



13461 - The Influence of Environment on Star Forming Disks

Cycle: 21, Proposal Category: GO

(Availability Mode: SUPPORTED)

INVESTIGATORS

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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) NGC-300-OUTER-1 ANY	ACS/WFC WFC3/UVIS	1	13-Jun-2013 21:57:56.0	yes
02	(2) NGC-300-OUTER-2 ANY	ACS/WFC WFC3/UVIS	1	13-Jun-2013 21:58:06.0	yes

2 Total Orbits Used

ABSTRACT

We propose two single-orbit pointings in the outer NGC 300 disk to extend our measurements of the evolution of the disk structure from 4 scale lengths to 12 scale lengths, matching the radial coverage for the 2 other nearby bulgeless spiral disks, M33 and NGC 2403. With these data, we can measure the star formation rate density to levels well below those probed by GALEX, and we can measure radial trends for different stellar populations. These measurements will distinguish the role of environment in warping the NGC 300 gas disk and will test our tentative result from available HST data that the evolution of the NGC 300 disk mimics that of NGC 2403 and is distinct from that of M33. This result, awaiting

confirmation with resolved stellar photometry of the NGC 300 outer disk, suggests that the relatively isolated environments of NGC 2403 and NGC 300 have resulted in significantly different disk structure evolution for galaxies of very similar mass, metallicity, star formation rate, and morphology.

OBSERVING DESCRIPTION

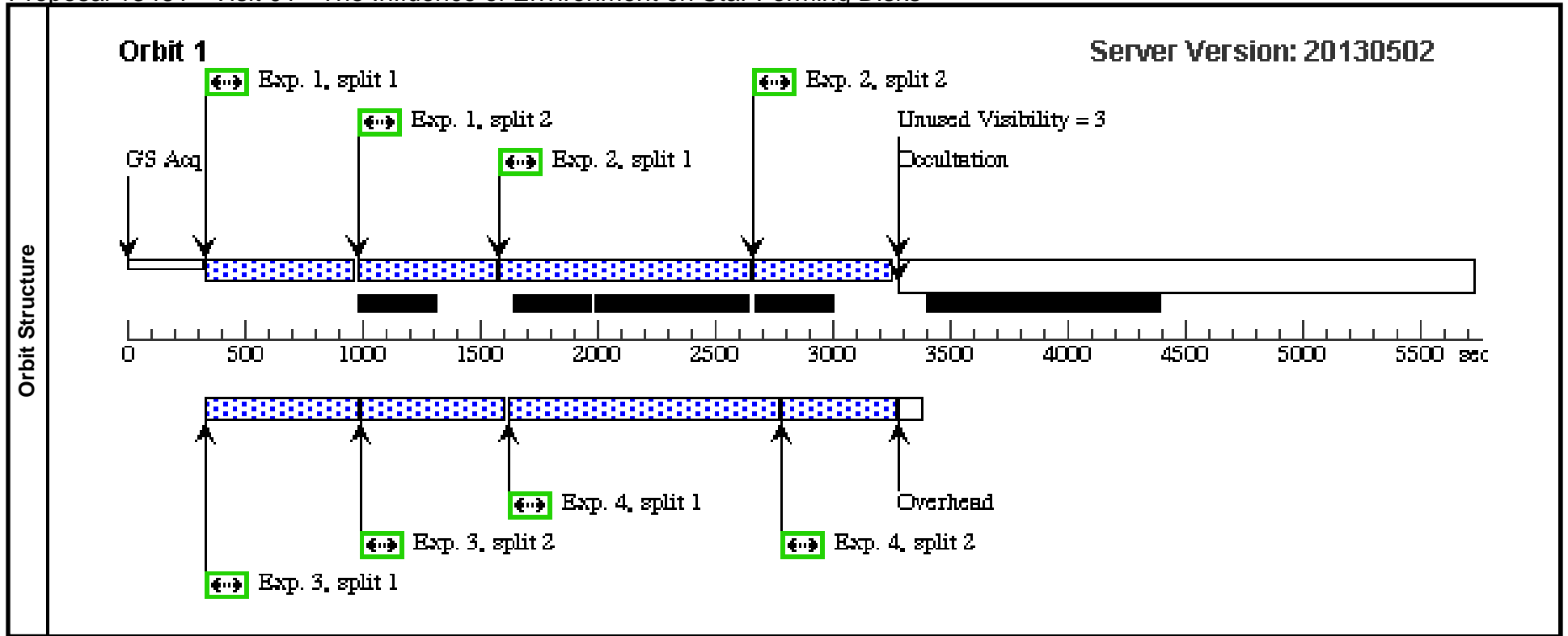
We will take parallel imaging data in F606W and F814W. Obtaining 2 exposures per filter, per camera, per visit. We will not dither so that we can optimally remove cosmic rays from the data.

Proposal 13461 - Visit 01 - The Influence of Environment on Star Forming Disks

Fri Jun 14 01:58:14 GMT 2013

Fixed Targets	#		Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous		
		(1)		NGC-300-OUTER-1	RA: 00 53 25.8730 (13.3578042d) Dec: -37 34 22.89 (-37.57303d) Equinox: J2000		V=26	Reference Frame: ICRS	

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	Outer disk 1 ACS F606W R-1	(1) NGC-300-OUTE	ACS/WFC, ACCUM, WFC	F606W	CR-SPLIT=2	GS ACQ SCENARI O BASE1B3	Prime + Parallel Gro up 1-4 in Visit 01	1119 Secs (894 Secs) [==>427.0 Secs (Split 1)] [==>467.0 Secs (Split 2)]	[1]
	2	Outer disk 1 ACS F814W R-1	(1) NGC-300-OUTE	ACS/WFC, ACCUM, WFC	F814W	CR-SPLIT=2		Prime + Parallel Gro up 1-4 in Visit 01	1118 Secs (1354 Secs) [==>887.0 Secs (Split 1)] [==>467.0 Secs (Split 2)]	[1]
	3	Outer disk 1 WFC3 F606 W	ANY	WFC3/UVIS, ACCUM, UVIS	F606W	CR-SPLIT=2		Prime + Parallel Gro up 1-4 in Visit 01	400 Secs (1000 Secs) [==>500.0 Secs (Split 1)] [==>500.0 Secs (Split 2)]	[1]
	4	Outer disk 1 WFC3 F814 W	ANY	WFC3/UVIS, ACCUM, UVIS	F814W	CR-SPLIT=2		Prime + Parallel Gro up 1-4 in Visit 01	300 Secs (1500 Secs) [==>1010.0 Secs (Split 1)] [==>490.0 Secs (Split 2)]	[1]



Proposal 13461 - Visit 02 - The Influence of Environment on Star Forming Disks

Fri Jun 14 01:58:16 GMT 2013

Fixed Targets	#		Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
		(2)	NGC-300-OUTER-2	RA: 00 52 30.6526 (13.1277192d) Dec: -37 30 13.78 (-37.50383d) Equinox: J2000		V=26	Reference Frame: ICRS

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	Outer disk 2 ACS F606W R-2	(2) NGC-300-OUTE	ACS/WFC, ACCUM, WFC	F606W	CR-SPLIT=2	GS ACQ SCENARI O BASE1B3	Prime + Parallel Gro up 1-4 in Visit 02	1119 Secs (894 Secs) [==>427.0 Secs (Split 1)] [==>467.0 Secs (Split 2)]	[1]
	2	Outer disk 1 2ACS F814 W	(2) NGC-300-OUTE R-2	ACS/WFC, ACCUM, WFC	F814W	CR-SPLIT=2		Prime + Parallel Gro up 1-4 in Visit 02	1118 Secs (1354 Secs) [==>887.0 Secs (Split 1)] [==>467.0 Secs (Split 2)]	[1]
	3	Outer disk 2 WFC3 F606 W	ANY	WFC3/UVIS, ACCUM, UVIS	F606W	CR-SPLIT=2		Prime + Parallel Gro up 1-4 in Visit 02	400 Secs (1000 Secs) [==>500.0 Secs (Split 1)] [==>500.0 Secs (Split 2)]	[1]
	4	Outer disk 2 WFC3 F814 W	ANY	WFC3/UVIS, ACCUM, UVIS	F814W	CR-SPLIT=2		Prime + Parallel Gro up 1-4 in Visit 02	300 Secs (1500 Secs) [==>1010.0 Secs (Split 1)] [==>490.0 Secs (Split 2)]	[1]

