Sedimentologika

Corrigendum

Corrigendum to *"Soutter, E. et al. (2024). Exceptional preservation of three-dimensional dunes on an ancient deep-marine seafloor: implications for sedimentary processes and depositional environments"*

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The y-axes in Figure 6B of Soutter et al. (2024) are incorrect, resulting in the plotted and reconstructed dune profile dimensions and gradient being an underestimation. This has affected some descriptive text in the manuscript (First paragraph, Section: 4.4; see below), but does not affect any other aspect of the manuscript.

We have changed the y-axes and labels in Figure 6B to the directly measured dip angle and amended the figure caption. We have also edited the descriptive text to reflect these changes using the scan (Figure 7) and field measurements. We have also refined the scale and added some additional explanatory text to the caption of Figure 7.

The orginal first paragraph, Section 4.4. was:

4.4. Dune morphology

The dunes have a wavelength (crest to next downstream crest along the axis of migration) of 1.5 to 2 m, with the distance between the crest and the trough varying between 0.5 m to 1 m (Figure 6). Crest heights (relative to the trough) range between 0.05 - 0.1 m. Restored dune gradients are horizontal to 5° on stoss-slopes and up to 10° on lee-slopes. These (compacted) lee gradients are consistent with dunes formed by major rivers in the present, with 75% of fluvial dunes having lee-slopes of < 14.9° (Cisneros et al., 2020); however, migration of superimposed dunes, scouring, compaction and the inherent difficulty in restoring bedforms from tectonically-tilted surfaces will all have modified the measured lee-slope bedforms, making 'true' values for depositional heights and gradients difficult to assess (Figure 8A).

The updated first paragraph is now:

4.4. Dune morphology

The dunes have a wavelength (crest to next downstream crest along the axis of migration) of up to 3 m, with the distance between the crest and the trough varying between ~0.1 - ~1 m (Figures 6, 7 and 8). Crest heights (relative to the trough) range between ~0.1 - ~0.7 m. Migration of superimposed dunes, scouring, compaction and the inherent difficulty in restoring bedforms from tectonically-tilted surfaces will all have modified the measured bedforms, making 'true' values for depositional heights and gradients difficult to assess.

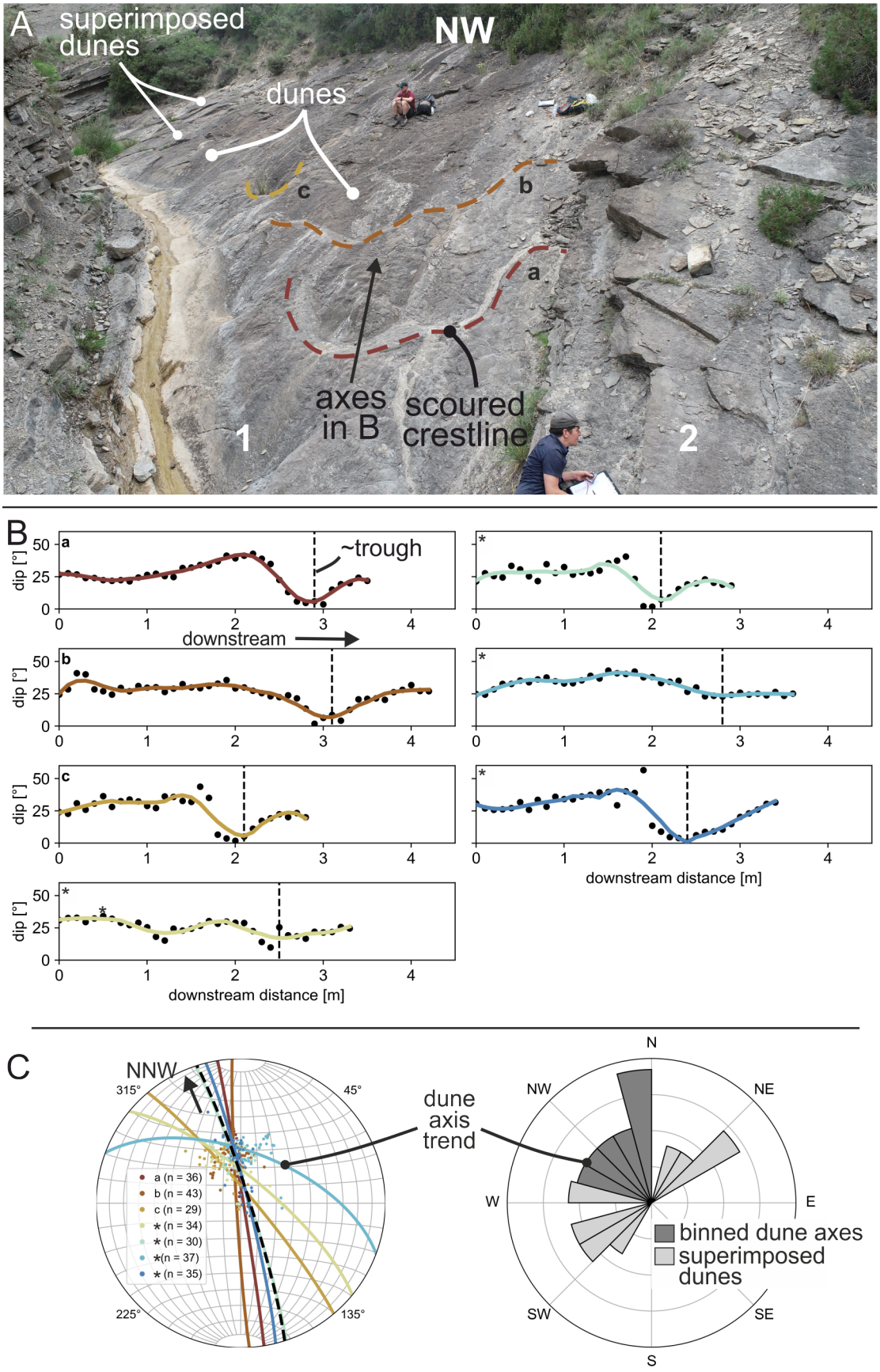

Figure 6 | (A) Bedding plane with curvilinear dunes and spoon-shaped scours. Exposure in Figure 3 to the left. (B) Downstream dune dip angles. Note that the y-axis is dip angle and not elevation, so the plotted curve is not the true shape of the dune, as high dip angles are seen on both the lee and stoss-side, as the surface has been tectonically-tilted. The point at which the gradient approaches zero is the approximate position of the dune trough. See Figure 7 for dip angles restored to approximately palaeo-horizontal. Location of dune crestlines a, b and c in (A). Asterisk (*) indicates dune profile unclear in (A) due to perspective. (C) Dune axis trends and associated rose diagram. Dunes predominantly migrate to the NNW, while superimposed dunes migrate toward the SW and NE.

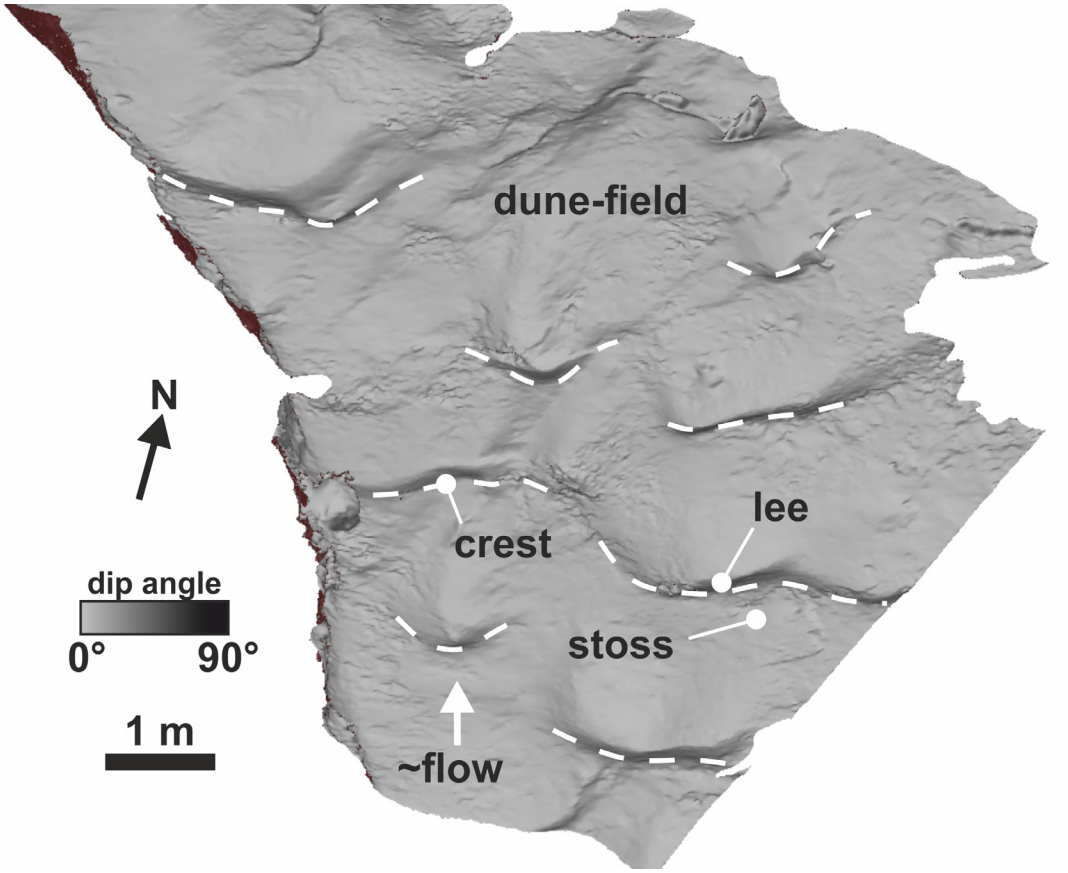

Figure 7 | Lidar scan of part of the dune-field (Figure 6A) shaded by dip-angle and restored to approximately palaeo-horizontal. Note that the low viewing angle of the scan affects the depth scale. The distance between successive crests is up to ~3 m. Note steep downstream dipping lee-sides and shallow upstream-dipping stoss-sides. The sinuous shape of the dune crests and their tendency to merge along strike is also apparent.

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