



Our ref.: 04020/2025/I/WIGOS/MINT/IPC-XIV

23 April 2025

Annexes: 3 (available in English only)

Subject: Fourteenth International Pyrheliometer Comparison (IPC-XIV) and the jointly held Fourth International Pyrgeometer Comparison (IPgC-IV) and Sixth Filter Radiometer Comparison (FRC-VI), Davos, Switzerland, 22 September – 10 October 2025

Action required:

- (1) Register for intended participation in the IPC-XIV, IPgC-IV and/FRC-VI on the PMOD/WRC website, **as soon as possible**
- (2) If needed, submit requests for financial support to the WMO Secretariat not later than **15 May 2025**
- (3) Regional Radiation Centres to return the questionnaire provided in Annex III to the WMO Secretariat not later than **15 May 2025**

Dear Sir/Madam,

The World Meteorological Organization (WMO) Executive Council at its thirty-fourth session (EC-XXXIV), through its [Resolution 13 \(EC-XXXIV\)](#) – Development and comparison of radiometers, decided that International and Regional Pyrheliometer Comparisons (IPCs and RPCs) should be carried out at five-yearly intervals to check the quality of the operated radiation standards against the instruments of the World Standard Group (WSG) and, for RPC, against the regional standard instruments. The purpose of these comparisons is to foster the comparability of radiation measurements throughout the world through traceability to the World Radiometric Reference. WMO is currently in the process of investigating the feasibility to establish new solar and terrestrial radiation references.

I have now pleasure in informing you that, at the kind invitation of Switzerland, the Fourteenth International Pyrheliometer Comparison (IPC-XIV) will be held at the World Radiation Centre (WRC) in Davos, Switzerland, from 22 September to 10 October 2025. The WRC Davos has also indicated that the Sixth Filter Radiometer Comparison (FRC-VI) and Fourth International Pyrgeometer Comparison (IPgC-IV) will be held in conjunction with IPC-XIV.

IPC-XIV is primarily intended for the calibration of standard pyrheliometers of all WMO Regional Radiation Centres (RRCs). National Standard Pyrheliometers that are maintained at National Radiation Centres (NRCs), will also be compared against the WSG if the total number of instruments does not exceed the capacity of the Davos Centre.

The WRC plans to organize a scientific symposium on meteorological radiometry and atmospheric radiation. RRCs will be expected to present a report on their activities in the last five years during the symposium.

The financial resources available to support participants are very limited. Taking this into account, I would like to urge you to consider meeting the travel and per diem expenses of the participant(s) from your Service.

To: Permanent Representatives of Members with WMO

cc: Hydrological Advisers

Nevertheless, requests for financial assistance will be considered within limited resources available for IPC-XIV. It is our target to support the participation of some RRCs from developing countries, and, if possible, some NRCs from developing countries. With the kind help of the WRC, special arrangements are being planned to minimize the local cost for accommodation and half/full board of participants.

Financial assistance for the transport of instruments cannot be provided by WMO.

Please see enclosed the following annexes:

- List of WMO Regional Radiation Centres ([Annex I](#))
- Questionnaire – Request for financial support for participation at IPC-XIV/RPCs ([Annex II](#))
- Questionnaire for Regional Radiation Centres ([Annex III](#))

If you wish to nominate a radiation expert and bring one or more instruments to the IPC-XIV, FRC-VI, and/or IPgC-IV, you are kindly requested **to fill in the on-line forms provided on the [WRC website](#)**. Confirmation of participation will be provided to you directly by WRC.

Requests for financial assistance must be **submitted to the WMO Secretariat by the relevant Permanent Representative of the nominated expert by 15 May 2025 at the latest**, by returning the completed form provided in [Annex II](#).

Members hosting a RRC are requested to complete and return the questionnaire on RRC, provided in [Annex III](#), at your earliest convenience but **not later than 15 May 2025** to provide information on the traceability of RRCs and their adherence to the RRC Terms of Reference.

Regarding insurance coverage for non-staff members, may I draw your attention to the following:

Non-staff members of WMO who are authorized to travel at the Organization's expense and/or who are receiving a DSA from WMO must ensure they are fully responsible for expenses incurred in the event of death, illness or injury during official travel and attendance at meetings on behalf of the Organization. They are, therefore, fully responsible for arranging life, health, and accident, as well as any other forms of insurance with an adequate level of coverage for the duration of such meetings and events.

WMO liability is limited to the performance of services or attendance at a meeting on behalf of the Organization, is covered by an injury and illness benefit insurance which provides limited coverage for medical, emergency, and supplementary official travel expenses.

Detailed information on the organization of the IPC-XIV, FRC-VI, and IPgC-IV and conditions for participation will be sent by the Director of the WRC to the nominated expert(s) directly. Additional information on local arrangements will be made available on the [website](#).

Yours faithfully,



Ms Ko Barrett
for the Secretary-General

LIST OF WMO REGIONAL RADIATION CENTRES¹

Ref.: 04020/2025-1.11.1/0111

Region I (Africa)

Tamanrasset	(Algeria)
Cairo	(Egypt)
Lagos	(Nigeria)
Khartoum	(Sudan)
Tunis	(Tunisia)
Kinshasa	(Democratic Republic of the Congo)

Region II (Asia)

Pune	(India)
Tokyo	(Japan)

Region III (South America)

Buenos Aires	(Argentina)
Santiago	(Chile)
Huayao	(Peru)

Region IV (North America, Central America and the Caribbean)

Toronto	(Canada)
Mexico City	(Mexico)
Boulder	(United States of America)

Region V (South-West Pacific)

Melbourne	(Australia)
-----------	-------------

Region VI (Europe)

Uccle	(Belgium)
Toulouse/Carpentras	(France)
Lindenberg	(Germany)
Budapest	(Hungary)
St. Petersburg	(Russian Federation)
Norrkoeping	(Sweden)
Davos	(Switzerland)

¹ See [Guide to Instruments and Methods of Observation](#) (WMO-No. 8)

QUESTIONNAIRE¹ - REQUEST FOR FINANCIAL SUPPORT

for participation at the

INTERNATIONAL AND REGIONAL PYRHELIOMETER COMPARISONS (IPC-XIV, RPCs)**WORLD RADIATION CENTRE (WRC)**

Davos, Switzerland, 22 September to 10 October 2025

Ref.: 04020/2025-1.11.10114

1. Member country**2. Radiation Centre**Regional ☐National ☐

Address

Telephone

Telefax

Email

3. Regional Radiation Centres (RRC)Instruments
composing
the regional
standard

(a)

(b)

(c)

(d)

(e)

Main
activities

2021

2022

2023

2024

2025

Number of instruments calibrated by the RRC for other countries in the last five years:

List countries for which these services were provided:

¹ The electronic version of the questionnaire is available [online](#).

4. National Radiation Centres (NRC)

Type/Model of national reference instrument

Number of instruments calibrated with the national reference instrument in the last five years:

Type/Model of instruments calibrated with national reference instrument	(a)
	(b)
	(c)
	(d)

5. Expert² proposed for participation

Family name

Dr / Mr / Ms

First name

Address

Telephone

Email

Position presently held

6. Information on standard pyrhelimeters foreseen for participation in the IPC/RPC

first priority	Type/Model
	Manufacturer
	Serial Number

second priority	Type/Model
	Manufacturer
	Serial Number

7. Assistance is requested forPer diem ☐Travel ☐

² Designated experts may also consult the [WRC website](#) for more information.

8. Submitted by

Family name

First name

Email

Date

9. Permanent Representative³

Name

Date

Signature of the Permanent Representative

Please return the electronic version of the completed questionnaire
by **15 May 2025**
via email to: iruedi@wmo.int, wmo@wmo.int

Dr Isabelle Rüedi
Infrastructure Department
World Meteorological Organization
Tel: (+41) 22 730 8278

³ Signature is needed if financial assistance is requested.

QUESTIONNAIRE¹
FOR REGIONAL RADIATION CENTRES

in preparation for the International Pyrheliometer Comparisons (IPC-XIII)
 World Radiation Centre (WRC)
 Davos, Switzerland, 22 September to 10 October 2025

Ref.: 04020/2025-1.11.10111

 Regional Radiation Centre

 Respondent's name

 Respondent's
 contact details (email)

 (1) How many pyrheliometers do you have in your standard group? Total:
Please provide in the table below the type and serial number (s/n)

 (2) Do you know the uncertainty of each of these instruments? YES ☐ NO ☐

If yes, how was the uncertainty obtained for each of the instruments?
Please answer to this question in the table below.

Pyrheliometers

	type and s/n	uncertainty known		uncertainty obtained by
(a)	type s/n	yes <input type="checkbox"/>	no <input type="checkbox"/>	
(b)	type s/n	yes <input type="checkbox"/>	no <input type="checkbox"/>	
(c)	type s/n	yes <input type="checkbox"/>	no <input type="checkbox"/>	
(d)	type s/n	yes <input type="checkbox"/>	no <input type="checkbox"/>	
(e)	type s/n	yes <input type="checkbox"/>	no <input type="checkbox"/>	

 (3) What type of data acquisition system do you use for the standard group?

¹ The electronic version of the questionnaire is available [online](#).

-
- (4) How frequently do you calibrate your data acquisition system for the standard group?

When was it last calibrated?

Date:

- (5) How many people are involved in maintaining and using the standard group?

(a) What are the qualifications of these people?

(b) What metrology training have these people received?

- (6) Does your RRC have a quality management system (e.g. ISO 17025, ISO 9001, or internal procedures)?

YES: ☐

NO: ☐

If yes, briefly describe your quality management system.

- (7) Is the RRC audited in any way (internally or externally)?

YES: ☐

NO: ☐

If yes: When was it last audited?

Date:

- (8) How frequently do you intercompare the radiometers of your standard group?

(a) What are the results of the latest intercomparison?

(b) Did any of the standard radiometers change with respect to the group and by how much?

- (9) How do you maintain the traceability of your standard group to the WRR?

How many of your standard group instruments have participated in an IPC/RPC?

-
- (10) What would you find most useful in a training course/symposium on radiation measurement?
-

Please return the electronic version of the completed questionnaire
by **15 May 2025**
via email to: iruedi@wmo.int, wmo@wmo.int

Dr Isabelle Rüedi
Infrastructure Department
World Meteorological Organization
Switzerland
Tel: (+41) 22 730 8278
