



HERSCHEL

Herschel Enhanced Acronym List

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Acronyms

A huge number of acronyms appear in Herschel technical and general documentation and are used in any Herschel conversation or presentation, usually without people even being consciously aware of using them. Some acronyms can even mean different things according to the context in which they are used as they have been re-used (there are multiple cases of a single acronym with as many as three different definitions in different areas of Herschel and one where **four** different definitions are found). Other acronyms have changed their meaning over the (long) history of the Herschel project, or just changed (e.g. as FIRST became Herschel, acronyms such as “FOTAC” became “HOTAC”, but can still be found in its original form in older documents): if this is the case, both the original and actual definitions are listed. There are even examples of a single term that may be known by different acronyms according to the document consulted and of acronyms that have been used as such for so long that they have become de facto words in the Herschel argot and the actual original significance of the acronym is uncertain. The following is an extensively updated version of the 2004 Herschel/Planck project acronym list prepared by the then Herschel Development Manager (later, Herschel Mission Manager) Johannes Riedinger. It includes many acronyms and their definitions garnered from multiple sources, found in Herschel documentation, or in presentations. While undoubtedly not exhaustive, it is most certainly the best list available at this time.

2Mass 2 micron All Sky Survey	APD Absolute Pointing Drift
4WD 4 (reaction) Wheel Drive	APE Absolute Pointing Error
A/D Analogue to Digital Converter	APF Attitude Parameter File
AAD Attitude Anomaly Detection	APH Attitude Pointing History
AAS American Astronomical Society	API Application Programming Interface
AAT Astronomy Acceptance Test	API Application Programmers Interface
ABCL As-Built Configuration List	APID Application Identifier
ABI Application Binary Interface	APID Application Programme Identifier
AC Alternating Current	APID Application Process Identifier
ACB ACC Bus	APPP Averaged Pointed Photometer Product
ACC Attitude Control Computer	AR Acceptance Review
AccAsw Attitude Control Computer Application Software	AR Anomaly Report
AccBsw Attitude Control Computer Basic Software	AR Anti-Reflex
ACM Attitude Control and Measurement	AR Active Region (on the Sun)
ACMS Attitude Control and Measurement Sub-system	AR5 Ariane 5
ACMS Attitude Control and Monitoring System	AR5-ECA Ariane 5 Extended Capabilities
ACS Auto-Correlation Spectrometer	ARE Absolute Rate Error
AD Applicable Document	ARAD Attitude and Rate Anomaly Detection
ADC Analogue to Digital Converter	ASCII American Standard Characters International Interchange
ADD Architectural Design Document	ASF Additional Safety Factor
ADP Acceptance Data Package	ASIC Application Specific Integrated Circuit
ADP Auxiliary Data Product	ASTRO-F Original name for AKARI
ADR Architectural Design Review	ASW Address and Synchronisation Word
AGB Asymptotic Giant Branch	ASW Application Software
AGC Automatic Gain Control	AT Acceptance Test
AGN Active Galactic Nucleus	ATC Astronomy Technology Centre, Edinburgh
AHF Attitude History File	ATC Active Thermal Control
AIT Assembly, Integration and Test	ATT Attenuator
AIV Assembly, Integration, and Verification	AU Astronomical Unit
AIV Assembly Integration Verification	ATT Attenuator
AKARI Japanese mid-infrared satellite (also known as ASTR_F or IRIS)	AU Astronomical Unit (mean Earth-Sun distance)
AM Avionics Model	AUX Auxiliary
AMA Absolute Measurement Accuracy	BACUS Bolometer Array Calibration Unit for SPIRE
AME Attitude Measurement Error	BAF Bâtiment d'Assemblage Final
AME Absolute Measurement Error	BAU Buffer Amplifier Unit
AMR Area to Mass Ratio	BBID Building Block ID (HIPE)
AMS Active Management System	BCR Battery Charge Regulator
AO Announcement of Opportunity	BCS Back-end Control System
AOCS Attitude and Orbit Control System	BdL Bureau de Longitude
AOPF Augmented Observation Planning File (former name of the EPOS file)	BDR Battery Discharge Regulator
AOR Astronomical Observation Request	BE Back End
AOS Acousto Optic Spectrometer	BEM Back End Module (LFI)
AOS Acquisition Of Signal	BER Bit Error Rate
AOT Astronomical Observation Template	BEU Back End Unit (LFI)
	BIB Blocked Impurity Band
	BICE A Japanese balloon borne telescope experiment

BIT Build In Test
BLOB Binary Large Object
BMOS Buckling Margin of Safety
BOL Beginning of Life
BOLC Bolometer Controller
bps bits per second
BRDF Bi-directional Reflectance Distribution Function
BRU Battery Regulator Unit
BSF Basic Safety Factor
BSM Beam Steering Mechanism
BSM Beam Steering Mirror
BSF Basic Software
BW Bandwidth
CA Calibration Analysis (software)
CaC Cost at Completion
CAISMI Centro per l'Astronomia Infrarossa e lo Studio del Mezzo Interstellare
CBB Cold Black Body
CC Configuration Control
CCB Configuration Control Board
cCCB Core Configuration Control Board
CCD Charged Coupled Device
CCE Central Check-Out Equipment
CCSDS Consultative Committee for Space Data Systems
CD Compact Disk
CDD Configuration Data Document
CDMS Command and Data Management **Sub-system**
CDMS Command and Data Management System
CDMS Central Data Management System
CDMU Central Data Management Unit
CdmuAsw Central Data Management Unit Application Software
CdmuBsw Central Data Management Unit Basic Software
CDR Critical Design Review
CEA Commissariat à l'énergie atomique
CEB Cebreros (Ground Station)
CEL Critical Event Log
CESR Centre d'Etude Spatiale des Rayonnements
CET Central European Time
CEST Central European Summer Time
CEU Cryo Electronics Unit
CFC Carbon Fibre Compound
CFIRB Cosmic Far InfraRed Background
CFRP Carbon Fibre Reinforced Plastic
CGI Common Gateway Interface
CIDL Configuration Item Data List
CIL Critical Items List
CL Confidence Level
Cluster ESA mission for ionospheric studies
CMB Cosmic Microwave Background
CMD Command
CME Coronal Mass Ejection
CMOS Complementary Metal Oxide Semiconductor
CMS Configuration Management System
CNES Centre National d'Etudes Spatiales
CNR Consiglio Nazionale delle Ricerche
C/O Check-Out
COA Common Optics Assembly
COBE Cosmic Background Explorer
COE Check-out Equipment
CoG Centre of Gravity
Co-I Co-Investigator
COM Centre of Mass
COM Common Object Model
COM (RAM) Communication (RAM)
COP Commissioning Operations Plan
CoP Commissioning Phase
Co-PI Co-Principal Investigator
CORBA Common Object Request Broker Architecture
COSPAR Committee on Space Research
COTS Commercial Off The Shelf Software
COTS Computer Off The Shelf
CQM Cryogenic Qualification Model
CPU Central Processing Unit
CRC Cyclic Redundancy Check
CRE Cryogenic Readout Electronics (in some documents: Cold Readout Electronics)
CREMA Consolidated Report on Mission Analysis (sometimes written **CReMA**)
CRM Command Response Module
CRP Contingency Recovery Procedure
Cs Caesium
CS4 Cornerstone 4 (= FIRST = Herschel)
CSA Canadian Space Agency
CSA Calibration Source Assembly
CSAP Contingency Support Activation Plan
CSDT Common Software Development Team
CSG Centre Spatiale Guyanais
CSG Community Support Group (HSC)
CSG Computer Support Group (HSC)
CSO Caltech Sub-millimetre Observatory
CSS Community Support Scientist
CST Community Support Tools
CTE Coefficient of Thermal Expansion
CTS Chirp Transform Spectrometer
CTU Central Terminal Unit
CUC CCSDS Un-segmented time Code
CUS Common Uplink System
CVCM Collected Volatile Condensable Material
CVV Cryostat Vacuum Vessel
CWG Commonality Working Group
D/A Digital to Analogue converter
DA Data Analysis (NASA)
DAC Digital to Analogue Converter
DACS Digital Autocorrelator Spectrometer
DAE Data Acquisition Electronics (LFI)
DAG Data Analysis Guide (HIPE)
DAPSAS Data Processing and Science Analysis Software
DASO Distant Artificial Satellite Observation Circular
dB Decibel
DB Database
DBMS Database Management System
dBmW/MHz Noise power level in **dB** relative to 1 **mW** in a 1 **MHz** bandwidth
DBR Distributed Bragg Reflector
DBS Double Beam Switch
DBU Digital Bus Unit, the digital interface provided by the spacecraft
DC Direct Current
DC/DC Direct Current voltage converter
DCCU Dilution Cooler Control Unit
DDD Detailed Design Document
DDR Detailed Design Review
DDS Data Distribution System
DDT Director's Discretionary Time
DDVP Design, Development and Verification Plan
DEC Detector Control
DECMEC Detector Control Mechanism
DECMEC Detector Control Mechanism – Mechanical Control Unit (PACS)
DESPA Département de Recherche Spatiale, Paris
DHS Data Handling System
DHSS Data Handling Sub-System
DLCM Direct Liquid Content Measurement (both the device & the measurement)
DM Demonstration Model
DM Development Model
DM Dynamic Model
DM Data Memory

DMA Direct Memory Access
DML Declared Material List
DMPL Declared Mechanical Parts List
DMS Document Management System
DNS Dominion Name Server
D/OPS Directorate of Operations (ESA)
DoD Depth of Discharge
DOF Degree of Freedom
DOY Day Of Year
DPC (Planck) Data Processing Centre
DPL Declared Process List
DPOP Daily Prime Operational Phase
DPT Defective Pixel Table
DPU Data Processing Unit
DPUG Data Processing Users Group
DR Data Reduction
DRAO Dominion Radio Astronomy Observatory
DRB Delivery Review Board
DRG Data Reduction Guide
DRCU Detector Readout and Control Unit
DS Digital Serial
DSB Double Side Band
DSN Deep Space Network
DSP Digital Signal Processor
DSRI Danish Space Research Institute
D/SRE Director of Science and Robotic Exploration (ESA)
DTCP Daily TeleCommunications Period
DTE Detector Timeline Explorer
DTM Diagnostic Telemetry
DTMM Detailed Thermal Mathematical Model
DU Digital Units
DVD Digital Versatile Disk
E2E End To End
EADS European Aeronautic Defence and Space
EAS European Astronomical Society
ECC ESTRACK Control Centre
ECC Early Cold Core (star formation)
ECR Engineering Change Request
ECSS European Cooperation for Space Standardisation
EDAC Error Detection And Correction
EDS Electrostatic Discharge
EE End to End (Test)
EED Electro-Explosive Device
EEE Electrical, Electronic and Electro-mechanical
EEPROM Electrically Erasable Programmable Read Only Memory
EGSE Electrical Ground Support Equipment
EIDP End Item Data Product
EIRP Equivalent Isotropically Radiated Power
EM Engineering Model
EM Electrical Model
EMC Electro-Magnetic Compatibility
EMF Electro-Motive Force
EMI Electromagnetic Interference
EOH End of Helium
EOHe End of Helium
EOL End of Life
EOM Electro Optic Modulator
EOM End of Mission
EOP Early Orbit Phase
EP Entrance Pupil
EPC Electrical Power Conditioner
EPLM Extended Payload Module
EPOS Extended POS file
ESA European Space Agency
ESAC European Space Astronomy Centre
ESO European Southern Observatory
ESOC European Space Operations Centre **ESTEC** European Space Technology and Research Centre
ESTRACK European Space Tracking Station Network
ESTRACK ESA (ground) Station Tracking
ESW Electrical Standing Wave(s)
EU Electrical Unit
EU European Union
EUMETSAT European Meteorological Satellite
EUMETSAT European Organisation for the Exploitation of Meteorological Satellites
f/D Ratio of focal length to Diameter
FAQ Frequently Asked Questions
FAR Flight Acceptance Review
FCP Flight Control Procedure
FCS Flight Control System
FCSS FIRST Common Science System
FCSSMG FIRST Common Science System Management Group
FCT Flight Control Team
FCU Focal Plane Control Unit (HIFI)
FD Flight Dynamics
FDB FIRST Data Base
FDIR Fault Detection Isolation and Recovery
FDS Flight Dynamics System
FEM Front End Module (LFI)
FEM Finite Element Model
FEU Front End Unit (LFI)
FFT Fast Fourier Transform
FGSAG FIRST Ground Segment Advisory Group
FGSSE First Ground Segment System Engineering (Group)
FH Feed Horn (LFI)
FIFO First In First Out
FINDAS FIRST Integrated Network and Data Archive System
FIR Far Infrared
FIRAS Far Infrared Absolute Spectrophotometer
FIRST Far Infrared and Sub-millimetre Telescope (Herschel, pre-2000)
FITS Flexible Image Transportation System
FM Flight Model
FMECA Failure-Modes, Effects and Criticality Analysis
FMS Failure Management System
FOD Flight Operations Director
FOM Figure of Merit
FOP Flight Operations Plan
FOP Flight Operations Procedure
FOR Field of Regard
FOS Factor of Safety
FOTAC FIRST Observation Time Allocation Committee (old name for HOTAC)
FOV Field of View
FP Fabry-Perot
FPA Focal Plane Assembly
FPC Focal Plane Chopper
FPG Focal Plane Geometry
FPGA Field Programmable Gate Array
FPLM FIRST Payload Module
FPU Focal Plane Unit
FQR Flight Qualification Review
FRD Formatted Raw Data
FRR Flight Readiness Review
FS FIRST Scheduler
FS Flight Spare Model
FSC FIRST Science Centre (Pre-2000 name for HSC)
FSCDM FSC Development Manager
FSCDT FSC Development Team
FSCOM FSC Operations Manager
FSCOT FSC Operations Team
FSCS FIRST Science Centre System
FSEC FIRST Science Evaluation Committee
FSOD-G FIRST Science Operations Definitions Group
FSS Fine Sun Sensor
FST FIRST Science Team

FT Functional Test
FTB Focal Plane JFET and/or RF filter box (SPIRE)
FTE Full Time Equivalent
FTP File Transfer Protocol
FTS Fourier Transform Spectrometer
FUSE Far Ultraviolet Spectroscopic Explorer
FUV Far Ultraviolet
FWHM Full Width Half at Maximum
FY Fiscal Year
Gb Gigabit
GO Geostationary Orbit
G/S Ground Station
G/T Gain to Temperature Ratio
GaAs Gallium Arsenide Semiconductor
GEO Geostationary Earth Orbit
GFC Glass Fibre Compound
GFRP Glass Fibre Reinforced Plastic
GFURD Ground Facility User Requirement Document
GLS Generalised Least Squares
GMC Giant Molecular Cloud
GMM Geometrical Mathematical Model
GMT Greenwich Mean Time
GO Guest Observer
GOES Geostationary Operational Environmental Satellite
GS Ground Segment
GSAG Ground Segment Advisory Group
GSCMP Ground Segment Configuration Management Plan
GSDR Ground Segment Design Review
GSE Ground Support Equipment
GSFC Goddard Space Flight Center
GSID Ground Segment Interface Document
GSIR Ground Segment Implementation Review
GSM Ground Segment Manager (ESOC)
GSPAP Ground Segment Product Assurance Plan
GSRQR Ground Segment Requirement Review
GSRR Ground Segment Readiness Review
GSS Ground Segment Schedule
GST Ground Segment Team
GT Guaranteed Time
GT1 First Guaranteed Time call
GT2 Second Guaranteed Time call
GTO Geostationary Transfer Orbit
GTO Guaranteed Time Observer
GUI Graphical User Interface
Gyr Gyroscope
Gyr Giga Years (10^9 years)
gzip A Unix data compression program
H/W Hardware
HAIO Herschel Science Archive Inter-Operability Subsystem
HBB Hot Black Body
HBES HIFI Back-End Sub-system
HBES-1 HBES IF processor
HBES-2 HBES high resolution spectrometer
HBES-3 HBES wide band spectrometer
HCI Human Computer Interface
HCNE Herschel Confusion Noise Estimator
HCSS Herschel Common Science System
HCalSG Herschel Calibration Steering Group
HCCSSMG Herschel Common Science System Management Group
HDC Herschel Duplication Checker
HDR Hardware Design Review
HEB Hot Electron Bolometer
HELL Herschel Explanatory Legacy Library
HELP Herschel Explanatory Legacy Pages
HEMT High Electron Mobility Transistor
HEO Highly Eccentric Orbit
HET Heterodyne instrument of the FIRST model payload
HFCU HIFI Focal Plane Control Unit
HFI High Frequency Instrument (Planck)
HFOM Herschel Facilities Operations Manual
HFPU HIFI Focal Plane Unit
HGA High-Gain Antenna
HGSSE Herschel Ground Segment System Engineering group
HICU HIFI Instrument Control Unit
HIFI Heterodyne Instrument for FIRST (original)
HIFI Heterodyne Instrument for the Far Infrared (official)
HIPE Herschel Interactive Processing Environment
HK or H/K House Keeping (data)
HLCU HIFI Local Oscillator Control Unit
HLOU HIFI Local Oscillator Unit
HLS High-Level Software (LFI)
HMP (Comet 45P/Honda-Mrkos-Pajdusakova (Herschel target)
HMSF High Mass Star Formation
HOB Herschel Optical Bench
HOG HIPE Owners Guide
HOSS Herschel Optical System Scientist
HOT Helium One Tank
HOT Herschel Operations Team
HOTAC Herschel Observation Time Allocation Committee
H/P Herschel/Planck
HPBW Half-Power Beam Width
HPDP Highly-Processed Data Product
HPMCS Herschel/Planck Mission Control System
HPSDB Herschel/Planck Satellite DataBase
HRI High-Resolution IF processor (HIFI)
HROST Herschel Reserved Observation Search Tool
HRP High Resolution IF Processor
HRS High-Resolution Spectrometer (HIFI)
HSA Herschel Science Archive
HSC Herschel Science Centre
HSCDM Herschel Science Centre Development Manager
HSCDT Herschel Science Centre Development Team
HSCOM Herschel Science Operations Manager
HSGSSG Herschel Science Ground Segment Steering Group
HSGSG-RRF Herschel Science Ground Segment Communications Rapid Response Force
HSIA Hardware/Software Interaction Analysis
HSK House Keeping
HSpot Herschel SPOT (Herschel Observation Planning Tool)
HSO Herschel Space Observatory (HIFI frame of reference, **not** mission acronym)
HSOCG Herschel Science Operations Coordination Group
HST Hubble Space Telescope
HST Herschel Science Team
HTML Hypertext Mark-up Language
HTT Helium Two Tank
HTTP Hypertext Transfer Protocol
HUG Herschel Users Group
HUI HSA User Interface
HUM Herschel User's Manual
H/W Hardware
I/F Interface
I/O Input/Output
IA Interactive Analysis (software)
IAC Instituto de Astrofísica de Canarias, Tenerife
IAS Institut d'Astrophysique Spatiale, Orsay
IAU International Astronomical Union
IBDR Instrument Baseline Design Review
IC Imperial College
ICC Instrument Control Centre
ICD Interface Control Document
ICDR Instrument Critical Design Review
ICL Instrument Command Language
ICR Infrastructure Change Request
ICRP Instrument Contingency Recovery Procedure
ICS Instrument Command Sequence
ICS Instrument and Calibration Scientist

ICSTM Imperial College of Science, Technology and Medicine
ICWG Instrument Coordination Working Group
ICU Instrument Control Unit
ID Interface Document
ID Identifier
IDIS (Planck) Integrated Data and Information System
IDR Intermediate Design Review
IF Intermediate Frequency
IFAR Instrument Flight Acceptance Review
IFCP Instrument Flight Control Procedure
IFDU Intermediate Frequency Distribution Unit
IFEM Interface Finite Element Model
IFMS Intermediate Frequency Management System
IFOP Instrument Flight Operations Plan
IFOP Instrument Flight Operations Procedures
IFP Intermediate Frequency Processor
IFSI Istituto di Fisica dello Spazio Interplanetario, Rome
IFSS Intermediate Frequency and Spectrometer System
IHDR Instrument Hardware Design Review
IIA Instrument Implementation Agreement
IID Instrument Interface Document
ILT Instrument Level Test
IMT Instrument Monitoring Thermistors (HFI)
InP Indium Phosphide semiconductor material
INTEGRAL International Gamma-ray Astrophysics Laboratory
IOCR In Orbit Commissioning Review
IOT Instrument Operations Team
IPAC (NASA/JPL) Infrared Processing and Analysis Center
IR Infrared
IRAS Infrared Astronomical Satellite
IRDC Infrared Dark Cloud
IRD Instrument Requirements Document
IRAS Infrared Astronomical Satellite
IRC Infrared Compact (Mt Wilson IR catalogue). Correctly “IRc”.
IRIS InfraRed Imaging Surveyor (former name of ASTRO-F or AKARI)
IRM Image Rejection Mixer
IRSKY Infrared Sky (software)
IRTS Infrared Telescope in Space (Japanese space mission)
IRU Inertial Reference Unit
ISCL Instrument Specific Class Libraries
IS Instrument Station
ISM Interstellar Medium
ISO Infrared Space Observatory
IST Instrument System Test
IST Integrated System Test
ISVR Instrument Science Verification Review
ITT Invitation to Tender
IW Instrument Workstation
JCMT James Clerk Maxwell Telescope
JFET Junction (Gate) Field Effect Transistor
JPL Jet Propulsion Laboratory
JPP Jiggled Photometer Product (HIPE)
J-T Joule-Thomson
KAI Kapteyn Astronomical Institute
KAL Keep Alive Line
KAO Kuiper Airborne Observatory
Kb Kilobit
KP Key Programme
KPGT Key Programme (Guaranteed Time)
KPOT Key Programme (Open Time)
kpbs kilobit per second
KIP Key Inspection Point
KOSMA Kölner Observatorium für Submm- und mm-Astronomie
KRU Korou (Ground Station)
KU Leuven Katholieke Universiteit Leuven
L0, L1, L2 Level 0, 1, 2
L2 Second Lagrange Point of the Sun-Earth system
LAN Local Area Network
LAS Laboratoire d'Astronomie Spatiale, Marseille
LAT Lot Acceptance Testing
LBV Luminous Blue Variable
LCDA Launcher Coupled Dynamic Analysis
LCL Latch Current Limiter (HIFI)
LCU Local Oscillator Control Unit
LD Lunar Distance (Mean Earth-Moon distance – analogous to the AU for near-Earth space)
LDAP Lightweight Directory Access Protocol
LEAF Large European Acoustic Facility
LED Light Emitting Diode
LEO Low Earth Orbit
LEOP Launch and Early Operations
LEOP Launch and Early Orbit Phase
LFI Low Frequency Instrument (Planck)
LGA Low-Gain Antenna
LHe Liquid Helium
LLS Low-Level Software (LFI)
LMC Large Magellanic Cloud
LNA Low Noise Amplifier
LO Local Oscillator
LOA Local Oscillator Assembly
LOBT Local On-Board Time
LOE Long-term OEM orbit file
LOS Line of Sight
LOS Loss of Signal
LOU Local Oscillator Unit
LP Large Programme (OT1 Call)
LRP Long-Range Plan
LRR Launch Readiness Review
LSA Large Southern Array
LSB Least Significant Bit
LSB Lower Side Band
LSR Local System of Reference
LSR Local Standard of Rest (HIFI reference frame)
LSS Large Space Simulator
LSST Large Space Simulator Tank
LSU Local Oscillator Synthesiser Unit (HIFI)
LSU Local Oscillation Source Unit (HIFI)
LTA Long Term Archive
LTE Local Thermodynamic Equilibrium
LV Launch Vehicle
LVDE Low Vibration Drive Electronics
LVDT Linear Variable Differential Transducer
LVDT Linear Voltage Displacement Transducer
LW Launch Window
LWS Long Wavelength Spectrometer for ISO
LWU Local Oscillator Waveguide Unit (HIFI)
M1/M2 Main mirror/Secondary mirror
M3 Third Mirror in the optical train starting with the telescope primary
MA Mixer Assembly
Mb Megabit
MAC Modal Assurance Criterion
MADmap Microwave Anisotropy Dataset mapper (HIPE)
MARCS Model Atmospheres in Radiative and Convective Scheme
MCC Mission Control Centre
M-CDR Mission Level CDR
MCM Multi Chip Module
MCR Main Control Room
MCR Model Change Request
MCS Mission Control System
MDB Mission Data Base
MEC Mechanism Control
MEM Maximum Entropy Method
MEOP Maximum Expected Operating Pressure

MGA Medium Gain Antenna
MGSE Mechanical Ground Support Equipment
MIB Mission Information Base (database)
MIME Multipurpose Internet Mail Extensions
MIP Mandatory Inspection Point
MIP Mission Implementation Plan
MIRD Mission Implementation Requirements Document
MIRO Microwave Radiometer Experiment on the **ROSETTA** Mission
MLI Multi-Layer Insulation
MLG Malargüe (Ground Station)
MM Mass Memory
MMA Millimetre Array
MMB Model Management Board
MMIC Monolithic Microwave Integrated Circuit
MMU Mass Memory Unit
MOC Mission Operations Centre
MoI Moment of Inertia
MOIS Mission Operations Information System
MoM Minutes of Meeting
MOS Margin of Safety
MPAE Max Planck-Institut für Aeronomie, Lindau
MPE Max-Planck Institute für Extraterrestrische Physik, Garching
MPIA Max-Planck Institute für Astronomie, Heidelberg
MPIfR Max-Planck Institute für Radioastronomie, Bonn
MPML Minor Planet Mailing List
MPPT Maximum Power Point Tracking
MPS Mission Planning **Sub-system**
MPS Mission Planning System
MRB Materials Review Board
MRD Mission Requirements Document
MS Microsoft
MS Mission Scientist
MSG Meteosat Second Generation
MSSL Mullard Space Science Laboratory
MT Mission Timeline
MTL Mission Timeline
MTBF Mean Time Between Failures
MUX Multiplexer
MWC Mount Wilson Catalogue
N/A Not Applicable
NaN Not a Number
NASA National Aeronautics and Space Administration
NASTRAN NASA Structural Analysis Tool
Nb Niobium
NbTiN Niobium Titanium Nitride
NCR Non-Conformance Report
NCTRS Network Control and Telemetry Relay System
NCTRS Network Controller and Telemetry Router System
NDIU Network Data Interface Unit
NED NASA/IPAC Extragalactic Database
NEFD Noise Equivalent Flux Density
NEO Near Earth Object
NEP Noise Equivalent Power
NHSC NASA Herschel Science Center
NNO New Norcia (Ground Station)
NOAA National Oceanic and Atmospheric Administration
NP Normal Programmes (in OT1)
NRT Near-Real Time
NSSDC National Space Science Data Center
NTD Neutron Transmutation Doped
OB Optical Bench
OBCP On-board Command Procedure
OBCP On-board Control Procedure
OBDB On-board Database
OBDH On-board Data Handling (System)
OBP Optical Bench Plate
Obs Observation
OBS On-board Software
OBSID Observation Identifier (sequential observation number)
OBSM On-board Software Monitoring System
OBSM On-board Software Maintenance
OBSW On-board Software
OBT On-Board Time
OCM Orbit Control Mode
OCM Orbit Correction Manoeuvre
OD Operational Day
OD-B Operational Database
OD-BMS Object Data Base Management System
OD-D On-demand Processed Data
OD-IN Swedish, French, Canadian mission for sub-mm astronomy and aeronomy
OD-P On-demand Processing
OD-R On-demand Processing Report
ODS Orbital Disconnect Support
OE Optical Encoder
OEM Orbit Ephemeris Message
OFD On the Fly processed Data
OFD Operations Facilities Document (old name for HFOM)
OFF On the Fly Processing
OFF On the Fly Processing Report
OGSE Optical Ground Support Equipment
OIRD Operations Interface Requirements Document
OMC Orion Molecular Cloud
OMP
OMT Ortho Mode Transducer (LFI)
ONS One Night Stand (unconfirmed single night of astrometry)
OO Object Oriented
OOD Object Oriented Analysis and Design
OOD-BA
OOD-BMS Object Oriented Data Base Management System
OOD Out-of-limits, Out of Limits File (telemetry auxiliary file)
OP Observing Programme
OPD Optical Path Difference
OPS-O Directorate of Operations – Operations Department (ESA)
ORR Operations Readiness Review
Osc Oscillator
OSR Optical Solar Reflector
OT Open Time
OTAC Observing Time Allocation Committee
OTF On-Target Flag
OTF On the Fly
OT1 First Open Time call
OT2 Second Open Time call
OU Optics Unit
OVRO Owens Valley Radio Observatory
P/L Payload
P1 Priority 1
P2 Priority 2
P2MDB Proposal to Mission Data Base
PA Product Assurance
PA Performance Assurance
PA/QA Product Assurance/Quality Assurance
PACS Photoconductor Array Camera and Spectrometer
PACS-P PACS Photometry
PACS-S PACS spectroscopy
PAH Polycyclic Aromatic Hydrocarbon molecule
PC Personal Computer
PCAL Photometer Calibration Source
PCDU Power Control and Distribution Unit
PCS Permanent Command Sequence
PCS Power Control System
PCU Power Control Unit
PCDU Power Control and Distribution Unit
PDB Proposal Data Base
PDD Payload Definition Document

PDE Pointing Drift Error
PDF Portable Document Format
PDR Photodissociation Region
PDR Preliminary Design Review
PDRG PACS Data Reduction Guide
PDS Packet Delivery System
PDU Power Distribution Unit
PER Proposal Evaluation Report
PFM Proto-Flight Model
PGLS Post-processed Generalised Least Squares (HIPE)
P-GSAG Planck Ground Segment Advisory Group
p-HEMT Pseudo-morphic High Electron Mobility Transistor
PHS Proposal Handling Sub-system
PHS Proposal Handling System
PI Principal Investigator
PID Packet Identifier
PID Proportional, Integral, Derivative (controller)
PID Proportional, Integral & Differential (control parameters)
PIN diode P-type-Intrinsic-N-type diode, used in microwave switches and attenuators
PISA PI Support Area
PLL Phase-Locked Loop, an aperture synthesis technique
PLM Payload Module
PSW Photometer Long Wavelength (SPIRE photometer array)
PM Program Memory
PM Processor Module
PM Project Manager
PM Polarisation Maintaining optical fibre
PMD Propellant Management Device
PMW Photometer Medium Wavelength (SPIRE photometer array)
PN Planetary Nebula
POC Pointing Offset Correction
POF Planned Observations File (former name of POS file)
POPS Post-Operations
POS Preferred Observation Sequence (Mission Planning observing schedule file)
PPARC Particle Physics and Astronomy Research Council
PPLM Planck Payload Module
PPN Protoplanetary Nebula
PPS Passive Phase Separator
PPS Pre-Processing Sub-system
PR Public Relations
PROM Programmable Read-Only Memory
PRP Public Relations Plan
PS Project Scientist
PSC Point Source Catalogue
PSF Planning Skeleton File
PSF Point Spread Function
PSF Point Spread Function
PSI Pounds per Square Inch
PS-ICD Packet Structure Interface Control Document
PSI Pounds per Square Inch
PSM Pipeline Specification Manual
PSOF Planned Spacecraft Operations File
PSP Priority Science Programme (HIFI)
PSR Project Support Room
PSS Portable Spacecraft Simulator
PST Planck Science Team
PST Project Scientist Team
PSU Power Supply Unit (LFI, HFI)
PSW Photometer Short Wavelength (SPIRE photometer array)
PT Product Tree
PTC Photometer Thermal Control
PU Peak Up
PUD Pop-Up Detector
PUM Planck User's Manual
PUS Packet Utilisation Standard
PV Performance Verification
PVOP Performance Verification Operations Plan
PVP Performance Verification Phase
PWG Payload Working Group
PWM Pulse Width Modulation
QA Quality Assurance
QAR Quality Assessment Report
QC Quality Control
QCP Quality Control Pipeline
QLA Quick Look Assessment (software)
QM Qualification Model
QMS Quality Management System
QMW Queen Mary and Westfield College, London
QPD Quality Processed Data
QR Qualification Review
QSO Quasi-Stellar Object
QTR Qualification Test Review
R&D Research and Development
RA Right Ascension
RAA Radiometer Array Assembly (LFI)
RAL Rutherford Appleton Laboratory
RAL Revue d'Aptitude au Lancement
RAM Random Access Memory
RAS Radiometer Assembly Structure (LFI)
RBI Remote Bus Interface
RC Release Candidate
RCS Reaction Control Sub-system
RCS Reaction Control System
RD Reference Document
RDY ReaDY (SPIRE's standby mode) [obsolete version]
RE Radiated Emission
REBA Radiometer Electronics Box Assembly (LFI)
REDY REaDY (SPIRE's standby mode)
REU Readout Electronics Unit (HFI)
RF Radio Frequency
RFI Radio Frequency Interference
RFD Request For Deviation
RFW Request for Waiver
RH Reference Hole
RH Relative Humidity
RHCP Right Hand Circular Polarisation
RID Review Item Discrepancy
RM Radiation Monitor
RML Recoverable Mass Loss
RMS Root Mean Square
RMS Reference Mission Scenario
ROL Reserved Observation List
ROM Read Only Memory
ROM Rough Order of Magnitude
ROP Routine Operations Plan
ROSETTA ESA's 3rd cornerstone mission to rendezvous with a comet
RP Reflector Provider (Planck)
RPE Relative Pointing Error
RRF Rapid Response Force (or HSGSC-RRF)
RS Radiated Susceptibility
RSP Routine Science Phase
RSRF Relative Spectral Response Function
RSS Root Sum Squared
RT or R/T Real-time
RTA Real-time Assessment (software)
RTMM Reduced Thermal Mathematical Model
RTU Remote Terminal Unit
RUG Rijks Universiteit Groningen
RWB Reaction Wheel Biasing
RWL Reaction Wheel
Rx Receiver
S/C Spacecraft
S/N Signal to Noise Ratio
S/S Sub-system

S/W Software
SA Scientific Analysis
SA Solar Array
SAA Solar Aspect Angle
SAA Sun Aspect Angle
SAG Science Advisory Group
SAP (CEA) Service d'Astrophysique, Saclay
SAS Sun Acquisition Sensor
SAW Surface Acoustic Wave, device used for microwave filters and delay lines
SBRAC Single Bounce Reflective Array Compressor, a type of SAW dispersive filter
SBP Standalone Browse Products
S/C Spacecraft
SCAL Spectrometer Calibration Sources (SCAL2 & SCAL4)
SCC Sorption Cooler Compressor (LFI)
SCC Source Sequence Counter
SCCE Sorption Cooler Cold End (LFI)
SCE Sorption Cooler Electronics (LFI)
SCEB Sorption Cooler Electronic Box
SCET Spacecraft Event Time
SCET Spacecraft Elapsed Time (obsolete)
SCIAT [Herschel] Science Anomaly Tracking
SciOpsWG Science Operations Working Group
SCI-S Scientific Directorate – Space Science Department (ESA)
SCI-SA Scientific Directorate – Astronomy Division (ESA)
SCL Spacecraft Control Language
SCM Science Mode
SCMP Software Configuration Management Plan
SCOE Spacecraft Check-Out Equipment
SCOM Science Operations Manager
SCOM Spacecraft Operations Manager
SCOS Spacecraft Operations Control System
SCOS Spacecraft Operating System
SCP Sorption Cooler Pipes (LFI)
SCP Satellite Commissioning Phase
SCR Software Change Request
SCS Sorption Cooler Sub-system (LFI)
SCUBA Sub-millimetre Common-User Bolometer Array
SDAG SPIRE Data Analysis Group
SDB Satellite Data Base
SDB System Data Bus
SDE Software Development Environment
SDP Science Demonstration Phase
SDR System Design Review
SDS System Definition Study
SED Spectral Energy Distribution
SES Spacecraft Environment Scientist
SEL Spacecraft Event Log
SEU Single Event Upset
SF Safety Factor
SFT Short Functional Test
SG Scripting Guide
SG-ICD Space-to-Ground Interface Control Document
SGS Science Ground Segment
SHT Spacecraft HSK Thermistors (HFI)
SIAT System Integration and Acceptance Testing
SIAM Spacecraft Instrument Alignment Matrix
SiC Silicon Carbide (material used for Herschel mirror)
SID Structure Identifier
SIMBAD Set of Identifications, Measurements, and Bibliography for Astronomical Data
SIN Straylight Induced Noise
SIP Science Implementation Plan
SIRD Science Implementation Requirements Document
SIRTF Space Infrared Telescope Facility
SIS Superconductor-Insulator-Superconductor
SIV Software Independent Validation
SLE Space Link Extension
SLW Spectrometer Long Wave (SPIRE detector)
SM Safe Mode
SM Structural Model
SM Survival Mode
SMC Small Magellanic Cloud
SMCS Scalable Multichannel Communications Subsystem
SMEC Spectrometer Mechanism
SMM Structural Mathematical Model
SMP Science Management Plan
SMPS Scientific Mission Planning Strategy
SMPS Scientific Mission Planning System
S/N Signal-to-Noise
SN Supernova
SNR Supernova Remnant
SOAP State-of-the-Art Performance
SOB Science Operations Board
SOC Science Operations Centre
SOE Short-term OEM orbit file
SOFIA (NASA/DLR) Stratospheric Observatory for Infrared Astronomy
SOL Sequenced Observation List
SOM Spacecraft Operations Manager
SOPS Spacecraft OperationS
SOR SPIRE Optical Reference
SOVT Systems Operation Validation Test
SOW Statement of Work
SPACON Spacecraft Controller
SPC Science Programme Committee (ESA)
SPE Solar Proton Event
SPE Static Phase Error
SPF Single Point Failure
SPG Standard Product Generation (software)
SPG Systematic Product Generation (data processing)
SPIA SPIRE Photometer Interactive Analysis
SPID Structure Packet Identifier
SPIRE Spectral and Photometric Imaging Receiver
SPIRE-P SPIRE Photometry
SPIRE-S SPIRE Spectroscopy
SPL Split Phase Level
SPMP Software Project Management Plan
SPOT SPitzer Observation Planning Tool
SPR Software Problem Report
SPT System Performance Test
SPT Special Performance Test
SPT (Instrument) Specific Performance Test
SPT Spacecraft Powered Thermistors (HFI)
SPU Signal Processing Unit
SPUD Superconducting Pop-Up Detector
SQAP Software Quality Assurance Plan
SQUID Superconducting Quantum Interference Device
SRAM Static Random Access Memory
SRD Software Requirements Document
SREM Standard Radiation Environment Monitor
SRON Space Research Organisation of the Netherlands
SRP Solar Radiation Pressure
SRPE Spatial Relative Pointing Error
SRR Software Requirements Review
SRSD Scientific Requirement Scheduling Document
SSAC Space Science Advisory Committee (ESA)
SSB Single Side Band
SSBC Solar System BaryCentre (HIFI reference frame)
SSC Source Sequence Count
SSD Software Specification Document
SSD Space Science Department (ESA)
SSM Second Surface Mirror
SSMM Solid State Mass Memory
SSO Solar System Object
SSR Solid State Recorder
SSW Spectrometer Short Wave (SPIRE detector)

STB Standby
STBY **ST**and**BY** (SPIRE active and generating science data)
STA Short Term Archive
STM Structural/Thermal Model
STR Star Tracker
SUM Satellite User Manual
SVF Software Validation Facility
SVM Service Module
SVS Schedule Visualisation Software
SVT System Validation Test
SVVP Software Verification and Validation Plan
S/W Software
SW Software
SWAS Sub-millimetre Wave Astronomy Satellite (NASA)
SWM Software Maintenance Mode (for STR)
SWS Short-Wavelength Spectrometer (on ISO)
SxR Software Change Request/Problem Report (generic software issue)
TA Technical Assistant
TA Trend Analysis (software)
TA Telescope Assembly
TAI Temps Atomique International
TAO ThermalAcoustic Oscillation
TAS Thales Alenia Space
TAS-F/I Thales Alenia Space – France/Italy
TB Thermal Balance
TBC To be Confirmed
TBD To be Determined
TBD To be Defined
TBS To be Specified
TB/TV Thermal Balance – Thermal Vacuum test
TC Telecommand
TCF Time Correlation File
TCMS Telecommand Management System
TCS Thermal Control System
TDB Time Dynamic Barycentric
TDP Telemetry Derived Parameters
TEB Technical Evaluation Board
TEI Test Equipment Interface
TES Transition Edge Superconductor
TEB Technical Evaluation Board
TFL Telemetry Flow
 T_{inj} Time of Injection
TF Test Factor
TLA Three Letter Acronym
TM Telemetry
TMC Taurus Molecular Cloud
TML Total Mass Loss
TMM Thermal Mathematical Model
TMP Telemetry Processor
TMR Taurus Molecular Ring
TMTCS Telemetry and Telecommunications System
TN Technical Note
TNO Trans-Neptunian Object
TNO Technical Note (MOC)
TOD Time-Ordered Data
TOM Thermo-Optical Model
ToO Target of Opportunity
TP Telescope Provider
TPM Thermo Physical Model
TRB Technical Review Board
TRR Test Readiness Review
VO Virtual Observatory
VOTable Virtual Observatory Table
TRRB Test Readiness Review Board
TRW A USA electronics company
TS Technical Specification
TT Terrestrial (Dynamic) Time
TTC Telemetry, Tracking and Command
TV Thermal Vacuum
TV/TB Thermal Vacuum/Thermal Balance (Test)
Tx Transmitter
UF Ultimate Factor of Safety
UFT Unit Functional Test
UIR Unidentified Infrared
ULE Ultra-Low Expansion
UM User Manual
UML Unified Modelling Language
UMOS Ultimate Margin of Safety
UofS University of Saskatchewan, Canada
UPC UP-Converter
UPDP User-Provided Data Product
URD User Requirements Document
URM User Reference Manual
URR User Requirements Review
USB Upper Side Band
UT Universal Time
UTC Universal Time Coordinated
UU Uplink Units (Mission Timeline)
UV Ultraviolet
VC Virtual Channel
VESPER Venus Sounder for Planetary Exploration
Vilspa Villafranca, Spain (old name for ESAC)
VLBI Very Long Baseline Interferometry
VMC Visual Monitor Camera
VMC Visual Monitoring Camera
Vss JFET Source Voltage
WBC Wide-Band Spectrometer Control (HIFI)
WBI Wide-Band Spectrometer IF processor (HIFI)
WBO Wide-Band Spectrometer AOS (HIFI)
WBS Work Breakdown Structure
WBS Wide-Band Spectrometer
WBSPU Wide Bandwidth Spectrometer Processing Unit
WCA Worst Case Analysis
WERD Warm Electronics Requirements Document
WFE Wave-Front Error
WG Wave Guide
WIH Warm Interconnect Harness (HIFI, PACS, SPIRE)
WIMPY World Map with station predictions
WINFOPS Windows-based Flight Operations Procedures writing tool
WO Work Order
WP Work Package
WPD Work Package Description
WR Wolf-Rayet
WWW World Wide Web
XCAL Cross Calibration
XLPA X-band Low Power Amplifier
XMM X-ray Multi Mirror
YFOS Yield Factor of Safety
YMOS Yield Margin of Safety
YSO Young Stellar Object
ZPD Zero Path Difference
Z Zulu, Universal Time