GSL Acronym List - Earth System Prediction - Modeling Section

Acronym	Definition
AOD	Aerosol Optical Depth
ARL	Air Resources Laboratory
BAMS	Bulletin of the American Meteorological Society
CAM	Convection Allowing Model
CCPP	Common Community Physics Package
CMAQ	Community Multiscale Air Quality Modeling System
CPOL	C-BAND POLARIMETRIC
CSI	Critical Success Index
CSL	Chemical Sciences Laboratory
DA	Data Assimilation
DIFF	difference
DOE	U.S. Department of Energy
DTC	Developmental Testbed Center
EPAD	Earth Prediction Advancement Division
ESRL-FIMr1p1	Earth System Research Laboratories - Flow-Following Icosahedral Model
FRP	Fire radiative power
FV3	Finite Volume Cubed Sphere model
FV3-CMAQ	Finite Volume Cubed Sphere - Global Forecast System
FV3-GFS	Finite Volume Cubed Sphere - Community Multiscale Air Quality
GEFS	Global Ensemble Forecast System
GEFS - EMC	Global Ensemble Forecast System - Environmental Modeling Center
GEFS-Aerosols	Global Ensemble Forecast System - Aerosols
GEM-ECCC	Global Environmental Multiscale Model - Environment and Climate Change Canada
GEOS	Goddard Earth Observing System Model
GF	Grell-Freitas conveection scheme
GF/GFO	Grell-Freitas (convective scheme, or Grell-Freitas-Olson version)
GLERL	Great Lakes Environmental Research Laboratory
GMAO-GEOS	Global Modeling and Assimilation Office - Goddard Earth Observing System Model
GML	Global Monitoring Laboratory
GOCART	Goddard Chemistry Aerosol Radiation and Transport model
GPS-Met PW	Global Positioning System Meteorology system Precipital Water
GWD	Gravity Wave Drag
Height ALS	Airborne laser scanning
HRRR	High-Resolution Rapid Refresh model
HRRR-AK	HRRR-Alaska
HRRR-smoke	HRRR Smoke model
JTECH	The Journal of Atmospheric and Oceanic Technology
LASSO Study	Large-Eddy Simulation (LES) ARM Symbiotic Simulation and Observation
LES	Large-Eddy Simulation
MERRA2	Modern-Era Retrospective analysis for Research and Applications, Version 2
METAR	Aviation Routine Weather Report (translation from French)
ML	Machine Learning
MME	North American Multi-Model Ensemble

MRMS Multi-Radar/Multi-Sensor (national radar data merger system)

MYNN Mellor-Yamada-Nakanishi-Nino (boundary-layer parameterization)

MYNN-EDMF Mellor-Yamada-Nakanishi-Nino Eddy Diffusivity-Mass Flux

NASA National Aeronautics and Space Administration
Navy-ESPC US Navy - Earth System Prediction Capability
NGAC National Geospatial Advisory Committee
NGGPS Next-Generation Global Prediction System

NHX Northern Hemisphere
NRL Naval Research Laboratory

NW Northwest

NWM National Water Model

NWP Numerical Weather Prediction

OBS Observation

PBL Planetary Boundary Layer
PDF Probability Density Function

PM2.5 Particulate Matter that is 2.5 micrometers and smaller

ppb parts per billion

PSL Physical Sciences Laboratory

QPF Quantitative Precipitation Forecast

RAP domain

Rapid Refresh models geographic coverage area

RAP-Chem

Rapid Refresh model - coupled to chemistry

RAP-smoke

Rapid Refresh model - coupled to chemistry

RMS/RMSE Root-Mean-Square Error

RRTM Rapid Radiative Transfer Model

RSMAS-CCSM4 Rosenstiel School of Marine and Atmospheric Science -Community Climate System Model version

4.0

RUC Rapid Update Cycle model
RUC LSM RUC Land-Surface Model

SAS Simplified Arakawa–Schubert Convection Scheme

SGS Subgrid-scale

SHX Southern hemisphere

SOA secondary organic aerosols

SPP Stociastially Pertermbed PArameterizations
SPPT Stociastially Pertermbed Physical Tendancies

SubX FIM Subseasonal Experiment Flow-following finite-volume Icosahedral Model (experimental global

model)

TKE Turbulent Kinetic Energy

TWP-ICE Tropical Western Pacific – International Cloud Experiment

UCAR University Corporation for Atmospheric Research

UFS Unified Forecast System
UTC Coordinated Universal Time

WRF Weather Research and Forecasting model (community model system)

WRF-Chem Extended version of WRF model including inline chemistry (two-way interaction)
WRF-GSI Weather Research and Forecasting Model - Gridpoint Statistical Interpolation

WV West Virginia