

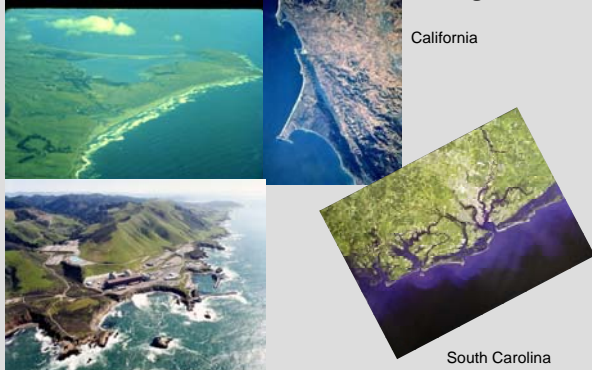
## Data management for Quaternary coastal geochronology

John Wehmiller and Vincent Pellerito  
University of Delaware  
NE GSA 2014

## History and purpose

- Goal: Digital inventory of Quaternary coastal geochronological studies (14C, U-Th, AAR, OSL, other.....)
- Most AAR labs (including UD) pre-date the digital world: Hard copies, then spreadsheets, but rarely a common format for data preservation; several labs now decommissioned
- Document the current location of samples to allow future work

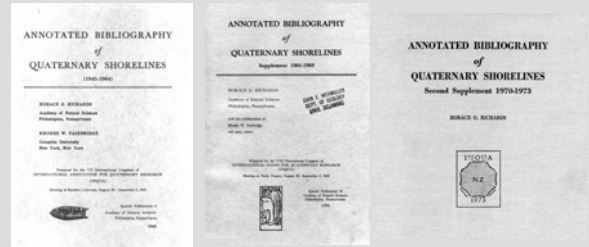
## USGS Reactor Hazards Program



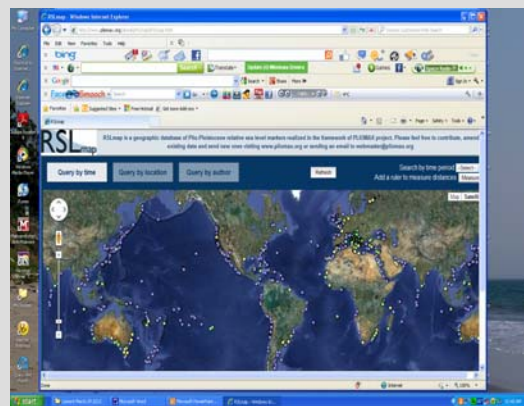
## Scanawah Island SC



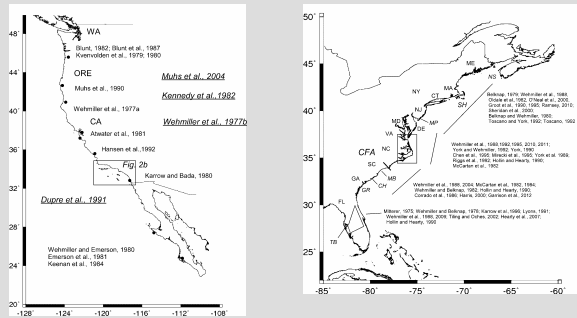
## Quaternary Shorelines Inventories: Richards and Fairbridge



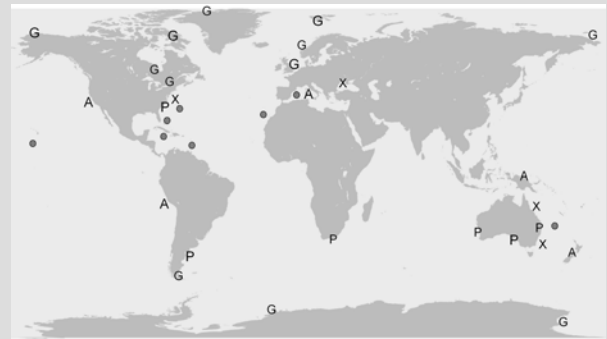
## Crowdsourcing in the Quaternary sea level community: insights from the Pliocene A. Rovere et al., Quaternary Science Reviews 56 (2012) 164-166



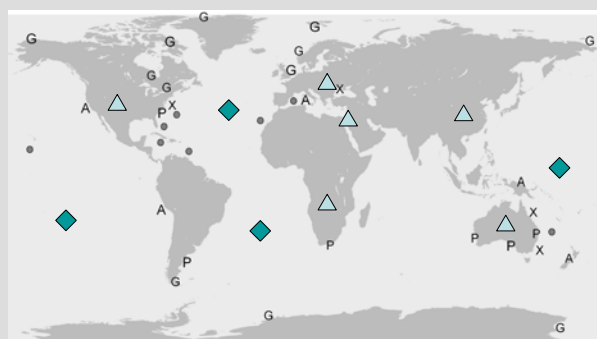
Wehmiller 2013 *Quaternary Geochronology*: Testing and applying AAR in Quaternary coastal sequences



AAR COASTAL STUDIES  
A=active; P=passive; G=glacial; X=offshore; ● = island

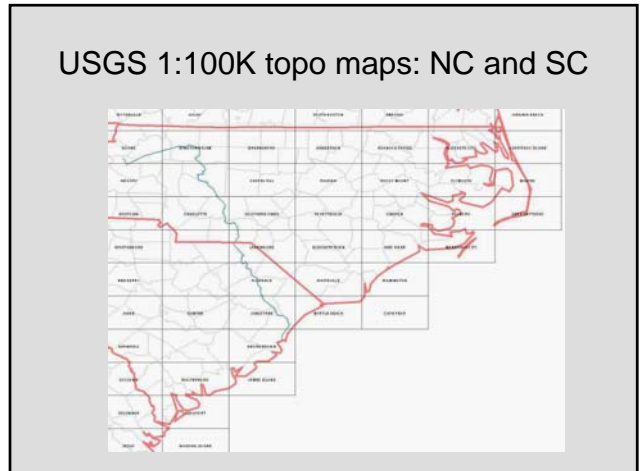
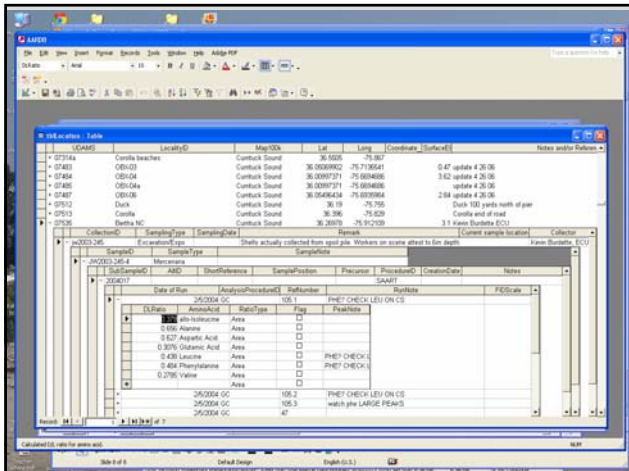
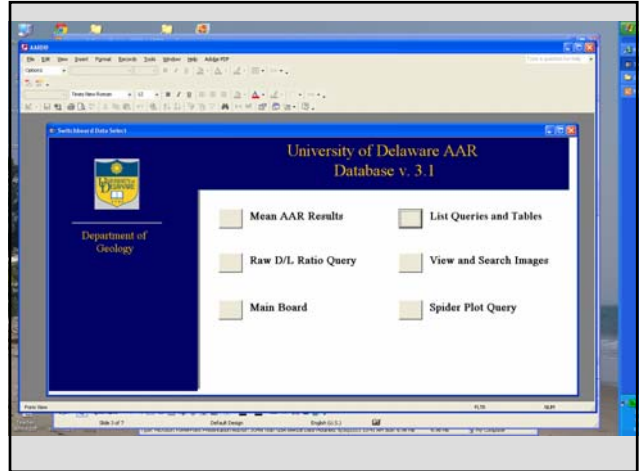
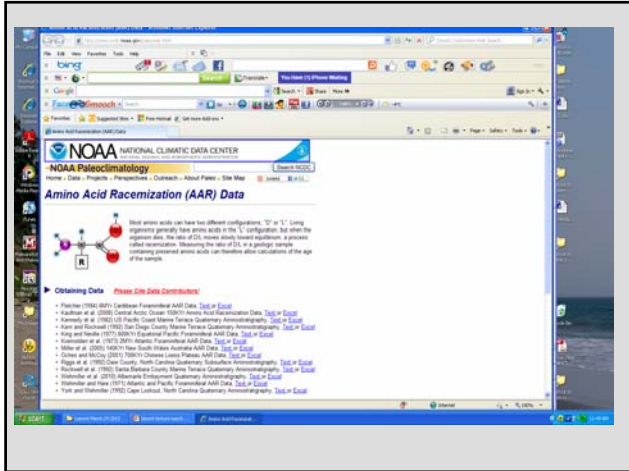


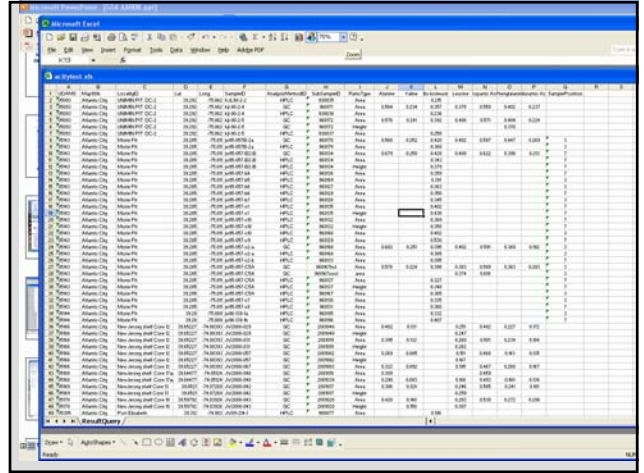
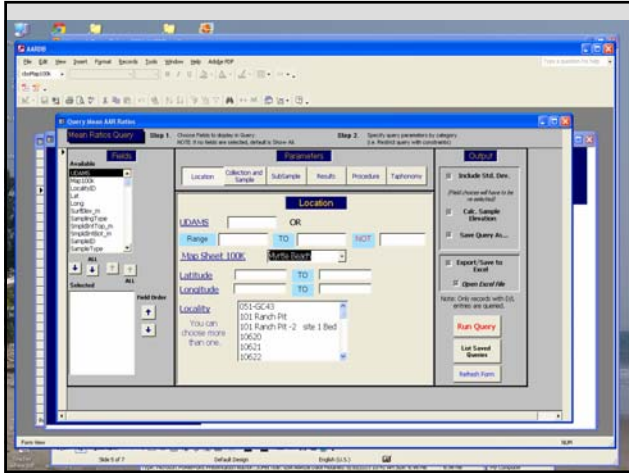
A=active; P=passive; G=glacial; X=offshore; ● = island  
△ Terrestrial    ◆ Marine



Data management – NOAA project

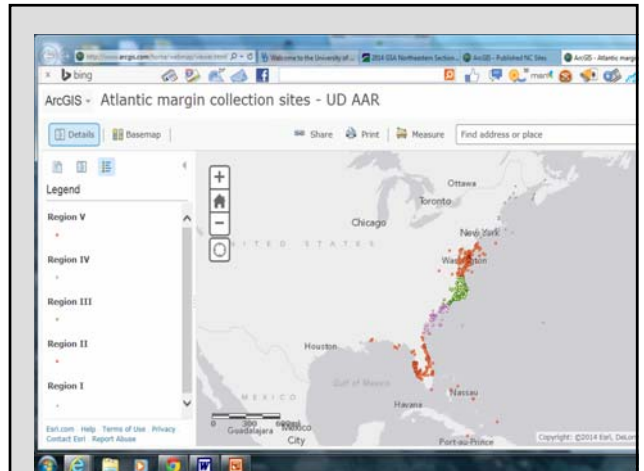
- 2010 and 2011 Workshops, Denver and Bern (NSF \$\$)
- AAR labs from US, UK, Spain, Australia
- NOAA site for *published* AAR datasets, established early 2011:
  - <http://www.ncdc.noaa.gov/paleo/aar.html>
  - Dozens more files to be uploaded from numerous labs!

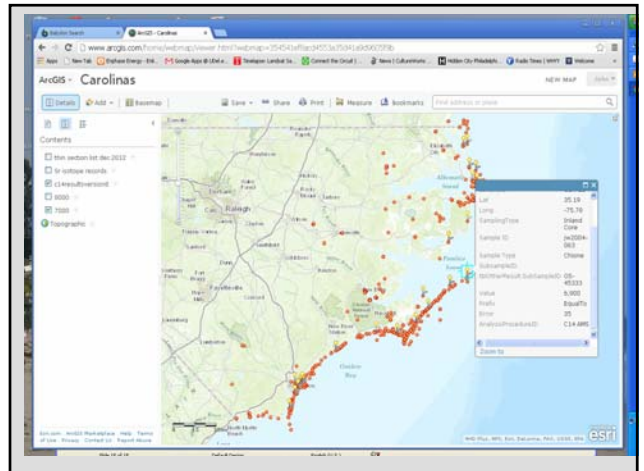
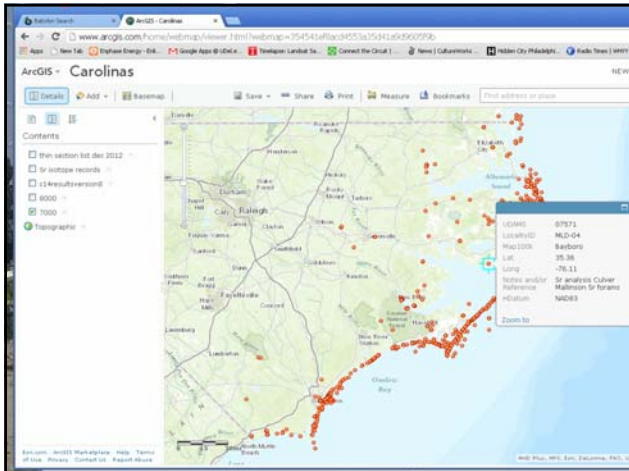
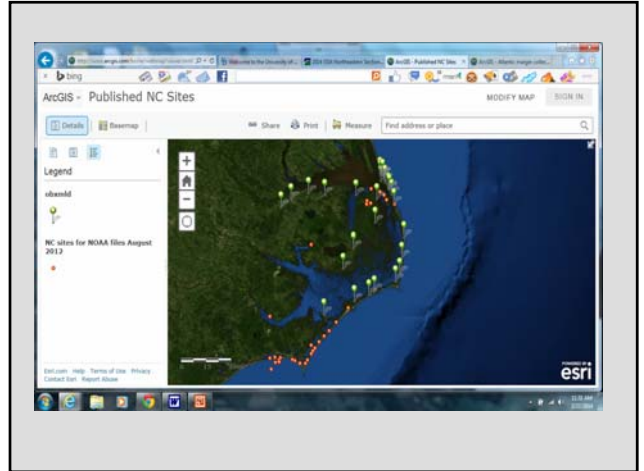
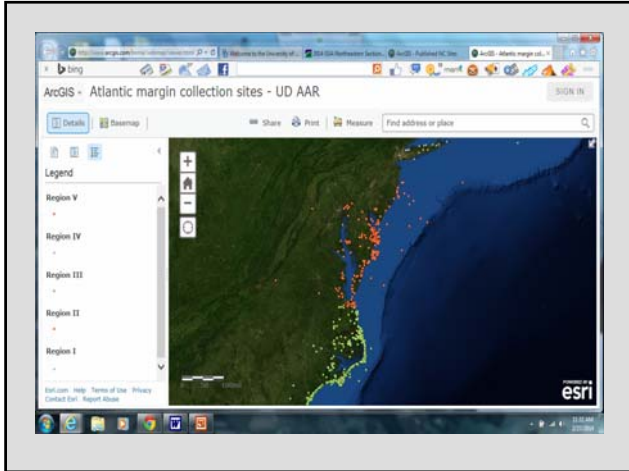


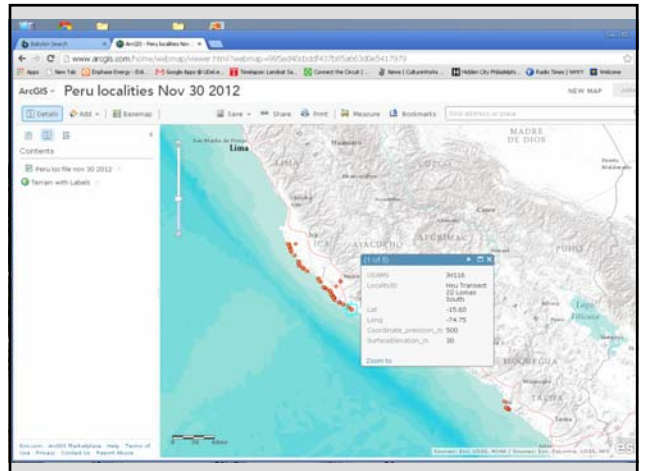
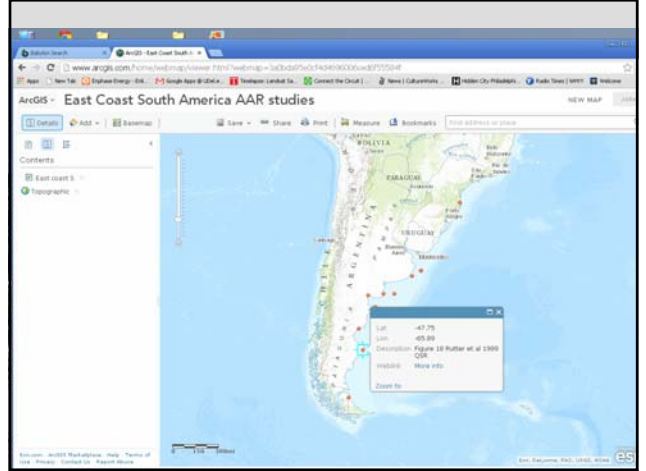
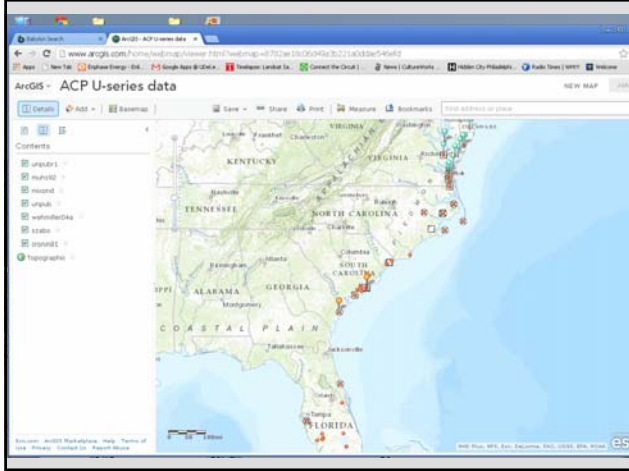


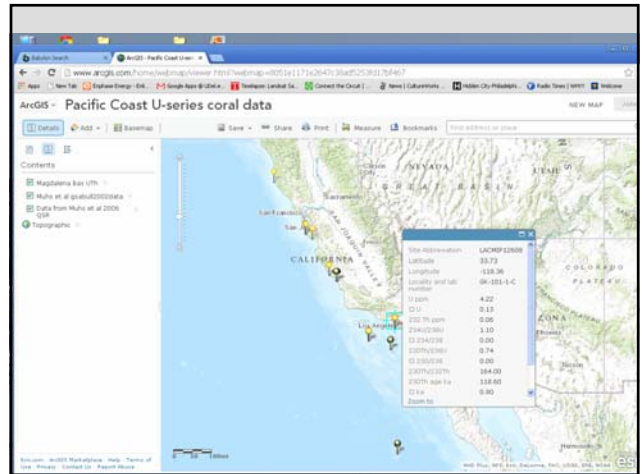
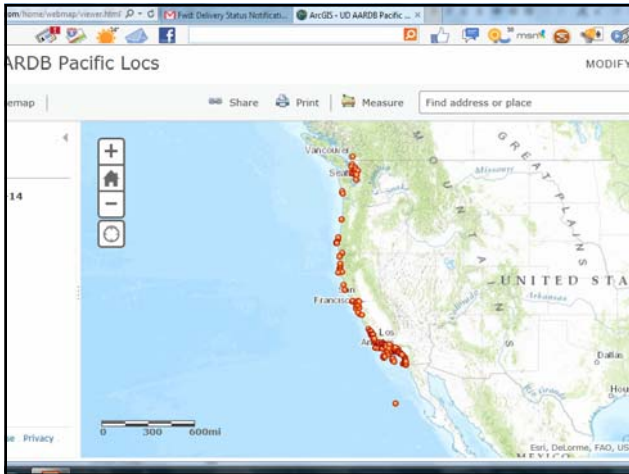
## Data management: ArcGis

- Compilation of AAR, 14C, U-Th, OSL, and other analytical data for US Pacific and Atlantic sites – see Wehmiller 2013 QG review paper
- South American sites are in progress
- Ultimately hope to coordinate with locality databases from various museums (LACM, FLMNH, PRI, .....









Data management: Florida project

- Very first publications on AAR used samples from Florida; numerous collections and analyses done since late 1960's; very few publications; current effort to compile history of work using ArcGis site

