

IAMAS-IUGG
Activities' Report - Year 2023
Delegate/Author Name
Mario Marcello Miglietta

1. Introduction

Various initiatives aimed at diffusing the meteorology and the atmospheric sciences in Italy have been promoted.

2. Main activities carried on by IAMAS during 2023 relevant for Italy and for CNR

The 28th IUGG General Assembly was held in the City Cube of Berlin from 11 to 20 July 2023. Around 500 scientists from all over the world participated: the Italian participation was numerous, especially in solid earth geophysics and volcanology, but very limited in atmospheric physics. Certainly, the high registration costs (around 650 euros for the entire program) did not encourage the trip, despite the scientific program being of the highest level. In particular, the session "Advances in Dynamic Meteorology" was very interesting, in my opinion.

3. Activities carried on by Mario Marcello Miglietta within the Union during 2023 and impact on the Italian scientific community

The undersigned wrote a short article for the AISAM (Italian Association of Atmospheric Sciences and Meteorology) newsletter to report on the IUGG General Assembly and share the main results that emerged from the conference. The resolutions adopted during the assembly, relevant to the IAMAS association, were also disseminated in the scientific community of the sector.

As Italian representative of IAMAS, the undersigned participated in the two meetings of the management board, in which the activities of the association were discussed, the new board was elected, the next joint workshop with two other IUGG associations, IAPSO and IACS, was decided to be held in Busan (South Korea) in July 2025. The next meeting of the IAMAS board will be during the next IUGG assembly, which will take place in Incheon, still in South Korea, in 2027.

Finally, the undersigned was elected as new member of the International Committee on Dynamical Meteorology (ICDM; <https://www.iamas.org/icdm/>). ICDM plans to organize a workshop in China, at the Nanjing University International Conference Center, in October 2024. The topic of the workshop is currently under discussion, but it will likely address advances in the study of intense events and of their predictability.

Among the activities proposed for the promotion of meteorology in Italy, the undersigned was part of the scientific committee of the researcher-forecasters workshop "Beyond the week: the challenge of long-term forecasts", which took place this year in Turin in September, and which focused on monthly forecasts, of growing interest for both researchers and operational bodies in the sector. Organized under the aegis of Italia Meteo and the professional section of AISAM, the workshop, which was attended by around fifty people in person and around one hundred remotely, was the opportunity of a meeting point between the world of research and the operational institutions.

The undersigned was part of the scientific and organizing committee of the 9th CNR-ISAC Summer School of Castro Marina "The challenge of precipitation forecasting" during which he also held three

hours of lessons. The Summer School, this year co-organized with the Polytechnic University of Marche, took place at its historic headquarters in Castro Marina, from 3 to 7 July 2023. This year, the aim of the Summer School was to provide a complete overview of current knowledge on precipitation forecasting, especially considering intense meteorological events. The school was primarily aimed at doctoral candidates, master's students in atmospheric sciences, postdoctoral researchers and operational forecasters from regional and national weather agencies. This year, thanks to the support of the American Meteorological Society, it was possible to invite two researchers working at the National Center for Atmospheric Research (NCAR) in Boulder, Colorado: Richard Rotunno, who held four lectures on meteorological predictability and hurricanes, and Stefano Alessandrini, who spoke about the verification of ensembles and "analogues". The students' feedback was very positive, due to the high quality of the lessons and the social activity which allowed the establishment of new scientific collaborations.

Finally, the undersigned participated in the work of the scientific and organizing committee for the 5th AISAM Congress, scheduled from 5 to 8 February 2024 in Lecce; furthermore, was a member of the scientific committee of the 11th European Severe Storms Conference (ESSC), held in May in Romania, and of the International Conference on Alpine Meteorology (ICAM), held in June in Switzerland.

Uni-Met (<http://www.uni-met.it/>) constitutes a sort of discussion and coordination table for eleven Italian meteorological associations, to which the previous IAMAS national delegate (dr. Teodoro Georgiadis) provided the endorsement. The undersigned reiterated his support for the activities of the table, which concern, among the other, various archiving activities, in particular:

- DABAT@ for Tornadoes in Italy: the historical part 1800-1900 has been expanded with research on newspapers and magazines
- ITALIAN WEATHER DIARY: list of weather events from 1900 to today
- WEATHER CALENDAR: new reports and disasters for 2023 have been added (Emilia-Romagna flood and the recent European hail record).
- The 9th Roundtable took place regularly on Saturday 7 October 2023 in Varese at the Pre-Alpine Geophysical Observatory.
- The ROSMI Group, a Network of Italian Meteorological Observatories, was established, which currently has over 25 observatories, many of which are secular.

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

Overall, the participation in the Union has brought to the attention of the national and international scientific community the activity carried out by various national associations in the field of atmospheric sciences and meteorology. These considerations indicate that the benefit/cost ratio is to be considered favorable.

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

The 8th edition of the CVC (Convective and Volcanic Clouds detection, monitoring and modeling) training school (<http://www.cvctrainingschool.org>), to which the undersigned contributed as Keynote lecturer, was held in Nicolosi from 2 to 8 October 2022; at the request of the organizers, the undersigned has collected information in order to request funding under the IUGG–Grant Program. Unfortunately, the numerous bureaucratic formalities required and the poor and late responses from the IAMAS secretary led the organizers to renounce the request. Also in the recent past, the very long interaction times made it impracticable to request funding from IUGG both for the organization of events and for submitting nominations for the various prizes. It is hoped that the situation will improve with the installation of the new management committee. Furthermore, the complexity of the application procedure indicates that, if one wants to make the announcement accessible to all, it would

be necessary to simplify the process, for example by making the form for participation in these initiatives accessible without requesting it from the associations' secretariat.

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

.....

7. If Union with CNR Commission, short summary about the 2023 CNR Commission activities

As regards the activities of IUGG in Italy, the Commission for the participation of the CNR in IUGG operates as the "Italian National Committee" and is composed of the Italian Titular Representative in IUGG, dr. Fausto Guzzetti, and by the Italian titular representatives in the eight IUGG Associations. The commission found a way to meet during a break in the rich conference program at Berlin, reporting the activities of the individual associations in the last four years, and proposing to soon organize the second part of the workshop "State of the art and perspectives in the predictability of events natural", which took place in Rome in the Marconi room of the CNR in November 2019 and which was unanimously considered a great success. Following the in-person meeting, several remote meetings followed, in which the organization of the Workshop was better defined, the title of which will be "Potentially dangerous natural events: models, uncertainties, communication", which presumably will be held in Rome in September 2024.

8. Conclusions

9.

Various activities relevant to the national community were carried out during the current year:

- interaction with some national associations in the sector;
- organization of events relevant to IAMAS activities and promotion in the national community;
- participation in the activities of the Berlin General Assembly;
- appointment to the Dynamic Meteorology commission.

Signature

Bari, 5 March 2024

