Table S1. The KL divergences for the seven individual angles.

| $\alpha$ | $\beta$ | $\gamma$ | $\chi$ | δ      | $\epsilon$ | ζ      |
|----------|---------|----------|--------|--------|------------|--------|
| -0.014   | -0.013  | -0.015   | -0.016 | -0.045 | -0.017     | -0.008 |

The table shows the KL divergence (in bits) from the experimental data to the mixture model, minus the KL divergence from the experimental data to BARNACLE, for the marginal distribution of the individual angles.