



The Eye on Alaska's Coasts and Oceans

Ocean Data Explorer

AOOS's public data discovery, visualization and access platform

Taylor Borgfeldt
Alaska Water Level Watch Coordinator
Borgfeldt@aoos.org
907-531-2484

Sheyna Wisdom
Executive Director
Wisdom@aoos.org
907-748-5864



Photo courtesy of Kathy Kuletz

Who is AOOs?

- **Integrated Ocean Observing System (IOOS)**

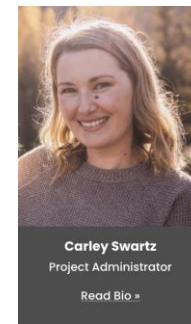
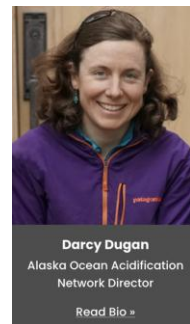
- NOAA program under National Ocean Service (NOS)
- IOOS Program Office are NOAA personnel
- 1 of 11 Regional Associations across U.S. are not
- Regional Associations operate under 5-year NOAA Cooperative Agreements
- Operating since 2003

- **AOOS organizational setup**

- Mission to increase observing & forecasting in all regions of Alaska
- Board of federal and state agencies, academic institutions, research facilities, industry, non-profits, tribal
- Operates as a non-profit organization with Alaska SeaLife Center (ASLC) acting as fiscal sponsor
- 10 staff members (2 hourly)

- **AOOS observing activities are highly leveraged**

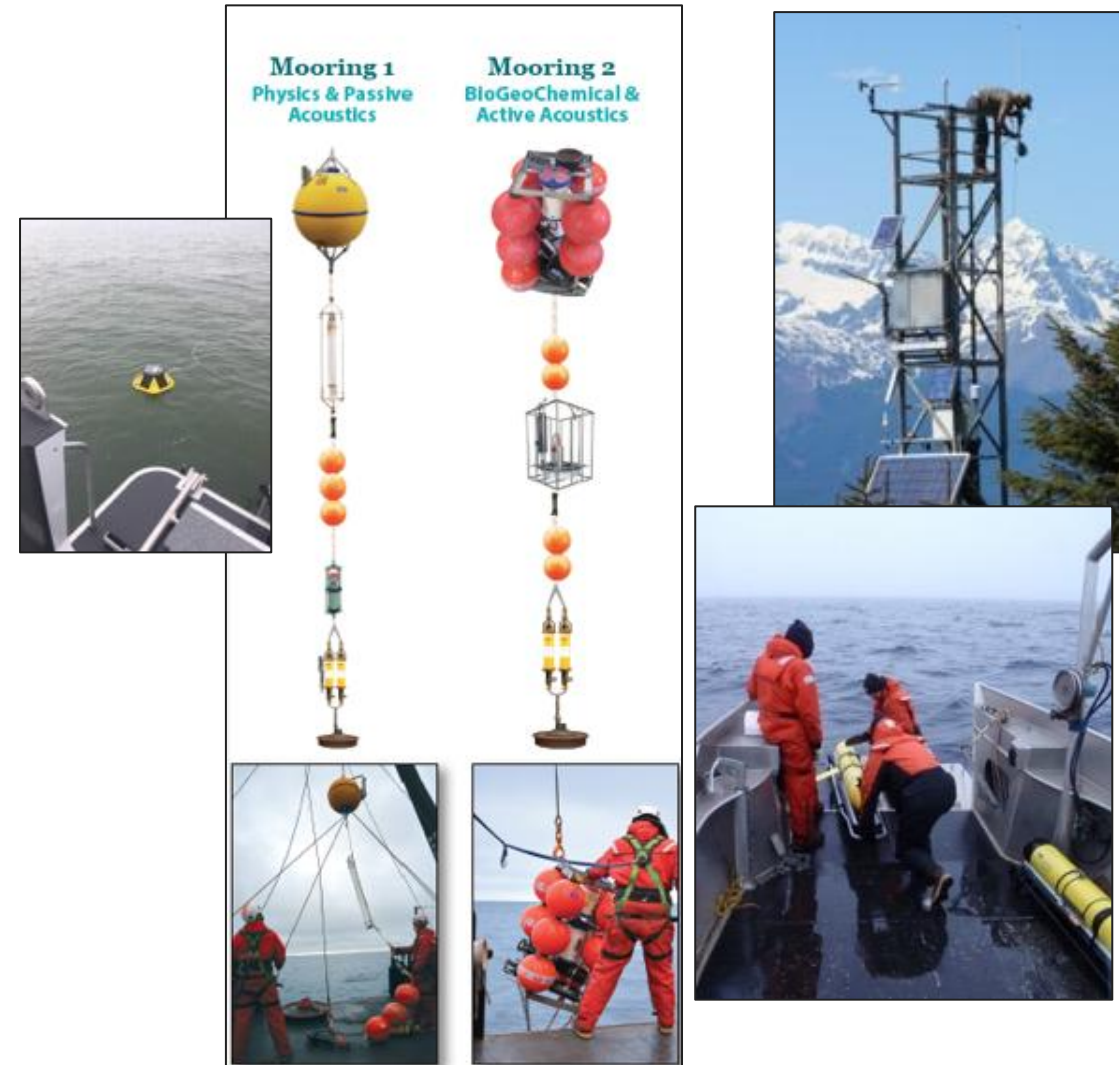
- Partners are essential for successful ocean observing in our region



Overview of AOOs Approach

AOOs

- **Sustained observations and assets**
 - Moorings
 - Gliders
 - High frequency radars (HFRs)
 - Ship surveys
- **Fund/test new and innovative technologies**
 - Coastal hazard assets (water level sensors, Hydroball bathymetry GNSS-R)
 - Imaging Flow Cytobot (IFCBs) for HABs
 - Sofar Ocean Spotter wave buoys (Backyard Buoys)
- **Collaborations and partnerships to find solutions**
 - Collaborative networks
 - Community sampling programs
 - Leverage funding
- **Work with ocean users to collect, use, and how information in meaningful way**
 - Data portal
 - Incident Response Tools
 - Mariner's dashboards
 - Other products/services

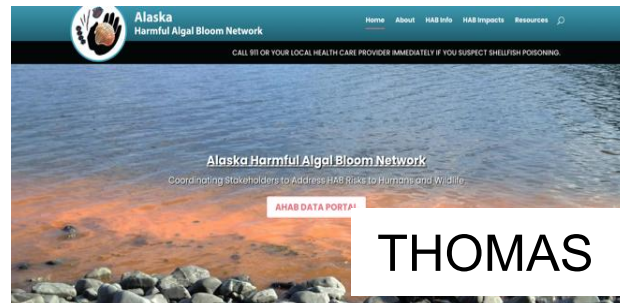


Collaboration Networks

AOOS

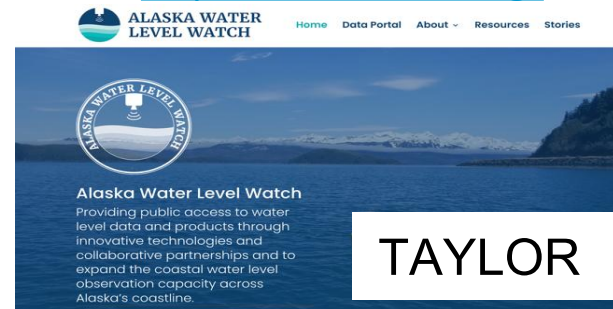
Alaska Harmful Algal Bloom Network (AHAB)

<https://ahab.aos.org/>



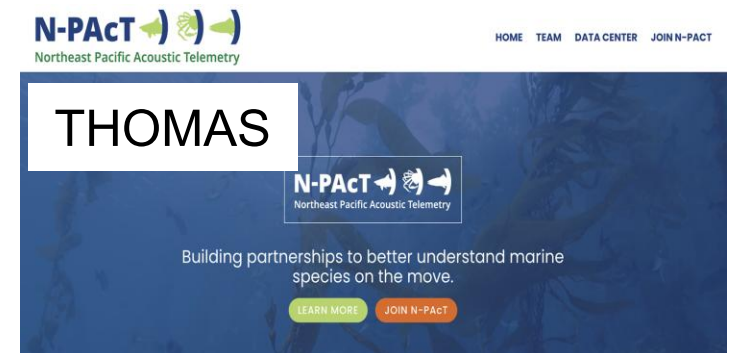
Alaska Water Level Watch (AWLW)

<https://awlw.aos.org/>



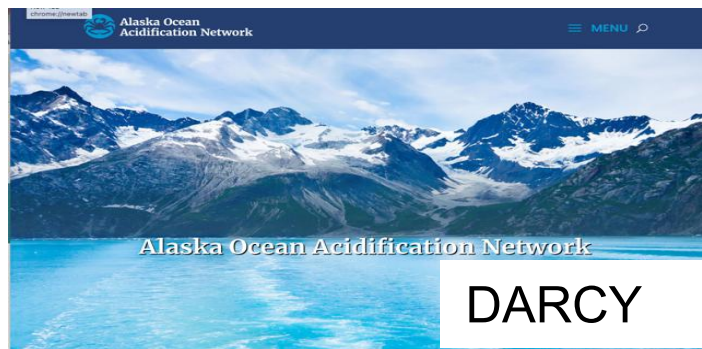
Northeast Pacific Acoustic Telemetry (N-PACT)

<https://npact.aos.org/>



Alaska Ocean Acidification Network (AOAN)

<https://aoan.aos.org/>



SHEYNA
OR GINNY



Alaska Marine Policy Forum (AMPF)

<https://aos.org/alaska-issues/alaska-marine-policy-forum/>
<https://alaskaseagrant.org/events/alaska-marine-policy-forum/>

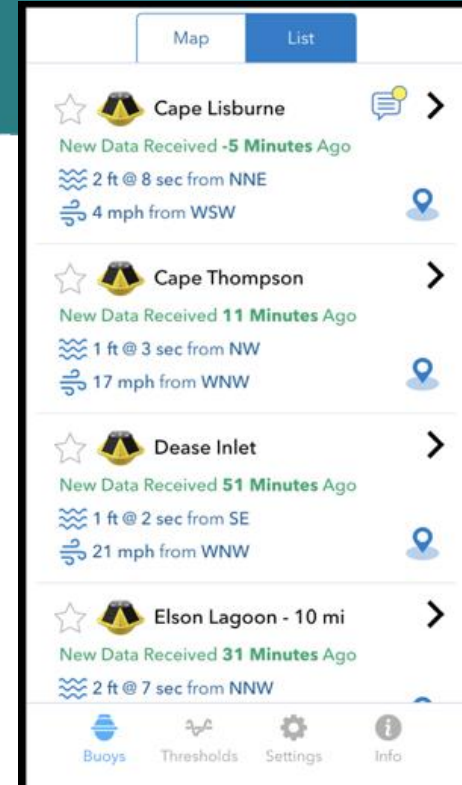
Other Data Resources

- **Backyard Buoys Wave Buoy App**
 - Designed by University of Washington
 - **App is now live on Apple and Android to download!!!**
 - Friends of Backyard Buoys: at <https://backyardbuoys.org/data/> to get your Sofar Spotter buoy data on our app!
- **Mariner's Dashboard**
 - Portal (desktop version): <https://aoot.org/portal-highlights-2/real-time-information-for-current-maritime-conditions>
 - Dashboard (mobile version): <https://aoot-demo.thedigteam.tech/>
- **Working on more products outside of data portal**
New water level?
- **Would love feedback!!!**

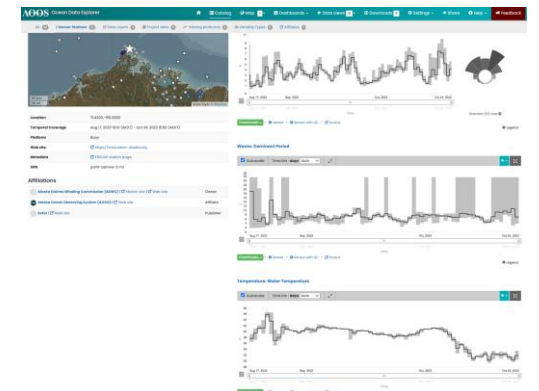
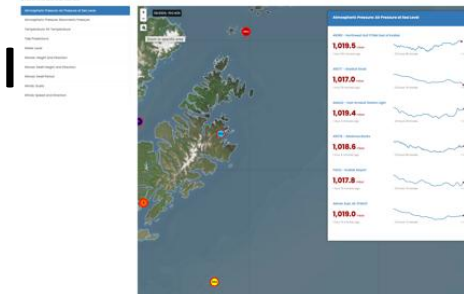
App links



PORTAL

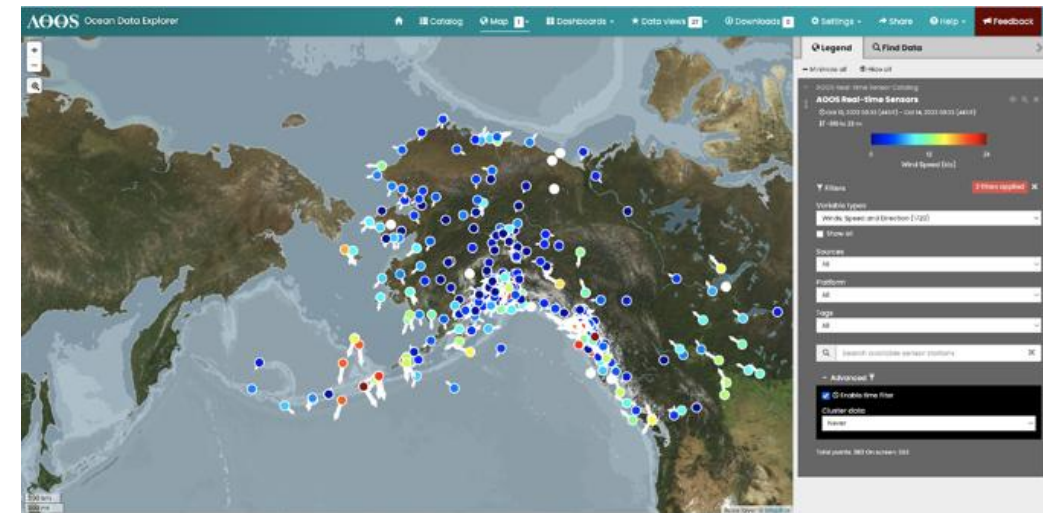
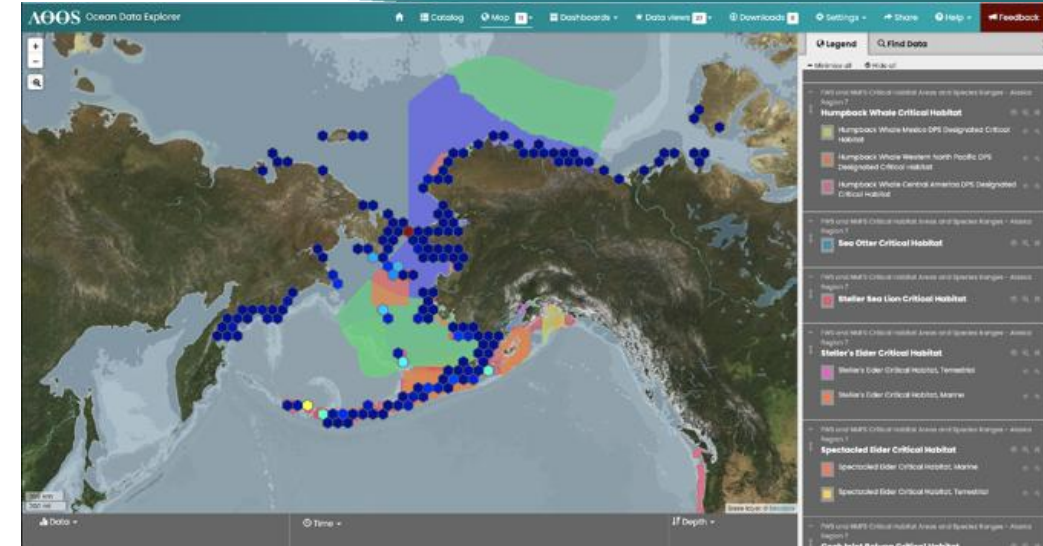


AOOS Marine Weather Dashboard: Kodiak



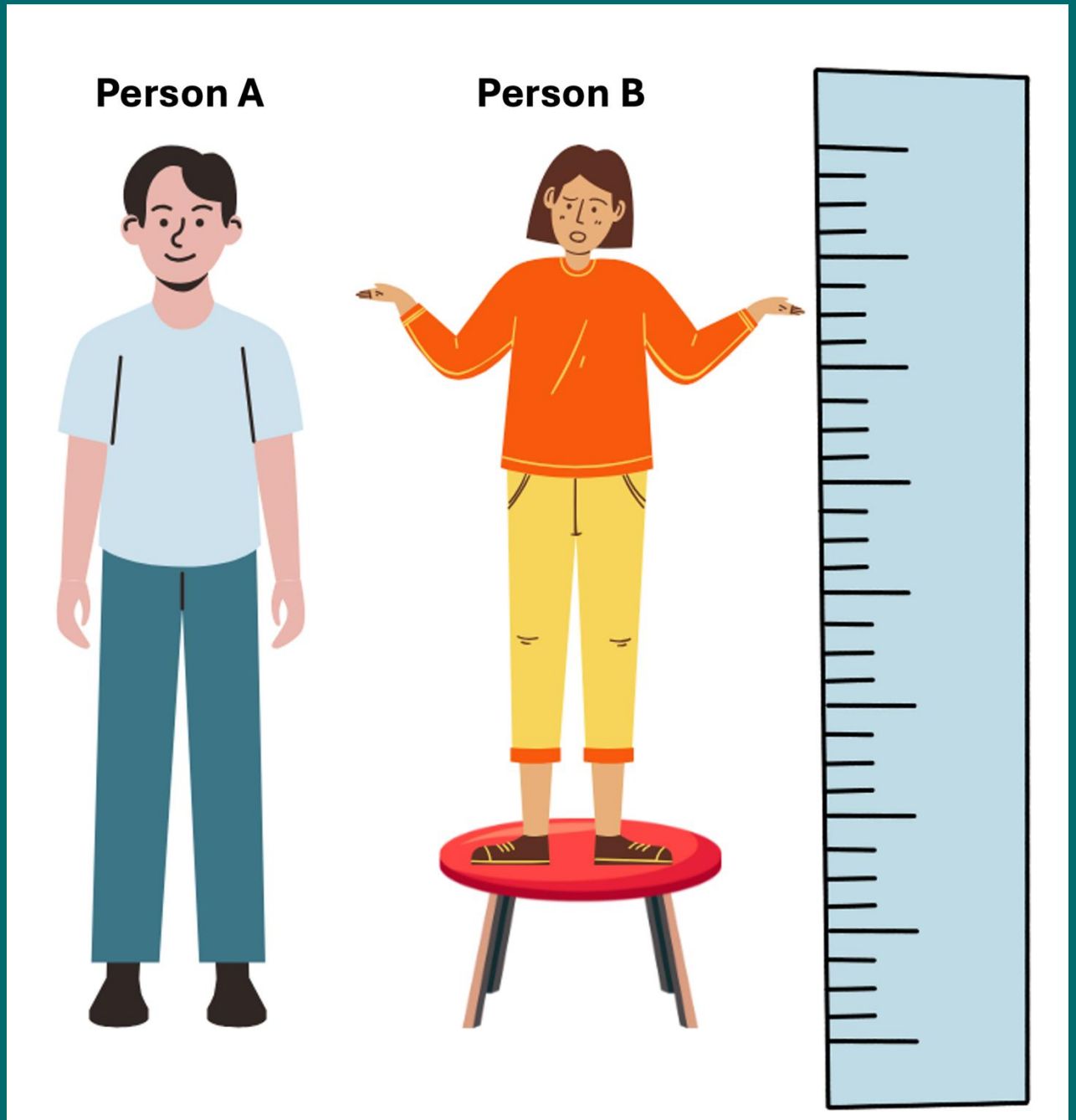
Making Data Accessible

- Ocean Data Explorer (<https://portal.aoot.org/>)
- Map View: Integrates & visualizes data
 - AOOS funded projects
 - Real-time sensors
 - Moving platforms
 - Data rescue projects
- Catalog View: Search & data download
 - 3000 + data layers
 - Search with keywords
 - Download data
- Data View: Compare different data streams
- Reach out if you need something you can't find!



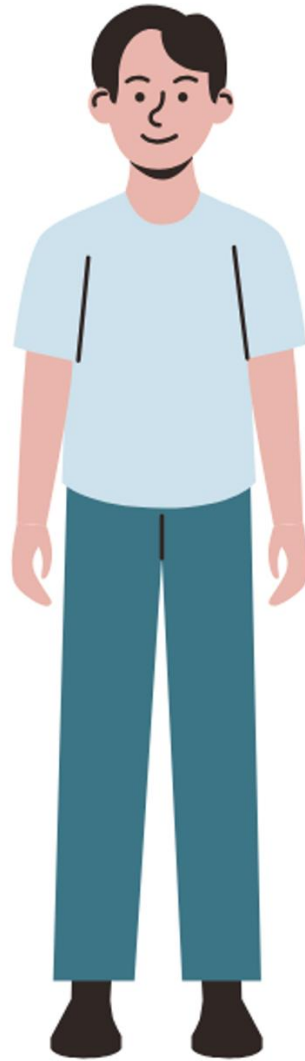
Person A says they're the same height as Person B.

Is that true?



Depends on the datum!

Person A



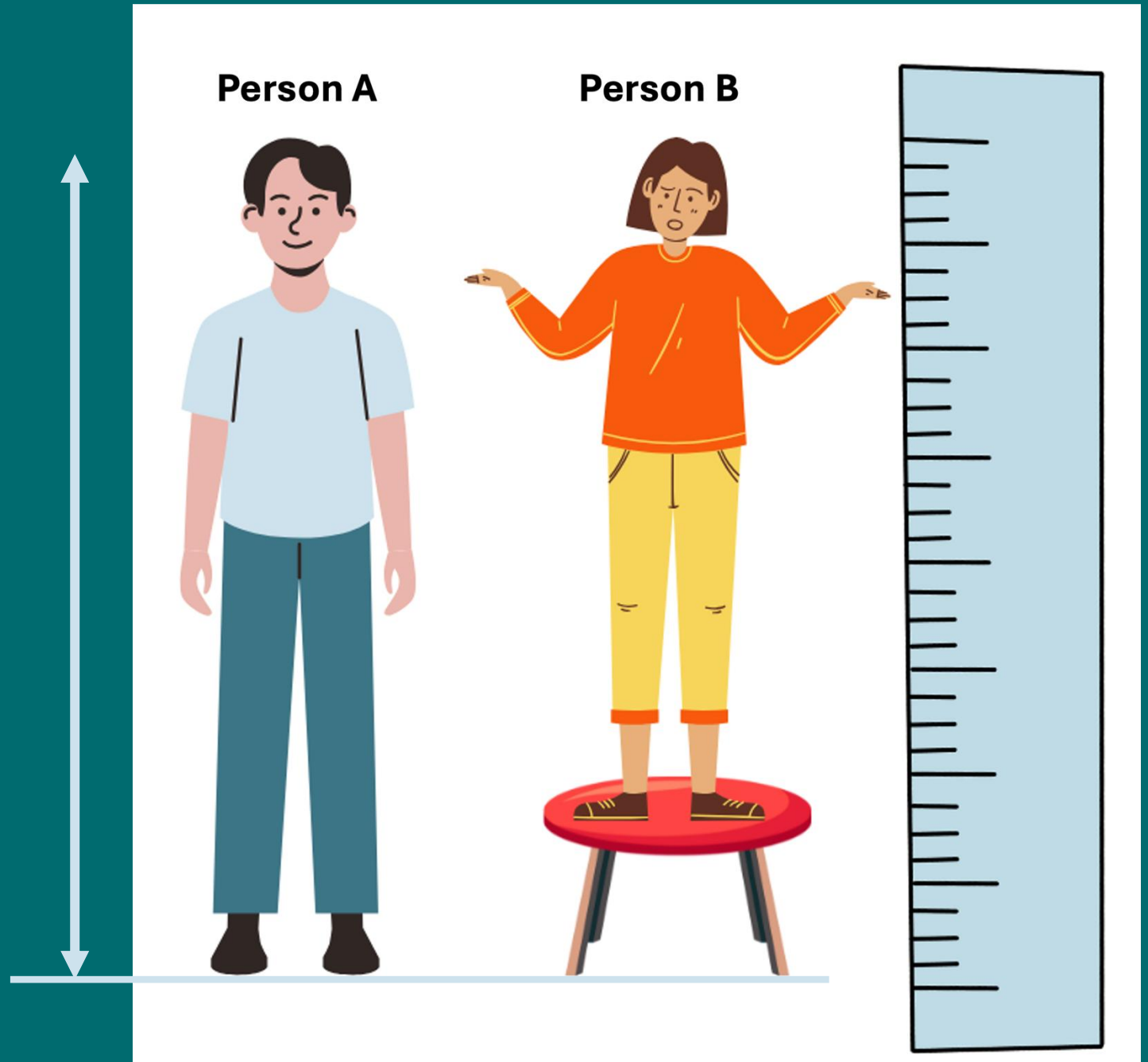
Person B



A datum is a measuring point.

Let's say the datum is the floor.
We'll measure from the datum
(floor) to the tops of their heads.

From this datum, Person A and
Person B are the same height.

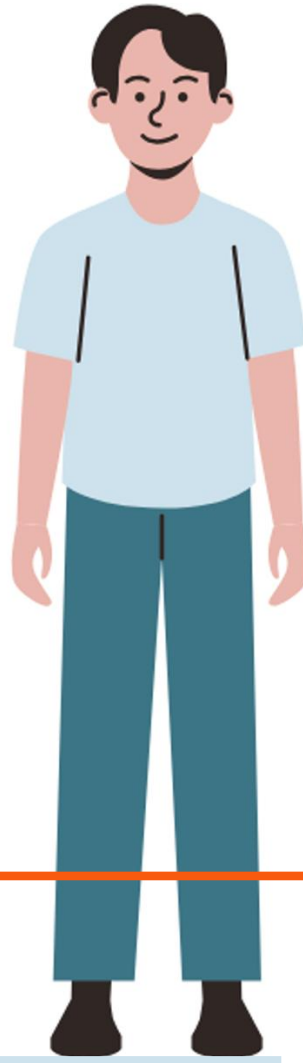


Now let's say the **datum** is **their own feet**.

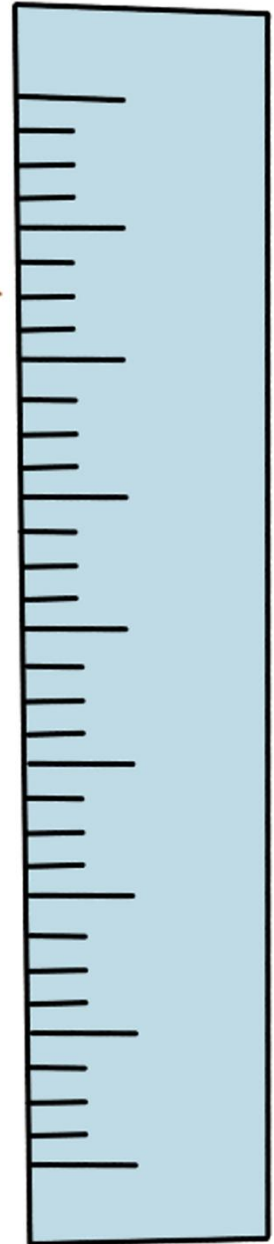
From this datum, we can see that Person A is taller than Person B.



Person A



Person B



Questions & Contacts



AOOS Staff

Sheyna Wisdom, Executive Director, wisdom@aoos.org

Holly Kent, Director of Administration, kent@aoos.org

Carol Janzen, Director of Operations, janzen@aoos.org

Darcy Dugan, OA Program Manager, dugan@aoos.org

Thomas Farrugia, HABs & ATN Program Manager, farrugia@aoos.org

Alice Bailey, Director of Outreach, bailey@aoos.org

Lisa Sheffield Guy, Regional Ocean Partnership Program Manager,
sheffieldguy@aoos

Taylor Borgfeldt, Alaska Water Level Watch Coordinator,
borgfeldt@aoos.org



AOOS

Alaska Ocean Observing System

The Eye on Alaska's Coasts and Oceans

