## <u>Acronyms</u>

ACE	Advanced Composition Explorer
ADAPT	Air Force Data Assimilative Photospheric flux Transport
AE/9-AP-9	Radiation/ Plasma Model
AFRL	Air Force Research Laboratory
AFSPC	Air Force SPace Command
AFWA	Air Force Weather Agency
AIA	Atmospheric Imaging Assembly
AMIE	Assimilative Mapping of Ionospheric Electrodynamics
AMPERE	Active Magnetosphere Polar Electrodynamics Response Experiment
AMS	American Meteorological Society
ARMAS	Automated Radiation Measurement for Aviation Safety
AST	FAA's Office of Commercial Space Transportation
ASTRA	Atmospheric & Space Technology Research Associates LLC
BDA	Brazilian Decimetric Array-Solar Radio Telescopes
CAPS	Communication Alert and Prediction System
CAS	Chinese Academy of Sciences
CASS	Center for Atmospheric and Space Science
CCDEV	Commercial Crew Development
CCMC	Community Coordinated Modeling Center, NASA
CDAAC	COSMIC Data and Archive Center
CIRES	Cooperative Institute for Research in Environmental Sciences
CISM	Center for Integrated Space Weather Modeling
CMA	China Meteorological Administration
CMIT	Coupled Magnetosphere, Ionosphere, Thermosphere
C/NOFS	Communications/Navigation Outage Forecasting System
C/No	Carrier to Noise ratio
COMS	Communication, Oceanic, and Meteorological Satellite
CORHEL	CORrona-HELiosphere
COSMIC	Constellation Observing System for Meteorology, Ionosphere and Climate
COTS	Commercial Orbital Transportation System
CPWG	Cross Polar Working Group
CRCM	Comprehensive Ring Current Model
CSLA	Commercial Space Launch Act
CSPAR	Center for Space Plasma and Aeronomic Research
CSSAR	Center for Space Science and Applied Research
CTIM	Coupled Thermosphere Ionosphere Model
CTIPe	Coupled Thermosphere Ionosphere Plasma Sphere Electrodynamics
DARN	Dual Auroral Radar Network
DIMS	Data Information and Management System
DMSP	Defense Meteorological Satellites Program
DOD	Department of Defense
DREAM	Dynamic Radiation Environment Assimilation Model
DSCOVR	Deep Space Climate Observatory
Dst	Geomagnetic Disturbance Index
EDP	Electron Density Profiles
EIS	Electric Infrastructure Security
EMBRACE	Brazilian Space Weather Study and Monitoring Program
EMC	Environmental Modeling Center, NOAA

EMP	Electromagnetic Pulse
EPRI	Electric Power Research Institute
EFRI	European Space Agency
ESD	
ESTEC	Electrostatic Discharge European Space Research and Technology Center
EUV	Extreme Ultraviolet
EUV	Extreme Ultraviolet Variability Experiment
FAA	Federal Aviation Administration
FEMA	
FERC	Federal Emergency Management Agency
FISM	Federal Energy Regulatory Commission
FISM	Flare Irradiance Spectral Model
	Full Operational Capability
GAIA	Ground-to-top model of Atmosphere and Ionosphere for Aeronomy
GAIM	Global Assimilation of Ionospheric Measurements
GEO	Geosynchronous Satellite / Group on Earth Observations
GEOSS	Global Earth Observation System of Systems
GEM	Geospace Environment Modeling
GFS	Global Forecast System
GGCM	Geospace General Circulation Model
GIC	Geomagnetically Induced Currents
GIP	Global Ionosphere-Plasmasphere
GLA	General Lighthouse Authorities (of the United Kingdom and Ireland)
GLE	Ground Level Event
GMD	Geomagnetic Disturbance
GMDTF	Geomagnetic Disturbance Task Force
GMKF	Gauss-Markov Kalman Filter Model
GNSS	Global Navigation Satellite System
GPS	Global Positioning System
GRACE	Gravity Recovery and Climate Experiment
GSFC	Goddard Space Flight Center, NASA
HAF	Hakamada-Akasofu-Fry (solar wind model)
HAO	High-Altitude Observatory
HEO	High Earth Orbit
HMI	Helioseismic and Magnetic Imager
HMO	Hermanus Magnetic Observatory
ICAO	International Civil Aviation Organization
ICSWIAS	International Committee for Space Weather Impacts to Aviation Safety
ICTSW	WMO's Inter-Programme Coordination Team on Space Weather
IDEA	Dynamics through Earth Atmosphere
IESD	Radiation-induced internal Electrostatic Discharge
IFM	Ionosphere Forecast Model
IGS	International GNSS Service
IGY	International Geophysical Year
IHY	International Heliophysical Year
IMAGE	Imager for Magnetopause-to-Aurora Global Exploration
IMO	International Maritime Organization
INTERMAGNET	International Real-time Magnetic observatory Network
IPS	Interplanetary Scintillation
ISES	International Space Environment Service
ISOON	Improved Solar Optical Observing Network
ISS	International Space Station

ISWA	Integrated Space Weather Analysis
ISWI	International Space Weather Initiative
JPDO	Joint Planning and Development Office
JPL	Jet Propulsion Laboratory, NASA
JSC	Johnson Space Center, NASA
KACST	King Abdulaziz City for Science and Technology
KCC	Korea Communications Commission
KMA	Korea Meteorological Administration
KSEFC	Korean Space Environment Forecast Center
KSWC	Korean Space Weather Center
LANL	Los Alamos National Laboratory
LASP	Laboratory for Atmospheric and Space Physics
LEO	Low Earth Orbit
LMSAL	Lockheed Martin Solar and Astrophysics Laboratory
LOC	Loss of Crew
LOC	Loss of Mission
LWS	Living with a Star
LYRA	Large Yield RAdiometer
MDI	Michelson Doppler Imager
MHD	Magneto Hydro-Dynamics
MURI	Multidisciplinary University Research Initiative
NADIR	Neutral Atmosphere Density Interdisciplinary Research
NAIRAS	Nowcast of Atmospheric Ionizing Radiation for Aviation Safety
NASA	National Aeronautics and Space Agency
NCAR	National Center for Atmospheric Research
NCEP	National Centers for Environmental Prediction, NOAA
NCSW	National Center for Space Weather (China)
NEO	Near Earth Objects
NERC	North American Electric Reliability Corporation
NESDIS	National Satellite Data and Information Service, NOAA
NEXT	Iridium 2nd Generation Satellite Constellation
NextGen	Next Generation Air Transportation System
NICT	National Institute of Information and Communications Technology (Japan)
NGDC	National Geophysical Data Center, NOAA
NOAA	National Oceanic and Atmospheric Administration
NSO	National Solar Observatory
NSF	National Science Foundation
NSFC	National Natural Science Foundation of China
NSSTC	National Space Science and Technology Center
NSTP	National Satellite Technology Program (Saudi Arabia)
NSWP	National Space Weather Program
NTRIP	Networked Transport of RTCM via Internet Protocol
NWS	National Weather Service, NOAA
OFCM	Office of the Federal Coordinator for Meteorology
ONR	Office of Naval Research
OpenGGCM	Open Geospace General Circulation Model
PĊA	Polar Cap Absorption
PNT	Positioning, Navigation, and Timing
PROBA	PRoject for OnBoard Autonomy
RAC	Radiation Auroral Clutter
RBSP	Radiation Belt Storm Probes

RIMS	Solar Radio Interference Measuring Sets
RO	Radio Occultation
RPC	Rapid Prototyping Center
RRA	Radio Research Agency (Korea)
RTK	Real Time Kinematic
RWC	Regional Warning Center
SAGA	South Atlantic Geomagnetic Anomaly
SAUA	Department of State's Office of Space and Advanced Technology
SC (23/24)	Solar Cycle
SCINDA	Scintillation Network Decision Aid
SDO	Solar Dynamics Observatory
SEALION	Southeast Asia Low Latitude Ionospheric Network
SEEFS	SSA Environmental Effects Fusion System
SEIEG	U.K. Space Environment Impact Expert Group
SEP	Solar Energetic Particle
SEPC	Space Environmental Prediction Center
	Short-term Prediction Research and Prediction Center
SPoRT	
SET	Space Environment Technologies
SHINE	Solar, Heliospheric, and INterplanetary Environment
SIDC	Solar Influences Data Center
SITEC	Sudden Increases in Total Electron Content
SMEI	Solar Mass Ejection Imager
SpaceWOC	Space Weather Operations Center, USAF
SPE	Solar Proton Events
SRAG	Space Radiation Analysis Group, NASA
SRB	Solar Radio Burst
SRS	Solar Radio Spectrograph Radiometer
SSA	Space Situational Awareness
SSCC	Space weather Service Centre
SST	Space Surveillance and Tracking
STEREO	Solar TErrestrial RElations Observatory
SWACI	Space Weather Application Center – Ionosphere
SWAP	Sun Watcher with Active Pixels
SWC	Space Weather Center
SWE	Space WEather
SWL	Space Weather Laboratory
SWENET	Space Weather European NETwork
SWFL	Space Weather Forecast Laboratory
SWFO	Space Weather Forecast Office
SWMF	Space Weather Modeling Framework
SWPC	Space Weather Prediction Center, NOAA
TEC TIEGCM	Total Electron Content Thermosphere Ionosphere Electrodynamic General Circulation Model
TIMED	
	Thermosphere Ionosphere Mesosphere Energetics and Dynamics
TIMEGCM	Thermosphere-Ionosphere Mesosphere Electrodynamics General Circulation Model
ТР	Turbulence Plot
UCAR	
UNBSS	University Corporation for Atmospheric Research United Nations Basic Space Science
UN-COPUOS	
USAF	United Nations Committee on the Peaceful Use of Outer Space United States Air Force
USAF	United States All Polle

USGS	United States Geologic Survey
USTAR	Utah Science Technology and Research Program
UVI	Ultraviolet Imager
VERB	Versatile Electron Radiation Belt
WAM	Whole Atmosphere Model
WHI	Whole Heliosphere Interval
WIGOS	World Meteorological Organization Integrated Global Observing System
WIS	WMO Information System
WMO	World Meteorological Organization
WSA	Wang-Sheeley-Arge Model