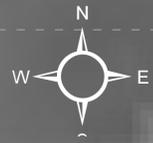
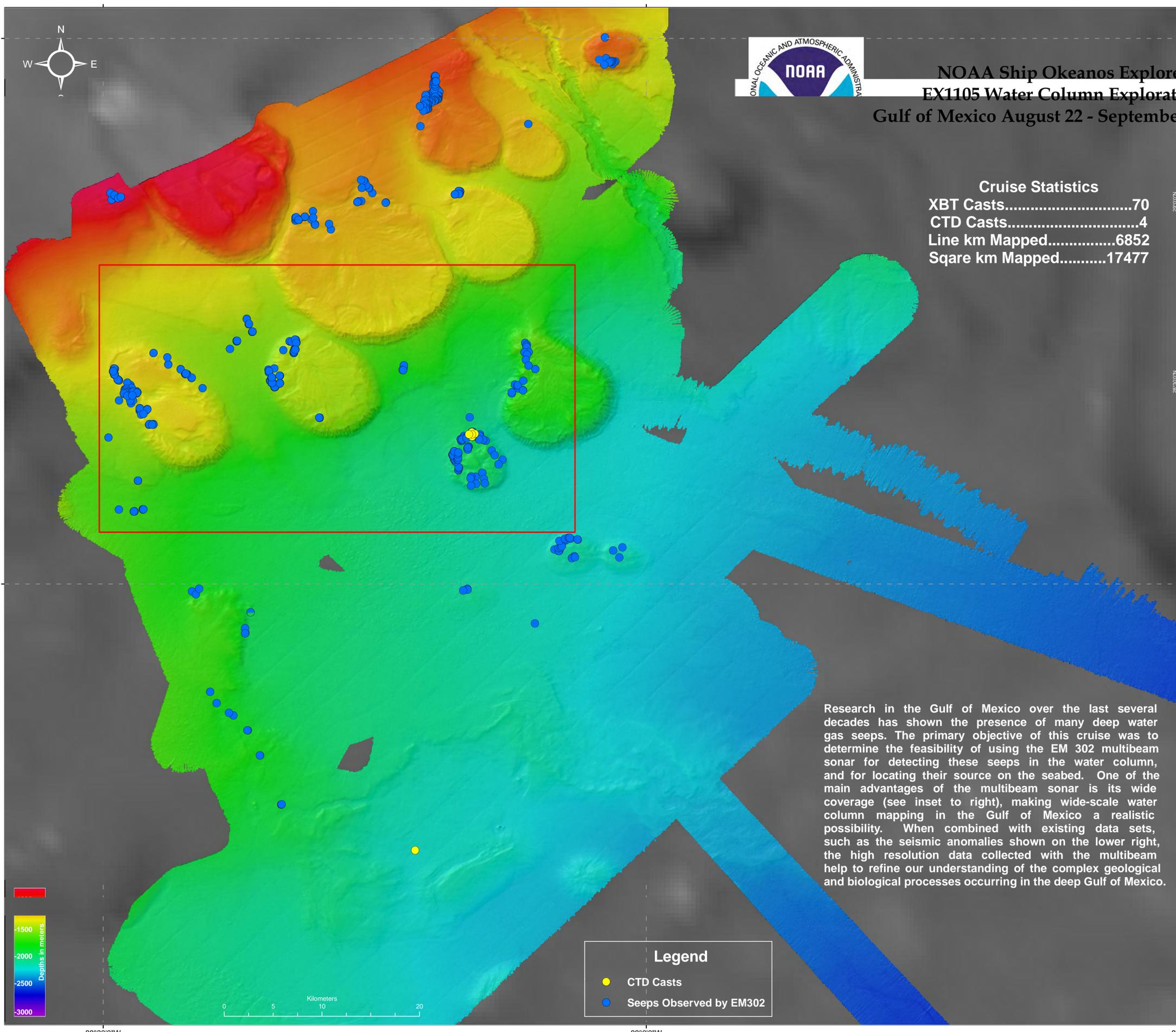


29°00'N

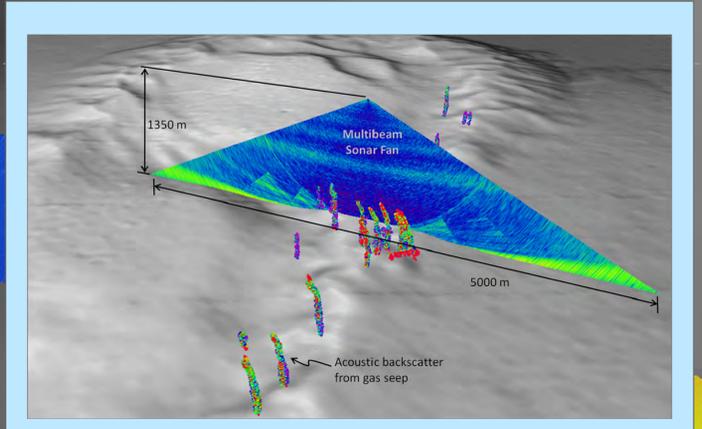
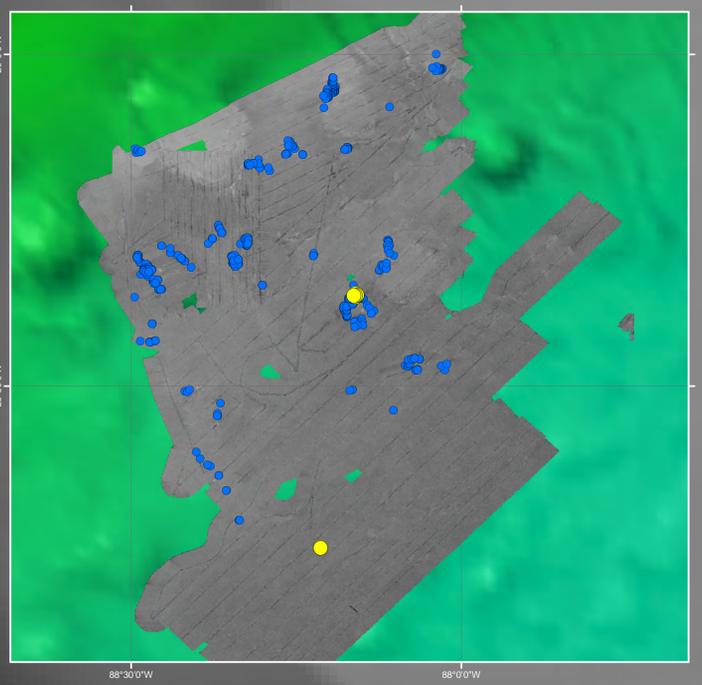


# NOAA Ship Okeanos Explorer EX1105 Water Column Exploration Gulf of Mexico August 22 - September 10, 2011



**Cruise Statistics**

XBT Casts.....	70
CTD Casts.....	4
Line km Mapped.....	6852
Sqare km Mapped.....	17477

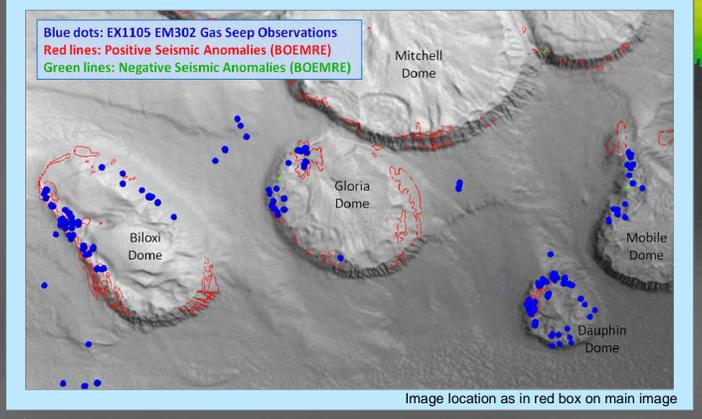


Research in the Gulf of Mexico over the last several decades has shown the presence of many deep water gas seeps. The primary objective of this cruise was to determine the feasibility of using the EM 302 multibeam sonar for detecting these seeps in the water column, and for locating their source on the seabed. One of the main advantages of the multibeam sonar is its wide coverage (see inset to right), making wide-scale water column mapping in the Gulf of Mexico a realistic possibility. When combined with existing data sets, such as the seismic anomalies shown on the lower right, the high resolution data collected with the multibeam help to refine our understanding of the complex geological and biological processes occurring in the deep Gulf of Mexico.



**Legend**

- CTD Casts
- Seeps Observed by EM302



88°30'0"W

88°0'0"W

87°30'0"W