



12756 - X-raying the spectacular star-forming trail behind IC 3418

Cycle: 19, 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) IC-3418-POS1 (2) IC-3418-POS2	ACS/WFC WFC3/UVIS	4	01-Sep-2011 21:31:41.0	yes

4 Total Orbits Used

ABSTRACT

The ICM has long been proposed to play a vital role in galaxy evolution in clusters, through stripping of the cold gas. Studies of gaseous tails behind cluster late-type galaxies have shed light on the energy transfer in the multi-phase gas, demonstrated by the recent discoveries of X-ray tails, intracluster star formation and ULXs in the stripped gas. It is now known that star formation indeed happens commonly in the stripped ISM, but a lot of detail is still unknown. We propose a 35 ks ACIS-S observation of a dwarf galaxy with a remarkable star-forming trail in the Virgo cluster. Its proximity provides an unprecedented opportunity to study the evolution of the stripped gas, intracluster X-ray binaries and star formation. Joint HST

Proposal 12756 (STScI Edit Number: 0, Created: Thursday, September 1, 2011 8:31:48 PM EST) - Overview and EVLA data observations are also requested.

OBSERVING DESCRIPTION

We will use WFC3 and ACS to study the dwarf galaxy IC 3418 and its star-forming trail in the Virgo cluster. The WFC3 F275W data in one orbit will be used to study the young star clusters in the galaxy and the gaseous tail. We will also get the F475W and F814W data. The data will be compared with the similar data we have for ESO 137-001 and ESO 137-002 in A3627.

Proposal 12756 - Visit 01 - X-raying the spectacular star-forming trail behind IC 3418

Fri Sep 02 01:31:48 GMT 2011

Visit	Proposal 12756, Visit 01 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: (none)					
	#	Primary Pattern	Secondary Pattern	Exposures		
Patterns	(1)	Pattern Type=WFC3-UVIS-MOS-DITH-LINE Purpose=MOSAIC Number Of Points=3 Point Spacing=2.4 Line Spacing= Coordinate Frame=POS-TARG Pattern Orientation=85.754 Angle Between Sides= Center Pattern=true		(3), (4)		
	(2)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=3.011 Line Spacing= Coordinate Frame=POS-TARG Pattern Orientation=85.28 Angle Between Sides= Center Pattern=false		(1-2), (5-6)		
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(1)	IC-3418-POS1	RA: 12 29 43.8060 (187.4325250d) Dec: +11 24 6.16 (11.40171d) Equinox: J2000		V=15	Reference Frame: ICRS
	<i>Comments: Position 1</i>					
(2)	IC-3418-POS2	RA: 12 29 51.8400 (187.4660000d) Dec: +11 22 32.31 (11.37564d) Equinox: J2000		V=15	Reference Frame: ICRS	
<i>Comments: Position 2</i>						

Proposal 12756 - Visit 01 - X-raying the spectacular star-forming trail behind IC 3418

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	(1) IC-3418-POS1	ACS/WFC, ACCUM, WFC	ACS/WFC, ACCUM, WFC	F814W			Pattern 2, Exps 1-2 in Visit 01 (2)	339 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[1]
	2	(1) IC-3418-POS1	ACS/WFC, ACCUM, WFC	ACS/WFC, ACCUM, WFC	F475W			Pattern 2, Exps 1-2 in Visit 01 (2)	728 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[1]
	3	(1) IC-3418-POS1	WFC3/UVIS, ACCUM, UVIS-FIX	WFC3/UVIS, ACCUM, UVIS-FIX	F275W			Pattern 1, Exps 3-3 in Visit 01 (1)	882 Secs [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)]	[2]
	4	(2) IC-3418-POS2	WFC3/UVIS, ACCUM, UVIS-FIX	WFC3/UVIS, ACCUM, UVIS-FIX	F275W			Pattern 1, Exps 4-4 in Visit 01 (1)	882 Secs [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)]	[3]
	5	(2) IC-3418-POS2	ACS/WFC, ACCUM, WFC	ACS/WFC, ACCUM, WFC	F814W			Pattern 2, Exps 5-6 in Visit 01 (2)	339 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[4]
	6	(2) IC-3418-POS2	ACS/WFC, ACCUM, WFC	ACS/WFC, ACCUM, WFC	F475W			Pattern 2, Exps 5-6 in Visit 01 (2)	728 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[4]



