

## ACKNOWLEDGMENTS

In addition to the specific acknowledgments below readers are directed to *Appendix 1: Relevant Datasets and Sources* for information on specific data and products availability and relevant climate variables or phenomena.

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## ACRONYMS AND ABBREVIATIONS

BASS:	Blended Analysis of Surface Salinity (NOAA)	MLO:	Mauna Loa Observatory (Hawaii, US)
CCI:	Climate Change Initiative	MRI/JMA:	Meteorological Research Institute/ Japan Meteorological Agency
CERES:	Clouds and the Earth's Radiant Energy Systems	NASA:	National Aeronautics and Space Administration (US)
CFSR:	Climate Forecast System Reanalysis (NCEP)	NCAR:	National Center for Atmospheric Research (US)
CIIFEN:	Centro Internacional para la Investigación del Fenómeno El Niño (Ecuador)	NCEI:	National Centers for Environmental Information (NOAA)
CMAP:	CPC Merged Analysis of Precipitation	NCEP:	National Centers for Environmental Prediction (NOAA)
CMEMS:	Copernicus Marine and Environment Monitoring Service	NOAA:	National Oceanic and Atmospheric Administration (US)
CPC:	Climate Prediction Center (NOAA)	NSIDC:	National Snow and Ice Data Center (US)
CSIRO/ACE CRC/IMAS-UTAS:	(Australia) Commonwealth Scientific and Industrial Research Organisation	OLR:	outgoing longwave radiation
	Antarctic Climate & Ecosystems Cooperative Research Centre	PMEL/JPL/JIMAR:	(US) Pacific Marine Environmental Laboratory/Jet Propulsion Laboratory/
	Institute for Marine and Antarctic Studies - University of Tasmania		Joint Institute for Marine and Atmospheric Research
DWD:	Deutscher Wetterdienst	RAPID-MOC/MOCHA/WBTS:	(International, UK-led)
ECV:	Essential Climate Variable		RAPID Climate Change Programme-Meridional Overturning Circulation Meridional Overturning Circulation and Heatflux Array
ESA:	European Space Agency		Western Boundary Time Series
ESRL:	Earth System Research Laboratory (NOAA)	RSW:	reflected shortwave
FLASHFlux:	Fast Longwave And Shortwave Radiative Fluxes	TOA:	top of atmosphere
GO-SHIP:	Global Ocean Ship-based Hydrographic Investigations Program	TRMM:	Tropical Rainfall Measuring Mission
GODAS:	Global Ocean Data Assimilation System	TSI:	total solar irradiance
GPCP:	Global Precipitation Climatology Project	WOA:	World Ocean Atlas
GRACE:	Gravity Recovery and Climate Experiment		
INMET:	Instituto Nacional de Meteorologia (Brazil)		

Additional acronyms and abbreviations can be found at this AMS website [www.ametsoc.org/ams/index.cfm/publications/authors/journal-and-bams-authors/and-manuscript-components/list-of-acronyms-and-abbreviations/](http://www.ametsoc.org/ams/index.cfm/publications/authors/journal-and-bams-authors/and-manuscript-components/list-of-acronyms-and-abbreviations/)

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