

**An Immersive 3D Presentation of  
Permian Basin Geology: a Web Portal  
Prototype for Accessing Online  
Geologic Data**

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The Bureau of Economic Geology (BEG) at The University of Texas at Austin has a long history of developing and presenting custom 3D presentations to showcase various research programs and initiatives. Martian deltas, the Edwards aquifer, CO<sub>2</sub> sequestration, the Haynesville Shale, and Texas coastal processes are just a few of the places and topics for which BEG has constructed compelling, immersive 3D presentations for high school students, lawmakers, fellow scientists, and industry partners. Our latest project is an immersive fly-through of Permian Basin geology. It begins with an overview of regional structure maps, cross sections, and geophysical data and then zooms in for a detailed look at Ward County subsurface geology, including 14 geologic surfaces, more than 1,000 wells, and some of the more productive plays and fields in the area. Although we are presenting this project as a fly-through on a large screen in stereographic 3D, it is likewise fully interactive, runs on any Windows-compatible computer, and serves as a prototype for one of BEG's latest initiatives: developing an interactive 3D web portal for accessing online geologic data warehoused at the BEG.