Temperature and oxygen data from the North Aral Sea, 2018-2019

Dataset to publication "The Aral Sea after restoration"

by Kirillin, Shatwell and Izhitskiy

Geographic position N46°32.391' E60°03.542'

Time coverage: Sep 2018 - Sep 2019

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Copyrigth: To be assigned.

Current usage: for reviewing purposes only.

Data files:

1. `Temperature2019.csv`

   * Values: Water temperature in °C

   * Instrument: RBR Solo-T, Manufacturer: RBR Global, Canada

   * Number of lopggers: 9

   * Time resolution: 1-hour averaged 20s measurements

   * Logger positions: positions calculated from the annual mean pressure data at the deepest logger, measured by RBR Duet-TD, RBR Global, Canada

   * File format: csv; Date/time in the first column, Depth values (metres) in the first row

2. `DO2019.csv`

   * Values: Dissolved oxygen content in ppm

   * Instrument: D-opto logger, Manufacturer: Zebra-Tech, New Zealand

   * Time resolution: 1 hour, no averaging

   * Logger position: 11.77 m under the lake surface. Calculated from the annual mean pressure data at the deepest logger, measured by RBR Duet-TD, RBR Global, Canada

   * File format: csv; Date/time in the first column, Depth value (metres) in the first row

3. north-aral-temp-daily.csv

   * Values: Water temperature in °C

   * Instrument: RBR Solo-T, Manufacturer: RBR Global, Canada

* Number of loggers: 9

* Time resolution: daily averaged 20s measurements

* Logger positions: positions calculated from the annual mean pressure data at the deepest logger, measured by RBR Duet-TD, RBR Global, Canada

* File format: csv; Columns: depth in m, datetime, water temperature in °C, month, year.

4. aral_sensitivity_out.zip

* Results of the model sensitivity analysis

  - Model: FLake version 2.0
  - Time resolution: daily
  - File format: compressed csv (archive contains the file aral_sensitivity_out.csv)

5. NorthAral_sensitivity_EGU.R

* R-script that uses the files north-aral-temp-daily.csv and aral_sensitivity_out.csv (after decompression of aral_sensitivity_out.zip)

  - The script creates the plots of the sensitivity analysis and calculates some model results presented in the manuscript.