Distribution of HP rocks in the nappes of the Lepontine Dome

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Published petrological data on pressure and temperature are critically reviewed, and positioned on the new geological map and cross sections (1:10’000) of the Osogna sheet that includes most nappes of the Lepontine Dome (Central Alps). The goal is to place the P-T metamorphic conditions on the geological, structural and tectonic framework that was recently mapped. The questions we seek to answer are: How is the pressure distributed within the tectonic units and within the Lepontine Dome? Do we observe sharp or gradual pressure gradients within the tectonic units? Can the HP conditions be averaged/extended over the tectonic units? If not, do they correspond to conditions of observable subunits, or do they reflect anomalies in the pressure field? Answering these questions may lead to controversial results and is fundamental to better understand the thermobarometric evolution patterns of the Lepontine Dome and the formation of tectonic nappes in general.