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Our ref.: OBS/WIS/DMA/NCMP

GENEVA, 10 November 2015

Annexes: 2

Subject: National Climate Monitoring Products (NCMPs)

Action required: To nominate a focal point for NCMPs and to complete the Survey on existing capabilities to produce NCMPs

Dear Sir/Madam,

In response to Resolution 16 of the Seventeenth World Meteorological Congress (Cg-17) which refers to Recommendation 3 of the sixteenth session of the Commission for Climatology (CCI-16), the CCI Expert Team on National Climate Monitoring Products (ET-NCMP) developed Terms of Reference for the work of national focal points on National Climate Monitoring Products (NCMPs) (see Annex 1).

A wide variety of climate monitoring products are produced around the world and there are many different methods used by different countries, which leads to inconsistencies among products. Inconsistencies make product comparisons difficult or impossible and limit their usefulness, e.g. for regional and global analyses. Other countries do not routinely produce climate monitoring products. The aim of the ET-NCMP is to generate a shortlist of standard NCMPs that can be produced consistently and shared by most countries. NCMPs are also useful within a country, raising awareness and understanding of the effects of climate variability and change, and the importance of national climate monitoring services.

The ET-NCMP has developed a survey to gauge current capabilities and development requirements for producing six NCMPs (see Annex 2) to be generated by Members on a voluntary basis. These NCMPs will create consistent and comparable analyses for various national and regional assessments, including the annual *WMO Statement on the Status of the Global Climate*.

You are kindly invited to nominate a NCMP focal point of your Service as per the Terms of Reference attached. It is suggested that the nominee completes the attached survey and sends it by e-mail to WMO (wcdmp@wmo.int) at your earliest convenience **but not later than 15 December 2015**. Please contact Mr Peer Hechler, WMO Scientific Officer (phechler@wmo.int) for further clarification, if needed.

Yours faithfully, M. Jarraud) Secretary-General

- To: Permanent Representatives (or Directors of Meteorological or Hydrometeorological Services) of Members of WMO (PR-6875)
- cc: Hydrological Advisers to Permanent Representatives) President of CCI) (for information)

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OBS/WIS/DMA/NCMP, ANNEX 1

TERMS OF REFERENCE FOR THE FOCAL POINT FOR NATIONAL CLIMATE MONITORING PRODUCTS

BACKGROUND

The WMO CCI OPACE 2 Expert Team on National Climate Monitoring Products (ET-NCMP) is working to document a shortlist of defined National Climate Monitoring Products (NCMPs) which could be produced by all countries in a consistent manner. This would aid the production of summary reports on regional and global climate, and allow countries with fewer resources to utilize them efficiently.

The focal points for NCMPs are expected to have knowledge about national climate data and monitoring activities. A basic knowledge of statistics would be advantageous, but is not essential.

TERMS OF REFERENCE

- To collaborate with ET-NCMP on identifying existing national sources for climate monitoring products and related capacities as well as related training and capacity building needs;
- To raise awareness of the NMHS staff and other relevant stakeholders on the need for and the importance of NCMPs;
- To facilitate the calculation of NCMPs including its dissemination via agreed protocols;
- To prepare and submit feedback to ET-NCMP on the challenges and the need for improvement emanating from the preparation and dissemination of the NCMPs.

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OBS/WIS/DMA/NCMP, ANNEX 2

WMO SURVEY ON EXISTING CAPABILITIES TO PRODUCE NATIONAL CLIMATE MONITORING PRODUCTS

The purpose of this questionnaire is to understand the current capabilities and development requirements of each WMO-affiliated National Hydrological or Meteorological Service to produce six national climate monitoring products (NCMPs) at the national level, as recommended by the WMO Expert Team on National Climate Monitoring Products (ET-NCMP). The NCMPs will enable the generation of time series of consistent and comparable analyses for various national and regional assessments, including the annual *WMO Statement on the Status of the Climate*. The members of the ET-NCMP need this information to guide the specifications that they are currently developing, design appropriate user-friendly computer software for producing the NCMPs and to identify areas where they can focus on capacity-building at a national level.

The current recommended NCMPs are:

- 1. Monthly area-average mean temperature anomaly (°C);
- 2. Monthly area-average total precipitation anomaly (% of average);
- 3. Monthly area-average standardized precipitation index (no units);
- 4. Monthly area-average percent of days with daily maximum temperature above the 90th percentile (%);
- 5. Monthly area-average percent of days with daily minimum temperature below the 10th percentile (%);
- 6. Extremes of temperature and precipitation.

We are kindly inviting you to complete this questionnaire and send it to wcdmp@wmo.int by **15 December 2015**, or by fax to +41 22 730 8128 or by mail to

World Meteorological Organization 7bis avenue de la Paix Case postale 2300 1211 Genève 2 SUISSE.

For more information on the Commission for Climatology OPACE 2 Expert Team on National Climate Monitoring Products, please visit http://www.metoffice.gov.uk/hadobs/opace2_tt_ncmp/.

We greatly appreciate your taking the time to fill in this questionnaire. Thank you.

Contact information:

Name:	
Position:	
Institution:	
Address:	
Country:	
E-mail address:	

Questions

Please respond to all questions. Type your response directly in the document. You can also print the document, enter your responses by hand and send us the scanned document.

1. Temperature:

Do you use daily maximum and minimum temperature for climate monitoring?	Yes 🗆 No 🗆
How many stations do you use for monitoring temperature approximately?	
Do you QC daily temperature for climate monitoring?	Yes 🗆 No 🗆
Do you homogenize temperature data for climate monitoring?	Yes 🗆 No 🗆
Do you calculate monthly mean temperature anomalies?	Yes 🗆 No 🗆
If yes: What base period do you use to calculate temperature anomalies?	
Do you produce a map of the monthly temperature anomalies?	Yes 🗆 No 🗆
Do you calculate area-averages of the monthly mean temperatures?	Yes 🗆 No 🗆
If yes: How often is the area average updated? monthly \Box seasor	nal 🗆 annual 🗆
Is there an example of this product available on the internet?	Yes 🗆 No 🗆
If yes: What is the URL or web address?	
2. Precipitation:	
2. Precipitation:Do you use daily precipitation for climate monitoring?	Yes 🗆 No 🗆
	Yes □ No □
Do you use daily precipitation for climate monitoring?	Yes □ No □ Yes □ No □
Do you use daily precipitation for climate monitoring? How many stations do you use for monitoring precipitation approximately?	
Do you use daily precipitation for climate monitoring? How many stations do you use for monitoring precipitation approximately? Do you QC daily precipitation for climate monitoring?	Yes 🗆 No 🗆
Do you use daily precipitation for climate monitoring? How many stations do you use for monitoring precipitation approximately? Do you QC daily precipitation for climate monitoring? Do you homogenize precipitation data for climate monitoring?	Yes □ No □ Yes □ No □ Yes □ No □
Do you use daily precipitation for climate monitoring? How many stations do you use for monitoring precipitation approximately? Do you QC daily precipitation for climate monitoring? Do you homogenize precipitation data for climate monitoring? Do you calculate monthly precipitation anomalies?	Yes □ No □ Yes □ No □ Yes □ No □
Do you use daily precipitation for climate monitoring? How many stations do you use for monitoring precipitation approximately? Do you QC daily precipitation for climate monitoring? Do you homogenize precipitation data for climate monitoring? Do you calculate monthly precipitation anomalies? If yes: What base period do you use to calculate precipitation anomalies?	Yes No Yes No Yes No Yes No

Do you produce a map of the monthly SPI?	Yes 🗆 No 🗆
Do you calculate area-averages of the monthly SPI?	Yes 🗆 No 🗆
If yes: How often is the area average updated?	monthly \Box seasonal \Box annual \Box
Is there an example of this product available on the internet?	Yes 🗆 No 🗆
If yes: What is the URL or web address?	

3. Do you have any comments and suggestions regarding the NCMPs and or this survey?

Thank you for your time!