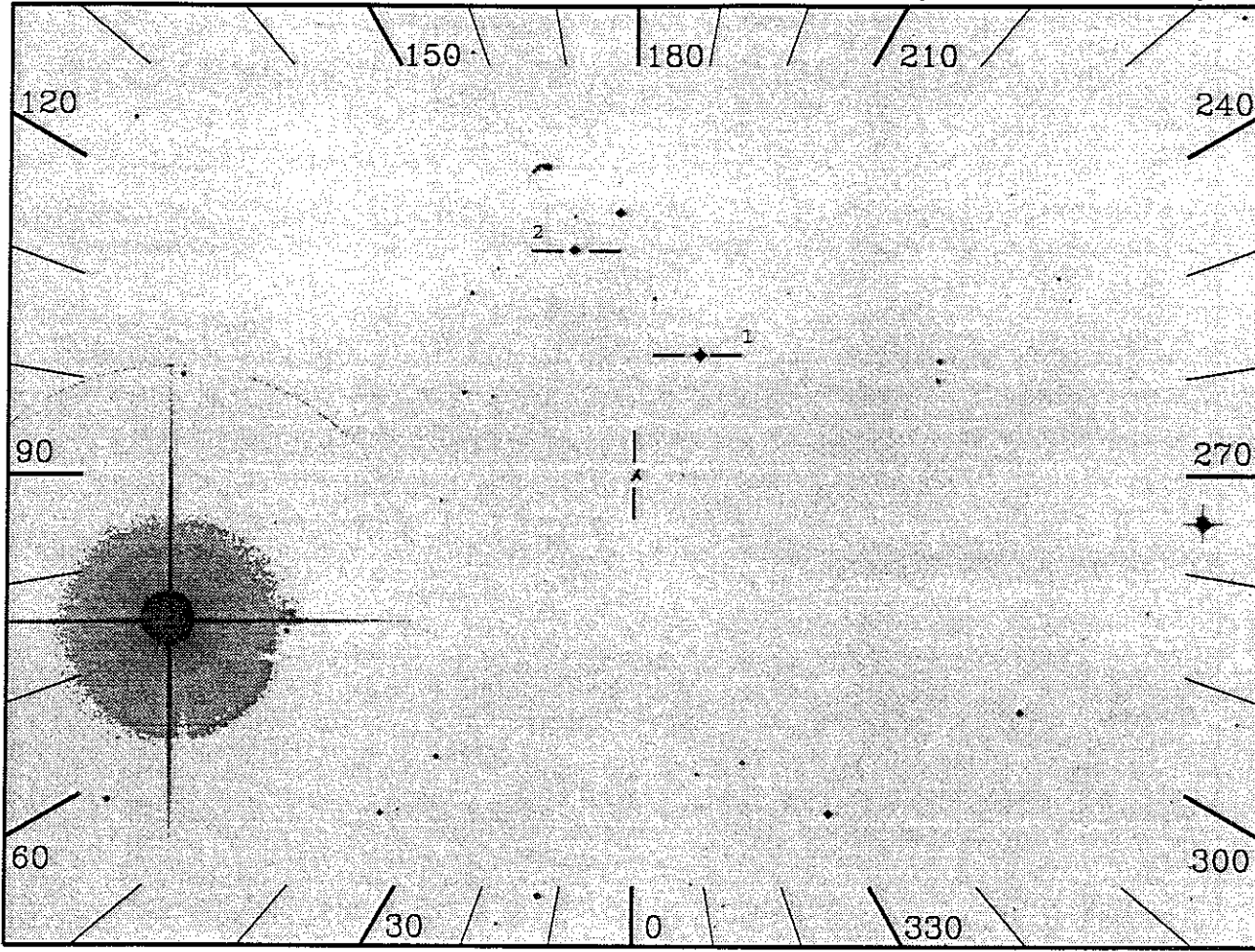
Mechanism: Dust? and reflection nebula

Comments:

May be too faint for WUP.



TGT/ASTRO2/FIN A



20", 2000(s), Night

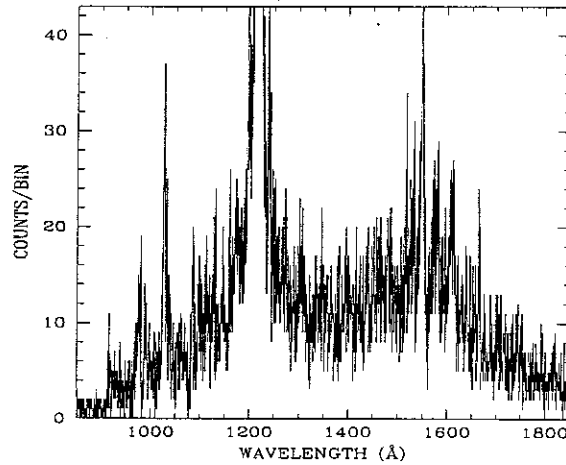
OBJECT: 4703 HH43

KEYWORDS: Herbig-Haro Object, Low Excitation

COMMENTS:

Faint, low excitation HH Object. HUT is looking for any evidence of any H<sub>2</sub> fluorescence in the sub-Lyman alpha region.

Bright Star nearby necessitates the use of TP BR\_OUT to protect the HUT CCTV. This is a tough GS locate with only two stars, neither of which is very close to the object position.



ID: 4703-1 H=Prime SciPgm= H11

Names: HH43

Info: V=16.0 Wupmag=12.9

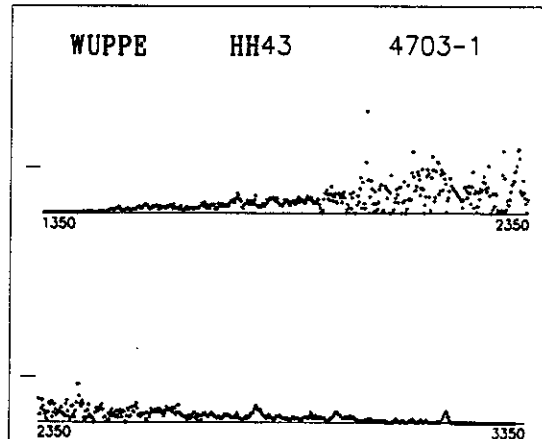
% Pol: 2.9%

Pos Ang: 57

Mechanism: Dust? and reflection nebula

Comments:

May be too faint for WUP. Continuum is polarized but em lines are not.



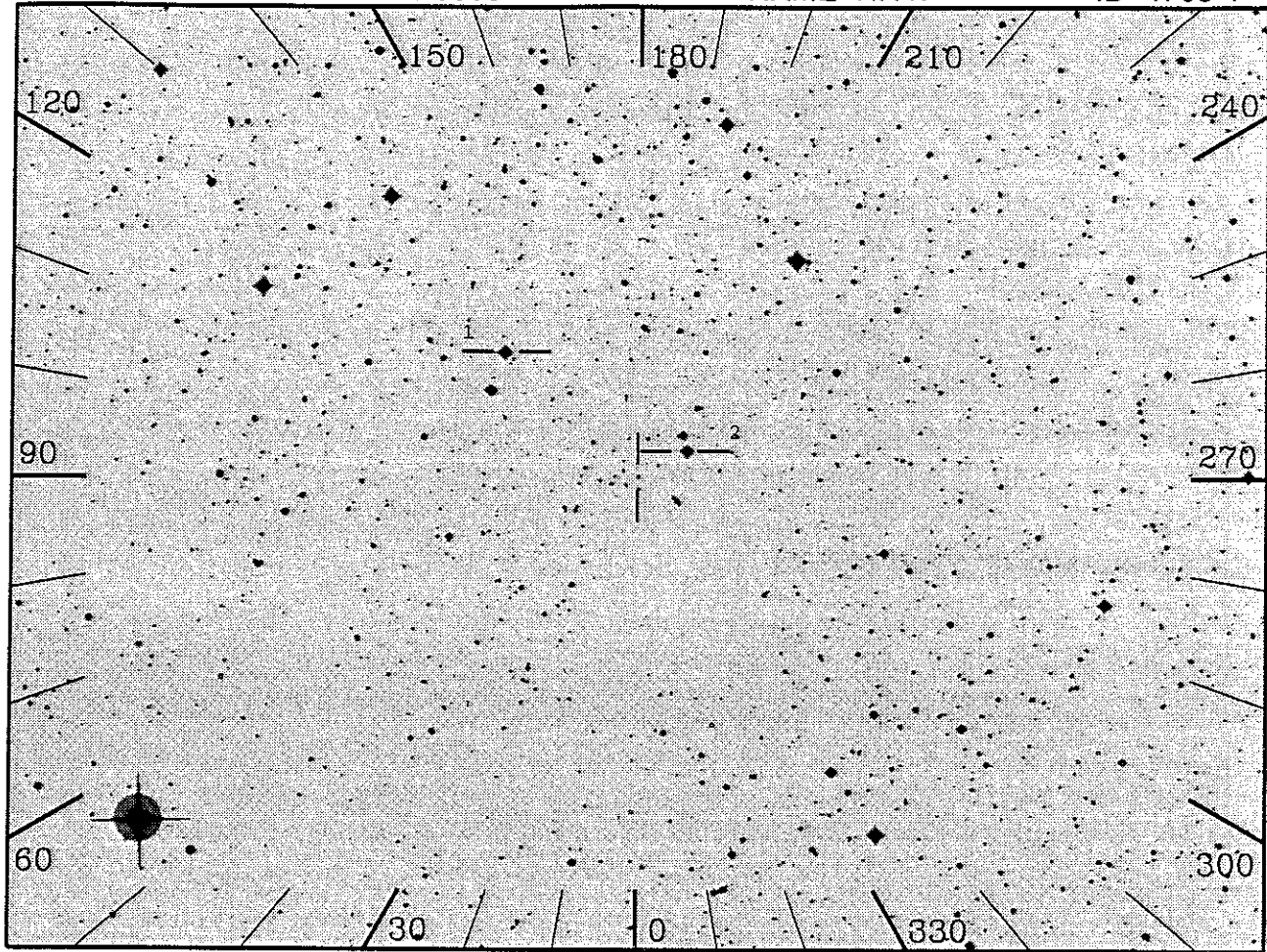


RA 126.0950

DEC -50.8333

NAME HH47

ID 4705-1



20", 2000(s), Night

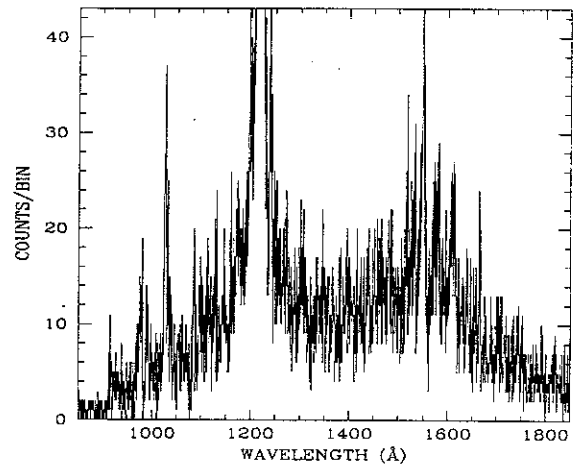
OBJECT: 4705 HH47

KEYWORDS: Herbig-Haro Object, Low Excitation

COMMENTS:

Faint, low excitation HH Object. HUT is looking for any evidence of any H<sub>2</sub> fluorescence in the sub-Lyman alpha region.

This is a tough GS locate with only two stars, neither of which is very close to the object position.



ID: 4705-1 H=Prime SciPgm= H11

Names: HH47

Info: V=17. Wupmag=12.7

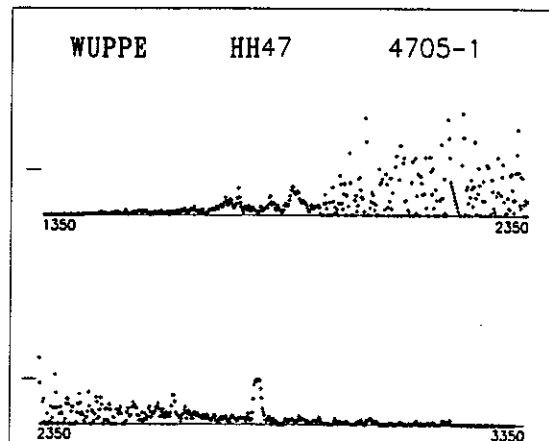
% Pol:

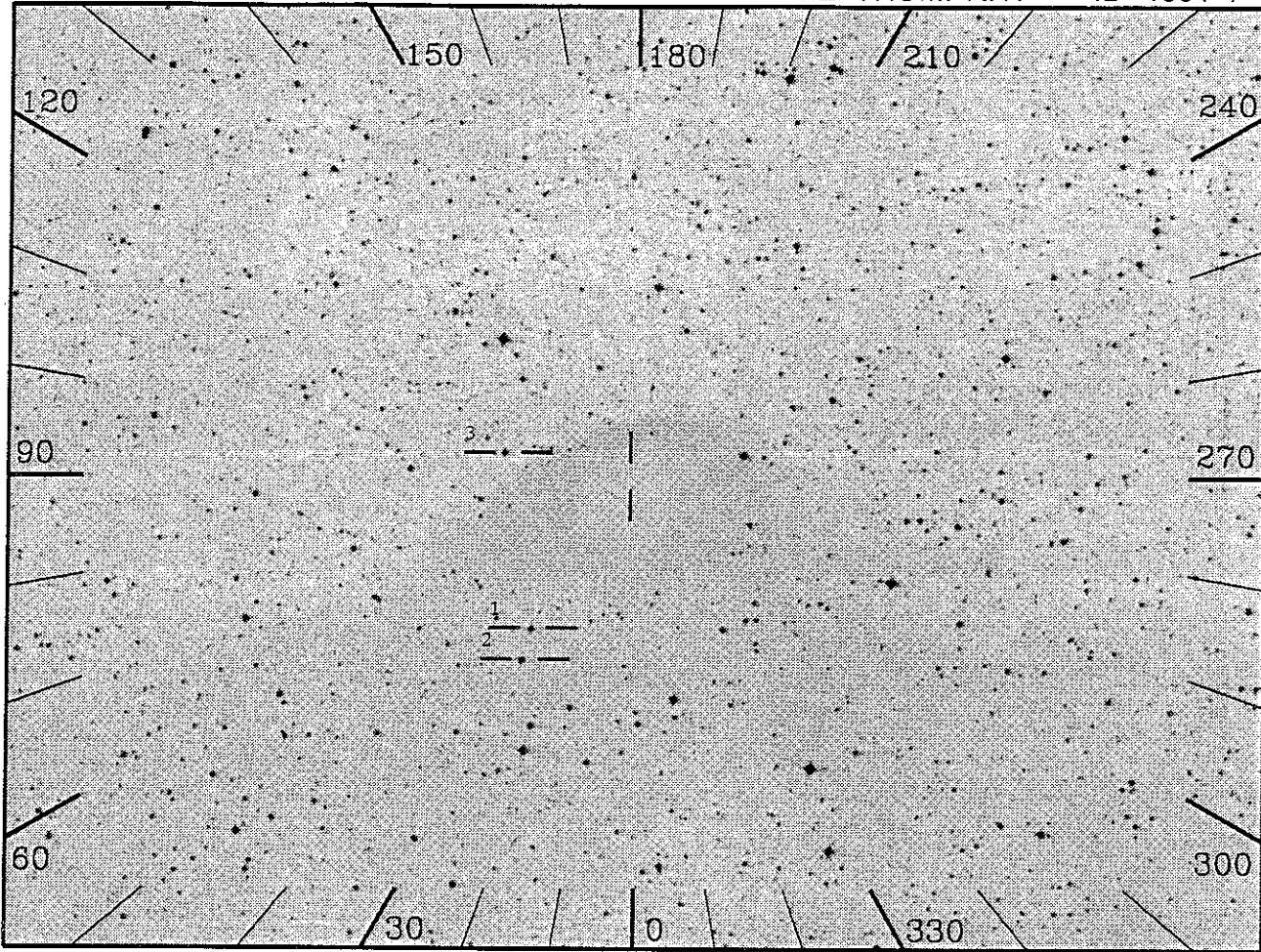
Pos Ang:

Mechanism: Dust? and reflection nebula

Comments:

May be too faint for WUP. Has interesting variations in PA across the region. Very large pol in optical, in nearby regions, but emission knots A/B/C are almost unpolz'd.





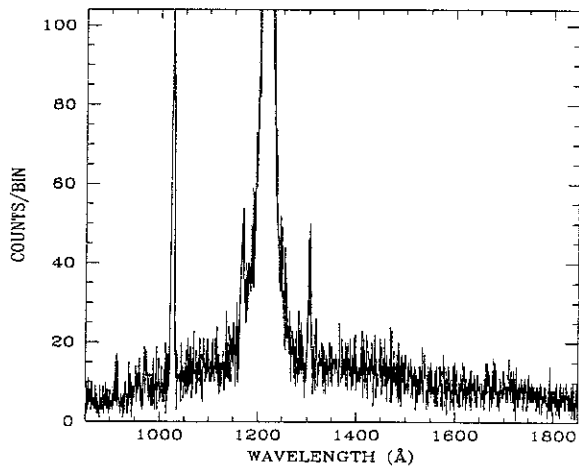
19x197, 2000(s), Night

OBJECT: 4801 THUMPRNT

KEYWORDS: High lat. Cloud Reflecting Milky Way light

COMMENTS:

Scattered light spectrum will be faint and resemble a B star spectrum overlaid with airglow. FUV measurements of scattered light rare and valuable. Large 19x197 aperture used during night observation. If launch slips, slit 5 MUST BE CLOSED 2 minutes prior to day.



ID: 4801-1 U=Prime SciPgm= U06

Names: THUMPRNT

Info: V= Wupmag=

% Pol:

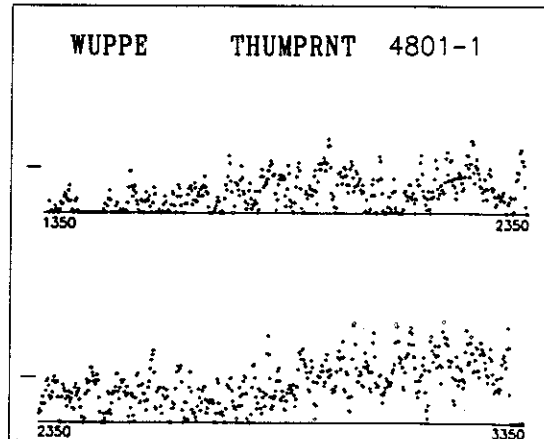
Pos Ang:

Mechanism:

Comments:

Object (dark nebula) is too faint for WUPPE.

IUE data used for simulated spectrum is that of A665 (9319).

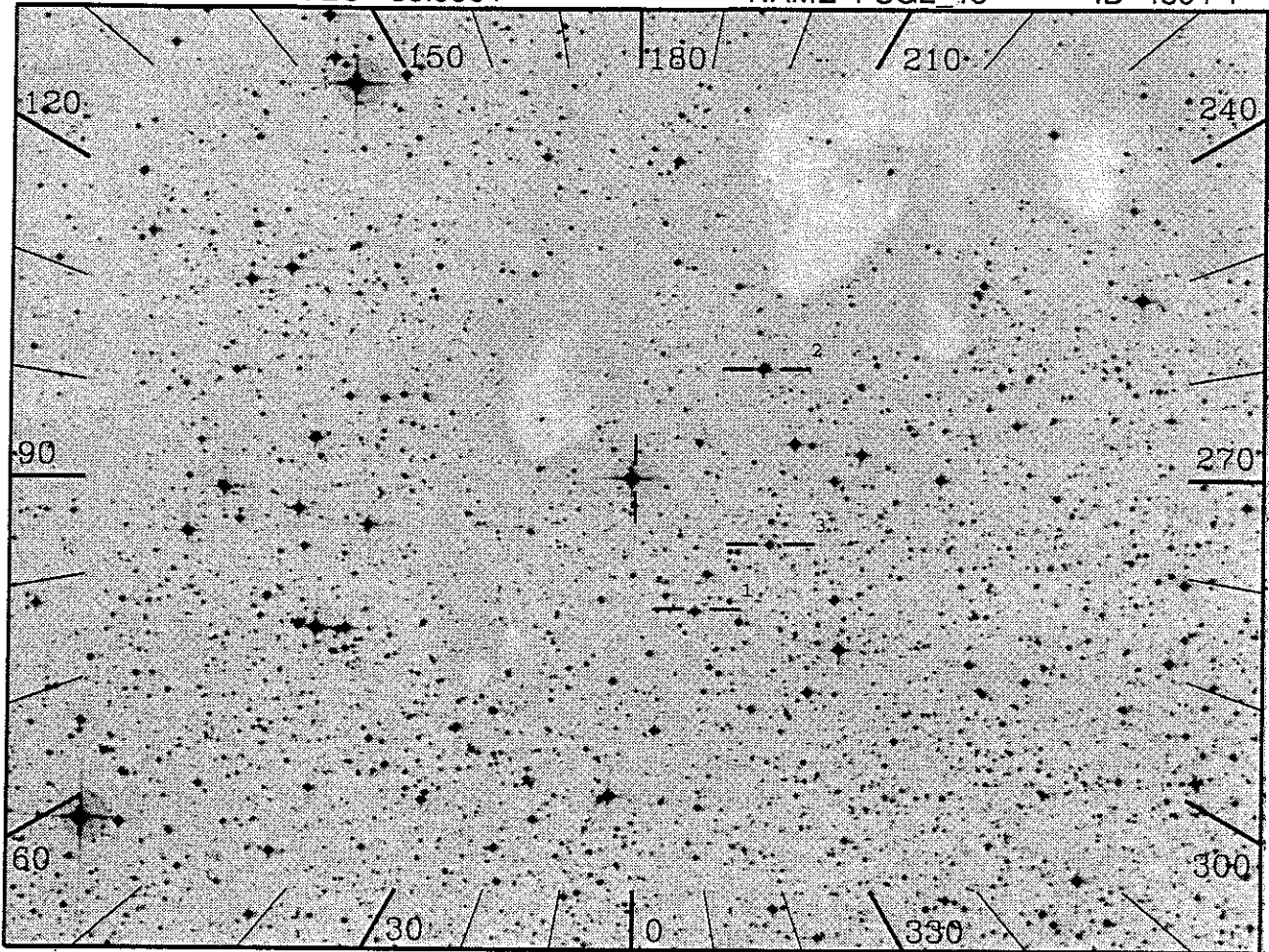


RA 121.8743

DEC -35.9564

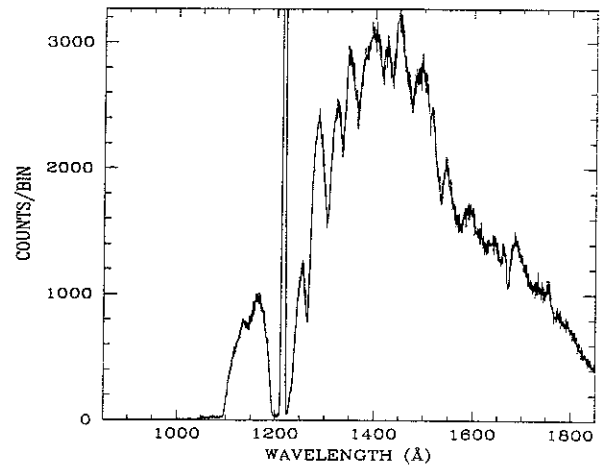
NAME FSGL\_15

ID 4804-1



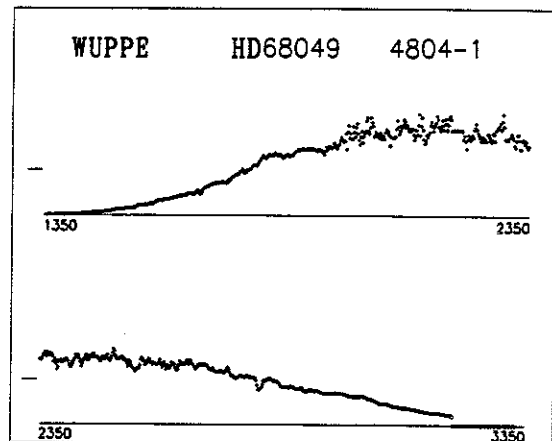
20, 2000(s), Night

OBJECT: 4804 FSGL\_15  
 KEYWORDS: Foreground late B star  
 COMMENTS:  
 Observing serendipitous B star



ID: 4804-1 U=Prime SciPgm= U06  
 Names: FSGL\_15  
 HUT=HD68049  
 Info: B8/9III/IV V= 9.7 Wupmag=7.98  
 % Pol: about .2%  
 Pos Ang:  
 Mechanism: Interstellar dust  
 Comments:

HUT & WUP observing HD68049, near dark nebula. Appears unreddened, expect only slight pol.  
 IUE data used for simulated spectrum is that of Xi2-Cet (0604).

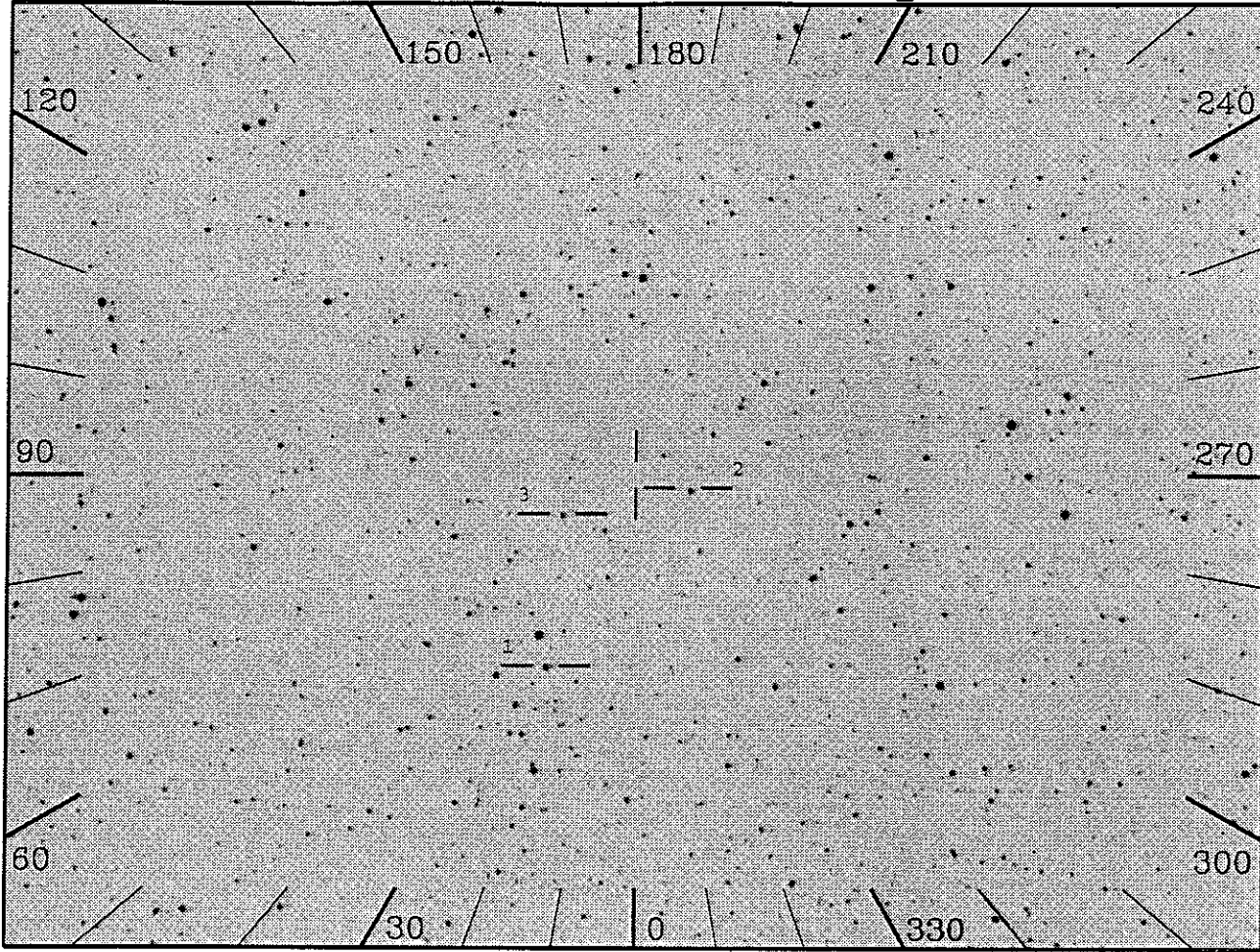


RA 9.0625

DEC 52.5911

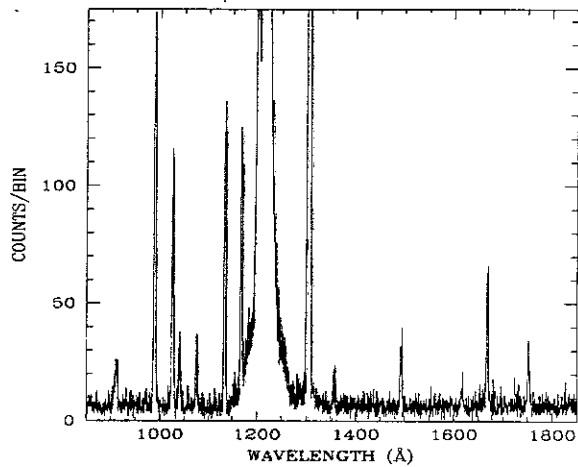
NAME CB 4

ID 4807-1



10x56, 2000(s), Day

OBJECT: 4807 CB\_4  
 KEYWORDS: High lat. Cloud Reflecting Milky Way light  
 COMMENTS:  
 Dayglow will likely swamp cloud reflected light.  
 Useful for airglow observation. If target is  
 rescheduled during night, changing to slit 5 (19x197)  
 during night would make observation more useful.



ID: 4807-1 U=Prime SciPgm= U06  
 Names: CB\_4  
 Info: V= Wupmag=  
 % Pol:  
 Pos Ang:  
 Mechanism:  
 Comments:

Object (dark nebula) is too faint for  
 WUPPE.  
 IUE data used for simulated spectrum is  
 that of A665 (9319).

