Recent activities in the Iberoamerican Cooperation of AEMET

Dr. Jorge Tamayo Carmona
The Iberoamerican cooperation in meteorology of AEMET

- AEMET promoted the Iberoamerican Meteorological Cooperation through CIMHET
- Governing body: Conference of the Iberoamerican Directors of NMHSs (CIMHET)
- Planning instrument: Iberoamerican Meteorological Cooperation Program
- Funding mechanism: Trust fund established by Spain in WMO and other resources (AECID...
CIMHET

- Working and cooperation structure, with annual meetings, aimed to improve institutional and operative capacities and to share experiences
- Reactivated in 2003
- Design, approval and implementation of action plans
- Active role of WMO
- Permanent Secretariat in AEMET
- Open to Associated NMHS
- Access to funding mechanisms
- Cooperation and synergies with regional institutions and similar networks
Iberoamerican Meteorological Cooperation Program

• **Strategic lines**
  • Institutional reinforcement and resource mobilisation
  • Provision of weather, climate and hydrological services

• **Training**
  • More than 1,200 students in more than 60 courses with more than 3,000 hours
  • Creation of a WMO TRC in Spain
  • Promotion of horizontal cooperation
Environmental Iberoamerican networks

- **Weather and climate**
  Conference of Iberoamerican Directors of NMHS
  [www.cimhet.org](http://www.cimhet.org)

- **Water**
  Conference of Iberoamerican Directors of Water
  [www.codia.info](http://www.codia.info)

- **Climate Change**
  Iberoamerican Network of Climate Change Offices
  [www.lariocc.es](http://www.lariocc.es)

Covering all Iberoamerica

Complementary activities

Great potential for common strategies and joint activities
Common activities

- **Joint Workshops CIMHET-CODIA-RIOCC**
  - Central America-Hispanic Caribbean (December 2016)
  - South America (December 2018)
  - WMO participation
  - International institutions participation (CAZALAC, ISDR, CEPREDENAC, PNUD, CIIFEN, CRRH, PHI)

- **Proposed activities on:**
  - Promoting Virtual Regional Forecasting Centers, comprehensively addressed. Virtual Regional Centers
  - Generation of downscaling climatic change scenarios and its application to determine the future impacts on water resources and extreme events. Recovering data
  - Economic evaluation of extreme hydrometeorological events
  - Projects for NMHS strengthening (currently, in development in INAMHI-Ecuador)
Central America Lightning Detection Network

- Observation component of Central America Virtual Center
- Agreement by all NMHS concerned
- Funded by EU LAIF, managed by AECID (674,000 EUR)
- Operational from August 2019
Central America lightning detection network

- A single processing system, in Hidromet-ETESA (Panama)
- Detectors (25) distributed by all countries
  - Location accuracy < 100 m in mostly of the area
  - Detection efficiency higher 90%
- Operating systems (6) in each NMHS
- Include current systems (Honduras network)
Regional Downscaling Climate Change Scenarios

- Reference to develop specific impact studies assessing vulnerability and adaptation needs of different sectors
- Proposed in the CIMHET-CODIA-RIOCC workshops
  - Developing in Central America
  - Proposed for South America
- Strengthening the role of NMHSs in climate change
Regionalized climatic change scenarios for Central America

• **Regional project**

• **Institutions**
  - INSIVUMEH-Guatemala
  - IMN-Costa Rica
  - COPECO-Honduras
  - SNET-El Salvador
  - INETER-Nicaragua
  - Hidromet ETESA-Panamá
  - AEMET-Spain (Coordination)
  - CRRH-SICA (Host results)

• **Estimated completion:** November 2019

• **Funded by EUROCLIMA+ (200.000 EUR)**
Project characteristics

- **Data rescue**
  - Digitization (where necessary) of daily Tx, Tm, Precipitation. Hiring of personnel

- **Users involvement**
  - National users workshops carried out in all involved countries

- **Training**
  - Course on CORDEX (February)
  - Course on Climatic Services (June)
  - Course on Statistic Regionalization (October)

- **Scenarios generation**
  - Expert hired for calculations
  - Regional working group with NMHS experts
  - Common methodology
  - Dynamic and Statistical methods
  - Emphasis on uncertainties
Results

- Visor web with results hosted by CRRH-SICA on Centro Clima
- Web expert hired for development
- From local to regional scale
- Maps, graphics and capacity for data download
- Parameters defined on users workshops
- Format based on Spanish visor web (adaptecca.es)
- New possible projects
  - Scenarios for Andean region
  - Data rescue
Examples of Visor Web (Adaptecca.es)
Cooperation Agencies Collaboration

- Close relationship with Spanish Cooperation Agencies (AECID, FIIAPP)
  - Training: AECID Training Centers in Iberoamerica
  - EUROCLIMA + Project on DRR: droughts and floods. Support to three projects approved on Andean region, Central America, South America
  - Projects with Climatic Governance of EUROCLIMA+
  - Movilization of EU funds
MUCHAS GRACIAS POR SU ATENCION

THANKS FOR YOUR ATTENTION