

APPENDIX E

ABBREVIATIONS AND ACRONYMS

ACE	Advanced Composition Explorer
AE	auroral electrojet
AFB	Air Force Base
AFOSR	Air Force Office of Scientific Research
AFRL	Air Force Research Laboratory
AFSCN	Air Force Satellite Control Network
AFWA	Air Force Weather Agency
AF/XOW	Headquarters U.S. Air Force, Directorate of Weather
AGO	Automated Geophysical Observatory
AGU	American Geophysical Union
Ap	Planetary A index of geomagnetic activity
ARGOS	Advanced Research and Global Observing Satellite
AU	astronomical unit
CCMC	Community Coordinated Modeling Center
CEDAR	Coupling Energetics and Dynamics of Atmospheric Regions
CME	coronal mass ejection
CRADA	Cooperative Research and Development Agreement
CRL	Communications Research Laboratory, Tokyo, Japan
CRRES	Combined Release and Radiation Effects Satellite
CSEF	Committee for Space Environment Forecasting (OFCM)
CSTR	Committee on Solar Terrestrial Research (National Academy of Sciences)
CSW	Committee for Space Weather (OFCM)
CTIM	coupled thermospheric-ionospheric model
CY	calendar year
DISS	Digital Ionospheric Sounding System
DMSO	Defense Modeling and Simulation Office
DMSP	Defense Meteorological Satellite Program
DOC	Department of Commerce
DOD	Department of Defense
DOE	Department of Energy
DOI	Department of Interior
DOT	Department of Transportation
DPU	Data Processing Unit
DSN	Deep Space Network
Dst	magnetic disturbance storm time index
E-field	electric field
EISCAT	European Incoherent Scatter Radar
ESA	European Space Agency
EUV	extreme ultraviolet
eV	electron-volt
EVA	Extra-Vehicular Activity

FAA	Federal Aviation Administration
FAST	Fast Auroral Snapshot
FCMSSR	Federal Committee for Meteorological Services and Supporting Research (OFCM)
foF2	Maximum ordinary mode radiowave frequency capable of reflection from the F2 region of the ionosphere
FY	fiscal year
GEC	global electrodynamics connection
GEM	Geospace Environment Modeling Program
GEO	Geosynchronous orbit
GEOSpace	Workstation software suite of space weather and related applications
GGG	Global Geospace Science Program
GHz	gigahertz
GIC	geomagnetically induced currents
GLO	Arizona Airglow Experiment
GOES	Geostationary Operational Environmental Satellite
GPS	Global Positioning System
GPS/MET	Global Positioning System Meteorological Sounding Experiment
HEO	highly elliptical Earth orbit
HESSI	High Energy Solar Spectroscopic Imager
HF	high frequency
ICMSSR	Interdepartmental Committee for Meteorological Services and Supporting Research (OFCM)
IMAGE	Imager for Magnetopause to Aurora Global Exploration
IMF	interplanetary magnetic field
IPS	interplanetary scintillation
IR	infrared
IRI	International Reference Ionosphere
ISES	International Space Environment Service
ISOON	Improved Solar Observing Optical Network
ISTP	International Solar-Terrestrial Physics Program
IUWDS	International URSIgram and World Days Service
JHU/APL	The Johns Hopkins University/Applied Physics Laboratory
K-12	kindergarten through 12 th grade
keV	hundred electron-volts
kHz	kilohertz
km	kilometers
Kp	Planetary K index of geomagnetic activity
L1	Lagrangian point
LAN	local area network
LEO	low Earth orbit
LORAN	Long-range Radio Navigation
LTE	local thermodynamic equilibrium
LWS	Living with a Star Program (NASA)
MeV	million electron volts

MHD	magnetohydrodynamics
MIT	Massachusetts Institute of Technology
MLTI	mesosphere and lower thermosphere/ionosphere
MSFM	Magnetospheric Specification and Forecast Model
MSIS	Mass Spectrometer and Incoherent Scatter model
MSM	Magnetospheric Specification Model
MSX	Midcourse Space Experiment
NAS	National Academy of Sciences
NASA	National Aeronautics and Space Administration
NGDC	National Geophysical Data Center
NmF2	peak F-region electron density
NOAA	National Oceanic and Atmospheric Administration
NPOESS	National Polar-orbiting Operational Environmental Satellite System
NRL	Naval Research Laboratory
NSF	National Science Foundation
NSSA	National Security Space Architect
NSSDC	National Space Science Data Center
NSWP	National Space Weather Program
NSWPC	National Space Weather Program Council (OFCM)
OFCM	Office of the Federal Coordinator for Meteorology
OMB	Office of Management and Budget
PI	power index
PL	Phillips Laboratory
POES	Polar Orbiting Environmental Satellite
PRISM	Parameterized Realtime Ionospheric Specification Model
RAL	Rutherford Appleton Laboratory, United Kingdom
RAO	Relocatable Atmospheric Observatory
R_E	Earth radii
RPC	Rapid Prototyping Center
R_s	solar radii
RSTN	Radio Solar Telescope Network
RTSW	Real Time Solar Wind
SAMPEX	Solar Anomalous Magnetospheric Particle Experiment
SAX	Space Architect Exercise
SBIR	Small Business Innovative Research
s/c	spacecraft
SCINDA	Scintillation Network Decision Aid
SEC	Space Environment Center (NOAA) or NASA's Sun-Earth Connections Program
SEM	Space Environment Monitor
SEON	Solar Electro-Optical Observing Network
SEP	solar energetic particles
SHINE	Solar Heliospheric and Interplanetary Environment Program
SMC	Space and Missile Systems Center, Air Force Materiel Command
SMEI	Solar Mass Ejection Imager

SOHO	Solar and Heliospheric Observatory
SRBL	Solar Radio Burst Locator
SSI	Space Sciences Institute
SST	supersonic transport
STOA	shock time of arrival
SuperDARN	Super Dual Auroral Radar Network
SWRN	Space Weather Research Network
SXI	Solar X-ray Imager
TEC	total electron content
TIEGCM	Thermosphere-Ionosphere Electrodynamics General Circulation Model
TIMED	Thermosphere-Ionosphere-Magnetosphere Energetics and Dynamics Mission
TIROS	Television and Infrared Observation Satellite
TRACE	Transitions Region and Coronal Explorer
T ²	technology transfer
UARS	Upper Atmosphere Research Satellite
UCLA	University of California at Los Angeles
UHF	ultrahigh frequency
UML	University of Massachusetts at Lowell
URL	World Wide Web Universal Resource Locator
USAF	United States Air Force
USGS	United States Geological Survey
UV	ultraviolet
VHF	very high frequency
W	watt
WAAS	Wide Area Augmentation System
WAN	wide area network
WBMOD	Wideband Model
WG/NSWP	Working Group for the National Space Weather Program (OFCM)
3D	three-dimensional
55 SXWS	55 th Space Weather Squadron (USAF)