

Table 2. Critical values of \bar{R} (Raleigh test) for $n = 39$ (after Stephens 1969)

α	0.05	0.01
\bar{R}	0.275	0.341

We can now conclude that the distribution of the azimuths of the long axes of the slide blocks discussed by Naylor (1982) are almost certainly non-random (-uniform) and that an appropriate model can be formed by assuming a cyclicity of 60° between clusters of measurements. The clusters are centred around the azimuths 004° , 064° and 124° on the 180° range. What this model means in geological terms is not at all clear but any comment on these slide blocks should take this pattern of preferred orientation into account.

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Dr. M. A. Naylor replies:

I endorse Dr. Savage's demonstration of the usefulness of the simple Kuiper test in seeking preferred orientations in two-dimensional orientation data.

However, it should be noted that one of the three modes (at 064°) implied by the statistical treatment of Dr. Savage is not borne out by the original data (fig. 7(a) of Naylor 1982). The remaining two modes have a straightforward explanation. Inspection of the map of the Casanova Complex (fig. 2 of Naylor 1982) reveals that the slide blocks commonly occur in groups with similar long axis orientations. This does not contradict the hypothesis, based on several other lines of evidence, that the blocks were emplaced by gravity sliding. Indeed, the

grouping of blocks suggests that the first block which came to rest determined (presumably by its relief) the final orientation of successive elongate blocks which came to rest against it. The clustering of blocks may be due to their accumulation in localized depressions in the sedimentary basin (ponding) or to localized, fault-bounded source areas within an otherwise more extensive, unbroken and uniformly dipping distal continental margin.

To alleviate the interdependence of block orientations within the geographic groups, one could attribute the same weight to the mean long axis direction of a group and to each single isolated block. The case for random (uniform) orientation of slide block long axes then becomes much stronger, using either the Rayleigh or Kuiper test.

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