**Amazon hydrology**

Point data on river water level (cm) and river discharge/flow (m3/s), measured at 938 and 551 fluviometric stations, respectively, and daily precipitation from 1342 pluviometric stations were collected from the Brazilian Government National Water Agency, ANA (*Agência Nacional de Águas*) via their HidroWeb website at <http://hidroweb.ana.gov.br>. Fluviometric stations are situated to measure both river level and flow, although data were not always available for both at the same gauging station. Across our study region, fluviometric and pluviometric stations have been monitoring water level, flow, and precipitation on a daily basis since as early as 1922, although most data records fall between 1965 to 2015. We utilized the Hidro1.2 software package (widely used by ANA) to process the data and generate separate spreadsheet files for each gauging station.

The **HYDROLOGY** database encompasses data from four Amazonian watersheds (Amazon, Tocantins, Atlantic, and Parana) that are zipped into separate folders. In addition to Rainfall, Water Level, and Flow data, each watershed folder includes two summary tables (FINAL\_AllAmazon\_Fluvio\*.csv; FINAL\_AllAmazon\_Pluvio\*.csv) that summarize fluviometric and pluviometric station information for the corresponding watershed, including coordinates for each station that can be displayed in GIS using the WGS 1984 coordinate system.

Fluviometric station summary tables contain the following fields:

1. STATION\_CODE: Fluviometric station code.

2. STATION\_NAME: Name assigned to fluviometric station.

3. RIVER: River being measured for discharge/flow (m3/s) and water level (m).

4. MUNIC\_CODE: Municipal Code as defined by IBGE, consisting of seven numbers. The first two numbers identify the state.

5. MUNICIP: Name of municipality where fluviometric station is located.

6. FLOW\_DATA: Indicates presence (1) or absence (0) of flow data for associated fluviometric station.

7. WATER\_LEVEL: Indicates presence (1) or absence (0) of water level data for associated fluviometric station.

8. LAT: Latitudinal location of the rain gauge.

9. LON: Longitudinal location of the rain gauge.

10. START\_DATE\_FLOW: Earliest date that river flow data is available (mm/dd/yy).

11. END\_DATE\_FLOW: Latest date that river flow data is available (mm/dd/yy).

12. START\_DATE\_WL: Earliest date that water level data is available (mm/dd/yy).

13. END\_DATE\_WL: Latest date that water level data is available (mm/dd/yy).

Pluviometric station summary tables contain the following fields:

1. STATION\_CODE: Pluviometric station code where rain gauge measures daily precipitation (mm).

2. STATION\_NAME: Name assigned to pluviometric station.

3. MUNIC\_CODE: Municipal Code as defined by IBGE, consisting of seven numbers. The first two numbers identify the state.

4. MUNICIP: Name of municipality where rain gauge is located.

5. LAT: Latitudinal location of the rain gauge.

6. LON: Longitudinal location of the rain gauge.

7. START\_DATE\_PLUV: Earliest date that daily precipitation data is available (mm/dd/yy).

8. END\_DATE\_PLUV: Latest date that daily precipitation data is available (mm/dd/yy).

Flow datasets contain the following fields:

1. Date: Date of the river flow measurement.

2. Flow (m3/s): River flow in meters cubed per second.

Water level datasets contain the following fields:

1. Date: Date of the water level measurement.

2. Water level (cm): River water level in centimeters.

Rainfall datasets contain the following fields:

1. Date: Date of the rainfall measurement.

2. Rainfall (mm): Daily accumulated precipitation in millimeters.