

3D Regional Canvas of the Californias Regional Workbench Consortium



This solid terrain model of the Southern California-Northern Baja California border region was cut from a single block of dense foam by a computer-driven milling machine. The model was painted by a unique 3D inkjet plotter with a Landsat image (30-meter resolution, from the Space Shuttle Radar Topography Mission, August 2000). The model combines satellite imagery, USGS digital elevation models, CICESE and INEGI (Mexico's Mapping Agency) digital elevation data for Mexico, and Scripps Institution of Oceanography (Geological Data Center) seafloor data.

The model is a product of the Regional Workbench Consortium (RWBC), a collaborative effort by university and community-based partners in the US and Mexico dedicated to linking science and technology to policy and planning. The model is one of the RWBC's planning and decision support tools for watershed management and pollution prevention in the context of UCSD's Superfund Basic Research Program. The geographic extent includes mountainous terrain running from the north of San Diego to just south of Ensenada, and from the 6,000 feet deep Pacific Ocean basin in the west to the desert lands of the Arizona-California border, Salton Sea and Colorado River delta in the east.

In collaboration with Richard Marciano (San Diego Supercomputer Center) and Keith Pezzoli (Urban Studies and Planning Program, UCSD), an early prototype of the 3D Regional Canvas was created by Dru Clark in Mike Bailey's Telemanufacturing Facility located at UCSD's Supercomputer Center. The current version was created by Alejandro Hinojosa (CICESE, and fellow of the Center for U.S.-Mexican Studies), in partnership with SIO's Geological Data Center (Steve Miller, Dru Clark), SIO Visualization Center (Debi Kilb and Graham Kent), TELESIS (Shane DeGross), Earthstar Geographics (Eric Augenstein), and the UCSD Library (Dan Henderson). A digital version of the 3D Regional Canvas is also available thanks to Jeff Sale (San Diego State University's Education Center on Computational Science and Engineering) and John Ryan (San Diego State University, Department of Geography).

More detail about the solid and digital versions of the 3D Regional Canvas of the Californias is on the RWBC Web site at: http://regionalworkbench.org/databank/rwbc_search.php?page=viewall

For additional information, please browse:

The Regional Workbench Consortium

Accessing seafloor data

Mexico's partner in the process

Building the model

www.regionalworkbench.org

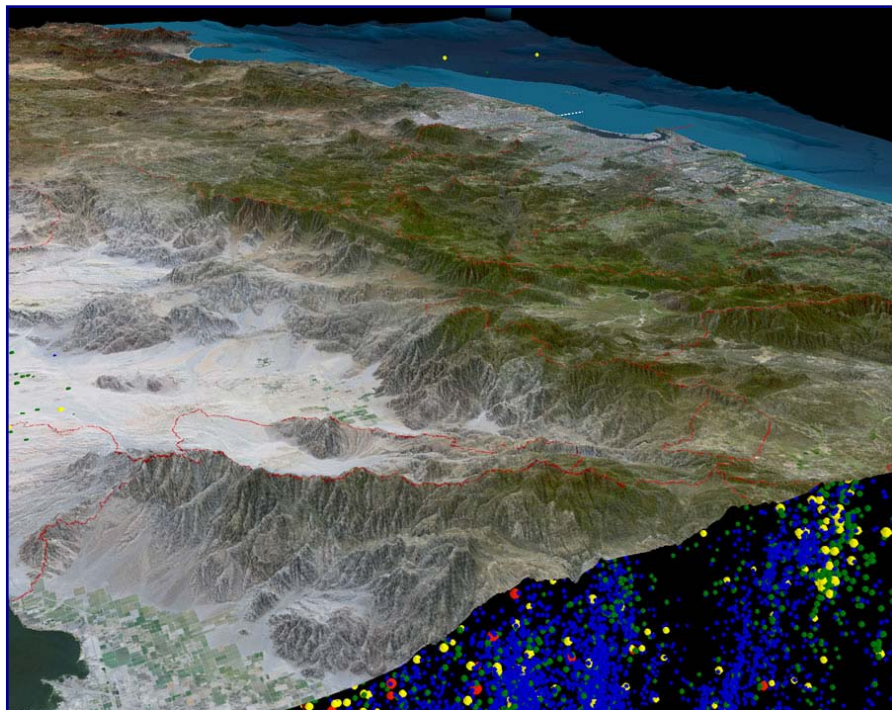
<http://SIOExplorer.ucsd.edu>

www.CICESE.mx

www.stm-usa.com

Spanish copy

Lienzo Regional 3D de las Californias ***Regional Workbench Consortium***



Este es un modelo físico del relieve del terreno de la zona fronteriza entre Baja California, California, Sonora y Arizona, cortado de un bloque de material sintético por una máquina guiada por computadora y posteriormente pintado por una impresora de inyección de tinta con un mosaico en color natural de imágenes de satélite Landsat. Las cabezas de impresión 3D, van flotando a una pequeña distancia sobre la superficie tallada liberando tinta. La información del relieve proviene de datos obtenidos en la Misión de Topografía por Radar del Transbordador Espacial (NASA), del CICESE con información del relieve de México y de Scripps Institution of Oceanography con datos del lecho

marino.

Este modelo es un producto del Consorcio Regional (Regional Workbench Consortium), un grupo de universidades y organizaciones comunitarias de México Y E.U.A. unidas en un esfuerzo colaborativo para apoyar la planeación regional en la zona fronteriza, preocupados por la ecología de las cuencas hidrológicas y la contaminación del agua.

Para más información acerca del modelo sólido y la versión digital, ve:
http://regionalworkbench.org/databank/rwbc_search.php?page=viewall

Para mayores informes:

Consorcio Regional	www.regionalworkbench.org
Acceso a datos del lecho marino	http://SIOExplorer.ucsd.edu
Institución científica Mexicana	www.CICESE.mx
Maquina que construye el modelo	www.stm-usa.com

Lat. / Long. Coordinates of the 3D Regional Canvas of the Californias

	Top Left	Lower Right	Range
Latitude	33:35:18.24N	31:20:7.47N	2:15:10.77
Longitude	117:40:11.48W	114:23:17.83W	3:16:53.65