

Data Release Report: Water Chemistry and Quality of Glacial Streams in Yukon-Charley Rivers National Preserve and Wrangell-St. Elias National Park and Preserve, Alaska

National Park Service, Arctic Inventory and Monitoring Network

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Summary

The data in this release were collected by the National Park Service, Central Alaska Inventory and Monitoring Program as part of its water inventory work in 2002. The data consist of water quality and chemistry measurements of glacial streams in Yukon-Charley Rivers National Preserve and Wrangell-St. Elias National Park and Preserve, Alaska.

Key words: water, chemistry, quality, turbidity, solids, alaska, glacial

Study Area

Data were collected in glacial streams in Yukon-Charley Rivers National Preserve and Wrangell-St. Elias National Park and Preserve, Alaska (Figure 1).

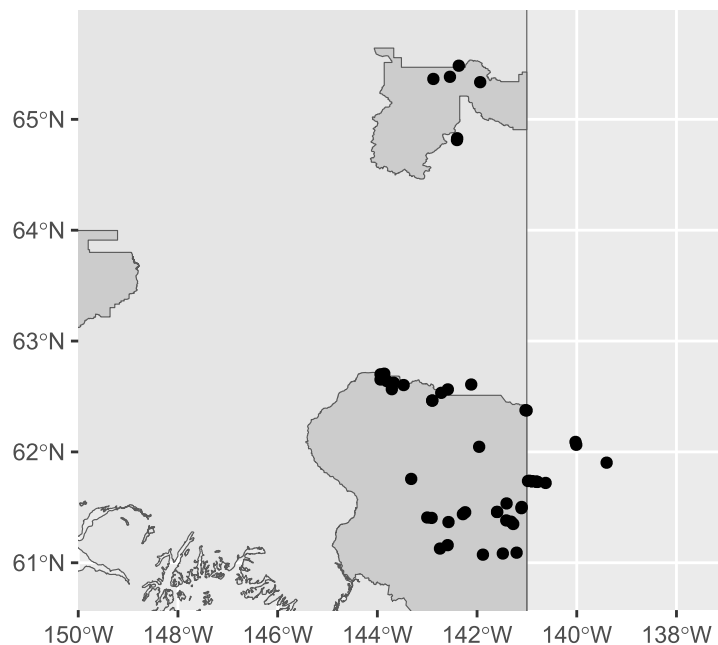


Figure 1. Study sites map.

Files

This data release consists of the following files:

File	Description
2002 YUCH - WRST Water Quality and Chemistry.csv	Water quality and chemistry data.

Columns and Data Types

Data column descriptors appear in Table 1, below.

Table 1. Data column descriptors.

ColumnName	DataType
Site	character
Date	Date
Weather	character
Latitude	numeric
Longitude	numeric
Elevation_m	integer
GPS Error (+/-m)	numeric
WaterTemperature_C	numeric
AirTemperature_C	numeric
Depth_m	numeric
Turbidity (NTU)	numeric
Conductivity (uS/cm)	numeric
Total dissolved solids (mg/L)	numeric
pH	numeric
T-alkalinity (ppm) (Lamotte)	integer
Dissolved oxygen (% O2)	numeric
Dissolved oxygen (mg/L)	numeric
Dissolved oxygen (mg/L) (Chemets)	integer
Alkalinity CaCO3 (mg/L)	integer
Dissolved Organic Carbon (mg/L)	numeric
Aluminum (mg/L)	numeric

ColumnName	DataType
Cadmium (mg/L)	numeric
Calcium (mg/L)	numeric
Chromium (mg/L)	numeric
Copper (mg/L)	numeric
Iron (mg/L)	numeric
Lead (mg/L)	numeric
Magnesium (mg/L)	numeric
Potassium (mg/L)	numeric
Sulfate (mg/L)	numeric
Zinc (mg/L)	numeric
Chloride (mg/L)	numeric
Nitrite-N (mg/L)	numeric
Nitrate-N (mg/L)	numeric
Total Nitrites/Nitrates-N (mg/L)	numeric
Chlorophyll-a (mg/m3) corrected	numeric
Chlorophyll-a (mg/m3) uncorrected	numeric
Total Suspended solids (mg/L)	numeric
Total Nitrogen (mg/L)	numeric
Total Kjeldahl Nitrogen (mg/L)	integer
Total Phosphate-P (mg/L)	numeric
Flow volume (m ³ /sec)	numeric
Flow volume comment	character
Gradient of creek/river 1	integer
Gradient of creek/river 2	character
Comments/ Hydro Tech notes	character
Habitat description	character
Conductivity (uS/cm) Temperature	numeric
Total dissolved solids (mg/L) Temperature	numeric
pH Temperature	numeric
Dissolved oxygen (% O2) Temperature	numeric

ColumnName	DataType
Dissolved oxygen (mg/L) Temperature	numeric

Data Summary

Streams

The National Park Service inventoried 57 streams for this study (Table 2).

Table 2. Glacial streams included in this dataset.

Site	Longitude	Latitude
Alder Lake Creek	-140.0250	62.09010
Big Cirque Lake-YUCH	-142.4025	64.81331
Bonanza Creek	-141.1095	61.49256
Chalk Creek	0.0000	0.00000
Chathenda Creek	-140.0100	62.06411
Chistochina River	0.0000	0.00000
Chitistone River	-141.5976	61.45855
Chititu Creek	-141.3191	61.37069
Chokasna River	-142.2383	61.45563
Cobb Lake #1 (smaller)	-143.8609	62.70564
Cobb Lake #2 (bigger)	-143.9358	62.70004
Creek between Long Lake and Little Jack Creek	-142.7184	62.53292
Crystal Creek	-142.5729	61.36728
Cub Creek	-140.8161	61.73075
Dan Creek	-141.4143	61.38201
Geohenda Creek	-141.9579	62.04609
Gilahina River	-142.2837	61.43850
Glacier Creek	-141.5977	61.45856
Goat Creek	-141.8823	61.07308
Holmes Creek (Random Creek #1)	-140.6247	61.72009
Jack Creek	-142.8990	62.46323
Jack Creek beaver pond	-142.8986	62.46276
Jumbo Creek	-141.1047	61.50337

Site	Longitude	Latitude
Kiagna River	-141.4830	61.08326
Kletsan Creek	-140.9778	61.73762
Klu River	-142.5896	61.15892
Lake #1-YUCH	0.0000	0.00000
Lake #2-YUCH (adj. To Takoma Bluff)	-142.3662	65.48397
Lower Cabin Creek	-141.0276	62.37585
Lower Granitic Creek	-141.2065	61.09104
Monahan Creek	-142.7433	61.12812
Moose Creek- Kluane Game Sanctuary	-139.4008	61.90293
Northern lakes-Heli site #2	-142.1168	62.60798
Northern lakes-Heli site #1	-143.6719	62.62390
Random #1-Heli site	-143.4727	62.60305
Random #2-Heli site	-143.8074	62.63836
Random #3-Heli site	-143.7094	62.56594
Random #4-Heli site	-143.9361	62.65309
Random Creek #2 (White River tributary)	-140.7862	61.72918
Rock Lake	-142.5861	62.56389
Seymore Lake-YUCH	-141.9370	65.33547
Site #1-YUCH	-142.8764	65.36456
Site #2-YUCH	-142.5437	65.38392
Smallest Cirque Lake-YUCH	-142.3988	64.82967
Solo Creek	-143.3209	61.75634
Swift Creek	-142.9986	61.40829
Tractor Creek	-142.9109	61.40453
Traver Creek (Random Creek #3)	-140.9071	61.73611
Traver Creek side channel (Random Creek #4)	-140.9071	61.73611
Upper Cabin Creek	-141.0052	62.37381
West Fork Creek	-141.4076	61.53521
West Fork Slough	0.0000	0.00000
White River #1	0.0000	0.00000

Site	Longitude	Latitude
White River #2	-140.8053	61.73212
White River #3	-140.9486	61.73961
White River (adjacent to Traver Creek)	-140.9071	61.73611
Young Creek	-141.2745	61.34977

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