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Alternative approaches to the palaeomagnetic field direction using remanence small circle

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So far, small circle methods ('optimal differential untilting' and 'small circle estimate') have been applied only to synfolding remanences, however, because independent from the remanence character, they apply as well to prefolding data. The benefits of the application in addition to the conventional methods are discussed. First, small circle methods allow to check fold test results by independent geometrical approaches, in this way enhancing reliability of interpretation. Second, the comparison of palaeofield estimates from tilt correction and small circle methods shows whether underlying tectonic assumptions are met or not. For instance, when all palaeofield estimates coincide, horizontal tilt axes, absence of subsequent folding or overall tilts, and absence of relative vertical-axis rotations within the data set are most likely given. Should discrepancies turn out, there must be a reason for which is to be investigated in detail. Eventually, the addition of small circle methods to palaeomagnetic methodology makes interpretation more reliable and brings out more tectonic details.