This README Råne River Geochemistry file was generated on 2022-02-12 by Katelyn Murphy.

GENERAL INFORMATION

1. Title of Dataset: Råne River Geochemistry

2. Author Information

A. Principal Investigator Contact Information
Name: Sarah Conrad
Institution: Luleå University of Technology
Address: 97187 Luleå, Sweden
Email: sarah.conrad@ltu.se

3. Date of data collection:

Råne_River_Chemistry_2013: May and June 2013
Råne_River_Chemistry _2014: February 2014, March through July 2014
Råne_River_Chemistry_2016: March through June 2016

4. Geographic location of data:

Råne River mouth and estuary, Norbotten, Sweden.

5. Information about funding sources that supported the collection of the data:

Individual funding sources for the data collection can be found in the linked publications.

SHARING/ACCESS INFORMATION

1. Links to publications that cite or use the data:

https://doi.org/10.1007/s10498-019-09360-z
https://doi.org/10.1016/j.marchem.2017.08.010

2. Links/relationships to ancillary data sets:

The data found in Råne_River_Chemistry_2013, Råne_River_Chemistry _2014, and Råne_River_Chemistry_2016 was collected simultaneously with data from the Kalix River and Gulf of Bothnia. This data can be found in the Kalix_River_Geochemistry and Gulf_of_Bothnia_Geochemistry datasets. This data was analyzed together in the publication https://doi.org/10.1007/s10498-019-09360-z .

3. Was data derived from another source?
No

DATA & FILE OVERVIEW

1. File List:
    1. Råne_River_Chemistry_2013
    2. Råne_River_Chemistry _2014
    3. Råne_River_Chemistry_2016

2. Relationship between files, if important:

Files 1, 2, and 3 were a part of the same study, published here https://doi.org/10.1007/s10498-019-09360-z

3. Additional related data collected that was not included in the current data package:

N/A

4. Are there multiple versions of the dataset?

No

METHODOLOGICAL INFORMATION

1. Description of methods used for collection/generation and processing of data:

The collection and processing methods can be found in this publication: https://doi.org/10.1007/s10498-019-09360-z .

3. Instrument- or software-specific information needed to interpret the data:

Data was interpreted using Microsoft Excel.

4. Standards and calibration information, if appropriate:

Refer to any standards and calibration information mentioned in the publications.

5. Environmental/experimental conditions:

Refer to environmental and experimental conditions mentioned in the publications. In addition, some environmental conditions information can be found within the data in the weather conditions comments.

6. Describe any quality-assurance procedures performed on the data: Quality information can be found in the corresponding publication.

7. People involved with sample collection, processing, analysis and/or submission:

Sarah Conrad, Kathrin Wuttig, Nils Jansen, Ilia Rodushkin, Katherina Wortberg, Per S. Andersson, Johan Ingri, and G.J. Wasserburg.

DATA-SPECIFIC INFORMATION FOR: Råne_River_Chemistry_2013

There are 7 tabs within the excel sheet, the first tab contains general information. Tabs 2 through 4 contain data from one sampling event and tabs 5 through 7 contain data from a second sampling event.

1. Number of variables:
Sampling Information: 8
A Information: 20
A Particles/A Dissolved: 79 each
B Information: 20
B Particles/B Dissolved: 79 each

2. Number of cases/rows:

Sampling Information: 4
A Information: 8
A Particles/A Dissolved: 8 each

B Information: 11
B Particles/B Dissolved: 11 each

3. Variable List:

Sampling Information: Variable names in **bold**.
Station (the name of each sample station), **Latitude Degrees, Latitude Decimal Minutes, Longitude Degrees, Longitude Decimal Minutes, Depth** (depth in meters from the water surface), **A May-13** (date of the first sampling event) **B Jun-13** (Date of the second sampling event).

A Information: All variables are named in full and include units.

A Particles/A Dissolved: 72 different elements were screened; the concentrations are displayed using the standard nomenclature for each element. All concentrations in nmol/l. Additionally Iron isotope data are displayed, along with the standard deviation of each measurement.

B Information: All variables are named in full and include units.

B Particles/B Dissolved: 72 different elements were screened; the concentrations are displayed using the standard nomenclature for each element. All concentrations in nmol/l. Additionally Iron isotope data are displayed, along with the standard deviation of each measurement.

4. Missing data codes:
Sampling Information: N/A
A Information/A Particles/A Dissolved: SD – Standard Deviation
B Information/B Particles/B Dissolved: SD – Standard Deviation

5. Specialized formats or other abbreviations used: N/A

DATA-SPECIFIC INFORMATION FOR: Råne_River_Chemistry_2014

There are 16 tabs within the excel sheet, the first tab contains general information. Tabs 2 through 6 contain data from one sampling event, tabs 7 through 11 contain data from a second sampling event, and tabs 12 through 16 contain data from a third sampling event.

1. Number of variables:
Sampling Information: 9
C Information: 9
C DOC: 11
C Particles: 79
C Dissolved / C Sediment: 75 each
C Ultrafiltration: 73
D Information: 8
D DOC: 7
D Particles: 79
D Dissolved: 75
CD' Information: 14
CD' DOC: 6
CD' Particles: 73
CD' Dissolved / CD' Ultrafiltration: 74 each

2. Number of cases/rows:

Sampling Information: 5

C Information: 56
C DOC: 8
C Particles: 8
C Dissolved: 10
C Sediment: 3
C Ultrafiltration: 4
D Information: 4
D DOC / D Particles / D Dissolved: 3 each
CD' Information: 53
CD' DOC: 9
CD' Particles: 2
CD' Dissolved: 4
CD' Ultrafiltration: 16

3. Variable List:

Sampling Information: Variable names in **bold**.
Station (the name of each sample station), **Latitude Degrees, Latitude Decimal Minutes, Longitude Degrees, Longitude Decimal Minutes, Depth** (depth in meters from the water surface), **C March-14** (date of the first sampling event) **D July-14** (date of second sampling event) **CD* 01/02/2014 to 01/07/2014** (Date range of the third sampling event).

C Information: All variables are named in full and include units.

C DOC: All variables are named in full and include units.

C Particles: 72 different elements were screened; the concentrations are displayed using the standard nomenclature for each element. All concentrations in nmol/l. Additionally Iron isotope data are displayed, along with the standard deviation of each measurement.

C Dissolved: 72 different elements were screened; the concentrations are displayed using the standard nomenclature for each element. All concentrations in nmol/l.

C Sediment: 72 different elements were screened; the concentrations are displayed using the standard nomenclature for each element. All concentrations in µg/kg.

C Ultrafiltration: 72 different elements were screened; the concentrations are displayed using the standard nomenclature for each element. All concentrations in nmol/l.

D Information: All variables are named in full and include units.

D DOC: All variables are named in full and include units.

D Particles: 72 different elements were screened; the concentrations are displayed using the standard nomenclature for each element. All concentrations in nmol/l. Additionally Iron isotope data are displayed, along with the standard deviation of each measurement.

D Dissolved: 72 different elements were screened; the concentrations are displayed using the standard nomenclature for each element. All concentrations in nmol/l.

CD' Information: All variables are named in full and include units. This tab includes information from the Råne filters as well, which are under the initial data set of sampling location general parameters.

CD' DOC: All variables are named in full and include units.

CD' Particles / CD' Dissolved / CD' Ultrafiltration: 72 different elements were screened; the concentrations are displayed using the standard nomenclature for each element. All concentrations in nmol/l.

4. Missing data codes:
C Particles: SD – Standard Deviation

5. Specialized formats or other abbreviations used:

Ultrafiltration data is presented with the abbreviations "Perm" meaning permeate and "Ret" meaning retentate.

DATA-SPECIFIC INFORMATION FOR: Råne_River_Chemistry_2016

There are 5 tabs within the excel sheet, the first tab contains general information. Tabs 2 through 5 contain data from one sampling event.

1. Number of variables:
Sampling Information: 7
E Information: 13
E DOC: 10
E Particles / E Dissolved: 77 each

2. Number of cases/rows:
Sampling Information: 1
E Information: 13
E DOC: 22
E Particles / E Dissolved: 8 each

3. Variable List:
Station (the name of each sample station), **Latitude Degrees, Latitude Decimal Minutes, Longitude Degrees, Longitude Decimal Minutes, Depth** (depth in meters from the water surface), **E 01/03/2016 to 01/06/2016**(date range of the sampling event).

E Information: All variables are named in full and include units.

E DOC: All variables are named in full and include units.

E Particles / E Dissolved: 72 different elements were screened; the concentrations are displayed using the standard nomenclature for each element. All concentrations in nmol/l. Additionally Iron isotope data are displayed, along with the standard deviation of each measurement.

4. Missing data codes:
E Particles / E Dissolved: SD – Standard Deviation

5. Specialized formats or other abbreviations used: N/A