

List of Acronyms

A/D	analogue to digital
AAMP	Ambient Temperature Amplifiers
ADE	Antenna Drive Electronics
AMS	Airborne Mass Spectrometer
ANT	Submillimeter Antenna
ANT-RCS	antenna reference coordinate system
AO	announcement of opportunity
AOPT	Ambient Temperature Optics
AOS	Radio Spectrometer
AOS	acousto-optic (<i>or</i> acousto-optical) spectrometer
ATLAS	Atmospheric Laboratory for Applications and Science
ATMOS	Atmospheric Trace Molecule Spectroscopy
AU	AOS Analyzer Unit
BBM	breadboard model
BDR	basic design review
bps	bit per second
BSMILES	Balloon-borne SMILES
BUS	Payload Bus
BWO	backward-wave oscillator
CAM	STT Camera Units
CAMC	STT Camera Controller
CCD	charge coupled device
CCSDS	Consultative Committee for Space Data System
CD-ROM	compact disc - read-only memory
CDMS	Cologne Database for Molecular Spectroscopy
CDR	critical design review
CFC	chlorofluorocarbon
CHL	Calibration Hot Load
CMG	Control Moment Gyro
CPU	Central Processing Unit
CRE	Cryo-electronics Unit
CREC	CRE Control Electronics
CRL	Communications Research Laboratory
CS	cryogenic sampling
CST	Cold Sky Terminator
CVU	Video Unit
DNL	differential non-linearity
DPC	Data Processing and Control Section
DRTS	Data Relay Test Satellite
DRTS-W	Data Relay Test Satellite-West
DRTSS	Data Relay Test Satellite System
DSB	double sideband
DVD-ROM	digital versatile (<i>or</i> video) disc / read-only memory

EF	Exposed Facility
EFM	engineering flight model
EFU	Exposed Facility Unit
ELM-ES	Experiment Logistics Module - Exposed Section
ELM-PS	Experiment Logistic Module - Pressurized Section
EM	engineering model
EOPD	Earth Observation Program Department
EORC	Earth Observation Research Center
EOS	Earth Observing System
EOS-CHEM	Earth Observing System Chemistry Mission
EPS	Electric Power System
ESA	European Space Agency
ESTO	Earth Science & Technology Organization
FIFO	first in and first out
FIP	FACOM Information Processing
FIRS	Far Infra-Red Survey
FM	flight model
FM1	forward model I
FM2	forward model II
FOV	field of view
FTIR	Fourier transform infrared spectrometer
FWHM	full-width at half-maximum
GAW	Global Atmospheric Watch
GB	gigabytes
GCS	geocentric inertial equatorial coordinate system
GEISA	Gestion et Étude des Informations Spectroscopiques Atmosphériques
Gflops	giga floating operations per second
GI/UAF	Geophysical Institute, University of Alaska Fairbanks
GIE-CS	geocentric inertial equatorial coordinate system
GN&C	Guidance, Navigation and Control
GSE	ground support equipment
H	height
HCS	heliocentric inertial equatorial reference coordinate system
HECP	Helium Gas Compressors
HEMT	high electron mobility transistor
HITRAN	High-resolution Transmission Molecular Absorption Database
HK	house keeping
HPBW	half-power beamwidths
HRDL	High-Rate Data Link
HRDR	High Rate Data Recorder
HTV	H-II Transfer Vehicle
ICS	Interorbit Communication System
IF	intermediate frequency
IFA	IF Amplification Section
ILAS	Improved Limb Atmospheric Spectrometer
IMG	Interferometric Monitor for Greenhouse Gases
I/O	input/output
IR	infrared
ISDN	integrated services digital network
ISS	International Space Station

IUP	Institut für Umweltphysik (Institute for Environmental Physics)
JCP	JEM Control Processor
JEM	Japanese Experiment Module
JEM/OS	JEM Operation System
JEMRMS	JEM Remote Manipulator System
JIF	JEM Interface Mechanism
JPL	Jet Propulsion Laboratory
JSC	Johnson Space Center
L	length
L1	level 1
L2	level 2
L3	level 3
LAPAN	Lembaga Penerbangan dan Antariksa Nasional (National Institute of Aeronautics and Space)
LO	local oscillator
LS	lower stratosphere
LSB	lower sideband
LVLH	local vertical local horizontal
MAES	Millimeter Wave Atmospheric Emission Simulator
MAS	Millimeter-wave Atmospheric Sounder
MASTER	Millimeter-wave Acquisitions of Stratosphere/Troposphere Exchanges Research
MB	megabytes
MFS	Mainframe Structure
MIL-STD	Military Standard
MLS	Microwave Limb Sounder
MNT	Antenna Mounting Structure
MOIP	Mission Operation Implementation Plan
MOIS	Mission Operation Interface Specification
MPI	Martin-Puplett interferometer
MPM	Millimeter-Wave Propagation Model
N	north
NA	not applicable
NAO	National Astronomical Observatory
NASA	National Aeronautics and Space Administration
NASDA	National Space Development Agency of Japan
NDSC	Network for the Detection of Stratospheric Change
NIES	National Institute of Environment Study
NRO	Nobeyama Radio Observatory
NSBF	National Scientific Balloon Facility
NW	network
OEM	optimal estimation method
OPLN	operation plan
PDH	Payload Data Handling Unit
PDR	preliminary design review
PM	JEM Pressurized Module
PSC	polar stratospheric cloud
REF	Antenna Reflectors
RF	radio frequency
rms	root-mean-squares
RMS	root-mean-squares

RSS	root-sum-squares
S	south
SAO	Smithsonian Astrophysical Observatory Line Database
SBUV	solar backscatter ultraviolet
SIKIE	symmetry induced kinetic effect
SIS	superconductor-insulator-superconductor
SJTD	Stirling & JT Drive Electronics
SLO	submillimeter-wave local oscillator
SLOC	Submillimeter LO Controller
SMILES	Superconducting Submillimeter-Wave Limb-Emission Sounder
SOOH	Spacecraft Orbital Operation Handbook
SOPRANO	Sub-millimetre Observation of Process in the Absorption, Noteworthy for Ozone
SRX	Submillimeter Receiver
SSB	single sideband
SSC	Swedish Space Corporation
STE	stratosphere-troposphere exchange
STEL	Solar-Terrestrial Environment Laboratory
STT	Star Tracker
STT-RCS	Star-Tracker reference coordinate system
SYNC	synchronization
TBD	to be determined
TCS	Thermal Control System
TDRSS	Tracking and Data Relay Satellite System
TEA	Torque Equilibrium Attitude
TKSC	Tsukuba Space Center
TOMS	Total Ozone Mapping Spectrometer
TRN	Beam Transfer Section
UARS	Upper Atmosphere Research Satellite
US	United States
USA	United States of America
USB	upper sideband
UT	Universal Time
UT	upper troposphere
UTC	Coordinated Universal Time
UV	ultraviolet
W	width
WGS84	World Geodetic System 1984
WMO	World Meteorological Organization
ZOE	Zone of Exclusion

