# Acronyms
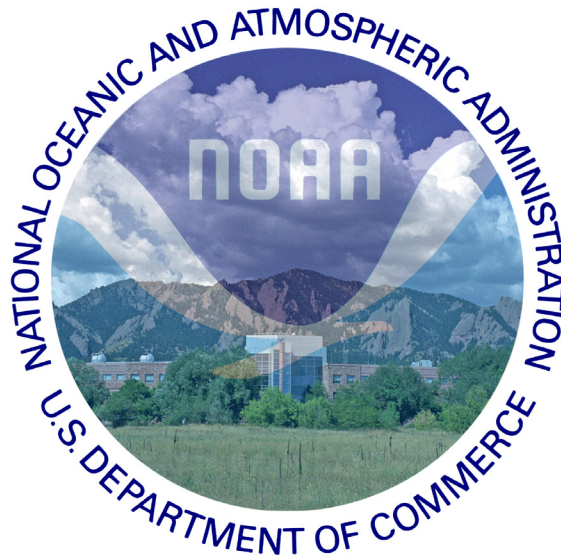


## ESRL Physical Sciences Laboratory Review

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# Acronyms from Presentations

| | |
|---|---|
| 20CR | Twentieth Century Reanalysis |
| 3DVAR | 3-Dimensional Variational Assimilation |
| 4DVAR | 4-Dimensional Variational Assimilation |
| AB3 | The third-order Adams-Bashforth scheme |
| ACR | Advance Ceramics Research |
| ACRE | Atmospheric Circulation Reconstructions over the Earth |
| ACUF | AMS Committee on Uncertainty in Forecasts |
| AFB | Air Force Base |
| AFWA | Air Force Weather Agency |
| AGL | Above Ground Level (height above ground) |
| AGU | American Geophysical Union |
| AIRMAP | Air Quality and Climate Mapping Program (University of New Hampshire) |
| ALPS | [Advanced Linux Prototype System](#) |
| AMDAR | Aircraft Meteorological Data Report(s) |
| AMIP | Atmospheric Model Intercomparison Project |
| AMO | Atlantic Mulitdecadal Oscillation |
| AMS | American Meteorological Society |
| AMSU | Advanced Microwave Sounding Unit |
| AOPC | Atmosphere Observation Panel for Climate |
| AR | Atmospheric River |
| ARL | Air Resources Laboratory |
| ARTCC | Air Route Traffic Control Center |
| ASOA | International Arctic Systems for Observing the Atmosphere |
| ASTC | Association of Science-Technology Centers |
| AWC | Aviation Weather Center (NCEP center) |
| AWIPS | Advanced Weather Interactive Processing System |
| AWRP | Aviation Weather Research Program |
| CAP | Climate Applications Project |
| CAPS | Center for Analysis and Prediction of Storms (at University of Oklahoma) |
| CCRG | Climate Change Research Group |
| CCSP | Climate Change Science Program (now USGCRP) |
| CDMP | Climate Database Modernization Program |
| CFS | Climate Forecast System (NCEP model) |
| CIG | Climate Impacts Group |
| CIRA | Cooperative Institute for Research in the Atmosphere |
| CIRES | Cooperative Institute for Research in Environmental Sciences |
| CLIMAS | Climate Assessment for the Southwest |
| CMIP | Climate Model Intercomparison Project |
| COADS | Comprehensive Ocean-Atmosphere Data Set |
| CONUS | Contiguous United States |
| COTS | Commercial Off-the-Shelf Technology |
| CPC | Climate Prediction Center (NCEP center) |
| CPU | Central Processing Unit |

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|---|---|
| CRREL | Cold Regions Research and Engineering Laboratory (US Army) |
| CSD | Chemical Sciences Division |
| CSU | Colorado State University |
| CSIRCA | Chemical and Surface Input Reanalysis for Climate Applications |
| CU | University of Colorado |
| CUDA | Compute Unified Device Architecture |
| CWSU | Center Weather Service Unit |
| DA | Data Assimilation |
| DCS | Digital Camera System |
| DJF | December, January, February |
| DOC | Department of Commerce |
| DOE | Department of Energy |
| DSS | Decision Support Service/System |
| DTC | Developmental Testbed Center |
| EC | Environment Canada |
| ECWMF | European Centre for Medium-Range Weather Forecasts |
| EGU | European Geosciences Union |
| EMULATE | European and North Atlantic daily to MULtidecadal climATE variability |
| EnKF | Ensemble Kalman filter |
| EnKF/4DVAR | Ensemble Kalman filter / four-dimensional variational |
| ENSO | El Niño Southern Oscillation |
| EO/IR | Electro Optical/Infra red (sensor) |
| EPA | Environmental Protection Agency |
| ERA-40 | ECMWF Reanalysis Archive 40 |
| ESMF | Earth System Modeling Framework |
| ESRL | Earth System Research Laboratory |
| EU | European Union |
| FAR | False Alarm Ratio |
| FCT | Flux-Correct Transport |
| FIM | Flow-following finite-volume Icosahedral Model |
| FIP | Forecast Icing Potential |
| FX-C | FX-Collaborative – Forecasting in and X-Windows environment. |
| FX-Net | Same as above, but the Net stands for Internet, as in 'the Net' |
| GC | Gas Chromatograph |
| GCM | Global Climate Model |
| GCOS | Global Climate Observing System |
| GCRM | Global Cloud Resolving Model |
| GFDL | Geophysical Fluid Dynamics Laboratory |
| GFE | Graphical Forecast Editor |
| GFFS | Gridded Forecast Feedback Systems |
| GFS | Global Forecast System (NCEP global model) |
| GIP | Global Interoperability Program |
| GISS | Goddard Institute for Space Studies |
| GMAO | Global Modeling and Assimilation Office (NASA Goddard) |
| GMD | Global Monitoring Division (within ESRL) |

| | |
|---|---|
| GOES | Geostationary Operational Environmental Satellites |
| GOES-E | GOES-East |
| GPRA | Government Performance Results Act |
| GPS-IPW | Global Positioning System-Integrated Precipitable Water |
| GPS-Met | GPS Meteorology network |
| GPUs | Graphical Processor Units |
| GSI | Gridpoint Statistical Interpolation (assimilation) |
| GSD | Global Systems Division |
| GTG | Graphical Turbulence Guidance |
| HadISST | Hadley Centre Ice and Sea Surface Temperature dataset |
| HALE | High-Altitude Long Endurance (UAS) |
| HFIP | Hurricane Forecast Improvement Project |
| HMT | Hydrometeorology Testbed |
| HPC | High Performance Computing |
| HPC | Hydrometeorological Prediction Center |
| HRRR | High-Resolution Rapid Refresh (3 km hourly updated radar-initialized model) |
| HYCOM | HYbrid Coordinate Ocean Model |
| IBTRACS | International Best Track Archive for Climate Stewardship |
| ICOADS | International Comprehensive Ocean-Atmosphere Data Set |
| IEDRO | International Environmental Data Rescue Organization |
| IFGA | Institute of General Applied Physics |
| IJHPC | International Journal of High Performance Computation |
| IM | Portuguese Meteorological Institute |
| IMET | Incident Meteorologist |
| INCITE | Innovative and Novel Computational Impact on Theory and Experiment |
| IPCC | Intergovernmental Panel on Climate Change |
| ISETCSC | Interdisciplinary Scientific Environmental Technology (ISET) Cooperative Science Center |
| ISPD | International Surface Pressure Databank |
| IT | Information Technology |
| IWV | Integrated water vapor |
| JCP | Journal Computational Physics |
| JCSDA | Joint Center for Satellite Data Assimilation |
| Kft | Thousands of feet (height unit) |
| KNMI | Koninklijk Nederlands Meteorologisch Instituut |
| LALE | Low Altitude Long Endurance (UAS) |
| LAPS | Local Analysis and Prediction System |
| LIDAR | Light Detection and Ranging |
| LLJ | Low-level Jet |
| LSM | Land-Surface Model |
| MADIS | Meteorological Assimilation Data Ingest System |
| MAF | Million Acre Feet |
| METAR | Aviation Routine Weather Report (translation from French) |
| MDL NWS | Meteorological Development Laboratory |

| MJO | Madden-Julian Oscillation |
| MOA | Memorandum of Agreement |
| MPP | Massively Parallel Processor |
| MWR | Monthly Weather Review |
| NAEFS | North American Ensemble Forecast System |
| NAM | North American Mesoscale Model |
| NARRE | North American Rapid Refresh Ensemble |
| NASA | National Aeronautics and Space Administration |
| NCAR | National Center for Atmospheric Research |
| NCDC | National Climatic Data Center |
| NCEP | National Centers for Environmental Prediction |
| NCS | NOAA Climate Service |
| NCWF | National Convective Weather Forecast |
| NDML | Numerical Data Markup Language |
| NEXRAD | NEXt generation RADar |
| NEMS | NOAA Environmental Modeling System |
| NEVS | Network-Enabled Verification Service |
| NextGen | Next-Generation Air Transportation System |
| NGDC | National Geophysical Data Center |
| NH | Northern Hemisphere |
| NHC | National Hurricane Center |
| NICAM | Non-hydrostatic Icosahedral Atmospheric Model |
| NIDIS | National Integrated Drought Information System |
| NIM | Non-hydrostatic Icosahedral Model |
| NMFS | NOAA Marine Fisheries Service |
| NMML | NOAA Marine Mammal Laboratory |
| NNR | NCEP-NCAR Reanalysis |
| NOAA | National Oceanic and Atmospheric Administration |
| NPN | NOAA Profiler Network |
| NRC | National Research Council |
| NRCS | Natural Resources Conservation Services |
| NSF | National Science Foundation |
| NSSL | National Severe Storms Laboratory |
| NSTA | National Science Teachers Association |
| NWP | Numerical Weather Prediction |
| NWS | National Weather Service |
| NUOPC | National Unified Operational Prediction Capability |
| O&M | Operation and Maintenance |
| O3 | Ozone |
| OAR | NOAA's Office of Oceanic and Atmospheric Research |
| OHD | Office of Hydrologic Development |
| OLR | Outgoing Longwave Radiation |
| OOPC | Ocean Observations Panel for Climate |
| OSE | Observing System Experiment |
| OSIP | Operational Service Improvement Process |

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|---|---|
| OSSE | Observing System Simulation Experiment |
| OST | Office of Science and Technology Home |
| PADS | Precision Air Drop System |
| PBL | Planetary Boundary Layer |
| PCMDI | Program for Climate Model Diagnosis and Intercomparison |
| PDO | Pacific Decadal Oscillation |
| PDSI | Palmer Drought Severity Index |
| PGF | Pressure Gradient Force |
| PMVS | Passive Microwave Vertical Sounder |
| PODY | Probability of Detection, Yes |
| PoP | Probability of Precipitation |
| PPBES | Planning, Programming, Budgeting, and Execution System |
| PPI | Plan Position Indicator (radar) |
| PQPF | Probabilistic Quantitative Precipitation Forecast |
| PSD | Physical Sciences Division |
| QC | Quality Control |
| QPF | Quantitative Precipitation Forecast |
| RASS | Radio Acoustic Sounding System |
| R&D | Research and Development |
| RCC | Regional Climate Center |
| RCFP–RUC | Convective Probability Forecast |
| RFC | River Forecast Center |
| RISA | Regional Integrated Sciences and Assessments |
| Roshydromet | Russian Federation for Hydrometeorological and Environmental |
| RR | Rapid Refresh (model/assimilation system) |
| RSA | Range Standardization and Automation |
| RTO | Research to Operations |
| RTVS | Real-Time Verification System |
| RUC | Rapid Update Cycle (model/assimilation system) |
| SAMOS | Shipboard-Automated Meteorological and Oceanographic System |
| SAON | Sustained Arctic Observing Network |
| SAP | Synthesis and Assessment Product of the CCSP |
| SAS | Single Authoritative Source |
| SEAFLUX | Ocean Surface Turbulent Flux Project |
| SH | Southern Hemisphere |
| SIGN | Signatures of environmental change In the observations of the Geophysical Institutes |
| SIRCA | Surface Input Reanalysis for Climate Applications |
| SMS | Scalable Modeling System |
| SOD | Stats-on-Demand Verification System |
| SOS | Science On a Sphere |
| SST | Sea Surface Temperature |
| STEM | Science Technology Engineering and Mathematics |
| STMAS | Space-Time Mesoscale Analysis System |
| TACC | Texas Area Computing Center |

| | |
|---|---|
| TAMDAR | Tropospheric AMDAR |
| TAO | Tropical Atmosphere Ocean |
| TMU | Traffic Management Unit |
| UAS | Unmanned Aircraft Systems |
| UIUC | University of Illinois Urbana-Champaign |
| UK | United Kingdom |
| UNSW | University of New South Wales |
| U.S. GCRP | United States Global Change Research Program |
| USACE | United States Army Corps of Engineers |
| USAF | United States Air Force |
| USBR | United States Bureau of Reclamation |
| USDA | United States Department of Agriculture |
| USFS | United States Forest Service |
| USFWS | United States Fish and Wildlife Service |
| USGCRP | United States Global Change Research Program |
| USGS | United States Geological Survey |
| VACT | Volcanic Ash Coordination Tool |
| VAD | Velocity Azimuth Display (Radar winds) |
| VBAFB | Vandenburg Air Force Base |
| VIC | Variable Infiltration Capacity Land Model |
| WWA | Western Water Assessment |
| WCRP | World Climate Research Programme |
| WDC | World Data Center |
| WFO | Weather Forecast Office |
| WGA | Western Governors' Association |
| WHOI | Woods Hole Oceanographic Institution |
| WIDA | Weather Information Decision Aids |
| WMO | World Meteorological Organization |
| WRF | Weather Research and Forecast (community model) |
| WRF-Chem | Weather Research and Forecast model coupled with chemistry |
| WSWC | Western States Water Council |
| ZAMG | Austrian Weather Service |