## Supplementary Information for: The outcrop-scale manifestations of reactivation during multiple superimposed rifting and basin inversion events: the Devonian Orcadian Basin, N Scotland

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Stereographic projections of compiled data from fieldwork localities in Devonian strata, Orcadian Basin, Caithness, Scotland.

Structural orientation datasets (Supplementary Figs S1, S2, S3, S4) are presented from 15 named field localities the locations of which are shown in Figure 2d. Structures are grouped according to whether they are believed to have either formed or accommodated significant strain during the 3 main events recognised: Group 1 (orange borders); Group 2 (blue borders); or Group 3 (green borders). Note that some Group 3 faults may be reactivated Group 1 structures.

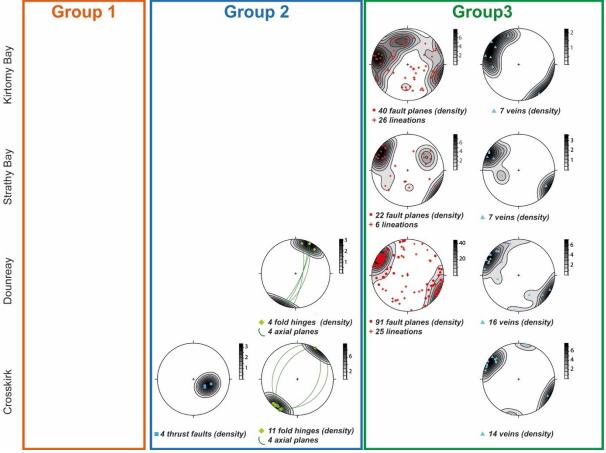


Figure S1: Data from Kirtomy Bay, Strathy Bay, Dounreay, Crosskirk.

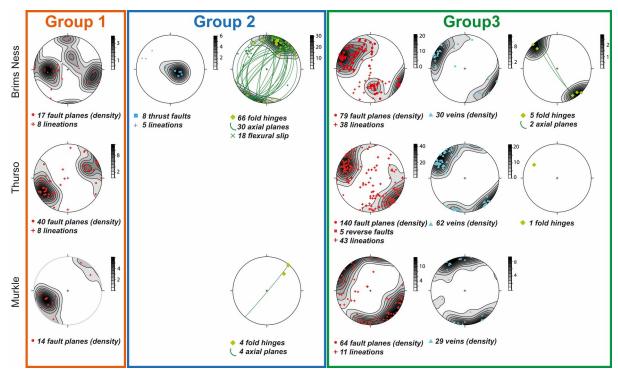


Figure S2: Data from Brims Ness, Thurso, Murkle.

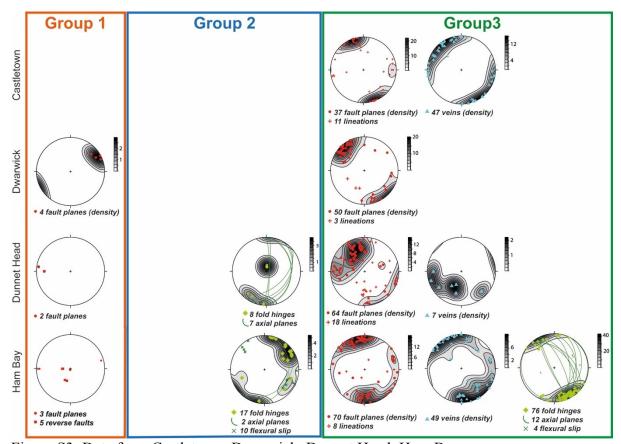


Figure S3: Data from Castletown, Dwarwick, Dunnet Head, Ham Bay

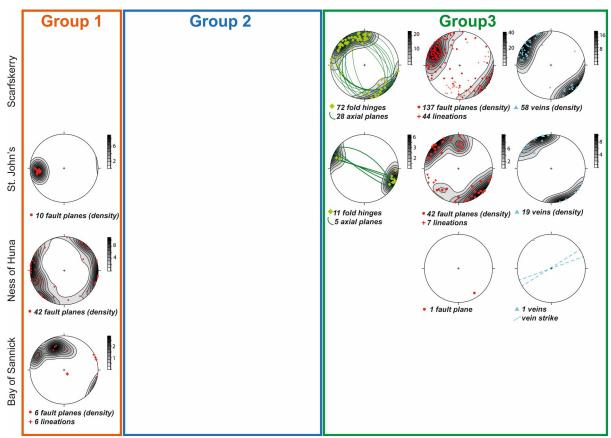


Figure S4: Data from Scarfskerry, St John's, Ness of Huna, Bay of Sannick

Data included are from fault planes (shown as poles), slickenline lineations, fold hinges, fold axial planes (show cyclographically to illustrate variability in dip) and, for Group 3, tensile calcite veins (shown also as poles). Poles to planes and fold hinges are also contoured.

A compilation of Stress Inversion analyses from the various localities is shown if Figure S5, once again grouped based on structural age: Group 1 (orange borders); Group 2 (blue borders); or Group 3 (green borders).

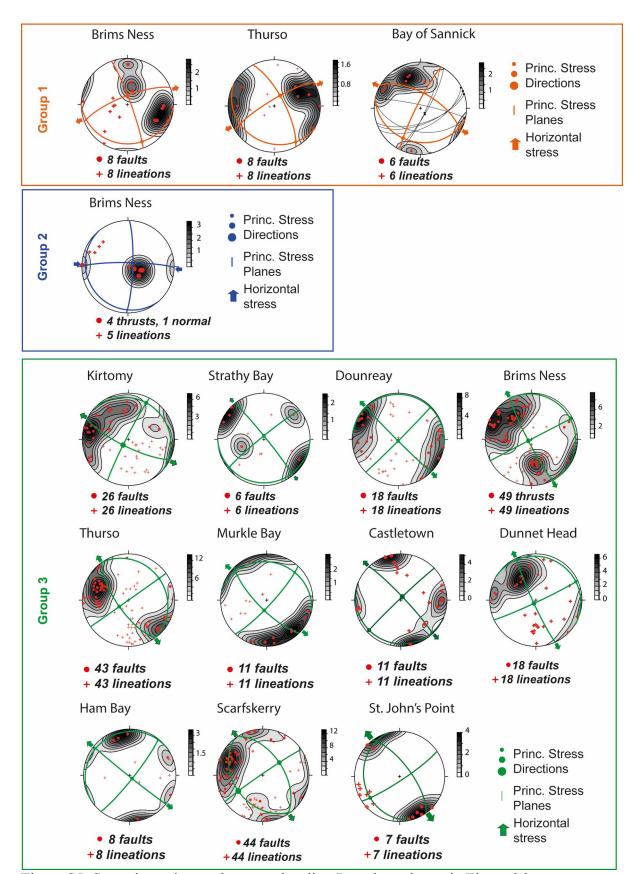


Figure S5: Stress inversion analyses per locality. Locations shown in Figure 2d.

All stereographic projections are lower hemisphere equal area.