# Rubin Observatory Glossary and Acronym Definitions

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These are the full contents of the glossary definition file Tags are used by generateAcronyms.py to differentiate between overloaded entries. For information and usage see `https://lsst-texmf.lsst.io/lsstdoc.html#acronyms-or-glossaries`.

| Entry | Description | Tags |
|---|---|---|
| 1D | One-dimensional | Gen |
| 2D | Two-dimensional | Gen |
| 2MASS | Two-Micron All Sky Survey | Gen |
| 3D | Three-dimensional | Gen |
| A/D | Analogue-to-Digital (converter) | Gen |
| AA | Authentication and Authorization | TS |
| AAAC | Astronomy and Astrophysics Advisory Committee | TS |
| AAAS | American Association for the Advancement of Science | Gen |
| AAPT | American Association of Physics Teachers | TS |
| AAS | American Astronomical Society | Gen |
| AAVSO | American Association of Variable Star Observers | TS |
| ABI | Application Binary Interface | Gen |
| ABOD | AURA Board of Directors | Gen |
| AC | Alternating Current | Gen |
| ACCS | Auxiliary Camera Control System | LSST DM |
| ACGIH | American Conference of Governmental Industrial Hygienists | Gen |
| ACM | Award Cash Management Service | OPS |
| ACWP | Actual Cost of Work Performed | Gen |
| AD | Associate Director | OPS |
| ADASS | Astronomical Data Analysis Software and Systems | Gen |
| ADC | atmospheric dispersion corrector | TS |
| ADC | Analogue-to-Digital Converter | Gen |
| ADCO | Associate Director for Chilean Operations | TS Gen |
| ADQL | Astronomical Data Query Language | Gen |
| ADS | Astrophysics Data System | OPS Gen |
| ADU | Analogue-to-Digital Unit | Gen |
| AED | Automated External Defibrillator | OPS |

| | | |
|---|---|---|
| AEON | Alert Event Observatory Network | OPS Sci |
| AGN | active galactic nuclei | TS |
| AGN | Active Galactic Nuclei | OPS |
| AGU | American Geophysical Society | TS |
| AIP | American Institute of Physics | Gen |
| AISES | American Indian Science and Engineering Society | DEI |
| AIT | Assembly Integration and Test | Gen |
| AIV | Assembly Integration and Verification | Gen |
| ALD | Associate Lab Director | OPS DOE |
| ALICE | A Large Ion Collider Experiment | Gen |
| ALMA | Atacama Large Millimeter Array (ESO) | Gen |
| AMCL | AURA Management Council for LSST | LSST |
| AMCR | AURA management Council for Rubin Observatory | OPS Rubin |
| AMD | Advanced Micro Devices | OPS |
| AMPATH | Americas Pathway (Network) | Gen |
| ANSI | American National Standards Institute | Gen OPS |
| ANTARES | Arizona-NOA Temporal Analysis and Response to Events System | OPS |
| AOB | Any Other Business | Gen |
| AOC | AURA Oversight Council | OPS |
| AOS | Active Optics System | TS |
| AOSS | AURA Observatory Support Services | OPS |
| AP | Alert Production | LSST DM |
| APDB | Alert Production DataBase | DM |
| API | Application Programming Interface | Gen |
| APS | American Physical Society | TS |
| arcmin | arcminute minute of arc (unit of angle) | Gen |
| arcsec | arcsecond second of arc (unit of angle) | Gen |
| ASAP | As Soon As Possible | Gen |
| ASCII | American Standard Code for Information Interchange | Gen |
| ASDC | ASI Science Data Center (Italy) | OPS |
| ASI | Agenzia Spaziale Italiana | OPS |
| ASP | Astronomical Society of the Pacific | TS |
| AST | NSF Division of Astronomical Sciences | TS |
| AT | Auxiliary Telescope | TS |
| ATCA | Advanced Telecommunications Architecture | TS |
| ATCS | Auxiliary Telescope Control System | TSSW |

| | | |
|---|---|---|
| ATLAS | A Toroidal LHC Apparatus | Gen |
| ATM | Adaptavist Test Management | LSST DM |
| AU | deprecated acronym for astronomical unit; use au instead | Gen |
| au | astronomical unit | Gen |
| AURA | Association of Universities for Research in Astronomy | Gen |
| AWIS | Association for Women in Science | DEI |
| AWS | Amazon Web Services | Gen |
| B | Byte (8 bit) | Gen |
| b | bit | Gen |
| BAC | Budget At Complete | Gen |
| BAO | Baryon Acoustic Oscillations | Sci |
| BCE | Before Common Era | Gen |
| BCR | Baseline Change Request | CAM |
| BCWP | Budgeted Cost of Work Performed | Gen |
| BCWS | Budgeted Cost of Work Scheduled | Gen |
| BDC | Base Data Center | DM IT |
| BGP | Border Gateway Protocol | IT |
| BEE | back-end electronics | TS |
| BJD | barycentric corrected Julian date | TS |
| BNF | Backus-Naur Form | Gen |
| BNL | Brookhaven National Laboratory | Gen |
| BOE | Basis of Estimate | Gen |
| BOF | Birds of a Feather (Sessions at ADASS) | Gen |
| BPS | Batch Production Service | DF LDF DM |
| Bps | Bytes per second | Gen |
| bps | bit(s) per second | Gen |
| BTU | British Thermal Unit | OPS |
| CA | Control (or Cost) Account | Gen |
| CADC | Canadian Astronomy Data Centre | Gen |
| CAM | CAMera | LSST DM |
| CAM | Control (or Cost) Account Manager | Gen |
| CAOM | Common Archive Observation Model | DM Gen |
| CAS | Central Administrative Services | Adm |
| CASNET | AURA's financial reporting database | Adm |
| CB | Configuration Baseline | LSST DM |
| CBP | Collimated Beam Projector | DM LSST OPS |

| | | |
|---|---|---|
| CC | Change Control | Gen |
| CC-IN2P3 | Centre de Calcul de l'IN2P3 | Gen |
| CCB | Change Control Board | LSST DM |
| CCD | Charge-Coupled Device | Gen |
| CCOB | Camera Calibration Optical Bench | LSST DM |
| CCP | Change Control Process | Adm |
| CCS | Camera Control System | LSST DM |
| CDN | Content Delivery Network | DM IT |
| CDS | Centre de Donnes astronomiques de Strasbourg | Gen |
| CEC | International in-kind Contribution Evaluation Committee | LSST |
| CEE | Communications, Education, and Engagement | OPS OIR |
| CEP | Cost Estimating Plan | OPS |
| CEPP | COVID-19 Exposure Prevention Plan | OPS |
| CERN | European Organization for Nuclear Research | Gen |
| CET | Community Engagement Team | OPS OIR |
| CfA | (Harvard-Smithsonian) Center for Astrophysics | Gen |
| CFD | computational fluid dynamics | TS |
| CFHT | Canada-France-Hawaii Telescope | TS |
| CFHT-LS | A 5-passband legacy imaging survey conducted at the Canada-France-Hawaii Telescope from 2003-2008 | Sci |
| CFHTLS | Canada-France-Hawaii Telescope Legacy Survey | TS |
| CFR | Code of Federal Regulations | OPS |
| CI | Continuous Integration | Gen |
| CI | Cyber Infrastructure | Petabytes |
| CIS | Computer Infrastructure Support | TS |
| CLP | Chilean Peso | OPS |
| CM | Configuration Management | LSST DM |
| CMB | Cosmic Microwave Background | Sci OPS |
| CMDB | Configuration Management Database | LSST DM |
| CMMS | Computerized Maintenance Management System | OPS |
| CMOS | complementary metal-oxide semiconductor | TS |
| CNRS | Centre national de la recherche scientifique | Gen |
| ComCam | The commissioning camera is a single-raft, 9-CCD camera that will be installed in LSST during commissioning, before the final camera is ready. | Gen |

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|---|---|---|
| COMPASS | Catalogues of Objects and Measured Parameters from All Sky Surveys | Gen |
| CORBA | Common Object Request Broker Architecture | Gen |
| COS | Center Operations Services | OPS |
| COTS | Commercial-Off-The-Shelf | Gen |
| COVID | COrona VIrus Disease | Gen |
| CP | catalog prices | TS |
| CPI | Cost Performance Index | Gen |
| CPP | Calibration Production Processing | LSST DM |
| CPR | Cardiopulmonary resuscitation | Gen |
| CPU | Central Processing Unit | Gen |
| CQA | Compliance and Quality Administrator | |
| CR | Change Request | LSST DM |
| CR | Cosmic Ray | Gen |
| CRB | cluster reference boards | TS |
| CRIO | CompactRIO National Instruments | TSSW |
| CRTS3 | Catalina Real-Time Transient Survey | TS |
| CS | citizen science | TS |
| CSA | Cooperative Support Agreement | Gen |
| CSC | Commandable SAL Component | TS |
| CSDC | Community Science Data Center | OPS OIR |
| CSV | Comma Separated Values | Gen |
| CTIO | Cerro Tololo Inter-American Observatory | Gen |
| CV | Curriculum Vitae | Gen |
| DAC | Data Access Center | LSST DM |
| DAF | data access framework | TS |
| DAQ | Data Acquisition System | LSST DM |
| DAX | Data Access Services | LSST DM |
| DB | DataBase | Gen |
| Db | Decibel | Gen |
| DBA | database administrator | TS |
| DBB | Data Backbone | LSST DM |
| DBBBM | Data Backbone Buffer Manager | DM |
| DBMS | DataBase Management System | Gen |
| DC | Data Center | LSST DM |
| DC2 | Data Challenge 2 (DESC) | OPS |

| | | |
|---|---|---|
| DCM | Directorate Communications Manager | OPS |
| DCR | Differential Chromatic Refraction | Gen |
| DCT | Discovery Channel Telescope (Lowell Observatory) | TS |
| DDF | Deep Drilling Fields | OPS |
| DDMPM | Data Management Deputy Project Manager | LSST DM |
| DDN | Data Delivery Network | Gen |
| DDOS | Distributed Denial Of Service | IT Gen |
| DDS | Data Distribution System | TSSW |
| DE | dark energy | TS |
| DEC | Declination | Gen |
| deg | degree; unit of angle | Gen |
| DEI | Diversity, Equity, and Inclusion | DEI |
| DES | Dark Energy Survey | LSST DM OPS |
| DESC | Dark Energy Science Collaboration | LSST DM OPS |
| DESI | Dark Energy Spectroscopic Instrument | LSST DM OPS |
| DETF | Dark Energy Task Force (AAAC/HEPAP joint advisory sub-committee) | TS |
| DF | Data Facility | OPS DF DM |
| DIA | Difference Image Analysis | DM |
| DIMM | Differential Image Motion Monitor | Gen |
| DKIST | Daniel K. Inouye Solar Telescope | OPS |
| DLS | Deep Lens Survey | TS |
| DM | Data Management | LSST DM |
| DM-SST | DM System Science Team | LSST DM |
| DMCCB | DM Change Control Board | LSST DM |
| DMCS | Data Management Control System | LSST DM |
| DMIS | DM Interface Scientist | LSST DM |
| DMLT | DM Leadership Team | LSST DM |
| DMO | Data Management Organization | LSST DM |
| DMOC | Data Management Operations Chile | TS |
| DMOG | Data Management Operations Group | TS |
| DMPM | Data Management Project Manager | LSST DM |
| DMQA | Data Management Quality Assurance | LSST DM |
| DMS | Data Management Subsystem | LSST DM |
| DMS-REQ | Data Management System Requirements prefix | DM |
| DMSE | Data Management System Engineer | LSST DM |

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|---|---|---|
| DMSR | DM System Requirements; LSE-61 | LSST DM |
| DMSS | DM Subsystem Scientist | LSST DM |
| DMSST | DM System Science Team | LSST DM |
| DMTN | DM Technical Note | LSST DM |
| DMTR | DM Test Report | LSST DM |
| DNS | Domain Name Service | OPS |
| DOE | Department of Energy | Gen |
| DoF | Degree(s) of Freedom (also known as DOF) | Gen |
| DOI | Digital Object Identifier | DM OPS |
| DOM | Document Object Model | Gen |
| DoNM | Date of Next Meeting | Gen |
| DOS | Data Operations Services | OPS OIR |
| DOT | U.S. Department of Transportation | OPS |
| DP | Data Production | OPS |
| DP0 | Data Preview 0 | OPS |
| DP1 | Data Preview 1 | OPS |
| DP2 | Data Preview 2 | OPS |
| DPAC | Data Processing and Analysis Consortium (Gaia) | Gen |
| DPC | Data Policy Committee | OPS |
| DPDD | Data Product Definition Document | LSST DM |
| DPP | Data Products Processing | TS |
| DQ | data quality | TS |
| DQA | data quality assurance | TS |
| DR | Data Release | LSST DM |
| DR1 | Data Release 1 | OPS |
| DR2 | Data Release 2 | OPS |
| DR10 | Data Release 10 | OPS |
| DR11 | Data Release 11 | OPS |
| DRB | Data Release Board | OPS |
| DRP | Data Release Production | LSST DM |
| DS9 | Deep Space 9 (specific astronomical data visualisation application; SAOImage) | Gen |
| DTN | Data Transfer Node | LSST DM |
| DUNE | Deep Underground Neutrino Experiment | Sci |
| DWDM | Dense Wave Division Multiplex | Gen LSST DM |
| EA | enterprise architect | TS |

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|---|---|---|
| EAC | Estimate At Completion | LSST DM |
| EB | ExaByte | Gen |
| EDC | EPO Data Center | OPS EPO |
| EDR | early data release | TS |
| EE | engineering estimate | TS |
| EEPROM | Electrically Erasable Programmable Read-Only Memory | Gen |
| EFD | Engineering and Facility Database | LSST DM |
| EIE | European Industrial Engineering - Italian engineering company (Dome) | LSST DM |
| EOS | Engineering Operations Services | OPS |
| EPA | Environmental Protection Agency | Gen |
| EPLS | Excludable Parties List | TS |
| EPO | Education and Public Outreach | LSST DM |
| EPOC | Education and Public Outreach Center | OPS |
| ESA | European Space Agency | Gen |
| ESAC | European Space Astronomy Centre | Gen |
| ESD | electrostatic discharge | TS |
| ESNet | Energy Sciences Network | Gen |
| ESO | European Southern Observatory | OPS |
| ET | exposure time | TS |
| ETC | Estimate To Complete | Gen LSST DM |
| ETL | extract-transform-load | TS |
| ETS | engineering and technical devices | TS |
| ETU | Engineering Test Unit | LSST DM |
| EUPS | Extended Unix Product System | LSST DM |
| eV | electron-Volt | Gen |
| EVM | Earned Value Management | Adm Gen |
| EVMS | Earned Value Management System | Adm Gen |
| EXIST | Energetic X-ray Imaging Survey Telescope | TS |
| F2F | Face 2 Face (meeting) | DM |
| FAQ | Frequently Asked Question | Gen |
| FAR | Federal Acquisition Regulations | TS |
| FDP | federated data product | TS |
| FDR | Final Design Review | LSST DM |
| FEA | Finite Element Analysis | OPS |
| FEC | Front-End Cage | TS |

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|---|---|---|
| FEE | Front-End Electronics | TS |
| FFRDC | Federally Funded Research and Development Center | Gen OPS |
| FFT | Fast Fourier Transform | Gen |
| FGCM | Forward Global Calibration Model | DM |
| FGST | Fermi Gamma-ray Space Telescope | Sci OPS |
| FIFO | First In First Out | Gen |
| FITS | Flexible Image Transport System | Gen |
| FIU | Florida International University | Gen |
| FK5 | Fifth Fundamental Catalogue | Gen |
| FLOP | FLoating point Operation | IT |
| FLOPS | FLoating point Operation per Second | IT |
| FMEA | failure modes and effect analysis | TS |
| FMECA | Failure Modes, Effects, and Causality Analysis | OPS OIR |
| FNAL | Fermi National Accelerator Lab | OPS |
| FOA | Facilities Operations in Arizona | OPS |
| FOC | Facilities Operations in Chile | OPS |
| FOH | Facilities Operations in Hawai'i | OPS |
| FoM | Figure of Merit | Gen |
| FoV | Field of View (also denoted FOV) | Gen |
| FOV | field of view | TS |
| FPA | Focal Plane Array | LSST |
| FPD | Fundamental Physics Directorate | OPS |
| FPGA | Field-Programmable Gate Array | Gen |
| FPRD | functional performance requirements document | TS |
| FPSL | Forced-Photometry Sensitivity Limit | TS |
| FS | File System | Gen |
| FSAAS | Filesystem as a Service | IT |
| FTE | Full-Time Equivalent | Adm Gen |
| FUSE | a user space filesystem framework | IT |
| FWHM | Full Width at Half-Maximum | Gen |
| FWP | Field Work Proposals | OPS |
| FY | Financial Year | OPS DM |
| FY21 | Financial Year 21 | OPS |
| GAVO | German Astronomical Virtual Observatory | Gen |
| GB | Gigabyte | Gen |
| Gb | Gigabit | Gen |

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|---|---|---|
| GC | NSF Grant Conditions | TS |
| gcc | The GNU Compiler Collection; a C and C++ compiler | Gen |
| GCE | Google Compute Engine | IT |
| GCN | GRB Coordinates Network | Gen |
| GCP | Google Cloud Platform | IT |
| GCS | Generic Control System | TSSW |
| GDS | Guider Data System | TS |
| GFLOP | Giga FLOP | Gen |
| GFLOPS | Giga FLOP per Second | Gen |
| GID | Group Identifier | IT |
| GIS | Global Interlock System | |
| GLAST | Gamma-Ray Large Area Space Telescope | TS |
| GLONASS | GLObal NAvigation Satellite System | Gen |
| GMT | Giant Magellan Telescope | OPS |
| GMU | George Mason University | TS |
| GNU | GNU's Not Unix! An operating system and an extensive collection of free computer software | OPS DM |
| GPFS | General Parallel File System (now IBM Spectrum Scale) | Gen |
| GPL | GNU Public License | Gen |
| GPS | Global Positioning System | Gen |
| GPU | Graphics Processing Unit | Gen |
| GRB | Gamma-Ray Burst | Gen |
| GST | Greenwich Sidereal Time | Gen |
| GUI | Graphical User Interface | Gen |
| GW | Gravitational Wave | Sci OPS |
| HBCU | Historically Black Colleges and Universities | DEI |
| HD | historical data | TS |
| HDD | Hard Disk Drive | DM Gen |
| HEALPix | Hierarchical Equal-Area iso-Latitude Pixelisation | Gen |
| HEASARC | NASA's Archive of Data on Energetic Phenomena | Gen |
| HEP | High Energy Physics | Gen |
| HEPAP | HEP Advisory Panel | TS |
| HIPS | Hierarchical Progressive Survey | Gen |
| HPC | High Performance Computing | DM |
| HQ | Head Quarters | OPS |
| HR | Human Resources | Gen |

| | | |
|---|---|---|
| HSC | Hyper Suprime-Cam | Gen |
| HSI | Hispanic Serving Institutions | DEI |
| HST | Hubble Space Telescope | Gen |
| HTC | High Throughput Computing | DM |
| HTM | Hierarchical Triangular Mesh | Gen |
| HTML | HyperText Markup Language | Gen |
| HTTP | HyperText Transfer Protocol | Gen |
| HVAC | Heating, Ventilation, and Air Conditioning | OPS |
| HW | HardWare | Gen |
| I&T | Integration and Test | Gen |
| IAM | Identity and Access Management | IT |
| IAU | International Astronomical Union | Gen |
| IBM | International Business Machines | Gen |
| ICBS | International Communications and Base Site | LSST DM |
| ICD | Interface Control Document | Adm |
| ICoD | Interface Compliance Document | Adm |
| IDA | Interface Design Artifact | TS |
| IDAC | Independent Data Access Center | DM OPS |
| IDF | Interim Data Facility | OPS |
| IDL | Interactive Data Language | Gen |
| IIP | image ingest and processing | TS |
| ImSim | Image Simulation | Sims |
| IN2P3 | Institut National de Physique Nucléaire et de Physique des Particules | Gen |
| IoA | Institute of Astronomy (Cambridge; also denoted IOA) | Gen |
| IP | Internet Protocol | DM |
| IPC | International Program Coordinator | OPS |
| IPAC | No longer an acronym; science and data center at Caltech | Gen |
| IPEDS | Integrated Postsecondary Educational Data System | DEI |
| IPS | Integrated Project Schedule | Adm |
| IR | infrared | TS |
| IRAF | Image Reduction and Analysis Facility | Hist |
| IRNC | International Research Network Connections | TS |
| IRSA | Infrared Science Archive | Gen |
| IRU | indefinable right to use | TS |
| IS | Interface Scientist | LSST DM |

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|---|---|---|
| ISD | Interface Support Document | |
| ISM | interstellar medium | TS |
| ISO | International Standards Organisation | Gen |
| ISR | Instrument Signal Removal | LSST DM |
| IT | Information Technology | Gen |
| ITC | Information Technology Center | LSST DM |
| ITIL | Information Technology Infrastructure Library | Gen |
| ITO | IT Operations | OPS OIR |
| ITSC | Information Technology Services Committee | Adm |
| IVOA | International Virtual-Observatory Alliance | Gen |
| JD | Julian Date | Gen |
| JDBC | Java DataBase Connectivity | Gen |
| JDR | Joint Directors Review | LSST |
| JHU | Johns Hopkins University | Gen |
| JOG | Joint Oversight Group | Adm |
| JPL | Jet Propulsion Laboratory (DE ephemerides) | Gen |
| JRE | Java Runtime Environment | Gen |
| JSON | JavaScript Object Notation | Gen |
| JSR | Joint Status Review | LSST DM |
| JTM | Joint Technical Meeting | LSST DM |
| JVM | Java Virtual Machine | Gen |
| JWST | James Webb Space Telescope (formerly known as NGST) | Gen |
| K8S | Kubernetes provisioning system | IT LSST DM |
| KB | KiloByte | Gen |
| KBO | Kuiper-Belt Object | Gen |
| kbps | kilobits per second | Gen |
| KIPAC | Kavli Institute for Particle Astrophysics and Cosmology | Sci |
| KPM | Key Performance Metric | LSST DM |
| KPMO | Kitt Peak Mountain Operations | OPS |
| KPNO | Kitt Peak National Observatory | OPS |
| KW | Kilowatt | Gen |
| L1 | Lens 1 | TS |
| L2 | Lens 2 | TS |
| L3 | Lens 3 | TS |
| L4 | Lens 4 | TS |
| LAN | Local Area Network | Gen |

| | | |
|---|---|---|
| LAPACK | Linear Algebra PACKage | Gen |
| LASER | Light Amplification by Stimulated Emission of Radiation | Gen |
| LaTeX | (Leslie) Lamport TeX (document markup language and document preparation system) | Gen |
| LATISS | LSST Atmospheric Transmission Imager and Slitless Spectrograph | TS |
| LBT | Large Binocular Telescope | TS |
| LBTO | Large Binocular Telescope Observatory | OPS |
| LCA | Document handle LSST camera subsystem controlled documents | CAM |
| LCLS | Linac Coherent Light Source | Gen |
| LCO | Las Cumbres Observatories | Gen |
| LCR | LSST Change Request | LSST DM |
| LCURM | AIP Liaison Committee on Underrepresented Minorities | DEI |
| LDAP | Lightweight Directory Access Protocol | IT |
| LDF | LSST Data Facility | LSST DM |
| LDM | LSST Data Management (Document Handle) | LSST DM |
| LDO | LSST Document Operations (Document Handle) | LSST OPS |
| LED | Light-Emitting Diode | Gen |
| LEP | LSST EPO (Document Handle) | LSST EPO |
| LF | luminosity function | TS |
| LHC | Large Hadron Collider (at CERN) | Gen |
| LHN | long haul network | TS |
| LIGO | Laser Interferometer Gravitational-Wave Observatory | TS |
| LILA | Links Interconnecting Latin America | TS |
| LISA | Laser Interferometer Space Antenna | TS |
| LLNL | Lawrence Livermore National Laboratory | Gen |
| LOE | Level of Effort | Gen |
| LOP | LSST Operations Plan | TS |
| LOVE | LSST Operations Visualization Environment | LSST DM |
| LOY | LSST Operations Year | OPS |
| LPGL | Lesser Public GNU general License | Gen |
| LPM | LSST Project Management (Document Handle) | LSST DM |
| LSE | LSST Systems Engineering (Document Handle) | LSST DM |
| LSP | LSST Science Platform (now Rubin Science Platform) | LSST DM |
| LSR | LSST System Requirements; LSE-29 | LSST DM |
| LSST | Legacy Survey of Space and Time (formerly Large Synoptic Survey Telescope) | Gen |

| | | |
|---|---|---|
| LSSTC | LSST Corporation | Adm |
| LSSTPO | LSST Project Office | Adm |
| LTS | LSST Telescope and Site (Document Handle) | TS |
| LUT | Look-Up Table | Gen |
| LZ | LUX-ZEPELIN (Dark Matter Mission) | Sci |
| M1 | primary mirror | TS |
| M1M3 | Primary Mirror Tertiary Mirror | LSST |
| M2 | Secondary Mirror | LSST |
| M3 | tertiary mirror | TS |
| MACHO | massive compact halo object | TS |
| MASS | Multi-Aperture Scintillation Sensor | TS |
| MAST | Mikulski Archive for Space Telescopes | Gen |
| MB | MegaByte | Gen |
| Mb | Megabit (1000000 bit) | Gen |
| MBA | main belt asteroid | TS |
| MBE | model-based engineering | TS |
| MBps | Megabits per second | Gen |
| MBSE | model-based systems engineering | TS |
| MBTU | Mega British Thermal Unit | OPS |
| MC | Monte-Carlo (simulation/process) | Gen |
| MCM | Master Control Module | TS |
| MCMC | Monte Carlo Markov Chain | Gen |
| MEMS | micro-electronic mechanical systems | TS |
| MERRA | Modern-Era Retrospective analysis for Research and Applications | NASA |
| MIDAS | Munich Image Data Analysis System (ESO) | Gen |
| MIE | Major Item of Equipment | OPS |
| MJD | Modified Julian Date (to be avoided; see also JD) | Gen |
| MMT | Multiple Mirror Telescope | OPS |
| MNRAS | Monthly Notices of the Royal Astronomical Society | TS |
| MOA | Memo Of Agreement | OPS |
| MOC | Multi Ordered Catalogue | VO DM |
| MODTRAN | MODerate resolution TRANsmission model | TS |
| MOF | Multi-Object Multi-Band Fitting | OPS |
| MOPS | Moving Object Processing System (deprecated; see SSP) | LSST DM |
| MOSFET | Metal-Oxide Semiconductor Field-Electric Transistor | Gen |
| MOU | Memo Of Understanding | OPS |

| | | |
|---|---|---|
| MPA | Max Planck Institute for Astrophysics | Gen |
| MPC | Minor Planet Center | Gen |
| MPO | Memorandum Purchase Order | OPS DOE |
| MPP | Massively Parallel Process | DM |
| MPS | NSF Mathematical and Physical Sciences directorate | OPS |
| MPS/AST | NSF Mathematical and Physical Sciences directorate's Division of Astronomical Sciences | OPS |
| MREFC | Major Research Equipment and Facility Construction | Gen |
| MREN | Montenegrin Research and Education Network | Gen |
| MSB | Most Significant Bit | Gen |
| MSO | Mid-Scale Observatories | OPS OIR |
| MT | Main Telescope | TS |
| MTU | Maximum Transmission Unit | IT NET |
| MTBF | Mean Time Between Failures | OPS |
| MTDC | Modified Total Direct Costs | OPS |
| MTM1M3 | Main Telescope M1M3 | TS |
| MTM2 | Main Telescope Secondary Mirror | TS |
| MTOFC | Main Telescope Optical Feedback Control | TS |
| MTTR | Mean Time To Repair | OPS |
| MYDB | My Database | DM Gen |
| NACME | National Action Council for Minorities in Engineering | DEI |
| NAOJ | National Astronomical Observatory of Japan | Gen |
| NAS | National Academy of Science | Sci |
| NAS | Network Attached Storage | DM |
| NASA | National Aeronautics and Space Administration | Gen |
| NAT | nodal aberration theory | TS |
| NCOA | National Center for Optical-Infrared Astronomy | Gen |
| NCOIRA | (Obsolete now NOIRLab) National Center for Optical and Infrared Astronomy | TS |
| NCR | Non Conformance Report | PMO |
| NCSA | National Center for Supercomputing Applications | Gen |
| NCW | Non Conformance Waiver | PMO |
| NEA | Near-Earth Asteroid | Gen |
| NED | NASA/IPAC Extragalactic Database | Gen |
| NEO | Near-Earth Object | Gen |
| NET | Network Engineering Team | LSST DM |

| | | |
|---|---|---|
| NFPA | National Fire Protection Association | OPS |
| NFS | Network File System | Gen |
| NGSS | Next-Generation Science Standards | OPS |
| NIR | Near Infrared | Sci |
| NIST | National Institute of Standards and Technology (USA) | Gen |
| NLR | National Lambda Rail | TS |
| NMOC | NSF's OIR Lab Management Oversight Council | Gen |
| NOAA | National Oceanic and Atmospheric Administration | Gen |
| NOAO | National Optical Astronomy Observatories (USA) | Gen |
| NOC | Network Operations Center | NET |
| NOGLSTP | National Organization of Gay and Lesbian Scientists and Technical Professionals | DEI |
| NOIR | NSF's National Optical-Infrared Astronomy Research Laboratory; `https://nationalastro.org` | Gen |
| NOS | NSF's OIR Lab Operations Services | OPS OIR |
| NPCF | National Petascale Computing Facility | OPS OIR |
| NRAO | National Radio Astronomy Observatory | Gen |
| NRC | National Research Council | OPS |
| NSB | National Science Board | TS |
| NSBP | National Society of Black Physicists | DEI |
| NSF | National Science Foundation | Gen |
| NSF's OIR Lab | NSF's National Optical-Infrared Astronomy Research Laboratory; `https://nationalastro.org` | Gen |
| NSO | National Solar Observatory | OPS |
| NSS | NOAO Support Services | OPS |
| NTP | Network Time Protocol | OPS |
| NTS | NCSA Test Stand | DM CAM |
| NUV | Near Ultraviolet | Sci |
| NVMe | Non Volatile Memory Express | DM IT |
| NYT | New York Times | Gen |
| OAB | Outreach Advisory Board | EPO |
| OBS | Organisation Breakdown Structure | Gen |
| OC | AURA Observatory Council | OPS |
| OCDD | Operations Concept Definition Document | OPS |
| OCPS | OCS Controlled Pipeline System | TS DM |
| OCS | Observatory Control System | LSST DM |

| | | |
|---|---|---|
| OHEP | Office of High-Energy Physics | TS |
| OI | Organization International | OPS |
| OIR | optical and infrared astronomy | TS |
| OMB | Office of Management and Budget | OPS |
| OODS | Observatory Operations Data Service | DM |
| OPCC | Oficina de Protección de la Calidad del Cielo | OPS |
| OPD | optical path difference | TS |
| OPS | Operations | LSST DM |
| OpSim | Operations Simulation | Sims |
| OPSTN | Operations Technical Note | LSST DM |
| ORR | Operations Readiness Review | OPS |
| OS | Operating System | Gen |
| OSHA | Occupational Safety and Health Administration | OPS |
| OSI | open systems interconnect | TS |
| OSPL | OpenSplice DDS - the underlying messaging system for SAL | TS |
| OSS | Observatory System Specifications; LSE-30 | LSST DM |
| OSX | Macintosh Operating System (obsolete; now macOS) | Gen |
| OTB | Over Target Baseline | Gen |
| OTS | observatory telemetry system | TS |
| PanDA | Production ANd Distributed Analysis system | OPS |
| Pan-STARRS | Panoramic Survey Telescope and Rapid Response System | Gen |
| Parsl | Parallel Scripting Library `http://parsl-project.org/` | DM |
| PB | PetaByte | Gen |
| PBI | Predominantly Black Institution | DEI |
| PCA | Principal Component Analysis | Gen |
| PCB | printed circuit boards | TS |
| PCI | Peripheral Component Interconnect | Gen |
| PCW | Project Community Workshop | LSST DM |
| PD | Program Development | OPS |
| PDAC | Prototype Data Access Center | LSST DM |
| PDF | Portable Document Format | Gen |
| PDF | Probability Density Function | Gen |
| PDR | Preliminary Design Review | LSST DM |
| PDR1 | Public Data Release 1 (HSC) | OPS |
| PDR2 | Public Data Release 2 (HSC) | OPS |
| PDU | Power Distribution Unit | LSST DM |

| | | |
|---|---|---|
| PEP | Project Execution Plan | Adm |
| PFS | Prime Focus Spectrograph | Gen |
| PHA | potentially hazardous asteroids | TS |
| PI | Principle Investigator | Sci OPS |
| PII | personally identifiable information | TS |
| PLL | Phase-Locked Loop | Gen |
| PM | Project Manager | LSST DM |
| PMCS | Project Management Controls System | LSST DM |
| PMM | precision measuring machine | TS |
| PMO | Project Management Office | Adm |
| PMP | (DM) Project Management Plan; LDM-294 | LSST DM |
| POC | Proof Of Concept | Gen |
| POC | People Of Color | DEI |
| POCIT | People Of Color In Tech | DEI |
| POE | POly Esters | OPS |
| POP | Project Operating Plan | LSST OPS |
| POSIX | Portable Operating System Interface | Gen |
| PPDB | Prompt Products DataBase | DM |
| PPE | Personal Protection Equipment | OPS |
| PR | Pull Request | Gen |
| PRC | Procurement Charge | OPS DOE |
| PRT | Personal Research Time | OPS |
| PS | Project Scientist | LSST DM |
| PSD | power spectral density | TS |
| PSF | Point Spread Function | Gen |
| PST | Project Science Team | LSST DM |
| PSTN | Project Science Technical Note | LSST DM |
| PVI | Processed Visit Image | DM |
| PWI | Predominantly White Institution | DEI |
| QA | Quality Assurance | Gen |
| QAP | Quality Assurance Plan | TS |
| QC | Quality Control | Gen |
| QE | quantum efficiency | TS |
| QSERV | LSST Query Services | TS |
| RA | Right Ascension | Gen |
| RAC | Resource Allocation Committee | OPS |

| | | |
|---|---|---|
| RAID | Redundant Array of Inexpensive Disks | Gen |
| RAL | Rutherford Appleton Laboratory (UK) | Gen |
| RAM | Random Access Memory | Gen |
| RAVE | Radial Velocity Experiment (spectroscopic survey) | TS |
| RBSE | Research-Based Science Education (AURA) | OPS |
| RC | Release Candidate | Gen |
| RCC | Raft Control Rate | CAM |
| RCI | Raft Communication Interface | CAM |
| RCM | Raft Communication Module | CAM |
| RDBMS | Relational Database Management System | Gen |
| RDO | Rubin Directors Office | OPS |
| RDP | Rubin Data Production | OPS |
| REB | Readout Electronics Board | LSST DM |
| REN | Research and Education Network | OPS |
| RENATER | Réseau National de télécommunications pour la Technologie l'Enseignement et la Recherche | OPS |
| REO | Rubin Education and Outreach | OPS |
| REST | REpresentational State Transfer | IT |
| REUNA | Red Universitaria Nacional | Gen |
| RFC | Request For Comment | LSST DM |
| RFP | Request For Proposals | PMO |
| RFQ | Request For Quotations | LSST OPS |
| RM | Release Manager | LSST DM |
| RMS | Root-Mean-Square | Gen |
| RNP | Rede Nacional de Ensino e Pesquisa (National Education and Research Network Brazil) | IT |
| ROO | Rubin Observatory Operations | OPS |
| ROOT | Object-oriented data analysis framework developed at CERN | Gen |
| RPF | Rubin system PerFormance | OPS |
| RPM | RPM Package Manager (originally Red Hat Package Manager; now a recursive acronym) | IT |
| RS232C | Standard 25-pin serial connection between computers and modems | Gen |
| RSA | Raft Sensor Array | CAM |
| RSP | Rubin Science Platform | DM |
| RSS | square root of the sum of the squares | TS |

| | | |
|---|---|---|
| RTA | responsible technical authority | TS |
| RTD | Resistance Temperature Detector | OPS |
| RTI | rise time invariance | TS |
| RTM | Raft Tower Module | CAM |
| RTN | Rubin Technical Note | LSST DM |
| RTV | raster to vector | TS |
| S3 | (Amazon) Simple Storage Service | IT |
| SaaS | Software as a Service | Gen |
| SAC | Science Advisory Committee | LSST Adm |
| SACNAS | Society for Advancement of Chicanos/Hispanics and Native Americans in Science | DEI |
| SAL | Service Abstraction Layer | OPS TSSW |
| SAMP | Simple Application Messaging Protocol | Gen |
| SAO | Smithsonian Astrophysical Observatory | Gen |
| SAPP | Science Algorithms, Pipelines, and Products | TS |
| SATA | Serial Advanced Technology Attachment | IT DM |
| SBS | Shared Business Services | OPS OIR |
| SC | Science Collaboration | DM |
| SCADA | Supervisory Control And Data Acquisition | TS |
| SCIDAR | Scintillation Detection And Ranging | TS |
| SCOC | Survey Cadence Optimization Committee | OPS |
| SCOSC | Survey Cadence Optimization Strategy Committee | OPS |
| SDQA | Science Data Quality Assessment | DM LSST |
| SDS | Science array Data acquisition Subsystem | TS |
| SDSS | Sloan Digital Sky Survey | Gen |
| SE | System Engineering | Rubin |
| SED | Spectral Energy Distribution | Sci |
| SEM | Systems Engineering Manager | Adm |
| SEMP | Systems Engineering Management Plan | LSST DM |
| SEWG | Survey Evaluation Working Group | OPS |
| SHA-1 | Secure Hash Algorithm 1 | Gen |
| SHE | Safety, Health, and Environmental | |
| SHPE | Society of Hispanic Professional Engineers | DEI |
| SI | Système International (International System of units defined by ISO) | Gen |
| SIA | Simple Image Access | Gen |

| | | |
|---|---|---|
| SIT | System Integration, Test | LSST OPS |
| SIT-COM | System Integration, Test and Commissioning | LSST OPS |
| SLA | Service Level Agreement | Gen |
| SLAC | SLAC National Accelerator Laboratory | LSST DM |
| SMARTS | Small and Moderate Aperture Research Telescope System | OPS |
| SN | SuperNovae | Sci |
| SO | scientific operations | TS |
| SOAP | Simple Object Access Protocol | Gen |
| SOAR | Southern Astrophysical Research Telescope | Gen |
| SOC | Science Operations Centre | OPS Gaia |
| SODA | Server-side Operations for Data Access | Gen |
| SODAR | sonic detection and ranging | TS |
| SOF | Single-Object Fitting | OPS |
| SOG | science operations group | TS |
| SOML | Steward Observatory Mirror Lab (University of Arizona) | Gen |
| SOS | Science Operations Services | OPS |
| SOW | Statement Of Work | Gen |
| SP | Survey Performance | Sci |
| SP | System PerFormance | OPS |
| SP | Story Point | DM |
| SPI | Schedule Performance Index | Gen |
| SPIE | The international society for optics and photonics | Gen |
| SPL | Science PipeLines | DM |
| SQL | Structured Query Language | Gen |
| SQR | SQuARE document handle | LSST DM |
| SQuaRE | Science Quality and Reliability Engineering | LSST DM |
| SQuaSH | Science Quality Analysis Harness | DM |
| SRCF | Stanford Research Computing Facility | OPS |
| SRD | LSST Science Requirements; LPM-17 | LSST DM |
| SRT | Science Raft Tower | CAM |
| SS | Subsystem Scientist | LSST DM |
| SSC | Survey Strategy Committee | OPS |
| SSD | Solid-State Disk | Gen |
| SSH | Secure SHell | Gen |
| SSL | Secure Sockets Layer | IT |
| SSM | Subsystem Manager | Adm |

| | | |
|---|---|---|
| SSP | Solar System Processing | LSST DM |
| SST | Simonyi Survey Telescope | Gen |
| SST | Subsystem Science Team | LSST DM |
| stdin | standard input | Gen |
| stdout | standard output | Gen |
| STEM | Science, Technology, Engineering and Math | Gen |
| STFC | UK Science and Technology Facilities Council | OPS |
| SU | Stanford University | OPS |
| SUI | Science User Interface (original name for the LSP Portal and API Aspects) | LSST DM |
| SUIT | Science User Interface and Tools (LSST Data Management WBS element and team, responsible for LSP Portal Aspect) | LSST DM |
| SV | Science Validation | LSST DM |
| SW | Software (also denoted S/W) | Gen |
| SWE | Society of Women Engineers | DEI |
| T/CAM | Technical/Control (or Cost) Account Manager | LSST DM |
| T&S | Telescope and Site | LSST DM |
| TAC | Time Allocation Committee | OPS |
| TACABS | absolute time-recording accuracy (millisecond) | TS |
| TACC | Texas Advanced Computing Center | Gen |
| TACREL | internal (relative) time-recording accuracy (millisecond) | TS |
| TAI | International Atomic Time | Gen |
| TAP | Table Access Protocol | Gen |
| TB | TeraByte | Gen |
| TBA | To Be Announced | Gen |
| TBC | To Be Confirmed | Gen |
| TBD | To Be Defined (Determined) | Gen |
| TBR | To Be Resolved | Gen |
| TC | Thermocouple | LSST DM |
| TCAM | Technical Control (or Cost) Account Manager | DM |
| TCP | Transmission Control Protocol | IT |
| TCS | Telescope Control System | TS DM |
| TCT | Technical Control Team (obsolete; now DMCCB) | LSST DM |
| TEA | Top End Assembly | TS |
| TFLOP | Tera FLOP | Gen |
| TLD | Top Level Domain | IT |

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|---|---|---|
| TLS | Transport Layer Security | IT |
| TMA | Telescope Mount Assembly | TS DM |
| TMT | Thirty Meter Telescope | OPS |
| TNO | trans-Neptunian object | TS |
| TOPCAT | Tool for OPerations on Catalogues And Tables | Gen |
| TOWG | Technical Operations Working Group | TS |
| TS | Test Specification | LSST DM |
| TSIP | Telescope System Instrumentation Program | OPS |
| TSS | Telescope and Site Software | LSST |
| TVSS | transient voltage surge suppressor | TS |
| UA | University of Arizona | TS |
| UCL | University College London (UK) | Gen |
| UDP | User Datagram Protocol | Gen |
| UHV | Ultra-high vacuum | LSST OPS |
| UI | User Interface | Gen |
| UID | User Identifier | IT |
| UIUC | University of Illinois at Urbana-Champaign | TS |
| UK | United Kingdom | Gen OPS |
| UKDF | United Kingdom Data Facility | OPS |
| UKIDSS | UKIRT Infrared Deep Sky Survey | Gen |
| UKIRT | United Kingdom Infrared Telescope | Gen |
| UML | unified modeling language | TS |
| UNSO | United States Naval Observatory | TS |
| UPS | uninterruptible power supply | TS |
| URL | Universal Resource Locator | Gen |
| US | United States | Gen |
| USD | United States dollar | TS |
| USDF | United States Data Facility | OPS DF DM |
| USNO | United States Naval Observatory | Gen |
| UT | Universal Time | Gen |
| UT1 | Universal Time 1 | Gen |
| UTC | Coordinated Universal Time | Gen |
| UW | University of Washington | Gen |
| UX | User Experience | Gen |
| VCD | Verification Control Document | LSST DM |
| VE | vendor estimate | TS |

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|---|---|---|
| VF2F | Virtual Face 2 Face (meeting) | DM |
| VISTA | Visible and Infrared Survey Telescope for Astronomy | Gen |
| VLA | Very Large Array (NRAO) | Gen |
| VLAN | Virtual Local Area Network | IT |
| VLBA | Very Long Baseline Array | Gen |
| VLBI | Very Long Baseline Interferometry | Gen |
| VLT | Very Large Telescope (ESO) | Gen |
| VLTI | Very Large Telescope Interferometer (ESO) | Gen |
| VM | Virtual Machine | Gen |
| VNOC | Virtual Network Operations Center | NET |
| VO | Virtual Observatory | Gen |
| VOIP | Voice Over Internet Protocol | IT DM |
| VPC | Virtual Private Cloud | IT |
| VPN | virtual private network | TS |
| VQ | vendor quote | TS |
| VRO | (not to be used)Vera C. Rubin Observatory | Gen |
| VST | VLT Survey Telescope | Gen |
| W3C | World Wide Web Consortium | Gen |
| WAN | Wide Area Network | Gen |
| WBS | Work Breakdown Structure | Gen |
| WCAG | Web Content Accessibility Guidelines | OPS |
| WCS | World Coordinate System | Gen |
| WEPAN | Women in Engineering ProActive Network | DEI |
| WFD | Wide Fast Deep | OPS |
| WFS | WaveFront Sensor | TS |
| WG | Working Group | LSST DM |
| WIED | Women In Engineering Division | DEI |
| WISE | Wide-field Survey Explorer | Gen |
| WIYN | (No longer an acronym - formerly:) Wisconsin, Indiana University, Yale University, NOAO (National Optical Astronomy Observatories) Observatory | Gen |
| WL | Weak gravitational Lens cosmic shear | Sci |
| WLMS | work load management service | TS |
| WMS | Work Management System | OPS |
| WOUCAO | Windows on the Universe Center for Astronomy Outreach | OPS |
| WP | Work Package | OPS |

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|---|---|---|
| WRHEN | Western Hemisphere Research & Education Networks | TS |
| WSDL | Web Services Description Language | Gen |
| WWT | World Wide Telescope | TS |
| XHTML | eXtensible HyperText Markup Language | Gen |
| XML | eXtensible Markup Language | Gen |
| XMM | X-ray Multi-mirror Mission (ESA; officially known as XMM-Newton) | Gen |
| XSD | XML Schema Definition | Gen |
| XSEDE | Extreme Science and Engineering Discovery Environment | OPS |
| XSL | eXtensible Stylesheet Language | Gen |
| XSLT | eXtensible Stylesheet Language Transformation | Gen |
| YAML | Yet Another Markup Language | Gen |
| ZD | zenith distance | TS |
| ZTF | Zwicky Transient Facility | Gen |
| Accident | An undesired event that results in harm to people, damage to property, or loss to process. Accidents result from contact with a substance or source of energy above the threshold limit of the body structure | Adm |
| Accruals | Accounts on a balance sheet that represent liabilities and non-cash-based assets used in accrual-based accounting; these accounts include, among many others, accounts payable, accounts receivable, goodwill, future tax liability, and future interest expense | Adm |
| adaptive moments | The second moments of the source intensity distribution, which are used for measuring source shapes. This approach is close to optimal for measuring the shapes of faint galaxies | Sci |
| afw | LSST's pipeline library code and primitives including images and tables | DM |
| aggregate metric | An aggregation of multiple point metrics. For example, the overall photometric repeatability for a particular tract given given the repeatability of multiple individual stars in the tract. See also: "metric" | DM QA |
| aggregation | The process of reducing multiple input values to a single output, e.g., a metric value, computed from a collection of input values. For example, a sum or average of a metric computed over patches to produce an aggregate metric at tract level. See also: "metric", "aggregate metric" | DM QA |

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| airmass | The pathlength of light from an astrophysical source through the Earth's atmosphere. It is given approximately by sec z, where z is the angular distance from the zenith (the point directly overhead, where airmass = 1.0) to the source | Sci |
| Alert | A packet of information for each source detected with signal-to-noise ratio > 5 in a difference image by Alert Production, containing measurement and characterization parameters based on the past 12 months of LSST observations plus small cutouts of the single-visit, template, and difference images, distributed via the internet | DM |
| Alert Production | Executing on the Prompt Processing system, the Alert Production payload processes and calibrates incoming images, performs Difference Image Analysis to identify DIASources and DIAObjects, and then packages the resulting alerts for distribution. | DM |
| Alert Production DataBase | A dedicated, internal database system used to support LSST Alert Production. Does not support end-user access. | DM |
| algorithm | A computational implementation of a calculation or some method of processing | Sci |
| Alternate Standard Visit | A single observation of an LSST field comprised of one 30 second exposure | DM |
| Amplifier | An electronic component of a CCD that is used to recover the signal during read-out. For LSST, multiple amplifiers on each CCD will enable simultaneous read-out of adjacent regions of each detector. Often this term is used, not quite correctly, as a synonym for a read-out channel | CAM |
| Apache Parquet | A columnar storage data persistence format maintained by the Apache project | DM QA |
| aperture correction | A correction that is applied to fluxes of sources that were measured within a finite aperture, to account for the source flux that lies outside the aperture. This correction is usually based upon a model of the PSF as derived from bright, isolated stars. From the model one can derive the magnitude of the correction with aperture size and its variation with position in the image, which asymptotically approaches 1.0 at infinite aperture. Fluxes of sources in crowded fields are often measured with small apertures to avoid contamination, and then corrected with this approach | DM |

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| Archive | The repository for documents required by the NSF to be kept. These include documents related to design and development, construction, integration, test, and operations of the LSST observatory system. The archive is maintained using the enterprise content management system DocuShare, which is accessible through a link on the project website www.project.lsst.org | Adm |
| Archive Center | Part of the LSST Data Management System, the LSST archive center is a data center at NCSA that hosts the LSST Archive, which includes released science data and metadata, observatory and engineering data, and supporting software such as the LSST Software Stack | DM |
| Archiver | The IIP component responsible for transferring raw images and metadata to OODS and DBB in real time | DM |
| Association of Universities for Research in Astronomy | consortium of US institutions and international affiliates that operates world-class astronomical observatories, AURA is the legal entity responsible for managing what it calls independent operating Centers, including LSST, under respective cooperative agreements with the National Science Foundation. AURA assumes fiducial responsibility for the funds provided through those cooperative agreements. AURA also is the legal owner of the AURA Observatory properties in Chile | Adm |
| Association Pipeline | An application that matches detected Sources or DIASources or generated Objects to an existing catalog of Objects, producing a (possibly many-to-many) set of associations and a list of unassociated inputs. Association Pipelines are used in Alert Production after DIASource generation and in the final stages of Data Release processing to ensure continuity of Object identifiers | DM |
| astrometry | In astronomy, the sub-discipline of astrometry concerns precision measurement of positions (at a reference epoch), and real and apparent motions of astrophysical objects. Real motion means 3-D motions of the object with respect to an inertial reference frame; apparent motions are an artifact of the motion of the Earth. Astrometry per se is sometimes confused with the act of determining a World Coordinate System (WCS), which is a functional characterization of the mapping from pixels in an image or spectrum to world coordinate such as (RA, Dec) or wavelength | Sci |

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| astronomical object | A star, galaxy, asteroid, or other physical object of astronomical interest. Beware: in non-LSST usage, these are often known as sources | Sci |
| Attribute | A quantitative performance parameter in the context of the SysML based SysArch model used to generate a requirements document | SE |
| AURA Management Council for LSST | , group reporting to the AURA Board of Directors that oversees the activities of the LSST Project Office and advocates the mission of the LSST | Adm |
| AURA Management Council for Rubin Observatory | , group reporting to the AURA Board of Directors that oversees the activities of the Rubin Observatory Directors Office and advocates the mission of the observatory | Adm |
| AURA-O | AURA Observatory in Chile | Gen |
| AuxTel | LSST's 1.2-meter Auxiliary Telescope will measure atmospheric transmission and will be used to calibrate LSST images. | Gen |
| background | In an image, the background consists of contributions from the sky (e.g., clouds or scattered moonlight), and from the telescope and camera optics, which must be distinguished from the astrophysical background. The sky and instrumental backgrounds are characterized and removed by the LSST processing software using a low-order spatial function whose coefficients are recorded in the image metadata | DM |
| Base Facility | The data center located at the Base Site in La Serena, Chile. The Base Facility is composed of the Base portion of the Prompt Enclave directly supporting Observatory operations, the Commissioning Cluster, an Archive Enclave holding data products, and the Chilean Data Access Center | DM |
| Base Year Cost | The cost of a particular project element as of a year chosen to represent an arbitrary cost level of 100, usually the year the project plan was created or refreshed. New, up-to-date base years are periodically introduced to keep data current | Adm |

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| Baseline | The point at which project designs or requirements are considered to be 'frozen' and after which all changes must be traced and approved | Adm |
| Baseline, Cost | The 'frozen' total costs required for completion of the project based on known resources (staff, physical assets, knowledge, etc.) that will be needed | Adm |
| Baseline, Design | The baseline defining the site specific preliminary design of the LSST subsystems and their associated hardware and software deliverables required to meet the requirements and definitions of the System Baseline | Adm |
| Baseline, Functional | The baseline defining at the highest level the scientific, functional, and performance requirements for what the LSST Observatory is and what it must do as a whole | Adm |
| Baseline, Schedule | The 'frozen' amount of time required for completion of the project based on known resources (staff, physical assets, knowledge, etc.) that will be needed | Adm |
| Baseline, System | The baseline defining the high level set of functional and performance requirements for the LSST system and each of the LSST subsystems (Camera, Telescope and Site, and Data Management), the Observatory Control System, and Education and Public Outreach | Adm |
| Baseline, Technical | The 'frozen' requirements, specifications, designs, and allocations needed for completion of the project based on known resources (staff, physical assets, knowledge, etc.) that will be needed | Adm |
| Basis of Estimate | justification for arriving at a particular cost estimate, including estimating methods, approach taken, prices used, assumptions made; an analyzed and carefully calculated number | Adm |
| Batch Production | Computational processing that is executed as inputs become available, in a distributed way across multiple enclaves when needed, while tracking status and outputs. Examples of Batch Production include offline processing for Prompt Data Products, calibration products, template images, and Special Programs data products. Prioritization protocols for the various types of batch production are given in LDM-148 | DM |

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|---|---|---|
| brighter-fatter effect | The common term used to refer to one of the photometric qualities of the LSST camera: sources with a higher flux have a broader PSF. This is accounted for during calibration | DM |
| Broker | Software which receives and redistributes Alerts, and may also perform processing such as filtering for certain characteristics, cross-matching with non-LSST catalogs, and/or light-curve classification, in order to identify and prioritize targets for follow-up and/or make scientific analyses. | DM |
| Builder | Individuals who have accumulated 2 FTE years worth of employment/contributions to the LSST Project | Adm |
| Business Manager | The person responsible for all business activities of the LSST Project and the LSST Corporation; he or she serves as liaison to AURA CAS, develops and monitors contracts, and serves as the LSST Corporation Secretary | Adm |
| Butler | A middleware component for persisting and retrieving image datasets (raw or processed), calibration reference data, and catalogs | DM |
| Buyer | Includes the terms 'Buyer' 'subcontract administrator or officer' 'contracts administrator or officer' sub-award administrator, or any other LSSTC authorized procurement official as used herein are inter-changeable | Adm |
| CA-FACTS | NSF Cooperative Agreement Financial & Administrative Terms and Conditions | Gen |
| Cadence | The sequence of pointings, visit exposures, and exposure durations performed over the course of a survey | Sims Sci |
| CalExp | A particular type of Butler dataset that consists of an image corresponding to a single CCD, which has been characterized and calibrated. (A Butler term.) | DM |
| Calibrated Science Image | Deprecated term; see Processed Visit Image | DM |

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| calibration | The process of translating signals produced by a measuring instrument such as a telescope and camera into physical units such as flux, which are used for scientific analysis. Calibration removes most of the contributions to the signal from environmental and instrumental factors, such that only the astronomical component remains | DM |
| Calibration Image | Any of a set of images used in the Instrument Signature Removal pipeline to remove distortions caused by the telescope, detector, or other sources, from the raw images. Includes darks, flats, tunable-laser dome flats, etc | DM |
| Calibration Scientist | The person responsible for the system calibration plan who establishes the requirements for the constituent elements of the calibration hardware, software, and operational data. The Calibration Scientist works under the direction of the Systems Engineering group | DM |
| Camcol | In the SDSS survey, a camera column is the range (in declination) covered by a single sensor in the camera | CAM |
| Camera | The LSST subsystem responsible for the 3.2-gigapixel LSST camera, which will take more than 800 panoramic images of the sky every night. SLAC leads a consortium of Department of Energy laboratories to design and build the camera sensors, optics, electronics, cryostat, filters and filter exchange mechanism, and camera control system | CAM |
| camera | An imaging device mounted at a telescope focal plane, composed of optics, a shutter, a set of filters, and one or more sensors arranged in a focal plane array | Sci |
| Camera Crosstalk-Corrected Image | An image from the Camera system that has had crosstalk removed but has not been processed by the Instrument Signature Removal pipeline | DM |
| Catch-up Archiver | The Archiver for any images missed by the real time archiver | DM |
| CatSim | The catalog simulator simulates the properties and distributions of stars, galaxies, and asteroids that LSST expects to observe. | Sci |
| Center | An entity managed by AURA that is responsible for execution of a federally funded project | Adm |

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|---|---|---|
| Central Administrative Services | AURA corporate division responsible for providing accounting, procurement, and business IT support services to AURA centers | Adm |
| Change Control | The systematic approach to managing all changes to the LSST system, including technical data and policy documentation. The purpose is to ensure that no unnecessary changes are made, all changes are documented, and resources are used efficiently and appropriately | Adm |
| Change Control Board | Advisory board to the Project Manager; composed of technical and management representatives who recommend approval or disapproval of proposed changes to, deviations from, and waivers to a configuration item's current approved configuration documentation | Adm |
| Change Control Board Chair | The person responsible for CCB administration and implementation of approved changes to the project technical, cost, and schedule baselines; the CCB Chair is also the Systems Engineering Manager (SEM) | Adm |
| Change Control Process | collection of formal documented procedures used to apply technical and administrative direction and monitoring processes to the Project. Proposed changes to items under change control must undergo impact analysis to assess their effect(s) on project cost, schedule and performance capabilities. All changes to items under change control must be approved by the Project Manager, or if certain thresholds apply, by the LSST Director and/or the NSF. See LPM-19 | Adm |
| Change Controlled Documents | Those documents which have been designated by the project as under formal configuration control | Adm |
| Channel | An amplifier on an LSST camera CCD (see sensor). For LSST there are 16 amplifiers for each science sensor, resulting in 16 parallel data channels from each device. The 16 channels comprising a sensor are numbered from "0,0" through '1,7'. This term may also refer to the raw data from a read-out amplifier of a sensor | CAM |
| Charge-Coupled Device | a particular kind of solid-state sensor for detecting optical-band photons. It is composed of a 2-D array of pixels, and one or more read-out amplifiers | CAM Sci |

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| Chi-squared Coadd Image | A Coadd Image that is the weighted sum of multiple input images, where for each input: coadd.image += image.image**2 / image.variance coadd.mask \|= image.weightMap += weight For bad pixels, coadd and weightMap are not altered. Note that the inputs must be aligned to a common projection and pixel grid and corrected to the same photometric scale and zero-point | DM |
| Chief Scientist | The principal scientific advisor to the LSST Director; he or she acts as an interface to the science community in order to ensure that the LSST program is scientifically and technologically well founded and that the specifications are appropriate for achieving the scientific goals of the project | Adm |
| CmdLineTask | A special kind of Task that can read its inputs and write its outputs using a Butler, and can run easily from the command-line. CmdLineTask is a specific implementation of the concept of a command-line task. CmdLineTasks are being phased out in favor of PipelineTasks. | DM |
| Coadd Image | An image that is the combination of multiple input images. The inputs are aligned to a common projection and pixel grid, corrected to the same photometric scale and zero-point, with bad pixels and artifacts rejected. (Image PSFs may also be matched prior to coaddition.) Coadd Images have had non-astrophysical background removed | DM |
| COBRA | The trade name for an integrated suite of project management software programs that work together to track all aspects of an ongoing construction job | Adm |
| Collimated Beam Projector | The hardware to project a field of sources onto discrete sections of the telescope optics in order to characterize spatial variations in the telescope and instrument transmission function, and to monitor filter throughput evolution during the survey. Images obtained using the CBP will be used in calibration | DM |
| command-line task | An enhancement of a Task in the LSST Stack context, it is the equivalent of a data processing pipeline and may be run directly from the shell command-line. A command-line task minimally consists of: a configuration and metadata, an argument parser, and a run method and a runner script | DM |

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| Commissioning | A two-year phase at the end of the Construction project during which a technical team a) integrates the various technical components of the three subsystems; b) shows their compliance with ICDs and system-level requirements as detailed in the LSST Observatory System Specifications document (OSS, LSE-30); and c) performs science verification to show compliance with the survey performance specifications as detailed in the LSST Science Requirements Document (SRD, LPM-17) | Adm |
| Compliance | Adherence to the laws, regulations, award terms and conditions, specifications, and internal policies applicable to the LSST Project | Adm |
| Compliance and Quality Administrator | The person who directs activities designed to ensure the LSST Project's compliance with all applicable laws, regulations and internal policies. The CQA reports directly to the LSST Project Manager. However, if appropriate and applicable, s/he also may directly report significant compliance issues and matters to the LSST Director and the NSF | Adm |
| configuration | A task-specific set of configuration parameters, also called a 'config'. The config is read-only; once a task is constructed, the same configuration will be used to process all data. This makes the data processing more predictable: it does not depend on the order in which items of data are processed. This is distinct from arguments or options, which are allowed to vary from one task invocation to the next | DM |
| Configuration Item | Any component of the LSST system, such as requirements, specifications, designs, characteristics, and/or documents describing the aforementioned, that has reached a baseline point and is under change control | Adm |
| Constraint | An external limitation imposed on a delivered item under which it must meet its requirements (e.g. the survey performance must be met under the constraint of the historical weather pattern of the chosen site). A constraint is not a characteristic possessed by the system or subsystem itself | Adm TS CAM DM SE |

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| Construction | The period during which LSST observatory facilities, components, hardware, and software are built, tested, integrated, and commissioned. Construction follows design and development and precedes operations. The LSST construction phase is funded through the NSF MREFC account | Adm |
| Contingency | The project's overall reserves in excess of the documented baselines for budget, schedule, and technical scope. Held in order to accommodate unexpected events or circumstances that represent potential risk to the project | Adm |
| Contingency Management | The formal process that provides the ability and flexibility to solve unforeseen issues that may impact the project's budget, schedule, and technical performance. The process incorporates activity-based uncertainties and high impact event-based uncertainties | Adm |
| Contract | A binding legal agreement between parties obligating the one (typically the 'seller') to furnish certain supplies or services and the other (typically, the buyer) to compensate the seller for the supplies or services with some form of consideration, (typically money). The term, 'contract' is used interchangeably with 'sub-award' 'agreement' 'memorandum of understanding and/or agreement' and 'purchase order' Each is a term used to differentiate between a purchase-order-format type document and a complex purchase in a subcontract/sub-award-format type document. These also include awards and notices of awards; job orders or task letters issued under basic ordering agreements; letter contracts; orders, such as purchase orders and subcontracts under which the order becomes effective by written acceptance or performance; and bilateral contract modifications | Adm |
| Cost Estimate | An approximation of total costs required for completion of the project based on known resources (staff, physical assets, knowledge, etc.) that will be needed | Adm |
| cycle | The time period over which detailed, short-term plans are defined and executed. Normally, cycles run for six months, and culminate in a new release of the LSST Software Stack, however this need not always be the case | DM |

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| dashboard | A visual display of the most important information needed to achieve one or more objectives, consolidated and arranged on a single screen so that the information can be monitored at a glance (as in Few, S., 2013, Information Dashboard Design, Analytics Press, 2 edn.) | DM QA |
| Data Access Center | Part of the LSST Data Management System, the US and Chilean DACs will provide authorized access to the released LSST data products, software such as the Science Platform, and computational resources for data analysis. The US DAC also includes a service for distributing bulk data on daily and annual (Data Release) timescales to partner institutions, collaborations, and LSST Education and Public Outreach (EPO). | DM |
| Data Backbone | The software that provides for data registration, retrieval, storage, transport, replication, and provenance capabilities that are compatible with the Data Butler. It allows data products to move between Facilities, Enclaves, and DACs by managing caches of files at each endpoint, including persistence to long-term archival storage (e.g. tape) | DM |
| data collection | A data collection in the second-generation (Gen2) Butler (referred to as a data repository in earlier generations) consists of hierarchically organized data files, an inventory or registry of the contents (i.e., metadata from the data files) stored in an sqlite3 file, and a Mapper file that specifies to the LSST Stack software the camera model to apply when accessing the data in the data repository | DM |
| Data Identifier | A specification of one or more specific metadata that allow the selection of data from a collection. The specific metadata vary, depending on the origin of the data, but often include some sort of visit identifier, a sensor or CCD, and a filter. For details of syntax, see the Data Identifiers page | DM |

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| Data Management | The LSST Subsystem responsible for the Data Management System (DMS), which will capture, store, catalog, and serve the LSST dataset to the scientific community and public. The DM team is responsible for the DMS architecture, applications, middleware, infrastructure, algorithms, and Observatory Network Design. DM is a distributed team working at LSST and partner institutions, with the DM Subsystem Manager located at LSST headquarters in Tucson | DM |
| Data Management Subsystem | The Data Management Subsystem is one of the four subsystems which constitute the LSST Construction Project. The Data Management Subsystem is responsible for developing and delivering the LSST Data Management System to the LSST Operations Project | DM |
| Data Management System | The computing infrastructure, middleware, and applications that process, store, and enable information extraction from the LSST dataset; the DMS will process peta-scale data volume, convert raw images into a faithful representation of the universe, and archive the results in a useful form. The infrastructure layer consists of the computing, storage, networking hardware, and system software. The middleware layer handles distributed processing, data access, user interface, and system operations services. The applications layer includes the data pipelines and the science data archives' products and services | DM |
| Data Product | The LSST survey will produce three categories of Data Products. Prompt, Data Release, User Generated. Previously referred to as Levels 1, 2, and 3 | DM |
| Data Release | The approximately annual reprocessing of all LSST data, and the installation of the resulting data products in the LSST Data Access Centers, which marks the start of the two-year proprietary period | DM |

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| Data Release Data Product | These products will be made available annually as the result of coherent processing of the entire science data set to date. These will include calibrated images; measurements of positions, fluxes, and shapes; variability information such as orbital parameters for moving objects; and an appropriate compact description of light curves. The Data Release Data Products will include a uniform reprocessing of the difference-imaging-based Prompt Data Products | DM |
| Data Release Processing | Deprecated term; see Data Release Production | DM |
| Data Release Production | An episode of (re)processing all of the accumulated LSST images, during which all output DR data products are generated. These episodes are planned to occur annually during the LSST survey, and the processing will be executed at the Archive Center. This includes Difference Imaging Analysis, generating deep Coadd Images, Source detection and association, creating Object and Solar System Object catalogs, and related metadata | DM |
| data repository | A data repository consists of hierarchically organized data files, an inventory or registry of the contents (i.e., metadata from the data files) stored in an sqlite3 file, and a Mapper file that specifies to the LSST Stack software the camera model to apply when accessing the data in the repository. With the second-generation (Gen2) Butler, the term repository will be replaced by data collection | DM |
| database schema | A database schema defines how content is structured, as described in a formal language supported by the database management system. It refers to a mapping of the data model to the database structure, as realized in the partitioning of information into fields within tables of related information | DM |

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| deblend | Deblending is the act of inferring the intensity profiles of two or more overlapping sources from a single footprint within an image. Source footprints may overlap in crowded fields, or where the astrophysical phenomena intrinsically overlap (e.g., a supernova embedded in an external galaxy), or by spatial co-incidence (e.g., an asteroid passing in front of a star). Deblending may make use of a priori information from images (e.g., deep CoAdds or visit images obtained in good seeing), from catalogs, or from models. A 'deblend' is commonly referred to in terms of 'parent' (total) and 'child' (component) objects | DM |
| declination | Often abbreviated Dec, it is a part of an equatorial coordinate pair that expresses the angular distance (usually expressed in degrees) from the Celestial Equator, measured along great circles that intersect the Equatorial poles. Positions south of the equator are given negative sign | Sci |
| deepCoadd | A Coadd Image designed to produce detections as maximum depth. Produced by AssembleCoaddTask | DM |
| deepDiff | A Difference Image that results from subtracting a template from a CalExp | DM |
| Department of Energy | cabinet department of the United States federal government; the DOE has assumed technical and financial responsibility for providing the LSST camera. The DOE's responsibilities are executed by a collaboration led by SLAC National Accelerator Laboratory | Adm |
| Deputy Director | The person who supports the Director in the execution of the overall LSST project and assumes his or her duties and authority during any short term or extended absence, planned or unplanned | Adm |
| Descope | A strategic downward revision to project objectives | Adm |
| deVaucouleurs profile | The radial distribution of flux of an astronomical source that is characterized as: I(r)=I0exp(7.67(r/re)1/4) An elliptical version of this profile can be fit to every detected source, yielding the deVaucouleurs parameters. | Sci |

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| DIAObject | A DIAObject is the association of DIASources, by coordinate, that have been detected with signal-to-noise ratio greater than 5 in at least one difference image. It is distinguished from a regular Object in that its brightness varies in time, and from a SSObject in that it is stationary (non-moving) | DM |
| DIASource | A DIASource is a detection with signal-to-noise ratio greater than 5 in a difference image | DM |
| Difference Image | Refers to the result formed from the pixel-by-pixel difference of two images of the sky, after warping to the same pixel grid, scaling to the same photometric response, matching to the same PSF shape, and applying a correction for Differential Chromatic Refraction. The pixels in a difference thus formed should be zero (apart from noise) except for sources that are new, or have changed in brightness or position. In the LSST context, the difference is generally taken between a visit image and template. | DM |
| Difference Image Analysis | The detection and characterization of sources in the Difference Image that are above a configurable threshold, done as part of Alert Generation Pipeline | DM |
| Differential Chromatic Refraction | The refraction of incident light by Earth's atmosphere causes the apparent position of objects to be shifted, and the size of this shift depends on both the wavelength of the source and its airmass at the time of observation. DCR corrections are done as a part of DIA | DM |
| Director | The person responsible for the overall conduct of the project; the LSST director is charged with ensuring that both the scientific goals and management constraints on the project are met. S/he is the principal public spokesperson for the project in all matters and represents the project to the scientific community, AURA, the member institutions of LSSTC, and the funding agencies | Adm |
| Docker | A system for packaging and distributing software using self-contained containers which may be run on any Linux system; `https://www.docker.com/` | DM |
| Document | Any object (in any application supported by DocuShare or design archives such as PDMWorks or GIT) that supports project management or records milestones and deliverables of the LSST Project | Adm |

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| Document Specialist | The person responsible for maintaining the Project's document archive (DocuShare) as well as providing editing and technical writing services. He or she also coordinates administrative support to the Project Management Office and the distributed Project team | Adm |
| DocuShare | The trade name for the enterprise management software used by LSST to archive and manage documents | Adm |
| drill down | Move from a higher level aggregation of data to its inputs. For example, given data describing a tract, to drill down to constituent patches and then to objects. Also refers to the act of identifying an issue in a high-level summary of the data (e.g. an aberrant metric value) and interactively investigating its inputs to find the source of the problem | DM QA |
| Earned Value | A measurement of how much work has been completed compared to how much was expected to have been completed at a given point in the project | Adm |
| Earned Value Management | A project management technique for objectively measuring project performance and progress in terms of budget and schedule | Adm Gen |
| Earned Value Management System | A set of tools, techniques and procedures which are used to implement a EVM approach to project management | Adm Gen |
| Education and Public Outreach | The LSST subsystem responsible for the cyberinfrastructure, user interfaces, and outreach programs necessary to connect educators, planetaria, citizen scientists, amateur astronomers, and the general public to the transformative LSST dataset | EPO |
| Eimage | An output product of PhoSim, an Eimage is a simulation of the response of a single sensor, where the outputs of the constituent amps have been integrated, and the effects of variations in pixel-to-pixel sensitivity and amplifier gains have been removed | Sims |
| element | A node in the hierarchical project WBS | DM |
| Enclave | Individually defined portions of the computational resources at the Summit, Base, NCSA, and Satellite Facilities, such as the Prompt Enclave, the Archive Enclave, etc. | DM |

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| Encumbrances | A contingent liability, contract, purchase order, payroll commitment, tax payable, or legal penalty that is chargeable to an account; it ceases to be an encumbrance when paid out or when the actual liability amount is determined and recorded as an expense | Adm |
| ephemeris | An ephemeris (pl: ephemerides) gives the predicted positions of astronomical objects or artificial satellites in the sky with time. The ephemerides are computed from mathematical models of motion of the object and the Earth. In LSST Solar System Processing, it refers to a predicted position (RA/Dec/time/etc) of a Solar System Object (SSObject) | Sci |
| epic | A self contained work with a concrete deliverable which my be scheduled to take place with a single cycle and WBS element | DM |
| epoch | Sky coordinate reference frame, e.g., J2000. Alternatively refers to a single observation (usually photometric, can be multi-band) of a variable source | Sci |
| Escalation | Change in the cost or price of specific goods and services in a given economy over a period | Adm |
| eups | ExtUPS (usually abbreviated as eups) is the software component management system that is used for the LSST Stack. It enables a choice of which versions of components should be used for a software build, and ensures that a consistent set is chosen. See the Eups Tutorial for details | DM |
| eups-tag | A versioned tag for eups that identifies a build product with its git-source SHA-1 identifier | DM |
| exponential profile | The radial distribution of flux of an astronomical source that is characterized: I(r)=I0exp(.68(r/re)) The normalization 1.68 is chosen so that the model radius is a half-light radius. An 2-dimensional elliptical version of this profile is fit to every detected source | Sci |
| Filter | A filter in astronomy is an optical element used to restrict the passband of light reaching the focal plane, it transmits a selected range of wavelengths. Filters elements are often named after standard photometric passbands, such as those used in the SDSS survey: u, g, r, i, z | CAM |

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| Firefly | A framework of software components written by IPAC for building web-based user interfaces to astronomical archives, through which data may be searched and retrieved, and viewed as FITS images, catalogs, and/or plots. Firefly tools will be integrated into the Science Platform | DM |
| Flexible Image Transport System | an international standard in astronomy for storing images, tables, and metadata in disk files. See the IAU FITS Standard for details | DM |
| flux | Shorthand for radiative flux, it is a measure of the transport of radiant energy per unit area per unit time. In astronomy this is usually expressed in cgs units: erg/cm2/s | Sci |
| Focal plane array | A focal plane array (FPA) is the arrangement of multiple sensors in the focal plane of a camera. For LSST, the FPA is divided into an array of contiguous rafts, upon which 9 science sensors are mounted 3x3. Additional engineering sensors are mounted on rafts near the periphery to support wavefront sensing and telescope guiding | CAM |
| footprint | See 'source footprint', 'instrumental footprint', or 'survey footprint', 'Footprint' is a Python class representing a source footprint | DM |
| forced photometry | A measurement of the photometric properties of a source, or expected source, with one or more parameters held fixed. Most often this means fixing the location of the center of the brightness profile (which may be known or predicted in advance), and measuring other properties such as total brightness, shape, and orientation. Forced photometry will be done for all Objects in the Data Release Production | DM |
| ForcedSource | DRP table resulting from forced photometry | DM |
| Full-Time Equivalent | A unit equivalent to one person working full time for one year with normal holidays, vacations, and sick time. No paid overtime is assumed | Adm Gen |
| GalSim | GalSim is open-source software for simulating images of astronomical objects (stars, galaxies) in a variety of ways. | Sci |
| GEANT | pan-European data network for the research and education community | Gen |

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| General Parallel File System | The bulk data storage provided through a POSIX filesystem interface at the LSST Data Facility. Refers specifically to IBM's General Parallel File System; also known as IBM Spectrum Scale | DM QA |
| git | A distributed revision control system, often used for software source code. See the Git User Manual for details. Not developed by LSST DM | DM |
| git-tag | The tag assigned to a particular SHA-1 identifier which associates the git source with an eups-tag of the build product | DM |
| Global Interlock System | A safety system that makes mechanisms or functions of the observatory system mutually dependent in order to prevent equipment from harming people or equipment by preventing one element from changing state due to the state of another element, and vice versa | TS |
| Handle | The unique identifier assigned to a document uploaded to DocuShare | Adm |
| Head of Safety | See Safety Manager | Adm |
| Hierarchical Triangular Mesh | is a partitioning scheme to divide the surface of the unit sphere into spherical triangles. It is a hierarchical scheme and the subdivisions have roughly equal areas. HTM is used to index the coordinates in the object databases for faster querying speeds | DM Sci |
| Image Decorrelation | A method of improving the noise properties of the Difference Image in cases where the Template Image has a significant amount of noise, in order to use the same detection thresholds for defining DIASources | DM |
| Image Simulation | High fidelity end-to-end simulations of the sky; these simulated images are used in designing and testing algorithms for use by Data Management; evaluating the capabilities and scalability of the reduction and analysis pipelines; testing and optimizing the scientific returns of the LSST survey; and providing realistic LSST data to the science collaborations to evaluate the expected performance of LSST. Under the direction of the Systems Engineering group, the Image Simulation group's principle goal during construction is to deliver a simulator to support commissioning | Sims |

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| Incident | An undesired event, which under slightly different circumstances, could have resulted in harm to people, damage to property, or loss to process | Adm |
| Independent Data Access Center | Externally supported and administered versions of the DAC to serve the full, or a limited subset of, the LSST data products and/or software to authorized users. | DM |
| Information Technology Services Committee | Internal LSST Project Office committee charged with managing project IT services, including advising management on which services LSST should use. The ITSC's goals are 1) to ensure interoperability exists among products, 2) to combine, reuse and/or, recycle existing services when possible, 3) to prevent applications from becoming stagnant or security hazards, 4) to make recommendations on whether a particular tool remains 5) to keep the project informed of what is going on at all spectrums, and 6) to make recommendations for how the Project Office will transition into commissioning and operations | Adm |
| Information Technology Systems Administrator | The person responsible for maintaining the Project Office's servers, networks, and computing hardware; he or she also provides technical support to the Project Management Office and the distributed Project team | Adm |
| Instance Catalog | A catalog of astronomical sources containing source type, coordinates, brightnesses, and SEDs for use in creating simulated LSST images with PhoSim. Synonym with trim file | Sims |
| Institutional Member | An organization such as an institute, observatory, university, or company committed to making an intellectual, financial, or other significant contribution to LSST operations or to preparing the scientific community to use the LSST dataset. They are members of the LSST Corporation and pay an annual membership fee in an amount established by the LSSTC Board of Directors | Adm |
| Instrument Signature Removal | Instrument Signature Removal is a pipeline that applies calibration reference data in the course of raw data processing, to remove artifacts of the instrument or detector electronics, such as removal of overscan pixels, bias correction, and the application of a flat-field to correct for pixel-to-pixel variations in sensitivity | DM |

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| instrumental footprint | The size and shape of a region on the sky that is covered by the field of view of an instrument, or part of an instrument, e.g., the LSST Camera, or ComCam, or a single LSST CCD. Often represented by a geometric region defined in field-angle space | DM |
| Integrated Project Schedule | Complete picture of the entire project life cycle. By incorporating all project phases into the same model, the IPS allows the project team to plan the critical interfaces not only among project work elements but also among the design, construction, commissioning, and operations phases | Adm |
| Interface Control Document | A Document that describes, defines, and controls the interface(s) of a system, thereby bounding its requirements. The description includes the inputs and outputs of a single system or element. An ICD may also describe the interface between two systems or subsystems. The purpose of the ICD is to communicate all possible inputs to and all potential outputs from a system for some potential or actual user of the system in operations. The internal interfaces of a system or subsystem are typically not documented in an ICD, but rather in a system design document | Adm |
| Interface Support Document | Constrains an ICD through such things as dictionaries, protocols, or definitions of system-wide architectural frameworks by which the subsystem teams must abide. However, ISDs do NOT contain requirements. ISDs are written by the subsystem teams with a stake in the subject matter; they are change controlled documents | Adm |
| International Affiliate | An organization outside of the United States or Chile such as an institute, university, consortium, or government agency that has agreed to share in the annual operating costs of the LSST in exchange for data rights for a specified list of principal investigators during LSST operations and commissioning. These data rights may include access to specified project resources prior to operations. Rights also come with responsibilities, similar to those required of U.S.-based scientists, regarding unauthorized redistribution of data | Adm |
| J2000 | Julian Date referring to the instant of 12 noon (midday) on January 1, 2000. IAU standard equinox. | Sci |

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| JIRA | issue tracking product (not an acronym but a truncation of Gojira the Japanese name for Godzilla) | Gen |
| Joint Oversight Group | oversight body comprised of representatives from the NSF and DOE; the JOG meets regularly with LSST senior management to coordinate the Project's activities | Adm |
| jointcal | The jointcal package optimizes the astrometric and photometric calibrations of a set of astronomical images that cover a sky tract and were obtained as a series of visits, which may be spread out in time. The jointcal algorithms incorporates object matching both between visits and to reference star catalogs, and produces more accurate distortion and throughput models than if the astrometry and photometry were fit independently. Jointcal is a part of the Science Pipelines | DM |
| Julian Date | The Julian Date (JD) of any instant is the Julian day number for the preceding noon (UTC), plus the fraction of the day elapsed since that instant. The Julian day number is a running sequence of integral days, starting at noon, since the beginning of the Julian Period; JD 0.0 corresponds to noon on 1 January 4713 BCE. Various Julian Date converters are available on the Web. For example, 18h 00m 00.0s UT on 2014-July-01 (near the start of LSST construction) corresponds to JD 2456840.25 | Sci |
| Kubernetes | A system for automating application deployment and management using software containers (e.g. Docker); `https://kubernetes.io` | DM |
| Level 1 Data Product | Deprecated term; see Prompt Data Product | DM |
| Level 1 Processing | Deprecated term; see Prompt Processing | DM |
| Level 2 Data Product | Deprecated term; see Data Release Data Product | DM |
| Level 2 Processing | Deprecated term; see Data Release Production | DM |
| Level 3 Data Product | Deprecated term; see User Generated Data Product | DM |
| Level 3 Processing | Deprecated term; see User Generated Processing | DM |

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| LSST Change Request | document that proposes a change to a configuration item; after evaluation by the CCB and decision by the Project Manager, the change request is updated with the outcome, action items, and necessary notification | Adm |
| LSST Corporation | An Arizona 501(c)3 not-for-profit corporation formed in 2003 for the purpose of designing, constructing, and operating the LSST System. During design and development, the Corporation stewarded private funding used for such essential contributions as early site preparation, mirror construction, and early data management system development. During construction, LSSTC will secure private operations funding from international affiliates and play a key role in preparing the scientific community to use the LSST dataset | Adm |
| LSST Project Office | Official name of the stand-alone AURA operating center responsible for execution of the LSST construction project under the NSF MREFC account | Adm |
| magnitude, Petrosian | A magnitude determined from a fit to a Petrosian brightness profile: Rp(r) = stuf f Appropriate for galaxies | Sci |
| magnitude, Pogson | Usually simply magnitude, it is a logarithmic measure of integrated source brightness, usually within a standard photometric passband, such that: MM0=2.5log(F/F0) where the zero-point flux is defined by a photometric standard | Sci |
| magnitude, PSF | For isolated stars that are well described by the PSF, the optimal measure of the total flux is determined by fitting a PSF model to the object | Sci |
| Major Research Equipment and Facility Construction | the NSF account through which large facilities construction projects such as LSST are funded | Adm |
| Manifest | Various files (and file formats) which define sets of build products having some shared attribute. There are release manifests which enumerate the eups-tags of all eups build products a the validated suite | Adm |

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| Mapper | A piece of software that abstracts persisting and unpersisting data; specifically, it knows how to navigate a data repository to locate data that match selection criteria that are relevant for data obtained with a particular camera. Used by the Butler | DM |
| metadata | General term for data about data, e.g., attributes of astronomical objects (e.g. images, sources, astroObjects, etc.) that are characteristics of the objects themselves, and facilitate the organization, preservation, and query of data sets. (E.g., a FITS header contains metadata) | DM |
| metric | A measurable quantity which may be tracked. A metric has a name, description, unit, references, and tags (which are used for grouping). A metric is a scalar by definition. See also: aggregate metric, model metric, point metric | DM QA |
| metric value | The result of computing a particular metric on some given data. Note that metric values are typically computed rather than measured. See also: metric | DM QA |
| middleware | Software that acts as a bridge between other systems or software usually a database or network. Specifically in the Data Management System this refers to Butler for data access and Workflow management for distributed processing. | DM OPS |
| Mini-Broker | A tool provided by the LSST Science Platform that provides a limited amount of alert filtering capabilities | DM |
| model metric | A metric describing a model related to the data. For example, the coefficients of a 2D polynomial fit to the background of a single CCD exposure | DM QA |
| monitoring | In DM QA, this refers to the process of collecting, storing, aggregating and visualizing metrics | DM QA |
| Moving Object Processing System | Deprecated term; see Solar System Processing | DM |
| My Database | The notion of having a local storage beside the queriable database to store either temporary tables or uploaded catalogs | DM Gen |
| National Science Foundation | primary federal agency supporting research in all fields of fundamental science and engineering; NSF selects and funds projects through competitive, merit-based review | Adm |

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| NCSA Facility | The data center at the National Center for Supercomputing Applications (NCSA) in Urbana, Illinois, USA. The NCSA Facility is composed of the NCSA portion of the Prompt Enclave, the Offline Production Enclave hosting all offline Data Release and calibration activities, an Archive Enclave holding data products, and the US Data Access Center | DM |
| Nightly Alert Processing | Deprecated term; see 'Alert Production' | DM |
| Nightly Archive Processing | Deprecated term; see 'Prompt Processing' | DM |
| Non-Standard Visit | Any single observation of a LSST field that is not comprised of either two 15 second 'Snap' exposures (a standard visit) or one 30 second exposure (an alternative standard visit). For example, exposure times for Special Programs might be significantly shorter or longer than a standard visit (or of random length) | DM |
| nublado | The service underpinning the Notebook Aspect of the Rubin Science Platform | DM |
| Object | In LSST nomenclature this refers to an astronomical object, such as a star, galaxy, or other physical entity. E.g., comets, asteroids are also Objects but typically called a Moving Object or a Solar System Object (SSObject). One of the DRP data products is a table of Objects detected by LSST which can be static, or change brightness or position with time | DM |
| Offer | A response to a solicitation that, if accepted, would bind the offeror to perform the work described in resultant contract. Responses to sealed bidding are offers that are often referred to as 'bids' or 'sealed bids;' responses to a request for proposals (RFP, negotiated-type procurements) are offers often referred to as 'proposals' responses to a request for quotations (RFQ) are not offers and are generally called 'quotes' | Adm |
| Operations | The 10-year period following construction and commissioning during which the LSST Observatory conducts its survey | Adm |

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| Operations Rehearsal | A data management system prototype project employing the same methods, tools, personnel, and technologies as the real system in order to introduce and validate new algorithms, functionality, and infrastructure. Previously referred to as a data challenge | DM |
| Operations Simulation | OpSim uses a sophisticated model to simulate 10 years of LSST operations using realistic seeing distributions, historical weather data, scheduled engineering downtime, and the most current telescope, dome, and camera design parameters. Under the direction of the Systems Engineering group, the OpSim group also works closely with the Telescope and Site group to ensure coordination with the OCS Scheduler development | Sims |
| Opportunity | The degree of exposure to an event that might happen to the benefit of a program, project, or other activity. It is described by a combination of the probability that the opportunity event will occur and the consequence of the extent of gain from the occurrence, or impact. There are two levels of opportunities. At the macro level, a project itself is the manifestation of the pursuit of an opportunity. At the element level, tactical opportunities exist, whereby certain events, if realized, provide a cost or schedule savings to the project or increase technical performance | Adm |
| Opportunity Management | The proactive art and science of planning, assessing, and handling future events to seek favorable impacts on project, cost, schedule, or performance to the extent possible. Opportunity management is a structured, formal, and disciplined activity focused on the necessary steps and planning actions to determine and exploit opportunities to the extent possible | Adm |
| Overscan | Refers to the portion of the channel read-out of either a) non photo-active pixels, or b) additional read-out of the serial register after all science pixels have been accumulated (sometimes called virtual overscan). The overscan is often appended to the science pixels in the assembled amplifier image as a separate region. This region is useful to science processing software for estimating the stability of the DC offset in the read-out electronics | CAM |

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| passband | The window of wavelength or the energy range admitted by an optical system; specifically the transmission as a function of wavelength or energy. Typically the passband is limited by a filter. The width of the passband may be characterized in a variety of ways, including the width of the half-power points of the transmission curve, or by the equivalent width of a filter with 100% transmission within the passband, and zero elsewhere | Sci |
| patch | An quadrilateral sub-region of a sky tract, with a size in pixels chosen to fit easily into memory on desktop computers | DM |
| PhoSim | The Photon Simulator (PhoSim) simulate realistic astronomical images by tracing photons through the atmosphere and a telescope and camera into pixels. | Sci |
| photometric redshift | Often abbreviated to photo-z, this is an estimate of the true redshift (of a galaxy) determined from multi-band photometry. Generally determined from a fit of source colors to grid of model SEDs with redshift | Sci |
| pipeline | A configured sequence of software tasks (Stages) to process data and generate data products. Example: Association Pipeline | DM |
| PipelineTask | A special kind of Task that can read its inputs and write its outputs using a Butler, in addition to being able to have them passed in and out directly as Python objects. PipelineTasks may be connected together dynamically and executed by a generic workflow system. PipelineTasks typically (but not always) delegate most of their work to nested regular Tasks | DM |
| point metric | A metric that is associated with a single entry in a catalog. Examples include the shape of a source, the standard deviation of the flux of an object detected on a Coadd, the flux of an source detected on a difference image | DM QA |
| point spread function | The point-spread function (PSF) is the distribution of intensity on a sensor (or image) originating from an unresolved point-source (i.e., a star). Often the PSF is not the same Airy shape as would be expected from a finite-aperture optical system, owing primarily to atmospheric effects and imperfections in the optical system and the detector | Sci |
| Policy file | A structured ASCII file that contains set of attributes for input to a pipeline. Deprecated | Adm |

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| postage stamp | Image cutouts that are 30x30 arcseconds, centered on an Object, and included in every Alert | DM |
| precovery | The process of finding, or putting upper limits on, detections of a newly discovered DIAObject in previously obtained images, typically using forced photometry. Alert Packets will contain precovery data derived from the past 30 days of images that include the location of a new DIAObject | DM |
| Preferred Version | The default version of a document served to a DocuShare user. For change controlled documents, the preferred version represents the document's current, approved baseline. For other documents, the preferred version represents the most current iteration | Adm |
| Predominantly Black Institution | A college or university with at least 1,000 enrolled students, of whom at least 40% are Black or African American and at least 50% are low income or first generation to college. | DEI |
| Primavera | The trade name for the project management software suite used by LSST to maintain its program plan and schedule | Adm |
| Processed Visit Image | A fully-qualified LSST image from a single visit that includes the science pixel array and concomitant data including a quality mask and a variance array, in addition to a PSF characterization and metadata (including calibration metadata) about the image. It is stored with the background already subtracted | DM |
| Procurement | The activities involved with or the actual purchase, subcontract, lease, rent, or otherwise acquire supplies or services, and actions associated therewith | Adm |
| Project Execution Plan | primary document defining how the LSST Project will be undertaken; it details the project's scope, activities, quality and technical specifications, resources, schedule, and organization | Adm |
| Project Management Controls Specialist | The person responsible for maintaining the Project Management Control System (PCMS); he or she works closely with the Project Manager and each of the Subsystem Managers | Adm |
| Project Management Controls System | suite of tools used to organize and manage a project, including cost and schedule databases, a qualified accounting system, and change control | Adm |

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| Project Management Office | the work element responsible for achieving the project's objectives | Adm |
| Project Manager | The person responsible for exercising leadership and oversight over the entire LSST project; he or she controls schedule, budget, and all contingency funds | Adm |
| Project Science Team | an operational unit within LSST that carries out specific scientific performance investigations as prioritized by the Director, the Project Manager, and the Project Scientist. Its membership includes key scientists on the Project who provide specific necessary expertise. The Project Science Team provides required scientific input on critical technical decisions as the project construction proceeds | Adm |
| Project Scientist | The principal scientific advisor to the LSST Project Manager to ensure that LSST system specifications are appropriate for achieving the scientific goals of the project; the Project Scientist also works closely with the Systems Engineering group and chairs the LSST Science Council | Adm |
| Prompt Data Product | Prompt Data Products are generated continuously based on the image stream from the telescope by the Prompt Processing system. They include low-latency alerts on transient and variable sources, as well as a variety of image data products and source catalogs. Compare Data Release Data Product. | DM |
| Prompt Processing | The data processing which occurs at the Archive Center based on the stream of images coming from the telescope. This includes both Alert Production, which scans the image stream to identify and send alerts on transient and variable sources, and Solar System Processing, which identifies and characterizes objects in our solar system. It also includes specialized rapid calibration and Commissioning processing. Prompt Processing generates the Prompt Data Products. | DM |
| Prompt Products DataBase | Data products within LSST data releases relating to LSST Alert Production | DM |

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| provenance | Information about how LSST images, Sources, and Objects were created (e.g., versions of pipelines, algorithmic components, or templates) and how to recreate them | DM |
| PSF match | To convolve an image to obtain a desired point spread function (PSF), typically in order to match it to another image. For example, Template Images are PSF matched to the new image before image subtraction when Difference Images are created | DM |
| QAWG | QA Strategy Working Group | DM QA |
| Qserv | LSST's distributed parallel database. This database system is used for collecting, storing, and serving LSST Data Release Catalogs and Project metadata, and is part of the Software Stack | LSST DM |
| Quality Assurance | All activities, deliverables, services, documents, procedures or artifacts which are designed to ensure the quality of DM deliverables. This may include QC systems, in so far as they are covered in the charge described in LDM-622. Note that contrasts with the LDM-522 definition of "QA" as "Quality Analysis", a manual process which occurs only during commissioning and operations. See also: Quality Control | DM QA |
| Quality Control | Services and processes which are aimed at measuring and monitoring a system to verify and characterize its performance (as in LDM-522). Quality Control systems run autonomously, only notifying people when an anomaly has been detected. See also Quality Assurance | DM QA |
| Raft | The sensors in the LSST camera are packaged into replaceable electronic assemblies, called rafts, consisting of 9 butted sensors (CCDs) in a 3x3 mosaic. Each raft is a replaceable unit in the LSST camera. There are 21 science rafts in the camera plus 4 additional corner rafts with specialized, non-science sensors, making for a total of 189 CCDs per focal plane image. The 21 science rafts are numbered from "0,1" through "0,3", "1,0" through "3,4", and "4,1" through "4,3". (In other words, the 25 combinations from "0,0" through "4,4" minus the four corners which are non-science.) | CAM |
| Raw Image | The output from a camera, consisting of a set of image sections from each amplifier on each sensor on the focal plane array, including overscan | DM |

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| releasable product | A software package or other component of the DM system which is expected to be included in the next tagged release of the system. This implies inclusion in a standard top-level package. See also release-tag | DM QA |
| Release | Publication of a new version of a document, software, or data product. Depending on context, releases may require approval from Project- or DM-level change control boards, and then form part of the formal project baseline | DM Adm |
| release-tag | Refers to a tag which groups an entire stack of packages that are verified as unit and package-integration tested; this is also an eups-tag | DM |
| Requirement | A declaration of a specified function or quantitative performance that the delivered system or subsystem must meet. It is a statement that identifies a necessary attribute, capability, characteristic, or quality of a system in order for the delivered system or subsystem to meet a derived or higher requirement, constraint, or function | Adm |
| Retarget | In the context of task construction, a task may substitute a class sub-task to change the behavior of a particular step in the processing | Adm |
| Review | Programmatic and/or technical audits of a given component of the project, where a preferably independent committee advises further project decisions, based on the current status and their evaluation of it. The reviews assess technical performance and maturity, as well as the compliance of the design and end product with the stated requirements and interfaces | Adm |
| Review Committee | A panel of independent reviewers performing a programmatic and/or technical audit of a given component of the project; committees consist of subject matter experts external to the reviewed team and preferably external to the LSST project. The committee submits a post-review report including findings (observations), comments (concerns), and recommendations (requests for action) | Adm |

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| Review Data Package | The set of documents and data to be made available to Review Committee members during a review of a project component; the package has two parts: management data and product data. Management data includes appropriately mature and detailed versions of management plans, budgets and/or cost estimates, schedule, and procurement plans. Product data includes appropriately mature and detailed versions of the product technical documentation such as requirements, ICDs, models and analysis reports, and integration and verification plans | Adm |
| Review Decision Making Authority | The person responsible for a project component who calls a review and consequently makes programmatic and/or technical decisions based on the Review Committee's findings, comments, and recommendations | Adm |
| Review Hub | An LSST website that acts as a clearinghouse for information about external reviews of all LSST components planned to occur in the next six months. The site links to review-specific websites for both planned reviews and reviews that have been conducted already | Adm |
| Review Plan | An enumeration of the necessary components for a proposed review of a project component; the review plan defines the Review Committee chair and members, the charge to the Review Committee, the Review Data Package, and the expected/required participants, including key team members presenting review material | Adm |
| right ascension | Often abbreviated RA, it is a part of an equatorial coordinate pair that expresses the angular distance along the Celestial Equator. It is analogous to terrestrial longitude. RA increases to the east along the projection of the Earth's equator, from the origin (i.e., the Vernal Equinox). Positions are customarily expressed in degrees (0 < RA < 360), or hours (0 < RA < 24, usually in sexagesimal format) | Sci |

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| Risk | The degree of exposure to an event that might happen to the detriment of a program, project, or other activity. It is described by a combination of the probability that the risk event will occur and the consequence of the extent of loss from the occurrence, or impact. Risk is an inherent part of all activities, whether the activity is simple and small, or large and complex | Adm |
| Risk Management | The art and science of planning, assessing, and handling future events to avoid unfavorable impacts on project cost, schedule, or performance to the extent possible. Risk management is a structured, formal, and disciplined activity focused on the necessary steps and planning actions to determine and control risks to an acceptable level. Risk Management is an event-based management approach to managing uncertainty | Adm |
| Risk, Cost | The possibility that available budget will be exceeded. Cost risk exists if a) the project must devote more resources than planned to achieve technical requirements, b) the project must add resources to support slipped schedules due to any reason, c) if changes must be made to the number of items to be produced, or d) if changes occur in the organization or national economy. Cost risk can be predicted at the total project level or for a system element. The collective effects of element-level cost risk can produce cost risk for the total project | Adm |
| Risk, Programmatic | Produced by events that are beyond the control of the project manager. These events often are produced by decisions made by personnel at higher levels of authority, such as reductions in project priority, delays in receiving authorization to proceed with a project, reduced or delayed funding, changes in organization or national objectives, etc. Programmatic risk can be a source of risk in any of the other three risk categories | Adm |

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| Risk, Schedule | The possibility that the project will fail to meet scheduled milestones. Schedule risk exists if there is inadequate allowance for acquisition delays or if difficulty is experienced in achieving scheduled technical accomplishments, such as the development of software. Schedule risk can be incurred at the total project level for milestones such as deployment of the first system element. The cascading effects of element-level schedule risks can produce schedule risk for the total project | Adm |
| Risk, Technical | The possibility that a technical requirement of the system may not be achieved in the system life cycle. Technical risk exists if the system may fail to achieve performance requirements; to meet operability, producibility, testability, or integration requirements; or to meet environmental protection requirements. A potential failure to meet any requirement that can be expressed in technical terms is a source of technical risk | Adm |
| Safety | The control of accidental loss | Adm |
| Safety Council | A consulting body providing policy advice and evaluation of safety program effectiveness; the council is composed of independent safety professionals and representatives of LSST institutional members | Adm |
| Safety Manager | The person who manages, executes, and verifies compliance with the LSST Safety Policy (LPM-18); the Safety Manager is also chair of the Safety Council | Adm |
| SAL script | A program which communicates via SAL messages and adheres to a specific API, performing coordinated telescope and instrument control operations, such as 'slew to a target and take an image', or 'take a series of flats' | TS |
| Satellite Facility | The data center at CC-IN2P3 in Lyon, France | DM |
| Science Advisory Committee | An advisory body which provides a formal and two-way connection to the external science community served by LSST; comprised of scientists familiar with but external to the LSST Project, the SAC advises the LSST Director on both policy questions and technical topics of interest to the Project and the science community | LSST Adm |

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| Science Collaboration | An autonomous body of scientists interested in a particular area of science enabled by the LSST dataset, which through precursor studies, simulations, and algorithm development lays the groundwork for the large-scale science projects the LSST will enable. In addition to preparing their members to take full advantage of LSST early in its operations phase, the science collaborations have helped to define the system's science requirements, refine and promote the science case, and quality check design and development work | Adm |
| Science Collaboration Chair | The leader of and spokesperson for a Science Collaboration | Adm |
| Science Data Quality Assessment | An analysis system that examines and reports on the quality of LSST data and data products from a scientific perspective, and determines whether the data meets the science requirements in LPM-17 | DM |
| Science Pipelines | The library of software components and the algorithms and processing pipelines assembled from them that are being developed by DM to generate science-ready data products from LSST images. The Pipelines may be executed at scale as part of LSST Prompt or Data Release processing, or pieces of them may be used in a standalone mode or executed through the LSST Science Platform. The Science Pipelines are one component of the LSST Software Stack | DM |
| Science Platform | A set of integrated web applications and services deployed at the LSST Data Access Centers (DACs) through which the scientific community will access, visualize, and perform next-to-the-data analysis of the LSST data products | DM |
| Science Quality Analysis Harness | provides a minimal infrastructure for monitoring the LSST verification metrics. It can be used and extended to preserve the code and knowledge developed during LSST construction `https://squash.lsst.codes/` | DM |

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| Science Verification | The second phase of Commissioning for the LSST Construction Project, Science Verification demonstrates the system's compliance with the survey performance specifications detailed in the LSST Science Requirements Document (SRD, LPM-17). These activities are based solely on the measured 'on-sky' performance of the LSST system | DM |
| SCons | A piece of software developed externally to LSST. An automated build tool used for DM software development. See the SCons website for details | DM |
| Scope | The work needed to be accomplished in order to deliver the product, service, or result with the specified features and functions | Adm |
| script queue | A CSC which manages SAL scripts, running one script at a time until the queue is exhausted or paused | TS |
| SDQA Metric | The name of a quantity that is calculated for image data by SDQA-related pipeline processes (e.g., mean, standard deviation, number of saturated pixels, mean PSF width, etc.). Associated with the metric name are the physical units of the calculated quantity and whether the quantity's data type is integer or floating-point | DM |
| SDQA Rating | The value and error associated with an SDQA metric. An image can have a set of different SDQA ratings | DM |
| SDQA Status | The status assigned to an image by the SDQA subsystem (e.g., pass, fail, unknown, etc.). Database tables that store image metadata will include a field containing an ID number that corresponds to an SDQA status | DM |
| SDQA Threshold | The set of lower and upper thresholds associated with an SDQA Metric. Some metrics have only either a lower or upper threshold. In general, the thresholds depend on observing conditions (e.g., atmospheric seeing, filter, etc.) | DM |
| seeing | An astronomical term for characterizing the stability of the atmosphere, as measured by the width of the point-spread function on images. The PSF width is also affected by a number of other factors, including the airmass, passband, and the telescope and camera optics | Sci |

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| Sensor | A sensor is a generic term for a light-sensitive detector, such as a CCD. For LSST, sensors consist of a 2-D array of roughly 4K x 4K pixels, which are mounted on a raft in a 3x3 mosaic. Each sensor is divided into 16 channels or amplifiers. The 9 sensors that make up a raft are numbered from ”0,0” through ”2,2” | CAM |
| shape | In reference to a Source or Object, the shape is a functional characterization of its spatial intensity distribution, and the integral of the shape is the flux. Shape characterizations are a data product in the DIASource, DIAObject, Source, and Object catalogs | DM |
| SHE Plans | SHE plans are site-specific guidelines for safe working conditions. LSST expects that each collaborating organization and contractor has established safety programs to govern the specific activities at that location. LSST has a minimum expectation for the criteria established in these plans and expects all staff, permanent to the location or visiting, to follow these local procedures. When LSST specific sites are established the project will issue specific SHE plans for those locations | Adm |
| Signature Authority | The individual designated by the LSSTC policy as authorized to approve the use of funds from a specific account; he or she must approve each Purchase Requisition for the account listed on the Purchase Requisition | Adm |
| Simonyi Survey Telescope | The telescope at the Rubin Observatory that will perform the LSST (this refers to all physical components: the mirror, the mount assembly, etc.). | |
| Simulations Lead | The person who oversees the activities of the LSST simulations efforts (ImSim, OpSim, PhoSim, etc.). The Simulations Lead is part of the Systems Engineering group and reports to the Systems Engineering Manager | Sims Adm |
| Single Visit Image | See CalExp | DM |
| Singularity | A software containerization system; an alternative to Docker; `https://sylabs.io` | DM |
| Site Manager | The LSST-delegated representative at the Cerro Pachón, Chile Summit site who is authorized to approve and accept work, provide technical liaison, monitor safety, and interpret LSST plans and specifications on behalf of AURA/LSST | Adm |

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| sky map | A sky tessellation for LSST. The Stack includes software to define a geometric mapping from the representation of World Coordinates in input images to the LSST sky map. This tessellation is comprised of individual tracts which are, in turn, comprised of patches | DM |
| SLAC National Accelerator Laboratory | A national laboratory funded by the US Department of Energy (DOE); SLAC leads a consortium of DOE laboratories that has assumed responsibility for providing the LSST camera. Although the Camera project manages its own schedule and budget, including contingency, the Camera team's schedule and requirements are integrated with the larger Project. The camera effort is accountable to the LSSTPO. | TS |
| Sloan Digital Sky Survey | is a digital survey of roughly 10,000 square degrees of sky around the north Galactic pole, plus a 300 square degree stripe along the celestial equator | Sci |
| Snap | One 15 second exposure within a Standard Visit in the LSST cadence | DM |
| Software Stack | Often referred to as the LSST Stack, or just The Stack, it is the collection of software written by the LSST Data Management Team to process, generate, and serve LSST images, transient alerts, and catalogs. The Stack includes the LSST Science Pipelines, as well as packages upon which the DM software depends. It is open source and publicly available | DM |
| Solar System Object | A solar system object is an astrophysical object that is identified as part of the Solar System: planets and their satellites, asteroids, comets, etc. This class of object had historically been referred to within the LSST Project as Moving Objects | DM |
| Solar System Processing | A component of the Prompt Processing system, Solar System Processing identifies new SSObjects using unassociated DIASources. | DM |
| Sole Source | A purchase of a commodity or a service that is noncompetitive in price, specifications, or use; or is 'only source' and must be accompanied by a sole source justification | Adm |
| Sole Source Justification | A document accompanying a Purchase Requisition that provides the justification(s) for procuring the items must be from the single vendor listed on the Purchase Requisition | Adm |

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| Source | A single detection of an astrophysical object in an image, the characteristics for which are stored in the Source Catalog of the DRP database. The association of Sources that are non-moving lead to Objects; the association of moving Sources leads to Solar System Objects. (Note that in non-LSST usage "source" is often used for what LSST calls an Object.) | DM |
| Source Association | The process of associating source detections on multiple images taken at different epochs, or in multiple passbands, with a single astronomical Object | DM |
| source footprint | A set of pixels that are determined to be part of a Source (or DIASource). It is implemented as a list of spans. A span contains coordinates of a stripe of pixels: row (y) given span belongs to, and a section of a column (xStart, xEnd). In DM code, the term 'footprint' refers to a 'source footprint' | DM |
| Speakers Bureau | A volunteer body promoting LSST's visibility by identifying, initiating, and coordinating opportunities for LSST-related talks, especially at large conferences | Adm |
| Speakers Bureau Website | An LSST website used by the LPO as a tool for screening and approving participation of LSST project personnel at various externally hosted meetings; the site also provides a mechanism for the Speakers Bureau to accept speaker requests, coordinate speakers, and maintain a record of requests received and talks given. With this tool the Director and Project Manager can review and approve/deny requests for LSST financial support for travel before such meetings occur. Project personnel use the site to report their intended participation in a meeting even if they are requesting neither a speaker nor LSST funding | Adm |
| Special Program | Any LSST mini-survey or deep drilling field that is observed independently of the Wide-Fast-Deep (WFD) main survey | DM |
| Specification | One or more performance parameter(s) being established by a requirement that the delivered system or subsystem must meet | Adm |
| Spectral Energy Distribution | the radiated energy of an astrophysical object as a function of energy (or wavelength) across the entire spectrum of light | Sci |

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| sqlite3 | A software package external to DM, sqlite3 provides a SQL interface compliant with the DB-API 2.0 specification for SQLite, a self-contained public-domain SQL database engine | DM |
| stack | a grouping, usually in layers (hence stack), of software packages and services to achieve a common goal. Often providing a higher level set of end user oriented services and tools | DM |
| Standard Visit | A single observation of a LSST field comprised of two 15 second 'Snap' exposures that are immediately combined. An 'Alternate Standard Visit' is a single observation of a LSST field comprised of one 30 second exposure | DM |
| Stop Work Authority | The authority of any individual to stop work if unanticipated/unsafe conditions are identified or non-compliant practices are observed at the site. Workers shall be instructed stop the work immediately and notify their supervisor(s), safety and health representative(s), and the LSST site manager of this action. Disagreements or differences of opinion about the need to terminate an activity shall occur only after the activity is stopped and people are removed from the hazard. All workers at the site have the authority to stop work. Work may not proceed until the circumstances are investigated and deficiencies corrected | Adm |
| story | A JIRA issue type describing a scheduled, self-contained task worked as part of an epic. Typically, stories are appropriate for work worth between a fraction of a SP and 10 SP; beyond that, the work is insufficiently fine-grained to schedule as a story. While fractional SP are fine, all stories involve work, so the SP total of an in progress or completed story should not be 0 | DM |
| Stripe 82 | A 2.5° wide equatorial band of sky covering roughly 300 square degrees that was observed repeatedly in 5 passbands during the course of the SDSS, In part for calibration purposes | Sci |
| Subcontract | An agreement under which another entity will perform part or all of the project's contract obligations | Adm |
| Subsystem | A set of elements comprising a system within the larger LSST system that is responsible for a key technical deliverable of the project | Adm |

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| Subsystem Manager | responsible manager for an LSST subsystem; he or she exercises authority, within prescribed limits and under scrutiny of the Project Manager, over the relevant subsystem's cost, schedule, and work plans | Adm |
| Subsystem Scientist | The principal science advisor to a Subsystem Manager; he or she ensures that the subsystem specifications are appropriated for achieving the project's goals | Adm |
| Subsystem Systems Engineer | A subsystem team member who works closely with the Subsystem Manager and the project Systems Engineering group on internal integration of the subsystem's component parts and the subsystem's integration with the larger LSST system | Adm |
| Summit | The site on the Cerro Pachón, Chile mountaintop where the LSST observatory, support facilities, and infrastructure will be built | Adm |
| Summit Facility | The main Observatory and Auxiliary Telescope buildings at the Summit Site on Cerro Pachón, Chile | DM |
| supertask | Deprecated term; see PipelineTask | DM |
| survey footprint | The portion of the sky covered by data from an astronomical survey, e.g., the main wide-fast-deep LSST 10-year survey, the LSST deep drilling fields, or the Science Validation data taken during commissioning. Sometimes represented by Boolean maps or other summary statistics in an all-sky representation, e.g., the IVOA MOC standard | DM |
| System Integration and Test | The first year of the two-year Commissioning phase of the LSST Construction Project, during which the various technical components of the three subsystems will be integrated and compliance with ICDs and system level compliance as detailed in the LSST Observatory System Specifications document (OSS, LSE-30) will be shown. Roughly 4-6 months into the System I&T phase, the telescope and camera will be fully integrated and periodically producing science grade images over the full field of view, at which point 'System First Light' will be declared | TS CAM DM SE |
| Systems Engineer | A member of the Systems Engineering group who works closely with the Systems Engineering Manager and the Systems Scientist on the integrated LSST system's various technical issues spanning the full life cycle of the entire project | Adm |

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| Systems Engineering | an interdisciplinary field of engineering that focuses on how to design and manage complex engineering systems over their life cycles. Issues such as requirements engineering, reliability, logistics, coordination of different teams, testing and evaluation, maintainability and many other disciplines necessary for successful system development, design, implementation, and ultimate decommission become more difficult when dealing with large or complex projects. Systems engineering deals with work-processes, optimization methods, and risk management tools in such projects. It overlaps technical and human-centered disciplines such as industrial engineering, control engineering, software engineering, organizational studies, and project management. Systems engineering ensures that all likely aspects of a project or system are considered, and integrated into a whole | SE |
| Systems Engineering Manager | individual responsible for the oversight and coordination of the LSST systems engineering efforts as well as the management of the Systems Engineering group and work package. The SEM is also the CCB Chair and as such is responsible for the execution, technical oversight, and coordination of configuration control activities | Adm |
| Systems Scientist | A member of the Systems Engineering group and chief liaison to all project scientists; the Systems Scientist works closely with the Systems Engineering Manager and is responsible for the flow-down of science requirements. The Systems Scientist ensures that acceptance testing and commissioning address the science requirements | Adm |
| Task | Tasks are the basic unit of code re-use in the LSST Stack. They perform a well defined, logically contained piece of functionality. Tasks come standard with configuration, logging, processing metadata, and debugging features. For further details, see How to Write a Task in the source code documentation. Tasks can be nested, providing a natural way to structure - and configure - high level algorithms that delegate work to lower-level algorithms | DM |

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| Technical Baseline Classified Index | An index linking to the various requirements documents, specifications documents, ICDs, design documents, budgets and allocations, and WBS dictionaries defining the current baseline of the LSST project's technical scope (LSE-90) | Adm |
| Telescope and Site | The LSST subsystem responsible for design and construction of the telescope structure, telescope mirrors, optical wavefront measurement and control system, telescope and observatory control systems software, and the summit and base facilities. The Telescope technical team is hosted by NOAO | Adm |
| Template | A co-added, single-band image of the sky that is deep, and created in a manner to remove transient or fast moving objects from the final image. Constituent images for templates may be selected from a limited range of quality parameters, such as PSF size or airmass. Such images are used to perform Difference Image Analysis in order to detect variable, transient, and Solar System astrophysical objects | DM |
| test stand | An environment used for testing the operation of the LSST Camera, or some component thereof. In the Data Management context, this generally refers to a simulated Camera readout system used to test the interface between the Camera and the DM system (see, for example, NTS) | DM CAM |
| Then-Year Cost | An extrapolation from the base year cost of a project element out to the year the cost actually will be incurred that accounts for escalation rates | Adm |
| tidy data | Tidy datasets have a specific structure: each variable is a column, each observation is a row, and each type of observational unit is a table (Wickham, H., 2014, Journal of Statistical Software, Articles, 59, 1) | DM QA |
| tile | Obsolete form of sky tessellation, superseded by tracts/patches | DM |
| timebox | A limited time period assigned to a piece of work or other activity. Useful in scheduling work which is not otherwise easily limited in scope, for example research projects or servicing user requests | DM |
| tracklet | Links between unassociated DIASources within one night to identify moving objects | DM |

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| tract | A portion of sky, a spherical convex polygon, within the LSST all-sky tessellation (sky map). Each tract is subdivided into sky patches | DM |
| transient | A transient source is one that has been detected on a difference image, but has not been associated with either an astronomical object or a solar system body | Sci |
| Travel Administrator | The person responsible ensuring compliance with the LSST Travel Policy. S/he makes all travel arrangements for all individuals whose travel is paid by LSST. S/he also reviews all Travel Expense Reports (TER) to vet claimed expenses as allowable before submitting them for approval by the LSST Business Manager | Adm |
| User Generated Data Product | The products of User Generated Processing pipelines; these products will originate from the community, including project teams | DM |
| User Generated Processing | Any (re)processing of LSST data performed by a user, with either custom pipelines or reconfigured LSST software, to create User Generated Data Products. This processing will originate from the community, including project teams | DM |
| Validation | A process of confirming that the delivered system will provide its desired functionality; overall, a validation process includes the evaluation, integration, and test activities carried out at the system level to ensure that the final developed system satisfies the intent and performance of that system in operations | Adm |
| Verification | The process of evaluating the design, including hardware and software - to ensure the requirements have been met; verification (of requirements) is performed by test, analysis, inspection, and/or demonstration | Adm |
| Visit | A sequence of one or more consecutive exposures at a given position, orientation, and filter within the LSST cadence. See Standard Visit, Alternate Standard Visit, and Non-Standard Visit | DM TS Sims |
| warp | (noun) The pixels from a single CCD Exposure that overlap a given coadd patch, trimmed and resampled into the patch's coordinate system; in other words, an image that has been astrometrically registered to the common coordinate system of a tract | DM |
| Wide-Fast-Deep | The main survey of the LSST to cover at least 18000 square degrees of the southern sky | DM TS |

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| Work Breakdown Structure | a tool that defines and organizes the LSST project's total work scope through the enumeration and grouping of the project's discrete work elements | Adm |
| Work Elements | The critical tasks of the LSST Project as represented in the WBS | Adm |
| World Coordinate System | a mapping from image pixel coordinates to physical coordinates; in the case of images the mapping is to sky coordinates, generally in an equatorial (RA, Dec) system. The WCS is expressed in FITS file extensions as a collection of header keyword=value pairs (basically, the values of parameters for a selected functional representation of the mapping) that are specified in the FITS Standard | Sci |