

CEPHEIDS OBSERVATION  
(light curve nr 10/97)

23 SET. 1997

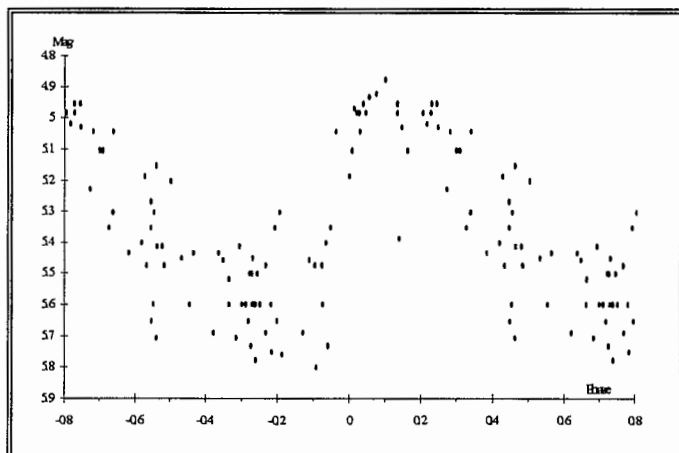
# RT Aur

GCVS 1985 data: Max = 42361.155 + 3.728115 \* E  
 Type: DCEP M-m = 0.25 Range: 5.00 - 5.82 V Spect: F4IB-G1IB

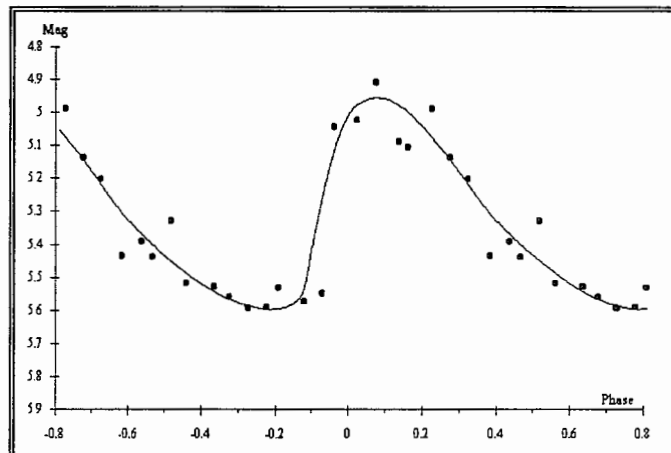
Observer: VANDENBROERE Jacqueline (VBR)  
 Estimates: 81 from Oct 1988 to Apr 1989 Instrument: J 42 x 7 Chart GEOS C15  
 Personal sequence: A=4.50, B=5.10, C=5.60, D=6.13 Degree: 0.07 mag

Nr	Phase	Mag	Nr	Phase	Mag
9	0.022	5.02	2	0.518	5.32
3	0.075	4.91	2	0.560	5.51
4	0.138	5.08	3	0.635	5.52
1	0.163	5.10	4	0.676	5.55
6	0.228	4.98	10	0.727	5.59
2	0.277	5.13	7	0.777	5.58
6	0.325	5.20	2	0.809	5.53
1	0.384	5.43	2	0.880	5.57
6	0.437	5.39	7	0.927	5.54
7	0.465	5.43	1	0.961	5.04

Table of mean values



Raw light curve



Mean light curve

Phase MIN =  $0.77 \pm 0.03$       Mag MIN = 5.8  
 Phase MAX =  $0.11 \pm 0.05$       Mag MAX = 4.9  
 M-m =  $0.34 \pm 0.08$       Amplitude = 0.9

Mean MAX (JD) =  $47536.19 \pm 0.19$

O-C (GCVS 85) =  $0.41 \pm 0.19$  d

Note: phases of extremum points on mean light curve have been calculated by SOP program.

CEPHEIDS OBSERVATION  
(light curve nr 12/97)

# TU Cas

GCVS 1985 data: Max = 41704.839 + 2.139298 \* E

Type: CEP(B)

M-m = 0.31

Range: 6.88 - 8.18 V

Spect: F3II-F5II

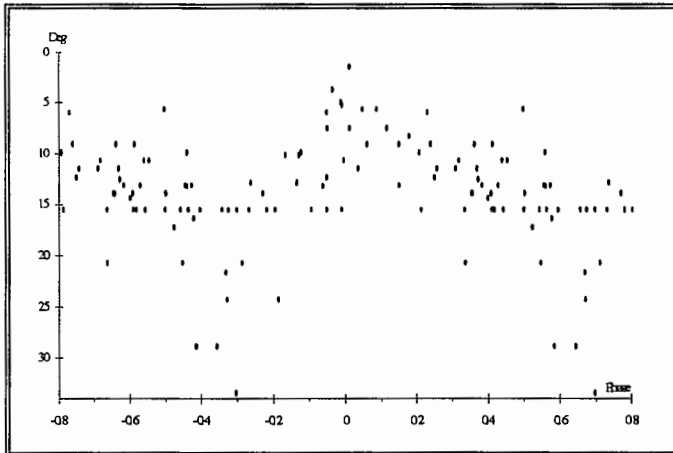
Observer: VANDENBROERE Jacqueline (VBR)

Estimates: 78 from Oct 1988 to Mar 1989

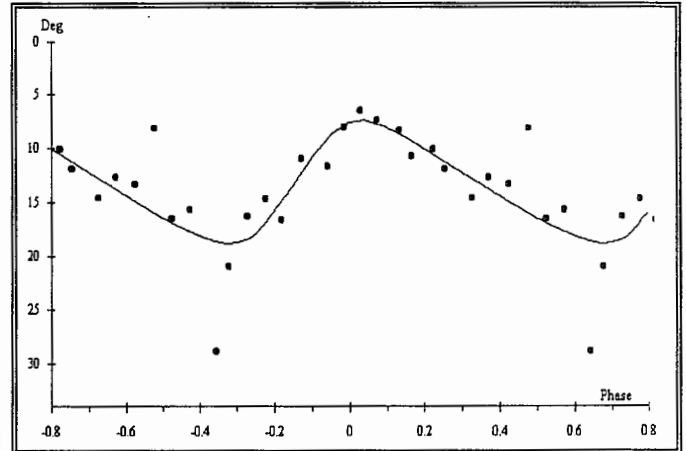
Instrument: J 42 x 7

Nr	Phase	Deg	Nr	Phase	Deg
5	0.026	6.53	5	0.523	16.60
2	0.073	7.37	8	0.571	15.71
2	0.132	8.32	1	0.642	28.89
2	0.164	10.71	6	0.678	21.00
4	0.222	10.14	3	0.727	16.38
2	0.253	11.91	2	0.775	14.71
4	0.325	14.63	3	0.817	16.66
7	0.371	12.63	3	0.871	10.98
7	0.422	13.34	6	0.939	11.68
2	0.475	8.17	5	0.985	8.04

Table of mean values



Raw light curve



Mean light curve

Phase MIN =  $0.69 \pm 0.11$

Phase MAX =  $0.06 \pm 0.05$

M-m =  $0.37 \pm 0.16$

Mean MAX (JD) =  $47526.00 \pm 0.11$

O-C (GCVS 85) =  $0.13 \pm 0.11$  d

Note: phases of extremum points on mean light curve have been calculated by SOP program.

CEPHEIDS OBSERVATION  
(light curve nr 14/97)

23 SET. 1997

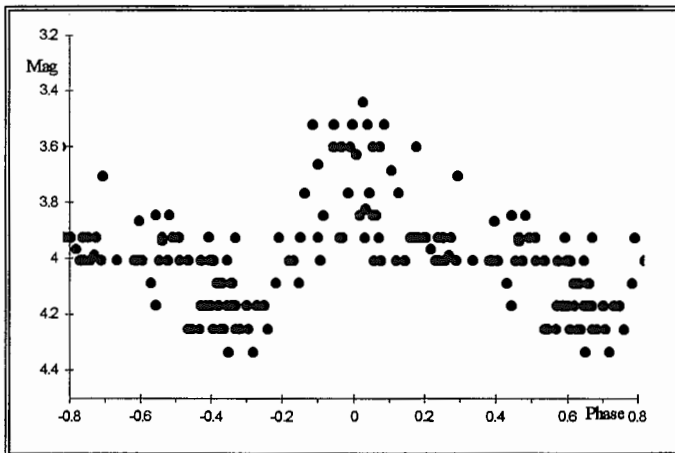
# δ Cep

GCVS 1985 data: Max = 36075.445 + 5.366341 \* E  
 Type: DCEP M-m = 0.25 Range: 3.48 - 4.37 V Spect: F51B-G11B

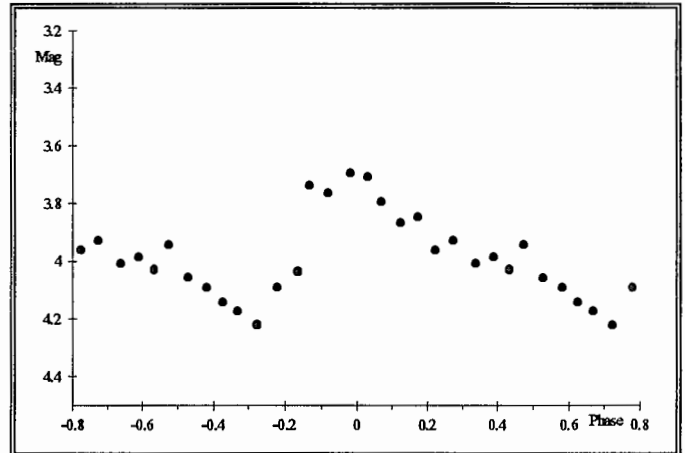
Observer: VANDENBROERE Jacqueline (VBR)  
 Estimates: 116 from Jul 1988 to Mar 1989 Instrument: eyes  
 Personal sequence: A=3.36, B=4.19

Nr	Phase	Mag	Nr	Phase	Mag
7	0.030	3.70	7	0.527	4.05
11	0.068	3.79	6	0.582	4.09
4	0.125	3.86	11	0.624	4.14
4	0.173	3.84	10	0.667	4.17
6	0.223	3.96	5	0.722	4.22
6	0.273	3.92	3	0.779	4.09
1	0.336	4.00	3	0.834	4.03
6	0.389	3.98	3	0.867	3.73
4	0.432	4.02	6	0.919	3.76
6	0.473	3.94	7	0.981	3.69

Table of mean values



Raw light curve



Mean light curve

Phase MIN =  $0.68 \pm 0.03$                       Mag MIN = 4.2  
 Phase MAX =  $-0.02 \pm 0.02$                   Mag MAX = 3.6  
 M-m =  $0.30 \pm 0.05$                           Amplitude = 0.6

Mean MAX (JD) =  $47473.45 \pm 0.11$

O-C (GCVS 85) =  $-0.10 \pm 0.11$  d

Note: phases of extremum points on mean light curve have been calculated by SOP program.

CEPHEIDS OBSERVATION  
(light curve nr 16/97)

# U Vul

GCVS 1985 data: Max = 44939.58 + 7.990676 \* E

Type: DCEP

M-m = 0.33

Range: 6.73 - 7.54 V

Spect: F6IAB-G2

Observer: VANDENBROERE Jacqueline (VBR)

Estimates: 53 from Sep 1988 to Nov 1989

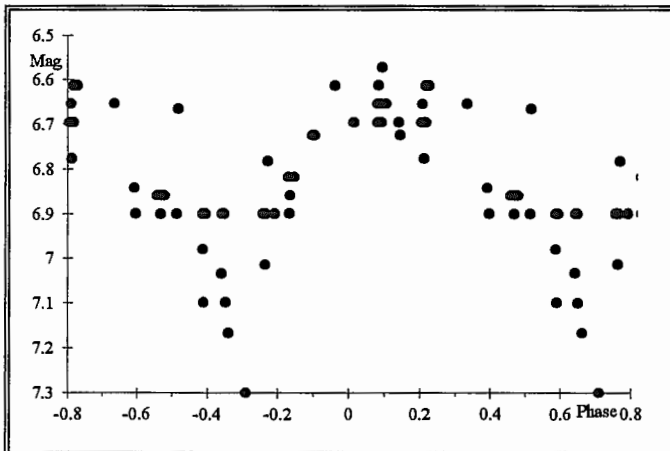
Personal sequence: C=6.49, D=6.90, E=7.30

Instrument: J 42

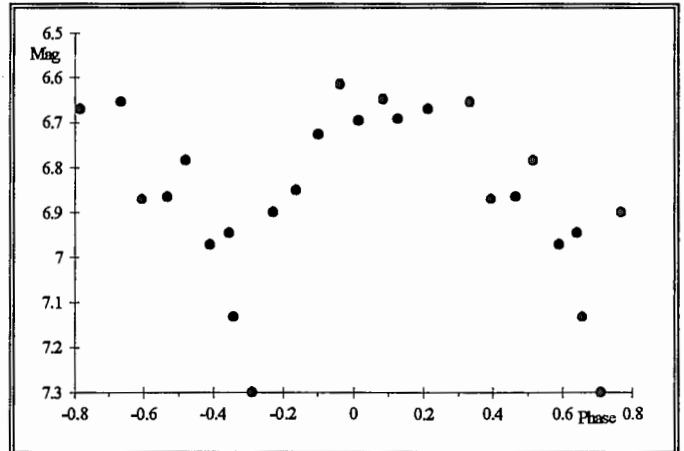
Degree=0.045 mag

Nr	Phase	Mag	Nr	Phase	Mag
1	0.014	6.69	2	0.517	6.78
6	0.087	6.64	4	0.589	6.97
3	0.130	6.69	3	0.644	6.94
0	-	-	2	0.657	7.13
8	0.215	6.67	1	0.710	7.30
0	-	-	6	0.770	6.90
1	0.334	6.65	4	0.836	6.84
2	0.394	6.87	1	0.898	6.72
0	-	-	2	0.902	6.72
6	0.467	6.86	1	0.962	6.61

Table of mean values



Raw light curve



Mean light curve

Phase MIN =  $0.70 \pm 0.03$

Phase MAX =  $0.03 \pm 0.01$

M-m =  $0.33 \pm 0.04$

Mag MIN = 7.3

Mag MAX = 6.6

Amplitude = 0.6

Mean MAX (JD) =  $47440.9 \pm 0.3$

O-C (GCVS 85) =  $0.24 \pm 0.3$  d

Note: phases of extremum points on mean light curve have been calculated by SOP program.

CEPHEIDS OBSERVATION  
(light curve nr 17/97)

23 SET. 1997

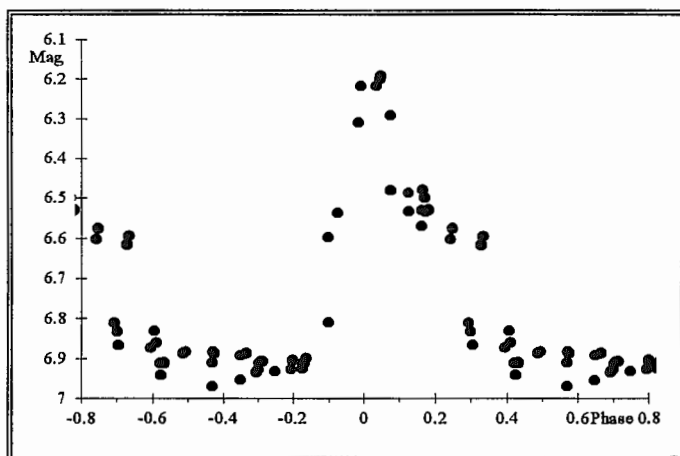
# SU Cyg

GCVS 1985 data: Max = 43301.778 + 3.8455473 \* E  
 Type: DCEP M-m = 0.37 Range: 6.44 - 7.22 V Spect: F2-G0I-II+B7V

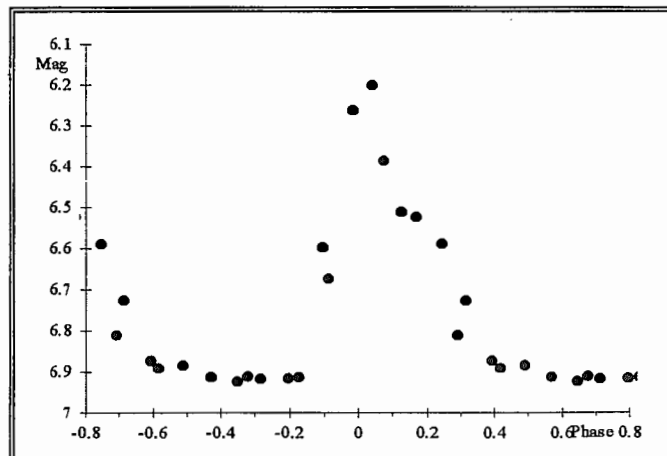
Observer: DUMONT Michel (DMT)  
 Estimates: 53 from Aug to Dec 1987 Instrument: J 50 Chart GEOS C93  
 Personal sequence: B=6.00, C=6.37, D=6.71, E=7.10 Degree=0.038 mag

Nr	Phase	Mag	Nr	Phase	Mag
3	0.042	6.20	0	-	-
2	0.074	6.38	4	0.571	6.91
2	0.125	6.51	2	0.648	6.92
6	0.169	6.52	2	0.679	6.91
2	0.246	6.59	4	0.715	6.91
1	0.293	6.81	2	0.797	6.91
4	0.316	6.72	5	0.830	6.91
1	0.395	6.87	1	0.898	6.59
5	0.419	6.89	2	0.913	6.67
2	0.490	6.88	2	0.987	6.26

Table of mean values



Raw light curve



Mean light curve

Phase MIN =  $0.65 \pm 0.03$   
 Phase MAX =  $0.04 \pm 0.04$   
 M-m =  $0.39 \pm 0.07$

Mag MIN = 6.9  
 Mag MAX = 6.2  
 Amplitude = 0.7

Mean MAX (JD) =  $47082.10 \pm 0.15$

O-C (GCVS 85) =  $0.15 \pm 0.15$  d

Note: phases of extremum points on mean light curve have been calculated by SOP program.  
 Light curves are affected by a remarkable Carnevali's effect.

CEPHEIDS OBSERVATION  
(light curve nr 11/97)

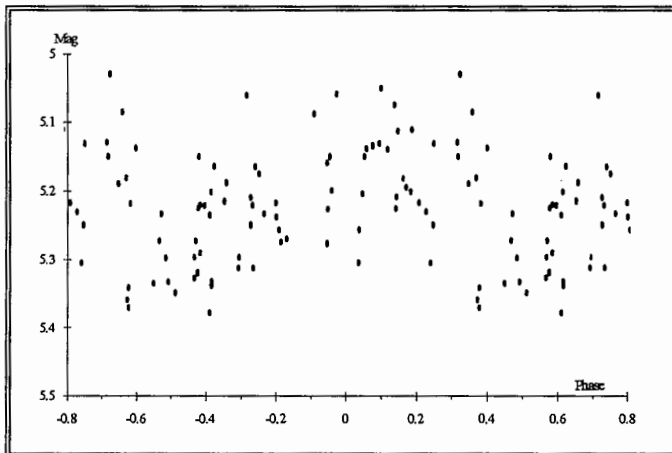
# FF Aql

GCVS 1985 data: Max = 41576.428 + 4.470916 \* E  
 Type: DCEPS M-m = 0.48 Range: 5.18 - 5.68 V Spect: F5IA-F8IA

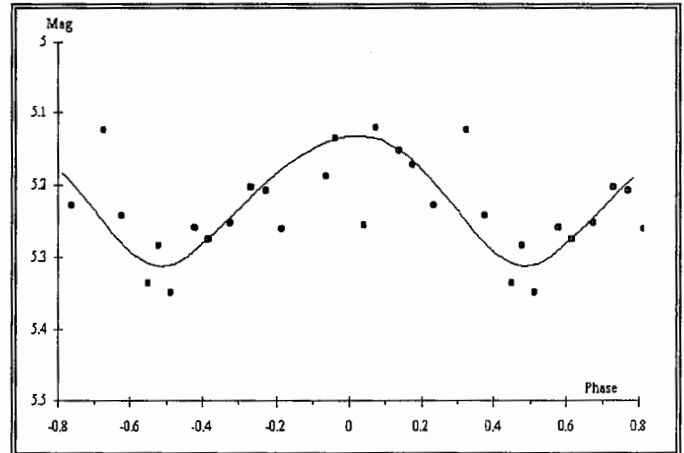
Observer: DUMONT Michel (DMT)  
 Estimates: 78 from May 1983 to Dec 1983 Instrument: J 50 Chart GEOS C71  
 Personal sequence: 111 Her=4.37, C=5.69

Nr	Phase	Mag	Nr	Phase	Mag
3	0.040	5.25	1	0.512	5.34
5	0.075	5.12	9	0.578	5.25
5	0.138	5.15	6	0.615	5.27
4	0.176	5.17	4	0.675	5.25
5	0.234	5.22	6	0.730	5.20
0	-	-	3	0.772	5.20
4	0.326	5.12	4	0.814	5.26
7	0.376	5.24	0	-	-
1	0.449	5.33	4	0.936	5.18
4	0.478	5.28	3	0.962	5.13

Table of mean values



Raw light curve



Mean light curve

Phase MIN =  $0.51 \pm 0.04$       Mag MIN = 5.3  
 Phase MAX =  $0.08 \pm 0.06$       Mag MAX = 5.1  
 M-m =  $0.57 \pm 0.10$       Amplitude = 0.2

Mean MAX (JD) =  $45573.785 \pm 0.27$

O-C (GCVS 85) =  $0.36 \pm 0.27$  d

Note: phases of extremum points on mean light curve have been calculated by SOP program (after having discarded points at phase 0.936 and 0.040).

CEPHEIDS OBSERVATION  
(light curve nr 13/97)

# FF Aql

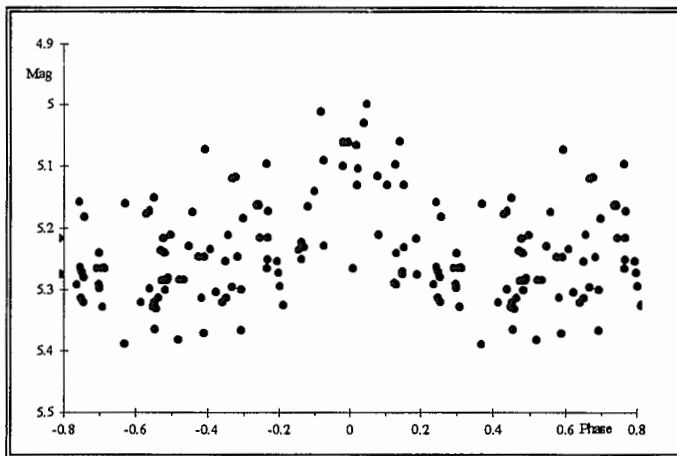
23 SET. 1997

GCVS 1985 data: Max = 41576.428 + 4.470916 \* E  
 Type: DCEPS M-m = 0.48 Range: 5.18 - 5.68 V Spect: F5IA-F8IA

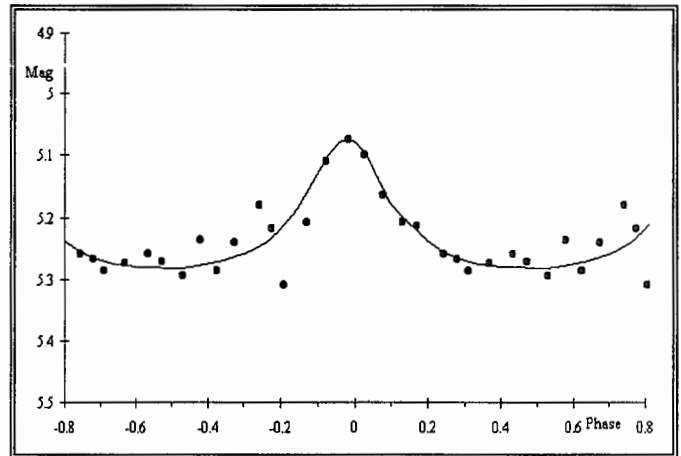
Observer: DUMONT Michel (DMT)  
 Estimates: 102 from Jun 1984 to Oct 1985 Instrument: J 50 Chart GEOS C71  
 Personal sequence: 111 Her=4.37, C=5.69

Nr	Phase	Mag	Nr	Phase	Mag
6	0.024	5.09	4	0.530	5.29
2	0.078	5.16	6	0.580	5.23
8	0.131	5.20	3	0.623	5.28
4	0.170	5.21	10	0.674	5.24
5	0.243	5.25	3	0.740	5.17
7	0.278	5.26	7	0.774	5.21
3	0.310	5.28	3	0.807	5.30
2	0.368	5.27	6	0.871	5.20
5	0.433	5.25	3	0.922	5.10
13	0.472	5.27	3	0.983	5.07

Table of mean values



Raw light curve



Mean light curve

Phase MIN =  $0.47 \pm 0.06$   
 Phase MAX =  $-0.01 \pm 0.03$   
 M-m =  $0.52 \pm 0.09$

Mean MAX (JD) =  $46109.90 \pm 0.13$

O-C (GCVS 85) =  $-0.04 \pm 0.13$  d

Note: phases of extremum points on mean light curve have been calculated by SOP program. In order to have more points, data of two-years of observations were collected.

CEPHEIDS OBSERVATION  
(light curve nr 15/97)

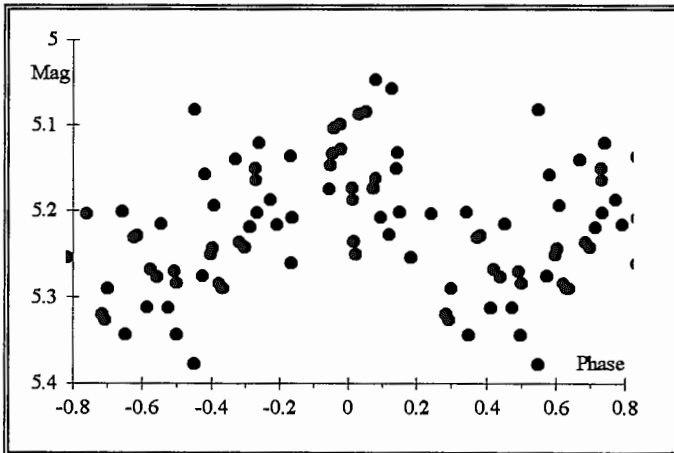
# FF Aql

GCVS 1985 data: Max = 41576.428 + 4.470916 \* E  
 Type: DCEPS M-m = 0.48 Range: 5.18 - 5.68 V Spect: F5IA-F8IA

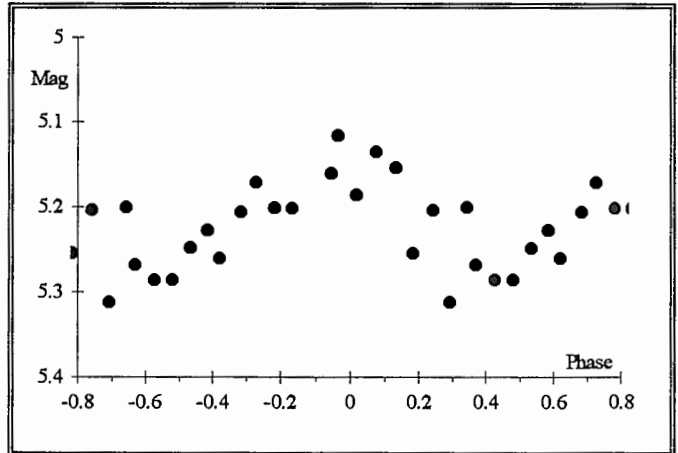
Observer: DUMONT Michel (DMT)  
 Estimates: 61 from Apr to Sep 1986 Instrument: J 50 Chart GEOS C71  
 Personal sequence: 111 Her=4.37, C=5.69

Nr	Phase	Mag	Nr	Phase	Mag
5	0.017	5.18	3	0.533	5.24
5	0.074	5.13	3	0.583	5.22
5	0.134	5.15	5	0.620	5.25
1	0.181	5.25	3	0.683	5.20
1	0.240	5.20	5	0.729	5.17
3	0.292	5.31	2	0.783	5.20
1	0.342	5.20	3	0.833	5.20
3	0.369	5.26	0	-	-
3	0.425	5.28	2	0.947	5.16
4	0.479	5.28	4	0.966	5.11

Table of mean values



Raw light curve



Mean light curve

Phase MIN =  $0.44 \pm 0.02$   
 Phase MAX =  $-0.01 \pm 0.03$   
 M-m =  $0.55 \pm 0.05$

Mean MAX (JD) =  $46624.05 \pm 0.13$

O-C (GCVS 85) =  $-0.04 \pm 0.13$  d

Note: phases of extremum points on mean light curve have been calculated by SOP program.

Ces 8 compositages ont été réalisés par DDL.