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## ACRONYMS AND ABBREVIATIONS

AAO	Antarctic Oscillation	GCOS	Global Climate Observing System
ACE	NOAA's Accumulated Cyclone Energy Index	GHCN	Global Historical Climatology Network
AGGI	NOAA's Annual Greenhouse Gas Index	GHG	greenhouse gas
ALT	active layer thickness	GISS	NASA's Goddard Institute of Space Studies
AMO	Atlantic multidecadal oscillation	GOME	Global Ozone Monitoring Experiment
AMSR-E	Advanced Microwave Scanning Radiometer for Earth Observing System	GPCC	Global Precipitation Climatology Centre
AMSU	Advanced Microwave Sounding Unit	GPCP	Global Precipitation Climatology Project
AO	Arctic Oscillation	GRACE	Gravity Recovery and Climate Experiment
AOD	aerosol optical depth	GTN-P	Global Terrestrial Network on Permafrost
ATSR	Along-Track Scanning Radiometers	HadAT	Met Office Hadley Centre's radiosonde temperature product
AVHRR	Advanced Very High Resolution Radiometer	HadCRUT	Met Office Hadley Centre/CRU gridded monthly temperatures dataset
AVISO	Archiving, Validating, and Interpretation of Satellite Oceanographic data	HadISST	Met Office Hadley Centre's sea ice and SST dataset
CAMS	Climate Anomaly Monitoring System	HIRS-W	High Resolution Infrared Sounder
CDR	climate data record	IBTrACS	International Best Track Archive for Climate Stewardship
CERES	Clouds and the Earth's Radiant Energy System	ICD	ice cover duration
CPC	NOAA's Climate Prediction Center	IOD	Indian Ocean dipole
CPHC	NOAA's Central Pacific Hurricane Center	ISCCP	International Satellite Cloud Climatology Project
CRU	University of East Anglia's Climate Research Unit	JMA	Japanese Meteorological Agency
DU	Dobson Unit	JPL	Jet Propulsion Laboratory
E-P	evaporation minus precipitation	JRA	Japanese Reanalysis
ECMWF	European Centre for Medium-Range Weather Forecasts	JTWC	U.S. Navy's Joint Typhoon Warning Center
ECV	essential climate variable	LHF	latent heat flux
EECI	effective equivalent chlorine	LLGHG	long-lived greenhouse gas
EESC	effective equivalent stratospheric chlorine	MDR	Main Development Region
EOS	Earth Observatory System	MEI	multivariate ENSO index
ERB	Earth radiation budget	MERIS	Medium Resolution Imaging Spectrometer
ERBE	Earth Radiation Budget Experiment	MISR	Multiangle Imaging SpectroRadiometer
ERSST	Extended Reconstructed Sea Surface Temperature	MLS	Microwave Limb Sounder
ESA	European Space Agency	MOC	meridional overturning current
ESRL	Earth System Research Laboratory	MOCHA	Meridional Overturning Circulation Heat Transport Array
FAPAR	Fraction of Absorbed Photosynthetically Active Radiation	MODIS	Moderate Resolution Imaging Spectroradiometer
FLASHflux	Fast Longwave and Shortwave Radiative Fluxes	MSLP	mean sea level pressure
		MSU	Microwave Sounding Unit

NAO	North Atlantic Oscillation	RICH	Radiosonde Innovation Composite
NASA	National Aeronautics and Space Administration		Homogenization
NCAR	National Center for Atmospheric Research	RSS	Remote Sensing Systems
NCDC	NOAA's National Climatic Data Center	SAM	Southern annular mode
NCEP	NOAA's National Center for Environmental Prediction	SCD	snow covered duration
NERC	National Environmental Research Council	SCE	snow cover extent
NOAA	National Oceanic and Atmospheric Administration	SCIAMACHY	Scanning Imaging Absorption Spectrometer for Atmospheric Chartography
NSIDC	National Snow and Ice Data Center	SeaWiFS	Sea-viewing Wide Field of View
OAFlux	Objectively Analyzed Air-Sea Fluxes	SHF	Sensible heat flux
ODGI	Ozone-depleting Gas Index	SLP	Sea level pressure
ODS	ozone-depleting substance	SOI	Southern Oscillation index
OHCA	ocean heat content anomaly	SPCZ	South Pacific convergence zone
OISST	Optimal Interpolation SST	SSM/I	Special Sensor Microwave Imager
OLR	outgoing longwave radiation	SSH	Sea surface height
OMI	Ozone Monitoring Instrument	SSS	Sea surface salinity
ONI	NOAA's Oceanic Niño index	SSTA	Sea surface temperature anomaly
OPI	OLR precipitation index	SWE	Snow water equivalent
P-E	precipitation minus evaporation	TCHP	Tropical cyclone heat potential
PATMOS (-x)	Pathfinder Atmospheres (Extended Product)	TCWV	Total column water vapor
PDO	Pacific decadal oscillation	TOA	Top of atmosphere
PSC	polar stratospheric clouds	TOMS	Total Ozone Mapping Spectrometer
PSS	practical salinity scale	TRMM	Tropical Rainfall Measuring Mission
QBO	Quasi-biennial oscillation	WBM	Water Balance Model
QuikSCAT	Quick Scatterometer	w.e.	water equivalent
RAOBCORE	Radiosonde Observation Correction	WGMS	World Glacier Monitoring Service
RATPAC	Radiosonde Atmospheric Temperature Products for Assessing Climate	WMO	World Meteorological Organization
		WOA	World Ocean Atlas
		WOCE	World Ocean Circulation Experiment