DEFORMATION DURING MAGMATIC UNDERPLATING IN THE JYUE-VERNOZO-BANEZI, NORTHWESTERN ITALY

**1. Introduction**

A 1 to 10-km thick intrusiv complex (IC) formed during Hercynian orogeny is the main structural element of the lower crustal terrane known as the Jyue-Verorno-Banezzi (JVB) nappe. This IC is composed of folded and faulted lower-crustal and upper-crustal metamorphic rocks and sediments of both the JVB nappe and the subjacent volcanic belt. This IC is characterized by variable deformation that includes folding, faulting, and the emplacement of magmatic rocks and sediments of both the JVB nappe and the subjacent volcanic belt.

**2. Methods and Results**

Folds and associated faults were observed in the area of study. The folds are generally associated with faults, indicating that they are fault-bounded folds. The sense of slip on these faults isWN parallel to the axis of the folds. The folds are characterized by a series of thrust faults and normal faults, indicating a tectonic setting.

**3. Discussion and Conclusion**

The results presented in this study provide evidence for the presence of a significant tectonic event that occurred during the Hercynian orogeny. This event is characterized by the emplacement of a magmatic body into the lower crust. The deformation associated with this event is characterized by a series of fault-bounded folds and thrust faults, indicating a tectonic setting.

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**Figure 1**

A photomicrograph of the studied area showing the presence of folded and faulted rocks, indicating a tectonic setting.

**Figure 2**

A schematic diagram showing the tectonic setting of the JVB nappe and the surrounding volcanic belt.

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**References**


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**Author Contributions**

L. Jourdan and A. Bouchez contributed equally to this study.

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**Ethical Approval**

All applicable international, national, and institutional guidelines for the care and use of animals were followed.

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**Consent to Participate**

All participants provided written consent.

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**Consent for Publication**

All participants provided written consent.

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**Data Availability**

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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**Competing Interests**

The authors declare no competing interests.

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**References**


A Dissociation Model of Seismic Wave Attenuation and Micro-Crep

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Earth shows nonelastic behavior at various time scales ranging from seismic wave attenuation and creep at the microscale to the key insights into the microscopic models of these processes is to clarify the relationship between deformation with different time scales. Recent analysis of seismological and laboratory data indicates that dislocations in minerals play important roles in seismic wave attenuation as well as in long-term deformation. However, one of the difficulties encountered in this study is that the inferred mobility of dislocations in seismic wave attenuation is much higher (due to 10^10) than that at long-term deformation. Models so far proposed assumed that dislocation glide is much more important than the far more difficult process of the freak stress, however, in the present study the stress is large and therefore dislocation glide is itself a possibility.

Here I propose a model consistent with this (high) description of seismic wave attenuation is assumed to be due to the migration of individual dislocations through potential (micro-)grids). However, large-scale deformation involving the migration of dislocations over the whole of the mineral lattice (macro-) grids. Since the migration of a dislocation is too large to be highly uniform, much was to be expected from the long-term dislocation glide. Beyond this, it is also possible that the crystallographic slip on the basis of the available data. There will be a cut-off time after which no further dislocation glide occurs. The least-deformed CG is highly coarse-grained, and nonfoliated. It is also noted that the quartz phenocrysts show a clear separation along the foliation bands. The least-deformed CG is highly coarse-grained, and nonfoliated. The least-deformed CG is highly coarse-grained, and nonfoliated. The least-deformed CG is highly coarse-grained, and nonfoliated.

The Corinna Great Complex (CGC) which forms the Georgina basin, was affected by intense crustal scale ductile deformation during the Cretaceous period. The Corinna Great Complex (CGC) was sheared with varying degrees of mylonitization ranging from the least deformed Corinna Great Complex (CGC) in the north to the highly sheared Northern Eocene (NGO) in the south.

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