

GEOS-IT File Specification Parameter Table

The tables below show the parameters for each GEOS-IT file collection. The shortname for ordering from the GES DISC is also included in the header for each description.

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asm_const_0hr_glo_C180x180x6_slv (GEOSIT_ASM_C0_C_SLV): Constant Fields

Frequency: 0-hourly from 00:00 UTC (invariant)

Spatial Grid: 2D, single-level, global horizontal resolution on cube

Dimensions: grid resolution=180, time=1

Granule Size: ~7 MB

<i>Name</i>	<i>Dim</i>	<i>Description</i>	<i>Units</i>
AREA	tyx	agrid cell area	m+2
FRLAKE	tyx	fraction of lake	1
FRLAND	tyx	fraction of land	1
FRLANDICE	tyx	fraction of land ice	1
FROCEAN	tyx	fraction of ocean	1
PHIS	tyx	surface geopotential height	m+2 s-2
SGH	tyx	isotropic stdv of GWD topography	m
corner_lats	YCdim XCdim	latitude	degrees_north
corner_lons	YCdim XCdim	longitude	degrees_east

asm_const_0hr_glo_L576x361_slv (GEOSIT_ASM_C0_L_SLV): Constant Fields

Frequency: 0-hourly from 00:00 UTC (invariant)

Spatial Grid: 2D, single-level, global horizontal resolution

Dimensions: longitude=576, latitude=361, time=1

Granule Size: ~1 MB

<i>Name</i>	<i>Dim</i>	<i>Description</i>	<i>Units</i>
AREA	tyx	agrid cell area	m+2
FRLAKE	tyx	fraction of lake	1
FRLAND	tyx	fraction of land	1
FRLANDICE	tyx	fraction of land ice	1
FROCEAN	tyx	fraction of ocean	1
PHIS	tyx	surface geopotential height	m+2 s-2
SGH	tyx	isotropic stdv of GWD topography	m

adg_tavg_3hr_glo_L576x361_slv (GEOSIT_ADG_T3_L_SLV): Extended Aerosol Diagnostics

Frequency: 3-hourly from 01:30 UTC (time-averaged)

Spatial Grid: 2D, single-level, global horizontal resolution

Dimensions: longitude=576, latitude=361, time=1

Granule Size: ~42 MB

<i>Name</i>	<i>Dim</i>	<i>Description</i>	<i>Units</i>
BCDP001	tyx	Black Carbon Dry Deposition Bin 001	kg m-2 s-1
BCDP002	tyx	Black Carbon Dry Deposition Bin 002	kg m-2 s-1
BCEM001	tyx	Black Carbon Emission Bin 001	kg m-2 s-1
BCEM002	tyx	Black Carbon Emission Bin 002	kg m-2 s-1
BCEMAN	tyx	Black Carbon Anthropogenic Emissions	kg m-2 s-1
BCEMBB	tyx	Black Carbon Biomass Burning Emissions	kg m-2 s-1
BCEMBF	tyx	Black Carbon Biofuel Emissions	kg m-2 s-1
BCHYPHIL	tyx	Black Carbon Hydrophobic to Hydrophilic	kg m-2 s-1
BCSV	tyx	black carbon tendency due to conv scav	kg m-2 s-1
BCWT001	tyx	Black Carbon Wet Deposition Bin 001	kg m-2 s-1
BCWT002	tyx	Black Carbon Wet Deposition Bin 002	kg m-2 s-1
DUAERIDX	tyx	Dust TOMS UV Aerosol Index	1
DUDP001	tyx	Dust Dry Deposition Bin 001	kg m-2 s-1
DUDP002	tyx	Dust Dry Deposition Bin 002	kg m-2 s-1
DUDP003	tyx	Dust Dry Deposition Bin 003	kg m-2 s-1
DUDP004	tyx	Dust Dry Deposition Bin 004	kg m-2 s-1
DUDP005	tyx	Dust Dry Deposition Bin 005	kg m-2 s-1
DUEM001	tyx	Dust Emission Bin 001	kg m-2 s-1
DUEM002	tyx	Dust Emission Bin 002	kg m-2 s-1
DUEM003	tyx	Dust Emission Bin 003	kg m-2 s-1
DUEM004	tyx	Dust Emission Bin 004	kg m-2 s-1
DUEM005	tyx	Dust Emission Bin 005	kg m-2 s-1
DUEXTTFM	tyx	Dust Extinction AOT [550 nm] - PM 1.0 um	1
DUSCATFM	tyx	Dust Scattering AOT [550 nm] - PM 1.0 um	1
DUSD001	tyx	Dust Sedimentation Bin 001	kg m-2 s-1
DUSD002	tyx	Dust Sedimentation Bin 002	kg m-2 s-1
DUSD003	tyx	Dust Sedimentation Bin 003	kg m-2 s-1
DUSD004	tyx	Dust Sedimentation Bin 004	kg m-2 s-1
DUSD005	tyx	Dust Sedimentation Bin 005	kg m-2 s-1
DUSV	tyx	dust tendency due to conv scav	kg m-2 s-1
DUWT001	tyx	Dust Wet Deposition Bin 001	kg m-2 s-1
DUWT002	tyx	Dust Wet Deposition Bin 002	kg m-2 s-1

DUWT003	tyx	Dust Wet Deposition Bin 003	kg m-2 s-1
DUWT004	tyx	Dust Wet Deposition Bin 004	kg m-2 s-1
DUWT005	tyx	Dust Wet Deposition Bin 005	kg m-2 s-1
NH3DP	tyx	Ammonia Dry Deposition	kg m-2 s-1
NH3EM	tyx	Ammonia Emission	kg m-2 s-1
NH3SV	tyx	Ammonia Convective Scavenging	kg m-2 s-1
NH3WT	tyx	Ammonia Wet Deposition	kg m-2 s-1
NH4DP	tyx	Ammonium Dry Deposition	kg m-2 s-1
NH4SD	tyx	Ammonium Settling	kg m-2 s-1
NH4SV	tyx	Ammonium Convective Scavenging	kg m-2 s-1
NH4WT	tyx	Ammonium Wet Deposition	kg m-2 s-1
NIDP001	tyx	Nitrate Dry Deposition Bin 001	kg m-2 s-1
NIDP002	tyx	Nitrate Dry Deposition Bin 002	kg m-2 s-1
NIDP003	tyx	Nitrate Dry Deposition Bin 003	kg m-2 s-1
NIHT001	tyx	Nitrate Production from Het Chem Bin 001	kg m-2 s-1
NIHT002	tyx	Nitrate Production from Het Chem Bin 002	kg m-2 s-1
NIHT003	tyx	Nitrate Production from Het Chem Bin 003	kg m-2 s-1
NIPNH3AQ	tyx	Ammonia Change from Aqueous Chemistry	kg m-2 s-1
NIPNH4AQ	tyx	Ammonium Production from Aqueous Chemistry	kg m-2 s-1
NIPNO3AQ	tyx	Nitrate Production from Aqueous Chemistry	kg m-2 s-1
NISD001	tyx	Nitrate Sedimentation Bin 001	kg m-2 s-1
NISD002	tyx	Nitrate Sedimentation Bin 002	kg m-2 s-1
NISD003	tyx	Nitrate Sedimentation Bin 003	kg m-2 s-1
NISV	tyx	nitrate tendency due to conv scav	kg m-2 s-1
NISV001	tyx	Nitrate Convective Scavenging Bin 001	kg m-2 s-1
NISV002	tyx	Nitrate Convective Scavenging Bin 002	kg m-2 s-1
NISV003	tyx	Nitrate Convective Scavenging Bin 003	kg m-2 s-1
NIWT001	tyx	Nitrate Wet Deposition Bin 001	kg m-2 s-1
NIWT002	tyx	Nitrate Wet Deposition Bin 002	kg m-2 s-1
NIWT003	tyx	Nitrate Wet Deposition Bin 003	kg m-2 s-1
OCDP001	tyx	Organic Carbon Dry Deposition Bin 001	kg m-2 s-1
OCDP002	tyx	Organic Carbon Dry Deposition Bin 002	kg m-2 s-1
OCEM001	tyx	Organic Carbon Emission Bin 001	kg m-2 s-1
OCEM002	tyx	Organic Carbon Emission Bin 002	kg m-2 s-1
OCEMAN	tyx	Organic Carbon Anthropogenic Emissions	kg m-2 s-1
OCEMBB	tyx	Organic Carbon Biomass Burning Emissions	kg m-2 s-1
OCEMBF	tyx	Organic Carbon Biofuel Emissions	kg m-2 s-1
OCEMBG	tyx	Organic Carbon Biogenic Emissions	kg m-2 s-1
OCHYPHIL	tyx	Organic Carbon Hydrophobic to Hydrophilic	kg m-2 s-1

OCSV	tyx	organic carbon tendency due to conv scav	kg m-2 s-1
OCWT001	tyx	Organic Carbon Wet Deposition Bin 001	kg m-2 s-1
OCWT002	tyx	Organic Carbon Wet Deposition Bin 002	kg m-2 s-1
SO2EMAN	tyx	SO2 Anthropogenic Emissions	kg m-2 s-1
SO2EMBB	tyx	SO2 Biomass Burning Emissions	kg m-2 s-1
SO2EMVE	tyx	SO2 Volcanic (explosive) Emissions	kg m-2 s-1
SO2EMVN	tyx	SO2 Volcanic (non-explosive) Emissions	kg m-2 s-1
SO4EMAN	tyx	SO4 Anthropogenic Emissions	kg m-2 s-1
SSAERIDX	tyx	Sea Salt TOMS UV Aerosol Index	1
SSDP001	tyx	Sea Salt Dry Deposition Bin 001	kg m-2 s-1
SSDP002	tyx	Sea Salt Dry Deposition Bin 002	kg m-2 s-1
SSDP003	tyx	Sea Salt Dry Deposition Bin 003	kg m-2 s-1
SSDP004	tyx	Sea Salt Dry Deposition Bin 004	kg m-2 s-1
SSDP005	tyx	Sea Salt Dry Deposition Bin 005	kg m-2 s-1
SSEM001	tyx	Sea Salt Emission Bin 001	kg m-2 s-1
SSEM002	tyx	Sea Salt Emission Bin 002	kg m-2 s-1
SSEM003	tyx	Sea Salt Emission Bin 003	kg m-2 s-1
SSEM004	tyx	Sea Salt Emission Bin 004	kg m-2 s-1
SSEM005	tyx	Sea Salt Emission Bin 005	kg m-2 s-1
SSEXTTFM	tyx	Sea Salt Extinction AOT [550 nm] - PM 1.0 um	1
SSSCATFM	tyx	Sea Salt Scattering AOT [550 nm] - PM 1.0 um	1
SSSD001	tyx	Sea Salt Sedimentation Bin 001	kg m-2 s-1
SSSD002	tyx	Sea Salt Sedimentation Bin 002	kg m-2 s-1
SSSD003	tyx	Sea Salt Sedimentation Bin 003	kg m-2 s-1
SSSD004	tyx	Sea Salt Sedimentation Bin 004	kg m-2 s-1
SSSD005	tyx	Sea Salt Sedimentation Bin 005	kg m-2 s-1
SSSV	tyx	sea salt tendency due to conv scav	kg m-2 s-1
SSWT001	tyx	Sea Salt Wet Deposition Bin 001	kg m-2 s-1
SSWT002	tyx	Sea Salt Wet Deposition Bin 002	kg m-2 s-1
SSWT003	tyx	Sea Salt Wet Deposition Bin 003	kg m-2 s-1
SSWT004	tyx	Sea Salt Wet Deposition Bin 004	kg m-2 s-1
SSWT005	tyx	Sea Salt Wet Deposition Bin 005	kg m-2 s-1
SUDP001	tyx	Sulfate Dry Deposition Bin 001	kg m-2 s-1
SUDP002	tyx	Sulfate Dry Deposition Bin 002	kg m-2 s-1
SUDP003	tyx	Sulfate Dry Deposition Bin 003	kg m-2 s-1
SUDP004	tyx	Sulfate Dry Deposition Bin 004	kg m-2 s-1
SUEM001	tyx	Sulfate Emission Bin 001	kg m-2 s-1
SUEM002	tyx	Sulfate Emission Bin 002	kg m-2 s-1
SUEM003	tyx	Sulfate Emission Bin 003	kg m-2 s-1

SUEM004	tyx	Sulfate Emission Bin 004	kg m-2 s-1
SUPMSA	tyx	MSA Prod from DMS Oxidation [column]	kg m-2 s-1
SUPSO2	tyx	SO2 Prod from DMS Oxidation [column]	kg m-2 s-1
SUPSO4AQ	tyx	SO4 Prod from Aqueous SO2 Oxidation [column]	kg m-2 s-1
SUPSO4G	tyx	SO4 Prod from Gaseous SO2 Oxidation [column]	kg m-2 s-1
SUPSO4WT	tyx	SO4 Prod from Aqueous SO2 Oxidation (wet dep) [column]	kg m-2 s-1
SUSV	tyx	sulfate tendency due to conv scav	kg m-2 s-1
SUWT001	tyx	Sulfate Wet Deposition Bin 001	kg m-2 s-1
SUWT002	tyx	Sulfate Wet Deposition Bin 002	kg m-2 s-1
SUWT003	tyx	Sulfate Wet Deposition Bin 003	kg m-2 s-1
SUWT004	tyx	Sulfate Wet Deposition Bin 004	kg m-2 s-1

aer_inst_3hr_glo_L576x361_v72 (GEOSIT_AER_I3_L_V72): Aerosol Diagnostics

Frequency: 3-hourly from 00:00 UTC (instantaneous)

Spatial Grid: 3D, model-level, global horizontal resolution

Dimensions: longitude=576, latitude=361, level=72, time=1

Granule Size: ~700 MB

<i>Name</i>	<i>Dim</i>	<i>Description</i>	<i>Units</i>
AIRDENS	tzyx	moist air density	kg m-3
BCPHILIC	tzyx	Hydrophilic Black Carbon	kg kg-1
BCPHOBIC	tzyx	Hydrophobic Black Carbon	kg kg-1
DELP	tzyx	pressure thickness	Pa
DMS	tzyx	Dimethylsulphide	kg kg-1
DU001	tzyx	Dust Mixing Ratio (bin 001)	kg kg-1
DU002	tzyx	Dust Mixing Ratio (bin 002)	kg kg-1
DU003	tzyx	Dust Mixing Ratio (bin 003)	kg kg-1
DU004	tzyx	Dust Mixing Ratio (bin 004)	kg kg-1
DU005	tzyx	Dust Mixing Ratio (bin 005)	kg kg-1
FRSEAICE	tyx	ice covered fraction of tile	1
MSA	tzyx	Methanesulphonic acid	kg kg-1
NH3	tzyx	Ammonia (NH3, gas phase)	kg kg-1
NH4A	tzyx	Ammonium ion (NH4+, aerosol phase)	kg kg-1
NO3AN1	tzyx	Nitrate size bin 001	kg kg-1
NO3AN2	tzyx	Nitrate size bin 002	kg kg-1
NO3AN3	tzyx	Nitrate size bin 003	kg kg-1
OCPHILIC	tzyx	Hydrophilic Organic Carbon (Particulate Matter)	kg kg-1

OCPHOBIC	tzyx	Hydrophobic Organic Carbon (Particulate Matter)	kg kg-1
PS	tyx	surface pressure	Pa
RH	tzyx	relative humidity after moist	1
SO2	tzyx	Sulphur dioxide	kg kg-1
SO4	tzyx	Sulphate aerosol	kg kg-1
SS001	tzyx	Sea Salt Mixing Ratio (bin 001)	kg kg-1
SS002	tzyx	Sea Salt Mixing Ratio (bin 002)	kg kg-1
SS003	tzyx	Sea Salt Mixing Ratio (bin 003)	kg kg-1
SS004	tzyx	Sea Salt Mixing Ratio (bin 004)	kg kg-1
SS005	tzyx	Sea Salt Mixing Ratio (bin 005)	kg kg-1
TS	tyx	surface skin temperature	K

aer_tavg_3hr_glo_L576x361_slv (GEOSIT_AER_T3_L_SLV): Primary Aerosol Diagnostics

Frequency: 3-hourly from 01:30 UTC (time-averaged)

Spatial Grid: 2D, single-level, global horizontal resolution

Dimensions: longitude=576, latitude=361, time=1

Granule Size: ~28 MB

<i>Name</i>	<i>Dim</i>	<i>Description</i>	<i>Units</i>
BCANGSTR	tyx	Black Carbon Angstrom parameter [470-870 nm]	1
BCCMASS	tyx	Black Carbon Column Mass Density	kg m-2
BCEXTTAU	tyx	Black Carbon Extinction AOT [550 nm]	1
BCFLUXU	tyx	Black Carbon column u-wind mass flux	kg m-1 s-1
BCFLUXV	tyx	Black Carbon column v-wind mass flux	kg m-1 s-1
BCSCATAU	tyx	Black Carbon Scattering AOT [550 nm]	1
BCSMASS	tyx	Black Carbon Surface Mass Concentration	kg m-3
DMSCMASS	tyx	DMS Column Mass Density	kg m-2
DMSSMASS	tyx	DMS Surface Mass Concentration	kg m-3
DUANGSTR	tyx	Dust Angstrom parameter [470-870 nm]	1
DUCMASS	tyx	Dust Column Mass Density	kg m-2
DUCMASS25	tyx	Dust Column Mass Density - PM 2.5	kg m-2
DUEXTT25	tyx	Dust Extinction AOT [550 nm] - PM 2.5	1
DUEXTTAU	tyx	Dust Extinction AOT [550 nm]	1
DUFLUXU	tyx	Dust column u-wind mass flux	kg m-1 s-1
DUFLUXV	tyx	Dust column v-wind mass flux	kg m-1 s-1
DUSCAT25	tyx	Dust Scattering AOT [550 nm] - PM 2.5	1
DUSCATAU	tyx	Dust Scattering AOT [550 nm]	1

DUSMASS	tyx	Dust Surface Mass Concentration	kg m-3
DUSMASS25	tyx	Dust Surface Mass Concentration - PM 2.5	kg m-3
HNO3CMASS	tyx	Nitric Acid Column Mass Density	kg m-3
HNO3SMASS	tyx	Nitric Acid Surface Mass Concentration	kg m-3
NH3CMASS	tyx	Ammonia Column Mass Density	kg m-3
NH3SMASS	tyx	Ammonia Surface Mass Concentration	kg m-3
NH4CMASS	tyx	Ammonium Column Mass Density	kg m-3
NH4SMASS	tyx	Ammonium Surface Mass Concentration	kg m-3
NIANGSTR	tyx	Nitrate Angstrom parameter [470-870 nm]	1
NICMASS	tyx	Nitrate Column Mass Density	kg m-2
NICMASS25	tyx	Nitrate Column Mass Density [PM2.5]	kg m-2
NIEXTTAU	tyx	Nitrate Extinction AOT [550 nm]	1
NIEXTTFM	tyx	Nitrate Extinction AOT [550 nm] - PM 1.0 um	1
NIFLUXU	tyx	Nitrate column u-wind mass flux	kg m-1 s-1
NIFLUXV	tyx	Nitrate column v-wind mass flux	kg m-1 s-1
NISCATAU	tyx	Nitrate Scattering AOT [550 nm]	1
NISCATFM	tyx	Nitrate Scattering AOT [550 nm] - PM 1.0 um	1
NISMASS	tyx	Nitrate Surface Mass Concentration	kg m-3
NISMASS25	tyx	Nitrate Surface Mass Concentration [PM2.5]	kg m-3
OCANGSTR	tyx	Organic Carbon Angstrom parameter [470-870 nm]	1
OCCMASS	tyx	Organic Carbon Column Mass Density	kg m-2
OCEXTTAU	tyx	Organic Carbon Extinction AOT [550 nm]	1
OCFLUXU	tyx	Organic Carbon column u-wind mass flux	kg m-1 s-1
OCFLUXV	tyx	Organic Carbon column v-wind mass flux	kg m-1 s-1
OCSCATAU	tyx	Organic Carbon Scattering AOT [550 nm]	1
OCSMASS	tyx	Organic Carbon Surface Mass Concentration	kg m-3
SO2CMASS	tyx	SO2 Column Mass Density	kg m-2
SO2SMASS	tyx	SO2 Surface Mass Concentration	kg m-3
SO4CMASS	tyx	SO4 Column Mass Density	kg m-2
SO4SMASS	tyx	SO4 Surface Mass Concentration	kg m-3
SSANGSTR	tyx	Sea Salt Angstrom parameter [470-870 nm]	1
SSCMASS	tyx	Sea Salt Column Mass Density	kg m-2
SSCMASS25	tyx	Sea Salt Column Mass Density - PM 2.5	kg m-2
SSEXTT25	tyx	Sea Salt Extinction AOT [550 nm] - PM 2.5	1
SSEXTTAU	tyx	Sea Salt Extinction AOT [550 nm]	1
SSFLUXU	tyx	Sea Salt column u-wind mass flux	kg m-1 s-1
SSFLUXV	tyx	Sea Salt column v-wind mass flux	kg m-1 s-1
SSSCAT25	tyx	Sea Salt Scattering AOT [550 nm] - PM 2.5	1
SSSCATAU	tyx	Sea Salt Scattering AOT [550 nm]	1

SSSMAS	tyx	Sea Salt Surface Mass Concentration	kg m-3
SSSMAS25	tyx	Sea Salt Surface Mass Concentration - PM 2.5	kg m-3
SUANGSTR	tyx	SO4 Angstrom parameter [470-870 nm]	1
SUEXTTAU	tyx	SO4 Extinction AOT [550 nm]	1
SUFLUXU	tyx	SO4 column u-wind mass flux	kg m-1 s-1
SUFLUXV	tyx	SO4 column v-wind mass flux	kg m-1 s-1
SUSCATAU	tyx	SO4 Scattering AOT [550 nm]	1
TOTANGSTR	tyx	Total Aerosol Angstrom parameter [470-870 nm]	1
TOTEXTTAU	tyx	Total Aerosol Extinction AOT [550 nm]	1
TOTSCATAU	tyx	Total Aerosol Scattering AOT [550 nm]	1

asm_inst_1hr_glo_L576x361_slv (GEOSIT_ASM_I1_L_SLV): State

Frequency: 1-hourly from 00:00 UTC (instantaneous)

Spatial Grid: 2D, single-level, global horizontal resolution

Dimensions: longitude=576, latitude=361, time=1

Granule Size: ~12 MB

<i>Name</i>	<i>Dim</i>	<i>Description</i>	<i>Units</i>
DISPH	tyx	zero plane displacement height	m
DMDTANA	tyx	vertically integrated mass tendency due to analysis	kg m-2 s-1
DMDTDYN	tyx	vertically integrated mass tendency due to dynamics	kg m-2 s-1
DMDTPHY	tyx	vertically integrated mass tendency due to physics	kg m-2 s-1
DQDTANAIN	tyx	vertically integrated water vapor tendency due to analysis	kg m-2 s-1
HOURNORAIN	tyx	time-during an hour with no precipitation	s
PS	tyx	surface pressure	Pa
QV10M	tyx	10-meter specific humidity	kg kg-1
QV2M	tyx	2-meter specific humidity	kg kg-1
SLP	tyx	sea level pressure	Pa
T10M	tyx	10-meter air temperature	K
T2M	tyx	2-meter air temperature	K
T2MMAX	tyx	2-meter air temperature	K
T2MMIN	tyx	2-meter air temperature	K
TO3	tyx	total column ozone	Dobsons
TOX	tyx	total column odd oxygen	kg m-2
TPRECMAX	tyx	total precipitation	kg m-2 s-1
TQI	tyx	total precipitable ice water	kg m-2
TQL	tyx	total precipitable liquid water	kg m-2

TQV	tyx	total precipitable water vapor	kg m-2
TROPPB	tyx	tropopause pressure based on blended estimate	Pa
TROPPT	tyx	tropopause pressure based on thermal estimate	Pa
TROPPV	tyx	tropopause pressure based on EPV estimate	Pa
TROPQ	tyx	tropopause specific humidity using blended TROPP estimate	kg kg-1
TROPT	tyx	tropopause temperature using blended TROPP estimate	K
TS	tyx	surface skin temperature	K
U10M	tyx	10-meter eastward wind	m s-1
U2M	tyx	2-meter eastward wind	m s-1
U50M	tyx	50-meter eastward wind	m s-1
V10M	tyx	10-meter northward wind	m s-1
V2M	tyx	2-meter northward wind	m s-1
V50M	tyx	50-meter northward wind	m s-1

asm_inst_3hr_glo_L576x361_p42 (GEOSIT_ASM_I3_L_P42): State On Pressure Levels

Frequency: 3-hourly from 00:00 UTC (instantaneous)

Spatial Grid: 3D, pressure-level, global horizontal resolution

Dimensions: longitude=576, latitude=361, level=42, time=1

Granule Size: ~168 MB

<i>Name</i>	<i>Dim</i>	<i>Description</i>	<i>Units</i>
EPV	tzyx	ertels potential vorticity	K m+2 kg-1 s-1
H	tzyx	edge heights	m
O3	tzyx	ozone mass mixing ratio	kg kg-1
OMEGA	tzyx	vertical pressure velocity	Pa s-1
PHIS	tyx	surface geopotential height	m+2 s-2
PS	tyx	surface pressure	Pa
QI	tzyx	mass fraction of cloud ice water	kg kg-1
QL	tzyx	mass fraction of cloud liquid water	kg kg-1
QR	tzyx	mass fraction of falling rain	kg kg-1
QS	tzyx	mass fraction of falling snow	kg kg-1
QV	tzyx	specific humidity	kg kg-1
RH	tzyx	relative humidity after moist	1
SLP	tyx	sea level pressure	Pa
T	tzyx	air temperature	K
T2M	tyx	2-meter air temperature	K

U	tzyx	eastward wind	m s-1
U10M	tyx	10-meter eastward wind	m s-1
V	tzyx	northward wind	m s-1
V10M	tyx	10-meter northward wind	m s-1

asm_inst_3hr_glo_L576x361_v72 (GEOSIT_ASM_I3_L_V72): State On Native Levels

Frequency: 3-hourly from 00:00 UTC (instantaneous)

Spatial Grid: 3D, model-level, global horizontal resolution

Dimensions: longitude=576, latitude=361, level=72, time=1

Granule Size: ~316 MB

<i>Name</i>	<i>Dim</i>	<i>Description</i>	<i>Units</i>
CLOUD	tzyx	cloud fraction for radiation	1
DELP	tzyx	pressure thickness	Pa
EPV	tzyx	ertels potential vorticity	K m+2 kg-1 s-1
H	tzyx	mid layer heights	m
O3	tzyx	ozone mass mixing ratio	kg kg-1
OMEGA	tzyx	vertical pressure velocity	Pa s-1
PHIS	tyx	surface geopotential height	m+2 s-2
PL	tzyx	mid level pressure	Pa
PS	tyx	surface pressure	Pa
QI	tzyx	mass fraction of cloud ice water	kg kg-1
QL	tzyx	mass fraction of cloud liquid water	kg kg-1
QR	tzyx	mass fraction of falling rain	kg kg-1
QS	tzyx	mass fraction of falling snow	kg kg-1
QV	tzyx	specific humidity	kg kg-1
RH	tzyx	relative humidity after moist	1
SLP	tyx	sea level pressure	Pa
T	tzyx	air temperature	K
U	tzyx	eastward wind	m s-1
V	tzyx	northward wind	m s-1

asm_tavg_3hr_glo_L576x361_v72 (GEOSIT_ASM_T3_L_V72): Assimilated State On Native Levels

Frequency: 3-hourly from 01:30 UTC (time-averaged)

Spatial Grid: 3D, model-level, global horizontal resolution

Dimensions: *longitude=576, latitude=361, level=72, time=1*

Granule Size: *~306 MB*

<i>Name</i>	<i>Dim</i>	<i>Description</i>	<i>Units</i>
DELP	tzyx	pressure thickness	Pa
EPV	tzyx	ertels potential vorticity	K m+2 kg-1 s-1
H	tzyx	mid layer heights	m
O3	tzyx	ozone mass mixing ratio	kg kg-1
OMEGA	tzyx	vertical pressure velocity	Pa s-1
PHIS	tyx	surface geopotential height	m+2 s-2
PL	tzyx	mid level pressure	Pa
PS	tyx	surface pressure	Pa
QI	tzyx	mass fraction of cloud ice water	kg kg-1
QL	tzyx	mass fraction of cloud liquid water	kg kg-1
QR	tzyx	mass fraction of falling rain	kg kg-1
QS	tzyx	mass fraction of falling snow	kg kg-1
QV	tzyx	specific humidity	kg kg-1
RH	tzyx	relative humidity after moist	1
SLP	tyx	sea level pressure	Pa
T	tzyx	air temperature	K
U	tzyx	eastward wind	m s-1
V	tzyx	northward wind	m s-1

chm_inst_3hr_glo_L576x361_v72 (GEOSIT_CHM_I3_L_V72): Chemistry Diagnostics

Frequency: *3-hourly from 00:00 UTC (instantaneous)*

Spatial Grid: *3D, model-level, global horizontal resolution*

Dimensions: *longitude=576, latitude=361, level=72, time=1*

Granule Size: *~86 MB*

<i>Name</i>	<i>Dim</i>	<i>Description</i>	<i>Units</i>
AIRDENS	tzyx	moist air density	kg m-3
CO	tzyx	Carbon Monoxide (All Sources)	mol mol-1
CO2	tzyx	Carbon Dioxide (All Sources)	mol mol-1
DELP	tzyx	pressure thickness	Pa
PS	tyx	surface pressure	Pa

chm_tavg_3hr_glo_L576x361_slv (GEOSIT_CHM_T3_L_SLV): Chemistry Diagnostics

Frequency: 3-hourly from 01:30 UTC (time-averaged)

Spatial Grid: 2D, single-level, global horizontal resolution

Dimensions: longitude=576, latitude=361, time=1

Granule Size: ~3 MB

<i>Name</i>	<i>Dim</i>	<i>Description</i>	<i>Units</i>
CO2CL	tyx	CO2 Bulk Mixing Ratio (Column Mass/ps) Bin 001	1
CO2EM	tyx	CO2 Emission Bin 001	kg m-2 s-1
CO2SC	tyx	CO2 Surface Concentration Bin 001	1e-6
COCL	tyx	CO Column Burden	kg m-2
COEM	tyx	CO Emission	kg m-2 s-1
COLS	tyx	CO Chemical Loss	kg m-2 s-1
COPD	tyx	CO Chemical Production	kg m-2 s-1
COSC	tyx	CO Surface Concentration in ppbv	1e-9
FRSEAICE	tyx	ice covered fraction of tile	1
TS	tyx	surface skin temperature	K

cld_tavg_3hr_glo_L576x361_v72 (GEOSIT_CLD_T3_L_V72): Cloud Diagnostics

Frequency: 3-hourly from 01:30 UTC (time-averaged)

Spatial Grid: 3D, model-level, global horizontal resolution

Dimensions: longitude=576, latitude=361, level=72, time=1

Granule Size: ~100 MB

<i>Name</i>	<i>Dim</i>	<i>Description</i>	<i>Units</i>
CFAN	tzyx	convective cloud area fraction	1
CFCU	tzyx	updraft areal fraction	1
CFLS	tzyx	large scale cloud area fraction	1
DELP	tzyx	pressure thickness	Pa
DTRAIN	tzyx	detraining mass flux	kg m-2 s-1
PS	tyx	surface pressure	Pa
QCCU	tzyx	grid mean convective condensate	kg kg-1
QIAN	tzyx	mass fraction of convective cloud ice water	kg kg-1
QILS	tzyx	mass fraction of large scale cloud ice water	kg kg-1
QLAN	tzyx	mass fraction of convective cloud liquid water	kg kg-1
QLLS	tzyx	mass fraction of large scale cloud liquid water	kg kg-1

RH	tzyx	relative humidity after moist	1
TAUCLI	tzyx	in cloud optical thickness for ice clouds	1
TAUCLW	tzyx	in cloud optical thickness for liquid clouds	1

flx_avg_1hr_glo_L576x361_slv (GEOSIT_FLX_T1_L_SLV): Surface Flux Diagnostics

Frequency: 1-hourly from 00:30 UTC (time-averaged)

Spatial Grid: 2D, single-level, global horizontal resolution

Dimensions: longitude=576, latitude=361, time=1

Granule Size: ~17 MB

<i>Name</i>	<i>Dim</i>	<i>Description</i>	<i>Units</i>
BSTAR	tyx	surface buoyancy scale	m s-2
CDH	tyx	surface exchange coefficient for heat	kg m-2 s-1
CDM	tyx	surface exchange coefficient for momentum	kg m-2 s-1
CDQ	tyx	surface exchange coefficient for moisture	kg m-2 s-1
CN	tyx	surface neutral drag coefficient	1
DISPH	tyx	zero plane displacement height	m
EFLUX	tyx	total latent energy flux	W m-2
EVAP	tyx	evaporation from turbulence	kg m-2 s-1
FRCAN	tyx	areal fraction of anvil showers	1
FRCCN	tyx	areal fraction of convective showers	1
FRCLS	tyx	areal fraction of nonanvil large scale showers	1
FRSEAICE	tyx	ice covered fraction of tile	1
HFLUX	tyx	sensible heat flux from turbulence	W m-2
HLML	tyx	surface layer height	m
NIRDF	tyx	surface downwelling nearinfrared diffuse flux	W m-2
NIRDR	tyx	surface downwelling nearinfrared beam flux	W m-2
PBLH	tyx	planetary boundary layer height	m
PGENTOT	tyx	Total column production of precipitation	kg m-2 s-1
PRECANV	tyx	anvil precipitation	kg m-2 s-1
PRECCON	tyx	convective precipitation	kg m-2 s-1
PRECLSC	tyx	nonanvil large scale precipitation	kg m-2 s-1
PRECSNO	tyx	snowfall	kg m-2 s-1
PECTOT	tyx	total precipitation	kg m-2 s-1
PREVTOT	tyx	Total column re-evap/subl of precipitation	kg m-2 s-1
QLML	tyx	surface specific humidity	1
QSH	tyx	effective surface specific humidity	kg kg-1

QSTAR	tyx	surface moisture scale	kg kg-1
RADSRF	tyx	net downwelling radiation at surface	W m-2
RHOA	tyx	air density at surface	kg m-3
RISFC	tyx	surface bulk richardson number	1
SPEED	tyx	surface ventilation velocity	m s-1
TAUGWX	tyx	surface eastward gravity wave stress	N m-2
TAUGWY	tyx	surface northward gravity wave stress	N m-2
TAUX	tyx	eastward surface stress	N m-2
TAUY	tyx	northward surface stress	N m-2
TLML	tyx	surface air temperature	K
TSH	tyx	effective surface skin temperature	K
TSTAR	tyx	surface temperature scale	K
ULML	tyx	surface eastward wind	m s-1
USTAR	tyx	surface velocity scale	m s-1
VLML	tyx	surface northward wind	m s-1
Z0H	tyx	surface roughness for heat	m
Z0M	tyx	surface roughness	m

lfo_inst_1hr_glo_L576x361_slv (GEOSIT_LFO_I1_L_SLV): Land Surface Forcing

Frequency: 1-hourly from 00:00 UTC (instantaneous)

Spatial Grid: 2D, single-level, global horizontal resolution

Dimensions: longitude=576, latitude=361, time=1

Granule Size: ~3 MB

<i>Name</i>	<i>Dim</i>	<i>Description</i>	<i>Units</i>
HLML	tyx	surface layer height	m
PS	tyx	surface pressure	Pa
QLML	tyx	surface specific humidity	1
SPEEDLML	tyx	surface wind speed	m s-1
TLML	tyx	surface air temperature	K

lfo_tavg_1hr_glo_L576x361_slv (GEOSIT_LFO_T1_L_SLV): Land Surface Forcing

Frequency: 1-hourly from 00:30 UTC (time-averaged)

Spatial Grid: 2D, single-level, global horizontal resolution

Dimensions: longitude=576, latitude=361, time=1

Granule Size: ~3 MB

<i>Name</i>	<i>Dim</i>	<i>Description</i>	<i>Units</i>
LWGAB	tyx	surface absorbed longwave radiation	W m-2
PARDF	tyx	surface downwelling par diffuse flux	W m-2
PARDR	tyx	surface downwelling par beam flux	W m-2
PRECCU	tyx	liquid water convective precipitation	kg m-2 s-1
PRECLS	tyx	liquid water large scale precipitation	kg m-2 s-1
PRECSNO	tyx	snowfall	kg m-2 s-1
SWGDN	tyx	surface incoming shortwave flux	W m-2
SWLAND	tyx	Net shortwave land	W m-2

lnd_tavg_1hr_glo_L576x361_slv (GEOSIT_LND_TI_L_SLV): Land Surface Diagnostics

Frequency: 1-hourly from 00:30 UTC (time-averaged)

Spatial Grid: 2D, single-level, global horizontal resolution

Dimensions: longitude=576, latitude=361, time=1

Granule Size: ~9 MB

<i>Name</i>	<i>Dim</i>	<i>Description</i>	<i>Units</i>
BASEFLOW	tyx	baseflow flux	kg m-2 s-1
ECHANGE	tyx	rate of change of total land energy	W m-2
EVLAND	tyx	Evaporation land	kg m-2 s-1
EVPINTR	tyx	interception loss energy flux	W m-2
EVPSBLN	tyx	snow ice evaporation energy flux	W m-2
EVPSOIL	tyx	baresoil evap energy flux	W m-2
EVPTRNS	tyx	transpiration energy flux	W m-2
FRSAT	tyx	fractional area of saturated zone	1
FRSNO	tyx	fractional area of land snowcover	1
FRUNST	tyx	fractional area of unsaturated zone	1
FRWLT	tyx	fractional area of wilting zone	1
GHLAND	tyx	Ground heating land	W m-2
GRN	tyx	greenness fraction	1
GWETPROF	tyx	ave prof soil moisture	1
GWETROOT	tyx	root zone soil wetness	1
GWETTOP	tyx	surface soil wetness	1
LAI	tyx	leaf area index	1
LHLAND	tyx	Latent heat flux land	W m-2
LWLAND	tyx	Net longwave land	W m-2

PARDF	tyx	surface downwelling par diffuse flux	W m-2
PARDR	tyx	surface downwelling par beam flux	W m-2
PRECSNO	tyx	snowfall	kg m-2 s-1
PRECTOT	tyx	total precipitation	kg m-2 s-1
PRMC	tyx	water profile	m3 m-3
QINFIL	tyx	Soil water infiltration rate	kg m-2 s-1
RUNOFF	tyx	overland runoff including throughflow	kg m-2 s-1
RZMC	tyx	water root zone	m3 m-3
SFMC	tyx	water surface layer	m3 m-3
SHLAND	tyx	Sensible heat flux land	W m-2
SMLAND	tyx	Snowmelt flux land	kg m-2 s-1
SNODP	tyx	snow depth within snow covered area fraction	m
SNOMAS	tyx	Total snow storage land	kg m-2
SPLAND	tyx	rate of spurious land energy source	W m-2
SPSNOW	tyx	rate of spurious snow energy	W m-2
SPWATR	tyx	rate of spurious land water source	kg m-2 s-1
SWLAND	tyx	Net shortwave land	W m-2
TELAND	tyx	Total energy storage land	J m-2
TPSNOW	tyx	surface temperature of snow	K
TSAT	tyx	surface temperature of saturated zone	K
TSOIL1	tyx	soil temperatures layer 1	K
TSOIL2	tyx	soil temperatures layer 2	K
TSOIL3	tyx	soil temperatures layer 3	K
TSOIL4	tyx	soil temperatures layer 4	K
TSOIL5	tyx	soil temperatures layer 5	K
TSOIL6	tyx	soil temperatures layer 6	K
TSURF	tyx	surface temperature of land incl snow	K
TUNST	tyx	surface temperature of unsaturated zone	K
TWLAND	tyx	Avail water storage land	kg m-2
TWLT	tyx	surface temperature of wilted zone	K
WCHANGE	tyx	rate of change of total land water	kg m-2 s-1

mst_tavg_3hr_glo_L576x361_v72 (GEOSIT_MST_T3_L_V72): Moist Processes Diagnostics

Frequency: 3-hourly from 01:30 UTC (time-averaged)

Spatial Grid: 3D, model-level, global horizontal resolution

Dimensions: longitude=576, latitude=361, level=72, time=1

Granule Size: ~37 MB

<i>Name</i>	<i>Dim</i>	<i>Description</i>	<i>Units</i>
DELP	tzyx	pressure thickness	Pa
DQRCU	tzyx	convective rainwater source	kg kg-1 s-1
DQRLSAN	tzyx	large scale rainwater source	kg kg-1 s-1
PS	tyx	surface pressure	Pa
REEVAPCN	tzyx	evap subl of convective precipitation	kg kg-1 s-1
REEVAPLSAN	tzyx	evap subl of non convective precipitation	kg kg-1 s-1

mst_tavg_3hr_glo_L576x361_v73 (GEOSIT_MST_T3_L_V73): Moist Processes Diagnostics At Edges

Frequency: 3-hourly from 01:30 UTC (time-averaged)

Spatial Grid: 3D, model-level edge, global horizontal resolution

Dimensions: longitude=576, latitude=361, level=73, time=1

Granule Size: ~29 MB

<i>Name</i>	<i>Dim</i>	<i>Description</i>	<i>Units</i>
CMFMC	tzyx	cumulative mass flux	kg m-2 s-1
PFICU	tzyx	3D flux of ice convective precipitation	kg m-2 s-1
PFILSAN	tzyx	3D flux of ice nonconvective precipitation	kg m-2 s-1
PFLCU	tzyx	3D flux of liquid convective precipitation	kg m-2 s-1
PFLLSAN	tzyx	3D flux of liquid nonconvective precipitation	kg m-2 s-1
PLE	tzyx	edge pressure	Pa

nav_tavg_3hr_glo_L576x361_v72 (GEOSIT_NAV_T3_L_V72): Vertical Coordinate Navigation

Frequency: 3-hourly from 01:30 UTC (time-averaged)

Spatial Grid: 3D, model-level, global horizontal resolution

Dimensions: longitude=576, latitude=361, level=72, time=1

Granule Size: ~33 MB

<i>Name</i>	<i>Dim</i>	<i>Description</i>	<i>Units</i>
H	tzyx	mid layer heights	m
PL	tzyx	mid level pressure	Pa

nav_tavg_3hr_glo_L576x361_v73 (GEOSIT_NAV_T3_L_V73): Vertical Coordinate Navigation At Edges

Frequency: 3-hourly from 01:30 UTC (time-averaged)

Spatial Grid: 3D, model-level edge, global horizontal resolution

Dimensions: longitude=576, latitude=361, level=73, time=1

Granule Size: ~33 MB

<i>Name</i>	<i>Dim</i>	<i>Description</i>	<i>Units</i>
PLE	tzyx	edge pressure	Pa
ZLE	tzyx	edge heights	m

ocn_tavg_1hr_glo_L576x361_slv (GEOSIT_OCN_T1_L_SLV): Ocean Related Variables

Frequency: 1-hourly from 00:30 UTC (time-averaged)

Spatial Grid: 2D, single-level, global horizontal resolution

Dimensions: longitude=576, latitude=361, time=1

Granule Size: ~12 MB

<i>Name</i>	<i>Dim</i>	<i>Description</i>	<i>Units</i>
BCOOL	tyx	buoyancy generation in cool layer	m+2 s-3
COSZ	tyx	cosine of the solar zenith angle	1
DCOOL	tyx	depth of cool layer	m
DELTS	tyx	change of surface skin temperature	K
DTSdT_ANA	tyx	total skin temperature tendency	K s-1
DWARM	tyx	depth at base of warm layer	m
EFLUXICE	tyx	sea ice latent energy flux	W m-2
EFLUXWTR	tyx	open water latent energy flux	W m-2
EVAPOUT	tyx	evaporation	kg m-2 s-1
FRLAKE	tyx	fraction of lake	1
FRLAND	tyx	fraction of land	1
FRLANDICE	tyx	fraction of land ice	1
FROCEAN	tyx	fraction of ocean	1
FRSEAICE	tyx	ice covered fraction of tile	1
HFLUXICE	tyx	sea ice upward sensible heat flux	W m-2
HFLUXWTR	tyx	open water upward sensible heat flux	W m-2
LANGM	tyx	Langmuir number	1
LCOOL	tyx	Saunders parameter	1
LWGNTICE	tyx	sea ice net downward longwave flux	W m-2
LWGNTWTR	tyx	open water net downward longwave flux	W m-2

PHIW	tyx	Similarity function in warm layer	1
PRECSNOOCN	tyx	ocean snowfall	kg m-2 s-1
QCOOL	tyx	net cooling in cool layer	W m-2
QV10M	tyx	10-meter specific humidity	kg kg-1
QWARM	tyx	net heating in warm layer	W m-2
RAINOCN	tyx	ocean rainfall	kg m-2 s-1
SWCOOL	tyx	solar heating in cool layer	W m-2
SWGNTICE	tyx	sea ice net downward shortwave flux	W m-2
SWGNTWTR	tyx	open water net downward shortwave flux	W m-2
SWWARM	tyx	solar heating in warm layer	W m-2
T10M	tyx	10-meter air temperature	K
TAUTW	tyx	relaxation time of TW to TS FOUND	s
TAUXICE	tyx	eastward stress over ice	N m-2
TAUXWTR	tyx	eastward stress over water	N m-2
TAUYICE	tyx	northward stress over ice	N m-2
TAUYWTR	tyx	northward stress over water	N m-2
TBAR	tyx	mean temperature of interface layer	K
TDEL	tyx	temperature at base of cool layer	K
TDROP	tyx	temperature drop across cool layer	K
TSKINICE	tyx	sea ice skin temperature	K
TSKINWTR	tyx	open water skin temperature	K
TS_FOUND	tyx	foundation temperature for interface layer	K
U10M	tyx	10-meter eastward wind	m s-1
USTARW	tyx	ustar over water layer	m s-1
V10M	tyx	10-meter northward wind	m s-1
ZETA_W	tyx	Stability parameter in Warm Layer	1

rad_tavg_1hr_glo_L576x361_slv (GEOSIT_RAD_T1_L_SLV): Radiation Diagnostics

Frequency: 1-hourly from 00:30 UTC (time-averaged)

Spatial Grid: 2D, single-level, global horizontal resolution

Dimensions: longitude=576, latitude=361, time=1

Granule Size: ~10 MB

<i>Name</i>	<i>Dim</i>	<i>Description</i>	<i>Units</i>
ALBEDO	tyx	surface albedo	1
ALBNIRDF	tyx	surface albedo for near infrared diffuse	1
ALBNIRDR	tyx	surface albedo for near infrared beam	1

ALBVISDF	tyx	surface albedo for visible diffuse	1
ALBVISDR	tyx	surface albedo for visible beam	1
CLDHGH	tyx	cloud area fraction for high clouds	1
CLDLOW	tyx	cloud area fraction for low clouds	1
CLDMID	tyx	cloud area fraction for middle clouds	1
CLDTOT	tyx	total cloud area fraction	1
EMIS	tyx	surface emissivity	1
LWGAB	tyx	surface absorbed longwave radiation	W m-2
LWGABCLR	tyx	surface absorbed longwave radiation assuming clear sky	W m-2
LWGABCLRCLN	tyx	surface absorbed longwave radiation assuming clear sky and no aerosol	W m-2
LWGEM	tyx	longwave flux emitted from surface	W m-2
LWGNT	tyx	surface net downward longwave flux	W m-2
LWGNTCLR	tyx	surface net downward longwave flux assuming clear sky	W m-2
LWGNTCLRCLN	tyx	surface net downward longwave flux assuming clear sky and no aerosol	W m-2
LWSCC5	tyx	surface absorbed longwave radiation assuming clear sky masked using cldtt LE 5	W m-2
LWTUP	tyx	upwelling longwave flux at toa	W m-2
LWTUPCLR	tyx	upwelling longwave flux at toa assuming clear sky	W m-2
LWTUPCLRCLN	tyx	upwelling longwave flux at toa assuming clear sky and no aerosol	W m-2
OLRCC5	tyx	upwelling longwave flux at toa assuming clear sky masked using cldtt LE 5	W m-2
SWGDN	tyx	surface incoming shortwave flux	W m-2
SWGDNCLR	tyx	surface incoming shortwave flux assuming clear sky	W m-2
SWGNT	tyx	surface net downward shortwave flux	W m-2
SWGNTCLN	tyx	surface net downward shortwave flux assuming no aerosol	W m-2
SWGNTCLR	tyx	surface net downward shortwave flux assuming clear sky	W m-2
SWGNTCLRCLN	tyx	surface net downward shortwave flux assuming clear sky and no aerosol	W m-2
SWTDN	tyx	toa incoming shortwave flux	W m-2
SWTNT	tyx	toa net downward shortwave flux	W m-2
SWTNTCLN	tyx	toa net downward shortwave flux assuming no aerosol	W m-2
SWTNTCLR	tyx	toa net downward shortwave flux assuming clear sky	W m-2
SWTNTCLRCLN	tyx	toa net downward shortwave flux assuming clear sky and no aerosol	W m-2
TAUHG	tyx	in cloud optical thickness of high clouds(EXPORT)	1
TAULOW	tyx	in cloud optical thickness of low clouds	1
TAUMID	tyx	in cloud optical thickness of middle clouds	1

TAUTOT	tyx	in cloud optical thickness of all clouds	1
TS	tyx	surface skin temperature	K

rad_tavg_3hr_glo_L576x361_v72 (GEOSIT_RAD_T3_L_V72): Radiation Diagnostics

Frequency: 3-hourly from 01:30 UTC (time-averaged)

Spatial Grid: 3D, model-level, global horizontal resolution

Dimensions: longitude=576, latitude=361, level=72, time=1

Granule Size: ~113 MB

<i>Name</i>	<i>Dim</i>	<i>Description</i>	<i>Units</i>
CLOUD	tzyx	cloud fraction for radiation	1
DELP	tzyx	pressure thickness	Pa
DTDTLWR	tzyx	air temperature tendency due to longwave	K s-1
DTDTLWRCLR	tzyx	air temperature tendency due to longwave for clear skies	K s-1
DTDTSWR	tzyx	air temperature tendency due to shortwave	K s-1
DTDTSWRCLR	tzyx	air temperature tendency due to shortwave for clear skies	K s-1
PS	tyx	surface pressure	Pa

slv_tavg_1hr_glo_L576x361_slv (GEOSIT_SLV_T1_L_SLV): Single Level Diagnostics

Frequency: 1-hourly from 00:30 UTC (time-averaged)

Spatial Grid: 2D, single-level, global horizontal resolution

Dimensions: longitude=576, latitude=361, time=1

Granule Size: ~17 MB

<i>Name</i>	<i>Dim</i>	<i>Description</i>	<i>Units</i>
CLDPRS	tyx	cloud top pressure	Pa
CLDTMP	tyx	cloud top temperature	K
DISPH	tyx	zero plane displacement height	m
H1000	tyx	height at 1000 mb	m
H250	tyx	height at 250 hPa	m
H500	tyx	height at 500 hPa	m
H850	tyx	height at 850 hPa	m
OMEGA500	tyx	omega at 500 hPa	Pa s-1
PBLTOP	tyx	pbltop pressure	Pa
PS	tyx	surface pressure	Pa
Q250	tyx	specific humidity at 250 hPa	kg kg-1

Q500	tyx	specific humidity at 500 hPa	kg kg-1
Q850	tyx	specific humidity at 850 hPa	kg kg-1
QV10M	tyx	10-meter specific humidity	kg kg-1
QV2M	tyx	2-meter specific humidity	kg kg-1
SLP	tyx	sea level pressure	Pa
T10M	tyx	10-meter air temperature	K
T250	tyx	air temperature at 250 hPa	K
T2M	tyx	2-meter air temperature	K
T500	tyx	air temperature at 500 hPa	K
T850	tyx	air temperature at 850 hPa	K
TO3	tyx	total column ozone	Dobsons
TOX	tyx	total column odd oxygen	kg m-2
TQI	tyx	total precipitable ice water	kg m-2
TQL	tyx	total precipitable liquid water	kg m-2
TQV	tyx	total precipitable water vapor	kg m-2
TROPPB	tyx	tropopause pressure based on blended estimate	Pa
TROPPT	tyx	tropopause pressure based on thermal estimate	Pa
TROPPV	tyx	tropopause pressure based on EPV estimate	Pa
TROPQ	tyx	tropopause specific humidity using blended TROPP estimate	kg kg-1
TROPT	tyx	tropopause temperature using blended TROPP estimate	K
TS	tyx	surface skin temperature	K
U10M	tyx	10-meter eastward wind	m s-1
U250	tyx	eastward wind at 250 hPa	m s-1
U2M	tyx	2-meter eastward wind	m s-1
U500	tyx	eastward wind at 500 hPa	m s-1
U50M	tyx	eastward wind at 50 meters	m s-1
U850	tyx	eastward wind at 850 hPa	m s-1
V10M	tyx	10-meter northward wind	m s-1
V250	tyx	northward wind at 250 hPa	m s-1
V2M	tyx	2-meter northward wind	m s-1
V500	tyx	northward wind at 500 hPa	m s-1
V50M	tyx	northward wind at 50 meters	m s-1
V850	tyx	northward wind at 850 hPa	m s-1

tdt_tavg_3hr_glo_L576x361_v72 (GEOSIT_TDT_T3_L_V72): Temperature Tendencies

Frequency: 3-hourly from 01:30 UTC (time-averaged)

Spatial Grid: 3D, model-level, global horizontal resolution

Dimensions: *longitude=576, latitude=361, level=72, time=1*

Granule Size: *~282 MB*

<i>Name</i>	<i>Dim</i>	<i>Description</i>	<i>Units</i>
DELP	tzyx	pressure thickness	Pa
DTDTANA	tzyx	total temperature analysis tendency	K s-1
DTDTDYN	tzyx	tendency of air temperature due to dynamics	K s-1
DTDTFRI	tzyx	tendency of air temperature due to friction	K s-1
DTDTFRIC	tzyx	tendency of air temperature due to moist processes friction	K s-1
DTDTGWD	tzyx	air temperature tendency due to GWD	K s-1
DTDTMST	tzyx	tendency of air temperature due to moist processes	K s-1
DTDTRAD	tzyx	tendency of air temperature due to radiation	K s-1
DTDTTOT	tzyx	tendency of air temperature due to physics	K s-1
DTDTTRB	tzyx	tendency of air temperature due to turbulence	K s-1
PS	tyx	surface pressure	Pa

trb_tavg_3hr_glo_L576x361_v73 (GEOSIT_TRB_T3_L_V73): Turbulence Diagnostics At Edges

Frequency: *3-hourly from 01:30 UTC (time-averaged)*

Spatial Grid: *3D, model-level edge, global horizontal resolution*

Dimensions: *longitude=576, latitude=361, level=73, time=1*

Granule Size: *~189 MB*

<i>Name</i>	<i>Dim</i>	<i>Description</i>	<i>Units</i>
KH	tzyx	total scalar diffusivity	m+2 s-1
KHLK	tzyx	entrainment heat diffusivity from Lock	m+2 s-1
KHLS	tzyx	scalar diffusivity from Louis	m+2 s-1
KHRAD	tzyx	radiation driven scalar diffusivity from Lock scheme	m+2 s-1
KHSFC	tzyx	surface driven scalar diffusivity from Lock scheme	m+2 s-1
KM	tzyx	total momentum diffusivity	m+2 s-1
KMLK	tzyx	entrainment momentum diffusivity from Lock	m+2 s-1
KMLS	tzyx	momentum diffusivity from Louis	m+2 s-1
PLE	tzyx	edge pressure	Pa
RI	tzyx	Richardson number from Louis	1

adg_tavg_3hr_glo_C180x180x6_slv (GEOSIT_ADG_T3_C_SLV): Extended Aerosol Diagnostics

Frequency: 3-hourly from 01:30 UTC (time-averaged)

Spatial Grid: 2D, single-level, global horizontal resolution on cube

Dimensions: grid resolution=180, time=1

Granule Size: ~49 MB

<i>Name</i>	<i>Dim</i>	<i>Description</i>	<i>Units</i>
BCDP001	tyx	Black Carbon Dry Deposition Bin 001	kg m-2 s-1
BCDP002	tyx	Black Carbon Dry Deposition Bin 002	kg m-2 s-1
BCEM001	tyx	Black Carbon Emission Bin 001	kg m-2 s-1
BCEM002	tyx	Black Carbon Emission Bin 002	kg m-2 s-1
BCEMAN	tyx	Black Carbon Anthropogenic Emissions	kg m-2 s-1
BCEMBB	tyx	Black Carbon Biomass Burning Emissions	kg m-2 s-1
BCEMBF	tyx	Black Carbon Biofuel Emissions	kg m-2 s-1
BCHYPHIL	tyx	Black Carbon Hydrophobic to Hydrophilic	kg m-2 s-1
BCSV	tyx	black carbon tendency due to conv scav	kg m-2 s-1
BCWT001	tyx	Black Carbon Wet Deposition Bin 001	kg m-2 s-1
BCWT002	tyx	Black Carbon Wet Deposition Bin 002	kg m-2 s-1
DUAERIDX	tyx	Dust TOMS UV Aerosol Index	1
DUDP001	tyx	Dust Dry Deposition Bin 001	kg m-2 s-1
DUDP002	tyx	Dust Dry Deposition Bin 002	kg m-2 s-1
DUDP003	tyx	Dust Dry Deposition Bin 003	kg m-2 s-1
DUDP004	tyx	Dust Dry Deposition Bin 004	kg m-2 s-1
DUDP005	tyx	Dust Dry Deposition Bin 005	kg m-2 s-1
DUEM001	tyx	Dust Emission Bin 001	kg m-2 s-1
DUEM002	tyx	Dust Emission Bin 002	kg m-2 s-1
DUEM003	tyx	Dust Emission Bin 003	kg m-2 s-1
DUEM004	tyx	Dust Emission Bin 004	kg m-2 s-1
DUEM005	tyx	Dust Emission Bin 005	kg m-2 s-1
DUEXTTFM	tyx	Dust Extinction AOT [550 nm] - PM 1.0 um	1
DUSCATFM	tyx	Dust Scattering AOT [550 nm] - PM 1.0 um	1
DUSD001	tyx	Dust Sedimentation Bin 001	kg m-2 s-1
DUSD002	tyx	Dust Sedimentation Bin 002	kg m-2 s-1
DUSD003	tyx	Dust Sedimentation Bin 003	kg m-2 s-1
DUSD004	tyx	Dust Sedimentation Bin 004	kg m-2 s-1
DUSD005	tyx	Dust Sedimentation Bin 005	kg m-2 s-1
DUSV	tyx	dust tendency due to conv scav	kg m-2 s-1
DUWT001	tyx	Dust Wet Deposition Bin 001	kg m-2 s-1
DUWT002	tyx	Dust Wet Deposition Bin 002	kg m-2 s-1
DUWT003	tyx	Dust Wet Deposition Bin 003	kg m-2 s-1

DUWT004	tyx	Dust Wet Deposition Bin 004	kg m ⁻² s ⁻¹
DUWT005	tyx	Dust Wet Deposition Bin 005	kg m ⁻² s ⁻¹
NH3DP	tyx	Ammonia Dry Deposition	kg m ⁻² s ⁻¹
NH3EM	tyx	Ammonia Emission	kg m ⁻² s ⁻¹
NH3SV	tyx	Ammonia Convective Scavenging	kg m ⁻² s ⁻¹
NH3WT	tyx	Ammonia Wet Deposition	kg m ⁻² s ⁻¹
NH4DP	tyx	Ammonium Dry Deposition	kg m ⁻² s ⁻¹
NH4SD	tyx	Ammonium Settling	kg m ⁻² s ⁻¹
NH4SV	tyx	Ammonium Convective Scavenging	kg m ⁻² s ⁻¹
NH4WT	tyx	Ammonium Wet Deposition	kg m ⁻² s ⁻¹
NIDP001	tyx	Nitrate Dry Deposition Bin 001	kg m ⁻² s ⁻¹
NIDP002	tyx	Nitrate Dry Deposition Bin 002	kg m ⁻² s ⁻¹
NIDP003	tyx	Nitrate Dry Deposition Bin 003	kg m ⁻² s ⁻¹
NIHT001	tyx	Nitrate Production from Het Chem Bin 001	kg m ⁻² s ⁻¹
NIHT002	tyx	Nitrate Production from Het Chem Bin 002	kg m ⁻² s ⁻¹
NIHT003	tyx	Nitrate Production from Het Chem Bin 003	kg m ⁻² s ⁻¹
NIPNH3AQ	tyx	Ammonia Change from Aqueous Chemistry	kg m ⁻² s ⁻¹
NIPNH4AQ	tyx	Ammonium Production from Aqueous Chemistry	kg m ⁻² s ⁻¹
NIPNO3AQ	tyx	Nitrate Production from Aqueous Chemistry	kg m ⁻² s ⁻¹
NISD001	tyx	Nitrate Sedimentation Bin 001	kg m ⁻² s ⁻¹
NISD002	tyx	Nitrate Sedimentation Bin 002	kg m ⁻² s ⁻¹
NISD003	tyx	Nitrate Sedimentation Bin 003	kg m ⁻² s ⁻¹
NISV	tyx	nitrate tendency due to conv scav	kg m ⁻² s ⁻¹
NISV001	tyx	Nitrate Convective Scavenging Bin 001	kg m ⁻² s ⁻¹
NISV002	tyx	Nitrate Convective Scavenging Bin 002	kg m ⁻² s ⁻¹
NISV003	tyx	Nitrate Convective Scavenging Bin 003	kg m ⁻² s ⁻¹
NIWT001	tyx	Nitrate Wet Deposition Bin 001	kg m ⁻² s ⁻¹
NIWT002	tyx	Nitrate Wet Deposition Bin 002	kg m ⁻² s ⁻¹
NIWT003	tyx	Nitrate Wet Deposition Bin 003	kg m ⁻² s ⁻¹
OCDP001	tyx	Organic Carbon Dry Deposition Bin 001	kg m ⁻² s ⁻¹
OCDP002	tyx	Organic Carbon Dry Deposition Bin 002	kg m ⁻² s ⁻¹
OCEM001	tyx	Organic Carbon Emission Bin 001	kg m ⁻² s ⁻¹
OCEM002	tyx	Organic Carbon Emission Bin 002	kg m ⁻² s ⁻¹
OCEMAN	tyx	Organic Carbon Anthropogenic Emissions	kg m ⁻² s ⁻¹
OCEMBB	tyx	Organic Carbon Biomass Burning Emissions	kg m ⁻² s ⁻¹
OCEMBF	tyx	Organic Carbon Biofuel Emissions	kg m ⁻² s ⁻¹
OCEMBG	tyx	Organic Carbon Biogenic Emissions	kg m ⁻² s ⁻¹
OCHYPHIL	tyx	Organic Carbon Hydrophobic to Hydrophilic	kg m ⁻² s ⁻¹
OCSV	tyx	organic carbon tendency due to conv scav	kg m ⁻² s ⁻¹

OCWT001	tyx	Organic Carbon Wet Deposition Bin 001	kg m ⁻² s ⁻¹
OCWT002	tyx	Organic Carbon Wet Deposition Bin 002	kg m ⁻² s ⁻¹
SO2EMAN	tyx	SO2 Anthropogenic Emissions	kg m ⁻² s ⁻¹
SO2EMBB	tyx	SO2 Biomass Burning Emissions	kg m ⁻² s ⁻¹
SO2EMVE	tyx	SO2 Volcanic (explosive) Emissions	kg m ⁻² s ⁻¹
SO2EMVN	tyx	SO2 Volcanic (non-explosive) Emissions	kg m ⁻² s ⁻¹
SO4EMAN	tyx	SO4 Anthropogenic Emissions	kg m ⁻² s ⁻¹
SSAERIDX	tyx	Sea Salt TOMS UV Aerosol Index	1
SSDP001	tyx	Sea Salt Dry Deposition Bin 001	kg m ⁻² s ⁻¹
SSDP002	tyx	Sea Salt Dry Deposition Bin 002	kg m ⁻² s ⁻¹
SSDP003	tyx	Sea Salt Dry Deposition Bin 003	kg m ⁻² s ⁻¹
SSDP004	tyx	Sea Salt Dry Deposition Bin 004	kg m ⁻² s ⁻¹
SSDP005	tyx	Sea Salt Dry Deposition Bin 005	kg m ⁻² s ⁻¹
SSEM001	tyx	Sea Salt Emission Bin 001	kg m ⁻² s ⁻¹
SSEM002	tyx	Sea Salt Emission Bin 002	kg m ⁻² s ⁻¹
SSEM003	tyx	Sea Salt Emission Bin 003	kg m ⁻² s ⁻¹
SSEM004	tyx	Sea Salt Emission Bin 004	kg m ⁻² s ⁻¹
SSEM005	tyx	Sea Salt Emission Bin 005	kg m ⁻² s ⁻¹
SSEXTTFM	tyx	Sea Salt Extinction AOT [550 nm] - PM 1.0 um	1
SSSCATFM	tyx	Sea Salt Scattering AOT [550 nm] - PM 1.0 um	1
SSSD001	tyx	Sea Salt Sedimentation Bin 001	kg m ⁻² s ⁻¹
SSSD002	tyx	Sea Salt Sedimentation Bin 002	kg m ⁻² s ⁻¹
SSSD003	tyx	Sea Salt Sedimentation Bin 003	kg m ⁻² s ⁻¹
SSSD004	tyx	Sea Salt Sedimentation Bin 004	kg m ⁻² s ⁻¹
SSSD005	tyx	Sea Salt Sedimentation Bin 005	kg m ⁻² s ⁻¹
SSSV	tyx	sea salt tendency due to conv scav	kg m ⁻² s ⁻¹
SSWT001	tyx	Sea Salt Wet Deposition Bin 001	kg m ⁻² s ⁻¹
SSWT002	tyx	Sea Salt Wet Deposition Bin 002	kg m ⁻² s ⁻¹
SSWT003	tyx	Sea Salt Wet Deposition Bin 003	kg m ⁻² s ⁻¹
SSWT004	tyx	Sea Salt Wet Deposition Bin 004	kg m ⁻² s ⁻¹
SSWT005	tyx	Sea Salt Wet Deposition Bin 005	kg m ⁻² s ⁻¹
SUDP001	tyx	Sulfate Dry Deposition Bin 001	kg m ⁻² s ⁻¹
SUDP002	tyx	Sulfate Dry Deposition Bin 002	kg m ⁻² s ⁻¹
SUDP003	tyx	Sulfate Dry Deposition Bin 003	kg m ⁻² s ⁻¹
SUDP004	tyx	Sulfate Dry Deposition Bin 004	kg m ⁻² s ⁻¹
SUEM001	tyx	Sulfate Emission Bin 001	kg m ⁻² s ⁻¹
SUEM002	tyx	Sulfate Emission Bin 002	kg m ⁻² s ⁻¹
SUEM003	tyx	Sulfate Emission Bin 003	kg m ⁻² s ⁻¹
SUEM004	tyx	Sulfate Emission Bin 004	kg m ⁻² s ⁻¹

SUPMSA	tyx	MSA Prod from DMS Oxidation [column]	kg m-2 s-1
SUPSO2	tyx	SO2 Prod from DMS Oxidation [column]	kg m-2 s-1
SUPSO4AQ	tyx	SO4 Prod from Aqueous SO2 Oxidation [column]	kg m-2 s-1
SUPSO4G	tyx	SO4 Prod from Gaseous SO2 Oxidation [column]	kg m-2 s-1
SUPSO4WT	tyx	SO4 Prod from Aqueous SO2 Oxidation (wet dep) [column]	kg m-2 s-1
SUSV	tyx	sulfate tendency due to conv scav	kg m-2 s-1
SUWT001	tyx	Sulfate Wet Deposition Bin 001	kg m-2 s-1
SUWT002	tyx	Sulfate Wet Deposition Bin 002	kg m-2 s-1
SUWT003	tyx	Sulfate Wet Deposition Bin 003	kg m-2 s-1
SUWT004	tyx	Sulfate Wet Deposition Bin 004	kg m-2 s-1
corner_lats	YCdim XCdim	latitude	degrees_north
corner_lons	YCdim XCdim	longitude	degrees_east

aer_inst_3hr_glo_C180x180x6_v72 (GEOSIT_AER_I3_C_V72): Aerosol Diagnostics

Frequency: 3-hourly from 00:00 UTC (instantaneous)

Spatial Grid: 3D, model-level, global horizontal resolution on cube

Dimensions: grid resolution=180, level=72, time=1

Granule Size: ~733 MB

<i>Name</i>	<i>Dim</i>	<i>Description</i>	<i>Units</i>
AIRDENS	tzyx	moist air density	kg m-3
BCPHILIC	tzyx	Hydrophilic Black Carbon	kg kg-1
BCPHOBIC	tzyx	Hydrophobic Black Carbon	kg kg-1
DELP	tzyx	pressure thickness	Pa
DMS	tzyx	Dimethylsulphide	kg kg-1
DU001	tzyx	Dust Mixing Ratio (bin 001)	kg kg-1
DU002	tzyx	Dust Mixing Ratio (bin 002)	kg kg-1
DU003	tzyx	Dust Mixing Ratio (bin 003)	kg kg-1
DU004	tzyx	Dust Mixing Ratio (bin 004)	kg kg-1
DU005	tzyx	Dust Mixing Ratio (bin 005)	kg kg-1
FRSEAICE	tyx	ice covered fraction of tile	1
MSA	tzyx	Methanesulphonic acid	kg kg-1
NH3	tzyx	Ammonia (NH3, gas phase)	kg kg-1
NH4A	tzyx	Ammonium ion (NH4+, aerosol phase)	kg kg-1
NO3AN1	tzyx	Nitrate size bin 001	kg kg-1

NO3AN2	tzyx	Nitrate size bin 002	kg kg-1
NO3AN3	tzyx	Nitrate size bin 003	kg kg-1
OCPHILIC	tzyx	Hydrophilic Organic Carbon (Particulate Matter)	kg kg-1
OCPHOBIC	tzyx	Hydrophobic Organic Carbon (Particulate Matter)	kg kg-1
PS	tyx	surface pressure	Pa
RH	tzyx	relative humidity after moist	1
SO2	tzyx	Sulphur dioxide	kg kg-1
SO4	tzyx	Sulphate aerosol	kg kg-1
SS001	tzyx	Sea Salt Mixing Ratio (bin 001)	kg kg-1
SS002	tzyx	Sea Salt Mixing Ratio (bin 002)	kg kg-1
SS003	tzyx	Sea Salt Mixing Ratio (bin 003)	kg kg-1
SS004	tzyx	Sea Salt Mixing Ratio (bin 004)	kg kg-1
SS005	tzyx	Sea Salt Mixing Ratio (bin 005)	kg kg-1
TS	tyx	surface skin temperature	K
corner_lats	YCdim XCdim	latitude	degrees_north
corner_lons	YCdim XCdim	longitude	degrees_east

aer_tavg_3hr_glo_C180x180x6_slv (GEOSIT_AER_T3_C_SLV): Primary Aerosol Diagnostics

Frequency: 3-hourly from 01:30 UTC (time-averaged)

Spatial Grid: 2D, single-level, global horizontal resolution on cube

Dimensions: grid resolution=180, time=1

Granule Size: ~35 MB

<i>Name</i>	<i>Dim</i>	<i>Description</i>	<i>Units</i>
BCANGSTR	tyx	Black Carbon Angstrom parameter [470-870 nm]	1
BCCMASS	tyx	Black Carbon Column Mass Density	kg m-2
BCEXTTAU	tyx	Black Carbon Extinction AOT [550 nm]	1
BCFLUXU	tyx	Black Carbon column u-wind mass flux	kg m-1 s-1
BCFLUXV	tyx	Black Carbon column v-wind mass flux	kg m-1 s-1
BCSCATAU	tyx	Black Carbon Scattering AOT [550 nm]	1
BCSMASS	tyx	Black Carbon Surface Mass Concentration	kg m-3
DMSCMASS	tyx	DMS Column Mass Density	kg m-2
DMSSMASS	tyx	DMS Surface Mass Concentration	kg m-3
DUANGSTR	tyx	Dust Angstrom parameter [470-870 nm]	1
DUCMASS	tyx	Dust Column Mass Density	kg m-2
DUCMASS25	tyx	Dust Column Mass Density - PM 2.5	kg m-2

DUEXTT25	tyx	Dust Extinction AOT [550 nm] - PM 2.5	1
DUEXTTAU	tyx	Dust Extinction AOT [550 nm]	1
DUFLUXU	tyx	Dust column u-wind mass flux	kg m ⁻¹ s ⁻¹
DUFLUXV	tyx	Dust column v-wind mass flux	kg m ⁻¹ s ⁻¹
DUSCAT25	tyx	Dust Scattering AOT [550 nm] - PM 2.5	1
DUSCATAU	tyx	Dust Scattering AOT [550 nm]	1
DUSMASS	tyx	Dust Surface Mass Concentration	kg m ⁻³
DUSMASS25	tyx	Dust Surface Mass Concentration - PM 2.5	kg m ⁻³
HNO3CMASS	tyx	Nitric Acid Column Mass Density	kg m ⁻³
HNO3SMASS	tyx	Nitric Acid Surface Mass Concentration	kg m ⁻³
NH3CMASS	tyx	Ammonia Column Mass Density	kg m ⁻³
NH3SMASS	tyx	Ammonia Surface Mass Concentration	kg m ⁻³
NH4CMASS	tyx	Ammonium Column Mass Density	kg m ⁻³
NH4SMASS	tyx	Ammonium Surface Mass Concentration	kg m ⁻³
NIANGSTR	tyx	Nitrate Angstrom parameter [470-870 nm]	1
NICMASS	tyx	Nitrate Column Mass Density	kg m ⁻²
NICMASS25	tyx	Nitrate Column Mass Density [PM2.5]	kg m ⁻²
NIEXTTAU	tyx	Nitrate Extinction AOT [550 nm]	1
NIEXTTFM	tyx	Nitrate Extinction AOT [550 nm] - PM 1.0 um	1
NIFLUXU	tyx	Nitrate column u-wind mass flux	kg m ⁻¹ s ⁻¹
NIFLUXV	tyx	Nitrate column v-wind mass flux	kg m ⁻¹ s ⁻¹
NISCATAU	tyx	Nitrate Scattering AOT [550 nm]	1
NISCATFM	tyx	Nitrate Scattering AOT [550 nm] - PM 1.0 um	1
NISMASS	tyx	Nitrate Surface Mass Concentration	kg m ⁻³
NISMASS25	tyx	Nitrate Surface Mass Concentration [PM2.5]	kg m ⁻³
OCANGSTR	tyx	Organic Carbon Angstrom parameter [470-870 nm]	1
OCCMASS	tyx	Organic Carbon Column Mass Density	kg m ⁻²
OCEXTTAU	tyx	Organic Carbon Extinction AOT [550 nm]	1
OCFLUXU	tyx	Organic Carbon column u-wind mass flux	kg m ⁻¹ s ⁻¹
OCFLUXV	tyx	Organic Carbon column v-wind mass flux	kg m ⁻¹ s ⁻¹
OCSCATAU	tyx	Organic Carbon Scattering AOT [550 nm]	1
OCSMASS	tyx	Organic Carbon Surface Mass Concentration	kg m ⁻³
SO2CMASS	tyx	SO2 Column Mass Density	kg m ⁻²
SO2SMASS	tyx	SO2 Surface Mass Concentration	kg m ⁻³
SO4CMASS	tyx	SO4 Column Mass Density	kg m ⁻²
SO4SMASS	tyx	SO4 Surface Mass Concentration	kg m ⁻³
SSANGSTR	tyx	Sea Salt Angstrom parameter [470-870 nm]	1
SSCMASS	tyx	Sea Salt Column Mass Density	kg m ⁻²
SSCMASS25	tyx	Sea Salt Column Mass Density - PM 2.5	kg m ⁻²

SSEXTT25	tyx	Sea Salt Extinction AOT [550 nm] - PM 2.5	1
SSEXTTAU	tyx	Sea Salt Extinction AOT [550 nm]	1
SSFLUXU	tyx	Sea Salt column u-wind mass flux	kg m-1 s-1
SSFLUXV	tyx	Sea Salt column v-wind mass flux	kg m-1 s-1
SSSCAT25	tyx	Sea Salt Scattering AOT [550 nm] - PM 2.5	1
SSSCATAU	tyx	Sea Salt Scattering AOT [550 nm]	1
SSSMAS	tyx	Sea Salt Surface Mass Concentration	kg m-3
SSSMAS25	tyx	Sea Salt Surface Mass Concentration - PM 2.5	kg m-3
SUANGSTR	tyx	SO4 Angstrom parameter [470-870 nm]	1
SUEXTTAU	tyx	SO4 Extinction AOT [550 nm]	1
SUFLUXU	tyx	SO4 column u-wind mass flux	kg m-1 s-1
SUFLUXV	tyx	SO4 column v-wind mass flux	kg m-1 s-1
SUSCATAU	tyx	SO4 Scattering AOT [550 nm]	1
TOTANGSTR	tyx	Total Aerosol Angstrom parameter [470-870 nm]	1
TOTEXTTAU	tyx	Total Aerosol Extinction AOT [550 nm]	1
TOTSCATAU	tyx	Total Aerosol Scattering AOT [550 nm]	1
corner_lats	YCdim XCdim	latitude	degrees_north
corner_lons	YCdim XCdim	longitude	degrees_east

asm_inst_1hr_glo_C180x180x6_slv (GEOSIT_ASM_II_C_SLV): State

Frequency: 1-hourly from 00:00 UTC (instantaneous)

Spatial Grid: 2D, single-level, global horizontal resolution on cube

Dimensions: grid resolution=180, time=1

Granule Size: ~18 MB

<i>Name</i>	<i>Dim</i>	<i>Description</i>	<i>Units</i>
DISPH	tyx	zero plane displacement height	m
DMDTANA	tyx	vertically integrated mass tendency due to analysis	kg m-2 s-1
DMDTDYN	tyx	vertically integrated mass tendency due to dynamics	kg m-2 s-1
DMDTPHY	tyx	vertically integrated mass tendency due to physics	kg m-2 s-1
DQDTANAIN	tyx	vertically integrated water vapor tendency due to analysis	kg m-2 s-1
HOURNORAIN	tyx	time-during an hour with no precipitation	s
PS	tyx	surface pressure	Pa
QV10M	tyx	10-meter specific humidity	kg kg-1
QV2M	tyx	2-meter specific humidity	kg kg-1

SLP	tyx	sea level pressure	Pa
T10M	tyx	10-meter air temperature	K
T2M	tyx	2-meter air temperature	K
T2MMAX	tyx	2-meter air temperature	K
T2MMIN	tyx	2-meter air temperature	K
TO3	tyx	total column ozone	Dobsons
TOX	tyx	total column odd oxygen	kg m-2
TPRECMAX	tyx	total precipitation	kg m-2 s-1
TQI	tyx	total precipitable ice water	kg m-2
TQL	tyx	total precipitable liquid water	kg m-2
TQV	tyx	total precipitable water vapor	kg m-2
TROPPB	tyx	tropopause pressure based on blended estimate	Pa
TROPPT	tyx	tropopause pressure based on thermal estimate	Pa
TROPPV	tyx	tropopause pressure based on EPV estimate	Pa
TROPQ	tyx	tropopause specific humidity using blended TROPP estimate	kg kg-1
TROPT	tyx	tropopause temperature using blended TROPP estimate	K
TS	tyx	surface skin temperature	K
U10M	tyx	10-meter eastward wind	m s-1
U2M	tyx	2-meter eastward wind	m s-1
U50M	tyx	50-meter eastward wind	m s-1
V10M	tyx	10-meter northward wind	m s-1
V2M	tyx	2-meter northward wind	m s-1
V50M	tyx	50-meter northward wind	m s-1
corner_lats	YCdim XCdim	latitude	degrees_north
corner_lons	YCdim XCdim	longitude	degrees_east

asm_inst_3hr_glo_C180x180x6_v72 (GEOSIT_ASM_I3_C_V72): State On Native Levels

Frequency: 3-hourly from 00:00 UTC (instantaneous)

Spatial Grid: 3D, model-level, global horizontal resolution on cube

Dimensions: grid resolution=180, level=72, time=1

Granule Size: ~329 MB

<i>Name</i>	<i>Dim</i>	<i>Description</i>	<i>Units</i>
CLOUD	tzyx	cloud fraction for radiation	1
DELP	tzyx	pressure thickness	Pa

EPV	tzyx	ertels potential vorticity	K m+2 kg-1 s-1
H	tzyx	mid layer heights	m
O3	tzyx	ozone mass mixing ratio	kg kg-1
OMEGA	tzyx	vertical pressure velocity	Pa s-1
PHIS	tyx	surface geopotential height	m+2 s-2
PL	tzyx	mid level pressure	Pa
PS	tyx	surface pressure	Pa
QI	tzyx	mass fraction of cloud ice water	kg kg-1
QL	tzyx	mass fraction of cloud liquid water	kg kg-1
QR	tzyx	mass fraction of falling rain	kg kg-1
QS	tzyx	mass fraction of falling snow	kg kg-1
QV	tzyx	specific humidity	kg kg-1
RH	tzyx	relative humidity after moist	1
SLP	tyx	sea level pressure	Pa
T	tzyx	air temperature	K
U	tzyx	eastward wind	m s-1
V	tzyx	northward wind	m s-1
corner_lats	YCdim XCdim	latitude	degrees_north
corner_lons	YCdim XCdim	longitude	degrees_east

asm_tavg_3hr_glo_C180x180x6_v72 (GEOSIT_ASM_T3_C_V72): Assimilated State On Native Levels

Frequency: 3-hourly from 01:30 UTC (time-averaged)

Spatial Grid: 3D, model-level, global horizontal resolution on cube

Dimensions: grid resolution=180, level=72, time=1

Granule Size: ~320 MB

<i>Name</i>	<i>Dim</i>	<i>Description</i>	<i>Units</i>
DELP	tzyx	pressure thickness	Pa
EPV	tzyx	ertels potential vorticity	K m+2 kg-1 s-1
H	tzyx	mid layer heights	m
O3	tzyx	ozone mass mixing ratio	kg kg-1
OMEGA	tzyx	vertical pressure velocity	Pa s-1
PHIS	tyx	surface geopotential height	m+2 s-2
PL	tzyx	mid level pressure	Pa

PS	tyx	surface pressure	Pa
QI	tzyx	mass fraction of cloud ice water	kg kg-1
QL	tzyx	mass fraction of cloud liquid water	kg kg-1
QR	tzyx	mass fraction of falling rain	kg kg-1
QS	tzyx	mass fraction of falling snow	kg kg-1
QV	tzyx	specific humidity	kg kg-1
RH	tzyx	relative humidity after moist	1
SLP	tyx	sea level pressure	Pa
T	tzyx	air temperature	K
U	tzyx	eastward wind	m s-1
V	tzyx	northward wind	m s-1
corner_lats	YCdim XCdim	latitude	degrees_north
corner_lons	YCdim XCdim	longitude	degrees_east

chm_inst_3hr_glo_C180x180x6_v72 (GEOSIT_CHM_I3_C_V72): Chemistry Diagnostics

Frequency: 3-hourly from 00:00 UTC (instantaneous)

Spatial Grid: 3D, model-level, global horizontal resolution on cube

Dimensions: grid resolution=180, level=72, time=1

Granule Size: ~93 MB

<i>Name</i>	<i>Dim</i>	<i>Description</i>	<i>Units</i>
AIRDENS	tzyx	moist air density	kg m-3
CO	tzyx	Carbon Monoxide (All Sources)	mol mol-1
CO2	tzyx	Carbon Dioxide (All Sources)	mol mol-1
DELP	tzyx	pressure thickness	Pa
PS	tyx	surface pressure	Pa
corner_lats	YCdim XCdim	latitude	degrees_north
corner_lons	YCdim XCdim	longitude	degrees_east

chm_tavg_3hr_glo_C180x180x6_slv (GEOSIT_CHM_T3_C_SLV): Chemistry Diagnostics

Frequency: 3-hourly from 01:30 UTC (time-averaged)

Spatial Grid: 2D, single-level, global horizontal resolution on cube

Dimensions: grid resolution=180, time=1

Granule Size: ~9 MB

<i>Name</i>	<i>Dim</i>	<i>Description</i>	<i>Units</i>
CO2CL	tyx	CO2 Bulk Mixing Ratio (Column Mass/ps) Bin 001	1
CO2EM	tyx	CO2 Emission Bin 001	kg m-2 s-1
CO2SC	tyx	CO2 Surface Concentration Bin 001	1e-6
COCL	tyx	CO Column Burden	kg m-2
COEM	tyx	CO Emission	kg m-2 s-1
COLS	tyx	CO Chemical Loss	kg m-2 s-1
COPD	tyx	CO Chemical Production	kg m-2 s-1
COSC	tyx	CO Surface Concentration in ppbv	1e-9
FRSEAICE	tyx	ice covered fraction of tile	1
TS	tyx	surface skin temperature	K
corner_lats	YCdim XCdim	latitude	degrees_north
corner_lons	YCdim XCdim	longitude	degrees_east

cld_tavg_3hr_glo_C180x180x6_v72 (GEOSIT_CLD_T3_C_V72): Cloud Diagnostics

Frequency: 3-hourly from 01:30 UTC (time-averaged)

Spatial Grid: 3D, model-level, global horizontal resolution on cube

Dimensions: grid resolution=180, level=72, time=1

Granule Size: ~104 MB

<i>Name</i>	<i>Dim</i>	<i>Description</i>	<i>Units</i>
CFAN	tzyx	convective cloud area fraction	1
CFCU	tzyx	updraft areal fraction	1
CFLS	tzyx	large scale cloud area fraction	1
DELP	tzyx	pressure thickness	Pa
DTRAIN	tzyx	detraining mass flux	kg m-2 s-1
PS	tyx	surface pressure	Pa
QCCU	tzyx	grid mean convective condensate	kg kg-1
QIAN	tzyx	mass fraction of convective cloud ice water	kg kg-1
QILS	tzyx	mass fraction of large scale cloud ice water	kg kg-1
QLAN	tzyx	mass fraction of convective cloud liquid water	kg kg-1
QLLS	tzyx	mass fraction of large scale cloud liquid water	kg kg-1
RH	tzyx	relative humidity after moist	1
TAUCLI	tzyx	in cloud optical thickness for ice clouds	1

TAUCLW	tyyx	in cloud optical thickness for liquid clouds	1
corner_lats	YCdim XCdim	latitude	degrees_north
corner_lons	YCdim XCdim	longitude	degrees_east

flx_tavg_1hr_glo_C180x180x6_slv (GEOSIT_FLX_T1_C_SLV): Surface Flux Diagnostics

Frequency: 1-hourly from 00:30 UTC (time-averaged)

Spatial Grid: 2D, single-level, global horizontal resolution on cube

Dimensions: grid resolution=180, time=1

Granule Size: ~23 MB

<i>Name</i>	<i>Dim</i>	<i>Description</i>	<i>Units</i>
BSTAR	tyx	surface buoyancy scale	m s-2
CDH	tyx	surface exchange coefficient for heat	kg m-2 s-1
CDM	tyx	surface exchange coefficient for momentum	kg m-2 s-1
CDQ	tyx	surface exchange coefficient for moisture	kg m-2 s-1
CN	tyx	surface neutral drag coefficient	1
DISPH	tyx	zero plane displacement height	m
EFLUX	tyx	total latent energy flux	W m-2
EVAP	tyx	evaporation from turbulence	kg m-2 s-1
FRCAN	tyx	areal fraction of anvil showers	1
FRCCN	tyx	areal fraction of convective showers	1
FRCLS	tyx	areal fraction of nonanvil large scale showers	1
FRSEAICE	tyx	ice covered fraction of tile	1
HFLUX	tyx	sensible heat flux from turbulence	W m-2
HLML	tyx	surface layer height	m
NIRDF	tyx	surface downwelling nearinfrared diffuse flux	W m-2
NIRDR	tyx	surface downwelling nearinfrared beam flux	W m-2
PBLH	tyx	planetary boundary layer height	m
PGENTOT	tyx	Total column production of precipitation	kg m-2 s-1
PRECANV	tyx	anvil precipitation	kg m-2 s-1
PRECCON	tyx	convective precipitation	kg m-2 s-1
PRECLSC	tyx	nonanvil large scale precipitation	kg m-2 s-1
PRECSNO	tyx	snowfall	kg m-2 s-1
PRECTOT	tyx	total precipitation	kg m-2 s-1
PREVTOT	tyx	Total column re-evap/subl of precipitation	kg m-2 s-1
QLML	tyx	surface specific humidity	1

QSH	tyx	effective surface specific humidity	kg kg-1
QSTAR	tyx	surface moisture scale	kg kg-1
RADSRF	tyx	net downwelling radiation at surface	W m-2
RHOA	tyx	air density at surface	kg m-3
RISFC	tyx	surface bulk richardson number	1
SPEED	tyx	surface ventilation velocity	m s-1
TAUGWX	tyx	surface eastward gravity wave stress	N m-2
TAUGWY	tyx	surface northward gravity wave stress	N m-2
TAUX	tyx	eastward surface stress	N m-2
TAUY	tyx	northward surface stress	N m-2
TLML	tyx	surface air temperature	K
TSH	tyx	effective surface skin temperature	K
TSTAR	tyx	surface temperature scale	K
ULML	tyx	surface eastward wind	m s-1
USTAR	tyx	surface velocity scale	m s-1
VLML	tyx	surface northward wind	m s-1
Z0H	tyx	surface roughness for heat	m
Z0M	tyx	surface roughness	m
corner_lats	YCdim XCdim	latitude	degrees_north
corner_lons	YCdim XCdim	longitude	degrees_east

lfo_inst_1hr_glo_C180x180x6_slv (GEOSIT_LFO_I1_C_SLV): Land Surface Forcing

Frequency: 1-hourly from 00:00 UTC (instantaneous)

Spatial Grid: 2D, single-level, global horizontal resolution on cube

Dimensions: grid resolution=180, time=1

Granule Size: ~8 MB

<i>Name</i>	<i>Dim</i>	<i>Description</i>	<i>Units</i>
HLML	tyx	surface layer height	m
PS	tyx	surface pressure	Pa
QLML	tyx	surface specific humidity	1
SPEEDLML	tyx	surface wind speed	m s-1
TLML	tyx	surface air temperature	K
corner_lats	YCdim XCdim	latitude	degrees_north
corner_lons	YCdim XCdim	longitude	degrees_east

lfo_tavg_1hr_glo_C180x180x6_slv (GEOSIT_LFO_T1_C_SLV): Land Surface Forcing

Frequency: 1-hourly from 00:30 UTC (time-averaged)

Spatial Grid: 2D, single-level, global horizontal resolution on cube

Dimensions: grid resolution=180, time=1

Granule Size: ~8 MB

<i>Name</i>	<i>Dim</i>	<i>Description</i>	<i>Units</i>
LWGAB	tyx	surface absorbed longwave radiation	W m-2
PARDF	tyx	surface downwelling par diffuse flux	W m-2
PARDR	tyx	surface downwelling par beam flux	W m-2
PRECCU	tyx	liquid water convective precipitation	kg m-2 s-1
PRECLS	tyx	liquid water large scale precipitation	kg m-2 s-1
PRECSNO	tyx	snowfall	kg m-2 s-1
SWGDN	tyx	surface incoming shortwave flux	W m-2
SWLAND	tyx	Net shortwave land	W m-2
corner_lats	YCdim XCdim	latitude	degrees_north
corner_lons	YCdim XCdim	longitude	degrees_east

lnd_tavg_1hr_glo_C180x180x6_slv (GEOSIT_LND_T1_C_SLV): Land Surface Diagnostics

Frequency: 1-hourly from 00:30 UTC (time-averaged)

Spatial Grid: 2D, single-level, global horizontal resolution on cube

Dimensions: grid resolution=180, time=1

Granule Size: ~16 MB

<i>Name</i>	<i>Dim</i>	<i>Description</i>	<i>Units</i>
BASEFLOW	tyx	baseflow flux	kg m-2 s-1
ECHANGE	tyx	rate of change of total land energy	W m-2
EVLAND	tyx	Evaporation land	kg m-2 s-1
EVPINTR	tyx	interception loss energy flux	W m-2
EVPSBLN	tyx	snow ice evaporation energy flux	W m-2
EVPSOIL	tyx	baresoil evap energy flux	W m-2
EVPtrns	tyx	transpiration energy flux	W m-2
FRSAT	tyx	fractional area of saturated zone	1
FRSNO	tyx	fractional area of land snowcover	1

FRUNST	tyx	fractional area of unsaturated zone	1
FRWLT	tyx	fractional area of wilting zone	1
GHLAND	tyx	Ground heating land	W m-2
GRN	tyx	greenness fraction	1
GWETPROF	tyx	ave prof soil moisture	1
GWETROOT	tyx	root zone soil wetness	1
GWETTOP	tyx	surface soil wetness	1
LAI	tyx	leaf area index	1
LHLAND	tyx	Latent heat flux land	W m-2
LWLAND	tyx	Net longwave land	W m-2
PARDF	tyx	surface downwelling par diffuse flux	W m-2
PARDR	tyx	surface downwelling par beam flux	W m-2
PRECSNO	tyx	snowfall	kg m-2 s-1
PRECTOT	tyx	total precipitation	kg m-2 s-1
PRMC	tyx	water profile	m3 m-3
QINFIL	tyx	Soil water infiltration rate	kg m-2 s-1
RUNOFF	tyx	overland runoff including throughflow	kg m-2 s-1
RZMC	tyx	water root zone	m3 m-3
SFMC	tyx	water surface layer	m3 m-3
SHLAND	tyx	Sensible heat flux land	W m-2
SMLAND	tyx	Snowmelt flux land	kg m-2 s-1
SNODP	tyx	snow depth within snow covered area fraction	m
SNOMAS	tyx	Total snow storage land	kg m-2
SPLAND	tyx	rate of spurious land energy source	W m-2
SPSNOW	tyx	rate of spurious snow energy	W m-2
SPWATR	tyx	rate of spurious land water source	kg m-2 s-1
SWLAND	tyx	Net shortwave land	W m-2
TELAND	tyx	Total energy storage land	J m-2
TPSNOW	tyx	surface temperature of snow	K
TSAT	tyx	surface temperature of saturated zone	K
TSOIL1	tyx	soil temperatures layer 1	K
TSOIL2	tyx	soil temperatures layer 2	K
TSOIL3	tyx	soil temperatures layer 3	K
TSOIL4	tyx	soil temperatures layer 4	K
TSOIL5	tyx	soil temperatures layer 5	K
TSOIL6	tyx	soil temperatures layer 6	K
TSURF	tyx	surface temperature of land incl snow	K
TUNST	tyx	surface temperature of unsaturated zone	K
TWLAND	tyx	Avail water storage land	kg m-2

TWLT	tyx	surface temperature of wilted zone	K
WCHANGE	tyx	rate of change of total land water	kg m-2 s-1
corner_lats	YCdim XCdim	latitude	degrees_north
corner_lons	YCdim XCdim	longitude	degrees_east

mst_tavg_3hr_glo_C180x180x6_v72 (GEOSIT_MST_T3_C_V72): Moist Processes Diagnostics

Frequency: 3-hourly from 01:30 UTC (time-averaged)

Spatial Grid: 3D, model-level, global horizontal resolution on cube

Dimensions: grid resolution=180, level=72, time=1

Granule Size: ~44 MB

<i>Name</i>	<i>Dim</i>	<i>Description</i>	<i>Units</i>
DELP	tzyx	pressure thickness	Pa
DQRCU	tzyx	convective rainwater source	kg kg-1 s-1
DQRLSAN	tzyx	large scale rainwater source	kg kg-1 s-1
PS	tyx	surface pressure	Pa
REEVAPCN	tzyx	evap subl of convective precipitation	kg kg-1 s-1
REEVAPLSAN	tzyx	evap subl of non convective precipitation	kg kg-1 s-1
corner_lats	YCdim XCdim	latitude	degrees_north
corner_lons	YCdim XCdim	longitude	degrees_east

mst_tavg_3hr_glo_C180x180x6_v73 (GEOSIT_MST_T3_C_V73): Moist Processes Diagnostics At Edges

Frequency: 3-hourly from 01:30 UTC (time-averaged)

Spatial Grid: 3D, model-level edge, global horizontal resolution on cube

Dimensions: grid resolution=180, level=73, time=1

Granule Size: ~37 MB

<i>Name</i>	<i>Dim</i>	<i>Description</i>	<i>Units</i>
CMFMC	tzyx	cumulative mass flux	kg m-2 s-1
PFICU	tzyx	3D flux of ice convective precipitation	kg m-2 s-1
PFILSAN	tzyx	3D flux of ice nonconvective precipitation	kg m-2 s-1
PFLCU	tzyx	3D flux of liquid convective precipitation	kg m-2 s-1

PFLLSAN	tzyx	3D flux of liquid nonconvective precipitation	kg m-2 s-1
PLE	tzyx	edge pressure	Pa
corner_lats	YCdim XCdim	latitude	degrees_north
corner_lons	YCdim XCdim	longitude	degrees_east

nav_tavg_3hr_glo_C180x180x6_v72 (GEOSIT_NAV_T3_C_V72): Vertical Coordinate Navigation

Frequency: 3-hourly from 01:30 UTC (time-averaged)

Spatial Grid: 3D, model-level, global horizontal resolution on cube

Dimensions: grid resolution=180, level=72, time=1

Granule Size: ~41 MB

<i>Name</i>	<i>Dim</i>	<i>Description</i>	<i>Units</i>
H	tzyx	mid layer heights	m
PL	tzyx	mid level pressure	Pa
corner_lats	YCdim XCdim	latitude	degrees_north
corner_lons	YCdim XCdim	longitude	degrees_east

nav_tavg_3hr_glo_C180x180x6_v73 (GEOSIT_NAV_T3_C_V73): Vertical Coordinate Navigation At Edges

Frequency: 3-hourly from 01:30 UTC (time-averaged)

Spatial Grid: 3D, model-level edge, global horizontal resolution on cube

Dimensions: grid resolution=180, level=73, time=1

Granule Size: ~41 MB

<i>Name</i>	<i>Dim</i>	<i>Description</i>	<i>Units</i>
PLE	tzyx	edge pressure	Pa
ZLE	tzyx	edge heights	m
corner_lats	YCdim XCdim	latitude	degrees_north
corner_lons	YCdim XCdim	longitude	degrees_east

ocn_tavg_1hr_glo_C180x180x6_slv (GEOSIT_OCN_T1_C_SLV): Ocean Related Variables

Frequency: 1-hourly from 00:30 UTC (time-averaged)

Spatial Grid: 2D, single-level, global horizontal resolution on cube

Dimensions: grid resolution=180, time=1

Granule Size: ~18 MB

<i>Name</i>	<i>Dim</i>	<i>Description</i>	<i>Units</i>
BCOOL	tyx	buoyancy generation in cool layer	m+2 s-3
COSZ	tyx	cosine of the solar zenith angle	1
DCOOL	tyx	depth of cool layer	m
DELTS	tyx	change of surface skin temperature	K
DTSDDT_ANA	tyx	total skin temperature tendency	K s-1
DWARM	tyx	depth at base of warm layer	m
EFLUXICE	tyx	sea ice latent energy flux	W m-2
EFLUXWTR	tyx	open water latent energy flux	W m-2
EVAPOUT	tyx	evaporation	kg m-2 s-1
FRLAKE	tyx	fraction of lake	1
FRLAND	tyx	fraction of land	1
FRLANDICE	tyx	fraction of land ice	1
FROCEAN	tyx	fraction of ocean	1
FRSEAICE	tyx	ice covered fraction of tile	1
HFLUXICE	tyx	sea ice upward sensible heat flux	W m-2
HFLUXWTR	tyx	open water upward sensible heat flux	W m-2
LANGM	tyx	Langmuir number	1
LCOOL	tyx	Saunders parameter	1
LWGNTICE	tyx	sea ice net downward longwave flux	W m-2
LWGNTWTR	tyx	open water net downward longwave flux	W m-2
PHIW	tyx	Similarity function in warm layer	1
PRECSNOOCN	tyx	ocean snowfall	kg m-2 s-1
QCOOL	tyx	net cooling in cool layer	W m-2
QV10M	tyx	10-meter specific humidity	kg kg-1
QWARM	tyx	net heating in warm layer	W m-2
RAINOCN	tyx	ocean rainfall	kg m-2 s-1
SWCOOL	tyx	solar heating in cool layer	W m-2
SWGNTICE	tyx	sea ice net downward shortwave flux	W m-2
SWGNTWTR	tyx	open water net downward shortwave flux	W m-2
SWWARM	tyx	solar heating in warm layer	W m-2
T10M	tyx	10-meter air temperature	K
TAUTW	tyx	relaxation time of TW to TS FOUND	s

TAUXICE	tyx	eastward stress over ice	N m-2
TAUXWTR	tyx	eastward stress over water	N m-2
TAUYICE	tyx	northward stress over ice	N m-2
TAUYWTR	tyx	northward stress over water	N m-2
TBAR	tyx	mean temperature of interface layer	K
TDEL	tyx	temperature at base of cool layer	K
TDROP	tyx	temperature drop across cool layer	K
TSKINICE	tyx	sea ice skin temperature	K
TSKINWTR	tyx	open water skin temperature	K
TS_FOUND	tyx	foundation temperature for interface layer	K
U10M	tyx	10-meter eastward wind	m s-1
USTARW	tyx	ustar over water layer	m s-1
V10M	tyx	10-meter northward wind	m s-1
ZETA_W	tyx	Stability parameter in Warm Layer	1
corner_lats	YCdim XCdim	latitude	degrees_north
corner_lons	YCdim XCdim	longitude	degrees_east

rad_tavg_1hr_glo_C180x180x6_slv (GEOSIT_RAD_T1_C_SLV): Radiation Diagnostics

Frequency: 1-hourly from 00:30 UTC (time-averaged)

Spatial Grid: 2D, single-level, global horizontal resolution on cube

Dimensions: grid resolution=180, time=1

Granule Size: ~16 MB

<i>Name</i>	<i>Dim</i>	<i>Description</i>	<i>Units</i>
ALBEDO	tyx	surface albedo	1
ALBNIRDF	tyx	surface albedo for near infrared diffuse	1
ALBNIRDR	tyx	surface albedo for near infrared beam	1
ALBVISDF	tyx	surface albedo for visible diffuse	1
ALBVISDR	tyx	surface albedo for visible beam	1
CLDHGH	tyx	cloud area fraction for high clouds	1
CLDLOW	tyx	cloud area fraction for low clouds	1
CLDMID	tyx	cloud area fraction for middle clouds	1
CLDTOT	tyx	total cloud area fraction	1
EMIS	tyx	surface emissivity	1
LWGAB	tyx	surface absorbed longwave radiation	W m-2
LWGABCLR	tyx	surface absorbed longwave radiation assuming clear	W m-2

		sky	
LWGABCLRCL N	tyx	surface absorbed longwave radiation assuming clear sky and no aerosol	W m-2
LWGEM	tyx	longwave flux emitted from surface	W m-2
LWGNT	tyx	surface net downward longwave flux	W m-2
LWGNTCLR	tyx	surface net downward longwave flux assuming clear sky	W m-2
LWGNTCLRCL N	tyx	surface net downward longwave flux assuming clear sky and no aerosol	W m-2
LWSCC5	tyx	surface absorbed longwave radiation assuming clear sky masked using cldtt LE 5	W m-2
LWTUP	tyx	upwelling longwave flux at toa	W m-2
LWTUPCLR	tyx	upwelling longwave flux at toa assuming clear sky	W m-2
LWTUPCLRCL N	tyx	upwelling longwave flux at toa assuming clear sky and no aerosol	W m-2
OLRCC5	tyx	upwelling longwave flux at toa assuming clear sky masked using cldtt LE 5	W m-2
SWGDN	tyx	surface incoming shortwave flux	W m-2
SWGDNCLR	tyx	surface incoming shortwave flux assuming clear sky	W m-2
SWGNT	tyx	surface net downward shortwave flux	W m-2
SWGNTCLN	tyx	surface net downward shortwave flux assuming no aerosol	W m-2
SWGNTCLR	tyx	surface net downward shortwave flux assuming clear sky	W m-2
SWGNTCLRCL N	tyx	surface net downward shortwave flux assuming clear sky and no aerosol	W m-2
SWTDN	tyx	toa incoming shortwave flux	W m-2
SWTNT	tyx	toa net downward shortwave flux	W m-2
SWTNTCLN	tyx	toa net downward shortwave flux assuming no aerosol	W m-2
SWTNTCLR	tyx	toa net downward shortwave flux assuming clear sky	W m-2
SWTNTCLRCL N	tyx	toa net downward shortwave flux assuming clear sky and no aerosol	W m-2
TAUHIGH	tyx	in cloud optical thickness of high clouds(EXPORT)	1
TAULOW	tyx	in cloud optical thickness of low clouds	1
TAUMID	tyx	in cloud optical thickness of middle clouds	1
TAUTOT	tyx	in cloud optical thickness of all clouds	1
TS	tyx	surface skin temperature	K
corner_lats	YCdim XCdim	latitude	degrees_north
corner_lons	YCdim XCdim	longitude	degrees_east

Frequency: 3-hourly from 01:30 UTC (time-averaged)

Spatial Grid: 3D, model-level, global horizontal resolution on cube

Dimensions: grid resolution=180, level=72, time=1

Granule Size: ~123 MB

<i>Name</i>	<i>Dim</i>	<i>Description</i>	<i>Units</i>
CLOUD	tzyx	cloud fraction for radiation	1
DELP	tzyx	pressure thickness	Pa
DTDTLWR	tzyx	air temperature tendency due to longwave	K s-1
DTDTLWRCLR	tzyx	air temperature tendency due to longwave for clear skies	K s-1
DTDTSWR	tzyx	air temperature tendency due to shortwave	K s-1
DTDTSWRCLR	tzyx	air temperature tendency due to shortwave for clear skies	K s-1
PS	tyx	surface pressure	Pa
corner_lats	YCdim XCdim	latitude	degrees_north
corner_lons	YCdim XCdim	longitude	degrees_east

slv_tavg_1hr_glo_C180x180x6_slv (GEOSIT_SLV_T1_C_SLV): Single Level Diagnostics

Frequency: 1-hourly from 00:30 UTC (time-averaged)

Spatial Grid: 2D, single-level, global horizontal resolution on cube

Dimensions: grid resolution=180, time=1

Granule Size: ~23 MB

<i>Name</i>	<i>Dim</i>	<i>Description</i>	<i>Units</i>
CLDPRS	tyx	cloud top pressure	Pa
CLDTMP	tyx	cloud top temperature	K
DISPH	tyx	zero plane displacement height	m
H1000	tyx	height at 1000 mb	m
H250	tyx	height at 250 hPa	m
H500	tyx	height at 500 hPa	m
H850	tyx	height at 850 hPa	m
OMEGA500	tyx	omega at 500 hPa	Pa s-1
PBLTOP	tyx	pbltop pressure	Pa
PS	tyx	surface pressure	Pa
Q250	tyx	specific humidity at 250 hPa	kg kg-1

Q500	tyx	specific humidity at 500 hPa	kg kg-1
Q850	tyx	specific humidity at 850 hPa	kg kg-1
QV10M	tyx	10-meter specific humidity	kg kg-1
QV2M	tyx	2-meter specific humidity	kg kg-1
SLP	tyx	sea level pressure	Pa
T10M	tyx	10-meter air temperature	K
T250	tyx	air temperature at 250 hPa	K
T2M	tyx	2-meter air temperature	K
T500	tyx	air temperature at 500 hPa	K
T850	tyx	air temperature at 850 hPa	K
TO3	tyx	total column ozone	Dobsons
TOX	tyx	total column odd oxygen	kg m-2
TQI	tyx	total precipitable ice water	kg m-2
TQL	tyx	total precipitable liquid water	kg m-2
TQV	tyx	total precipitable water vapor	kg m-2
TROPPB	tyx	tropopause pressure based on blended estimate	Pa
TROPPT	tyx	tropopause pressure based on thermal estimate	Pa
TROPPV	tyx	tropopause pressure based on EPV estimate	Pa
TROPQ	tyx	tropopause specific humidity using blended TROPP estimate	kg kg-1
TROPT	tyx	tropopause temperature using blended TROPP estimate	K
TS	tyx	surface skin temperature	K
U10M	tyx	10-meter eastward wind	m s-1
U250	tyx	eastward wind at 250 hPa	m s-1
U2M	tyx	2-meter eastward wind	m s-1
U500	tyx	eastward wind at 500 hPa	m s-1
U50M	tyx	eastward wind at 50 meters	m s-1
U850	tyx	eastward wind at 850 hPa	m s-1
V10M	tyx	10-meter northward wind	m s-1
V250	tyx	northward wind at 250 hPa	m s-1
V2M	tyx	2-meter northward wind	m s-1
V500	tyx	northward wind at 500 hPa	m s-1
V50M	tyx	northward wind at 50 meters	m s-1
V850	tyx	northward wind at 850 hPa	m s-1
corner_lats	YCdim XCdim	latitude	degrees_north
corner_lons	YCdim XCdim	longitude	degrees_east

tdt_tavg_3hr_glo_C180x180x6_v72 (GEOSIT_TDT_T3_C_V72): Temperature Tendencies

Frequency: 3-hourly from 01:30 UTC (time-averaged)

Spatial Grid: 3D, model-level, global horizontal resolution on cube

Dimensions: grid resolution=180, level=72, time=1

Granule Size: ~296 MB

<i>Name</i>	<i>Dim</i>	<i>Description</i>	<i>Units</i>
DELP	tzyx	pressure thickness	Pa
DTDTANA	tzyx	total temperature analysis tendency	K s-1
DTDTDYN	tzyx	tendency of air temperature due to dynamics	K s-1
DTDTFRI	tzyx	tendency of air temperature due to friction	K s-1
DTDTFRIC	tzyx	tendency of air temperature due to moist processes friction	K s-1
DTDTGWD	tzyx	air temperature tendency due to GWD	K s-1
DTDTMST	tzyx	tendency of air temperature due to moist processes	K s-1
DTDTRAD	tzyx	tendency of air temperature due to radiation	K s-1
DTDTTOT	tzyx	tendency of air temperature due to physics	K s-1
DTDTTRB	tzyx	tendency of air temperature due to turbulence	K s-1
PS	tyx	surface pressure	Pa
corner_lats	YCdim XCdim	latitude	degrees_north
corner_lons	YCdim XCdim	longitude	degrees_east

trb_tavg_3hr_glo_C180x180x6_v73 (GEOSIT_TRB_T3_C_V73): Turbulence Diagnostics At Edges

Frequency: 3-hourly from 01:30 UTC (time-averaged)

Spatial Grid: 3D, model-level edge, global horizontal resolution on cube

Dimensions: grid resolution=180, level=73, time=1

Granule Size: ~200 MB

<i>Name</i>	<i>Dim</i>	<i>Description</i>	<i>Units</i>
KH	tzyx	total scalar diffusivity	m+2 s-1
KHLK	tzyx	entrainment heat diffusivity from Lock	m+2 s-1
KHLS	tzyx	scalar diffusivity from Louis	m+2 s-1
KHRAD	tzyx	radiation driven scalar diffusivity from Lock scheme	m+2 s-1
KHSFC	tzyx	surface driven scalar diffusivity from Lock scheme	m+2 s-1
KM	tzyx	total momentum diffusivity	m+2 s-1

KMLK	tzyx	entrainment momentum diffusivity from Lock	m+2 s-1
KMLS	tzyx	momentum diffusivity from Louis	m+2 s-1
PLE	tzyx	edge pressure	Pa
RI	tzyx	Richardson number from Louis	1
corner_lats	YCdim XCdim	latitude	degrees_north
corner_lons	YCdim XCdim	longitude	degrees_east