Roman Teisseyre's Involvement in Field Research

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Professor Roman Teisseyre was mainly a theoretician but often wanted to verify or supplement the results of his research on the basis of measurements done in permanent geophysical observatories and/or specifically designed field projects in various field conditions. One of such projects realized in the last twenty years concerned the study of seismic waves in glaciers. The other was a search for records of rotation seismic waves based on continuous data from various observatories and targeted measurements in these observatories. The results of theoretical and experimental investigations have been described in many publications listed in the bibliography at the end of the present book.

We often participated in organizing and were members of Roman's field campaigns. It was a real pleasure to work with him. He was a cheerful, cordial, colorful, cooperative, and nonconfrontational personality, and thus an excellent companion in such expeditions, where a good team atmosphere is very important. He had an excellent sense of humor and willingly participated in friendly gatherings, preferably with wine. He liked long scientific discussions, to the great benefit of the interlocutors. Roman was also an enthusiastic tourist, which is why we began this text with a photo of Roman and his wife after arriving in the Austrian Alps to make seismological measurements (Fig. 1).

The main aim of the expedition to the Austrian Alps was the study of icequakes. Roman was a pioneer in this kind of research, using seismometers deployed directly on ice. He started the measurements on the Hans Glacier in Spitsbergen as early as 1962, and then, after years, took the decision to continue them on the Pasterze Glacier, Austria (presently, because of global warming, this glacier is gradually decreasing in size). The next two photos (Figs. 2 and 3) illustrate how the specially designed seismometers were installed on the glacier's surface.

The other project was the search for records of rotation seismic waves: Roman carried out systematic investigations based on continuous seismic data in various observatories, mainly in Ojców, Poland, and L'Aquila, Italy. The Observatory in L'Aquila, where research has been done in cooperation with Italian scientists from the *Instituto Nationale di Geofisica e Vulcanologia*, is located in the deep basement of the Renaissance Castle (Fig. 4). Special seismometers to record rotation seismic waves were constructed at the Institute of Geophysics PAS and deployed in this Observatory (Fig. 5).

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Fig. 1. Austrian Alps: Roman and his wife Elżbieta arrived at the mountains.



Fig. 2. Austrian Alps: It's not easy to install seismometers on a glacier.



Fig. 3. Austrian Alps: Will it work?



Fig. 4. L'Aquila, Italy: Seismological Observatory is located in the deep basement of this castle.



Fig. 5. L'Aquila: Roman and Jerzy Suchcicki with the seismometers installed in the deep basement of the castle.



The last photo (Fig. 6) illustrates the the seismological team after some field measurements.

Fig. 6. The seismological team after one of the laborious days (from the left: J. Reda, W. Jóźwiak, T. Ernst, and very happy Roman Teisseyre)

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