



Eastern Pacific Invertebrate Communities of the Cenozoic (EPICC)

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Collaborator Map



Scope of project

- 66 million years of marine community evolution, since the end-Cretaceous mass extinction, from the entire Eastern Pacific.
- Taxa include species from all readily fossilizable animal phyla (except vertebrates).
- ~1.6 million fossils to be web mobilized.



Management of the network: oversight

- Lead institution – UC Berkeley (UCMP)
 - Project Leader and overall financial oversight, Charles Marshall
 - Project Coordinator, Erica Clites
 - Manages communication
 - Serves as the interface among the TCN partners
- Local financial oversight: PI of each funded partner
- Education and Outreach
 - Led by Lisa White (UCMP, Berkeley) and Greg Dietl (Paleontological Research Institute, NY)

Data management

- Each institution will serve its data directly to iDigBio via an IPT (driven by our sustainability plan).
- Data sets to be released as CC0 or CCBY, as required by institutional policies; other digital deliverables released as CCBY-NC or with other less restrictive licenses.
- Each institution currently has offsite backup; we are investigating shared offsite backup for images.
- We agreed to adopt the convention of “fuzzing” locality data to 0.1 degree to support legal requirements and stakeholder ethics.



Management of the network: processes

- First TCN meeting Sept 17–19, 2015.
 - Established a strong sense of community and shared goals.
 - Established working groups (georeferencing, taxonomy, geologic referencing).
 - Established communication protocols (via listserves and bi-monthly online meetings).
 - Established TCN goals, and metrics.
 - Modified our protocols for our planned Virtual Field Experiences.

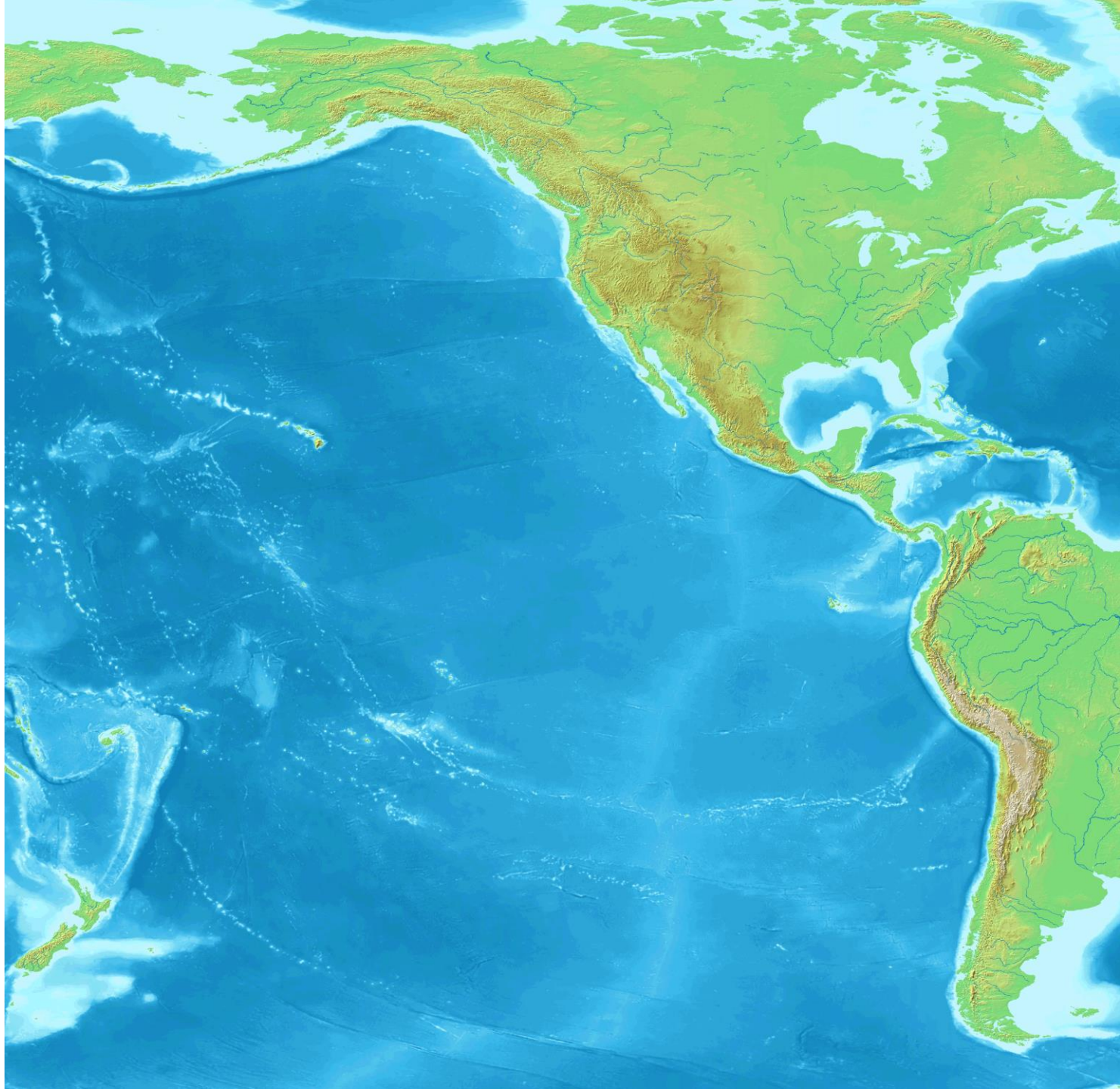
Digital deliverables

(beyond the piping of specimen data to iDigBio)

- Online stratigraphic dictionary for the eastern Pacific.
- Locality compilation showing equivalence across different museums.
- Updated taxonomic authorities for eastern Pacific fossils (there is no existing online source).
- Video, Gigamacro image sets, 3D models as part of Virtual Field Experiences, linked to Googlemaps and web-mobilized specimen data.
- Established standardized image acquisition protocols and views for the relevant taxonomic groups.

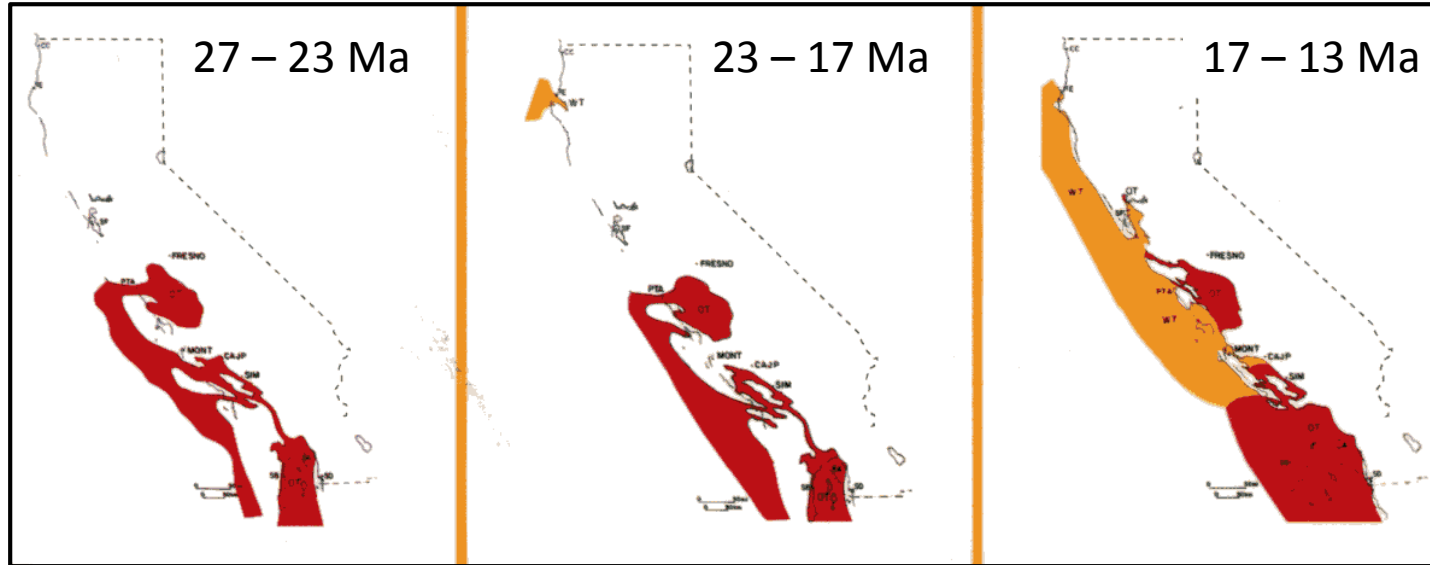
Research Uses

Ecological and evolutionary response of marine species and communities to major environmental change since the death of the dinosaurs, 66 million years ago.

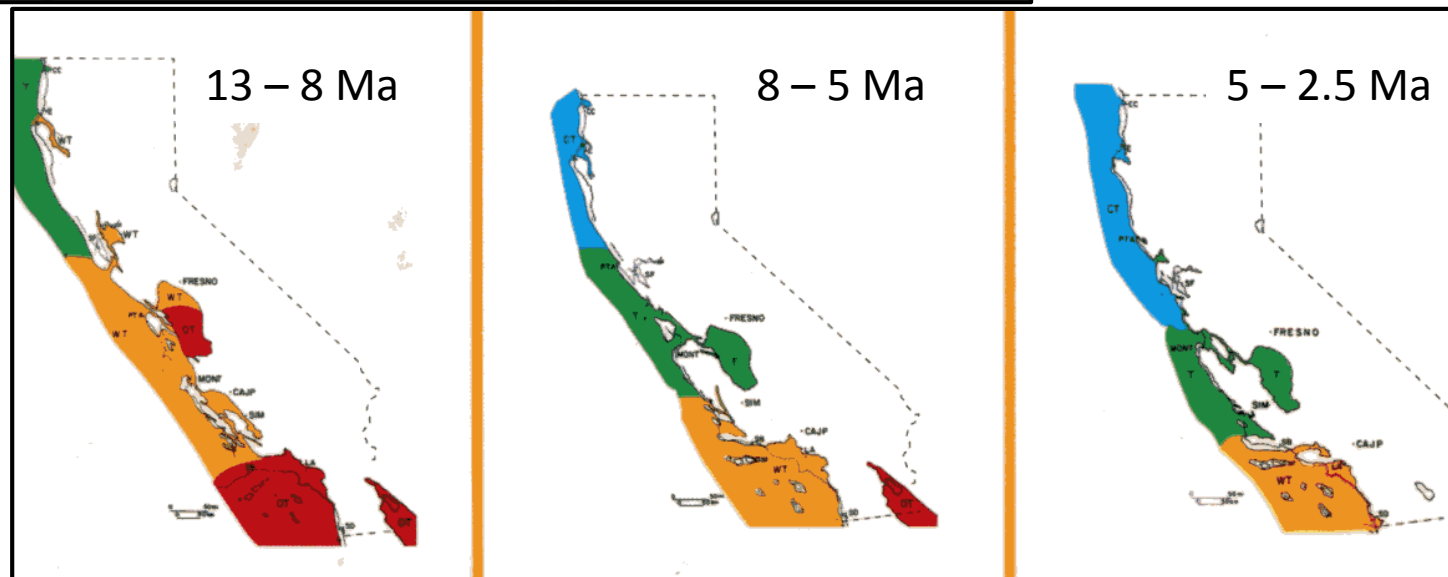


Example of research enabled by large-scale data

integration: Collapse of the tropics over the last 15 million years



Hall (2002)



***Thanks to iDigBio and NSF for enabling
large-scale integration of dispersed collections!!***

