

AVON
FLEX

REFLECTOR 6

3873 a 1874

Enfoque (24-5-72)

$F_{\text{colimador}} = 25.0$

$$D_{H\gamma} = 20 \frac{\text{\AA}}{\text{mm}} ; F_{\text{cám.}} = 28.3$$

$$D_{H\gamma} = 40 \frac{\text{\AA}}{\text{mm}} ; F_{\text{cám.}} = 39.0$$

$$D_{H\gamma} = 110 \frac{\text{\AA}}{\text{mm}} ; F_{\text{cám.}} = 8.0$$

(diaphr. 2.5)

Enfoque (2-6-72)

$$D_{H\gamma} = 110 \frac{\text{\AA}}{\text{mm}} ; F_{\text{cám.}} = 7.5$$

(diaphr. 2.8)

Enfoque (11-6-73)

$$D_{H\gamma} = 110 \frac{\text{\AA}}{\text{mm}} ; F_{\text{cám.}} = 6.5 \text{ (diaphr. 2.8)}$$

t. exp. creo bien - 2 seg (con 1 vidrio esmerilado)

Enfoque (1-XII-77)

$$D_{H\gamma} = 40 \frac{\text{\AA}}{\text{mm}} ; \left. \begin{array}{l} F_{\text{cám.}} = 31.5 ; F_c = 2^1 \text{ con 2 vid. esmerilados} \\ F_{\text{cám.}} = 32.5 ; N_c = 1^m \text{ (ver la pag. 155)} \end{array} \right\}$$

Estado de las Imágenes

p pulsante
m móvil
d difusa
i irregular

Enfoque (1-9-70)

$$F_{\text{colimador}} = 25.0$$

$$D_{H_g} = 20 \frac{\text{Å}}{\text{mm}}, F_{\text{cám}} = 28.3$$

$$D_{H_g} = 40 \frac{\text{Å}}{\text{mm}}, F_{\text{cám}} = 33.5$$

$$D_{H_g} = 110 \frac{\text{Å}}{\text{mm}}, F_{\text{cám}} = 7.0$$

(6-8-71)

34.0

6.0

Observadores

K Kuciewicz
F Ferrer
G Gómez Ana Elvira
J Jaschek
M Malaroda
B Brondi
L García Lía
H Hernández
A Arnal
Gr Gerhardt
LG López García
HL Levato Hugo
LL Luis López

Tiempo de Revelado

D-19

14°	7 ^m .4
16°	6 ^m .4
18°	5 ^m .8
20°	5 ^m .0
22°	4 ^m .4
24°	3 ^m .9

Diafragmas de Aluminio

A	d = 11 cm	$m_A = 0.8 + m_f$
B	d = 19	$m_B = 1.63 + m_f$
C	d = 21.5	$m_C = 2 + m_f$

Z AVON
AVON  AVON
AVON AVON

D desde 5. X. 69

$$T.U. = T.A. + 3^h$$

D desde 23. I. 74 hasta 30. IV. 74 $T.U. = T.A. + 2^h$

2

8/9/9/70 M+HL T.S T.U A.H med

Hu 3873

HR 7254 IIa-0 25^m 20^h 43^m 21^h 07^m 1^h 23^m 1^h 49^m

HX 3844

9/10-IX-70 A

HR 6916 IIa-0

" "

" "

" "

" "

" "

HX 3875

13/14-IX-70 A

HD 163472 IIa-0 7^m.5 20^h 13.5 21^h 01^m 1^h 13.5 1^h 21^m

" " 11^m.5 21^h 01.5 21^h 13^m 1^h 21^m.5 1^h 32^m

HD 164284 " 2^m.8 21^h 22.2 21^h 25^m 1 43.7 1 46.5

" " 4^m.3 21^h 25.7 21^h 30^m 1 47 1 51.3

HD 177756 " 0^m.5 22 06.5 22 07 2 27.5 2 28

" " 1^m.0 22 08 22 09 2 29 2 30

HR 8137 " 2^m.8 22 31.2 22 34 2 51.2 2 54

" " 4^m.8 22 34.2 22 39 2 54.2 2 59

" " 8^m.3 22 41.7 22 50 3 01.7 3 10

HR 8141 " 4^m.0 23 08 23 12 3 20 3 24

" " 6^m.7 23 13.3 23 20 3 25.3 3 32

Disp/Ran.

$$40 \frac{f}{m} \quad \frac{2R+20}{40}$$

$$110 \frac{f}{mm} \quad \frac{11R+12}{40}$$

$$1R+\frac{5}{40}-A$$

$$4 \quad Fe \quad 5^s \text{ /cm.} \quad t = 13.2 \quad f/\text{cm} = 35.0$$

$$5 \quad Fe \quad 1^s \quad f/\text{cm} = 7.0$$

$$5 \quad Fe \quad 1^s \text{ /cm} \quad f/\text{cm} = 7.0 \quad HR 6684$$

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HR 6712

HR 7236

H) 202671

H) 202753

4

T. S.

T. U

A. H. melco

13/14-IX-70 A

HX 3875 HR 8141. IIa-0 12^m 23 21 23 23 3 33 3 45HX 3876 HR 8353. IIa-0 30^s 23 36.5 23 37 3 57.5 3 58" " 45^s 23 37.2 23 38.0 3 58.2 3 59" " 1^m 23 38.9 23 40 4 00 4 01~~Continúa en la pag. 6.~~

HX 3876 HR 8376. "

HR 8592. "

Continúa en la pag. 6. Ver el signo. ①

18-19/9/70 M+HL

HX 3882 HR 7291. IIa-0 20^m 20 33 20 53 00 44 01 04 + 1^h 29HR 7496. " 8^m 21 12 21 20 01 23 01 31 + 1^h 34~~HU 3883~~ 19/20/9/70 M+HLHU 3883 HR 7590. IIa-0 16^m 21 36 21 53 01 33 01 50HU 3884 HR 7913. " 6^m 22 19 22 25 02 16 02 22HU 3885 HR 7950. " 10^m 22 51 23 03 02 48 03 00HU 3886 HR 8305. " 33^m 23 27 00 11 03 24 04 08HU 3887 HR 9062. " 81^m 00 33 01 56 04 30 05 53HU 3888 HR 100. " 23^m 02 18 02 43 06 15 06 40HU 3889 HR 804. " 5^m 03 01 03 06 06 58 07 03HU 3890 HR 919. " 31^m 03 43 04 15 07 40 08 12

✓

Fe 1^s c/m

f/c 7.0

120°/mm 5-1

4

Fe 3s

 $\pm 18^{\circ}, 2$

3

402/mm

Faint

$$2R + \frac{20}{40} = L$$

5

Fe 5

$$t = N \cdot 2$$

35.0

$\frac{20}{40}$ A.

con
esmeril

11

11



354

 $t = 14.9$

6

112

 $t = 13.9$ 

5

10

11

1

HU 3891A HR 1251 : IIa-O 16^m 04 40 04 50 08 31 08 47 //

23/24/9/70 M+HL

HU 3892A HR 7883 : IIa-O 42^m 22 04 22 47 01 44 02 27

HU 3893A HR 8450 : " 10^m 23 13 23 24 02 53 03 04

HU 3894A HR 8675 : " 8^m 00 13 00 21 03 53 04 01

HU 3895A HR 191 : " 42^m 01 03 01 47 04 43 05 27

Volume 12

04x 38ff 13/14-IX-70 HR 8386 : A 2^m 8 00 37.2 00 40 04 58.2 05 01

" : IIa-O 4^m 8 00 40.2 00 45 05 01.2 05 06

" : " 8^m 4 00 45.6 00 54 05 06.6 05 15

Handwritten

HR 8919 : " 3^m 9 01 07.1 01 11 05 28.1 05 32

" : " 6^m 7 01 11.3 01 18 05 32.3 05 39

" : " 12^m 0 01 19 01 31 05 40 05 52

" : "

HR 9031 : " 2^m 0 01 41 01 43 06 02 06 04

" : " 3^m 5 01 44.5 01 48 06 05.5 06 09

" : " 6^m 0 01 49 01 55 06 10 06 16

HR 9108 : " 3^m 5 02 08.5 02 12 06 29.5 06 33

" : " 6^m 0 02 13 02 19 06 34 06 40

" : " 11^m 0 02 20 02 31 06 41 06 52

12/14-18

A

T.A.

T.U.

4x 3878	HR 674	IIa-O	4 ^s	300	302720.3	721	
"	"	"	1 ^m	301	302722	723	
HR 939	"	"	3 ^m .5	314.5	318734.5	738	
"	"	"	6 ^m	319	325739	745	
"	"	"	11 ^m	326	337746	757	
HD 32990	"	"	2 ^m .7	352.3	355812.3	815	
"	"	"	4 ^m .7	356.3	401816.3	821	
"	"	"	8 ^m .3	401.7	410821.7	830	
14-15/9/20							
4x 3879	HD 148184	IIc-O	1 ^m .2	1938.8	19422354.8	2356	+3 15
"	"	"	55 ^s	1941	19422357	2358	+3 17
HD 159975	"	"	2 ^m .0	1950	19520007	0009	
"	"	"	3 ^m .5	1952.5	19560009.5	0013	
HD 161056	"	"	14 ^m .5	2005.5	20200022.5	0037	
"	"	"	25 ^m	2022	20400039	0104	
HD 177756	"	"	40 ^s	2229.4	22390244.4	0245	
"	"	"	1 ^m .00	2230	22310246	0247	
HD 183656	"	"	12 ^m	2249	23010305	0317	
HD 184279	"	"	26 ^m	2322	23480338	0404	+4 03

 $\Delta t = +1$

9

HD

110 H₂/mm

5 Fe 1st c/cm

F_{0.4} = 7.0

HD 14228

"

"

"

"

HD 19400

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HR 1659

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HD 148184 = HR 6118

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4

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HR 6567

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3

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de mable.

HR 6601

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5

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HR 7236

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HR 7415

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HR —

10.

14-15/IX/70

A

Hx 3880	HD 210934	He-O	4 ^m .3	0 04.7	0 09.4	21.7	4 26
"	"	"	7 ^m .5	0 09.5	0 17.4	26.5	4 34
HD 210934 = HR 8478	"	"	3 ^m .2	0 31.8	0 35.4	47.8	4 51
"	"	"	5 ^m .4	0 35.6	0 41.4	51.6	4 57
"	"	"	10 ^m	0 42	0 52.4	58	5 08
HR 9087	"	"	6 ^m .7	1 05.3	1 12.5	22.3	5 29
"	"	"	13 ^m	1 13	1 26.5	30	5 43
HR 250	"	"	50 ^s	1 37.2	1 37.5	53.8	5 54.5
"	"	"	1 ^m .3	1 37.7	1 39.5	54.7	5 56
"	"	"	2 ^m .2	1 39.8	1 42.5	56.8	5 59
HR 364	"	"	4 ^m .3	1 57.7	2 02.6	14.7	6 19
"	"	"	7 ^m .5	2 03.5	2 11.6	20.5	6 28
"	"	"					

Hx 3881 14-15/IX/70 A

HR 612	He-O	1 ^m .2	2 26.8	2 28.6	42.8	6 44
"	"	2 ^m .0	2 29	2 31.6	45	6 47
"	"	3 ^m .5	2 31.5	2 35.6	47.5	6 51
HR 1100	"	2 ^m .2	2 49.8	2 52.7	04.8	7 07
"	"	4 ^m .0	2 53	2 57.7	08	7 12
"	"	6 ^m .7	2 57.3	3 04.7	12.3	7 20

110 R/mm

J Fe 15/cm

F_{cdm} = 7.0

HR 8478

"

"

21

"

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4

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7

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7

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110 A/cm

"

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F_{cdm} = 7.0

"

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"

"

14-15/IX/70 A

4X 3881	HR 1240	Ia0	1 ^m 3 ^s 11.2	3 R 5728.3	796
"	"	"	2 ^m 2 ^s 12.7	3 R 5739.8	732
"	"	"	4 ^m 0 ^s 15	3 R 5732	736

(of course same as before) 4th (medium)
M+HL

HU 3882	HR 8937	Ia0	31 ^m 0 ^h 11 ^m	0 ^h 47 ^m 0 ^h 28 ^m	1 ^h 04 ^m
HU 3883	HR 125	"	63 ^m 1 ^h 08 ^m	2 ^h 20 ^m 1 ^h 25 ^m	2 ^h 37 ^m
HU 3884	HR 596	"	34 ^m 3 ^h 16 ^m	3 ^h 56 ^m 3 ^h 37 ^m	4 ^h 13 ^m
HU 3885	HR 897	"	5 ^m 4 ^h 19 ^m	4 ^h 24 ^m 4 ^h 35 ^m	4 ^h 40 ^m

1-2/XII/70

19th XII/70

A.

4X 3886	HD 33904	1039-0	30 ^s 4 ^h 38 ^m 5	4 ^h 39 ^m 3 ^h 47 ^m 5	3 ^h 48 ^m + 1.5 0
3-4/XII-70	"	"	50 ^s 4 ^h 39 ^m 2	4 ^h 40 ^m 3 ^h 48 ^m 3 ^h 49 ^m	"
HD 7374	"	"	7 ^m 3 ^h 47 ^m 5	3 ^h 54 ^m 2 ^h 49 ^m 2 ^h 56 ^m	2 ^h 45 ^m 0
HD 24155	"	"	11 ^m 4 ^h 31 ^m	4 ^h 42 ^m 3 ^h 24 ^m 3 ^h 35 ^m	
"	"	"	18 ^m 4 ^h 42 ^m 3	4 ^h 50 ^m 3 ^h 35 ^m 3 ^h 53 ^m	4 ^h 55 ^m 0.
? HD 27279	"	"	4 ^m 3 ^h 12 ^m 7	5 ^h 17 ^m 4 ^h 15 ^m 7	4 20 30 ^m 0.
"	"	"	7 ^m 5 ^h 18 ^m 0	5 ^h 25 ^m 4 ^h 20 ^m 5	4 28
HD 29589	"	"	4 ^m 3 ^h 34 ^m 7	5 ^h 39 ^m 4 ^h 35 ^m 7	4 40 30 ^m 0
"	"	"	7 ^m 5 ^h 39 ^m 5	5 ^h 47 ^m 4 ^h 40 ^m 5	4 47 ^m 5
4X 3887	HD 30076	10390	12 ^m 5 ^h 6 ^h 28 ^m 5	6 ^h 34 ^m 5 ^h 22 ^m 5	5 ^h 35 ^m 1 ^h 45 ^m 0
HD 30612	"	"	12 ^m 5 ^h 6 ^h 45 ^m 5	6 ^h 58 ^m 5 ^h 47 ^m 5	5 57 ^m 2 ^h 0.

Julia?
No la puse
preguntar

110 A/mm

5 Fe 1³/cm $F_{\text{cm}} = 7.0$

"

"

"

40 A/mm

3 Fe 6³/term $t = 18^{\circ}8$ $F_{\text{cm}} = 33.5$

inog. cl.

 $2R + \frac{20}{40} = L$

3

"

 18°

"

"

3

"

"

"

 $\frac{15}{40} = A$

2

"

 17°

"

irregular -

10 A/mm

4 Fe 1³ $t = 14^{\circ}2$ $F_{\text{cm}} = 7.0$

"

"

"

"

"

 $16^{\circ}1$

"

"

 $16^{\circ}0$

"

"

 $15^{\circ}8$

"

"

"

"

"

 $15^{\circ}8$

"

"

"

"

"

"

"

"

 $15^{\circ}7$

HR 1508

"

"

 $15^{\circ}6$

HR 1541

HD 27279:
 $\alpha = 4^h 13^m 9^s$, $\delta = +39^{\circ} 36'$
 $K 2$, $m_v = 7.8$, $m_p = 8.9$

14.

3-4/XII/70

T. S.

T. V.

Hx3887	HD 36412	103a-0	1 ^h .5	7 ^m 12.5	7 ^m 17.5	6 ^h 17.5	6 ^h 19 ^m	1 ^h 45 ^m .0
"	"	"	2 ^h .5	7 ^m 17.5	7 ^m 17.5	6 ^h 19 ^m	6 ^h 21.5	"
HD 36719	"	"	14 ^h .5	7 ^m 40.5	7 ^m 55 ^m	6 ^h 43 ^m	6 ^h 57.5	"
HD 36861-2	"	"	7 ^h .5	8 ^m 09 ^m	8 ^m 16.5	7 ^h 10.5	7 ^h 18 ^m	2 ^h 45 ^m .0

20-21/III/70 K.

Hu38881	HR 4313	103a-E	20	11 54	12 14	3 53	4 13	+ 1 01
Hu38892	HR 4706	"	14	12 45	12 59	4 44	4 58	+ 0 31

8-9/I/71 K.

Hu38903	HR 1088	103a-E	4	5 00	5 04	1 40	1 44	+ 1 30
Hu38914	HR 1640	"	36	5 52	6 28	2 32	3 08	+ 1 08
Hu38925	HR 2781	"	4	7 36	7 40	4 16	4 20	+ 0 21
Hu38936	HR 2782	"	5	7 50	7 55	4 30	4 35	+ 0 35

15-16/I/71 K.

Hu38941	HR 2907	103a-E	34	9 00	9 34	5 13	5 47	+ 1 45
Hu38952	HR 3872	"	30	10 08	10 38	6 21	6 51	+ 0 41
Hu38963	HR 4292	"	20	11 00	11 20	7 13	7 33	+ 0 12

110 $\frac{A}{mm}$	4 Fe 15	$F_{col} = 7.0$	$t^{\circ} 15.6$	HR 7855
"	"	"	"	"
"	"	"	15.1	HR 1873
"	"	"	15.1	HR 1879-80

40 $\frac{A}{mm}$		$F_{col} = 25.0$		
25-7	4 Ne 24 ¹	$F_{cam} = 12.5$	$t_{amb} = 20.2$	$R: \frac{L}{7} = 1 + \frac{33}{40}$
"	"	"	19.9	

40 $\frac{A}{mm}$				
25-7	5 We 24 ¹	$F_{cam} = 33.5$	$t_{amb} = 22.6$	
"	"	"	18.5	
"	"	"	17.6	-p1

40 $\frac{A}{mm}$				
25-7	5 Ne 24 ¹	$F_{cam} = 33.5$	$t_{amb} = 24.8$	
"	"	"	24.5	
"	"	"	24.3	

16

16-17/I/71 K.

T. S.

T. V.

HU 38974 HR 1696 · 103a-E 5 6 19 6 24 2 28 2 33 + 1 11
 HU 38986 HR 2501 · " 18 7 24 7 42 3 33 3 51 + 0 49

17-18/I/71

M + HL

HU 38999 HR 3007 · IIa-0 25 8 57 9 22 5 00 5 25 + 1 27
 HR 3018 · " 25 9 34 9 59 5 36 6 00 + 2 04
 HR 3591 · " 10 10 10 10 20 6 13 6 23 + 1 16
 HR 4061 · " 40 10 44 11 24 6 46 7 27 + 0 47

20-21/I/71 M + HL

HU 3900 HR 1412 · IIa-0 7^m 4 39 4 46 0 31 0 38 + 0 15
 HU 3901 HR 1465 · IIa-0 1^m 5 06 5 07 0 58 0 59 + 0 33
 HU 3902 HR 1544 · IIa-0 33^m 5 24 6 06 1 16 1 58 + 0 50

19-20/I/71 K.

HU 3903 HR 1948 · 103a-E 1,5 8 05 8 06,5 4 01 4 02,5 + 2 27
 HU 3904₂ HR 2944 · " 6 8 28 8 34 4 24 4 30 + 0 54
 HU 3905₃ HR 3189 · " 40 8 46 9 26 4 42 5 22 + 0 59

24-25/I/71 M + HL

40 #/mm

HU 3906 HR 1389 · IIa-0 36 6 14 6 52 1 50 2 29
 HU 3907 HR 1702 · " 1^m 5 7 37 7 38,5 3 13 3 14,5

1731

40 Å/mm

cielo

25-7

5 Ne 24³F_{can} = 33.5t_{amb} = 26.3

"

"

"

"

"

25.8

[e]

120 Å/mm

4 Fe 3⁵

Fe 201

t_{amb} 22.8

$$11R + \frac{12}{40} = L$$

"

"

"

"

22.4

$$1R + \frac{5}{40} = A$$

3

"

"

"

23.0

nubes

Fe

noche

F_{can} = 33.5t_{amb}.

40 Å/mm

6⁵

5

26° 4.

$$2R + \frac{20}{40} = L$$

6⁵

5

"

$$\frac{17}{40} = A$$

3³ + 3⁵

4

"

velo.

40 Å/mm

25-7 con De

5 Ne 24³F_{can} = 33.5t_{amb} = 22.0

"

"

"

"

"

21.5

"

"

"

"

"

20.8 se nullo.

t_{amb}

$$L = 2R + \frac{20}{40}$$

5 Fe

6⁵F_{can} = 33.5

19.7

$$A = \frac{17}{40}$$

"

"

"

18

24-25/I/71

T.S.

T.U.

Hu 3908	HR 1998	IIa-0	8 ^m 7 49	7 59	3 25	3 35
Hu 3909	HR 2550	"	4 8 13	8 18	3 49	8 54
Hu 3910	HR 2763	"	9 8 40	8 50	4 15	4 25
Hu 3911	HR 3314	"	16 9 07	9 25	4 43	5.00
Hu 3912	HR 3487	"	16 9 43	10.00	5 19	5 36
Hu 3913	HR 3890	"	1,5 10 10	10 10,5	5 46	5 46,5
Hu 3914	HR 4023	"	16 10 25	10 42	6 00	6 17
Hu 3915	HR 4343	"	4,5 11 16	12 04	6 52	7 40

22-23/I/71 K.

Hu 3916	HR 1892	103a-E	5 6 05	6 10	150	155 + 0 34
Hu 3917	HR 1891	"	32 6 31	7 03	2 16	2 48 + 1 14

~~Hu 3918~~ 25-26/I/71 K.

Hu 3918	HR 1190	103a-E	8 5 17	5 25	0 50	0 58 + 1 34
Hu 3919	HR 1189	"	15 5 35	5 50	1 08	1 23 + 1 56
Hu 3920	HR 1754	"	36 7 09	7 45	2 42	3 18 + 2 09
Hu 3921	HR 1753	"	32 6 20	6 52	1 53	2 25 + 1 18
Hu 3922	HR 3011	"	22 8 36	8 58	4 09	4 31 + 1 04

1915

40 Å/mm

Feo Cam

t. amb.

2R+ $\frac{20}{40}$

5

Fe

6^r

33.5

18.8

"

"

"

 $\frac{17}{40}$

"

"

"

18.0

"

"

"

"

17.6

"

"

"

17.1

"

"

"

"

"

"

"

"

16.7

40 Å/mm $F_{cam} = 33.5$

25-7

4

Ne

24^d

F = 311

t. amb. = 27.7

"

"

"

"

27.5

40 Å/mm $F_{cam} = 33.5$

25-7

5

Ne

24^d

F = 310

t. amb. = 21.6

"

"

"

"

21.4

"

"

"

"

21.4

"

"

"

"

21.4

"

"

"

"

21.2

20 28-29/I/71 K. T. S. T. U.

Hu 3923	1 HR 1621	103a-E	8 5 16	5 24	0 37	0 45	+ 0 20
Hu 3924	3 HR 1948	"	1 6 20	6 21	1 41	1 42	+ 0 42
Hu 3925	4 HR 2128	"	8 7 10	7 18	2 31	2 39	+ 1 14

2-3/II/71 K.

Hu 3926	1 HR 1806	103a-E	34 5 38	6 12	0 39	1 13	+ 0 31
Hu 3927	2 HR 2129	"	30 6 26	6 56	1 27	1 57	+ 0 41
Hu 3928	3 HR 2155	"	7 7 07	7 14	2 08	2 15	+ 1 06
Hu 3929	4 HR 2624	"	24 7 30	7 54	2 31	2 55	+ 0 43
Hu 3930	5 HR 2956	"	32 8 10	8 42	3 11	3 43	+ 0 48
Hu 3931	6 HR 3367	"	14 9 02	9 16	4 03	4 17	+ 0 39
Hu 3932	7 HR 3744	"	52 9 46	10 38	4 47	5 39	+ 0 47
Hu 3933	8 HR 4082	"	30 10 48	11 18	5 49	6 19	+ 0 42
Hu 3934	9 HR 4494	"	7 11 43	11 50	6 44	6 51	+ 0 08

22-23/II/71 K.

Hu 3935	1 HR 2202	103a-E	32 6 46	7 18	0 29	1 01	+ 0 52
Hu 3936	2 HR 2895	"	36 7 48	8 24	1 31	2 07	+ 0 35
Hu 3937	3 HR 3278	"	40 8 48	9 28	2 31	3 11	+ 0 49
Hu 3938	4 HR 3832	"	42 9 51	10 33	3 34	4 16	+ 0 36

40 $\frac{A}{mm}$ $F_{c\dot{a}m} = 33.5$; $F_{col.} = 25.0$

25-7	3	N _e 24 ¹	F = 310	t _{amb} = 25.6	Pasen las
"	Con De	" N _e 24 ¹	"	25.5	grindes
"	"	"	"	25.4	de mble.

40 $\frac{A}{mm}$ $F_{c\dot{a}m} = 33.5$; $F_{col.} = 25.0$ t_{amb.}

25-7	5	N _e 24 ¹ C.S.L.	F = 310	24.8
"	"	"	"	24.6
"	"	"	"	24.5
"	"	"	"	24.3
"	"	"	"	24.0
"	"	"	"	23.8
"	"	"	"	23.5
"	"	"	"	23.3
"	"	"	"	23.3

40 $\frac{A}{mm}$ $F_{c\dot{a}m} = 33.5$; $F_{col.} = 25.0$ t_{amb.}

25-7	5	N _e 24 ¹	F = 310	21.4
"	"	"	"	20.9
"	"	"	"	20.4
"	"	"	"	20.4

22.

22-23/II/71

K.

T. S.

T. U.

H ₀ 3939	5 HR 4369	103a-E	40	11 28	12 08	5 11	5 51	+0	33
H ₀ 3940	6 HR 4628	"	36	12 36	13 12	6 19	6 55	+0	46

24-25/IV/71

K.

H ₀ 3941	7 HR 2226	103a-E	42	6 45	7 27	0 20	1 02	+0	54
H ₀ 3942	8 HR 2678	"	16	7 52	8 08	1 27	1 43	+0	55
H ₀ 3943	9 HR 2902	"	44	8 21	9 05	1 56	2 40	+1	11
H ₀ 3944	10 HR 3516	"	32	9 30	10 02	3 05	3 37	+0	57
H ₀ 3945	11 HR 4073	"	46	10 26	11 12	4 01	4 47	+0	29
H ₀ 3946	12 HR 4490	"	42	11 39	12 21	5 14	5 56	+0	22

19-20/II/71

M + H_L

H ₀ 3947	HR 1611	Ja ² 0	6 ^m	6 45	6 51	0 40	0 46
HR 1767	"	13 ^m	7 14	7 27	1 08	1 21	
HR 2400	"	16 ^m	7 53	8 09	1 47	2 03	
HR 2530	"	19 ^m	8 35	8 54	2 29	2 48	
HR 2906	"	5 ^m	9 18	9 17	3 06	3 11	
HR 3079	"	11 ^m	9 41	9 55	3 25	3 49	

7-8/III/71

K.

H ₀ 3948	1 HR 2497	103a-E (44)	7 18	8 02	0 10	0 54	+0	56	
H ₀ 3949	2 HR 2902	"	30	8 31	9 01	1 23	1 53	+1	14

40 $\frac{\text{\AA}}{\text{mm}}$ $F_{\text{c\acute{a}m}} = 33.5$; $F_{\text{col.}} = 25.0$

+ amb.

25-7

5 Ne 24⁺ $F = 310$

20.4

"

" "

"

20.1

40 $\frac{\text{\AA}}{\text{mm}}$

$F_{\text{c\acute{a}m}} = 33.5$; $F_{\text{col.}} = 25.0$

+ amb.

25-7

5 Ne 24⁺

$F = 310$

16.5

"

" "

"

16.0

"

" "

"

15.0

R

"

" "

"

14.3

"

" "

"

13.7

"

" "

"

13.0

120 $\frac{\text{\AA}}{\text{mm}}$

5

17.3

11R+12-L
40

"

1R+5-A
40

"

"

15.7

inter 5 m

40 $\frac{\text{\AA}}{\text{mm}}$

$F_{\text{c\acute{a}m}} = 33.5$; $F_{\text{col.}} = 25.0$

+ amb.

25-7

5 Ne 24⁺ e. v. e

$F = 310$

22.2

"

" "

21.9

24

7-8/III/71 K.

T.S

T.U.

H₀ 39503 HR 3542. 103a-E 42 9 26 10 08 2 18 3 00 + 0 55H₀ 39514 HR 4089. " 8 10 30 10 38 3 22 3 30 + 0 12

10-11/III/71 K.

H₀ 39521 HR 3485. 103a-E 3 10 42 10 45 3 03 3 06 + 2 00

21-22/2/71 M+HL

H₀ 3953 HR 1473. IIa-O 40^m 6 03 6 48 23 50 0 35H₀ 3954 HR 1666. " 1^m 5 7 08 7 10 0 55 0 57H₀ 3955 HR 2020. " 18 7 29 7 48 1 15 1 34H₀ 3956 HR 2714. " 24 8 54 9 20 2 41 3 07H₀ 3957 HR 2996. " 24 9 36 10 01 3 22 3 47H₀ 3958 HR 3410. " 25/0 17 10 43 4 04 4 30H₀ 3959 HR 3615. " 25 10 59 11 33 4 46 5 20H₀ 3960 HR 4534. " 30^{seg} 12 25 12 26 6 12 6 13H₀ 3961 HR 4520. " 12^m 12 44 12 56 6 31 6 43H₀ 3962 HR 4689. " 16 13 15 13 32 7 02 7 19H₀ 3963 HR 5028. " 1^m 5 13 44 13 47 7 31 7 33H₀ 3964 HR 4819. " 1^m 13 57 13 59 7 44 7 46

40 Å/mm $F_{\text{cam}} \approx 33.5$; $F_{\text{col.}} = 25.0$ $\theta_{\text{amb.}}$

25-7 5 $\text{K} \times 24^{\circ}$ v.e. $F = 310$ 21.3

" 3 " " 21.0

40 Å/mm

25-7 D_c 3 $\text{K} \times 24^{\circ}$ " 17.7

40 Å/mm $F_{\text{cam}} 33.5$ $F_{\text{col.}} = 25.0$

5 $F_{\text{cam}} = 33.5$ 21.1

$$L = 2R + \frac{20}{40}$$

" Fe 65.

" "

$$A = \frac{48}{40}$$

" " 19.4

" "

" " "

" " "

" " "

" " 19.0

" " "

" " "

" " 18.3

26

8-9/III/71

M+HL

TS

T.U.

HU3965	HR 2124.	IIa-0	33 ^m	7 02	7 36	23 47	0 20
HU3966	HR 2746.	"	68 ^m	8 02	9 16	0 47	1 01

22-23/III/71 K.

HU3967	1 HR 2902.	103a-E	15	7 48	8 03	23 40	23 55 + 0 23.5
HU3968	2 HR 2902.	"	10	8 15	8 25	0 07	0 17 + 0 48
HU3969	3 HR 3022	"	22	8 41	9 03	0 33	0 55 + 1 07
HU3970	4 HR 3920.	"	40	9 55	10 35	1 47	2 27 + 0 23
HU3971	5 HR 4136.	"	50	10 55	11 45	2 47	3 37 + 0 50
HU3972	6 HR 4135.	"	32	12 00	12 32	3 52	4 24 + 1 46
HU3973	7 HR 4736.	"	40	12 56	13 36	4 48	5 28 + 0 51
HU3974	8 HR 5051.	"	52	13 59	14 51	5 51	6 43 + 1 01
HU3975	9 HR 5586.	"	8	15 16	15 24	7 08	7 16 + 0 21

23-24/III/71 HL

HU3976	HR 3787.	IIa-0	57 ^m	9 53	10 51	1 45	2 44 + 1 ^h 00
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25-26/III/71 A

HT 3977	HD 130807.	IIa-0	1 ^h 6	12 34.5	12 36	4 18.5	4 20 - 2 ^h 1
"	"	"	2 ^h 8	12 37	12 40	4 21	4 24
HD 134759.	"	"	2 ^h 3	12 49	12 53	4 33	4 36 - 2 ^h 3
"	"	"	4 ^h 0	12 53	12 57	4 36	4 40

40 Å/mm

Fe.

t. amb.

2R + $\frac{20}{40}$ F_{caim} = 33.5

6s.

4

23° 4.

 $\frac{18}{40}$

"

4

se nubló

40 $\frac{A}{mm}$ F_{caim} = 33.5 ; F_{col.} = 25.0 ; F = 31.0

25-7

5

19.0

"

"

Fe 24¹

18.9

"

"

"

17.9

"

"

"

16.9

"

"

"

16.0

"

"

"

15.4

"

"

"

14.9

"

"

"

14.6

"

"

"

14.2

40 Å/mm

F_{caim}

33.5

Fe = 6³

3-4

17° 4.

velo.

110 Å/mm

Fe = 2⁵

5

HR 5528

"

"

HR 5652

28

28-29/III/71 HL T. S. T. V.

Hu 3978 HR 3492.	IIaO 33 ^m	9 25	10 00	0 54	129	+0 53
Hu 3979 HR 3556.	" 79 ^m	10 24	11 45	1 58	3 13	+2 10
Hu 3980 HR 4889.	" 45 ^m	13 49	14 36	5 17	6 04	+1 28

26-27/III/71 K.

Hu 3981 1 HR 2902.	103a-E 8	7 48	7 56	23 25	23 33	+0 20
Hu 3982 2 HR 2902.	" 50	8 05	8 55	23 42	0 32	+0 58
Hu 3983 3 HR 3022.	" 22	9 23	9 45	1 00	1 22	+1 49
Hu 3984 4 HR 3964.	" 34	10 09	10 43	1 46	2 20	+0 24
Hu 3985 5 HR 4135.	" 7	10 59	11 16	2 36	2 53	+0 37
↳ HR 4136.	10					
Hu 3986 6 HR 4338.	" 15	11 42	11 57	3 19	3 34	+0 42,5
Hu 3987 7 HR 4470.	" 40	12 23	13 03	4 00	4 40	+1 08
Hu 3988 8 HR 4832.	" 35	13 28	14 03	5 05	5 40	+1 05
Hu 3989 9 HR 4832.	" 8	14 16	14 30	5 53	6 07	+1 42,5
↳ HR 4834.	6					
Hu 3990 10 HR 4834.	" 26	14 47	15 13	6 24	6 50	+2 19
Hu 3991 11 HR 5605-6.	" 4	15 33	15 37	7 10	7 14	+0 33
Hu 3992 12 HR 5664.	" 10	16 02	16 12	7 39	7 49	+0 53
Hu 3993 13 HR 5959.	" 18	16 36	16 54	8 13	8 31	+0 46

40 Å/mm

Fe

C

 t°

$$L = 2R + \frac{20}{40}$$

$$F_{\text{cam}} = 33.5$$

 6^S

4

 23°

$$A = \frac{12}{40}$$

 $3^S + 3^S$

4

 22.5 6^S

4

 21.5

se nubló.

 $40 \frac{\text{Å}}{\text{mm}}$

$$F_{\text{cam}} = 33.5 ; F_{\text{col}} = 25.0$$

25-7

 $F = 31.0$ Ne 24^1 c.v.e.

5

 21.3

"

"

Ne 16^m Fe 6^3

"

 21.1 La región Heit $= 8^m$

"

"

Ne 24^1 c.v.e.

"

 20.8

[e]

"

"

Ne 24^1

"

 20.4

"

"

"

"

 20.4 } sobre una placa
un espectro de
2*

"

"

"

"

 20.5

"

"

"

"

 20.8

"

"

"

"

 20.8

"

"

"

"

 20.7 } sobre una placa
un espectro de
2*

"

"

"

"

 20.4

"

"

"

"

 20.2

"

"

"

"

 20.0

"

"

"

"

 19.9

30

6-7/IV/71 K.

T.S.

T.V.

H ₀ 3994	1HR 2902	103 ^m E 60 ^m 903	10 03 23 57	0 57	+2 01
H ₀ 3995	2HR 3207	" 2 10 56	10 58 2 00	2 02	+2 49
H ₀ 3996	3HR 42 10	" 30 11 18	11 48 2 22	2 52	+0 49
H ₀ 3997	4HR 43 27	" 14 12 10	12 24 3 04	3 18	+1 11
H ₀ 3998	5HR 42 50	" 14 12 43	12 57 4 37	4 51	+1 59
H ₀ 3999	6HR 48 44	" 8 13 24	13 32 5 18	5 26	+0 44
H ₀ 4000	7HR 48 97	" 6 13 52	13 58 5 46	5 52	+1 03
H ₀ 4001	8HR 53 42	" 30 14 25	14 55 6 19	6 49	+0 26
H ₀ 4002	9HR 56 05-6	" 4 15 14	15 18 7 08	7 12	+0 14

1-2/IV/71 A

H ₀ 4003	4D 103192	IIa-0 3 ^m 3 12 12.7	12 16 3 25.7	3 29	+0 10
"	111123	" 2 12 28.3	12 28.5 3 40.3	3 40.5	
"	111R3	" 3 12 28.7	12 29.3 40.7	3 41	-0 20
"	126769	" 7.5 12 43.5	12 51.3 55.5	4 03	-1 45
"	131657	" 18.0 13 16	13 34.4 28	4 46	-1 30
"	142301	" 14.4 14 30.6	14 45.5 42.6	5 57	-1 10
"	142990	" 8.3 15 05.7	15 14.6 17.7	6 26	-0 40
"	143699	" 14.3 15 20.7	15 24.6 33.7	6 37	-0 30
H ₀ 4004	" 144334	" 14.4 15 41.6	15 56.6 53.6	7 08	-0 15
	147888	" 6.0 16 06	16 12.7 18	7 24	+0 10

147933-34

312

40 $\frac{\text{Å}}{\text{mm}}$ $F_{\text{cam}} = 33.5$; $F_{\text{col}} = 25.0$; $T_{\text{amb.}}$

25-7	$F = 310$	$\text{Fe } 24^{\text{th}}$	$\text{Fe } 6^{\text{th}}$	5	17.5	} $\text{Región } H_{21} \text{ exp.} = 5^{\text{m}}$ $H_{21} \text{ exp.} = 25^{\text{m}}$
"	"	"	"	"	16.9	
"	"	"	"	"	16.7	con De
"	"	"	"	"	16.7	
"	"	"	"	"	16.1	
"	"	"	"	"	16.1	con De
"	"	"	"	"	16.1	
"	"	"	"	"	16.1	
"	"	"	"	"	16.1	

110 $\frac{\text{Å}}{\text{mm}}$

Se despoja 2/30

"	$F_{\text{cam}} = 7.0$	$\text{Fe } 2^{\text{S}}$	4	23.0	23 ^h 30 ^m $\pm$ HR 4552
"			"		HR 4853
"			"		"
"			5	23.0	HR 5407
"			"	22.8	HR 5559
"			"	22.7	HR 5912
"			"		HR 5942
"		$\text{Fe } 2^{\text{S}}$	"	22.7	HR 5967
"		$\text{Fe } 2^{\text{S}}$	5		HR 5988
"			"	22.6	HR 6112-3

32

34/IV/71 A

T.S.

T.U

Hx4005	40	44743	IIa-0	0 ^u .3	8 35.2	8 35.5	23 40.7	23 41	+2 10
"		44743		0 ^u .7	8 35.8	8 36.5	23 41.3	23 42	+1 50
"		49606		12 ^u	8 47	8 59	23 52	0 04	+2 05
"		52312		13 ^u	9 06	9 19	0 12	0 25	+2 20
"		52918		4 ^u .3	9 26.7	9 31	0 31.7	0 36	+2 40
"		53974		6 ^u .0	9 39	9 45	0 44	0 50	+2 35
"		58343		6 ^u .0	9 51	9 57	0 57	1 03	+2 55
"		58978		5 ^u .30	10 19.5	10 25	1 24.5	1 30	+2 45
"		63462		3 ^u .0	10 31	10 34	1 36	1 39	+2 50
"		64740		3 ^u .2	10 39.8	10 43	1 45.8	1 49	+2 45
"		73952		21 ^u .3	10 57	11 18	2 02.2	2 23.5	+3 00
"		74196		12 ^u	11 25.5	11 37	2 31.5	2 43.5	
Hx4006	"	74535		7 ^u .5	11 48.5	11 56	2 53.5	3 01	—
"		75416		13 ^u	12 05.5	12 18	3 13.5	3 24.5	+3 30
"		78316		7 ^u .5	12 31.5	12 39	3 36.5	3 44	+4 00

8-9/IV/71 K.

HU4007	1HR	2996	103a-E	4	9 09	9 13	23 54	23 58	+1 29
HU4008	2HR	3022	"	22	9 28	9 50	0 13	0 35	+1 54
HU4009	3HR	3971	"	40	10 12	10 52	0 57	1 37	+0 30

110 $\frac{\text{Å}}{\text{mm}}$ $F_{\text{cam}} = 7.0$

Tamb.

110 $\frac{\text{Å}}{\text{mm}}$ p-8 $F_{\text{c}} 2^{\circ}$

5

 20.2

HR 2294

"

"

"

5

HR 2519

"

HR 2624

"

HR 2648

"

 19.6

HR 2678

"

 19.4

HR 2825

"

HR 2855

"

 19.0

HR 3034

"

 18.9

HR 3089

"

HR 3435

"

HR 3448

 $F_{\text{c}} 2^{\circ}$

"

 18.8

HR 3466

"

HR 3502

 $F_{\text{c}} 2^{\circ}$

"

 18.8

HR 3623

40 $\frac{\text{Å}}{\text{mm}}$ $F_{\text{cam}} = 33.5$; $F_{\text{col}} = 25.0$

25-7

 $F = 310$ $N_{\text{c}} 24^{\circ}$

5

 16.8

"

"

"

"

 16.4

"

"

"

"

 15.5

34

8-9/IV/71 K. T. S. T. V.

HU 4010 4 HR 4147. 103a-E 48 11 20 12 08 2 05 2 53 +1 12
 HU 4011 5 HR 4619. " 40 12 38 13 18 3 23 4 03 +0 52
 HU 4012 6 HR 5115. " 40 13 48 14 28 4 33 5 13 +0 32
 HU 4013 7 HD 131168. " 70 15 22 16 32 6 07 7 17 +1 06
 HU 4014 8 HR 6002. " 20 16 55 17 15 7 40 8 00 +1 00

13-14/IV/71 K.

HU 4015 1 HR 3667. 103a-E 40 10 20 11 00 0 46 1 26 +1 28
 HU 4016 2 HR 4147. " 30 11 24 11 54 1 50 2 20 +1 07
 HU 4017 3 HR 4250. " 10 12 10 12 20 2 36 2 46 +1 24
 HU 4018 4 HR 4338. " 11 12 34 12 45 3 00 3 11 +1 32.5
 HU 4019 5 HR 4804. " 52 13 04 13 56 3 30 4 22 +0 53
 HU 4020 6 HR 5016. " 36 14 15 14 51 4 41 5 17 +1 17
 HU 4021 7 HR 5403. " 52 15 18 16 10 5 44 6 36 +1 18

19-20/IV/71 K.

HU 4022 8 HR 4169. 103a-E 28 11 07 11 35 1 09 1 37 +0 45
 HU 4023 9 HR 4576. " 18 12 02 12 20 2 04 2 22 +0 15
 HU 4024 10 HR 4664. " 36 12 45 13 21 2 47 3 23 +0 49
 HU 4025 11 HR 4965. " 38 13 44 14 22 3 46 4 24 +0 54
 HU 4026 12 HR 5400. " 44 15 04 15 48 5 06 5 50 +1 02
 HU 4027 13 HR 5944. " 7 16 20 16 27 6 22 6 29 +0 27

40 Å/mm

$$F_{\text{cam}} = 33.5, F_{\text{col}} = 25.0$$

25-7	F = 310	Ne 24 ³	5	15.7
"	"	"	"	15.9
"	"	"	"	15.9
"	"	"	"	15.6
"	"	"	"	15.6

40 Å/mm

25-7	F = 310	Ne 24 ³	5	17.7
"	"	"	"	17.4 [e]
"	"	"	"	17.5 [e]
"	"	"	"	17.5
"	"	"	"	17.3 e
"	"	"	"	16.8
"	"	"	"	16.6

40 Å/mm

25-7	F = 310	Ne 24 ³	4	12.2 [e]
"	"	"	4	11.9
"	"	"	5	11.6
"	"	"	"	11.0
"	"	"	"	10.9
"	"	"	"	11.1 Con De

36

2-3 / V / 71 K.

T.S.

T.U.

HU 4028 1 HR 3207. II a-0 2 10 33 10 35 23 44 23 46 + 2 26
 HU 4029 1 HR 4147. 103 a-E 20 10 56 11 16 0 07 0 27 + 0 34
 HU 4030 2 HR 4438. " 40 11 44 12 24 0 55 1 35 + 0 34
 HU 4031 3 HR 4692. " 34 12 46 13 20 1 57 2 31 + 0 45
 HU 4032 4 HR 5061. " 38 13 48 14 26 2 59 3 37 + 0 42

4-5 / V / 71 K.

HU 4033 1 HR 3207. II a-0 9 10 51 11 00 23 54 0 03 + 2 47
 HU 4034 2 HR 3207. " 6 11 10 11 16 0 13 0 19 + 3 05

4-5 / V / 71 K.

HU 4035 1 HR 4951. 103 a-E 20 13 24 13 44 2 27 2 47 + 0 29
 HU 4036 2 HR 5157. " 32 14 15 14 47 3 18 3 50 + 0 50
 HU 4037 3 HR 5523. " 16 15 26 15 42 4 29 4 45 + 0 47

10-11 / V / 71 K.

HU 4038 1 HR 4002. 103 a-E 24 11 06 11 30 23 45 0 09 + 1 10
 HU 4039 2 HR 4438. " 24 11 55 12 19 0 34 0 58 + 0 37
 HU 4040 3 HR 4714. " 26 12 39 13 05 1 18 1 44 + 0 30
 HU 4041 4 HR 4880. " 40 13 28 14 08 2 07 2 47 + 0 58
 HU 4042 5 HR 5207. " 20 14 25 14 45 3 04 3 24 + 0 45
 HU 4043 6 HR 5311. " 38 15 05 15 43 3 44 4 22 + 1 13
 HU 4044 7 HR 5920. " 22 16 15 16 37 4 54 5 16 + 0 31

40 $\frac{\text{Å}}{\text{mm}}$ $F_{\text{cám}} = 33.5$; $F_{\text{col}} = 25.0$

25-7	$F = 310$	$\text{Fe } 6^{\text{A}} \text{ c.v.e.}$	4	10.2	Con Dc
"	"	$\text{Ne } 24^{\text{A}}$	"	9.4	e
"	"	"	"	8.5	[e]
"	"	"	"	7.9	
"	"	"	4-3	7.0	

20 $\frac{\text{Å}}{\text{mm}}$ $F_{\text{cám}} = 28.1$; $F_{\text{col}} = 25.0$

7-1 ^R	$F = 310$	$\text{Fe } 12^{\text{A}} \text{ c.v.e.}$	5	8.1	
"	"	$\text{Fe } 8^{\text{A}}$	"	7.5	

40 $\frac{\text{Å}}{\text{mm}}$ $F_{\text{cám}} = 33.5$; $F_{\text{col}} = 25.0$

20-7	$F = 310$	$\text{Ne } 24^{\text{A}}$	5	6.2	
"	"	"	"	5.7	
"	"	"	4d	5.9	

40 $\frac{\text{Å}}{\text{mm}}$ $F_{\text{cám}} = 33.5$; $F_{\text{col}} = 25.0$

15-7	$F = 310$	$\text{Ne } 24^{\text{A}}$	c=5	12.7	
"	"	"	"	12.5	e
"	"	"	"	12.2	
"	"	"	"	11.8	
"	"	"	"	11.8	
"	"	"	"	11.6	
"	"	"	"	11.5	

38

10-11/V/71

K.

T.S.

T.U.

HU 4045 2 HR 6040. 103a-E 26 16 53 17 19 532 5 58 +0 53

11-12/V/71 HL

HU 4046 HR 4368. ~~103a-E~~ 5th 11 23 13 21 0 56 1 54

12-13/V/71 K.

HU 4047 HR 4796. 103a-E 28 12 52 13 20 128 1 56 +0 32

HU 4048 2 HR 4796. " 26 13 36 14 02 2 12 2 38 + 1 15

13-14/V/71 A.

HU 4049 HD 120709. IIa-0 2nd 21439.8 1440 405.8 4 08

" " 4th 1442.2 15 46 5 408.7 4 13 + 1 40

HD 142301. " 10th 16 04 16 14 4 31 4 41

" " 16th 16 15 16 31 4 42 4 58 + 0 15

HD 144331. " 10th 16 38 16 48 5 05 5 16

" " 16th 16 49 17 05 5 16 5 32 + 0 40

18-19/V/71 K.

HU 4050 1 HR 4579. 103a-E 50 12 21 13 11 0 29 1 19 +0 49

HU 4051 2 HR 4881. " 42 13 30 14 12 1 38 2 20 + 1 01

HU 4052 3 HR 4921. " 26 14 31 14 57 2 39 3 05 + 1 46

HU 4053 4 HR 5662. " 40 15 26 16 06 3 34 4 14 + 0 34

HU 4054 5 HR 5948. " 12 16 33 16 45 4 41 4 53 + 0 41

HU 4055 6 HR 6473. " 40 18 20 19 00 6 28 7 08 + 1 18

40 Å/mm

 $F_{\text{cán}} = 33.5$; $F_{\text{col.}} = 25.0$

15-7

 $F = 310$ $N_e 24^1$ $C = 5$ $11.4^\circ C$

40 Å/mm

 $Fe 6^S$

4

 13.8

40 Å/mm

15-7

 $F = 310$ $N_e 24^1$ $C = 3-2$ 11.8 "

"

"

$C = 4-2$

11.8

110 Å/mm

$F_{\text{cán}} = 7.0$

$Fe 3^S$

4

12.5

HR

5210

"

"

5

12.3

5912

"

5

5

5988

"

$Fe 3^S$

Nubes

12.3

40 Å/mm

$F_{\text{cán}} = 33.5$; $F_{\text{col.}} = 25.0$

25-7

$F = 310$

$N_e 24^1 C, V.E.$

5

13.2

"

"

"

"

12.9

"

"

"

"

5 m d

12.6

"

"

"

"

5 d

12.9

"

"

"

"

"

12.9

con DC

"

"

"

"

5 m d

12.3

40

28-29/VI/71 K.

T.S.

T.V.

HU 4056	1 HR 5106	103a-E	24	14 44	15 08	2 12	2 36	+1 23
HU 4057	2 HR 5578	"	44	15 54	16 38	3 22	4 06	+1 20
HU 4058	3 HR 5793	"	3	17 30	17 33	4 58	5 01	+1 58.5
HU 4059	4 HR 5793	"	3	18 02	18 05	5 30	5 33	+2 30.5
HU 4060	5 HR 5948	"	8	18 34	18 42	6 02	6 10	+2 40
HU 4061	6 HR 5948	"	12	18 54	19 06	6 22	6 34	+3 02
HU 4062	7 HR 6993	"	24	19 36	20 00	7 04	7 28	+1 12

2-3/VI/71 K.

HU 4063	1 HR 4398	103a-E	24	12 22	12 46	23 30	23 54	+1 13
HU 4064	2 HR 4597	"	24	13 16	13 40	0 24	0 48	+1 27
HU 4065	3 HR 4985	"	32	14 02	14 34	1 10	1 42	+1 07
HU 4066	4 HR 5066	"	36	15 00	15 36	2 08	2 44	+1 52
HU 4067	5 HR 5948	"	6	16 06	16 12	3 14	3 20	+0 11
HU 4068	6 HR 6066	"	54	16 43	17 37	3 51	4 45	+0 55
HU 4069	7 HR 6367	"	30	18 04	18 34	5 12	5 42	+1 13

9-10/VI/71 K.

 $\Delta T = +5^m$

HU 4070	1 HR 4857	103a-E	42	14 15	14 57	0 50	1 32	+1 50
HU 4071	2 HR 5324	"	30	15 37	16 07	2 12	2 42	+1 39
HU 4072	3 HR 5881	"	16	16 40	16 56	3 15	3 31	+1 00
HU 4073	4 HR 5898	"	36	17 21	17 57	3 56	4 32	+1 47

40 $\frac{A}{mm}$

$$F_{c\text{m}} = 33.5; F_{c\text{ol}} = 25.0$$

25-7	$F = 310$	$N_c 24^1$	$C = 4$	9.1	Passen los cables.
------	-----------	------------	---------	-----	--------------------

"	"	"	"	8.9	
---	---	---	---	-----	--

"	"	"	"	8.9	con Dc
---	---	---	---	-----	--------

"	"	"	"	8.7	"
---	---	---	---	-----	---

"	"	"	5	8.8	"
---	---	---	---	-----	---

15-7	"	"	"	8.9	"
------	---	---	---	-----	---

25-7	"	"	"	8.8	
------	---	---	---	-----	--

40 $\frac{A}{mm}$

25-7	$F = 310$	$N_c 24^1$	$C = 5$	8.4	
------	-----------	------------	---------	-----	--

"	"	"	"	7.7	
---	---	---	---	-----	--

"	"	"	"	7.2	
---	---	---	---	-----	--

"	"	"	"	6.7	
---	---	---	---	-----	--

35-7	"	"	"	6.6	con Dc
------	---	---	---	-----	--------

25-7	"	"	"	6.1	
------	---	---	---	-----	--

"	"	"	"	5.8	
---	---	---	---	-----	--

25-7	$F = 310$	$N_c 24^1$	$C = 5$	8.2	
------	-----------	------------	---------	-----	--

"	"	"		7.8	
---	---	---	--	-----	--

"	"	"		7.5	con Dc
---	---	---	--	-----	--------

"	"	"		6.7	
---	---	---	--	-----	--

Surc: 055, 137 eq.
 T.O.: $\Delta T = +5^{\circ}m$
 Se debe en correspondencia

42 10-11/VI/71 K.

T. S.

T. U.

H₀4074 5 HR 4990. 103a-E 28 14 05 14 33 0 41 1 09 +1 08H₀4075 6 HR 5146 " 42 15 00 15 42 1 36 2 18 +1 42H₀4076 7 HR 6026 " 40 16 38 17 18 3 14 3 54 +0 4811-12/VI/71 K.H₀4075 8 HR 4901. 103a-E 32 12 57 13 29 23 29 0 01 +0 21H₀4077 9 HR 4911 " 32 14 02 14 34 0 34 1 06 +1 24H₀4078 10 HR 126366 " 44 15 15 15 59 1 47 2 31 +1 14H₀4079 11 HR 6041 " 32 16 48 17 20 3 20 3 52 +0 53H₀4080 12 HR 6278 " 46 18 18 19 04 4 50 5 36 +1 4912-13/VI/71 K.H₀4081 13 HR 4874. 103a-E 10 13 20 13 30 ~~23~~ 23 57 +0 36H₀4082 14 HR 4879 " 24 13 49 14 13 0 16 0 40 +1 1113-14/VI/71 K.H₀4083 15 HR 5397. 103a-E 44 14 40 15 24 1 06 1 50 +0 39H₀4084 16 HR 6679 " 42 18 05 18 47 4 31 5 13 +0 3214-15/VI/71 K.H₀4085 17 HR 5406. 103a-E 34 14 42 15 16 1 04 1 38 +0 3416-17/VI/71 K.H₀4086 18 HR 4838. 103a-E 40 13 39 14 19 23 53 0 33 +1 17H₀4087 19 HR 5197 " 32 14 56 15 28 1 10 1 42 +1 24

40 $\frac{\text{Å}}{\text{mm}}$ $F_{\text{cán.}} = 33.5; F_{\text{col.}} = 25.0$

25-7	$F = 3/0$	$N_e 24^1$	$C = 5$	7.6	
"	"	"	"	6.9	Sobre la placa
"	"	"	"	6.5	HU 4075 haz 2
					(dos) espectros:
25-7	$F = 3/0$	$N_e 24^1$	$C = 5$	8.0	HR 4901 y HR 5146
"	"	"	"	7.7	
"	"	"	"	7.1	
"	"	"	"	7.1	
"	"	"	"	6.6	
25-7	$F = 3/0$	$N_e 24^1$	$C = 4$	8.9	
"	"	"	5	8.4	
25-7	$F = 3/0$	$N_e 24^1$	$C = 5$	8.0	
"	"	"	"	5.6	
25-7	$F = 3/0$	$N_e 24^1$	$C = 4$	9.9	
25-7	$F = 3/0$	$N_e 24$	$C = 5$	6.3	
"	"	"	"	6.0	

44

16-17/VI/71 K.

T.S.

T.V.

H_U 4088 20 HR 5474. 103a-E 46 15 50 16 36 2 04 2 50 +1 33H_U 4089 21 HR 6211. " 48 17 07 17 55 3 21 4 09 +0 5015-16/VII/71 K.H_U 4090 1 HR 5683. 103a-D 12 16 30 16 42 0 50 1 02 +1 20H_U 4091 2 HR 6519. " 26 17 42 18 08 2 02 2 28 +0 26H_U 4091A H_U 4091¹²³ 5th ca pag. 160; H_U 4091C.
26-27/VII/71 K.H_U 4092 3 HR 5221. 103a-D 26 16 18 16 44 23 54 0 20 +2 40H_U 4093 4 HR 5683. " 12 17 09 17 21 0 45 0 57 +1 595-6/VIII/71 K.

HX 4094 1 HR 5683. IIa-D 6 17 19 17 25 0 15 0 21 +2 06

2 HR 5781. " 12 17 40 17 52 0 36 0 48 +2 13

3 HR 6519. " 12 18 10 18 22 1 06 1 18 +0 47

4 HR 6819. " 28 18 45 19 13 1 41 2 09 +0 45

7-8/VIII/71 K.

HX 4095 1 HR 5683. IIa-D 4 17 15 17 19 0 03 0 07 +2 01

3 HR 5781. " 10 17 32 17 42 0 20 0 30 +2 04

5 HR 6519. " 8 18 01 18 09 0 49 0 57 +0 36

7 HR 6819. " 22 19 03 19 25 1 51 2 13 +1 00

$$40 \frac{\text{Å}}{\text{mm}} \quad F_{\text{cam}} = 33.5 \quad F_{\text{col}} = 25.0$$

$$25-7 \quad F = 310 \quad \text{Ne } 24^1 \quad c = 5 \quad 5.60$$

$$" \quad " \quad " \quad " \quad 5.1$$

$$40 \frac{\text{Å}}{\text{mm}}$$

$$21-5 \quad " \quad \text{Fe } 5^1 \quad c = 5 \quad 12.7 \quad R.: A = 0 + \frac{R}{40} \cdot \frac{21}{40} \quad L = 1 + \frac{R}{40} \cdot \frac{35}{40}$$

$$" \quad " \quad " \quad " \quad 12.2$$

$$21-5 \quad " \quad \text{Fe } 4^1 \quad c = 5 \quad 10.2$$

$$" \quad " \quad " \quad " \quad 10.2 \quad \text{se umblo'}$$

$$110 \frac{\text{Å}}{\text{mm}}$$

$$F_{\text{cam}} = 6.5; \text{Diap. } \text{N}^{\circ} 4; F_{\text{col}} = 25.0$$

$$A = 1 + \frac{R}{40} \cdot \frac{5}{40}$$

$$F = 310 \quad \text{Fe } 2^1 \quad c = 5 \quad 10.7$$

$$L = 1 + \frac{R}{40} \cdot \frac{9}{40}$$

$$" \quad " \quad " \quad 10.5$$

$$" \quad " \quad " \quad 10.5$$

$$" \quad " \quad \text{Fe } 2^1 \quad " \quad 10.0$$

$$110 \frac{\text{Å}}{\text{mm}}$$

$$F_{\text{cam}} = 6.0; \text{Diap. } \text{N}^{\circ} 2,5; F_{\text{col}} = 25.0$$

$$A = 1 + \frac{R}{40} \cdot \frac{5}{40}$$

$$F = 310 \quad \text{Fe } 2^1 \text{ con 2 l.e.} \quad c = 5 \quad 12.3$$

$$L = 1 + \frac{R}{40} \cdot \frac{9}{40}$$

$$" \quad \text{Fe } 4^1 \text{ con 2 l.e.} \quad " \quad 12.1$$

$$" \quad \text{Fe } 1^1 \quad " \quad " \quad " \quad 12.0$$

$$" \quad \text{Fe } 3^1 \quad " \quad " \quad " \quad 11.5$$

Arco de Fe:
con 2 vidrios
esmerilados

46

10-11/VIII/21 A

T.S.

T.V

Hx4096	HD 120324	IIa-0 20 ^s	16 33.2	16 33.5	23 10.2	23 10.5	
	" 120324	" 30 ^s	16 33.5	16 34.0	23 10.5	23 11.0	
	" 120324	" 50 ^s	16 34.6	16 35.4	23 11.6	23 12.4	
	" 120324	" 1 ^m .1	16 35.4	16 36.5	23 12.4	23 13.5	+2 ^h 50 ^m
	HD 142990	" 2 ^m .0	17 42.0	17 44.0	01 18.0	01 20.0	
	" 142990	" 3 ^m .5	17 44.5	17 46.0	01 20.5	01 24.0	+1 ^h 50 ^m
	HD 159975	" 50 ^s	18 08.2	18 09.2	01 44.2	01 45.0	
	" 159975	" 1 ^m .4	18 09.0	18 10.5	01 45.1	01 46.5	
	" 159975	" 2 ^m .5	18 10.5	18 13.0	01 46.5	01 49.0	+0 ^h 30 ^m
Hx4097	HD 163472	" 4 ^m .3	18 41.2	18 45.0	01 18.2	01 22.5	
	" 163472	" 7 ^m .5	18 45.5	18 53.0	01 22.5	01 30	+1 ^h 00 ^m
	HD 164284	" 1 ^m .7	19 23.3	19 25.0	02 01.3	02 03.0	
	" 164284	" 2 ^m .5	19 25.5	19 28.0	02 03.5	02 06.0	+1 ^h 20 ^m

11-12/VIII/21 K.

Hx4098	HR 5683	IIa-0 3	17 49	17 51	0 21	0 24	+2 35
2	"	" 4	17 52	17 56	0 25	0 29	+2 38
3	HR 5781	" 5	18 14	18 19	0 47	0 52	+2 43
4	"	" 8	18 20	18 28	0 53	1 01	+2 51
5	"	" 8	18 29	18 37	1 02	1 10	+3 00
6	HR 6519	" 5	18 57	19 02	1 30	1 35	+1 30

47

140 g/m

c

17 MAY 21-11

"75" + 1412 25 Fe 12⁵ 4 3 15⁰.6 HR 5193

HR 5942

$a \frac{1}{2}$ m menos

" 1958 J. L. F. M. 16 51 10 61 HR 6567 a 1^m micro.

$2\frac{1}{2}''$

Fe 2 ^s	5	normal
-------------------	---	--------

110 A/mu

208 - 29845878 87 02 108 1/2" mms

Fe 2^s 3 140.7 Kelo

110 $\frac{\text{\AA}}{\text{mm}}$ $F_{\text{c\acute{a}m.} = 6.0, F_{\text{col.} = 25.0$

$$A = 1 \times \frac{5}{20} \quad F = 300 \quad F \times 1^d \text{ con } 2 \text{ v.c.} \quad 4 \quad 15.4$$
$$L \cong \mathbb{H}^R + 0$$

11	15.2
----	------

[illegible]

9 9 9 9

и и и и

48

11-12/VIII/71 K.

T. S.

T. U.

Hx4098	7 HR 6519	IIa-0	8	19 03	19 11	1 36	1 44	+ 1 38
	8 HR 6819	"	8	19 34	19 42	2 07	2 15	+ 1 24
	9 "	"	15	19 43	19 58	2 16	2 31	+ 1 37

15-16/VIII/71 A.

Hx4099	HD 120324	IIa-0	35 ^s	16 11.5	16 12	22 28.5	22 29	
	"	"	50 ^s	16 12.0	16 12	22 29	22 29.8	
	"	"	1 ^m 2	16 12.8	16 14	22 29.8	22 31	+ 2.15
	HD 142990	"	6.0	16 42	16 48	22 59	23 05	
	"	"	11.0	16 48	16 59	23 05	23 16	+ 1.00
	HD 129174	"	3.5	17 11.5	17 16	23 30.5	23 34	
	"	"	6.0	17 17	17 23	23 35	23 41	+ 2.50
	HD 130807	"	2.0	17 25	17 37	23 53	23 55	
	"	"	3.5	17 37.5	17 41	23 55.5	23 59	+ 2.50
	HD 159975	"	2.5	17 51.5	17 54	00 08.5	00 11	
	"	"	4.3	17 55	17 59	00 12	00 16	+ 0.10
Hx4100	HD 163472	IIa-0	7.5	18 13.5	18 21	00 33.5	00 40	
	"	"	13	18 22	18 35	00 41	00 52	
	HD 164284	"	2.5	18 44.5	18 47	01 01.5	01 04	
	"	"	4.8	18 48	18 53	01 05	01 10	
	HD 161056	"	18.5	19 03.5	19 22	01 30.5	01 39	+ 2.00

49

110 $\frac{\text{Å}}{\text{mm}}$

$$A = 1R + \frac{5}{20}$$

$$L = 1R + 0$$

F = 310

C

 $t_{\text{amb.}}$

4

4

15.0

11

110 $\frac{\text{Å}}{\text{mm}}$

$$A = 1R + 5/40$$

F = 310

Fe = 2^s

5

11.6

HA

5193

$$L = 1R + 40$$

"

"

"

5942

"

"

11.2

5475-6

"

"

5528

"

"

6567

Fe = 2^s

"

"

6684

Fe = 2^s

"

"

6712

"

"

10.9

6601

50

15-16/VIII/71 A. T. 2 T. U

1174100	HD 170740.	$\Pi a-075$	1933.5	1941	0100.5	0158	+1 00
	4D176304.	" 21.0	1951	2012	0208	0229	+1 30
	7-8/IX/71	K.					
HX4101	3 HR 8899.	$\Pi a-023$	2356	019	443	506	+0 45
	5 HR 8899.	" 40	020	100	507	547	+1 17.5
	7 HR 939.	" 4	158	202	645	649	-1 02
	9 HR 939.	" 7	203	210	650	657	-0 56
	4-5/X/71	K.					
HU4102	1 HR 6745.	$\Pi a-046$	2110	2156	010	056	+3 27
	5-6/X/71	K.					
HU4103	2 HR 6745.	$\Pi a-036$	2100	2136	2356	032	+3 12
	7-8/X/71	K.					
HU4104	3 HR 6745.	$\Pi a-026$	2104	2130	2352	018	+3 11
HX4105	3 HR 6745.	" 2	2205	2207	053	055	+4 00
	5 HR 6745.	" 1.5	2208	2209.5	056	057.5	+4 02.5
	7 HR 6745.	" 1	2210	2211	058	059	+4 04
	24-25/X/71	K.					
HU4106	1 HR 7920.	$\Pi a-030$	2225	2255	006	036	+1 58
	25-26/X/71	K.					
HU4107	4 HR 6745.	$\Pi a-036$	2216	2252	2353	029	+4 28

110 $\frac{A}{mm}$

51

4R

6946

7173

$A = 1R + \frac{5}{40}$
 $L = 11R + 0$

$F = 310$

Fe 2^s

5

tons

10°4

10°1

110 $\frac{A}{mm}$

$A = 1R + \frac{5}{40}$
 $L = 11R + 0$

$F = 310$

Fe 1^a con 2 v. es.

5

15°1

"

"

14.8

"

"

13.6

"

"

13.4

40 $\frac{A}{mm}$

$A = \frac{25}{40}R, L = \frac{1R+33}{20}$

$F = 310$

Fe 5^a con 1 v. es.

5

8°7

40 $\frac{A}{mm}$

$A = \frac{25}{40}R, L = 2R$

$F = 310$

Fe 5^a con 1 v. es.

5

9°8

40 $\frac{A}{mm}$

$A = \frac{25}{40}R, L = 2$

$F = 310$

Fe 5^a con 1 v. es.

5

12.6

$A = 1R + \frac{5}{40}$

$L = 11R$

"

Fe 2^a con 2 v. es.

"

12.5

Cám. D = 110 $\frac{A}{mm}$

"

"

"

"

12.5

"

"

"

"

12.5

40 $\frac{A}{mm}$

$A = \frac{25}{40}R, L = 2$

$F = 310$

Fe 5^a con 1 v. es.

5

15.9

"

"

"

Fe 5^a con 1 v. es.

5

18.2

T. V.
23 53 0 29

52. 25-26/X/71 K.

T. S.

T. U.

40 $\frac{A}{mm}$

HU 4108	2 HR 7920	II a-O 20	23 05 23 25	0 42 1 02	As $\frac{R}{\mu} = 2$
HU 4109	3 HR 8988	103 a-E 6	1 00 1 06	2 37 2 43	+122 ^m

26-27/X/71 K.

HU 4110	1 HR 8865	103 a-E 10	0 16 0 26	1 48 1 58	+1 04
HU 4111	2 HR 8949	" 8	1 01 1 09	2 33 2 41	+1 32

27-28/X/71 K.

HU 4112	5 HR 6745	II a-O 16	22 41 22 57	0 10 0 26	+4 43
---------	-----------	-----------	-------------	-----------	-------

24-25/XI/71 F.

HX 4103	1 HR 8817	II a-O	0 46 0 54	1 01 1 09	
	2 "	"	1 12 1 22	1 27 1 37	
	3 HR 1219	"	4 15 4 35	4 30 4 50	
	4 HR 1771	"	5 35 5 50	5 50 6 05	

HX 4114	1 HR 3056	II a-O	6 12 6 35	6 27 6 50	
	2 HR 3307	"	6 45 6 46	7 00 7 01	
	3 "	"	6 47 6 47.5	7 02 7 02.5	
	4 "	"	6 48 6 49.5	7 03 7 04.5	
	5 HR 3347	"	7 04 7 08	7 19 7 23	

1-2/XII/71 HL

40 $\frac{A}{mm}$

HU 4115	HR 5737	II a-O 26 ^m	2 ^h 34 3 ^h 05 ^m	1 44 2 15	+1 ^h 50 ^m
---------	---------	------------------------	--	-----------	---------------------------------

$$40 \frac{\text{\AA}}{\text{mm}}$$

$$A = \frac{25^R}{40} L = 2^R$$

$$F = 310$$

Fe 5¹ con 1 v. el. 5

$$17.9^\circ \text{ A.h.m} = +2^h 33^m$$

"

"

Ne 24¹

"

$$17.8$$

$$+1^h 22^m$$

"

$$F = 310$$

Ne 24¹

5

$$19.6$$

"

"

"

"

$$19.5$$

"

"

Fe 5¹ con 2 v. el.

"

$$21.1$$

$$110 \frac{\text{\AA}}{\text{mm}}$$

$$F = 6.$$

Tomadas sin

$$A = 7^R + 5/40$$

"

efectos de

5

$$22^\circ 7$$

$$L = 11^R$$

"

comparación.

"

$$21^\circ 2$$

"

"

No había

"

$$17^\circ 5$$

"

"

de. continua.

"

$$17^\circ 0$$

"

"

"

$$15^\circ 0$$

"

"

"

"

"

"

"

"

"

"

"

"

"

"

"

$$15^\circ 0$$

Se nubla -

$$A = \frac{18}{40}$$

$$F =$$

Fe 10 seg.

4

$$27^\circ$$

$$L = 2R + \frac{20}{40}$$

54

1/2-XII-71

HL

Hx 4116	HR 1100.	IIa-O 92 ^m	4 09	6 00	0 19	2 13	1 ^h 30 ^m
Hx 4117	1) HR 2233.	IIa-O 18	6 58	7 16	3 07	3 25	
	2) HR 2607.	14	7 46	8 00	3 55	4 09	
	3) HR 2811.	20	8 14	8 34	4 23	4 43	

G-7/XII/1971

F.

HX 4118	HD 31244.5.	IIa-O	4 16	4 51	4 06	4 41	
	HR 1772.	"	5 14	5 37	5 04	5 27	
	HR 2388.	"	5 58	6 30	5 48	6 20	
	HR 2803.	"	6 38	6 42	6 28	6 32	
	"	"	6 43	6 46	6 33	6 36	
	HR 3056.	"	6 58	6 18	6 48	6 08	

7.8/XII 1971 - F.

HX 4119	HR 1219.	IIa-O -	3 16	3 41	3 01	3 26	
	HD 31244.5.	"	4 35	5 20	4 20	5 05	
	HR 1771.	"	5 32	5 48	5 17	5 33	
	HR 2388.	"	6 03	6 36	5 48	6 21	
	HD 47579.8.	"	6 44	7 15	6 29	7 00	

40 Å/mm

$$A = \frac{18}{40}$$

$$L = 2R + \frac{20}{40}$$

F =

Fe = 10 seg.

4

26°.5

110 Å/mm.

$$A = 1R + \frac{5}{40} \quad F = 6$$

Fe = 4 seg.

4

27°

$$L = 11R + \frac{12}{40}$$

$$110 \text{ Å/mm} \quad F = 6$$

Fe 2 seg

Velo variable.

19°

$$A = 1R + \frac{5}{40}$$

-

"

17°.9

$$L = 11R + \frac{12}{40}$$

"

"

17°.7

-

"

"

"

17°.1

"

"

16°.9

"

"

110 Å/mm

F = 6

Fe 2 seg

5

20°.4

$$A = 1R + \frac{5}{40}$$

"

"

$$L = 11R + \frac{12}{40}$$

"

"

20°.0

"

"

19°.5

"

"

19°.5

"

"

19°.4

T. V

HU 4120	1 HR 1826.	1034-E	34	5 57	6 31	2 50	3 24	+0 47
HU 4121	2 HR 1890.	"	45	7 07	7 52	4 00	4 45	+1 56
HU 4122	3 HR 1898.	"	34	8 12	8 46	5 05	5 39	+2 55

6-7 I/72 K.

HU 4123 4 HR 1840. 103a-E. 34 7 15 749 4 04 4 38 +2 04
 HU 4124 5 HR 1848. " 32 8 09 841 4 58 5 30 +2 56
 HX 4124A. Voir la pag. 162. HX 4124B; HX 4124C

22-23 / I / 72 HL-M

HU 4125 HR 186J. II a-O I^m 5 48 J49 131 132

Hx 4126	HR 1922.	"	1 ^m	702	703	244	245
	2514.	"	13 ^m	720	733	302	315
	2562.	"	15 ^m	744	759	326	340
	2786.	"	7 ^m	817	824	400	407
	2866.	"	17 ^m	831	838	413	430
	3591.	"	8 ^m	901	909	443	451
	3591.	"	4 ^m	912	916	454	458
	3598.	"	8 ^m	928	936	510	518

23-24/I/72 HL-M

$$40 \frac{\text{Å}}{\text{mm}}$$

$$A = \frac{25R}{20} L = 2R$$

$$F = 320$$

$$Ne \ 28^\circ$$

$$G = 5$$

$$18.2$$

"

"

$$Ne \ 25$$

"

$$17.7$$

"

"

"

"

$$17.2$$

"

"

$$Ne \ 28^\circ$$

"

$$17.8$$

"

"

"

"

$$16.8$$

Ver la pag. 160.

$$40 \frac{\text{Å}}{\text{mm}}$$

—

—

4

$$25.2$$

$$A = \frac{2R + \frac{14}{40}}{L = 2R + \frac{20}{40}}$$

$$110 \frac{\text{Å}}{\text{mm}}$$

—

$$24.6$$

"

—

$$24.4$$

"

—

$$24.1$$

"

—

$$24.3$$

"

—

"

—

"

—

$$23.8$$

—

No hay corriente
continua

5.8

23-24/I/72 HL-M T.S

T.U

A.H

Hx4127	HR 1665	IIa-O	20	6 26	6 47	2 06	2 27
	HR 2000	"	15	6 55	7 12	2 35	2 52
	HR 2254	"	21	7 22	7 45	3 01	3 24
	HR 3220	"	5	9 09	9 15	4 48	4 54
	HR 3291	"	15	9 27	9 42	5 06	5 21
	HR 3297	"	13	9 52	10 12	5 31	5 45
	HR 3321	"	5	10 13	10 18	5 51	5 56

20-21/I/72 K.

Hv4128	1 HR 2237	103a-E	30	6 45	7 15	2 39	3 09 +0 46
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21-22/I/72 K.

Hv4129	2 HR 1217	103a-E	40	4 57	5 31	0 41	1 21 +1 18
Hv4130	3 HR 1919	"	40	6 03	6 43	1 53	2 33 +0 48
Hv4131	4 HR 2244	"	10	6 59	7 09	2 49	2 59 +0 50
Hv4132	5 HR 2270	"	40	7 55	8 35	3 45	4 25 +1 58
Hv4133	6 HR 3335	"	50	9 06	9 56	4 56	5 46 +1 05
Hv4134	7 HR 3345	"	60	10 20	11 20	6 10	7 10 +2 23

24-25/I/72 K.

Hv4135	8 HR 1835	103a-E	20	6 33	6 53	2 11	2 31 +1 16
Hv4136	9 HR 1903	"	1.5	7 12	7 13.5	2 50	2 51.5 +1 38.5

110 R / min

$F = 6.0$

$A = 1R$

$+ \frac{5}{40}$

"

"

—

4

25° 5

No key
corrected
continua

—

"

—

"

—

"

25° 3

—

"

24° 9

—

"

24° 6

—

"

$L = 11R$

"

$+ \frac{12}{40}$

"

"

"

40 $\frac{A}{min}$

$A = \frac{25R}{401} L = 2R$

$F = 3.0$

$Nc = 28^d$

$C = 5$

25.0

" " "

"

"

25.5

" " "

"

"

25.2

" " "

"

"

25.2

" " "

"

"

24.8

" " "

"

"

24.6

" " "

"

"

24.3

" " "

"

"

25.9

" " "

"

"

25.6 Con De

60 25-26/I/72 K. T. S. T. U. A.h.m.

HU 4137	10 HR 1966	103a-E	40	6 00	6 40	1 34	2 14	+0 40
HU 4138	11 HR 2356	"	6	7 28	7 34	3 02	3 08	+1 04
HU 4139	12 HR 2418	"	16	7 48	8 04	3 22	3 38	+1 21
HU 4140	13 HR 3042	"	30	8 27	8 57	4 01	4 31	+0 54
HU 4141	14 HR 3059	"	10	9 21	9 31	4 55	5 05	+1 36

26-27/I/72 K.

HU 4142	15 HR 2414	103a-E	6	7 35	7 41	3 05	3 11	+1 05
HU 4143	16 HR 2509	"	26	7 55	8 21	3 25	3 51	+1 23
HU 4144	1 HR 4109	"	36	11 02	11 38	6 32	7 08	+0 53

27-28/I/72 K.

HU 4145	2 HR 2279	103a-E	20	8 35	8 55	4 01	4 21	+2 27
HU 4146	3 HR 3344	"	60	9 19	10 19	4 45	5 45	+1 22

29-30/I/72 K.

HU 4147	2 HR 2164	103a-E	30	7 08	7 38	2 26	2 56	+1 18
HU 4148	3 HR 2583	"	40	8 20	9 00	3 38	4 18	+1 48
HU 4149	4 HR 3358	"	15	9 19	9 34	4 37	4 52	+0 59
HU 4150	5 HR 3370	"	20	9 48	10 08	5 06	5 26	+1 31
HU 4151	6 HR 3831	"	50	10 30	11 20	5 48	6 38	+1 20

30-31/I/72 K.

HU 4152	7 HR 1783	103a-E	12	6 10	6 22	1 24	1 36	+0 54
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40 $\frac{J}{min}$

61

$$A = \frac{25^{\circ}}{40}, L = 2^R$$

$$K = 310$$

$$N_e 28^{\circ}$$

$$C = 5$$

$$t = 27.6$$

"	"	"	"	27.3 e
"	"	"	"	26.8 e
"	"	"	"	26.5
"	"	"	"	26.4
"	"	"	"	19.3
"	"	"	"	19.0
"	"	"	"	18.0
"	"	"	"	21.3
"	"	"	"	20.7
"	"	"	"	24.6
"	"	"	"	24.4
"	"	"	"	24.1
"	"	"	"	23.8
"	"	"	"	23.6
"	"	"	"	25.4

62 30-31/I/72 K. T.S. T.V. A.h.m.

HU 4153	8 HR 1788	103a-E	3	6 39	6 42	1 53	1 56	+1 18
HU 4154	9 HR 1800	"	40	6 56	7 36	2 10	2 50	+1 52
HU 4155	10 HR 2623	"	36	8 05	8 41	3 19	3 55	+1 25
HU 4156	11 HR 3101	"	30	9 02	9 32	4 16	4 46	+1 23
HU 4157	12 HR 3371	"	60	9 55	10 55	5 09	6 09	+1 56

1-2/II/72 K.

HU 4158	1 HR 1300	103a-E	36	5 20	5 56	0 26	1 02	+1 28
HU 4159	2 HR 1758	"	36	6 20	6 56	1 26	2 02	+1 20
HU 4160	3 HR 1899	"	6	7 09	7 15	2 15	2 21	+1 39
HU 4161	4 HR 1918	"	28	7 32	8 00	2 38	3 06	+2 10
HU 4162	5 HR 2972	"	60	8 33	9 33	3 39	4 39	+1 24
HU 4163	6 HR 3817	"	10	10 14	10 24	5 20	5 30	+0 47
HU 4164	7 HR 4115	"	40	10 42	11 22	5 48	6 28	+0 36

3-4/II/72 K.

HU 4165	1 HR 1899	103a-E	4	6 06	6 10	1 05	1 09	+0 35
HU 4166	2 HR 1950	"	36	6 28	7 04	1 27	2 03	+1 07
HU 4167	3 HR 2448	"	30	7 46	8 16	2 45	3 15	+1 24
HU 4168	4 HR 3019	"	60	8 42	9 42	3 41	4 41	+1 27
HU 4169	5 HR 3710	"	50	10 12	11 02	5 11	6 01	+1 19

40 $\frac{A}{\text{mm}}$

63

$$A = \frac{25.8}{40} \cdot h = 2R$$

$$F = 310$$

$$N_e 28^3$$

$$C = 5$$

$$t = 25.2 \text{ Con } D_A$$

" " " " 24.7

" " " " 24.2

" " " " 24.2

" " " " 24.5

" " " " 19.5

" " " " 19.2

" " " " 19.2 Con D_c

" " " " 18.7

" " " " 17.5

" " " " 16.6

" " " " 16.3

" " " " 25.4 Con D_c

" " " " 24.7

" " " " 24.3

" " " " 24.0

" " " " 23.4

64 10-11/II/72. K.

T.S.

T.U.

A.h.m.

HU 4170	1 HR 22 44.	103 a-E	7	6 35	6 42	1 06	1 13	+0 24,5
HU 4171	2 HR 19 73.	"	14	6 53	7 07	1 24	1 38	+1 19
HU 4172	3 HR 26 56.	"	56	7 44	8 40	2 15	3 11	+1 10
HU 4173	4 HR 35 91.	IIa-O	80	9 27	10 47	3 58	5 48	+1 08
HU 4174	5 HR 42 28.	103 a-E	46	11 24	12 10	5 55	6 41	+1 00

18-19/II/72 K.

HU 4175	1 HR 23 09.	103 a-E	30	6 50	7 20	0 50	1 20	+0 43
HU 4176	2 HR 24 24.	"	20	7 40	8 00	1 40	2 00	+1 16
HU 4177	3 HR 29 86.	"	40	8 18	8 58	2 18	2 58	+0 57
HU 4178	4 HR 32 55.	"	60	9 24	10 24	3 24	4 24	+1 39
HU 4179	5 HR 40 76.	"	40	10 44	11 24	4 44	5 24	+0 44
HU 4180	6 HR 43 20.	"	60	11 50	12 50	5 50	6 50	+1 15

23-24/II/72 K.

HU 4181	1 HR 21 77.	103 a-E	10	7 24	7 34	1 04	1 14	+1 23
HU 4182	2 HR 21 87.	"	34	7 53	8 27	1 33	2 07	+2 03
HU 4183	3 HR 24 51.	"	10	8 45	8 55	2 25	2 35	+2 14
HU 4184	4 HR 30 05.	"	60	9 14	10 14	2 54	3 54	+2 02
HU 4185	5 HR 35 74.	"	6	10 30	10 36	4 10	4 16	+1 38
HU 4186	6 HR 39 85.	"	50	11 00	11 50	4 40	5 30	+1 18
HU 4187	7 HR 43 38.	"	16	12 25	12 41	6 05	6 21	+1 26

46 $\frac{\text{\AA}}{\text{mm}}$

65

$A = \frac{25^R}{\pi}, h = 2^R$	$F = 310$	$Ne\ 28^A$	$C = 5$	$t = 25.4$	
"	"	"	"	25.1	Expos. de Ne con 1 vid. esmerilada
"	"	"	"	23.6	
"	"	"	"	21.7	
"	"	"	"	21.3	
"	"	"	"	19.3	e
"	"	"	"	18.9	
"	"	"	"	17.4	
"	"	"	"	16.7	
"	"	"	"	15.8	
"	"	"	"	14.9	
"	"	"	"	19.5	
"	"	"	"	18.7	
"	"	"	"	18.6	con D_c
"	"	"	"	18.1	
"	"	"	"	18.1	
"	"	"	"	17.2	
"	"	"	"	17.2	

66 29-II-1972

O.F.

29/II - 1/III/72

TS

TU

A_{2m}

IX 4188	HR 2803	IIa-O	706	710	0 21	0 25
	"	"	711	717	0 26	0 32
	HR 2786	"	734	752	0 49	1 07
IX 4189	HR 3386	IIa-O	936	958	2 51	3 03
	HR 3534	"	1015	1103	3 30	4 18
	HR 4177	"	1113	1131	4 28	4 46

26-27/II/72 K.

HU 4190	3 HR 3591	IIa-O	3 954	9 57	3 22	3 25 + 0 56
	5 HR 3591	"	6 958	10 04	3 26	3 32 + 1 02
	7 HR 3591	"	10 1005	10 15	3 33	3 43 + 1 11
HU 4191	HR 3591	"	60 1050	11 50	4 18	5 18 + 2 21
HU 4192	3 HR 4502	103a-E	20 1227	12 47	5 55	6 15 + 0 58
HU 4193	4 HR 4651	"	44 1311	13 55	6 39	7 23 + 1 21

27-28/II/72 K.

HU 4194	5 HR 2656	103a-E	56 829	9 25	1 53	2 49 + 1 55
HU 4195	6 HR 3353	"	50 952	10 42	3 16	4 06 + 1 49
HU 4196	7 HR 3781	"	50 1112	12 02	4 36	5 26 + 2 08
HU 4197	8 HR 4331	"	60 1228	13 28	5 52	6 52 + 1 52

28-29/II/72 K.

HU 4198	9 HR 2670	103a-E	60 734	8 34	0 54	1 54 + 1 00
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D
110 Å/mm

67

$A = 1R + 5/40$	$F = 6.0$	-	5	24°	No hay continua
$L = 11R + 12/40$	"	-	5		f/ el espectro de Fe.
"	"	-	5	23° 9	
"	"	-	5		
"	"	-	5	23° 9	
"	"	-	5	23° 1	
110 Å/mm					
$A = \frac{45R}{40}$	$F_{chem} = 6.0$		5	22.2	HR 3591
$L = 41R$	"			22.2	"
"	"			22.1	"
$40 \frac{A}{mm}$	$F_{chem} = 34.0$		"	21.8	HR 3591
$A = \frac{25R}{40} L = 2R$	"	Ne 28 ¹	"	21.5	
"	"	"	"	21.2	
"	"	Ne 28 ¹	"	22.1	
"	"	"	5	21.8	
"	"	"	"	21.3	
"	"	"	"	21.2	
"	"	"	"	22.5	

68 28-29/II/72 K.

T. S.

T. V.

A. h. m.

HU 4199	10 HR 2963	103a-E	20	8 53	9 13	2 13	2 33	+1 25
HU 4200	11 HR 3157	"	36	9 33	10 09	2 53	3 29	+1 50
HU 4201	13 HR 4217	"	54	11 14	12 08	4 34	5 28	+0 56
HU 4202	14 HR 4262	"	50	12 26	13 16	5 46	6 36	+1 59

28-29/III/72 K.

HU 4203	1 HR 3783	103a-E	30	9 49	10 19	1 15	1 45	+0 36
HU 4204	2 HR 4003	"	50	10 38	11 28	2 04	2 54	+0 53
HU 4205	4 HR 4814	"	40	13 27	14 07	4 53	5 33	+1 09

3-4/IV/72 K

HU 4206	14 HR 3680	"	40	9 41	10 21	0 43	1 23	+0 47
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4-5/IV/72 K

HX 4207	HD 45677	IIa-0	90	8 39	10 09	23 38	1 08	+2 57
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17-18/IV/72 K.

HX 4208	1 HR 3591	IIa-0	3	11 16	11 19	1 23	1 26	+2 18
2	"	"	6	11 19	11 25	1 26	1 32	+2 23
3	"	"	10	11 25	11 35	1 32	1 42	+2 31

18-19/IV/72 K.

HX 4209	1 HR 3591	"	2	11 01	11 03	1 04	1 06	+2 03
2	"	"	5	11 03	11 08	1 06	1 11	+2 06
3	"	"	10	11 08	11 18	1 11	1 21	+2 14

69

7 amb.

40 $\frac{A}{mm}$	$F_{elm} = 34.0$	$N_e 28^1$	$C = 5$	$22.4^0 C$	HU 4199
$A = 35^R, C = 2^R$	"	"	"	22.0	HU 4200
"	"	"	"	21.4	HU 4201
"	"	"	"	21.2	HU 4202
"	"	"	"	14.3	
"	"	"	"	14.2	
"	"	"	"	13.0	
"	"	"	"	18.7	
110 $\frac{A}{mm}$	$F_{elm} = 6.0$		$C = 5$	16.3	
$A = 45^R, C = 11^R$					
"	"		5	16.3	
"	"	$F_e 2^1$	5		
"	"		"	16.1	
"	"		5	16.4	
"	"	$F_e 2^1$	"		
"	"		"	16.3	

70

18-19/IV/72 K.

T.S.

T.V.

A.P.m.

HX4209	5 HD 101065	$\Pi_a - 0$	2 ^h 5	11 30	14 00	133	4 03	+1 09
7	HR 5327	"	14	14 24	14 38	4 27	4 41	+0 13
9	HR 5221	"	5	14 58	15 03	5 01	5 06	+1 10

27-28/IV/72 K.

HX4210	1 HR 3591	$\Pi_a - 0$	2	11 02	11 04	0 30	0 32	+2 04
2	"	"	5	11 04	11 09	0 32	0 37	+2 07.4
3	"	"	10 ^m	11 09	11 19	0 37	0 47	+2 15
5	HD 101065	"	3 ^h	11 35	14 35	1 03	4 03	+1 29
7	HR 5327	"	3 ^h 47	14 57	15 31	4 25	4 59	+0 56
9	HR 5221	"	4	15 49	15 53	5 17	5 21	+2 00

29-30/IV/72 K.

HU4211	HR 5093	103a-E	40 ⁵⁰	13 52	14 32	3 12	4 02	+0 46
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24-25/V/72 K.

HX4212	1 HR 4133	$\Pi_a - 0$	20	12 42	13 02	0 23	0 43	+2 24
2	HR 4140	"	2	13 32	13 34	1 13	1 15	+3 02
3	HR 5285	"	2.5	14 05	14 07.5	1 46	1 48.5	+0 03
4	HR 5683	"	2	14 35	14 37	2 16	2 18	-0 40
5	HR 5781	"	18	14 48	15 06	2 29	2 47	-0 36
6	HR 6519	"	4	15 35	15 39	3 16	3 20	-1 52
7	HR 6745	"	2	16 03	16 05	3 44	3 46	-2 02

$$110 \frac{\text{Å}}{\text{mm}}$$

$R: a = 45^\circ, b = 11^\circ$	$F_{\text{adm}} = 6.0$	$Fe 2^\circ$	$c = 5$	$t = 15.80$	
"	"	"	"	15.4	
"	"	"	"	15.4	Con JA
"	"	—	"	15.6	
"	"	$Fe 2^\circ$	"		Con 2 vid. cam.
"	"	"	"	15.0	
"	"	$Fe 2^\circ$	"	13.0	"
"	"	"	"	12.6	"
"	"	"	"	12.2	Con JA "

$$D = 40 \frac{\text{Å}}{\text{mm}}$$

$$R: a = 25^\circ, b = 2^\circ \quad F_{\text{adm}} = 34.0 \quad Kc 28^\circ \quad " \quad 15.2 + 10^m$$

$$D = 110 \frac{\text{Å}}{\text{mm}}$$

$$R: a = 45^\circ, b = 11^\circ \quad F_{\text{adm}} = 8.0 \quad Fe 1^\circ \quad c = 5 \quad t = 13.0 \quad \text{Con } D_B$$

"	"	"	"	12.8	
"	"	"	"	12.7	
"	"	"	"	12.6	
"	"	"	"	12.4	
"	"	"	"	12.4	
"	"	"	"	12.5	

72

24-25/V/72 K.

T. S.

T. U.

HX 4212	2 HR 68 19	IIa-0	10	16 30	16 40	4 56	5 06	-1 39
21-22/IV/72 HL.								
HX 4213	HD 74196	IIa-0	5	9 41	9 46	23 32	23 37	
	HD 74196		5	10 31	10 36	0 23	0 28	
	HD 80781		15	10 40	10 55	0 31	0 46	
	HD 90264		4	11 34	11 37	1 25	1 29	
	HD 93163		10	13 28	13 38	3 05	3 15	
	HD 120324		0.3	14 17.6	14 18.3	28.7	28.7	3 29
	HD 126769		3	14 22	14 25	4 07	4 10	
	HD 130807		0.8	14 49.2	14 50	4 14.2	4 15	

16-17/VI/72 K.

HX 4214	1 HR 53 27	IIa-0	28	14 48	15 16	0 58	1 26	+0 42
2 HD	137 193	"	44	15 28	16 12	1 38	2 22	+0 26
3 HD	140 817	"	24	16 40	17 04	2 50	3 14	+1 07
4 HR	59 10	"	10	17 22	17 32	3 32	3 42	+1 35
5 HR	59 12	"	12	18 28	18 40	4 38	4 50	+2 42
6 HD	153 919	"	15	19 00	19 15	5 10	5 25	+2 05
7	"	"	25	19 15	19 40	5 25	5 50	+2 25
8	"	"	40	19 40	20 20	5 50	6 30	+2 58

$$D_{Ag} = 110 \frac{\text{\AA}}{\text{mm}}$$

$$R: a = 45^\circ, b = 11^\circ \quad F_{edm} = 8.0$$

$$\frac{1}{R} + \frac{5}{40}$$

$$F_{edm} = 8.0$$

$$Fe\ 1^s$$

$$c = 5$$

$$t = 12.5$$

$$\frac{1}{R} + \frac{12}{40}$$

$$Fe\ 2^s$$

$$t = 19.4$$

$$Fe\ 2^s$$

$$Fe\ 2^s$$

$$Fe\ 2^s$$

$$18.2$$

$$D_{Ag} = 110 \frac{\text{\AA}}{\text{mm}}$$

$$R: a = 45^\circ, b = 2^\circ \quad F_{edm}' = 7.5$$

$$Fe\ 3^s$$

$$c = 5$$

$$t = 12.8$$

$$F_{edm} \text{ con drif. } 2, 8.$$

u

u

u

u

$$12.3$$

u

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u

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$$12.6$$

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$$12.5$$

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$$12.6$$

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$$12.8$$

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$$12.5$$

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u

$$12.0$$

74

17-18/ $\sqrt{I}$ /72 K.

T. S.

T. V.

 $D_{ij} = \frac{40}{mm}$

HU4215	1 HR 52 69.	103a-E	35	14 40	15 15	0 46	1 21	+0 56
HU4216	2 HR 56 14.	"	76	15 54	17 10	2 00	3 16	+1 29
HU4217	3 HR 63 47.	"	26	17 50	18 16	3 56	4 22	+0 59
HU4218	4 HR 66 81.	"	40	18 43	19 23	4 49	5 29	+1 09

18-19/ $\sqrt{I}$ /72 K.

HU4219	5 HR 51 58.	103a-E	50	14 07	14 57	0 09	0 59	+0 50
HU4220	6 HR 57 73.	"	60	16 45	17 45	2 47	3 47	+1 43

22-23/ $\sqrt{II}$ /72 K.

HX4221	1 HR 56 83.	IIa-0	3	17 10	17 13	0 58	1 01	+1 56
	2 HR 57 81.	"	18	17 27	17 45	1 15	1 33	+2 03
	3 HR 67 45.	"	4	18 27	18 31	2 15	2 19	+0 23
	4 HR 68 19.	"	14	18 54	19 08	2 42	2 56	+0 47

24-25/ $\sqrt{II}$ /72 K.

HU4222	1 HR 65 58.	103a-E	36	18 26	19 02	2 06	2 42	+1 09
HU4223	2 HR 66 32.	"	48	19 15	20 03	2 55	3 43	+1 51

29-30/ $\sqrt{III}$ /72 K.

HU4224	1 HR 67 73.	103a-E	34	18 44	19 18	2 05	2 39	+0 55
HU4225	2 HR 69 19.	"	32	19 37	20 09	2 58	3 30	+1 27

2-3/ $\sqrt{III}$ /72 K.

HU4226	3 HR 63 47.	103a-E	14	17 25	17 39	0 30	0 44	+0 28
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$R: a = 25^d, l = 2^z$	$F_{cam} = 34.0$	$N_c 28^d$	$C = 5$	$t = 14.4$	
"	"	"	"	14.6	
"	"	"	"	14.5	
"	"	"	"	14.4	
$D_{Hj} = 40 \frac{A}{mm}$					
$R: a = 25^d, l = 2^z$	"	"	"	10.7	+ 6"
"	"	"	"	9.4	
$D_{Hj} = 110 \frac{A}{mm}$					
$R: a = 45^d, l = 1^z$	$F_{cam} = 7.5$		$C = 5$	$t = 10.0$	
"	"	$Fe 3^d$	"	9.6	
"	"	"	"	9.3	
"	"	"	"	9.1	
$D_{Hj} = 40 \frac{A}{mm}$					
$R: a = 25^d, l = 2^z$	$F_{cam} = 34.0$	$N_c 28^d$	$C = 5$	$t = 9.8$	
"	"	"	"	9.4	
$R_{Hj} = 40 \frac{A}{mm}$					
$R: a = 25^d, l = 2^z$	$F_{cam} = 34.0$	$N_c 28^d$	$C = 5$	$t = 10.3$	
"	"	"	"	10.2	
$R_{Hj} = 40 \frac{A}{mm}$					
$R: a = 25^d, l = 2^z$	"	"	$C = 5$	$t = 9.1$	

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2-3/viii/72 K.

T.S.

T.U.

HU 4227	4 HR 6235.	103a-E	32	17 55	18 27	1 00	1 32	+1 25
HU 4228	6 HR 7209.	"	18	20 05	20 23	3 10	3 28	+1 13
HU 4229	7 HR 7574.	"	56	20 50	21 46	3 55	4 51	+1 27

3-4/viii/72 K.

HU 4230	8 HR 5930.	103a-E	40	16 29	17 09	23 30	0 10	+0 55
HU 4231	9 HR 6061.	"	32	17 30	18 02	0 31	1 03	+1 32
HU 4232	10 HR 6841.	"	54	19 14	20 08	2 15	3 09	+1 26
HU 4233	11 HR 7155.	"	52	20 40	21 32	3 41	4 33	+2 10

4-5/viii/72 K.

HU 4234	12 HR 6350.	103a-E	40	17 23	18 03	0 20	1 00	+0 39
HU 4235	13 HR 6386.	"	40)	18 50	19 30	1 47	2 27	+2 00

21-22/x/72 B.

HU 4236	HD 221507.	II a-O	40	22:45	23:25	0 35	1.15	+0 26
HU 4237	HD 220825.	"	⁶ 80	0:02	1 02	1 52	2 52	+1 06

24-25/x/72 F.

HX 4238	HR 7814.	"		21 31	21 42	23 06	23 17	
	HR 8644.	"		21 58	22 10	23 33	23 45	
	HR 8655.	"		22 28	22 43	0 03	0 18	
HU 4239	13-14/x/72 HR 8937.	B. II a-O	32	0:45	1:19	1 04	1 38	+1 20
HU 4240	HR 8949.	"	63	2:03	3:06	2 22	3 25	+3 01

$$D_{H_2} = 40 \frac{\text{\AA}}{\text{mm}}$$

$$R: a = 25^d, l = 2^l \quad F_{\text{cám}} = 34.0$$

$$\text{de } 28^s$$

$$c = 5$$

$$t = 8.8$$

$$u \quad u \quad u \quad u \quad 7.4$$

$$u \quad u \quad u \quad u \quad 6.8 \quad e$$

$$u \quad u \quad u \quad u \quad 6.0$$

$$u \quad u \quad u \quad u \quad 5.3$$

$$u \quad u \quad u \quad u \quad 4.0$$

$$u \quad u \quad u \quad u \quad 3.5$$

$$u \quad u \quad u \quad u \quad 6.5$$

$$u \quad u \quad u \quad u \quad 5.6$$

$$D_{H_2} = 40 \frac{\text{\AA}}{\text{mm}}$$

$$h = 25^d \quad F_{\text{cám}} = 34.0$$

$$Fe = 5 \text{ seg.}$$

$$22^\circ$$

$$HR 8937$$

$$l = 2R + \frac{20}{40}$$

$$u \quad u$$

$$u$$

HR 8911 (-20)
Exposición preliminar
pida por miles. -

$$D_{H_2} 110 \frac{\text{\AA}}{\text{mm}} \quad F_{\text{cám}} = 7.5 \quad Fe = 1 \text{ seg.} \quad c = 5$$

$$21^\circ$$

$$A = 1R + \frac{5}{40}$$

$$u$$

$$20.5^\circ$$

$$L = 11R$$

$$u$$

$$20^\circ$$

$$D_{H_2} = 40 \frac{\text{\AA}}{\text{mm}} \quad F_{\text{cám}} = 34.0 \quad Fe = 5 \text{ seg.}$$

$$+ 3^m$$

$$h = 27^d$$

$$l = 2R + \frac{20}{40}$$

$$u \quad u$$

$$u$$

$$HD 221760$$

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	13-14/XI/72	B.	T.S.	T.U.	A.h.m
Hu4241	HR 1240.	IIa-0 45	3:57 4:45	4 16 5 04	+0 22
	22-23/XI/72	B.			
Hu4242	HD 223640.	IIa-0 80	2:24 3:44	2:0 ⁸ 3:2 ²⁸	+3 14
Hu4243	HR 1240.	" 45	4:16 5:01	4:00 4:45	+0 40
	28-29/XI/72	H.L.			
Hu4244	HD 2262.	IIa-0 25 ^m	1:12 1:44	0:34 1:04	+1 ^h 00
Hu4245	HD 36822.	" 25 ^m	3:16 3:56	2:36 3:16	-2 ^h 00
	28-29/XI/72	H.L.			
Hx4246	HD 33095.	IIa-0 60 ^m	3:50 5:53	01:09 02:13	+0:30
	HD 67594.	7 ^m	6:49 6:59	03:07 03:18	-1:15
	HD 70110.	29 ^m	7:20 7:52	03:40 04:11	-0:40
	21-22/XII/72	K.		T.A.	
Hu4247	HR 710.	IIa-F (70)	3 31 - 4 41	22 20 23 30	+1 42
Hu4248	HR 1661.	" 76	6 11 - 7 27	1 00 2 16	+1 43
	26-27/XII/72	K.		T.A.	
Hu4249	HR 1705.	IIa-F 11	5 45 5 56	0 15 0 26	+0 39
Hu4250	HR 1762.	" 16	6 12 6 28	0 42 0 58	+1 01
Hu4251	HR 1899.	" 2	6 44 6 46	1 14 1 16	+1 12
Hu4252	HR 1899.	" 1	6 52 6 53	1 22 1 23	+1 19
Hu4253	HR 2521.	" 46	7 16 8 02	1 46 2 32	+0 52

$$D_{H_2} = 40 \frac{\text{\AA}}{\text{mm}}$$

$$h = 27^\circ$$

$$l = 2R + 20/40$$

$$F_{\text{cain}} = 34.0$$

$$Fe = 5^{\text{seg.}}$$

$$+ 3^m$$

$$D_{H_2} = 40 \frac{\text{\AA}}{\text{mm}}$$

$$h = 27^\circ$$

$$l = 2R + 20/40$$

$$F_{\text{cain}} = 34.0$$

$$Fe = 4^{\text{seg.}}$$

$$c = 5$$

$$HR 9031$$

$$19^\circ$$

$$D_{H_2} = 40 \frac{\text{\AA}}{\text{mm}}$$

$$h = 20^\circ$$

$$l = 2R + 20$$

$$"$$

$$10^{\text{seg.}} Fe.$$

$$4$$

$$h = 20^\circ$$

$$"$$

$$"$$

$$"$$

$$D_{H_2} = 110 \frac{\text{\AA}}{\text{mm}}$$

$$F_{\text{cain}} = 7.5$$

$$A = 1R + 5/40$$

$$Fe = 5^{\text{seg.}}$$

$$4$$

$$"$$

$$"$$

$$"$$

$$L = 11R + 10/40$$

$$"$$

$$"$$

$$"$$

$$D_{H_2} = 40 \frac{\text{\AA}}{\text{mm}}$$

$$R: 25^\circ - 2^\circ$$

$$F_{\text{cain}} = 34.0$$

$$Fe 64^\circ$$

$$c = 5$$

$$t = 25.0^\circ C$$

$$T. U. \quad 1^{20} \quad 2^{30}$$

$$"$$

$$"$$

$$"$$

$$"$$

$$24.7$$

$$400$$

$$516$$

$$D_{H_2} = 40 \frac{\text{\AA}}{\text{mm}}$$

$$R: 25^\circ - 2^\circ$$

$$"$$

$$"$$

$$c = 5$$

$$20.6$$

$$315$$

$$326$$

$$"$$

$$"$$

$$"$$

$$"$$

$$20.3$$

$$342$$

$$358$$

$$"$$

$$"$$

$$"$$

$$"$$

$$20.3$$

$$414$$

$$416$$

$$"$$

$$"$$

$$"$$

$$"$$

$$20.3$$

$$422$$

$$423$$

$$"$$

$$"$$

$$"$$

$$"$$

$$19.8$$

$$446$$

$$532$$

$$T. U.$$

80.

30-31/xii/72 K.

T. S.

T. V.

HC4254 · KR 1091 · $\bar{11}a-F$ 90 4 23 5 53 137 307 +135

H04255 2 HR 1957. " 90 6 18 7 48 3 32 502 +1 24

3-4 / I / 73 K.

HU4256	1	HR 1244	IIa-F	30	4 20	4 50	1 18	1 48	+0 35
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H04257 2 HR 1462 . " 90 507 637 205 335 + 118

K04258 3 HR 1903. " 5 6 57 702 355 400 +125

404259 4 HR 2694. " 90 7 24 8 54 4 22 552 + 102

5-6/15/73 K.

HJ 4260 1 HR 1363. π_{eff} 50 519 609 209 259 + 1.25

NO 4261 2 APR 1903. " 3 656 659 346 349 +124

H ₀ 4262 3	HR 2455.	"	76	720	836	410	526	+120
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24-25/I/73 K.

HV 4263 14R 1363. Π a-R 50 451 541 026 116 +057

H04264 2 hr 1903. " 4 6 05 6 09 140 144 + 033

25-26/II/73 u.

H042653	HR 1441	IIaF	52	500	552	031	123	+055
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HU4266 4 HR 1513. " 40 6 16 6 56 145 225+154

Ho 42675 HR 2727^c 4 30 7 29 7 59 3 00 3 30 + 0 33

26-27/I/73 K.

HW4268642 1778. Ya-F 70 523 633 050 200 4037

$$D_{4j} = 40 \frac{\text{\AA}}{\text{mm}}$$

$$R: 25 \text{ } 2^2 \quad F_{\text{chim}} = 34.0$$

$$\sqrt{e} 64^1$$

$$c = 4$$

$$t = 23.00$$

$$\sqrt{e} 64^1$$

"

$$22.4$$

"

"

"

$$c = 5$$

$$23.9$$

"

"

"

"

$$23.9$$

"

"

"

"

$$23.7 \text{ con De}$$

"

"

"

"

$$23.3$$

"

"

"

$$c = 5, p, d$$

$$19.4$$

"

"

"

"

$$18.8 \text{ con De}$$

"

"

"

"

$$17.5$$

"

"

"

$$c = 5$$

$$19.6$$

"

"

"

"

$$19.6 \text{ con De}$$

"

"

"

"

$$18.4$$

"

"

"

"

$$17.9$$

"

"

"

"

$$17.9 \text{ se nullo'}$$

"

"

"

"

$$22.6$$

26-27/I/73 K.

T.S.

T.U.

HU 4269	7 HR 2357.8	IIa-F	26	7 28	7 54	2 55	3 21	+1 14
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27-28/I/73 K.

HU 4270	8 HR 1443.	IIa-F	22	5 30	5 52	0 53	1 15	+1 11
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HU 4271	9 HR 1801.	"	70	6 09	7 19	1 32	2 42	+1 22
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HU 4272	10 HR 2940.	"	48	7 57	8 45	3 20	4 08	+0 45
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HU 4273	11 HR 3460.	"	30	9 27	9 57	4 50	5 20	+1 03
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3-4/II/73 K.

HU 4274	3 HR 3502.	IIa-F	40	9 15	9 55	4 11	4 51	+0 52
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HU 4275	4 HR 3925.	"	45	10 15	11 00	5 11	5 56	+0 45
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4-5/II/73 K.

HU 4276	5 HR 2125.	IIa-F	56	6 40	7 36	1 32	2 28	+1 15
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HU 4277	6 HR 2348.	"	50	7 58	8 48	2 50	3 40	+1 58
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HU 4278	7 HR 3223.	"	12	9 12	9 24	4 04	4 16	+1 10
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HU 4279	8 HR 3784.	"	36	9 39	10 15	4 31	5 07	+0 28
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5-6/II/73 K.

HU 4280	9 HR 1947.	IIa-F	60	6 35	7 35	1 23	2 23	+1 28
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HU 4281	10 HR 2716.	"	50	7 55	8 45	2 43	3 33	+1 10
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HU 4282	11 HR 3483.	"	90	9 14	10 44	4 02	5 32	+1 15
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14-15/II/73 K.

HU 4283	1 HR 2005.	103a-E	30	6 43	7 13	0 55	1 25	+1 12
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$$D_f = 40 \frac{\text{Å}}{\text{mm}}$$

$$R_{\text{eff}} = 25 \text{ Å} / l = 22 \text{ Å} \quad F_{\text{calc}} = 34.0 \quad N_e 64^1 \quad c = 5 \quad t = 22.5 \text{ Å} \quad e \text{ to mbblo'}$$

$$21 \quad 21 \quad 21 \quad 21 \quad 24.5$$

$$21 \quad 21 \quad 21 \quad 21 \quad 23.5$$

$$21 \quad 21 \quad 21 \quad 21 \quad 22.6$$

$$21 \quad 21 \quad 21 \quad 21 \quad 21.3$$

$$21 \quad 21 \quad 21 \quad 21 \quad 16.5$$

$$21 \quad 21 \quad 21 \quad 21 \quad 15.9$$

$$21 \quad 21 \quad 21 \quad 21 \quad 17.6$$

$$21 \quad 21 \quad 21 \quad 21 \quad 16.9$$

$$21 \quad 21 \quad 21 \quad 21 \quad 16.9$$

$$21 \quad 21 \quad 21 \quad 21 \quad 16.3$$

$$21 \quad 21 \quad 21 \quad 21 \quad 20.7$$

$$21 \quad 21 \quad 21 \quad 21 \quad 20.5$$

$$21 \quad 21 \quad 21 \quad 21 \quad 20.2$$

$$21 \quad 21 \quad N_e 28^1 \quad 21 \quad 19.0$$

84

14-15/II/73 K.

T.S.

T.U.

D₀ = 40 $\frac{A}{mm}$

HU 4284	2 HR 2829	103a-E	40	7 32	8 12	1 44	2 24	R: a=25 $\frac{A}{mm}$
HU 4285	3 HR 2984	"	42	8 34	9 16	2 46	3 28	"
HU 4286	4 HR 3503	"	40	9 36	10 16	3 48	4 28	"
HU 4287	5 HR 4123	"	16	10 46	11 02	4 58	5 14	"

15-16/II/73 K.

A.h.m.

HU 4288	1 HR 2262	103a-E	34	7 47	8 21	1 55	2 29	+149
HU 4289	2 HR 2994	"	16	8 44	9 00	2 52	3 08	+110
HU 4290	3 HR 3349	"	44	9 23	10 07	3 31	4 15	+119
HU 4291	4 HR 4056	"	28	10 36	11 04	4 44	5 12	+033

15-17/II/73 F.

D 110 $\frac{A}{mm}$

HX 4292	HR 2309	103a-O	6 35	6 55			
	HR 3070	"	7 53	8 12			
	HR 3276	"	8 25	9 21			
	HR 3863	"	10 00	10 18			
	HR 4134	"	10 34	10 46			
	HR 4239	"	10 55	11 10			
	HR 4423	"	11 25	11 30			
	HR 4443	"	11 45	12 00			
	HR 4444	"	12 02	12 20			

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A. h. m.

$F_{cam} = 34.0$	$F_{cal} = 25.0$	$N_e 28^1$	$C = 5$	$t = 18.50 + 0.29$
"	"	"	"	18.2 + 1.15
"	"	"	"	18.0 + 1.09
"	"	"	"	17.9 + 0.25 e
$D_{avg} = 40 \frac{\text{Å}}{\text{mm}}$ $R: a = 25.1, b = 2^2$				
$F_{cam} = 34.0$	$F_{cal} = 25.0$	$N_e 28^1$	$C = 5$	19.0
"	"	"	"	18.9
"	"	"	"	19.0
"	"	"	"	19.4
$C = 5$				22° 6
"				22°
"				22°
"				21° 5
"				21° 5
"				21° 3
"				"
"				"
"				20° 8

86 9-10/II/73 K.

T. S.

T. V.

D₁₂ = 40 $\frac{A}{mm}$

Hv4293	1 HR 3503	103a-B	40	8 55	9 35	1 37	2 12	R: a=25 $\frac{A}{mm}$
Hv4294	2 HR 3867	"	40	9 59	10 39	2 41	3 21	"
Hv4295	3 HR 4239	"	26	11 49	12 15	4 31	4 57	"
Hv4296	4 HR 4513	"	36	12 42	13 18	5 24	6 00	"

10-11/II/73 K.

Hv4297	5 HR 3010	"	32	8 18	8 50	0 56	1 28	"
Hv4298	6 HR 3255	"	54	9 17	10 11	1 55	2 49	"

20-21/III/73 K.

Hv4299	1 HR 3135	"	30	8 45	9 15	0 43	1 13	"
Hv4300	2 HR 3135	"	30	9 47	10 17	1 45	2 15	"
Hv4301	3 HR 4000	"	36	10 29	11 05	2 27	3 03	"

21-22/II/73

Hx4302 HD 49333 IIa-0 10^m1^h:50^m 2^h:05^mD₁₂ = 110 $\frac{A}{mm}$
1R+5/40
11R+20/40

24-25/III/73 H.L.

Hx4303 HR 3321 103a-0 7^m0^h:37^m 0^h:4^m D₁₂ = 110 $\frac{A}{mm}$ 3321 5^m

0:50 0:59 1R+11/40

3448 5^m

1:30 1:36 11R+20/40

3462 5^m

1:49 1:58

3502 4^m

2:28 2:34

4175 21^m

2:53 3:16

A.h.m

$F_{elm} = 34.0$	+0 28	$N_e 28^3$	$C = 5$	$t = 19.2$	
"	+0 38	"	"	18.8	
"	+1 14	"	"	18.1	
"	+1 18	"	"	17.9	
"	+0 50	"	"	20.2	
"	+1 29	"	"	19.5	
"	+1 01	$N_e 32^3$	$C = 4$	20.9	Velo
"	+2 03	"	"	20.6	
"	+0 38	"	$C = 5$	20.4	
$F_{elm} = 7.5$	+1 ^h 20 ^m	No	$C = 4$	25.2	
$F_{elm} = 7.5$	+0 ^h 43 ^m	No	$C = 5$	24.4	
"	+0 ^h 50 ^m	"	"		
"	+1: 10	"	"	24.2	
"	+1: 35	"	"		
"	+2: 10	"	"		
"	+0: 57	"	"	23.8	

24-25/III/73

T.S.

T.U.

D₄₀ 1104

Hx 4303	HR 4089	/030-0	1 ^m 5			3.39	3.41	
	4390		0 ^m 4			4 9.5	4 10	
41	113163		53 ^m			4.41	5.35	
30-31/III/73 K.								
HU 4304	HR 3135	103a-E	40	9 03	9 43	0 22	1 02	D ₄₀ = 40 $\frac{\text{Å}}{\text{mm}}$ 2.1625/62
HU 4305	2 HR 3846	"	40	10 12	10 52	1 31	2 11	"
16-17/IV/73 K.								
HU 4306	1 HR 3488	103a-E	40	9 28	10 08	23 40	0 20	D ₄₀ = 40 $\frac{\text{Å}}{\text{mm}}$ "
HU 4307	2 HR 4263	"	36	11 17	11 53	1 29	2 05	"
HU 4308	3 HR 4387	"	48	12 25	13 13	2 37	3 25	"
HU 4309	4 HR 5103	"	56	13 36	14 32	3 48	4 44	"
HU 4310	5 HR 5439	"	26	15 00	15 26	5 12	5 38	"
18-19/IV/73 K.								
HU 4311	1 HR 3207	Ja-O	8	9 06	9 14	23 10	23 18	D ₄₀ = 40 $\frac{\text{Å}}{\text{mm}}$ "
HU 4312	2 HR 3207	103a-E	3	9 26	9 29	23 30	23 33	"
HU 4313	3 HR 3207	"	2	9 38	9 40	23 42	23 44	"
HU 4314	4 HR 3488	"	46	9 56	10 42	0 00	0 46	"
HU 4315	5 HR 4290	"	40	11 01	11 41	1 05	1 45	"
HU 4316	6 HR 4342	"	90	12 06	13 36	2 10	3 40	"
HU 4317	7 HR 4675	"	90	14 02	14 42	4 06	4 46	"

From	A. h. m	Comp.		
7.5	+1:40	Mo	C = 5	
	+1:10	"	"	
	+0:55	"	"	23° 9
F _{dm} = 34.0	+1:24	Ne 40 ¹	C = 5	21.8 μ_x, μ_β cm.
"	+0:54	"	"	21.4
"	+1:03	"	"	13.8
"	+0:42	"	"	13.2
"	+1:31	"	"	13.0
"	+0:32	"	"	13.1
"	+0:40	"	"	13.0
"	+1:02	—	"	16.1 Con D _B
"	+1:19	Ne	"	15.8 Con D _C
"	+1:31	"	"	15.8 Con D _C
"	+1:34	"	"	15.3
"	+0:23	"	"	14.9
"	+1:42	"	"	14.7
"	+2:06	"	"	14.5

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2-3/II/73 K.

T.S.

T.V.

A.h.m.

HU4318	1 HR 50 97.	103a-E	20	14 32	14 52	3 41	4 01	+1 12
HU4319	2 HR 54 38.	"	50	15 12	16 12	4 21	5 21	+1 10
HU4320	3 HR 53 40.	"	45	16 46	16 47.5	5 55	5 56.5	+2 32
HU4321	4 HR 59 42.	"	14	17 01	17 15	6 10	6 24	+1 12

4-5/II/73 K.

HU4322	1 HR 34 88.	103a-E	34	10 39	11 13	23 40	0 14	+2 11
HU4323	2 HR 39 86.	"	50	13 09	13 59	1 10	2 00	+3 27

7-8/II/73 K.

HU4324	3 HR 34 89.	103a-E	60	10 42	11 42	23 31	0 31	+2 28
HU4325	4 HR 41 52.	"	60	12 23	13 23	1 12	2 12	+2 19
HU4326	5 HR 46 12.	"	40	13 46	14 26	2 35	3 15	+2 02

12-13/II/73 K.

HU4327	1 HR 42 10.	103a-E	50	12 10	12 50	0 39	1 19	+1 46
HU4328	2 HR 49 30.	"	40	13 20	14 00	1 49	2 29	+0 40
HU4329	3 HR 50 27.	"	40	14 10	14 50	2 39	3 19	+1 12
HU4330	4 HR 55 61.	"	50	15 31	16 21	4 00	4 50	+1 02

17-18/II/73 K.

HU4331	1 HR 42 50.	103a-E	14	11 53	12 07	0 03	0 17	+1 09
HU4332	2 HR 44 38.	"	30	12 31	13 01	0 41	1 11	+1 16
HU4333	3 HR 48 76.	"	36	13 33	14 09	1 43	2 19	+1 02

40 $\frac{\text{Å}}{\text{mm}}$

918P

R: $\lambda = 25^{\circ}$, $\phi = 2^{\circ}$ $F_{\text{can}} = 34.0$ $c = 5$ $t = 8.7^{\circ}\text{C}$

NE 401

8.5

8.5

Can De

8.2

12.6

12.2

11.9

CJ-582242

11.7

11.5

9.6

9.2

8.6

8.5

11.0

10.5

10.2

92

17-18/V/73 K.

T.S.

T.U.

A.h.m.

Hv 4334	4. HR 5316.	103a-E	10	14 56	15 06	3 06	3 16	+0 49
Hv 4335	5 HR 5376.	"	20	15 20	15 40	3 30	3 50	+1 10
Hv 4336	6 HR 5466.	"	24	16 00	16 24	4 10	4 35	+1 33

21-22/V/73 K.

Hv 4337	1. HR 4037.	103a-E	2	13 08	13 10	1 02	1 04	+2 56
Hv 4338	2 HR 4908.	"	12	13 31	13 43	1 25	1 37	+0 43
Hv 4339	3 HR 4952.	"	46	14 05	14 51	1 59	2 45	+1 22
Hv 4340	4 HR 5484.	"	24	15 23	15 47	3 17	3 41	+0 54
Hv 4341	5 HR 5517.	"	30	16 07	16 37	4 01	4 31	+1 36
Hv 4342	6 HR 6042.	"	60	17 04	18 04	4 58	5 58	+1 23

13-14/VI/73 K.

Hv 4343	1 HR 4930.	103a-E	32	14 01	14 33	0 18	0 50	+1 17
Hv 4344	2 HR 5027.	"	30	14 57	15 27	1 14	1 44	+1 54
Hv 4345	3 HR 5951.	"	36	16 34	17 10	2 51	3 27	+0 53

18-19/VI/73 K.

Hv 4346	1 HR 5952.	103a-E	34	16 50	17 24	2 53	3 27	+1 09
Hv 4347	2 HR 6233.	"	32	17 55	18 27	3 58	4 30	+1 23

31/VII-1/VIII/73 K.

Hv 4348	3 HR 6051.	103a-E	40	16 45	17 25	23 59	0 39	+0 53
Hv 4349	4 HR 6473.	"	44	17 51	18 35	1 05	1 49	+0 51

40. $\frac{A}{mm}$

93

$R: a = 25, b = 22$ $F_{em} = 234.0$ $N_e 40^3$ $c = 5$ $t = 10.1 c$

" " " " 10.2

" " " " 10.1

" " " " 12.7

" " " " 12.4

" " " " 11.5

" " " " 11.1

" " " " 10.7

" " " " 9.9

" " " " 9.6

" " " " 8.9

" " " " 8.3

" " $N_e 44^3$ " 5.6

" " " " 5.3

" " " " 10.9

" " " " 10.3

94.

31-VII/1-VIII/73 K.

T. S.

T. U.

A. h. ms

HU 4350	5 KR 69 89.	103a-E	76	19 10	20 28	2 24	3 40	+1 12
HU 4351	6 KR 72 69.	"	80	21 18	22 38	4 32	5 52	+2 50

5-6/VIII/73 K.

HU 4352	1 KR 62 75.	103a-E	40	17 20	18 00	0 14	0 54	+0 47
HU 4353	2 KR 64 78.	"	40	18 26	19 06	1 20	2 00	+1 22
HU 4354	3 KR 68 81.	"	24	19 29	19 53	2 23	2 47	+1 20
HU 4355	4 KR 72 41.	"	50	20 18	21 08	3 18	4 02	+1 38

14-15/VIII/73 K.

HU 4356	5 KR 78 90.	103a-E	40	21 53	22 33	4 12	4 52	+1 36
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16-17/VIII/73 K.

HU 4357	1 KR 72 68.	103a-E	40	21 32	22 12	3 43	4 23	+2 44
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18-19/VIII/73 K.

HU 4358	2 KR 73 39.	103a-E	46	21 03	21 49	3 06	3 52	+2 07
HU 4359	3 KR 82 60.	"	8	22 28	22 36	4 31	4 39	+0 57
HU 4360	4 KR 83 86.	"	16	22 51	23 07	4 54	5 10	+1 00
HU 4361	5 KR 84 02.	"	8	23 21	23 29	5 24	5 32	+1 24
HU 4362	6 KR 84 08.	"	24	23 44	0 08	5 46	6 10	+1 54
HU 4363	7 KR 86 28.	"	5	0 22	0 27	6 24	6 29	+1 48

19-20/VIII/73 K.

HU 4364	8 KR 69 63.	"	46	19 53	20 39	1 52	2 38	+1 45
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95P

$$D_{H_2} = 40 \frac{\text{Å}}{\text{mm}}$$

$R: a = 25 \frac{1}{\text{Å}} \text{Å}^2$	$F_{\text{am}} = 34.0$	Ne 443	$C = 5$	$t = 9.6^\circ \text{C}$	
"	"	"	"	8.8	
"	"	—	"	12.4	$F = 310$
"	"	—	"	11.6	
"	"	—	"	11.4	
"	"	Ne 100 ^A con W.C.	"	11.2	Con un vid. com.
Nuevo fotómetro					$F = 155$
"	"	Ne 54 ^A	$C = 4-3$	6.7	$F = 318$
"	"	"	$C = 5$	12.4	$F = 312$
"	"	"	"	8.5	$F = 315$
"	"	"	"	8.4	
"	"	"	"	8.3	
"	"	"	"	8.2	
"	"	"	"	7.5	
"	"	"	"	7.5	
"	"	"	"	9.7	

96

19-20/VIII/73 K.

T. S.

T. U.

HU 4365	9 HR 7246	103a-E	48	21 04	21 52	3 03	3 51	+2 22
HU 4366	10 HR 7920	II a-0	30	22 43	23 13	4 42	5 12	+2 16

26-27/VIII/73 K.

HU 4367	1 HR 6881	103a-E	24	20 42	21 06	2 14	2 38	+2 33
HU 4368	2 HR 7211	"	20	21 28	21 48	3 00	3 20	+2 36

2-3/IX/73 K.

HU 4369	3 HR 6962	"	28	20 34	21 02	1 38	2 06	+2 17
HU 4370	4 HR 7270	"	40	21 20	22 00	2 24	3 04	+2 31

3-4/IX/73 K.

HU 4371	5 HR 6821	"	40	19 07	19 47	0 07	0 47	+1 13
HU 4372	6 HR 7068	"	20	21 10	21 30	2 10 2 30	2 30	+2 33

18-19/IX/73 K.

HU 4373	1 HR 6175	103a-F	10	20 31	20 41	0 32	0 42	+4 00
HU 4374	2 HR 6175	"	6	21 14	21 20	1 15	1 21	+4 41

27-28/X/73 K.

HU 4375	1 HR 884	103a-E	40	3 20	4 00	2 45	3 25	+0 44
HU 4376	2 HR 1128	"	60	4 27	5 27	3 52	4 52	+1 22
HU 4377	3 HR 1759	"	40	6 02	6 42	5 27	6 07	+1 04
HU 4378	4 HR 2060	"	50	7 13	8 03	6 38	7 28	+1 46

$$D_H = 40 \frac{\text{\AA}}{\text{mm}}$$

$R: a=25, b=2^2$	$F_{\text{can}} = 34.0$	Ne 54^1	$C=5$	$t=9.2^\circ\text{C}$	
"	"	Fe 2^1	"	8.3	Fe 2^1 can 1 bid. can
"	"	Ne 54^1	"	9.7	e
"	"	"	"	9.2	"
"	"	"	"	16.9	"
"	"	"	"	16.2	"
"	"	"	"	"	"
"	"	"	"	16.9	"
$D_H = 40 \frac{\text{\AA}}{\text{mm}}$					
$R: a=25, b=4^2$	"	Ne $4^m, Fe 2^1$	"	10.7	Fe 2^1 can 1 v. us.
"	"	Ne $2^m, Fe 4^1$	"	10.2	Fe 4^1 " " "
$D_H = 40 \frac{\text{\AA}}{\text{mm}}$					
$R: a=25, b=2^2$	"	Ne 60^1	"	17.2	$F=318$
"	"	"	"	16.6	+ 10^m exposure
"	"	"	"	16.2	"
"	"	"	"	16.1	"

98

28-29/XI/73 K.

T. 3.

T. U.

Hu4379	5 HR 990	103a-E	60	1 56	2 56	1 17	2 17	- 0 44
Hu4380	6 HR 1018	"	46	3 45	4 31	3 06	3 52	+ 0 47
Hu4381	7 HR 1217	"	50	4 59	5 49	4 20	5 10	+ 1 31
Hu4382	8 HR 2071	"	50	6 14	7 04	5 35	6 25	+ 0 45
10-11/XII/73 K.								
Hu4383	1 HR 1596	"	50	2 53	3 43	1 26	2 16	- 1 38
Hu4384	2 HR 1049	"	50	4 24	5 14	2 57	3 47	+ 1 24
Hu4385	3 HR 1700	"	40	5 40	6 20	4 13	4 53	+ 0 53
Hu4386	4 HR 1960	"	40	6 50	7 30	5 23	6 03	+ 1 33
11-12/XII/73 K.								
Hu4387	5 HR 1058	"	70	3 48	4 58	2 18	3 28	+ 0 56
Hu4388	6 HR 1081	"	40	5 15	5 55	3 45	4 25	+ 2 06
Hu4389	7 HR 1769	"	50	6 33	7 23	5 03	5 53	+ 1 38
16-17/XII/73 K.								
Hu4390	1 HR 1082	"	50	5 26	6 16	3 36	4 26	+ 2 21
15-16/I/74 K.								
Hu4391	2 HR 1960	"	40	6 50	7 30	3 02	3 42	+ 1 33
Hu4392	3 HR 2932	"	46	8 10	8 56	4 22	5 08	+ 0 57
Hu4393	4 HR 3257	"	44	9 28	10 12	5 40	6 24	+ 1 34

99

F = 311

$$D_H = 40 \frac{\text{\AA}}{\text{mm}}$$

$$R: a=25^{\circ}, b=2^{\circ}$$

$$F = 34.0$$

Chm

$$N_e 60^{\circ}$$

$$C = 5$$

$$t = 20.4e + 10^m \text{ de } \text{aproximado}$$

"	"	"	"	19.9	
"	"	"	"	19.4	F = 315
"	"	"	"	19.2	
"	"	"	"	19.2	F = 301
"	"	"	"	17.1	F = 306
"	"	"	"	15.8	
"	"	"	"	14.9	
"	"	"	"	17.6	
"	"	"	"	17.5	
"	"	"	4	17.7	
"	"	"	5	20.7	
"	"	"	5	22.9	
"	"	"	"	22.6	
"	"	"	"	22.4	

100

16-17/I/74 K.

T. J.

T. U.

HU4394	5 HR 1186	103a-E	36	5 28	6 04	1 36	2 12	+2 00
HU4395	6 HR 2039	"	36	6 39	7 15	2 47	3 23	+1 07
HU4396	7 HR 2306	"	46	7 36	8 22	3 44	4 30	+1 37
HU4397	8 HR 3241	"	30	9 11	9 41	5 19	5 49	+1 14
18-19/I/74 K.								

HU4398	1 HR 1246	"	34	5 23	5 57	1 23	-1 57	+1 41
HU4399	2 HR 1888	"	44	6 25	7 09	2 25	-3 09	+1 15
HU4400	3 HR 2755	"	46	7 36	8 22	3 36	-4 22	+0 45
HU4401	4 HR 2841	"	24	8 50	9 14	4 50	5 14	+1 38
23-24/I/74 K. <i>circle</i> 23. I. 74 <i>haste</i> 30. IV								

HU4402	1 HR 1271	"	60	6 26	7 26	2 06	3 06	+3 07
HU4403	2 HR 2689	"	18	7 51	8 09	3 31	3 49	+1 01

29-30/I/74 K.

HU4404	3 HR 1851	"	80	5 40	7 00	0 50	2 10	+0 50
HU4405	4 HR 2328	"	40	7 40	8 20	2 50	3 30	+1 35
HU4406	5 HR 3060	"	46	8 52	9 38	4 02	4 48	+1 26

30-31/I/74 K.

HU4407	6 HR 2433	"	38	7 15	7 53	2 27	3 05	+0 59
HU4408	7 HR 2801	"	28	8 33	9 01	3 45	4 13	+1 27
HU4409	8 HR 3162	"	20	9 21	9 41	4 33	4 53	+1 30

102

31/I - 1/II / 74 K.

T. S.

T. U.

HU 4410	9 HR 1991	103a-E	34	6 50	7 24	1 57	2 31	+1 29
HU 4411	10 HR 2534	"	40	7 54	8 34	3 01	3 41	+1 25
HU 4412	11 HR 2860	"	20	9 00	9 20	4 07	4 27	+1 44
1-2/II / 74 K.								

HU 4413	12 HR 1972	103a-E	40	5 50	6 30	0 54	1 34	+0 29
HU 4414	13 HR 2059	"	40	7 22	8 02	2 26	3 06	+2 04
HU 4415	14 HR 3032	"	40	8 32	9 12	3 36	4 16	+1 06

22-23/II / 74 K.

HU 4416	1 HR 2826	103a-E	36	8 39	9 15	2 20	2 56	+1 34
HU 4417	2 HR 3437	"	60	9 44	10 44	3 25	4 25	+1 35

23-24/II / 74 K.

HU 4418	3 HR 3273	103a-E	50	9 24	10 14	3 02	3 52	+1 31
HU 4419	4 HR 3501	"	40	10 44	11 24	4 22	5 02	+2 17

24-25/II / 74 K.

HU 4420	5 HR 2625	103a-E	30	8 22	8 52	1 56	2 26	+1 39
HU 4421	6 HR 3331	"	60	9 16	10 16	2 50	3 50	+1 21
HU 4422	7 HR 3443	"	50	10 50	11 40	4 24	5 14	+2 37

28/II - 1/III / 74 K.

HU 4423	1 HR 2761	103a-E	26	8 24	8 50	1 42	2 08	+1 23
HU 4424	2 HR 2789	"	30	9 11	9 41	2 29	2 59	+2 09

$$1) H_g = 40 \frac{A}{mm}$$

103

$R: a = 20, l = 2^2$	$F_{\text{thm}} = 34.0$	$N_e \text{ (mm}^{-1}\text{)}$	$C = 5$	$f = 24.8$
"	"	"	"	24.3
"	"	"	"	24.0
"	"	"	"	23.8
"	"	"	"	23.0
"	"	"	"	22.9
"	"	"	"	20.0
"	"	"	"	19.5
"	"	"	"	21.4
"	"	"	"	20.7
"	"	"	"	22.3
"	"	"	"	21.9
"	"	"	"	21.3
"	"	"	"	23.7
"	"	"	"	23.9

104

28/II-1/III/74 K.

F. I.

T. U.

HU 4425	3	HR 33 63	103a-E	36	9 56	10 32	3 14	3 50	+1 46
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HU 4426	4	HR 34 13	"	22	10 50	11 12	4 08	4 30	+2 26
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2-3/III/74 K.

HU 4427	5	HR 29 71	103a-E	30	8 38	9 08	1 48	2 18	+1 15
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HU 4428	6	HR 30 81	"	24	9 29	9 53	2 39	3 03	+1 52
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HU 4429	7	HR 32 34	"	28	10 23	10 51	3 33	4 01	+2 26
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HU 4430	8	HR 33 73	"	38	11 09	11 47	4 19	4 57	+2 58
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3/4/III/74 ~~103a-E~~ K.

HU 4431	9	HR 31 51	103a-E	40	9 28	10 08	2 34	3 14	+1 49
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HU 4432	10	HR 33 41	"	40	10 33	11 13	3 39	4 19	+2 28
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HU 4433	11	HR 42 18	"	60	11 47	12 47	4 53	5 53	+1 31
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4-5/III/74 K.

HU 4434	12	HR 31 61	103a-E	44	9 05	9 49	2 07	2 51	+1 26
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5-6/III/74 K.

HU 4435	13	HR 27 59	103a-E	30	8 02	8 32	1 00	1 30	+1 03
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HU 4436	14	HR 31 56	"	28	9 02	9 30	2 00	2 28	+1 16
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HU 4437	15	HR 33 00	"	30	9 52	10 22	2 50	3 20	+1 45
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9-10/III/74 K.

HU 4438	1	HR 32 03	103a-E	26	10 26	10 52	3 09	3 35	+2 31
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HU 4439	2	HR 35 25	"	60	11 16	12 16	3 59	4 59	+1 00
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$$D_k = 40 \frac{\text{Å}}{\text{m m}}$$

106

13-14/III/74 K.

T.I.

T.U.

HU4440	3 HR 3152	103a-E	40	9 14	9 54	1 40	2 20	+1 35
HU4441	4 HR 3217	"	40	10 17	10 57	2 43	3 23	+2 29
HU4442	5 HJ 93524	"	50	11 25	12 15	3 51	4 41	+1 04
1-2/IV/74 K.								
HU4443	1 HR 3971	103a-E	40	10 30	11 10	1 42	2 22	+0 48
HU4444	2 HR 4147	"	56	11 45	12 49	2 57	3 53	+1 41
HU4445	3 HR 4897	"	7	13 09	13 16	4 21	4 28	+0 20
2-3/IV/74 K.								
HU4446	4 HR 3100	103a-E	46	8 44	9 30	23 52	0 38	+1 13
HU4447	5 HR 3593	"	28	10 15	10 43	1 23	1 51	+1 30
HU4448	6, HR 4221	"	14	11 06	11 20	2 14	2 28	+0 28
3-4/IV/74 K.								
HU4449	1 HR 3006	103a-E	50	9 01	9 51	0 05	0 55	+1 45
HU4450	2 HR 3670	"	20	10 11	10 31	1 15	1 35	+1 09
HU4451	3 HR 4037	"	3	10 52	10 55	1 56	1 59	+0 41
HU4452	4 HR 4169	"	36	11 08	11 44	2 12	2 48	+0 50
4-5/IV/74 K.								
HU4453	5 HR 2952	103a-E	60	8 16	9 16	23 16	0 16	+1 09
HU4454	6 HR 3049	"	36	9 39	10 15	0 39	1 15	+2 09
HU4455	7 HR 4009	"	28	10 47	11 15	1 47	2 15	+0 51

10711

$$J_{H_f} = 40 \frac{\text{A}}{\text{mm}}$$

$$R: a = 25, b = 2, F = 340$$

$$N_e 60^\circ$$

$$C = 5$$

$$\phi = 22,3$$

$$n \quad n \quad n \quad n \quad 22.1 \quad e$$

$$n \quad n \quad n \quad n \quad 21.5$$

$$n \quad n \quad n \quad n \quad 19.0$$

$$n \quad n \quad n \quad n \quad 18.3$$

$$n \quad n \quad n \quad n \quad 17.9$$

$$n \quad n \quad n \quad n \quad 21.8$$

$$n \quad n \quad n \quad n \quad 21.3$$

$$n \quad n \quad n \quad n \quad 21.0$$

$$n \quad n \quad n \quad n \quad 22.4$$

$$n \quad n \quad n \quad n \quad 22.1$$

$$n \quad n \quad n \quad n \quad 21.9$$

$$n \quad n \quad n \quad n \quad 21.5$$

$$n \quad n \quad n \quad n \quad 18.4$$

$$n \quad n \quad n \quad n \quad 17.8$$

$$n \quad n \quad n \quad n \quad 17.0$$

108

4-5/IV/74 K.

T.S.

T.U.

H04456	8 HR 4262	103a-E	46	11 34	12 20	2 34	3 20	+ 1 05
H04457	9 HR 4460	"	10	12 47	12 57	3 47	3 57	+ 1 19
H04458	10 HR 4625	"	18	13 16	13 34	4 16	4 34	+ 1 18

5-6/IV/74 K.

H04459	11 HR 3143	103a-E	60	10 03	11 03	0 59	1 59	+ 2 35
H04460	12 HR 4250	"	10	11 40	11 50	2 36	2 46	+ 0 54
H04461	13 HR 4250	"	14	11 55	12 09	2 51	3 05	+ 1 11
H04462	14 HR 4537	"	6	12 25	12 31	3 21	3 27	+ 0 40
H04463	15 HR 4804	"	60	12 47	13 47	3 43	4 43	+ 0 40

8-9/IV/74 K.

H04464	16 HR 2968	103a-E	26	10 17	10 43	1 01	1 27	+ 2 52
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9-10/IV/74 K.

H04465	2 HR 3356	103a-E	26	10 50	11 16	1 30	1 56	+ 2 35
H04466	3 HR 4210	"	40	11 30	12 10	2 10	2 50	+ 1 06
H04467	4 HR 4438	"	50	12 45	13 35	3 25	4 15	+ 1 40
H04468	5 HR 4823	"	12	13 59	14 11	4 39	4 51	+ 1 25

15-16/IV/74 K.

H04469	6 HR 3745	103a-E	34	10 10	10 44	0 27	1 01	+ 1 02
H04470	7 HR 3946	"	34	11 06	11 40	1 23	1 57	+ 1 26
H04471	8 HR 3858	"	8	12 00	12 08	2 17	2 25	+ 2 25

$$D_{ij} = 40 \frac{\text{Å}}{\text{mm}}$$

$$R: a = 25.1 \times 10^{-2} \text{ cm}, F_{\text{cam}} = 34.0$$

Ne 60°

c = 5

t = 16.4 e

"	"	"	"	16.3
---	---	---	---	------

"	"	"	"	16.2
---	---	---	---	------

"	"	"	"	20.1
---	---	---	---	------

"	"	"	"	20.0
---	---	---	---	------

"	"	"	"	19.9
---	---	---	---	------

"	"	"	"	19.9
---	---	---	---	------

"	"	"	"	19.8
---	---	---	---	------

"	"	"	"	23.1
---	---	---	---	------

"	"	"	"	17.7
---	---	---	---	------

"	"	"	"	16.4
---	---	---	---	------

"	"	"	"	15.2
---	---	---	---	------

"	"	"	"	14.9
---	---	---	---	------

"	"	"	"	21.1
---	---	---	---	------

"	"	"	"	20.7
---	---	---	---	------

"	"	"	"	20.7
---	---	---	---	------

110

15-16/IV/74 K.

T.S.

T.V.

HU4472	9 HR 46 96.	103a-E	15	12 34	12 49	2 51	3 06	+0 23
HU4473	10 HR 46 21.	"	8	13 26	13 34	3 43	3 51	+1 24
HU4474	11 HR 48 30.	"	26	14 08	14 34	4 25	4 51	+1 40

9-10/IV/74 K.

HU4475	1 HR 28 70.	103a-E	40	9 38	10 18	0 18	0 58	+2 31
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25-26/IV/74 K.

HU4476	1 HR 41 47.	103a-E	26	12 07	12 33	1 44	2 10	+1 48
HU4477	2 HR 42 21.	"	10	12 55	13 05	2 32	2 42	+2 15
HU4478	3 HR 42 21.	"	10	13 10	13 20	2 47	2 57	+2 30
HU4479	4 HR 50 27.	"	30	13 34	14 04	3 11	3 41	+0 31
HU4480	5 HR 51 93.	"	10	14 48	14 58	4 25	4 35	+1 06
HU4481	6 HR 54 84.	"	30	15 25	15 55	5 02	5 32	+0 59

26-27/IV/74 K.

HU4482	7 HR 33 30.	103a-E	10	10 01	10 11	23 35	23 45	+1 42
HU4483	8 HR 42 50.	"	24	11 17	11 41	0 51	1 15	+0 38
HU4484	9 HR 43 38.	"	12	12 01	12 13	1 35	1 47	+1 00
HU4485	10 HR 41 98.	"	15	12 31	12 46	2 05	2 20	+1 57
HU4486	11 HR 48 90.	"	26	13 06	13 32	2 40	3 06	+0 28

27-28/IV/74 K.

HU4487	13 HR 41 33.	103a-E	14	11 36	11 50	1 05	1 19	+1 15
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111

$$D_H = 40 \frac{\text{Å}}{\text{mm}}$$

$$R: G=25, l=2^2 F_{\text{aim}}=34.0$$

$$N_e 60^s$$

$$C=5$$

$$t=20.5c$$

$$n \quad n \quad n \quad n \quad 20.4 \text{ Con De}$$

$$n \quad n \quad n \quad n \quad 19.9$$

$$n \quad n \quad n \quad n \quad 18.5$$

$$n \quad n \quad n \quad n \quad 11.6$$

$$n \quad n \quad n \quad n \quad 11.4$$

$$n \quad n \quad n \quad n \quad 11.3$$

$$n \quad n \quad n \quad n \quad 10.8$$

$$n \quad n \quad n \quad n \quad 10.7 \text{ Con De}$$

$$n \quad n \quad n \quad n \quad 10.6$$

$$n \quad n \quad n \quad n \quad 14.1$$

$$n \quad n \quad n \quad n \quad 13.0$$

$$n \quad n \quad n \quad n \quad 12.7$$

$$n \quad n \quad n \quad n \quad 12.5$$

$$n \quad n \quad n \quad n \quad 12.3$$

$$n \quad n \quad n \quad n \quad 13.6 \text{ Con De } (+15^m)$$

112

27-28/IV/74 K.

T.S.

T.V.

HU 4488	14 HR 4123	103a-E	16	12 12	12 28	1 41	1 57	+1 51
HU 4489	15 HR 4140	"	14	13 01	13 15	2 30	2 44	+2 37
HU 4490	16 HR 5036	"	26	13 41	14 07	3 10	3 36	+0 34
2-3/V/74 K.								

HU 4491	1 HR 3488	103a-E	40	10 43	11 23	23 53	0 33	+2 18
HU 4492	2 HR 4074	"	6	11 52	11 58	1 02	1 08	+1 36
HU 4493	3 HR 4876	"	40	13 20	14 00	2 30	3 10	+0 51
HU 4494	4 HR 4899	"	14	14 32	14 46	3 42	3 56	+1 47
HU 4495	5 HR 5440	"	6	15 00	15 06	4 10	4 16	+0 30
HU 4496	6 HR 5327	"	46	15 33	16 19	4 43	5 29	+1 38
HU 4497	7 HR 6175	103a-F	8	17 14	17 22	6 24	6 32	+0 43
16-17/V/74 K.								

HU 4498	1 HR 4876	103a-E	34	14 32	15 06	2 47	3 21	+2 00
HU 4499	2 HR 5440	"	4	15 29	15 33	3 44	3 48	+0 58
HU 4500	3 HR 5873	"	22	15 50	16 12	4 05	4 27	+0 13
30-31/V/74 K.								

HU 4501	1 HR 4221	"	12	12 45	12 57	0 05	0 17	+2 06
HU 4502	3 HR 4908	"	14	13 33	13 47	0 53	1 07	+0 46
HU 4503	4 HR 5223	"	22	14 03	14 25	1 23	1 45	+0 23
HU 4504	5 HR 5551	"	14	15 10	15 24	2 30	2 44	+0 23

$$D_{ij} = 40 \frac{\text{Å}}{\text{mm}}$$

$R: a=25, b=2^2$	$F_{\text{min}}=34.0$	Ne 60 ^s	$c=5$	$f=13.6c$	
"	"	"	"	13.6	Can DB
"	"	"	"	13.5	
"	"	"	"	17.4	
"	"	"	"	17.3	
"	"	"	"	17.3	
"	"	"	"	17.1	
"	"	"	"	17.0	Can De
"	"	"	"	15.8	
$R: 25, b=4^2$	"	Ne 2 ^m	"	15.4	
$R: a=25, b=2^2$	"	Ne 60 ^s	"	14.8	
"	"	"	"	14.6	Can De
"	"	"	"	14.0	
"	"	"	"	12.9	
"	"	"	"	12.2	
"	"	"	"	11.8	
"	"	"	3	11.1	

114

30-31/V/74 K.

T.1.

T.V.

HU 4505	6 HR 5646	103a-E	5	15 43	15 48	3 03	3 08	+0 36
4-5/VI/74 K.								
HU 4506	1 HR 4908	103a-E	20	14 50	15 10	1 49	2 09	+2 06
HU 4507	2 HR 5223	"	26	15 26	15 52	2 25	2 51	+1 48
HU 4508	3 HR 5551	"	16	16 09	16 25	3 08	3 24	+1 23
HU 4509	4 HR 5646	"	8	16 37	16 45	3 36	3 44	+1 32
HU 4510	5 HR 6445	"	20	17 11	17 31	4 10	4 30	+0 32
HU 4511	6 HR 6249	"	70	18 04	19 14	5 03	6 13	+1 49
7-8/VII/74 K.								
HX 4512	1 HR 4706	103a-0	8	15 52	16 00	0 42	0 50	+3 35
	2 HR 4706	"	4	16 00	16 04	0 50	0 54	+3 41
	4 HR 4706	"	6	16 04	16 10	0 54	1 00	+3 46
	5 HR 4706	"	10	16 10	16 20	1 00	1 10	+3 54
HX 4513	6 HR 6446	IIa-0	6	17 50	17 56	2 40	2 46	+0 34
	7 HR 6446	"	8	17 56	18 04	2 46	2 54	+0 41
	8 HR 6446	"	12	18 04	18 16	2 54	3 06	+0 51
	10 HR 7001	"	1	18 46	18 47	3 36	3 37	+0 10
	12 HR 7001	"	2	18 47	18 49	3 37	3 39	+0 12
5-6/VIII/74 K.								
HX 4514	1 HR 6446	IIa-0	6	17 06	17 12	0 02	0 08	-0 10

$$D_H = 40 \frac{\text{\AA}}{\text{mm}}$$

$$R: a = 25, l = 2^2 F_{\text{cam}} = 34.0$$

$$Ne 60^1$$

$$c = 3$$

$$t = 10.8 c$$

n	"	"	5	8.3	
n	"	"	"	7.6	
n	"	"	"	7.3	
n	"	"	"	7.1	
n	"	"	"	6.9	HR 6245
n	"	"	"	6.4	

$$D_H = 110 \frac{\text{\AA}}{\text{mm}}$$

$$R: a = 45, l = 11^2 F_{\text{cam}} = 6.5$$

$$c = 5$$

n	"	"	"		
n	"	Fe 2 ¹ con 2 v.e.	"		con 2 libros iguales
n	"	Fe 3 ¹ con 2 v.e.	"	t = 15.2 c	zitados
n	"	Fe 6 ¹ con 2 v.e.	"		
n	"	Fe 8 ¹ con 2 v.e.	"		
n	"	"	"	t = 15.0	
n	"	"	"		con De
n	"	Fe 8 ¹ con 2 v.e.	"	t = 14.9	con De
n	"	"	c = 5	t = 9.8	

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5-6/VIII/74 K.

T. S.

T. U.

HX 4514	2 HR 6446	IIa-D	8	17 12	17 20	0 08	0 16	-0 03
	3 HR 6446	"	12	17 20	17 32	0 16	0 28	+0 07
	5 HR 7001	"	3	18 07	18 10	1 03	1 06	-0 28
	6 HR 7001	"	4	18 10	18 14	1 06	1 10	-0 24
	7 HR 7001	"	6	18 14	18 20	1 10	1 16	-0 19
HU 4515	1 HR 7068	103a-E	24	20 00	20 24	2 55	3 19	+1 25
	7-8/VIII/74 K.							
HU 4516	1 HR 6054	103a-E	36	17 28	18 02	0 14	0 50	+1 32
HU 4517	2 HR 153919	"	60	18 34	19 34	1 22	2 22	+2 02
HU 4518	3 HR 6745	"	8	20 00	20 08	2 48	2 56	+1 58
HU 4519	4 HR 7068	"	24	20 30	20 54	3 18	3 42	+1 55
HU 4520	5 HR 7890	"	40	21 20	22 00	4 08	4 48	+1 03
	11-12/VIII/74 K.							
HU 4521	1 HR 6878	103a-E	50	19 48	20 38	2 19	3 09	+1 52
HU 4522	2 HR 7527	"	46	21 08	21 54	3 39	4 25	+1 44
HU 4523	3 HR 8260	"	10	22 26	22 36	4 57	5 07	+0 56
HU 4524	4 HR 8386	"	20	22 51	23 11	5 22	5 42	+1 02
HU 4525	5 HR 8402	"	10	23 28	23 36	5 57	6 07	+1 30
HU 4526	6 HR 8628	"	6	23 56	0 02	6 27	6 33	+1 21

11711

$$D_{H_f} = 110 \frac{\text{Å}}{\text{mm}}$$

$$R: a = 45^\circ; d = 11^\circ \quad F_{\text{cm}} = 6.5 \quad F_c = 8^\circ \text{ on } 2V.c. \quad c = 5 \quad t = 9.3$$

$$r \quad u \quad ? \quad "$$

$$q \quad u \quad ? \quad "$$

$$q \quad " \quad F_c = 8^\circ \text{ on } 2V.c. \quad " \quad "$$

$$u \quad " \quad " \quad " \quad 9.6$$

$$D_{H_f} = 40 \frac{\text{Å}}{\text{mm}} \quad F = 34.0 \quad F_c = 60^\circ \quad c = 4 \quad 9.2 \quad R: a = 25^\circ; t = 2^\circ$$

$$u \quad " \quad F_c = 70^\circ \quad c = 5 \quad 6.7 \quad "$$

$$u \quad " \quad " \quad " \quad 6.2 \quad (1) 153919$$

$$u \quad " \quad " \quad " \quad 6.3$$

$$u \quad " \quad " \quad " \quad 6.2$$

$$u \quad " \quad " \quad " \quad 5.9$$

$$u \quad " \quad 80^\circ \quad c = 5 \quad 10.9$$

$$q \quad " \quad " \quad " \quad 10.6$$

$$q \quad " \quad " \quad " \quad 10.4$$

$$u \quad " \quad 2^\circ \quad " \quad 10.4$$

$$u \quad " \quad 80^\circ \quad " \quad 10.2$$

$$u \quad " \quad c \quad " \quad 10.1$$

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9-10/IX/74 K.

T.S.

T.V.

HU 4527	1 HR 7068	103a-E	26	20 25	20 51	1 03	1 29	+1 51
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HU 4528	2 HR 7574	"	90	21 27	22 57	2 05	3 35	+2 21
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16-17/IX/74 K.

HU 4529	3 HR 6819	103a-E	20	20 44	21 04	0 53	1 13	+2 40
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19-20/IX/74 K.

HU 4530	4 HR 7763	103a-E	20	20 11	20 31	0 09	0 29	+0 04
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HU 4531	5 HR 7920	"	12	21 25	21 37	1 23	1 35	+0 49
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26-27/IX/74 K.

HU 4532	6 HR 7249	103a-E	20	20 50	21 10	0 21	0 41	+1 54
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HU 4533	7 HR 7342	"	10	21 34	21 44	1 05	1 15	+2 20
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30/IX-1/X/74 K.

HU 4534	8 HR 6960	103a-E	18	20 52	21 10	0 07	0 25	+2 30
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HU 4535	9 HR 7074	"	6	21 31	21 37	0 46	0 52	+2 45
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1-2/X/74 K.

HU 4536	10 HR 7763	103a-E	20	21 36	21 56	0 48	1 08	+1 29
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HU 4537	11 HR 8709	"	20	23 06	23 26	2 18	2 38	+0 23
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HU 4538	12 HR 8728	"	4	23 42	23 46	2 54	2 58	+0 48
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HU 4539	13 HR 8959	"	10	0 08	0 18	3 20	3 30	+0 37
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13-14/XU/74 K.

HU 4540	1 HR 1895	103a-E	(15) 6	10 6	25 4	33 4	48	+0 46
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119

$$D_H = 40 \frac{A}{mm}$$

 $R: a = 25 \frac{1}{2} \text{ cm}$
 $F = 34.0$
 Cam.

Ne 70°

C = 5

t = 10.00

9.5

12.7

12.3

12.3

13.5

13.1

11.1

10.8

12.7

12.4

12.4

12.2

16.5

Con Dc

Con Dc

120

13-14/XII/74 K.

T. J.

T. V.

HU 4541	2 HR 1897	103a-E (40)	6 36	6 46	4 59	5 09	+1 08
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HU 4542	3 HR 1944	" (40)	7 14	7 54	5 37	6 17	+1 56
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16-17/XII/74 K.

HU 4543	1 HR 2211	103a-E 50	6 16	7 06	4 28	5 18	+0 31
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23-24/XII/74 K.

HU 4544	2 HR 2323	103a-E 40	6 34	7 17	4 18	4 58	+0 31
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HU 4545	3 HR 2412	" 26	7 32	7 58	5 13	5 39	+1 14
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30-31/XII/74 K.

HU 4546	4 HR 2415	103a-E 18	6 35	6 53	3 50	4 08	+0 11
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HU 4547	5 HR 2507	" 60	7 22	8 22	4 37	5 37	+1 07
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HU 4548	6 HR 2545	" 20	8 45	9 05	6 00	6 20	+2 06
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20-21/I/75 K.

HU 4549	1 HR 2507	103a-E 60	7 25	8 25	3 18	4 18	+1 10
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HU 4550	2 HR 3025	" 70	8 50	10 00	4 43	5 53	+1 40
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21-22/I/75 K.

HU 4551	3 HR 1895	103a-E 16	5 40	5 56	1 30	1 46	+0 17
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HU 4552	4 HR 1897	" 12	6 03	6 15	1 53	2 05	+0 36
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HU 4553	5 HR 2412	" 24	6 34	6 58	2 24	2 48	+0 15
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HU 4554	6 HR 2435	" 6	7 17	7 23	3 07	3 13	+0 46
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HU 4555	7 HR 2603	" 50	7 53	8 43	3 43	4 33	+1 22
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$$D_{H_2} = 40 \frac{\text{\AA}}{\text{min}}$$

$$R: 4 = 25, l = 2, F = 34.0$$

$$K_e 70^3$$

$$c = 5$$

$$t = 16.4$$

"	"	"	"	16.4
"	"	"	"	14.5
"	"	"	"	24.1
"	"	"	"	24.0
"	"	"	"	18.4
"	"	"	"	16.6
"	"	"	"	16.1
"	"	"	"	23.8
"	"	"	"	23.3
"	"	"	"	26.1
"	"	"	"	25.8
"	"	"	"	25.4
"	"	"	"	25.2
"	"	"	"	24.6

122

27-28/I/75 K.

T. S.

T. U.

HU 4556	1 HR 28 89	103a-E 60	8 48	9 48	4 14	5 14	+148
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28-29/I/75 K.

HU 4557	2 HR 25 22	103a-E 16	6 50	7 06	2 12	2 28	+0 11
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HU 4558	3 HR 25 28	"	52	7 21	2 13	2 43	3 35 +0 59
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HU 4559	4 HR 28 50	"	60	8 40	9 40	4 02	5 02 +1 45
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1-2/IV/75 K.

HU 4560	1 HR 35 91	103a-E 12	10 20	10 32	1 33	1 45	+1 27
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HU 4561	2 HR 42 21	"	14	11 25	11 39	2 38	2 52 +0 47
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HU 4562	3 HR 42 10	"	36	11 56	12 32	3 09	3 45 +1 30
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2-3/IV/75 K.

HU 4563	4 HR 31 95	103a-E 36	10 16	10 52	1 25	2 01	+2 27
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HU 4564	5 HR 32 07	"	2	11 15	11 17	2 24	2 26 +3 08
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HU 4565	6 HR 32 07	"	2	11 32	11 34	2 41	2 43 +3 25
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HU 4566	7 HR 40 18	"	40	12 04	12 44	3 13	3 53 +2 12
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3-4/IV/75 K.

HU 4567	8 HR 25 78	103a-E 40	8 30	9 10	2 34	0 14	+1 58
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HU 4568	9 HR 28 24	"	60	9 44	10 44	0 48	1 48 +2 52
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HU 4569	10 HR 36 42	"	8	11 20	11 28	2 24	2 32 +2 19
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HU 4570	11 HR 41 88	"	60	12 00	13 00	3 04	4 04 +1 50
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123

$$D_g = 40 \frac{\text{\AA}}{\text{mm}}$$

$$R: a = 25, b = 2, F_{\text{cam}} = 34.0$$

Ne 70¹

C = 5

t = 18.00

		Ne 70 ¹	C = 5	t = 18.00
"	"	"	"	20.6
"	"	Ne 140 ¹	"	20.6
"	"	Ne 70 ¹	"	20.3
"	"	"	"	16.4
"	"	"	"	15.9
"	"	"	"	15.7
"	"	"	"	17.3
"	"	120 ³	"	17.1 Con De
"	"	70 ³	"	17.0 Con De
"	"	"	"	16.5
"	"	"	"	18.7
"	"	"	"	18.5
"	"	"	"	18.4
"	"	"	"	18.4

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8-9/IV/75 K.

T. S.

T. U.

HU4571	12 HR 28 38	103a-E 80	9 10 10 30	23 56 1 16	+2 26
HU4572	13 HR 37 08	" 46	11 16 12 02	2 02 2 48	+2 22
HU4573	14 HR 96 44	" 60	12 34 13 34	3 20 4 20	+1 59

9-10/IV/75 K.

HU4574	15 HR 25 37	103a-E 60	8 40 9 40	23 21 0 21	+2 22
HU4575	16 HR 32 37	" 7	10 14 10 21	0 55 1 02	+2 06

11-12/IV/75 K.

HU4576	1 HR 26 21	103a-E 40	8 53 9 33	23 25 0 05	+2 16
HU4577	2 HR 34 98	" 6	10 04 10 10	0 36 0 42	+1 21
HU4578	3 HR 31 47	" 20	10 34 10 54	1 06 1 26	+2 46

14-15/IV/75 K.

HU4579	4 HR 25 45	103a-E 20	9 21 9 41	23 43 0 03	+2 42
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15-16/IV/75 K.

HU4580	5 HR 25 79	103a-E 60	9 03 10 03	23 23 0 23	+2 41
HU4581	6 HR 28 70	" 40	10 36 11 16	0 56 1 36	+3 29
HU4582	7 HR 96 44	" 80	11 57 13 17	2 17 3 37	+1 32

18-19/IV/75 K.

HU4583	1 HR 27 54	103a-E 36	10 18 10 54	0 25 1 01	+3 24
HU4584	2 HR 55 65	" 40	12 07 12 47	2 14 2 54	-2 28
HU4585	3 HR 55 79	" 50	13 16 14 06	3 23 4 13	-1 16

125

$$D_{H_2} = 40 \frac{\text{\AA}}{\text{mm}}$$

$$R_{10} = 25.1, l = 2, F = 34.0$$

Ne 70³

C = 5

t = 15.2

" " " " 14.3

" " " " 13.6

" " " " 17.3

" " " " 16.7

" " " " 16.1

" " " " 15.3

" " " " 14.4

" " " " 15.4

" " 70 " 14.8

" " 120³ " 14.5

" " 70 " 14.4

" " " " 17.4

" " " " 17.1

" " " " 16.3

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18-19/IV/75 K.

T. S.

T. U.

HU 4586	4 HR 5653	103a-E (40)	14 33	15 13	4 40	5 20	-0 18
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21-22/V/75 K

HU 4587	5 HR 4338	103a-E 18	11 32	11 50	1 27	1 45	+0 34
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HU 4588	6 HR 4537	" 6	12 17	12 23	2 12	2 18	+0 32
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HU 4589	7 HR 4804	" 60	12 56	13 56	2 51	3 51	+0 49
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HU 4590	8 HR 4890	" 30	14 35	15 05	4 30	5 00	+1 59
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22-23/IV/75 K.

HU 4591	9 HR 3356	103a-E 24	10 08	10 32	23 59	0 23	+1 52
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HU 4592	10 HR 4169	" 34	11 02	11 36	0 53	1 27	+0 43
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2-3/V/75 K.

HU 4593	1 HR 4221	103a-E 14	12 24	12 38	23 33	23 47	+1 46
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HU 4594	2 HR 4221	EO 9802 (14)	12 50	13 04	23 59	0 13	+2 12
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HU 4595	3 HR 5027	103a-E 30	14 22	14 52	1 31	2 01	+1 19
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HU 4596	4 HR 5440	" 4	15 12	15 16	2 21	2 25	+0 41
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HU 4597	5 HR 5661	" 20	15 35	15 55	2 44	3 04	+0 32
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HU 4598	6 HR 5683	" 4	16 10	16 14	3 19	3 23	+0 56
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HU 4599	7 HR 6131	" 26	16 35	17 01	3 44	4 10	+0 21
---------	-----------	------	-------	-------	------	------	-------

HU 4600	8 HR 6175	" 6	17 30	17 36	4 39	4 45	+0 57
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3-4/V/75 K.

HU 4601	9 HR 4169	103a-E 28	11 58	12 26	23 04	23 32	+1 36
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$$D_{Hf} = 40 \frac{\text{Å}}{\text{mm}}$$

127

$$R: \lambda = 25.4 \text{ Å} \quad F = 34.0 \text{ eV.}$$

Ne 70⁺

C = 5

t = 16.3

"	"	"	"	22.4	
"	"	"	"	22.2	
"	"	"	"	21.1	
"	"	"	"	20.8	
"	"	"	"	17.3	
"	"	"	"	16.5	
"	"	"	"	10.3	
"	"	"	"	10.1	
"	"	"	"	9.6	
"	"	"	"	9.4	Con De
"	"	"	"	8.9	
"	"	"	"	8.6	
"	"	"	"	8.6	
"	"	"	"	8.4	Con De
"	"	"	"	10.6	

128

3-4/V/75 K.

T. S.

T. U.

A. h. m.

HU 4602	10 HR 4147.	103a-E 26	12 49	13 15	23 55	0 21	+2 30
HU 4603	1 HR 5619.	" 30	16 00	16 30	3 06	3 36	+1 11
HU 4604	2 HR 5912.	" 24	17 06	17 30	4 12	4 36	+1 26
HU 4605	3 HR 6435.	" 31	18 13	18 44	5 19	5 50	+1 11

12-13/V/75 K.

HU 4606	1 HR 5193.	103a-E 12	14 44	14 56	1 14	1 26	+1 03
HU 4607	2 HR 4823.	" 10	15 15	15 25	1 45	1 55	+2 40
HU 4608	3 HR 5790.	" 36	15 42	16 18	2 12	2 48	+0 26

18-19/V/75 K.

HU 4609	4 HR 4898.	103a-E 4	13 41	13 45	23 47	23 51	+0 51
HU 4610	5 HR 4899.	" 14	13 52	14 06	23 58	0 12	+1 07
HU 4611	6 HR 5223.	" 30	15 06	15 36	1 12	1 42	+1 30
HU 4612	7 HR 5873.	" 20	16 10	16 30	2 16	2 36	+0 32
HU 4613	8 HR 6272.	" 30	17 07	17 37	3 13	3 43	+0 30

2-3/VII/75 K.

HU 4614	1 HR 5223.	103a-E 20	14 31	14 51	23 41	0 01	+0 50
HU 4615	2 HR 4898.	" 4	15 14	15 18	0 24	0 28	+2 24

12-13/VII/75 K.

HU 4616	3 HR 5551.	103a-E 12	15 25	15 37	23 55	0 07	+0 37
HU 4617	4 HR 5790.	" 36	16 00	16 36	0 30	1 06	+0 44

$$D_H = 40 \frac{\text{\AA}}{\text{mm}}$$

$$R: a = 25^\circ, l = 2^\circ \quad F_{\text{com}} = 34.0$$

		$N \approx 70^\circ$	$C = 5$	$t = 10.1^\circ$	
"	"	"	"	9.2	
"	"	"	"	8.8	
"	"	"	"	7.8	
"	"	$N \approx 90^\circ$	$C = 5$	11.0	con De
"	"	"	"	10.5	
"	"		3-2		
"	"	$N \approx 90^\circ$	$C = 5$	17.7	
"	"	"	"	17.1	
"	"	"	3	16.4	
"	"	"	"	15.9	
"	"	"	"	15.5	
"	"	$N \approx 100^\circ$	$C = 5$	11.4	
"	"	"	"	11.1	
"	"	"	$C = 5$	9.1	
"	"	"	"	8.8	

130

12-13/VII/75 K.

T.S.

T.V.

A_hm.

HU 4618	5	HR 5873	103a-E 20	16 56	17 16	1 26	1 46	+1 18
HU 4619	6	HR 6387	" 32	17 52	18 24	2 22	2 54	+0 58

16-17/VII/75 K.

HU 4620	1	HR 5805	103a-E 60	16 49	17 49	1 03	2 03	+1 43
HU 4621	2	HR 6620	" 36	18 19	18 55	2 33	3 09	+0 52

17-18/VII/75 K.

HU 4622	1	HR 6802	103a-E 50	18 17	19 07	2 27	3 17	+0 33
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18-19/VII/75 K.

HU 4623	2	HR 5918	103a-E 34	17 00	17 34	1 05	1 39	+1 24
HU 4624	3	HR 6356	" 56	18 32	19 28	2 37	3 33	+1 54

25-26/VII/75 K.

HU 4625	1	HR 6294	103a-E 32	17 55	18 27	1 37	2 09	+1 16
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13-14/VIII/75 K.

HU 4626	2	HR 5860	103a-E 16	16 43	16 59	23 08	23 24	+1 07
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HU 4627	3	HR 5925	" 14	17 22	17 36	23 47	0 01	+1 35
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HU 4628	4	HR 5926	" 20	17 44	18 04	0 09	0 29	+2 00
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HU 4629	5	HR 6530	" 50	18 33	19 23	0 58	1 48	+1 26
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HU 4630	6	HR 6921	" 60	19 53	20 53	2 18	3 18	+1 57
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20-21/VIII/75 K.

HU 4631	3	HR 6403	103a-E 36	19 00	19 36	0 58	1 34	+2 05
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1370-11

$$\textcircled{1} u_f = 40 \frac{\text{Å}}{\text{mm}}$$

$$R: a = 25^\circ; l = 2^2 \quad F_{\text{cm}} = 34.0$$

$$K_c 100^\circ$$

$$c = 5$$

$$t = 8.7^\circ$$

u

u

u

u

8.6

u

u

u

u

3.9

u

u

u

u

3.8

u

u

u

u

4.3

u

u

u

u

7.0

u

u

u

u

6.9

u

u

u

u

4.6

u

u

u

u

10.7

u

u

u

u

10.1

u

u

u

u

9.6

u

u

u

u

8.6

u

u

u

u

8.5

u

u

u

u

13.6

132

20-21/VIII/75 K.

T. I.

T. V.

A. h. m.

HU 4632	4 HR 69 26	103a-E 60	19 59	20 59	1 57	2 57	+2 03 ^m
HU 4633	5 HR 75 27	" 40	21 32	22 12	3 30	4 10	+2 05

25-26/VIII/75 K.

HU 4634	6 HR 59 07	103a-E 14	18 22	18 36	0 00	0 14	+2 37
HU 4635	7 HR 65 20	" 30	18 56	19 26	0 34	1 04	+1 42
HU 4636	8 HR 66 71	" 30	19 56	20 26	1 34	2 04	+2 20
HU 4637	9 HR 72 49	" 12	20 53	21 05	2 31	2 43	+1 54
HU 4638	10 HR 78 90	" 40	21 38	22 18	3 16	3 56	+1 21

~~26-27/VIII/75~~ K.

HU 4639	11 HR 73 42	103a-E 8	20 43	20 51	2 16	2 24	+1 28 ^m
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15-16/IX/75 K.

HU 4640	1 HR 68 33	103a-E 46	20 36	21 22	0 51	1 37	+2 44
HU 4641	2 HR 82 60	" 6	22 00	22 06	2 15	2 21	+0 28
HU 4642	3 HR 83 86	" 16	22 31	22 47	2 46	3 02	+0 40
HU 4643	4 HR 84 08	" 22	23 02	23 24	3 17	3 39	+1 11

16-17/IX/75 K.

HU 4644	5 HR 72 49	103a-E 14	21 17	21 31	1 28	1 42	+2 18
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17-18/IX/75 K.

HU 4645	1 HR 72 49	103a-E 14	20 42	20 56	0 44	0 58	+1 43
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16-17/X/75 K.

$$D_{H_j} = 40 \frac{\text{\AA}}{\text{mm}}$$

$$R: a=25^{\circ}, l=2^{\circ} \quad F_{\text{cam.}} = 34.0$$

$$N_c = 100^{\circ}$$

$$c = 5^{\circ}$$

$$t = 13.0^{\circ} \text{C}$$

$$12.7$$

$$7.4$$

$$6.6 \quad \text{HR 6520}$$

$$6.4 \quad + 4^{\text{m}}$$

$$6.5 \quad + 2^{\text{m}}$$

$$6.3$$

$$26-27/\sqrt{m}/75$$

$$10.1$$

$$13.2$$

$$13.1$$

$$12.9$$

$$12.8$$

$$R: a=20^{\circ}, l=2^{\circ} \quad 13.9$$

$$R: a=25^{\circ}, l=2^{\circ} \quad 16.0$$

134

16-17/X/75

K.

T.S.

T.U.

A.P.m.

HU4646	2	HR 8151	103a-E	8	23 36	23 44	1 49	1 57	+2	22
23-24/X/75 K.										
HU4647	1	HR 8425	103a-E	2	22 58	23 00	0 43	0 45	+0	52
HU4648	2	HR 8425	"	2	23 08	23 10	0 53	0 55	+1	02
HU4649	4	HR 8439	"	24	0 20	0 44	2 05	2 29	+2	25
24-25/X/75 K.										
HU4650	5	HR 8418	"	6	23 20	23 26	1 01	1 07	+1	19
HU4651	6	HR 8478	"	16	23 46	0 02	1 27	1 43	+1	42
HU4652	7	HR 8518	E09802(5)		0 22	0 27	2 03	2 08	+2	05
HU4653	8	HR 8673	"	22	0 41	1 03	2 22	2 44	+2	06
HU4654	9	HR 317	"	20	1 30	1 50	3 11	3 31	+0	36
HU4655	10	HR 433	"	12	2 19	2 31	4 00	4 12	+0	57
HU4656	11	HR 220	"	18	2 59	3 17	4 40	4 58	+2	22

16-17/I/76

B.-

Hx4657	1	HR 1347	103a-0	3 ^m	4:56	4:59	0:07	0:10		
	2	"	"	4	5:01	5:05	0:11	0:15		
	3	"	"	6	5:08	5:14	0:18	0:24		
	4	ADS 5107	"	7 ^m	6:29	6:36	1:39	1:46		
	5	"	"	10	6:40	6:50	1:50	2:00		
Hx4658	1	ADS 6255A	"	4	8:04	8:08	3:12	3:16		

$$D_{H\gamma} = 40 \frac{\text{\AA}}{\text{mm}}$$

$$R: a = 25^{\text{d}}, l = 2^{\text{d}} \quad F = 34.0$$

 cm

$$N_e 100^{\text{d}}$$

$$c = 5$$

$$t = 20^{\circ} \text{C}$$

"	"	"	4	17.7	con D_c
"	"	"	"	17.7	con D_c
"	"	"	"	17.6	
"	"	"	5	18.9	
"	"	"	"	18.5	
"	"	"	"	18.5	
"	"	"	"	18.4	
"	"	"	"	18.2	
"	"	"	"	18.3	
"	"	"	"	17.9	

$$D_{H\gamma} = 110 \frac{\text{\AA}}{\text{mm}}$$

$$R: a = 17^{\text{d}} \frac{5}{40}, l = 11^{\text{d}}$$

$$F_{\text{cám.}} = 3.5$$

$$F_e = 3^{\text{seg.}}$$

(con 2 vidrios
esmerilados)

$$c = 4$$

(luna llena)

$$26^{\circ} 3'$$

"	"	"	"	"	"
"	"	"	"	"	"
"	"	"	"	"	"
"	"	"	"	"	"

No salieron los
espectros. t exp.
demorando bajo

136

16-17/I/76 B.

T.S.

T.U.

A.h.m.

Hx4658	2 ADS 6255A	103a-0	^{min} 6	8:10	8:16	3:18	3:24
	3 ADS 6255 B.	"	4	8:20	8:24	3:28	3:32
	4 " "	"	7	8:26	8:33	3:34	3:41

17-18/I/76 B.-

Hx4659	1 HR 338	103a-0	4	5:12	5:16	0:17	0:21
	2 " "	"	6	5:20	5:26	0:25	0:31

18-19/III/76 K.

Hu4660	1 HR 3753	103a-E	12	80 35-10	47	2 40	2 52	+1 16
Hu4661	2 HR 3941	"	30	11 02	11 32	3 07	3 37	+1 21
Hu4662	3 HR 4556	"	50	12 00	12 50	3 05	3 55	+0 33

22-23/III/76 K.

Hu4663	4 HR 2598	103a-E	50	8 07	8 57	23 57	0 47	+1 38
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12-13/VII/76 K.

Hu4664	1 HR 5661	103a-E	24	16 58	17 22	1 26	1 50	+1 57
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15-16/VII/76 K.

Hu4665	2 HR 5354	103a-E	4	15 21	15 25	23 37	23 41	+1 06
Hu4666	3 HR 5661	"	24	15 44	16 08	0 00	0 24	+0 43
Hu4667	4 HR 5664	"	14	16 24	16 38	0 40	0 54	+1 16
Hu4668	5 HR 6080	"	46	18 01	18 47	2 17	3 03	+2 06
Hu4669	6 HR 6708	"	46	19 21	20 07	3 37	4 23	+1 44

1371

$$D_H \sigma = 110 \text{ \AA/mm}$$

$$R: a = 1 \frac{R}{40}, l = 11^R$$

$$F_{\text{cárie}} = 3.5$$

"

"

"

$$D_H \sigma = 40 \frac{\text{Å}}{\text{mm}}$$

$$R: a = 25, l = 2^2 F_{\text{cárie}} = 34.0$$

"

"

$$D_H \sigma = 40 \frac{\text{Å}}{\text{mm}}$$

$$R: a = 30, l = 2^2 F_{\text{cárie}} = 34.0$$

$$R: a = 25, l = 2^2 F_{\text{cárie}} = 34.0$$

"

"

"

"

"

$$Fe = 3^5$$

(con 2 vidrios)

"

"

"

$$Ne 110^4$$

"

"

$$Ne 80^4$$

$$Ne 40^4$$

$$Ne 80^3$$

"

"

"

"

$$c = 4$$

(luna llena)

"

$$c = 4$$

se nubló

$$c = 5$$

"

"

$$c = 5$$

$$c = 3$$

$$c = 5$$

"

"

"

"

$$t_{\text{amb}} = 26.3$$

"

"

$$t_{\text{amb}} = 29.3$$

"

$$16.2 \text{ C}$$

$$15.9$$

$$16.1$$

$$21.5 \text{ C}$$

$$6.5$$

$$10.3$$

$$9.9$$

$$9.9$$

$$9.3$$

$$8.7$$

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27-28/VII/76 K. T.S. T.V. A.P.m.

Hv4670	1 HR 62 44	103a-E 40	17 02	17 42	0 30	1 10	+0 34
Hv4671	2 HR 66 45	" 60	18 55	19 55	2 23	3 23	+1 36
	9-10/VIII/76	K.					
Hv4672	3 HR 54 63	" 18	17 45	18 03	0 22	0 40	+3 14
Hv4673	1 HR 66 83	" 50	20 04	20 54	2 41	3 31	+2 34
Hv4674	2 HR 77 90	" 2	21 35	21 37	4 12	4 14	+1 12
Hv4675	3 HR 81 25	" 44	22 11	22 55	4 48	5 32	+1 18
	13-14/IX/76	K.					
Hv4676	1 HR 65 23	" 36	19 37	20 13	23 56	0 32	+2 24
Hv4677	2 HR 68 12	" 30	20 32	21 02	0 51	1 21	+2 36
	17-18/IX/76	K.					
Hv4678	1 HR 65 72	" 24	19 14	19 38	23 18	23 42	+1 48
Hv4679	2 HR 65 72	" 24	19 47	20 11	23 51	0 15	+2 21
Hv4680	3 HR 78 42	" 46	20 38	21 24	0 42	1 28	+0 30
Hv4681	4 HR 78 89	" 16	21 46	22 02	1 50	2 06	+1 16
Hv4682	5 HR 80 14	" 60	22 23	23 23	2 27	3 27	+1 59
Hv4683	6 HR 87 28	" 2	23 53	23 55	3 57	3 59	+0 58
Hv4684	7 HR 87 28	" 2	23 58	0 00	4 02	4 04	+1 03
Hv4685	8 HR 88 58	" 5	0 56	1 01	5 00	5 05	+1 42
Hv4686	9 HR 90 87	" 12	1 18	1 30	5 22	5 34	+1 24

$$D_{H_f} = 40 \frac{\text{Å}}{\text{mm}}$$

$R: \kappa = 25^\circ, l = 2^\circ$	$F_{\text{clm}} = 34.0$	$N_e = 80^\circ$	$c = 4$	$t = 9.9^\circ \text{C.}$	
"	"	"	$c = 3-2$	9.4	
"	"	"	"	"	
"	"	"	$c = 5$	9.0	Con Dc
"	"	"	"	7.8	
"	"	"	"	7.4	Con Dc
"	"	"	"	6.9	
"	"	"	"	"	
"	"	"	"	10.4	
"	"	"	"	10.0	Con Dc
"	"	"	"	"	
"	"	"	"	14.8	
"	"	"	"	14.0	
"	"	"	"	12.8	
"	"	"	"	12.4	
"	"	"	"	11.6	
"	"	"	"	11.2	Con Dc
"	"	"	"	11.1	Con Dc
"	"	"	"	10.7	
"	"	"	"	10.4	

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20-21/IX/76

K.

T.S.

T.V.

A.P.m.

HU4687	10 HR 7709.	1034-E	60	20 54	21 54	0 46	1 46	+1 14
HU4688	11 HR 8083.	"	40	22 36	23 16	2 28	3 08	+1 50
HU4689	12 HR 8478.	"	16	23 43	23 59	3 35	3 51	+1 39
HU4690	13 HR 8576.	"	16	0 19	0 35	4 11	4 27	+1 58
HU4691	14 HR 9091.	"	10	0 53	1 03	4 45	4 55	+0 57
22-23/IX/76		K.						
HU4692	1 HR 6620.	"	46	20 03	20 49	23 47	0 33	+2 41
HU4693	2 HR 7842.	"	60	21 05	22 05	0 49	1 49	+1 04
HU4694	3 HR 8452.	"	20	22 30	22 50	2 14	2 34	+0 32
HU4695	4 HR 8616.	"	30	23 06	23 36	2 50	3 20	+0 44
HU4696	5 HR 9091.	"	12	0 07	0 19	3 51	4 03	+0 12
5-6/I/77		K.						
HU4697	1 HR 911.	"	8	4 10	4 18	1 00	1 08	+1 13
HU4698	6 HR 2205.	"	8	7 22	7 30	4 12	4 20	+1 16
6-7/I/77		K.						
HU4699	1 HR 1790.	"	3	5 30	5 33	2 16	2 19	+0 08
HU4700	2 HR 1852.	"	6	5 48	5 54	2 34	2 40	+0 21
HU4701	3 HR 2205.	"	8	6 14	6 22	3 00	3 08	+0 08
HU4702	4 HR 2206.	"	40	6 48	7 28	3 34	4 14	+0 58

14/11

$$D_{Hf} = 40 \frac{\text{Å}}{\text{mm}}$$

$$R: h=25, d=2^2 \quad F_{\text{con.}} = 34.0$$

$$K \approx 80^\circ$$

$$C = 5$$

$$t = 17.3^\circ \text{C}$$

"	"	"	"	16.5	
"	"	"	"	16.2	
"	"	"	"	15.9	HR 8576
"	"	"	"	15.8	
"	"	"	"	15.9	
"	"	"	"	15.2	
"	"	"	"	15.0	15.0°C
"	"	"	"	14.8	
"	"	"	"	14.7	
"	"	"	"	24.1	
"	"	"	"	23.6	
"	"	"	"	25.9	Con De
"	"	"	"	25.6	Con De
"	"	"	"	25.6	
"	"	"	"	25.2	

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7-8/I/77 K.

T.S.

T. U. A.P.m.

HU4703	1 HR 9 11.	103 a-E	4	4 25	4 29	1 07	1 11	+1 26
HU4704	2 HR 10 20.	"	8	4 47	4 55	1 29	1 37	+1 22
HU4705	3 HR 16 17.	"	8	5 35	5 43	2 17	2 25	+0 39
HU4706	4 HR 17 02.	"	2	6 07	6 09	2 49	2 51	+0 57

26-27/I/77 K.

HU4707	1 HR 15 41.	"	20	6 00	6 20	1 26	1 46	+1 27
HU4708	2 HR 22 05.	"	12	7 15	7 27	2 41	2 53	+1 10

27-28/I/77 K.

HU4709	3 HR 9 11.	"	2	5 42	5 44	1 05	1 07	+2 42
HU4710	4 HR 18 55.	"	12	6 12	6 24	1 35	1 47	+0 48
HU4711	5 HR 19 52.	"	10	6 48	6 58	2 11	2 21	+1 14
HU4712	7 HR 28 63.	"	18	7 50	8 08	3 13	3 31	+0 33

2-3/II/77 K.

HU4713	1 HR 16 79.	"	6	5 50 - 5 56	0 50	0 56	+0 46
HU4714	2 HR 17 56.	"	6	6 08 - 6 14	1 08	1 14	+0 53
HU4715	3 HR 18 68.	"	20	6 35 - 6 55	1 35	1 55	+1 13
HU4716	4 HR 26 48.	"	12	7 18 - 7 30	2 18	2 30	+0 23

14-15/II/77 K.

HU4717	2 HR 16 79.	"	6	6 16	6 22	0 28	0 34	+1 12
HU4718	4 HR 16 71.	"	34	7 07	7 41	1 19	1 53	+2 18

$$D_{\text{Hy}} = 40 \frac{\text{\AA}}{\text{mm}}$$

$$R: a = 25^\circ, b = 22^\circ \quad F_{\text{cmm}} = 34.0$$

$$\text{Ne } 90^\circ$$

$$c = 5$$

$$t = 26.5$$

$$u \quad u \quad u \quad u \quad 26.3$$

$$u \quad u \quad u \quad u \quad 25.9$$

$$u \quad u \quad u \quad u \quad 25.8$$

$$u \quad u \quad u \quad u \quad 24.7$$

$$u \quad u \quad u \quad u \quad 24.8$$

$$u \quad u \quad u \quad u \quad 27.1$$

$$u \quad u \quad u \quad u \quad 26.8 \text{ Con } D_A$$

$$u \quad u \quad u \quad u \quad 26.4$$

$$u \quad u \quad u \quad u \quad 26.1$$

$$u \quad u \quad u \quad u \quad 21.3$$

$$u \quad u \quad u \quad u \quad 21.0$$

$$u \quad u \quad u \quad u \quad 20.4$$

$$u \quad u \quad u \quad u \quad 20.0$$

$$u \quad u \quad u \quad u \quad 20.8$$

$$u \quad u \quad 100 \quad u \quad 19.8$$

144

14-15/II/77 K.

T.S.

T.U.

A.k.m.

HU4719	6 HR 2648.	103a-E	12	8 30	8 42	2 42	2 54	+1 34
HU4720	8 HR 3084.	"	10	10 00	10 10	4 12	4 22	+2 14

17-18/II/77 K.

HU4721	3 HR 3084.	"	16	8 22	8 38	2 22	2 38	+0 39
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1-2/III/77 K.

HU4722	1 HR 2356.	"	10	7 38	7 48	0 51	1 01	+1 16
HU4723	2 HR 2356.	"	16	7 57	8 13	1 10	1 26	+1 38
HU4724	3 HR 2749.	"	8	8 37	8 45	1 50	1 58	+1 28
HU4725	4 HR 3192.	"	14	9 05	9 19	2 18	2 32	+1 05
HU4726	5 HR 3192.	"	10	9 25	9 35	2 38	2 48	+1 23
HU4727	6 HR 3663.	"	12	10 05	10 17	3 18	3 30	+1 01
HU4728	7 HR 3990.	"	20	10 35	10 55	3 48	4 08	+0 38

3-4/III/77 K.

HU4729	1 HR 2696.	"	12	7 37	7 49	0 42	0 54	+0 01
HU4730	2 HR 2504.	"	36	8 09	8 45	1 14	1 50	+1 42
HU4731	3 HR 3089.	"	26	9 10	9 36	2 15	2 41	+1 31
HU4732	4 HR 3294.	"	28	9 57	10 25	3 02	3 30	+1 50
HU4733	5 HR 4037.	"	6	11 00	11 06	4 05	4 11	+0 50
HU4734	6 HR 4074.	"	20	11 19	11 39	4 24	4 44	+1 10

145-1

$$D_{H_j} = 40 \frac{A}{mm}$$

$$R: a = 25, l = 2, F_{can} = 34.0$$

$$K_e 200^3$$

$$c = 5$$

$$t = 19.4c$$

$$100 \quad 3 \quad 19.1$$

$$200 \quad 5 \quad 20.6$$

$$120 \quad 5 \quad 17.4$$

$$4 \quad 9 \quad 17.0$$

$$4 \quad 4 \quad 16.9$$

$$4 \quad 4 \quad 17.1$$

$$4 \quad 4 \quad 16.8$$

$$4 \quad 4 \quad 16.3$$

$$4 \quad 4 \quad 15.9$$

$$4 \quad 4 \quad 21.2$$

$$4 \quad 4 \quad 20.7$$

$$4 \quad 4 \quad 21.0$$

$$4 \quad 4 \quad 21.2$$

$$4 \quad 4 \quad 21.2$$

$$4 \quad 4 \quad 21.0$$

146

4-5/III/77 K.

T.1.

T.2.

A.P.m.

H04735	7 HR 2387	103a-E 16	7 23	7 39	0 24	0 40	+1 01
H04736	8 HR 2395	" 30	7 58	8 28	0 59	1 20	+1 41
H04737	9 HR 2781	" 20	8 50	9 10	1 51	2 11	+1 43
H04738	10 HR 2782	" 14	9 29	9 43	2 30	2 44	+2 19
H04739	11 HR 3447	" 6	10 20	10 26	3 21	3 27	+1 44
H04740	12 HR 3468	" 8	10 44	10 52	3 45	3 53	+2 06

10-11/III/77 K.

H04741	1 HR 3498	" 18	10 00	10 18	2 38	2 56	+1 23
H04742	2 HR 3659	" 8	10 34	10 42	3 12	3 20	+1 28
H04743	3 HR 3990	" 20	11 02	11 22	3 40	4 00	+1 04
H04744	4 HR 3898	" 30	11 47	12 17	4 25	4 55	+2 14

15-16/III/77 K.

H04745	5 HR 3090	" 16	10 05	10 21	2 23	2 39	+2 21
H04746	6 HR 4140	" 8	10 44	10 52	3 02	3 10	+0 17
H04747	7 HR 4460	" 24	11 50	12 14	4 08	4 32	+0 29
H04748	8 HR 4537	" 18	12 34	12 52	4 52	5 10	+0 55

16-17/III/77 K.

H04749	9 HR 2762	" 28	8 38	9 06	0 52	1 20	+1 38
H04750	10 HR 3685	" 2	9 42	9 44	1 56	1 58	+0 30
H04751	11 HR 3527	" 28	10 04	10 32	2 18	2 46	+1 29

$$D_{H_g} = 40 \frac{\text{Å}}{\text{mm}}$$

$$R: \lambda = 25^\circ, l = 2^\circ F_{\text{cam.}} = 34.0$$

$$N_e 120^\circ$$

$$c = 5$$

$$t = 22.9^\circ \text{C}$$

"	"	"	"	22.6
"	"	"	"	22.3
"	"	"	"	22.1
"	"	"	"	21.9
"	"	"	"	21.8
"	"	"	"	17.9
"	"	"	"	17.5
"	"	"	"	17.0
"	"	"	"	16.6
"	"	"	"	23.4
"	"	"	"	23.2
"	"	"	"	22.7
"	"	"	5 $\rightarrow$ 3	22.7
"	"	"	5	23.0
"	"	"	"	22.7
"	"	"	"	22.2

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16-17/III/77 K.

T.A.

T.O. A.P.m.

H04752	12 HR 41 99.	103a-E 4	11 05	11 09	3 19	3 23	+0 25
H04753	13 HR 42 05.	" 34	11 30	12 04	3 44	4 18	+1 04
H04754	14 HR 45 37.	" 18	12 24	12 42	4 38	4 56	+0 45

23-24/IV/77 K.

H04755	1 HR 38 60.	" 36	10 40	11 16	2 26	3 02	+1 23
H04756	2 HR 41 40.	" 8	11 34	11 42	3 20	3 28	+1 07
H04757	3 HR 41 99.	" 4	12 02	12 06	3 48	3 52	+1 22
H04758	4 HR 45 52.	" 16	12 24	12 40	4 10	4 26	+0 41
H04759	5 HR 47 31.	" 2	12 57	12 59	4 43	4 45	+0 34
H04760	6 HR 47 98.	" 4	13 18	13 22	5 04	5 08	+0 45

5-6/V/77 K

H04761	1 HR 27 81.	" 28	10 10	10 38	1 05	1 33	+3 07
H04762	2 HR 39 90.	" 20	10 56	11 16	1 51	2 11	+0 58
H04763	3 HR 40 74.	" 20	11 41	12 01	2 36	2 56	+1 32

18-19/IV/77 K.

H04764	5 HR 46 74.	" 16	13 37	13 53	3 41	3 57	+1 29
H04765	6 HR 49 42.	" 16	14 12	14 28	4 16	4 32	+1 15
H04766	7 HR 51 32.	" 2	14 50	14 52	4 54	4 56	+1 13

22-23/IV/77 K.

H04767	1 HR 37 34.	103a-E/14	10 58	11 12	0 46	1 00	+1 44
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149

$$D_{ij} = 40 \frac{\text{Å}}{\text{min}}$$

$$R_{ij} = 225^\circ, l = 2^\circ \quad F = 34.0 \text{ cm}^{-1}$$

Ne 120°

C = 5

T = 22.0°C

"	"	"	"	21.6
"	"	"	"	21.2
"	"	"	"	17.3
"	"	"	"	17.2
"	"	"	"	17.1
"	"	"	"	16.8
"	"	"	"	16.7
"	"	"	"	16.5
"	"	"	"	15.5
"	"	"	"	15.0
"	"	"	"	14.6
"	"	"	"	17.0
"	"	"	"	16.8
"	"	"	"	16.7
"	"	Ne 130°	"	18.5 cm Dc

150

22-23/IV/77

K.

T.S.

T.U.

A.h.m.

HU4768	2 HR 3990.	103 a-E/20	11 32	11 52	120	1 40	+1 34
HU4769	3 HR 4133.	" (10)	12 24	12 34	2 12	2 22	+1 57
HU4770	4 HR 4732.	" (28)	12 54	13 22	2 42	3 10	+0 44
HU4771	5 HR 5132.	" (2)	13 40	13 42	3 28	3 30	+0 03
HU4772	6 HR 4993.	" (28)	14 00	14 28	3 48	4 16	+1 01
HU4773	7 HR 5231.	" (4)	14 57	15 01	4 45	4 49	+1 06
HU4774	8 HR 5267.	" (1)	15 16	15 17	5 04	5 05	+1 16
HU4775	9 HR 5267.	" (1)	15 25	15 26	5 13	5 14	+1 24

2-3/V/77 K.

HU4776	1 HR 3990.	"	30	10 25	10 55	23 34	0 04	+0 32
HU4777	2 HR 4199.	"	2	11 15	11 17	0 24	0 26	+0 34
HU4778	3 HR 4199.	"	4	11 26	11 30	0 35	0 39	+0 46
HU4779	4 HR 4537.	"	16	12 01	12 17	1 10	1 26	+0 21
HU4780	5 HR 4621.	"	4	13 02	13 06	2 11	2 15	+0 58
HU4781	6 HR 4552.	"	16	13 23	13 39	2 32	2 48	+1 40
HU4782	7 HR 5132.	"	2	14 13	14 15	3 22	3 24	+0 36
HU4783	8 HR 5248.	"	12	14 40	14 52	3 49	4 01	+0 50

1-2/VIII/77 K.

HU4784	2 HR 5652.	"	16	16 41	16 57	23 51	0 07	+1 39
HU4785	4 HR 6580.	"	16	19 28	19 44	2 38	2 54	+1 55

15/21

$$D_H = 40 \frac{\text{Å}}{\text{mm}}$$

$R = 0.25$	$\lambda = 2.2$	$F = 34.0$ Cal.	$N_e 3^m$	$C = 5$	$t = 18.5^\circ C$	
"	"	"	"	"	18.6	
"	"	"	"	"	18.3	
"	"	"	"	"	18.2	
"	"	"	"	"	17.9	
"	"	"	"	"	17.8	
"	"	"	"	"	17.7	
"	"	"	"	"	17.7	Con D _c
"	"	"	"	"	14.0	
"	"	"	"	"	13.9	
"	"	"	"	"	13.6	
"	"	"	"	"	13.4	
"	"	"	"	"	13.5	
"	"	"	"	"	13.6	
"	"	"	"	"	13.7	
"	"	"	"	"	13.5	
"	"	"	"	"	9.8	
"	"	"	"	"	7.2	Con D _c

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1-2/viii/77 K.

T.S.

T.U.

A.P.m.

	1-2/ <u>viii</u> /77 K.		T.S.	T.U.	A.P.m.
HU 4786	5 HR 79 50	103a-E	8 21 15 21 23	4 25 4 33	+0 33

2-3/viii/77 K.

HU 4787	6 HR 56 52	"	10 16 48 16 58	23 54 0 04	+1 43
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HU 4788	7 HR 56 52	"	12 17 05 17 17	0 11 0 23	+2 01
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HU 4789	8 HR 65 80	"	10 18 00 18 10	1 06 1 16	+0 24
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HU 4790	9 HR 65 67	"	12 18 32 18 44	1 38 1 50	+1 02
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HU 4791	10 HR 68 22	"	26 19 01 19 27	2 07 2 33	+1 01
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4-5/viii/77 K.

HU 4792	1 HR 56 85	"	12 17 06 17 18	0 04 0 16	+1 57
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HU 4793	2 HR 57 76	"	20 17 36 17 56	0 34 0 54	+2 13
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HU 4794	3 HR 56 95	"	5 18 17 18 22	1 15 1 20	+3 00
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HU 4795	4 HR 65 19	"	16 18 48 19 04	1 46 2 02	+1 27
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HU 4796	5 HR 72 57	"	50 19 35 20 25	2 33 3 23	+0 53
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23-24/viii/77 K.

HU 4797	1 HR 62 47	"	10 17 55 18 05	23 38 23 48	+1 11
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HU 4798	2 HR 61 65	"	10 18 24 18 34	0 07 0 17	+1 56
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HU 4799	3 HR 61 65	"	16 18 48 19 04	0 31 0 47	+2 18
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HU 4800	4 HR 65 00	"	6 19 22 19 28	1 05 1 11	+1 57
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HU 4801	5 HR 71 88	"	16 19 54 20 10	1 37 1 53	+1 02
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HU 4802	6 HR 70 29	"	16 20 34 20 50	2 17 2 33	+2 00
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$$D_{H_2} = 40 \frac{\text{\AA}}{\text{min}}$$

$$R: a = 25^{\circ}; l = 2^{\circ} F = 34.0$$

cm.

Ne 3^m

c = 5

t = 6.5 e

"	"	"	"	7.7	
"	"	"	"	7.4	
"	"	"	"	7.5	con De
"	"	"	"	7.5	
"	"	"	"	7.7	
"	"	"	"	9.5	con De
"	"	"	"	9.2	con De
"	"	"	"	9.1	
"	"	"	"	8.6	
"	"	"	"	7.8	
"	"	"	"	12.2	con De
"	"	"	"	11.8	con De
"	"	"	"	11.4	con De
"	"	"	"	11.1	
"	"	"	"	10.6	
"	"	"	"	10.4	

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23-24/VIII/77 K.

T. S.

T. V.

A. h. m.

HU	HR								
4803	21 37	103 a-E	30	21 16	21 46	2 59	2 29	+0	15

24-25/VIII/77 K.

HU 4804	1 HR 65 35	103 a-E	46	19 34	20 20	1 13	1 59	+2	24
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HU 4805	2 HR 78 81	"	30	21 11	21 41	2 50	3 20	+0	48
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HU 4806	3 HR 83 53	"	2	22 22	22 24	4 01	4 03	+0	31
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25-26/VIII/77 K.

HU 4807	5 HR 61 65	"	2	18 13	18 15	23 48	23 50	+1	40
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HU 4808	6 HR 65 19	"	18	18 34	18 52	0 09	0 27	+1	14
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HU 4809	7 HR 66 92	"	60	19 18	20 18	0 53	1 53	+1	52
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HU 4810	8 HR 76 68	"	90	21 00	22 30	2 35	4 05	+1	42
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1-XII-77 K.

Enfoque de la cámara $D_H = 40 \text{ mm}$

La ranura que da el ancho de la línea espectral (tornillo plateado), comienza abrirse con la lectura del tambor igual a 32° .

Anteriormente la ranura se abría con la lectura igual a 3° . Así que para el ancho de la ranura anterior $a_1 = 25^\circ$ ahora la lectura del tambor será:

$$a_2 = 32^\circ + 22^\circ = 54^\circ = 12^\circ + 14^\circ; R: a = 12^\circ + 14^\circ, b = 2^\circ$$

$$D_{H\gamma} = 40 \frac{\text{\AA}}{\text{mm}}$$

$$R_{\gamma} = 25^{\circ} \quad F_{\text{cám}} = 39.0$$

$$l = 2^2$$

$$Ne = 3^m$$

$$c = 5$$

$$t = 10.0 \text{ c}$$

$$H \quad H \quad H \quad H \quad 11.5$$

$$H \quad H \quad H \quad H \quad 11.3$$

$$H \quad H \quad H \quad H \quad 11.3$$

$$H \quad H \quad H \quad H \quad 15.4$$

$$H \quad H \quad H \quad H \quad 15.1$$

$$H \quad H \quad H \quad H \quad 19.4$$

$$H \quad H \quad H \quad H \quad 13.6$$

Después de las modificaciones del objetivo del colimador del espectrógrafo Hussey, para la cámara de $D_{H\gamma} = 40 \frac{\text{\AA}}{\text{mm}}$ quedó así: $F_{\text{col}} = 25.0$. Para las placas 103a-O el foco de la región de $H\gamma$ será: $F_{\text{cám.}} = 31.5$; $F_{\text{e}} = 2^4$ con 2 vidrios esmerilados. Para las placas 103a-E el foco de la región de $H\gamma$ será: $F_{\text{cám.}} = 32.5$; $Ne = 40^3$.

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2-3/XII/77 K.

T.S.

T.V.

A.P.m.

HJ 4811	1	HR 126	103a-E	10	2 52	3 02	1 57	2 07	+2 27
HJ 4812	2	HR 126	"	5	3 08	3 13	2 13	2 18	+2 40
HJ 4813	3	HR 338	"	8	3 25	3 33	2 30	2 38	+2 22
HJ 4814	4	HR 338	"	4	3 38	3 42	2 43	2 47	+2 33

5-6/XII/77 K.

HJ 4815	5	HR 83	"	30	2 07	2 37	1 00	1 30	+2 02
HJ 4816	6	HR 806	"	6	2 53	2 59	1 46	1 52	+0 17
HJ 4817	7	HR 779	"	6	3 22	3 28	2 15	2 21	+0 47
HJ 4818	8	HR 983	"	60	3 46	4 46	2 39	3 39	+1 01
HJ 4819	9	HR 1463	"	6	5 16	5 22	4 09	4 15	+0 44

9-10/XII/77 K.

HJ 4820	1	HR 817	"	34	3 40	4 14	2 17	2 51	+1 14
HJ 4821	2	HR 1121	"	16	4 35	4 51	3 12	3 28	+1 04
HJ 4822	3	HR 1582	"	15	5 14	5 29	3 51	4 06	+0 26

22-23/XII/77 K.

HJ 4823	1	HR 1088	"	4	4 23	4 27	2 09	2 13	+0 52
HJ 4824	2	HR 1100	"	10	4 42	4 52	2 28	2 38	+1 12
HJ 4825	3	HR 1312	"	28	5 03	5 31	2 49	3 17	+1 05
HJ 4826	4	HR 1781	"	10	6 20	6 30	4 06	4 16	+1 03

$$D_{H_1} = 40 \frac{\text{\AA}}{\text{mm}}$$

R.S	$a = 1^2 + 14^d$	Ne 2^m	$F_{\text{adm}} = 32.5$	$C = 5$	$t = 24.9$	$a = 1^2 + 14^d$
	$b = 2^2$	"	"	"	24.8	$b = 2^2$
	"	"	"	"	24.7	
	"	"	"	3	24.7	
				5	19.7	
			"	"	19.1	
		"	"	"	18.8	
		"	"	"	18.0	
		"	"	"	17.5	
		Ne 1^m	"	"	23.5	
		"	"	"	23.4	
		"	"	"	23.3	
		Ne 40^s	"	"	19.3	
		"	"	"	19.2	
		Ne 60^s	"	"	19.2	
		Ne 40^s	"	"	19.2	

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26-27/XII/77 K.

T. S.

T. J.

A. P. m.

Hv 4827	1 HR 899	103a-E	16	4 12	4 28	142	158	+1 22
Hv 4828	2 HR 811	"	11	4 51	5 02	2 21	2 32	+2 14
Hv 4829	3 HR 1202	"	12	5 20	5 32	2 50	3 02	+1 34

28-29/XII/77 K.

Hv 4830	4 HR 658	"	60	3 30	4 30	0 52	1 52	+1 47
Hv 4831	5 HR 1288	"	12	4 54	5 06	2 16	2 28	+0 52
Hv 4832	6 HR 1363	"	20	5 20	5 40	2 42	3 02	+1 10

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$$D_H = 40 \text{ mm}$$

$$R: a = 7 + 14$$

$$Ne 40^\Delta$$

$$F_{adm} = 32.5$$

$$c = 5, p, m, t = 23.9^\circ C$$

$$l = 2^2$$

1

1

22.1

23.6

1

1

1

22.1

23.4

1

1

1

5, p,

22.0

1

1

1

1

21.6

1

1

1

1

21.4

160.

8-9/I/72 A.

T. S.

T. U.

A. P. m.

HX4129C	HR 2825	$\Pi a-O$	5	7 31	7 36	4 12	4 17	+0 ^h 10 ^m
	HR 3717	"	18	7 55	8 13	4 36	4 54	- 1 15
	HR 4552	"	2	8 33	8 35	5 14	5 16	- 3 17
	"	"	3	8 35	8 38	5 16	5 19	- 3 15

Agregado al pag. 44

20-21/VII/71 F

HU 4091A	HR 6134	$\Pi a-O$	10	17 25 17 35 1 24 1 34				+1 02
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21-22/VII/71 F

HU 4091B	HR 4817	$\Pi a-O$	70	15 05	16 15	23 00	0 10	+3 07
HU 4091C	HR 7869	"	42	19 58	20 40	3 53	4 35	-0 17

16/1

$$D = 110 \frac{\text{Å}}{\text{mm}}$$

$$R: A = 1^{\circ} 5^d$$

$$L = 1^{\circ} 12^d$$

$$C = 5$$

$$t = 21^{\circ} 40'$$

$$21.3$$

$$t = -1^{\circ} 15^m$$

$$21.1$$

$$D = 40 \frac{\text{Å}}{\text{mm}}$$

$$R: A = 25^d$$

$$L = 2^{\circ}$$

$$F = 5^{\circ}$$

$$C = 5$$

$$h = h^m \text{ T.V.}$$

$$17^{\circ} 25^m - 17^{\circ} 35^m \text{ T.V.}$$

$$12^{\circ} 0'$$

$$11^{\circ} 6'$$

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7-8/I/72

A

T. J.

T. U.

A. h. m.

HX 4124A	HR 1660	II a-o	18	6 52	7 10	3 37	3 55	+1 ^h 55 ^m
"	"	"	11	7 10	7 21	3 55	4 06	+2 09
✓	HD 62753	"	19	7 52	8 11	4 37	4 56	+0 20
✓	HR 3034	"	2	8 31	8 33	5 16	5 18	+0 45
✓	"	"	4	8 33	8 37	5 18	5 22	+0 48
✓	HR 3448	"	13	8 53	9 06	5 38	5 51	+0 20
✓	HR 3502	"	10	9 29	9 36	6 11	6 21	+0 52

8-9/I/72 A.

HX 4124B	HR 1541	II a-o	8	3 28	3 36	0 11	0 17	- 1 11
"	"	"	14	3 36	3 50	0 17	0 31	- 1 00
✓	HR 2648	"	3	4 05	4 08	0 46	0 49	- 2 55
"	"	"	5	4 09	4 14	0 50	0 53	- 2 50
✓	HR 2855	"	5	4 26	4 31	1 07	1 12	- 2 57
"	"	"	10	4 31	4 41	1 12	1 22	- 2 50
✓	HR 3034	"	2	4 51	4 53	1 32	1 34	- 2 55
✓	"	"	4	4 53	4 57	1 34	1 38	- 2 52
✓	HR 1339	"	7	5 19	5 26	2 00	2 07	+ 1 05
✓	HR 1484	"	7	5 45	5 52	2 26	2 33	+ 1 10
✓	HR 2454	"	22	6 08	6 30	2 49	3 11	- 0 20
✓	HR 2678	"	5	6 43	6 48	3 24	3 29	- 0 20

110 $\frac{A}{m \cdot m}$ $\phi = 12.5^{\text{th}}$ $\phi = 11^{\text{th}} 12^{\text{th}}$ $c = 5$ $t =$

18.5 C

18.0

18.0

17.8

17.4

22.1

22.0

21.8

21.7

21.6

21.6

21.4

21.4



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