

## NEOTECTONICS TO SEISMOTECTONICS IN PERU

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In Peru, most of the seismic risk is associated with earthquakes occurring in the Benioff zone, at tens to hundreds kilometers deep. However, crustal (5–20 km-deep) events have caused historically strong damage in several areas. During late 70s and early 80s, international programs encouraged the rapid development of Neotectonics, allowing a basic knowledge of structures able to produce hazardous earthquakes. The working group was based at IGP and took benefit from cooperation agreements with IFEA, CNRS and Université Paris Sud. Major active fault systems: Cordillera Blanca (220 km) and Cuzco-Vilcanota (150 km) were mapped. Several kilometric local faults (Quiches, Chaquibamba, Huaytapallana, Tambomachay, Shitari, Ausangate) were identified and thoroughly studied. Recent structural patterns on the Peruvian Amazonia were set, including their relationships with environmental changes. Studies on seismicity served to identify hidden active structures, and to better delineate dangerous regions. National neotectonic map was early compiled in 1982, as contribution to the SISRA (CERESIS) project, and updated until 1991. Science transfer and formation were main components of the neotectonic program. Five French and three Peruvian geoscientists obtained doctoral degrees in France; several professional dissertations were presented, in Peruvian universities. During late 80s and 90s, country troubles, difficulties within national research institutes, better salary and opportunities in mining companies, and the temporal withdrawal of foreign cooperation, led to the dismembering of groups and stop of neotectonic studies. Now, when Seismology is again in progress, the challenge is to recompose working groups, train new people, and set up a funded national program on Seismotectonics.