



## 11787 - Dynamical Masses and Radii of Four White Dwarf Stars

Cycle: 17, Proposal Category: GO

(Availability Mode: SUPPORTED)

### INVESTIGATORS

<i>Name</i>	<i>Institution</i>	<i>E-Mail</i>
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### VISITS

<i>Visit</i>	<i>Targets used in Visit</i>	<i>Configurations used in Visit</i>	<i>Orbits Used</i>	<i>Last Orbit Planner Run</i>	<i>OP Current with Visit?</i>
01	(1) WD1639+153 (2) WD1639-REF1 (3) WD1639-REF2 (4) WD1639-REF3 (6) WD1639-REF6 (7) WD1639-REF7	FGS	1	26-Aug-2009 21:11:48.0	yes
02	(1) WD1639+153 (2) WD1639-REF1 (3) WD1639-REF2 (4) WD1639-REF3 (5) WD1639-REF4 (6) WD1639-REF6	FGS	1	26-Aug-2009 21:11:55.0	yes

<i>Visit</i>	<i>Targets used in Visit</i>	<i>Configurations used in Visit</i>	<i>Orbits Used</i>	<i>Last Orbit Planner Run</i>	<i>OP Current with Visit?</i>
04	(8) WD1818+126 (9) WD1818-REF1 (10) WD1818-REF2 (11) WD1818-REF3 (12) WD1818-REF4 (14) WD1818-REF6	FGS	1	26-Aug-2009 21:12:00.0	yes

3 Total Orbits Used

### **ABSTRACT**

This proposal uses the FGS1r in TRANS mode to resolve a pair of double degenerate binary systems (WD1639+153 and WD 1818+26) in order to determine their orbital elements. In addition, the binaries and several nearby field stars are observed by FGS1r in POS mode to establish the local inertial reference frame of each binary, as well as its parallax and proper motion. This will allow for a direct measurement of the distance, which yields the intrinsic luminosity, and when combined with the spectroscopic estimates of the  $T_{\text{eff}}$ , the radius of each of the four WD stars. When combined with the orbital elements, this leads to a dynamical mass measurement for each WD, and a four calibration points of the WD mass-radius relation.

### **OBSERVING DESCRIPTION**

We will use FGS1r in its high angular resolution observing mode (TRANS) to resolve the white dwarf binary systems. Each exposure will be comprised of about 20 scans. The interferograms derived from each scan will be cross-correlated and co-added to yield a high SNR. To further suppress the noise (these targets are near the FGS's faint limiting magnitude), the co-added interferograms will be carefully smoothed by being represented as a piece-wise smooth segmented polynomial. These observations will yield the separation and position angle of the binary components, as well as the brightness of each. In addition, the binary and field stars simultaneously in the FGS FOV will be observed in POS mode

to accurately determine the relative positions of the stars. This will facilitate the construction of an inertial reference frame for the binary, thereby allowing the relative orbit that will be ultimately determined from the TRANS data to be converted into a physical orbit. This will allow us to determine the relative mass of each white dwarf in the binary system. In addition, the POS mode data will give the proper motion and parallax of the binary, which will allow us to compute the mass and radius of each white dwarf.

#### **ADDITIONAL COMMENTS**

The observations should be scheduled to occur at times of maximum parallax factor to allow us to determine the distance to each of these two white dwarf binary systems.

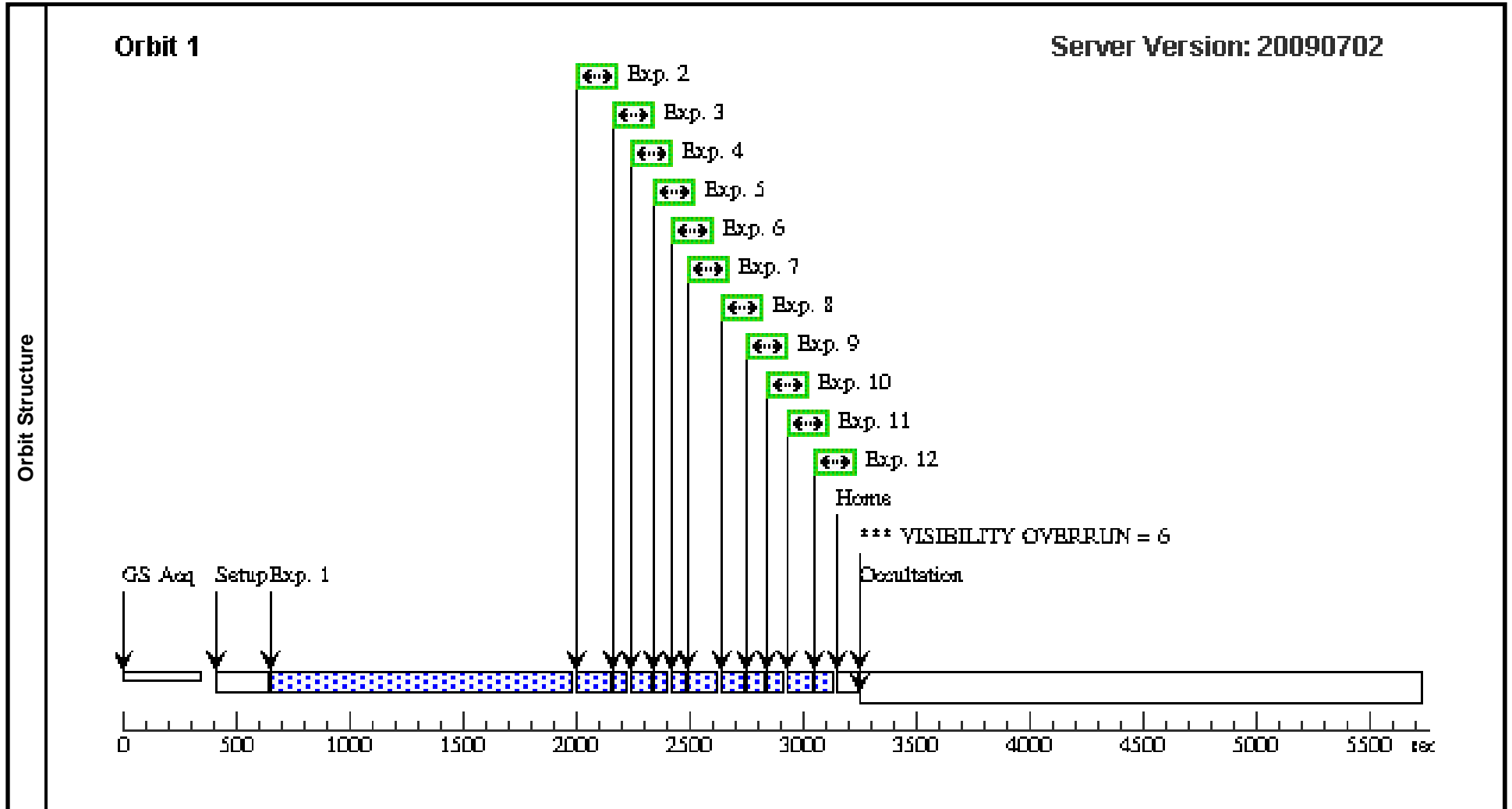
Proposal 11787 - Visit 01 - Dynamical Masses and Radii of Four White Dwarf Stars

Thu Aug 27 01:12:04 GMT 2009

Visit	<b>Proposal 11787, Visit 01, completed</b> <b>Diagnostic Status: Warning</b> Scientific Instruments: FGS Special Requirements: GYRO MODE 2G; ORIENT 290D TO 290 D; BETWEEN 26-JAN-2009:00:00:00 AND 28-FEB-2009:00:00:00																																																				
Diagnostics	(Visit 01) Warning (Orbit Planner): VISIBILITY OVERRUN (Visit 01) Warning (Orbit Planner): FGS EXPOSURE TOO SHORT TO GUARANTEE SCIENCE DATA (Visit 01) Warning (Orbit Planner): SHORT FGS SCAN LENGTH MAY SIGNAL PROBLEMS (Visit 01) Warning (Orbit Planner): FGS EXPOSURE TOO SHORT TO GUARANTEE SCIENCE DATA (Visit 01) Warning (Form): Gyro Mode overrides default value of 3GOBAD. (Visit 01) Warning (Orbit Planner): FGS EXPOSURE TOO SHORT TO GUARANTEE SCIENCE DATA (Visit 01) Warning (Orbit Planner): FGS EXPOSURE TOO SHORT TO GUARANTEE SCIENCE DATA (Visit 01) Warning (Orbit Planner): FGS EXPOSURE TOO SHORT TO GUARANTEE SCIENCE DATA (Visit 01) Warning (Orbit Planner): FGS EXPOSURE TOO SHORT TO GUARANTEE SCIENCE DATA (Visit 01) Warning (Orbit Planner): FGS EXPOSURE TOO SHORT TO GUARANTEE SCIENCE DATA																																																				
Fixed Targets	<table border="1"> <thead> <tr> <th data-bbox="142 581 247 613">#</th> <th data-bbox="247 581 485 613">Name</th> <th data-bbox="485 581 905 613">Target Coordinates</th> <th data-bbox="905 581 1304 613">Targ. Coord. Corrections</th> <th data-bbox="1304 581 1598 613">Fluxes</th> <th data-bbox="1598 581 2003 613">Miscellaneous</th> </tr> </thead> <tbody> <tr> <td data-bbox="142 613 247 776">(1)</td> <td data-bbox="247 613 485 776">WD1639+153</td> <td data-bbox="485 613 905 776">RA: 16 41 36.7000 (250.4029167d) Dec: +15 12 36.38 (15.21011d) Equinox: J2000</td> <td data-bbox="905 613 1304 776">Proper Motion RA: 0.005s/yr Proper Motion Dec: -0.736"/yr Parallax: 0" Epoch of Position: 2000.0</td> <td data-bbox="1304 613 1598 776">V=15.7+/-0.1</td> <td data-bbox="1598 613 2003 776">Reference Frame: HST CYCLE 10 OBSERVATIONS</td> </tr> <tr> <td colspan="6" data-bbox="142 776 2003 784"><i>Comments: Maximum parallax factor occurs Feb 27 &amp; Aug 30.</i></td> </tr> <tr> <td data-bbox="142 784 247 873">(2)</td> <td data-bbox="247 784 485 873">WD1639-REF1 Alt Name1: GSC1520.00549</td> <td data-bbox="485 784 905 873">RA: 16 41 39.6000 (250.4150000d) Dec: +15 12 1.87 (15.20052d) Equinox: J2000</td> <td data-bbox="905 784 1304 873">Parallax: 0" Epoch of Position:</td> <td data-bbox="1304 784 1598 873">V=10.73+/-0.1</td> <td data-bbox="1598 784 2003 873">Reference Frame: ICRS</td> </tr> <tr> <td data-bbox="142 873 247 963">(3)</td> <td data-bbox="247 873 485 963">WD1639-REF2 Alt Name1: GSC1520.00514</td> <td data-bbox="485 873 905 963">RA: 16 41 54.1000 (250.4754167d) Dec: +15 11 19.20 (15.18867d) Equinox: J2000</td> <td data-bbox="905 873 1304 963">Parallax: 0" Epoch of Position:</td> <td data-bbox="1304 873 1598 963">V=12.1+/-0.1</td> <td data-bbox="1598 873 2003 963">Reference Frame: ICRS</td> </tr> <tr> <td data-bbox="142 963 247 1052">(4)</td> <td data-bbox="247 963 485 1052">WD1639-REF3 Alt Name1: GSC1520.00496</td> <td data-bbox="485 963 905 1052">RA: 16 41 49.1300 (250.4547083d) Dec: +15 11 1.97 (15.18388d) Equinox: J2000</td> <td data-bbox="905 963 1304 1052">Parallax: 0" Epoch of Position:</td> <td data-bbox="1304 963 1598 1052">V=14.69+/-0</td> <td data-bbox="1598 963 2003 1052">Reference Frame: ICRS</td> </tr> <tr> <td data-bbox="142 1052 247 1157">(6)</td> <td data-bbox="247 1052 485 1157">WD1639-REF6 Alt Name1: GSC1520.00628</td> <td data-bbox="485 1052 905 1157">RA: 16 41 22.4500 (250.3435417d) Dec: +15 14 11.80 (15.23661d) Equinox: J2000</td> <td data-bbox="905 1052 1304 1157">Parallax: 0" Epoch of Position:</td> <td data-bbox="1304 1052 1598 1157">V=13.9+/-0.1</td> <td data-bbox="1598 1052 2003 1157">Reference Frame: ICRS</td> </tr> <tr> <td data-bbox="142 1157 247 1248">(7)</td> <td data-bbox="247 1157 485 1248">WD1639-REF7 Alt Name1: GSC1520.00612</td> <td data-bbox="485 1157 905 1248">RA: 16 41 25.9400 (250.3580833d) Dec: +15 15 44.39 (15.26233d) Equinox: J2000</td> <td data-bbox="905 1157 1304 1248">Parallax: 0" Epoch of Position:</td> <td data-bbox="1304 1157 1598 1248">V=13.26+/-0.1</td> <td data-bbox="1598 1157 2003 1248">Reference Frame: ICRS</td> </tr> </tbody> </table>					#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(1)	WD1639+153	RA: 16 41 36.7000 (250.4029167d) Dec: +15 12 36.38 (15.21011d) Equinox: J2000	Proper Motion RA: 0.005s/yr Proper Motion Dec: -0.736"/yr Parallax: 0" Epoch of Position: 2000.0	V=15.7+/-0.1	Reference Frame: HST CYCLE 10 OBSERVATIONS	<i>Comments: Maximum parallax factor occurs Feb 27 &amp; Aug 30.</i>						(2)	WD1639-REF1 Alt Name1: GSC1520.00549	RA: 16 41 39.6000 (250.4150000d) Dec: +15 12 1.87 (15.20052d) Equinox: J2000	Parallax: 0" Epoch of Position:	V=10.73+/-0.1	Reference Frame: ICRS	(3)	WD1639-REF2 Alt Name1: GSC1520.00514	RA: 16 41 54.1000 (250.4754167d) Dec: +15 11 19.20 (15.18867d) Equinox: J2000	Parallax: 0" Epoch of Position:	V=12.1+/-0.1	Reference Frame: ICRS	(4)	WD1639-REF3 Alt Name1: GSC1520.00496	RA: 16 41 49.1300 (250.4547083d) Dec: +15 11 1.97 (15.18388d) Equinox: J2000	Parallax: 0" Epoch of Position:	V=14.69+/-0	Reference Frame: ICRS	(6)	WD1639-REF6 Alt Name1: GSC1520.00628	RA: 16 41 22.4500 (250.3435417d) Dec: +15 14 11.80 (15.23661d) Equinox: J2000	Parallax: 0" Epoch of Position:	V=13.9+/-0.1	Reference Frame: ICRS	(7)	WD1639-REF7 Alt Name1: GSC1520.00612	RA: 16 41 25.9400 (250.3580833d) Dec: +15 15 44.39 (15.26233d) Equinox: J2000	Parallax: 0" Epoch of Position:	V=13.26+/-0.1	Reference Frame: ICRS
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous																																																
(1)	WD1639+153	RA: 16 41 36.7000 (250.4029167d) Dec: +15 12 36.38 (15.21011d) Equinox: J2000	Proper Motion RA: 0.005s/yr Proper Motion Dec: -0.736"/yr Parallax: 0" Epoch of Position: 2000.0	V=15.7+/-0.1	Reference Frame: HST CYCLE 10 OBSERVATIONS																																																
<i>Comments: Maximum parallax factor occurs Feb 27 &amp; Aug 30.</i>																																																					
(2)	WD1639-REF1 Alt Name1: GSC1520.00549	RA: 16 41 39.6000 (250.4150000d) Dec: +15 12 1.87 (15.20052d) Equinox: J2000	Parallax: 0" Epoch of Position:	V=10.73+/-0.1	Reference Frame: ICRS																																																
(3)	WD1639-REF2 Alt Name1: GSC1520.00514	RA: 16 41 54.1000 (250.4754167d) Dec: +15 11 19.20 (15.18867d) Equinox: J2000	Parallax: 0" Epoch of Position:	V=12.1+/-0.1	Reference Frame: ICRS																																																
(4)	WD1639-REF3 Alt Name1: GSC1520.00496	RA: 16 41 49.1300 (250.4547083d) Dec: +15 11 1.97 (15.18388d) Equinox: J2000	Parallax: 0" Epoch of Position:	V=14.69+/-0	Reference Frame: ICRS																																																
(6)	WD1639-REF6 Alt Name1: GSC1520.00628	RA: 16 41 22.4500 (250.3435417d) Dec: +15 14 11.80 (15.23661d) Equinox: J2000	Parallax: 0" Epoch of Position:	V=13.9+/-0.1	Reference Frame: ICRS																																																
(7)	WD1639-REF7 Alt Name1: GSC1520.00612	RA: 16 41 25.9400 (250.3580833d) Dec: +15 15 44.39 (15.26233d) Equinox: J2000	Parallax: 0" Epoch of Position:	V=13.26+/-0.1	Reference Frame: ICRS																																																

Proposal 11787 - Visit 01 - Dynamical Masses and Radii of Four White Dwarf Stars

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	1	(1) WD1639+153	FGS, TRANS, 1	F583W	STEP-SIZE=0.5; SCANS=27	POS TARG 0.0,0.0; GS ACQ SCENARI O BASE1T3	Sequence 1-12 Non-I nt	900.0 Secs [==>]	[1]
	2	2	(1) WD1639+153	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-12 Non-I nt	25.0 Secs [==>]	[1]
	3	3	(2) WD1639-REF1	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-12 Non-I nt	5.0 Secs [==>]	[1]
	4	4	(4) WD1639-REF3	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-12 Non-I nt	10.0 Secs [==>]	[1]
	5	5	(3) WD1639-REF2	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-12 Non-I nt	5.0 Secs [==>]	[1]
	6	7	(2) WD1639-REF1	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-12 Non-I nt	5.0 Secs [==>]	[1]
	7	8	(1) WD1639+153	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-12 Non-I nt	25.0 Secs [==>]	[1]
	8	9	(7) WD1639-REF7	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-12 Non-I nt	10.0 Secs [==>]	[1]
	9	10	(6) WD1639-REF6	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-12 Non-I nt	5.0 Secs [==>]	[1]
	10	11	(2) WD1639-REF1	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-12 Non-I nt	5.0 Secs [==>]	[1]
	11	12	(1) WD1639+153	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-12 Non-I nt	5.0 Secs [==>]	[1]
12	12	(3) WD1639-REF2	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-12 Non-I nt	5.0 Secs [==>]	[1]	



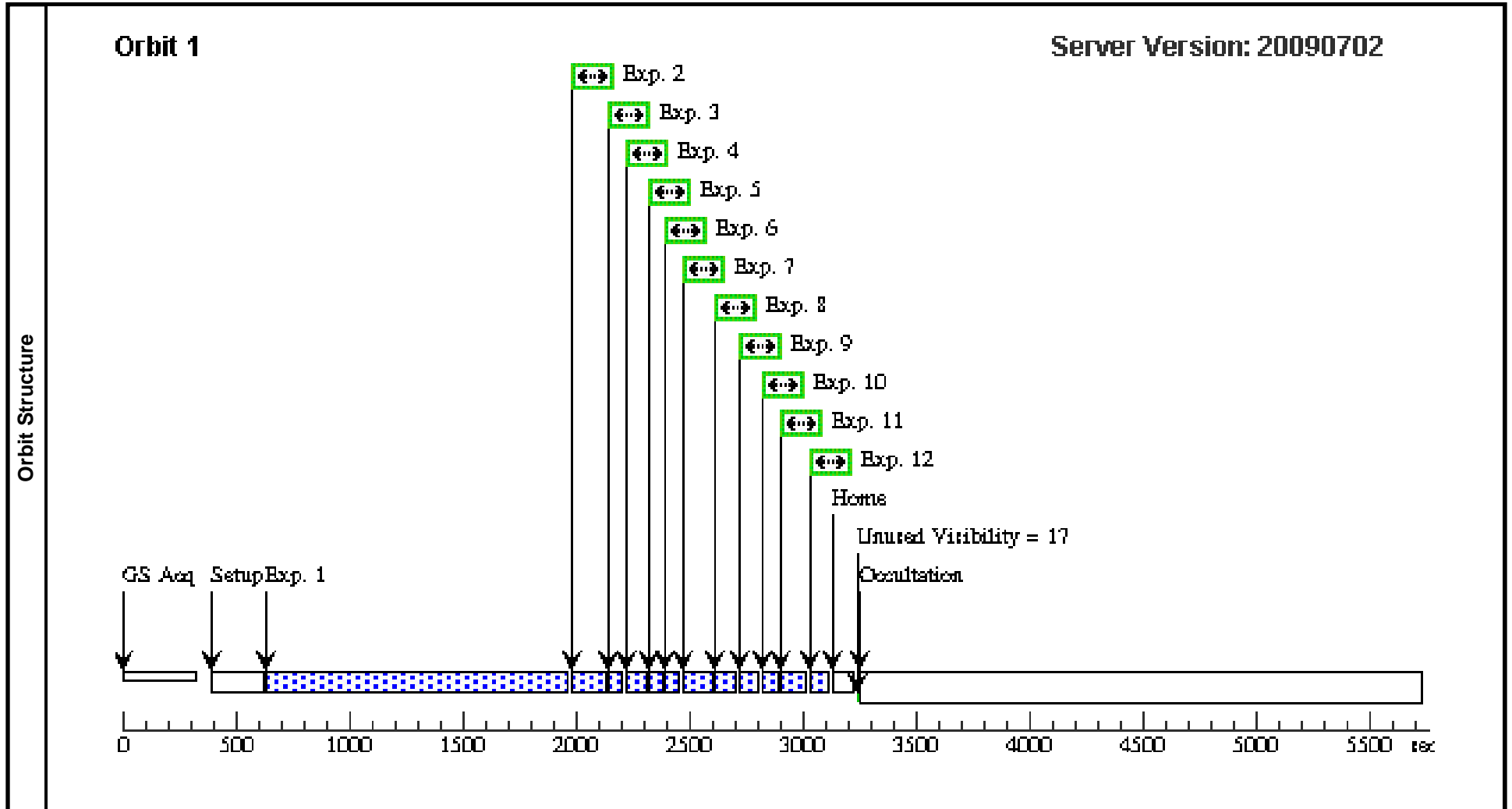
Proposal 11787 - Visit 02 - Dynamical Masses and Radii of Four White Dwarf Stars

Thu Aug 27 01:12:06 GMT 2009

<b>Visit</b>	<b>Proposal 11787, Visit 02, scheduling</b> <b>Diagnostic Status: Warning</b> Scientific Instruments: FGS Special Requirements: ORIENT 110.D TO 110. D; BETWEEN 28-AUG-2009:00:00:00 AND 30-AUG-2009:00:00:00										
	(Visit 02) Warning (Orbit Planner): FGS EXPOSURE TOO SHORT TO GUARANTEE SCIENCE DATA (Visit 02) Warning (Orbit Planner): FGS EXPOSURE TOO SHORT TO GUARANTEE SCIENCE DATA (Visit 02) Warning (Orbit Planner): FGS EXPOSURE TOO SHORT TO GUARANTEE SCIENCE DATA (Visit 02) Warning (Orbit Planner): FGS EXPOSURE TOO SHORT TO GUARANTEE SCIENCE DATA (Visit 02) Warning (Orbit Planner): FGS EXPOSURE TOO SHORT TO GUARANTEE SCIENCE DATA (Visit 02) Warning (Orbit Planner): FGS EXPOSURE TOO SHORT TO GUARANTEE SCIENCE DATA (Visit 02) Warning (Orbit Planner): FGS EXPOSURE TOO SHORT TO GUARANTEE SCIENCE DATA (Visit 02) Warning (Orbit Planner): FGS EXPOSURE TOO SHORT TO GUARANTEE SCIENCE DATA (Visit 02) Warning (Orbit Planner): SHORT FGS SCAN LENGTH MAY SIGNAL PROBLEMS										
<b>Fixed Targets</b>	<b>#</b>	<b>Name</b>	<b>Target Coordinates</b>	<b>Targ. Coord. Corrections</b>		<b>Fluxes</b>	<b>Miscellaneous</b>				
	(1)	WD1639+153	RA: 16 41 36.7000 (250.4029167d) Dec: +15 12 36.38 (15.21011d) Equinox: J2000	Proper Motion RA: 0.005s/yr Proper Motion Dec: -0.736"/yr Parallax: 0" Epoch of Position: 2000.0		V=15.7+/-0.1	Reference Frame: HST CYCLE 10 OBSERVATIONS				
	<i>Comments: Maximum parallax factor occurs Feb 27 &amp; Aug 30.</i>										
	(2)	WD1639-REF1 Alt Name1: GSC1520.00549	RA: 16 41 39.6000 (250.4150000d) Dec: +15 12 1.87 (15.20052d) Equinox: J2000	Parallax: 0" Epoch of Position:		V=10.73+/-0.1	Reference Frame: ICRS				
	(3)	WD1639-REF2 Alt Name1: GSC1520.00514	RA: 16 41 54.1000 (250.4754167d) Dec: +15 11 19.20 (15.18867d) Equinox: J2000	Parallax: 0" Epoch of Position:		V=12.1+/-0.1	Reference Frame: ICRS				
	(4)	WD1639-REF3 Alt Name1: GSC1520.00496	RA: 16 41 49.1300 (250.4547083d) Dec: +15 11 1.97 (15.18388d) Equinox: J2000	Parallax: 0" Epoch of Position:		V=14.69+/-0	Reference Frame: ICRS				
	(5)	WD1639-REF4 Alt Name1: GSC1520.00555	RA: 16 41 22.8200 (250.3450833d) Dec: +15 11 55.82 (15.19884d) Equinox: J2000	Parallax: 0" Epoch of Position:		V=13.25+/-0.1	Reference Frame: ICRS				
(6)	WD1639-REF6 Alt Name1: GSC1520.00628	RA: 16 41 22.4500 (250.3435417d) Dec: +15 14 11.80 (15.23661d) Equinox: J2000	Parallax: 0" Epoch of Position:		V=13.9+/-0.1	Reference Frame: ICRS					
<b>Exposures</b>	<b>#</b>	<b>Label</b>	<b>Target</b>	<b>Config,Mode,Aperture</b>	<b>Spectral Els.</b>	<b>Opt. Params.</b>	<b>Special Reqs.</b>	<b>Groups</b>	<b>Exp. Time/[Actual Dur.]</b>	<b>Orbit</b>	
	1	1	(1) WD1639+153	FGS, TRANS, 1	F583W	STEP-SIZE=0.5; SCANS=27	POS TARG 0.0,0.0; GS ACQ SCENARI O BASE1B3	Sequence 1-12 Non-Int	900.0 Secs [==>]	[1]	
2	2	(1) WD1639+153	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-12 Non-Int	25.0 Secs [==>]	[1]		

Proposal 11787 - Visit 02 - Dynamical Masses and Radii of Four White Dwarf Stars

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
Exposures (continued)	3	(2) WD1639-REF1	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-12 Non-Int	5.0 Secs [==>]	[1]
	4	(4) WD1639-REF3	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-12 Non-Int	10.0 Secs [==>]	[1]
	5	(3) WD1639-REF2	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-12 Non-Int	5.0 Secs [==>]	[1]
	6	(2) WD1639-REF1	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-12 Non-Int	5.0 Secs [==>]	[1]
	7	(1) WD1639+153	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-12 Non-Int	25.0 Secs [==>]	[1]
	8	(5) WD1639-REF4	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-12 Non-Int	10.0 Secs [==>]	[1]
	9	(6) WD1639-REF6	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-12 Non-Int	5.0 Secs [==>]	[1]
	10	(2) WD1639-REF1	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-12 Non-Int	5.0 Secs [==>]	[1]
	11	(1) WD1639+153	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-12 Non-Int	5.0 Secs [==>]	[1]
	12	(3) WD1639-REF2	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-12 Non-Int	5.0 Secs [==>]	[1]



Proposal 11787 - Visit 04 - Dynamical Masses and Radii of Four White Dwarf Stars

Thu Aug 27 01:12:08 GMT 2009

Visit	<b>Proposal 11787, Visit 04, pi</b> <b>Diagnostic Status: Warning</b> Scientific Instruments: FGS Special Requirements: ORIENT 106D TO 110 D; BETWEEN 21-SEP-2010:00:00:00 AND 30-SEP-2010:00:00:00										
	Diagnostics	(Visit 04) Warning (Orbit Planner): SHORT FGS SCAN LENGTH MAY SIGNAL PROBLEMS									
Fixed Targets		#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(8)	WD1818+126	RA: 18 20 30.8800 (275.1286667d) Dec: +12 39 17.70 (12.65492d) Equinox: J2000	Proper Motion RA: 0.007s/yr Proper Motion Dec: 0.271"/yr Parallax: 0" Epoch of Position: 2000.0	V=16.06+/-0.1	Reference Frame: HST CYCLE 10 PROPOSAL					
	<i>Comments: maximum parallax factor occurs Sep 29 and March 29</i>										
	(9)	WD1818-REF1 Alt Name1: GSC1018.02189	RA: 18 20 23.6700 (275.0986250d) Dec: +12 39 43.80 (12.66217d) Equinox: J2000	Parallax: 0" Epoch of Position:	V=10.92+/-0.2	Reference Frame: ICRS					
	(10)	WD1818-REF2 Alt Name1: GSC1018.02278	RA: 18 20 26.3600 (275.1098333d) Dec: +12 39 25.20 (12.65700d) Equinox: J2000	Parallax: 0" Epoch of Position:	V=12.7+/-0.2	Reference Frame: ICRS					
	(11)	WD1818-REF3 Alt Name1: GSC1018.01251	RA: 18 20 31.9700 (275.1332083d) Dec: +12 38 48.12 (12.64670d) Equinox: J2000	Parallax: 0" Epoch of Position:	V=12.97+/-0.2	Reference Frame: ICRS					
	(12)	WD1818-REF4 Alt Name1: N020230030828	RA: 18 20 33.8600 (275.1410833d) Dec: +12 39 5.56 (12.65154d) Equinox: J2000	Parallax: 0" Epoch of Position:	V=14.23+/-0.2	Reference Frame: ICRS					
	<i>Comments: position and magnitude from GSC2, using Kriss &amp; Stys color transformations.</i>										
(14)	WD1818-REF6 Alt Name1: N020230031910	RA: 18 20 33.6100 (275.1400417d) Dec: +12 40 16.29 (12.67119d) Equinox: J2000	Parallax: 0" Epoch of Position:	V=14.43+/-0.3	Reference Frame: ICRS						
<i>Comments: position and magnitude from GSC2, using Kriss &amp; Stys color transformation</i>											
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit	
	1	1	(8) WD1818+126	FGS, TRANS, 1	F583W	STEP-SIZE=0.4; SCANS=20	POS TARG 0.0,0.0; GS ACQ SCENARI O BASE1B3	Sequence 1-11 Non-Int	830.0 Secs [==>]	[1]	
	2	2	(8) WD1818+126	FGS, POS, 1	F583W		SAME POS AS 1	Sequence 1-11 Non-Int	30.0 Secs [==>]	[1]	

Proposal 11787 - Visit 04 - Dynamical Masses and Radii of Four White Dwarf Stars

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
Exposures (continued)	3	3	(9) WD1818-REF1	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-11 Non-Int	7.0 Secs [==>]	[1]
	4	4	(12) WD1818-REF4	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-11 Non-Int	7.0 Secs [==>]	[1]
	5	5	(11) WD1818-REF3	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-11 Non-Int	7.0 Secs [==>]	[1]
	6	6	(10) WD1818-REF2	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-11 Non-Int	7.0 Secs [==>]	[1]
	7	7	(8) WD1818+126	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-11 Non-Int	30.0 Secs [==>]	[1]
	8	8	(14) WD1818-REF6	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-11 Non-Int	7.0 Secs [==>]	[1]
	9	10	(12) WD1818-REF4	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-11 Non-Int	7.0 Secs [==>]	[1]
	10	11	(8) WD1818+126	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-11 Non-Int	30.0 Secs [==>]	[1]
	11	12	(9) WD1818-REF1	FGS, POS, 1	F583W	SAME POS AS 1	Sequence 1-11 Non-Int	7.0 Secs [==>]	[1]

