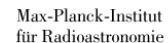




Long-term Binary Monitoring with Separated Fringe Packets: Transitioning to Visibility in 2014

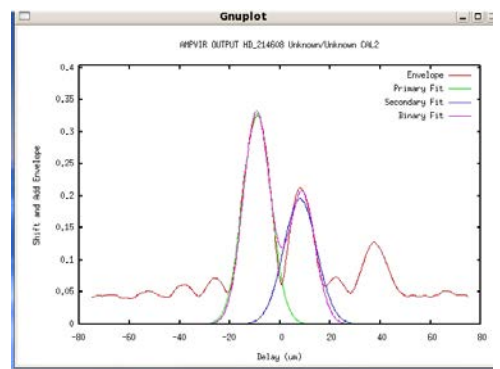
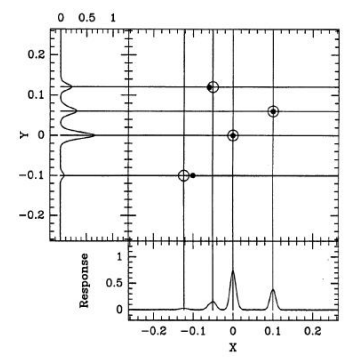
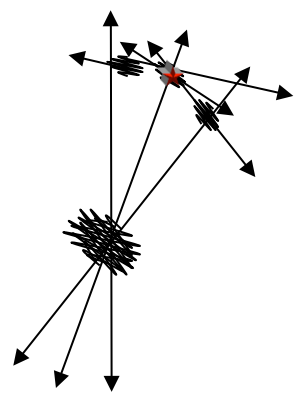
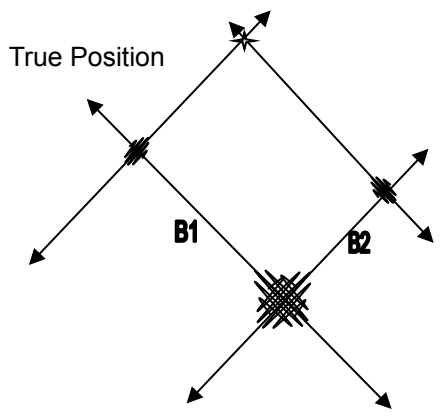
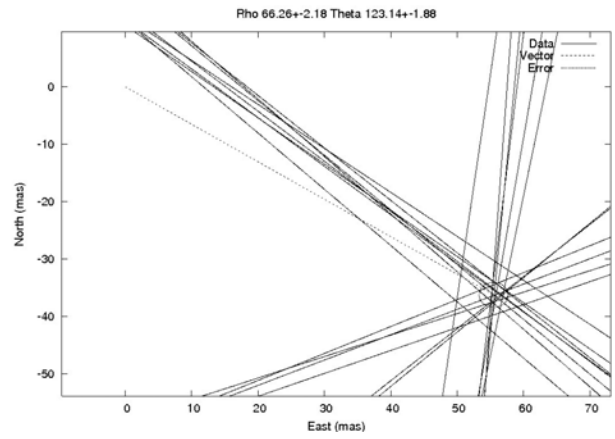
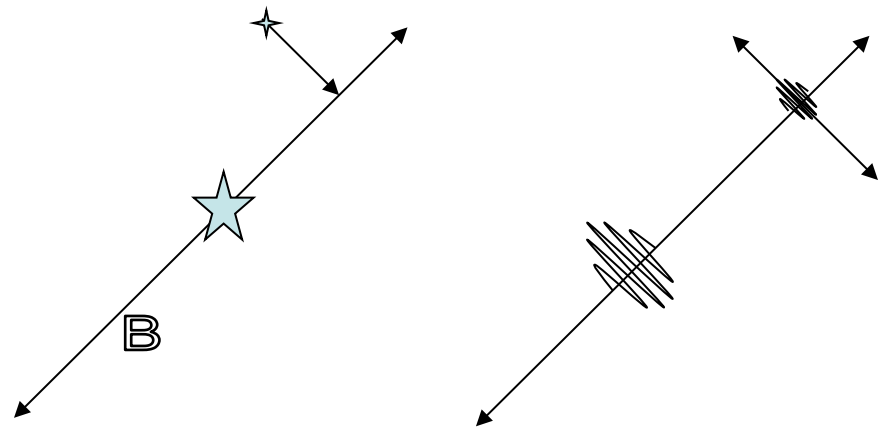
Christopher Farrington

March 2014 – CHARA Year 10





SFP Observing



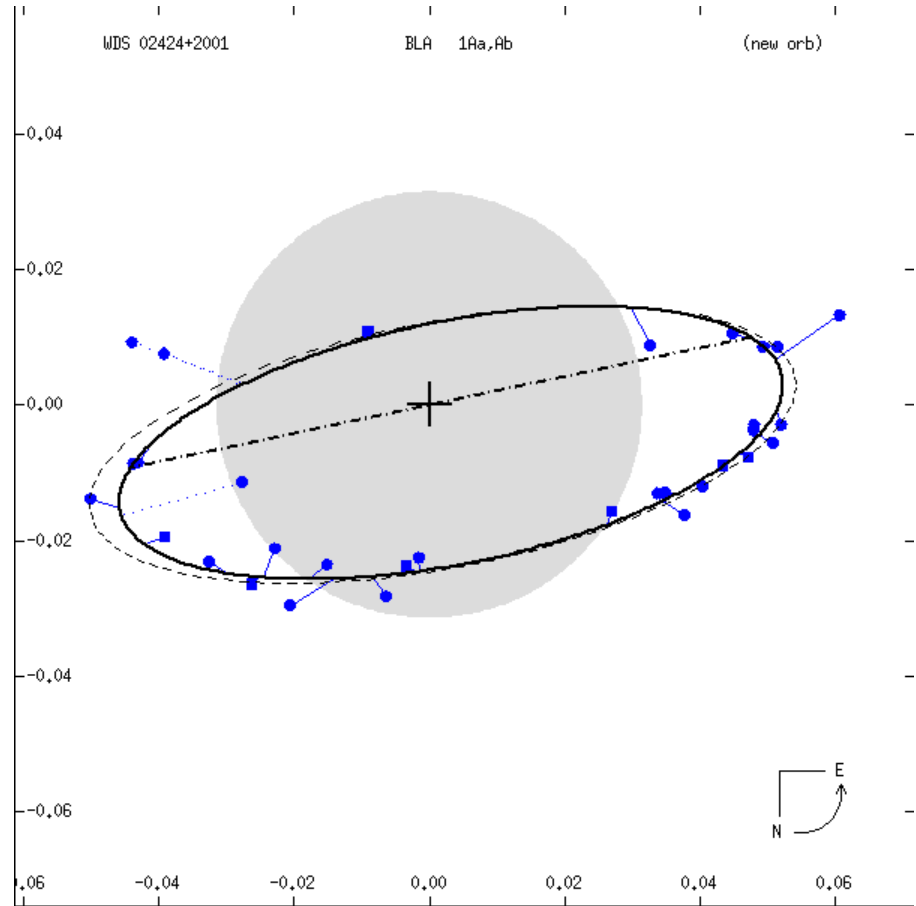
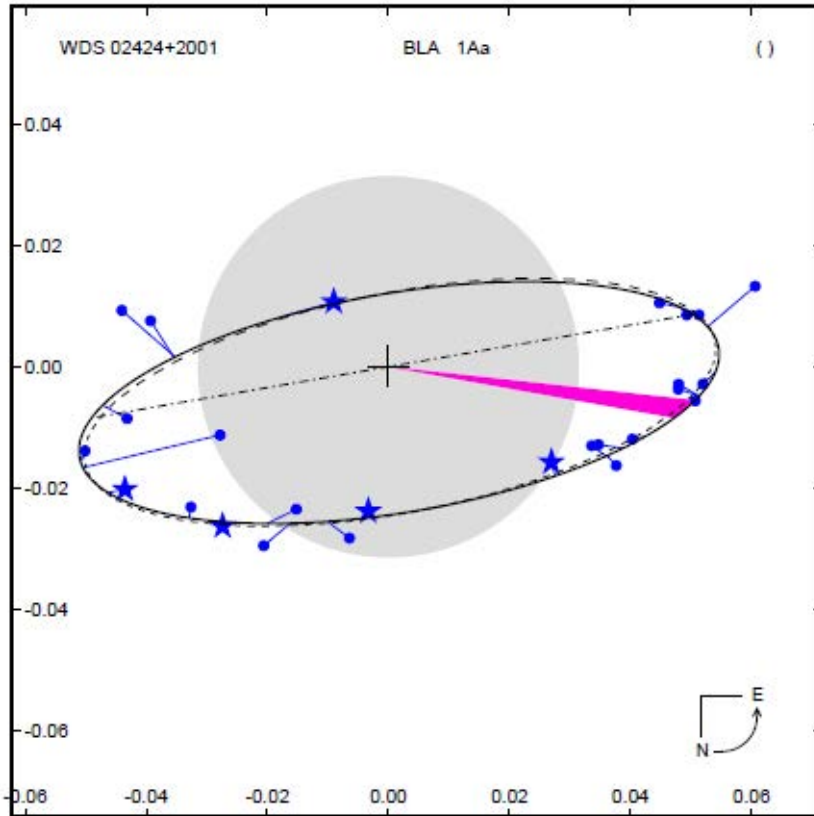


2013 Observing

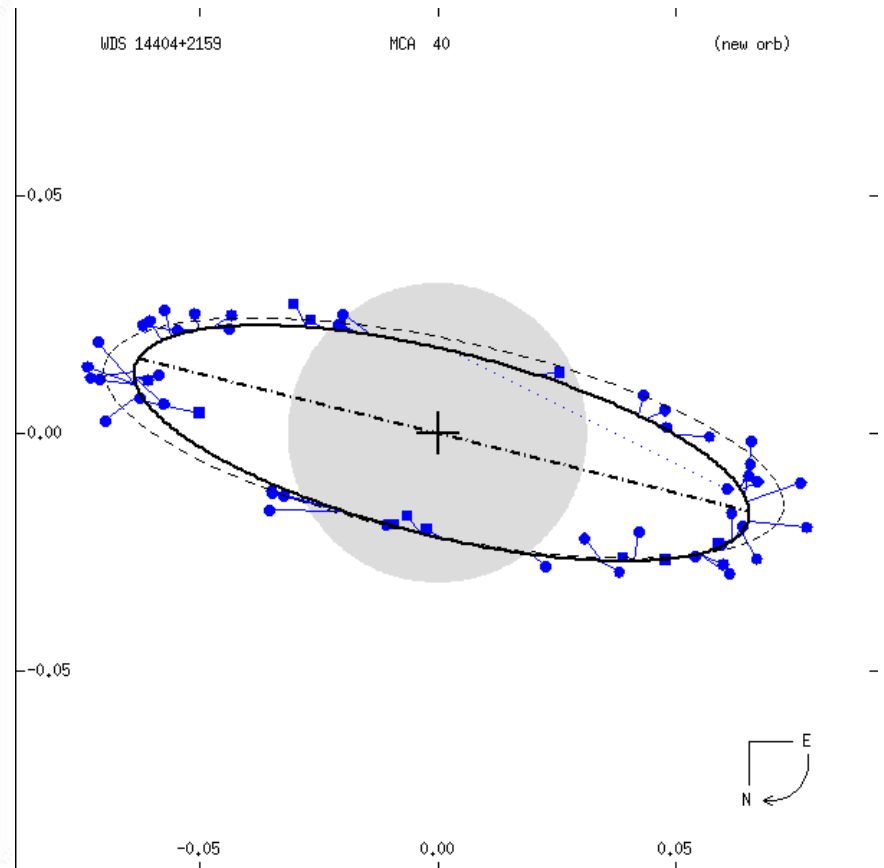
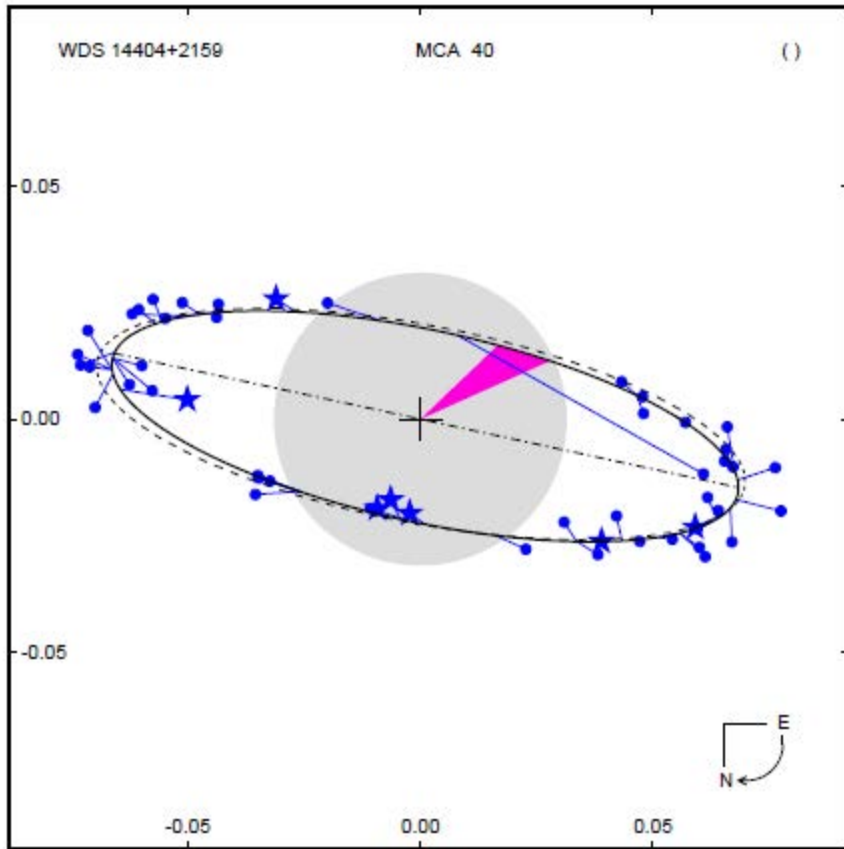
- 10 nights for 2013
- 7 nights of actual data collection
- 227 data files on 26 targets

5408	6	129132	11	178475	3	213306	2
6456	3	134064	3	178596	9	214608	6
16234	6	145849	17	181655	36	217676	6
16811	12	156164	21	184760	6	222326	6
16861	6	160181	29	193468	3		
98031	3	163840	10	194765	3		
98353	3	166988	4	198183	3		

HD 16811

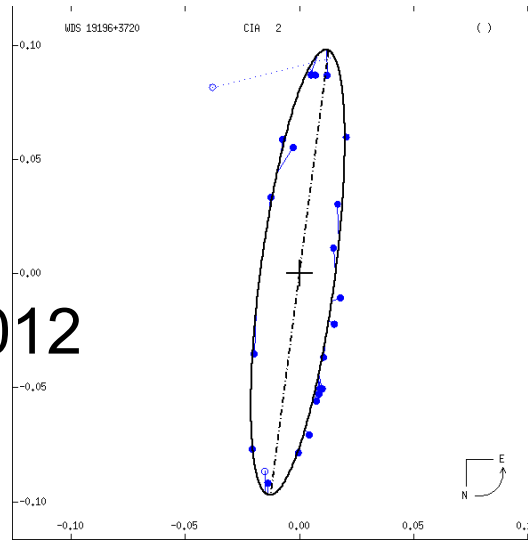
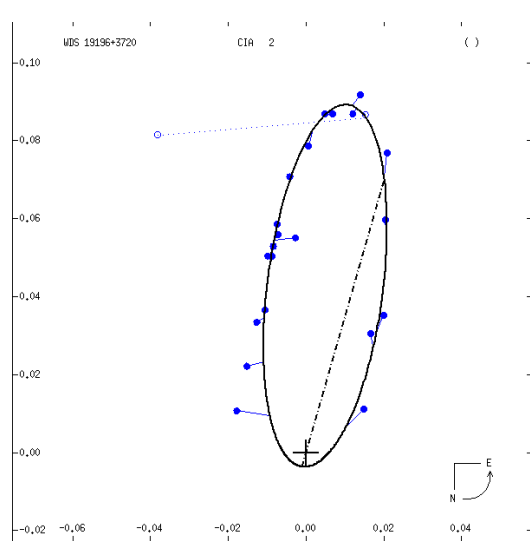
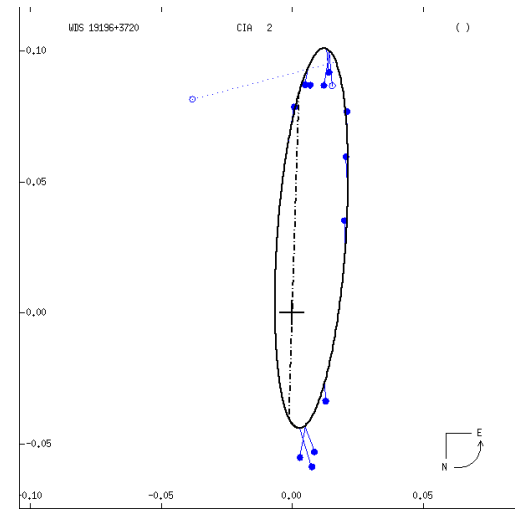
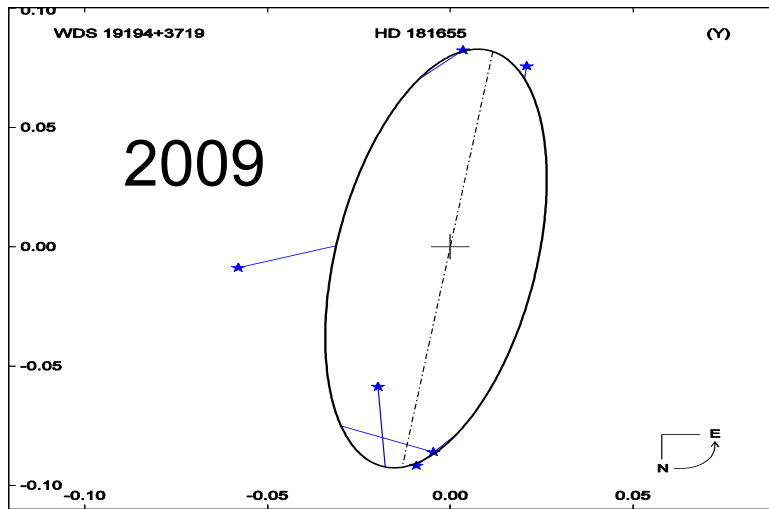


HD 129132

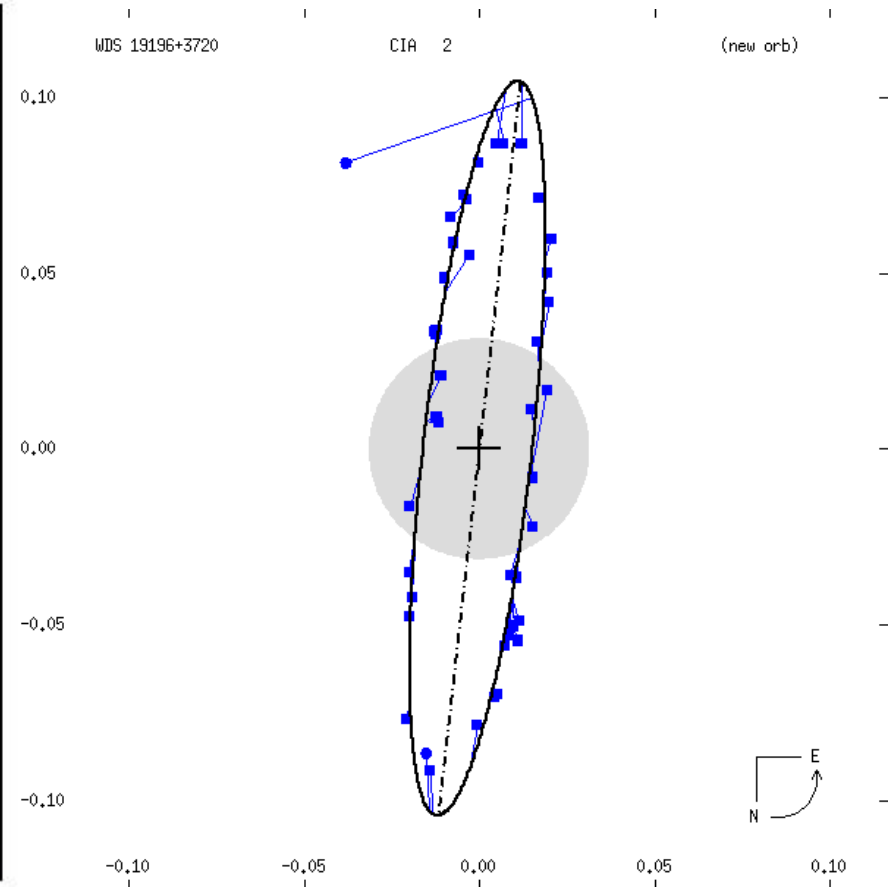
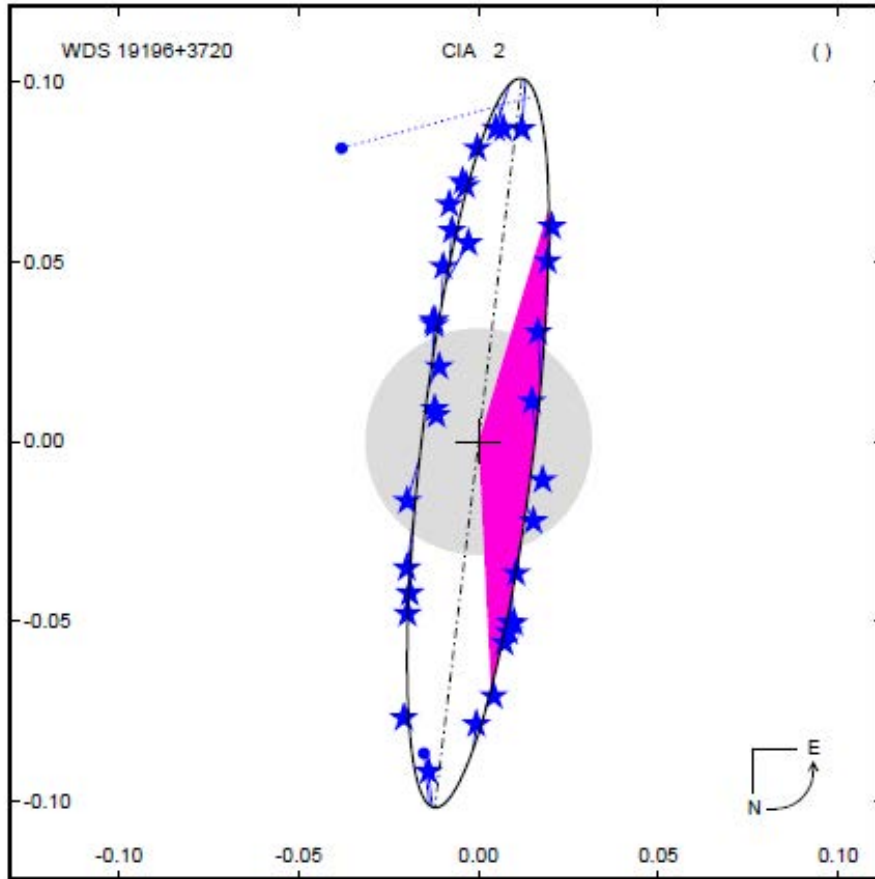




HD 181655

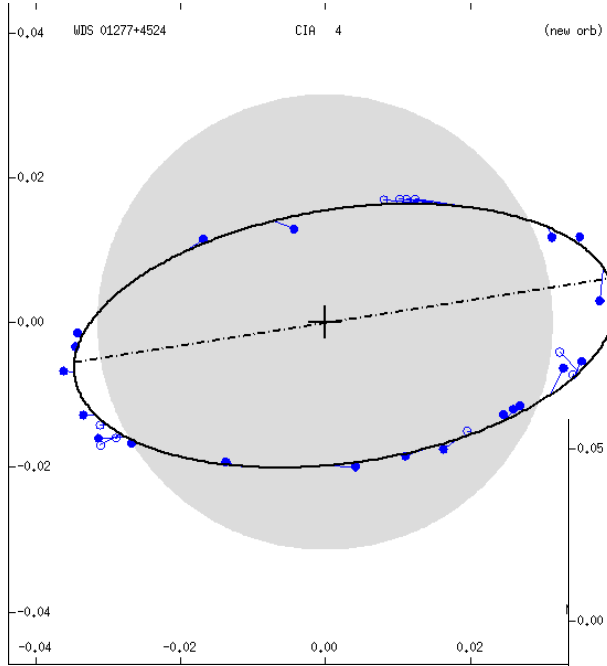


HD 181655

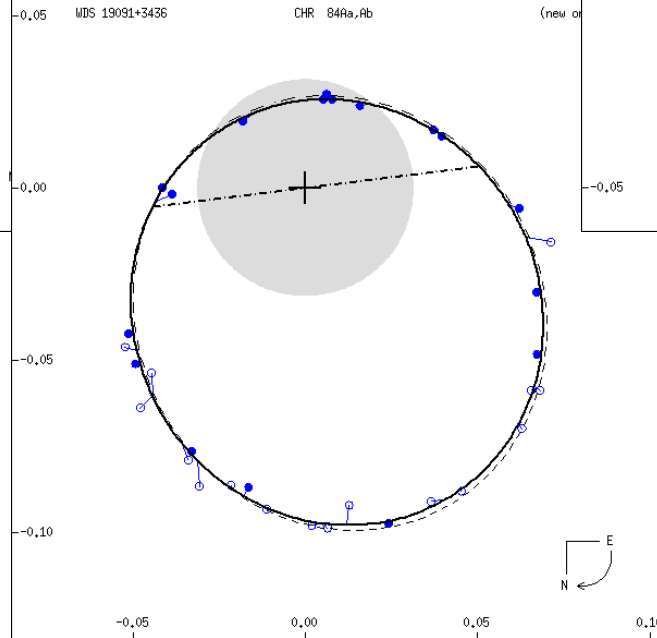




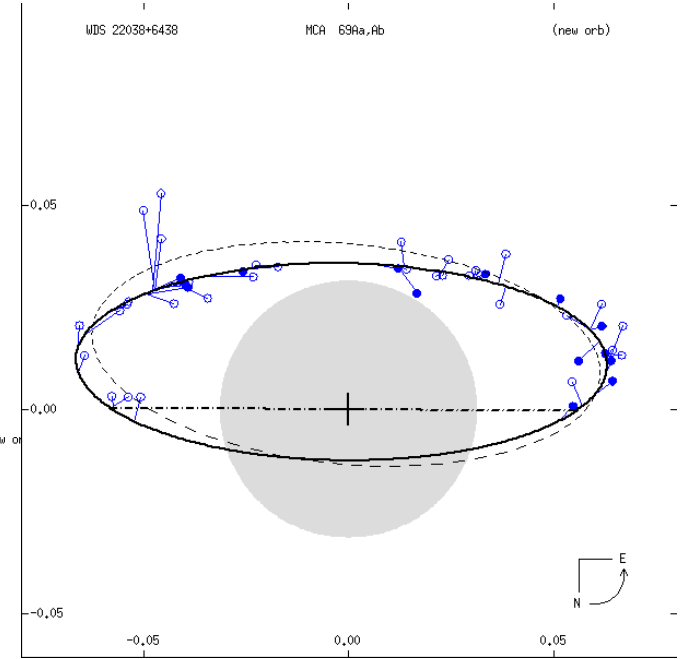
SFP2 Paper – Submitted



HD 8799

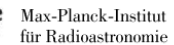


HD 178911



HD 209790

Comments processing...





2014

- Most of the remaining targets for SFP are long period, once or twice per year observability
- Approximately 200 targets that need to be checked – “one-offs”
- 25 spectroscopic binaries that require visibility studies – $P \sim 50\text{-}5000$ days
- Last year for observing last 5-10 SFPs, orbits should be finished this year
- 1026 files since 2010, 450 observations 2007-2009, all to be sorted and reduced.



Schedule 2014

• **Statistics:**

- 265 nights available
- Optimum time requested: 409.5 nights
 - 54.6% oversubscribed
- Minimum time requested: 286.5 nights
 - 8.2% oversubscribed

• **Schedule compared to previous years**

- 409.5(286.5) - 2014
- 345.5(303.0) – 2013
- 364.75(276.2) – 2012

- 279.0 assigned in 2014
- 310.5 assigned in 2013
- 290.5 assigned in 2012

• **Telescope downtime**

- S1 - through ~April 25
- E1 – May 7-14
- W1 – July 1-10
- W2 – Sept 21-30
- E2 – Oct 1-9

Beam Combiner	Time Requested (Opt(Min))	Assigned	% of total available	# of programs
Classic	30(27)	24	9.1%	7 Aloha 2 NOAO, 2 C/P, 2 TOO
CLIMB	88(57.5)	57	21.5%	10 3 CL/P
JouFLU	43(28)	33	12.5%	4 1 J/V 1 J/M
MIRC	83(64)	58	21.8%	10 1 M/J, 1 M/P 1 NOAO
PAVO	98(64)	59	22.3%	12 2 P/C, 3 P/CL 1 P/M
VEGA	67.75(46.5)	48	18.1%	17 1 V/J



Scheduling 2014

Month	Available	# of programs	Nights Assigned
April	30	8	30 – 25+(5 DD)
May	31	10	31
June	30	8	34
July	31	10	31 – 30.5+(0.5 DD)
August	31	9	31
September	30	12	32
October	31	7	33
November	29	12	30
December	22	10	27



2004-2014 Google Docs

- During winter this year, converted all previous schedules to a master list in Google Docs.
- At the moment, it is Date and PI (assigned)
 - Does not take into account nights swapped, time lost due to weather or fire
- Also encoded CHARA Spectroscopic Binary catalog into online spreadsheet



Blast from the past...

Summary of CHARA Proposals for Spring/Summer 2005

Prop. Num.	Principal Investigator	Brief Project Title	Dates Scheduled
1	van Belle	Diameters of Metal Poor Stars	5-7 May
2	Farrington	Diameters of F and G Dwarfs	9-13 May
3	van Belle	Diameters of Stars with Planets	Deferred
4	Boden	Diameters of TPF Target Stars	Deferred
5	Berger	Diameters of Low-Mass Dwarfs	23-30 Apr, 18-19 May, 8-13 Jul
6	Ciardi	Inner Regions of Vega-like and λ Boo Stars	Deferred
7	Gies	The Be Star κ Draconis	1-11 Apr
8	Tuthill	The P Cygni Emission Region	14-17 May, 28-31 Jul
9	Monnier	Young Stellar Objects	14-28 Jul
10	du Foresto	FLUOR Observations of Vega and Other Stars	16 May - 15 Jun
11	Aufdenberg	The Asymmetric Atmosphere of Deneb	15-20 Jun
12	Aufdenberg	Apsidal Motion in the Spica System	29 May - 3 Jun
13	Baines	Late Type Double-lined Spectroscopic Binaries	28 Jun - 4 Jul, 9 Aug - 19 Aug
14	Baines	Inspection of Extrasolar Planetary Systems	9-13 May, 28 Jun - 4 Jul, 9-19 Aug
15	Boden	Diameters and Temperatures of PTI/CIA Binaries	2-4 May, 5-7 Jul, 5-7 Aug <i>→ agree it to 20</i>
16	Turner	Duplicity Survey of O-Type Stars	miscellaneous
17	Bagnuolo	Wide Binary Astrometry	19-22 Apr, 21-23 Jun, 22-24 Aug
18	McAlister	Double-Lined Spectroscopic Binary Stars	28 Jun - 4 Jul, 9-19 Aug
19	Sturmann	Tip/Tilt Enhancement Engineering	miscellaneous
20	van Belle	Calibrator Stars	1-4 Aug
21	Ogden	I-Band Beam Combiner Engineering	12-18 Apr
22	Monnier	MIRC Engineering	25 Aug - 18 Sep

