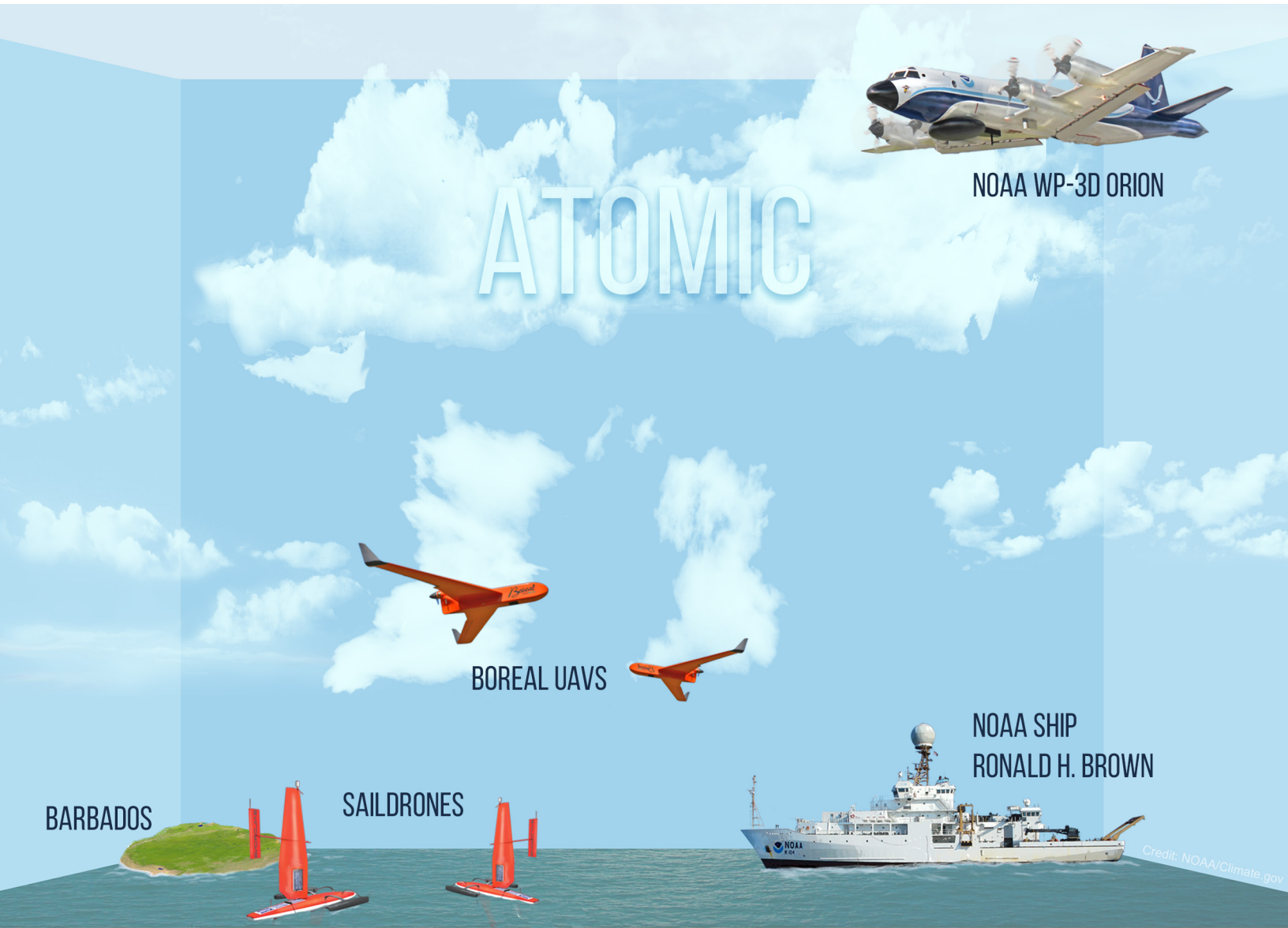


# STATE OF THE CLIMATE IN 2020

## RELEVANT DATASETS AND SOURCES



See Chapter 1 (Introduction) for information about the ATOMIC field campaign. Image credit: NOAA/Climate.gov

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## 8: RELEVANT DATASETS AND SOURCES

General Variable or Phenomenon	Specific dataset or variable	Source	Section
Aerosols	CAMS Reanalysis	<a href="https://ads.atmosphere.copernicus.eu/cdsapp#!/dataset/cams-global-radiative-forcing-auxilliary-variables?tab=overview">https://ads.atmosphere.copernicus.eu/cdsapp#!/dataset/cams-global-radiative-forcing-auxilliary-variables?tab=overview</a>	2g3
	MODIS Aerosol	<a href="https://modis.gsfc.nasa.gov/data/dataproduct/mod04.php">https://modis.gsfc.nasa.gov/data/dataproduct/mod04.php</a>	2g3
	AATSR	<a href="https://earth.esa.int/eogateway/instruments/aatsr">https://earth.esa.int/eogateway/instruments/aatsr</a>	2g3
Air-sea fluxes	CERES Energy Balanced and Filled	<a href="https://ceres.larc.nasa.gov/data/">https://ceres.larc.nasa.gov/data/</a>	3e4
	CERES FLASHflux	<a href="https://ceres.larc.nasa.gov/data/">https://ceres.larc.nasa.gov/data/</a>	3e1
	ERA5	<a href="https://www.ecmwf.int/en/forecasts/datasets/reanalysis-datasets/era5">https://www.ecmwf.int/en/forecasts/datasets/reanalysis-datasets/era5</a>	6g1
	Woods Hole Oceanographic Institute OAFlux	<a href="http://oaflux.whoi.edu">http://oaflux.whoi.edu</a>	3e1, 3e2, 3e3
Albedo	MODIS	<a href="https://doi.org/10.5067/MODIS/MCD43C3.006">https://doi.org/10.5067/MODIS/MCD43C3.006</a>	2h1
	MODIS (Greenland)	<a href="https://doi.org/10.22008/promice/data/modis_greenland_albedo">https://doi.org/10.22008/promice/data/modis_greenland_albedo</a>	5e
Biomass, Greenness or Burning	GFAS v1.4	<a href="ftp://ftp.mpic.de/GFAS/sc17">ftp://ftp.mpic.de/GFAS/sc17</a> (special reprocessing)	2h3
	Global Inventory Modeling and Mapping Studies (GIMMS) 3gy1	<a href="https://iridl.ldeo.columbia.edu/SOURCES/.NASA/.ARC/.ECOCAST/.GIMMS/.NDVI3g/.v1p0/index.html?Set-Language=en">https://iridl.ldeo.columbia.edu/SOURCES/.NASA/.ARC/.ECOCAST/.GIMMS/.NDVI3g/.v1p0/index.html?Set-Language=en</a>	5i
	MODIS MCD43A4	<a href="https://lpdaac.usgs.gov/products/mcd43a4v006/">https://lpdaac.usgs.gov/products/mcd43a4v006/</a>	5i
	MODIS fire	<a href="https://modis.gsfc.nasa.gov/data/dataproduct/mod14.php">https://modis.gsfc.nasa.gov/data/dataproduct/mod14.php</a>	5SB.1
	VIIRS SNPP	<a href="https://oceancolor.gsfc.nasa.gov/data/viirs-snpp/">https://oceancolor.gsfc.nasa.gov/data/viirs-snpp/</a>	5SB.1
Cloud Properties	Aqua MODIS C6	<a href="http://dx.doi.org/10.5067/MODIS/MYD08_M3.006">http://dx.doi.org/10.5067/MODIS/MYD08_M3.006</a>	2d7, 2h3
	Terra MODIS C6	<a href="http://dx.doi.org/10.5067/MODIS/MOD08_M3.006">http://dx.doi.org/10.5067/MODIS/MOD08_M3.006</a>	2d7
	MODIS 08_L3	<a href="https://modis.gsfc.nasa.gov/data/dataproduct/mod08.php">https://modis.gsfc.nasa.gov/data/dataproduct/mod08.php</a>	2d7
	CALIPSO	<a href="http://www-calipso.larc.nasa.gov">http://www-calipso.larc.nasa.gov</a>	2d7, 6h
	CERES MODIS	<a href="https://ceres.larc.nasa.gov/data/general-product-info/">https://ceres.larc.nasa.gov/data/general-product-info/</a>	2d7
	CLARA-A2	<a href="https://www.cmsaf.eu/EN/Home/home_node.html">https://www.cmsaf.eu/EN/Home/home_node.html</a>	2d7
	CLOUD_CCI	<a href="http://www.esa-cloud-cci.org">www.esa-cloud-cci.org</a>	2d7
	HIRS	<a href="https://www.ncei.noaa.gov/access/metadata/landing-page/bin/iso?id=gov.noaa.ncdc:C00951">https://www.ncei.noaa.gov/access/metadata/landing-page/bin/iso?id=gov.noaa.ncdc:C00951</a>	2d7
	MISR	<a href="https://l0dup05.larc.nasa.gov/L3Web/">https://l0dup05.larc.nasa.gov/L3Web/</a>	2d7
	PATMOS-x/AVHRR	<a href="http://www.ncdc.noaa.gov/cdr/atmospheric/avhrr-cloud-properties-patmos-x">www.ncdc.noaa.gov/cdr/atmospheric/avhrr-cloud-properties-patmos-x</a>	2d7
	PATMOS-x/MODIS C6	<a href="http://ladsweb.nascom.nasa.gov">http://ladsweb.nascom.nasa.gov</a>	2d7
SatCORPS	No public archive	2d7	
Drought	CRU TS 4.05	<a href="https://crudata.uea.ac.uk/cru/data/hrg/cru_ts_4.05/">https://crudata.uea.ac.uk/cru/data/hrg/cru_ts_4.05/</a>	2d11
Land Evaporation	GLEAM	<a href="http://www.gleam.eu/">www.gleam.eu/</a>	2d12
FAPAR	MERIS	<a href="https://earth.esa.int/eogateway/">https://earth.esa.int/eogateway/</a>	2h2
	MODIS-TIP	<a href="http://ladsweb.nascom.nasa.gov/">http://ladsweb.nascom.nasa.gov/</a>	2h2
	SeaWiFS FAPAR	<a href="http://fapar.jrc.ec.europa.eu/">http://fapar.jrc.ec.europa.eu/</a>	2h2
Geopotential Height	ERA5	<a href="https://www.ecmwf.int/en/forecasts/datasets/reanalysis-datasets/era5">https://www.ecmwf.int/en/forecasts/datasets/reanalysis-datasets/era5</a>	6b
	NCEP/NCAR Reanalysis 1: Pressure	<a href="https://psl.noaa.gov/data/gridded/data.ncep.reanalysis.pressure.html">https://psl.noaa.gov/data/gridded/data.ncep.reanalysis.pressure.html</a>	4d2, 4f2

General Variable or Phenomenon	Specific dataset or variable	Source	Section
Glacier Mass, Area or Volume	GRACE / GRACE-FO	<a href="https://grace.jpl.nasa.gov/data/get-data/">https://grace.jpl.nasa.gov/data/get-data/</a>	5e, 5f, 6e
	World Glacier Monitoring Service	<a href="http://dx.doi.org/10.5904/wgms-fog-2020-08">http://dx.doi.org/10.5904/wgms-fog-2020-08</a>	2c3
	Glacier Front Line (Greenland)	<a href="https://doi.org/10.22008/promice/data/calving_front_lines">https://doi.org/10.22008/promice/data/calving_front_lines</a>	e3
Groundwater and terrestrial water storage	GRACE / GRACE-FO	<a href="https://grace.jpl.nasa.gov/data/get-data/">https://grace.jpl.nasa.gov/data/get-data/</a>	2d9
Humidity, [Near] Surface	ERA5	<a href="https://www.ecmwf.int/en/forecasts/datasets/reanalysis-datasets/era5">https://www.ecmwf.int/en/forecasts/datasets/reanalysis-datasets/era5</a>	2d1
	HadISDH	<a href="http://www.metoffice.gov.uk/hadobs/hadisdh">www.metoffice.gov.uk/hadobs/hadisdh</a>	2d1
	MERRA-2	<a href="https://gmao.gsfc.nasa.gov/reanalysis/MERRA-2/">https://gmao.gsfc.nasa.gov/reanalysis/MERRA-2/</a>	2d1
	JRA-55 Atmospheric Reanalysis	<a href="http://jra.kishou.go.jp/JRA-55/index_en.html">http://jra.kishou.go.jp/JRA-55/index_en.html</a>	2d1
Humidity, Upper Atmosphere	ERA5	<a href="https://www.ecmwf.int/en/forecasts/datasets/reanalysis-datasets/era5">https://www.ecmwf.int/en/forecasts/datasets/reanalysis-datasets/era5</a>	2d3
	HIRS	<a href="http://www.ncdc.noaa.gov/cdr/fundamental/hirs-ch12-brightness-temperature">www.ncdc.noaa.gov/cdr/fundamental/hirs-ch12-brightness-temperature</a>	2d3
	UTH, Microwave	by email to <a href="mailto:Viju.John@eumetsat.int">Viju.John@eumetsat.int</a>	2d3
Ice Sheet Characteristics	DMSP-SSMIS	<a href="https://nsidc.org/data/nsidc-0001">https://nsidc.org/data/nsidc-0001</a>	6d
	ERA5	<a href="https://www.ecmwf.int/en/forecasts/datasets/reanalysis-datasets/era5">https://www.ecmwf.int/en/forecasts/datasets/reanalysis-datasets/era5</a>	6c
	ICESat, ICESat-2	<a href="https://icesat-2.gsfc.nasa.gov/">https://icesat-2.gsfc.nasa.gov/</a>	5d2, 6e
	Cryosat-2	<a href="https://earth.esa.int/eogateway/missions/cryosat">https://earth.esa.int/eogateway/missions/cryosat</a>	5d2
	SMOS	<a href="https://earth.esa.int/eogateway/missions/smos">https://earth.esa.int/eogateway/missions/smos</a>	5d2
	MERRA-2	<a href="https://gmao.gsfc.nasa.gov/reanalysis/MERRA-2/">https://gmao.gsfc.nasa.gov/reanalysis/MERRA-2/</a>	6c, 6h
	Modèle Atmosphérique Régionale surface mass	<a href="https://mar.cnrs.fr/">https://mar.cnrs.fr/</a>	5e
	PROMICE (Greenland)	<a href="https://doi.org/10.22008/promice/data/aws">https://doi.org/10.22008/promice/data/aws</a>	5e
	DMI Weather Stations	<a href="http://polarportal.dk/en/weather/historisk-vejr/#:~:text=DMI%20has%20a%20number%20of,go%20back%20almost%20250%20years.&amp;text=One%20cannot%20expect%20that%20temperature%20observations%20spanning%20centuries%20are%20homogeneous">http://polarportal.dk/en/weather/historisk-vejr/#:~:text=DMI%20has%20a%20number%20of,go%20back%20almost%20250%20years.&amp;text=One%20cannot%20expect%20that%20temperature%20observations%20spanning%20centuries%20are%20homogeneous</a>	5e
	ICE_6G_D	<a href="https://www.atmosp.physics.utoronto.ca/~peltier/data.php">https://www.atmosp.physics.utoronto.ca/~peltier/data.php</a>	5e
Ice Discharge (Greenland)	<a href="https://doi.org/10.22008/promice/data/ice_discharge/d/v02">https://doi.org/10.22008/promice/data/ice_discharge/d/v02</a>	5e	
Lake Ice	Global Lake and River Ice Phenology Database, Version 1	<a href="https://doi.org/10.7265/N5W66HP8">https://doi.org/10.7265/N5W66HP8</a>	2c4
	Great Lakes Ice	<a href="http://www.glerl.noaa.gov/data/ice">www.glerl.noaa.gov/data/ice</a>	2c4
	ERA5	<a href="https://www.ecmwf.int/en/forecasts/datasets/reanalysis-datasets/era5">https://www.ecmwf.int/en/forecasts/datasets/reanalysis-datasets/era5</a>	2c4

General Variable or Phenomenon	Specific dataset or variable	Source	Section
Lake Temperature	ERA5	<a href="https://www.ecmwf.int/en/forecasts/datasets/reanalysis-datasets/era5">https://www.ecmwf.int/en/forecasts/datasets/reanalysis-datasets/era5</a>	2b3
	NERC Globalakes, Copernicus Climate Service	<a href="https://cds.climate.copernicus.eu/cdsapp#!dataset/satellite-lake-water-temperature?tab=overview">https://cds.climate.copernicus.eu/cdsapp#!dataset/satellite-lake-water-temperature?tab=overview</a>	2b3
	MetOp A & B ATSR and AVHRR	<a href="https://www.eumetsat.int/website/home/Satellites/CurrentSatellites/Metop/index.html">https://www.eumetsat.int/website/home/Satellites/CurrentSatellites/Metop/index.html</a>	2b3
	Sentinel 3 SLSTR	<a href="https://sentinel.esa.int/web/sentinel/user-guides/sentinel-3-slstr/overview">https://sentinel.esa.int/web/sentinel/user-guides/sentinel-3-slstr/overview</a>	2b3
Lake Water Levels	Hydroweb	<a href="http://hydroweb.theia-land.fr/">http://hydroweb.theia-land.fr/</a>	2b3
Modes of Variability	Arctic Oscillation (AO)	<a href="http://www.cpc.ncep.noaa.gov/products/precip/CWlink/daily_ao_index/teleconnections.shtml">www.cpc.ncep.noaa.gov/products/precip/CWlink/daily_ao_index/teleconnections.shtml</a>	2e1
	Indian Ocean Dipole Mode Index	<a href="https://psl.noaa.gov/gcos_wgsp/Timeseries/DMI/">https://psl.noaa.gov/gcos_wgsp/Timeseries/DMI/</a>	4f, 4h
	Madden-Julian Oscillation (MJO) - Real-time Multivariate MJO	<a href="http://www.bom.gov.au/climate/mjo/graphics/rmm.74toRealtime.txt">www.bom.gov.au/climate/mjo/graphics/rmm.74toRealtime.txt</a>	4c
	North Atlantic Oscillation (NAO)	<a href="https://climatedataguide.ucar.edu/climate-data/hurrell-north-atlantic-oscillation-nao-index-station-based">https://climatedataguide.ucar.edu/climate-data/hurrell-north-atlantic-oscillation-nao-index-station-based</a>	2e1
	Oceanic Nino Index (ONI)	<a href="http://www.cpc.ncep.noaa.gov/products/analysis_monitoring/ensostuff/ensoyears.shtml">www.cpc.ncep.noaa.gov/products/analysis_monitoring/ensostuff/ensoyears.shtml</a>	4b
	Southern Annular Mode (SAM)	<a href="http://www.antarctica.ac.uk/met/gjma/sam.html">www.antarctica.ac.uk/met/gjma/sam.html</a>	6b
	Southern Annular Mode (SAM, AAO)	<a href="http://www.cpc.ncep.noaa.gov/products/precip/CWlink/daily_ao_index/aa0/aa0.shtml">www.cpc.ncep.noaa.gov/products/precip/CWlink/daily_ao_index/aa0/aa0.shtml</a>	2e1
	Multivariate El Nino Index (MEI)	<a href="https://psl.noaa.gov/enso/mei/">https://psl.noaa.gov/enso/mei/</a>	3i
Southern Oscillation Index (SOI)	<a href="ftp://ftp.bom.gov.au/anon/home/ncc/www/sco/soi/soiplaintext.html">ftp://ftp.bom.gov.au/anon/home/ncc/www/sco/soi/soiplaintext.html</a>	2e1	
Rock Glacier Kinematics	Austria: V. Kaufmann and A. Kellerer-Pirklbauer, France: X. Bodin and E. Thibert, Switzerland: R. Delaloye, J. Noetzli and C. Pellet	available from authors upon request	2SB.2
Ocean Carbon	$f\text{CO}_2$	<a href="http://www.socat.info">www.socat.info</a>	3j2
	Takahashi LDEO $f\text{CO}_2$	<a href="https://www.ncei.noaa.gov/access/ocean-carbon-data-system/oceans/LDEO_Underway_Database/">https://www.ncei.noaa.gov/access/ocean-carbon-data-system/oceans/LDEO_Underway_Database/</a>	3j2
	Global Ocean Ship-Based Hydrographic Investigations Program	<a href="http://www.go-ship.org">www.go-ship.org</a>	3j3
	Saildrone	<a href="https://data.saildrone.com/">https://data.saildrone.com/</a>	6g3
	SOCOM profiling float	<a href="https://socom.princeton.edu/content/data-access">https://socom.princeton.edu/content/data-access</a>	6g3

General Variable or Phenomenon	Specific dataset or variable	Source	Section
Ocean Heat Content	CLIVAR and Carbon Hydrographic Data Office	<a href="https://cchdo.ucsd.edu/">https://cchdo.ucsd.edu/</a>	3c
	CSIRO/ACE CRC/IMAS-UTAS estimate	<a href="http://www.cmar.csiro.au/sealevel/thermal_expansion_ocean_heat_timeseries.html">www.cmar.csiro.au/sealevel/thermal_expansion_ocean_heat_timeseries.html</a>	3c
	IAP/CAS	<a href="https://climatedataguide.ucar.edu/climate-data/ocean-temperature-analysis-and-heat-content-estimate-institute-atmospheric-physics">https://climatedataguide.ucar.edu/climate-data/ocean-temperature-analysis-and-heat-content-estimate-institute-atmospheric-physics</a>	3c
	PMEL/JPL/JIMAR	<a href="http://oceans.pmel.noaa.gov">http://oceans.pmel.noaa.gov</a>	3c
	MRI/JMA	<a href="https://www.data.jma.go.jp/gmd/kaiyou/english/ohc/ohc_data_en.html">https://www.data.jma.go.jp/gmd/kaiyou/english/ohc/ohc_data_en.html</a>	3c
	NCEI	<a href="https://www.ncei.noaa.gov/access/global-ocean-heat-content/">https://www.ncei.noaa.gov/access/global-ocean-heat-content/</a>	3c
	UK Met Office EN4.0.2	<a href="http://www.metoffice.gov.uk/hadobs/en4/download-en4-0-2-109.html">www.metoffice.gov.uk/hadobs/en4/download-en4-0-2-109.html</a>	3c
	Argo monthly climatology	<a href="https://sio-argo.ucsd.edu/RG_Climatology.html">https://sio-argo.ucsd.edu/RG_Climatology.html</a>	3SB1, 6g2
Argo	<a href="https://usgodae.org/argo/argo.html">https://usgodae.org/argo/argo.html</a>	3c	
Ocean Mass	GRACE	<a href="https://grace.jpl.nasa.gov/data/get-data">https://grace.jpl.nasa.gov/data/get-data</a>	3f
Ocean Salinity	Aquarius V3.0	<a href="http://podaac.jpl.nasa.gov/aquarius">http://podaac.jpl.nasa.gov/aquarius</a>	3d2
	Argo	<a href="https://usgodae.org/argo/argo.html">https://usgodae.org/argo/argo.html</a>	3d2
	Blended Analysis for Surface Salinity	<a href="ftp://ftp.cpc.ncep.noaa.gov/precip/BASS">ftp://ftp.cpc.ncep.noaa.gov/precip/BASS</a>	3d2
	SMAP	<a href="https://podaac.jpl.nasa.gov/SMAP">https://podaac.jpl.nasa.gov/SMAP</a>	3d2
	SMOS	<a href="https://earth.esa.int/eogateway/missions/smos">https://earth.esa.int/eogateway/missions/smos</a>	3d2
	World Ocean Atlas 2013	<a href="http://www.nodc.noaa.gov/OC5/woa13/">www.nodc.noaa.gov/OC5/woa13/</a>	3d2, 3d3
	World Ocean Atlas 2018	<a href="https://www.ncei.noaa.gov/products/world-ocean-atlas">https://www.ncei.noaa.gov/products/world-ocean-atlas</a>	2d8
NCEI	<a href="https://www.ncei.noaa.gov/access/global-ocean-heat-content/">https://www.ncei.noaa.gov/access/global-ocean-heat-content/</a>	3d3	
Outgoing Longwave Radiation	AVHRR	<a href="https://psl.noaa.gov/data/gridded/data.interp_OLR.html">https://psl.noaa.gov/data/gridded/data.interp_OLR.html</a>	4d2, 4g2
	Daily OLR	<a href="http://www.ncdc.noaa.gov/cdr/atmospheric/outgoing-longwave-radiation-daily">www.ncdc.noaa.gov/cdr/atmospheric/outgoing-longwave-radiation-daily</a>	4b2, 4b3, 4c, 4g3, 4g5, 4g6

General Variable or Phenomenon	Specific dataset or variable	Source	Section
Ozone, Total Column and Stratospheric	GOME/SCIAMACHY/GOME2 (GSG) Merged Total Ozone	<a href="http://www.iup.uni-bremen.de/UVSAT/datasets/merged-wfdoas-total-ozone">http://www.iup.uni-bremen.de/UVSAT/datasets/merged-wfdoas-total-ozone</a>	2g4
	GOME/SCIAMACHY/GOME2 (GTO) Merged Total Ozone	<a href="https://atmos.eoc.dlr.de/gto-ecv">https://atmos.eoc.dlr.de/gto-ecv</a>	2g4
	GOZCARDS ozone profiles	<a href="https://gozcards.jpl.nasa.gov">https://gozcards.jpl.nasa.gov</a>	2g4
	Aura OMI/MLS	<a href="https://disc.sci.gsfc.nasa.gov/Aura/data-holdings/MLS">https://disc.sci.gsfc.nasa.gov/Aura/data-holdings/MLS</a> <a href="ftp://toms.gsfc.nasa.gov/pub/omi/data/ozone/">ftp://toms.gsfc.nasa.gov/pub/omi/data/ozone/</a> (for years 2013-2017) <a href="https://disc.gsfc.nasa.gov/datasets/OMT03d_003/summary">https://disc.gsfc.nasa.gov/datasets/OMT03d_003/summary</a> <a href="https://disc.gsfc.nasa.gov/datasets/OMUVBd_003/summary">https://disc.gsfc.nasa.gov/datasets/OMUVBd_003/summary</a>	5j1, 6h
	Multi Sensor Reanalysis (MSR-2) of total ozone	<a href="http://www.temis.nl/protocols/O3global.html">http://www.temis.nl/protocols/O3global.html</a>	2g4
	NASA BUV/SBUV v8.6 (MOD v8.6) Merged Ozone	<a href="http://acdb-ext.gsfc.nasa.gov/Data_services/merged">http://acdb-ext.gsfc.nasa.gov/Data_services/merged</a>	2g4
	NOAA BUV/SBUV v8.6 (MOD v8.6) Merged Ozone	<a href="ftp://ftp.cpc.ncep.noaa.gov/SBUV_CDR">ftp://ftp.cpc.ncep.noaa.gov/SBUV_CDR</a>	2g4
	Bodeker Scientific	<a href="http://www.bodekerscientific.com/data/total-column-ozone">http://www.bodekerscientific.com/data/total-column-ozone</a>	5j1
	Ozone Mapping & Profiler Suite (OMPS) Ozonesonde	<a href="https://ozoneaq.gsfc.nasa.gov/omps/">https://ozoneaq.gsfc.nasa.gov/omps/</a> <a href="http://www.esrl.noaa.gov/gmd/dv/spo_oz">www.esrl.noaa.gov/gmd/dv/spo_oz</a>	6h 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	<a href="http://www.esrl.noaa.gov/csd/groups/csd8/swoosh/">www.esrl.noaa.gov/csd/groups/csd8/swoosh/</a>	2g4
	WOUDC Ground-based Ozone	<a href="ftp://tor.ec.gc.ca">ftp://tor.ec.gc.ca</a> <a href="http://cd/pub/woudc/Projects/Campaigns/ZonalMeans">cd/pub/woudc/Projects/Campaigns/ZonalMeans</a>	2g4
	Antarctic UV monitoring network NDACC lidar, microwave and FTIR	<a href="https://gml.noaa.gov/grad/antuv/">https://gml.noaa.gov/grad/antuv/</a> <a href="ftp://ftp.cpc.ncep.noaa.gov/ndacc">ftp://ftp.cpc.ncep.noaa.gov/ndacc</a>	6h 2g4
Ozone, Tropospheric	Aura OMI/MLS	<a href="http://acd-ext.gsfc.nasa.gov/Data_services/cloud_slice/new_data.html">http://acd-ext.gsfc.nasa.gov/Data_services/cloud_slice/new_data.html</a>	2g6
	NOAA Observatory Data	<a href="ftp://aftp.cmdl.noaa.gov/data/ozwv/SurfaceOzone/">ftp://aftp.cmdl.noaa.gov/data/ozwv/SurfaceOzone/</a>	2g6
Permafrost	Active Layer Thickness	<a href="http://www2.gwu.edu/~calm/">www2.gwu.edu/~calm/</a>	2c1, 5h2
	GTN-P global mean annual ground temperature data for permafrost	<a href="https://doi.org/10.1594/PANGAEA.884711">https://doi.org/10.1594/PANGAEA.884711</a>	2c1
	Global Terrestrial Network for Permafrost (GTN-P)	<a href="http://gtnpdatabase.org/">http://gtnpdatabase.org/</a>	2c1, 5h1
	Permafrost Temperature	<a href="http://permafrost.gi.alaska.edu/sites_map">http://permafrost.gi.alaska.edu/sites_map</a>	5h1
	Permafrost Temperature at Chinese (QTP) sites	<a href="https://nsidc.org/data/GGD700/versions/1">https://nsidc.org/data/GGD700/versions/1</a>	2c1
	Permafrost Temperature at French sites	<a href="http://permafrost.osug.fr">permafrost.osug.fr</a>	2c1
	Permafrost Temperature at Norwegian sites	<a href="http://www.tspnorway.com">www.tspnorway.com</a>	2c1
Permafrost Temperature at Swiss sites (PERMOS)	<a href="http://www.permos.ch">www.permos.ch</a>	2c1	

General Variable or Phenomenon	Specific dataset or variable	Source	Section
Phenology	NDVI	<a href="https://modis.gsfc.nasa.gov/data/dataproduct/mod13.php">https://modis.gsfc.nasa.gov/data/dataproduct/mod13.php</a>	2h4
	PhenoCam	<a href="http://phenocam.sr.unh.edu">http://phenocam.sr.unh.edu</a>	2h4
	Harvard Forest	<a href="https://harvardforest1.fas.harvard.edu/exist/apps/datasets/showData.html?id=hf003">https://harvardforest1.fas.harvard.edu/exist/apps/datasets/showData.html?id=hf003</a>	2h4
	Natures Calendar	<a href="https://naturescalendar.woodlandtrust.org.uk/">https://naturescalendar.woodlandtrust.org.uk/</a>	2h4
Vegetation Optical Depth	VODCA	<a href="https://zenodo.org/record/2575599">https://zenodo.org/record/2575599</a>	2SB.3
	ESA CCI Biomass	<a href="https://catalogue.ceda.ac.uk/uuid/bedc59f37c9545c981a839eb552e4084">https://catalogue.ceda.ac.uk/uuid/bedc59f37c9545c981a839eb552e4084</a>	2SB.3
	MODIS MOD15A2H LAI	<a href="https://earthexplorer.usgs.gov/">https://earthexplorer.usgs.gov/</a>	2SB.3
Phytoplankton, Ocean Color	MODIS-Aqua	<a href="https://oceancolor.gsfc.nasa.gov/data/aqua/">https://oceancolor.gsfc.nasa.gov/data/aqua/</a>	3i
	SeaWiFS	<a href="https://oceancolor.gsfc.nasa.gov/data/seawifs/">https://oceancolor.gsfc.nasa.gov/data/seawifs/</a>	3i
Precipitation	Climate Extremes Index	<a href="https://www.ncdc.noaa.gov/extremes/cei/">https://www.ncdc.noaa.gov/extremes/cei/</a>	2d5
	CMORPH	<a href="http://www.cpc.ncep.noaa.gov/products/janowiak/cmorph_description.html">www.cpc.ncep.noaa.gov/products/janowiak/cmorph_description.html</a>	4d1
	ERA5	<a href="https://www.ecmwf.int/en/forecasts/datasets/reanalysis-datasets/era5">https://www.ecmwf.int/en/forecasts/datasets/reanalysis-datasets/era5</a>	2d5
	GHCN v4	<a href="http://www.ncdc.noaa.gov/temp-and-precip/ghcn-gridded-products/precipitation">www.ncdc.noaa.gov/temp-and-precip/ghcn-gridded-products/precipitation</a>	2d5
	GHCNDEX	<a href="http://www.climdex.org/datasets.html">www.climdex.org/datasets.html</a>	2d5
	GPCP v2.3	<a href="https://psl.noaa.gov/data/gridded/data.gpcp.html">https://psl.noaa.gov/data/gridded/data.gpcp.html</a>	3e2, 4e, 4f, 4h
	GPCC	<a href="http://www.dwd.de/EN/ourservices/gpcc/gpcc.html">www.dwd.de/EN/ourservices/gpcc/gpcc.html</a>	2d5
	MERRA-2	<a href="http://gmao.gsfc.nasa.gov/reanalysis/MERRA-2/">http://gmao.gsfc.nasa.gov/reanalysis/MERRA-2/</a>	2d5
Pressure, Sea Level or Near-Surface	ERA5	<a href="https://www.ecmwf.int/en/forecasts/datasets/reanalysis-datasets/era5">https://www.ecmwf.int/en/forecasts/datasets/reanalysis-datasets/era5</a>	5b2, 6b, 6SB.1
	HadSLP2r	<a href="http://hadobs.metoffice.com/hadslp2/">http://hadobs.metoffice.com/hadslp2/</a>	2e1
	NCEP/NCAR Reanalysis	<a href="http://www.esrl.noaa.gov/psd/data/gridded/data.ncep.reanalysis.html">www.esrl.noaa.gov/psd/data/gridded/data.ncep.reanalysis.html</a>	4f2
	ERA5	<a href="https://www.ecmwf.int/en/forecasts/datasets/reanalysis-datasets/era5">https://www.ecmwf.int/en/forecasts/datasets/reanalysis-datasets/era5</a>	5f
River Discharge	CaMA Flood	<a href="http://hydro.iis.u-tokyo.ac.jp/~yamada/cama-flood/">http://hydro.iis.u-tokyo.ac.jp/~yamada/cama-flood/</a>	
	ELSE	offline	
	DDM30	<a href="https://www.uni-frankfurt.de/45218101/DDM30">https://www.uni-frankfurt.de/45218101/DDM30</a>	
Sea Ice Age	EASE-Grid v3	<a href="http://nsidc.org/data/nsidc-0611/">http://nsidc.org/data/nsidc-0611/</a>	5d3
Sea Ice Duration	Near-Real-Time DMSP SSM/I-SSMIS Daily Polar Gridded	<a href="http://nsidc.org/data/nsidc-0081.html">http://nsidc.org/data/nsidc-0081.html</a>	5d3, 6f
	Nimbus-7 SMMR and DMSP SSM/I (Bootstrap)	<a href="http://nsidc.org/data/nsidc-0079.html">http://nsidc.org/data/nsidc-0079.html</a>	6f

General Variable or Phenomenon	Specific dataset or variable	Source	Section
Sea Ice Extent / Area / Concentration	Nimbus-7 SMMR and DMSP SSM/I (Bootstrap)	<a href="http://nsidc.org/data/seaice_index/">http://nsidc.org/data/seaice_index/</a>	5c, 5d1, SB6.2
	Nimbus-7 SMMR Sea Ice Concentration	<a href="https://nsidc.org/data/nsidc-0007">https://nsidc.org/data/nsidc-0007</a>	6d
	NSIDC Passive Microwave Sea Ice Concentration	<a href="https://nsidc.org/data/G02202">https://nsidc.org/data/G02202</a>	5c
	Passive Microwave melt data (Greenland)	<a href="https://nsidc.org/greenland-today/">https://nsidc.org/greenland-today/</a>	5e
	NSIDC Sea Ice Extent	<a href="https://nsidc.org/data/g02135">https://nsidc.org/data/g02135</a>	5c, 5d1
	OSI SAF CCI : OSI-401-b	<a href="http://osisaf.met.no/p/ice/ice_conc_reprocessed.html">http://osisaf.met.no/p/ice/ice_conc_reprocessed.html</a>	5d1
	GRACE technical notes T13, T14	TN-13: <a href="https://podaac-tools.jpl.nasa.gov/drive/files/allData/gracefo/docs/TN-13_GEOC_JPL_RL06.txt">https://podaac-tools.jpl.nasa.gov/drive/files/allData/gracefo/docs/TN-13_GEOC_JPL_RL06.txt</a> TN-14: <a href="https://podaac-tools.jpl.nasa.gov/drive/files/allData/gracefo/docs/TN-14_C30_C20_GSFC_SLR.txt">https://podaac-tools.jpl.nasa.gov/drive/files/allData/gracefo/docs/TN-14_C30_C20_GSFC_SLR.txt</a>	5e
AMSR-E	<a href="https://soccom.princeton.edu/content/data-access">https://soccom.princeton.edu/content/data-access</a>	6g3	
Sea Level / Sea Surface Height	GRACE / GRACE-FO	<a href="https://grace.jpl.nasa.gov/data/get-data/">https://grace.jpl.nasa.gov/data/get-data/</a>	3f
	NOAA/NESDIS/STAR	<a href="http://www.star.nesdis.noaa.gov/sod/lisa/SeaLevelRise/LSA_SLR_timeseries.php">www.star.nesdis.noaa.gov/sod/lisa/SeaLevelRise/LSA_SLR_timeseries.php</a>	3f
	CMEMS	<a href="http://marine.copernicus.eu/services-portfolio/access-to-products/?option=com_csw&amp;view=details&amp;product_id=SEALEVEL_GLO_PHY_L4_NRT_OBSERVATIONS_008_046">http://marine.copernicus.eu/services-portfolio/access-to-products/?option=com_csw&amp;view=details&amp;product_id=SEALEVEL_GLO_PHY_L4_NRT_OBSERVATIONS_008_046</a>	3f
	Argo	<a href="https://usgodae.org/argo/argo.html">https://usgodae.org/argo/argo.html</a>	3f
	Tide Gauge	<a href="http://uhslc.soest.hawaii.edu/">http://uhslc.soest.hawaii.edu/</a>	3f
	AVISO	<a href="https://www.aviso.altimetry.fr/en/data.html">https://www.aviso.altimetry.fr/en/data.html</a>	3g, 3h
ocean currents	AOML climate indices	<a href="https://www.aoml.noaa.gov/phod/indexes/index.php">https://www.aoml.noaa.gov/phod/indexes/index.php</a>	3g
	Ocean Surface Current Analysis - Real time (OSCAR)	<a href="https://podaac.jpl.nasa.gov/dataset/OSCAR_L4_OC_third-deg">https://podaac.jpl.nasa.gov/dataset/OSCAR_L4_OC_third-deg</a>	3g
	Global Drifter Program	<a href="https://www.aoml.noaa.gov/phod/gdp/">https://www.aoml.noaa.gov/phod/gdp/</a>	3g
	Atlantic Ship of Opportunity XBT	<a href="https://www.aoml.noaa.gov/phod/goos/xbt_network/">https://www.aoml.noaa.gov/phod/goos/xbt_network/</a>	3h
	RAPID array	<a href="https://rapid.ac.uk/rapidmoc/">https://rapid.ac.uk/rapidmoc/</a>	3h
	MOVE array	<a href="http://www.oceansites.org/tma/move.html">http://www.oceansites.org/tma/move.html</a>	3h
	OSNAP	<a href="https://www.o-snap.org/">https://www.o-snap.org/</a>	3h
	SAMBA	<a href="http://www.oceansites.org/tma/samba.html">http://www.oceansites.org/tma/samba.html</a>	3h
Florida Current transport	<a href="https://www.aoml.noaa.gov/phod/floridacurrent/data_access.php">https://www.aoml.noaa.gov/phod/floridacurrent/data_access.php</a>	3h	
Sea Surface Temperature	ERSSTv5	<a href="https://doi.org/10.7289/V5T72FNM">https://doi.org/10.7289/V5T72FNM</a>	3b, 4b, 4e, 4g2
	HadSST3.1.1	<a href="http://www.metoffice.gov.uk/hadobs/hadsst3">www.metoffice.gov.uk/hadobs/hadsst3</a>	3b, 4e
	HadSST4	<a href="https://www.metoffice.gov.uk/hadobs/hadsst4/">https://www.metoffice.gov.uk/hadobs/hadsst4/</a>	2SB.1, 3b
	NOAA Optimum Interpolation SST (OISST) v2	<a href="http://apdrc.soest.hawaii.edu/dods/public_data/NOAA_SST/OISST/monthly">http://apdrc.soest.hawaii.edu/dods/public_data/NOAA_SST/OISST/monthly</a>	4b1, 4d2, 4f
	NOAA Optimum Interpolation SST (OISST) v2	<a href="https://www.ncdc.noaa.gov/oisst">https://www.ncdc.noaa.gov/oisst</a>	2b3, 3b, 4g3, 4g5, 4g6, 4h, 5c



General Variable or Phenomenon	Specific dataset or variable	Source	Section
<b>Snow Properties</b>	Canadian Meteorological Centre Daily Snow Depth Analysis v1	<a href="https://nsidc.org/data/NSIDC-0447">https://nsidc.org/data/NSIDC-0447</a>	5f
	Crocus Snowpack Model	<a href="http://www.umr-cnrm.fr/spip.php?article265">http://www.umr-cnrm.fr/spip.php?article265</a>	5f
	GlobSnow 2	<a href="https://nsidc.org/data/NSIDC-0595/versions/2">https://nsidc.org/data/NSIDC-0595/versions/2</a>	5f
	NOAA Interactive Multi-sensor Snow and Ice Mapping System (Snow Cover Duration)	<a href="https://usicecenter.gov/Products/lmsHome">https://usicecenter.gov/Products/lmsHome</a>	5f
	NOAA Snow Chart Data Record (Snow Cover Extent)	<a href="http://www.snowcover.org">www.snowcover.org</a>	2c2, 5f
	Northern Hemisphere (NH) Snow Cover Extent (SCE), Version 1	doi:10.7289/V5N014G9	2c2, 5f
	MERRA-2	<a href="http://gmao.gsfc.nasa.gov/reanalysis/MERRA-2/">http://gmao.gsfc.nasa.gov/reanalysis/MERRA-2/</a>	5f
<b>Soil Moisture</b>	ESA CCI SM	<a href="http://www.esa-soilmoisture-cci.org/index.php">www.esa-soilmoisture-cci.org/index.php</a>	2d10
<b>Temperature, [Near] Surface</b>	Antarctic Meteorological Research Center (AMRC) AWS	<a href="http://amrc.ssec.wisc.edu/data">http://amrc.ssec.wisc.edu/data</a>	6b
	CRUTEM4	<a href="http://www.metoffice.gov.uk/hadobs/crutem4">www.metoffice.gov.uk/hadobs/crutem4</a>	5b1
	ERA5	<a href="https://www.ecmwf.int/en/forecasts/datasets/reanalysis-datasets/era5">https://www.ecmwf.int/en/forecasts/datasets/reanalysis-datasets/era5</a>	2b1, 2b3, 2SB.1, 5SB.1, 6b
	GHCNDEX	<a href="http://www.climdex.org/">www.climdex.org/</a>	2b3
	HadCRUT5 Global Temperature	<a href="https://www.metoffice.gov.uk/hadobs/hadcrut5/">https://www.metoffice.gov.uk/hadobs/hadcrut5/</a>	2b1
	JRA-55 Atmospheric Reanalysis	<a href="http://jra.kishou.go.jp/JRA-55/index_en.html">http://jra.kishou.go.jp/JRA-55/index_en.html</a>	2b1, 4f
	MERRA-2	<a href="http://gmao.gsfc.nasa.gov/reanalysis/MERRA-2/">http://gmao.gsfc.nasa.gov/reanalysis/MERRA-2/</a>	2b3
	MERRA-2 monthly	<a href="https://goldsmr4.gesdisc.eosdis.nasa.gov/data/MERRA2_MONTHLY/M2TMNXLND.5.12.4">https://goldsmr4.gesdisc.eosdis.nasa.gov/data/MERRA2_MONTHLY/M2TMNXLND.5.12.4</a>	2h4
	NASA/GISS Global Temperature	<a href="https://data.giss.nasa.gov/gistemp/">https://data.giss.nasa.gov/gistemp/</a>	2b1
	NCEP/NCAR Reanalysis	<a href="https://psl.noaa.gov/data/gridded/data.ncep.reanalysis.html">https://psl.noaa.gov/data/gridded/data.ncep.reanalysis.html</a>	5b2, 5f
	ERA-Interim	<a href="http://www.ecmwf.int/en/research/climate-reanalysis/era-interim">www.ecmwf.int/en/research/climate-reanalysis/era-interim</a>	5f
	NOAA/NCEI NOAAGlobalTemp	<a href="http://www.ncdc.noaa.gov/data-access/marineocean-data/noaa-global-surface-temperature-noaaglobaltemp">www.ncdc.noaa.gov/data-access/marineocean-data/noaa-global-surface-temperature-noaaglobaltemp</a>	2b1

General Variable or Phenomenon	Specific dataset or variable	Source	Section
Temperature, Upper Atmosphere	ERA5	<a href="https://www.ecmwf.int/en/forecasts/datasets/reanalysis-datasets/era5">https://www.ecmwf.int/en/forecasts/datasets/reanalysis-datasets/era5</a>	2b4, 2b5, 6b, 6h
	JRA-55 Atmospheric Reanalysis	<a href="http://jra.kishou.go.jp/JRA-55/index_en.html">http://jra.kishou.go.jp/JRA-55/index_en.html</a>	2b4, 2b5
	MERRA-2	<a href="http://gmao.gsfc.nasa.gov/reanalysis/MERRA-2/">http://gmao.gsfc.nasa.gov/reanalysis/MERRA-2/</a>	2b4, 2b5, 6h
	NOAA merged SSU+AMSU satellite data	<a href="https://www.star.nesdis.noaa.gov/smcd/emb/mscat/index.php">https://www.star.nesdis.noaa.gov/smcd/emb/mscat/index.php</a>	2b5
	RAOBCORE, RICH	<a href="http://www.univie.ac.at/theoret-met/research/raobcore">www.univie.ac.at/theoret-met/research/raobcore</a> (get version 1.7 fro Leo Haimberger)	2b4,2b5
	RATPAC A2	<a href="http://www.ncdc.noaa.gov/data-access/weather-balloon/radiosonde-atmospheric-temperature-products-accessing-climate/ratpac-a">www.ncdc.noaa.gov/data-access/weather-balloon/radiosonde-atmospheric-temperature-products-accessing-climate/ratpac-a</a>	2b4
	RSS v4.0	<a href="http://www.remss.com">www.remss.com</a>	2b4, 2b5
	NOAA/NESDIS/STAR MSU v4.1	<a href="ftp://ftp.star.nesdis.noaa.gov/pub/smcd/emb/mscat/data/MSU_AMSU_v4.1">ftp://ftp.star.nesdis.noaa.gov/pub/smcd/emb/mscat/data/MSU_AMSU_v4.1</a>	2b4
	UW MSU v1.0	<a href="https://pochedls.github.io/#!data.md">https://pochedls.github.io/#!data.md</a>	2b4
	UAH MSU v6.0	<a href="https://www.nsstc.uah.edu/public/msu/">https://www.nsstc.uah.edu/public/msu/</a>	2b4, 2b5
	NCAR merged SSU+MLS satellite data	<a href="ftp://ftp.acom.ucar.edu/user/randel/SSUdata">ftp://ftp.acom.ucar.edu/user/randel/SSUdata</a>	2b5
	Stratospheric QBO data	<a href="https://acd-ext.gsfc.nasa.gov/Data_services/met/qbo/qbo.html">https://acd-ext.gsfc.nasa.gov/Data_services/met/qbo/qbo.html</a>	2b5
	CLASSmat	<a href="https://catalogue.ceda.ac.uk/uuid/9058edd550624de69a8b2a882d11b65c">https://catalogue.ceda.ac.uk/uuid/9058edd550624de69a8b2a882d11b65c</a>	2SB.1
UAHNMAT	<a href="https://www.nsstc.uah.edu/climate/">https://www.nsstc.uah.edu/climate/</a>	2SB.1	
TOA Earth Radiation Budget	CERES EBAF Ed4.1	<a href="https://ceres-tool.larc.nasa.gov/ord-tool/jsp/EBAF41Selection.jsp">https://ceres-tool.larc.nasa.gov/ord-tool/jsp/EBAF41Selection.jsp</a>	2f1
	TSIS TIM Level 3 Total Solar Irradiance 24-hour Means	<a href="https://doi.org/10.5067/TSIS/TIM/DATA306">doi:10.5067/TSIS/TIM/DATA306</a>	2f1
Solar Transmission, Apparent	Mauna Loa Observatory	<a href="https://www.esrl.noaa.gov/gmd/webdata/grad/mloapt/mauna_loa_transmission.dat">https://www.esrl.noaa.gov/gmd/webdata/grad/mloapt/mauna_loa_transmission.dat</a>	2f2
Trace Gases	Atmospheric Greenhouse Gas Index (AGGI)	<a href="http://www.esrl.noaa.gov/gmd/aggi">www.esrl.noaa.gov/gmd/aggi</a>	2g1
	Atmospheric Gas trends	<a href="http://www.esrl.noaa.gov/gmd/ccgg/trends">www.esrl.noaa.gov/gmd/ccgg/trends</a>	2g1
	CAMS Reanalysis (Carbon Monoxide)	<a href="https://ads.atmosphere.copernicus.eu/cdsapp#!/dataset/cams-global-radiative-forcing-auxilliary-variables?tab=overview">https://ads.atmosphere.copernicus.eu/cdsapp#!/dataset/cams-global-radiative-forcing-auxilliary-variables?tab=overview</a>	2g7
	Nitrous Oxide	<a href="http://www.esrl.noaa.gov/gmd/hats/combined/N2O.html">www.esrl.noaa.gov/gmd/hats/combined/N2O.html</a>	2g1
	Ozone-Depleting Gas Index (ODGI)	<a href="http://www.esrl.noaa.gov/gmd/odgi">www.esrl.noaa.gov/gmd/odgi</a>	2g2
Tropical Cyclone Data	HURDAT2	<a href="http://www.aoml.noaa.gov/hrd/hurdat/Data_Storm.html">www.aoml.noaa.gov/hrd/hurdat/Data_Storm.html</a>	4g2
	International Best Track Archive for Climate Stewardship (IBTrACS)	<a href="http://www.ncdc.noaa.gov/ibtracs/">www.ncdc.noaa.gov/ibtracs/</a>	4g1, 4g3, 4g5, 4g6, 4g7
	JTWC Best-track Dataset	<a href="https://www.metoc.navy.mil/jtwc/jtwc.html?best-tracks">https://www.metoc.navy.mil/jtwc/jtwc.html?best-tracks</a>	4g4,4g5
	RSMC-Tokyo, JMA best-track data	<a href="http://www.jma.go.jp/jma/jma-eng/jma-center/rsmc-hp-pub-eg/besttrack.html">www.jma.go.jp/jma/jma-eng/jma-center/rsmc-hp-pub-eg/besttrack.html</a>	4g4
	Southwest Pacific Enhanced Archive of Tropical Cyclones (SPEARtc)	<a href="http://apdrc.soest.hawaii.edu/projects/speartc">http://apdrc.soest.hawaii.edu/projects/speartc</a>	4g8
	HURDAT US Hurricanes	<a href="http://www.aoml.noaa.gov/hrd/hurdat/All_U.S._Hurricanes.html">http://www.aoml.noaa.gov/hrd/hurdat/All_U.S._Hurricanes.html</a>	4SB.1

General Variable or Phenomenon	Specific dataset or variable	Source	Section
UV Radiation Data	Canadian sites	<a href="ftp://exp-studies.tor.ec.gc.ca/pub/uvdata/Preliminary/MSC">ftp://exp-studies.tor.ec.gc.ca/pub/uvdata/Preliminary/MSC</a>	5j2
	Greenland site	<a href="http://uv.biospherical.com/Version2/data.asp">http://uv.biospherical.com/Version2/data.asp</a>	5j2
	Norwegian sites	<a href="https://github.com/uvnrpa/Minute_Data">https://github.com/uvnrpa/Minute_Data</a>	5j2
	OMI	<a href="https://disc.gsfc.nasa.gov/datasets?page=1&amp;source=AURA%20OMI">https://disc.gsfc.nasa.gov/datasets?page=1&amp;source=AURA%20OMI</a>	5j2
	NASA Aura Microwave Limb Sounder	<a href="https://mls.jpl.nasa.gov/products/h2o_product.php">https://mls.jpl.nasa.gov/products/h2o_product.php</a>	2g5
Water Vapor, Total Column	COSMIC	<a href="https://cdaac-www.cosmic.ucar.edu/">https://cdaac-www.cosmic.ucar.edu/</a>	2d2
	ERA5	<a href="https://www.ecmwf.int/en/forecasts/datasets/reanalysis-datasets/era5">https://www.ecmwf.int/en/forecasts/datasets/reanalysis-datasets/era5</a>	2d2, 6SB.1
	GNSS Ground-Based Total Column Water Vapor	<a href="https://doi.org/10.25326/18">https://doi.org/10.25326/18</a>	2d2
	JRA-55 Atmospheric Reanalysis	<a href="http://jra.kishou.go.jp/JRA-55/index_en.html">http://jra.kishou.go.jp/JRA-55/index_en.html</a>	2d2
	METOP A B C	<a href="https://www.eumetsat.int/our-satellites/metop-series">https://www.eumetsat.int/our-satellites/metop-series</a>	2d2
	RSS SSM/I -AMSR-E Ocean Total Column Water Vapor	<a href="http://www.remss.com">www.remss.com</a>	2d2
Wind, [Near] Surface	ERA5	<a href="https://www.ecmwf.int/en/forecasts/datasets/reanalysis-datasets/era5">https://www.ecmwf.int/en/forecasts/datasets/reanalysis-datasets/era5</a>	2e2, 4g4
	HadISD3.1.1	<a href="http://www.metoffice.gov.uk/hadobs/hadisd/">www.metoffice.gov.uk/hadobs/hadisd/</a>	2e2
	JRA-55 Atmospheric Reanalysis	<a href="http://jra.kishou.go.jp/JRA-55/index_en.html">http://jra.kishou.go.jp/JRA-55/index_en.html</a>	4h
	MERRA-2	<a href="http://gmao.gsfc.nasa.gov/reanalysis/MERRA-2/">http://gmao.gsfc.nasa.gov/reanalysis/MERRA-2/</a>	2e2
	RSS Radiometer winds	<a href="http://www.remss.com/measurements/wind">www.remss.com/measurements/wind</a>	2e2
Wind, Upper Atmosphere	Climate Forecast System Reanalysis	<a href="http://www.ncdc.noaa.gov/data-access/model-data/model-datasets/climate-forecast-system-version2-cfsv2">www.ncdc.noaa.gov/data-access/model-data/model-datasets/climate-forecast-system-version2-cfsv2</a>	4g3, 4g5, 4g6
	ERA5	<a href="https://www.ecmwf.int/en/forecasts/datasets/reanalysis-datasets/era5">https://www.ecmwf.int/en/forecasts/datasets/reanalysis-datasets/era5</a>	2e3, 4e, 6b
	ERA-Interim	<a href="http://www.ecmwf.int/en/research/climate-reanalysis/era-interim">www.ecmwf.int/en/research/climate-reanalysis/era-interim</a>	2e3
	JRA-55 Atmospheric Reanalysis	<a href="http://jra.kishou.go.jp/JRA-55/index_en.html">http://jra.kishou.go.jp/JRA-55/index_en.html</a>	2e3
	MERRA-2	<a href="http://gmao.gsfc.nasa.gov/reanalysis/MERRA-2/">http://gmao.gsfc.nasa.gov/reanalysis/MERRA-2/</a>	2 e3
	NCEP/NCAR Reanalysis	<a href="https://psl.noaa.gov/data/gridded/data.ncep.reanalysis.html">https://psl.noaa.gov/data/gridded/data.ncep.reanalysis.html</a>	4b2, 4b3, 4c, 4g2, 4g3
	QBO	<a href="https://www.geo.fu-berlin.de/met/ag/strat/produkte/qbo/index.html">https://www.geo.fu-berlin.de/met/ag/strat/produkte/qbo/index.html</a>	2 e3

