

**Triassic-to-Present Exhumation History of Moroccan Meseta Massifs Assessed by Apatite Thermochronology on Granite Samples: How to Explain Apparent Age Discrepancies Between the Jebilet and Rehamna Massifs**

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The Moroccan Meseta constitutes a relatively stable block between the Atlas and Rif belt. We studied for apatite fission tracks (AFT) 6 granite samples from the Jebilet, i.e. the southernmost massif of western Meseta, and 1 sample from the Ras-el-Abiod leucogranite from the Rehamna massif, ca. 70 km north of the Jebilet. Additionally, we consider 9 results obtained with the same technical procedure by Sabil (1995) from the Sebt-Brikyine granite of the Rehamna. All these granites emplaced during the Variscan orogeny, and both the Jebilet and Rehamna massifs belong to the West Moroccan Arch, uplifted and eroded from 295 Ma-290 Ma to 140-125 Ma. Paradoxically, these Mesetan granites yield two clearly distinct groups of apparent ages, 185-200 Ma in the Jebilet versus 81-112 Ma in the Rehamna. Once excluded technical bias, we may assume that the observed differences in the AFT results are linked to one or both of the only two differences which can be noted between the studied massifs, i) the depth of emplacement of the granites which intrude country rocks equilibrated at 15-20 km in the Rehamna, vs 9 km in the Jebilet; ii) the importance of the Neogene subsidence and subsequent uplift (more marked in the case of the Jebilet). Track length modelling allows us to conclude that the depth of intrusion is the dominant factor accounting for the apparent AFT age discrepancies.