

# Management Challenges in the Northern Islands

**Fran Castro - DEQ**



# The Islands

- The CNMI is comprised of 14 islands along the chain.
- Southern islands have mainly limestone bedrock associated with historical geological processes
- Northern islands are predominantly volcanic



# Management Challenges

- Islands are inaccessible
- Unpermitted land activities
- Proposed resettlement
  - Schools
  - Villages
- Proposed mining activities

# MARAMP Cruise

NOAA Research Vessel – Oscar Elton Sette  
August 22 – September 21, 2003



# CNMI Contingent – DEQ, CRM, DFW



**Kate Moots**  
**DFW**

**Ken Cochran**  
**CRM**

**Fran Castro**  
**DEQ**

**Peter Houk**  
**DEQ**

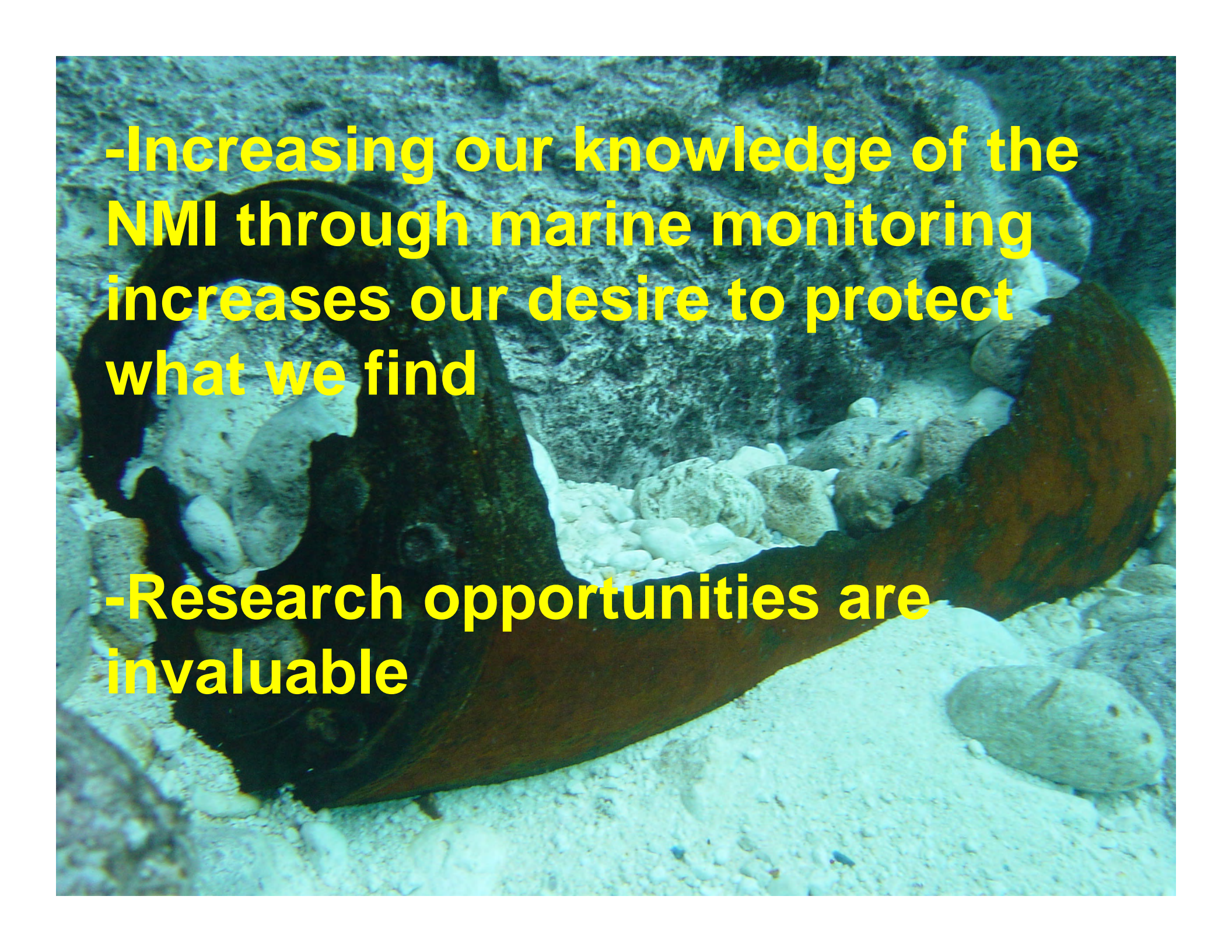
**Mike Trianni**  
**DFW**

# Data Collection

An underwater photograph of a large, healthy coral reef. The coral is dark brown and has a complex, branching structure. Numerous yellow-striped snappers are swimming around the coral. The water is clear and blue. In the bottom right corner, there is a red timestamp that reads '15 2:29 PM'.

- Data will be used as a foundation for the establishment of management plans

15 2:29 PM

An underwater photograph showing a large, dark, curved object, possibly a piece of metal or a large shell, resting on a sandy seabed. The object is partially buried in the sand and has a rough, textured surface. The background is a sandy, rocky seabed with some small blue fish visible. The lighting is dim, typical of an underwater environment.

**-Increasing our knowledge of the NMI through marine monitoring increases our desire to protect what we find**

**-Research opportunities are invaluable**

# Anatahan – NW



# Anatahan - SE







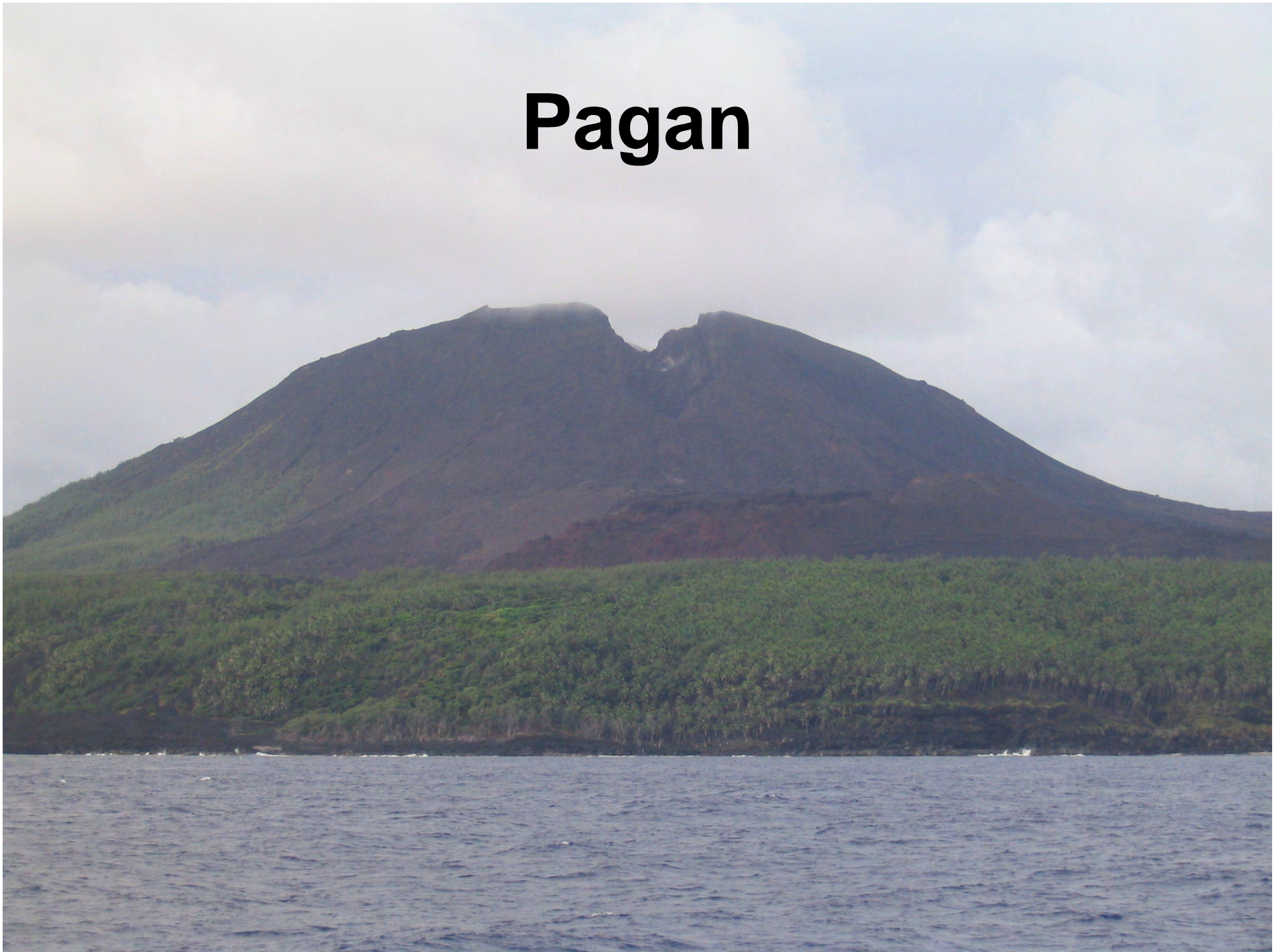
# Alamagan







# Pagan



# Agrihan



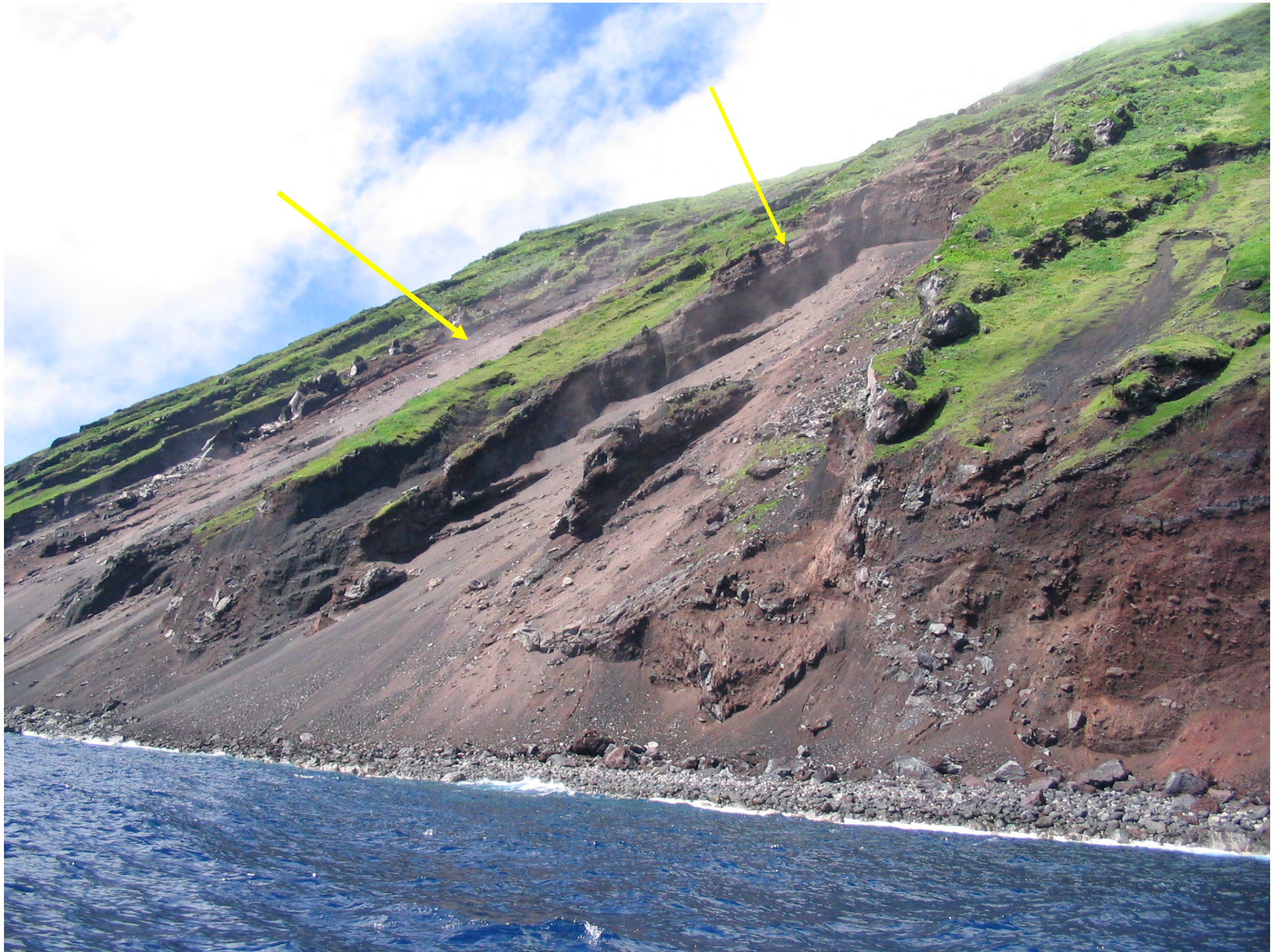






# Asuncion



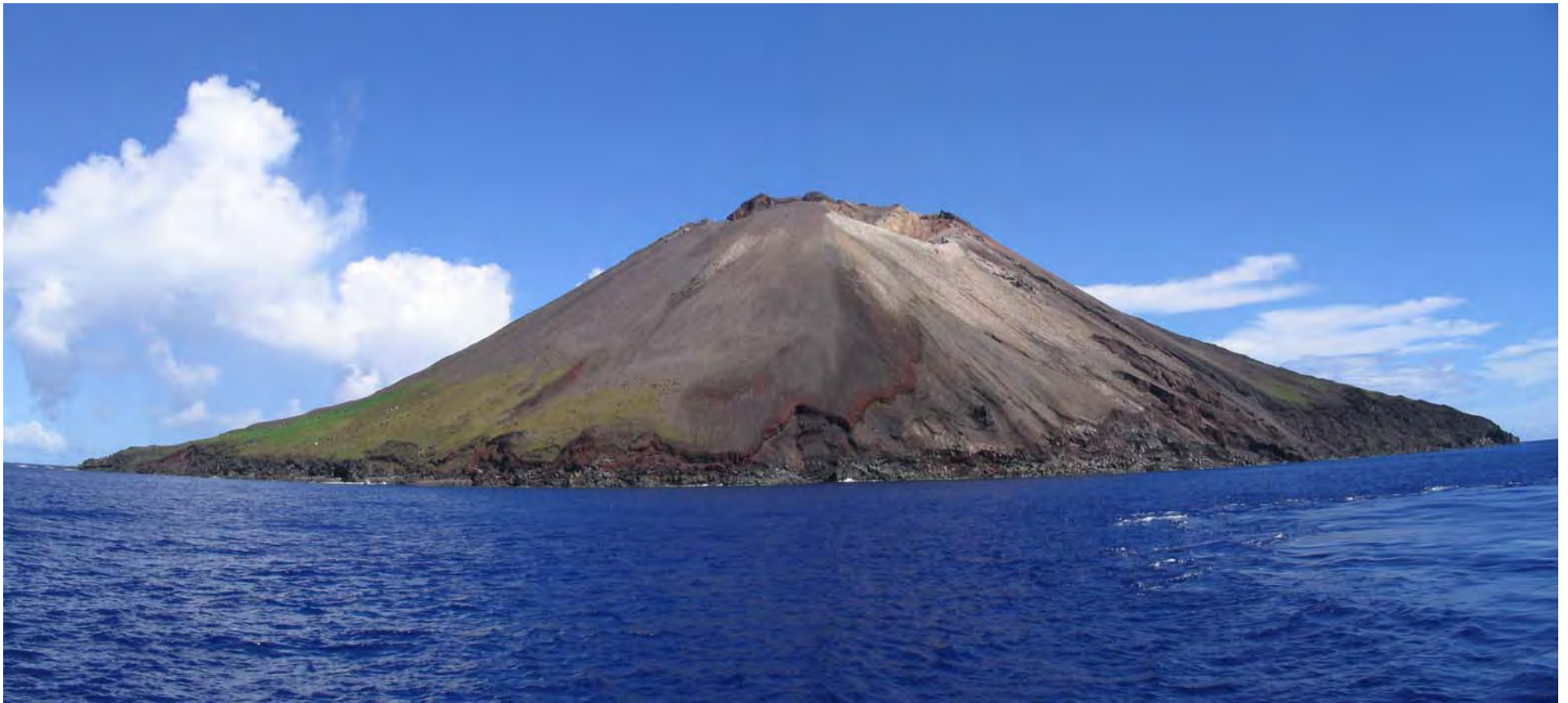


# Maug





# Farallon de Pajaros or Uracas





Thank you!

