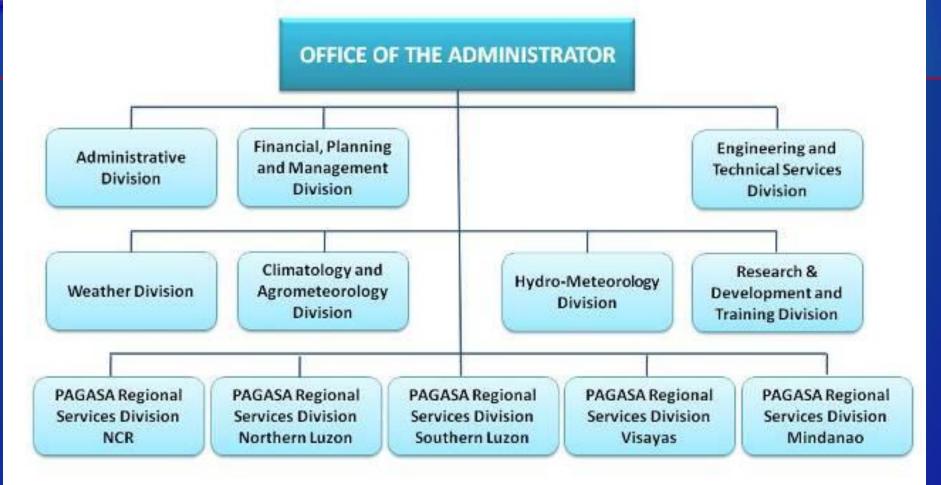
REGIONAL INSTRUMENT CENTER (RIC) – MANILA Philippines (Regional Association – V)



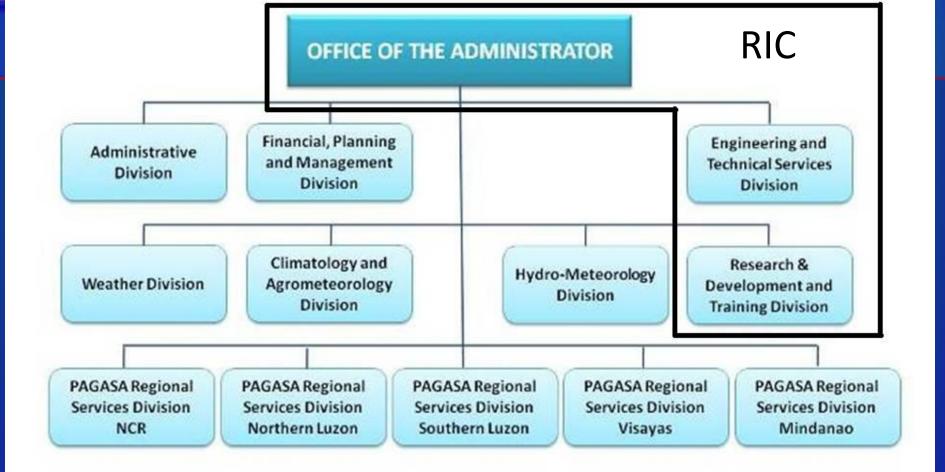
Ferdinand Barcenas

Contact Person, RIC Manila

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PAGASA STRUCTURE



PAGASA STRUCTURE

STRUCTURE of RIC Manila

Regional Instrument Center Administrator/Manager

Research & Development and Training Division (RDTD) / Hydrometeorology, Tropical Meteorology and Instrument Research and Development Section (HTMIRDS) Engineering & Technical Services Division (ETSD)/ Meteorological Equipment, Telecomn. & Technical Services Section (METTSS)

Instruments Research and Development Unit (IRDU) Basic Meteorological Instrument Unit (BMIU)

Accurate and Operational Meteorological Instruments of Observatories/Users/Customers

On-Going Plan

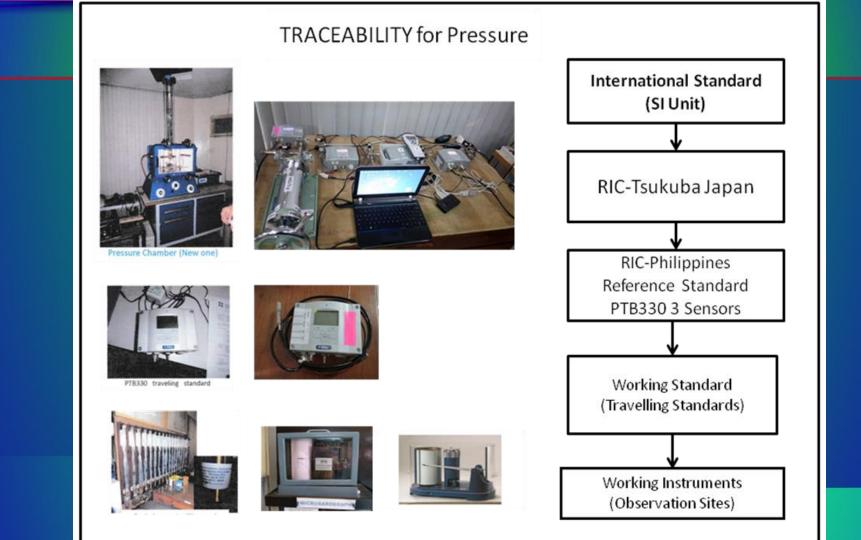


 Serve as the center for the national reference standard for basic meteorological instrument of the agency.

 Keep a set of meteorological standard instruments traceable with recognized international or national standards

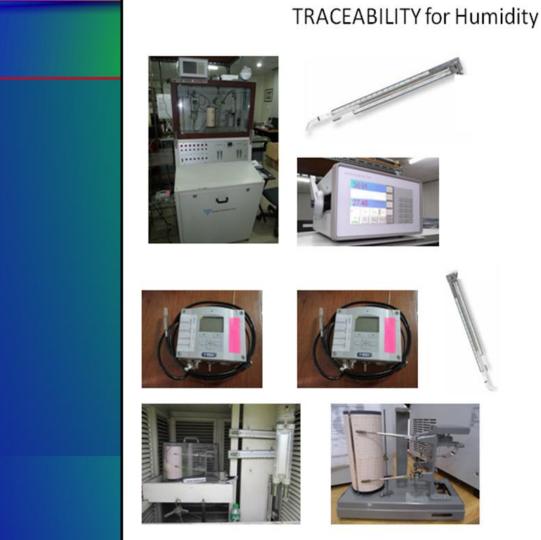


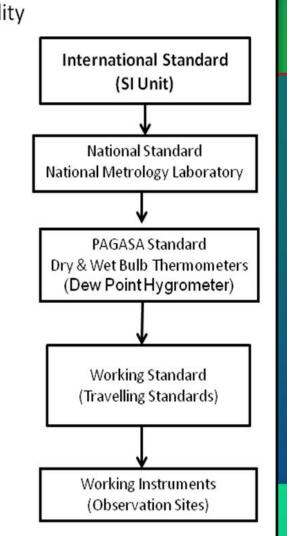
TRACEABILITY OF OUR STANDARD INSTRUMENTS

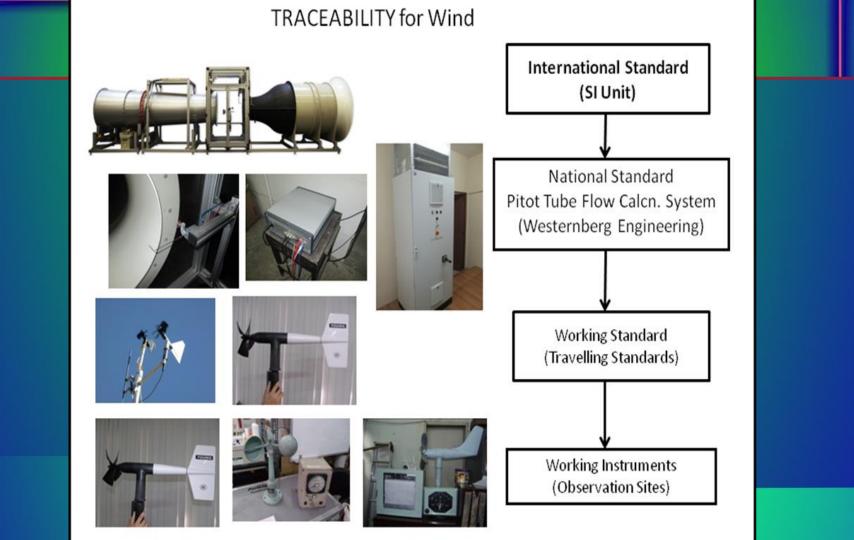


TRACEABILITY for Temperature



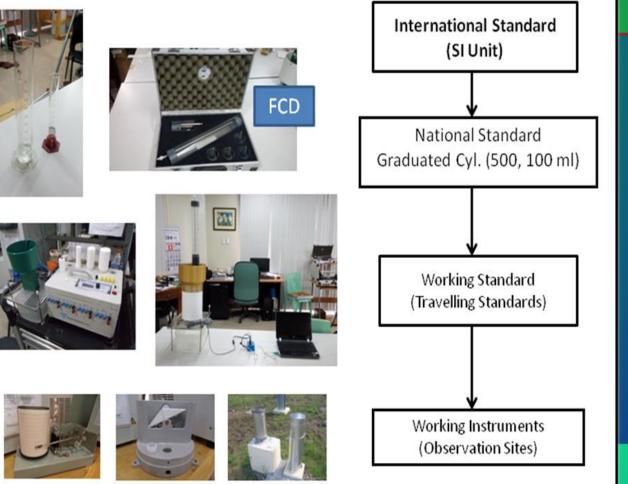








TRACEABILITY for Precipitation



 Training of personnel in the operation, maintenance and calibration method.

Training of personnel

raining of personnel



 Perform the calibration of basic meteorological and related instruments and equipment.

Calibration of basic meteorological

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7.

instruments



 Regularly visit the PAGASA Field stations and AWSs for the checking, inspection and maintenance of basic meteorological instruments and/or sensors to include other requesting agencies.

Field checking, inspection and maintenance





Field checking, inspection and maintenance







Inspection of AWSs of Private Company as requested

• Issue and file certificates of calibration



- Cooperate with other local and international instrument center for standardization of basic meteorological instruments.
- Participate in inter-comparison of basic meteorological instruments.

Visitors from BMG, Jakarta in 2009 To inter-compare their barometer and thermometer



Experts from Japan

They conducted lectures on calibration , traceability and surface weather observation. Inter-comparison of barometers and thermometers was also carried out for sharing mutual knowledge between both RICs. (March 2016)

• Participate actively in workshops and conferences.

France

WORKSHOPS Australia

111



CHINA Study Tour

T

TECO-2002 WMO Technical Conference crological and Environmental Instruments and Methods of Observation 21-25 September 2002

WMO/CIMO Technical Conferences

Cont.

WMO Technical Confer Meteorological and Envir Instruments and Meth Observation (TECO-2010) Helsinki, Finland, 30.8-1.1

al and Enviremental tts and Mech bservation ECO-2010) nland, 30.8-1.9

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gical and I onmental

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 Entertain local and international inquiries regarding our standard instruments and other relevant materials/information.

Technical Personnel from Bhutan





Students from Schools/Universities

Other visitors



• Maintain standard instruments and equipment.





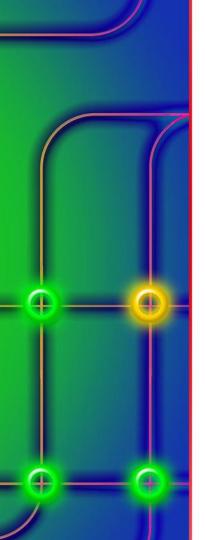






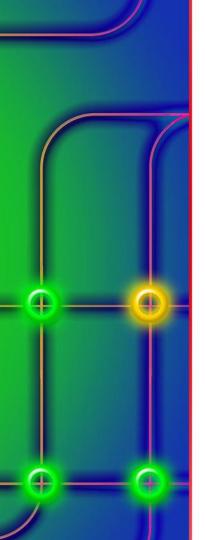


Climatic Chambers for the calibration of Humidity and Temperature Sensors/Instruments



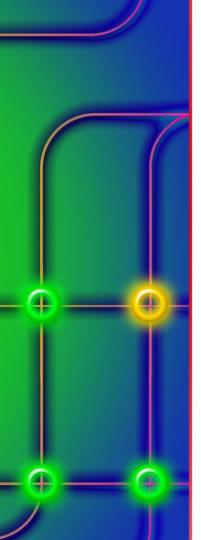
Current Status:

- PAGASA has its own calibration laboratory with complete calibration test chambers/ equipment for PTU, raingauge (tipping bucket), & wind instruments.
- Conducting on site checking and/or field inspection and maintenance with the available traveling standards and equipment.

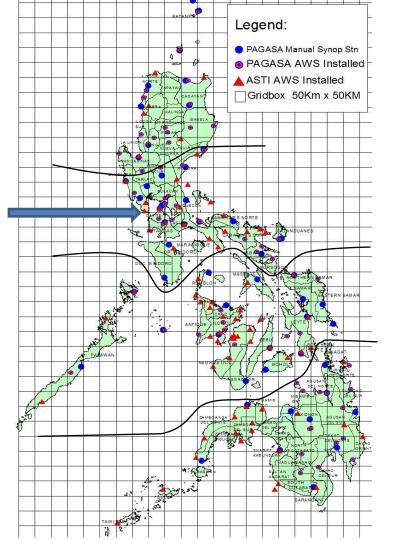


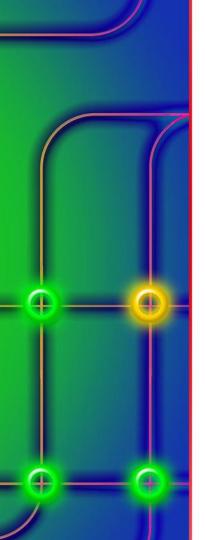
Future plans:

- Establishment of Local Instrument Centre in Northern Luzon, the Visayas and Mindanao PRSDs each with calibration laboratory and field inspection personnel.
- Acquisition of more traveling standards and portable calibration equipment to conduct on site calibration to be performed for the whole range.



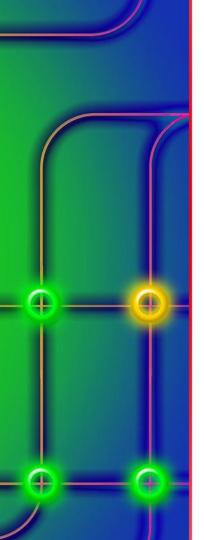
RIC Manila Main instrument Centre





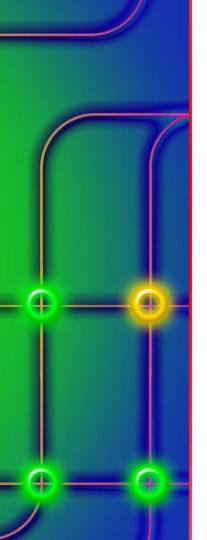
Observing <u>Stations</u>

- 58 Synoptic Stations
- 22 Agromet Stations
- 77 Automatic Wx Stations
- 96+100 Automatic Rain Gauges + ASTI
- Aviation Weather Observing Stations
- 3 Mobile X-Band Radars
- 13 Doppler Radar Stations
- 3 Marine Buoys
- 9 Upper Air Stations
- Satellite Receiving Facilities
- National Solar Radiation Centre (NSRC)



Conclusion

Upgrading the RIC-Manila with the acquisition of better instruments and equipment, and the establishment of local instrument centers at strategic locations will further strengthen its capabilities and improvement of weather, flood, and climate forecasts not only in the Philippines but also in other Members of WMO in the South-West Pacific region through more accurate measurement of meteorological and hydrometeorological elements and parameters. Its expansion will lead to a better functional and operational potential.



Conclusion continued ...

As a Regional Instrument Centre, it does not intend to be left behind the potential opportunities offered by the advances in meteorological instrumentation. It will strive to be at pace with the emerging technological growth and will continue to pursue and strengthen international relations and collaboration for expeditious and productive fulfillment of the Philippine commitments to play an important role in the natural disaster prevention and mitigation as well as in maintaining instrument performance within the WMO Integrated Global Observing System.



THANK YOU FOR YOUR KIND ATTENTION