APPENDIX 2

Joints interpretation from Scania outcrops

Numbers in the brackets refer to a stratigraphic position of the outcrop marked in Figure 2.

Snogeröd – (7) Klinta formation (Mehlqvist et al., 2014) – low-quality outcrop, approx. 1x1 m in a drainage ditch. Two joint directions are present, JS 3 (st = 339°) and JS 2 (st = 312°). These observations are uncertain in regard to a small number of observations.

Råröd – (7) Klinta formation (Mehlqvist et al., 2014) – as previously, small outcrop on watercourse bank not allowing for many orientation measurements. However, two major joint sets: JS 1 (st = 021°) and JS 2 (st = 290°) were noticed. The low number of observations made cluster striking near 320° highly unsure.

Harlösa – (6) Colonus shale (Mehlqvist et al., 2014) – as above, the outcrop is located on the small riverbank, its size is ~2x5 m. This allowed taking a more significant number of observations compared to previous sites. In this outcrop, small faults of ~010° strike are observed. Also, small irregular fold structures are present, but in regard to the outcrop preservation state, it is hard to determine if they are drag folds, folds *sensu stricto*, or effect of mass movements. JS 3 (st = 345°) and JS 2 (st = 289°) are clearly identifiable. Les certain JS 1 is striking at 028°. Additional cluster is associated with strikes of 007°, but a low number of measurements and widespread of observations in this cluster suggest its artificial origin.

Vollsjö – (6) Colonus shale (Mehlqvist et al., 2014) –3x10 m outcrop showing similar statistical quality as the previous site. Only two joint sets are present, JS 1 (st = 011°) and JS 5 (st = 049°), from which JS 1 is much wider and showed two closely lying maxima on the contour plot.

Rövarekulan – (6) Colonus shale (Mehlqvist et al., 2014) – large exposure on a riverbank consisting of several smaller outcrops, with a height varying from 1 to 5 m and width from 1 to 15 m, this allowed making a relatively large number of observations. Two main joint sets in this site are well distinguishable and present clear maxima on contour plot, JS 1 (st =014°) and JS 4 (st = 091°). JS 5 (st = 032°) consists of two observation subpopulations, one with strikes 037° (larger) and the second with strikes 055° (smaller). The analysis of the spatial arrangement of observations along the exposure showed that the strikes near 037° and 055° occur interchangeably. This suggests that the multimodal character of JS 5 is related to a local change of joints direction along the exposure. However, a majority of observations in JS 5 are associated with subpopulation that striking 037°, thus this one was taken as the orientation of JS 5 in the described exposure. Probable JS 3 and JS 2 show strikes of 341° and 293°, but these clusters are highly uncertain regarding a small number of observations within them. JS striking 323° is ambiguous, placed in between the usual position of JS 3 and JS 2. Such a feature seems not to be local due to its occurrence as a primary one in Järrestad, and a secondary in Fågelsång. Thus, JS striking 323° is interpreted as JS 2, most frequent in other data.

Järrestad – (6) Colonus shale (Mehlqvist et al., 2014) – outcrop is located along the riverbank, a few smaller sites which allowed for a statistically significant number of measurements. Main joint sets are clearly distinguishable, JS 1 (st = 024°), JS 3 (st = 343°), JS 4 (st = 106°), and JS 5 (st = 055°). Cluster with a strike of 321° gathers a majority of observations. Same as in Rövarekulan, lack of other reliable joint set with strikes near 300° leads to its interpretation as joint set 2. The orientation of JS 4 highly differs from clusters described as JS 4 in other sites and should be treated with caution.

Fågelsång – (5) Almelund shale, Sularp shale (Bergstrom et al., 2000) – site consist of few smaller outcrops exposed along the riverbank, which allowed for a significant number of measurements. The majority of observations are grouped in JS 1 (st = 017°). Besides, JS 2 (st = 294°) is also clearly identifiable. Cluster located at 313° stays ambiguous in regard to a low number of observations within it, however, its orientation roughly covers the orientation of JS 2 in Järrestad and Rövarekulan.

Gislövhammar – (4) Komstad Limestone (Wu et al., 2018) – planar outcrop located at the seashore. Despite the relatively low number of measurements, the main joint sets are clearly distinguishable. JS 1 (st = 016°), JS 3 (st = 340°), and JS 2 (st = 309°).

Degerhamn – (3) Alum shale and overlying limestone, as well as Andrarum – (2) sites with Alum shale are described in appendix 1. JS orientation in these outcrops does not show a significantly different pattern than other Lower Palaeozoic outcrops from SW Sweden.

Brantevik – (1) Hardeberga formation (Calner et al., 2013) – same as Gislövhammar, the site is placed along the seashore. In this exposure, all common joint directions beside JS 5 are present and easily identifiable, JS 1 (st = 031°), JS 3 (st = 355°), JS 4 (st = 091°), and JS 2 (st = 312°). All joint sets in Brantevik seem to be rotated clockwise compared to other data, but a low number of measurements in the outcrop make this observation uncertain.