
Acronyms

ACRONYMS

2D	Two Dimensional
3D	Three Dimensional
4DDA	4-Dimensional Data Assimilation

A

A/SA	arid/semi-arid
AABW	Antarctic Bottom Water
AASE II	Airborne Arctic Stratospheric Expedition II
AATSR	Advanced Along Track Scanning Radiometer
ACRIM I	Active Cavity Radiometer Irradiance Monitor I
ACSYS	Arctic Climate System Study
ADEOS	Advanced Earth Observing System
AEAP	Atmospheric Effects of Aviation Program
AERONET	Aerosol Robotic Network
AESOPS	Antarctic Environment Southern Ocean Process Study
AGCM	atmospheric general circulation models
AHM	(model)
AIRS	Atmospheric Infrared Sounder
AIRSAR	Airborne Synthetic Aperture Radar
ALOS	Advanced Land Observation Satellite
ALT	Altimeter
AMI	Active Microwave Instrument
AMIP	Atmospheric Model Intercomparison Project
AMLS	Array MLS
AMSR	Advanced Microwave Scanning Radiometer
AMSR-E	Advanced Microwave Scanning Radiometer (EOS Version)
AMSU	Advanced Microwave Sounding Unit
APAR	Absorbed Photosynthetically-Active Radiation
ARM	Atmospheric Radiation Measurement
ASAR	Advanced Synthetic Aperture Radar
ASF	Alaska SAR Facility
ASTER	Advanced Spaceborne Thermal Emission and Reflection Radiometer
ATBD	Algorithm Theoretical Basis Document
ATLAS	Atmospheric Laboratory for Applications and Science
ATMOS	Atmospheric Trace Molecule Spectroscopy

ATSR	Along Track Scanning Radiometer
AVHRR	Advanced Very High-Resolution Radiometer
AVIRIS	Airborne Visible-Infrared Imaging Spectrometer
AWS	Automatic Weather Stations

B

BAHC	Biospheric Aspects of the Hydrological Cycle
BATS	Biosphere-Atmosphere Transfer Model
BIOME	Biogeochemical Information Ordering Management Environment
BOREAS	Boreal Ecosystems Atmosphere Study
BRDF	bidirectional reflectance distribution function
BSRN	Baseline Surface Radiation Network
BUV	Backscatter Ultraviolet

C

CALM	Circumpolar Active Layer Monitoring
CART	Cloud and Radiation Testbed
CASES	Cooperative Atmosphere-Surface Exchange Study
CCD	Charge-Coupled Device
CCN	Cloud Condensation Nuclei
CDIAC	Carbon Dioxide Information and Analysis Center
CDOM	Colored Dissolved Organic Matter
CEM	cumulus ensemble model
CERES	Clouds and the Earth's Radiant Energy System
CESBIO	Centre d'Études Spatiales de la Biosphère
CFC	Chlorofluorocarbon
CH₂Cl₂	Dichloromethane
CH₃Cl	Methyl chloride
CHCl₃	Chloroform
CHEM-1	Chemistry Mission-1
CLAES	Cryogenic Limb Array Etalon
CLASS	Canadian Land Surface Scheme
CLIVAR	CLimate VARIability and prediction
CIO_x	oxides of chlorine family
CMDL	Climate Monitoring and Diagnostics Laboratory

COARE	Coupled Ocean-Atmosphere Response
COS	Carbonyl Sulfide
COSEPUP	Committee on Science, Engineering, and Public Policy
COV	Coefficient of Variation
CPR	Cloud Profiling Radar
CR	Correlation Radiometry
CRYSYS	Use of the Cryospheric System to Monitor Global Change in Canada (EOS IDS)
CTM	Chemistry and Transport Model
CZCS	Coastal Zone Color Scanner

D

DAAC	Distributed Active Archive Center
DAO	Data Assimilation Office
DAS	Data Assimilation System
DDL	Direct Downlink
DECAFE	Dynamique et Chimie de l'Atmosphere en Foret Equatoriale
DEM	Digital Elevation Model
DFA	Dual-Frequency radar Altimeter
DIC	Dissolved Inorganic Carbon
DMS	Dimethyl Sulfide
DMSP	Defense Meteorological Satellite Program
DOC	Dissolved Organic Carbon
DoD	Department of Defense
DoE	Department of Energy
DOM	Dissolved Organic Matter
DORIS	Doppler Orbitography and Radiopositioning Integrated by Satellite
DT	Delta T (Temperature)
DU	Dobson Unit

E

ECHIVAL	European International Project on Climate and Hydrological Interactions between Vegetation, Atmosphere, and Land Surfaces
ECLIPS	Experimental Cloud Lidar Pilot Study
ECMWF	European Centre for Medium-Range Weather Forecasts
EDC	EROS Data Center
EFEDA	ECHIVAL Field Experiment in Desertification-Threatened Areas
EGIG	Expédition Glaciologique Internationale au Groenland

ENSO	El Niño-Southern Oscillation
ENVISAT	Environmental Satellite, ESA
EOS	Earth Observing System
EOS PM	EOS afternoon-crossing satellite
EOSDIS	EOS Data and Information System
EOSP	Earth Observing Scanning Polarimeter
EP	Earth Probe
ER-2	NASA Research Aircraft
ERB	Earth Radiation Budget
ERBE	Earth Radiation Budget Experiment
ERBS	Earth Radiation Budget Satellite
EROS	Earth Resources Observation System
ERS	European Remote-Sensing Satellite
ERS-1	European Remote-Sensing Satellite-1
ESA	European Space Agency
ESCC	Electrically Self-Calibrating Cavity
ESMR	Electronically Scanning Microwave Radiometer
ESSC	Earth System Sciences Committee
ET	Evapotranspiration
ETM	Enhanced Thematic Mapper
ETM+	Enhanced Thematic Mapper Plus
EURECA	European Retrievable Carrier

F

FAA	Federal Aviation Administration
FAO	Food and Agriculture Organization
FAPAR	Fraction Absorbed Photosynthetically Active Radiation
FIFE	First ISLSCP Field Experiment
FIRE	First ISCCP Regional Experiment
FLUXNET	Flux Network
FPAR	Fraction of Photosynthetically-Active Radiation
FSSP	Forward Scattering Spectrometer Probe
FTS	Fourier Transform Spectrometer

G

GAIM	Global Analysis, Interpretation, and Modeling
GAP	Gap Analysis Project
GCIP	GEWEX Continental-Scale International Project

GCM	General Circulation Model (also Global Climate Model)
GCOS	Global Climate Observing System
GCTE	Global Change in Terrestrial Ecosystems
GEBA	Global Energy Balance Archive
GENESIS	Global Environmental and Ecological Simulation of Interactive Systems
GEOS	Goddard Earth Observing System
GERB	Geostationary Earth Radiation Budget
GEWEX	Global Energy and Water Cycle Experiment
GFDL	Geophysical Fluid Dynamics Laboratory
GFO	Geosat Follow-On
GGD	Global Geocryology Database
GHCN	Global Historical Climatology Network
GIS	Geographic Information System
GISP	Greenland Ice Sheet Program
GISS	Goddard Institute for Space Studies
GLAS	Geoscience Laser Altimeter System
GLCTS	Global Landcover Test Site Initiative
GLI	Global Imager
GLIMS	Global Land Ice Monitoring from Space
GLOBE	Global Learning and Observations to Benefit the Earth
GLOBEC	Global Ocean Ecosystem Dynamics
GMS	Geostationary Meteorological Satellite
GNP	Gross National Product
GOALS	Global Ocean-Atmosphere-Land System
GOES	Geostationary Operational Environmental Satellite
GOMOS	Global Ozone Monitoring By Occultation of Stars
GPCP	Global Precipitation Climatology Project
GPP	Gross Primary Productivity
GPS	Global Positioning System
GRDC	Global Runoff Data Center
GSFC	Goddard Space Flight Center
Gt	Gigaton
GTOS	Global Terrestrial Observing System
GVaP	GEWEX Water Vapor Project

H

HALOE	Halogen Occultation Experiment
HAPEX	Hydrological-Atmospheric Pilot Experiment
HCFC	Hydrochlorofluorocarbon
HH	Horizontal, Horizontal Polarization
HIRDLS	High-Resolution Dynamics Limb Sounder

HIRS	High-Resolution Infrared Radiation Sounder
HNLC	High Nutrient, Low Chlorophyll
HO_x	odd hydrogen family
HRDI	High-Resolution Doppler Imager
HSB	Humidity Sounder, Brazil
HSCT	High-Speed Civil Transport

IABP	International Arctic Buoy Program
ICESat	Ice, Clouds, and Land Elevation Satellite
ICRCCM	Intercomparison of Radiative Codes for Climate Models
ICSU	International Council of Scientific Unions
IDS	Interdisciplinary Science Investigation (EOS)
IFC	Intensive Field Campaign
IFO	intensive field observation
IFOV	Instantaneous Field of View
IGAC	International Global Atmospheric Chemistry
IGBP	International Geosphere-Biosphere Programme
IGPPDI	Global Primary Production Data Initiative
IHP	International Hydrological Program
ILAS	Improved Limb Atmospheric Spectrometer
IMAS	Integrated Multispectral Atmospheric Sounder
IOC	Intergovernmental Oceanographic Commission
IOP	Intensive Observing Period
IPCC	Intergovernmental Panel on Climate Change
IR	infrared
ISAMS	Improved Stratospheric and Mesospheric Sounder
ISCCP	International Satellite Cloud Climatology Project
ISLSCP	International Satellite Land Surface Climatology Project
IT	Instrument Team
ITCZ	Inter-Tropical Convergence Zone
IWP	ice water path

J

JERS	Japanese Earth Remote-Sensing Satellite
JERS-OPS	Japanese Earth Remote-sensing Satellite-OPS
JGOFS	Joint Global Ocean Flux Study

JPLAIRSAR JPL Airborne Synthetic Aperture Radar
JPO Joint Planning Office

K

KINEROS Kinematic wave overland flow, channel routing and Erosion model

L

LAI Leaf-Area Index
Landsat Land Remote-Sensing Satellite
LBA Large Scale Biosphere-Atmosphere Experiment in Amazonia
LERTS Laboratoire d'Etudes et de Recherches en Teledetection Spatiale
LHH L-band HH
LIS Lightning Imaging Sensor
LITE Lidar In-space Technology Experiment
LOICZ Land Ocean Interactions in the Coastal Zone
LS Lower Stratosphere
LSM Land-Surface Model
LSP Land-Surface Parameterizations
ILTER Long-Term Ecological Research
LW longwave
LWP liquid water path

M

MAAT Mean Annual Air Temperatures
MAPS Measurement of Air Pollution from Satellites
MCS mesoscale convective systems
MERIS Medium-Resolution Imaging Spectrometer
METEOR-3 Russian Operational Weather Satellite
METOP Meteorological Operational Satellite
MHS Microwave Humidity Sounder
MIMR Multifrequency Imaging Microwave Radiometer
MISR Multi-angle Imaging Spectroradiometer
MIT Massachusetts Institute of Technology
MLS Microwave Limb Sounder
MM mesoscale model
MMIC Microwave Monolithic Integrated Circuit
MMS Modular Modeling System

MODIS Moderate-Resolution Imaging Spectroradiometer
MODLAND MODLIS Land
MOPITT Measurements of Pollution in the Troposphere
MOU Memorandum of Understanding
MSG Meteosat Second Generation
MSU Microwave Sounding Unit
MT Megaton
MVI MODIS Vegetation Index

N

NAD Nitric Acid Dihydrate
NADW North Atlantic Deep Water
NASA National Aeronautics and Space Administration
NASDA National Space Development Agency
NAT Nitric Acid Trihydrate
NBIOME Northern Biosphere Observation and Modeling Experiment
NCAR National Center for Atmospheric Research
NCDC National Climatic Data Center
NCEP National Centers for Environmental Prediction
NDVI Normalized Difference Vegetation Index
NESDIS National Environmental Satellite, Data, and Information Service
NEXRAD Next Generation Weather Radar
NH Northern Hemisphere
NIR Near Infrared
NMC National Meteorological Center
NMHC Non-Methane Hydrocarbons
NOAA National Oceanic and Atmospheric Administration
NOPEX Northern Hemisphere Climate-Processes Land-Surface Experiment
NO_x odd nitrogen family
NPOESS National Polar-orbiting Operational Environmental Satellite System
NPP Net Primary Production
NRC National Research Council
NSCAT NASA Scatterometer
NSF National Science Foundation
NSIDC National Snow and Ice Data Center
NWP Numerical Weather Prediction

O

OCS	Carbonyl Sulfide
OCTS	Ocean Color and Temperature Scanner
OH	Hydroxyl
OLR	Outgoing Longwave Radiation
OMI	Ozone Measuring Instrument
ONR	Office of Naval Research
ORNL	Oak Ridge National Laboratory
OSU	Oregon State University
OTTER	Oregon Transect Terrestrial Ecosystem Research

P

PAR	Photosynthetically-Active Radiation
PARCA	Program for Arctic Regional Climate Assessment
PEM	Production Efficiency Model
PI	Principal Investigator
PIK	Potsdam Institute for Climate Impact Research
PILPS	Project for Intercomparison of Land-Surface Parameterization (LSP) Schemes
PNZ	Phytoplankton-nutrient-zooplankton
POLDER	Polarization and Directionality of the Earth's Reflectance
POLES	Polar Exchange at the Sea Surface (IDS)
ppm	parts per million
PR	Precipitation Radar
PSC	Polar Stratospheric Cloud
PSU	Pennsylvania State University
PW	precipitable water

Q

QBO	Quasi-Biennial Oscillation
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R

Radarsat	Radar Satellite, Canada
RAMS	Regional Atmospheric Modeling System
RC	radiative-convective
REP	Relativistic Electron Precipitation
RGPS	Radarsat Geophysical Processor System

S

S.D.	Standard Deviation
SAFARI	South African Fire—Atmospheric Research Initiative
SAGE	Stratospheric Aerosol and Gas Experiment
SALSA	Semi-Arid Land-Surface-Atmosphere
SAM	Stratospheric Aerosol Measurement
SAR	Synthetic Aperture Radar
SAVI	Soil-Adjusted Vegetation Index
SBUV	Solar Backscatter Ultraviolet
SCA	Snow-Covered Area
SCANSAR	Scanning Synthetic Aperture Radar
SCAR-B	Smoke Cloud and Radiation-Brazil
SCARAB	Scanner for Radiation Budget
SCF	Science Computing Facility
SCICEX	Submarine Arctic Science Cruise (Program)
SCOPE	Scientific Committee on Problems of the Environment
SeaWiFS	Sea-viewing Wide Field-of-view Sensor
SEB	Surface Energy Balance
SEDAC	Socioeconomic Data and Applications Center
SGP	Southern Great Plains
SHEBA	Surface Heat Budget of the Arctic Ocean
SiB	Simple Biosphere Model
SIMIP	Sea Ice Model Intercomparison Project
SIR-C	Shuttle Imaging Radar-C
SLR	Satellite Laser Ranging
SMM	Solar Maximum Mission
SMM/I	Special Sensor Microwave/Imager
SMMR	Scanning Multispectral Microwave Radiometer
SOHO	Solar Heliospheric Observatory
SOLAS	Surface Ocean Lower Atmosphere Study
SOLSTICE	Solar Stellar Irradiance Comparison Experiment
SPCZ	South Pacific Convergence Zone
SPE	Solar Particle Event
SPOT	Systeme pour l'Observation de la Terre
SRB	Surface Radiation Budget
SRBEX	Susquehanna River Basin Experiment
SSALT	Solid State radar Altimeter
SSM/I	Special Sensor Microwave/Imager
SST	Sea-Surface Temperature
SSU	Stratospheric Sounding Unit
STP	Standard Temperature and Pressure
STS	Space Transport System

SVAT Soil-Vegetation-Atmosphere Transfer Model
SVI Spectral Vegetation Indices
SW shortwave
SWE Snow Water Equivalent
SWIR Shortwave Infrared

UT Upper Troposphere
UV Ultraviolet
UV-B Ultraviolet-B

T

T-S temperature-salinity
TARFOX Tropospheric Aerosol Radiative Forcing Observational Experiment
TEM Terrestrial Ecosystem Model
TES Tropospheric Emission Spectrometer
THM Terrestrial Hydrology Model
TIR Thermal Infrared
TM Thematic Mapper
TMI TRMM Microwave Imager
TMR TOPEX Microwave Radiometer
TOA top of the atmosphere
TOGA Tropical Ocean Global Atmosphere
TOMS Total Ozone Mapping Spectrometer
TOP Terrestrial Observation Panel
TOPEX/Poseidon Ocean Topography Experiment
TOPORAD (model)
TOPSAR Topographic Synthetic Aperture Radar
TOVS TIROS Operational Vertical Sounder
TRACE-A Transport and Chemistry near the Equator over the Atlantic
TRAGNET United States Trace Gas Network
TRMM Tropical Rainfall Measuring Mission
TSI total solar irradiance

V

VEMAP Vegetation/Ecosystem Modeling and Analysis Project
VHRR Very High Resolution Radiometer
VI Vegetation Index
VIC Variable Infiltration Capacity
VIRGO Variability of solar Irradiance and Gravity Oscillations
VIRS Visible Infrared Scanner
VIS Visible
VNIR Visible and Near Infrared
VOC Volatile Organic Carbon

W

WCRP World Climate Research Program
WDC-A World Data Center-A
WFPS Water-Filled Pore Space
WMO World Meteorological Organization
WOCE World Ocean Circulation Experiment
WSR Weather Surveillance Radar

X

X-SAR X-Band Synthetic Aperture Radar

U

UARS Upper Atmosphere Research Satellite
UKMO United Kingdom Meteorological Office
UMCP University of Maryland, College Park
UNEP United Nations Environment Program
UNESCO United Nations Educational, Scientific, and Cultural Organization
USAF United States Air Force
USDA United States Department of Agriculture
USGCRP U.S. Global Change Research Program
USGS United States Geological Survey

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