

Name of the Union
IAMAS-IUGG
Activities' Report - Year 2022
Delegate/Author Name
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1. Introduction

Various initiatives have been promoted in support of Italian researchers or aimed at promoting meteorology and atmospheric sciences in Italy.

2. Main activities carried on by IAMAS during 2022 relevant for Italy and for CNR

It is a moment of great ferment for the meteorology in Italy. The Italia Meteo agency, whose direction has been entrusted to Dr. Carlo Cacciamani, is taking his first steps and is launching, together with the Italian Air Force, a series of exploratory meetings to understand the possible contributions to the newly formed agency that the various meteorological institutions in Italy can provide. The undersigned participated in the second workshop, held at Palazzo Aeronautica on 3 February 2022, with a presentation entitled "Numerical modeling at CNR-ISAC"; also, he will inform the National Commission for the participation of the CNR to IUGG when the meeting relating to ground stations will be convened, since it is of potential interest for other IUGG associations.

The undersigned was also a member of the organizing committee of the first workshop between researchers and forecasters, held at the RAI headquarters in Bologna on 27 September 2022, organized under the aegis of Italia Meteo and of the professional section of AISAM. The meeting, which was attended by about thirty people in person and one hundred remotely, was an opportunity for discussion between researchers and operational forecasters in the field of severe weather. The workshop had an excellent feedback and will be repeated in Bologna in the month of September 2023, focusing this time on sub-seasonal predictions.

Uni-Met constitutes a sort of discussion and coordination table for 11 Italian meteorological associations, to which the previous IAMAS national delegate (Dr. Teodoro Georgiadis) provided the endorsement, which was renewed during the IUGG conference in Montreal in 2019. The undersigned has reaffirmed the support for the activities of Uni-Met, which concern, inter alia, various archiving activities, in particular:

DABAT@: list of tornadoes in Italy, of which the historical part (1800-1900) has been expanded with researches on newspapers and magazines;

ITALIAN METEOROLOGICAL DIARY: list of the most important weather events since 1900;

WEATHER CALENDAR 2022;

WEATHER EXTREMES;

WEATHER OBSERVATION STATIONS, for which an update of the dedicated page is planned.

The eighth Round Table took place on Saturday 1 October 2022 in Rome at the Historic Observatory of "Collegio Romano". The next meeting is scheduled in Varese at the Prealpine Geophysical Observatory on 7 October 2023; it is the intention of Uni-Met to invite the Directors of the Secular Observatories who have not met live since March 2019.

Among the activities carried out in Italy in 2022, the undersigned contributed to the organization of the eighth edition of the CNR-ISAC summer school ("Atmospheric Composition and Meteorology") held in Castro Marina from 20 to 24 June 2022, during which he taught for three hours of lesson; the undersigned was also Chair of the session "Atmospheric observations for meteorology, the environment and the climate: systems and measurements" during the Aisam Conference, held in Milan from 15 to 19 February 2022. The undersigned is a member of the organizing committee of the next Aisam Conference, which will be held in Lecce in February 2024.

3. Activities carried on by Mario Marcello Miglietta within the Union during 2022 and impact on the Italian scientific community

The 7th edition of the CVC (Convective and Volcanic Clouds detection, monitoring and modeling) school (<http://www.cvctrainingschool.org>), to which the undersigned contributed as a Keynote lecturer, was held in Nicolosi from 5 to 13 September 2022; at the request of the organizers, the undersigned has collected information for their application for funding under the IUGG–Grant Program 2022-2023. Unfortunately, the numerous bureaucratic formalities required and the scarce and late responses from the IAMAS secretariat led the organizers to abandon the request.

Given the scarce attention of the current IAMAS commissions to phenomena that can have a strong local impact, the undersigned believes that a specific focus on the study of these phenomena is necessary, considering their potential impact and taking into account on the one hand the growing importance of the attribution of these events to climate change, of which the Mediterranean is a hotspot, on the other hand the possibility of numerical models to resolve ever finer scales. The request for a new commission dealing with mesoscale meteorology was not approved, but a greater representation of phenomena at these scales was ensured within the Dynamic Meteorology Commission (ICDM), chaired by prof. Thomas Spengler. Presumably, the matter will be taken up again at the next Berlin conference.

Within the framework of the National Commission for the participation of the CNR in IUGG, a conference on the different types of forecasting of natural events and risks had been scheduled, following the one held in Rome on 26-27 November 2019. The second part of the workshop on “State of the art and perspectives on the prediction of natural events”, focused on the prediction of natural hazards both in the short and long term, should have considered the types of events neglected in the first event, also considering the interaction with the stakeholders. The activity has been postponed to a date to be determined. However, the commission met on several occasions to support the candidacy of dr. Paolo Papale, Research Director of the National Institute of Geophysics and Volcanology (INGV), to IUGG Honorary Member (Fellow). The candidacy was successful thanks to the strong support of the commission, and in particular of its President, dr. Fausto Guzzetti.

At the request of Dr. Davide Faranda, the undersigned tried to support the candidacy of dr. Gabriele Messori for the IUGG Early Career Scientist (ECS) award 2022. Unfortunately, it was not possible to submit the candidacy through one of the two methods allowed, i.e., through the National Commission for the participation of the CNR in IUGG or through the IAMAS secretariat, since in both cases a candidate had already been proposed.

4. Evaluation of the participation in terms of benefits and membership cost

Overall, the participation in the Union has brought the activity carried out by various national associations in the field of atmospheric sciences and meteorology to the attention of the national and international scientific community; moreover, the success of the candidacy of dr. Papale gave international visibility to a leading Italian researcher in Earth Sciences. These considerations indicate that the benefit/cost ratio should be considered really favorable.

5. Evaluation of Italians’ attendance and how to improve interest and involvement

The establishment of the Commission for the participation of the CNR in IUGG was certainly very important for coordinating and strengthening the national activities within the Association, as demonstrated by the success of the candidacy of dr. Papale.

The request for funding from the IUGG–Grant Program 2022-2023 for the CVC2022 school and the attempted candidacy of Dr. Messori highlighted the interest of the national community in the activities of IAMAS. However, the numerous bureaucratic formalities required, the scarce and late replies from the IAMAS secretariat, and in general the complexity of the application procedure indicate that, if we want to make the call accessible to all, it would be necessary to simplify the procedure, for example making the form for participation in these initiatives accessible without requesting it from the secretariat of the associations.

The request for a greater presence of mesoscale phenomena within the Dynamic Meteorology Commission (ICDM) should stimulate greater interest from the national community. Unfortunately, it is not currently clear if and how the request will be taken into consideration.

6. Italian experts with important roles within the Union or within related Commissions and Programs (if known)

- Maria Cristina Facchini (ISAC-CNR): member of the International Commission on Atmospheric Chemistry and Global Pollution (ICACGP)
- Christina Plainaki (INAF-IASP): secretary of the International Commission on Planetary Atmospheres and their Evolution (ICPAE)

- Alcide Giorgio di Sarra (ENEA / UTMEA-TER): member of the International Radiation Commission (IRC)

- Teodoro Georgiadis (IBE-CNR): member of the Capacity Building and Education Committee

7. If Union with CNR Commission, short summary about the 2022 CNR Commission activities

NO

8. Conclusions

In the fourth year as IAMAS national delegate, various activities were carried out, in particular:

- interaction with some national associations of the sector;
- organization of events relevant for IAMAS activities in the national community;
- promotion of funding possibilities for schools/workshops (IUGG Grant) and prizes (ECS award).

It is hoped that, also through the participation in the Berlin General Assembly, it will be possible to promote a greater representation of mesoscale meteorological activities in the work of the Dynamic Meteorology commission and a simplification in the procedure for funding events and for submitting applications for the foreseen international awards.

Padua, 30 March 2023

Signature

