

Acknowledgements

I would like to sincerely thank my supervisor Prof. Dr. Rainer Kind for providing me the subject of this research work, for guidance and far-reaching freedom, discussions, motivation and a literally always open door.

I am deeply grateful to Dr. Wolfram Geissler for his part in initiating the project, introducing the receiver function method to me and for a lot of voluntary help during deploying and running temporary seismic stations in the Czech Republic and Germany for almost two years. He freely shared his vast knowledge about the investigation area and was a very pleasant and reliable partner for cooperation.

Close cooperation with Dr. Horst Kämpf included many interesting discussions about geological, geochemical and geophysical processes in western Bohemia. Horst always encouraged and motivated me a lot with his enthusiasm, cheerfulness and creative ideas.

I would very much like to thank Prof. Dr. Serge Shapiro for serving as co-referee.

One of the main initiators of the German part of the BOHEMA seismic experiment was Prof. Dr. Michael Korn, to whom I would like to express my gratitude.

German temporary BOHEMA stations were provided by the Geophysical Instrument Pool Potsdam, whose staff also helped when technical problems occurred. Data of other permanent and temporary stations were provided by members of the BOHEMA working group. I am especially thankful for good cooperation with the colleagues from the Geophysical Institute of the Czech Academy of Sciences, Prague. Station deployment and maintenance would not have been possible without the help of Manfred Brunner and Dr. Klaus Klinge and people who provided station locations, sometimes even in their private homes. During archiving of the huge amount of data into the GEOFON data archive, Dr. Winfried Hanka helped me when problems occurred. To complement the BOHEMA data set, I had the possibility to use data of a previous seismic experiment in the western Bohemian Massif, for which I would like to thank the authors of *Geissler et al.* (2005).

Many of the programs I used were written by Dr. Xiaohui Yuan. Data processing was carried out with Dr. Klaus Stammler's software package *SeismicHandler*. My "Hiwi" Dr. Kai Hahne helped me much with routine processing of the data. Most of the figures were created with the free software GMT (*Wessel and Smith, 1998*).

During the start of the BOHEMA experiment, I was still at SZGRF Erlangen/BGR. I am grateful to the colleagues from Erlangen for good cooperation and a lot of support. At GFZ Potsdam I shared the office for three years with Dr. Forough Sodoudi. She was not only a very amiable and helpful colleague, but also became a close friend.

I had a nice time working in section 2.4 of GFZ Potsdam with very pleasant colleagues and (former) PhD students who supported me and provided a very good working atmosphere. Therefore I would like to thank all of them, particularly Benjamin Heit, Ingo Wölbern, Jörn Kummerow, Xiaohui Yuan, Xueqing Li, Susanne Hemmleb, Ivan Koulakov, Amerika Manzanares, Mirjam Bohm, Karl-Heinz Jäckel, Manfred Stiller, Joachim Saul, and Heiko Sperlich. Furthermore I would like to thank Wolfram Geissler, Horst Kämpf, and Kai Hahne for carefully reading the manuscript.

Last but not least, I would like to thank the German Research Foundation (DFG) for funding of the BOHEMA project, as well as GFZ Potsdam for further financial support and providing an excellent infrastructure. I would also like to thank the people who initiated and run the Betriebskindertagesstätte "Geolino" on the Telegrafenberg, which made it much easier to start working again after staying at home with the baby.