

**Name of the Union**  
**IAMAS-IUGG**  
**Activities' Report - Year 2019**

**Delegate/Author Name**

**Mario Marcello Miglietta**

**1. Introduction**

2019 was an important year for the Italian meteorology. The definition of the role of the new Italia Meteo agency, which should finally allow a rationalization of the meteorological activities in our Country, the consolidation of the Italian Association of Atmospheric Sciences and Meteorology (AISAM) as a reference body for the different operational and academic institutions in the sector, as well as the birth of the Professional Weather Association (AMPRO) are changing the scenario of the Italian meteorology. Perhaps there has never been such a ferment of initiatives in the Italian meteorology as in this historical moment. In this constantly evolving context, as IAMAS-IUGG delegate, I tried to affirm and enhance the role of IAMAS in the national context.

**2. Main activities carried on by (Union name) during 2019 relevant for Italy and for CNR**

During the Association's Executive Committee, held in Montreal in the framework of the IUGG General Assembly, the outgoing President of IAMAS favorably highlighted the use of the IAMAS-IUGG logo in communications of UNIMET, which constitutes a sort of national coordination of several Italian meteorological associations. In line with what has been done by the previous IAMAS delegate (Dr. Teodoro Georgiadis), I have confirmed the endorsement of this initiative.

The financial support provided by IAMAS and IUGG for the organization of the first TEAMx workshop (Multi-scale transport and exchange processes in the atmosphere over mountains - program and experiment), held in Rovereto in the period 28-30 August 2019, is worthy of mention. TEAMx is an important scientific program, which aims to study mountain meteorology with the most recent modeling and observational instruments, also through a specific measurement campaign planned in the Alps in 2023. This program is ideally linked to the Mesoscale Alpine Program (MAP), an important measurement campaign that took place in the Alpine area in 1999. Numerous researchers from various parts of the world participated to the workshop, including a high percentage of Italians, who showed considerable interest for the activities proposed in the program and for the forthcoming experimental campaign.

**3. Activities carried on by (Italian Delegate name) within the Union during 2019 and impact on the Italian scientific community**

The activities carried out as delegate in 2019 were manifold.

A first objective was to make the activity of the Association better known and to propose the possibility of endorsement by IAMAS to some of the meteorological activities planned within our Country, such as the events organized by AISAM, the biennial summer school organized by ISAC-CNR (<http://ss2020.le.isac.cnr.it>), the CVC Convective and Volcanic Clouds detection, monitoring and modeling training school (<http://www.cvctrainingschool.org>). The organizers of the latter event have expressed interest and intend to send a request for financial support to IUGG for the next edition, which should presumably be held in 2021.

The 10 commissions that coordinate the activity in IAMAS have not been updated since 1989, despite the continuous evolution that meteorology has known in recent years. During the meeting of the IAMAS Executive Committee in Montreal, I proposed the establishment of a new commission that deals with mesoscale meteorology, given the progress in recent years on the knowledge of small-scale phenomena, obtained using both advanced instrumentation and fine-resolution modeling. In the meeting of the Steering Committee of the International Conference on Alpine Meteorology (ICAM), of which I am one of the two representatives for Italy, I therefore proposed a connection with the activities in IAMAS, in particular in relation to this possible new group of work.

With the other Italian IUGG delegates we held several preparatory meetings, both in streaming and during the Union General Assembly in Montreal, with the purpose of planning a conference about the different types of forecasting for natural hazards, which was held in Rome, in the Marconi room in the headquarters of CNR, on 26-27 November 2019. The workshop on the “State of the art and perspectives on the forecast of natural events” was organized considering the prediction of natural hazards both in a short- and long-term perspective, and was open not only to scientists but also to stakeholders. Given the limited capacity of the room (about 80 seats), the conference was also streamed.

The aim of the workshop was to bring together several experts on the prediction of different natural hazards in order to evaluate methods, techniques, tools useful for their understanding and to identify what our current ability to predict natural hazards is and what the prospects for the future are. The workshop focused on 16 talks that dealt with 8 main risks/phenomena. For each hazard/phenomenon, two speakers were selected for each of the eight IUGG Associations. The presentations were interspersed with periods of collegial discussion, which constituted the real central moment of the workshop, dealing with the current forecasting capabilities and the perspectives in the predictability of the natural events that were considered. I played the role of chairman in the final session, animating the debate in the last slot reserved for discussion. The debate was very interesting in a "multi-danger/multi-risk" context, which is talked about a lot and which is often poorly founded from the point of view of scientific rigor. The event was, in the unanimous opinion of the attendees, a great success, and should follow up on two new meetings scheduled for 2020 and 2021, of which the first will deal with the risks overlooked in the first event, and the second will focus on the interaction with stakeholders.

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

The participation in the Union has made it possible to bring to the attention of the Association the activities carried out by the Italian national community of atmospheric sciences and meteorology. This implies an advantage for the national system, through an increase in visibility and authoritativeness within the Association. Moreover, the participation in the Union allows to be able to benefit from a part of the funding allocated for this purpose. For example, the TEAMx workshop, organized in Rovereto and attended by many Italian researchers, was financially supported by IAMAS-IUGG. In conclusion, I believe that the membership benefit/cost ratio is extremely 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 has certainly been very important for coordinating and strengthening the national activities within the Association. The organization of the national workshop “State of the art and perspectives on the forecast of natural events” made it possible to promote the Association's activities and to create greater awareness in the national scientific community. The proposal for two forthcoming meetings, extended not only to the scientific community and more focused on interaction with stakeholders, will further improve the external interest in the Association's activities.

#### **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 2019 CNR Commission activities**

NO.

#### **8. Conclusions**

The balance of the first year as a national IAMAS delegate is certainly to be considered positive. If on the one hand the opportunity to participate in the General Assembly has allowed me to understand the structure and objectives of the Association, on the other hand the participation in the CNR-IUGG Commission has made it

possible to share with the other associations of the Union the objective of organizing a workshop of great interest for the national scientific community and for the operators in the sector.

The commitment for the current year is to continue along this path, promoting and supporting new initiatives, internal (workshops) and external (schools, conferences, dissemination activities) to the Association, and improving the interaction with the various national associations.

Padova, 10 marzo 2020

Signature

A handwritten signature in black ink, appearing to read "Marco Mignola". The signature is written in a cursive style with a large initial 'M' and a long, sweeping underline.