AN OVERVIEW OF RECENT SEISMIC REFRACTION EXPERIMENTS IN CENTRAL EUROPE

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AND CELEBRATION 2000, ALP 2002, SUDETES 2003 WORKING GROUPS

1. INTRODUCTION

Beginning in 1997, Central Europe has been covered by an unprecedented network of seismic refraction experiments (Figure 1). These experiments (POLONAISE’97, CELEBRATION 2000, ALP2002, and SUDETES 2003) have only been possible due to a massive international cooperative effort. They along with the BOHEMA teleseismic experiment are providing exciting new insights into the structure and evolution of the lithosphere in this region (Plomerová et al., 2003). The papers that follow provide technical descriptions of these experiments with the exception of POLONAISE’97 where this information is published in a paper by Guterch et al., (1999). In fact, papers have been published providing full interpretations of the POLONAISE’97 profiles (Środa et al., 1999; Jensen et al., 1999; Grad et al., 2002; Czuba et al., 2002; and Janik et al., 2002). In addition, a 3-D velocity model has been derived and interpreted (Środa et al., 2002), and the final interpretation of the longest profile P4. Here we would like to discuss some of the geologic features, scientific questions, and international efforts that the refraction experiments share.
Fig. 1. Index map showing the locations of major seismic refraction experiments in Central Europe.