



*
* V A R I A B I L I A *
* ===== *
* nummer 41 juli 1994 *
* *
* Redaktie: *
* H.Feijth *
* Oer de Feart 7 *
* 9084 BP Goutum *
* *

WAARNEMINGSRESULTATEN
MAART-JUNI 1994

In het tijdvak maart-juni 1994 werden door acht waarnemers 2246 schattingen gedaan. Onderstaande tabel geeft aan hoe de aantallen

per maand over de diverse waarnemers verdeeld zijn. Bovendien zijn achter / de "inner sanctum" schattingen vermeld. Deze hebben betrekking op de positieve schattingen zwakker dan 13.7 alsmede de negatieve schattingen zwakker dan 14.0.

Waarnemer		MRT	APR	MEI	JUN	totaal
R.J. Bouma	BMU			101/5	71	172
G. Comello	CMG	7			13	20
E. van Dijk	VDJ			42	32	74
H. Feijth	FJH	445/122	259/65	611/173	314/64	1629
H. v.d. Hil	VDH	10	10			20
J. Holtrop	HJO	61	75	99/1	72	307
R. Jansen	JAN			8		8
A. Scholten	SAQ			11	5	16
totaal		523	344	872	507	2246

OBSERVARIA Nu het weer zich eindelijk van zijn goede zijde laat zien hebben wij ruim de gelegenheid de veranderlijken te volgen in hun lichtwisseling. Daarbij kunnen wij onze aandacht richten op niet minder dan vijf novae. Nova Cygni 1992 (V1974 Cyg) neemt na een periode constant op 12.7 geweest te zijn langzaam in helderheid af. Nu (17 juli) is de helderheid 13.7. Nova Aquilae 1993 is nog steeds zichtbaar; de helderheid is 13.1 en verandert nauwelijks. Deze nova behoort tot die categorie die na een secundair minimum langzaam in helderheid toenemen tot een secundair maximum dat ongeveer 300 dagen plaatsvindt na het primaire maximum.

Nova Cassiopeiae 1993 is een uitgesproken vertegenwoordiger van die groep; na een diep secundair minimum van ongeveer 16.0 in maart nam de helderheid weer toe. Vanwege het onvermogen onze grootste kijkers te verplaatsen hebben wij dit minimum gemist. Pas eind april konden wij met verplaatsbare telescopen van 25 cm de nova weer schatten. Toen was de helderheid 13.6. Nu is deze toegenomen tot 12.1. De verwachting is dat

het secundaire maximum in oktober zal plaatsvinden bij een helderheid van 11. Bovendien zijn er nog twee waarneembare novae in zuidelijke regionen; Nova Ophiuchi 1994 die begin juni nog 8.7 was is afgenomen tot 10.3 omstreeks twee weken later. Nova Sagittarii 1994 Nr2 werd begin en eind juni geschat op 10.5 terwijl in het midden van de maand een maximum geregistreerd werd van 8.8.

Naast galactische novae konden wij ook nog twee supernovae waarnemen. SN 1994D in NGC 4526 (bij R Vir) had een maximum van 12.1 in het einde van maart. Supernova 1994I in M51 ofwel de Draaikolknevel viel tegen wat betreft maximale helderheid. Deze bedroeg slechts 13.5 (eind april). Opvallend is de grote spreiding in de geschatte helderheden. Beide supernovae stonden vlak bij de kern van hun melkwegstelsel zodat een zeer forse vergroting (> 300 maal) nodig was om ze goed te kunnen schatten. Mij komt het voor dat de heldere schattingen afkomstig zijn van waarnemers die veel minder sterk vergroot hebben zodat zij (een gedeelte van) de kern hebben meegeschat.

Wat betreft de dwergnovae kan worden opgemerkt dat SS Cygni zich normaal gedroeg; maxima werden waargenomen in april en het einde van juni. Laatstgenoemd maximum is zelfs zeer goed waargenomen; de stijgende tak is ook goed geobserveerd. Daarentegen liet U Geminorum het afweten. Toen ik in het begin van mei in Puimichel was heb ik U Gem nauwgezet in het oog gehouden met de 254 mm Jones-Bird. Ondanks dat toen al meer dan 100 dagen verstreken waren na het maximum weigerde U Gem in de JB een opvallend object te worden. Na terugkomst was U Gem vanwege de schemering niet meer waarneembaar. Wanneer het maximum heeft plaatsgevonden is mij niet bekend. RU Pegasi werd daarentegen evenals X Leonis wel in Puimichel in maximum waargenomen.

Z Camelopardalis zowel als RX Andromedae zijn niet in stilstand en daarom prettige objecten om waar te nemen.

R Coronae Borealis is nog steeds in het maximum en zelfs in Goutum met het blote oog zichtbaar. Daarentegen was SU Tauri voordat deze in de avondschemering verdween zelfs in een 30 cm onzichtbaar.

Chi Cygni had een naar verhouding zwak maximum (6.0) op het einde van mei. Omstreeks dezelfde tijd had R Leo een zo helder maximum (5.5) dat hij met het blote oog zichtbaar was. T Cephei beleeft nu andermaal een zwak minimum van 10.8.

Momenteel is de symbiotische veranderlijke AG Draconis in uitbarsting. De helderheid bedraagt sinds juni ongeveer 8.2. De laatste uitbarsting was in 1985/86.

De unieke veranderlijke FG Sagittae blijft zich merkwaardig gedragen. Eind april begon de helderheid af te nemen van 12.0 tot 13.5 in de eerste helft van juni. Nu is de helderheid getegen tot 12.5. Het blijft de moeite waard om dere veranderlijke voortdurend in de gaten te houden. Een handicap is dat vlak bij FG een ster van 12.5 staat zodat steeds een forse vergroting moet worden toegepast.

----- 000451 SS Cas type Mira	type Mira 483.6 9.8 FJH ----- 004435 V And type Mira	414.31 11.7 FJH ----- 013238 RU And type SRa	021558 S Per type SRC
422.3 13.2 FJH 503.5 11.1 FJH -----	483.6 9.6 FJH ----- 004958 W Cas type Mira	422.3 11.2 FJH ----- 013338 Y And type Mira	414.3 12.1 FJH 422.3 12.0 FJH 431.3 12.0 FJH 433.4 12.0 HJO 460.3 12.0 HJO -----
000928 UW And type Mira	433.4 9.3 HJO ----- 005840 RX And type UGZ	414.3 <14.4 FJH 483.6 9.6 FJH ----- 015254 U Per type Mira	022150 RR Per type Mira
483.6 11.1 FJH 512.6 11.7 FJH -----	422.40 11.8 BMU 424.31 11.4 BMU 448.32 10.8 BMU 479.60 12.4 FJH 483.57 11.0 FJH 509.50 11.5 BMU -----	433.4 9.3 HJO 446.3 9.2 HJO ----- 015457 V666 Cas type Mira	414.3 13.7 FJH 422.3 13.9 FJH ----- 022980 RR Cep type Mira
001046 X And type Mira	010940 U And type Mira	422.3 11.9 FJH ----- 020657A TZ Per type UGZ	479.6 :15.5 FJH ----- 001726 T And type Mira
479.6 9.4 FJH 526.5 11.5 FJH -----	483.6 13.1 FJH ----- 011041A UZ And type Mira	414.32 13.7 FJH 422.30 12.6 FJH 425.32 13.0 FJH 428.31 13.8 FJH 431.32 13.9 FJH 483.57 12.6 FJH -----	415.5 11.3 FJH 425.3 12.0 FJH 436.4 12.1 FJH 456.4 13.0 FJH 479.4 13.9 FJH 487.6 13.8 FJH 503.5 14.0 FJH 512.5 14.0 FJH -----
001755 T Cas type Mira	483.6 :14.8 FJH ----- 011055A VZ Cas type Mira	021024 R Ari type Mira	023133 R Tri type Mira
433.3 8.5 HJO 504.4 9.2 FJH 528.5 9.7 FJH -----	422.3 10.9 FJH ----- 011272 S Cas type Mira	422.3 11.3 FJH ----- 021143A W And type Mira	326.4 9.5 VDh 415.3 9.9 FJH ----- 031170 V667 Cas type Mira
001838 R And type Mira	422.3 10.0 FJH 483.6 12.5 FJH 503.5 12.5 FJH 512.5 12.7 FJH -----	422.3 8.1 FJH 431.3 7.7 FJH 439.3 7.6 HJO ----- 021281 Z Cep type Mira	422.3 11.8 FJH 431.4 12.1 FJH ----- 032043 Y Per type Mira
479.6 13.1 FJH 485.6 13.3 FJH 512.6 14.3 FJH 533.5 :15.0 FJH -----	012746 SX And type Mira	415.5 10.7 FJH 425.3 10.7 FJH 436.4 10.8 FJH 456.4 11.8 FJH 479.4 12.8 FJH 503.5 13.8 FJH 512.5 14.1 FJH -----	032335 R Per type Mira
003179 Y Cep type Mira	414.3 12.9 FJH 422.3 12.7 FJH 483.6 10.7 FJH -----	479.4 12.8 FJH 503.5 13.8 FJH 512.5 14.1 FJH -----	414.3 12.8 FJH 422.3 13.6 FJH 431.3 14.0 FJH ----- 032443 GK Per type Na
415.5 12.5 FJH 425.3 11.4 FJH 436.4 9.9 FJH 456.4 9.3 FJH 479.4 10.0 FJH 503.4 11.0 FJH 509.5 11.4 FJH 527.5 12.5 FJH -----	013050 KT Per type UGZ		414.33 13.0 FJH 422.30 13.0 FJH
004047 U Cas type Mira			
483.6 :14.8 FJH -----			
004132 RW And			

431.33 13.3 FJH	475.4 12.3 HJO	485.4 11.5 FJH	448.4 14.4 FJH
-----	479.4 12.1 FJH	-----	479.4 14.3 FJH
034532 RX Per	485.4 12.4 HJO	054319 SU Tau	485.4 14.4 FJH
type Mira	487.4 12.0 FJH	type RCB	-----
414.3 13.4 FJH	504.4 11.9 FJH	414.3 :16.0 FJH	060443 RR Aur
422.3 14.0 FJH	-----	422.3 <16.0 FJH	type Mira
-----	044617 V Tau	429.3 <15.5 FJH	414.3 14.7 FJH
040150 FO Per	type Mira	448.3 <15.5 FJH	422.3 :14.8 FJH
type UG	425.3 9.7 FJH	-----	448.3 14.5 FJH
422.30 12.8 FJH	449.3 11.1 FJH	054615A Z Tau	479.4 13.6 FJH
425.32 13.0 FJH	-----	type Mira	487.3 13.2 FJH
-----	050953 R Aur	415.3 10.9 FJH	-----
041916 VX Tau	type Mira	425.3 10.9 FJH	060450 X Aur
type Mira	417.5 10.7 HJO	449.3 10.9 FJH	type Mira
425.3 :14.3 FJH	433.3 10.6 FJH	-----	417.5 9.3 HJO
-----	433.5 10.2 HJO	054615C RU Tau	475.4 12.9 HJO
042209 R Tau	442.4 10.1 HJO	type Mira	485.4 11.9 HJO
type Mira	462.3 9.4 FJH	415.3 11.5 FJH	-----
415.3 11.5 FJH	475.4 8.6 HJO	425.3 11.3 FJH	060547 SS Aur
425.3 10.5 FJH	485.4 7.8 HJO	449.3 10.6 FJH	type UGSS
438.3 9.5 FJH	-----	-----	414.33 14.9 FJH
-----	052036 W Aur	054920A U Ori	415.37 14.9 FJH
042309 S Tau	type Mira	type Mira	417.45 14.8 FJH
type Mira	415.3 11.9 FJH	326.4 8.2 VDH	422.31 14.9 FJH
415.3 11.4 FJH	433.3 10.8 FJH	438.3 11.9 FJH	425.32 14.9 FJH
425.3 11.4 FJH	448.3 10.3 FJH	448.4 12.1 FJH	427.33 11.2 FJH
438.3 11.4 FJH	460.3 9.3 HJO	-----	428.31 11.0 FJH
-----	480.3 9.3 FJH	054974 V Cam	429.31 10.9 FJH
043065 T Cam	487.3 9.9 FJH	type Mira	431.31 10.9 FJH
type Mira	053337 RU Aur	415.4 14.9 FJH	433.34 11.1 FJH
417.5 8.8 HJO	type Mira	425.4 15.1 FJH	433.37 10.8 HJO
427.4 8.8 FJH	414.3 13.9 FJH	448.4 :15.3 FJH	436.39 12.0 FJH
433.5 8.8 HJO	422.3 14.0 FJH	479.4 15.3 FJH	441.34 14.8 FJH
438.5 9.1 FJH	448.4 14.7 FJH	487.4 15.4 FJH	448.33 15.0 FJH
446.3 9.4 HJO	-----	-----	449.34 15.0 FJH
454.4 9.4 HJO	053531 U Aur	055439 AZ Aur	456.35 14.9 FJH
504.4 10.8 FJH	type Mira	type Mira	479.36 14.9 FJH
-----	422.4 10.6 FJH	415.3 11.8 FJH	480.35 15.0 FJH
043208 RX Tau	448.3 11.5 FJH	422.4 11.7 FJH	482.39 14.9 FJH
type Mira	480.3 12.3 FJH	433.3 11.5 FJH	483.37 15.0 FJH
415.3 13.2 FJH	485.3 12.6 FJH	448.3 11.0 FJH	485.35 14.9 FJH
-----	-----	460.3 10.2 HJO	487.35 14.9 FJH
043274 X Cam	053538 SZ Aur	462.3 10.3 FJH	-----
type Mira	type Mira	480.4 10.4 FJH	060746A ST Aur
417.5 8.5 HJO	415.3 13.5 FJH	487.3 10.4 FJH	type Mira
427.4 8.3 FJH	422.3 13.3 FJH	-----	417.5 12.3 FJH
438.5 8.9 FJH	431.3 13.4 FJH	060246 VY Aur	417.5 12.3 HJO
446.3 10.0 HJO	448.3 13.4 FJH	type Mira	422.4 12.6 FJH
454.4 10.7 HJO	462.3 13.5 FJH	414.3 14.6 FJH	425.5 12.9 HJO
	479.4 11.8 FJH	422.3 14.4 FJH	448.4 14.0 FJH

-----	480.35 14.1 FJH	445.40 11.1 VDJ	422.34 11.2 FJH
073508 U Cmi	482.39 14.2 FJH	446.33:11.2 HJO	422.41 11.2 BMU
type Mira	483.36 14.1 FJH	447.45 11.3 FJH	422.41 11.1 VDJ
	485.36 14.2 FJH	448.32 11.3 BMU	422.49 11.3 HJO
415.4 11.0 FJH	487.36 14.2 FJH	448.38 11.4 FJH	425.33 11.6 FJH
425.4 11.7 FJH	-----	448.44 11.6 HJO	425.46 11.6 BMU
436.4 11.7 FJH	080362 SU UMa	449.33 11.8 FJH	425.54 11.7 HJO
448.3 12.1 FJH	type UGSU	449.35 11.4 BMU	427.35 12.2 FJH
478.4 12.8 FJH		454.33 12.2 BMU	427.42 12.4 CMG
485.3 13.1 FJH	414.35 13.9 FJH	454.35 12.1 HJO	427.43 12.2 BMU
-----	415.46 14.4 FJH	456.35 13.4 FJH	427.43 11.9 VDJ
073723 S Gem	417.46 14.4 FJH	460.35 12.9 FJH	428.32 12.8 FJH
type Mira	422.34 14.2 FJH	478.37 13.0 FJH	429.32 13.2 FJH
	425.33 14.2 FJH	479.35 12.1 FJH	431.32 13.2 FJH
415.3 9.7 FJH	427.35 14.3 FJH	480.36 13.0 FJH	431.60 13.2 BMU
427.3 9.6 FJH	428.32 12.5 FJH	482.39 14.8 FJH	431.60 13.0 VDJ
436.4 9.5 FJH	429.33 13.1 FJH	483.36 14.8 FJH	431.61:13.1 HJO
449.4 9.7 FJH	431.35 13.7 FJH	485.36 15.0 FJH	433.34 13.2 FJH
462.3 9.7 FJH	441.40 14.3 FJH	487.36 14.8 FJH	436.40 13.0 FJH
478.4 9.8 FJH	447.46 14.4 FJH	-----	438.42 13.2 FJH
485.4 9.9 FJH	448.37 14.3 FJH	080523 RR Cnc	441.40 12.9 FJH
-----	449.33 14.3 FJH	type Mira	441.45 12.7 HJO
074323 T Gem	456.35 13.0 FJH		442.42 12.6 HJO
type Mira	460.35 14.2 FJH	414.4 12.4 FJH	444.46 10.9 HJO
	477.39 14.2 FJH	431.3 11.6 FJH	445.39 10.9 BMU
414.3 14.1 FJH	478.39 14.1 FJH	441.4 11.0 FJH	445.39 11.1 VDJ
422.3 14.2 FJH	479.38 12.7 FJH	460.4 9.3 FJH	445.51 11.4 HJO
431.3 14.7 FJH	480.36 12.8 FJH	478.4 9.3 FJH	446.30 10.8 HJO
447.5 14.5 FJH	480.48 12.3 HJO	485.4 9.3 FJH	447.46 10.6 FJH
456.4 13.8 FJH	481.46 13.7 FJH	-----	448.35 10.7 BMU
478.4 12.5 FJH	482.39 13.7 FJH	080837 RT Lyn	448.38 10.4 FJH
485.4 10.9 FJH	483.37 13.8 FJH	type Mira	448.45 10.1 HJO
-----	485.36 14.2 FJH		449.33 10.7 FJH
074922 U Gem	485.42:13.6 HJO	415.4 :14.6 FJH	449.39 10.9 BMU
type UGSS+E	487.36 14.4 FJH	425.4 14.3 FJH	449.40 10.5 VDJ
	-----	441.4 14.0 FJH	454.34 11.7 BMU
414.35 14.2 FJH	080428 YZ Cnc	449.4 13.6 FJH	454.34 11.2 VDJ
415.37 14.1 FJH	type UGSU	479.4 11.8 FJH	454.42 11.5 HJO
417.46 14.1 FJH		487.4 11.5 FJH	456.33 12.0 FJH
417.50 14.2 BMU	414.35 14.8 FJH	-----	460.35 12.9 FJH
422.33 13.7 FJH	415.37 14.7 FJH	081040 W Lyn	461.47:12.9 HJO
422.41 14.2 BMU	417.46 12.0 FJH	type Mira	462.34 13.0 FJH
425.32 14.0 FJH	417.50 12.1 BMU		464.43 12.9 FJH
427.35 14.0 FJH	422.33 14.8 FJH	415.4 10.9 FJH	468.46 13.3 FJH
428.31 14.2 FJH	425.31 11.9 FJH	422.4 11.5 FJH	471.41 11.1 BMU
429.32 14.2 FJH	425.49 11.8 HJO	436.4 12.1 FJH	471.41 11.0 VDJ
431.31 14.2 FJH	427.35 14.1 FJH	449.4 12.6 FJH	475.38 11.8 BMU
441.34 14.2 FJH	428.32 14.9 FJH	462.3 13.0 FJH	475.44 12.0 HJO
445.35 14.3 BMU	429.34 14.9 FJH	479.4 13.4 FJH	477.40 12.8 FJH
447.45 14.2 FJH	431.31 14.3 FJH	487.3 13.6 FJH	480.36 12.9 FJH
448.32 14.2 BMU	431.47 14.0 FJH	-----	480.47 13.0 HJO
448.33 14.0 FJH	433.34 12.0 FJH	081473 Z Cam	481.46 12.9 FJH
449.33 14.2 FJH	441.33 11.8 FJH	type UGZ	482.40 12.9 FJH
456.35 14.3 FJH	441.44 11.6 HJO		483.37 12.9 FJH
460.34 14.2 FJH	442.41 11.1 HJO	414.35 13.2 FJH	484.41 13.0 BMU
478.37 14.2 FJH	444.45 11.1 HJO	415.46 12.9 FJH	484.44 13.0 HJO
479.35 14.2 FJH	445.40 11.2 BMU	417.46 12.8 FJH	485.37 12.9 FJH

485.42 13.0 HJO	-----	448.38 11.8 FJH	093952 EQ UMa
486.49 13.0 HJO	082953 SW UMa	449.33 12.3 FJH	type UG
487.36 12.8 FJH	type UG	460.35 13.4 FJH	
488.50 11.4 HJO		478.39 13.4 FJH	414.36 13.9 FJH
489.40 11.4 FJH	485.4 16.0 FJH	479.41 13.3 FJH	415.44 13.6 FJH
500.41 13.3 FJH	-----	480.36 13.2 FJH	417.46 14.5 FJH
500.41:13.3 HJO	083013 UY Cnc	482.39 12.8 FJH	422.35 14.8 FJH
502.41:13.2 HJO	type Mira	485.37 12.0 FJH	424.3 13.6 BMU
502.43 13.3 BMU		-----	427.4 13.8 BMU
503.46:13.2 HJO	414.4 14.2 FJH	090425 W Cnc	427.41 13.8 FJH
503.49 13.4 BMU	422.3 14.5 FJH	type Mira	429.33 13.6 FJH
503.49 13.2 VDJ	431.3 14.5 FJH		431.35 14.6 FJH
504.42:13.0 HJO	448.3 15.0 FJH	417.5 8.4 FJH	441.45 12.6 FJH
504.43 13.2 BMU	478.4 14.5 FJH	427.4 8.8 FJH	445.40 12.7 BMU
504.43 13.2 VDJ	485.4 14.9 FJH	438.5 9.3 FJH	448.37 12.5 BMU
507.43 11.5 HJO	-----	460.4 10.4 FJH	449.40 12.9 BMU
507.49 11.0 BMU	083019 U Cnc	478.4 11.0 FJH	454.34 13.3 BMU
507.49 11.1 VDJ	type Mira	485.4 11.1 FJH	460.45 14.5 FJH
509.43 11.0 BMU		-----	479.44 14.5 FJH
509.43 10.9 HJO	414.4 :15.1 FJH	093178 Y Dra	480.36 12.7 FJH
512.49 11.3 FJH	422.3 15.1 FJH	type Mira	481.46 12.4 FJH
515.43 12.1 HJO	431.3 14.6 FJH		482.40 12.3 FJH
515.44 11.8 BMU	448.3 13.7 FJH	417.5 9.8 FJH	483.37 12.5 FJH
515.44 12.0 VDJ	460.4 13.0 FJH	425.5 10.4 FJH	484.42 12.2 BMU
517.44 13.0 BMU	478.4 11.3 FJH	456.3 11.8 FJH	485.38 12.6 FJH
517.44 13.0 VDJ	485.4 10.9 FJH	468.5 12.6 FJH	485.44 12.6 BMU
517.47 12.9 CMG	-----	479.4 12.9 FJH	487.36 13.0 FJH
518.44 13.0 HJO	083350 X UMa	487.4 13.1 FJH	500.42 14.5 FJH
518.45 13.0 VDJ	type Mira	500.4 13.1 FJH	-----
518.45 13.2 BMU		509.5 13.5 FJH	094211 R Leo
518.47 12.9 CMG	415.5 11.8 FJH	518.4 13.8 FJH	type Mira
520.50 13.3 BMU	422.5 11.1 FJH	-----	
533.43 10.9 BMU	425.5 10.8 HJO	093720 RS Leo	422.5 8.5 HJO
533.44 10.8 VDJ	431.6 10.2 FJH	type Mira	427.4 9.1 FJH
-----	441.4 9.8 FJH		438.5 8.6 FJH
081617 V Cnc	441.5 9.5 HJO	422.3 11.9 FJH	442.4 8.2 HJO
type Mira	448.5 9.4 HJO	433.3 12.7 FJH	454.3 7.6 VDJ
	460.3 9.4 HJO	447.5 13.6 FJH	454.3 7.8 BMU
417.5 10.3 FJH	464.4 9.7 FJH	460.4 14.3 FJH	460.3 7.4 HJO
427.4 10.2 FJH	475.4 9.6 HJO	485.4 :14.7 FJH	460.4 7.5 FJH
438.5 9.2 FJH	480.4 10.3 FJH	-----	475.4 6.2 BMU
-----	485.4 10.1 HJO	093934 R LMi	483.4 5.6 FJH
081633 T Lyn	489.4 10.8 FJH	type Mira	484.4 5.5 BMU
type Mira	500.4 11.1 HJO		485.4 5.3 VDJ
	-----	414.4 13.8 FJH	500.4 5.5 BMU
427.4 9.9 FJH	085518 SY Cnc	422.3 13.6 FJH	509.4 5.6 BMU
436.4 10.1 FJH	type UGZ	425.5 13.6 HJO	-----
449.4 10.5 FJH		441.4 13.4 FJH	094512 X Leo
462.3 10.6 FJH	414.36 12.5 FJH	448.5 :13.6 HJO	type UGSS
479.4 11.3 FJH	417.46 13.4 FJH	449.3 13.1 FJH	
487.4 11.5 FJH	422.34 13.5 FJH	460.5 13.4 HJO	415.44:15.5 FJH
-----	425.32 13.5 FJH	468.5 13.0 FJH	417.47:15.6 FJH
081935 X Lyn	427.35 13.5 FJH	475.4 :12.8 HJO	422.33 12.6 FJH
type Mira	429.32 13.5 FJH	480.4 12.7 FJH	422.40 12.4 BMU
	431.31 13.4 FJH	485.4 13.2 HJO	422.40 11.9 VDJ
480.4 :14.4 FJH	438.43 11.5 FJH	502.4 10.7 HJO	424.32 12.3 BMU
487.4 14.6 FJH	447.46 11.7 FJH	-----	425.41 12.6 FJH

425.45	12.3	BMU	425.44	13.9	FJH	431.5	12.7	FJH	424.33	11.8	BMU
425.46	12.0	VDJ	427.42	13.8	FJH	441.5	12.9	FJH	425.42	11.9	FJH
425.50	12.0	HJO	429.34	14.4	FJH	447.5	12.9	FJH	425.46	11.7	BMU
427.35	12.8	FJH	479.44	13.8	FJH	456.4	13.0	FJH	427.42	12.3	FJH
427.42	12.7	CMG	480.36	13.8	FJH	478.4	13.6	FJH	427.43	12.3	CMG
427.43	12.4	BMU	483.37	14.4	FJH	503.4	13.8	FJH	427.44	11.8	BMU
427.43	11.9	VDJ	485.39	14.4	FJH	-----			427.44	11.9	VDJ
427.51	12.0	HJO	487.36	14.6	FJH	120012	SU Vir		428.43	12.2	CMG
429.32	12.7	FJH	-----			type Mira			429.35	12.2	FJH
431.31	14.0	FJH	103769	R UMa					429.42	12.2	CMG
445.36	12.6	BMU	type Mira			415.4	12.7	FJH	431.46	12.1	FJH
445.36	12.3	VDJ				425.4	12.1	FJH	431.51:11.0	SAQ	
447.46	13.0	FJH	425.5	10.9	HJO	427.4	12.0	CMG	431.61	11.9	BMU
448.32	13.1	BMU	427.4	11.2	FJH	431.5	11.5	FJH	431.61	12.2	VDJ
448.38	14.0	FJH	441.5	10.7	HJO	449.4	10.8	FJH	433.35	11.5	SAQ
449.34	14.9	FJH	448.5	10.3	HJO	460.4	10.6	FJH	433.43	12.2	CMG
480.36	13.8	FJH	460.5	8.4	HJO	478.4	10.7	FJH	436.42	12.2	FJH
481.46	12.8	FJH	464.4	8.0	HJO	487.4	10.6	FJH	441.35	12.1	FJH
482.39	12.6	FJH	527.4	7.8	HJO	-----			448.36	12.2	BMU
483.37	12.7	FJH	-----			1209-05	T Vir		448.40	12.9	FJH
485.36	14.1	FJH	104814	W Leo		type Mira			448.41	12.2	SAQ
487.39	15.8	FJH	type Mira						449.38	12.9	FJH
-----						415.5	11.5	FJH	449.43	12.4	BMU
094735	S LMi		415.4	14.0	FJH	422.5	10.8	FJH	456.35	13.9	FJH
type Mira			422.5	13.8	FJH	425.5	10.3	FJH	460.38	14.0	FJH
			431.5	13.7	FJH	431.5	9.9	FJH	-----		
414.4	12.9	FJH	441.4	13.2	FJH	449.4	9.8	FJH	123160	T UMa	
422.3	12.5	FJH	447.5	12.5	FJH	460.4	9.9	FJH	type Mira		
425.5	12.5	HJO	456.4	11.7	FJH	479.5	10.1	FJH			
433.3	12.2	FJH	468.5	11.1	FJH	487.4	10.3	FJH	417.5	11.8	FJH
441.5	11.3	HJO	477.4	10.8	FJH	-----			422.5	11.3	FJH
448.5	10.2	HJO	485.4	10.9	FJH	122532	T CVn		433.5	9.1	HJO
449.3	10.6	FJH	-----			type Mira			437.5	8.6	VDH
460.3	9.3	HJO	113303	T Leo					448.3	7.8	VDH
468.5	9.3	FJH	type UG			422.5	9.3	HJO	454.5	7.9	HJO
475.4	8.3	HJO				445.5	9.9	HJO	462.4	7.2	FJH
480.4	8.9	FJH	417.47:14.8	FJH		448.5	9.8	HJO	464.4	7.7	HJO
485.4	8.4	HJO	448.39	10.2	FJH	460.5	10.0	HJO	465.3	7.8	VDH
502.4	8.5	HJO	449.38	9.9	FJH	500.4	11.0	HJO	473.5	7.9	VDH
-----			456.37	13.9	FJH	507.4	11.1	HJO	480.5	7.8	HJO
095421	V Leo		-----			515.4	11.0	HJO	485.4	7.9	VDJ
type Mira			113772	DO Dra		-----			485.5	8.0	BMU
			type UG			1228-03	Y Vir		500.4	8.5	HJO
415.4	13.8	FJH				type Mira			515.4	9.1	HJO
425.4	14.0	FJH	501.43:15.2	FJH					527.4	9.7	HJO
431.5	14.1	FJH	-----			415.5	14.0	FJH	528.4	9.6	FJH
441.4	14.5	FJH	115158	Z UMa		425.5	13.2	FJH	-----		
448.4	14.5	FJH	type SRb			431.5	12.5	FJH	123307	R Vir	
460.4	14.5	FJH				449.4	11.5	FJH	type Mira		
478.4	13.8	FJH	326.4	7.4	VDH	460.4	11.4	FJH			
485.4	14.0	FJH	473.5	6.9	VDH	479.5	9.5	FJH	425.4	11.1	FJH
-----			-----			487.4	9.7	FJH	449.4	11.1	FJH
095968	CH UMa		115919	R Com		-----			462.5	9.8	FJH
type UGSS			type Mira			122908	SN 94D				
						type SN					
415.46	14.7	FJH	415.5	12.3	FJH						
417.46	13.8	FJH	422.5	12.7	FJH	422.45	12.7	BMU			

-----	124204	RU Vir	417.5	10.6	FJH	436.4	11.4	FJH
123366	RV Dra	type Mira	425.5	9.7	FJH	454.5	11.8	HJO
type Mira			436.4	9.4	FJH	462.5	11.9	HJO
			415.5	13.1	FJH	462.4	10.7	FJH
417.5	10.9	FJH	422.5	12.9	FJH	480.5	11.1	FJH
422.5	11.0	HJO	431.5	13.0	FJH	489.4	11.9	FJH
422.5	11.2	FJH	449.4	12.8	FJH	500.4	12.3	FJH
431.6	11.1	FJH	460.4	12.9	FJH	509.4	12.5	FJH
441.4	12.0	FJH	479.5	12.1	FJH	527.5	13.1	FJH
445.5	12.2	HJO	487.4	12.2	FJH	-----		
460.4	12.9	FJH	500.4	11.4	FJH	134434	RT CVn	515.4
477.4	13.8	FJH	504.4	11.0	BMU	type Mira		515.5
487.5	14.5	FJH	-----					527.5
-----	124238	U CVn	415.5	10.9	FJH	533.4	10.7	HJO
123459	RS UMa	type Mira	422.5	11.3	FJH	-----		
type Mira			436.4	12.0	FJH	141954	S Boo	
			460.4	13.3	FJH	type Mira		
417.5	10.0	FJH	483.6	14.7	FJH			
422.5	10.1	FJH	-----			417.5	12.2	FJH
431.6	10.9	FJH	134440	R CVn		422.5	12.4	FJH
433.5	10.7	HJO	type Mira			427.5	13.0	HJO
437.5	10.9	VDH				431.5	12.6	FJH
441.4	11.0	FJH	415.5	10.4	FJH	436.4	12.8	FJH
454.5	12.0	HJO	427.4	10.2	FJH	448.5	13.6	HJO
460.4	12.8	FJH	427.5	10.0	HJO	449.5	13.4	FJH
464.4	12.9	HJO	445.6	8.7	HJO	460.4	13.5	FJH
468.5	12.9	FJH	460.5	8.5	HJO	477.4	13.3	FJH
477.4	13.4	FJH	480.5	8.3	HJO	480.5	13.4	HJO
480.5	13.4	HJO	501.5	8.5	HJO	485.4	13.0	FJH
485.5	13.6	BMU	509.4	8.7	HJO	500.5	12.8	FJH
485.5	13.6	FJH	515.4	8.9	HJO	501.5	12.7	HJO
500.4	14.1	FJH	527.4	9.4	HJO	507.4	12.8	FJH
508.5	14.2	FJH	-----			509.4	12.5	HJO
518.4	14.1	FJH	140113	Z Boo		515.4	12.2	HJO
-----	124606	U Vir	type Mira			517.4	12.4	FJH
123961	S UMa		475.4	9.4	SAQ	527.5	11.9	HJO
type Mira			479.5	9.0	FJH	528.4	11.7	FJH
			484.4	8.8	SAQ	-----		
417.5	8.9	FJH	488.4	8.7	SAQ	142205	RS Vir	
427.4	9.1	FJH	502.4	8.7	SAQ	type Mira		
433.5	8.9	HJO	518.4	8.7	SAQ			
437.5	9.2	VDH	-----			415.5	11.6	FJH
454.5	9.9	HJO	132547	SN 94I		422.5	11.6	FJH
462.4	10.4	FJH	type SN			431.5	12.4	FJH
464.4	10.4	HJO				449.4	13.1	FJH
473.5	10.7	VDH	449.38	13.7	FJH	460.4	13.3	FJH
477.4	11.3	FJH	449.39	13.5	BMU	478.4	13.7	FJH
480.5	11.5	HJO	449.39	13.6	VDJ	485.4	14.0	FJH
485.5	11.5	BMU	454.36	13.2	BMU	500.4	13.9	FJH
487.5	11.5	FJH	454.36	12.9	VDJ	509.5	14.0	FJH
500.4	11.9	FJH	456.35	14.0	FJH	-----		
500.4	12.0	HJO	458.35:12.5	SAQ		142539	V Boo	
507.4	12.0	FJH	460.37	14.3	FJH	type SRa		
515.4	11.6	HJO	461.38:13.0	SAQ				
517.4	11.3	FJH	-----			427.5	9.1	HJO
525.5	10.5	HJO	133273	T UMi		445.6	8.9	HJO
-----			type Mira			460.5	9.0	HJO
			417.5	11.0	FJH			
			425.5	11.3	FJH			
			425.5	11.7	HJO			

480.5	8.7	HJO	type Mira	427.4	10.2	FJH	462.4	9.7	FJH		
501.5	8.9	HJO		445.5	9.9	HJO	468.6	9.3	HJO		
515.4	9.0	HJO	479.5	12.8	FJH	454.5	9.7	HJO	481.5	9.2	FJH
527.4	9.2	HJO	485.4	11.9	FJH	462.5	9.3	HJO	484.5	9.2	HJO
-----			-----			475.4	8.8	HJO	489.4	9.6	FJH
142584	R	Cam	1506-05	Y	Lib	483.4	8.8	FJH	501.5	9.7	HJO
type Mira			type Mira			485.5	8.7	HJO	504.4	9.8	FJH
						503.5	8.3	HJO	509.5	9.8	HJO
417.5	9.7	FJH	460.5	14.7	FJH	533.4	8.8	HJO	526.4	11.5	FJH
429.3	10.0	FJH	478.4	13.7	FJH	-----			533.4	11.7	HJO
445.5	11.1	HJO	485.4	13.7	FJH	1536-20	U	Lib	534.5	12.0	FJH
449.3	11.1	FJH	503.4	12.3	FJH	type Mira			-----		
454.5	11.4	HJO	-----						154615	R	Ser
462.5	11.6	HJO	1515-20	S	Lib	480.4	14.3	FJH	type Mira		
475.4	12.0	HJO	type Mira			487.4	14.5	FJH			
479.4	12.2	FJH				-----					
485.5	12.5	HJO	479.5	8.9	FJH	1540-20	Z	Lib	422.5	7.6	FJH
487.4	12.5	FJH	487.4	8.9	FJH	type Mira			462.5	8.1	FJH
500.5	12.9	FJH	-----						483.4	8.8	FJH
503.5	13.2	HJO	151731	S	CrB	480.4	12.2	FJH	484.5	9.0	HJO
509.5	13.1	FJH	type Mira			487.4	12.2	FJH	501.4	9.5	FJH
527.4	12.8	HJO				-----			502.5	9.5	HJO
527.5	13.1	FJH	415.5	10.5	FJH	154428A	R	CrB	509.4	9.4	HJO
-----			425.4	10.7	FJH	type RCB			509.4	9.8	FJH
143227	R	Boo	427.6	10.5	HJO				526.4	10.4	FJH
type Mira			441.4	11.2	FJH	414.5	6.2	VDJ	534.5	11.0	FJH
			448.5	10.8	HJO	422.4	6.2	VDJ	-----		
427.6	7.2	HJO	460.5	11.4	HJO	422.5	6.1	BMU	154639	V	CrB
437.5	6.9	VDH	460.5	11.8	FJH	427.5	6.2	VDJ	type Mira		
473.5	7.3	VDH	468.5	12.2	FJH	431.6	6.0	BMU	415.5	11.5	FJH
480.5	8.5	HJO	468.6	11.9	HJO	431.6	6.1	VDJ	425.4	11.3	FJH
483.4	8.5	FJH	477.4	12.5	FJH	436.5	5.9	VDH	431.6	11.0	HJO
501.4	9.8	FJH	484.5	11.9	HJO	445.4	6.1	VDJ	441.4	10.1	FJH
501.5	9.4	HJO	485.4	12.6	FJH	465.3	5.9	VDH	462.4	9.2	FJH
507.4	10.3	FJH	500.4	12.8	FJH	471.4	6.0	BMU	462.5	9.4	HJO
509.4	9.5	HJO	501.5	12.6	HJO	471.4	6.1	VDJ	468.6	9.2	HJO
515.4	10.3	HJO	507.4	13.0	FJH	473.5	5.9	VDH	483.4	8.7	FJH
517.4	10.7	FJH	509.5	12.5	HJO	475.4	6.1	BMU	484.5	9.3	HJO
526.4	11.5	FJH	525.5	13.0	HJO	475.4	6.4	VDJ	501.5	8.9	HJO
533.4	11.8	HJO	526.4	12.9	FJH	480.4	6.0	BMU	504.4	9.2	FJH
-----			534.5	13.0	FJH	483.4	6.0	FJH	509.5	9.3	HJO
1434-17	V	Lib	-----			485.4	6.0	VDJ	528.4	9.6	FJH
type Mira			1518-22	RS	Lib	500.4	5.9	BMU	533.4	9.6	HJO
			type Mira			504.5	6.0	VDJ	-----		
479.4	10.8	FJH				509.4	5.9	BMU	1547-15	R	Lib
485.4	10.7	FJH	479.5	12.6	FJH	520.5	5.9	BMU	type Mira		
-----			487.4	12.0	FJH	526.5	5.9	CMG			
144339	RR	Boo	-----			527.4	5.9	BMU	479.5	13.7	FJH
type Mira			1527-14	RU	Lib	-----			485.4	14.2	FJH
			type Mira			154536	X	CrB	-----		
415.6	13.7	FJH				type Mira			1550-18	RR	Lib
425.5	13.4	FJH	479.5	8.8	FJH				type Mira		
468.5	9.5	FJH	487.4	8.8	FJH	415.5	11.5	FJH	479.5	14.0	FJH
517.4	10.9	FJH	-----			425.4	10.6	FJH	485.4	13.9	FJH
526.4	11.4	FJH	153378A	S	UMi	427.6	10.8	HJO			
-----			type Mira			441.4	10.4	FJH			
1500-18	RT	Lib				460.5	9.8	HJO			

-----				431.6	11.1	HJO	449.5	12.1	FJH		
155229	Z CrB	482.4	10.5	FJH	438.5	10.4	FJH	460.5	12.4	FJH	
type Mira		503.4	11.8	FJH	462.4	9.3	FJH	468.5	12.7	FJH	
		512.4	12.6	FJH	468.6	9.4	HJO	477.4	12.7	FJH	
415.5	14.8	FJH	527.4	13.2	FJH	473.6	9.0	VDH	480.6	13.0	HJO
427.5	14.8	FJH	-----	-----	485.5	8.2	HJO	485.4	12.8	FJH	
447.5	:15.0	FJH	160625	RU Her	489.4	8.6	FJH	485.5	13.1	HJO	
460.5	:15.0	FJH	type Mira		501.5	8.2	HJO	500.4	13.2	FJH	
477.4	13.8	FJH			504.4	8.8	FJH	501.5	13.5	HJO	
485.4	12.9	FJH	417.5	10.0	FJH	509.5	8.2	HJO	509.5	13.4	FJH
489.4	12.7	FJH	425.4	10.2	FJH	515.5	8.2	HJO	517.4	13.4	FJH
500.4	11.5	FJH	462.4	11.1	FJH	527.5	8.5	HJO	527.4	13.3	FJH
507.4	11.5	FJH	468.5	11.4	FJH	-----	-----	-----	-----	-----	-----
517.4	11.3	FJH	481.5	11.6	FJH	163266	R Dra	165631	RV Her		
526.4	10.9	FJH	489.4	11.9	FJH	type Mira		type Mira			
534.5	10.7	FJH	500.4	12.1	FJH						
-----	-----	-----	507.4	12.4	FJH	417.5	9.8	FJH	415.5	:15.2	FJH
155526	T CrB	527.4	13.1	FJH	427.4	8.1	FJH	425.5	:15.0	FJH	
type Nd		-----	-----	-----	462.4	7.8	FJH	441.4	13.8	FJH	
		161138	W CrB		483.4	8.9	FJH	449.5	13.1	FJH	
425.4	10.3	FJH	type Mira		485.5	8.8	HJO	460.5	12.3	FJH	
441.4	10.4	FJH			503.5	9.9	HJO	477.4	11.5	FJH	
462.4	10.5	FJH	415.5	10.4	FJH	527.5	11.4	FJH	485.4	11.3	FJH
483.4	10.6	FJH	431.6	8.8	HJO	527.5	11.7	HJO	500.4	11.1	FJH
489.4	10.6	FJH	438.5	8.9	FJH	-----	-----	-----	509.4	11.9	FJH
500.4	10.5	FJH	460.5	8.8	HJO	163414	AS Her		517.4	12.5	FJH
520.5	10.4	BMU	462.4	8.9	FJH	type Mira			526.4	13.1	FJH
526.4	10.5	FJH	468.6	9.0	HJO				533.4	13.7	FJH
-----	-----	-----	481.5	9.4	FJH	415.6	13.0	FJH	-----	-----	-----
160118	R Her	484.5	9.9	HJO	427.5	13.1	FJH	165722	SY Her		
type Mira		489.4	10.3	FJH	449.5	13.7	FJH	type Mira			
		500.4	11.2	FJH	460.5	13.7	FJH				
415.5	15.0	FJH	501.5	10.8	HJO	478.4	13.2	FJH	462.5	8.1	FJH
422.5	14.7	FJH	507.4	11.4	FJH	489.5	13.1	FJH	481.5	9.5	FJH
447.5	14.1	FJH	509.5	11.2	HJO	503.4	12.2	FJH	500.5	11.8	FJH
460.5	12.7	FJH	517.4	11.9	FJH	512.4	11.7	FJH	509.4	12.5	FJH
468.6	11.3	HJO	526.4	12.4	FJH	527.4	11.2	FJH	526.4	12.5	FJH
478.4	11.3	FJH	533.4	12.0	HJO	-----	-----	-----	533.4	11.8	FJH
484.5	10.3	HJO	534.5	12.8	FJH	164012	UV Her		-----	-----	-----
487.4	11.2	FJH	-----	-----	type Mira				170217	VY Her	
501.4	11.0	FJH	162119	U Her					type Mira		
502.5	10.3	HJO	type Mira		415.6	12.9	FJH				
509.5	11.2	FJH			427.5	12.8	FJH	415.6	10.7	FJH	
527.4	11.4	FJH	415.5	11.8	FJH	449.5	12.3	FJH	427.5	10.8	FJH
527.5	11.3	HJO	427.5	10.8	FJH	460.5	11.1	FJH	449.5	11.3	FJH
533.4	11.7	FJH	462.5	8.2	FJH	468.5	10.1	FJH	460.5	11.6	FJH
-----	-----	-----	468.6	8.4	HJO	477.4	9.5	FJH	468.5	12.1	FJH
160167	AG Dra	480.6	8.5	HJO	487.5	9.4	FJH	478.4	12.3	FJH	
type Z And		485.5	8.5	HJO	503.4	9.0	FJH	485.4	13.0	FJH	
		501.5	8.6	HJO	509.4	9.2	FJH	500.4	13.7	FJH	
527.4	8.5	BMU	527.5	9.2	HJO	527.4	9.5	FJH	509.5	14.1	FJH
528.4	8.5	BMU	-----	-----	-----	-----	-----	-----	517.4	14.3	FJH
533.5	8.7	BMU	163137	W Her					-----	-----	-----
533.5	8.7	VDJ	type Mira		164715	S Her			170627A	RT Her	
-----	-----	-----			type Mira				type Mira		
160210	U Ser	415.5	12.5	FJH	415.6	10.3	FJH				
type Mira		425.4	11.7	FJH	427.5	10.6	FJH	415.6	14.8	FJH	

427.5	14.8	FJH			527.5	12.3	FJH		415.6	13.3	FJH
449.5	15.6	FJH	482.4	10.0	FJH	-----			427.5	13.6	FJH
460.5	15.6	FJH	503.4	9.4	FJH	180666	X Dra		449.5	14.2	FJH
478.4	:15.5	FJH	512.4	9.3	FJH	type	Mira		460.5	:15.0	FJH
485.4	15.4	FJH	528.4	10.0	FJH	-----			482.5	14.9	FJH
503.4	14.7	FJH	-----			415.5	15.0	FJH	487.5	15.1	FJH
509.5	14.0	FJH	175519	RY Her		-----			489.5	14.9	FJH
526.4	13.2	FJH	type	Mira		181031	TV Her		502.5	15.0	FJH
534.5	12.3	FJH	-----			type	Mira		509.5	14.9	FJH
-----			480.5	10.8	FJH	-----			518.5	15.1	FJH
171723	RS Her		487.4	11.2	FJH	427.5	14.4	FJH	-----		
type	Mira		500.4	12.3	FJH	449.5	13.3	FJH	182039	TW Lyr	
			509.5	13.0	FJH	460.5	12.7	FJH	type	Mira	
415.6	11.4	FJH	517.4	13.1	FJH	468.6	:12.0	HJO			
422.5	11.5	FJH	527.4	13.5	FJH	481.5	10.8	FJH	415.6	12.9	FJH
431.5	11.7	FJH	-----			485.5	9.7	HJO	427.5	12.6	FJH
447.5	12.5	FJH	175654	V Dra		489.4	10.2	FJH	449.5	11.4	FJH
460.5	12.6	FJH	type	Mira		500.5	9.9	FJH	460.5	11.3	FJH
468.5	11.8	FJH				503.5	9.6	HJO	468.5	11.1	FJH
468.6	12.2	HJO	415.5	12.0	FJH	509.4	9.9	FJH	478.5	11.0	FJH
477.4	11.4	FJH	431.6	11.4	FJH	515.5	9.5	HJO	485.5	11.1	FJH
485.5	10.9	HJO	460.5	10.3	FJH	517.4	10.1	FJH	500.5	11.6	FJH
487.5	10.6	FJH	480.4	10.4	FJH	526.4	10.1	FJH	508.5	11.9	FJH
501.4	9.7	FJH	487.5	10.3	FJH	531.5	9.7	HJO	517.5	12.2	FJH
501.5	9.5	HJO	500.5	10.7	FJH	533.4	10.2	FJH	526.5	12.5	FJH
509.5	9.3	HJO	527.5	12.0	FJH	-----			534.5	12.6	FJH
515.5	9.3	HJO	-----			181136	W Lyr		-----		
533.5	8.8	HJO	180531	T Her		type	Mira		182172	RT Dra	
-----			type	Mira					type	Mira	
172809A	RU Oph					427.5	7.9	FJH			
type	Mira		415.6	8.8	FJH	462.5	8.6	FJH	425.4	11.3	FJH
			462.5	9.5	FJH	475.5	9.6	HJO	431.6	11.8	FJH
482.4	12.2	FJH	468.6	10.8	HJO	483.4	10.3	FJH	441.4	11.9	FJH
489.5	12.0	FJH	473.6	11.1	VDH	485.5	9.9	HJO	460.5	12.4	FJH
503.4	10.6	FJH	481.5	12.0	FJH	503.5	11.9	HJO	477.4	13.2	FJH
512.4	10.0	FJH	485.5	11.6	HJO	507.4	12.0	FJH	489.4	13.4	FJH
528.4	9.6	FJH	489.4	12.3	FJH	515.5	12.1	HJO	503.5	14.4	FJH
-----			500.5	12.7	FJH	517.5	12.5	FJH	-----		
1729-19	N94 Oph		503.5	13.3	HJO	526.5	12.7	FJH	182224	SV Her	
type	N		507.4	13.1	FJH	533.5	12.2	HJO	type	Mira	
			515.5	13.6	HJO	-----					
509.45	8.7	BMU	517.4	13.3	FJH	181306	BC Oph		431.5	10.9	FJH
509.50	8.7	VDJ	526.4	12.8	FJH	type	Mira		449.5	11.7	FJH
515.46	9.6	BMU	527.5	12.3	HJO				460.5	12.1	FJH
515.47	9.5	VDJ	533.4	12.0	FJH	489.5	13.0	FJH	468.5	12.3	FJH
517.43	10.2	SAQ	-----			503.4	14.3	FJH	478.4	12.9	FJH
517.45	9.6	BMU	180565	W Dra		-----			485.4	13.5	FJH
517.45	9.4	VDJ	type	Mira		181406	AY Oph		500.4	14.1	FJH
517.47	9.4	CMG				type	Mira		509.5	14.1	FJH
518.43	10.1	SAQ	415.5	11.7	FJH				533.5	14.6	FJH
518.44	9.8	BMU	425.4	11.2	FJH	489.5	13.4	FJH	-----		
518.44	9.5	VDJ	431.6	11.1	FJH	503.4	12.0	FJH	182306	T Ser	
518.47	9.9	CMG	460.5	10.5	FJH	512.4	11.1	FJH	type	Mira	
520.47	10.3	BMU	480.4	10.0	FJH	-----					
-----			489.4	10.4	FJH	181730	TV Lyr		482.5	13.0	FJH
175111	RT Oph		501.4	11.2	FJH	type	Mira		489.5	13.2	FJH
type	Mira		507.4	11.3	FJH				503.4	12.9	FJH

512.4	12.5	FJH				508.5	13.6	FJH	485.5	12.4	FJH
528.4	11.2	FJH	460.5	14.0	FJH	517.5	13.6	FJH	500.5	12.8	FJH
-----			480.5	14.6	FJH	527.4	13.7	FJH	508.5	13.2	FJH
1824-17	Sgr	Nr2	487.4	14.6	FJH	-----			517.5	13.4	FJH
type N			-----			184826	CY	Lyr	533.5	13.8	FJH
			184134	RY	Lyr	type	UGSS		-----		
503.47	10.7	BMU	type	Mira					185947	WZ	Lyr
503.47	10.5	VDJ				431.54	14.5	FJH	type	Mira	
504.46	10.7	BMU	415.6	14.6	FJH	460.48	13.2	FJH			
504.46	10.5	VDJ	427.5	14.6	FJH	482.41	13.3	FJH	415.6	13.9	FJH
507.47	10.6	BMU	449.5	14.5	FJH	483.39	13.4	FJH	427.5	13.4	FJH
507.47	10.5	VDJ	449.5	14.5	FJH	485.41	15.0	FJH	449.5	10.8	FJH
509.45	10.6	BMU	460.5	14.3	FJH	503.44	14.2	FJH	460.5	10.7	FJH
509.50	10.6	VDJ	478.5	13.8	FJH	504.44	13.2	FJH	468.5	10.7	FJH
515.47	10.4	VDJ	485.5	13.4	FJH	517.46	13.2	FJH	475.5	10.6	HJO
515.47	10.5	BMU	485.5	:13.9	HJO	518.43	13.2	FJH	478.5	10.8	FJH
517.46	10.4	BMU	500.5	13.0	FJH	-----			488.6	11.0	HJO
517.46	10.4	VDJ	503.5	13.3	HJO	185032	RX	Lyr	489.4	10.9	FJH
518.44	9.8	BMU	509.5	12.9	FJH	type	Mira		500.5	11.2	FJH
518.44	9.9	VDJ	515.5	12.6	HJO				503.5	11.4	HJO
520.48	8.8	BMU	517.5	12.3	FJH	483.5	16.0	FJH	508.5	11.5	FJH
526.49	10.0	CMG	526.5	11.9	FJH	489.5	:16.0	FJH	515.5	11.6	HJO
533.44	10.6	BMU	531.5	11.1	HJO	504.5	:15.7	FJH	517.5	12.0	FJH
533.44	10.5	VDJ	-----			-----			533.5	11.5	HJO
183138	LL	Lyr	184137	AY	Lyr	185131	SX	Lyr	534.5	13.0	FJH
type	UG		type	UGSU		type	Mira		-----		
			431.53	:15.0	FJH				190333	AB	Lyr
502.47	<15.5	FJH	460.48	<15.5	FJH	415.6	12.4	FJH	type	Mira	
503.44	<15.5	FJH	483.39	<15.5	FJH	427.5	12.5	FJH			
-----			502.47	13.1	FJH	449.5	13.2	FJH	415.6	11.5	FJH
183149A	SV	Dra	503.44	13.5	FJH	460.5	13.8	FJH	427.5	11.5	FJH
type	Mira		504.44	14.0	FJH	480.5	14.0	FJH	449.5	12.8	FJH
			512.45	13.1	FJH	487.4	14.1	FJH	460.5	14.1	FJH
460.5	13.1	FJH	517.47	13.5	FJH	502.4	14.5	FJH	483.5	15.2	FJH
480.5	14.0	FJH	518.43	14.8	FJH	509.5	14.5	FJH	487.5	15.5	FJH
487.5	14.2	FJH	-----			518.4	14.6	FJH	502.5	<15.5	FJH
502.4	14.7	FJH	1842-05	R	Sct	-----			512.5	<15.8	FJH
509.5	14.7	FJH	type	RV		185634	Z	Lyr	-----		
518.4	14.8	FJH				type	Mira		190443	MV	Lyr
533.5	14.3	FJH	502.5	6.4	BMU				type	NL	
-----			517.5	5.7	BMU	431.5	<15.0	FJH			
183225	RZ	Her	518.5	5.7	CMG	460.5	14.4	FJH	431.53	12.2	FJH
type	Mira		526.5	5.1	BMU	480.5	12.8	FJH	449.51	12.2	FJH
			526.5	5.3	CMG	500.5	12.2	FJH	460.48	12.3	FJH
431.5	9.9	FJH	533.4	5.3	BMU	508.5	12.0	FJH	478.51	12.2	FJH
449.5	9.9	FJH	-----			517.5	12.1	FJH	487.54	12.2	FJH
460.5	10.7	FJH	184243	RW	Lyr	527.5	12.0	FJH	504.45	12.2	FJH
468.5	11.0	FJH	type	Mira		-----			512.46	12.3	FJH
478.4	11.2	FJH				185737	RT	Lyr	527.44	12.2	FJH
487.4	11.5	FJH	415.6	15.5	FJH	type	Mira		-----		
500.4	11.7	FJH	427.5	14.5	FJH				190527	TY	Lyr
509.5	12.5	FJH	449.5	13.8	FJH	415.6	11.6	FJH	type	Mira	
527.4	12.7	FJH	460.5	13.6	FJH	427.5	10.6	FJH			
-----			468.5	13.5	FJH	449.5	11.4	FJH	415.6	10.3	FJH
183922	AE	Her	478.5	13.2	FJH	460.5	11.6	FJH	431.5	11.4	FJH
type	Mira		485.5	13.6	FJH	468.5	11.8	FJH	449.5	12.7	FJH
			500.5	13.6	FJH	478.5	12.2	FJH	460.5	12.8	FJH

468.5 13.3 FJH
480.5 13.5 FJH
485.5 13.9 FJH
501.4 14.0 FJH
509.5 14.4 FJH
518.5 14.5 FJH
533.5 14.5 FJH

190529A V Lyr
type Mira

415.6 12.8 FJH
431.5 13.0 FJH
449.5 13.5 FJH
460.5 13.9 FJH
480.5 14.2 FJH
485.5 14.3 FJH
502.5 14.9 FJH
509.5 15.1 FJH
518.5 :15.4 FJH

190529B VZ Lyr
type Mira

449.5 14.0 FJH
460.5 14.2 FJH

190643 ST Lyr
type Mira

431.5 14.8 FJH
449.5 14.7 FJH
460.5 14.8 FJH
480.5 14.4 FJH
487.5 14.4 FJH
504.4 12.7 FJH
512.5 12.3 FJH
527.4 11.1 FJH

190801 N93 Aql
type N

504.5 13.3 BMU
504.5 13.5 VDJ
509.46 13.2 BMU
515.49 13.3 BMU
515.49 13.0 VDJ
517.47 13.2 BMU
517.47 13.1 VDJ
520.48 13.3 BMU
533.46 13.2 BMU
533.46 13.5 VDJ
533.48 13.0 FJH

190933A RS Lyr
type Mira

415.6 13.7 FJH
427.5 14.5 FJH
460.5 15.0 FJH
483.5 14.9 FJH
487.5 15.0 FJH
502.5 15.2 FJH
509.5 15.0 FJH
518.5 15.0 FJH

190941 RU Lyr
type Mira

431.5 14.1 FJH
449.5 14.1 FJH
460.5 13.7 FJH
468.5 13.2 FJH
478.5 13.0 FJH
485.5 13.1 FJH
500.5 12.9 FJH
509.5 12.9 FJH
517.5 12.5 FJH
526.5 12.0 FJH

190967 U Dra
type Mira

425.5 11.9 FJH
462.5 9.8 FJH
480.4 10.0 FJH
489.4 10.1 FJH
527.5 10.7 FJH

191046 SS Lyr
type Mira

431.5 13.5 FJH
449.5 14.1 FJH
460.5 13.9 FJH
480.5 14.4 FJH
487.5 14.6 FJH
502.4 14.9 FJH
509.5 15.2 FJH
518.4 15.0 FJH

191637 U Lyr
type Mira

431.5 11.6 FJH
449.5 11.7 FJH
460.5 12.0 FJH
478.5 12.4 FJH
500.5 12.8 FJH
509.5 12.9 FJH
517.5 12.9 FJH
526.5 12.9 FJH

191831 AN Lyr

type Mira
460.5 14.4 FJH
468.5 13.9 FJH
475.5 13.3 HJO
478.5 13.3 FJH
485.5 12.3 FJH
502.4 11.4 FJH
503.5 11.2 HJO
512.5 11.0 FJH
517.5 10.1 HJO
517.5 10.7 FJH
527.4 10.7 FJH
533.5 10.4 HJO

192150 CH Cyg
type Z And

527.4 7.4 BMU
528.4 7.7 BMU
533.5 7.9 BMU

192928 TY Cyg
type Mira

482.5 14.6 FJH
487.6 15.1 FJH
502.5 14.9 FJH
512.5 14.5 FJH
518.5 14.3 FJH

193311 RT Aql
type Mira

478.5 11.9 FJH
489.5 10.9 FJH
528.4 8.0 FJH

193449 R Cyg
type Mira

462.5 12.0 FJH
468.5 12.6 FJH
475.5 12.3 HJO
478.5 12.6 FJH
485.5 12.7 FJH
488.6 12.6 HJO
489.4 12.9 FJH
500.5 13.1 FJH
512.4 13.1 FJH
517.5 13.3 HJO
526.5 13.3 FJH

193509 RV Aql
type Mira

478.5 12.3 FJH

489.5 13.1 FJH
501.4 13.7 FJH
508.5 13.8 FJH
533.5 14.6 FJH

194027 YZ Vul
type Mira

489.5 :15.0 FJH
512.5 :15.3 FJH
518.5 <15.2 FJH

194048 RT Cyg
type Mira

462.5 11.7 FJH
468.5 11.6 FJH
501.5 8.3 HJO
504.4 8.3 FJH
517.5 7.6 HJO
527.5 7.4 BMU

194348 TU Cyg
type Mira

468.5 13.3 FJH
480.5 14.0 FJH
487.6 14.3 FJH
502.5 15.0 FJH
512.5 15.1 FJH
518.5 14.4 FJH
526.5 13.3 FJH

194604 X Aql
type Mira

478.5 10.6 FJH
489.5 11.3 FJH
503.5 12.5 FJH
508.5 12.7 FJH
527.5 13.0 FJH
533.5 13.2 FJH

194632 Chi Cyg
type Mira

462.5 7.8 FJH
471.4 6.2 BMU
483.4 5.9 FJH
484.4 5.8 BMU
485.5 6.0 SAQ
500.4 6.0 BMU
509.4 6.1 BMU
517.4 6.5 SAQ
517.5 6.5 BMU
527.4 7.1 BMU

-----	485.5 11.1 FJH	-----	503.49 13.0 VDJ
195533 V482 Cyg	489.5 10.7 FJH	201647 U Cyg	503.53 13.2 FJH
type RCB	503.5 10.4 FJH	type Mira	504.43 13.3 BMU
	509.5 10.4 FJH		504.43 13.3 VDJ
533.5 11.1 BMU	517.4 10.5 FJH	462.5 10.3 FJH	509.43 13.4 BMU
-----	526.4 10.7 FJH	480.5 10.8 FJH	512.43 13.1 FJH
195551 CM Cyg	-----	489.4 10.3 FJH	515.48 13.4 BMU
type Mira	200812 RU Aql	503.5 9.9 HJO	517.47 13.3 BMU
	type Mira	504.4 10.2 FJH	518.43 13.2 FJH
		517.5 9.7 HJO	520.48 13.3 BMU
468.5 11.2 FJH	482.5 14.2 FJH	-----	526.48 13.2 FJH
480.5 12.5 FJH	489.5 14.6 FJH	202343 V503 Cyg	533.46 13.3 BMU
489.4 12.7 FJH	502.5 14.1 FJH	type UGSS	533.46 13.2 VDJ
502.5 13.0 FJH	508.5 13.8 FJH		533.48 13.2 FJH
512.4 13.1 FJH	527.5 13.2 FJH	483.49 14.8 FJH	-----
526.5 13.3 FJH	-----	509.52 13.7 FJH	202817 Z Del
-----	201008 R Del	512.44 13.9 FJH	type Mira
195818 TX Sge	type Mira	-----	
type Mira		202412 XZ Del	483.5 14.7 FJH
		type Mira	489.5 14.2 FJH
482.5 14.8 FJH	478.5 11.2 FJH		502.5 14.8 FJH
489.5 14.6 FJH	489.5 11.4 FJH	512.6 13.3 FJH	508.5 14.6 FJH
501.4 13.6 FJH	-----	-----	533.5 13.9 FJH
509.5 13.1 FJH	201130 SX Cyg	202509 RY Del	-----
527.5 12.7 FJH	type Mira	type Mira	202918 AG Del
-----			type Mira
195849 Z Cyg	468.5 10.2 FJH	483.5 14.7 FJH	
type Mira	482.5 10.5 FJH	489.5 13.9 FJH	483.5 13.0 FJH
	489.5 11.1 FJH	502.5 13.3 FJH	489.5 13.1 FJH
503.5 13.1 HJO	502.4 11.6 FJH	508.5 13.3 FJH	509.5 13.9 FJH
504.5 13.5 FJH	512.4 11.8 FJH	527.5 13.2 FJH	-----
512.4 13.6 FJH	520.5 12.1 FJH	-----	202962 BF Cep
-----	534.5 12.4 FJH	202512 RX Del	type Mira
200357 S Cyg	-----	type Mira	
type Mira	201559 CN Cyg		480.5 14.5 FJH
	type Mira	478.5 12.7 FJH	487.6 15.0 FJH
504.5 :16.1 FJH	480.5 15.0 FJH	485.6 12.0 FJH	504.5 15.0 FJH
-----	487.6 14.6 FJH	502.5 11.7 FJH	-----
200720 FG Sge	503.5 13.4 FJH	512.5 10.7 FJH	203513 SS Del
type uniek	512.4 13.2 FJH	527.5 10.9 FJH	type Mira
	526.5 12.5 FJH	-----	
468.5 12.2 FJH	-----	202752 1974 Cyg	483.5 15.4 FJH
480.5 13.2 FJH	201621 PU Vul	type N	489.5 15.4 FJH
482.5 13.5 FJH	type NL		508.5 15.3 FJH
485.5 13.5 FJH		417.49 12.6 BMU	527.5 14.3 FJH
489.5 13.5 FJH	475.5 11.7 BMU	427.43 12.7 BMU	-----
501.4 13.5 FJH	480.5 12.1 FJH	427.44 12.6 VDJ	203611 Y Del
504.5 13.7 FJH	501.4 12.0 FJH	448.37 12.8 BMU	type Mira
509.5 13.3 FJH	503.5 11.7 BMU	468.51 12.9 FJH	
517.4 13.5 FJH	504.5 12.0 FJH	471.45 13.2 BMU	483.5 15.0 FJH
526.4 13.2 FJH	509.5 11.6 BMU	475.43 13.1 BMU	512.5 15.0 FJH
533.5 13.2 FJH	512.4 12.0 FJH	478.52 13.0 FJH	-----
-----	518.5 11.4 VDJ	480.48 13.2 BMU	203718 HR Del
200720A ST Sge	518.5 11.6 BMU	483.39 13.1 FJH	type Nb
type Mira	526.5 12.0 FJH	484.46 13.2 BMU	
	533.5 11.7 BMU	489.56 13.5 FJH	483.5 12.1 FJH
468.5 12.1 FJH	533.5 11.7 VDJ	503.48 13.3 BMU	512.46 12.0 FJH
480.5 11.5 FJH			

-----	485.6 12.0 FJH	427.4 8.3 FJH	487.51 11.8 FJH
203816 S Del	502.5 12.7 FJH	483.4 9.7 FJH	489.50 12.1 FJH
type Mira	508.5 13.0 FJH	489.4 9.9 FJH	500.46 12.1 BMU
	517.5 13.4 FJH	504.4 10.7 FJH	500.47 12.1 FJH
478.5 11.8 FJH	526.5 13.5 FJH	528.4 10.9 FJH	502.43 12.1 BMU
485.5 12.1 FJH	-----	-----	503.43 12.2 BMU
502.5 12.3 FJH	205030A UX Cyg	211614 X Peg	503.46 12.2 FJH
509.5 12.4 FJH	type Mira	type Mira	504.42 12.1 BMU
517.5 12.4 FJH			504.47 12.1 FJH
526.5 12.3 FJH	517.5 10.8 HJO	479.6 10.6 FJH	507.49 12.1 BMU
-----	525.5 10.6 HJO	485.5 10.3 FJH	509.43 12.1 BMU
203847 V Cyg	-----	503.5 10.6 FJH	509.52 12.2 FJH
type Mira	210382 X Cep	509.5 10.7 FJH	512.43 11.8 FJH
	type Mira	526.5 11.3 FJH	515.44 12.2 BMU
504.4 9.7 FJH		-----	515.44 12.2 VDJ
528.4 9.8 FJH	415.5 13.8 FJH	212216 TV Peg	517.44 12.2 BMU
-----	425.3 14.1 FJH	type Mira	517.44 12.1 VDJ
203918 ES Del	448.4 14.3 FJH		517.47 12.0 CMG
type Mira	479.4 15.4 FJH	479.6 11.1 FJH	518.43 12.1 FJH
	487.6 15.2 FJH	485.5 11.4 FJH	518.44 12.2 BMU
483.5 14.9 FJH	-----	503.5 12.3 FJH	518.44 12.1 VDJ
489.5 15.4 FJH	210405 RR Equ	508.5 12.6 FJH	520.47 12.1 BMU
512.5 :15.6 FJH	type Mira	527.5 13.8 FJH	525.52 11.2 HJO
-----		-----	526.45 11.5 FJH
204016 T Del	479.6 14.2 FJH	212610 UU Peg	526.46 11.1 BMU
type Mira	485.6 14.7 FJH	type Mira	526.46 11.3 VDJ
	-----		526.49 11.5 CMG
483.5 14.9 FJH	210612 AN Peg	479.6 14.4 FJH	527.41 9.1 CMG
489.5 14.9 FJH	type Mira	489.5 14.7 FJH	527.42 8.8 FJH
503.5 14.2 FJH		508.5 14.7 FJH	527.43 8.5 BMU
508.5 14.1 FJH	483.5 11.9 FJH	-----	527.53 8.6 HJO
517.5 14.0 FJH	489.5 11.8 FJH	213678 S Cep	528.44 8.2 BMU
527.5 13.5 FJH	503.5 11.6 FJH	type Mira	528.44 8.2 FJH
-----	509.5 11.5 FJH		528.49 8.4 HJO
204318 V Del	526.5 11.6 FJH	417.5 10.5 FJH	530.51 8.2 HJO
type Mira	-----	427.4 10.0 FJH	531.51 8.2 HJO
	210812 R Equ	483.4 9.7 FJH	532.54 8.1 HJO
478.5 12.1 FJH	type Mira	504.4 10.0 FJH	533.43 8.2 BMU
485.6 12.5 FJH		528.5 10.1 FJH	533.43 8.0 VDJ
502.5 13.2 FJH	479.6 11.5 FJH	-----	533.51 8.4 HJO
508.5 13.2 FJH	485.5 11.6 FJH	213843 SS Cyg	534.47 8.4 FJH
517.5 13.3 FJH	503.5 12.0 FJH	type UGSS	-----
526.5 13.4 FJH	509.5 12.1 FJH		214012 TU Peg
-----	526.5 13.2 FJH	462.46 8.4 FJH	type Mira
204341 V516 Cyg	533.5 13.7 FJH	468.53 9.8 FJH	
type UGSS	-----	471.44 11.6 BMU	479.6 12.8 FJH
	210818 AS Peg	475.43 12.0 BMU	485.5 13.0 FJH
483.49<15.5 FJH	type Mira	478.52 11.7 FJH	508.5 13.6 FJH
487.55 13.8 FJH		480.43 11.9 BMU	512.5 13.6 FJH
502.45 14.4 FJH	479.6 <14.9 FJH	480.48 11.8 FJH	-----
503.54 14.8 FJH	489.5 <14.9 FJH	482.50 11.7 FJH	214024 RR Peg
518.43 13.5 FJH	508.6 :15.3 FJH	483.48 11.8 FJH	type Mira
-----	-----	484.42 12.0 BMU	
205017 X Del	210868 T Cep	485.44 12.0 VDJ	479.6 13.7 FJH
type Mira	type Mira	485.44 12.1 BMU	485.5 13.2 FJH
		485.50 11.8 FJH	500.5 12.4 FJH
478.5 11.2 FJH	326.4 6.3 VDH	486.47 12.1 BMU	526.5 10.2 FJH

-----		526.5 12.8 FJH	527.5 14.1 FJH
214443 WY Cyg	479.58 11.5 FJH	533.5 13.4 FJH	-----
type Mira	483.55 11.9 FJH	-----	233656 N93 Cas
	485.55 12.4 FJH	230110 R Peg	type N
483.5 13.3 FJH	503.53 12.5 FJH	type Mira	
489.5 13.3 FJH	512.54 12.7 FJH		353.35 6.5 JAN
500.5 13.6 FJH	526.50 12.3 FJH	479.6 11.4 FJH	354.37 6.8 JAN
512.5 13.8 FJH	527.48 12.1 FJH	-----	355.40 6.7 JAN
534.5 14.1 FJH	533.46 12.2 FJH	230759 V Cas	358.35 6.8 JAN
-----	-----	type Mira	370.37 7.7 JAN
215605 V Peg	222129 RV Peg		383.30 7.8 JAN
type Mira	type Mira	483.5 12.2 FJH	390.35 8.0 JAN
		508.5 12.0 FJH	392.32 8.2 JAN
479.6 13.3 FJH	479.6 12.2 FJH	512.5 12.1 FJH	471.42 13.7 VDJ
-----	500.5 12.4 FJH	-----	471.44 13.6 BMU
215934 RT Peg	508.5 12.4 FJH	231425 W Peg	475.41 13.6 BMU
type Mira	526.5 12.6 FJH	type Mira	479.54 13.8 FJH
	534.5 12.9 FJH		480.48 13.5 BMU
485.5 11.1 FJH	-----	479.6 11.8 FJH	481.48 13.5 VDJ
512.5 13.7 FJH	222439 S Lac	508.5 12.7 FJH	483.51 13.8 FJH
-----	type Mira	526.5 12.7 FJH	484.46 13.5 BMU
220133B RZ Peg		-----	485.45 13.0 VDJ
type Mira	479.6 12.2 FJH	231508 S Peg	485.45 13.4 BMU
	485.5 12.1 FJH	type Mira	485.50 13.7 FJH
479.6 12.0 FJH	528.5 9.2 FJH		487.57 13.6 FJH
485.5 12.0 FJH	-----	479.6 8.1 FJH	500.47 13.2 BMU
500.5 11.9 FJH	222924 SS Peg	-----	502.43 13.0 BMU
508.5 11.9 FJH	type Mira	231839 BU And	503.48 12.8 BMU
526.5 11.5 FJH		type Mira	503.48 13.0 VDJ
-----	479.6 9.9 FJH		503.54 12.8 FJH
220412 T Peg	526.5 11.8 FJH	479.5 12.3 FJH	504.45 12.8 BMU
type Mira	534.5 11.9 FJH	485.6 12.4 FJH	504.45 12.9 VDJ
	-----	503.5 12.3 FJH	507.49 12.6 BMU
479.6 14.5 FJH	223841 R Lac	508.6 12.3 FJH	508.53 12.6 FJH
485.6 14.9 FJH	type Mira	526.5 12.7 FJH	509.46 12.5 BMU
512.5 14.7 FJH		-----	512.57 12.5 FJH
-----	479.6 13.2 FJH	232144 AL And	515.46 12.5 BMU
220613 Y Peg	485.5 13.4 FJH	type Mira	515.46 12.7 VDJ
type Mira	500.5 14.2 FJH		517.46 12.4 BMU
	508.5 14.2 FJH	479.5 11.3 FJH	517.47 12.2 SAQ
479.6 11.3 FJH	518.5 14.8 FJH	485.6 11.8 FJH	517.47 12.6 VDJ
485.5 11.7 FJH	527.5 14.5 FJH	503.5 12.1 FJH	517.50 12.7 CMG
503.5 12.6 FJH	-----	508.6 12.2 FJH	518.45 12.4 BMU
508.5 12.7 FJH	225542 SZ And	526.5 13.1 FJH	518.45 12.6 VDJ
526.5 13.6 FJH	type Mira	-----	518.48 12.8 CMG
-----		232543 DX And	520.48 12.3 BMU
220714 RS Peg	479.5 13.9 FJH	type UGSS	520.52 12.2 FJH
type Mira	485.5 13.9 FJH		526.46 12.1 BMU
	503.5 14.0 FJH	483.57 14.5 FJH	526.46 12.5 VDJ
479.6 12.7 FJH	508.6 14.1 FJH	-----	526.51 12.2 FJH
485.5 12.9 FJH	-----	232642 BG And	533.45 12.2 BMU
503.5 13.4 FJH	225914 RW Peg	type Mira	533.45 12.5 VDJ
508.5 13.5 FJH	type Mira		533.48 12.2 FJH
526.5 13.8 FJH		479.5 12.3 FJH	533.53 12.0 HJO
-----	479.6 10.6 FJH	485.6 13.1 FJH	
220912 RU Peg	508.5 11.8 FJH	503.5 13.5 FJH	
type UGSS	520.5 12.6 FJH	508.6 13.6 FJH	

233956 Z Cas 526.5 11.1 FJH
533.5 11.4 FJH
type Mira

422.3 9.7 HJO
433.3 10.6 HJO
479.5 12.3 FJH
487.6 12.5 FJH
503.5 12.8 FJH
512.5 13.0 FJH
520.5 13.0 FJH
527.5 13.0 FJH

235053 RR Cas
type Mira

433.3 11.5 HJO
479.5 11.3 FJH
512.6 10.8 FJH

235255 WY Cas
type Mira

479.5 13.2 FJH
487.6 13.2 FJH
512.5 11.6 FJH
520.5 11.3 FJH
527.5 11.2 FJH

235350 R Cas
type Mira

422.3 12.7 FJH
483.6 12.3 FJH
503.5 11.7 FJH

235525 Z Peg
type Mira

479.6 11.4 FJH
512.6 12.6 FJH
526.5 12.9 FJH

235855A Y Cas
type Mira

479.5 10.7 FJH
487.6 10.9 FJH
512.6 11.5 FJH
520.5 11.6 FJH
527.5 11.7 FJH

235939 SV And
type Mira

479.6 9.9 FJH
503.5 9.9 FJH