### Supplementary Material 4

### 1. Makran topography



Figure S4: 3D view of the Makran topography of dimension 12.4 km×38.4 km, with a 400×400-m grid resolution.

### D2 Parameter details of the multi-event simulation performed on the Makran topography described section 3.2

|  |  |  |
| --- | --- | --- |
| **Lithology** | Sand  | Fine silt |
| **Grainsize (m)** | 300  | 20 |
| **Density [kg/m3]** | 2650 | 2450 |
| **Initial bed composition** | 20% | 80% |
| **Flow input** | **Type 1-Muddy flow concentrations** | 1% | 2% |
| **Type 2-Sandy flow concentrations** | 3% | 1% |
| **Thickness** | 150 m |
| **Velocity** | 1 m/s |
| **Duration of the single event** | 8000 s |
| **Drag coefficient** | 3·10–3 |
| **Erosion coefficient** | 1·10–7 |
| **Profile model** | Rouse |

Table S2: Makran simulation parameters