

The overall Italian Contribution to YOPP-SH activities

Vito Vitale¹ on behalf of the whole Italian community involved in YOPP-SH

¹ National Research Council, Institute of Polar Sciences (CNR-ISP), Bologna, Italy

Since the beginning Italian research community was very interested to YOPP. This large interest is well demonstrated by the number of Italian projects that requested since 2016 YOPP Endorsement: 11 projects received by YOPP such endorsement, and to them we need to add large participation to two international projects leaded by not Italian researchers.

On the other hand, PNRA and several Italian Research and Education Institutions supported in several way the large interest of the national community and YOPP activities:

1 - a specific line devoted to YOPP was included in the 2018 PNRA call, through which five Italian projects to carry out research in the fields of atmospheric science, sea-ice and polar ocean dynamics received support. Projects who aimed for PRNA funding were required to receive formal YOPP endorsement prior to their proposal submission. Funded projects add to other 3-5 PNRA projects and 3 observatory that yet indicate interest to contribute to YOPP-SH Summer Special Observing Period (SOP);

2 – during Summer SOP 2018-2019, more than 100 extra-soundings were launched from Mario Zucchelli and Concordia stations by personnel of the Meteo Observatory (RMO) and winter overs. These activities where also coordinated with the similar activities carried out by the KOPRI colleagues at the Jan BoGo station;

3 – a large Educational activity, CAPIRE-YOPP, was carried out in connection with the Summer SOP, involving about 400 students and from intermediate and high school in an active programme including dissemination events, seminars, interaction with Italian Meteo Service. CAPIRE-YOPP also supported extra soundings (about 30). Launches transported on sky drawings and other products by students, while high school students use data acquired for analysis activities in Italy;

4 – being a call for project not open when the idea for YOPP-SH winter campaign consolidated and was time to provide commitment for participation. Italian researcher work to prepare a possible proposal for contribution, and submit for a special support to CSNA. This application was successfull and resources was provided by PNRA with the aim (i) to better sustain winter ground-based activities during YOPP campaign and (ii) provide resources for extra soundings that time planned at three stations: Jan BoGo (TNB area - in cooperation with KOPRI), Concordia, Marambio (in cooperation with IAA and SMN). VAISALA sondes for 130 extra soundings have been acquired (more 20 sondes provided by KOPRI colleagues). In addition 110 ANASPHERE SLWC sondes have been also provided to address one of the key topic of this winter campaign: atmospheric water budget and vertical distribution.

5 – finally the National Antarctic Data Centre (NADC) is engaged to provide support for metadata and datasets and make concrete the bridge with the YOPP-SH Data management system. This activity and contribution can be quite relevant in relation to YOPP-SH legacy.

Details on projects contributing to YOPP-SH and carried out activities will be provided, together with some examples of the results obtained.