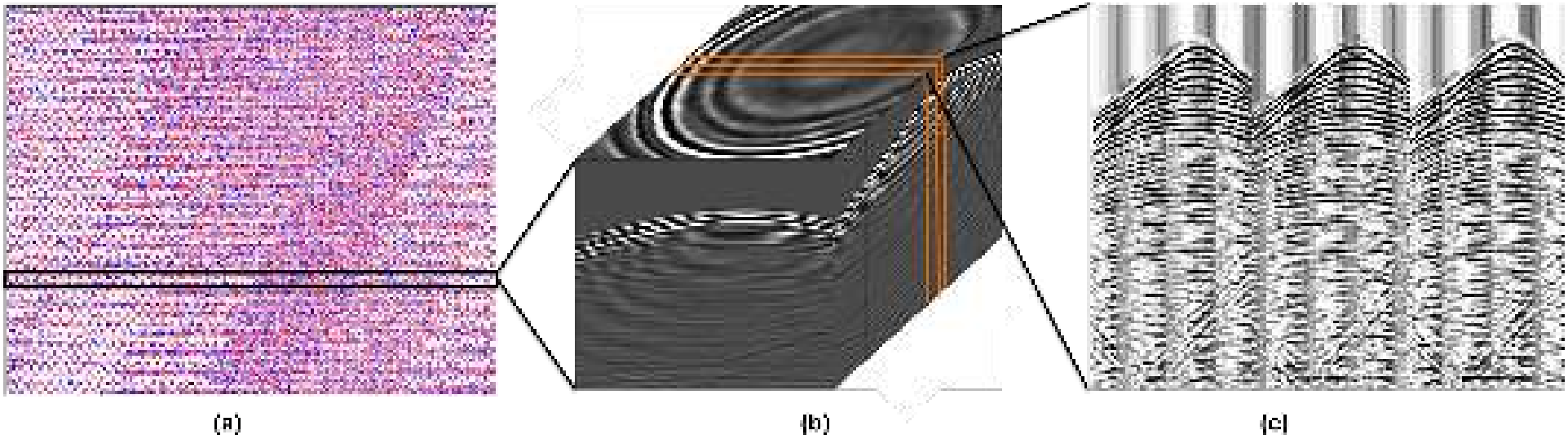

Fig. 1. To show the scale of the fully sampled 5D seismic data volume, we use three levels of granularity. (a) The first step shows a single 4D time-slice, consisting $101 \times 101 \times 40 \times 40$ iso-time samples, from the 5D tensor, where we use (s_x, s_y) matricization of the 4D tensor to display it as a matrix. The seismic data volume have 1024 time-slices. (b) In the second step, we extract **one** common-receiver gather at black box location from (a) where each common-receiver gather consists of $1024 \times 101 \times 101$ samples. (c) In the final step, for detailed visualization we extract 2D slices (marked with orange color) from (b) and unfold them along the source-axis. Interpolation is performed on the entire data volume, comprising multiple 4D monochromatic slices, each of containing $101 \times 101 \times 40 \times 40$ samples.