World Meteorological Organization Organisation météorologique mondiale

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Our ref.:

OBS/WIS/DMA/COS

GENEVA, 7 October 2015

Annexes:

2

Subject:

Centennial Observing Stations

Action required: Submit information for up to three long-term observing stations at your earliest

convenience but not later than 15 November 2015

Dear Sir/Madam,

I would like to draw your attention to the Seventeenth World Meteorological Congress, Resolution 35 (Cg-17) - WMO recognition of long-term observing stations, which aims at developing a WMO recognition mechanism to highlight the role of long-term observing stations and to contribute to Members' efforts in operating and maintaining their observing stations under the most suitable conditions. The resolution requests Members' collaboration in testing the implementation of such a mechanism on a limited number of stations, as a test phase.

I seek your collaboration on this important initiative and invite you to submit information of up to three long-term observing stations (candidate stations) of your National Meteorological and/or Hydrological Service (NMHS), which meet the criteria as per Annex 1.

An ad hoc group of experts from CCI, CBS, CIMO and GCOS will analyse responses and will submit conclusions of this test for consideration by the sixty-eighth session of the Executive Council (EC-68) with a view of the mechanism's full implementation. Submitted candidate stations may be subject to future WMO recognition.

I would, therefore, like to invite you to submit your information to the WMO Secretariat at your earliest convenience but not later than 15 November 2015. Please use one template (Annex 2) for each individual observing station.

Yours faithfully,

(E. Manaenkova) for the Secretary-General

Permanent Representatives (or Directors of Meteorological or Hydrometeorological To:

Services) of Members of WMO (PR-6871)

CC: Hydrological Advisers to Permanent Representatives)

Presidents of CCI, CBS, CIMO Chairperson of GCOS-SC

) (for information)

WORLD METEOROLOGICAL ORGANIZATION

OBS/WIS/DMA/COS, ANNEX 1

PROPOSED CRITERIA FOR A WMO RECOGNITION OF CENTENNIAL OBSERVING STATIONS

Mandatory criteria:

- (1) The observing station was founded at least 100 years ago, observing at least one meteorological element since then, and is in operation as an observing station at the date of nomination.
- (2) Periods of inactivity of the observing station shall not exceed 10% during the last 100 years (excluding periods of armed conflicts and natural disasters).
- (3) The minimum historic station metadata shall contain actual or derived geographical coordinates including elevation, identified meteorological element(s) and its unit(s), as well as the observing schedule.
- (4) The observing station has not been subject to known relocations, which have affected the climatological characteristics.
- (5) All historic observational data and metadata are rescued, or will be rescued in order to prevent them from deterioration of the medium (cf. Guidelines on Data Rescue). Members are requested to share information of the amount of data to be rescued including related plans for data rescue, if applicable.
- (6) The observing station shall be operated according to WMO observing standards.
- (7) The environment of a centennial observing station shall be classified according to the siting classification defined in the *Guide to Meteorological Instruments and Methods of Observation* (WMO-No. 8). Members are requested to share the results of the siting classification for the nomination process and any future re-nomination.
- (8) The observed and measured data shall be subject to routine quality control procedures as per current WMO guidelines and practices. The quality control processes as well as its results shall be well documented.
- (9) Members shall do their utmost to maintain nominated stations according to the above recognition criteria.

Desirable criteria:

- (a) Free and unrestricted data access [definition cf. Resolution 40 (Cg-XII); http://www.wmo.int/pages/about/Resolution40_en.html] should be granted to the data including respective metadata.
- (b) Observing station time series data should be subject to quality control.
- (c) Observing station time series should be subject to homogeneity testing and homogenization, if applicable. Note: Important for any centennial observing station is that the distribution of its observed data allows testing homogeneity and that possible breaks in the series are distributed in a way that the time series can be homogenized. A sufficient number of neighboring stations will facilitate the homogenization procedure. It is fundamental to preserve the original data before any further treatment. In case of homogenization the original as well as the homogenized series shall be stored.

WORLD METEOROLOGICAL ORGANIZATION

OBS/WIS/DMA/COS, ANNEX 2

WMO CENTENNIAL OBSERVING STATIONS CRITERIA SELF-ASSESSMENT TEMPLATE

Please send the filled in template (one template for one observing station) by <u>15 November 2015</u> to wcdmp@wmo.int (alternatively by fax to WIS/DMA, +41227308128); for request of clarification please contact Mr Peer Hechler, <u>phechler@wmo.int</u>, phone: +41 22 730 8224

1. Station Information

Station Name:	
WMO Station Code (if available):	
Station Lat. Long.	
Station Elevation (meter above MSL):	
Country/Place:	
WMO Region:	
Institution:	
Name of contact person:	E-mail address:

2. Mandatory criteria

Criteria	Compliance (Yes/No)	References/Remark
(1) The observing station was founded at least 100 years ago, observing at least one meteorological element since then, and is in operation as an observing station at the date of nomination.		
(2) Periods of inactivity of the observing station shall not exceed 10% during the last 100 years (excluding periods of armed conflicts and natural disasters).		
(3) The minimum historic station metadata shall contain actual or derived geographical coordinates including elevation, identified meteorological element(s) and its unit(s) as well as the observing schedule.		
(4) The observing station has not been subject to known relocations, which have affected the climatological characteristics.		
(5) All historic observational data and metadata are rescued, or will be rescued in order to prevent them from deterioration of the medium (cf. Guidelines on Data Rescue). Members are requested to share information of the amount of data to be rescued including related plans for data rescue, if applicable.		
(6) The observing station shall be operated according to WMO observing standards.		
(7) The environment of a centennial observing station shall be classified according to the siting classification defined in the Guide to Meteorological Instruments and Methods of		

Observation (WMO-No. 8). Members are requested to share the results of the siting classification for the nomination process and any future re-nomination.	
(8) The observed and measured data shall be subject to routine quality control procedures as per current WMO guidelines and practices. The quality control processes as well as its results shall be well documented.	
(9) Members shall do their utmost to maintain nominated stations according to the above recognition criteria.	

3. Desirable criteria

Criteria	Compliance (Yes/No)	References/Remarks
(a) Free and unrestricted data access should be granted to the data including respective metadata. [definition cf. Resolution 40 (Cg-XII); http://www.wmo.int/pages/about/Resolution40_en.html]		
(b) Observing station time series data should be subject to quality control.		
(c) Observing station time series should be subject to homogeneity testing and homogenization, if applicable.		
