

## **Brief History of Oman Meteorological Services**

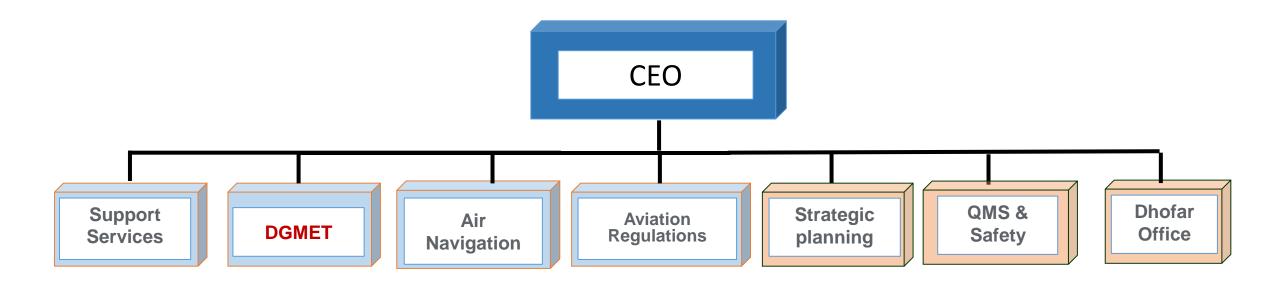
• 1973, the opening of Seeb Int. Airport (later named Muscat Int. Airport), A forecasting section was introduced to provide weather services for aviation.





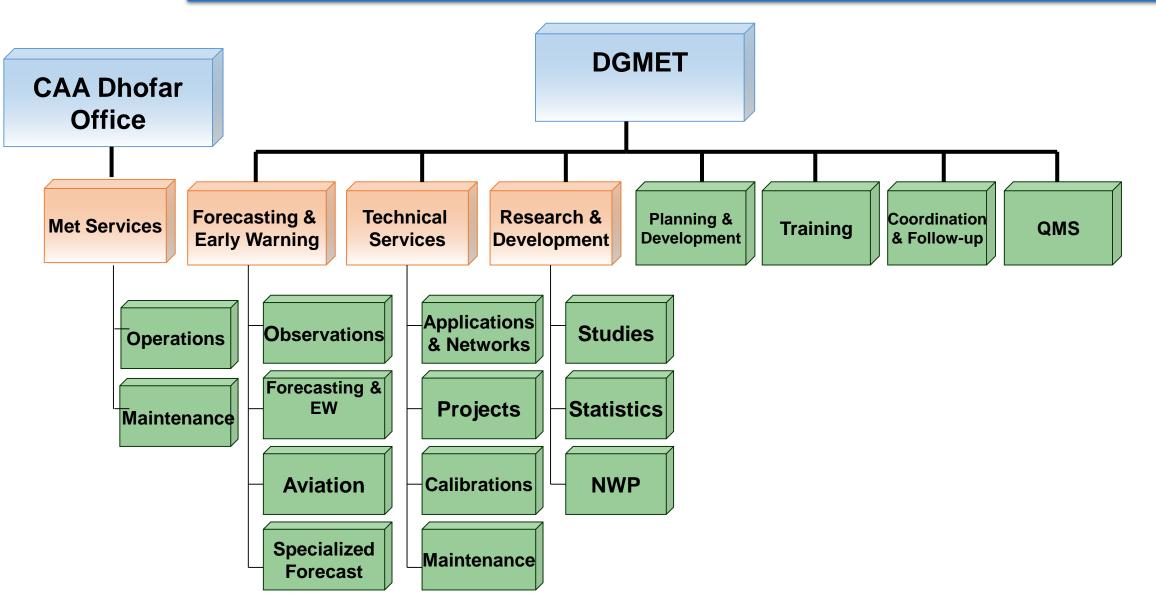
## **Brief History of Oman Meteorological Services**

 2012 Royal Decree (33/2012) establish Civil Aviation Authority (CAA) and DGMET as a directorate general within CAA





#### **Structure of DGMET**





## To have resilient Multi-Hazard Early Warning

Why?

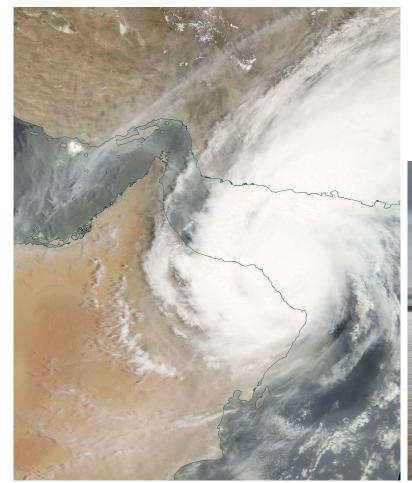
1- It provides valuable time for preparation before impact





#### 2- Because it is economically justified

#### **Tropical Cyclone Gonu Legacy (6-7 June 2007)**



	Gonu	Mekunu
Casualties	50	7
Damage	4.2 Billion (2007 USD \$)	400 million (2018 USD \$)

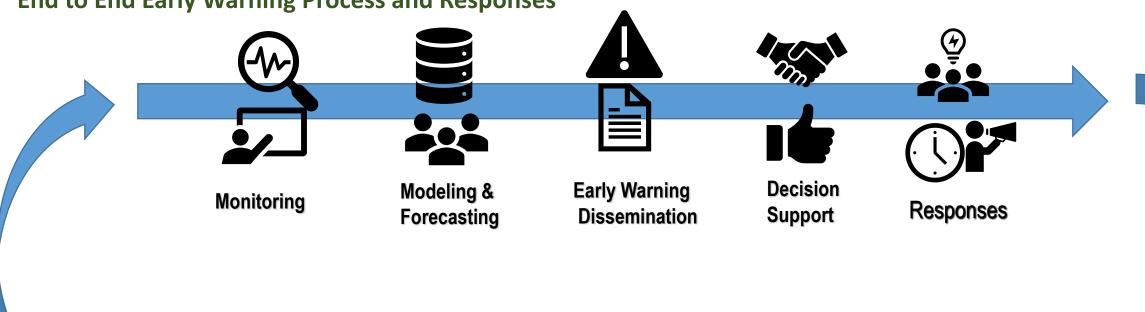




#### 3- There are many stakeholders in crisis management

DGMET, ROP, PACDA, NCCD, TVs, Radios and many other Gov, Privet and Public Sectors

**End to End Early Warning Process and Responses** 





## A resilient Multi-Hazard Early Warning System

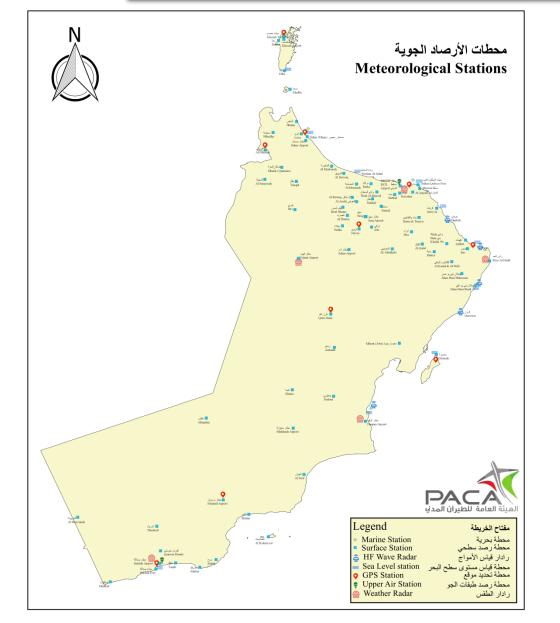
#### Six components for a resilient Multi-Hazard Early Warning System

- 1. Observation and Monitoring Capabilities —
- 2. Hazard Modeling and Assessing
- 3. Building Bridges with stakeholders
- 4. Standard Operating Procedures
- 5. Preparedness and Public Awareness
- 6. Research and Development





## **Observation Network**

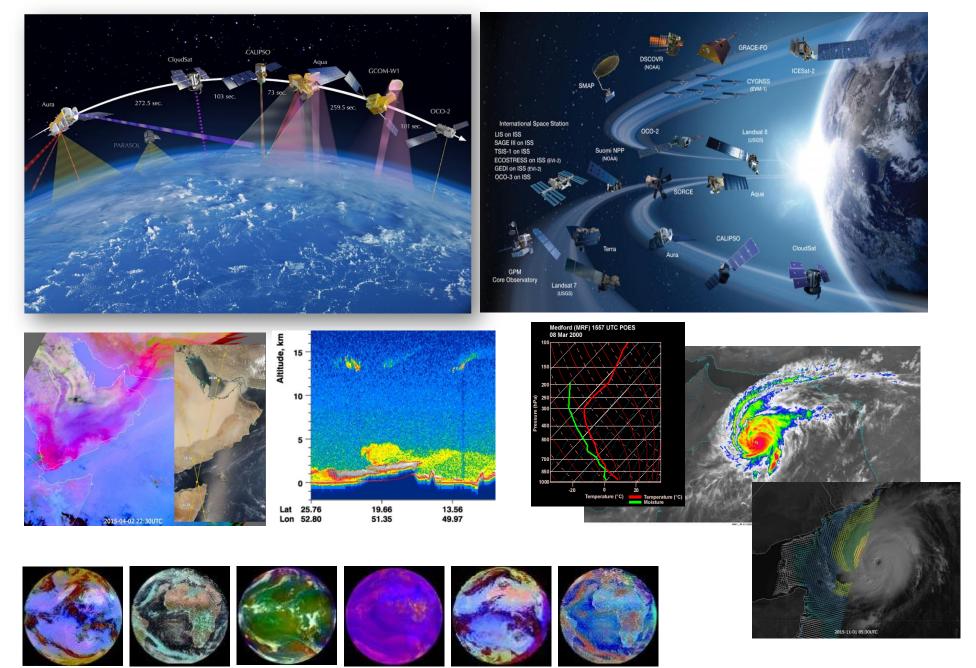


## **Observation Network**

العدد	Legend	مفتاح الخريطة
4	<ul><li>Marine Station</li></ul>	محطة بحرية
75	<ul><li>Surface Station</li></ul>	محطة رصد سطحي
6	🚊 HF Wave Radar	رادار قياس الأمواج
10	Sea Level station	محطة قياس مستوى سطح البحر
10	GPS Station	محطة قياس مستوى سطح البحر محطة تحديد موقع
2	Upper Air Station	محطة رصد طبقات الجو
5	Weather Radar	رادار الطقس



The amount of open source technologies and data out there is unprecedented + AI







- Research and Development
  - Watch for new technology and best practice
  - Vulnerability and risk assessment
  - Weather and Climate Research and Consultation Services
  - Training and Capacity Building



#### Weather and Climate Research and consultation Services

Weather and Climate studies and consultation Services are provided up on request

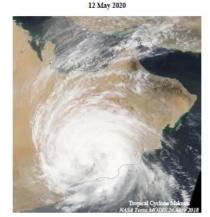
#### **Typical clints are:**

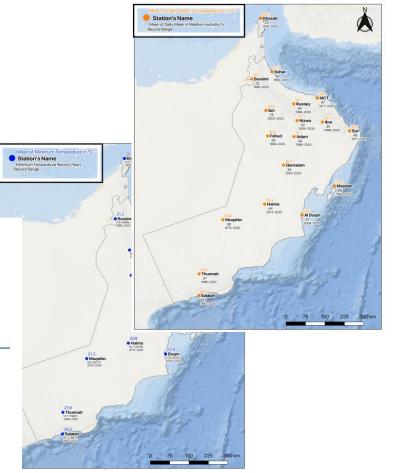
- Met Service Centres
- Insurance companies
- Consulting companies
- Universities and Research bodies



Climate Analysis over the Concession Area of Petroleum Development Oman

> Civil Aviation Authority Directorate General of Meteorology Department of Research and Development





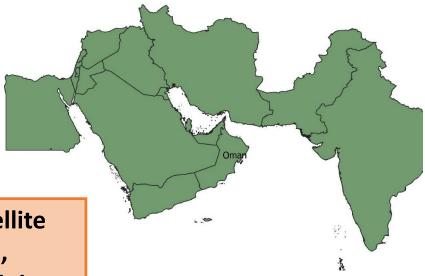


Training and Building Capacity

#### Special focus on Satellite Applications

WMO Centre of Excellence for Satellite Applications- Muscat





Regional hub for satellite applications research, collaboration and training





# Thank You