

# STATUS OF THE IGCP PALEO-TSUNAMI PROJECT



University Of Hormozgan

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Iran



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India



# STUDY AREA

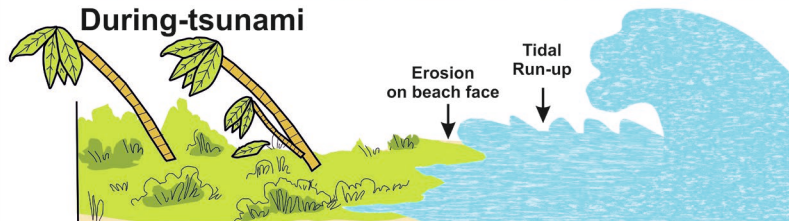


# SCENARIOS TO BE ASSESSED BASED ON GEOMORPHIC INFORMATION

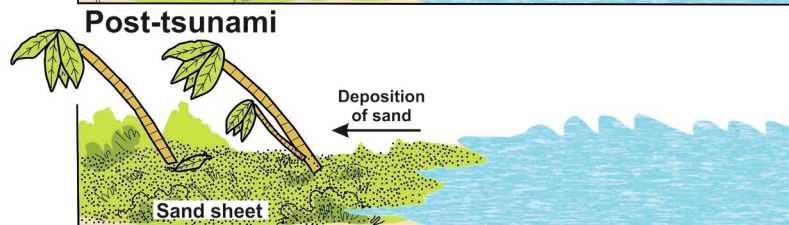
Pre-tsunami



During-tsunami



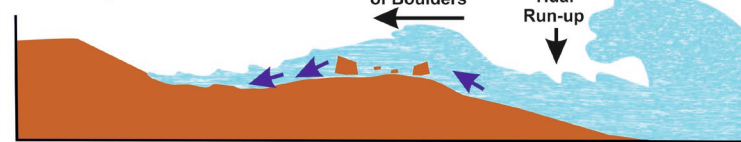
Post-tsunami



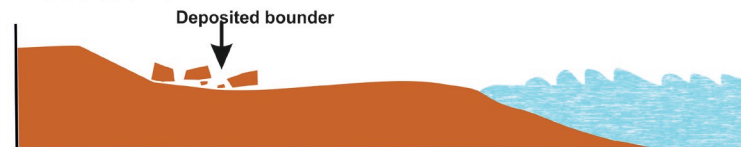
Pre-tsunami



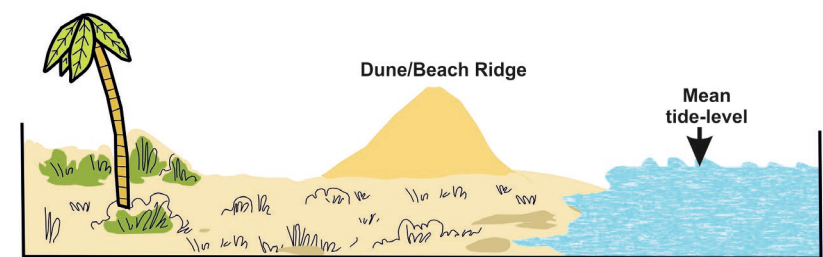
During-tsunami



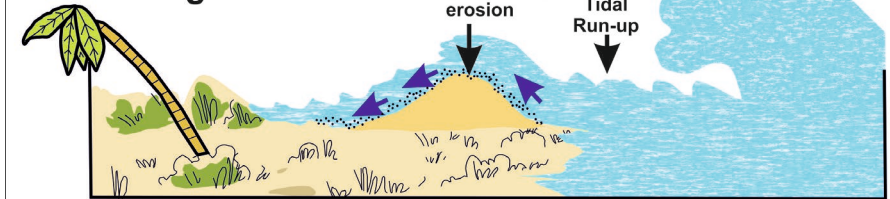
Post-tsunami



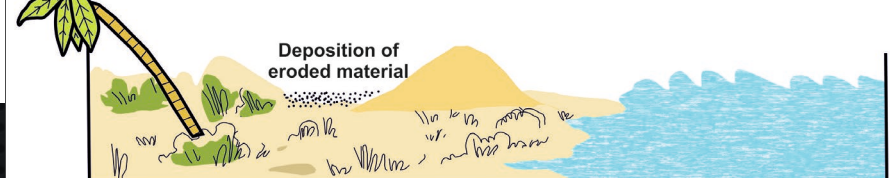
Pre-tsunami



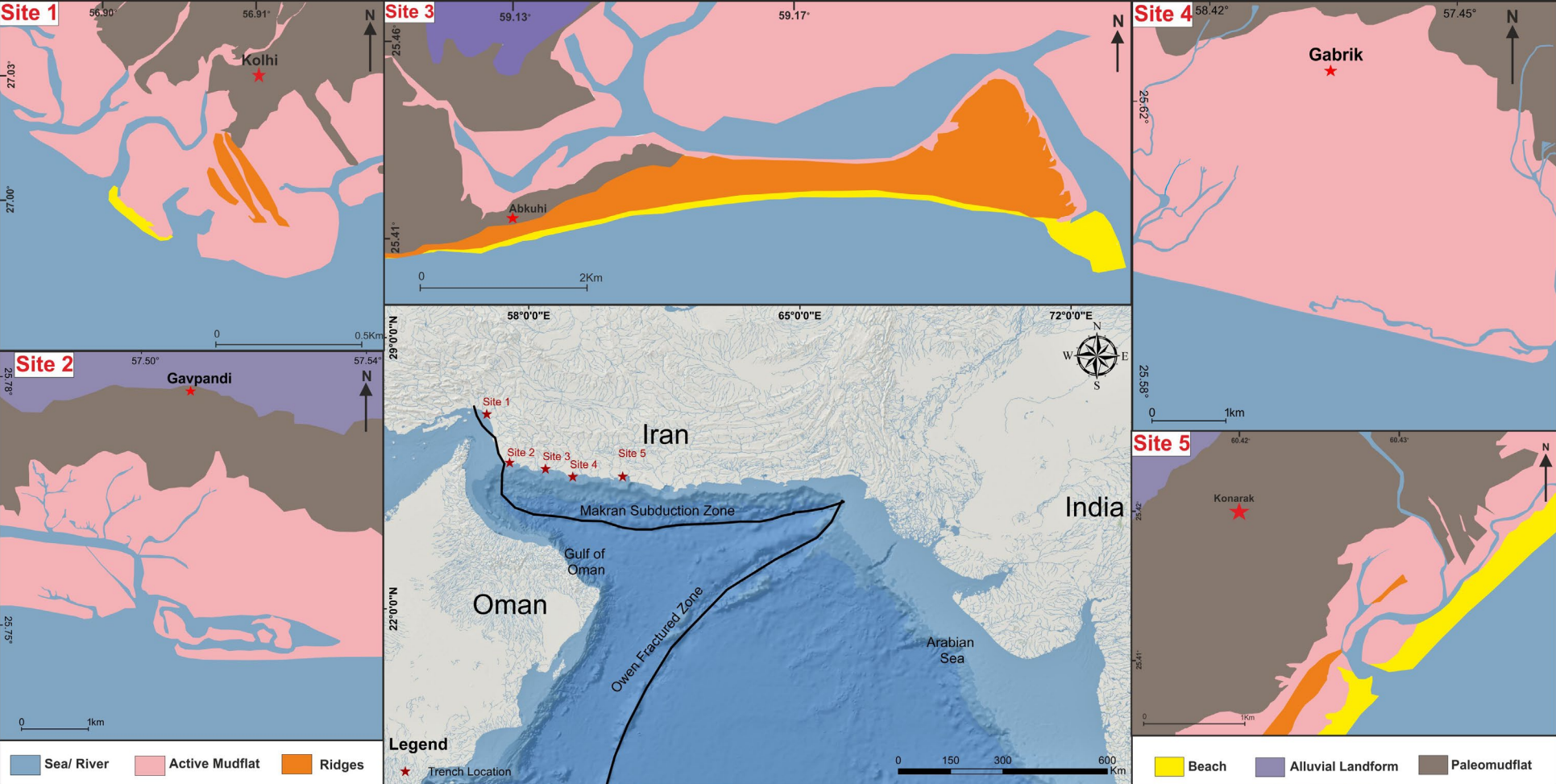
During-tsunami

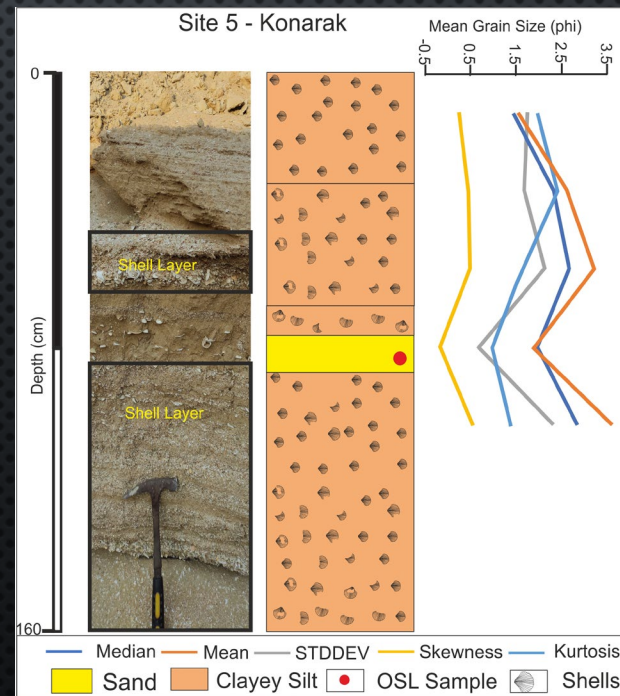
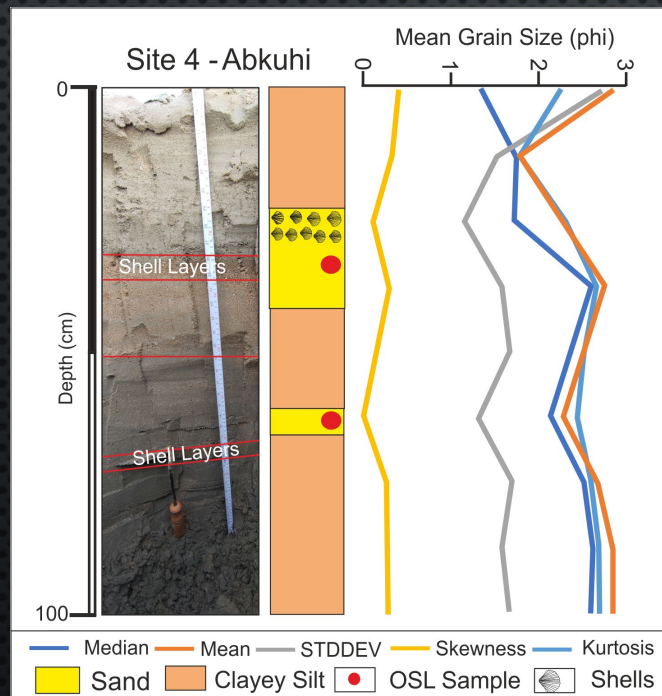
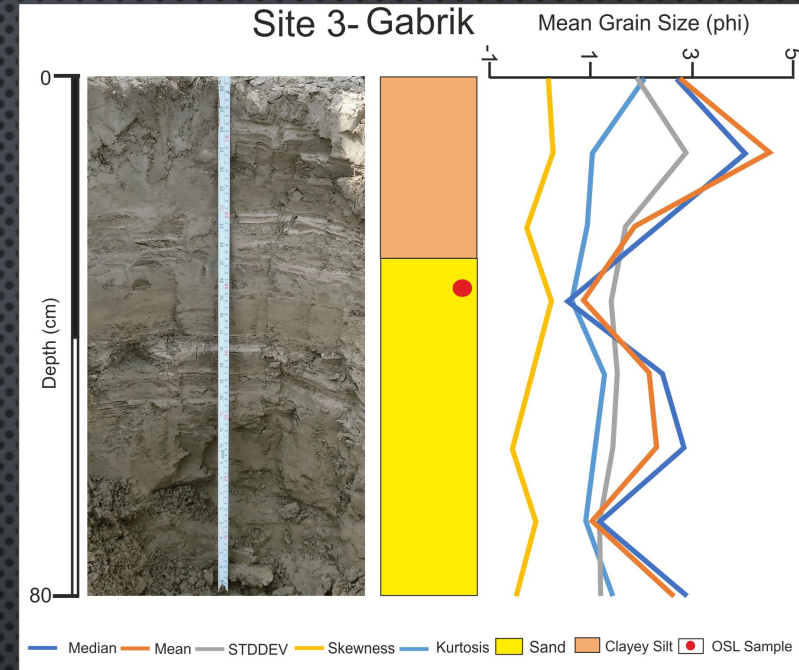
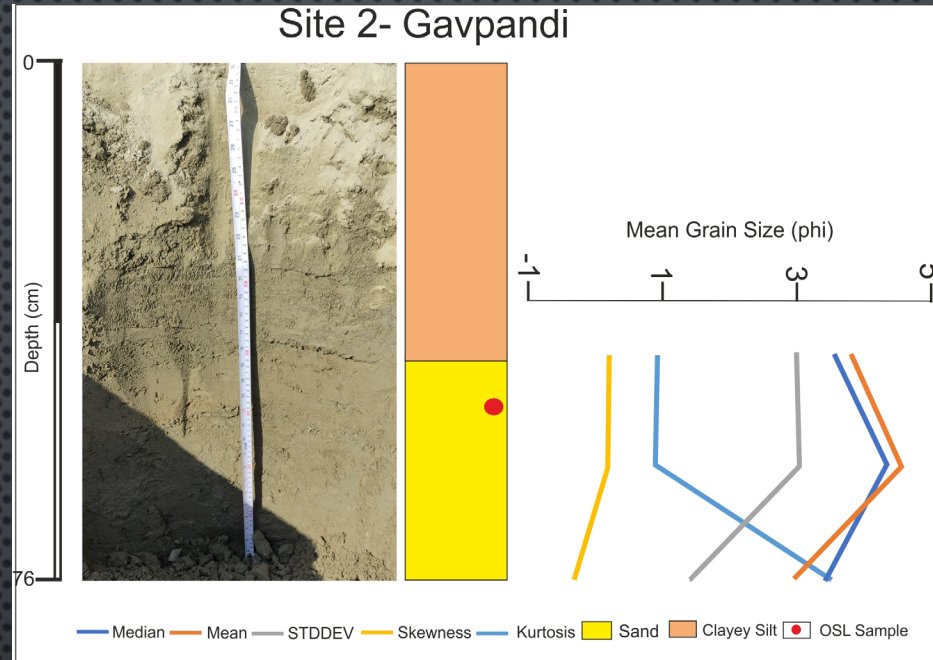
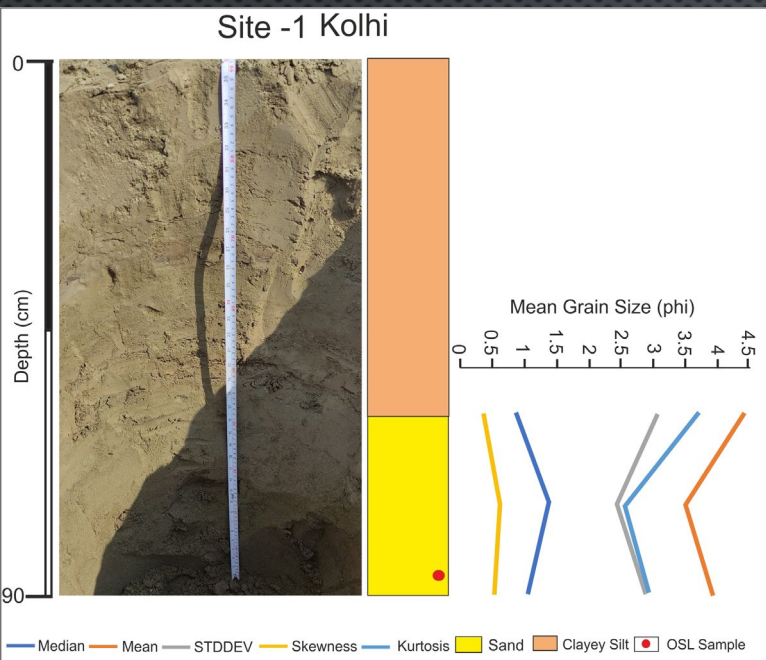


Post-tsunami



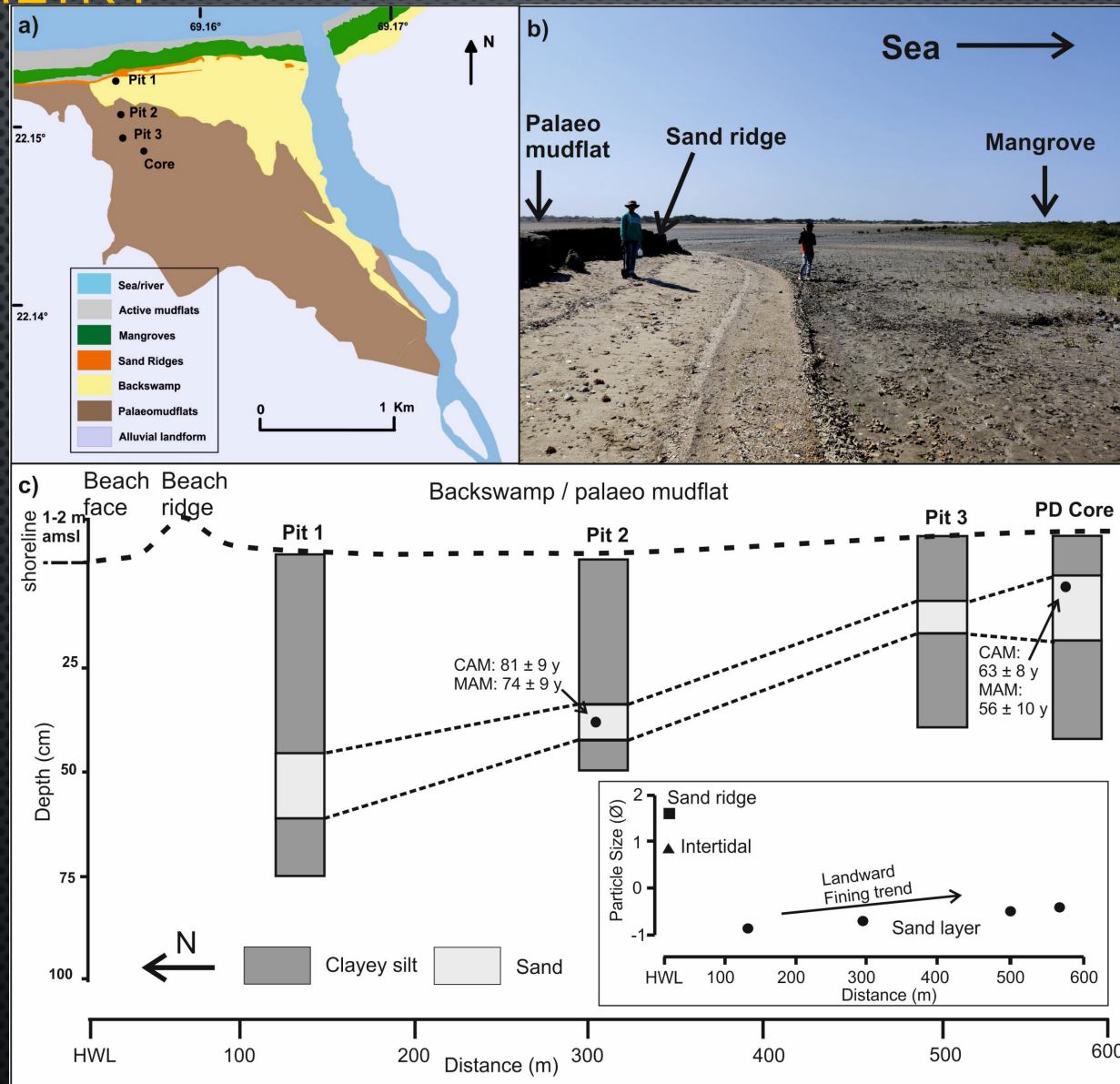
# GEOMORPHIC CONFIGURATION ALONG THE IRANIAN COASTLINE



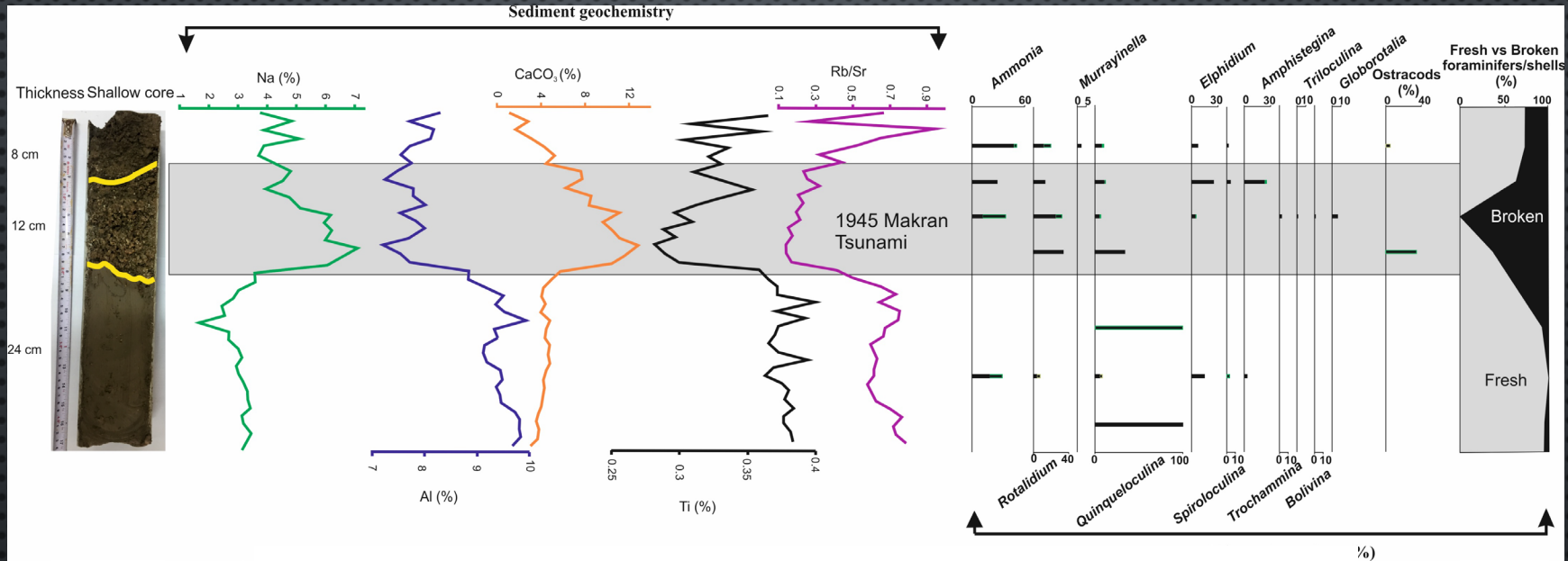


Grain size analysis: 45 samples  
 OSL dating : 14 samples  
 Geochemistry: 45 samples  
 AMS 14C chronology: 6 samples

# GEOMORPHIC SETTING AND SEDIMENT BODY GEOMETRY



# MULTI-PROXY INVESTIGATION OF THE SAND LAYER



Marine Geology 446 (2022) 106773

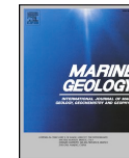


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Marine Geology

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Letter

## Geological footprints of the 1945 Makran tsunami from the west coast of India

S.P. Prizomwala<sup>a,\*</sup>, Chintan Vedpathak<sup>a,b</sup>, Aashna Tandon<sup>a</sup>, Archana Das<sup>a</sup>, Nisarg Makwana<sup>a</sup>, Neha Joshi<sup>a</sup>

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<sup>b</sup> Gujarat University, Ahmedabad 380009, India

# CATALOGUE OF HIGH ENERGY EVENTS ALONG INDIAN SHORELINE WITH GEOLOGICAL



Sr no.	Site	Characteristics	Age	Inference?	Reference
1	Nava Bandar	Boulder deposits	1982	Storm	Gandhi et al., (2016)
2	Pindara Coast	Sand Layer	1945 AD event	Tsunami	Prizomwala et al. (2022)
3	Kachchh coast	Sand layer	1008 AD event	Palaeo-tsunami	Bhatt et al., (2016) Prizomwala et al. (2018)
4	Kachchh coast (Mundra)	Sand layer	997-1107 AD to 618 - 784 AD	Palaeo-storm surge	Prizomwala et al. (2018)
5	Uchediya, Narmada estuary	Two Foraminifer rich facies	1200 - 1900 BP	Palaeo-storm (?)	Sukumaran et al. (2012)
6	Layza nana section and Mandvi coast	Washover deposits	Late Holocene	Extreme wave event	Shukla et al., (2013)
7	South Saurashtra	Boulder deposits	2.7 ka – 4.9 ka	Palaeo-tsunami (?)	Bhatt et al., (2016) Prizomwala et al. (2021)

**Need for catalogue for MSZ?**



# Characterization of paleotsunami deposits along the western coast of India

Siddharth P. Prizomwala, U. Pandey, A. Tandon, N. Makwana and A. Das

**PAGES 10TH WEBINAR**  
**(PALEO)-EARTHQUAKE AND -TSUNAMI SCIENCE**

To celebrate the release of the PAGES Magazine on (paleo)-Earthquakes and Tsunamis in April 2024, PAGES is organizing a webinar in collaboration with some of the authors who contributed to the Special Issue.

**SPEAKERS AND TALKS**



**JAMIE HOWARTH**  
VICTORIA UNIVERSITY  
OF WELLINGTON, NEW  
ZEALAND



**SIDDHARTH  
PRIZOMWALA**  
INSTITUTE OF  
SEISMOLOGICAL  
RESEARCH,  
GANDHINAGAR, INDIA



**BELLE PHILIBOSIAN**  
U.S. GEOLOGICAL  
SURVEY

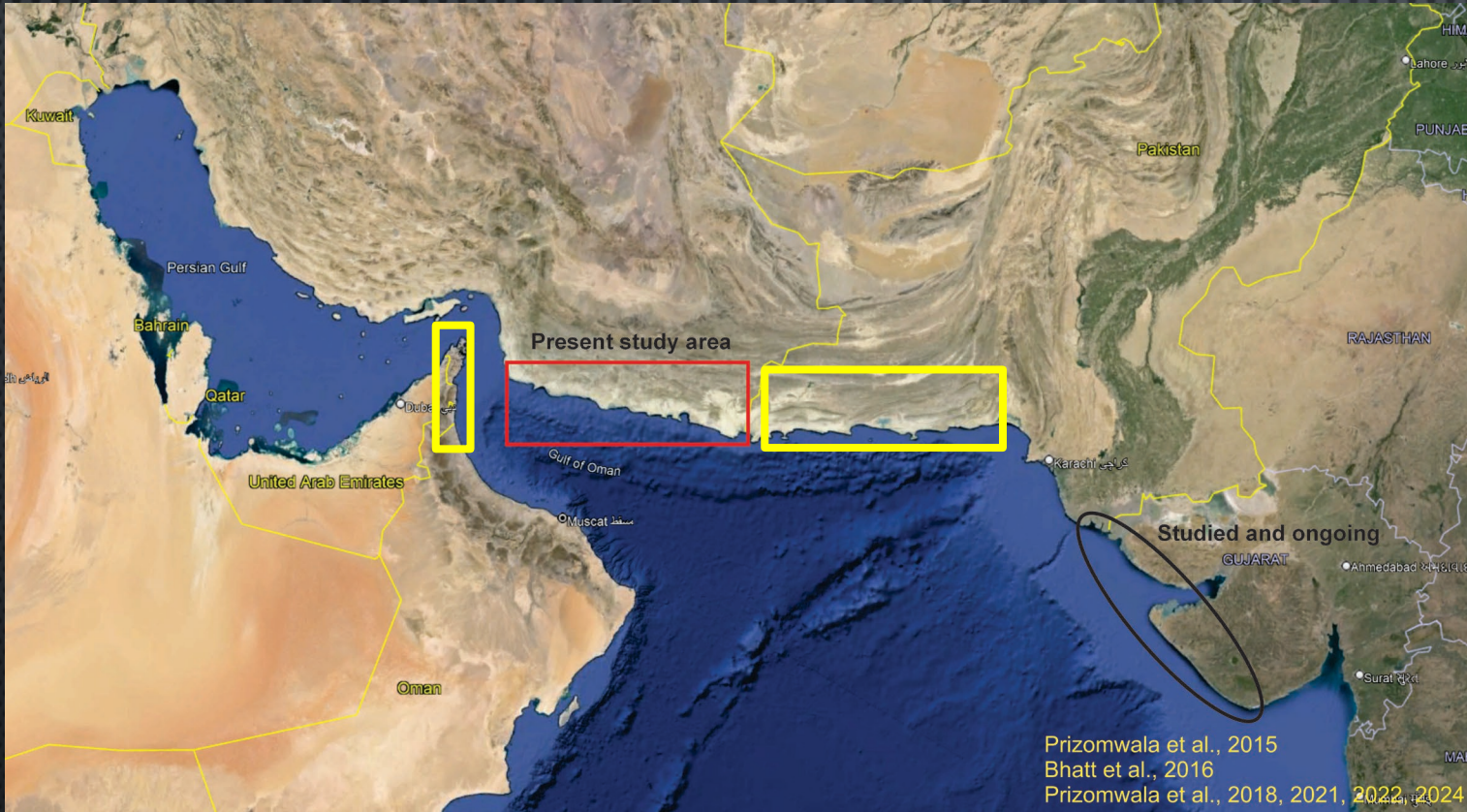
**8 MAY 2024** **05:00-06:00 UTC**

**PAGES**  
PAST GLOBAL CHANGES

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[pastglobalchanges.org/calendar](https://pastglobalchanges.org/calendar)



# WHAT NEXT?



## What we need?

### Immediate

- Extension for a year or so to complete lab analysis and supportive fieldwork (if req)

### On a longer span

- Studies along UAE and Pakistani shorelines
  - Seems excellent archives for such deposits

THANK YOU (આભાર)

LET'S MAKE SHORES SAFE FOR OUR FUTURE GENERATIONS!