

<b>Entry_ID</b>	salton2010	salton2011
<b>NGDC_Number</b>		
<b>DataClass</b>	Field,Processed	Field,Processed
<b>DataType_at_MSDC</b>	MCS	MCS, OBS
<b>Theme_Keyword_Thesaurus</b>	GCMD Science Keywords Valids	GCMD Science Keywords Valids
<b>Theme_Keyword</b>	EARTH SCIENCE > Solid Earth > Seismology > Seismic Profile	EARTH SCIENCE > Solid Earth > Seismology > Seismic Profile
<b>Place_Keyword_Thesaurus</b>	GCMD Location Valids	GCMD Location Valids
<b>Place_Keyword</b>	Salton Trough	Salton Trough
<b>General_Keywords_Thesaurus</b>	none	none
<b>General_Keywords</b>	rifting, hazard, fault, San Andreas Fault	rifting, hazard, fault, San Andreas Fault
<b>Platform</b>	Sea Ark	
<b>PlatformOrganization</b>	USGS	barge
<b>Beginning_Date</b>	2010-05-06	2011-03-05
<b>Ending_Date</b>	2010-05-14	2011-03-20
<b>SurveyDatum</b>	WGS84	WGS84
<b>Data_Set_Progress</b>	complete	complete
<b>rrentness_Reference</b>	ground condition	ground condition
<b>Originating_Organization_ID</b>	SIO/GRD,USGS	SIO/GRD,USGS
<b>Data_Organization_ID</b>	UTX-AUSTIN/IG	UTX-AUSTIN/IG
<b>Access_Constraints</b>	limited	limited
<b>Use_Constraints</b>	UTIG use rules apply, no commercial DB or Web use without permission	UTIG use rules apply, no commercial DB or Web use without permission
<b>Abstract</b>	The U.S. west coast is subject to significant risk of very large earthquakes, and heavily populated Southern California is particularly vulnerable owing to its proximity to the San Andreas Fault. The linkage of this fault system through the Salton Sea region is poorly understood, in part because the structure beneath the Salton Sea has not been defined. The project, conducted in conjunction with a deployment of on-land seismic stations, will address that problem by deploying an array of ocean bottom seismometers (OBS) on the floor of the Salton Sea, and conducting a complementary multi channel seismic survey aimed at imaging the structure beneath the Salton Trough. Improved understanding of the Earthquake hazard in this region has direct societal benefit. The project will also contribute to science education in California, and support the Ph.D. research of a young female graduate student at UCLA.	The U.S. west coast is subject to significant risk of very large earthquakes, and heavily populated Southern California is particularly vulnerable owing to its proximity to the San Andreas Fault. The linkage of this fault system through the Salton Sea region is poorly understood, in part because the structure beneath the Salton Sea has not been defined. The project, conducted in conjunction with a deployment of on-land seismic stations, will address that problem by deploying an array of ocean bottom seismometers (OBS) on the floor of the Salton Sea, and conducting a complementary multi channel seismic survey aimed at imaging the structure beneath the Salton Trough. Improved understanding of the Earthquake hazard in this region has direct societal benefit. The project will also contribute to science education in California, and support the Ph.D. research of a young female graduate student at UCLA.
<b>Purpose</b>	The objectives were to image the structure beneath the trough and to improve the understanding of the San Andreas Fault system and earthquake hazard in the region.	The objectives were to image the structure beneath the trough and to improve the understanding of the San Andreas Fault system and earthquake hazard in the region.
<b>AwardTitle</b>	Marine Seismic Reflection and Refraction Study of the Salton Trough	Marine Seismic Reflection and Refraction Study of the Salton Trough
<b>Project_Name</b>	Salton Seismic Imaging Project 2010	Salton Seismic Imaging Project 2011
<b>Funding_Organization_ID</b>	NSF	NSF
<b>Funding_Award_Number</b>	0927446	0927446
<b>Funding_Beginning_Date</b>	2009-08-01	2009-08-01
<b>Funding_Ending_Date</b>	2013-09-30	2013-09-30
<b>Data_Release_Date</b>		
<b>Cruise_Report</b>		
<b>Browse_Graphic_File_Name</b>		
<b>Browse_Graphic_File_Description</b>	Navigation for available field and processed data from the cruise, overlaying bathymetric/topographic data grid of Smith & Sandwell (1997, Science, 277:1956-1962).	Navigation for available field and processed data from the cruise, overlaying bathymetric/topographic data grid of Smith & Sandwell (1997, Science, 277:1956-1962).
<b>Browse_Graphic_File_Type</b>	JPEG	JPEG
<b>Cruise_Filename</b>		
<b>Cruise_Navigation</b>	salton2010.ts.tar.gz	
<b>Cruise_Start_Port</b>		
<b>Cruise_End_Port</b>		
<b>Line_Names_Comment</b>	MCS: 1_12, 14_17, 19, 1a, 2a,2b, 2c, 4a, 8a, 9a, 10a, 14a	MCS: 01_07, 09_12, 01a, 05a, 07b, 11a
<b>SNO_Region</b>	np09	np09
<b>Other_Archive_Files</b>	salton2010.observerLogs.zip	

### Intro\_Paragraph

Part of the Salton Seismic Imaging Project (SSIP), this 2010 survey of the Salton Trough collected 24-channel MCS data with an acquisition system tailored to enhance vertical resolution. <a href=http://www.ig.utexas.edu/sdc/cruise.php?cruiseIn=salton2011>SALTON2011</a> was a companion survey in 2011.

Part of the Salton Seismic Imaging Project (SSIP), this 2011 survey of the Salton Trough collected 48-channel MCS and OBS data with a deep acquisition system tailored to enhance penetration. A 17 m motor vessel towed a 30 m barge from which the instruments were deployed. <a href=http://www.ig.utexas.edu/sdc/cruise.php?cruiseIn=salton2010>SALTON2010</a> was a companion survey in 2010.

### ProcessingDescription

Processing included included velocity analysis, CMP stacking and predictive deconvolution using 2% prewhitening, bandpass filtered from 30-200 Hz using SIOSEIS. In-house MATLAB modules were used for CMP, gathering, stacking and deconvolution.

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### Links

### Comments