

GLAST and LAT Acronyms

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1553	MIL-STD-1553 Bus (Interface between Spacecraft and LAT)
A&T	Assembly & Test
ACD	The LAT Anti-Coincidence Detector Subsystem
ACE	Advanced Composition Explorer
ACS	Attitude Control System
ACT	Atmospheric Cherenkov Telescope
ACT+COM	ACWP + Outstanding Commitments
ACTUALS	ACWP
ACWP	Actual Cost of Work Performed
ADC	Analog to Digital Converter
ADC	Analog-to-Digital Converter
Aeff	Effective Area
AEM	ACD Electronics Module
AFEE	Analog Front End Electronics
AGN	Active Galactic Nuclei
AIAA	American Institute of Aeronautics and Astronautics
AIM	Applied Integration Management
AIP	American Institute of Physics
AMANDA	Antarctic Muon and Neutrino Detector Array
AMI	American Microsystems Inc.
AMOS	Air Force Maui Optical Site
AMS	Alpha Magnetic Spectrometer
ANSI	American National Standards Institute
AO	Announcement of Opportunity
AOS	Advanced Orbiting Systems
APS	American Physical Society
ARGOS	Advanced Research and Global Observations Satellite
ASI	Italian Space Agency
ASIC	Application Specific Integrated Circuit
ASP	Active Server Pages
ASQC	American Society for Quality Control
ASSY	Assembly
ATD	Advanced Technology Development Program (NASA)
ATD	Advanced Technology Development
ATIC	Advanced Thin Ionization Calorimeter
ATLAS	Atmospheric Laboratory for Application and Science; also: A Toriodal Large Acceptance Spectrometer; also: an Expendable Launch Vehicle
AV	Available
BAC	Budgeted at Completion
BCWP	Budgeted Cost of Work Performed
BCWS	Budgeted Cost of Work Scheduled
Bd	Board
BDC	Backgrounds Data Center
BE	Budget Element
BEA	Base Electronics Assembly
BER	Bit Error Rate
BF	Base Frame
BFEM	Balloon Flight Engineering Model
BGL	Bismuth Germinate
BIU	Balloon Interface Unit
Bps	Bits per second
BSP	Board Support Package
BT	Beam Test
BTEM	Beam Test Engineering Model

BUD+COM	BCWS+Planned Commitments
C&DH	Command and Data Handling Subsystem
C&DH	Command and Data Handling
C.R.	Cosmic Ray
CAD	Computer Aided Design
CAL	The LAT Calorimeter Subsystem
CAM	Cost Account Manager
CANGAROO	Collaboration between Australia and Nippon for a Gamma-Ray Observatory in the Outback
CAP	Cost Account Plan
CAPRICE	Cosmic Antiparticle Ring-Imaging Cherenkov Experiment
CAPW	Code Field Name for CAP Work Breakdown Structure
CAT	Cherenkov Array at Themis
C-C	Carbon Composite
CCB	Configuration Control Board
CCHP	Constant Conductance Heat Pipes
CCP	Contamination Control Plan
CCSDS	Consultative Committee for Space Data Systems
CCSDS Packet	A Spacecraft Packet Telecommand Standard Approved by the CCSDS
CD	Compact Disk
CDE	Crystal Detector Element
CDF	Collider Detector at Fermilab
CDM	Configuration & Data Management
CDR	Critical Design Review
CEA	Commissariat a l'Energes Atomique
CENBG	Centre d'etudes Nucleaires de Bordeaux Gradignan
CERN	Centre European pour la Recherche Nucleaire
CFC	Carbon-Fiber Composite
CFG	Configuration
CGRO	Compton Gamma Ray Observatory
CheX	Confined Helium Experiment
CIL	Critical Items List
CLA	Coupled Loads Analysis
CLUL	Confidence Level Upper Limit
CM	Configuration Management; also: Center of Mass
CMOS	Complementary Metal Oxide Semiconductor
CNO	Carbon-Nitrogen-Oxygen
CNRS	Centre National de la Recherche Scientifique
COMM	Communications
COS-B	European Gamma-ray Astronomy Satellite
COTS	Commercial Off-the-Shelf
CPI	Const Performance Index
CPN	Code Field Name for Work Packages
CPR	Cost Performance Report
CPU	Central Processing Unit
CsI (TI)	Cesium Iodide crystal doped with Thallium
CSOC	Consolidated Space Operations Center
CSSR	Cost/Schedule Status Reports
CSTA	California Science Teachers Association
CTE	Coefficient of Thermal Expansion
CU	Calibration Unit
CVS	Cost Variance
CVS	Concurrent Versions System
CY	Calendar Year

DAC	Digital to Analog Converter
DAPNIA	Departement d'Astrophysique, de physique des Particules, de physique Nucleaire et de L'Instrumentation Associee
DAQ	Data Acquisition System also: LAT Electronics, Data Acquisition and Flight Software Subsystem
DB	Data Base
DC	Direct Current
DESY	Deutsches Electron-Synchrotron
DM	Development Model
DMILL	Durci Mixte Isolant Logico Lineaire
DOD	Department of Defense
DOE	Department of Energy
DOF	Degrees of Freedom
DOORS	Dynamic Object Oriented Requirements System
DPD	Dual PIN PhotoDiode
dPDR	Delta Preliminary Design Review
DPF	Data Processing Facility
DRAM	Dynamic Random Access Memory
DRB	Design Review Board
DRL	Data Requirements List
DRT	Design Review Team
DSF	Data Switch FPGA
DSM	Direction des Sciences de la Matiere
DSP	Digital Signal Processor
E	Energy
EAC	Estimate at Completion
EAf	European Analysis Facility
EB	Event Builder
ECR	Engineering Change Request
ED&I	Engineering Design & Integration
EDAQ	the LAT Electronics, Data Acquisition and Flight Software Subsystem
EEE	Electrical, Electronic and Electromechanical
EEPROM	Electrically Erasable Programmable Read Only Memory
EGRET	Energetic Gamma Ray Experiment Telescope on CGRO
EGS	Electron Gamma Shower
EGSE	Electrical/Electronics Ground Support Equipment
ELEC	Electrical
ELX	Electronics
EM	Engineering Model
EM1	Engineering Model 1
EM2	LAT Engineering Model 2, multiple towers
EMC	European Muon Collaboration
EMC	Electromagnetic Compatibility
EMI	Electromagnetic Interference
EOL	End of Life
EP	Event Processor
EPO	Education and Public Outreach
EPU	Event Processing Unit
ESA	End Station A
ESD	Electrostatic Discharge
ETC	Estimate to Complete
EV	Earned Value (BCWP)
EWR	Eastern and Western Range
FAMM	Full Scale ACD Mechanical Model
FAR	Federal Acquired Regulation
FAX	Facsimile
FCDI	Flex-Circuit Detector Interconnect

FEA	Finite Element Analysis
FEE	Front-End Electronics
FEM	Finite Element Model
FERC	Front End Readout Chip
FFP	Firm Fixed Price
FIFO	First In First Out
FITS	Flexible Image Transport System
FM	Flight Module
FMA	Flight Module A
FMB	Flight Module B
FMEA	Failure Modes and Effects Analysis
FNAL	Fermi National Accelerator Laboratory
FOM	Figure of Merit
FOV	Field of View
FPGA	Field Programmable Gate Array
FREE	Front End Electronics
FSW	Flight Software
FTA	Fault Tree Analysis
FTE	Full Time Equivalent
FTOOL	Fits Tool
FU	Flight Unit
FUSE	Far Ultra Violet Spectroscopic Explorer
FWHM	Full Width Half Maximum
FY	Fiscal Year
GAFE	GLAST ACD Front End- Analog ASIC
GARC	GLAST ACD Readout Controller- Digital ASIC
GAS	Global Trigger, ACD, DAQ and SIG
GASU	GAS Unit
GBM	Gamma-ray Burst Monitor
Gbps	Gigabits per second
GCFE	GLAST Calorimeter Front-end Electronics - Analog ASIC
GCN	Global Communications Network
GCN	Gamma-ray Burst Coordinate Network
GCRC	GLAST Calorimeter Read-out Controller - Digital ASIC
GEM	Global-Trigger Electronics Module
GeV	Giga Electron Volts
GEVS	General Environmental Verification Specification
GIDEP	Government-Industry Data Exchange Program
GIOC	GBM Instrument Operations Center
GITD	GLAST Instrument Technology Development
GLAST	Gamma-ray Large Area Space Telescope
GLT	Global Trigger
GN	Ground Network
GNC	Guidance, Navigational and Control
GNU	GNU's Not Unix
GO	Guest Observer
GOLF	Global Oscillations at Low Frequencies
GPS	Global Positioning System
GRAPWG	Gamma-Ray Astronomy Program Working Group
GRB	Gamma-ray Burst
GRIS	Gamma Ray Imaging Spectrometer
GRO	Gamma Ray Observatory
GSE	Ground Support Equipment
GSFC	Goddard Space Flight Center
GSI	Gesellschaft für Schwerionenforschung
GT	Global Trigger
GTFE	GLAST Tracker Front-end Electronics (ASICS)
GTM	Global Trigger Module
GTRC	GLAST Tracker Read-out Controller

GUI	Graphical User Interface
HBCU	Historical Black Colleges & Universities
HE	High Energy
HEAO	High Energy Astrophysics Observatory
HEASARC	High Energy Astrophysics Science Archive Research Center
HEO	High Earth Orbit
HEP	High Energy Physics
HEPA	High Efficiency Particulate Arresting
HEPL	W.W. Hansen Experimental Physics Laboratory at Stanford University
HEXTE	High Energy X-ray Timing Experiment
HI discriminator	A discriminator set for the high end of a range
HLD	High Level Discriminator
HP	Hewlett Packard
HPK	Hamamatsu Photonics K (Japan)
HSK	Housekeeping
HSM	Hierarchical Storage Manager
HST	Hubble Space Telescope
HV	High Voltage
HVBS	High Voltage Bias Supply
HVPS	High Voltage Power Supply
HW	Hardware
I&T	Integration & Test
I&TM	I&T Manager
I/F	Interface
I/O	Input/Output
IA	Internal Available
IAU	International Astronomical Union
IC	Integrated Circuit
ICD	Interface Control Document
I-CDR	Instrument Critical Design Review
ICS	Interface and Control System
IDB	Instrument Data Bus
IDL	Interactive Data Language
IDS	Interdisciplinary Scientist
IDT	Instrument Design Team
IEEE	Institute of Electrical and Electronics Engineers
IFCT	Integration, Facilities Configuration & Test
IIS	Instrument Interface Structure
IMDC	Integrated Mission Design Center
IN	Internal Need
IN2P3	Institut National de Physique Nucleaire et de Physique des Particules
INFN	Istituto Nazionale Di Fisica Nucleare, (Italy)
IOC	Instrument Operations Center
I-PDR	Instrument Preliminary Design Review
IPI	Instrument Principal Investigator
IPM	Instrument Project Manager
IPO	Instrument Project Office
IPS	Instrument Power System
IPS	Integrated Project Schedule
IRD	Interface Requirement Document
IRF	Instrument Response Function
IS	Instrument Scientist
ISAS	Institute for Space and Astronautical Science, Japan
ISE	Instrument System Engineer
ISEE	International Sun-Earth Explorer
ISSET	Instrument System Engineering Team
ISM	Inter-Stellar Medium
ISO	International Organization for Standardization

ISP	Internet Service Provider
ISS	International Space Station
ITM	Instrument Technical Manager
IV&V	Independent Verification and Validation
JGC	Japanese GLAST Collaboration
JOG	Joint Operating Group
JON	Job Order Number
JPL	Jet Propulsion Laboratory
JSC	Johnson Space Center
Kbps	Kilobits per second
KEK	National Laboratory for High Energy Physics, Japan
kg	Kilogram
KSC	Kennedy Space Center
KTH	Royal Institute of Technology, Sweden
L1T	Level One Trigger
L2T	Level Two Trigger
L3T	Level Three Trigger
LASCO	Large Angle and Spectrometric Coronagraph Experiment
LAT	GLAST Large Area Telescope
LED	Light Emitting Diode
LEOP	Launch and Early Orbit Phase
LHA	Layer Hit Address
LHC	Large Hadron Collider
LHEA	Laboratory for High Energy Astrophysics at NASA's GSFC
LIOC	LAT Instrument Operations Center
LLI	Long Leadtime Items
LLIS	Lessons Learned Information System
LM	Lockheed Martin
LM-ATC	Lockheed-Martin Advanced Technology Center
LMMS	Lockheed Martin Missiles and Space Corporation
LO Discriminator	A discriminator set for the low end of a range
LOE	Level of Effort
LOF	LAT Operations Facility
LPNHE-X	Laboratoire de Physique Nucleaire des Hautes Energies de l'Ecole
LRE	Latest Revised Estimate (EAC)
LRP	Low Rate Physics
LRS	Low Rate Science
LV	Low Voltage
LV	Launch Vehicle
LVDS	Low Voltage Differential Signal
M&S	Materials & Services
MA	Multiple Access
MAG	Mission Assurance Guidelines
MAPMT	Multi-Anode Phototube Multiplier
MAR	Mission Assurance Requirements
Mbps	Megabits per second
MC	Monte Carlo
M-CDR	Mission Critical Design Review
MCM	Multi Chip Module
MDI	Michelson-Doppler Imager
MECH	Mechanical
MECO	Main Engine Cut-off

MeV	Mega Electron Volts
MGSE	Mechanical Ground Support Equipment
MIL	Military
MIP	Minimum Ionizing Particle
MLEV	Milestone Level
MLI	Multi-Layer Insulation
MO&DA	Mission Operations & Data Analysis program phase
MOA	Memorandum of Agreement
MOC	Mission Operation Center
MODA	Mission Operations and Data Analysis
MOSIS	Metal Oxide Semiconductor Implementation System
MOU	Memorandum of Understanding
M-PDR	Mission Preliminary Design Review
MPLS	Multi-Purpose Lift Sling
MSFC	Marshall Space Flight Center
MSI&T	Mission Systems Integration & Test program phase
MSI&T	Missions Systems I&T
MSPSP	Missile System Prelaunch Safety Package
MSS	Mission System Specification
MSSM	Minimum Super Symmetry Model
NaI	Sodium Iodide
NAO	National Astronomical Observatory
NAR	Non Advocate Review
NAS	National Academy of Sciences
NASA	National Aeronautics and Space Administration
NCR	Nonconformance Report
NCST	Naval Center for Space Technology
NCTM	National Council of Teachers of Mathematics
ND	Need
NDE	Non-Destructive Evaluation
NDI	Non-Development Item
NEMO	Naval Earth Map Observer
NFS	Network File System
NIM	Nuclear Instruments and Methods in Physics Research
NISN	NASA Integrated Services Network
NPD	NASA Policy Directive
NPSL	NASA Parts Selection List
NRL	Naval Research Laboratory
NSBF	National Scientific Balloon Facility
NSF	National Science Foundation
NSTA	National Science Teachers Association
OBS	Organizational Breakdown Structure
ODBC	Open Data Base Connectivity
OHP	Operational Health Physics
OM	Operations Model
OMEI	Other Minority Educational Institutions
ORU	Organized Research Units
OSHA	Occupational Safety and Health Administration
OSS	NASA Office of Space Science
OSSE	Oriented Scintillation Spectrometer Experiment on CGRO
OTL	Office of Technology Licensing
P&SA	Performance and Safety Assurance
PA&S	Performance Assurance and Safety
PAF	Payload Attach Fitting
PAIP	Performance Assurance Implementation Plan
PAM	Performance Assurance Manager

PAN	Polyacrylonitrile
PAPL	Program Approved Parts List
PAT	Pointing Accuracy per Tray
PCB	Printed Circuit Board
PCC	Power Conditioning Card
PCC	Laboratoire de Physique Corpusculaire et Cosmologie
PCM	Project Control Manager
PCS	Pointing Control Subsystem
PDA	Personal Digital Assistant
PDR	Preliminary Design Review
PDU	Power Distribution Unit
PEM	Plastic Encapsulated Module
PEM	Pre-Electronics Module
PER	Pre-Environmental Review
PFR	Problem/Failure Report
PGA	Programmable Gate Array
PHA	Pulse Height Analysis
PI	Principle Investigator
PID	Proportional Integral Derivative
PIL	Parts Identification List
PIN	Positive-Intrinsic-Negative, a type of semiconductor
PLANNED	BCWS
PMB	Performance Measurement Baseline
PMCS	Project Management Control System
PMT	Photo-Multiplier Tube
PMT	Performance Measurement Technique
PNMT	Photo-Multiplier Tube
PNMT	Photo Multiplier Tube
PPCP	Parts Program Control Plan
PPL	Preferred Parts List
PRA	Probabalistic Risk Analysis
PROM	Programmable Read Only Memory
PS	Power Supply
PSAM	Performance and Safety Assurance Manager
PSC	Power Switching Card
PSF	Point Spread Function
PSR	Pulsar
PSR	Pre-Shipment Review
PVM	Performance Verification Matrix
PWB	Printed Writing Board
QA	Quality Assurance
QC	Quality Control
QE	Quality Engineering
QU	Qualification Unit
R&D	Research and Development
R&QA	Reliability & Quality Assurance
R.L.	Radiation Length
R2	Revision 2
RDB	Relational Data Base
RFI	Request for Information
RFP	Request for Proposal
RHA	Resolved Hit Address
RI	Required Instrument
RIKEN	Japanese Institute of Physical and Chemical Research
RMS	Root Mean Square
RSDO	Rapid Spacecraft Development Office
RT	Remote Terminal
RTE	Real Time Engine

RTOS	Real Time Operating System
RXTE	Rossi X-Ray Timing Explorer
S&MA	Safety and Mission Assurance
SAA	South Atlantic Anomaly
SAC	Science Advisory Committee
SAGENAP	Scientific Assesment Group for Experiments on Non-Accelerator Physics
SAM	Safety Assurance Manager
SAP	Service d'Astrophysique
SAS	Science Analysis Software
SBC	Single Board Computer
SBIR	Small Business Innovation Research
SC	Spacecraft
SciFi	Scintillating Fiber
SCIPP	Santa Cruz Institute of Particle Physics at UCSC
SCL	Spacecraft Command Language
SCS	SLAC Computing Services
SDB	Small Disadvantaged Business
SDP	Science Data Processing
SE	System Engineering
SED	Service d'Etude des Detecteurs
SEE	Single Event Effects
SEI	Service d'Electronique & Informatique
SEL	Single Event Latch-up
SEP	Solar Energetic Particles
SEU	Single Event Upsept
SEU	Structure and Evolution of the Universe "NASA Program Theme"
SGC	Swedish GLAST Collaboration
SGL	Space/Ground Link
Si	Silicon
SI	Science Instrument
SIG	Signal Distribution
SINDA	Systems Improved Numerical Differencing Analyzer
SIS	Solar Isotope Spectrometer
SI-SC	Science Instrument-Spacecraft
SIU	Spacecraft Interface Unit
SLAC	Stanford Linear Accelerator Center
SLD	SLAC Large Detector
SMB	Software Messaging Bus
SMT	Surface Mount Technology
SN	Space Network
SNOB	Super Novae OB Star Association
SNR	Super Nova Remnant
SNR	Signal/Noise Ratio
SOC	Science Operations Center
SOHO	Solar and Heliospheric Observatory
SOI	Silicon On Insulator
SOW	Statement of Work
SPAR	Single Photon Angular Resolution
SPEC	Specification
SPI	Schedule Performance Index
SQA	Software Quality Assurance
SR	Steradian
SR&T	Sustaining Research & Technology
SRAM	Static Random Access Memory
SRD	Science Requirements Document
SRO	Systems Review Office
SRR	Site Recommendaiton Report
SRR	System Requirements Review
S-S	Subsystem

SSAC	Senior Scientist Advisory Committee
SSC	Synchrotron Self Compton
SSC	Science Support Center
SSD	Silicon Strip Detector
SSE	Space Science Enterprise
SSPP	System Safety Program Plan
SSR	Solid State Recorder
SSU	California State University at Sonoma
STD	Standard
STM	STMicroelectronics, (Italy)
STP	Space Test Program
SU	Stanford University
SU-HEPL	Stanford University Hanson Experimental Physics Laboratory
SUSIM	Solar Ultraviolet Spectral Irradiance Monitor
SU-SLAC	Stanford University-Stanford Linear Accelerator Center
SV	Space Vehicle
SVAC	Science Verification, Analysis and Calibration
SW	Software
SWG	Science Working Group
T&DF	Trigger and Dataflow
T&M	Test & Measuring
TACK	Trigger Acknowledge
TAMUK	Texas A&M Univeristy in Kingsville
TB	Test Board
TBD	To Be Determined
TBR	To Be Resolved
TCPU	Tower CPU
TCS	Thermal Control Subsystem
TDA	Tile Detector Assembly
TDRP	Technical Design Review Program
TDRSS	Tracking and Data Relay Satellite System
TDSP	TEM Digital Signal Processor
TECH	Technical
TDT	Tile Detection Test
TEM	Tower Electronics Module
THA	Tower Hit Address
TID	Total Ionizing Dose
TKR	The LAT Tracker Subsystem
TMCM	TKR Multi-Chip Module
TMM	Thermal-Mechanical Model
TOO	Target of Opportunity
TOT	Time Over Threshold
TPG	Thermal Pyrolytic Graphite
TPM	Technical Performance Measure
TQFP	Thin Quad Flat Package
TRC	Tower Readout Cable
TRG	Trigger
TRL	Technology Readiness Level
TSA	Tile Shell Assembly
TSS	Thermal Synthesizer System
TU	Test Unit
TV	Thermal Vacuum
UAH	University of Alabama at Huntsville
UARS	Upper Atmospheric Research Satellite
UCSC	University of California at Santa Cruz
UnID	Unidentified Sources
UTC	Universal Time Coordinated
UW	University of Washington

V&V	Verification and Validation
VAC	Vacuum
VCDU	Virtual Channel Data Unit
VCHP	Variable-Conductance Heat Pipe
VDG	Van Der Graff
VLPC	Visible Light Photon Counter
VLSI	Very Large Scale Integration
VM2	Verification Model 2
VME	Versa Module Eurocard
VR	Validation Reviews
VVC	Virtual Visitor Center
W	Watts
WAN	Wide Area Network
WBS	Work Breakdown Structure
WIMP	Weakly Interacting Massive Elementary Particle
WOA	Work Order Authorization
WP	Work Package
WSB	Wave Shifting Bars
WSF	Wave Shifting Fibers
WUStL	Washington University, St. Louis
X0	Radiation Length
XGT	External Gamma-Ray Target
X-LAT	Cross LAT