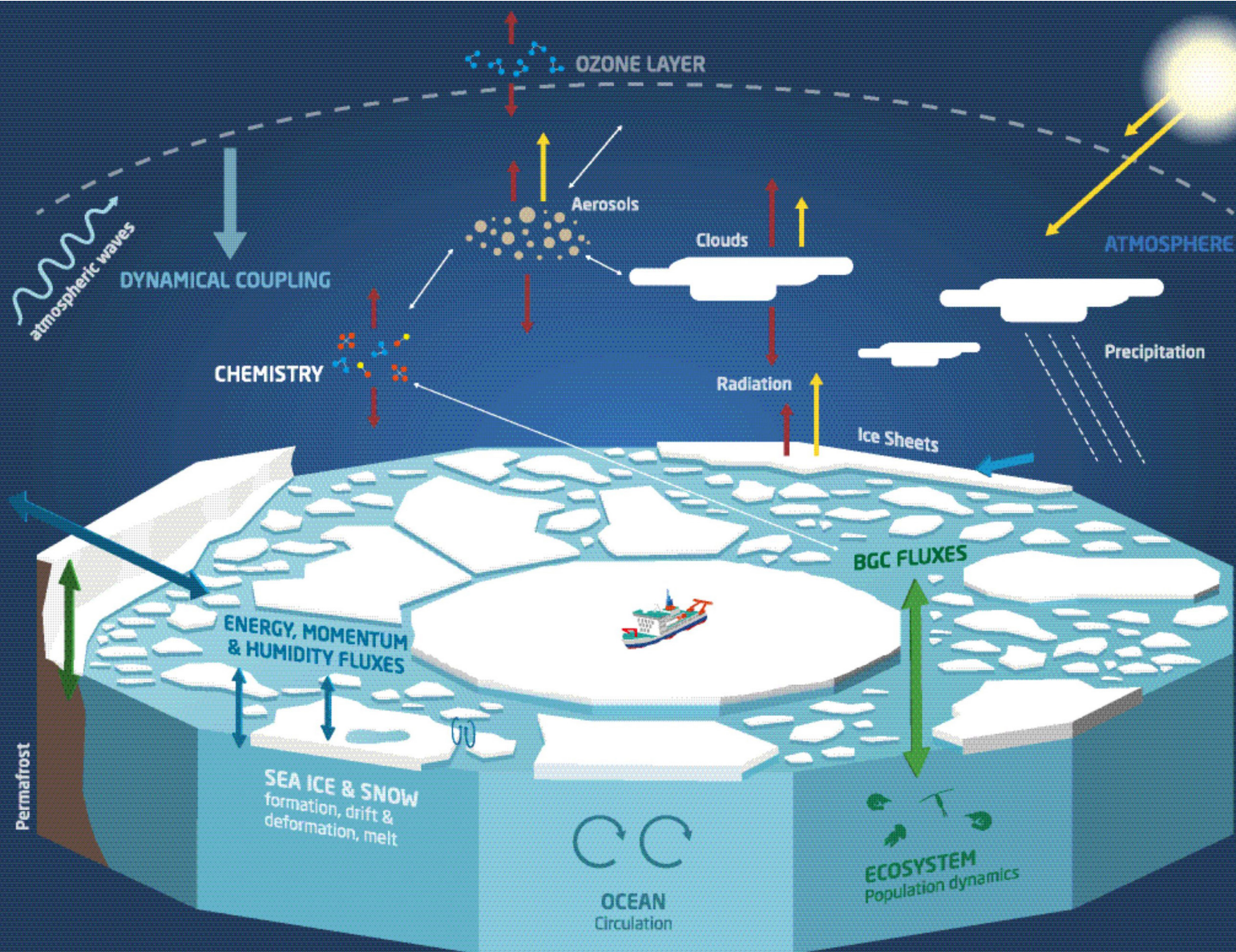


STATE OF THE CLIMATE IN 2021

RELEVANT DATASETS AND SOURCES



To learn more go to this website: <https://mosaic-expedition.org/>

Special Online Supplement to the *Bulletin of the American Meteorological Society*, Vol.103, No. 8, August 2022

https://doi.org/10.1175/2022BAMSStateoftheClimate_Chapter8.1

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8: RELEVANT DATASETS AND SOURCES

General Variable or Phenomenon	Specific dataset or variable	Source	Section
Aerosols	CAMS Reanalysis	https://ads.atmosphere.copernicus.eu/cdsapp#!/dataset/cams-global-radiative-forcing-auxilliary-variables?tab=overview	2g3
	MODIS Aerosol	https://modis.gsfc.nasa.gov/data/dataproduct/mod04.php	2g3
	AATSR	https://earth.esa.int/eogateway/instruments/aatsr	2g3
Air-sea fluxes	CERES Energy Balanced and Filled	https://ceres.larc.nasa.gov/data/	3 e1
	CERES FLASHflux	https://ceres.larc.nasa.gov/data/	3e1
	Woods Hole Oceanographic Institute OAFlux	http://oaflux.whoi.edu	3e1, 3e2, 3e3
Albedo	MODIS	https://doi.org/10.5067/MODIS/MCD43C3.006	2h1
	MODIS (Greenland)	https://nsidc.org/data/MODGRNLD/versions/1	5e
Biomass, Greenness or Burning	GFAS v1.4	ftp://ftp.mpic.de/GFAS/sc17 (special reprocessing)	2h3
	Modis Fire Power Radiative Product	DOI:10.5067/MODIS/MOD14.006, DOI:10.5067/MODIS/MYD14.006	2h3
	Global Inventory Modeling and Mapping Studies (GIMMS) 3gy1	https://iridl.ldeo.columbia.edu/SOURCES/.NASA/.ARC/.ECOCAST/.GIMMS/.NDVI3g/.v1p0/index.html?Set-Language=en	5i
	MODIS MCD43A4	https://lpdaac.usgs.gov/products/mcd43a4v006/	5i
Cloud Properties	Aqua MODIS C6	http://dx.doi.org/10.5067/MODIS/MYD08_M3.006	2d6, 2h3
	Terra MODIS C6	http://dx.doi.org/10.5067/MODIS/MOD08_M3.006	2d6
	CALIPSO	http://www-calipso.larc.nasa.gov	6h
	CERES Aqua MODIS	https://doi.org/10.5067/Aqua/CERES/SSF1degMonth_L3.004A	2d6
	CLARA-A2	https://www.cmsaf.eu/EN/Home/home_node.html	2d6
	MISR	http://eosweb.larc.nasa.gov/PRODOCS/misr/level3/overview.html	2d6
	PATMOD	not publicly available	
	PATMOS-x/MODIS C6	available soon from NCEI	
Drought	CRU TS 4.05	https://crudata.uea.ac.uk/cru/data/hrg/cru_ts_4.05/	2d11
Land Evaporation	GLEAM v3.6	www.gleam.eu/	2d12
FAPAR	MERIS	https://earth.esa.int/eogateway/	2h2
	JRC TIP MODIS	https://fapar.jrc.ec.europa.eu/_www/	2h2
	SeaWiFS FAPAR	http://fapar.jrc.ec.europa.eu/	2h2
Geopotential Height	ERA5	https://www.ecmwf.int/en/forecasts/datasets/reanalysis-datasets/era5	5SB2, 6b
Glacier Mass, Area or Volume	GRACE / GRACE-FO	https://grace.jpl.nasa.gov/data/get-data/	5e, 5f, 6e
	World Glacier Monitoring Service	http://dx.doi.org/10.5904/wgms-fog-2020-08	2c3, 5f
	Glacier Front Line (Greenland)	https://doi.org/10.22008/promice/data/calving_front_lines	5e
Groundwater and terrestrial water storage	GRACE / GRACE-FO	https://podaac.jpl.nasa.gov/dataset/TELLUS_GRAC-GRFO_MASCON_CRI_GRID_RL06_V2	2d9, 5g

General Variable or Phenomenon	Specific dataset or variable	Source	Section
Humidity, [Near] Surface	ERA5	https://www.ecmwf.int/en/forecasts/datasets/reanalysis-datasets/era5	2d1
	HadISDH	www.metoffice.gov.uk/hadobs/hadisdh	2d1
	MERRA-2	https://gmao.gsfc.nasa.gov/reanalysis/MERRA-2/	2d1
	JRA-55 Atmospheric Reanalysis	http://jra.kishou.go.jp/JRA-55/index_en.html	2d1
Humidity, Upper Atmosphere	ERA5	https://www.ecmwf.int/en/forecasts/datasets/reanalysis-datasets/era5	2d3
	HIRS	https://www.ncei.noaa.gov/access/metadata/landing-page/bin/iso?id=gov.noaa.ncdc:C00951	2d3
Ice Sheet Characteristics	DMSP-SSMIS	https://nsidc.org/data/nsidc-0001	5d, 6d
	ERA5	https://www.ecmwf.int/en/forecasts/datasets/reanalysis-datasets/era5	6c
	ICESat-2	https://icesat-2.gsfc.nasa.gov/	5d2, 6e
	Cryosat-2	https://earth.esa.int/eogateway/missions/cryosat	5d2
	SMOS	https://earth.esa.int/eogateway/missions/smos	5d2
	MERRA-2	https://gmao.gsfc.nasa.gov/reanalysis/MERRA-2/	6c, 6h
	Modèle Atmosphérique Régionale surface mass	https://mar.cnrs.fr/	5e
	PROMICE (Greenland)	https://doi.org/10.22008/promice/data/aws	5e
	PROMICE (Greenland) Mass Balance	https://doi.org/10.22008/FK2/OHI23Z	5e
	DMI Weather Stations	http://polarportal.dk/en/weather/historisk-vejrl#:~:text=DMI%20has%20a%20number%20of,go%20back%20almost%20250%20years.&text=One%20cannot%20expect%20that%20temperature%20observations%20spanning%20centuries%20are%20homogeneous.	5e
	Ice Discharge (Greenland)	https://doi.org/10.22008/promice/data/ice_discharge/d/v02	5e
	RACMO	https://www.projects.science.uu.nl/iceclimate/models/racmo-model.php	5e
	ATLAS/ICESat-2 Land Height	https://nsidc.org/data/atl06/versions/5	6e
	GRACE - GRACE FO CRI	https://podaac.jpl.nasa.gov/dataset/TELLUS_GRACE-GRFO_MASCON_CRI_GRID_RL06_V2	6e
Lake Ice	Great Lakes Ice	www.glerl.noaa.gov/data/ice	2c4
	ERA5	https://doi.org/10.24381/cds.adbb2d47	2c4
Lake Temperature	ERA5	https://doi.org/10.24381/cds.adbb2d47	2b2
	NERC Globolakes, Copernicus Climate Service	https://cds.climate.copernicus.eu/cdsapp#!/dataset/satellite-lake-water-temperature?tab=overview	2b2
	MetOp A & B ATSR and AVHRR	https://navigator.eumetsat.int/product/EO:EUM:DAT:METOP:AVHRR1	2b2
	Sentinel 3 SLSTR	https://sentinel.esa.int/web/sentinel/user-guides/sentinel-3-slstr/overview	2b2
	National Buoy Data Center Great Lakes Buoys	https://www.ndbc.noaa.gov/mobile/region.php?reg=great_lakes	2b2
Lake Water Levels	DAHITI	https://dahiti.dgfi.tum.de/en/31/time_series/	2d9

General Variable or Phenomenon	Specific dataset or variable	Source	Section
Modes of Variability	Indian Ocean Dipole Mode Index	https://psl.noaa.gov/gcos_wgsp/Timeseries/DMI/	4f
	Madden-Julian Oscillation (MJO) - Real-time Multivariate MJO	www.bom.gov.au/climate/mjo/graphics/rmm.74toRealtime.txt	4c
	Oceanic Nino Index (ONI)	www.cpc.ncep.noaa.gov/products/analysis_monitoring/ensostuff/ensoyears.shtml	4b, 4d1
	Southern Annular Mode (SAM)	www.antarctica.ac.uk/met/gjma/sam.html	6b
	Antarctic Oscillation (AAO)/Southern Annular Mode (SAM)	https://ftp.cpc.ncep.noaa.gov/cwlinks/norm.daily.aao.index.b790101.current.ascii	2e1, 2e2
Ocean Heat Content	CLIVAR and Carbon Hydrographic Data Office	https://cchdo.ucsd.edu/	3c
	CSIRO/ACE CRC/IMAS-UTAS estimate	www.cmar.csiro.au/sealevel/thermal_expansion_ocean_heat_timeseries.html	3c
	IAP/CAS	https://climatedataguide.ucar.edu/climate-data/ocean-temperature-analysis-and-heat-content-estimate-institute-atmospheric-physics	3c
	PMEL/JPL/JIMAR	http://oceans.pmel.noaa.gov	3c
	MRI/JMA	www.data.jma.go.jp/gmd/kaiyou/english/ohc/ohc_global_en.html	3c
	NCEI	https://www.ncei.noaa.gov/access/global-ocean-heat-content/	3c
	UK Met Office EN4.0.2	www.metoffice.gov.uk/hadobs/en4/download-en4-0-2-l09.html	3c
	Argo monthly climatology	https://sio-argo.ucsd.edu/RG_Climatology.html	3c, 3f, 6g1, 6g2
	Argo	https://usgoda.org/argo/argo.html	3c
Ocean Mass	GRACE	https://grace.jpl.nasa.gov/data/get-data	3f
Ocean Salinity	Aquarius V3.0	http://podaac.jpl.nasa.gov/aquarius	3d2
	Argo	https://usgoda.org/argo/argo.html	3c, 3d2
	Blended Analysis for Surface Salinity	ftp://ftp.cpc.ncep.noaa.gov/precip/BASS	3d2
	SMAP	https://podaac.jpl.nasa.gov/SMAP	3d2
	SMOS	https://earth.esa.int/eogateway/missions/smos	3d2
	World Ocean Atlas 2013	www.nodc.noaa.gov/OC5/woa13/	3d2, 3d3
	World Ocean Atlas 2018	https://www.ncei.noaa.gov/products/world-ocean-atlas	2d8
	NCEI salinity anomaly	https://www.ncei.noaa.gov/access/global-ocean-heat-content/	3d3
Ocean Chlorophyll	GlobColour	https://doi.org/10.48670/moi-00100	6g3
Outgoing Longwave Radiation	Daily OLR	https://www.ncei.noaa.gov/products/climate-data-records/outgoing-longwave-radiation-daily	2d8

General Variable or Phenomenon	Specific dataset or variable	Source	Section
Ozone, Total Column and Stratospheric	GOME/SCIAMACHY/GOME2 (GSG) Merged Total Ozone	http://www.iup.uni-bremen.de/UVSAT/datasets/merged-wfdoas-total-ozone	2g4
	GOME/SCIAMACHY/GOME2 (GTO) Merged Total Ozone	https://atmos.eoc.dlr.de/gto-ecv	2g4
	GOZCARDS ozone profiles	https://www.earthdata.nasa.gov/esds/competitive-programs/measures/gozcards	2g4
	Aura OMI/MLS	https://disc.gsfc.nasa.gov/datasets/ML203_004/summary	5j1, 6h
	Multi Sensor Reanalysis (MSR-2) of total ozone	http://www.temis.nl/protocols/O3global.html	2g4
	NASA BUV/SBUV v8.6 (MOD v8.6) Merged Ozone	http://acdb-ext.gsfc.nasa.gov/Data_services/merged	2g4
	Bodeker Scientific	http://www.bodekerscientific.com/data/total-column-ozone	5j1
	Ozone Mapping & Profiler Suite (OMPS)	https://ozoneaq.gsfc.nasa.gov/omps/	6h
	Ozonesonde	www.esrl.noaa.gov/gmd/dv/spo_oz	6h
	SAGE II/OSIRIS	dataset linked to Bourassa et al. (2018) doi:10.5194/amt-11-489-2018	2g4
	SAGE-SCIA-OMPS	dataset linked to Arosio et al., (2018) doi:10.5194/amt-2018-275	2g4
	SWOOSH	www.esrl.noaa.gov/csd/groups/csd8/swoosh/	2g4
	WOUDC Ground-based Ozone	ftp://ftp.ec.gc.ca	2g4
	NDACC lidar, microwave and FTIR	ftp://ftp.cpc.ncep.noaa.gov/ndacc	2g4
	OMTO3	https://disc.gsfc.nasa.gov/datasets/OMTO3_003/summary	5j2
Ozone, Tropospheric	TOMS	https://ozoneaq.gsfc.nasa.gov/data/toms/#	6h
	Aura OMI/MLS	http://acd-ext.gsfc.nasa.gov/Data_services/cloud_slice/new_data.html	2g6
	NOAA Observatory Data	ftp://aftp.cmdl.noaa.gov/data/ozwv/SurfaceOzone/	2g6
Permafrost	MERRA-2	http://gmao.gsfc.nasa.gov/reanalysis/MERRA-2/	5SB2, 6h
	CALM Active Layer Thickness	www2.gwu.edu/~calm/	2c1, 5h2
	GTN-P global mean annual ground temperature data for permafrost	https://doi.org/10.1594/PANGAEA.884711	2c1
	Global Terrestrial Network for Permafrost (GTN-P)	http://gtnpdatabase.org/	2c1, 5h1
	Permafrost Temperature	http://permafrost.gi.alaska.edu/sites_map	5h1
	Permafrost Temperature at Chinese (QTP) sites	https://nsidc.org/data/GGD700/versions/1	2c1
	Permafrost Temperature at French sites	permafrance.osug.fr	2c1
	Permafrost Temperature at Norwegian sites	www.tspnorway.com	2c1
	Permafrost Temperature at Swiss sites (PERMOS)	www.permos.ch	2c1

General Variable or Phenomenon	Specific dataset or variable	Source	Section
Phenology	NDVI	https://modis.gsfc.nasa.gov/data/dataproduct/mod13.php	2h4
	PhenoCam	http://phenocam.sr.unh.edu	2h4
	Harvard Forest	https://harvardforest1.fas.harvard.edu/exist/apps/datasets/showData.html?id=hf003	2h4
	Natures Calendar	https://naturescalendar.woodlandtrust.org.uk/	2h4
	German oak phenology data	https://opendata.dwd.de/	2h4
	UK Cumbrian lakes data	https://catalogue.ceh.ac.uk/documents/bf30d6aa-345a-4771-8417-ffb8cf8c08c28/	2h4
Vegetation Optical Depth	VODCA	https://zenodo.org/record/2575599	2h5
Lightning	OTD	http://dx.doi.org/10.5067/LIS/OTD/DATA101	2S.1
	ISS LIS	http://dx.doi.org/10.5067/LIS/ISS/LIS/DATA108	2S.1
	TRMM LIS	http://dx.doi.org/10.5067/LIS/LIS/DATA201	2S.1
Phytoplankton, Ocean Color	MODIS-Aqua	https://oceancolor.gsfc.nasa.gov/reprocessing/	3i
	SeaWiFS	https://oceancolor.gsfc.nasa.gov/reprocessing/	3i
Precipitation	Climate Extremes Index	https://www.ncdc.noaa.gov/extremes/cei/	2d5
	ERA5	https://www.ecmwf.int/en/forecasts/datasets/reanalysis-datasets/era5	2d5, 5b3
	GHCN v4	www.ncdc.noaa.gov/temp-and-precip/ghcn-gridded-products/precipitation	2d5
	GHCNDEX	www.climdex.org/	2d5
	GPCP	https://psl.noaa.gov/data/gridded/data.gpcp.html	2d4, 3e2, 4e, 4f
	GPCC	www.dwd.de/EN/ourservices/gpcc/gpcc.html	2d5
	European Climate & Assessment & Dataset	https://www.ecad.eu/	2d5
	CMAP	https://psl.noaa.gov/data/gridded/data.cmap.html	4d1
Pressure, Sea Level or Near-Surface	ERA5	https://www.ecmwf.int/en/forecasts/datasets/reanalysis-datasets/era5	2e1, 5b2, 5f, 6b, 6SB.1
	NCEP/NCAR Reanalysis	www.esrl.noaa.gov/psd/data/gridded/data.ncep.reanalysis.html	2e1, 4f2
Sea Ice Age	EASE-Grid v4	https://nsidc.org/data/NSIDC-0611/versions/4	5d2
Sea Ice Duration	Near-Real-Time DMSP SSM/I-SSMIS Daily Polar Gridded	http://nsidc.org/data/nsidc-0081.html	5d3, 6f
	Nimbus-7 SMMR and DMSP SSM/I (Bootstrap)	http://nsidc.org/data/nsidc-0079.html	6f
	EASE Sea Ice Duration	https://nsidc.org/data/NSIDC-0611/versions/4	5d2

General Variable or Phenomenon	Specific dataset or variable	Source	Section
Sea Ice Extent / Area / Concentration	Nimbus-7 SMMR and DMSP SSM/I (Bootstrap)	http://nsidc.org/data/seaice_index/	5d1
	Nimbus-7 SMMR Sea Ice Concentration	https://nsidc.org/data/nsidc-0007	6d
	NSIDC Passive Microwave Sea Ice Concentration v4	https://nsidc.org/data/g02202	5d1
	NSIDC Sea Ice Extent	https://nsidc.org/data/g02135	5d1, 5d2
	NSIDC Passive Microwave Sea Ice Extent v2	https://nsidc.org/data/g10016	5d1
	GRACE , GRACE FO	https://grace.jpl.nasa.gov/data/get-data/	5e
Sea Level / Sea Surface Height	GRACE / GRACE-FO	https://grace.jpl.nasa.gov/data/get-data/	3f
	University of Texas Center for Space Research Gravity field	https://www.ncei.noaa.gov/access/global-ocean-heat-content/	3f
	NOAA Laboratory for Sea Level Altimetry	www.star.nesdis.noaa.gov/sod/lsa/SeaLevelRise/LSA_SLR_timeseries.php	3f
	CMEMS	http://marine.copernicus.eu/services-portfolio/access-to-products/?option=com_csw&view=details&product_id=SEALEVEL_GLO_PHY_L4_NRT_OBSERVATIONS_008_046	3f
	Argo	https://usgodae.org/argo/argo.html	3f
	NCEI steric sea level	https://www.ncei.noaa.gov/access/global-ocean-heat-content/	3f
	Tide Gauge	http://uhslc.soest.hawaii.edu/	3f
	AVISO	https://www.aviso.altimetry.fr/en/data.html	6g1
ocean currents	AOML climate indices	https://www.aoml.noaa.gov/phod/indexes/index.php	3g
	Ocean Surface Current Analysis - Real time (OSCAR)	https://www.esr.org/research/oscar/oscar-surface-currents/	3g
	Global Drifter Program	https://www.aoml.noaa.gov/phod/gdp/	3g
	Atlantic Ship of Opportunity XBT	https://www.aoml.noaa.gov/phod/goos/xbt_network/	3h
	RAPID array	https://rapid.ac.uk/rapidmoc/	3h
	MOVE array	http://www.oceansites.org/tma/move.html	3h
	OSNAP	https://www.o-snap.org/	3h
	SAMBA	http://www.oceansites.org/tma/samba.html	3h
	Florida Current transport	https://www.aoml.noaa.gov/phod/floridacurrent/data_access.php	3h
	Global Temperature and Salinity Profile Program (GTSP)	https://www.ncei.noaa.gov/products/global-temperature-and-salinity-profile-programme	3h

General Variable or Phenomenon	Specific dataset or variable	Source	Section
Sea Surface Temperature	ERSSTv5	https://doi.org/10.7289/V5T72FNM	3b, 4b, 4e, 4g2
	HadISST	https://www.metoffice.gov.uk/hadobs/hadisst/	4e
	HadSST4	https://www.metoffice.gov.uk/hadobs/hadsst4/	2b3, 3b
	NOAA Optimum Interpolation SST (OISST) v2	https://www.ncei.noaa.gov/products/optimum-interpolation-sst	2b4, 3b, 4b1, 4d2, 4f, 4g3, 4g5, 4g6, 5c, 6f, 6g
	NOAA Optimum Interpolation SST (OISST) v2	https://psl.noaa.gov/data/gridded/data.noaa.oisst.v2.html	5c
	NOAA Daily Optimum Interpolated Temperature (DOISST)		3b
	MODIS Aqua	https://oceancolor.gsfc.nasa.gov/reprocessing	3i
Snow Properties	Crocus Snowpack Model	http://www.umr-cnrm.fr/spip.php?article265	5g
	NOAA Interactive Multi-sensor Snow and Ice Mapping System (Snow Cover Duration)	https://usicecenter.gov/Products/ImsHome	5g
	NOAA Snow Chart Data Record (Snow Cover Extent)	www.snowcover.org	2c5, 5g
	Northern Hemisphere (NH) Snow Cover Extent (SCE), Version 1	doi:10.7289/V5N014G9	2c5, 5g
	MERRA-2	http://gmao.gsfc.nasa.gov/reanalysis/MERRA-2/	5g
	Sentinel 3 SICE	http://snow.geus.dk/	5e
	Snow CCI	http://snow-cci.enveo.at/	5g
	ERA5	https://www.ecmwf.int/en/forecasts/datasets/reanalysis-datasets/era5	5g
Soil Moisture	ESA CCI SM	https://climate.esa.int/en/projects/soil-moisture/	2d10

General Variable or Phenomenon	Specific dataset or variable	Source	Section
Temperature, [Near] Surface	Antarctic Meteorological Research Center (AMRC) AWS	http://amrc.ssec.wisc.edu/data	6b, 6c
	Berkeley Earth	http://berkeleyearth.org/data/	2b1
	CRUTEM5	www.metoffice.gov.uk/hadobs/crutem5	5b1
	ERA5	https://www.ecmwf.int/en/forecasts/datasets/reanalysis-datasets/era5	2b1, 2b2, 2b4, 6b, 6SB1
	ERA5 Copernicus Climate Store	https://cds.climate.copernicus.eu	5h1
	GHCNDEX	www.climdex.org/	2b4, 4g3, 4g5, 4g6, 5c
	HadCRUT5 Global Temperature	https://www.metoffice.gov.uk/hadobs/hadcrut5/	2b1
	JRA-55 Atmospheric Reanalysis	http://jra.kishou.go.jp/JRA-55/index_en.html	2b1, 4f
	MERRA-2	http://gmao.gsfc.nasa.gov/reanalysis/MERRA-2/	6h
	NASA/GISS Global Temperature	https://data.giss.nasa.gov/gistemp/	2b1, 2b2, 2c4
	NCEP/NCAR Reanalysis	https://psl.noaa.gov/data/gridded/data.ncep.reanalysis.html	5b2, 5f
	NOAA/NCEI NOAA GlobalTemp	https://www.ncei.noaa.gov/products/land-based-station/noaa-global-temp	2b1
	Integrated Global Radiosonde Archive	https://www.ncei.noaa.gov/products/weather-balloon/integrated-global-radiosonde-archive	5f
Temperature, Upper Atmosphere	ERA5	https://www.ecmwf.int/en/forecasts/datasets/reanalysis-datasets/era5	2b4, 2b5, 6b, 6h
	JRA-55 Atmospheric Reanalysis	http://jra.kishou.go.jp/JRA-55/index_en.html	2b5
	MERRA-2	http://gmao.gsfc.nasa.gov/reanalysis/MERRA-2/	2b5, 6h
	RAOBCORE, RICH	https://imgw.univie.ac.at/forschung/klimadiagnose/raobcore/index.html	2b5
	RATPAC A2	https://www.ncei.noaa.gov/products/weather-balloon/radiosonde-atmospheric-temperature-products	2b5
	RSS v4.0	https://www.remss.com/measurements/upper-air-temperature/	2b5
	NOAA/NESDIS/STAR MSU v4.1	https://www.star.nesdis.noaa.gov/pub/smcd/emb/mscat/data/MSU_AMSU_v4.1/Monthly_Atmospheric_Layer_Mean_Temperature/	2b5
	UW MSU v1.0	https://pochedls.github.io/#!data.md	2b5
	UAH MSU v6.0	https://www.nsstc.uah.edu/public/msu/	2b5
	NCAR merged SSU+MLS satellite data	ftp://ftp.acom.ucar.edu/user/randel/SSUdata	2b6
	Stratospheric QBO data	https://acd-ext.gsfc.nasa.gov/Data_services/met/qbo/qbo.html	2b6
Nighttime marine Air Temperature	CLASSnmat	https://catalogue.ceda.ac.uk/uuid/9058edd550624de69a8b2a882d11b65c	2b3
	UAHNMAT	https://www.nsstc.uah.edu/climate/	2b3

General Variable or Phenomenon	Specific dataset or variable	Source	Section
TOA Earth Radiation Budget	CERES EBAF Ed4.1	https://ceres-tool.larc.nasa.gov/ord-tool/jsp/EBAF41Selection.jsp	2f1
	CERES FLASHflux	https://ceres-tool.larc.nasa.gov/ord-tool/jsp/FLASH_TISASelection.jsp	2f1
	TSIS TIM Level 3 Total Solar Irradiance 24-hour Means	doi:10.5067/TSIS/TIM/DATA306	2f1
Solar Transmission, Apparent	Mauna Loa Observatory	https://www.esrl.noaa.gov/gmd/webdata/grad/mloapt/mauna_loa_transmission.dat	2f2
	HYSPLIT	https://www.ready.noaa.gov/HYSPLIT.php	2f2
Trace Gases	Atmospheric Greenhouse Gas Index (AGGI)	www.esrl.noaa.gov/gmd/aggi	2g1
	Atmospheric Gas trends	www.esrl.noaa.gov/gmd/ccgg/trends	2g1
	CAMS Reanalysis (Carbon Monoxide)	https://ads.atmosphere.copernicus.eu/cdsapp#!/dataset/cams-global-radiative-forcing-auxiliary-variables?tab=overview	2g7
	Nitrous Oxide	www.esrl.noaa.gov/gmd/hats/combined/N2O.html	2g1
	Ozone-Depleting Gas Index (ODGI)	www.esrl.noaa.gov/gmd/odgi	2g2
Tropical Cyclone Data	HURDAT2	www.aoml.noaa.gov/hrd/hurdat/Data_Storm.html	4g2
	International Best Track Archive for Climate Stewardship (IBTrACS)	https://www.ncei.noaa.gov/products/international-best-track-archive	4g1, 4g3, 4g5, 4g6, 4g7
	JTWC Best-track Dataset	https://www.metoc.navy.mil/jtwc/jtwc.html?best-tracks	4b, 4e, 4g2, 4g5, 4g6
	RSMC-Tokyo, JMA best-track data	www.jma.go.jp/jma/eng/jma-center/rsmc-hp-pub-eg/besttrack.html	4g4
	Southwest Pacific Enhanced Archive of Tropical Cyclones (SPEARtC)	http://apdrc.soest.hawaii.edu/projects/speartc	4g8
	HURDAT US Hurricanes	http://www.aoml.noaa.gov/hrd/hurdat/All_U.S._Hurricanes.html	4SB.1
	Accumulated Cyclone Energy (ACE)	https://climatlas.com/tropical/	2e3
	Hurricane Glider Project	https://www.aoml.noaa.gov/hurricane-glider-project	4h
UV Radiation Data	NASA Aura Microwave Limb Sounder	https://mls.jpl.nasa.gov/	2g5
Water Vapor, Total Column	COSMIC	https://cdaac-www.cosmic.ucar.edu/	2d2
	ERA5	https://www.ecmwf.int/en/forecasts/datasets/reanalysis-datasets/era5	2d2, 6SB.1
	GNSS Ground-Based Total Column Water Vapor	https://doi.org/10.25326/18	2d2
	JRA-55 Atmospheric Reanalysis	http://jra.kishou.go.jp/JRA-55/index_en.html	2d2
	METOP A B C	https://www.eumetsat.int/our-satellites/metop-series	2d2

General Variable or Phenomenon	Specific dataset or variable	Source	Section
Wind, [Near] Surface	ERA5	https://www.ecmwf.int/en/forecasts/datasets/reanalysis-datasets/era5	2e2, 4e, 4g4, 4g5
	HadISD v3.3.0.202201p	www.metoffice.gov.uk/hadobs/hadis/	2e2
	JRA-55 Atmospheric Reanalysis	http://jra.kishou.go.jp/JRA-55/index_en.html	4f
	MERRA-2	http://gmao.gsfc.nasa.gov/reanalysis/MERRA-2/	2e2
	RSS Radiometer winds	www.remss.com/measurements/wind	2e3
	Climate Forecast System Reanalysis (CFSR)	https://climatedataguide.ucar.edu/climate-data/climate-forecast-system-reanalysis-cfsr	4g3, 4g5, 4g6
Wind, Upper Atmosphere	ERA5	https://www.ecmwf.int/en/forecasts/datasets/reanalysis-datasets/era5	2e3, 4e, 6b
	ERA-Interim	www.ecmwf.int/en/research/climate-reanalysis/era-interim	2e3
	MERRA-2	http://gmao.gsfc.nasa.gov/reanalysis/MERRA-2/	2e3
River Discharge	QBO	https://www.geo.fu-berlin.de/met/ag/strat/produkte/qbo/index.html	2e3
	CaMA Flood	http://hydro.iis.u-tokyo.ac.jp/~yamada/cama-flood/	2d7
	ELSE	offline	2d7
	DDM30	https://www.uni-frankfurt.de/45218101/DDM30	2d7

