GLDAS Model Output

Descriptions are available at the GES DISC.

- GLDAS1 products
- GLDAS2 products
- GLDAS Land Surface Models

Model Output Summary Table

Name	GRIB PDS IDs	Description	Units	Time
Swnet	111	Net short wave radiation flux	W m-2	average
Lwnet	112	Net long-wave radiation flux	W m-2	average
Qle	121	Latent heat net flux	W m-2	average
Qh	122	Sensible heat net flux	W m-2	average
Qg	155	Heat flux	W m-2	average
Snowf	131	Snow precipitation rate	kg m-2 s-1	average
Rainf	132	Rain precipitation rate	kg m-2 s-1	average
Evap	057	Evapotranspiration	kg m-2 s-1	average
Qs	235	Storm surface runoff	kg m-2 per 3-hour or kg m-2 s-1	accumulation or average
Qsb	234	Baseflow-groundwater runoff	kg m-2 per 3-hour or kg m-2 s-1	accumulation or average

Get the Data

LDAS datasets are available from the NASA GES DISC

The NASA Goddard Earth Sciences Data and Information Services Center (GES DISC) provides access to LDAS datasets using multiple methods, including HTTPS, GDS, and the ability to subset spatially, temporally, and/or by variable:

- GLDAS
- NLDAS
- NCA-LDAS
- FLDAS

These datasets are also available via Giovanni. Giovanni is an online application developed by the GES DISC that allows researchers to rapidly explore data, so that spatial-temporal variability, anomalous conditions, and patterns of interest can be directly and easily analyzed online before optionally downloading the data. Supported download formats include NetCDF, GeoTIFF, and KMZ.

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Qsm	099	Snow melt	kg m-2 per 3-hour or kg m-2 s-1 or kg m-2	accumulation or average
AvgSurfT	138	Average Surface Skin temperature	K	instantaneous
Albedo		Albedo	%	instantaneous
SWE	065	Snow depth water equivalent	kg m-2	instantaneous
SnowDepth		Snow depth	M	instantaneous
SoilMoist[depth]	086	Soil moisture	kg m-2	instantaneous
SoilTMP[depth]	085	Soil temperature	K	instantaneous
PotEvap		Potential evaporation rate	W m-2	average
ECanop		Canopy water evaporation	W m-2	average
Tveg		Transpiration	W m-2	average
ESoil		Direct Evaporation from Bare Soil	W m-2	average
RootMoist		Root zone soil moisture	kg m-2	instantaneous
CanopInt	071	Plant canopy surface water	kg m-2	instantaneous
SnowT		Snow surface temperature	K	average
Acond		Aerodynamic conductance	m s-1	average
TWS		Terrestrial water storage	mm	average
GWS		Ground water storage	mm	average
Wind_f	032	Wind speed	m/s	instantaneous

Rainf_f		Total precipitation rate	kg m-2 s-1	instantaneous
Tair_f	011	Temperature	K	instantaneous
Qair_f	051	Specific humidity	kg/kg	instantaneous
Psurf_f	001	Pressure	Pa	instantaneous
SWdown_f	204	Downward short-wave radiation	W m-2	average or instantaneous
LWdown_f	205	Downward long-wave radiation	W m-2	average or instantaneous

*"_f" indicates forcing variables *Not all variables are available in all LSMs or in GLDAS1

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