WMO OMM



World Meteorological Organization Organisation météorologique mondiale Organización Meteorológica Mundial Всемирная метеорологическая организация المنظمة العالمية للأرصاد الجوية 世界气象组织

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Our ref.: 11430/2018/DPFS/New Manual/GDPFS-2018

17 May 2018

Annexes: 2 (available in English only)

Subject: Publication of the revised *Manual on the Global Data-processing and Forecasting System* (GDPFS) (WMO-No. 485)

Action required: To confirm the mapping of WMC and/or RSMC currently hosted by your Service onto the new types of centres (taking into account their functions described in the revised Manual on the GDPFS) at your earliest convenience

Dear Sir/Madam,

In reference to the WMO letter dated 15 June 2016, ref: 8384-16/WDS-DPFS/New Manual on GDPFS-2016 (see Annex I), I am pleased to inform you that the new *Manual on the Global Data-processing and Forecasting System* (GDPFS) (WMO-No. 485), as approved by the WMO Executive Council, through Resolution 18 (EC-69), has been published on 16 February 2018 and available on the WMO website at the following link:

https://library.wmo.int/opac/doc_num.php?explnum_id=4246

WMO Members hosting a World Meteorological Centre (WMC) and/or a Regional Specialized Meteorological Centre (RSMC) are requested to confirm the mapping of WMC and/or RSMC (see Annex I) in their respective country, onto the corresponding new types of centres in line with the functions described in the revised Manual on the GDPFS. Several Members have already confirmed mapping (see Annex II). Please verify also whether your inputs were appropriately included.

Please note that the Centres with confirmed mapping are required to demonstrate their capabilities by the Eighteenth session of the World Meteorological Congress (Cg-18), in June 2019, in order to retain the new designation beyond Cg-18. Members currently hosting RSMCs with geographical specialization are reminded to ensure mapping of their centre onto the new types of centres, considering that RSMCs with geographical specialization will cease to exist after Cg-18.

In this regard, I wish to bring to your attention that as a part of the transitional arrangements recommended by CBS-Ext.(2014), Cg-17 (2015) agreed that the existing WMCs and RSMCs will retain their current status until the Cg-18 in 2019. To retain the status beyond Cg-18, they need to demonstrate full compliance with the designation criteria.

 To: Permanent Representatives (or Directors of Meteorological or Hydrometeorological Services) of Members of WMO (limited distribution) (Algeria, Argentina, Armenia, Australia, Austria, Brazil, Canada, China, Egypt, Fiji, France, Germany, Hungary, India, Italy, Japan, Kenya, Korea (Republic of), Netherlands, New Zealand, Norway, Russian Federation, Saudi Arabia, Senegal, Serbia, South Africa, Spain, Sweden, Tunisia, Turkey, UK, USA, Uzbekistan) Director General of ECMWF I would like to take this opportunity to express my sincere thanks to you and your Service for your continued support to the WMO Global Data-processing and Forecasting System (GDPFS).

Yours faithfully,

(W. Zhang)

for the Secretary-General

WMO OMM

ANNEX I



World Meteorological Organization Organisation météorologique mondiale Organización Meteorológica Mundial Всемирная метеорологическая организация المنظمة العالمية للأرصاد الجوية 世界气象组织

Secrétariat

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Our ref.: 8384-16/WDS-DPFS/New Manual on GDPFS-2016

GENEVA, 15 June 2016

Annexes: 2 (available in English only)

- Subject: Revision of the *Manual on the Global Data-processing and Forecasting System* (*GDPFS*) (WMO-No. 485)
- Action required: To confirm the mapping of the WMC and/or RSMC currently hosted by your Service onto the new designations (taking into account their functions described in the revised *Manual on the GDPFS*) at your earliest convenience **but not later than 15 August 2016**

Dear Sir/Madam,

The Manual on the Global Data-processing and Forecasting System (GDPFS) (WMO-No. 485) is the single source of technical regulations for all operational data-processing and forecasting systems of WMO Members, including their designated meteorological centres. Following the request by the Commission for Basic Systems, at its fourteenth session (CBS-XIV, 2009), progress has been made with the revision of the Manual on the GDPFS, including the development of an outline for a new Manual, which was adopted by the Sixteenth World Meteorological Congress (Cg-XVI, 2011) through Resolution 6 (Cg-XVI). Noting that the new Manual introduces a number of changes to the current procedures, the Commission for Basic Systems, at its 2014 extraordinary session (CBS-Ext.(2014)), considered the comprehensive summary of changes of functions and procedures that would ensure a smooth transition to the new Manual. Acknowledging that the new Manual is being developed in accordance with quality management principles, which ensure its sustainability as part of the WMO Quality Management Framework (QMF), and would facilitate the review of compliance of GDPFS Centres against the designation criteria, CBS-Ext.(2014) recommended a roadmap for the completion of the new Manual (which will replace the current version), including transition arrangements for its implementation to manage the technical changes and the initial designation of the GDPFS Centres as defined in the new Manual, including World Meteorological Centres (WMCs) and Regional Specialized Meteorological Centres (RSMCs), which were approved by the Seventeenth World Meteorological Congress (Cg-17, 2015) in Resolution 12 (Cg-17).

I wish to bring to your attention that the new Manual introduces a clear definition for a WMC, for which a WMC shall be appointed if fulfilling the following functions:

- RSMC for global deterministic numerical weather prediction;
- RSMC for global ensemble numerical weather prediction; and
- RSMC for global numerical long-range prediction (known as Global Producing Centre for Long-range Forecasts).
- To: Permanent Representatives of Members of Algeria, Argentina, Armenia, Australia, Austria, Brazil, Canada, China, Egypt, Fiji, France, Germany, Hungary, India, Italy, Japan, Kenya, Korea (Republic of), Netherlands, New Zealand, Norway, Russian Federation, Saudi Arabia, Senegal, Serbia, South Africa, Spain, Sweden, Tunisia, Turkey, UK, USA and Uzbekistan Director General of ECMWF

In addition, as per the summary of changes of functions and procedures, RSMCs with geographical specialization would become RSMCs with specialization in one (or more) of the following activities:

- RSMC for regional severe weather forecasting;
- RSMC for global deterministic numerical weather prediction;
- RSMC for limited-area deterministic weather prediction;
- RSMC for global ensemble numerical weather prediction; and
- RSMC for limited-area ensemble numerical weather prediction.

RSMCs with other activity specialization are redefined in the new Manual for clarity in the description of functions, not altering the designation criteria.

As part of the above-mentioned roadmap, WMO Members hosting a WMC and/or an RSMC are invited to confirm the mapping of the WMC and/or RSMC currently hosted by your Service (as per Appendix I-1 of the current version of the Manual on the GDPFS, Annex I) onto the corresponding designations (taking into account their functions described in the revised Manual on the GDPFS) at your earliest convenience **but not later than 15 August 2016**. Also for your easy reference, I wish to inform you that the draft version of the revised Manual (table of contents given in Annex II) is available on the WMO website at:

https://www.wmo.int/pages/prog/www/DPS/Manual/Table-of-content_Manual-gdpfs.html

This version takes into account comments received by WMO Members following the request to review its content in the WMO circular letter ref. WDS-DPFS/New Manual on GDPFS-2015, dated 11 May 2015.

I wish to recall that as part of the transitional arrangements recommended by CBS-Ext.(2014), Cg-17 agreed that the existing WMCs and RSMCs will retain their status until the Eighteenth session of the World Meteorological Congress (Cg-18) in 2019; and to retain status after Cg-18, they need to demonstrate compliance by Cg-18.

I would like to take this opportunity to express my personal gratitude to you and your Service for your continued support in making meteorological products of the WMO's Global Data-processing and Forecasting System (GDPFS), including Emergency Response Activities (ERA), increasingly more relevant in the world.

Yours faithfully,

(E. Manaenkova) for the Secretary-General

Confirmation form for mapping of the WMC and/or RSMC hosted by your Centre

WMO MEMBER: Focal Point:

E-mail address:

Q1. World Meteorological Centre (WMC)

The new Manual introduces a clear definition for a WMC, which WMC shall be appointed if fulfilling the following functions:

- RSMC for global deterministic numerical weather prediction;
- RSMC for global ensemble numerical weather prediction; and
- RSMC for global numerical long-range prediction (known as GPC).

If you currently host a WMC, please answer YES or No to confirm your will to map its functions onto a new designation of WMC.

| Designated Centre | Mapping confirmation (Yes/No) |
|--------------------------------------|-------------------------------|
| Melbourne (southern hemisphere only) | |
| Moscow | |
| Washington | |

Q2. Regional Specialized Meteorological Centre (RSMC) with geographical specialization

RSMCs with geographical specialization would become RSMCs for one (or more) of the following activities:

- (1) RSMC for regional severe weather forecasting;
- (2) RSMC for global deterministic numerical weather prediction;
- (3) RSMC for limited-area deterministic weather prediction;
- (4) RSMC for global ensemble numerical weather prediction; and
- (5) RSMC for limited-area ensemble numerical weather prediction.

If you currently host an RSMC with geographical specialization, please answer YES if you confirm your will to map its functions onto a new designation(s) of one (or more) of RSMC(s).

| Designated Centre | (1) RSMC for regional severe weather forecasting | (2) RSMC for global deterministic numerical weather prediction | (3) RSMC for limited-area deterministic weather prediction | (4) RSMC for global ensemble numerical weather prediction | (5) RSMC for limited-area ensemble numerical weather prediction |
|----------------------|---|--|---|---|---|
| Algiers | | • | | • | |
| Beijing | | | | | |
| Brasilia | | | | | |
| Buenos | | | | | |
| Aires | | | | | |
| Cairo | | | | | |
| Dakar | | | | | |
| Darwin | | | | | |
| Exeter | | | | | |
| Jeddah | | | | | |
| Khabarovsk | | | | | |
| Melbourne | | | | | |

| Miami | | | |
|-------------|--|--|--|
| Montreal | | | |
| Moscow | | | |
| Nairobi | | | |
| New Delhi | | | |
| Novosibirsk | | | |
| Offenbach | | | |
| Pretoria | | | |
| Rome | | | |
| Tashkent | | | |
| Tokyo | | | |
| Tunis | | | |
| /Casablanca | | | |
| Washington | | | |
| Wellington | | | |

Q3. Regional Specialized Meteorological Centre (RSMC) with activity specialization

If you currently host an RSMC with activity specialization, please answer YES or No to confirm your will to map its functions onto a new designation of its corresponding RSMC.

| Designated Centre | Mapping confirmation (Yes/No) |
|--|---------------------------------|
| Global Producing Centre for Long-range Fo | precasts (GPC) |
| Beijing | |
| CPTEC (Brazil) | |
| Exeter | |
| Melbourne | |
| Montreal | |
| Moscow | |
| Pretoria | |
| Seoul | |
| Tokyo | |
| Toulouse | |
| Washington | |
| European Centre for Medium-range | |
| Weather Forecasts (ECMWF) | |
| Tropical Cyclone Centre / Hurricane Centre | e / Typhoon Centre |
| Nadi – Tropical Cyclone Centre | |
| New Delhi – Tropical Cyclone Centre | |
| Miami – Hurricane Centre | |
| Tokyo – Typhoon Centre | |
| La Réunion – Tropical Cyclone Centre | |
| Honolulu – Hurricane Centre | |
| RSMC for Atmospheric Sand and Dust stor | m Forecasts |
| Barcelona | |
| RSMC for Nuclear Environmental Emergen | cy Response and/or Backtracking |
| Beijing | |
| Exeter | |
| Melbourne | |
| Montreal | |
| Obninsk | |
| Offenbach (backtracking only) | |
| Токуо | |
| Toulouse | |
| Vienna (backtracking only) | |
| Washington | |

| Regional Climate | e Centre | |
|-------------------|--------------------------|--|
| | y the African Centre of | |
| Meteorological | | |
| Development (A | CMAD) (RA I) | |
| Beijing (RA II) | | |
| Tokyo (RA II) | | |
| Moscow (RA II) | | |
| | America hosted by the | |
| International Res | search Centre on El Niño | |
| (RA III) | | |
| Network | De Bilt | |
| (RA VI) | (Climate Data Service) | |
| | Offenbach | |
| | (Climate Monitoring) | |
| | Toulouse | |
| | (Long-range | |
| | Forecasts) | |
| | Moscow | |
| | (Long-range | |
| | Forecasts) | |

If you currently host an RSMC with activity specialization for Region VI (Europe), please answer *YES* or *No* to confirm your will to map its functions onto a new designation and indicate the corresponding RSMC.

| Designated Centre | Mapping confirmation (Yes/No), if yes, please indicate the corresponding RSMC | | |
|--|---|--|--|
| RSMC for Medium-range Weather Forecasts for Region VI (Europe) | | | |
| ECMWF | | | |
| RSMC for the Provision of Ultraviolet-index | <pre> forecasts for Region VI (Europe) </pre> | | |
| Offenbach | | | |

TABLE OF CONTENTS

INTRODUCTION

PART I – OUTLINE OF THE WMO GLOBAL DATA-PROCESSING AND FORECASTING SYSTEM (GDPFS)

1. PURPOSE AND SUPPORTED ACTIVITIES

- 1.1 General description
- **1.2.** Activities supported by the GDPFS

2. CENTRES

- 2.1 Definitions
 - Appendix A.I.2.1 Definitions of meteorological forecasting ranges
- 2.2 Designation process

3. COORDINATION WITH OTHER SYSTEMS OR PROGRAMMES

PART II – SPECIFICATIONS OF GDPFS ACTIVITIES

1. OVERALL REQUIREMENTS AND STANDARDS

- **1.1. Quality control of incoming observations** Appendix A.II.1.1-a Techniques for monitoring the quality of observations Appendix A.II.1.1-b Procedures and formats for the exchange of monitoring results
- **1.2.** Data collection and product dissemination
- 1.3. Long-term storage of data and products
- 1.4. Product verification
- **1.5.** Documentation on system and products
- 1.6. Training
- 1.7. Reporting on compliance
- **1.8.** Graphical representation of observations, analyses and forecasts

2. SPECIFICATION OF ACTIVITIES AND PROCEDURES FOR THEIR MODIFICATION

2.1 General purpose activities

2.1.1. Global Deterministic Numerical Weather Prediction

Appendix A.II.2.1.1-a Minimum list of global deterministic NWP products to be made available on the WIS

Appendix A.II.2.1.1-b Characteristics of global deterministic NWP systems

2.1.2. Limited Area Deterministic Numerical Weather Prediction

Appendix A.II.2.1.2-a Minimum list of limited area deterministic NWP products to be made available on the WIS

Appendix A.II.2.1.2-b Characteristics of limited area deterministic NWP systems

2.1.3. Global Ensemble Numerical Weather Prediction

- Appendix A.II.2.1.3-a Minimum list of global EPS products to be made available on the WIS
- Appendix A.II.2.1.3-b Characteristics of global EPS
- 2.1.4. Limited Area Ensemble Numerical Weather Prediction
- Appendix A.II.2.1.4-a Minimum list of limited area EPS products to be made available on the WIS

Appendix A.II.2.1.4-b Characteristics of limited area EPS

2.1.5. Global Numerical Long-range Prediction

- Appendix A.II.2.1.5-a Mandatory and highly recommended seasonal numerical prediction products to be made available on the WIS
- Appendix II.2.1.5-b Characteristics of seasonal numerical prediction systems

Appendix II.2.1.5-c Additional seasonal numerical prediction products to be made available on the WIS

Numerical Ocean Wave Prediction 2.1.6.

Appendix A.II.2.1.6-a Minimum list of numerical ocean wave prediction products to be made available on the WIS

Appendix A.II.2.1.6-b

Appendix A.II.2.1.6-c Characteristics of global NOWP systems

Global Numerical Ocean Prediction 2.1.7

Appendix A.II.2.1.7-a Minimum list of global numerical ocean prediction products to be made available on the WIS

Appendix A.II.2.1.7-b

Appendix A.II.2.1.7-c Characteristics of global NOP systems

2.1.8. Nowcasting

Appendix II.2.1.8 Characteristics of Nowcasting systems

2.2 **Specialized activities**

Regional Severe Weather Forecasting 2.2.2.

Regional climate prediction and monitoring 2.2.3.

Appendix A.II.2.2.3-a RCC mandatory functions Appendix A.II.2.2.3-b Additional highly recommended RCC functions

Annex A.II.2.2.3-annex Guidelines for feedback from RCCs/NHMSs to GPCs

Coordination of Multi Model Ensemble Prediction for Long Range 2.2.4. Forecasts

Appendix A.II.2.2.4-a Minimum information to be available from LCs-LRFMME

Appendix A.II.2.2.4-b Additional information to be available from LCs-LRFMME

Appendix A.II.2.2.4-c Access to GPC data and visualization products held by the Lead Centres for LRFMME

2.2.5. **Tropical Cyclone Forecasting, including marine-related hazards**

2.2.6. **Volcanic Contaminants**

Marine Meteorological Services 2.2.7.

2.2.8. **Nuclear Environmental Emergency Response**

Appendix A.II.2.2.8-a Activation of support for nuclear emergency response and standards in the provision of international services by RSMCs

Appendix A.II.2.2.8-b Minimum list of products and rules for displaying products

Appendix A.II.2.2.8-c Default emission source parameters

Appendix A.II.2.2.8-d Characteristics of atmospheric transport modelling system

Appendix A.II.2.2.8-e Request form to activate RSMC support Appendix A.II.2.2.8-f Specifications for support to CTBTO

2.2.9. Non-nuclear Environmental Emergency Response

Appendix A.II.2.2.9-a Activation of support for non-nuclear emergency response

Appendix A.II.2.2.9-e Request form to activate RSMC support

Appendix A.II.2.2.9-f Users interpretation guide for non-nuclear atmospheric transport model products provided by RSMCs

2.2.10. Atmospheric sand and dust storm forecasting

Appendix A.II.2.2.10-a Minimum list of atmospheric sand and dust storm products to be made available on the WIS

Non real-time coordination activities 2.3

2.3.1. **Coordination of deterministic NWP verification**

Appendix A.II.2.3.1 I – Standardized verification of deterministic NWP products

Coordination of EPS verification 2.3.2.

Appendix A.II.2.3.2 II - Standard verification measures of global EPS

Coordination of LRF verification 2.3.3.

Appendix A.II.2.3.3 II - Standardized verification System for long-range forecasts (SVSLRF)

- 2.3.4. Coordination of ocean wave forecast verification
- 2.3.5 Coordination of tropical cyclone forecast verification
- 2.3.6. **Coordination of observation monitoring**

PART III - GDPFS IMPLEMENTATION

ACRONYMS

INDEX

STATUS OF CONFIRMATION OF THE MAPPING OF EXISTING WMCs, RSMCs ACTIVITY SPECIALIZATION AND LEAD CENTRES (HOSTED BY MEMBERS) ONTO THE CORRESPONDING DESIGNATIONS DESCRIBED IN THE REVISED MANUAL ON THE GDPFS (WMO-No. 485) (2017 Edition)

1. World Meteorological Centres (WMCs)

The new Manual introduces a clear definition for a WMC, which WMC shall be appointed if fulfilling the following functions:

- RSMC for global deterministic NWP;
- RSMC for global ensemble NWP; and
- RSMC for global numerical long-range prediction (known as GPC).

| Designated Centre | Mapping confirmation received at WMO (Yes/No) |
|--|--|
| Melbourne (southern hemisphere only) | No response |
| Moscow | Yes |
| Washington | Yes |
| New WMCs designated by EC-69 (2017) | |
| Canada (Montreal) | Yes |
| UK (Exeter) | Yes |
| Japan (Tokyo) | Yes |
| China (Beijing) | Yes |
| ECMWF (Reading) | Yes |
| Designation of new WMC (to designated by | / EC-70 (in June 2018) |
| Germany (Offenbach) | In consideration |

2. <u>Regional Specialized Meteorological Centre (RSMC) with geographical</u> <u>specialization</u>

The Members who are currently hosting RSMCs with geographical specialization are especially required to map themselves against any of new types of centres considering that RSMCs with geographical specialization will cease to exist after Congress-18 in 2019.

Such RSMCs may become RSMCs for one (or more) of the following activities depending upon their functions and capacities:

- (1) RSMC for regional severe weather forecasting;
- (2) RSMC for global deterministic NWP;
- (3) RSMC for limited-area deterministic NWP;

- (4) RSMC for global ensemble NWP; and
- (5) RSMC for limited-area ensemble NWP.

Therefore, Members hosting RSMCs with geographical specialization, are requested to please answer *YES* if they confirm their Centre(s) will to map its functions onto a new designation(s) of one (or more) of following RSMC(s).

| Designated | (1) | (2) | (3) | (4) | (5) | Mapping |
|--------------|-------------|-----------|-------------|----------|----------|-----------------------|
| Centre | RSMC for | RSMC for | RSMC for | RSMC for | RSMC for | confirmation |
| | regional | global | limited- | global | limited- | received at |
| | severe | determini | area | ensemble | area | WMO |
| | weather | stic NWP | determinist | NWP | ensemble | <mark>(Yes/No)</mark> |
| | forecasting | | ic NWP | | NWP | |
| Algiers | | | | | | No response |
| Beijing | Yes | Yes | | Yes | | No response |
| Brasilia | | | | | | No response |
| Buenos Aires | | | | | | No response |
| Cairo | | | | | | No response |
| Dakar | | | | | | No response |
| Darwin | | | | | | No response |
| Exeter | | Yes | Yes | Yes | Yes | Yes |
| Jeddah | | | | | | No response |
| Khabarovsk | | | | | | No response |
| Melbourne | | | | | | No response |
| Miami | | | | | | No response |
| Montreal | | | | | | No response |
| Moscow | | | | | | No response |
| Nairobi | | | | | | No response |
| New Delhi | | | | | | No response |
| Novosibirsk | | | | | | No response |
| Offenbach | Yes | | | | | Yes |
| Pretoria | Yes | - | Yes | - | - | Yes |
| Rome | - | Yes | - | - | Yes | Yes |
| Tashkent | Yes | _ | - | | - | Yes |
| Tokyo | Yes | Yes | - | Yes | - | Yes |
| Tunis | | | | | | No response |
| /Casablanca | | | | | | |
| Washington | | | | | | No response |

| Wellington | Yes | - | - | - | - | No response |
|------------|-----|-----|---|-----|---|-------------|
| ECMWF | - | Yes | - | Yes | - | Yes |
| (new | | | | | | |
| centre) | | | | | | |

3. Regional Specialized Meteorological Centre (RSMC) with activity specialization

If you currently host an RSMC with activity specialization, please answer *YES* or *No* to confirm your will to map its functions onto a new designation of its corresponding RSMC.

| Designated Centre | Mapping confirmation received at WMO (Yes/No) | | | | |
|---|--|--|--|--|--|
| Global Producing Centre for Long-range Forecasts (GPC) | | | | | |
| Beijing | Yes | | | | |
| CPTEC (Brazil) | Yes | | | | |
| Exeter | Yes | | | | |
| Melbourne | No response | | | | |
| Montreal | Yes | | | | |
| Moscow | Yes | | | | |
| Pretoria | No response | | | | |
| Seoul | No response | | | | |
| Токуо | Yes | | | | |
| Toulouse | Yes | | | | |
| Washington | Yes | | | | |
| European Centre for Medium-range | Yes | | | | |
| Weather Forecasts (ECMWF) Tropical Cyclone Centre / Hurricane Centre | / Typhoon Contro | | | | |
| Nadi – Tropical Cyclone Centre | Yes | | | | |
| New Delhi – Tropical Cyclone Centre | Yes | | | | |
| Miami – Hurricane Centre | Yes | | | | |
| Tokyo – Typhoon Centre | Yes | | | | |
| La Réunion – Tropical Cyclone Centre | Yes | | | | |
| Honolulu – Hurricane Centre | Yes | | | | |
| RSMC for Atmospheric Sand and Dust stor | m Forecasts | | | | |
| Barcelona | | | | | |
| RSMC for Nuclear Environmental Emergen | cy Response and/or Backtracking | | | | |
| Beijing | Yes | | | | |
| Exeter | Yes | | | | |

| Melbourne | | No response |
|------------------------|---------------------------|-------------|
| Montreal | | Yes |
| Obninsk | | Yes |
| Offenbach (bac | ktracking only) | Yes |
| Tokyo | | Yes |
| Toulouse | | Yes |
| Vienna (backtra | acking only) | Yes |
| Washington | | Yes |
| Regional Climat | te Centre | |
| Africa hosted l | by the African Centre of | Yes |
| Meteorological | Applications for | |
| Development (A | ACMAD) (RA I) | |
| Beijing (RA II) | | Yes |
| Tokyo (RA II) | | Yes |
| Moscow (RA II) | | Yes |
| New Centres | designated by EC-69 | |
| (2017) | | |
| ICPAC | | Yes |
| Pune | | Yes |
| CIMH, Barbados | S | Yes |
| North Africa Ne | twork RA I | Yes |
| Western South | America hosted by the | |
| International Re | esearch Centre on El Niño | Yes |
| (RA III) | | |
| Network (RA | De Bilt | Yes |
| VI) | (Climate Data Service) | |
| Offenbach | | Yes |
| (Climate Monitoring) | | |
| Toulouse | | Yes |
| (Long-range Forecasts) | | |
| | Moscow | Yes |
| | (Long-range Forecasts) | |

4. Lead Centres

| Designated Centre | Mapping confirmation | | |
|---|----------------------|--|--|
| Long-range Forecast Multi-model Ensemble (LRFMME) | | | |
| Seoul No | | | |
| Washington | Yes | | |

| Standard Verification System for Long-range Forecasts (SVSLRF) | |
|--|-----|
| Melbourne | No |
| Montreal | Yes |
| Deterministic NWP Verification | |
| ECMWF | Yes |
| EPS Verification | |
| Токуо | Yes |