

Appendix 1: Vorticity analysis data based on lawsonite shape fabrics; samples are located on Fig. 1. Vertical dashed lines are chosen critical aspect ratios R_c that are used to determine W_m . The choice of the critical aspect ratio R_c was made after consideration of two criteria: the overall shape of the envelope of data points and the angle between lawsonite long axes and the glaucophane (omphacite in sample SV08-176B) foliation. In samples SV08-17A and 274A, the envelope shows an abrupt slope at low aspect ratios, defining a clear cut-off value. In samples SV01-49A and SV08-5D, there is also a steep slope of the envelope, but the cut-off value is not so clear and is likely comprised between two possible values. In all pods and fault zone slivers samples, the envelope shows a smooth curvature over a broad range of aspect ratios. In this case, R_c was evaluated on the basis of the angular value: where two R_c are shown, the right-hand R_c shows the cut-off value where the total amplitude of angle to foliation is $< 30^\circ$; the left-hand R_c is a more conservative value of R_c where the $> 30^\circ$ total amplitude of angle to foliation is controlled by relatively few data points or where the envelope of data points shows a steep slope.

