

Glossary

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The following is a Glossary of common terms and acronyms found throughout this *Handbook*.

2MASS	Two-Micron All Sky Survey
ADC	Atmospheric Dispersion Corrector
ADU	Analog-to-Digital Unit (see DN)
AURA	Association of Universities for Research in Astronomy
CCD	Charge-coupled device, a common detector for the visible waveband
Bias	The nearly constant pedestal voltage, seen as an offset from zero DN, of a raw CCD frame. Also refers to a zero-second exposure used to determine the spatial structure of the bias level in the CCD
CTIO	Cerro Tololo Inter-American Observatory, located near La Serena, Chile and operated by NOAO/AURA for the NSF
Digital Average	During the read-out of an infrared detector array, two or more sequential reads of a single pixel are averaged to obtain the final value before the next pixel is read
Dither	An observing sequence of spatially overlapping exposures (with small relative offsets) intended to image a continuous region of sky free of interdetector gaps and other array defects
DN	Digital Number, or the quantized value of a pixel prior to conversion to electrons (or detected photons) via the detector gain. Synonymous with ADU.
DQM	Data quality mask
E2E	End-to-End system: The system that manages the flow of information and data from the database of approved observations, through data acquisition, transport from the telescope to an archive center, pipeline processing, and retrieval by an end-user
FITS	Flexible Image Transport System, the standard for data interchange in astronomy
Flat-field	Generally refers to an image of a uniform source in the relevant coordinates (spatial or wavelength/frequency), which is used to calibrate variations in the detector pixel-to-pixel sensitivity

FoV	Field of view (generally, for an imaging device or a telescope)
Fowler Sample	During the read-out of an infrared detector, a Fowler Sample refers to multiple, sequential reads of the entire array; this procedure is performed both at the start and at the end of an exposure, and the mean difference is retained
FPA	Focal plane array: Multiple, abutting detectors mounted in the focal plane of a camera, arranged in an array
IR	Infrared portion of the spectrum, which for a ground-based observatory is generally restricted to the near-IR range: 0.9–2.5 μm
KPNO	Kitt Peak National Observatory, located near Tucson, Arizona, USA and operated by NOAO/AURA for the NSF
Map	An observing sequence of spatially adjacent exposures (usually with some overlap) intended to image a region of sky that is significantly larger than the camera FoV
MEF	Multi-Extension FITS file, i.e., a file containing multiple data structures such as tables or binary images
NEWFIRM	NOAO Extremely Wide-Field Infrared Mosaic camera
NOAO	National Optical Astronomy Observatory
NSA	NOAO Science Archive
NSF	National Science Foundation
PI	Principal investigator, generally of an approved observing program
PSF	Points spread function
SMARTS	Small and Moderate Aperture Research Telescope System, located at CTIO near La Serena, Chile, and operated by a consortium of several universities and NOAO
SOAR	SOuthern Astrophysical Research telescope, located on Cerro Pachón near La Serena, Chile, and operated by a consortium of the Brazilian Ministry of Science, NOAO, the University of North Carolina, and Michigan State University
SOI	SOAR Optical Imager
VO	Virtual Observatory: Generally refers to the global, interconnected data repositories, supporting services, and tools that have been built by IVOA member organizations of the International Virtual Observatory Alliance
WCS	World Coordinate System, generally refers to the mathematical mapping from detector coordinates to a physical coordinate system, such as position in Right Ascension and Declination, as defined by FITS conventions
WIYN	A consortium of the University of Wisconsin, Indiana University, Yale University, and NOAO operating an observatory on Kitt Peak