Helping Climate Scientists Containerize Their Code

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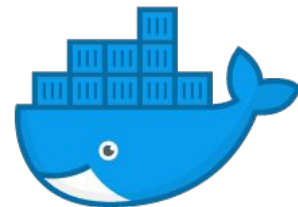
Background

- Paleoclimatology
- Scientists need to share their code
    - Difficult installation
    - Too many dependencies
- Containerization

Nicholas McKay
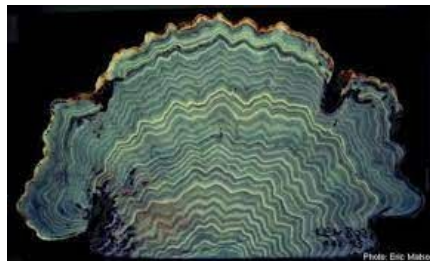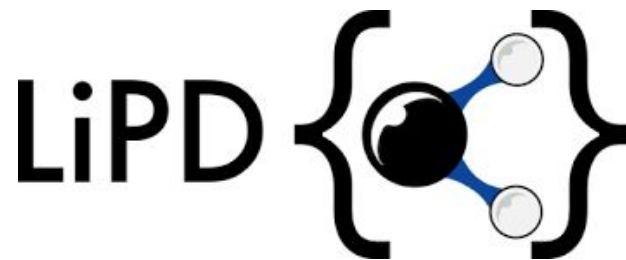Associate Professor
Paleoclimate Dynamics Laboratory

Figure: Coral Reefs

# Problems

Paleoclimate Reconstruction Storehouse (PReSto)

- Climate Model Programs can vary wildly

- No standards for code between Paleoclimate scientists

- Containerization sounds nice, but Scientists can't do DevOps

Solution

A tool that facilitates containerization and model configuration.

- Python & R adapter libraries for communicating with PResto

- User facing: Command Line Interface / Terminal User Interface

- External API for communicating with PReSto containers
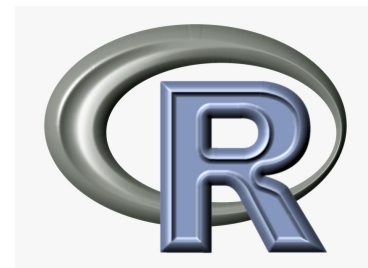
Conclusion

- Paleoclimatologists and climate change
- Climate models and data constantly changing, containerization has key
- Reliability through standardizing testing and output formatting is crucial

Questions?