

Meeting Report

Report on the COSPAR Capacity Building Workshop

"Planetary Sciences Data Analysis"

Antofagasta, Chile, 16-27 January 2023

(Carlos Gabriel, Chair of COSPAR Panel on Capacity Building)

The workshop took place at the Universidad Católica del Norte (UCN) in Antofagasta, the core of the Atacama Desert, from 16 to 27 January 2023. Organised mainly by COSPAR together with UCN, the University of Chile (Santiago de Chile) and the Uruguayan University of the Republic, it was supported by international organisations, such as the space agencies NASA and ESA and the European Southern Observatory (ESO). It was also sponsored by local organisations such as the Meteorological Society, the Centre for Astrophysics and Related Technologies (CATA), the Millennium Institute of Astrophysics and the Geological Society of Chile. The company L3Harris contributed by offering free IDL licenses for the students for 6 weeks.

The workshop was proposed and organised locally by Prof. Millarca Valenzuela from UCN, Prof. Gonzalo Tancred from the Universidad República del Uruguay who scientifically directed it, and Prof. Patricio Rojo (Universidad de Chile).

The aim of the workshop was to develop interesting scientific projects guided by experts from missions such as Hayabusa 2, Mars Express, JUNO, New Horizons and DART. This involved learning various analysis tools such as Spice, Small Body mapping Tool and programmes dedicated to the specific analysis of data from the different missions. Representatives from NASA's Planetary Data System, JAXA's Science Data Archive and ESA's Planetary Science Archive assisted in the extraction and management of data from the various databases.

Details of the workshop can be found on the Capacity Building Programme pages (<https://cospa-rhq.cnes.fr/Meetings/Workshops.html>) and on the local website (<http://cospar.das.uchile.cl/>).

Participants

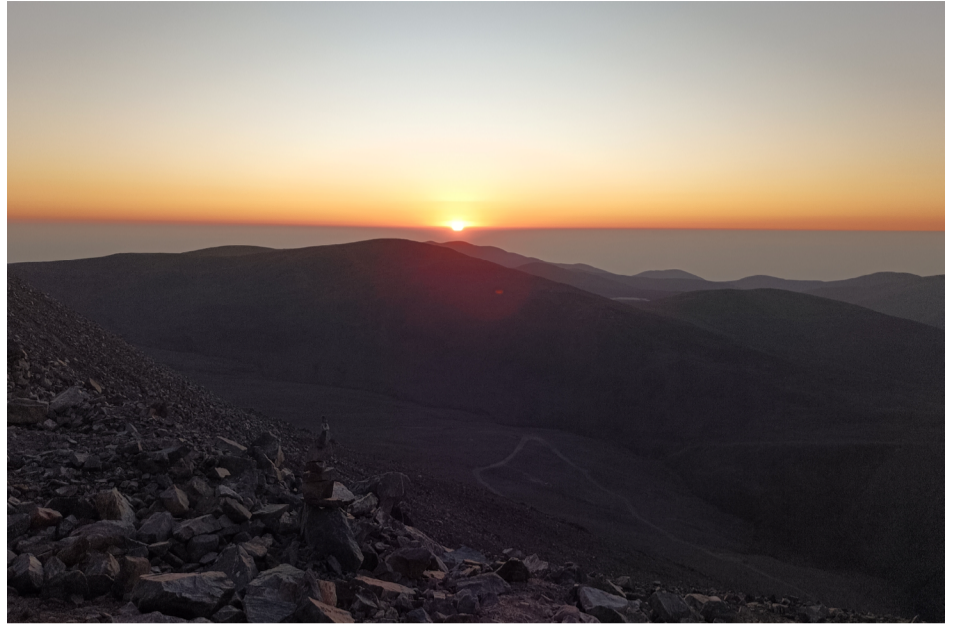
A total of 37 candidates were selected out of a total of 101 candidates. The selected students were all, with one exception, from Latin American countries (11 from Chile, 9 from Brazil, 6 from Argentina, 3 from Uruguay, 3 from Mexico and 1 each from Bolivia, Colombia, Ecuador, Peru and Japan). These workshops are defined as regional, for several reasons, including financial ones. A good candidate from a different region has to bear the costs of his or her participation. A couple of the originally chosen students had withdrawn their participation a few weeks before the event, but were easily replaced by other candidates. The limitation to 37 students was mainly due to financial reasons, the somewhat low local funding together with inflation especially related to flight costs forced us to be very conservative from the beginning.

The geographical distribution of the students showed a strong regional diversification. The gender distribution showed a 57/43% female/male student ratio, which is quite typical considering the workshops previously organised in this region.

Lecturers

For most of the speakers/supervisors this was their first participation in a COSPAR Capacity Building Workshop (CBW), most of them were sent by the space missions we have consulted. Juno, a NASA space probe orbiting Jupiter, sent

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From left to right

1. Telescopes from UCN
2. Sunset
3. The four Very Large Telescopes at Paranal
4. Searching for meteorites
5. Participants and lecturers on the last day of the Capacity Building Workshop