



Central and South America webinar

March 4, 2021 – 9:00 – 17:00 hs (GMT-3)
13:00-21:00 hs CET

Coordinators:

Andrea Coronato (Argentina) – Grace Alves (Brazil)

INTERNATIONAL GEOMORPHOLOGY WEEK 2021



Breylla Campos Carvalho
Instituto Brasileiro de Geografia e Estatística (IBGE) Brasil.

9:15-10:15

Past, present and future: how variations in sea level are reflected on the coastline

Shoreline behaviour is indicative of the trends to which the coastal system is subject, so understanding the meteo-oceanographic processes is essential to evaluate the coastal geomorphology. In this talk it will be presented the results of an investigation carried out along the Rio de Janeiro coastline, combining sea level data, wave reanalysis dataset and satellite imagery.

Planetary geomorphology: bringing worlds closer together through comparative geomorphology

Geomorphology as a discipline has extended its horizons reaching other celestial bodies. Planets, dwarf planets, moons and asteroids can be studied by applying the geomorphological premises. Through indirect information planetary surfaces can be interpreted in a comparative way. In this talk, the different worlds will be explored, recognizing the characteristic landforms of each one of them and how comparative study enhances this discipline.



Mauro Spagnuolo
Universidad de Buenos Aires, Argentina.

10:15-11:15



Fabiano Pupim
Universidade Federal de São Paulo, Brasil.

11:15-12:15

Deciphering the responses of fluvial mega-fans to Quaternary paleoenvironmental changes: lessons from the Pantanal plain, Brazil

The evolution of megafans is closely related to tectonic and climatic factors at various space-time scales. In this lecture, I will focus on how river megafans respond to environmental changes during the late Quaternary. I will present our multitechnical approach and the main research results.

Geomorphological effects of tropical cyclones in Costa Rica

Climate change, high vulnerability and exposure make Costa Rica a country with a high risk of being affected by tropical cyclones. The processes with the greatest recurrence are floods and landslides. There are several geomorphological methodologies to map, zoning and understand these processes. This presentation summarizes some of these case studies where Geomorphology provides answers to complex problems in this Central American country.



Adolfo Quesada Román
Universidad de Costa Rica, Costa Rica.

14:00-15:00



Catalina Pino Rivas
BGC Engineering Inc., Chile.

15:00-16:00

Rock glaciers study in the Semi-arid Andes

Rock glaciers are the most prominent periglacial landforms in the Semi-arid Andes. They have received an unprecedented attention during the last decade. As it is a rather recent research topic particularly in Chile, its dynamics, internal structure and potential water supply, especially its changes in response to climate change, are not known with great confidence. The volumetric variation of two rock glaciers between 1956 - 2018 will be presented, in order to determine the influence on their geomorphological evolution, climatic variations and potential hydrological implications for the basin.

Neotectonics evidences of the Magellan-Fagnano transforming plate edge, Isla Grande de Tierra del Fuego, Argentina

The morphological features of the eastern segment of the Magallanes-Fagnano fault system along the South American and Scotia tectonic plates boundary will be presented. The morphotectonic knowledge of the plate transforming boundary is important for a better understanding of its potential as a seismogenic source.



María Romina Onorato
CIGEOBIO-CONICET, Universidad Nacional de San Juan, Argentina.

16:00-17:00