

Acronyms Used in Lab Review Presentations

AABW	Antarctic Bottom Water
AAIW	Antarctic Intermediate Water
ACCESS	Australian Community Climate and Earth System Simulator
ACE	Ai2 Climate Emulator
AEP	Annual Exceedance Probability
AERO	Aerosol
AEROCOM	Aerosol Comparison
AFI	Air Freezing Index
AI	Artificial Intelligence
Ai2	Allen Institute for Artificial Intelligence
AM4	Atmospheric Model version 4
AM4VR	Variable-Resolution Global Chemistry-Climate Model
AM5	Atmospheric Model version 5
AMOC	Atlantic Meridional Overturning Circulation
AMSU-A	Advanced Microwave Sounding Unit-A
AOML	Atlantic Oceanographic & Meteorological Laboratory
APARC	Atmospheric Processes And their Role in Climate
AR	Atmospheric River
ASCE	American Society of Civil Engineers
ATMS	Advanced Technology Microwave Sounder
AWS	Amazon Web Services
B-SOSE	Biogeochemical Southern Ocean State Estimate
BBL	Bottom Boundary Layer
BGC	biogeochemistry
BIAS	Frequency Bias
BIL	Bipartisan Infrastructure Law
CAM-FV3	FV3-based Community Atmosphere Model
CBED	Carbon, Benthic Ecosystems, and Diagenesis model
CDNC	Cloud Droplet Number Concentration
CDR	Carbon Dioxide Removal
CEFI	Climate, Ecosystems, and Fisheries Initiative
CERES-EBAF	Clouds and Earth's Radiant Energy Systems - Energy Balanced and Filled
CESM	Community Earth System Model (NCAR)
CICERO	Norwegian Centre for International Climate and Environmental Research
CIMES	Cooperative Institute for Modeling the Earth System
CIs	Cooperative Institutes
CM4	Coupled Model version 4
CM5	Coupled Model version 5
CM5-HR	High resolution configuration of CM5
CM5-LR	Low resolution configuration of CM5
CMIP6	Coupled Model Intercomparison Project Phase 6
CMIP7	Coupled Model Intercomparison Project Phase 7
CMS	(U.S.) Climate Modeling Summit
COARE	Coupled Ocean-Atmosphere Response Experiment bulk algorithm
COBALT	Carbon, Ocean Biogeochemistry, and Lower Trophics model
CONUS	Contiguous United States
COSIMA	Consortium for Ocean-Sea Ice Modelling in Australia
CPC	(NOAA) Climate Prediction Center
CPO	(NOAA) Climate Program Office
CPSD	Cloud hydrometeor Particle Size Distribution
CPT	Climate Process Team
CRADA	Cooperative Research And Development Agreement
CrIS	Cross-track Infrared Sounder

CRTM	Community Radiative Transfer Model
CSL	Chemical Sciences Laboratory
CVP	Climate Variability and Prdictability
CWA	Central Weather Administration (Taiwan)
CWG	(NOAA) Climate Working Group
DA	Data Assimilation
DECK	Diagnostic, Evaluation and Characterization of Klima
DIMOSIC	Different Models, Same Initial Conditions
DJF	December January Febuary
DOC	US Department of Commerce
DOD	US Department of Defense
DOE	US Department of Energy
DOE HFTO	US DOE Hydrogen and Fuel Cell Technologies Office
DOI	Digital Object Identifier
DPC	Double Plume Convection
DYAMOND	DYnamics of the Atmospheric general circulation Modeled On Non-hydrostatic Domains
EC	Short for ECMWF
ECDA	Ensemble Coupled Data Assimilation
ECMWF	European Center for Medium-Range Weather Forecasts
EDMF	Eddy Diffusivity Mass Flux
EDMF	Eddy-Diffusivity Mass-Flux
EMC	Environmental Modeling Center
ENSO	El Niño / Southern Oscillation
EPA	Environmental Protection Agency
ePBL	Energetic Planetary Boundary Layer
EPIC	(NOAA) Earth Prediction Innovation Center
ERA5	ECMWF Reanalysis version 5
ERB	Earth Radiation Budget
ESD	Empirical Statistical Downscaling
ESF	Exponential Sum Fit technique
ESGF	Earth System Grid Federation
ESM	Earth System Model
ESM4.1	Earth System Model version 4.1
ESM4.5	Earth System Model version 4.5
ESMG	Earth System Modeling Group
ETS	Equitable Threat Score
FA	flux adjustment (e.g. for bias correction)
FAFMIP	Flux-anomaly-forced model intercomparison project
FAIR	Findable Accessible Interoperable Resusable (data principles)
FAR	First Assessment Report
FCST	Forecast
FEISTY	Fisheries Size and Functional Type Model
FGOALS	Flexible Global Ocean-Atmosphere-Land System
FIU	Florida International University
FLOR	Forecast-oriented Low Ocean Resolution Model
FMS	Flexible Modeling System
FRE	FMS (Flexible Modeling System) Runtime Environment
FV3	Finite-Volume Cubed-Sphere Dynamical Core
FV3net	Neural-Network enabled FV3GFS atmospheric model
FY	Fiscal Year
GCM	General Circulation Model
GEFS	Global Ensemble Forecast System
GEOS	Goddard Earth Observing System
GFS	Global Forecast System
GMAO	(NASA) Global Modeling and Assimilation Office

GMSL	Global Mean Sea Level
GOES-16	Geostationary Operational Environmental Satellite-16
GPSRO	GPS Radio Occultation
gridMET	gridded meteorological data
GSL	Global Systems Laboratory
GSRM	Global Storm Resolving Model
HAFS	Hurricane Analysis and Forecast System
HHE	Heat Health Emergency (Philadelphia)
HiFLOR	High-resolution Forecast-oriented Low Ocean Resolution Model
HPC	High-Performance Computing
HPD	Hourly Precipitation Data
hursmin	daily minimum relative humidity (2m)
HWRF	Hurricane Weather Research and Forecasting model
HWT	NOAA Hazardous Weather Testbed
HyVIS	Hydrogen Research Virtual Seminar (UK NERC)
IASI	Infrared Atmospheric Sounding Interferometer
IFS	(ECMWF) Integrated Forecast System
iOM	Ocean Model with Ice Sheets
IPCC	Intergovernmental Panel on Climate Change
JCSDA	Joint Center for Satellite Data Assimilation
JJA	June July August
JTTI	Joint Technology Transfer Initiative
KID	Kinematic Iceberg Dynamics
KIM	Korean Integrated Model
LASG	State Key Laboratory of Numerical Modeling for Atmospheric Sciences and Geophysical Fluid Dynamics
LEGEND	Learning Excellence and Good Examples for New Developers (Act)
LES	Large Eddy Simulation
LM4	GFDL Land Model, version 4
LMARS	Low Mach number Approximate Riemann Solver
LME	Large Marine Ecosystem
LSM	Land-Surface Model
M2LInES	Multiscale Machine Learning In Coupled Earth System Modeling
MAM	March April May
MAPP	Modeling, Analysis, Predictions and Projections
MCS	Mesoscale Convective System
MDTF	Model Diagnostics Task Force
MERRA	Modern-Era Retrospective analysis for Research and Applications
MG2	Morrison-Gottelman microphysics version 2
MJO	Madden–Julian Oscillation
ML	Machine Learning
MOM	Modular Ocean Model
MOM6	Modular Ocean Model version 6
MOM6-IS	Modular Ocean Model version 6 with Ice Sheet
MOP	Manuals of Practice
MPAS	Model for Prediction Across Scales
MRI	Mean Recurrence Interval
MW	Microwave
NAO	North Atlantic Oscillation; or NOAA Administrative Order
NARR	North American Regional Reanalysis
NASA	National Aeronautics and Space Administration
NCA	National Climate Assessment
NCAR	National Center for Atmospheric Research
NCCOS	National Centers for Coastal Ocean Science
NCEI	National Centers for Environmental Information
NCEP	National Centers for Environmental Prediction

NEFSC	Northeast Fisheries Science Center
NESDIS	National Environmental Satellite, Data, and Information Service
NHC	National Hurricane Center
NIHHIS	National Integrated Heat and Health Information System
NIST	National Institute of Standards and Technology
NMFS	(NOAA) National Marine Fisheries Service
NMME	North American Multi-Model Ensemble
NOAA	National Oceanic and Atmospheric Administration
NOAA NODD	NOAA Open Data Dissemination
NOAH	NCEP-Oregon State University-Air Force-Hydrologic Research Lab
NOHRSC	National Operational Hydrologic Remote Sensing Center
NOS	(NOAA) National Ocean Service
NOS-COOPS	NOS Center for Operational Oceanographic Products and Services
NRC	National Research Council
NSSL	National Severe Storms Laboratory
NWS	National Weather Service
OAR	(NOAA) Oceanic and Atmospheric Research
OM4	Ocean Model version 4
OM5	Ocean Model version 5
OmB	Observation minus background/first guess
PARR	Public Access to Research Results
PBL	Planetary Boundary Layer
PC	Pearson Correlation
PDO	Pacific Decadal Oscillation
PDV	Pacific Decadal Variability
POD	Process-oriented Diagnostics
PSD	Particle Size Distribution
PSL	(NOAA) Physical Sciences Laboratory
QBO	Quasi-Biennial Oscillation
QDM	Quantile Delta Mapping
R&D	research and development
R2O	Research to Operations
R2S	Research to Services
R2X	Research to (X = Applications, Services, Operations)
RCE	Radiative Convective Equilibrium
RCP	Representative Concentration Pathway
RK	Rotstayn-Klein microphysics
RMSE	Root Mean Squared Error
RRFS	Rapid Refresh Forecast System
RRTMGP	Rapid Radiative Transfer Model for General circulation model applications-Parallel
RTE	Radiative Transfer for Energetics
RTOFS	Real Time Ocean Forecast System
SAB	(NOAA) Science Advisory Board
S2S	Subseasonal to seasonal
SAL	Self-Attraction and Loading
ScenarioMIP	Scenario Model Intercomparison Project
SEA	Simplified Exchange Approximation
SEI	Structural Engineering Institute
SFE	Spring Forecasting Experiment
SFS	Seasonal Forecast System
SGS	Subgrid-Scale
SHIELD	System for High-resolution prediction on Earth-to-Local Domains
SIE	Sea-Ice Extent
SIPN	Sea Ice Prediction Network
SIS2	Sea Ice Simulator version 2

SO	Southern Ocean
SOCCOM	Southern Ocean Carbon and Climate Observations and Modeling project
SOFIA	Southern Ocean Freshwater Input from Antarctica
SOM	Slab Ocean Model
SON	September October November
SOSE	Southern Ocean State Estimate
SPEAR	Seamless System for Prediction and EArth System Research
SPMW	Subpolar Mode Water
SRM	Solar Radiation Modification
SROCC	Special Report on the Ocean and Cryosphere in a Changing Climate
SSA	Single Scattering Albedo
SSPxxx	Shared Socioeconomic Pathway
SST	Sea Surface Temperature
SURFEX-TEB	Surface Externalisée (in French) - Town Energy Balance model
TAO	Tropical Atmosphere Ocean moored buoy array (Pacific)
tasmax	daily maximum air temperature (2m)
TC	Tropical Cyclone
TEPEX	TPOS Equatorial Pacific Experiment
TIPMIP	Tipping Point Model Intercomparison Project
TKE	Turbulent Kinetic Energy
TOAR	Tropospheric Ozone Assessment Report
TPOS	Tropical Pacific Observing System
UDA	Unified Data Archive
UFS	Unified Forecast System
UKMO	United Kingdom Meteorological Office
UMD	University of Maryland
USGS	United States Geological Survey
VolRes-RE	Volcanic Response Readiness Exercise
WaF	Weather and Forecasting
WCRP	World Climate Research Program
WMO	World Meteorological Organization
WOA	World Ocean Atlas
WW3	WaveWatch III