

North Pacific climate history from long lived bivalves.

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Black

Things We Know

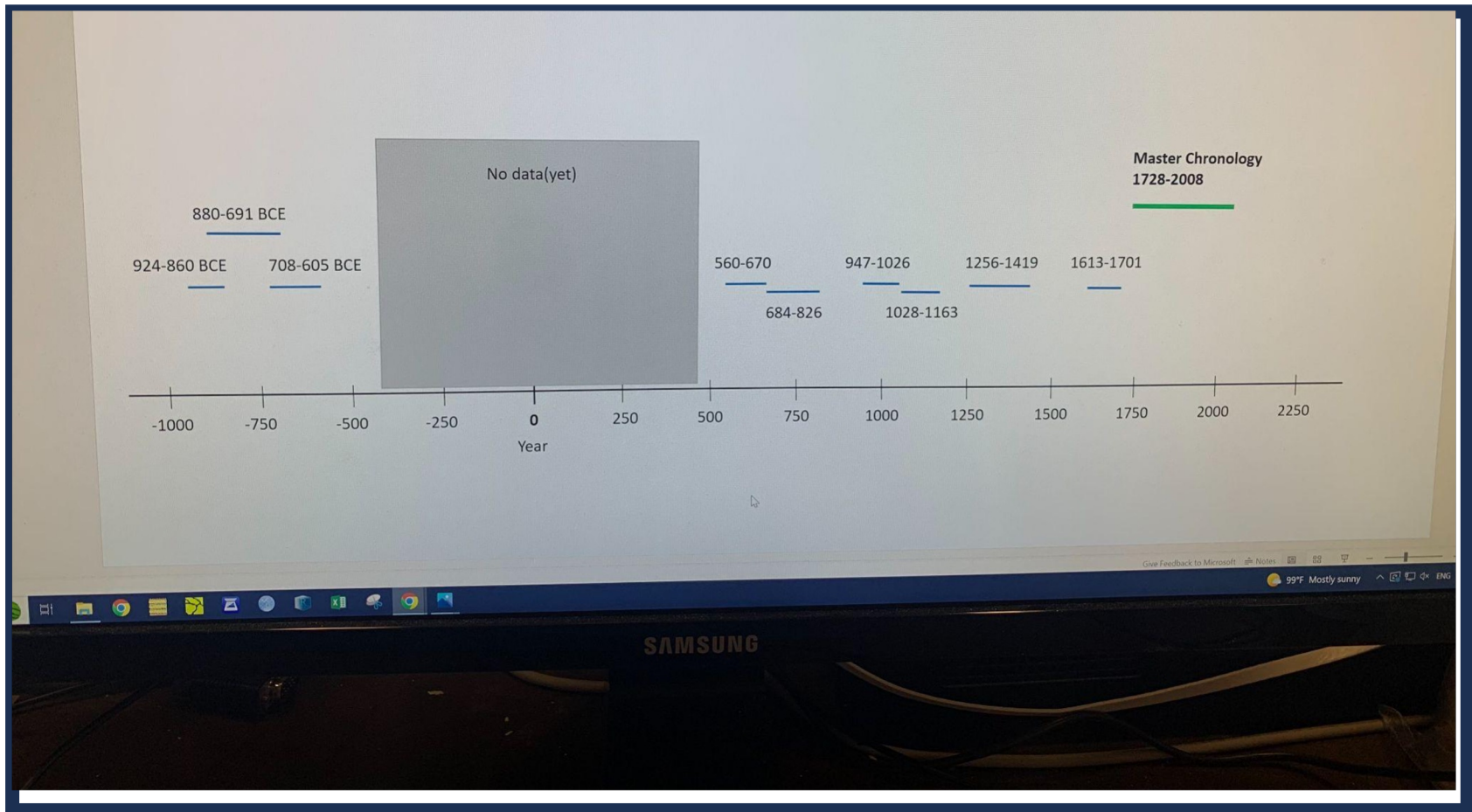
- Sampled from the Tree Nob Island, British Columbia, Canada.
- Geoduck form annual growth increments
- Geoduck growth is sensitive to sea surface temperature.
- Geoducks (*Panopea generosa*) are long lived
- Current chronology spans from 1728–2008.



“The Fish Site” July 29th 2022, Desiree Lawson
<https://thefishsite.com>

Objective

- Extend and replicate the existing chronology.



Method

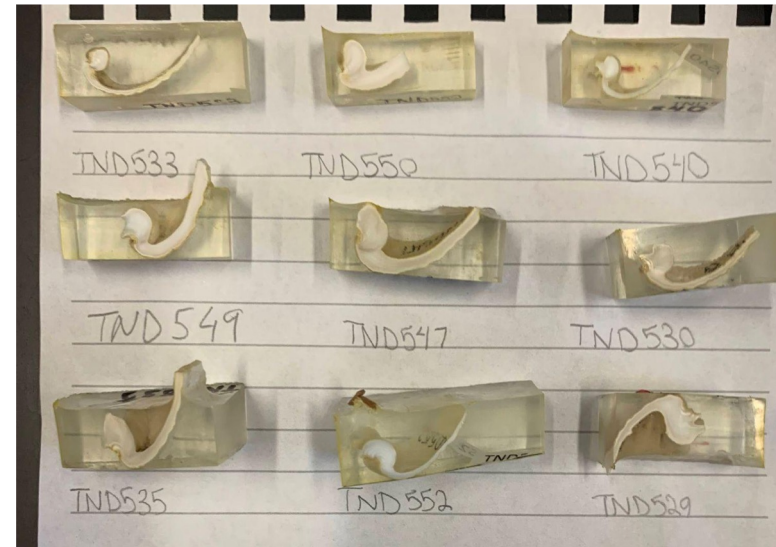
- Crossdating matches the pattern of wide and narrow rings in a tree.
- Crossdating dead collected shells.



Methods

Steps for crossdating include...

- Tile Saw
- Embedding
- Polishing
- Acid etching
- Precision saw
- Acetate peel

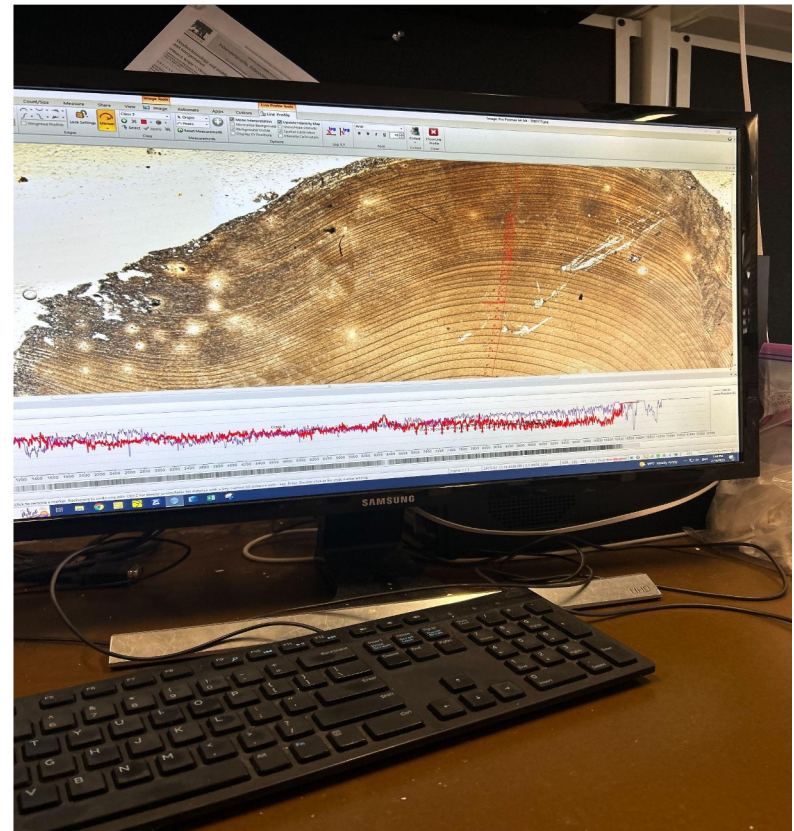


Methods

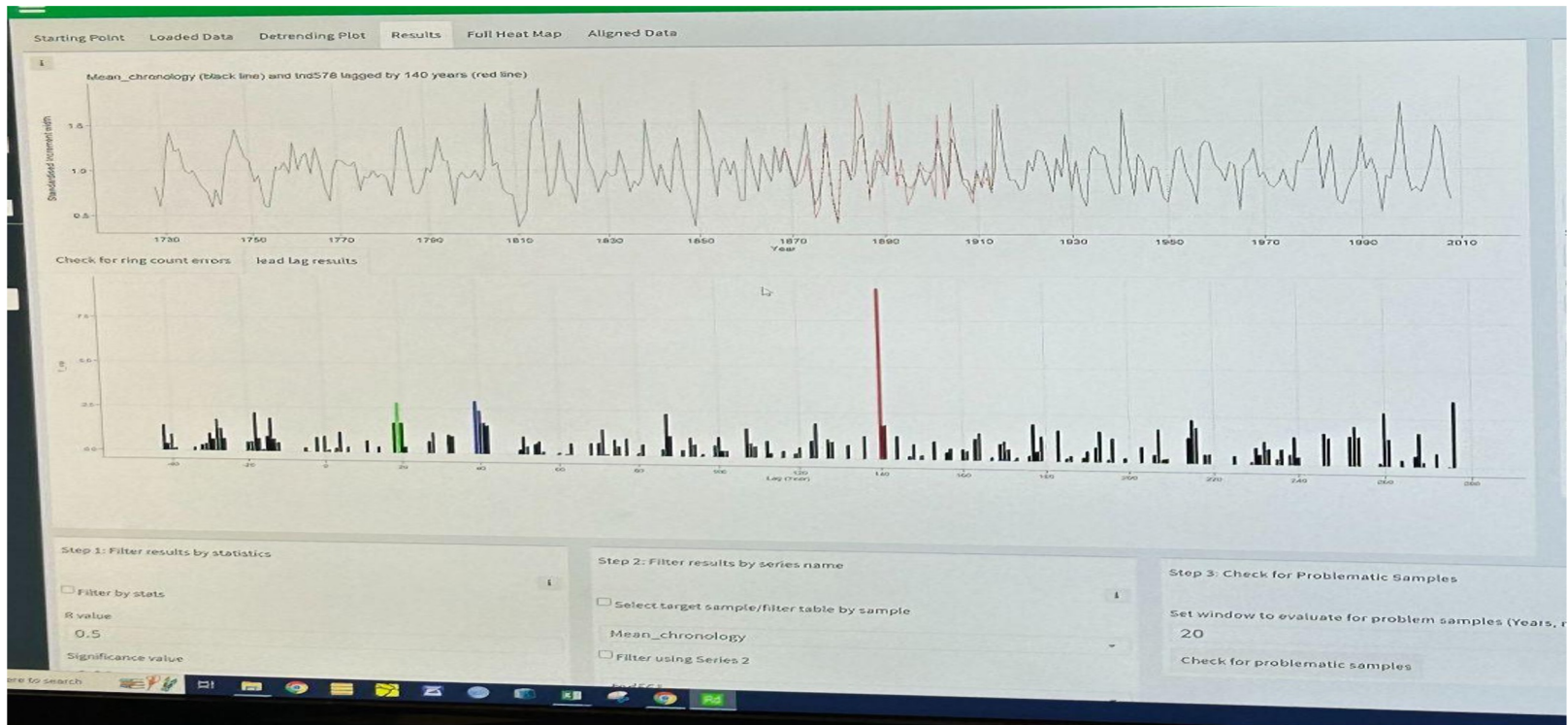
- Imaging (LASX)



- Measuring (Image-pro premier)



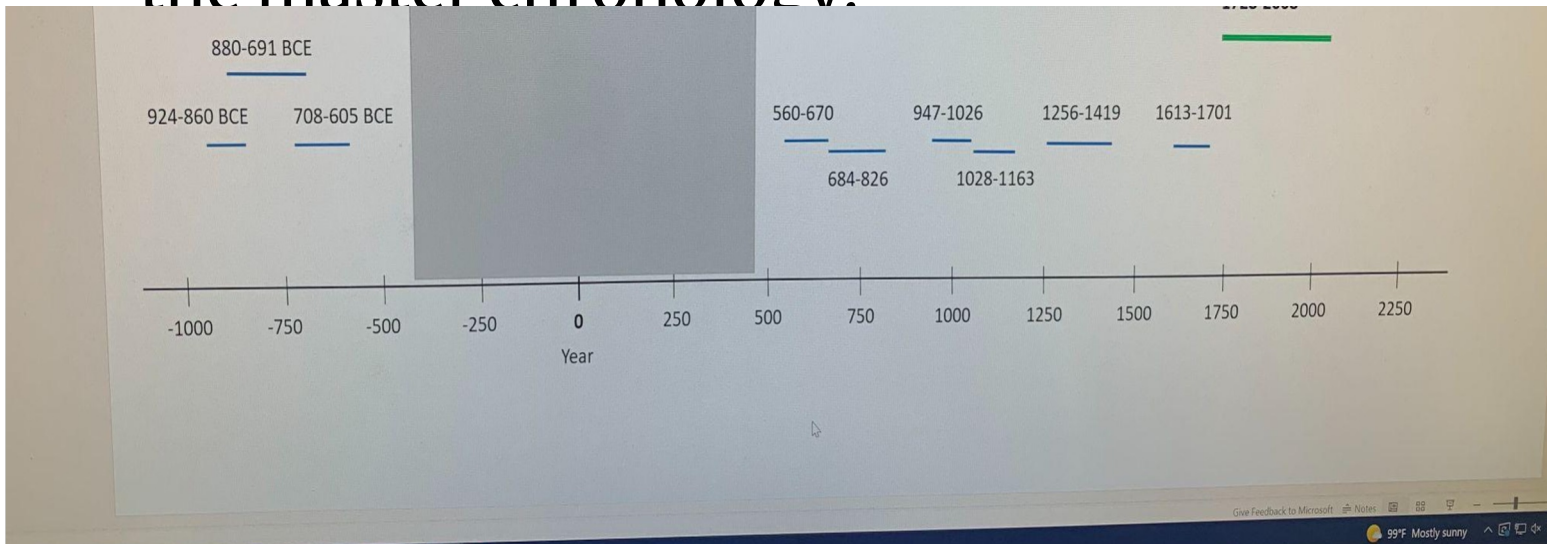
Results



- RingdateR gives an automatic result in matches from samples taken.
- Sample (TND578) matched with the Master Chronology.

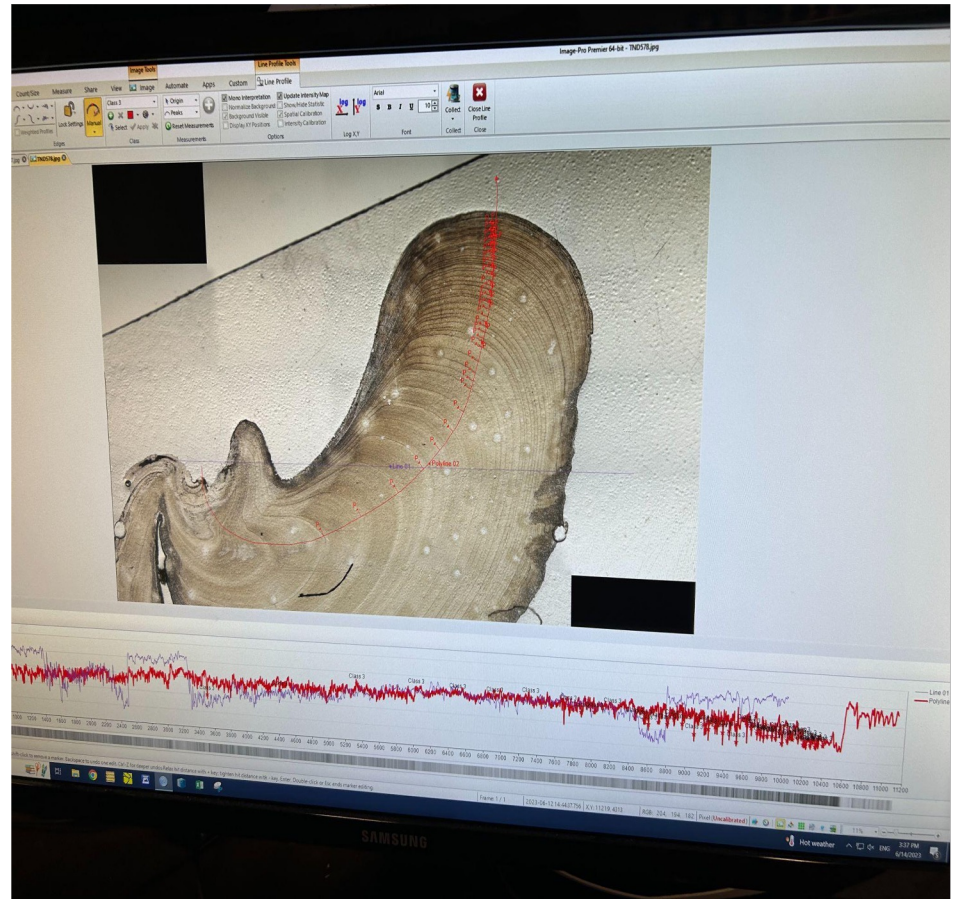
Results

- Samples TND566 and TND571 were also matches.
- Every other sample had no matches and has been labeled a floater.
- Floaters are shell samples that don't fit in the master chronology.



Discussion/Synthesis

- My results have added and tightened the existing chronology.
- Floaters are still important and can be used in the future.



Sample (TND578)

