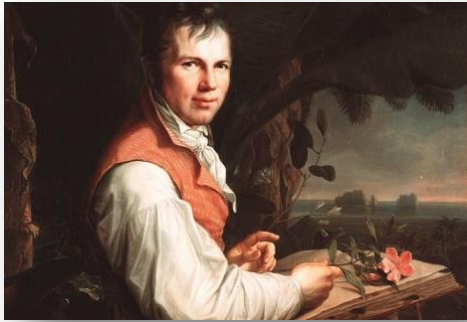




INQUA Focus Group QUASAP:

Kinds and rates of soil-forming processes reflected in Quaternary soils and palaeosols and their use as palaeoenvironmental archives

SHORT TITLE: QUATERNARY SOILS AND PALAEOSOLS



THE ROUTE OF HUMBOLDT

Rates of pedogenesis in the dynamic landscapes of Central Mexico:

From young tephra of the Transmexican Volcanic Belt to the dunes of the Atlantic coast

6-13 December 2016

The INQUA Focus Group QUASAP has been newly established in 2016, based on the former INQUA Project RAISIN. QUASAP will continue organizing annual workshops in the informal format of the RAISIN workshops, focusing on exploring soils and paleosols in the field that may give insight into rates of soil-forming processes under different environmental conditions. The first QUASAP workshop and field trip will be held in Mexico in December 2016. We will roughly follow the route that Alexander von Humboldt took, when he visited and measured the largest volcanoes of New Spain, from January 20 till March 7, 1804.

- Day 1 (Dec 6): Registration of participants, welcome evening. Stay overnight in Mexico City.
- Day 2 (Dec 7): Soil formation on young volcanic materials: Excursion to the Chichinautzin volcanic field. Fieldtrip leader: Dr. Christina Siebe. Stay overnight in Mexico City.
- Day 3 (Dec 8): Presentations at the Institute of Geology, UNAM, Mexico City. Stay overnight in Mexico City.
- Day 4 (Dec 9): Middle-Late Pleistocene tephra-paleosol sequence of Tlaxcala. Fieldtrip leaders: Dr. Sergey Sedov, Dr. Elizabeth Solleiro. Stay overnight in Tlaxcala.
- Day 5 (Dec 10): Visit of the Cantona archeological site. Along the road, soils and paleosols developed on volcanic materials of different ages will be shown. Arrival in Naolinco, Veracruz. Fieldtrip leaders: Dr. Sergey Sedov, Dr. Elizabeth Solleiro. Stay overnight in Naolinco.
- Day 6 (Dec 11): Soil development and landslides in Veracruz. Fieldtrip leaders: Dr. Birgit Terhorst, Dr. Sergio Rodríguez, Martine Wilde. Stay overnight in Palma Sola, Veracruz.
- Day 7. (Dec 12): Dunes and paleosols of Palma Sola. The sequence covers approx. 100 ka, with 4 paleosols, the youngest with pre-ceramic artefacts Archeology in Palma Sola. Fieldtrip leaders: Dr. Sergey Sedov, Dr. Elizabeth Solleiro. Stay overnight in Palma Sola.
- Day 8 (Dec 13): Return to Mexico City. Arrival approximately at 4 pm.

Cost of the excursion: 650 USD per person in double rooms; 800 USD in single rooms, including transportation, hotels, and meals (breakfast, field lunch, dinner).

Accommodation will be provided from December 6 until December 12 (7 nights). Meals will be provided from December 6 (welcome evening) until lunch on December 13.

Sites to be visited during the field trip

Day 1 (Dec 6): Registration of participants, welcome evening. Stay overnight in Mexico City.

Day 2 (Dec 7): Soil formation on young volcanic materials: Excursion to the Chichinautzin volcanic field. Fieldtrip leader: Dr. Christina Siebe. Stay overnight in Mexico City.



Overview of the Chichinautzin volcanic field (above) and soil profile on pyroclastic material (right) - day 2.

Day 3 (Dec 8): Presentations at the Institute of Geology, UNAM, Mexico City. Stay overnight in Mexico City.

Day 4 (Dec 9): Middle-Late Pleistocene tephra-paleosol sequence of Tlaxcala. Fieldtrip leaders: Dr. Sergey Sedov, Dr. Elizabeth Solleiro. Stay overnight in Tlaxcala.

Day 5 (Dec 10): Visit of the Cantona archeological site. Along the road, soils and paleosols developed on volcanic materials of different ages will be shown. Arrival in Naolinco, Veracruz. Fieldtrip leaders: Dr. Sergey Sedov, Dr. Elizabeth Solleiro. Stay overnight in Naolinco.



Tlaxcala paleosol sequence, covering a time span of 900 ka (day 4).



Cantona archeological site, built on and with volcanic rock (day 5).

Day 6 (Dec 11): Soil development and landslides in Veracruz
Fieldtrip leaders: Dr. Birgit Terhorst, Dr. Sergio Rodríguez, Martine Wilde.
Stay overnight in Palma Sola, Veracruz.

Day 7. (Dec 12): Dunes and paleosols of Palma Sola. The sequence covers approx. 100 ka, with 4 paleosols, the youngest with pre-ceramic artefacts Archeology in Palma Sola
Fieldtrip leaders: Dr. Sergey Sedov, Dr. Elizabeth Solleiro. Stay overnight in Palma Sola.



Left: Soils on recent volcanic materials in Veracruz

Middle and below: Soil development on old and recent coastal dunes.

Right: Lithic artefact found on a paleosol.



Day 8 (Dec 13): Return to Mexico City. Arrival approximately at 4 pm.