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The development of a regional-scale intraplate strike-slip fault system; Alpine deformation in the north of Ireland

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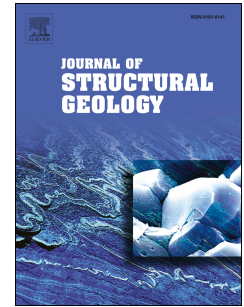
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1 **The development of a regional-scale intraplate strike-slip fault system; Alpine**  
2 **deformation in the north of Ireland.**

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19 **1. Abstract**

20 A paucity of displacement markers can make constraining the kinematics and interaction  
21 of regional-scale strike-slip faults difficult. In this study, a high-resolution aeromagnetic  
22 survey allows quantitative analysis of kilometre-scale Paleogene faulting in the north of  
23 Ireland. Mapping offset dykes and igneous centres reveals the presence of two  
24 orientations of Cenozoic strike-slip faults attributed to broadly N-S Alpine shortening  
25 arising from the convergence of Africa and Europe. Reactivated NE-SW striking faults  
26 accommodated up to 2.3 km of sinistral displacement mainly during the Paleocene.

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