INTERNATIONAL HYDROGRAPHIC ORGANIZATION

INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION (of UNESCO)

UNDERSEA FEATURE NAME PROPOSAL

Name Proposed:	Cruzeiro do Sul Rift	**Ocean or Sea:** Atlantic Ocean

Geometry that best defines the feature (Yes/No):

Point	Line	Polygon	Multiple points	Multiple lines*	Multiple polygons*	Combination of geometries*
Yes	Yes					

** Geometry should be clearly distinguished when providing the coordinates below.*

	Lat.	Long.
Coordinates:	(Central Point) 31°59.48'S	(Central Point) 33°15.95'W
	29°45.53'S	37°03.58'W
	30°31.60'S	36°02.33'W
	30°59.27'S	35°05.63'W
	31°36.32'S	33°50.45'W
	32°48.63'S	32°30.33'W
	33°43.50'S	31°16.38'W
	34°18.40'S	30°14.75'W
	34°37.80'S	28°52.17'W

Feature Description:	Maximum Depth: - 5300 m	Steepness:
	Minimum Depth : -630 m	Shape: Elongated
	Total Relief:	Dimension/Size: 1200 Km (approximately)

Associated Features: Rio Grande Plateau, Rio Grande Leste Plateau, Rio Grande Oeste Plateau and Konstantinov Ridge

Chart/Map References:	Shown Named on Map/Chart: Shown Unnamed on Map/Chart: 30 (201) Within Area of Map/Chart: 30 (201)

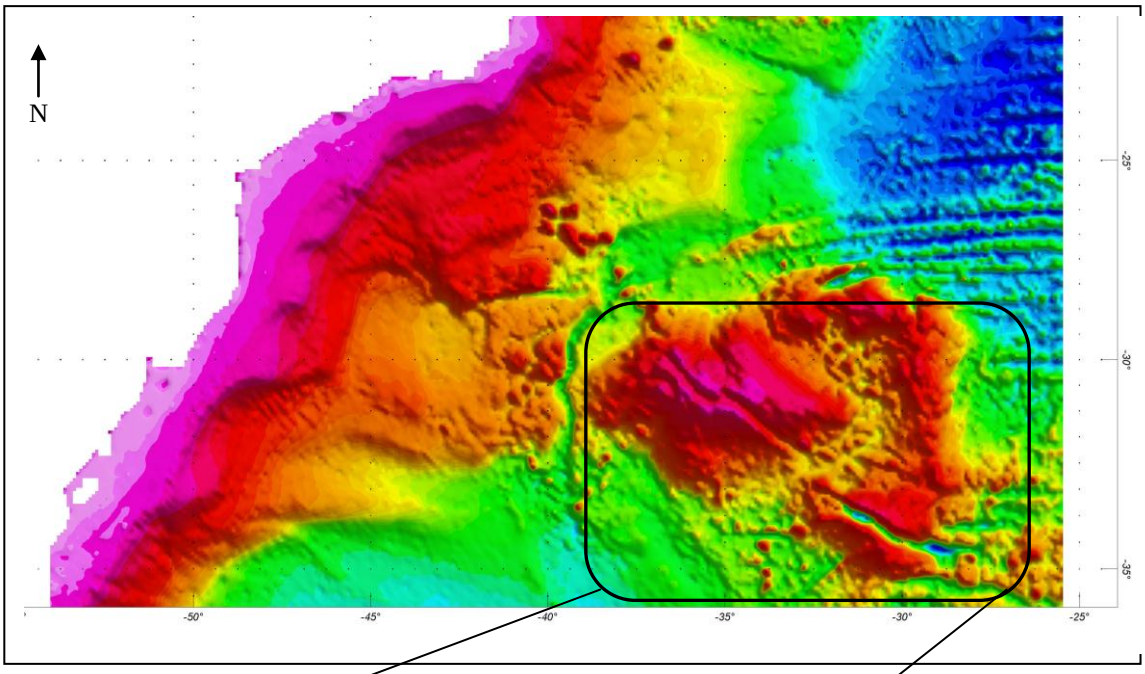
Reason for Choice of Name: Cruzeiro do Sul is the name of a five star constellation that indicates the South Pole. They became used as a national symbol by several southern nations and also appear in the Brazilian flag. The feature proposed is located in the Cruzeiro do Sul

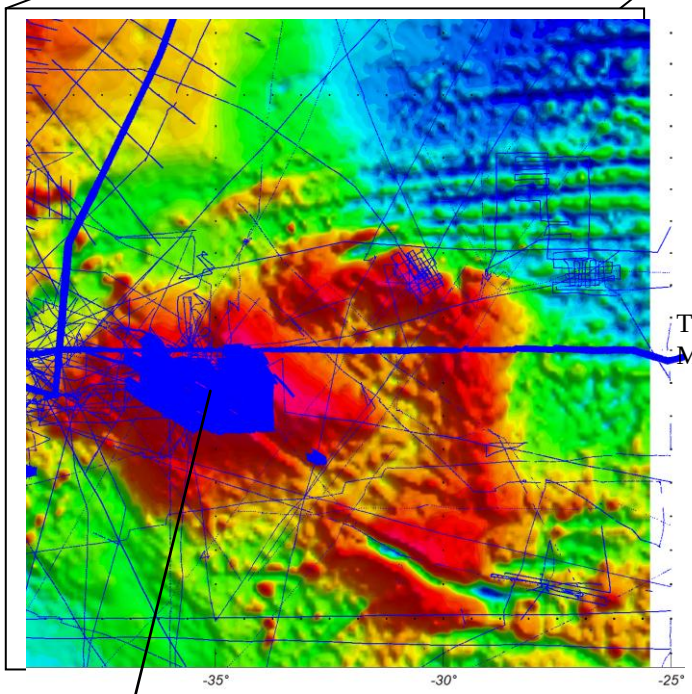
deformation zone, already described in scientific works.	
Discovery Facts:	Discovery Date: -------- Discoverer (Individual, Ship): --------
Supporting Survey Data, including Track Controls:	Date of Survey: 1966 - Abril/2010 - November/2003 to December/ 2003 Survey Ship: R/V Vema - NHi Sírius - R/V Mirai Sounding Equipment: Multibeam – Simrad EM 302 - Sea Beam 2112.004 Type of Navigation: GPS Estimated Horizontal Accuracy (nm): Survey Track Spacing: 4 km

Remarks: This proposal was presented in 23rd SCUFN Meeting as Cruzeiro do Sul Southeast Escarpment and Cruzeiro do Sul Northwest Escarpment. The SCUFN suggested renaming both as a single one rift feature.

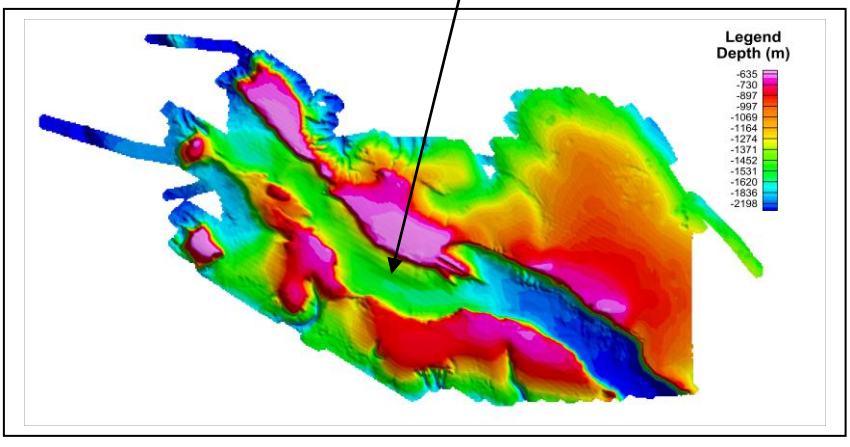
The amount of data in part of this area is very poor so that all bathymetric profiles shown in southeast part were extracted by the grid which was built with acquired data and ETOPO2.

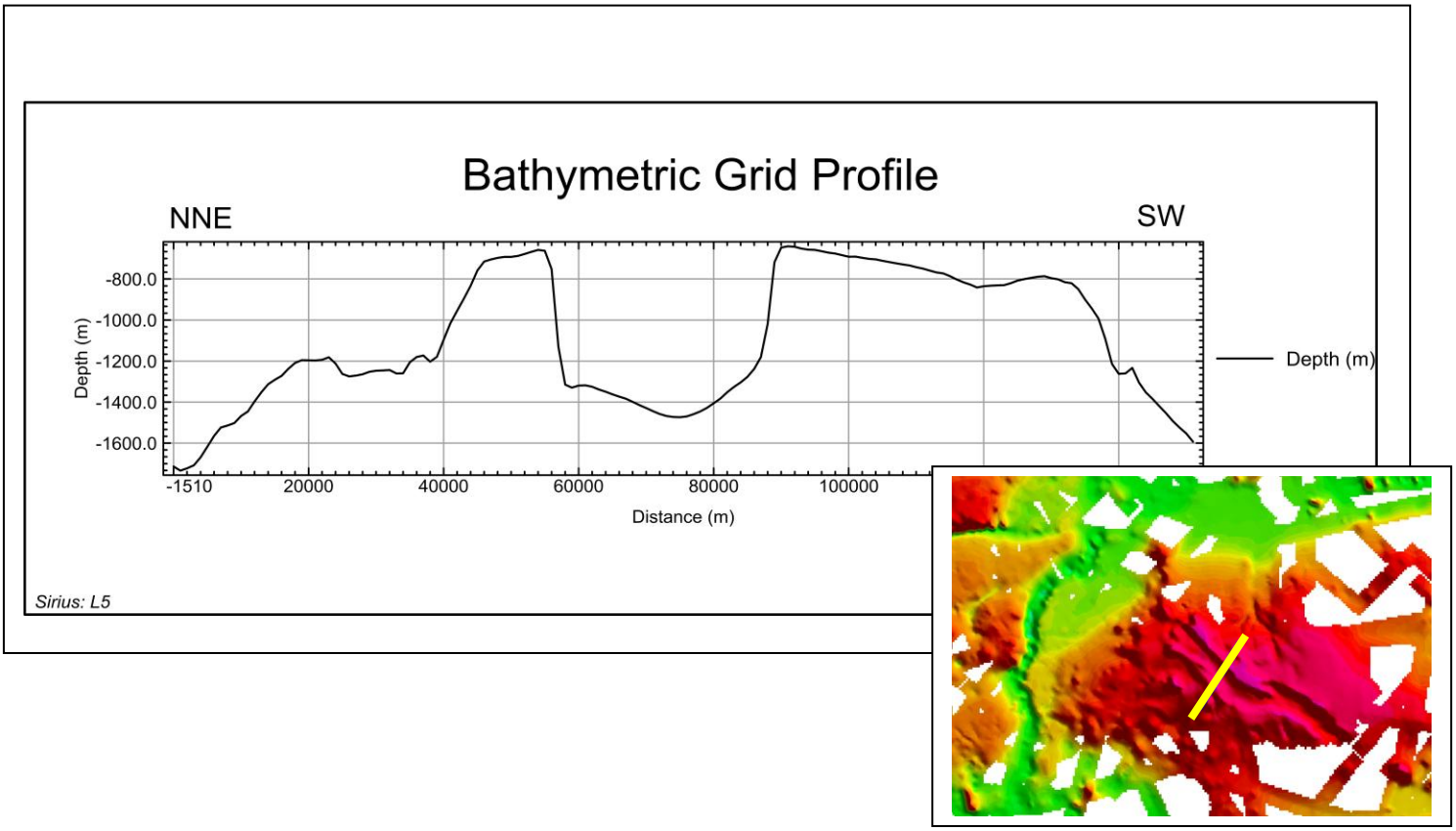
Location of Cruzeiro do Sul Rift

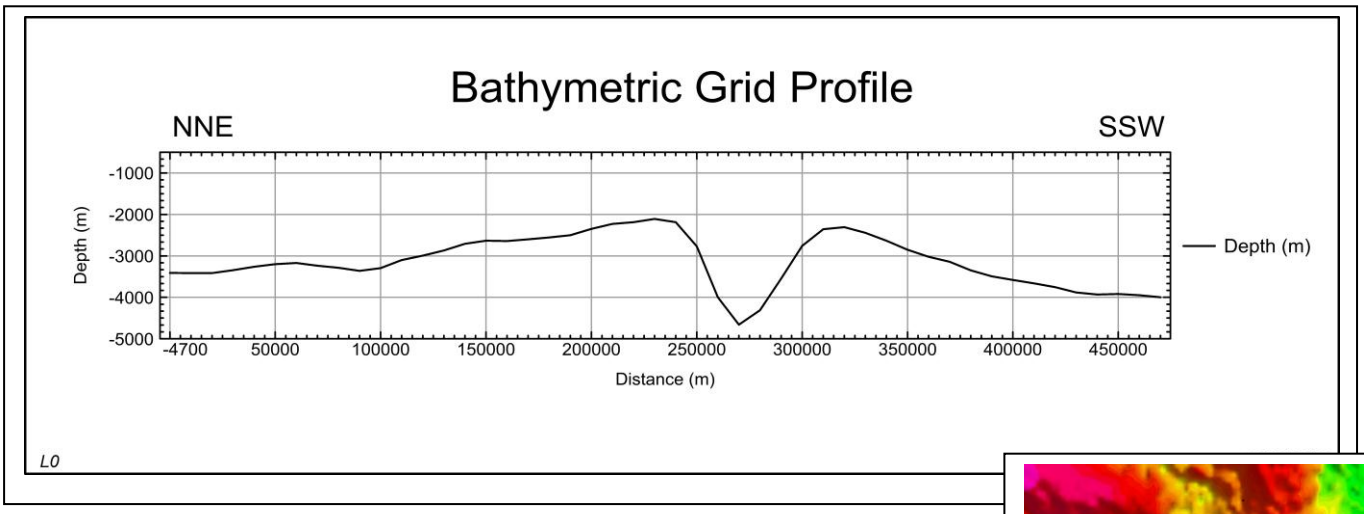


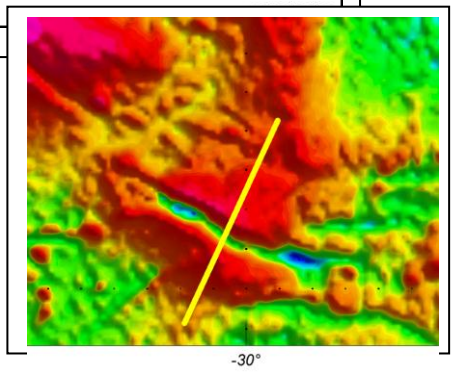


Track line data of
Multibeam and Singlebeam




Bathymetric Grid Profile
NNE
SW
-800.0
-1000.0
-1200.0
-1400.0
-1600.0
Depth (m)
-1510
20000
40000
60000
80000
100000
Distance (m)
Depth (m)
Sirius: L5


Bathymetric Grid Profile
NNE
SSW
-1000
-2000
-3000
-4000
-5000
Depth (m)
-4700
50000
100000
150000
200000
250000
300000
350000
400000
450000
Distance (m)
Depth (m)
L0



-30°

Proposer(s):	Name(s): Directorate of Hydrography and Navigation Date: August 2011 E-mail: ana.angelica@chm.mar.mil.br Organization and Address: Barão de Jaceguay Street – Ponta da Armação – Niterói – Rio de Janeiro – Brazil - ZIP code: 24.048-900 Concurrer (name, e-mail, organization and address):