

vEGU21 Media Tip Sheet: Geoscience games!

Games can teach people of all ages about important geoscience-related issues, from ocean acidification or volcanoes to river management. Check out some of the board and computer games and virtual reality experiences offered at the meeting. And don't forget about the Olympics!

<u>Can a local weather station be used in place of on-site measurements for heat stress assessment in a sports setting?</u>

New research examines whether local weather stations record accurate playing-field conditions for various sports playing surfaces (grass, turf, and hardcourt tennis).

Tues 27 Apr 15:41 CEST

Session NH1.3: Extreme heat events: processes, impacts and adaptation

<u>Crabby's Reef - Using games to bring people closer to the issue of ocean acidification</u>

Inspired by classic arcade games, this web-based game raises awareness about ocean acidification's effects on marine life.

Wed 28 Apr 14:17 CEST

Session **EOS7.5**: Games for geoscience

Breaking the Silos: an online and narrator-led role-playing game for multi-risk DRR management

This role-playing game is designed to support decision-makers and stakeholders as they try to manage the complexities of implementing disaster risk reduction measures when facing a fictional natural disaster. The game has already been used successfully during a World Bank risk conference.

Wed 28 Apr 14:19 CEST

Session EOS7.5: Games for geoscience

Designing the Virtual River Game to support the collaborative exploration of river interventions

Virtual River Game challenges players to manage a schematic stretch of a Dutch river. Players freely design and test typical Dutch river interventions.

Wed 28 Apr 14:21 CEST

Session **EOS7.5**: Games for geoscience

<u>Introducing the complexity of climate change through a videogame: Change Game – Play with the Planet</u>

In this app-based game, players are in charge of the growth and development of a city, including providing energy, water, and food to meet the population's needs. The goal is to learn about sustainable development and how our choices affect the climate.

Wed 28 Apr 14:25 CEST

Session **EOS7.5**: Games for geoscience

Gamified geo-challenges for immersive learning

Combining virtual reality, a web-based geotour, mobile learning games, and a street-view walking trail, plus a virtual robot guide, Project LIVE (Learning through Immersive Virtual Environments) is designed for use in undergraduate teaching and STEM outreach.

Wed 28 Apr 14:27 CEST

Session **EOS7.5**: Games for geoscience

Visual Geogame: if you can draw it, you can learn it

From the makers of "Escape Volcano" and "GeoTrivial" comes a new, Earth science-based game designed to help students requiring learning support.

Wed 28 Apr 14:29 CEST

Session **EOS7.5**: Games for geoscience

(Re)politicizing disaster governance: Simulating conflicting interests over matters of concern by means of a board game

A board game that simulates political decision-making on disaster risk reduction in western Ugandas erves as an example of how disaster risk reduction can be transformed into a public issue.

Wed 28 Apr 14:31 CEST

Session **EOS7.5**: Games for geoscience

Greenworks: Science, role-playing, and community transformation

This online role-playing game allows university students to practice diplomacy and policymaking to resolve environmental issues in a fictious world and then implement a community project to effect change in the real world.

Wed 28 Apr 14:33 CEST

Session **EOS7.5**: Games for geoscience

Project rAn: games to promote awareness of natural disasters in young students

This game, adjusted for multiple age groups, teaches kids about natural hazards and helps kids learn how to prepare and react should a hazard strike their city.

Wed 28 Apr 14:35 CEST

Session **EOS7.5**: Games for geoscience

Immersive visualization of ocean data in a game engine

Virtual reality experience to help Earth scientists and other users visualise and study ocean processes.

Wed 28 Apr 16:33 CEST

Session ESSI4.2: Innovations in scientific data visualization

GioGas: Edutainment and gas hazards

Targeting children ages 11 to 13, this app- and web-based video game spreads information on radon gas hazards, from learning how to identify it to managing the hazard.

Thurs 29 Apr 14:03 CEST

Session NH8.5: Radon: geogenic sources, hazard mapping, and health risk