

UC Santa Barbara

Data Descriptions

Title

Devereux Slough Solinst Levellogger data (2018–2023)

Permalink

<https://escholarship.org/uc/item/8186r0jp>

Author

Rickard, Alison

Publication Date

2024-06-04

Devereux Slough Solinst Levelogger data (2018–2023)



UC SANTA BARBARA

TITLE: Devereux Slough Solinst Levellogger data (2018–2023)

CONTENT:

- Water depth
- Water temperature
- Water conductivity
- Water surface elevation

DATE(S): Initiated in 2018, solinst levellogger data is available until 2023. Data is collected each year and is uploaded soon after the water year is over. Some loggers were moved to different sites or had technical difficulties, therefore dates that have gaps in data represent a time period where data is not available.

STATUS: Ongoing, updated in November of each year.

PURPOSE: Water level can provide a lot of information about a wetland, including how each branch reacts to storms, when the sand berm is anticipated to breach and when there is tidal influence in the estuary. This data is intended to indicate changes in water level, and is not representative of absolute water depth.

DATA LOCATION & ACCESS: Pressure transducer data along with logger locations can be downloaded from <https://datadryad.org/stash/dataset/doi:10.25349/D9RP7X>.

REFERENCED IN:

- Year 1 Monitoring Report (escholarship.org/uc/item/0zc3n78c)
- Year 2 Monitoring Report (escholarship.org/uc/item/5sj929vh)
- Year 3 Monitoring Report (escholarship.org/uc/item/7bq618m8)
- Year 4 Monitoring Report (escholarship.org/uc/item/4mc6h09z)
- Year 5 Monitoring Report (escholarship.org/uc/item/4pb052gr)

METHODS: Each site is equipped with a pvc pipe with holes drilled throughout. The solinst pressure transducers are deployed in the pvc attached to a wire for easy access to download data bimonthly.

Water surface elevation is calculated based on a known elevation reference point. A barometric pressure logger is located in the lab at 6969 Whittier drive. The raw device is compensated for barometric pressure and converted to water column equivalent using Solinst levellogger software 4.1 or later. The data is unprocessed, therefore outliers could represent logger malfunction. The level value is calculated based on the amount of water above the pressure transducer, not the total water depth.