

Data Release Report: 2002 Water Quality And Fish Data, Wrangell - St. Elias National Park and Preserve and Yukon - Charley Rivers National Preserve, Alaska

National Park Service

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Introduction

This Data Release Report describes water quality and fish observations collected by the National Park Service (NPS) from 46 sites in Wrangell - St. Elias National Park and Preserve (WRST) and 7 sites in Yukon - Charley Rivers National Preserve (YUCH), Alaska from June 06 to August 29, 2002.

Methods

These data were discovered during a data mining exercise in 2026. No methods, report, or documentation have been found to describe the data collection and processing, instrumentation, or analytical methods for this dataset. Use of these data is 'as-is'.

Files Included In This Release

This data release consists of the files include in Table 1.

Table 1. List of files included in this release.

File
Data Release Report DENA WRST Water Quality Data 2002.pdf
Water Quality Data YUCH WRST 2002.csv
Water Quality Data YUCH WRST 2002.csv Metadata.csv

Metadata

Metadata, including column names, definitions and units of measure for the file Water Quality Data YUCH WRST 2002.csv appears in Table 2. These values are also available in the file Water Quality Data YUCH WRST 2002.csv Metadata.csv

Table 2. Data columns, structure and definition.

ColumnName	Units	Description
Park		Conservation unit acronym
Site Name		Site name
Type		Water body type. Stream or Lake
Date		Date
Time		Time
Flow volume (m ³ /sec)	m ³ /sec	Flow volume (m ³ /sec)
Air Temperature (C)	C	Air Temperature (C)
Water Temperature (C)	C	Water Temperature (C)
Depth (m)	m	Depth (m)
Turbidity (NTU)	Nephelometric Turbidity Units	Turbidity (NTU)
Conductivity (uS/cm)	uS/cm	Conductivity (uS/cm)
Total Dissolved Solids (mg/L)	mg/L	Total Dissolved Solids (mg/L)
Total Dissolved Solids (mg/L) Temperature (C)	mg/L	Total Dissolved Solids (mg/L) Temperature (C)
Total Dissolved Solids (mg/L) Temperature Uncorrected	mg/L	Total Dissolved Solids (mg/L) Temperature Uncorrected
pH		pH
pH Temperature (C)	Degrees, Centigrade	pH Temperature (C)
pH Temperature Uncorrected	C	pH Temperature Uncorrected
T-alkalinity (ppm) (Lamotte)	Parts/million	T-alkalinity (ppm) (Lamotte)
Dissolved Oxygen (% O ₂)	Percent	Dissolved Oxygen (% O ₂)
Dissolved Oxygen (% O ₂) Temperature (C)	Degrees, Centigrade	Dissolved Oxygen (% O ₂) Temperature (C)
Dissolved Oxygen (% O ₂) Temperature Uncorrected	Percent	Dissolved Oxygen (% O ₂) Temperature Uncorrected
Dissolved Oxygen (mg/L)	mg/L	Dissolved Oxygen (mg/L)
Dissolved Oxygen (mg/L) Temperature (C)	mg/L	Dissolved Oxygen (mg/L) Temperature (C)
Dissolved Oxygen (mg/L) Temperature Uncorrected	mg/L	Dissolved Oxygen (mg/L) Temperature Uncorrected

ColumnName	Units	Description
Dissolved Oxygen (mg/L) (Chemets)	mg/L	Dissolved Oxygen (mg/L) (Chemets)
Alkalinity CaCO3) (mg/L)	mg/L	Alkalinity CaCO3) (mg/L)
Alkalinity CaCO3) (mg/L) 2	mg/L	Alkalinity CaCO3) (mg/L) 2
Dissolved Organic Carbon (mg/L)	mg/L	Dissolved Organic Carbon (mg/L)
Aluminum (mg/L)	mg/L	Aluminum (mg/L)
Cadmium (mg/L)	mg/L	Cadmium (mg/L)
Calcium (mg/L)	mg/L	Calcium (mg/L)
Chromium (mg/L)	mg/L	Chromium (mg/L)
Copper (mg/L)	mg/L	Copper (mg/L)
Copper (mg/L) Note	mg/L	Copper (mg/L) Note
Iron (mg/L)	mg/L	Iron (mg/L)
Lead (mg/L)	mg/L	Lead (mg/L)
Magnesium (mg/L)	mg/L	Magnesium (mg/L)
CaCO3 (mg/L, estimated)	mg/L	Estimated CaCO3 = 2.497 * Calcium (mg/L) + 4.118 * Magnesium (mg/L)
Potassium (mg/L)	mg/L	Potassium (mg/L)
Sulfate (mg/L)	mg/L	Sulfate (mg/L)
Zinc (mg/L)	mg/L	Zinc (mg/L)
Chloride (mg/L)	mg/L	Chloride (mg/L)
Nitrite-N (mg/L)	mg/L	Nitrite-N (mg/L)
Nitrate-N (mg/L)	mg/L	Nitrate-N (mg/L)
Total Nitrites/Nitrates-N (mg/L)	mg/L	Total Nitrites/Nitrates-N (mg/L)
Chlorophyll-a (mg/m3)	mg/m3	Chlorophyll-a (mg/m3)
Chlorophyll-a (mg/m3) Uncorrected	mg/m4	Chlorophyll-a (mg/m3) Uncorrected
Total Suspended solids (mg/L)	mg/L	Total Suspended solids (mg/L)
Total Nitrogen (mg/L)	mg/L	Total Nitrogen (mg/L)
Total Kjeldahl Nitrogen (mg/L)	mg/L	Total Kjeldahl Nitrogen (mg/L)
Total Phosphate-P (mg/L)	mg/L	Total Phosphate-P (mg/L)

ColumnName	Units	Description
Flow volume (m ³ /sec) Note	Cubic meters per second	Flow volume (m ³ /sec) Note
River Gradient (%)	Percent	River Gradient (%)
Habitat description from aquatic survey form		Habitat description from aquatic survey form
Total # of Fish Caught		Total # of Fish Caught
# of Fish Species Caught		# of Fish Species Caught
Dolly Varden	Count	Count of Dolly Varden
Artic Grayling	Count	Count of Artic Grayling
Slimy Sculpin	Count	Count of Slimy Sculpin
Prickly Sculpin	Count	Count of Prickly Sculpin
Coastrange Sculpin	Count	Count of Coastrange Sculpin
Unidentified Sculpin	Count	Count of Unidentified Sculpin
Rainbow Trout	Count	Count of Rainbow Trout
Chinook Salmon	Count	Count of Chinook Salmon
Coho Salmon	Count	Count of Coho Salmon
Longnose Sucker	Count	Count of Longnose Sucker
Round Whitefish	Count	Count of Round Whitefish
Burbot	Count	Count of Burbot
Lake Chub	Count	Count of Lake Chub
Northern Pike	Count	Count of Northern Pike
Unidentified Salmonid	Count	Count of Unidentified Salmonid
Latitude	Decimal degrees. WGS1984	Latitude
Longitude	Decimal degrees. WGS1984	Longitude
Elevation (m)	m	Elevation (m)
Weather		Weather
PONDNAME		NPS Shallow Lakes monitoring database site name cross-reference.
Notes		Notes

Study Area

Data in this release were collected within Wrangell - St. Elias National Park and Preserve and Yukon - Charley Rivers National Preserve in Alaska (Figure 2).

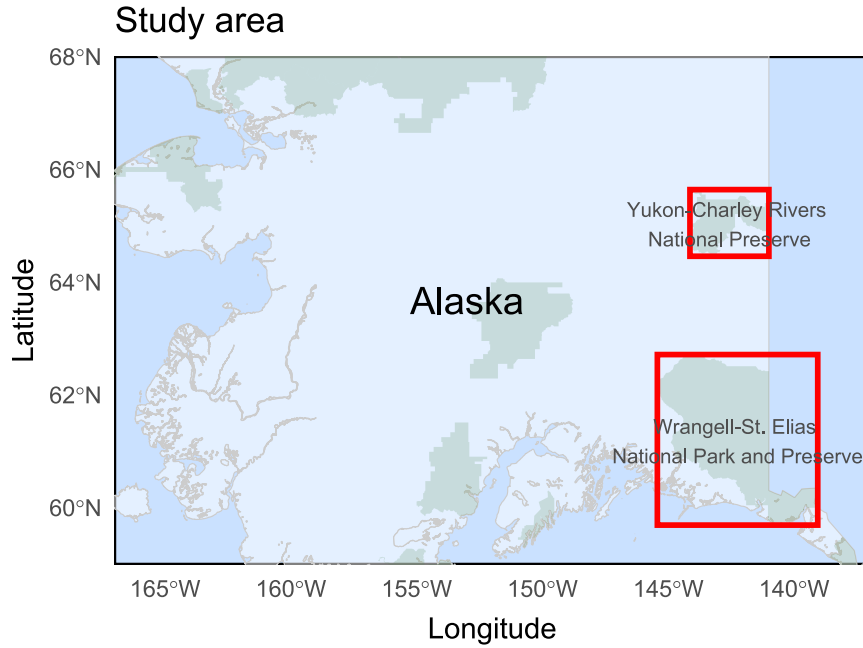


Figure 2. Study area, Yukon - Charley Rivers National Preserve and Wrangell - St. Elias National Park and Preserve.

Sites

Water quality data were collected in 8 sites in Wrangell - St. Elias National Park and Preserve, and 31 sites in Yukon - Charley Rivers National Preserve (Table 3, Figures 2 and 3).

Wrangell-St. Elias National Park and Preserve

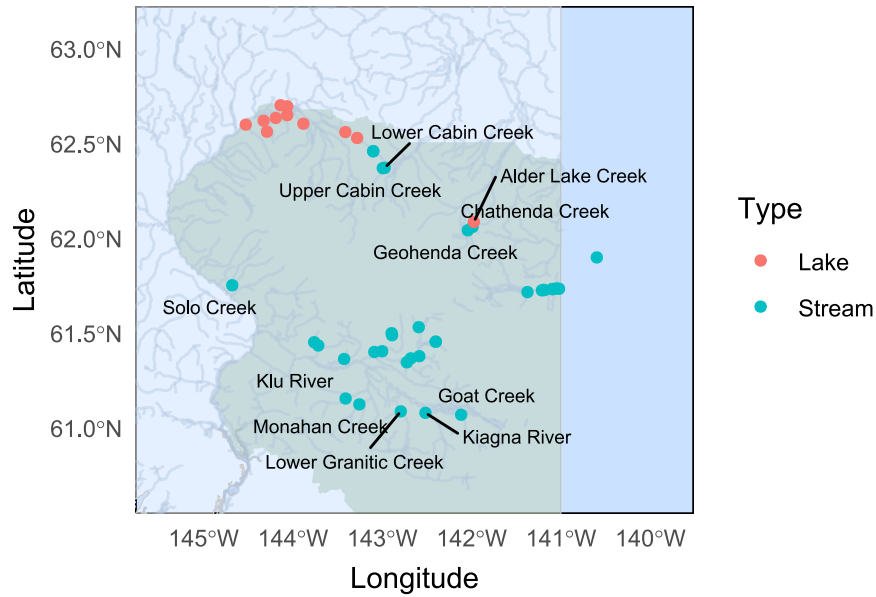


Figure 2. Map of study sites in Wrangell - St. Elias National Park and Preserve.

Yukon-Charley Rivers National Preserve

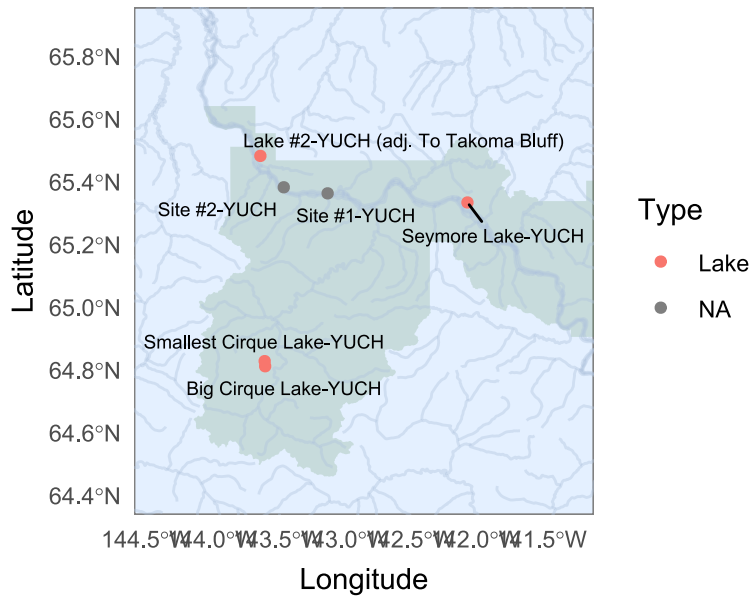


Figure 3. Map of study sites in Yukon - Charley Rivers National Preserve

Table 3. List of study sites. WRST = Wrangell - St. Elias National Park and Preserve. YUCH = Yukon - Charley Rivers National Preserve.

Park	Site Name	Longitude	Latitude
	WRST Alder Lake Creek	-141.9750	62.09010
	WRST Bonanza Creek	-142.8905	61.49256
	WRST Chathenda Creek	-141.9900	62.06411
	WRST Chistochina River		
	WRST Chitistone River	-142.4024	61.45855
	WRST Chititu Creek	-142.6809	61.37069
	WRST Chokasna River	-143.7617	61.45563
	WRST Cobb Lake #1 (smaller)	-144.1391	62.70564
	WRST Cobb Lake #2 (bigger)	-144.0642	62.70004
	WRST Creek between Long Lake and Little Jack Creek	-143.2816	62.53292
	WRST Crystal Creek	-143.4271	61.36728
	WRST Cub Creek	-141.1839	61.73075
	WRST Dan Creek	-142.5857	61.38201
	WRST Geohenda Creek	-142.0421	62.04609
	WRST Gilahina River	-143.7163	61.43850
	WRST Glacier Creek	-142.4023	61.45856
	WRST Goat Creek	-142.1177	61.07308
	WRST Holmes Creek (Random Creek #1)	-141.3753	61.72009
	WRST Jack Creek	-143.1010	62.46323
	WRST Jack Creek beaver pond	-143.1014	62.46276
	WRST Jumbo Creek	-142.8953	61.50337
	WRST Kiagna River	-142.5170	61.08326
	WRST Kletsan Creek	-141.0222	61.73762
	WRST Klu River	-143.4104	61.15892
	WRST Lower Cabin Creek	-142.9724	62.37585
	WRST Lower Granitic Creek	-142.7935	61.09104
	WRST Monahan Creek	-143.2567	61.12812
	WRST Moose Creek- Kluane Game Sanctuary	-140.5992	61.90293
	WRST Northern lakes-Heli site #2	-143.8832	62.60798
	WRST Northern lakes-Heli site #1	-144.3281	62.62390

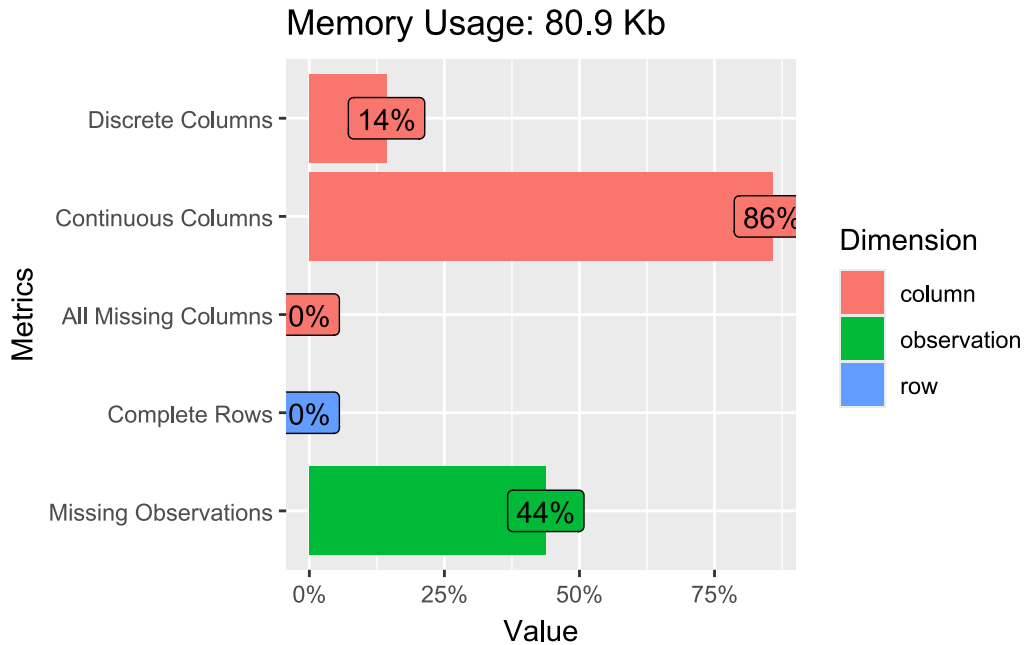
Park	Site Name	Longitude	Latitude
	WRST Random #1-Heli site	-144.5273	62.60305
	WRST Random #2-Heli site	-144.1926	62.63836
	WRST Random #3-Heli site	-144.2906	62.56594
	WRST Random #4-Heli site	-144.0639	62.65309
	WRST Random Creek #2 (White River tributary)	-141.2138	61.72918
	WRST Rock Lake	-143.4139	62.56389
	WRST Solo Creek	-144.6791	61.75634
	WRST Swift Creek	-143.0014	61.40829
	WRST Tractor Creek	-143.0891	61.40453
	WRST Traver Creek (Random Creek #3)	-141.0929	61.73611
	WRST Traver Creek side channel (Random Creek #4)	-141.0929	61.73611
	WRST Upper Cabin Creek	-142.9948	62.37381
	WRST West Fork Creek	-142.5924	61.53521
	WRST White River #2	-141.1947	61.73212
	WRST White River #3	-141.0514	61.73961
	WRST White River (adjacent to Traver Creek)	-141.0929	61.73611
	WRST Young Creek	-142.7255	61.34977
	YUCH Big Cirque Lake-YUCH	-143.5975	64.81331
	YUCH Lake #1-YUCH		
	YUCH Lake #2-YUCH (adj. To Takoma Bluff)	-143.6338	65.48397
	YUCH Seymore Lake-YUCH	-142.0630	65.33547
	YUCH Site #1-YUCH	-143.1236	65.36456
	YUCH Site #2-YUCH	-143.4563	65.38392
	YUCH Smallest Cirque Lake-YUCH	-143.6012	64.82967
	Chalk Creek		
	West Fork Slough		
	White River #1		

Data Quality

The sections below characterize the quality of the dataset.

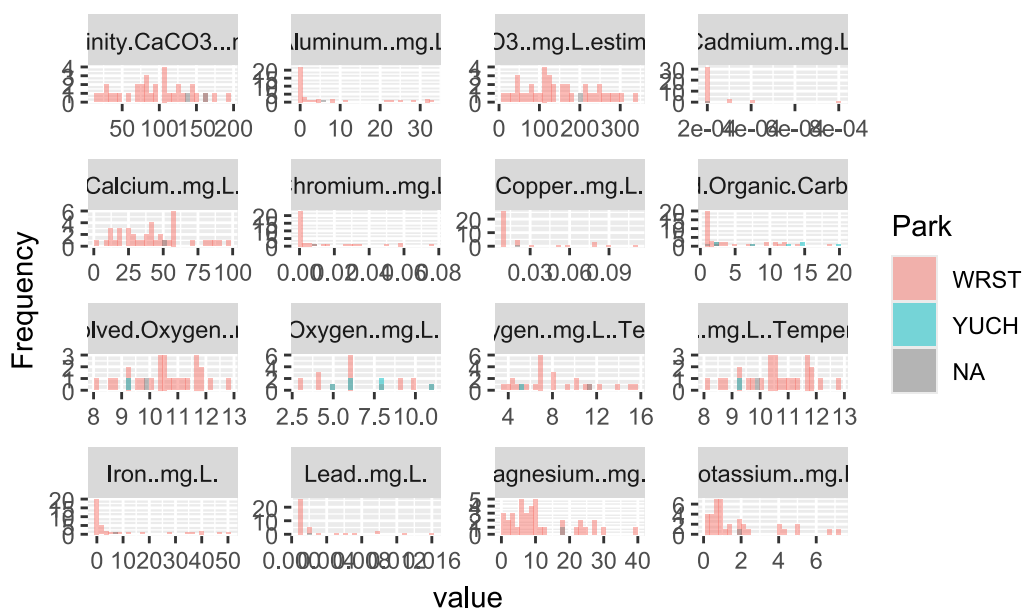
Dataset Attributes

The plot in this section summarizes discrete and continuous data columns, and proportions of complete records and records missing values. Note that some missing values were measured below minimum detection levels and such cases are represented with NULL values.

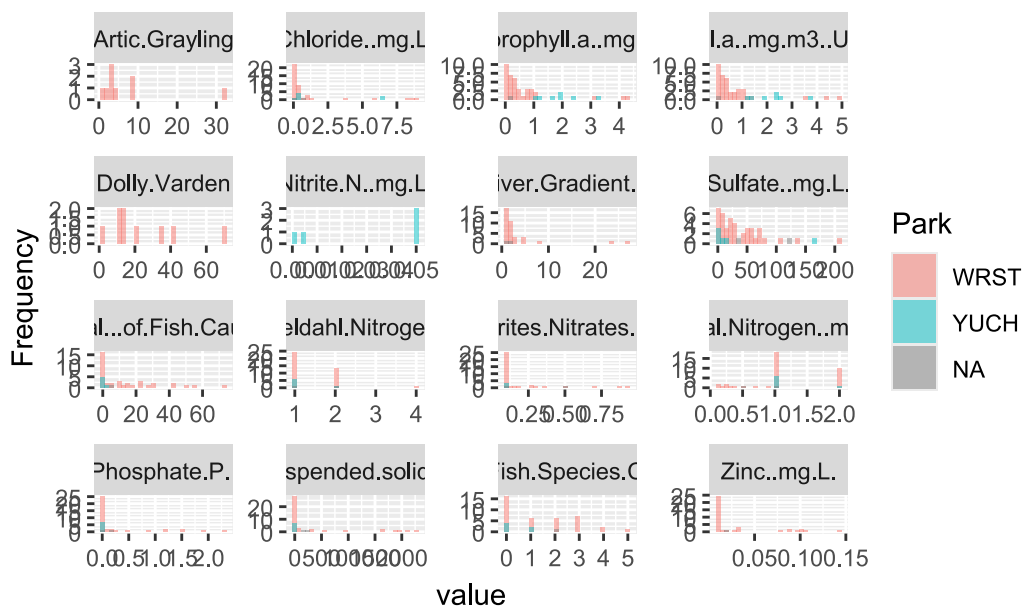


Missing Values Summary

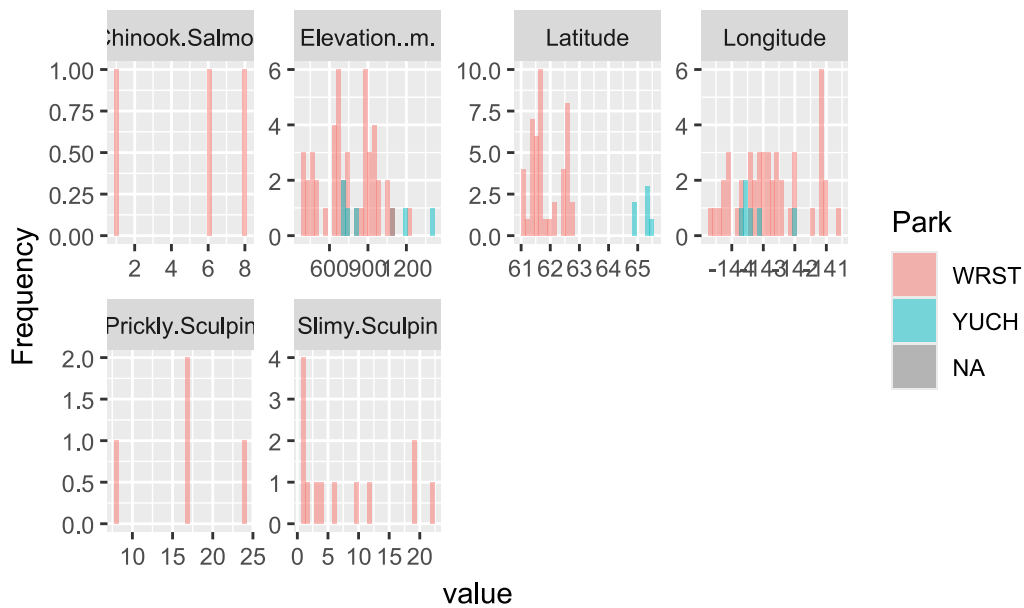
Missing values are summarized in the plot below. Note that many values were measured below minimum detection level and these cases will show in the data as NULLs.



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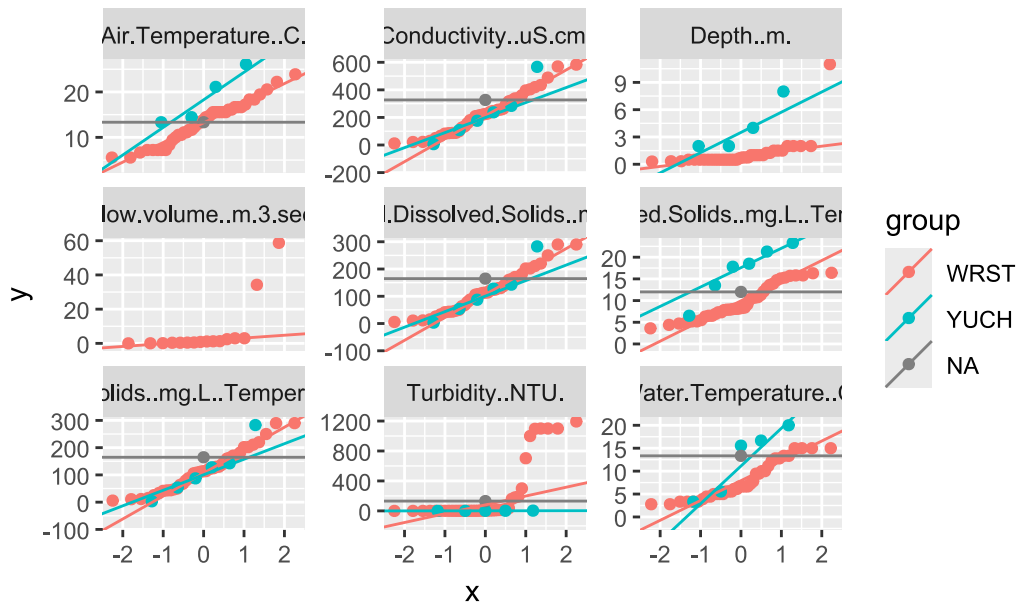
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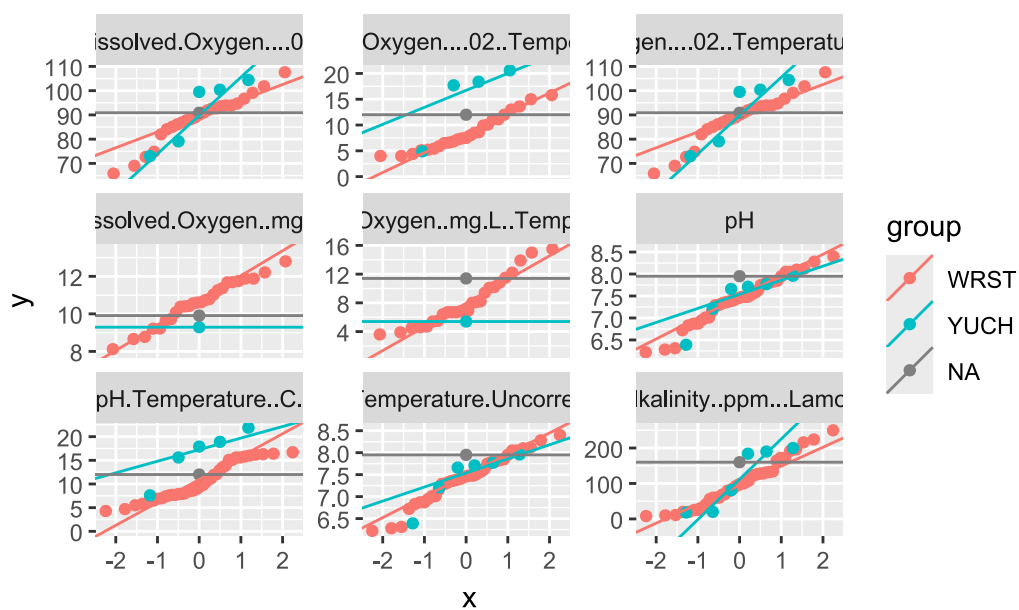
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Quantile - Quantile Plots

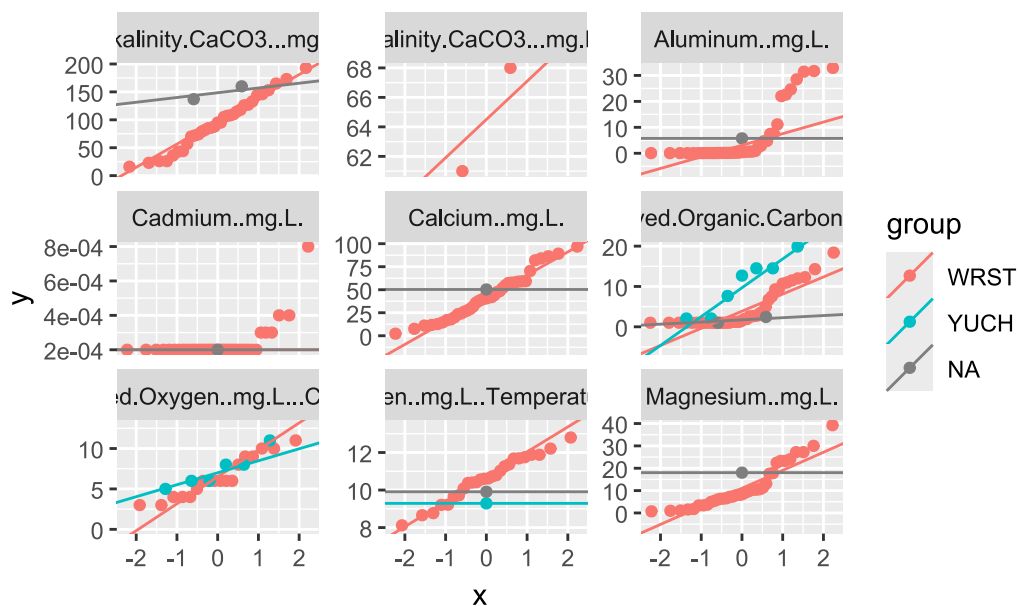
Quantile - quantile are presented in this section for each numeric water quality parameter.



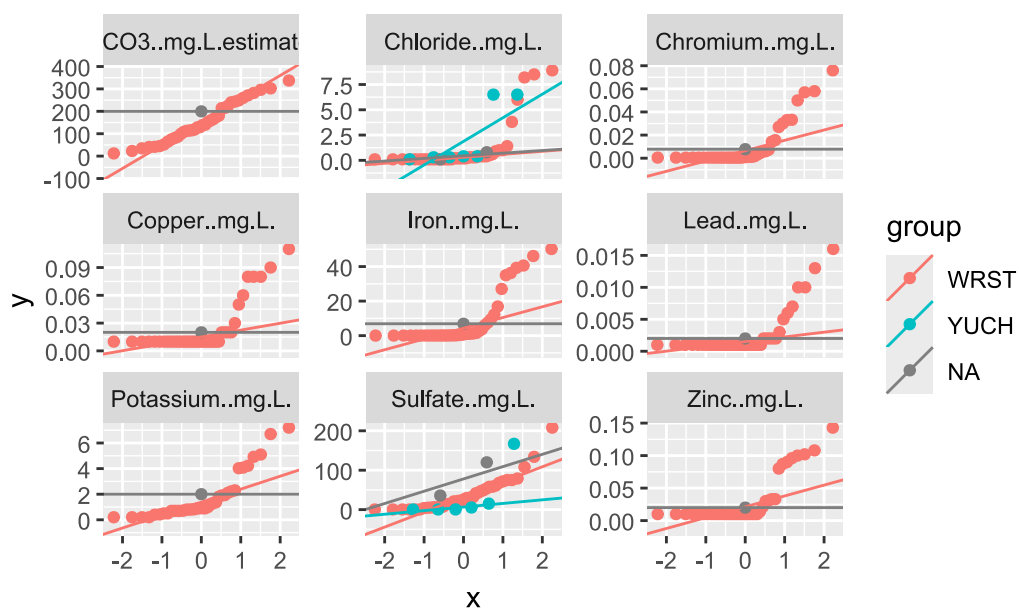
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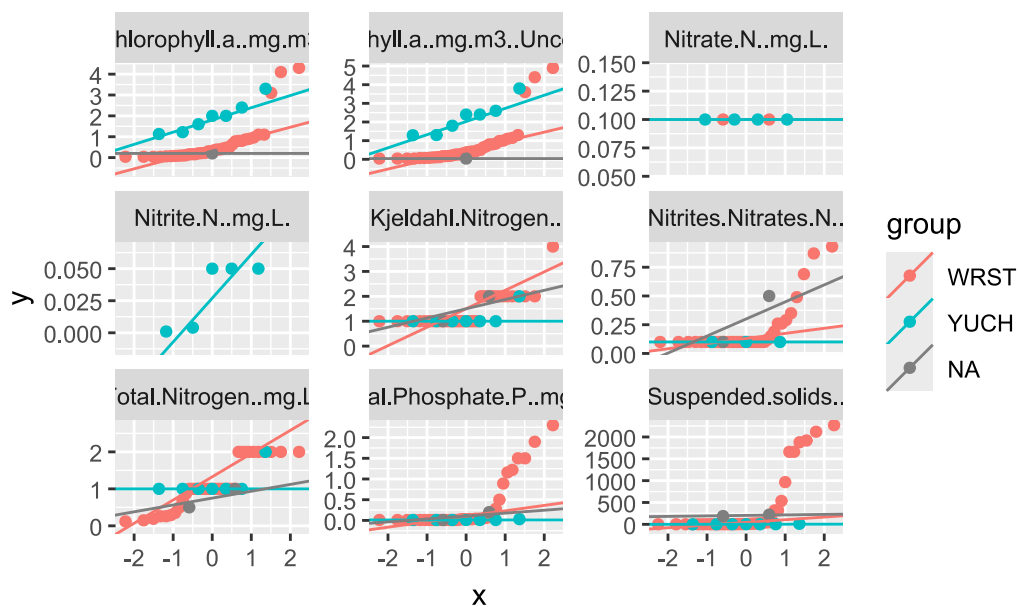
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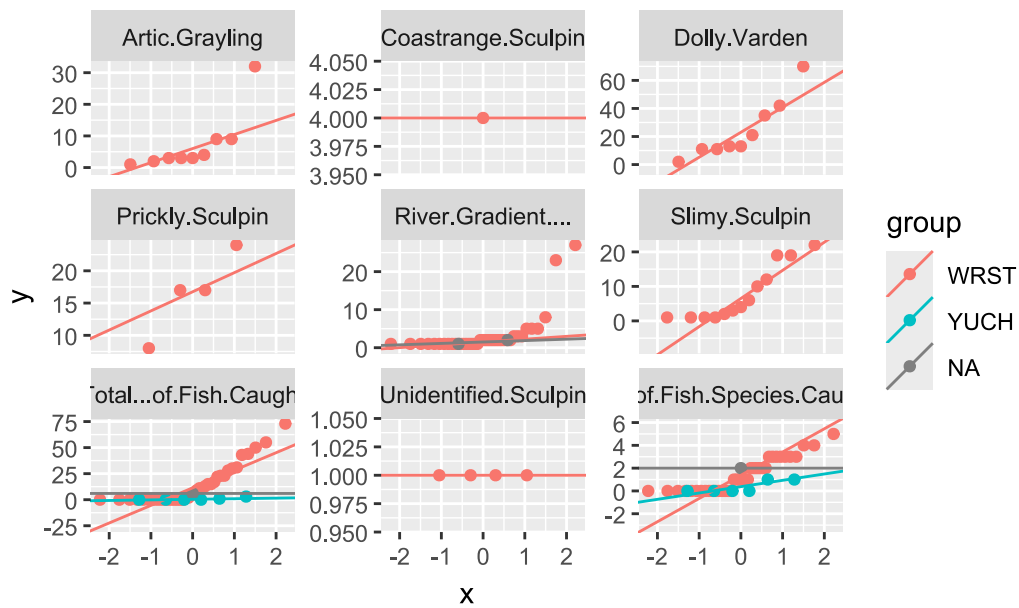
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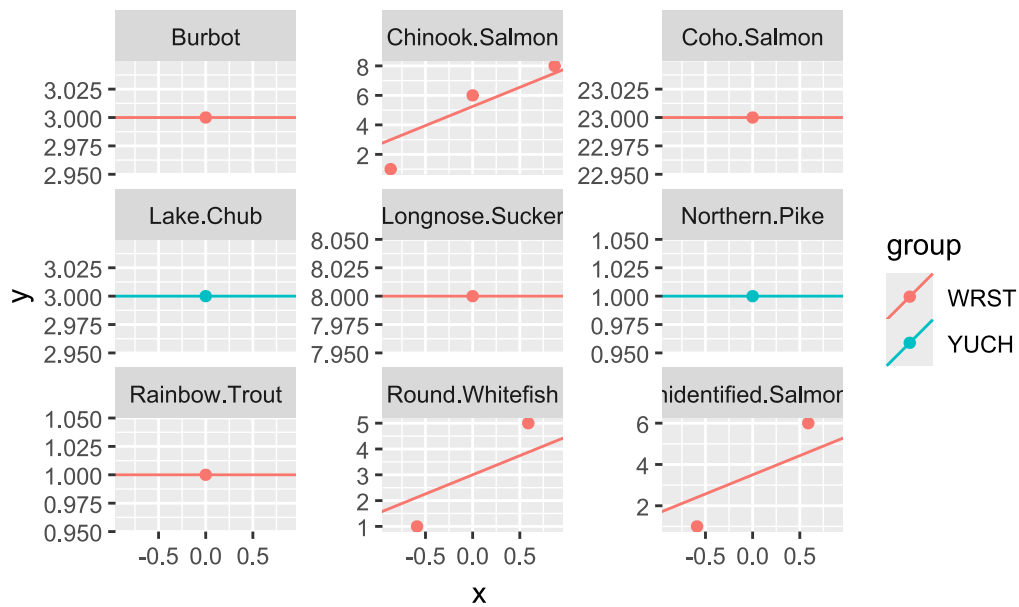
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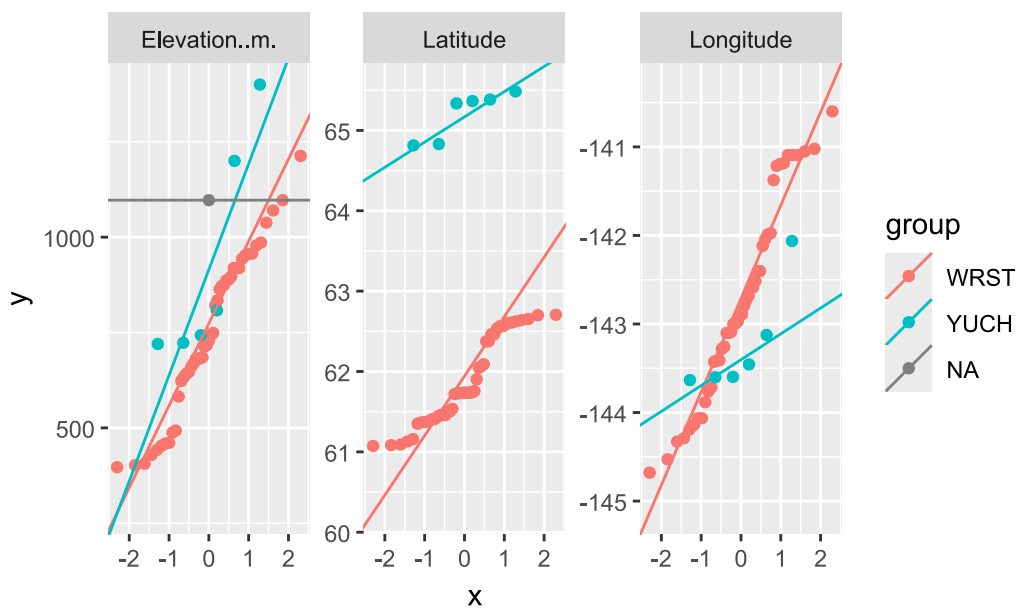
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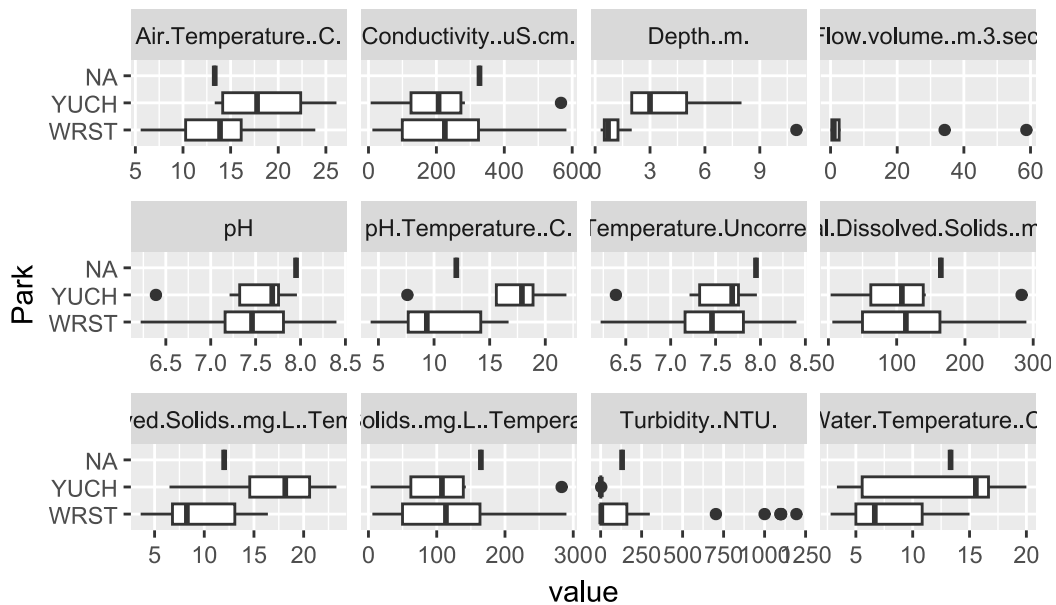


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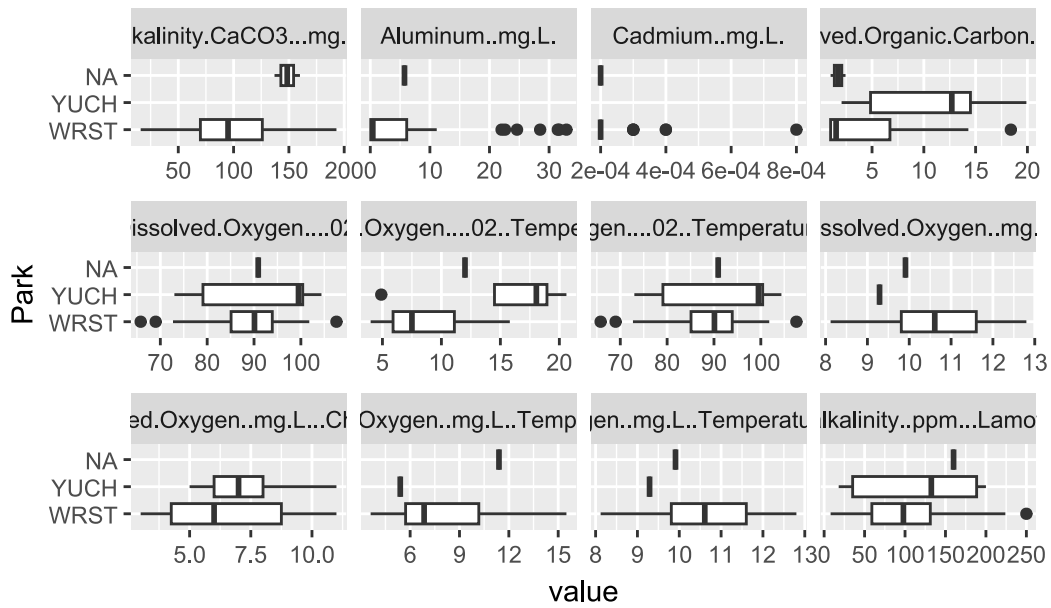


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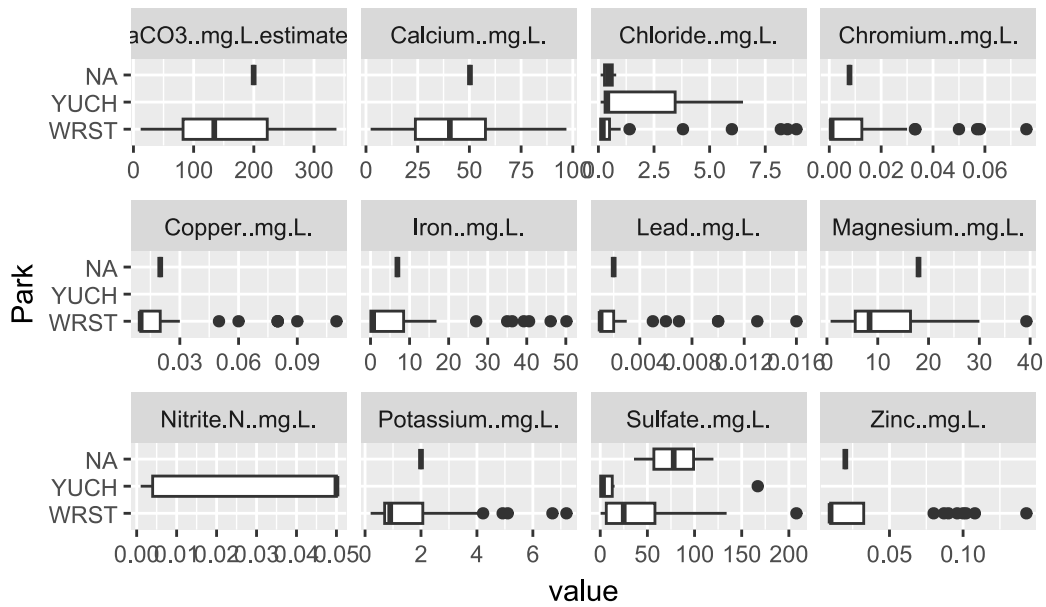
Box Plots



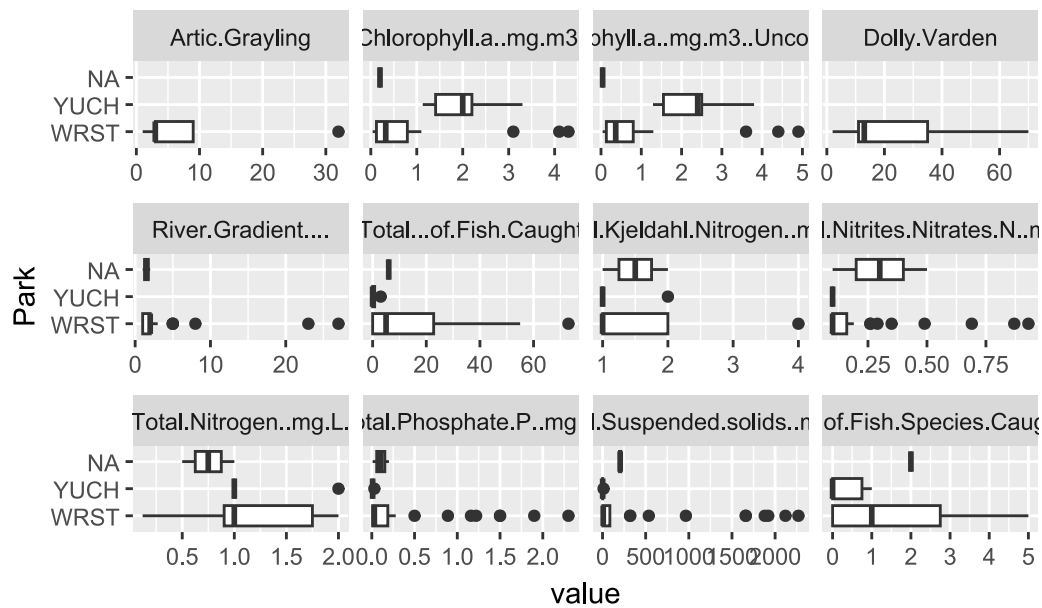
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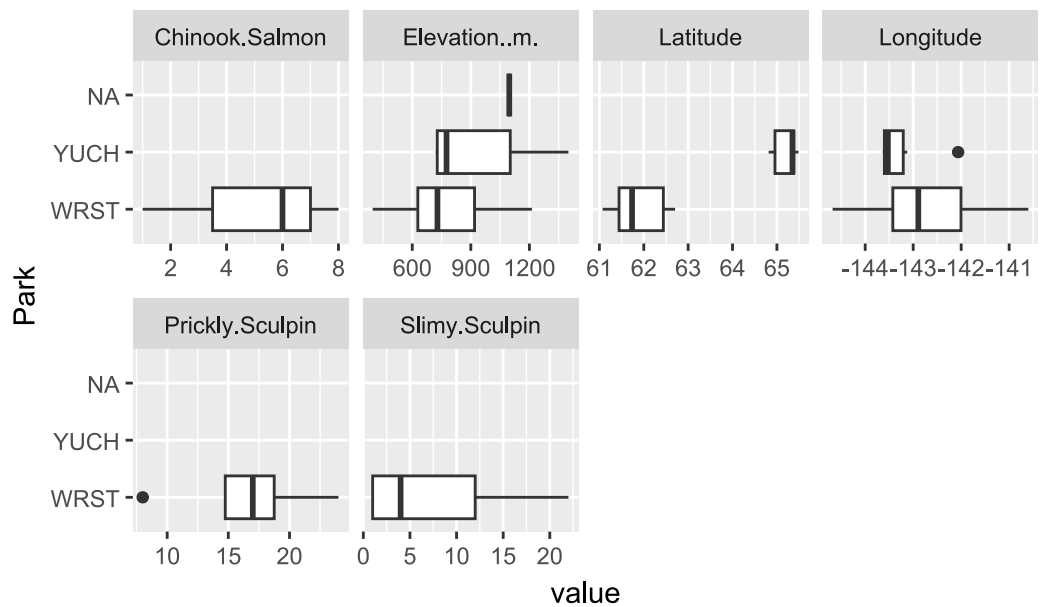
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References

2340 HARDNESS. Standard Methods For the Examination of Water and Wastewater, 24th. <https://doi.org/10.2105/SMWW.2882.025>