



CIMH

Caribbean Institute for Meteorology & Hydrology



WMO SDS-WAS Pan-American Node

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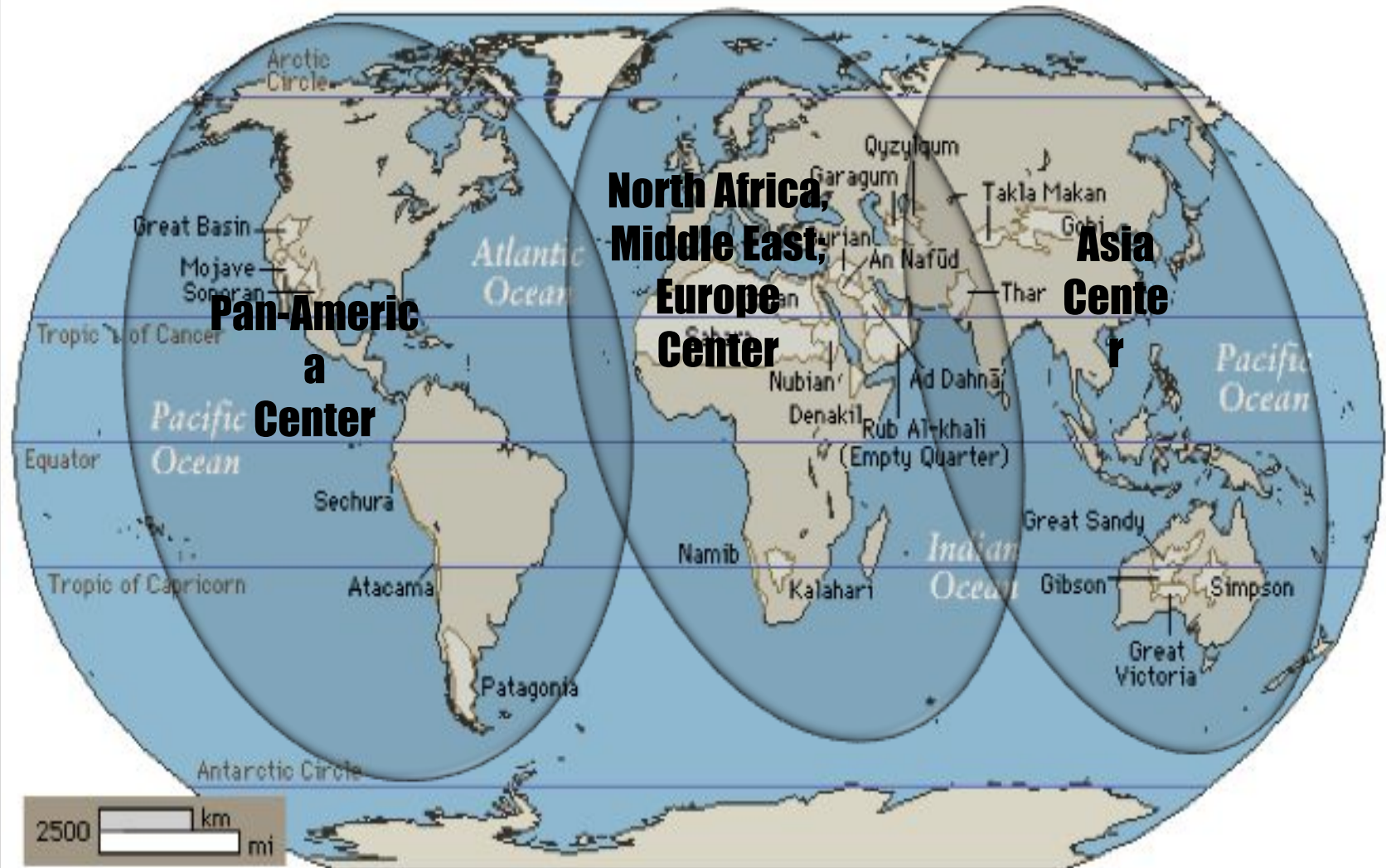
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WMO Sand and Dust Storm Warning Advisory and Assessment System (SDS-WAS)

- Need for international coordination of a diverse community dealing with the societal impacts of sand and dust storms
- In 2007 the World Meteorological Organization (WMO) took the lead with international partners to develop and implement an SDS-WAS to *enhance the ability of countries to deliver timely and quality sand and dust storm forecasts, observations, information and knowledge to users through an international partnership of research and operational communities*

WMO Sand and Dust Storm Warning Advisory and Assessment System (SDS-WAS)

- The SDS-WAS works as an international hub of research, operational centers and end-users, organized through regional nodes. Three nodes are currently in operation:
 - **Regional Node for Asia-** coordinated by a Regional Center in Beijing, China, hosted by the China Meteorological Administration (CMA)
 - **Regional Node for Northern Africa-** Middle East and Europe, coordinated by a Regional Center in Barcelona, Spain, hosted by the State Meteorological Agency of Spain (AEMET) and the Barcelona Supercomputing Center (BSC)
 - **Regional Node for Pan-America-** coordinated by a Regional Center in Bridgetown, Barbados, hosted by the Caribbean Institute for Meteorology and Hydrology (CIMH)



Regional Steering Group

NAME	ORGANISATION
Dr. Godfrey Xuereb	Pan American Health Organization (PAHO)
Dr. James Hospedales	Caribbean Public Health Agency (CARPHA)
Dr. Joe Prospero	RSMAS, University of Miami
Dr. Bjorn Stevens	Max Planck Institute for Meteorology
Dr. David Farrell	Caribbean Institute for Meteorology and Hydrology
Dr. Jack Molinie	Laboratory of Research in Geoscience and Energy, University of Antilles and Guyane, Pointe-a-Pitre, Guadeloupe
Mr. Arunas Kuciauskas	Naval Research Laboratory
Dr. Paul Kucera	National Center for Atmospheric Research
Dr. Judd Welton	NASA – MPL Network
Dr. Olga Mayol	Atmospheric Chemistry and Aerosols Research (ACAR) Department of Environmental Science University of Puerto Rico
Dr. Paul Ginoux	NOAA (GFDL)
Dr. Hongbin Yu	NASA
Dr. Daniel Tong	NOAA (Air Resources Laboratory)
Dr. Graciela Raga	UNAM, Mexico
Dr. Juan Carlos Antuña	GOAC, Camaguey, Cuba
Dr. Nicolás Huneeus	Universidad de Chile
Dr. Andrea Sealy, Chair	Caribbean Institute for Meteorology and Hydrology
Dr. William Sprigg	Institute of Atmospheric Physics, Department of Atmospheric Sciences The University of Arizona

WMO SDS-WAS Pan-American Regional Center



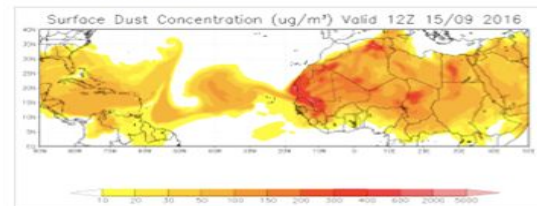
WMO Sand and Dust Storm Warning Advisory and Assessment System (SDS-WAS) Pan-American Regional Center

Enhancing the ability of countries to deliver timely and quality sand and dust storm forecasts, observations, information and knowledge to users through an international partnership of research and operational communities.

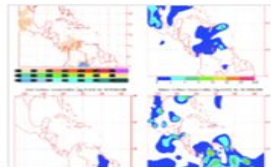
Featured Models

The observational system is aimed to a continuous dust monitoring, validation and verification of forecast products and data assimilation into numerical models.

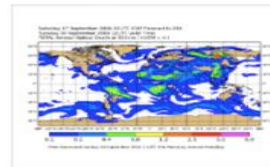
CIMH DAFC 7-Day Forecast



NAAPS Animated Forecasts



ICAP Multi-Model Ensemble



AERONET Observations



<http://sds-was.cimh.edu.bb>

View More >

WMO Pan-American Node Activities

Regional Science
Steering Group

Observations-
Dust,
particulate
matter

Education

[Research opportunities (home & abroad),
visiting lecturers/teachers, internships]

Research

[Meteorology, Hydrology, *Environmental
Science, Epidemiology, Biological
Oceanography*]

Operations

[Communications, Coordination, Planning, Risk
Reduction Information & Assessment]

Caribbean
Aerosol-Health
Network (CAHN)

Dust/Health
Early Warning
Systems

Modelling- Simulations;
Experimental and
Operational Forecasts

Challenges/Limitations

- Being careful to not do too much and spread our resources too thin (very important!)
- Reallocation of tasks and duties
- Webmaster
- Communications
- Balancing with other professional commitments

Moving forward

- Structure, working groups and be prepared to contribute time and resources including 3-5 years' plan and then re-evaluating that plan
- Sub-committees/working groups- use example from other nodes and based on our focus
- Develop terms of reference for education and training, instrumentation, modelling and other aspects of SDS-WAS
- Relevance and integrating science with the big picture
 - Meeting society's needs
- Facilitating effective communication and synergy among all sectors/stakeholders
- Alliances to help develop services and products

WMO SDS-WAS Global Steering Committee Meeting
and
First WMO SDS-WAS Pan-American Workshop
CIMH, Barbados, October 2017





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Thanks for listening!

http://www.wmo.int/pages/prog/arep/wwrp/new/Sand_and_Dust_Storm.html

<http://sds-was.cimh.edu.bb/>

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