



GEO Week 2023 took place in Cape Town, South Africa, from 6-10 November 2023, with the GEO Ministerial Summit on 10 November. Organized by the Group on Earth Observations (GEO), the event was hosted by the Government of South Africa. Yasuko Kasai, Vice-Chair of the COSPAR Task Group on GEO and Chair of Sub-Commission A1: Atmosphere (including Troposphere and Stratosphere), Meteorology, and Climate, spoke at the Summit on behalf of COSPAR. Here is a transcript of her speech.

COSPAR Statement for the 2023 GEO Summit

It is my pleasure to present, on behalf of the COSPAR leadership, the COSPAR perspective on priorities for GEO. Largely because the climate does not respect geo-political boundaries, the value of Earth observations, especially for critical climate-change studies, lies primarily in the ability to measure many variables frequently, over large spatial scales, and for long time-periods. Many nations acquire space-based and suborbital data of relevance, but only by combining data from many sources can we hope to develop adequate constraints on climate modeling and prediction.

As such, we strongly endorse the efforts of GEO to make available to the global climate research community all data relevant to climate-change studies. This entails several components. First, a policy of open data is required; this must come from decision-makers at high levels, and we encourage GEO to use its influence to realize this objective as much as possible. Then, there must be adequate data storage and distribution infrastructure, which requires having both the facilities and the expertise to archive and distribute data. COSPAR is committed to helping spread the relevant expertise through our Capacity Building program. Proposals for Capacity Building Workshops are generally initiated by established Earth scientists in collaboration with a local institution and local scientists in the host country. The workshops are funded jointly by COSPAR and the host country.

One additional requirement for data to actually be of use to the scientific community is adequate documentation. Whereas Open Data Access is already a well-established goal of GEO, documentation is usually either ignored, or the requirements imposed are utterly unrealistic, and little progress has been made in this area. Creating good documentation can be a costly activity. However, we believe an excellent solution in most cases is to document datasets in peer-reviewed publications. The peer-review process in high-quality journals can assure that the papers provide effective explanation of the strengths and limitations of the datasets, validation studies can be included in such publications, and the details of the data format and structure can and should be included in Supplemental Material. Further, journals tend to have longevity that a locally hosted "report" might not.

In addition to the Open Data Access and other efforts GEO is making to improve the availability and use of Earth science data, helping establish the peer-reviewed-journal-article-approach as the norm for Earth science data documentation could be a major contribution to the overall GEO effort.

Thank you.