Space weather acronym list – August 2025

A	(1) Area ; (2) Article ; (3) Ampère ; (4): Mount Wilson classification: a magnetically unipolar sunspot group (alpha)
aa, AA	A 3-hour and daily geomagnetic index (nT) based on two antipodal stations (Canberra and Hartland)
AA	Auroral Absorption
AAR	Auroral Acceleration Region
AAS	American Astronomical Society
AATR	Along Arc TEC Rate
aBG	Above background
ABL	Atmospheric Boundary Layer
ABOVE	Array for Broadband Observations of VLF/ELF Emissions (Canada)
A/C	Aircraft
Ac	Corrected area (e.g. for line-of-sight)
ACCESS-A	Australian Community Climate and Earth-System Simulator (version -A)
ACE	Advanced Composition Explorer
ACFJ	Australia, Canada, France and Japan consortium (PECASUS/ICAO)
ACM	Asteroids, Comets and Meteors conference
ACRIM	Active Cavity Radiometer Irradiance Monitor (SMM and other satellites)
ACSG	Atmospheric Composition Sub Group
AC-VC	Atmospheric Composition Virtual Constellation
ACVE	Atmospheric Composition Validation and Evolution
A/D	Analog-to-Digital
ADA	Astronomical Data Analysis
ADEOS-2	Advanced Earth Observing Satellite 2 (aka Midori-2 ; failed 25 Oct 2003)
ADF	Active Day Fraction
ADU	Analog to Digital Units
AE	Auroral Electrojet
A_e	Effective Area
A-EFFORT	Athens Effective Solar Flare Forecasting (NOA)
AERONET	AErosol RObotic NETwork
AFB	Air Force Base
AFFECTS	Advanced Forecast For Ensuring Communications Through Space
AFRL	Air Force Research Laboratory
AFS	Arch Filament System
AFWA	Air Force Weather Agency
AGACC	Advanced exploitation of Ground based measurements Atmospheric Chemistry and Climate applications
AGGA	Advanced GPS/Galileo ASIC
AGN	Active Geodetic Network
AGU	American Geophysical Union
AGW	Acoustic Gravity Waves (drivers of TID)
AH-64	Apache military helicopter
AI	Artificial Intelligence
AIA	Atmospheric Imaging Assembly (SDO)
AIAA	American Institute of Aeronautics and Astronautics
AIP	American Institute of Physics
AIRS	Atmospheric Infra-Red Sounder
AIT	Austrian Institute of Technology
a_k, A_k	Resp. a 3-hour and daily geomagnetic index for a specific station k, ranging from 0 (quiet) to 400 nT (extremely severe storm)
Al	Aluminum
ALADIN	Aire Limitée Adaptation Dynamique Développement International
ALARM	multi-hAzard monitoring and earLy wARning systeM
ALARO	ALADIN and AROME combined model
ALC	Automatic LIDAR Ceilometer
ALF	faint narrow-band radio bursts from sources

	propagating with velocities close to the local Alfvén velocity
AlGaN	Aluminium gallium nitride
ALIS	Auroral Large Imaging System
AlN	Aluminum Nitride
ALTEA	Anomalous Long Term Effects on Astronauts
ALTIUS	Atmospheric Limb Tracker for Investigation of the Upcoming Stratosphere
AM	Amplitude Modulation
AMRVAC	Adaptive Mesh Refinement – Versatile Advection Code
AMS	American Meteorological Society
AMTD	Atmospheric Measurement Techniques Discussion
anaprop	Anomalous Propagation
ANeMoS	Athens Neutron Monitor Station
AOCS	(1) Air Operations Control Station ; (2) Attitude and Orbit Control Subsystem
AOD	Aerosol Optical Depth
AOGS	Asia Oceania Geosciences Society
AOSWA	Asia-Oceania Space Weather Alliance
a_p, A_p	Resp. a 3-hour and daily global (planetary) geomagnetic index, ranging from 0 (quiet) to 400 nT (extremely severe storm)
APEX	Airborne Prism EXperiment
API	Application Programming Interface
ApJ	The Astrophysical Journal
APL	Applied Physics Laboratory (JHU)
APOD	Astronomy Picture of the Day (NASA)
AP-RASC	Asia-Pacific Radio Science Conference
APS	(1) Active Pixel Sensor (PROBA2 / SWAP) ; (2) American Physical Society
APSOLUTE	APS Optimized for Low-noise and Ultraviolet Tests and Experiments
APV	Approach with vertical guidance
APWC	Antennas and Propagation in Wireless Communications
AR	(1) Active Region ; (2) Annual Report
Ar	Argon
ARASE	Nickname of the ERG satellite (JAXA)
ARCAS	Augmented Resolution Callisto Spectrometer
ARMAS	Automated Radiation Measurements for Aerospace Safety program (NASA)
AROME	Application de la Recherche à l'Opérationnel à Meso-Echelle
ARTEMIS	Acceleration, Reconnection, Turbulence and Electrodynamics of the Moon's Interaction with the Sun
ARTIST	Automatic Real-Time Ionogram Scaler with True height (software)
ASCA	Advanced Satellite for Cosmology and Astrophysics (aka ASTRO-D ; failed on 14 July 2000)
ASCII	American Standard Code for Information Interchange
ASEC	Applied Space Environments Conference
ASFC	Australian Space Forecast Center (SWS)
ASGARD	An educational space programme for schools (no acronym)
ASH	Amateur Sterrenkundigen van Herentals
ASIC	Application Specific Integrated Circuit
ASIMUT	Atmospheric Spectra Inversion Modular Utility Tools (code; BIRA-IASB)
ASIS	Auroral Spectrograph In Skibotn (Sweden)
Asl, ASL	above sea level
ASOPOS	Assessment of Standard Operating Procedures for OzoneSondes
ASOV	Action Spécifique Observatoire Virtuel
ASPECS	Advanced Solar Particle Event Casting System
ASPIICS	Association of Spacecraft for Polarimetric and Imaging Investigation of the Corona of the Sun (Proba-3)
ASSA	(1) Automatic Solar Synoptic Analyzer (KSWC) ; (2) Astronomical Society of South Australia

ASTERIX	Absolute Solar-TErrestrial Radiation Imbalance eXplorer
ASTRA	Atmospheric & Space Technology Research Associates
ASTRON	Netherlands Institute for Radio Astronomy - Stichting Astronomisch Onderzoek in Nederland
ASU CAS	Astronomical Institute of the Czech Academy of Sciences
AT-AP-RASC	ATlantic / Asia-Pacific Radio SCience meeting
ATC	Air Traffic Control
ATLAS	Atmospheric Laboratory for Applications & Science
ATM	(1) Air Traffic Management ; (2) Apollo Telescope Mount (SkyLab)
ATMDEN	ATMospheric DENsity estimates of forecast and prior total density for atmopsheric drag calculation (UKMO)
ATMOS	(1) Advances in Atmospheric Science and Applications ; (2) Atmospheric Science Conference (ESA)
AT-RASC	Atlantic Radio Science meeting
AtRIS	The Atmospheric Radiation Interaction Simulator
ATST	Advanced Technology Solar Telescope (old name for DKIST ; NASA)
ATV	Automated Transfer Vehicle
AU, au	Astronomical Unit; about 150 million km
avg.	average
AVIDOS	Aviation Dosimetry (SL)
AVL	ASIMUT-(V)LIDORT model (IASI)
AWACS	Airborne early Warning And Control Station
AWARE	Automated WARnings of Earth arrivals (DTU)
AWDA	Automatic Whistler Detector and Analyzer
AWG	Astronomy Working Group
AZA	Auroral Zone Absorption
B	(1) Magnetic field (strength) ; (2): Mount Wilson classification: a bipolar sunspot group with distinct magnetic polarities (beta)
B.RCLab	Belgian Radiometric Characterization Laboratory
B.USOC	Belgian User Support and Operation Center
B/G, B/Gr	Background
B_0	Heliographic latitude of the central point of the solar disk (The range of B_0 is $\pm$7.23°)
BAMC - UKMHD	British Applied Mathematics Colloquium UK Magnetohydrodynamics
BAS	British Antarctic Survey
BASS2000	BAse de données Solaire Sol
BATSE	Burst And Transient Source Experiment (CGRO)
BBC	British Broadcasting Corporation
BBC-SWS	Balkan, Black Sea, and Caspian Sea Regional Network on Space Weather Studies
BBSO	Big Bear Solar Observatory (USA)
BDE	Bidirectional beams of suprathermal (> 100 eV) electrons
BE	Belgium
BeiDou	Chinese GNSS
BELARE	Belgian Antarctic Expeditions
BELSPO	Belgian Science Policy Office
BeNELux	Belgium, The Netherlands, and Luxembourg
BEPOM	Belgian Photonics Online Meetup
BER	Backscatter-to-Extinction Ratio
BESSY	Berliner Elektronenspeicherring-Gesellschaft für Synchrotronstrahlung
BE-WISSDOM	Belgian Web Incessant Screening for SDO Mission
BEZA-com	A networking project from BELSPO and its South African homologue NRF
BG	Mount Wilson classification: a bipolar sunspot group with a complex magnetic configuration (beta-gamma)
BGD	Mount Wilson classification: a bipolar sunspot group with a complex magnetic configuration and at least 1 delta structure (beta-gamma-delta)
BGS	British Geological Survey
Bifrost	MHD code for simulating stellar atmospheres (no acronym); the name of the

	rainbow bridge from Midgard (the realm of man) to Asgard (the realm of the gods)
BINA	Belgo-Indian Network for Astronomy and Astrophysics
BIOSPHERE	Metrology for Earth Biosphere: Cosmic rays, ultraviolet radiation and fragility of ozone shield (EURAMET)
BIPM	Bureau International des Poids et Mesures
BIRA	Koninklijk Belgisch Instituut voor Ruimte-Aëronomie
BIRA-IASB	Royal Belgian Institute for Space Aeronomy
BISA	Royal Belgian Institute for Space Aeronomy
BKG	German Federal Agency for Cartography and Geodesy (Bundesamt für Kartographie und Geodäsie)
BLH	Boundary Layer Height
BMD	Ballistic Missile Defense
BNCAR	Belgian National Committee on Antarctic Research
BNCGG	Belgian National Committee on Geodesy and Geophysics
BOLD	Blind to Optical Light Detectors
BOS	Bolometric Oscillation Sensor
BPIM	BIRA Plasmasphere-Ionosphere Model
bps	bits per second
BRAIN-be	Belgian Research Action through Interdisciplinary Networks (BELSPO)
BRAMS	Belgian RAdio Meteor Stations
BRITEC	Bringing Research into ThE Classroom
BSI	Back-Side Illuminated
BSPM	Belgian SWIFF Plasmasphere Model (BIRA-IASB)
BSS	(International) Beacon Satellite Symposium
BUKS	Belgium, UK, and Spain
Bz	Component of the IMF perpendicular to the ecliptic ("north-south" component)
C	Capacitor
c	Speed of light
C/N_0	Carrier-to-Noise density (dB-Hz)
C/NOFS	Communications/Navigation Outage Forecasting System
c_0	Speed of light in vacuum
C1, C2, C3	Coronagraphs of LASCO (SoHO)
Ca II H	A blue line in the solar spectrum at 396.85 nm
Ca II K	A blue line in the solar spectrum at 393.37 nm
CA	COST Action (COST)
CAAPC	Cercle d'Astronomes Amateurs du Pays de Charleroi
CACTus	Computer Aided CME Tracking software
CaF_2	Calcium fluoride
CALLISTO	Compound Astronomical Low frequency Low cost Instrument for Spectroscopy and Transportable Observatory
CAMS	(1) Cameras for All sky Meteor Surveillance (Benelux) ; (2) Copernicus Atmosphere Monitoring Service
CAP	Communicating Astronomy with the Public
CAS	Chinese Academy of Sciences
CASSIS	Coordination Action for the integration of Solar System Infrastructures and Science
CB	Central Bureau (EPN)
CBH	Cloud Base Height
CCD	Charge-Coupled Device
CCDF	Complementary Cumulative Distribution Function
C-class flare	Common x-ray flare
CCMC	Community Coordinated Modeling Center
CCOR	Compact Coronagraph (GOES)
CCSOM	Constraining CMEs and Shocks by Observations and Modelling
CCT	Communautés de Compétences Techniques (CNES)
CDAW	Coordinated data analysis web (NASA/GSFC)
CDS	Coronal Diagnostic Spectrometer (SOHO)
CELIAS	Charge, Element, and Isotope Analysis System (SOHO)
CEN	Centre d'étude de l'énergie nucléaire

CEOS	Committee on Earth Observation Satellites
CERES	Clouds and Earth's Radiant Energy System (radiometer)
CESPM	China-Europe Solar Physics Meeting
CESRA	Community of European Solar Radio Astronomers
CGRO	Compton Gamma-Ray Observatory (NASA)
cgs	Metric system based on the centimeter, the gram, and the second
CGU	Canadian Geophysical Union
CH	Coronal Hole
CH_4	Methane
CH_4TIR	CH4 Thermal InfraRed
CHAIN	Canadian High Arctic Ionospheric Network
CHAMP	CHAllenging Minisatellite Payload
CHARM	Contemporary physical challenges in Heliospheric and AstRophysical Models
CIMI	Comprehensive Inner-Magnetosphere Ionosphere model (NASA/GSFC)
CINDI	Coupled Ion-Neutral Dynamics Investigation
CIOMP	Changchun Institute of Optics, fine Mechanics and Physics (China)
CIR	Co-rotating Interaction Region
CIS	Cluster Ion Spectrometry (Cluster)
CISM	Center for Integrated Space Weather Modeling
CLIMSO	Christian Latouche IMageurs SOlaires (suite of solar telescopes at Pic du Midi)
CLS	Collecte Localisation Satellites (CNES)
Cluster	ESA/NASA mission to study the Earth's magnetosphere (no acronym)
CLW	Coronal Loops Workshop
CM	Central Meridian
cm, cm^2, cm^3	centimeter, square centimeter, cubic centimeter
CMA	China Meteorological Administration
CMD	Central Meridian Distance
CME	Coronal Mass Ejection
CMOS	Complementary Metal-Oxide-Semiconductor
CMOSIS	CMOS Image Sensor
CMP	Central Meridian Passage
CmPA	Centre for mathematical Plasma-Astrophysics (KUL)
CNES	Centre national d'études spatiales (France)
CNN	Convolutional Neural Network
CNRS	Centre national de la recherche scientifique (France)
CNSS	COMPASS Navigation Satellite System
Co.	Cooperation
CO_2	Carbon Dioxide
Co60	Cobalt 60
COCONUT	COolfluid COroNa UnsTructured (model)
CODE	Center for Orbit Determination in Europe
co-Is	co-investigators
COLAGE	Congreso Latinoamericano de Geofísica Espacial
COMESEP	COronal Mass Ejections and Solar Energetic Particles (Alert System)
CoMP	Coronal Multi-channel Polarimeter
COMPASS	Chinese navigation satellite system
COMPLIMENT	COMetary Plasma Light InstruMENT (Comet Interceptor ; ESA)
COMPTEL	Compton Telescope (CGRO)
CONUS	Continental/Contiguous United States (Lower 48 states in USA with/without Alaska)
COPUOS	COmmittee on the Peaceful Uses of Outer Space (UN)
COR (1/2)	Coronagraph (Inner/Outer) onboard STEREO
CORDEX	COordinated Regional Climate Downscaling Experiment
CORONAS	Complex ORbital Observations Near-Earth of Activity of the Sun (series of Russian satellites)
CORS	Continuously Operating Reference Stations (GNSS)
COSPAR	COmmittee on SPAce Research
COST	(European) COoperation in Science & Technology
COSTEP	Comprehensive SupraThermal and Energetic Particle analyser (SOHO)
COTS	Commercial off-the-shelf

COVID-19	Coronavirus disease 2019
CP	Coronagraph/Polarimeter (SMM)
CPAESS	Cooperative Programs for the Advancement of Earth System Science
CPCP	Cross-Polar Cap Potential
CPD	Coarse Pointing Device
CPG	Centre de Physique du Globe (Geophysical center Dourbes)
CPPA	Conference on Plasma Physics and Applications
CPSR	Core Plasma Supply and Refilling (in Geospace)
CPU	Central Processing Unit
CR	Carrington Rotation
CRAF	Committee on Radio Astronomy Frequencies
CRaTER	Cosmic Ray Telescope for the Effects of Radiation (LRO ; NASA)
CRC	(1) Control and Reporting Center ; (2) Cyclotron Research Centre (in Louvain-La-Neuve) ; (3) Consortium Russia-China (PECASUS/ICAO)
CRCM	Comprehensive Ring Current Model (NASA/GSFC)
CRF	Cosmic Ray Flux
CrIS	Cross-track Infrared Sounder (Suomi National Polar-orbiting Partnership)
CRMSE	Centred Root Mean Square Errors
CROM	A type of pyrheliometer developed by D. Crommelynck (RMI)
CRRES	Combined Release and Radiation Effects Satellite (NASA)
CSEM	Center of Space Environment Modeling (Switzerland)
CSHKP	Carmichael, Sturrock, Hirayama, Kopp and Pneuman (standard model for solar flares)
CSL	Centre Spatial de Liège
CSPM	Coimbra Solar Physics Meeting
CSWFC	Canadian Space Weather Forecast Center
CTIM	Coupled Thermosphere-Ionosphere Model
CTIPe	Coupled Thermosphere-Ionosphere-Plasmasphere-electrodynamic model
CTM	Continuum storm (radio)
CubeSat	A small satellite measuring 10cm x 10cm x 10cm
CUSUM	Cumulative sum
CVC	Convective and Volcanic Clouds
CW	Continuous Wave
CWS	Cross-track Wind Sensor
D	(1) Directivity of an antenna; (2) ionospheric layer ; (3) Mount Wilson classification: a suffix called that can be added to the other types (B, BG, G) in case of two opposite magnetic polarity umbrae that are less than 2° from each other within the same penumbra (delta).
D/SCI	ESA Science Directorate
D/TEC	ESA Technology, Engineering and Quality Directorate
D2D	Digisonde-to-Digisonde
D3S	Distributed Space weather Sensor System
DARA	Davos Absolute RAdiometer (Proba-3)
DAU	Data Acquisition Unit
dB FS	Decibels relative to Full Scale
dB	(1) Decibel ; (2) change in magnetic field amplitude ; (3) Disparition Brusque (DSF)
dB-Hz	decibel-Hertz (bandwidth relative to 1 Hz)
dBi	dB with reference to an isotropic antenna
dBm	dB with reference to 1 mW
dBW	Decibel Watt
dBZ	decibels relative to Z (reflectivity)
DCBs	Differential Code Biases
Dcx	Corrected Dst (and Dxt) for non-storm component and extended until 1932
DEM	Differential Emission Measure
DeMeLab	Detector Measurements Laboratory (aka STCL)
DENSER	DEeply uNderstanding Space weather (ESA)

DGPS	Differential Global Positioning System
DH	Decametric-Hectometric
DIARAD	DIfferential Absolute RADiometer
DIAS	Digital Upper Atmosphere Server
DICTAT	Dielectric Internal Charging Threat Assessment Tool
DIDBase	Digital Ionosonde network DataBase
Digisonde	Digitally Integrating Goniometric IonoSONDE
DIGISUN	A software application for digitization of scanned sunspot drawings
D_{Iono}	Ionospheric delay
DKIST	Daniel K. Inouye Solar Telescope (USA ; 4m aperture)
DLR	Deutsches Zentrum für Luft- und Raumfahrt (German Aerospace Center)
dm, dm^2, dm^3	decimeter, square decimeter, cubic decimeter
DMI	Danish Meteorological Institute
DMSP	Defense Meteorological Satellite Program
DMVTEC	Daily Mean VTEC
DN	Digital Number (pixel values not calibrated into physically meaningful units)
DNL	Distant Neutral Line
DOI	Digital Object Identifier
DONKI	space weather Database Of Notifications, Knowledge, Information (CCMC)
DOP	Dilution Of Precision
DOT	Dutch Open Telescope (45cm aperture)
DOU	Dourbes (Intermagnet)
DoY, DOY	Day of Year
DPD	Debrecen Photographic Data
DPM	Data Processing Model
DPP	Division of Plasma Physics (APS)
DPS	(1) Division for Planetary Sciences (EPSC) ; (2) Digital Portable Sounder
DPS4D	Digisonde-Portable-Sounder-4D
DPTIS	Double-Probe and Topside Ionospheric Sounder
DR	Dynamic Range
Dr. (US: Dr)	Doctor
DRAO	Dominion Radio Astrophysical Observatory (Canada)
D-RAP	D-Region Absorption Predictions (NOAA/SWPC)
DRBS	Dourbes (Belgium, NMDB)
DREAM.3D	A Digital Representation Environment for the Analysis of Microstructure in 3D
DSCOVR	Deep Space Climate Observatory
DSF	Disappearing Solar Filament (H-alpha)
DSLP	Dual Segmented Langmuir Probe (PROBA2)
DSN	Deep Space Network
DSP	Digital Signal Processing
Dst	Disturbance Storm Time index; an hourly geomagnetic index (nT)
DSW	Data Science Workshop
D_{Tropo}	Tropospheric delay
DTU	Technical University of Denmark
DUSTER	Dust Study, Transport and Electrostatic Removal (for exploration missions)
Dxt	Reconstructed and extended Dst index (up to 1932)
DYASTIMA	Dynamic Atmospheric Shower Tracking Interactive Model Application
E	(1) Electric field; (2) Electrical efficiency of an antenna; (3) Energy; (4) ionospheric layer; (5) East
e^-	electron
E, E_- , E_+	Energy, Ingoing energy, Outgoing energy
e.g.	exempli gratia (example given)
E1, E5a	Galileo frequencies: E1 = 1575.42 MHz , E5a = 1176.45 MHz
EBAF	Energy Balanced And Filled
EC	European Commission
ECA	European Cockpit Association
e-Callisto	extended Compact Astronomical Low-cost Low-frequency Instrument for Spectroscopy and Transportable Observatory
ECC	Electrochemical Concentration Cell

ECMWF	European Centre for Medium-range Weather Forecasts
E-corona	Emission corona (EUV)
ECS	European CubeSat Symposium
ECSIM(-CYL)	Energy Conserving Semi-Implicit Method (Cylindrical)
ECUVM	European conference on solar UV monitoring
ECV	Essential Climate Variable
ed.	Edition
EDACs	Error-detection-and-correction algorithms
EDAS	EGNOS Data Access Service
EDID	European Debris Impact Database (ESA)
EDP	Electron Density Profile
EDRS-C	European Data Relay System, Satellite-C
Eds.	Editors
EEJ	Equatorial ElectroJet current
EESC	Equivalent Effective Stratospheric Chlorine
EFR	Emerging Flux Region
EFW	Electric Field and Waves instrument (Van Allen probes)
EGNOS	European Geostationary Navigation Overlay Service (Galileo/Europe)
EGNSS	European GNSS
EGRET	Energetic Gamma Ray Experiment Telescope (CGRO)
EGU	European Geosciences Union
E-GVAP	EUMETNET GNSS water Vapour Programme
eHEROES	Environment for Human Exploration and RObotic Experimentation in Space
EHF	(1) Electron Heat Flux event ; (2) Extremely High Frequency (30-300 GHz)
EHIS	Energetic Heavy Ion Sensor (GOES)
EIA	Equatorial Ionization Anomaly
EIG	Economic Interest Grouping
EIS	(1) Extreme-Ultraviolet Imaging Spectrometer (Hinode) ; (2) European Ionosonde Service (NOA)
EISCAT	European Incoherent SCATter scientific association
EIT	Extreme ultraviolet Imaging Telescope (SOHO)
EIT-wave	A coronal wave named after the EIT instrument
EIWG	Earth ionosphere waveguide
ELF	Extremely Low Frequency (3-30 Hz)
ELIS	ELISabeth, Belgium station/receiver in Antarctica
EM	(1) Electromagnetic (2) Engineering Model
EMBRACE	Brazilian Studies and Monitoring of Space Weather
EMFISIS	Electric and Magnetic Field Instrument Suit and Integrated Science (VAP)
EMIC	ElectroMagnetic Ion Cyclotron
EMP	Electromagnetic pulse
EMUF	E-layer MUF (ionosphere)
ENEON	European Network of Earth Observation Networks (H2020)
ENLIL	Sumerian god of wind and storms (NOT an acronym)
ENTSO-E	European Network of Transmission System Operators for Electricity
ENV	Environnement atmosphérique et spatial (CNES)
ENVISAT	Environmental Satellite (ESA)
EnVision	ESA mission to Venus (no acronym)
EPAM	Electron, Proton, and Alpha Monitor (ACE)
EPB	Equatorial Plasma Bubble
EPCARD	European Program Package for the Calculation of Aviation Route Doses
EPD	Energetic Particle Detector (SolO)
EPEAD	Energetic Proton Electron and Alpha Detector (GOES / SEM)
EPN	(1) EUREF Permanent Network (2) Europlanet
EPOS(-PL)	European Plate Observing System (- Poland)
EPOS-IP	European Plate Observing System – Implementation Phase
E-PROFILE	EUMETNET Profiling Programme
EPS	European Physical Society

EPSC	European Planetary Science Congress
EPT	Energetic Particle Telescope (PROBA-V)
EQE	External Quantum Efficiency
ERA	ECMWF re-analysis
ERAI , ERA5	ERA-Interim, 5th ERA
ERA-Interim	ECMWF Re-Analysis Interim
ERB(S)	Earth Radiation Budget (Satellite)
ERG	Exploration of energization and Radiation in Geospace (now called ARASE ; JAXA)
erg	unit of energy (1 erg = 10^{-7} Joule)
ERNE	Energetic and Relativistic Nuclei and Electron experiment (SOHO)
ES	Earth System (Science and Environmental Management (COST)
Es	Sporadic E (ionosphere)
ESA	European Space Agency
ESAC	European Space Astronomy Centre
ESC	Expert Service Centre (ESA/SSA ; SSCC)
ESCAPE	(1) European SpaceCraft for the study of Atmospheric Particle Escape (2) European Science Cluster of Astronomy & Particle physics ESFRI research infrastructures
ESD	Electrostatic Discharge
ESERO	European Space Education Resource Office
ESF	Equatorial Spread F
ESFRI	European Strategy Forum on Research Infrastructures
ESIO	EUV Solar Imager for Operations
ESLab	Environmental Simulation Laboratory
ESLAB	ESRO Scientific and technical LABoratory
ESO	European Southern Observatory
ESOC	European Space Operations Centre
ESP	(1) EUV SpectroPhotometer (SDO) ; (2) Energetic Storm Particle event
ESPAS	European Strategy and Policy Analysis System (FP7)
ESPD	European Solar Physics Division (EPS)
ESPM	European Solar Physics Meeting
ESRIN	European Space Research Institute
ESRO	European Space Research Organisation
EST	European Solar Telescope (4m aperture ; under construction)
ESTEC	European Space Research and Technology Centre
E-SWAN	European Space Weather and Space Climate Association
ESWC	European Space Weather Community
ESWF	Empirical Solar Wind Forecasting (Uni Graz)
ESWP	European Space Weather Portal
ESWS	European Space Weather Symposium (2020)
ESWW	European Space Weather Week
et al.	et alii (and other)
etc.	et cetera (and so forth)
ETH Zürich	Eidgenössische Technische Hochschule Zürich
ETRS	European Terrestrial Reference System
EU	European Union
EUCARA	European Conference on Amateur Radio Astronomy
EUHFORIA	European Heliospheric Forecasting Information Asset
EUI	Extreme-Ultraviolet Imager (SolO)
EUMETNET	European Meteorological services Network
EUMETSAT	European Organization for the Exploitation of Meteorological Satellites
EUNADICS-AV	European Natural Airborne Disaster Information and Coordination System for Aviation
EURAMET	The European Association of National Metrology Institutes
EURAVIA	European Association of Aerospace Students
EUREF	EUropean Reference Frame
EURISGIC	European Risk from Geomagnetically Induced Currents project (FP7)
EUV	Extreme Ultraviolet

EUVI	Extreme Ultraviolet Imager (STEREO/SECCHI; LGRRS)
EUVM	EUV Monitor (MAVEN)
EUVS	Extreme Ultraviolet Sensor (GOES)
EUVST	EUV High-throughput Spectroscopic Telescope (Solar-C ; Jaxa)
eV	electron volt (1 eV = 1.602 × 10^{-19} joules)
EVA	Extravehicular activity
EVE	Extreme ultraviolet Variability Experiment (SDO)
EOVSA	Expanded Owens Valley Solar Array (USA)
EWC	Early Warning Capability
EXIS	EUV and X-ray Irradiance Sensors (GOES)
ExoMars	Exobiology on Mars (ESA, Roscosmos)
F	Force
f	frequency
F1, F2	Ionospheric layers
$F_{10.7}$, $F_{10.7\ cm}$	Solar radio flux at 10.7 cm wavelength
F10.7P	Proxy for $F_{10.7\ cm}$ solar radio flux (= (F10.7 + F10.7A)/2, with F10.7A the average over the previous 81 days
F_2	Main ionospheric layer
F_{30}	Solar radio flux at 30 cm wavelength
FAA	Federal Aviation Administration
FAC	Field Aligned Current
FADEC	Full Authority Digital Engine Control
FAIR	Findable, Accessible, Interoperable, and Re-usable
FAM	First Attendees Meeting
FARSUN	Findability and Accessibility of historical Raw SUnspot Numbers
FARWEST	FAst Radiation diffusion with Waves ESTimator
FAS	Frequency-Angular-Sounding
FC	Faraday Cup (DSCOVR)
F-corona	Fraunhofer corona (dust particles)
FCS	Flat Crystal Spectrometer (SMM)
FD	Forbush Decrease
Fe IX-X	8 respectively 9 times ionized iron
Fe xvi	Fifteen times ionized iron
FFT	Feature Finding Team
FHNW	Fachhochschule Nordwestschweiz (University of Applied Sciences and Arts Northwestern Switzerland)
FIELDS	Electromagnetic Fields Investigation (PSP)
FIG	Fédération Internationale des Géometres (International Federation of Surveyors)
FIP	First Ionization Potential
FITS	Flexible Image Transport System
FLEPOS	Flemish POsitioning Service
FLEXPART	FLEXible PARTicle dispersion model
FLIP	FLuid Implicit Particle
FLRW	Field line random walk
FM	(1) Flight Model ; (2) Frequency Modulation
FMI	Finnish Meteorological Institute
FN	False Negative
FNRS	Fonds National de la Recherche Scientifique
f-number	the ratio of the system's focal length to the diameter of the entrance pupil
foE	Critical frequency E-layer
foEs	Sporadic E critical frequency
foF1	Critical frequency F1-layer
foF2	Critical frequency F2-layer
ForMaL-SEP	Prediction tool for the expected maximum proton flux levels for ≥10 MeV (DENSER)
ForMaL-Xrange	Tool for the forecast of the hourly range of the ground-based magnetic field north component (DENSER)
FORMOSAT-2	From “Formosa” (Taiwan) and satellite (Taiwan)
FOT	Frequency of Optimum Transmission (ionosphere)
FOV	Field-Of-View
FP	False Positive
FP7	Framework Programme 7 (EU)
FPA	Focal Plane Assembly
FPGA	Field-Programmable Gate Array
FReSWeD	Future Research on Space Weather Drivers
FRi3D	Model of a flux rope in 3D
FRS	(1) Fondation pour la Recherche Stratégique ; (2)

	Fonds de la Recherche Scientifique
FS	Forward shock
FSI	Full Sun Imager (SolO/EUI)
FSL	Fluid Science Laboratory
FSMT	Fort Smith (Canada, NMDB)
FST	Facility Science Team (ISS-SOLAR)
ft	foot or feet (1 ft = 30,48 cm)
FTE	(1) Fast Transit Event ; (2) Full-Time Equivalent
ftp	file transfer protocol
FTS	Fourier Transform Spectrometer
FU	Frederick University
FUV	Far Ultraviolet
FWC	Full Well Capacity
FWHM	Full Width at Half Maximum (telescope filter parameter)
FY3E	FengYun: 5th satellite in the 3rd series of Chinese weather satellites
G	(1) Gauss (1 G = 100.000 nT; 1 T = 10.000 G) ; (2) NOAA's scale for geomagnetic storms; (3) Gain of an antenna ; (4): Mount Wilson classification: a complex sunspot group with magnetic polarities so irregularly distributed there's no longer a bipolar structure present (gamma) ; (5) Gigabyte (10^9 bytes)
g	number of sunspot groups
G4SUW	Geant4 Space Users Workshop
GAGAN	GPS Aided GEO Augmented Navigation (India)
Gaia	ESA satellite (no acronym)
Galileo	European GNSS
GAMIT	GPS Analysis at MIT
GaN	Gallium nitride
GASS	General Assembly and Scientific Symposium
GAW	Global Atmospheric Watch (WMO)
GB	Gigabyte (10^9 bytes)
GBAS	Ground Based Augmentation System
GBO	Ground-Based Observatory
GCOS	Global Climate Observing System
GCR	Galactic Cosmic Rays
GCS	Graduated Cylindrical Shell
GDM-TEC	Global daily mean Total Electron Content
GEANT-4	GEometry ANd Tracking (simulation platform)
GEEO	Global Environmental Earth Observation
GEN	General Data Service (SN-I)
GEO	Geostationary Earth Orbit , i.e. a circular geosynchronous orbit 35.786 km in altitude
GeodesyML	Geodesy Markup Language
GEONET	GNSS/GPS Earth Observation NETwork system
GEOSS	Global Earth Observation System of Systems
GERB	Geostationary Earth Radiation Budget (radiometer)
GeV	Giga electronvolt (10^9 . 1.6 . 10^{-19} Joule)
GF	Geometric-Free
Gfg²	GNSS for GEEO and GEOSS
GFZ	Deutsches GeoForschungsZentrum (German Research Centre for Geosciences)
GHOST	name of WG5 of the TOSCA project (no acronym)
GHz	Gigahertz (10^9 Hz)
GIC	Geomagnetically induced current
GIE	Geomagnetically induced Electric field
GIM	Global Ionospheric Mapping
GIOVE	Galileo In-Orbit Validation Element
GIRO	Global Ionosphere Radio Observatory
GLASS	GNSS Linkage Advanced Software System
GLE	Ground Level Enhancement
GLONASS	GLObal NAvigation Satellite System (Russia)
GMAC	Global Monitoring Annual Conference
GmbH	Gesellschaft mit beschränkter Haftung (Company with limited liability)
GMC	Geostationary Magnetopause Crossing
GMDSS	Global Maritime Distress and Safety System
GML	Global Monitoring Laboratory
GMS	Geomagnetic Storm
GNSS	Global Navigation Satellite System
GNSS(GRE)	GNSS corrections based on GPS-GLONASS-GALILEO

	constellations (GPS/Russia/Europe)
GNSS4SWEC	Advanced GNSS tropospheric products for the monitoring of Severe Weather Events and Climate
GNSS-MR	GNSS multipath reflectometry
G-nut/Tefnut	Software library for GNSS data
GOES	Geostationary Operational Environmental Satellite
GOLF	Global Oscillation at Low Frequency (SOHO)
GOME	Global Ozone Monitoring experiment (SCIAMACHY)
GOMESCIA	GOME/SCIAMACHY/GOME-2
GONG	Global Oscillation Network Group
GOP	Geodetic Observatory Pecný
GP-B	Gravity Probe B (2004-2010)
GPI	GNSS Performance Indicators
GPS	Global Positioning System (USA)
GRAPE	GNSS Research and Application for Polar Environment
GRAS	GNSS Receiver for Atmospheric Sounding
GRETSI	Groupe d'Etudes du Traitement du Signal et des Images
GRS	Gamma-Ray Spectrometer (SMM)
GRUAN	GCOS Reference Upper-Air Network
GSAC	GPS Seamless Archive Centers
GSE	Geocentric Solar Ecliptic (coordinate system)
GSEQ	Geocentric Solar EQuatorial (coordinate system)
GSFC	Goddard Space Flight Center
GSM	(1) Global System for Mobile Communications (2) Geocentric Solar Magnetospheric (coordinate system)
GSO	Geosynchronous orbit
GSSAC	German Space Situational Awareness Center
GST	Goode Solar Telescope (formerly known as NST ; BBSO)
GSTP	General Support Technology Programme (ESA)
GTIM	Global ionosphere Thermosphere Model
GTO	Geostationary Transfer Orbit
GUI	Graphical user interface
GUVI	Global Ultraviolet Imager (TIMED)
Gy	Gray (J/kg ; absorbed radiation dose)
h	(1) hour ; (2) Planck's constant ($6.62607004 \times 10^{-34}$ m^2 kg / s)
H	(1) Hydrogen ; (2) Heat flux
h'	virtual height (ionogram)
H_2	Molecular hydrogen
H2020	Horizon 2020; EU Research and Innovation program (2014 to 2020)
H_2O	Water, water vapour
HAARP	High Frequency Active Auroral Research Program
HAC	Hvar Astrophysical Colloquium
H-alpha (Hα)	A red visible spectral line at 656.28 nm created by Hydrogen
HAO	High Altitude Observatory
HAPI	Heliophysics Data Application Programming Interface (SWx timeline viewer of KNMI)
HaSTeNet	H-alpha Solar flare patrol TElescopic NETwork
h_c	Critical height
H-component	Horizontal component of the MF
HCS	Heliospheric Current Sheet
He	Helium
He, He II	Helium, ionized Helium
HEGIFTOM	Harmonization and Evaluation of Ground-based Instruments for Free Tropospheric Ozone Measurements
HEIDI	Hot Electron and Ion Drift Integrator code (RC model)
HEK	Heliophysics Events Knowledgebase
HELCATS	HELiospheric Cataloguing, Analysis and Techniques Service
Helios 1, 2	Two joint German-American space missions in the 1970s (no acronym)
HELIOS	HELmet streamers In the solar corona and their OScillations
HELSTOP	Harmonization and Evaluation of Lower

	Stratospheric and Tropospheric Ozone Vertical Profiles
HEO	High Earth Orbit (altitude > 35.786 km)
HEOS-1, -2	Highly Eccentric Orbit Satellite (ESA)
HESPERIA	High Energy Solar Particle Events forecasting and Analysis project
HF	High Frequency (3-30 MHz)
HF Com	HF Communication
HF-INT	HF Interferometry
HI	(1) Neutral atomic Hydrogen ; (2) Heliospheric Imager (STEREO)
Hi-C	High Resolution Coronal Imager
HILDCAA	High-Intensity Long-Duration Continuous Auroral Activities
Hinode	A JAXA/NASA solar mission : Solar-B satellite (“sunrise”)
HiSPAC	HIgh level Space Policy Advisory Committee (ESA)
h_mF_2	peak electron density height of F_2-layer
HMI	Heliospheric and Magnetic Imager (SDO)
HOME	Advances in Homogenisation Methods of Climate Series: An Integrated Approach (COST)
HOP	Hinode Operation Plan
HOSS	Handbook Of Space Security
hPa	hectopascal (atmospheric pressure)
HPL	Horizontal Protection Level (FAA)
Hpo	A group of Kp-like indices, where "H" stands for half-hourly or hourly, "p" for planetary, and "o" for open-ended (GFZ Potsdam)
Hp30, Hp60	Two varieties of the Hpo index, based on the time resolution: Hp30 concerns a 30-minute time interval, and Hp60 a 60-minute time interval (GFZ Potsdam)
HPS	Heliospheric Plasma Sheet
HQ	Headquarters
hr	hour
HRI	High-Resolution Imager (SolO/EUI)
HRIEUV	High Resolution Imager in the EUV (SolO/EUI)
HRILYA	High Resolution Imager in Ly-α (SolO/EUI)
HSF	Human Space Flight (SN-I)
HSRS	Humain Solar Radio Spectrograph
HSS	High Speed Stream
HUJO	HUmanistische JOngeren
HuRAS	Humain Radio Astronomy Station
HWM	Horizontal Wind Model
HWP	Half Wave Plate
HXIS	Hard X-ray Imaging Spectrometer (SMM)
HXR	Hard X-Rays
HXRBS	HXR Burst Spectrometer (SMM)
HXT	Hard X-ray Telescope (Yohkoh)
HyMeX	HYdrological cycle in the Mediterranean EXperiment
Hz	Hertz (per second)
I	(1) Intensity ; (2) Current
i	(1) ion(s) ; (2) The index in a counter or series
i.e.	“id est” (that is)
I/Ps	Ionosphere-Plasmasphere system
IAASARS	Institute for Astronomy, Astrophysics, Space Applications & Remote Sensing (NOA)
IABG	Industrieanlagen-Betriebsgesellschaft mbH (German company; Proba-3)
IAC	International Astronautical Congress
IAG	International Association of Geodesy
IAGA	International Association of Geomagnetism and Aeronomy
IAGOS	In-service Aircraft for a Global Observing System (MOZAIC)
IAIN	International Association of Institutes of Navigation
IAM	Institute of Aerospace Medicine (DLR)
IAMAS	International Association of Meteorology and Atmospheric Sciences
IAP	Interuniversity Attraction Pole
IAPSO	International Association for the Physical Sciences of the Oceans
IAS	Institut d'Astrophysique Spatiale (France)

IASB	Institut royal d'Aéronomie Spatiale de Belgique
IASC	International Arctic Science Committee
IASI	Infrared Atmospheric Sounding Interferometer
IASPEI	International Association of Seismology and Physics of the Earth's Interior
IAU	International Astronomical Union
IAUS	IAU Symposium
IAW	Inertial Alfvén Waves
IBUKS	India, Belgium, UK, and Spain
ICAC	International Conference on Aerosol Cycle
iCACGP	international Commission on Atmospheric Chemistry and Global Pollution
ICAO	International Civil Aviation Organization
ICARUS	a new inner heliospheric model for the simulation of a steady background solar wind and the propagation and evolution of superposed CMEs (KUL; no acronym)
ICCC	Inter-Commission Committee on "Geodesy for Climate Research" (IAG)
ICEAA	International Conference on Electromagnetics in Advanced Applications
IceCON	Constraining Ice Mass Change in Antarctica
ICEM	International Conference on Electronic Materials
ICG	International Committee on GNSS
ICIP	International Conference on Image Processing
ICMA	International Commission on the Middle Atmosphere
ICME	Interplanetary CME
ICNS	(1) Integrated Communications Navigation and Surveillance (conference) ; (2) International Conferencing and Networking Solutions
ICNSP	International Conference on Numerical Simulation of Plasmas
ICON	ICOsahedral Nonhydrostatic (meteorological model)
ICRC	International Cosmic Ray Conference
ICSO	International Conference on Space Optics
ICSU	International Council for Science
ICT	Information and Communication Technologies
ICTSW	Interprogramme Coordination Team on Space Weather (WMO)
IDL	Interactive Data Language
IDM	Internal Discharge Monitor (CRRES)
IEEE	Institute of Electrical and Electronics Engineers
IEH-3	International Extreme Ultraviolet Hitchhiker-03
IERS	International Earth Rotation and Reference Systems Service
IES	(1) Imaging Electron Spectrometer (Cluster) ; (2) Ionospheric Effects Symposium
IF	(1) Intermediate Frequency; (2) Interface
IFF	Identification Friend or Foe
IFOV	Instrument Field Of View
IGAC	International Global Atmospheric Chemistry project
IGACO-O_3/UV	Integrated Global Atmospheric Chemistry Observation - O_3/UV
IGS	International GNSS Service
IGSO	Inclined geosynchronous orbit
IGY	International Geophysical Year (1957-1958)
IHDEA	International Heliophysics Data Environment Alliance
IIFR	Interpolated In-Field Referencing
ILWS	International Living With a Star (Program)
IMAGE	Imager for Magnetopause-to-Aurora Global Exploration
IMC	(1) International Meteor Conference ; (2) Inner Magnetosphere Coupling
IMF	Interplanetary Magnetic Field
IMO	International Meteor Organization

IMPACT	In-situ Measurements of Particles and CME Transients (STEREO)
IMPALAS	Investigation of MagnetoPause Activity using Longitudinally-Aligned Satellites
IMPC	Ionosphere Monitoring and Prediction Center (DLR)
INA	Integrated Nonlinear Analysis
INAF	Istituto Nazionale di Astrofisica (Italy)
INAOE	Instituto Nacional de Astrofísica, Óptica y Electrónica - National Institute for Astrophysics, Optics and Electronics (Mexico)
INGV	Istituto Nazionale di Geofisica e Vulcanologia (Italy)
INPE	National Institute for Space Research (Brazil)
InSight	Interior Exploration using Seismic Investigations, Geodesy and Heat Transport
INSPIRE	(1) International Satellite Program in Research and Education (consortium of space universities) ; (2) Infrastructure for Spatial Information in the European Community (EU)
INTEGRAL	INTErnational Gamma-Ray Astrophysics Laboratory
INTERMAGNET	INTErnational Real-time MAGnetic Observatory NETwork
IOC	International Ozone Commission
ION	Institute Of Navigation
IOP	Institute of Physics
IP	Interplanetary
IPAG	Institut de Planétologie et d'Astrophysique de Grenoble (France)
IPB	Ionospheric Plasma Bubble
IPC	(1) Industrial Policy Committee (ESA) ; (2) International Pyrheliometric Comparison
IPCC	Intergovernmental Panel on Climate Change
IPE	Ionosphere-Plasmasphere Electrodynamics
IPELS	Interrelationship between Plasma Experiments in Laboratory and Space
IPEV	Institut Polaire Français Paul-Émile Victor
IPF	International Polar Foundation
IPIM	IRAP Plasmasphere Ionosphere Model
IPP	Ionospheric Piercing Point
IPS	(1) Interplanetary Scintillation ; (2) Ionospheric Prediction Service (old SWS)
IPSL	Institut Pierre-Simon Laplace
IPT-SWeISS	Inter-Programme Team on Space Weather Information, Systems and Services (WMO)
IPY	International Polar Year (most recent: 2007-2009)
IQR	InterQuartile Range
IR	Infrared
IRACON	Inclusive Radio Communication Networks for 5G and beyond
IRAP	Institut de Recherche en Astrophysique et Planétologie (France)
IRENE	International Radiation Environment near Earth
IRF	Institutet för rymdfysik / Swedish Institute of Space Physics
IRI	International Reference Ionosphere
IRIS	Interface Region Imaging Spectrograph (NASA)
IRM(B)	Institut Royal Météorologique (de Belgique)
IRNSS	Indian Regional Navigation Satellite System (Regional system; India)
Irr.	(1) Irradiance ; (2) Irregular
IRSA	Institut Royal pour Sourds et Aveugles (Brussels, Belgium)
IRSN	Institut de Radioprotection et de Sûreté Nucléaire
IS⊙IS	Integrated Science Investigation of the Sun (PSP)
ISAS	Institute of Space and Astronautical Science (Japan)

ISBN	International Standard Book Number
ISC	(1) International Science Council; (2) International Steering Committee
ISEE	International Sun-Earth Explorer program (ESA/NASA)
ISES	International Space Environment Service
ISEST	International Study of Earth-Affecting Solar Transients
ISIS	International Satellites for Ionospheric Studies
ISN	International Sunspot Number (= k . (10 . g + s))
ISO	International Organization for Standardization
iso-B lines	Lines of equal magnetic field strength
iso-L lines	Lines of equal L (see L*)
ISOON	Improved Solar Observing Optical Network (USAF/AFWA)
ISROSES	International Symposium on Recent Observations and Simulations of the Sun-Earth System
ISS	International Space Station
ISS-a, -b	Ionosphere Sounding Satellite (-a , -b ; Japan)
ISSI	International Space Science Institute
ISSN	International Standard Serial Number
ISSS	(1) International School of Space Science; (2) International School/Symposium for Space Simulations
ISTP	(1) International Symposium on Tropospheric Profiling ; (2) International Solar Terrestrial Program
ISU	International Space University
ISUAL	Imager of Sprites and Upper Atmospheric Lightning (FORMOSAT-2)
ISWAT	International Space Weather Action Teams (COSPAR)
ISWI	International Space Weather Initiative
IT	Information Technology
ITRF	International Terrestrial Reference Frame (IERS)
ITU	International Telecommunication Union
IUAP	Intra-University Attraction Pole network
IUGG	International Union of Geodesy and Geophysics
IUMRS	International Union of Materials Research Societies
IUWDS	International URSIgram and World Days Service (previous name of ISES)
I-V	Current-Voltage
IVOA	International Virtual Observatory Alliance
IWV	Integrated Water Vapour
J	Joule
JAXA	Japan Aerospace eXploration Agency
JBP	Jet Bright Point
JGR	Journal of Geophysical Research
JHU	Johns Hopkins University
jHV	jHelioViewer
JMG	Joint Meteorological Group
JOREM	Jupiter Radiation Environment and Effects Models and Mitigation
JOSIE	Jülich Ozonesonde Intercomparison Experiment
JPEG	Joint Photographic Experts Group
JSON	JavaScript Object Notation
JSWSC	Journal of Space Weather and Space Climate
JUICE	JUpiter ICy moons Explorer
JWG	Joint Working Group
K	(1) Local K-index: A 3-hour geomagnetic index, ranging from 0 (quiet) to 9 (extremely severe storm) ; (2) degrees Kelvin
k	wave number
K*	Local 1-minute resolution K index
Ka-band	"Kürz above": Radio frequency band from 27-40 GHz
KAW	Kinetic Alfvén Waves
K_BEL	Local K index for Belgium
KBVE	Koninklijke Belgische Vereniging der Elektrotechnici
K-Cor	K-coronagraph (MLSO)
K-corona	Kontinuierlich corona (electrons)
keV	kilo electronvolt (10^3 . 1.6 . 10^{-19} Joule)

k-factor	An observer-specific scaling factor used for the computation of the ISN
kHz	kilohertz (10^3 /second)
KI	Potassium iodide
km, km^2	kilometer, square kilometer
km/s	kilometers per second
KMI	Koninklijk Meteorologisch Instituut
KNMI	Koninklijk Nederlands Meteorologisch Instituut
KNVWS	Koninklijke Nederlandse Vereniging voor Weer- en Sterrenkunde
KORTES	KOronal X-Ray TElescope and Spectrometer (Russia ; ISS)
K_p	"planetarische Kennziffer" or Planetary K-index; A 3-hour geomagnetic index, ranging from 0 (quiet) to 9 (extremely severe storm)
KPN	Koninklijke PTT Nederland NV
KPNO	Kitt Peak National Observatory (USA)
K_s	Standardized K index
KSAW	Klaus Sievers Aviation Weather
KSB	Koninklijke Sterrenwacht van België
KSC	Kagoshima Space Center (Japan)
KSO	Kanzelhöhe Observatory for Solar and Environmental Research (Austria)
KSP	Key Science Project
KSWC	Korean Space Weather Center
KU	K unit (geomagnetic)
KUL, KULeuven	Katholieke Universiteit Leuven
kV	kiloVolt (10^3 Volt)
L	(1) Letter (manuscript); (2) Length; (3) Loss ; (4) L-shell (see L*)
L*	Set of Earth's magnetic field lines which cross the Earth's magnetic equator at * earth radii from the centre of the Earth (e.g. L = 2)
l/m^2	Liter per square meter
L_0	Heliographic longitude of the central point of the solar disk
L1, … , L5	First, … , fifth Lagrangian point
L1, L2	GPS frequencies: L1 = 1575.42 MHz, L2 = 1227.60 MHz
LAAS	Local Area Augmentation System
LAC	Local Analysis Centres (EPN)
LANL	Los Alamos National Laboratory (USA)
LaRa	Lander Radio science (ExoMars)
LaRC	Langley Research Center
LASCO	Large Angle Spectrometric Coronagraph (SOHO); small (C2) and wide (C3) field of view
LASP	Laboratory for Atmospheric and Space Physics
Lat	Latitude
LATMOS	Laboratoire ATmosphères, Milieux, Observations Spatiales (France)
LAU	LAUnch operations (SN-I)
LBL	line-by-line
L-class	Large class satellite (ESA)
LCS	(1) Local Coronal Signature ; (2) Low-Coronal Signatures
LDE	Long Duration Event
LDM-TEC	Latitudinal Daily Mean TEC value
LEA	Learmonth (RSTN, radio observatory)
LEMUR	Large European Module for solar Ultraviolet Research
LEO	Low Earth Orbit (160-2000 km altitude ASL)
LEP	Lightning induced Electron Precipitation
LET	Linear Energy Transfer
LF	Low Frequency (30-300 kHz)
LGRRS-EUVI	LaGRange Remote Sensing instruments (EUVI)
LH	Left-handed
LHCP	Left Hand Circular Polarized
LIDAR	LIght Detection And Radar
LIEDR	Local Ionospheric Electron Density profile Reconstruction
LIF	Light Ion radiation Facility (in Louvain-La-Neuve)
LLS	Research Unit "Lasers and Spectroscopies" at the Université de Namur (Belgium)
LMSAL	Lockheed Martin Solar and Astrophysics Laboratory
LOC	Local Organizing Committee
LOFAR	Low-Frequency Array
LOL	Loss Of Lock (GNSS)

Lon	Longitude
LORAN	Long Range Navigation
LOS	Line Of Sight
LOTUS	Long-term Ozone Trends and Uncertainties in the Stratosphere
LOUI-Base	Lowell ObliqUe Incidence database
LPV	Localizer performance with vertical guidance
LPV-200	Localizer Performance with Vertical guidance until the aircraft is 200 ft above the runway
LRO	Lunar Reconnaissance Orbiter (NASA)
LRSP	Living Reviews in Solar Physics
Ls	Solar longitude
L-shell	Set of planetary magnetic field lines (see L*)
LSTID	Large-Scale Traveling Ionospheric Disturbance
LSWC	Lund Space Weather Centre (Sweden)
LT	Local Time
LTI	Lower thermosphere and ionosphere region
LTP	Long-term planning (Solar Orbiter)
LUCE	LUnar CubeSats for Exploration
LUCI	Lagrange eUv Coronal Imager (Lagrange)
LUF	Lowest Usable Frequency
LUT	LookUp tables
LVF	Linear Variable Filter
LVNL	Luchtverkeersleiding Nederland
LW	Langmuir Wave
LWS	Living With a Star
LYA	Ly-α
LYRA	Large Yield RAdiometer, formerly called Lyman Alpha Radiometer (PROBA2)
LYRAFF	LYRA Flare Finder
Ly-α	Lyman-alpha, a spectral line in the VUV at 121.6 nm
m, m^2, m^3	Meter, square meter, cubic meter
M^3G	Metadata Management and distribution system for Multiple GNSS Networks
M2M	Moon-to-Mars
MAARBLE	Monitoring, Analyzing and Assessing Radiation Belt Loss and Energization
MAB	Manhay (Intermagnet)
MACH	Magnetic fields, Atmospheres, and the Connection to Habitability
MADAWG	Modelling and Data analysis Working Group (SolO)
MAG	Magnetometer instrument (ACE, DSCOVR, GOES, SolO)
MagEIS	MAGnetic Electron Ion Spectrometer (Van Allen probes)
MAGION-5	A Czech subsatellite
MAJIS	Moons And Jupiter Imaging Spectrometer (JUICE)
MAO	Main Astronomical Observatory of National Academy of Science of Ukraine (conference)
MAPLD	Military and Aerospace Programmable Logic Devices
MARECS-A	Maritime European Communications Satellite (Failed March 1991)
MARIE	Mars Radiation Experiment (Mars Odyssey ; failed during Halloween storms)
MARSIS	Mars Advanced Radar for Subsurface and Ionosphere Sounding
MASC	Magnetic Activity of the Solar Corona
MASTER	Meteoroid and Space Debris Terrestrial Environment Reference
MAVEN	Mars Atmosphere and Volatile EvolutioN (NASA)
MAX-DOAS	Multi-axis differential optical absorption spectroscopy
MB	Megabyte (10^6 bytes)
mbar	millibar
MC	(1) Magnetic cloud ; (2) Management Committee
MCC	Mission Control Centre
M-class flare	Medium x-ray flare
M-class	Medium class satellite (ESA)
MCM	Management Committee Meeting
MDI	Michelson Doppler Imager (SOHO)
MEDOC	Multi-Experiment Data and Operations Centre
MEGS-A	Multiple EUV Grating Spectrograph A (SDO) - No longer operational
MEGS-B	Multiple EUV Grating Spectrograph B (SDO)
MEO	Medium Earth Orbit (2000 - <35.786 km altitude ASL)
MER	Mars Exploration Rover

MESSENGER	Mercury, Surface, Space Environment, Geochemistry and Ranging mission
Meteosat	Series of geostationary meteorological satellites operated by EUMETSAT
METIS	Multi Element Telescope for Imaging and Spectroscopy (coronagraph onboard SolO)
METOC	Meteorology and Oceanography
MetOffice	Meteorological institute of the UK
MetOp	Meteorological Operational satellite (ESA)
METRO	MEteors TRajectories and Origins (BRAIN-be)
MeV	Mega electronvolt (10^6 . 1.6 . 10^{-19} Joule)
MF	(1) Medium frequency (300 kHz - 3 MHz); (2) Magnetic field
MgII	singly ionized Magnesium
MH	Millionths of a solar hemisphere (1 MH = ~ 3 million km^2). Area Earth = ~167 MH
MHD	Magnetohydrodynamics
MHF	Medium High Frequency
MHKA	Museum van Hedendaagse Kunst Antwerpen
MHz	Megahertz (10^6/s)
MImOSA	Magnetic imaging of the outer solar atmosphere
MIT	Massachusetts Institute of Technology
MJD	Modified Julian Day
MK	Million degrees Kelvin
mks	Metric system based on the meter, kilogram, and second
ML	Maximum Likelihood
MLE	Maximum Likelihood Estimate
MLH	Mixing Layer Height
ML-Helio	Machine Learning in Heliophysics
MLP	Multi-Layer Perceptron
MLSO	Mauna Loa Solar Observatory (USA)
MLT	Magnetic Local Time
Mm	Megameter (10^6 meter)
mm, mm^2	millimeter (10^{-3} meter), square mm
mm/s	millimeter per second
MMM	Monthly Management Meeting (SIDC)
MMS	Magnetospheric MultiScale mission (NASA ; 4 spacecraft)
MOC	(1) Mission Operations Center; (2) Maintenance and Observations Center (PECASUS)
MOF	Magneto-optical filter
MOMA	Multi-wavelength Observations and Modelling of Aurora
MoMo	Model of Mars Ionosphere
MOMSTER	MObile Meteor STation for Education & outreach
MOOC	Massive Open Online Courses
MOSWOC	Met Office Space Weather Operations Centre (UK)
MOZAIC	Measurement of Ozone and Water Vapor by Airbus In-Service Aircraft
MP	(1) Magnetopause ; (2) Materials, Physical and nanosciences (COST)
mph	miles per hour
MPI	Message Passing Interface
MPPC	Max Planck-Princeton Center
MPS	Max Planck Institute for Solar System Research
MPS-LO, -HI	Magnetospheric Particle Sensor – LOw, HIgh energy range (GOES)
ms	milliseconds (10^{-3} seconds)
MSAS	MTSAT Satellite Augmentation System (Japanese SBAS)
MSCS	McIntosh Sunspot Classification Scheme
MSFC	Marshall Space Flight Center (NASA)
MSM	(1) Metal-Semiconductor-Metal ; (2) Magnetospheric Specification Model
MSSL	Mullard Space Science Laboratory
MST	Meudon Solar Tower (France)
MSTID	Medium-Scale Traveling Ionospheric Disturbance
MSU	Moscow State University
mSv	millisievert (10^{-3} J/kg ; dose equivalent radiation)
MTI	Moving Target Indication
MTOF	Mass Tome-of-Flight sensor (SOHO)

MTSAT	Multifunctional Transport SATellite (Japan)
MUF, MUF3000	Maximum Usable Frequency, the maximum radio frequency that can be reflected by the ionosphere for a given distance of transmission e.g. 3000 km
MULTI-VP	multiple-1D solar wind model (not an acronym)
MUSCA	Multi-Utility Spacecraft Charging Analysis tool (JAXA)
MUV	Mid Ultraviolet
mV	milliVolt (10^{-3} V)
mW	milliWatt (10^{-3} W)
Mw	Moment magnitude (earthquake)
MWD	Measurements While Drilling
MySQL	My Structured Query Language
N	(1) Density: particles per volume unit ; (2) North ; (3) Nitrogen
n	neutral particles
N_2	Molecular nitrogen
N_2^+ 1NG	First Negative Group of ionized molecular nitrogen
N_2^+	Ionized molecular nitrogen
N_2O	Nitrous oxide ("laughing gas")
nA	nano-Ampère (10^{-9} Ampère)
NAIRAS	Nowcast of Atmospheric Ionizing Radiation for Aviation Safety (NASA/LaRC)
NAOJ	National Astronomical Observatory of Japan
NARMAX	Nonlinear AutoRegresssive Moving Average eXogenous model
NASA	National Aeronautics and Space Administration
NASO	Nepal Astronomical Society
NASU	National Academy of Sciences of Ukraine
NatGeo	National Geographic
NATO	North Atlantic Treaty Organization
NAVIC	NAVigation with Indian Constellation (Regional; Indian GNSS)
Nc, Ns, Ng	the number of spots Ns, the number of groups Ng, and the composite Nc = Ns + 10Ng
NCAR	National Center for Atmospheric Research
NCEI	National Centers for Environmental Information
NDA	Nançay Decameter Array
NDACC	Network for the Detection of Atmospheric Composition Change
N_e	(1) Electron density (e^-m^{-3}) ; (2) Number of electrons
Ne	Neon
NEC	Numerical Electromagnetic Code
NEMO	Novel EIT wave Machine Observing
NENL	Near-Earth Neutral Line
NEO	Near Earth Objects
NeQuick	Electron density Quick calculation model (ionospheric model)
Net-TIDE	Pilot Network for Identification of Travelling Ionospheric Disturbances in Europe
NGDC	National Geophysical Data Center (NOAA)
NGRM	Next Generation Radiation Monitor (ESA)
NICT	National Institute of Information and Communications Technology (SWFC Japan)
NIR	Near IR
NISP	NSO Integrated Synoptic Program
NIST	National Institute for Science and Technology (USA)
NITRO	Nitrogen Ion TRacing Observatory (ESA)
NJIT	New Jersey Institute of Technology
NL	The Netherlands
NLFFF	Non-Linear Force-Free magnetic Field
nm	nanometer (10^{-9} meter)
NM	Neutron Monitor
NMA	Norwegian Mapping Authority
NMDB	Neutron Monitor DataBase
N_mF_2	peak electron density of F_2-layer
NO, NO^+	Nitric oxide, ionized NO
No.	Number of
NO_2	Nitrogen dioxide
NOA	National Observatory of Athens
NOAA	National Oceanic and Atmospheric Administration

NOMAD	Nadir and Occultation for MArs Discovery (ExoMars)
NORAD	North American Aerospace Defense Command (USA)
NoRP	Nobeyama Radio Polarimeter
NORS	Demonstration Network Of ground-based Remote Sensing observations in support of the Copernicus Atmospheric Service (FP7)
NOSWE	NOrwegian centre for Space WEather
NO_x	Refers to NO and NO_2
NP	Non-parametric test
NRCan	Natural Resources Canada
NRF	National Research Foundation (South-Africa)
NRH	Nançay Radioheliograph
NRL	Naval Research Laboratory (USA)
NRT	Near Real Time
ns	nanosecond (10^{-9} second)
N-S	North-South
n-SEU	neutron induced SEU
NSF	National Science Foundation (USA)
NSMC	National Satellite Meteorology Center (China)
NSO	(1) National Solar Observatory (USA) ; (2) Non-Space systems Operations (SN-I)
NSREC	Nuclear & Space Radiation Effects Conference
NSSDC	National Space Science Data Center
NST	New Solar Telescope (former name of GST ; BBSO)
NSWP	National Space Weather Program (USA)
nT	nanotesla (10^{-9} Tesla)
NTC	Non-Thermal Continuum
NTRIP	Networked Transport of RTCM via Internet Protocol
NUV	Near Ultraviolet
NV/SA	Naamloze Vennootschap / Société Anonyme
NVBM	Nederlandse Vereniging ter Bevordering van de Meteorologie
NWC	Northwest Cape of Australia
NWP	Numerical Weather Prediction
NYRIA	Network of Young Researchers in Instrumentation for Astronomy
O, O_2 , O^+	Oxygen, molecular oxygen, ionized oxygen
O_3	Ozone
O3S	Ozone (O_3) Sonde
O3S-DQA	Ozonesonde - Data Quality Assessment
OACT	Osservatorio Astrofisico di Catania / Catania Astrophysical Observatory
OBEE	Outer belt electron enhancements
OD	Onderdepartement
ODC	On Duty Center (PECASUS)
ODS	Ozone Depleting Substances
ODYN	Open-Source Software Analysis Tool to Investigate Space Plasma Turbulence and Nonlinear DYNamics
OECD	Organization for Economic Co-operation and Development
OGSE	Optics Ground Support Equipment
OI	Oblique Incidence
OIC	Organization of Islamic Cooperation
OMI	Ozone Monitoring Instrument
OML	Orbital-Motion-Limited
OMNIweb	No acronym ; from “omni” meaning various, all (solar wind database ; GSFC/SPDF)
Op	Optical information (H-alpha classification)
OpenGGCM	Open Geospace General Circulation Model (NOAA)
ORB	Observatoire Royal de Belgique
ORFEES	Observation Radio Fréquences pour l’Etude des Eruptions Solaires
OSCAR	Observatories of the Solar Corona and Active Regions
OSO	Orbiting Solar Observatories (8 satellites ; 1962-1989 ; NASA)
OSSE	Oriented Scintillation Spectrometer Experiment (CGRO)
OSUC	Observatoire des Sciences de l’Univers en region Centre-Val de Loire (France)
OTH	Over The Horizon
OVATION	Oval Variation, Assessment, Tracking, Intensity, and Online Nowcasting (Johns Hopkins University ; NOAA/SWPC)

OVRO	Owens Valley Radio Observatory (USA)
OVSA	Owens Valley Solar Array (USA)
P	(1) The position angle between the geocentric north pole and the solar rotational north pole measured eastward from geocentric north. The range in P is ±26.3° ; (2) Power
p^+	proton
P2SC	PROBA2 Science Center
pA	pico-Ampère (10^{-12} Ampère)
PAL	Palehua (RSTN, radio observatory)
PAMIR	Portal to Atmospheric and Marine Information Resources (BRAIN-be)
PANDOCA	Professional Aviation Dose Calculator model
PAR	Phased Array Radar
PARADISE	Particle Radiation Asset Directed at Interplanetary Space Exploration
PARAFOG	Predictive Alert of RAdiation FOG
PAS	Polish Academy of Sciences
PATH	Particle Acceleration and Transport in the Heliosphere model
PB	Petabyte (10^{15} bytes)
PBC	Primary Backup-Center (PECASUS)
PbS	Lead Sulfide
PC	(1) Polar Cap; a dimensionless geomagnetic index based on a single nearpole station (one for each pole) ; (2) Personal Computer
PC1,…,5	Pulsation Continue (geomagnetic pulsations ; 1 thru 5 as a function of frequency)
PCA	(1) Polar Cap Absorption ; (2) Principal Component Analysis
PCAF	PCA forecast
PCB	Printed Circuit Board
PCF	Polar Crown Filament
PCO	Phase Center Offset
PCTR	Prominence-Corona Transition Region
PCV	Phase Center Variation
PDF	Probability Density Functions
PEA	(1) Post-eruption arcade (2) Princess Elisabeth Antarctic
PECASUS	Pan-European Consortium for Aviation Space weather User Services (ICAO)
PEN	Penticton (DRAO, radio flux)
PEP	Post Event Prediction
PFRR	Poker Flat Research Range
PFSS	Potential Field Source Surface
pfu	particle (proton) flux unit: the number of particles registered per second, per square cm, and per steradian (1 pfu = 1 particle / $cm^{-2}s^{-1}sr^{-1}$)
PhD	Doctor of Philosophy
PHI	Polarimetric and Helioseismic Imager (SolO)
PI	Principal Investigator
PIC	Particle -in-Cell
PICASSO	PICo-satellite for Atmospheric and Space Science Observations
PIL	Polarity Inversion Line (magnetic neutral line)
PITHIA-NRF	Plasmasphere Ionosphere Thermosphere Integrated Research Environment and Access services: a Network of Research Facilities (EU)
PlasMag	Plasma Magnetometer onboard DSCOVR to measure solar wind
PLASTIC	Plasma and Suprathermal Ion Composition (STEREO)
PLATINUM	PLAnetary plasma Turbulence and Intermittency - coupling with interplanetary transients from data analysis and NUmerical Modelling
PLIP	Polar Lights Imaging Polarimeter
PMOD	Physikalisch-Meteorologisches Observatorium Davos
PMT	Photo Multiplier Tube
POES	Polar Operational Environmental Satellite (NOAA, EUMETSAT)
POLENET	POLar Earth observing NETwork
PoS, PotS	Plane-of-the-Sky
POSKEN	Positioning Knowledge Exchange Network
p-p chain	proton-proton chain (energy production in the Sun and other stars)
ppb	parts per billion

PPEF	Prompt Penetration Electric Field
ppm	parts per million
PPP	Precise Point Positioning (DGPS)
PREMOS	PREcision MOnitoring Sensor
PRESTO	(1) Fast warning message for important SWx events issued by a RWC (no acronym) ; (2) PREdictability of the Solar-Terrestrial cOupling (SCOSTEP)
PRF	(1) Preliminary Report and Forecast of Solar Geophysical Data (the "Weekly"); (2) Pulse Repetition Frequency
PROBA	PRoject for OnBoard Autonomy (series of ESA satellites)
PROBA-V	PROBA-Vegetation
PROBE	PROfiling the atmospheric Boundary layer at European scale (COST)
PRODEX	PROgramme de Développement d'EXpériences scientifiques (ESA ; Program for the development of scientific experiments)
PROSPER	PRObabilistic Solar Particle Event foRecasting model
ps	picosecond (10^{-12} second)
PSD	Post-Storm Depression (of upper portion HF)
PSF	Point Spread Function
PSP	(1) Parker Solar Probe ; (2) Pipe-to-Soil Potential
PSR	Primary Surveillance Radar
PSV	Pipe-to-Soil Voltage
P_t	Transmitted power
PTB	Physikalish-Technische Bundesanstalt (Germany)
PTC	Photon Transfer Curve
PWE	Plasma Wave Experiment (ARASE)
PWOM	Polar Wind Outflow Model
px	pixel
PYRILIOS	A campaign for NIR Sun irradiance measurement, campaign name based on 'Sun' and 'Fire' in Greek (no acronym)
Python	Programming language (no acronym)
q	Charge
Q	Quantity (e.g. e^-, H_2O,...)
Q&A	Questions and Answers
QA	Quality Assurance
QB50	A network of 50 cubesats to be launched simultaneously (FP7)
QC	Quality Control
QDC	Quiet-Day Curve
QE	Quantum Efficiency
QPP	Quasi-periodic pulsation
QR-code	Quick Response code
QS	Quiet Sun
QZSS	Quasi-Zenith Satellite System (Regional system; Japan)
R	(1) Radius ; (2) NOAA's scale for Radio Blackouts; (3) Range ; (4) Resistor
R&D	Research and Development
$R_\odot$	Solar radius (696.000 km)
r^2	the square of the correlation coefficient
RAAF	Royal Australian Air Force
RAC	Radar Auroral Clutter
RACA	Rencontre Astronomique Centre Ardenne
RAD	International Conference on Radiation, Natural Sciences, Medicine, Engineering, Technology and Ecology
RADAR	RAdio Detection And Ranging
RADECS	RADiation Effects on Components and Systems
RadSEP	SEP post-event analysis for aviation radiation exposure (DLR/IAM)
RadSPACE	Radiation environment outside and inside the ISS (DLR/IAM)
RaD-X	Radiation Dosimetry Experiment (NASA ; stratospheric balloon)
RAE	Royal Academy of Engineering (UK)
RAL	Rutherford Appleton Laboratory
RAM	Ring-current Atmosphere interactions Model
RAM-SCB	RAM with self-consistent magnetic equilibrium solver
RAPID	Research with Adaptive Particle Imaging Detector (Cluster)
RAS	Royal Astronomical Society

RB-FAN	Radiation Belt Forecast And Nowcast
RBR	Radio burst (fixed frequency)
RBSP	Radiation Belt Storm Probes (now called the "Van Allen probes")
RC circuit	An electric circuit composed of resistors and capacitors
RC time	The time constant (in seconds) of an RC circuit
RC	Ring Current
RCAAM	Research Center for Astronomy and Applied Mathematics (Academy of Athens)
RCM	(1) Regional Climate Modelling ; (2) Rice Convection Model (magnetosphere)
RCM-E	RCM magnetic Equilibrium (magnetosphere)
RCS	Radar Cross Section
RDA	Range-Doppler Algorithm
R_e , R_E	Earth radius (6378 km)
REENOM	Radiation Environment and Effects NOwcasts for the Moon
REFAG	Reference Frames for Applications in Geosciences
ReLU	Rectified Linear Unit
R-ESC	Space Radiation ESC (SSCC)
ReSourCE	Radio Sciences Research on AntarCtic AtmosphEre
REST	REpresentational State Transfer
RF	Radio Frequency
RFI	Radio Frequency Interference
RGD	Rarefied Gas Dynamics
RGO	Royal Greenwich Observatory (UK)
RGP	Réseau GNSS Permanent
RH	Right-handed
RHCP	Right Hand Circular Polarized
RHESSI	Reuven Ramaty High Energy Solar Spectroscopic Imager
Ri	International sunspot number (old)
RINEX	Receiver Independent Exchange Format
Riometer	Relative Ionospheric Opacity Meter (originally: Relative Ionospheric Opacity Meter for Extra-Terrestrial Emissions of Radio noise)
RISE	Rotation and Interior Structure Experiment (InSight)
RMI(B)	Royal Meteorological Institute (of Belgium)
RMI-DPS-4D	RMI-Digital Portable Sounder-4D
RMOC	Rosetta Mission Operations Centre
RMS	(1) Root Mean Square ; (2) Radiation Monitoring System (ISS)
RMSE	Root Mean Square Error
RO	Radio Occultation
ROADMAP	ROle and impAct of Dust and clouds in the Martian AtmosPhere
ROB	Royal Observatory of Belgium
ROMA	Rank-Ordered Multifractal Analysis
Roscosmos	Russian Space Agency
ROT	Rate of TEC change
ROTEC	Rate of TEC
ROTI	ROT index
RPW	Radio and Plasma Waves (SolO)
RRL	Radio Research Laboratory (old NICT ; Japan)
RRR	Rolling Requirement Review; WMO system for recording space weather requirements
RS	(1) Reverse shock (2) Radiosonde
R_s	Solar radius/radii
RSP	Sweep-frequency radio burst
RSSB	Royal Statistical Society of Belgium
RSTN	Radio Solar Telescope Network (USAF)
R_{sun}	Solar radius (~ 696,000 km)
RTADC	Real-Time Automatic Data Correction
RTCM	Radio Technical Commission for Maritime Services
RTIM	Real Time Ionosphere Monitoring
RTK	Real Time Kinematics (DGPS)
RTSW	Real-Time Solar Wind data (ACE)
RWC	Regional Warning Center
Rx , RX	Receiver
s	(1) number of sunspots ; (2) second

S	(1) Sub flare ; (2) NOAA's scale for Solar radiation storms ; (3) South
S/C	Spacecraft
S/N	Signal-to-Noise
S4	Scintillation index (amplitude)
SAA	South Atlantic Anomaly
SACS	Support to Aviation Control Service (ESA)
SAD	Supra-Arcade Downflows
SAFIR	Système d'Alerte Foudre par Interférométrie Radioélectrique
SAFIRE	SolAr Flux monItoRing Equipment
SAG	Sagamore Hill (RSTN, radio observatory)
SAID	Subauroral Ion drifts
SAM	Solar Aspect Monitor (SDO) - No longer operational
SAMP	Simple Application Messaging Protocol
SAMPEX	Solar Anomalous and Magnetospheric Particle Explorer (NASA)
SANAE-IV	South African National Antarctic Expedition IV (Antarctic research base)
SANSA	South African National Space Agency
SAP	Science Activity Plan
SAPS	Subauroral polarization Streams
SAR	(1) Superactive region; (2) Synthetic Aperture Radar ; (3) Stable Auroral Red arcs
SARIF	Satellite Risk Prediction and Radiation Forecasts (BAS & UKMO)
SARR	Space Absolute Radiometer Reference
SASFF	Self-Adjusted Solar Flux Forecasting tool
sat(s)	satellite(s)
SATCOM	Satellite Communications
SAWS	SEP Advanced Warning System
S-band	Radio waves with frequencies ranging from 2 to 4 GHz (IEEE)
SBAS	Satellite (Space) -based augmentation systems
SBC	(1) Secondary Backup-Center (PECASUS) ; (2) Sector Boundary Crossing
SBO	Space-Based Observatory
SBUV	Solar Backscatter UltraViolet
SC	(1) Solar Cycle ; (2) Sudden Commencement
SC24, SC25	Solar Cycle 24, Solar Cycle 25
SCAR	Scientific Committee on Antarctic Research
SCATHA	Spacecraft Charging AT High Altitudes (P78-2 satellite ; USAF & NASA)
SCD	Spacecraft Design (SN-I)
SCIAMACHY	SCanning Imaging Absorption spectroMeter for Atmospheric CHartographY (ENVISAT)
SCINDA	SCIntillation Network Decision Aid (AFRL)
SCIOPS	SCIence OPerationS
SCK-CEN	Studiecentrum voor Kernenergie - Centre d'Etude de l'Energie Nucléaire
S-class	Small class satellite (ESA)
SCNA	Sudden Cosmic Noise Absorption
SCO	Spacecraft Operation (SN-I)
SCOPE	Solar Coronagraph for OPErations
SCORE	CME classification via speed (Slow-Common-Occasional-Rare-Extremely rare)
SCOSTEP	Scientific Committee on Solar Terrestrial Physics
SDA	Sudden Decrease of Atmospherics
SDO	Solar Dynamics Observatory
SDR	Software Defined Radio
SDU	Silicon Detector Units
SEA	Sudden Enhancement of Atmospherics
SEB	Single-event burnout
SEC	Space Environment Center (old name of SWPC)
SECCHI	Sun Earth Connection Coronal and Heliospheric Investigation (STEREO)
SED	Spectra Energy Distribution
SEE	(1) Single Event Effect ; (2) Solar EUV Experiment (TIMED)
SEESAW	Space Environment Engineering and Science Applications Workshop
SEII	Société Européenne des Ingénieurs et des Industriels
SEISS	Space Environment In-Situ Suite (GOES)
SEL	Single-event latch-up
SEM	(1) Solar EUV Monitor (SOHO) ; (2) Space

	Environment Monitor (GOES)
SEON	Solar Electro-Optical Network (USAF)
SEP	Solar Energetic Particle
SEPC	Space Environment Prediction Center (China)
SEPEM	Solar Energetic Particle Environment Modelling (ESA)
SEPVAL	SEP model VALidation working meeting
SES	Sudden Enhancements of Signal
SESAR	Single European Sky ATM Research
SESC	Space Environment Services Center
SEU	Single Event Upset (bit flip)
SEVIRI	Spinning Enhanced Visible and Infrared Imager
SFA	Sudden Field Anomalies
SFD	Sudden Frequency Deviations
SFE	Solar Flare Effect ("magnetic crochet")
SFU, sfu	Solar Flux Unit (10^{-22} W m^{-2} Hz^{-1})
SGD	Solar-Geophysical Data (NOAA)
SGEPSS	Society of Geomagnetism and Earth, Planetary and Space Science
SGIArv	Archive of Solar and Geomagnetic Indices for drag calculation (SRC PAS)
SGPS	Solar and Galactic Proton Sensor (GOES)
SHADOZ	Southern Hemisphere Additional Ozonesondes (JOSIE)
SHARP	(1) Stratospheric Change and its Role for Climate Prediction (SPARC) ; (2) SHocks: structure, AcceleRation, dissiPation (FMI)
SHF	Super High Frequency
SHINE	Solar Heliospheric & Interplanetary Environment
SHOCK	Solar and Heliospheric Collisionless Kinetics
Si	Silicon
SI	Sudden Impulse
SI^2N	SPARC, IOC, IGACO-O3/UV and NDACC
SIC	Seismoionospheric Coupling
SID	Sudden Ionospheric Disturbance
SIDC	Solar Influences Data analysis Center
SIGMA	Solar Investigation using a Global coronal Magnetograph
SILSO	Sunspot Index and Long-term Solar Observations (ROB)
SIM	Spectral Irradiance Monitor (SORCE)
SIMBA	Sun-earth IMBAlance radiometer
SIP	Solar Information Processing
SIPWork	Solar Information Processing Workshop
SIR	Stream Interaction Region
SIRTA	Site Instrumental de Recherche par Télédétection Atmosphérique (IPSL)
SIS	Solar Isotope Spectrometer (ACE)
SISTED	Sunlit Ionosphere Sudden TEC Enhancement Detector (UPC)
SITEC	Sudden increase of total electron content
SKA	Square Kilometre Array
SL	Seibersdorf Laboratories
SLOL	Signal LOL
SLP	Sweeping / Segmented / Single/ Split / Spherical Langmuir Probe
SLT	Solar Local Time
SM	Spare Model
SMART-L	Signaal Multibeam Acquisition Radar for Targeting, L-band
SMD	Safety and Metrology Division (Federal Services for Metrology)
SMEI	Solar Mass Ejection Imager (Coriolis)
SMILE MWG	SMILE - Modeling Working Group
SMILE	Solar wind-Magnetosphere-Ionosphere Link Explorer (ESA)
S_{min}	Minimal detectable signal
SMM	Solar Maximum Mission (1980-1989)
SMOS	Soil Moisture and Ocean Salinity (ESA)
sms	short message service
SN, S_n	(1) Sunspot Number ; (2) Space weather and Near-

	earth objects ; (3) Standard normal homogenization tests
SNAP	Spring – Negative – Autumn – Positive (CHs)
SN-I	Space Weather Segment Precursor Services –. Part-1: Definition and Service Consolidation (ESA)
SNN	Space Surveillance Network
SNR	Signal-to-Noise Ratio
SO	Solar Orbiter
SO5	Solar Orbiter Workshop 5
SOC	(1) Science Operations Centre ; (2) Scientific Organizing Committee
SODA	(1) SOTERIA Data Archive ; (2) Satellite Orbit DecAy (forecast model ; Uni Graz)
SoDIPE-RTK	Software for Determining the Ionospheric Positioning Error on RTK
SODISM	SOlar Diameter Imager and Surface Mapper (PICARD)
SoFAST	Solar Flare Automated Search Tool
SoHe	Meeting of the Italian Community in Solar and Heliospheric Physics
SOHO	SOlar & Heliospheric Observatory
SOI	Solar Oscillations Investigation (SOHO/MDI ; Stanford)
SOIR	Solar Occultation in the Infrared
SOL-ACES	SOLar Auto-Calibrating Extreme ultraviolet and ultraviolet Spectrometers (ISS-SOLAR)
SOLAR	ESA project onboard ISS (Columbus Laboratory), controlled by B.USOC, and having 3 main instruments: SOVIM, SOLSPEC and SOL-ACES
Solar-C	Next Generation Solar physics Mission (JAXA)
SOLERA	SOLar Euv flux RAte GNSS proxy (UPC)
SOLAR-ISS	Name of the new Solar Reference Spectrum (from 165 to 3000 nm) based on SOLAR/SOLSPEC)
SOLARNET	European network of solar physics researchers and facilities (H2020)
SOLAR-v	A solar spectral irradiance dataset based on SOLAR/SOLSPEC observations during SC24 (relative variability)
SOLCON	SOLar CONstant radiometer
SolEx	Solar Explorer (telescope)
SOLID	SOLar Irradiance Data exploitation (FP7)
SOLIS	Synoptic Optical Long-term Investigations of the Sun (NSO)
SOLMEX	SOLar Magnetism EXplorer
SOLMOD	Solar Modeling (code)
SolO	Solar Orbiter
SoloHI	Heliospheric Imagers (SolO)
SOLSPEC	SOLar SPECtrometer (ISS-SOLAR)
SOLSTICE	Solar Stellar Irradiance Comparison Experiment
SOLVAM	SOLar VAriability Monitor
SOLVE	Small spacecraft fOr near Lunar enViroment Exploration
SOON	Solar Observing Optical Network (USAF/AFWA)
SOOPs	Solar Orbiter Operation Plans (SolO)
SOPB	South Pole Bares (Antarctica, NMDB)
SOPO	South Pole (Antarctica, NMDB)
SOP(s)	Standard Operating Procedure(s)
SORCE	Solar Radiation and Climate Experiment
SoSpIM	Solar Spectral Irradiance Monitor (Solar-C)
SOT	(1) Space Object Tracking ; (2) Solar Optical Telescope (Hinode)
SOTERIA	Solar-Terrestrial Investigations and Archives (EU/FP7)
SOVA	SOlar constant and VAriability
SOVAP	SOlar VAriability Picard
SOVAR	Refurbished SOVA1 radiometer
SOVIM	Solar Variations and Irradiance Monitor (ISS-SOLAR)
SOWG	Science Operations Working Group
SP	Signal Processing
SP4GATEWAY	Space Plasma Physics Payload Package conceptual

	design for the Deep Space Gateway Lunar Orbital Platform
SPA	Sudden Phase Anomalies
SPACEMON	Space Environment Monitoring workshop
SPADE	Small Phased Array Demonstrator (Humain)
SPARC	(1) Stratosphere-troposphere Processes And their Role in Climate ; (2) Space Applications & Research Consultancy
SPARX	Solar Particle Radiation SWx
SPD	Solar Physics Division (AAS)
SPDF	Solar Physics Data Facility (GSFC)
SPE	Solar Proton Event
SPENVIS (-NG)	SPace ENVironment Information System (- Next Generation)
SPHINX	Solar Particles in the Heliosphere validation INfrastructure for SpWx
SPICE	Spectral Imaging of the Coronal Environment (SolO)
SPIE	Society of Photo-Optical Instrumentation Engineers
SPM	SWIFF Plasmasphere Model
SPOCA	Spatial POssibilistic Clustering Algorithm
SPORT	Solar Polar ORbit Telescope (China)
SPRING	Solar Physics Research Integrated Network Group (SOLARNET)
SPS	Science for Peace and Security (NATO)
SPWX	Space Weather (military)
Sq	Solar quiet (daily variations in the geomagnetic field)
S_R	Solar Regular
sr	steradian
SRAM	Static Random-Access Memory
SRB	Solar Radio Burst
SRBE	Société Royale Belge des Electriciens
SRC PAS	Space Research Center of the Polish Academy of Sciences
SREM	Standard Radiation Environment Monitor (Integral, Rosetta)
SRL	Space Research Laboratory (UTU)
SSA	(1) Space Situational Awareness ; (2) Single Scattering Albedo ; (3) Singular Spectrum Analysis
S-SAIL	Solar System Atmospheres' Investigation and exopLanets
SSB	Solar Sector Boundary
SSBC	Solar Sector Boundary Crossing
SSC	(1) STEREO Science Center; (2) Storm Sudden Commencement
SSCC	SSA Space Weather Coordination Centre (ESA)
SSEWG	Solar System Exploration Working Group
SSI	Solar Spectral Irradiance
SSN	(1) SunSpot Number ; (2) Smoothed Sunspot Number
SSN_{corr}	Corrected series of sunspot numbers
SSN_{ori}	Original series of sunspot numbers
SSR	(1) Solid state recorder; (2) Secondary Surveillance Radar
SST	(1) Space Surveillance and Tracking (SN-I) ; (2) Swedish 1-m Solar Telescope
SSWRF II	2nd international workshop on Small Satellites for Space Weather Research and Forecasting
ST-A, ST-B	STEREO-A(head), STEREO-B(ehind) spacecraft
STAFF	Solar Timelines viewer for AFFECTS
STCE	Solar-Terrestrial Centre of Excellence
STCL	Space Technology & Calibration Laboratories
STFC	Science and Technology Facilities Council (UK)
STEAM	Science, Technology, Engineering, Arts, Mathematics
STEC	Slant TEC
STEM	Science, Technology, Engineering, Mathematics
STEPPS	Solar Terrestrial and Experimental Plasma Physics Synergy
STEREO	Solar-TErrestrial RElations Observatory
STET	SuperThermal Electron Transport code
STEVE	Strong Thermal Emission Velocity Enhancement

STIX	Spectrometer Telescope for Imaging X-rays (SolO)
STM	Structural Model
STORM	Solar system plasma Turbulence: Observations, inteRmittency and Multifractals
STSM	Short-Term Scientific Mission (COST)
SUMER	Solar Ultraviolet Measurements of Emitted Radiation (SOHO)
SunPy	software library for solar physics based on Python
SunSCC	Automated tool for sunspot segmentation, clustering, and classification (ROB)
SuperDARN	Super Dual Auroral Radar Network
SURFEX	Surface Externalisée (surface model developed by Météo France)
SUVI	Solar Ultraviolet Imager (GOES16-…)
Sv	Sievert (J/kg ; dose equivalent radiation: equivalent biological effect of the deposit of a joule of radiation energy in a kilogram of human tissue)
SVI	San Vito (RSTN, radio observatory)
SVO	Solar Virtual Observatory
SVW	Sun Visibility Window
SW	(1) Space weather ; (2) Solar wind ; (3) Space Weather (journal)
SW4E	Space Weather for Engineers
SWA	Solar Wind Analyser (SolO)
SWACI	Space Weather Application Center – Ionosphere (DLR)
SWAMIS	Southwest Automatic Magnetic Identification Suite
SWAN	Solar Wind Anisotropies (SOHO)
SWANS	Space Weather and Navigation Systems
SWAP	Sun Watcher using APS detector and image Processing (PROBA2)
SWARM	Three identical satellites measuring Earth's MF (ESA)
SWAVES	STEREO/WAVES instrument (STEREO)
SWE	Space Weather
SWEAP	Solar Wind Electrons Alphas and Protons (PSP)
SWEC	Space Weather Education Centre (STCE)
SWEK	Space Weather Event Knowledgebase
SWENET	(European) Space WEather NETwork
SWEPAM	Solar Wind Electron, Proton, and Alpha Monitor (ACE)
SWF	ShortWave Fade
SWFC	Space Weather Forecast Center
SWG	Science Working Group
SWHV	Space weather helioviewer (jHV)
SWIC	Space Weather Introductory Course
SWIFF	Space Weather Integrated Forecasting Framework
SWiFT	Solar Wind Flux Tube (forecast model)
SWMF	Space Weather Modeling Framework
SWOC	Space Weather Operations Centre
SWOP	Space Weather OPerations group (SIDC)
SWPC	Space Weather Prediction Center (USA)
SWRC	Space Weather Research Center
SwRI	Southwest Research Institute
SWS	Space Weather Services (Australia)
SWSC	Journal of Space Weather and Space Climate *(old acronym)*
SWSC	Space Weather and Space Climate journal
SWT	Science Working Team
SWWT	(European) Space Weather Working Team
SWx	Space weather
SXI	Solar X-ray Imager (GOES12-15)
SXR	Soft x-rays
SXT	Soft X-Ray Telescope (Yohkoh)
SYM-H	A geomagnetic index (nT) similar to the Dst index, but with 1-min time resolution and different stations, to describe the symmetric (SYM) disturbances of the horizontal (H) component of the geomagnetic field
SZA	Solar Zenith Angle
T	(1) Tesla (1 Tesla = 10.000 Gauss) (2) Temperature ; (3)

	Tenflare (SRB) ; (4) Terabyte (10^{12} bytes)
t	Time
TACSAT	Tactical Satellite Communications
TaD	Topside sounder model profiler – assisted Digisonde
TAI	Temps Atomique International
TAP	Table Access Protocol
TAS	Technology Applications and Science
TB	Terabyte (10^{12} bytes)
TCS	Thematic Core Services
TEC	Total Electron Content
TEC-EES	Space Environments and Effects section (ESA/ESTEC)
TEC-EPS	Technical and quality management/Electrical Engineering/ Power & Space Environment Division/Space Environment (ESA)
Tech-TIDE	Warning and Mitigation Technologies for TIDs Effects
TECO	TEchnical Conference on meteorological and environmental instruments and methods of Observation (WMO)
TECu	TEC unit ($10^{16} e \cdot m^{-2}$)
TEPA	Thunderstorms and Elementary Particle Acceleration
TESS	Triennial Earth-Sun Summit
T-FORS	Travelling ionospheric disturbances FORecasting System
tg	Propagation time
TGO	(1) Trace Gas Orbiter (Exomars) ; (2) Tromsø Geophysical Observatory
TGSE	Thermic Ground Support Equipment
THEMIS	(1) Time History of Events and Macroscale Interactions during Substorms (NASA mission) ; (2) Télescope Héliographique pour l'Étude du Magnétisme et des Instabilités Solaires (solar telescope CNRS)
THESOW	Turbulence and Heating in the Solar Wind
THOR	Turbulence Heating ObserveR
THz	Terahertz (10^{12}/s)
TID	(1) Travelling Ionospheric Disturbance (2) Total Ionizing Dose
TIM	Total Irradiance Monitor
TIMED	Thermosphere Ionosphere Mesosphere Energetics and Dynamics (NASA satellite)
TiN	Titanium nitride
TIO	Trans-IOnospheric link (SN-I)
TIR	Thermal InfraRed
TL	Tube Luminescent
TLE	Transient Luminous Event
TMPU	Thermal Plasma Measurement Unit (PROBA2)
TMR	Triple-modular redundancy
TN	True Negative
TOA	Top Of Atmosphere
TOAR	Tropospheric Ozone Assessment Report
TOAR-II	Tropospheric Ozone Assessment Report, Phase II
TOPERS	Planets: Tracing the Transfer, Origin, Preservation, and Evolution of their ReservoirS
TOPROF	Towards Operational ground based PROFiling with ceilometers, doppler lidars and microwave radiometers for improving weather forecasts
TOR	Transmitters-of-Opportunity Reception
TOSCA	Towards a more complete assessment of the impact of solar variability on the Earth's climate
TP	True Positive
TRACE	Transition Region and Coronal Explorer (1998-2010)
TRACTEBEL	International company for consultancy and engineering; merger from Tractionel and Electrobel
TREASURE	Training Research and Applications Network to Support the ultimate real-time high-accuracy EGNSS solution
TREx	Transition Region Explorer (Canada)
TRF	(1) TIM Radiometer Facility ; (2) TSI Radiometer Facility
TRL	Technology Readiness Level

TROPOMI	TROPOspheric Monitoring Instrument (Sentinel-5 Precursor)
TSI	Total Solar Irradiance
TVAC	Thermal-VACuum chamber
Tx, TX	Transmitter
UAH	Universidad de Alcalá / University of Alcala (Spain)
UAV	Unmanned Aerial Vehicle
UCAR	University Corporation for Atmospheric Research
UCD	Unified content descriptors
UCL, UCLouvain	Université Catholique de Louvain
UFO	(1) Unidentified Flying Object ; (2) University FOrum (Ghent, Belgium)
UHF	Ultra High Frequency (300 MHz - 3 GHz)
UiT	University of Troms ; Arctic University of Norway
UK	United Kingdom
UKMO	UK Met Office
UKRI	UK research and Innovation
UKUS	UK-Ukraine-Spain
ULB	Université Libre de Bruxelles
ULF	Ultra-Low Frequency (0.3-3 kHz)
ULg	Université de Liège
Ulysses	A joint ESA/NASA/Canada NRL mission to study the Sun (1990-2009; no acronym)
UMASEP	University of Málaga Solar particle Event Predictor
UNCOPUOS	United Nations Committee on the Peaceful Use of Outer Space
Uni Graz	University of Graz
UNITER	Sciences de l'univers, de l'espace, de la terre et du climat
UNOOSA	United Nations Office for Outer Space Affairs
UOA	University Of Athens
UPC	Universitat Politècnica de Catalunya / Technical University of Catalonia (Spain)
URAN	Ukrainian Radio Interferometer of NASU
URL	Uniform Resource Locator
URSI	International Union of Radio Science - Union Radio-Scientifique Internationale
US(A)	United States (of America)
USAF	United States Air Force
USAFWA	US AFWA
usb, USB	Universal Serial Bus
USET	Uccle Solar Equatorial Table
USGS	US Geological Survey
USU	Utah State University
UT(C)	(Coordinated) Universal Time
UTL	Upper ion Transition Level
UTLS	Upper Troposphere-Lower Stratosphere
UTR	Ukrainian T-shaped Radio telescope
UTU	University of Turku (Finland)
UV	Ultraviolet
UVC-II	Second solar ultraviolet radiometer comparison campaign
UVCS	UV Coronagraph Spectrometer (SOHO)
UVIS	Ultraviolet and Visible
UVRIR	UV and Red IR detector(MSU)
UVSP	UV Spectrometer/Polarimeter (SMM)
v	Velocity (speed)
V	Volt, voltage
V1, 2, …	Version 1, 2, …
VACNT	Vertically Aligned Carbon Nanotubes
VAP	Van Allen Probe (-A and -B)
VarSITI	Variability of the Sun and Its Terrestrial Impact
VBI	Visible Broadband Imager (DKIST)
VenSpec-H	Venus Spectrometer with High resolution (EnVision ; ESA)
VERSIM	VLF/ELF Remote Sensing of Ionospheres and Magnetospheres
VESPA	Virtual European Solar and Planetary Access
VEX	Venus Express (2005-2015)
VHDL	VHSIC Hardware Description Language
VHF	Very High frequency (30-300 MHz)
VHSIC	Very High Speed Integrated Circuit
VI	Vertical Incidence
VIP	Very Important Person
VIRGO	Variability of solar IRradiance and Gravity Oscillations (SOHO)
VIS	(1) Visible ; (2) Visual
VISION	Visible Spectral Imager for Occultation and Nightglow

VITO	Flemish institute for technological research
VKI	Von Karman Institute
VLA	Very Large Array (USA)
VLF	Very Low Frequency (3-30 kHz)
VO	Virtual Observatory
VOEvent	Virtual Observatory Event
Vol.	Volume
Vp	Plasma Potential
VPL	Vertical Protection Level
VSC	(1) Vliebergh-SencieCentrum (Belgium) ; (2) Volontaire Service Civique (voluntary personnel for civil services)
VSOC	Venus Express Science Operations Centre
VSWMC	Virtual Space Weather Modelling Centre
VSx	Virtual Spacecraft
VTEC	Vertical TEC
VTI	Ieperse school voor Wetenschap en techniek
VTT	Technical research Centre of Finland
VUB	Vrije Universiteit Brussel
VUV	Vacuum Ultraviolet
VVS	Vereniging Voor Sterrenkunde (Belgian Astronomical Association)
W	(1) Watt; (2) West
W/m^2	Watt per square meter
WAAS	Wide Area Augmentation System (GPS/North-America ; USA)
WALCORS	WALlonia Continuous OpeRating System
WAMS	Wide Area Monitoring System
WAVACS	WAter VApor in the Climate System
WAVES	Radio and plasma wave investigation (WIND, STEREO)
WBGM	Wide Band Gap Material
WDC	World Data Center
WDS	World Data Service
WFOV	Wide Field Of View
WG	Working Group
WGCV	Working Group on Calibration and Validation
WGN	WerkGroepnieuws (Working Group News, bimonthly journal of the IMO)
WHISPER	Waves of High Frequency and Sounder for Probing of Density by Relaxation (Cluster)
WHPI	Whole Heliosphere and Planetary Interactions
WISA	Waves and Instabilities in the Solar Atmosphere
WISPR	Wide-field Imager for Solar Probe (PSP)
W_L	Energy of a Longmuir wave
WL	White light
WLF	White-light flare
WMFR	Weighted mean flare rate
WMO	World Meteorological Organization
WP	Work Package
WPGM	Western Pacific Geophysics Meeting
WPI	Wave-Particle Interactions
WRC	World Radiation Center
WRF-Chem	Weather Research and Forecasting model coupled with Chemistry
WRR	World Radiometric Reference
WS	Workshop
WSA	(1) Wang-Sheeley-Arge (model for solar wind) ; (2) Weddell Sea Anomaly
WTD	waiting-time distribution
X-band	Radio frequency band from 8-12 GHz
X-class flare	Extreme x-ray flare
XML	Extensible Markup Language
XRS	X-ray sensor (GOES)
XRT	X-Ray Telescope (Hinode)
XUV	Extreme Ultraviolet
Yohkoh	An ISAS (Japan) solar mission: Solar-1 satellite (“sunbeam”) (1991-2001)
yr	year
Z	Proton number
Zpc	McIntosh sunspot classification, where ‘Z’ is the modified Zurich class, ‘p’ describes the penumbra of the principal spot, and ‘c’ describes the distribution of spots in the group’s interior
Zr	Zirconium
ZTD	Zenith tropospheric Total Delay
% dec^{-1}	change (percentage) per decade
%	Percentage
σ	(1) sigma (confidence level) ; (2) Radar cross section

Space Weather Introductory Course

Δ	Delta (difference)
δ	Delta (difference)
Φ	Flux
φ	Phi angle
α	Power-law slope
σ_ϕ	Scintillation index (phase)
µBOS	micro Bolometric Oscillation Sensor
Ω_{ce} , Ω_{cp}	electron-cyclotron frequencies, proton-cyclotron frequencies
ρ_i	ion gyroradius
Å	Ångström (0.1 nm or 10^{-10} m)
α-particle	Helium nucleus
β	Plasma beta parameter (the ratio of the plasma pressure to the magnetic pressure)
λ	wavelength
μ	Magnetic moment of a gyrating particle
µm	micrometer (10^{-6} meter)
µ-waves	microwaves (300 MHz - 300 GHz)
ν	Frequency
τ	(1) Ionospheric slab thickness (meters) ; (2) Time

Δ	Delta (difference)
λ	wavelength
λ_e	electron inertial length
µm	micrometer (10^{-6} meter)
ν	Frequency
ρ_T	gyroradius
σ	sigma (confidence level)
τ, t	Time
$\sim$	(1) About (2) proportional to
$/\!/$	Parallel
°C dec^{-1}	°C per decade
°C	degrees Celsius
$\perp$	Perpendicular
1D, 2D, 3D,…	One, two, three,… dimensional
3DEES	3D Energetic Electron Spectrometer (Proba-3)
^{3}He	Stable isotope of Helium
4CESM	Chapman Conference on Causes and Consequences of the Extended Solar Minimum between SC23 and SC24
4S	Small Satellites Systems and Services
6U	6 Units (cubesats)