

Related Earth System Data Explorer Datasets

Sphere/Data Set	GLOBE Campaigns					GLOBE Observer			
	Air Quality	Frost Tube	Mission Mosquito	Trees Around the GLOBE	Urban Heat Island	Clouds	Mosquito Habitat Mapper	Eclipse Data	Land cover
Atmosphere									
Daily Mean Surface Air Temperature			X	X	X		X	X	X
Monthly Surface Air Temperature			X	X	X		X	X	X
Monthly Surface Air Temperature Anomaly			X	X	X		X	X	X
Daily High Cloud Coverage			X			X	X	X	
Daily Low Cloud Coverage			X			X	X	X	
Daily Middle Cloud Coverage			X			X	X	X	
Daily Total Cloud Coverage			X			X	X	X	
Monthly High Cloud Coverage			X			X	X	X	
Monthly Low Cloud Coverage			X			X	X	X	
Monthly Middle Cloud Coverage			X			X	X	X	
Monthly Total Cloud Coverage			X			X	X	X	
Monthly Cloud Opacity			X			X	X	X	
Monthly Cloud Phase			X			X	X	X	
Monthly Net Flow of Energy towards Earth by Longwave and Shortwave Radiation with Clouds						X			
Monthly Net Flow of Energy towards Earth by Longwave and Shortwave Radiation without Clouds						X			
Monthly Water Vapor in the Atmosphere			X	X		X	X	X	X
Daily Mean Relative Humidity	X		X	X		X	X		X
Monthly Mean Relative Humidity	X		X	X		X	X		X
Daily Precipitation Amount	X		X	X		X	X		X
Monthly Average Precipitation Rate	X		X	X		X	X		X
Daily Aerosol Optical Depth	X								
Monthly Aerosol Optical Depth	X								
Monthly Albedo Measured from Space	X								
Monthly Air Column Concentration of CO in the Lower Troposphere	X								
Daily Air Column Concentration of NO2	X								
Monthly Air Column Concentration of NO2	X								
Monthly Air Column Concentration of SO2	X		X				X		
Monthly Concentration of CO2 in Troposphere	X								
Monthly Total Column Ozone	X								
Monthly Eastward Surface Wind Speed Component (Land + Ocean)	X							X	
Monthly Near-Surface Wind Vectors (Land + Ocean)	X							X	
Monthly Northward Surface Wind Speed Component (Land + Ocean)	X							X	
Biosphere									
Monthly Chlorophyll Concentration									
Monthly Leaf Area Index				X	X				X
Monthly Normalized Difference Vegetation Index				X	X				X

Yearly All Land Cover Types				X					X
Yearly Barren or Sparsely Vegetated Coverage				X					X
Yearly Closed Shrublands Coverage				X					X
Yearly Cropland/Natural Vegetation Mosaic Coverage				X					X
Yearly Croplands Coverage				X					X
Yearly Deciduous Broadleaf Forest Coverage				X					X
Yearly Deciduous Needleleaf Forest Coverage				X					X
Yearly Evergreen Broadleaf Forest Coverage				X					X
Yearly Evergreen Needleleaf Forest Coverage				X					X
Yearly Grasslands Coverage				X					X
Yearly Mixed Forests Coverage				X					X
Yearly Open Shrublands Coverage				X					X
Yearly Permanent Wetlands Coverage				X					X
Yearly Savannas Coverage				X					X
Yearly Snow and Ice Coverage				X					X
Yearly Urban and Built Coverage				X					X
Yearly Water Coverage				X					X
Yearly Woody Savannas Coverage				X					X
Cryosphere									
Monthly Albedo Measured at the Surface		X			X				
Monthly Snow/Ice Percent Coverage		X			X				
Geosphere (Pedosphere)									
Monthly Daytime Surface (Skin) Temperature		X		X	X			X	X
Monthly Nighttime Surface (Skin) Temperature		X		X	X			X	X
Monthly Surface (Skin) Temperature		X		X	X			X	X
Daily Soil Moisture		X		X					X
Monthly Mean Soil Moisture		X		X					X
7-day Average Groundwater Storage Percentile		X		X					X
7-day Average Root Zone Soil Moisture Percentile		X		X					X
Location of Volcanoes	X								
Hydrosphere									
Monthly Sea Surface Salinity			X				X		
Daily Sea Surface Temperature (1995-2008)			X				X		
Daily Sea Surface Temperature (2009-Present)			X				X		
Monthly Mean Sea Surface Temperature			X				X		
US Watersheds			X				X		
World Rivers and Average River Discharge			X				X		
World Watershed Boundaries			X				X		

Atmosphere	
GLOBE Protocol	Earth System Data Explorer Dataset
Aerosols	Daily Aerosol Optical Depth
	Daily High Cloud Coverage
	Daily Low Cloud Coverage
	Daily Middle Cloud Coverage
	Daily Total Cloud Coverage
	Monthly Aerosol Optical Depth
	Monthly High Cloud Coverage
	Monthly Low Cloud Coverage
	Monthly Middle Cloud Coverage
	Monthly Total Cloud Coverage
Air Temperature	Daily Mean Surface Air Temperature
	Monthly Surface Air Temperature
	Monthly Surface Air Temperature Anomaly
Barometric Pressure	Daily High Cloud Coverage
	Daily Low Cloud Coverage
	Daily Mean Surface Air Temperature
	Daily Middle Cloud Coverage
	Daily Total Cloud Coverage
	Monthly High Cloud Coverage
	Monthly Low Cloud Coverage
	Monthly Middle Cloud Coverage
	Monthly Total Cloud Coverage
	Monthly Surface Air Temperature
	Monthly Surface Air Temperature Anomaly
	Daily Mean Relative Humidity
Clouds	Monthly Mean Relative Humidity
	Monthly Water Vapor in the Atmosphere
	Monthly Cloud Opacity

	Monthly Cloud Phase
	Daily High Cloud Coverage
	Daily Low Cloud Coverage
	Daily Middle Cloud Coverage
	Daily Precipitation Amount
	Daily Total Cloud Coverage
	Monthly High Cloud Coverage
	Monthly Low Cloud Coverage
	Monthly Middle Cloud Coverage
	Monthly Net Flow of Energy towards Earth by Longwave and Shortwave Radiation with Clouds
	Monthly Net Flow of Energy towards Earth by Longwave and Shortwave Radiation without Clouds
	Daily Mean Relative Humidity
	Monthly Mean Relative Humidity
	Monthly Average Precipitation Rate
	Monthly Total Cloud Coverage
Precipitation	Monthly Water Vapor in the Atmosphere
	Monthly Cloud Opacity
	Monthly Cloud Phase
	Daily High Cloud Coverage
	Daily Low Cloud Coverage
	Daily Middle Cloud Coverage
	Daily Precipitation Amount
	Daily Total Cloud Coverage
	Monthly High Cloud Coverage
	Monthly Low Cloud Coverage
	Monthly Middle Cloud Coverage
	Daily Mean Relative Humidity
	Monthly Mean Relative Humidity
	Monthly Average Precipitation Rate

	Monthly Total Cloud Coverage
Relative Humidity	Daily Mean Relative Humidity
	Monthly Mean Relative Humidity
	Monthly Water Vapor in the Atmosphere
	Monthly Cloud Opacity
	Monthly Cloud Phase
	Daily High Cloud Coverage
	Daily Low Cloud Coverage
	Daily Middle Cloud Coverage
	Daily Precipitation Amount
	Daily Total Cloud Coverage
	Monthly High Cloud Coverage
	Monthly Low Cloud Coverage
	Monthly Middle Cloud Coverage
	Monthly Average Precipitation Rate
	Monthly Total Cloud Coverage
Surface Temperature	Monthly Daytime Surface (Skin) Temperature
	Monthly Nighttime Surface (Skin) Temperature
	Monthly Surface (Skin) Temperature
Wind	Monthly Eastward Surface Wind Speed Component (Land + Ocean)
	Monthly Near-Surface Wind Vectors (Land + Ocean)
	Monthly Northward Surface Wind Speed Component (Land + Ocean)

Biosphere	
GLOBE Protocol	Earth System Data Explorer Dataset
Biometry	Monthly Chlorophyll Concentration
	Monthly Leaf Area Index
	Monthly Normalized Difference Vegetation Index
Carbon Cycle	Monthly Concentration of CO in the Lower Troposphere
	Monthly Concentration of CO2 in Troposphere
Fire Fuel	Yearly all Land Cover Types (There are additional data sets for each classification category.)
	Monthly Leaf Area Index
	Monthly Normalized Difference Vegetation Index
	Daily Mean Relative Humidity
	Monthly Mean Relative Humidity
Green Up/Green Down	Monthly Chlorophyll Concentration
	Monthly Leaf Area Index
	Monthly Normalized Difference Vegetation Index
Land Cover Classification	Yearly All Land Cover Types
	• Yearly Barren or Sparsely Vegetated Coverage
	• Yearly Closed Shrublands Coverage
	• Yearly Cropland/Natural Vegetation Mosaic Coverage
	• Yearly Croplands Coverage
	• Yearly Deciduous Broadleaf Forest Coverage
	• Yearly Deciduous Needleleaf Forest Coverage
	• Yearly Evergreen Broadleaf Forest Coverage
	• Yearly Evergreen Needleleaf Forest Coverage
	• Yearly Grasslands Coverage
	• Yearly Mixed Forest Coverage
	• Yearly Open Shrublands Coverage
	• Yearly Permanent Wetlands Coverage
	• Yearly Savannas Coverage
	• Yearly Snow and Ice Coverage

	<ul style="list-style-type: none">• Yearly Urban and Built Coverage
	<ul style="list-style-type: none">• Yearly Water Coverage
	<ul style="list-style-type: none">• Yearly Woody Savannas Coverage

Cryosphere

This is a sphere in My NASA Data but not in GLOBE. GLOBE protocols from other spheres that are related have been identified.

GLOBE Protocol	Earth System Data Explorer Dataset
Air Temperature	Daily Mean Surface Air Temperature
	Monthly Albedo Measured at the Surface
	Monthly Surface Air Temperature
	Monthly Surface Air Temperature Anomaly
Arctic Bird Migration	Yearly All Land Cover Types
	-Yearly Evergreen Broadleaf Forest Coverage
	-Yearly Evergreen Needleleaf Forest Coverage
	-Yearly Snow and Ice Coverage
	-Yearly Urban and Built Coverage
Biometry	Monthly Chlorophyll Concentration
	Monthly Leaf Area Index
	Monthly Normalized Difference Vegetation Index
Freshwater Ice Phenology	Monthly Snow/Ice Percent Coverage
	Sea Ice Extent 1979-2017
	Sea Ice Extent 2018-2019
Frost Tube	Daily Soil Moisture
	Monthly Daytime Surface (Skin) Temperature
	7-day Average Groundwater Storage Percentile
	Monthly Albedo Measured at the Surface
	Monthly Mean Soil Moisture
	Monthly Snow/Ice Percent Coverage
	Monthly Nighttime Surface (Skin) Temperature
	7-Day Average Root Zone Soil Moisture Percentile
Green Up/Green Down	Monthly Chlorophyll Concentration
	Monthly Leaf Area Index
	Monthly Normalized Difference Vegetation Index

Land Cover Classification	Yearly All Land Cover Types
	-Yearly Evergreen Broadleaf Forest Coverage
	-Yearly Evergreen Needleleaf Forest Coverage
	-Yearly Snow and Ice Coverage
	-Yearly Urban and Built Coverage
Precipitation	Monthly Cloud Opacity
	Monthly Cloud Phase
	Daily High Cloud Coverage
	Daily Low Cloud Coverage
	Daily Middle Cloud Coverage
	Daily Precipitation Amount
	Daily Total Cloud Coverage
	Monthly Average Precipitation Rate
	Monthly High Cloud Coverage
	Monthly Low Cloud Coverage
	Monthly Middle Cloud Coverage
	Monthly Total Cloud Coverage
	Monthly Water Vapor in the Atmosphere
Salinity (Including Titration)	Daily Sea Surface Temperature (1995-2008)
	Daily Sea Surface Temperature (2009-Present)
	Monthly Mean Sea Surface Temperature
	Monthly Sea Surface Salinity
Solid Precipitation	Monthly Albedo Measured at the Surface
	Monthly Snow/Ice Percent Coverage
Snowboard Construction	Monthly Snow/Ice Percent Coverage
Surface Temperature	Monthly Daytime Surface (Skin) Temperature
	Monthly Albedo Measured at the Surface
	Monthly Surface (Skin) Temperature
	Monthly Nighttime Surface (Skin) Temperature

Geosphere (Pedosphere)

GLOBE Protocol	Earth System Data Explorer Dataset
Frost Tube	Daily Soil Moisture
	Monthly Daytime Surface (Skin) Temperature
	7-day Average Groundwater Storage Percentile
	Monthly Albedo Measured at the Surface
	Monthly Mean Soil Moisture
	Monthly Snow/Ice Percent Coverage
	Monthly Nighttime Surface (Skin) Temperature
	7-Day Average Root Zone Soil Moisture Percentile
Soil Infiltration	Daily Precipitation Amount
	Daily Soil Moisture
	7-day Average Groundwater Storage Percentile
	Monthly Mean Soil Moisture
	Monthly Average Precipitation Rate
	7-day Average Root Zone Soil Moisture Percentile
Soil Moisture	Daily Precipitation Amount
	Daily Soil Moisture
	7-day Average Groundwater Storage Percentile
	Monthly Mean Soil Moisture
	Monthly /Average Precipitation Rate
	7-day Average Root Zone Soil Moisture Percentile
Soil pH	Daily Precipitation Amount
	Daily Soil Moisture
	7-day Average Groundwater Storage Percentile
	Monthly Air Column Concentration of SO ₂
	Monthly Mean Soil Moisture
	Monthly Average Precipitation Rate

	7-day Average Root Zone Soil Moisture Percentile
Soil Temperature	Monthly Daytime Surface (Skin) Temperature
	Monthly Surface Air Temperature
	Monthly Surface Air Temperature Anomaly
	Monthly Surface (Skin) Temperature
	Monthly Daytime Surface (Skin) Temperature
	Monthly Nighttime Surface (Skin) Temperature

Hydrosphere

GLOBE Protocol	Earth System Data Explorer Dataset
Alkalinity	Daily Precipitation Amount
	Daily Soil Moisture
	7-day Average Groundwater Storage Percentile
	Monthly Mean Soil Moisture
	Monthly Average Precipitation Rate
	7-Day Average Root Zone Soil Moisture Percentile
	Conductivity
Daily Soil Moisture	
7-day Average Groundwater Storage Percentile	
Monthly Mean Soil Moisture	
Monthly Average Precipitation Rate	
7-day Average Root Zone Soil Moisture Percentile	
Dissolved Oxygen	
Mosquito Habitat	Daily Precipitation Amount
Nitrates	Monthly Chlorophyll Concentration
pH	Daily Precipitation Amount
	Daily Soil Moisture
	7-day Average Groundwater Storage Percentile
	Monthly Air Column Concentration of SO ₂
	Monthly Mean Soil Moisture
	Monthly Average Precipitation Rate
	7-day Average Root Zone Soil Moisture Percentile
Salinity (Including Titration)	Sea Ice Extent 1979-2017
	Sea Ice Extent 2018-2019
	Monthly Sea Surface Salinity
Water Temperature	Daily Mean Surface Air Temperature
	Daily Sea Surface Temperature (1995-2008)
	Daily Sea Surface Temperature (2009-present)

	Monthly Mean Sea Surface Temperature
	Monthly Surface Air Temperature
	Monthly Surface Air Temperature Anomaly
Water Transparency	Monthly Chlorophyll Concentration

Monthly Surface Air Temperature Anomaly	X	X	X	X	X	X	X	X	X	X
Monthly Near-Surface Wind Vectors (Land + Ocean)	X			X						
Monthly Total Cloud Coverage	X	X	X	X	X	X	X	X	X	X
Monthly Total Column Ozone										
Monthly Northward Surface Wind Speed Component (Land + Ocean)	X			X						

Biosphere

Yearly All Land Cover Types	X			X	X	X	X			X
Yearly Barren or Sparsely Vegetated Coverage	X			X	X	X	X			X
Monthly Chlorophyll Concentration					X		X			
Yearly Closed Shrublands Coverage	X			X	X	X	X			X
Yearly Cropland/Natural Vegetation Mosaic Coverage	X			X	X	X	X			X
Yearly Croplands Coverage	X			X	X	X	X			X
Yearly Deciduous Broadleaf Forest Coverage	X			X	X	X	X			X
Yearly Deciduous Needleleaf Forest Coverage	X			X	X	X	X			X
Yearly Evergreen Broadleaf Forest Coverage	X			X	X	X	X			X
Yearly Evergreen Needleleaf Forest Coverage	X			X	X	X	X			X
Yearly Grasslands Coverage	X			X	X	X	X			X
Yearly Mixed Forests Coverage	X			X	X	X	X			X
Monthly Leaf Area Index	X					X	X			
Monthly Normalized Difference Vegetation Index	X					X	X			
Yearly Open Shrublands Coverage	X			X	X	X	X			X
Yearly Permanent Wetlands Coverage	X			X	X	X	X			X
Yearly Savannas Coverage	X			X	X	X	X			X
Yearly Snow and Ice Coverage	X			X	X	X	X			X
Yearly Urban and Built Coverage	X			X	X	X	X			X
Yearly Water Coverage	X			X	X	X	X			X
Yearly Woody Savannas Coverage	X			X	X	X	X			X

Cryosphere

Monthly Albedo Measured at the Surface										
Sea Ice Extent 1979-2017				X	X				X	
Sea Ice Extent 2018-2019				X	X				X	
Monthly Snow/Ice Percent Coverage										

Geosphere (Pedosphere)

Daily Soil Moisture		X		X	X	X	X	X	X	
Monthly Daytime Surface (Skin) Temperature		X		X	X	X	X	X	X	X
7-day Average Groundwater Storage Percentile		X		X	X	X	X	X	X	
Location of Volcanoes										
Monthly Mean Soil Moisture		X		X	X	X	X	X	X	
Monthly Nighttime Surface (Skin) Temperature		X		X	X	X	X	X	X	X
Monthly Surface (Skin) Temperature		X		X	X	X	X	X	X	X
7-day Average Root Zone Soil Moisture Percentile		X		X	X	X	X	X	X	
Hydrosphere										
Daily Sea Surface Temperature (1995-2008)		X	X	X						
Daily Sea Surface Temperature (2009-present)		X	X	X						
Monthly Mean Sea Surface Temperature		X	X	X						
Monthly Sea Surface Salinity			X	X	X				X	
Topography and Bathymetry				X						