

Supplementary Material - Uniform grain-size distribution in the active layer of a shallow, gravel-bed, braided river (the Urumqi River, China) and implications for paleo-hydrology - Guerit et al.

Table S1: Statistics of the  $\phi$ -normalized grain-size distributions.  $D_{50}$  is the median diameter and  $\sigma$  the standard deviation of the samples.

Sample	$D_{50} (\phi)$	$\sigma$	Sample	$D_{50} (\phi)$	$\sigma$
A1	3.16	0.85	D1	2.82	0.87
A2	3.07	0.80	D2	3.10	0.94
A3	2.99	0.87	D3	3.12	0.94
A4	3.01	0.95	D4	3.28	1.04
A5	3.10	1.08	D5	3.01	0.80
B1	3.47	0.97	E1	3.21	0.83
B2	3.16	0.89	E2	3.02	0.85
B3	3.37	0.97	E3	3.22	1.03
B4	3.10	1.07	E4	3.03	0.89
B5	3.28	1.03	E5	3.00	0.86
C1	3.00	0.90	F1	3.17	1.02
C2	3.16	0.97	F2	3.30	0.98
C3	3.29	0.95	F3	3.15	1.03
C4	3.23	0.92	F4	3.21	0.98
C5	3.01	0.84	F5	3.12	0.89
Total volume	3.14	0.95			
Vertical surface	3.11	0.88			

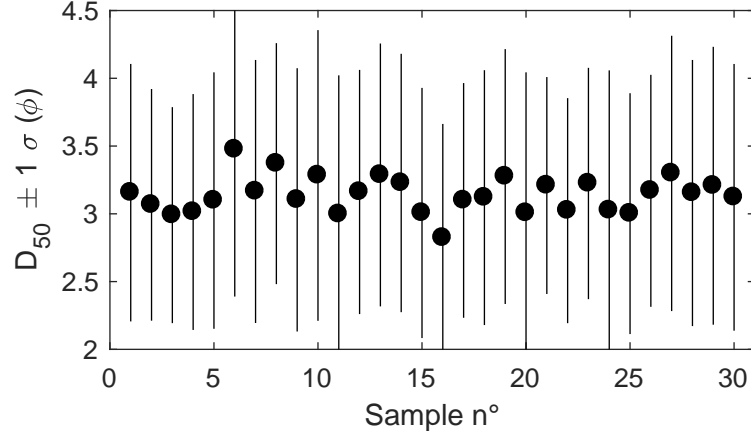


Figure S1: Median diameters ( $D_{50}$ ) and standard deviations ( $\sigma$ ) of the 30  $\phi$ -normalized grain-size volumetric samples issued from the trench. Dots indicate the  $D_{50}$  of the samples and the lines give  $\pm 1\sigma$ .

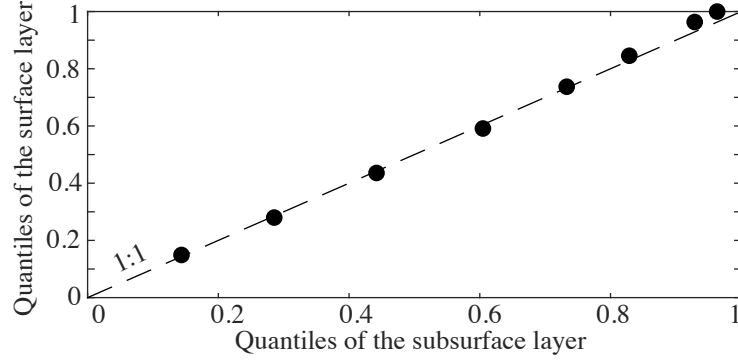


Figure S2: Quantile-quantile diagram of the surface and subsurface layers sampled by the volumetric method. Quantiles correspond to the cumulative density function (CDF) at each sieved diameter. Dots align in the 1:1 (black) line, indicating that the two layers have the same grain-size distribution and can thus be considered as similar.

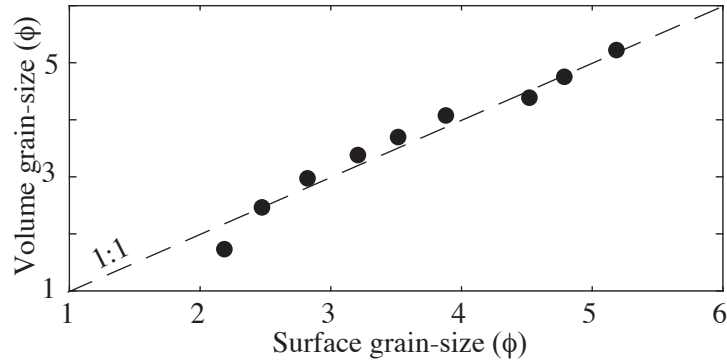


Figure S3: Quantile-quantile diagram of the vertical surface count and bulk volumetric samples issued from the trench. Diameters are determined at the quantiles issued from the discrete CDF of the volumetric distribution. Dots align in the 1:1 (black) line, indicating that the two samples have the same grain-size distribution and can thus be considered as similar.

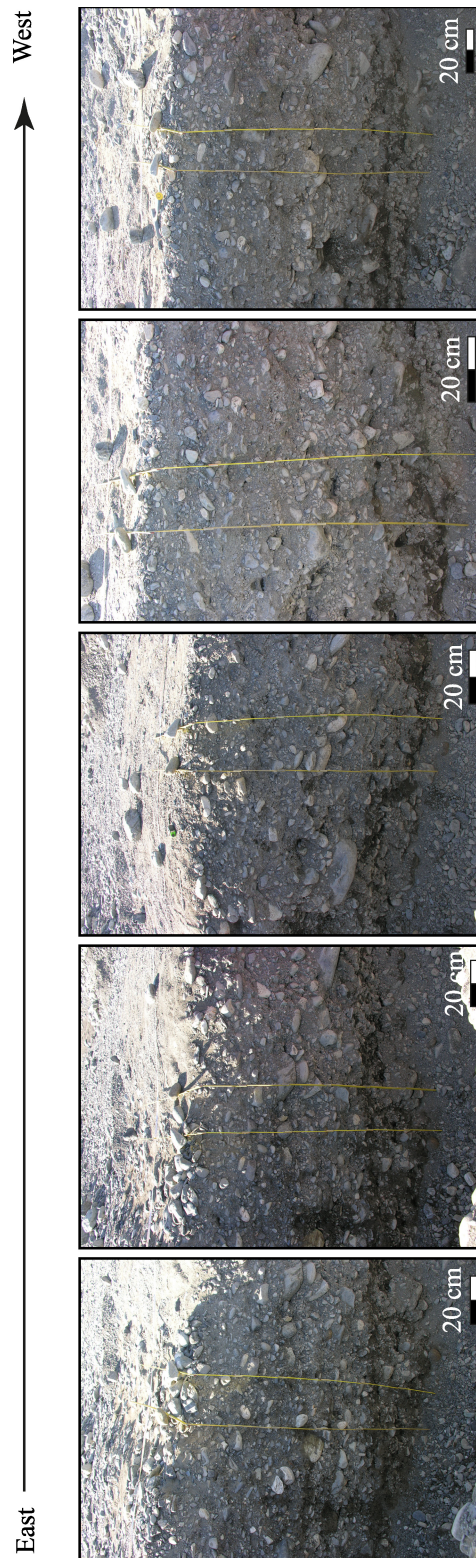


Figure S4: Photographs of the trench walls from east to west. Local heterogeneities with more fine or coarse grains can be observed but at the scale of the active layer, the sediments show no continuous vertical or lateral stratification.