

4D-MB Coordination Project

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The global objectives of this coordination project are the following:

1. Pursue integrative, multidisciplinary research that links *4D-MB* projects
2. Provide continued scientific support and data management services for *4D-MB*
3. Coordinate activities of *4D-MB*

The scientific aim of *4D-MB* from the outset has been to test the hypothesis that *re-organizations of Earth's mantle during the collision of tectonic plates have both immediate and long-lasting effects on earthquake distribution, crustal motion and landscape evolution in mountain belts*. The two research themes (**Fig. 1**) will help synthesize the wealth of seismological data collected from the *AlpArray Seismic Station Network (AASN)* and *SWATH-D dense seismic array* with the crustal and surface evolution gleaned from geological studies. The three working groups, A, B and C, were founded by members of *4D-MB* and link with the Collaborative Projects and Complementary Experiments of *AlpArray* (<http://www.alparray.ethz.ch/home/>). The Working Groups are described in turn below.

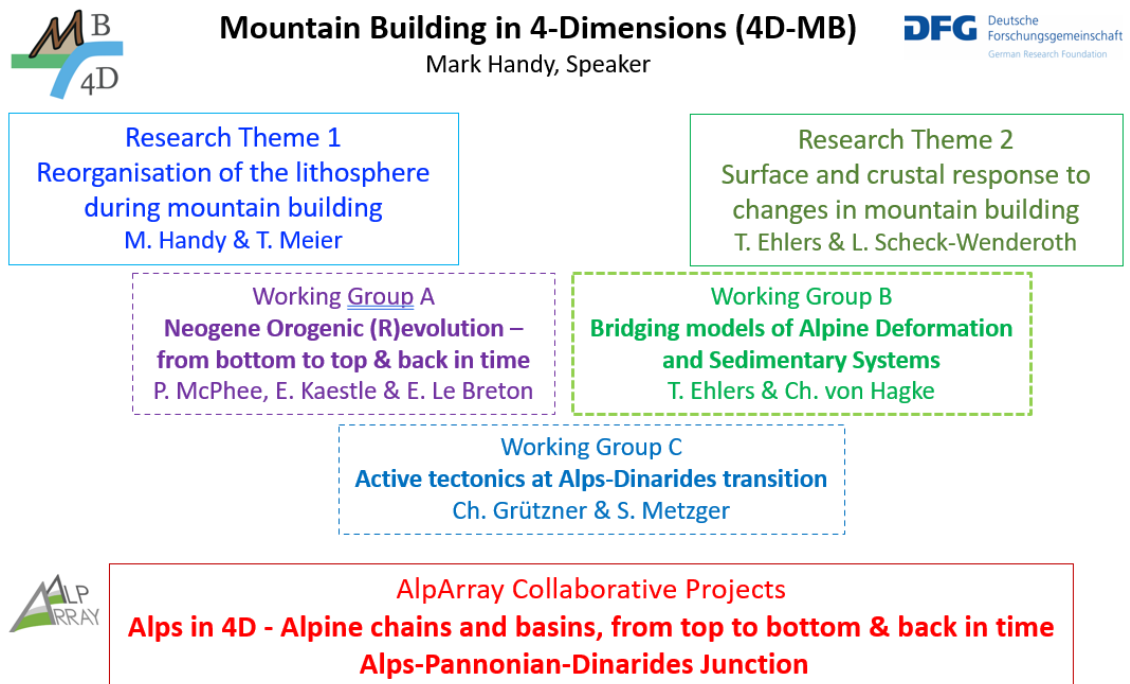


Figure 1: Organization of 4D-MB during the 2nd funding phase, with names of research themes, working groups (WGs), and managing members.

Part of the coordination effort will be to compile and integrate the geological and geophysical data sets as they become available. The aim is to establish a platform that facilitates 2D, 3D and even 4D visualisation of the Alp's surface and subsurface structure. Data is already being fed into this platform, named *Alpine Model Generator*, and will be open to all members of 4D-MB and AlpArray. It will ultimately serve as a vehicle for quantitative geodynamic modelling of orogenic processes.