# teleconnections.zip Contents

## **File Types and Descriptions**

Name	Entity Type	Externally Defined Format	Description	
Teleconnections_R_Script.R	text/x- rsrc	application/R	Script that outlines the Activity A, B, and C steps that students complete as part of the module.	
Lake_Characteristics		application/vnd.ms- excel	File with site information and physical characteristics of each lake. Tabs for each lake include long-term annual climate data used in the module. Save as .xlsx to run in script.	
Lakes/Barco folder				
glm2.nml	text/x- rsrc	application/GLM	File to configure lake characteristics, meteorological driver data, and physical response variables for the Barco Lake General Lake Model (GLM). Save as .nml to run.	
Lake_Characteristics		application/vnd.ms- excel	File with site information and physical characteristics of each lake. Tabs for each lake include long-term annual climate data used in the module. Save as .xlsx to run in script.	
met_hourly.csv			Meteorological GLM driver data for a baseline simulation based on observed data for Barco Lake.	
Lakes/Crampton folder				
glm2.nml	text/x- rsrc	application/GLM	File to configure lake characteristics, meteorological driver data, and physical response variables for the Crapmton Lake General Lake Model (GLM). Save as .nml to run.	
Lake_Characteristics		application/vnd.ms- excel	File with site information and physical characteristics of each lake. Tabs for each lake include long-term annual climate data used in the module. Save as .xlsx to run in script.	
met_hourly.csv			Meteorological GLM driver data for a baseline simulation based on observed data for Crampton Lake.	
Lakes/Falling Creek folder				
glm2.nml	text/x- rsrc	application/GLM	File to configure lake characteristics, meteorological driver data, and physical	

			response variables for the Falling Creek Reservoir General Lake Model (GLM). Save as .nml to run.
Lake_Characteristics		application/vnd.ms- excel	File with site information and physical characteristics of each lake. Tabs for each lake include long-term annual climate data used in the module. Save as .xlsx to run in script.
met_hourly.csv			Meteorological GLM driver data for a baseline simulation based on observed data for Falling Creek Reservoir.
inflow.csv			Surface inflow GLM driver data for a baseline simulation based on observed data for Falling Creek Reservoir.
outflow.csv			Surface outflow GLM driver data based on observed data for Falling Creek Reservoir.
Lakes/Mendota folder			
glm2.nml	text/x- rsrc	application/GLM	File to configure lake characteristics, meteorological driver data, and physical response variables for the Lake Mendota General Lake Model (GLM). Save as .nml to run.
Lake_Characteristics		application/vnd.ms- excel	File with site information and physical characteristics of each lake. Tabs for each lake include long-term annual climate data used in the module. Save as .xlsx to run in script.
met_hourly.csv			Meteorological GLM driver data for a baseline simulation based on observed data for Lake Mendota.
inflow.csv			Surface inflow GLM driver data for a baseline simulation based on observed data for Lake Mendota.
outflow.csv			Surface outflow GLM driver data based on observed data for Lake Mendota.
Lakes/Prairie Pothole folder			
glm2.nml	text/x- rsrc	application/GLM	File to configure lake characteristics, meteorological driver data, and physical response variables for the Prairie Pothole General Lake Model (GLM). Save as .nml to run.

Lake_Characteristics		application/vnd.ms- excel	File with site information and physical characteristics of each lake. Tabs for each lake include long-term annual climate data used in the module. Save as .xlsx to run in script.
met_hourly.csv			Meteorological GLM driver data for a baseline simulation based on observed data for Prairie Pothole.
Lakes/Suggs folder			
glm2.nml	text/x- rsrc	application/GLM	File to configure lake characteristics, meteorological driver data, and physical response variables for the Suggs Lake General Lake Model (GLM). Save as .nml to run.
Lake_Characteristics		application/vnd.ms- excel	File with site information and physical characteristics of each lake. Tabs for each lake include long-term annual climate data used in the module. Save as .xlsx to run in script.
met_hourly.csv			Meteorological GLM driver data for a baseline simulation based on observed data for Suggs Lake.
Lakes/Sunapee folder			
glm2.nml	text/x- rsrc	application/GLM	File to configure lake characteristics, meteorological driver data, and physical response variables for the Lake Sunapee General Lake Model (GLM). Save as .nml to run.
Lake_Characteristics		application/vnd.ms- excel	File with site information and physical characteristics of each lake. Tabs for each lake include long-term annual climate data used in the module. Save as .xlsx to run in script.
met_hourly.csv			Meteorological GLM driver data for a baseline simulation based on observed data for Lake Sunapee.
inflow.csv			Surface inflow GLM driver data for a baseline simulation based on observed data for Lake Sunapee.
outflow.csv			Surface outflow GLM driver data based on observed data for Lake Sunapee.
Lakes/Toolik folder			
glm2.nml	text/x-	application/GLM	File to configure lake characteristics,

	rsrc		meteorological driver data, and physical response variables for the Toolik Lake General Lake Model (GLM). Save as .nml to run.
Lake_Characteristics		application/vnd.ms- excel	File with site information and physical characteristics of each lake. Tabs for each lake include long-term annual climate data used in the module. Save as .xlsx to run in script.
met_hourly.csv			Meteorological GLM driver data for a baseline simulation based on observed data for Toolik Lake.
inflow.csv			Surface inflow GLM driver data for a baseline simulation based on observed data for Toolik Lake.
outflow.csv			Surface outflow GLM driver data based on observed data for Toolik Lake.

### **Data Table Structure**

### met\_hourly.csv

Column	Description	Unit or code explanation or date format	Empty value code
name		or date format	value code
time	Date and time of sampling	YYYY-MM-DD HH:MM:SS	NA
ShortWave	Short wave radiation	wattsPerSquareMeter	NA
LongWave	Long wave radiation	wattsPerSquareMeter	NA
AirTemp	Air temperature	celsius	NA
RelHum	Relative humidity in percent	dimensionless	NA
WindSpeed	Wind speed	metersPerSecond	NA
Rain	Hourly rain accumulation	metersPerDay	NA
Snow	Hourly snow accumulation	metersPerDay	NA

### inflow.csv (if applicable)

Column name	Description	Unit or code explanation or date format	Empty value code
time	Date and time of sampling	YYYY-MM-DD HH:MM:SS	NA
FLOW	Stream inflow rate	cubicMetersPerSecond	NA

SALT	Inflow stream salinity	milligramsPerLiter	NA
TEMP	Inflow water temperature	celsius	NA

### outflow.csv (if applicable)

Column name	Description	Unit or code explanation or date format	Empty value code
time	Date and time of sampling	YYYY-MM-DD HH:MM:SS	NA
FLOW	Stream inflow rate	cubicMetersPerSecond	NA