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Which parameters control the Variscan pegmatites field-scale organization?

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The emplacement of LCT-type pegmatite field is recently admitted to be controlled by regional tectonic structures rather than by the proximity to a granitic body. In particular, the emplacement of Monts d'Ambazac pegmatites (France), which is controlled by an oriented faults-system. In order to strengthen these findings, we investigated two pegmatite fields which present similar mineralizations, but different spatial organizations: the Forcarei pegmatite field (FPF, Spain) and The Barroso-Avão pegmatite field (BAPF, Portugal). The FPF is limited in its southern edge by the Celanovamigmatitic dome (CMD), where some pegmatites occurred. These observations favor *a priori* the model of direct crustal anatexis (DCA). Moreover, geostatistics and syn-kinematic criteria as shear-bands that are observed in pegmatites seem to suggest that the left-lateral Serra do Suido shear-zone near to the FPF has a major role during its emplacement. Indeed, pegmatites are clustered and oriented in the same broad N-S direction as the shear-zone. The formation of BAPF also matches the DCA model since it is located near to the southern edge of the CMD. The distribution of pegmatites shows no preferred orientation and cross-cutting of pegmatite-subtypes. The lack of shear-zone in BAPF indicates the key role of such structures on the field zonation. These preliminary results favor the influence of shear-zones as flow channels on i) the variscan pegmatite fields emplacement and ii) pegmatite subtypes field-scale organization. These results have been enhanced by preliminary numerical model which investigates the ascent of pegmatitic melts through crustal-scale permeable zones.