

## Intra-ACP Climate Services and Related Applications Programme

ClimSA COP29 - Side Event DATE: 16 November 2024 LOCATION: CARICOM PAVILION

### Enhancing capacities of National Meteorological and Hydrological Services: best practices, challenges and opportunities



## OUTLINE OF CONTENT



Role of National
Meteorological Services

03 Conclusion









#### Purpose of Side event:

- Raise awareness of public for Decision Makers to invest in weather and climate services for building a sustainable and resilient society
- Present Eight missions of National Meteorological



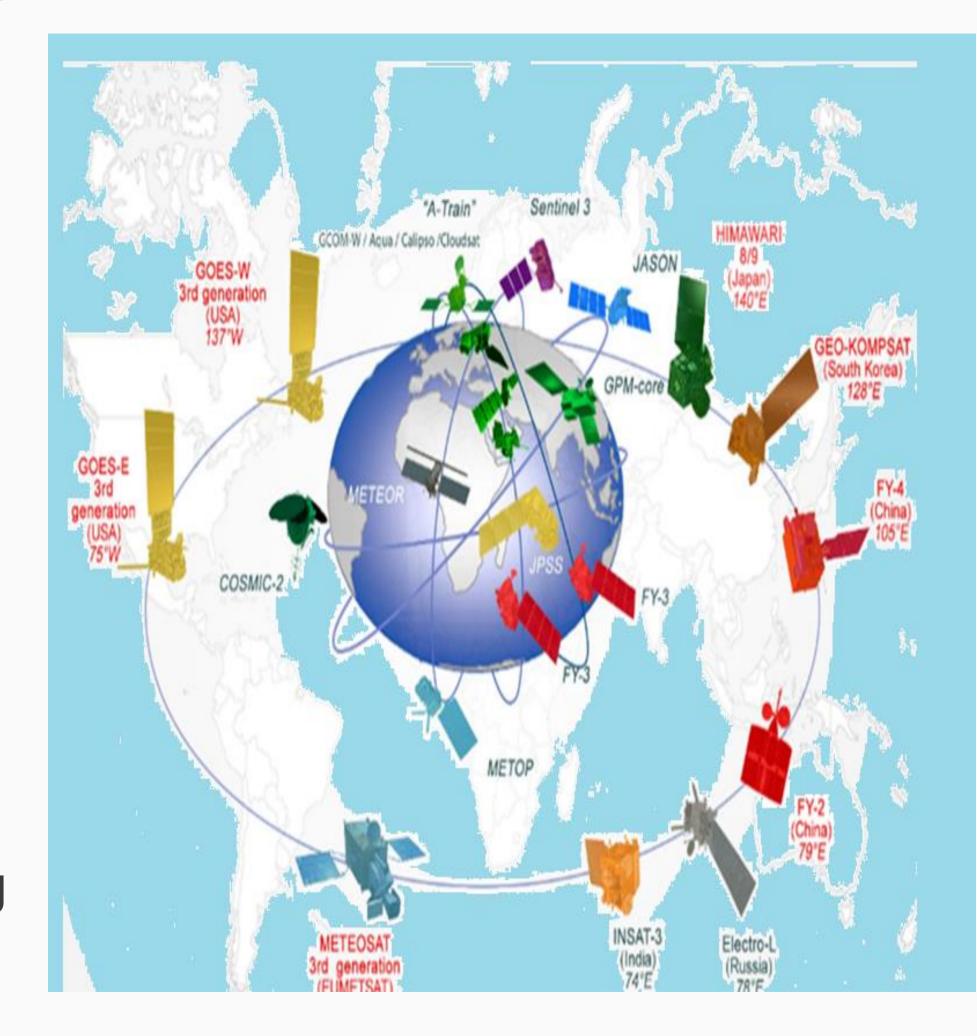


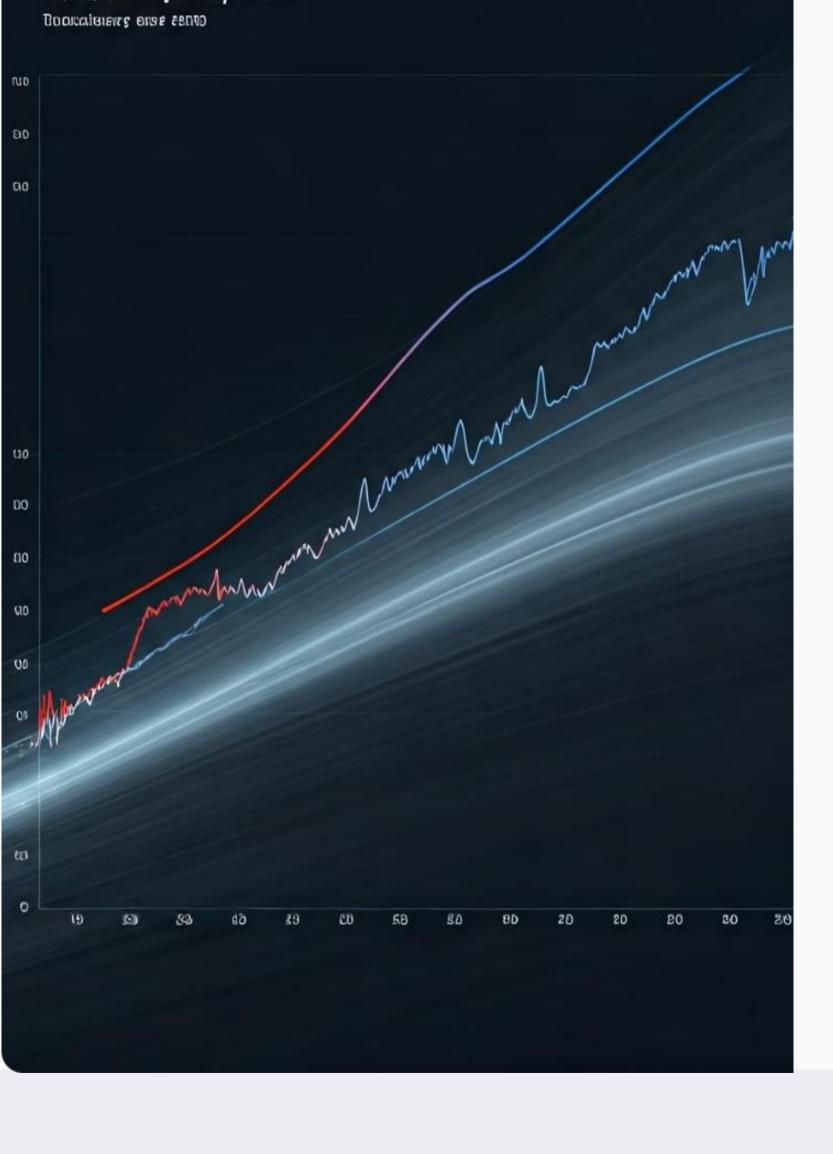




# I. Weather Monitoring and Forecasting: A Key Role in Safety and Planning

- Short- and long-term weather forecasts, providing essential information for the safety of people and property.
- The forecast is based on the sophisticated monitoring and data processing systems,
- It enables the authorities to take preventive measures to protect people and minimise potential damage.
- Monitoring and forecasting are for planning economic activities, such as agricultural production, tourism and transport.





### II. Monitoring and Analysis of Long-Term Climate Trends

- Monitoring for identifying ongoing climate changes and anticipating the associated risks.
- Analysis of climate trends provides a better **understanding of the impacts** of climate change on ecosystems, human health, agriculture, water resources and infrastructure.
- Climate services provide key information for decision-makers in developing policies and strategies for adapting to climate change.
- It contributes to the transition towards a more resilient and sustainable society.

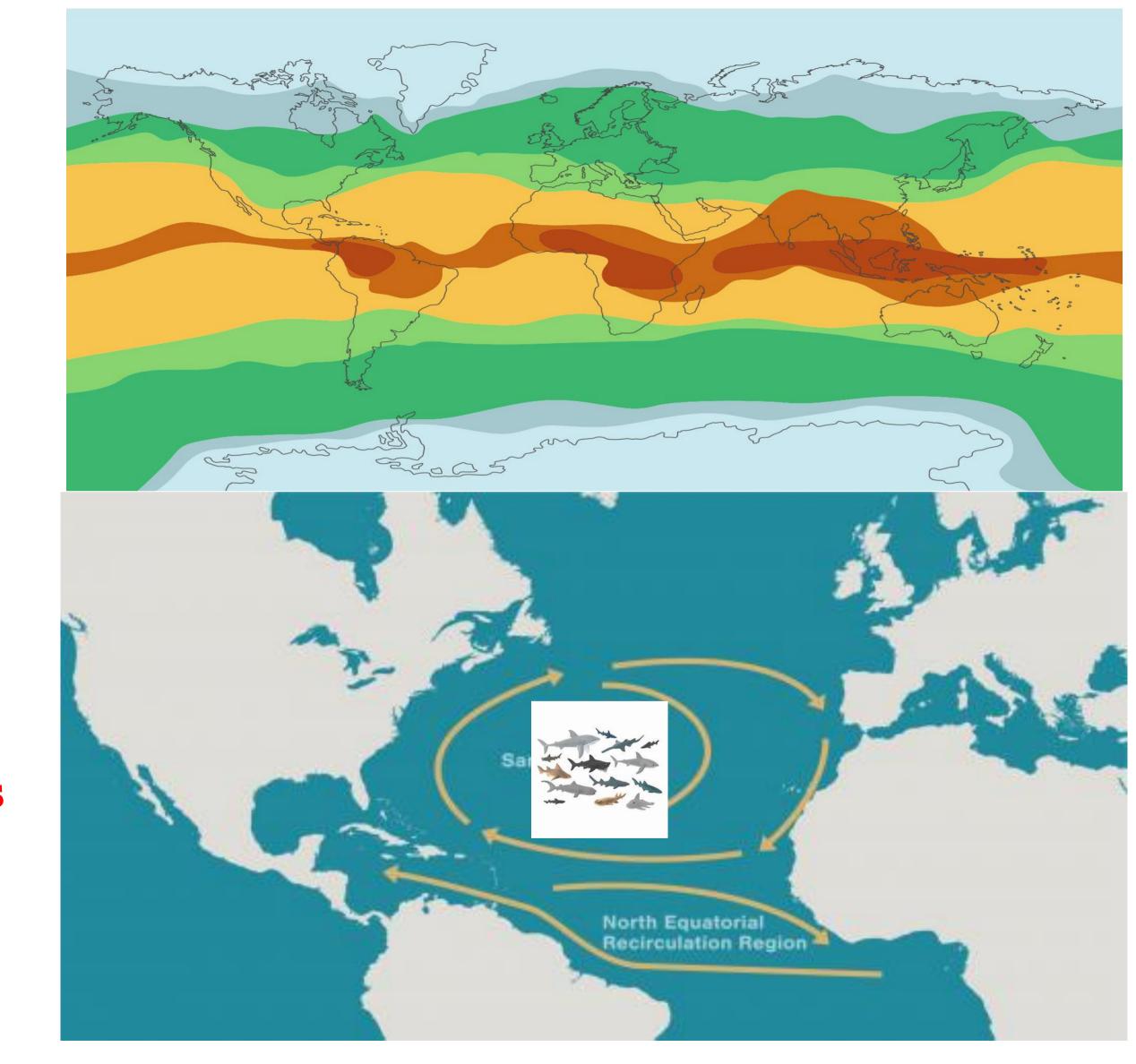


#### III. Extreme Weather Risk Assessment

- Extreme weather events, such as storms, floods, droughts and heat waves, are becoming more frequent and intense as a result of climate change.
- This information enables to put in place prevention and mitigation measures.
- Better protection and reduction of human and economic losses associated with extreme weather events.
- Core player for EW4ALL initiative

## IV. Contribution to the management of Natural resources

- Weather forecasts and climate services for optimise farming practices and maximise yields.
- Better management of irrigation, crops and harvests.
- Long-term climate data to develop strategies for the sustainable use of resources



### V. Support for the Design of Resilient Buildings and Infrastructures

- The design of buildings and infrastructure
- Make informed decisions about the construction and design of structures.
- For example, data on strong winds and intense precipitation can be used to design storm- and flood-resistant buildings.
- Information on temperature for designing ventilation and air conditioning systems.
- Infrastructure can be constructed to withstand the impacts of climate change.



## VI. Decision Support System for climate sensitive sectors : Ex. In Energy & Transport Sectors

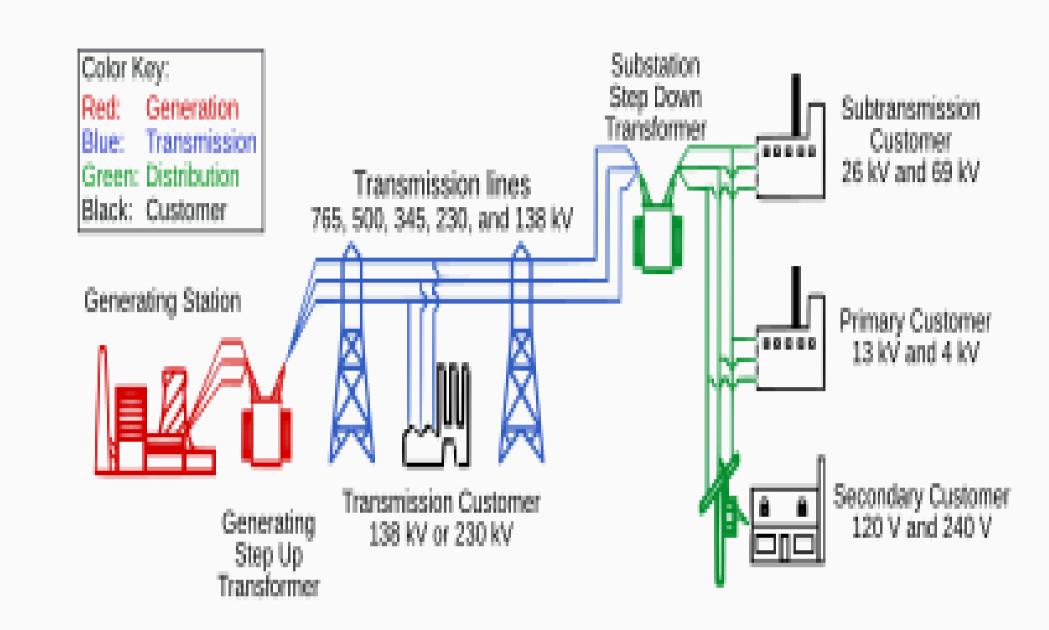
- To forecast energy requirements and optimise production and distribution.
- Plan for transport operations, particularly for air and maritime safety.
- · Help to prevent accidents and delays.

#### 1 ENERGY FORECAST

Data for planning the production of solar and wind energy, depending on variations in the weather.

#### 2 SAFETY OF TRANSPORT

Plan for air and sea transport operations, minimising the risks associated with adverse weather conditions.



#### Electric Network Management

Optimise energy production and distribution, taking into account energy requirements and weather conditions.

## VII. Raising public awareness and educating people about climate issues



Public awareness

On the impacts climate change and adaptation measures.

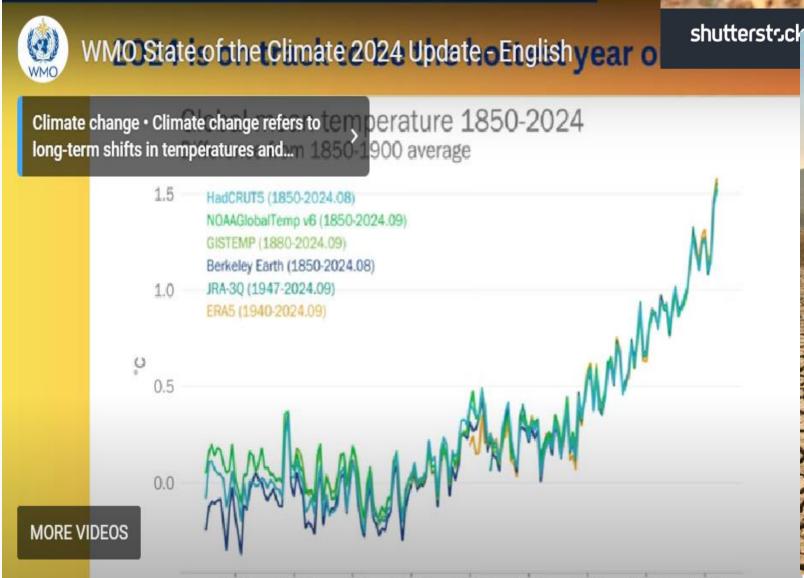


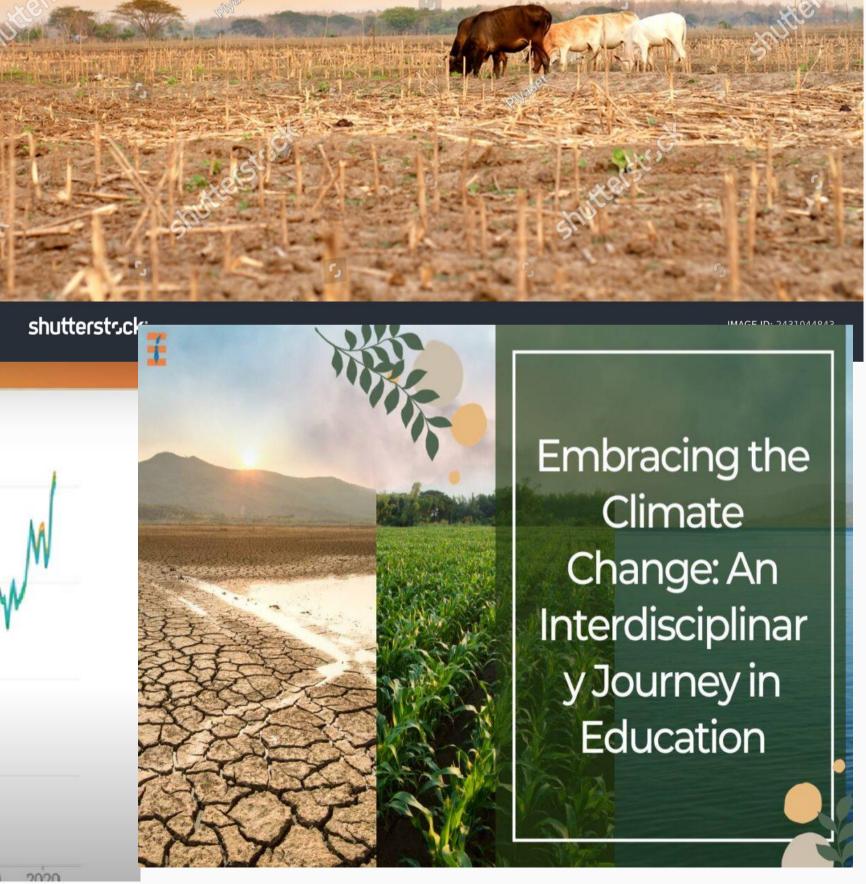
To raise awareness and provide information on climate issues.



#### **Early Warning**

Helping to keep people safe.



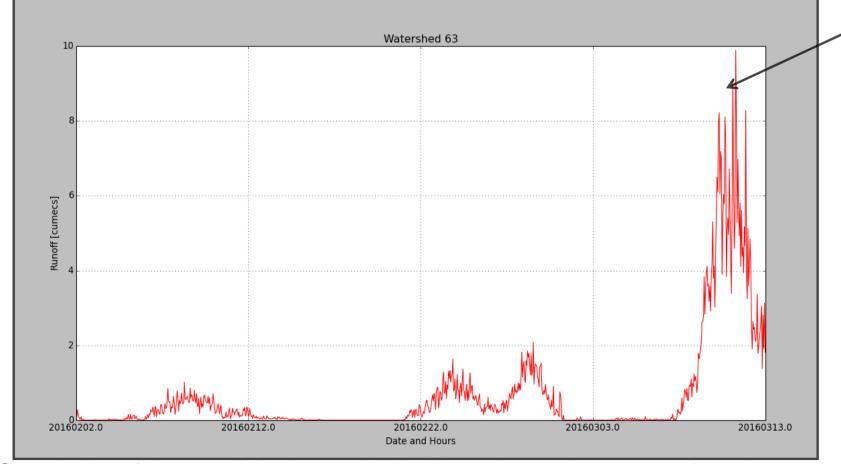




#### Flood monitoring Example

#### Looks like we Nailed IT!!!





Credit Prof Amon Murirwa, UZ- Flood service team leader

http://www.thezimbabwedaily.com







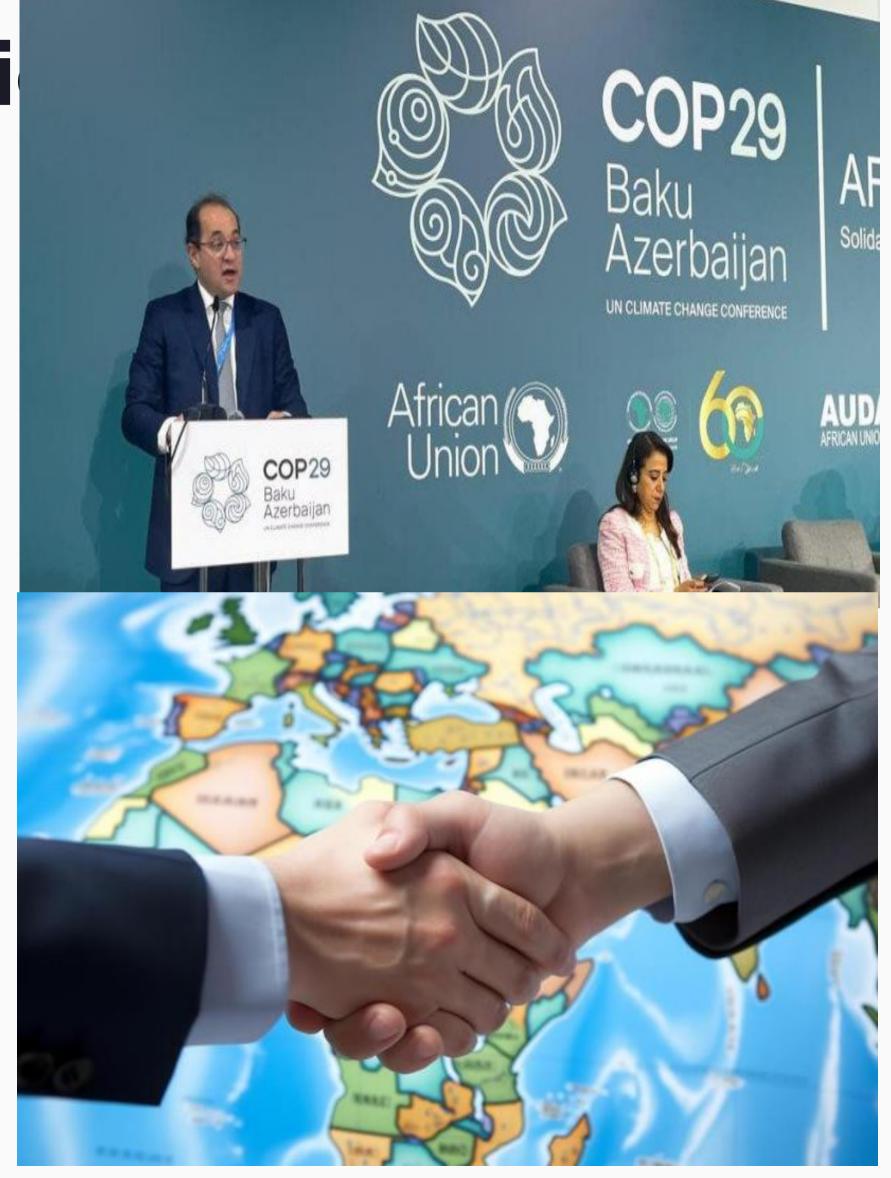


## VIII. International Collaboration a Global Action

The global challenges of climate change require global actions; Working together to share data, knowledge and best practice.

International organisations such as the World Meteorological Organisation (WMO) play a key role in coordinating global efforts.

International collaboration makes it possible to strengthen weather monitoring and forecasting systems, develop more accurate climate models and share information and knowledge on a global scale.



# Conclusion: Towards a Sustainable Society Thanks to Meteorological Services

They contribute to the

- 1. safety of people and property,
- 2. Management of natural resources,
- 3. Adaptation to climate change, and
- 4. raising public awareness.

By investing in weather and climate services, governments and organisations can make societies more resilient to the challenges of climate change.

These services are essential to building a more sustainable and prosperous future for all.





#### Thank you for your attention



















