Datashare 73

Structural inversion, imbricate wedging, and out-of-sequence thrusting in the southern Junggar fold-and-thrust belt, northern Tian Shan, China

Shuwei Guan, Joseph M. Stockmeyer, John H. Shaw, Andreas Plesch, and Jian Zhang

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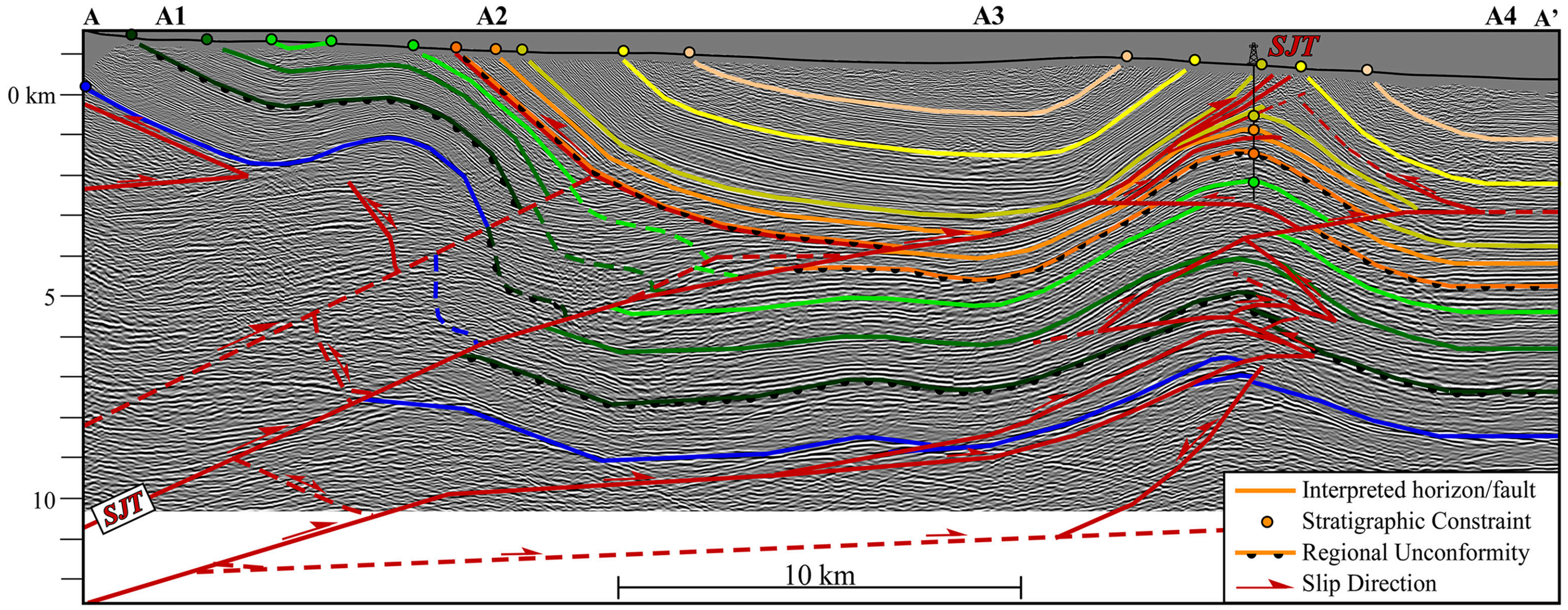

Figure S1. Seismic interpretation of section AA′. See text for details. Stratigraphy is constrained by surface geology, well data, and our regional seismic interpretations. Uninterpreted section is shown in Figure 4A. See Figures 1 and 2 for section location.

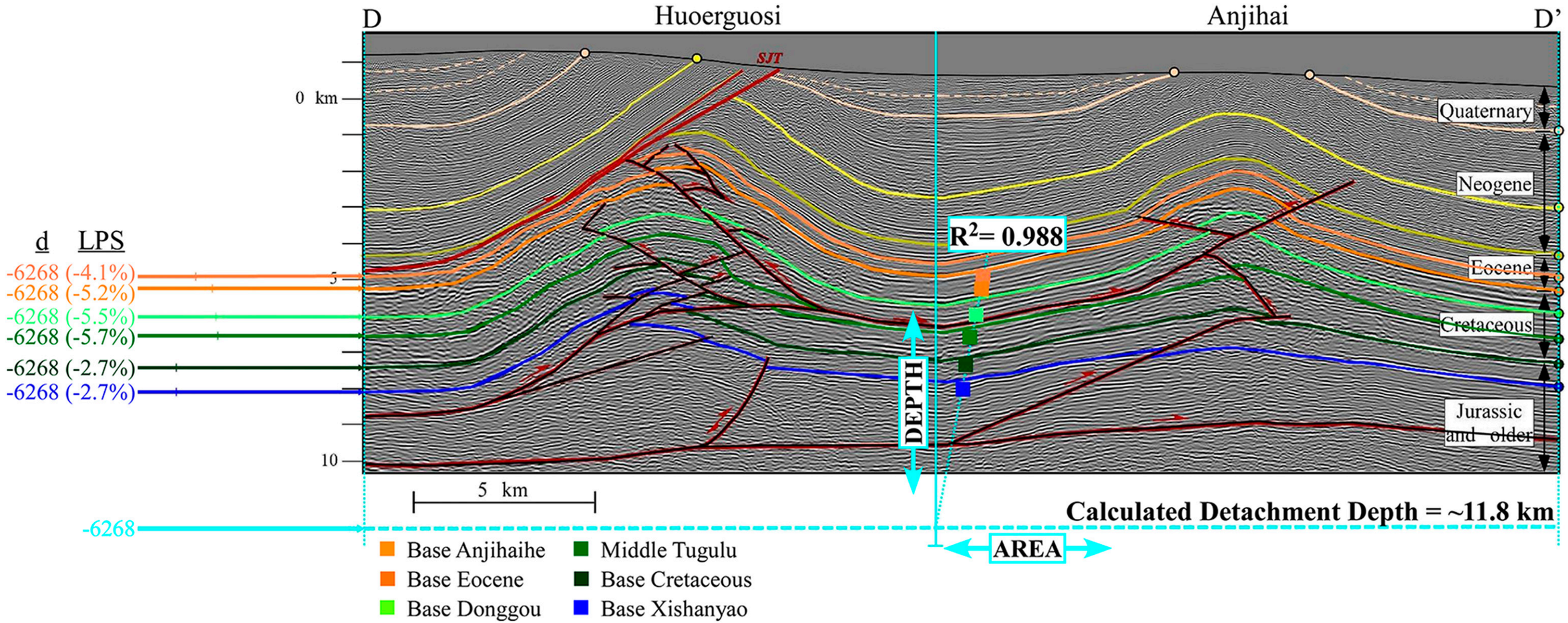

Figure S2. Area–depth plot generated in StructureSolver for section DD′ (Figure 9A). Squares are area–depth points from the structural interpretation. A linear best-fit function to these points calculates a basal detachment at approximately 11,800 m (~38,700 ft) below sea level and a constant boundary condition displacement (d) of 6268 m (~20,600 ft) for the entire Jurassic–Eocene section. In the area–depth interpretation, the discrepancy between the line length shortening estimates and the boundary condition shortening from the area–depth model is caused by layer-parallel shear (LPS) during deformation (e.g., Epard and Groshong, 1993; Groshong et al., 2012; Eichelberger et al., 2015). See text for details.