13948 - CONSTRAINING THE WIND-SHIELD SCENARIO OF PG 2112+059

Cycle: 22, Proposal Category: GO

(Availability Mode: SUPPORTED)

INVESTIGATORS

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VISITS

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
01	(2) 21145258+0607423	STIS/CCD STIS/FUV-MAMA STIS/NUV-MAMA	1	30-Oct-2014 21:08:04.0	yes
02	(2) 21145258+0607423	STIS/CCD STIS/FUV-MAMA STIS/NUV-MAMA	1	30-Oct-2014 21:08:06.0	yes

2 Total Orbits Used

ABSTRACT

The physical scenario describing the origin of quasar winds, still remain largely unsettled due to our failure to account for X-ray weak BALQSOs. In this proposal, we plan to study the relation between the inner part of the wind which is likely to be shielding the X-ray emission and the UV winds characterized by broad absorption lines (BALs). To address this, we propose to probe the shield-wind connection in the highly X-ray variable

BALQSO PG 2112+059, which has exhibited periods of X-ray weakness and X-Ray "normality" in the past.

OBSERVING DESCRIPTION

The observations will be performed in two different orbits.
In each HST observation orbit we requiere at least an 840 s exposure with the G230L grating and a 1000 s exposure with the G140L to get a S/N~30 in the continuum, suffcient for high quality studies of the key O vi, Ly, N v, and C iv absorption lines. Each HST observation orbit must be contemporaneous to two Chandra observations. Therefore, we require that each HST orbit observation is within a month of its respective Chandra observation counterpart. Additionally each set of Chandra-HST observations must be separated by at least eight months.

Visit

Proposal 13948, Visit 01, implementation Fri Oct 31 01:08:07 GMT 2014

Diagnostic Status: No Diagnostics

Scientific Instruments: STIS/CCD, STIS/FUV-MAMA, STIS/NUV-MAMA

Special Requirements: (none)

Fixed Targets

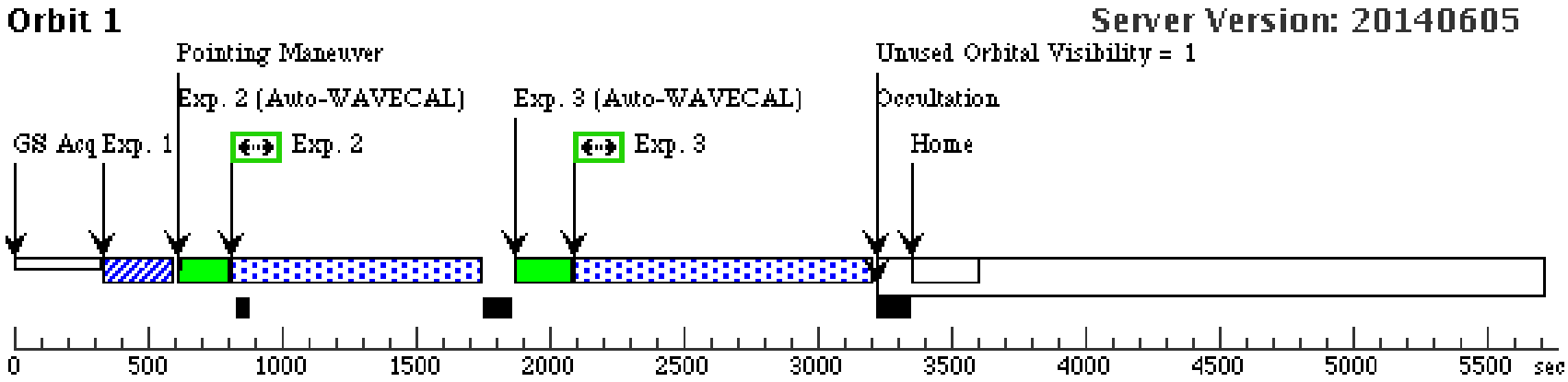
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	21145258+0607423	RA: 21 14 52.5886 (318.7191192d)		V=14.577	Reference Frame: ICRS
	Alt Name1: PG2112+059	Dec: +06 07 42.37 (6.12844d)			
		Equinox: J2000			

Comments: This object was generated by the targetselector and retrieved from the 2MASS database.

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(2) 21145258+0607423	STIS/CCD, ACQ, 50CCD	MIRROR			Sequence 1-3 Non-Int in Visit 01	5 Secs (5 Secs)	
								[==>]	***[1]***
2	(STIS.sp.64 4036)	(2) 21145258+0607423	STIS/NUV-MAMA, ACCUM, 52X0.2	G230L 2376 A			Sequence 1-3 Non-Int in Visit 01	920 Secs (920 Secs)	
								[==>]	***[1]***
3	(STIS.sp.64 4038)	(2) 21145258+0607423	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A			Sequence 1-3 Non-Int in Visit 01	1095 Secs (1095 Secs)	
								[==>]	***[1]***

Orbit Structure



Visit

Proposal 13948, Visit 02 Fri Oct 31 01:08:07 GMT 2014

Diagnostic Status: No Diagnostics

Scientific Instruments: STIS/CCD, STIS/FUV-MAMA, STIS/NUV-MAMA

Special Requirements: (none)

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	21145258+0607423	RA: 21 14 52.5886 (318.7191192d)		V=14.577	Reference Frame: ICRS
	Alt Name1: PG2112+059	Dec: +06 07 42.37 (6.12844d)			
		Equinox: J2000			

Comments: This object was generated by the targetselector and retrieved from the 2MASS database.

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(2) 21145258+0607423	STIS/CCD, ACQ, 50CCD	MIRROR			Sequence 1-3 Non-Int in Visit 02	5 Secs (5 Secs)	
								[==>]	***[1]***
2	(STIS.sp.64 4036)	(2) 21145258+0607423	STIS/NUV-MAMA, ACCUM, 52X0.2	G230L 2376 A			Sequence 1-3 Non-Int in Visit 02	920 Secs (920 Secs)	
								[==>]	***[1]***
3	(STIS.sp.64 4038)	(2) 21145258+0607423	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A			Sequence 1-3 Non-Int in Visit 02	1095 Secs (1095 Secs)	
								[==>]	***[1]***

Orbit Structure