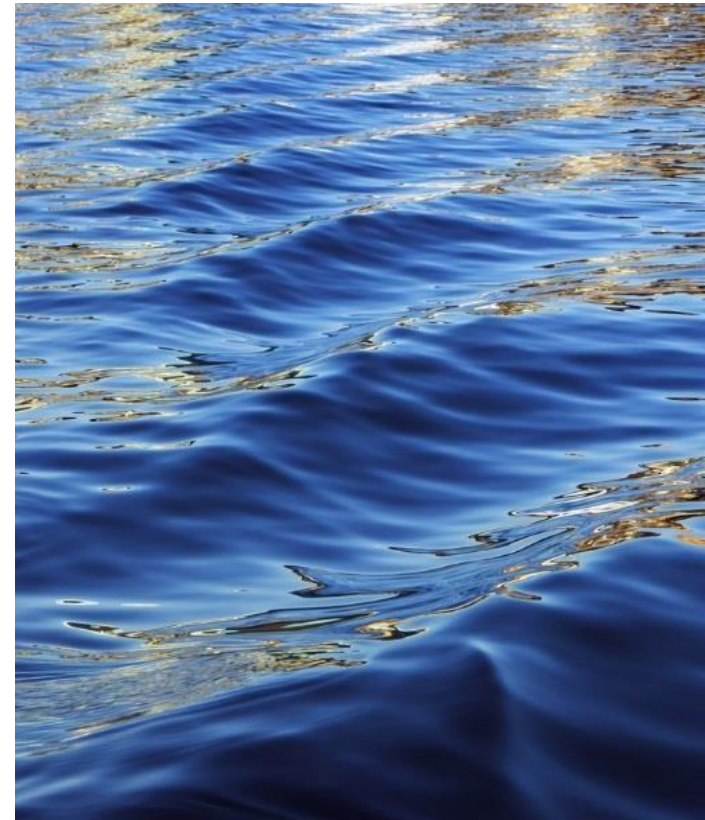


سلطنة عمان  
SULTANATE OF OMAN  
هيئة البيئة  
ENVIRONMENT AUTHORITY

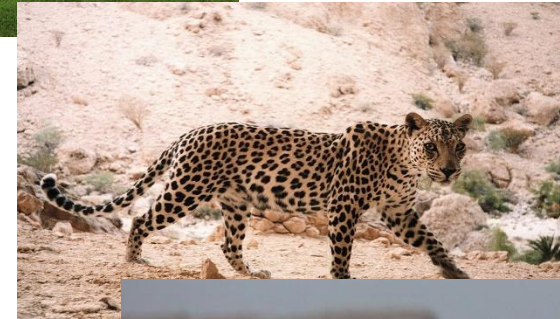
# Green Environment Ideas

Dr.Rahma Al Nadhairi



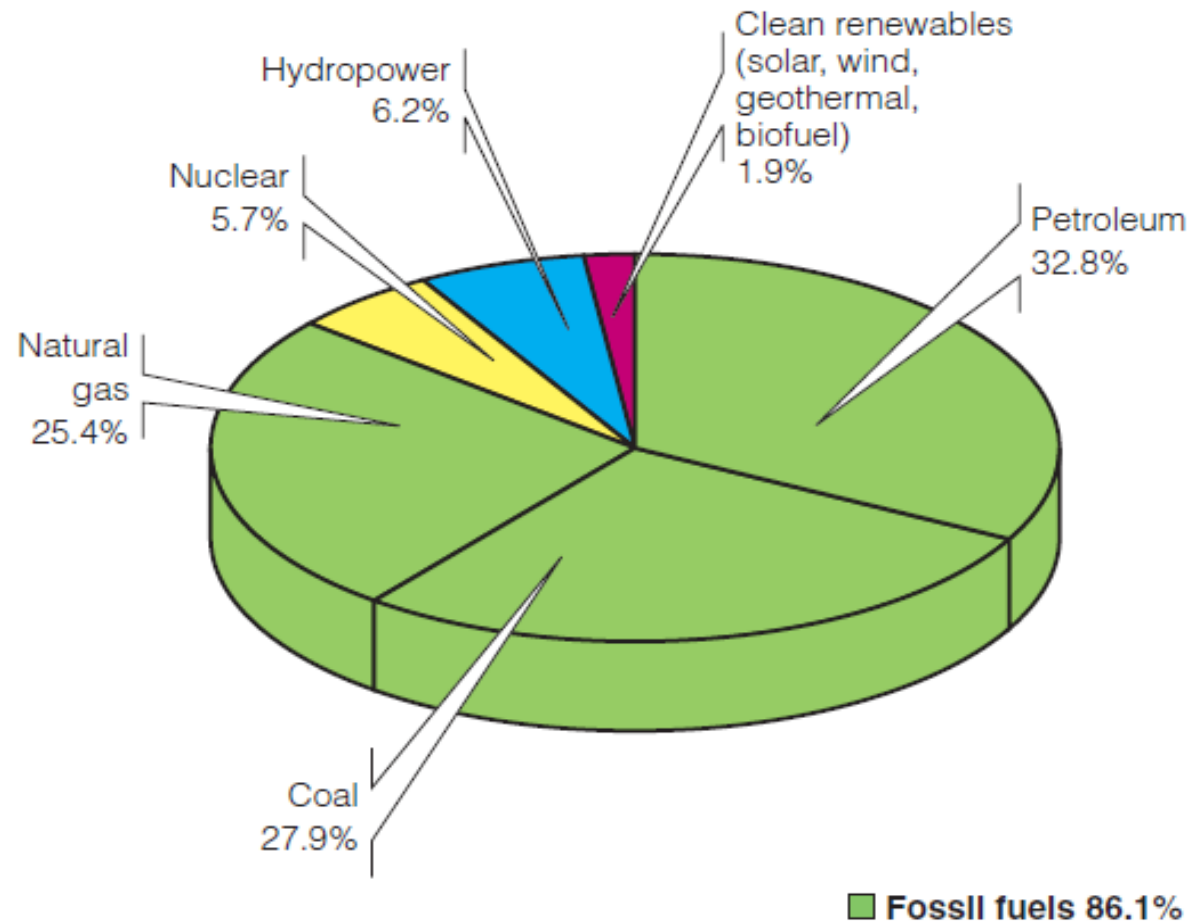
# Environment Authority Responsibilities

1. Environment authority is responsible for developing plans and programs to protect the environment and preserve its natural resources through the application of its policy and programs.
2. Environment authority ensures the safety of the environment, combat pollution and preserve the various environmental systems.
3. The authority also contributes to developing the scientific research, exchanging experiences, collecting scientific data.
4. it is responsible for spreading awareness and establishing the principles of preserving the environment and its resources



# Environmental Problems: An Overview

## Energy Use Worldwide



**Figure 13.1: World Energy Production by Source, 2007**  
Source: Energy Information Administration 2010.

# Developing the scientific research

- The Sahara and the world are both confronting environmental challenges, such as climate change and its impact on crops, vegetation, wildlife, and as well as flooding, and cyclones.
- Pollution from several sources, including water pollution, air pollution, and soil



## Policies and laws based on scientific work

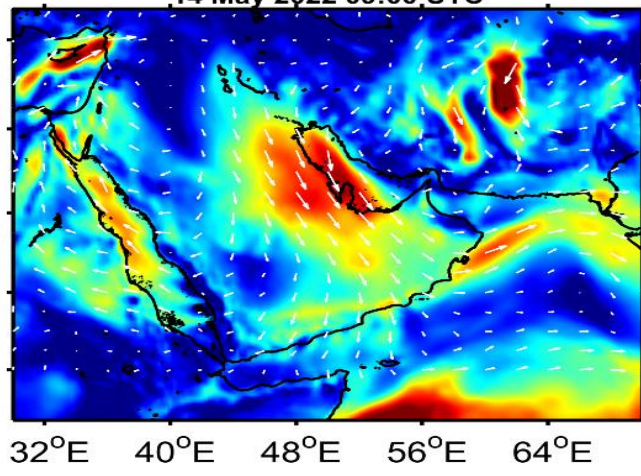
The authority undertakes the scientific research process in order to develop laws and policies that will protect the environment, and society as a whole while also reducing the effects of climate change



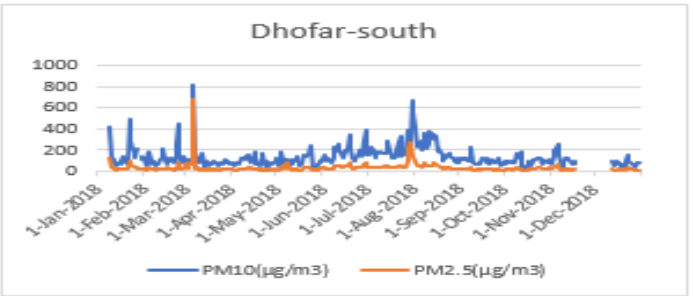
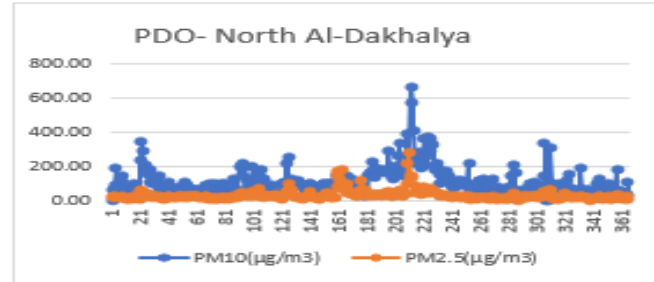
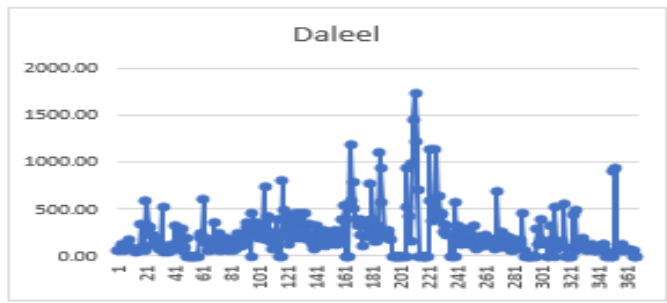
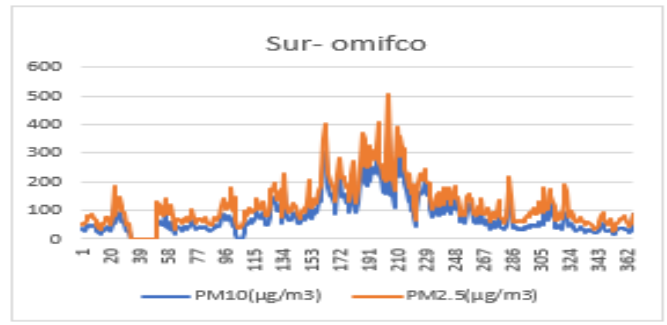
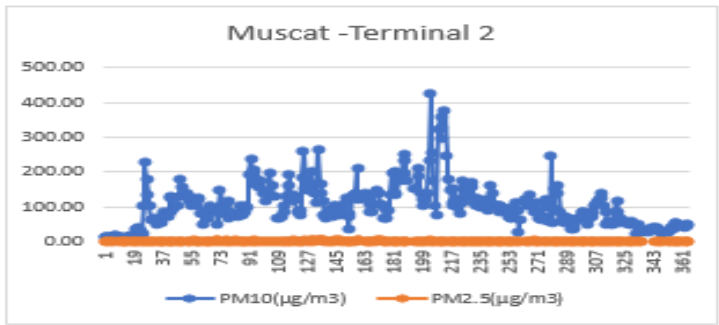
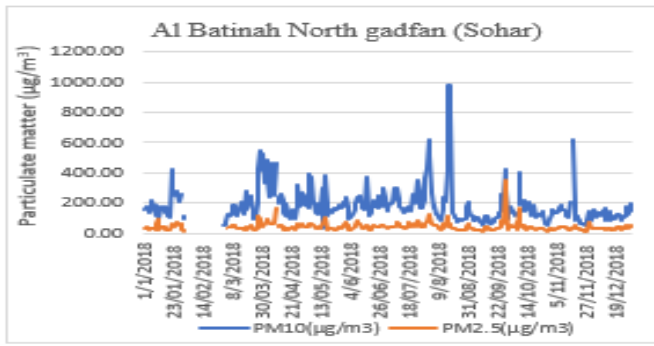
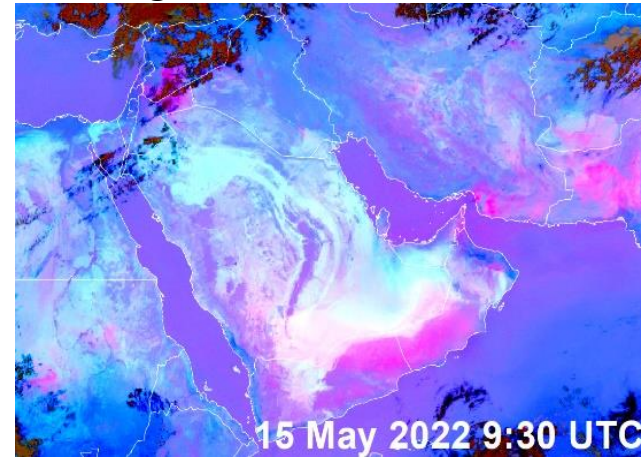
# Analysis of a air quality and severe Dust Storm Event

14 May 2022 09:00 UTC

Wind speed

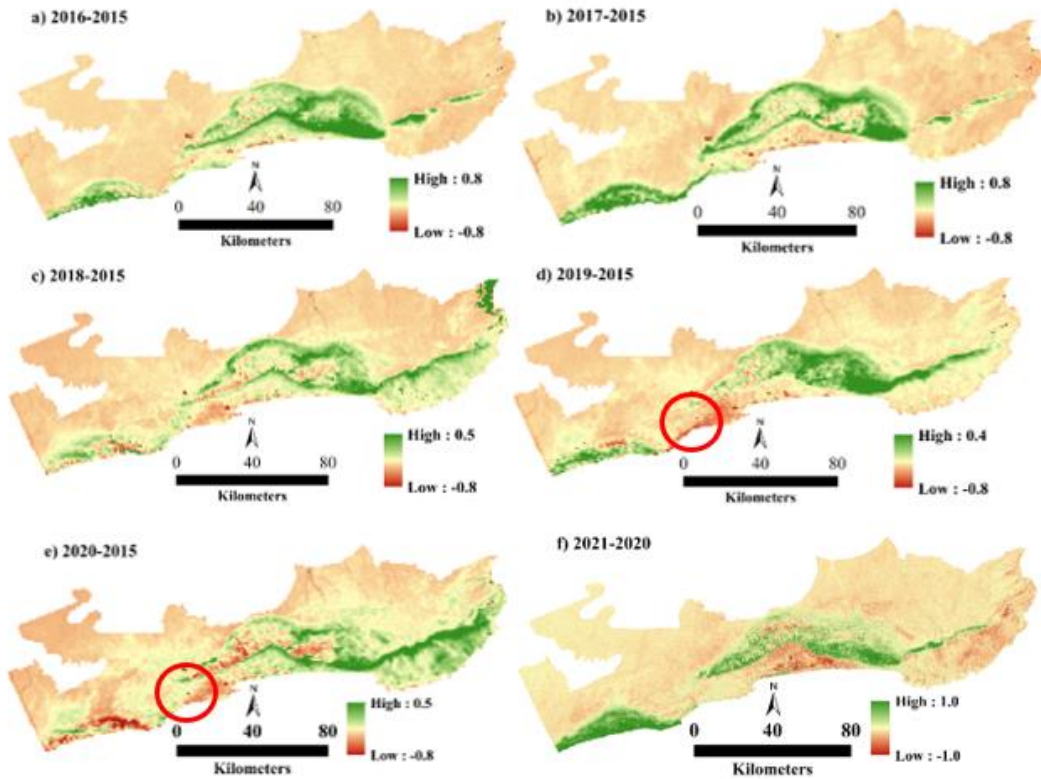


Dust satellite image

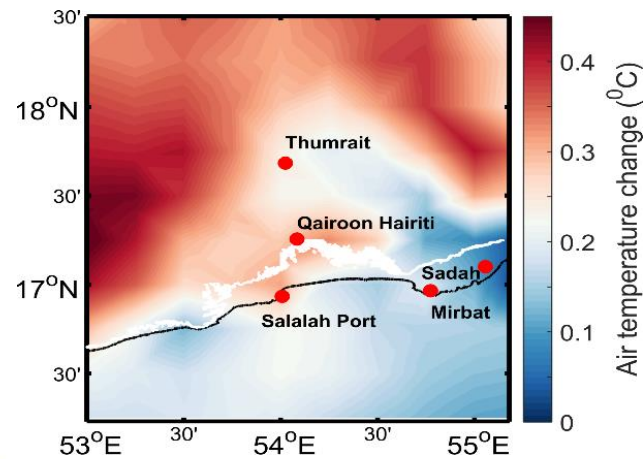


Particulate matter air quality stations

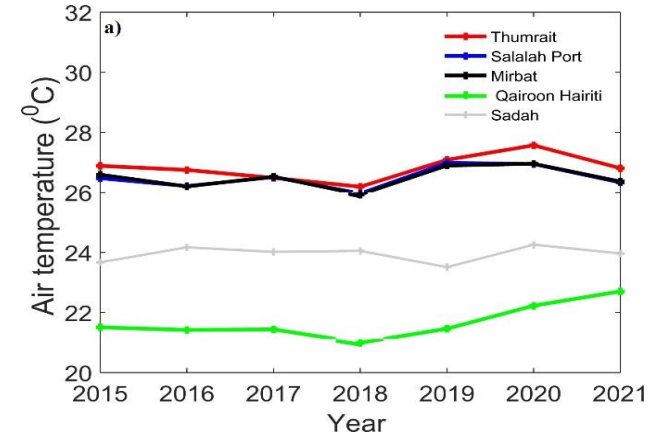
# Dynamic Change of Normalized Vegetation Index (NDVI) from 2015 to 2021 in Dhofar, Southern Oman in Response to the Climate Change



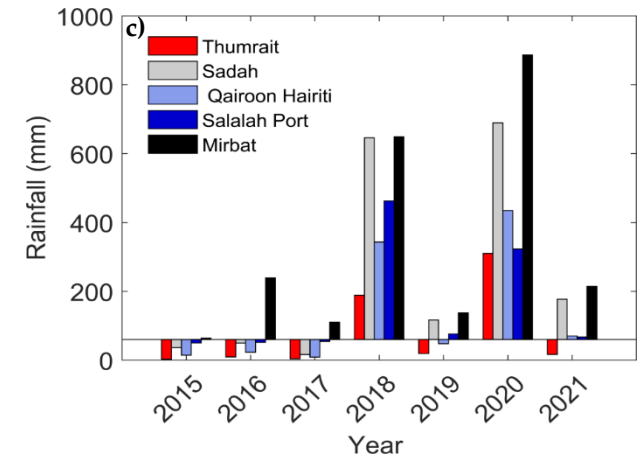
Vegetation index



Air temperature

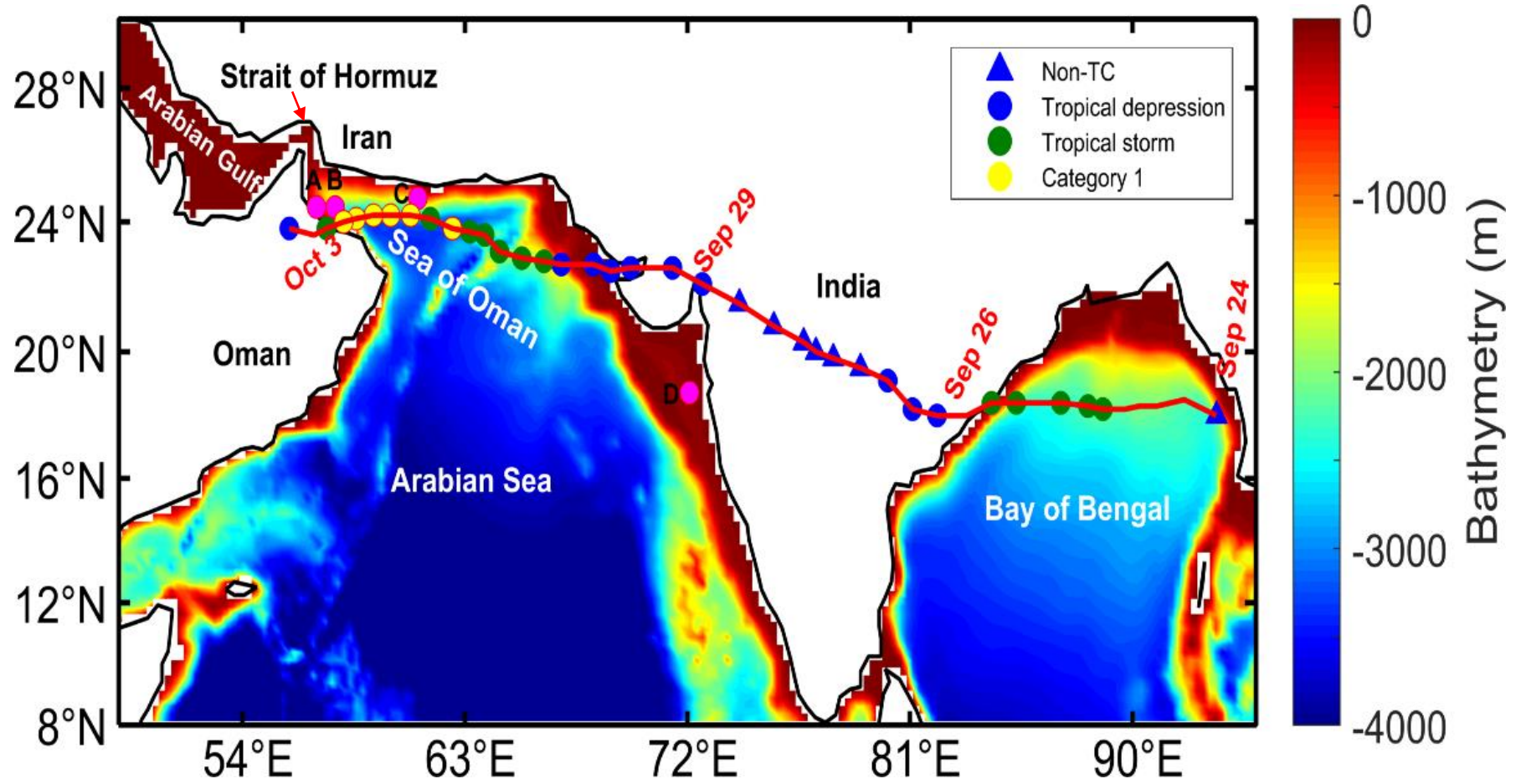


Air temperature



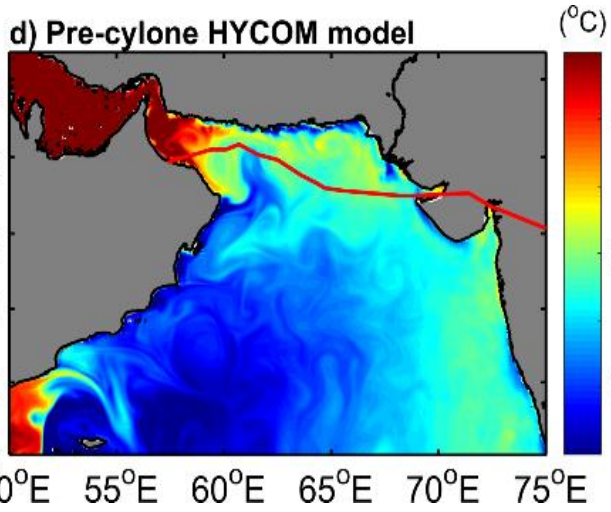
Rainfall

# Ocean responses to Shaheen, the first cyclone to hit the north coast of Oman in 2021

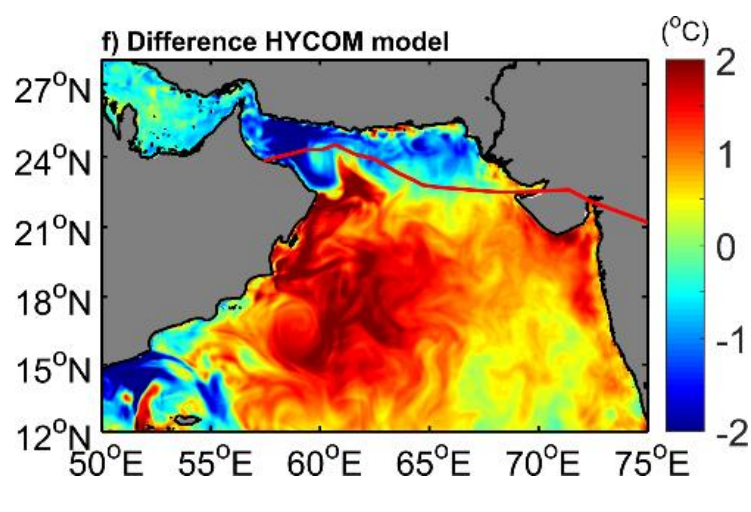


Cyclone track

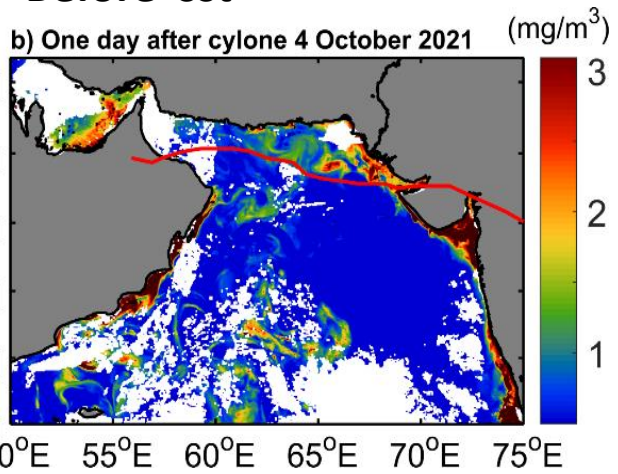
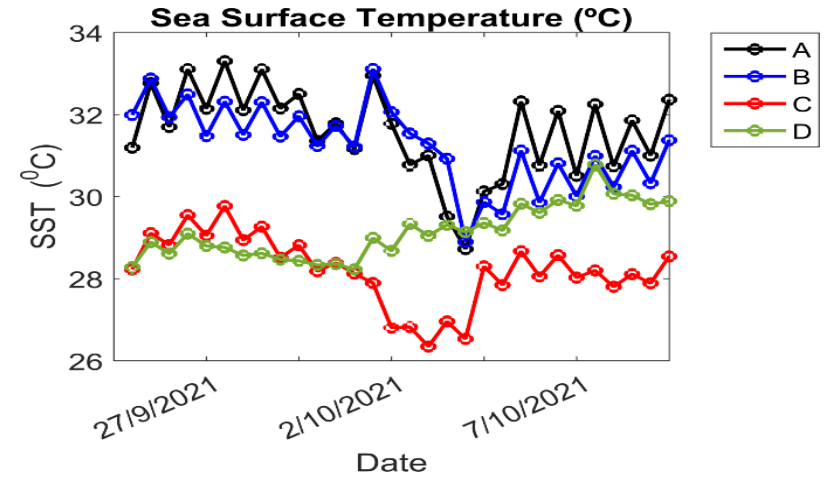
# Ocean responses to Shaheen, the first cyclone to hit the north coast of Oman in 2021



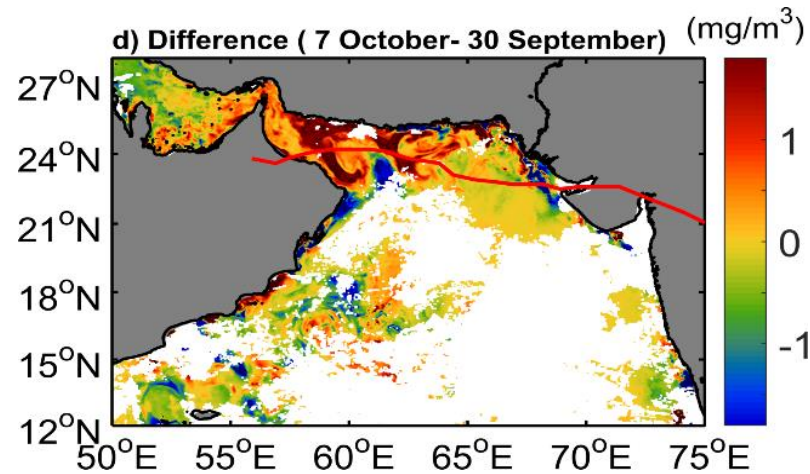
**Before sst**



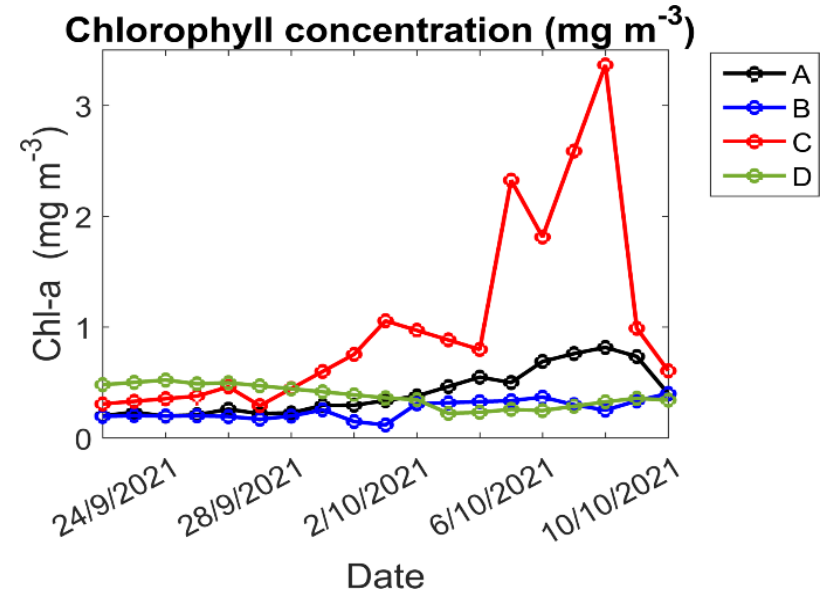
**After sst**



**Before chlorophyll-a**



**After chlorophyll-a**





# Other research

**Mangrove systems in Sultanate of Oman and its relation to climate change**

**Dynamic of Oxygen minimum Zone**

**Coastal erosion**

**Coral bleaching**

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Thank you