Acknowledgments

More than a decade has passed since I first opened myself to the Earth Sciences, and almost half of this time has involved exciting research. Years of intense experiences, in which I met amazing people and grew beyond my expectations. With these lines, I want to acknowledge the people that contributed to my formation as a researcher, and more specially, to those that led to the completion of this thesis, the end product of a scientific and personal roller-coaster ride. Some people were gentle slopes, some made me feel gravity zero, some were sudden turns and some bumpy-rides, but they all shaped the resulting rail circuit.

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