Solid Earth

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COVER  
First high-resolution, real-time, machine-contoured bathymetric map produced in the United States using the SEABEAM, swath sonar system aboard the NOAA ship Surveyor. The map shows the geological details of the actively spreading rift valley (blue color) of the Gorda Ridge located 107 kilometers off the coast of Oregon. The Gorda Rift is terminated at its northwestern end by the Blanco Fracture Zone (red color) striking at 300 degrees along the edge of the page. A color change occurs at every 100 meters in a chromatic scale. Violet indicates a depth of 3700 meters and red a depth of 2200 meters. Scale of map is 1 centimeter to 816 meters. See page 15. [Data for the map were taken in 1980 aboard the Surveyor, Captain Bruce Williams, commanding officer; color overlay on the machine-contoured map was prepared by Cathy Connelly.] See also page 110.