

GALEX DATA GLOSSARY

ACS	Attitude Control System
AIS	All-sky Imaging Survey [EXPTIME=100 s]
All-sky survey tile	A tile composed of multiple, separate dithered pointings, called legs, occurring within a single eclipse.
ATS	Absolute Time Sequence, a list of Spacecraft and Instrument commands accompanied by absolute command execution times.
BFA	Back Focal Assembly
CAG	Calibration Grism, a calibration program designation
CAI	Calibration Imaging, a calibration program designation
CAO	Calibration Opaque, a calibration program designation
CRP	Count Rate Protection
cps	counts per second
DIB	Data Interface Box (part of FEE)
DIS	Deep Imaging Survey [EXPTIME=30,000 s]
Dither	A controlled motion of the satellite to move the telescope boresight in a tight, slow spiral pattern that moves outward to 1.5' diameter across the sky.
Dose	Number of detected photon counts at a each location on a detector
DPU	(Instrument) Data Processing Unit, which contains most of the instrument electronics and commands or controls the rest. The electronics not in the DPU are the FEE , and thermal sensors, heaters, and mechanisms and their sensors.
DSS	Deep Spectroscopic Survey [EXPTIME=1,500,000 s]
Eclipse	Time interval during which the Sun is occulted by the Earth during a particular orbit of the spacecraft, typically 1800-2000 sec in length. All GALEX observations occur while GALEX is in eclipse. One target is observed per eclipse. The data acquired during an eclipse is sometimes referred to as an eclipse.
EE	encircled energy
EXPTIME	Nominal exposure time in seconds at each location in a GALEX survey.
FEE	Front End Electronics for Detector operation
FSW	Flight software
FUV	Far Ultraviolet detector (1344 – 1786 Å)
GALEX	Galaxy Evolution Explorer
Grism	A ruled prism which disperses the light into a spectrum. The GALEX grism is slitless so it acts on the entire field of view. (See the Mission & Instrument Overview in GRI documentation.)
GROW	Grism rotator and optical wheel mechanism. The optical wheel places one of three optics in the optical beam between the telescope and the detector. These are and imaging window, a grism
HK	House Keeping (data)
IOC	In-Orbit Checkout
Leg	A single, dithered pointing within an all-sky survey tile .
MCP	Microchannel Plate, the high-voltage electron-multiplier array that is the basis for the GALEX detectors.
MIS	Medium-Imaging Survey [EXPTIME=1500 s]
MOC	Mission Operations Center
MPS	Mission Planning System, semi-automatic ground software at the SOC and MOC used to plan observations and create the weekly ATS .
MSS	Medium Spectroscopic Survey [EXPTIME=100 ksec]
NGS	Nearby Galaxy Survey [EXPTIME=1500 s]
NUV	Near Ultraviolet detector (1771 – 2831 Å)
Observation	The acquisition of photon data from a region of the sky during a single orbital night (eclipse).
ObsFile	Observation commands generated by the SOC to be sent to the spacecraft
OOL	Out Of Limit (a value for a housekeeping parameter that is outside a preferred range)
PA	Passive Analog (thermistor temperature read by the spacecraft)
PHA	Pulse Height Analyzer
PhotoObj	Extracted objects from direct images
Plan	The requirements, constraints, and priorities for a series of observations of a single target. Requirements might include minimum exposure time and predecessor targets. Constraints may include start and end dates and South Atlantic Anomaly avoidance flags. Priority is used to create a hierarchy of plans based on a simple rank order scheme. These are incorporated into the Mission Planning System .
Pointing	Generic term referring to the location on the sky of a single, dithered GALEX field of view. A single tile or a target may consist of one or more pointings.
Primary Tile	A tile whose center coincides with a non-AIS target center or whose legs coincide with all-sky survey leg centers. Thus a target can be roughly described as a primary tile plus an optical wheel setting.
Programs	A collection of plans designed to accomplish a particular scientific goal. This can include survey programs, calibration programs and targeted observation programs.
PSF	Point Spread Function, the distribution of light in an image of an unresolved object
PTAG	Photon Tag (to temporally delimit raw photon data in the telemetry stream)
QDE	Quantum Detector Efficiency
Region	A pre-defined area on the sky where one or more targets (see list below) are clustered. A region is used for planning purposes.
RTS	Relative Time Sequence, a list of Spacecraft and Instrument commands accompanied by relative command execution times.
SAA	South Atlantic (Magnetic) Anomaly, in which elevated radiation levels require reduced detector high voltage, and no data is taken
SC	Spacecraft
SDSS	Sloan Digital Sky Survey
Secondary Tile	A tile with no single target counterpart, i.e., a secondary tile's photon data will come from multiple targets . Note that no data from secondary tiles exist in the GRI release.
SOC	Science Operations Center
SODA	Science Operations and Data Analysis
SpecExtract	Data describing each spectral extraction (extraction type may be optimal (default) or simple boxcar)
SpecFlux	Spectrum consisting of wavelengths, fluxes, & error tables
SpecStrip	2-D spectrum
SSR	Solid State Recorder (non-volatile memory on spacecraft used to store science data and housekeeping telemetry)
Sub-visit	A sequential count of legs detected and processed by the pipeline (see leg and all-sky survey tile). If all data for an AIS tile reach ground and are processed normally, the sub-visit number will correspond to the leg number, but if there are data gaps or the processing is aberrant in some way, legs may be missing (or possibly split in two), but sub-visit numbering will always be sequential. (Note the rough correspondence between visit vs. eclipse , and sub-visit vs. leg .)
Survey	A type of observation designed to study the sky at given depth (exposure time), with a given sky coverage and location, and in Imaging, Grism, or Opaque GROW mode. (See Survey Summary in the GRI documentation.)
Target	An area of sky observed by GALEX together with the spacecraft-motion and instrument commands used for that observation. Note that because the commanded spacecraft motion can be complex, a target can have a complex shape. In particular, All-sky Imaging Survey (AIS) targets are composed of several separate pointings, which may or may not overlap. Also note that the same geometric part of the sky (see Primary Tile) may be observed in both direct and grism modes, making two targets. A target can be roughly described as a primary tile plus an optical wheel setting. Targets may overlap one another. Most targets will consist of a single, roughly-circular, 1.25 degree diameter GALEX field of view, or, for AIS targets, a series of overlapping fields of view.
TBD	To Be Determined
TDC	Time to Digital Converter (part of FEE detector electronics)
Tile	An area of sky for which the pipeline has generated (or will generate) an image using GALEX photon data. A tile may have an arbitrary shape (see Target), but in general will comprise one or more images with north in the +Y direction. (See Primary Tile , and Secondary Tile .) Most tiles will consist of a single, roughly-circular, 1.25 degree diameter GALEX field of view, or, for AIS tiles, a series of overlapping fields of view.
TLM	Telemetry
VC	Virtual (telemetry) Channel (VC18=spacecraft and VC32=instrument) defined in the protocol for transmission and processing of data from the satellite
Visit	The planned sequential repeated count of an observation from a single eclipse of a single target . For example, if 10 widely-separated eclipses are allocated for observing a particular target, the visits will numbered 1 through 10. Note that since not all planned observations are made successfully, and some data may not reach ground, some visits may be missing from a sequence. See also sub-visit .
VisitData	Processed data from a single visit
WCS	World Coordinate System (FITS CRVAL1,CDELTA2,CROTA2,etc.)
WSS	Wide Spectroscopic Survey [EXPTIME=30 ksec]