+80754

7.25 +0.55

VB13 4 45 40 +08 54.0 ~~7.25 0.5~~

HD30311 (2+P) ✓✓

7.26 -358 906 -466 2143 24 Vel 80

7.24 -355 905 -462 2.145 25"

7.26 -356 906 -464 2.144

2+13

V(BL) √√ 4 24 55 +05 0.65 78+5[illegible]

235	-368	873	-443	2.143	14 Jan 80
236	-368	871	-441	2.149	16 " "
237	-368	872	-442	2.146	

+150627 956

VB65 4 26 25 +15 33 7.42 +54

VA446 (2B)

7.35-374 912-421 22 Dec 75

7.35-371 906-423 4 Jan 76

7.40-367 902-444 2.150 2 Dec 80

7.38-371 907-459 2.150 29 Dec 80 +0.175

334 179 450 2626 7.35 +0.185 17 Jan 76

347 176 350 7.29

960

+,50624

VB 59

VA884

X

4 24 56 +15 31 (29?) yes

7.49 +545

2+B

2.3

7.44 -358 +413 -435 22 Dec 75

~~7.42~~ -359 855 -455 ~~-482~~ 4 Jan 76

7.46 -349 879 -426 2.148 26 Dec 80

7.47 -354 868 -404 2.151 25 "

7.45 -355 879 -440 2.150

351 153 420 2626 7.40 +0.195 17 Jan 76

~~446 +17~~ 86.4

VB31 4003406 04 19 00 +19 11 7.47 +564

+18 0623

(2+B)

7.46 -354 899 -454 2.148 25 Dec 80

7.47 -348 906 -437 2.137 26

7.46 -361 903 -446 2.143

HD8227 7.51 +555

VB66 +11°614 4 26 40 +11 41.5

(2+B) ✓✓

7.52 -356 905 -464 2.145 25 Dec 80

7.52 -354 891 -469 2.144 28"

~~7.52~~ ~~-355~~ ~~894~~ ~~-466~~ ~~2.144~~

2-18

VB102 √ | 4 | 36 | 20 | +15 | 06.5 | 754+60

758	-816	891	-454	2132	14 pm 80
756	-320	898	-46	2132	16 "
757	-318	894	-458	2132	

X (Hβ) ✓

VB 50 ✓ 4 22 46 +14 43 ~~765+53~~ 7.62+60

VA 304

2.143 6 Jan 79

2.146 11 Jan 79

7.61 -330 918 -469 11 Jan 79

7.55 -328 +909 -434 -465 22 Jan 75

✓ 7.54 -329 934 -476 (-515) 7 Jan 76

✓ 753 -331 915 -424 -464 18 Jan 76

7.54 -330 914 -467 (4)

21

328 186 442 2620 (9) 7.46 +0.23 17 Jan 76

735 7.23

310 200 325

+15 496 (2+15) VB 118 4 45 20 +15 51.5 7.74+58

30584 ✓ ✓

7.73 -344 903 -442 2.140 26 dec 80
7.73 -342-891 -444 2.146 25"
7.73 -343 897 -443 2.143

Apples

20430/4 3 16 25 +07 34 — 2.40 +57
3 16 30 +07 36 — 2.45 +62 2.145 ② Jun 30

(X) (Y) 2+B

S. 738-348 892-408 2.158 22 Aug 30
A 734-344 889-401 2161 23" " "
734 344 890-404 2.165 other card
355

B 2.128 ② Jun 30

723-313 894-431 2147 22 Aug 30
724-322 907-414 2.134 23 Aug 30
724-318 900-425 2.151
390 173 485 2.625

HP

20430 3 16 06 +07 34.5

20434 3 16 12 +07 120" 35.5 7.25 +62 +15

7.28 +0.20 3 Jan 77

7.36 -340 882 -384 5 Jan 76 7.37 +0.21 13 Jan 76

7.34 -350 910 -413 7 " " 2.164 5 Jan 76 7.24 +0.18 27 " "

7.40 -354 907 -356 12 " " 2.157 10" 7.28 +0.19 29 " "

7.38 -352 900 -400 2.160 7.29 +0.19 (3)

7.77 -313 (968) -404 5 Jan 76 7.94 +0.205 3 Jan 77

7.77 -317 905 -430 7 " " 2.142 5 Jan 76 7.91 +0.195 29 Jan 76

7.74 -325 927 -431 12 " " 2.148 10" 7.24 +0.22 13 Jan 76

7.76 -324 934 -446 (4) 2.145 7.44 +0.19 27 " "

7.76 -322 935 -436 7.46 +0.195 (3)

2+B

VBSS √ 4 30 20 +13 62 775 +54

780 -354 885 -445 2.147 1/4 m.80
778 -340 888 -441 2.140 16
779 -347 886 -443 2.144

2+B

VB52 √√ 4 23 15 +10 50.5 7.80+4.1

7.83-322 902 -405 2.134 19 Jan 80
7.80 -314 864 -402 2.127 16
7.82 -313 900 -414 2.130

VB10 4 05 06 +15 36.5 285 +59

~~5.44~~	~~-325~~	~~892~~ = 451	2.129 14 Jan 80
7.84	-324	889	-456	2.143 9 Dec 79
285	-332	910	-482	2.143 8 Dec 79
~~7.86~~	~~-327~~	~~897~~	-455	2.138

324

2.617

2.136 +

7.6 +0.123 [illegible]

7.60 +0.168 20 "

~~7.60~~ ~~+0.170~~

VB39 4 21 35 +16 41 286 +68

2768

286 -264 940 -723 2.130 8" Dia 24

285 -303 947 -464 2.127 8"

286 -264 944 =471 2.128

410 210 434 2.400

259 +0.205 Dia 24

259 +0.205 20"

259 +0.205 ②

2+B

VB23 VV 4 27 35 +17 14.5 215 +61

7.88 -317 899 -457 2.124 14 pm 80
787 -317 899 -457 2.128 16 "
788 -314 897 -456 2.126

2+B

VB10b ✓✓ 4 37 50 +14 04 256+67

754 -300 923 -444 2.109 14 jun 80

756 -297 926 -445 2.118

758 -294 920 -444 2.114

VB15 4 13 20 +12 F.5 806 +6.4

8.03 -301 903 -445 2.136 9 Dec 74
8.02 -315 936 -456 2.141 8 Dec 74
8.02 -308 915 -450 2.138

400 18746.0 2612 2.78 +0.186 20 Dec 74
2.80 +0.196 Fri Dec 74
2.79 +0.191

VBL3 4 25 15 +16 45 8.06 +63

8.01 -306 914 -460 2.138 11 Dec 79

2.134 6 Dec 79

8.03 -307 914 -464 2.133 5 Dec 79

8.05 -315 ~~850~~ -446 23 Oct 76

8.04 -310 925 -459 28 Oct 76

8.08 -296 895 -463 24 Oct 76

8.07 -291 883 -448 2.133 8 Dec 79

8.05 -308 905 -465 2.137 (8)

398 178 44/42.160

VBG3 (HB ✓ ✓

VA8F9 4 24 40 +16 47 8.06+43

$50
~~$50~~ 1410

8.05 -319 ~~[illegible]~~ -449 23 cent 76

8.08 -296 985 -463 24 " "

8.04 -310 925 -458 25

-470

8.05 -310 905 -470

358 ~~140~~ 179 439 1546

2.139 blue 29

2.77 +0.20 20 blue 29

2.77 +0.20 19 blue

7.85 +0.21 256 blue 76

280 +0.20 [illegible]

VB64 4 25 30 +16 39 8.12 +655

8.09 -256 936 -423 2.134 10 Days
8.10 -244 541 -414 2.134 11 Days
8.10 -254 938 -464 2.134

2.85 +0.205 19 Days
2.85 +0.190 20 " "
2.85 +0.195 ⓐ

HD37835

YB49 (2+β) 4 23 00 +16 20 8.24+0.58

+16° 58'

8.21-338 921-445 2.742 21.4hr SD

8.22-338 911-460 2.141 28'

8.22-336 916 -452 2.142

VB 2✓

VA108 ✓ 4 14 26 +16 54 8.34 +0.77

467 257

-276 984 -508 PI

8.30 -244 977 -514 8 בינואר 01:10

8.36 -233 994 -487 23 בינואר 60"

8.23 -262 1005 -518 24"

8.40 -234 961 -490 3 בדצמבר

8.33 -253 985 -502 14 בינואר

8.32 -241 994 -532 29 בינואר 01:40

8.31 -245 980 -498 30 בינואר 01:30

8.32 -248 991 -513 1 בפברואר 01:35

8.32 -245 993 -500 2 בפברואר

8.30 -256 983 -508 8 בפברואר 01:05

לכבוד
מר משה שרת
ירושלים

VB 27 (2β) ✓ (+24)

V A156 4 17 23 +17 27 6.46 +33

	234		258		2.117 24 Mar 70
8.45	-283	974	-488	23 Oct 76	2.111 25
8.49	-272	981	-495	24 "	2.114
8.45	-279	988	-475	24	(2.583)
8.46	-278	981	-486		

8.23 +0.24 25 Oct 76

8.46 432 248 422 1746

(2B) ✓✓

VB17 4 13 16 +14 51 8.46 +70

8.49 -272 937 -465 14 Jan 80

8.46 -274 (965) -450 3 Dec 74

8.46 -274 934 -456 10 Dec

8.49 -276 938 -467 (3)

2.105

2.575

(B) See

2.105 24 Dec 80

2.09 25

2.107

8.19 +0.227 19 Dec 74

8.17 +0.2320

8.18 +0.220

VB46 4 32 50 +15 04 8.51 +87

8.46 -208 1055 -516 10 Ven 75
8.48 -218 1050 -456 11 " "
8.47 -213 1054 -506

8.10 +0.276 14 Ven 74
8.11 +0.271 20 "
8.10 +0.274

VB92✓ 4 31 50 +15 435 8.66 +24

8.67 -251 963 4+3 16 Jan 70
8.65 -249 971 -455 10 Jan 75
8.64 -258 984 -460 11 " "
8.66 253 973 -456

8.35 +0.229 20 "
8.80
8.35 +0.229

23 5

+32

VA587 04 29 17 +15 42 893

(R)

8.54 -214 1038 -478 2320278 60"
8.52 -220 1049 -478 24 " "
8.51 -200 1034 -489 3 Hours
8.52 -212 1040 -481

+30

8.52 +0309 2 Hours
8.51 +0300 42179

+309

W +2R ✓✓

684 4 31 40 +15 58 8.54

8.54 -188 1064 -489 3 Jan TO 60"

8.52 -197 1072 -507 1 Jan TO

8.54 -194 1065 -512 (3)

8.53 -193 1068 -504 (5)

521 404

8.52 +0.315 8 Jan T1

8.53 +0.310 T 11

8.52 +0.316

VB41 +33 8.44 +88

VH684 4 31 07 +15 56.5

195 33

8.52 -195 1059 -548 23 Oct 76
8.56 -188 1050 -476 24 " "
8.53 -199 1086 -511 25 " 8.59 +0.305 25 Oct 76
8.54 -194 1065 -512 (3)

356

8.54 520 325 ~~2056~~ 2056

V +2R

547 4 28 25 +17 51 5.9

8.45 -236 1059 -483 1 Jan 80

8.41 -222 1045 -481 (4)

8.43 -230 1052 -482 (5)

5.60 +0.255 8 Jan 81

8.61 +0.265 9 Jan 81

8.60 +0.260

1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9
10	10	10	10
11	11	11	11
12	12	12	12
13	13	13	13
14	14	14	14
15	15	15	15
16	16	16	16
17	17	17	17
18	18	18	18
19	19	19	19
20	20	20	20
21	21	21	21
22	22	22	22
23	23	23	23
24	24	24	24
25	25	25	25
26	26	26	26
27	27	27	27
28	28	28	28
29	29	29	29
30	30	30	30
31	31	31	31

+31

VA477 4 26 50 +13 49 9.02

UBC A

131 32

9.04 -217 1034 -457 23 Nw 78 60"

9.02 -226 1063 -487 24

9.00 -203 1034 -488 3 Nw 78 30"

9.02 -215 1043 -477

498 305

8.62 +0.315 20 Nw 70 60'

8.66 +0.295 Nw 78

8.64 +0.285 4 Nw 74

8.64

V+2R ✓

363 4 2y 30 +17 58 E02

X

9.01 -185 1143 -513 1 Jm 81 6.0"
9.06 -183 1148 -495 24 Int 76
9.07 -173 1144 -531 28 Int 76
9.01 -183 1145 (-537) 23 Int 76

9.02 -181 1145 -513 (4)

+0.315 9 Jm 81
8.56 +0.303 8 Jm 81
8.59 +0.309
8.58

+32

VH3W3 4 24 02 +17 57 9.01 +54

9.01	-193	1145	-525 (1601)	2360 ± 76
9.06	-183	1148	-495	24 " "
9.00	-173	1144	-531	24
9.02	-180	1146	-533 -513	

+354 mm

863 ± 0.3 (3)

9.02 535 399 374 2225

395

2 + 2RI

VB4/6 ✓ ✓ 4 22 20 +14 37.5 9.11 +567

See Duffin

9.14 -206 1063 -479 14 Jan YD
9.11 -206 1039 -486 16 Jan YD
9.12 -204 1061 -483

R

9.42 +0.259 (2978
8.77 +0.274 24 Jan YD
8.76 +0.265 25 "
8.76 +0.271

✓ VB174 +14°0644

VA459 4 2L 22 +14 22 9.5

9.46 -177 +1139 -441 12 Dec 75

9.46 -161 +1140 -447 11 Dec 75

9.46 -165 +1132 -430 29 Nov 75 9.12 +0.34 24 Nov 75

9.46 -168 +1137 -450 -460 9.13 +0.31 26 Nov 75

9.13 +0.31 30 Nov 75

9.13 +0.31

+0.32

747 ✓ 4 33 20 +15 47.5 9.7

9.64 -181 1138 -494 3 Jan 70 60"
9.70 -185 1127 -500 (3)
9.67 -183 1132 -497 (4)

9.28 +0.298 8 Jan 87
9.28 +0.300 9"
9.28 +0.295

-0.31

VA747 4 328 +15 46 9.64 +0.91

UA183 +15 165

255

9.64	-191	1121	-504	28 @ 76
9.74	-185	1126	-474	24 " 4
9.67	-174	1135	-505	28 "
9.70	-185	1127	-500	

9.70 530 382 404 2210 9.30 +0.31 (5)

+12° 55 8 04 06 35 +16 28

(X) (X)

RE

9.53 +1.01 +0.37 340

9.38 +0.340

9.52 -144 1251 -544 3179 9.42 +0.344 5279

9.52 -142 1235 -524 3179 9.40 +0342

9.52 -143 1243 -534 0.050

3

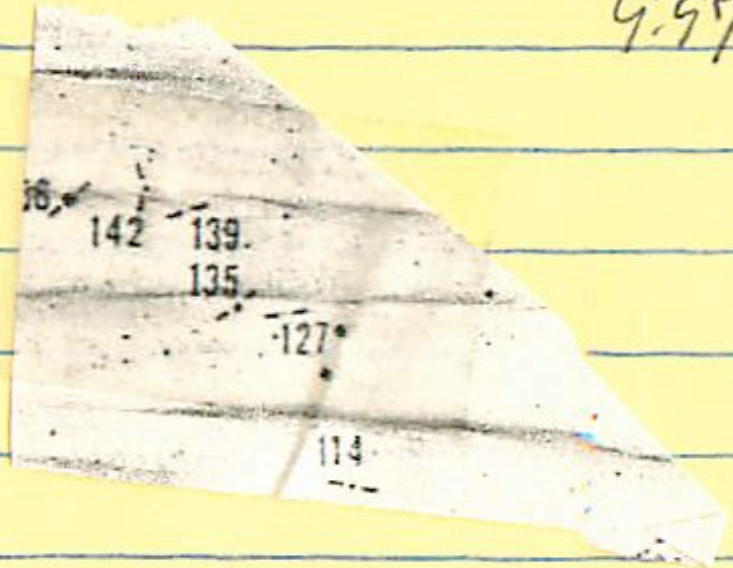
√ +2 R √ √

VA135 4 17 10 +17 22.5 9.93

10.02 -90 1303 -565 1 Jan 80

9.93 -86 1320 -554 (4)

9.97 -88 1312 -560 (5)



9.38 +0.422 8 Jan 81

9.41 +0.414 9

9.40 +0.433

✓ +39 mm

RT +37°

VA310 4 22 49 +17 56° 10.0

VTB174

214

+34 mm

9.55	-089	+1262 (-535)	25 sec 75	24"	+38 MP
9.56	-106	+1264 -485	11 sec 75	9.56	+36 ② 1972
9.54	-116	+1271 -464	12 sec 75		
9.88	-117	+1267 -476	3 sec 75		
9.94	-113	+1266 -485	④		

-489

2108
522

V A 135 4 16 55 +17 21.5 10.0

243 271 133 +47

9.86	-091	+1358	-477	30 Dec 75			
9.97	-076	+1302	-546	11 Dec 75	9.43	+0.46	26 Nov 75
9.98	-082	+1285	-532	12 Dec 75	9.45	+0.45	30 Nov 75
9.40	-094	+1326	-555	4 Jan 76	9.44	+0.455	
9.93	-86	+1328	-544	(4)	9.40	+0.470	2 1972
		1304	-559		9.32	+0.470	1 1969

-079

641 5404 390

+12°623 ✓✓ 4 38 40 +12 41-5

IR ✓

R-I
10-04 +1.08 +40

10.00 -113 1303 -564 28 Jan 74
10.00 -122 1314 -560 30 Jan 74
10.00 -118 1308 -564

9.43 +0.370 4 Feb 74
9.45 +0.362 8 Jan 91
9.44 +0.366

+10° 59 S 04 23 50 +16.56

(VA342) ✓✓

VBM6

10.30 -137 1266 -550 1 Jan 81

10.24 -136 1264 -548 30 Jan 74

10.28 -132 1250 -500 6 Jul 74

10.27 -135 1260 -549 (3)

R-E

10.28 +1.03 mS

9.74 +0.340 4 Jul 74

9.82 +0.382 Nov

9.77 +0.344 8 Jan 81

9.76 +0.342

18-I-45

VA548 04 25 12 +16 12 10.32

10.33 -70 1248 -559 28 km 0860"
10.30 -71 1246 -564 24 "
10.32 -70 1247 -562

650 452 344

Mon
+8.45 2 km

9.71 +0.436 Nelson
9.68 +0.435 43179
9.70
9.80 +0.438 ③ 157032