

Glossary

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

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| 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 |

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| 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 |