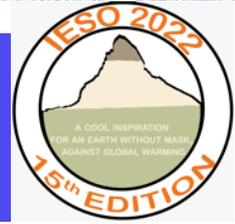


IESO 2022



15th EDITION ITALY-AOSTA HOST COUNTRY

4th NEWSLETTER

IESO 2022 will take place online, in Italy, from 25 to 31 August

Up to now 37 countries have already communicated their intention to participate in IESO 2020 and about 150 students have chosen which kind of test they will attend.

- ⇒ *IESO staff apologizes for some delays in replying but the requests have been many and very different; technical problems relating to payment methods and data entry are solved gradually, looking for the best solutions;*
- ⇒ IESO staff asks you to complete the application as soon as possible, so that we can have an idea of the participants in the different tests.

- ⇒ the two scheduled *lectio magistralis* can be followed directly or in streaming. Students and mentors are invited to participate as useful topics will be proposed to face the subsequent tests;
- ⇒ some tests will take place during the IESO week, others can be prepared before, by the students, individually or in teams, as better explained below;
- ⇒ some activities **will be simultaneous**, while others will be held following three time zones: 1) Asia and Oceania, 2) Africa and Europe, and 3) North-Central-South America
- ⇒ we hope that many students will want to participate in the DMT and NTFI, which give the opportunity to receive medals. We remind that the greater the number of participants, the greater the number of medals that can be awarded;
- ⇒ we thank the mentors who have given their willingness to participate in the ESP jury. Others are welcome;
- ⇒ further information, answers to FAQs will be provided in the next newsletter;
- ⇒ a **video conference is scheduled for mentors** for any clarifications, especially for newcomers, **on 8 August at 3 pm Rome time via zoom**, to allow everyone to participate. Mentors will receive a few days before the link to the meeting;
- ⇒ all the countries are invited to send an **"official" photo of the team**, as soon as available, to be published on the site. Photos in the field can also be sent to info@IESO2022.com and published on the website (family releases acquired);
- ⇒ all the countries **are invited to find local sponsors or patronages (no economic funding is requested)** to support the event, sharing their logo and disseminating information. Logo and information will be visible on a dedicated page, and shared with all participating countries, as already some Italian scientific associations.

The agenda and the activities illustrated in previous Newsletter are confirmed



IESO 2022 schedule

	25/08/2022	26/08/2022	27/08/2022	28/08/2022	29/08/2022	30/08/2022	31/08/2022
AM	12.00 AM ROME TIME OPENING CEREMONY	10.00 AM LOCAL TIME DATA MINING TEST 1-2	LECTIO MAGISTRALIS: GLOBAL WARMING, FROM THE SKYWAY, MOUNT BLANC DIRECT AND STREAMING	ESP PREPARATION	NTFI PRESENTATION	EARTH LEARNING STUDENTS' IDEAS PRESENTATION	12.00 AM ROME TIM CLOSING CEREMONY
PM.	4.00 PM LECTIO MAGISTRALIS ASTRONOMY, FROM THE REGIONAL OBSERVATORY OF AOSTA VALLEY DIRECT AND STREAMING	2.00 PM LOCAL TIME DATA MINING TEST 3-4	ESP PREPARATION	ESP PRESENTATION		IESO EARTH SCIENCE AND ART, IESO PLEDGE	

TEST, description, participation, awards, evaluation

the Data Mining Test (DMT)

This is an individual test. It consists in 4 independent investigations (or case studies).

- ⇒ 2 tests will take place on August 26th, in the morning (10.00-13.00),
- ⇒ 2 in the afternoon (14.00-17.00) local time of the three zones, even if each test will presumably require an hour to solve the different questions.

For each question, the student needs to explore online data which links are provided. A series of questions will guide the student, step by step, through each investigation.

Knowledge can help ... but analyze of the data may be sufficient!

The student in the various tests will have to fill in his google form, with single or multiple-choice answers, with data/numbers, abbreviations (for example SW for Southwest), and may have to send a screenshot.

He/she will have to do simple calculations (a calculator is useful).

The text of the Data Mining Tests will be sent to the mentor in charge of the team, 2/3 days before, for translation into own language, if necessary.

He will have to send the translated text as soon as possible to Info@ieso2022.com, so that it can be sent to the students at the right moment.

The answers will be checked automatically by the google system, their evaluation will be preliminarily decided by the Evaluation Board.

The answers will be checked by the mentors of the individual countries, as always.

The awarding of medals will also be decided by the Evaluation Board.

The DMTs were created in collaboration with researchers, with various Italian universities and research institutions, such as INGV, the National Institute of Geophysics and Volcanology, the OGS of Trieste, the National Institute of Oceanography and Experimental Geophysics, INAF National Institute of Astrophysics and Saint Barthelemy Astronomical Observatory-Clement Filletroz Foundation



the National Team Field Investigation (NTFI) *

Up to 2 teams from each nation can participate in the NTFI , creating its own field investigations for presentation during the IESO.

Each team will have to preliminarily prepare a presentation, or a film, to be sent to Nir Orion nir.orion@weizmann.ac.il, before the start of the IESO, possibly by August 15th.

We inform also that mentors of students attending NTFI who need further information can contact Nir Orion.

The team, possibly in presence and on field, or remotely, if distance, costs, and pandemic do not allow it, will have to analyze a geological, environmental issue, and possibly carry out "laboratory" investigations.

The field investigations will be presented for Jury evaluation during the IESO program. The presentations may be live on Zoom, or pre-recorded totally or partially, depending on the countries and students' ability to have good Zoom access, on morning 28th.

Students will have 15-20 minutes to present it.

The final evaluation considers: Originality, Scope, Independence, Logical sequence.

The team can obtain gold, silver, bronze medals based on Evaluation Board criteria

More information can be obtained on the web site.

The Earth Systems Project (ESP)

International groups of students will investigate one of the four topics on Earth System Phenomena, given at the beginning of IESO.

They can choose the subject on which they want to work with an international team.

The team will be organized from the IESO staff, according to the time zone, to allow the students to work together online on afternoon 27th and morning 28th, searching for useful materials on the web and drawing a poster; a Format of the poster will be provided.

Then they have about 12 minutes to make presentations to an international jury and 3 minutes to answer questions.

The ESP will be evaluated by an International Jury during the IESO, on afternoon 28th.

The presentations should be live on Zoom/ other platforms; but they may be pre-recorded totally or partially, depending on the countries and students' access to good Internet connectivity

The final evaluation considers a wealth of scientific content, collaboration between team members, effective communication.



The Earth System pledge

The ES pledge is a way for the students to let us, and their peers, know how they are going to use their knowledge and skills in the future.

The students will be asked to submit their Earth System pledges to their mentors for approval before being submitted to the IESO Jury, mentors must send to the info@ieso2022.com their students' pledges.

Earth System Pledges will be posted on the website IESO2022.com and selected for public recognition during the closing ceremony: students, mentors and observers will vote for their favorite pledge

The student Earth system pledge is helpful in applications for jobs and to go to university. It is not just what you know, but what you plan to do with it that is important.

Will students plan to help an issue facing their community, country, or the world? Will they work on natural risks and hazards warning or mitigation? Which Earth systems spheres interest them the most? The more specific the better. A good pledge is less than 200 words long.

the Astronomic game

An astronomical game created by Alessandro Bogliolo of the University of Urbino, in cooperation with INAF is proposed - which allows the student to participate in a real treasure hunt from his/her smartphone by interfacing with a bot (the Treasure Hunt bot, developed by Lorenz Klopfenstein, Digit srl) through the Telegram messaging app, and by consulting a convenient online map.

Students, individually or in teams, will be able to get involved.

It is requested to have:

- ⇒ a smartphone
- ⇒ a Telegram account
- ⇒ a data connection
- ⇒ a QR Code reader

The fastest will win.

IESO Art and Science

Students are requested to share some of their poems, paintings, sculptures, rap songs, earth science memes.

All students are excellent at Earth Science, but their talents do not end there.

Many of them are excellent artists in various media including the visual arts, writing, and theater arts.

This is an opportunity to share some of their poems, paintings, sculptures, rap songs, earth science memes etc. Submissions should be socially appropriate and address environmental or Earth systems issues or concepts. Many of the submitted artistic pieces will be included in the closing ceremony.

Artistic works need to be sent the country's mentor and then the mentor will submit them to be posted on the website IESO2022.com and selected for public recognition during the closing ceremony: students, mentors and observers will vote for their favorite artistic product.

This is a great place for students to communicate their emotions regarding the science that we study.



Earth Learning students' Ideas. ELSI

Students are invited, individually or in team, to produce a reel, or a short YouTube video

- ⇒ https://www.earthlearningidea.com/home/Videos_general.html
- ⇒ explaining a practical hands-on activity or demonstrating a geological phenomenon, theory, https://www.earthlearningidea.com/home/Teaching_videos_workshops.html
- ⇒ a short tale, https://www.earthlearningidea.com/PDF/Geological_fairytale.pdf

This new IESO test is dedicated to the memory of Chris King.

ELSI need to be sent to the country's mentor and then the mentor will submit them to be posted on the website IESO2022.com and selected for public recognition during the closing ceremony: students, mentors and observers will vote for their favorite ELSI

A video or reel suitable to explain a phenomenon or a theory can last anywhere from a few seconds to a few minutes.

To the next newsletter.

We look forward to seeing all mentors at the videoconference on August 8, 3 pm Rome time, via zoom, link will be sent via email.

*Susanna - IESO 2022Chair
IESO 2022 team*

