



**First workshop on the
IGCP 740 West Makran Paleo-tsunami Investigation
Tsunami and Earthquake Research Center -University of Hormozgan**

0600 – 0800 UTC on Friday 29th October, 2021

جمعه ۷ آبان ماه ۱۴۰۰ ساعت ۹:۳۰ الی ۱۱:۳۰

Chair Dr. Mohammad Mokhtari

Introduction

The MSZ is a very vital component of the Northern Arabian Sea in terms of the hazard it can generate. In the historical past it has generated several major earthquakes, some of which have also been associated with catastrophic landslides, such as the 1945 event. The hazard along the MSZ needs the urgent attention of seismologists, geophysicists, and geologists for unearthing the remnants of past activity, so as to visualize the futuristic hazard it can generate. Such an exercise would aid the coastal communities of Iran, Pakistan, India and Oman in better planning and managing of the vital assets along the shorelines.

Proposed audience.

1. Scientists and faculty members
2. Doctoral and masters' students
3. Community leaders, society representatives, Government and Non-Governmental Organization representatives.

Organizers:

TERC, University of Hormozgan, Contact persons: Dr. Mohammad Mokhtari and Dr. Mehdi Masoodi
UNESCO International Geoscience program (IGCP) secretariat
IOC-UNESCO Secretariat for the Indian Ocean Tsunami Warning and Mitigation System

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Joining The Workshop

To join the WORKSHOP please register at the event website on the UNESCO-IOC Tsunami Calendar where all other information will also be available: <https://oceanexpert.org/event/3316>

Agenda

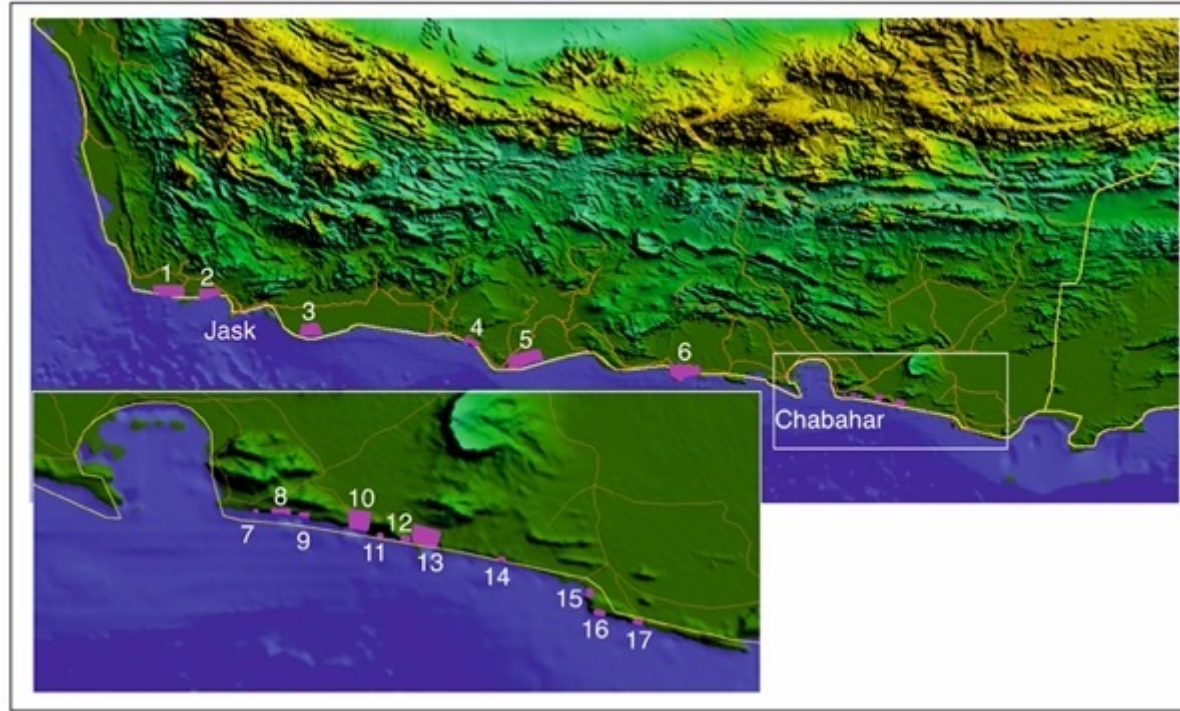
لینک ورود به کارگاه از طریق سایت روپرو در دسترس است

Title	Time	Speaker
Opening Ceremony: Introduction about the project and the upcoming plan and support	20	Dr. Özlem Adiyaman (Director of UNESCO International Geoscience program (IGCP) secretariat) Mr. Rick Bailey (Head of Secretariat IOC-UNESCO Indian Ocean Tsunami Warning and Mitigation System) Dr. Mohammad Mokhtari (Chair of NWIO-WG at IOC/IGC-UNESCO)
International Geoscience Program (IGCP): 50 years of worldwide capacity building, research support and sustainable development.	10	Prof. Sobhi Nasir (Chair of the UNESCO- IGCP)
MSZ seismicity	10	Dr. Issa El-Hussain (Director of Earthquake Monitoring Center, Sultan Qaboos University, Oman)
MSZ general tectonics	10	Dr. Mehdi Masoodi (Director of Tsunami and Earthquake Research Center -University of Hormozgan, Iran)
Towards comprehensive probabilistic tsunami hazard assessment in the Arabian and Red Seas and in Persian Gulf	10	Dr. Andrey Babeyko (GFZ, Germany)
Role of various coastal landforms in paleo-tsunami research	35	Dr. Siddharth Prizomwala (Institute of Seismological Research, India)
Discussion and future plan	20	All presenters/ participations
Summary and closing remarks	5	Dr. Mohammad Mokhtari (Leader of the IGCP 740 West Makran Plaeotsunami project)

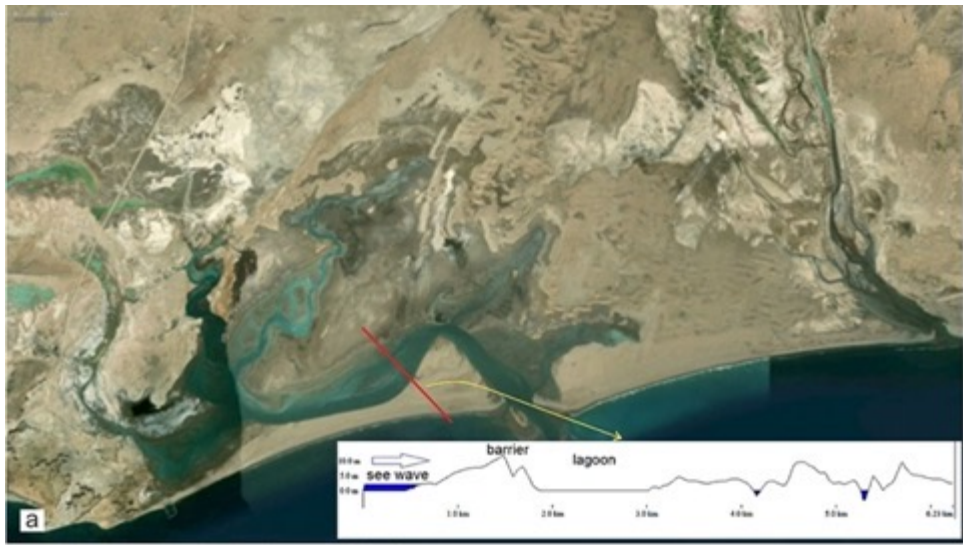
Date of workshops	Total number of participants	Number of young scientists/ students (<35 years old)	Number of male participants	Number of female participants
29 October 2021 (international)	56 From 11 countries	37	22	34

Countries:

Iran, Oman, Pakistan, India, Indonesia, United Arab Emirate, China, Germany, Australia, French, America,



Map of the study area. Violet squares, studied, visited and mapped in the project. The lower-left corner of the image shows the enlarged square of the Chabahar sites.



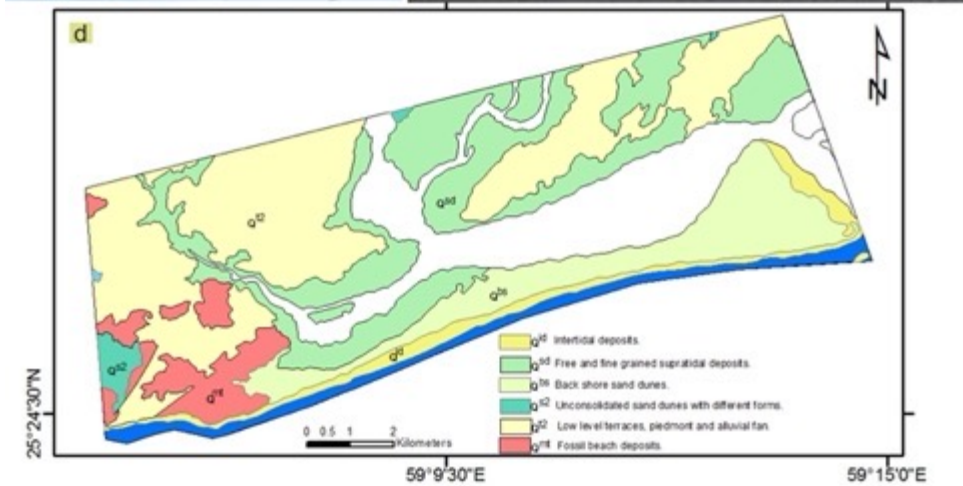
Satellite image (Google Earth) shows a long sandy linear barrier beach in a coastal area and Estuary in the Karati . Red line presents topographic profile across Karati coastal area.

The lower-right corner of the image shows the topographic profile across Karati shows barrier and lagoon conditions.

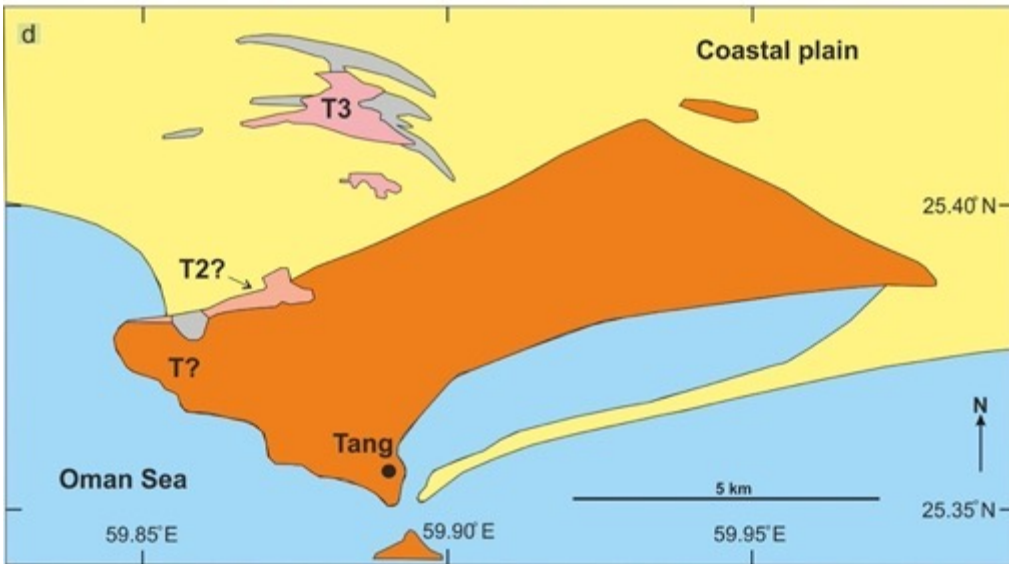
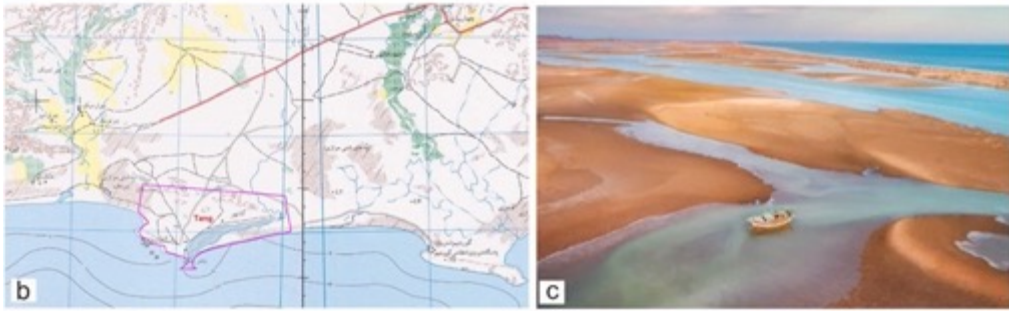
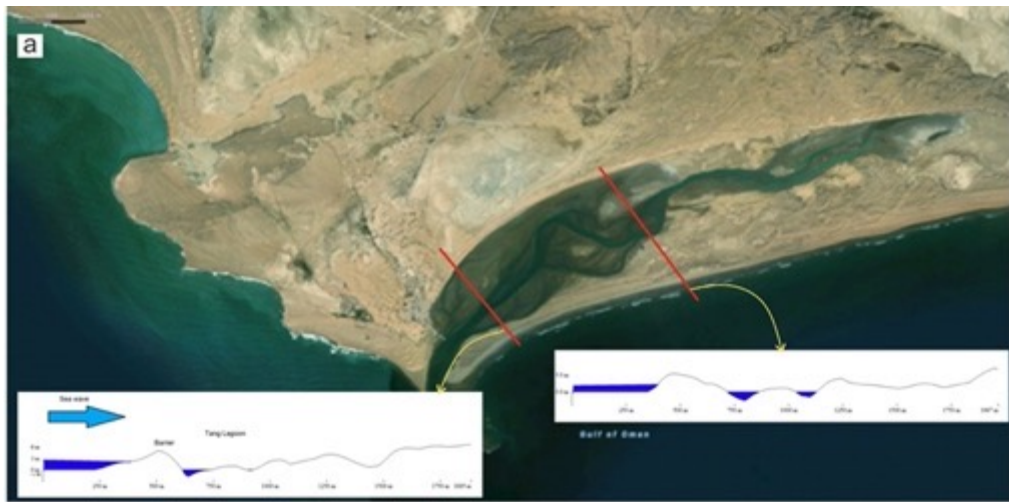


b). The topographic map shows the Karati Site.

c). Field Photograph of Karati Site.



d). Geology map of the Karati area



Satellite image (Google Earth) shows a lagoon and a barrier in the Tang Site.

Two redlines present topographic profiles across Tang coastal area. The lower-right corner and the lower-left corner of the image show the topographic profile across Tang show barrier and lagoon conditions.

b). The topographic map shows the Tang Site.

c). Field Photograph of Tang Site.

d). Geology map of the Tang area



(a)



(b)

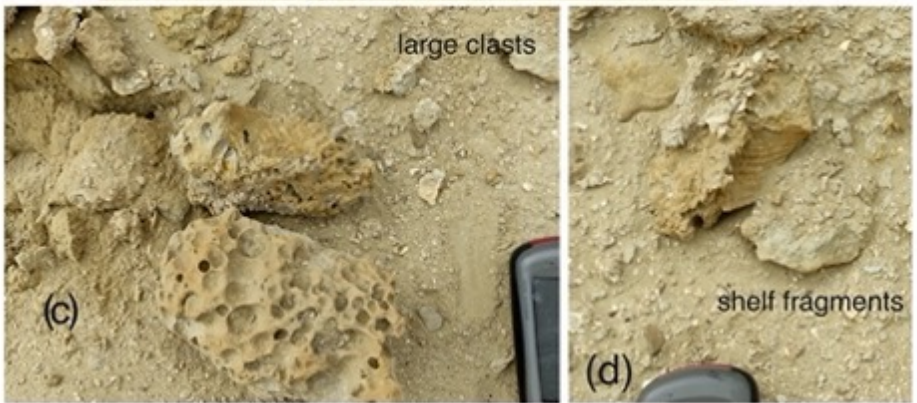
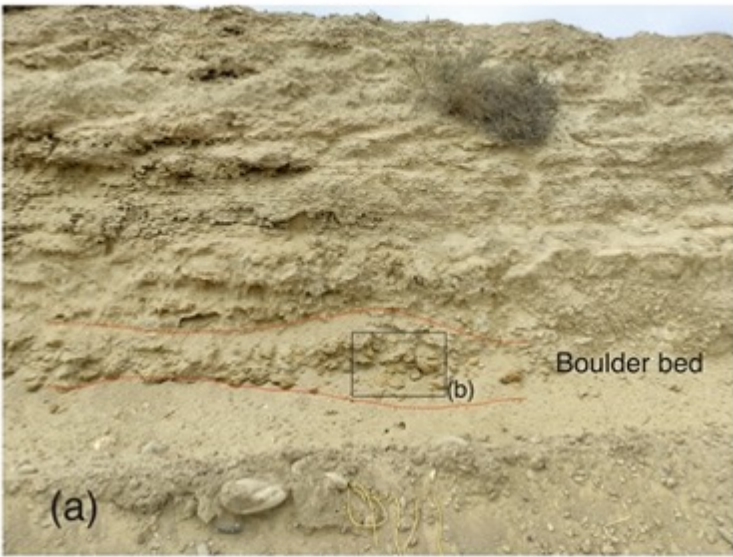


(c)

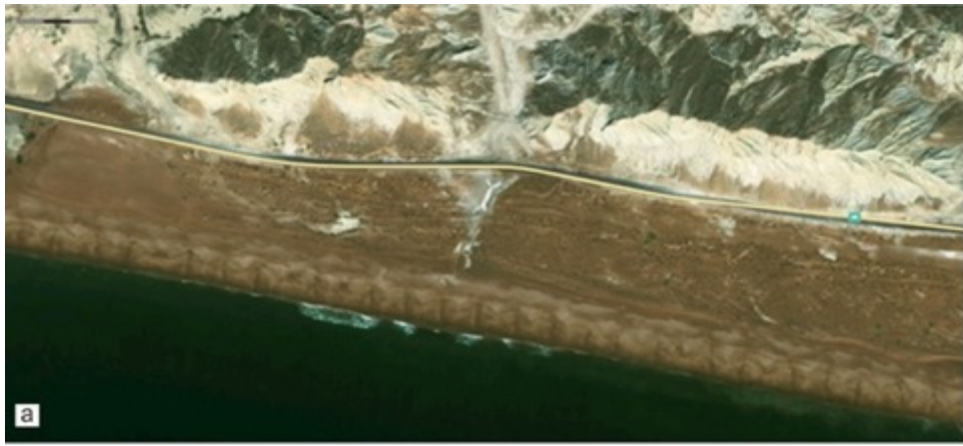
Field photographs show: a). Erosion of elevated marine terrace and paleocliff resulted in megaboulders fall in tidal area.

b). Single boulders and accumulated boulder train resting on a steep, high-energy cliff near Chabahar.

c). Imbricated clast structures in the boulder train. Note the imbrication and seaward dipping of the boulders and the elevated marine terraces in the background. View towards the east



Field photographs of Comb Site: a). Cliff section shows the marine boulder beds. b). Close-up view of the black square in the (a) image, c-d). Marine boulder beds showing large clasts, shelf fragments and the cavities

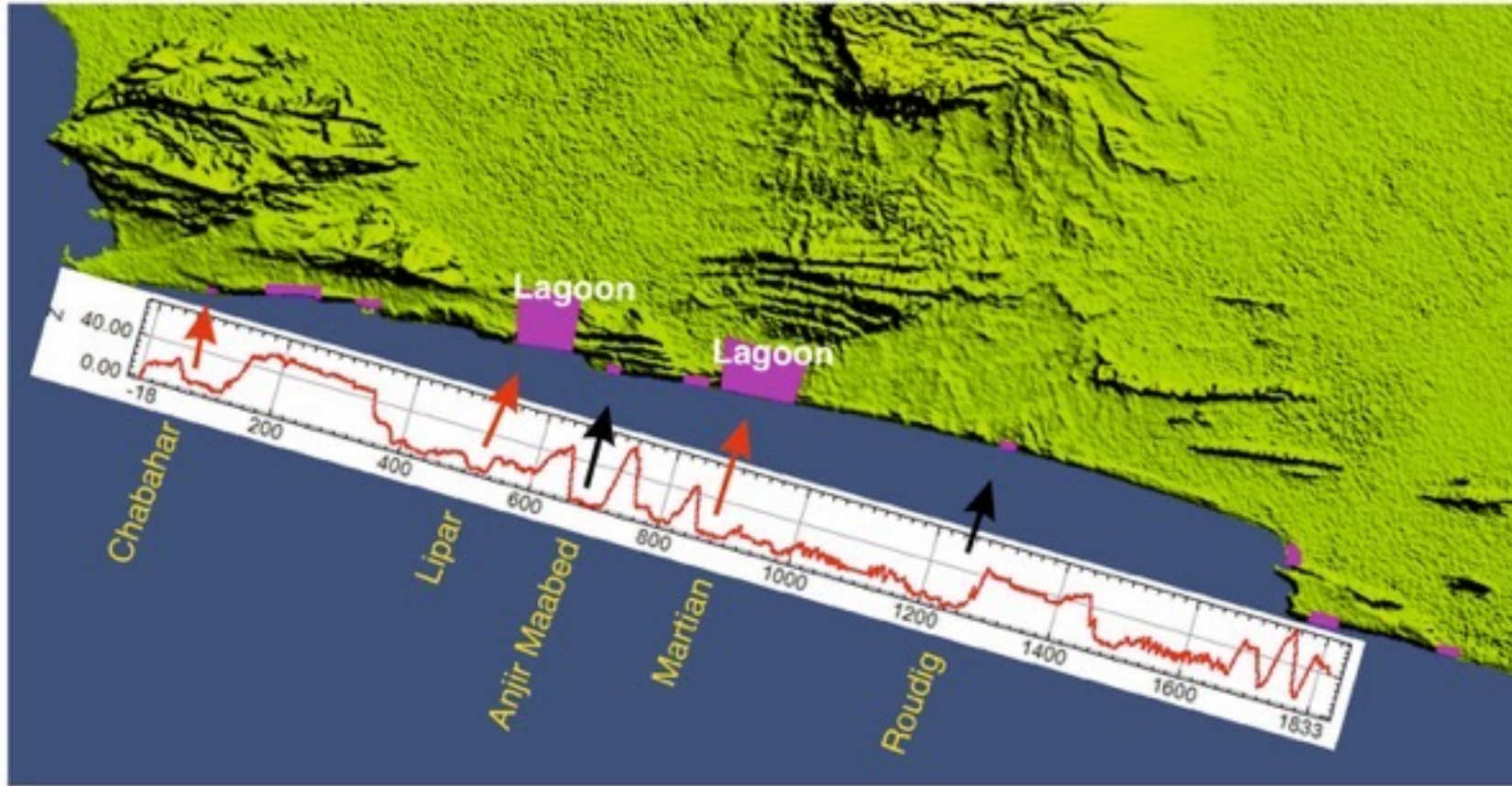


Satellite image (Google Earth) shows a coastal line in the Kacho Beach Site



b). Field Photograph of coastal blocks (?) for identifying past high-energy tsunami events at the Kacho





Based on field observations, generally, the western sites have lower elevation respect to eastern sites. So the possibility of tsunami inundation is bigger in western sites. Because of high uplift rate in eastern sites, the western site have more chance for preservation of tsunami sediments. Tsunami sediments may be eroded during uplift on eastern site.

