Bathymetric Chart of the South East Pacific

compiled by Wilhelm Weinrebe and Marcus Hasert

GEOMAR | Helmholtz Centre for Ocean Research Kiel

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Description of Dataset

This series of digital terrain models (DTM) of the South East Pacific Ocean has been created from a compilation of multibeam bathymetric data acquired during 18 cruises of German (RV Sonne, RV Meteor), British (R.R.S. James Cook) and Chilean (RV Vidal Gormaz) research vessels between 1995 and 2012. The multibeam data has been carefully reprocessed taking into account available water sound velocity profiles and manually edited (artifacts and outlier removal). The DTMs have been calculated on a regular grid with grid cell sizes of 200 m by 200 m. Grid calculations have been done using the MB-System software (www.ldeo.columbia.edu/res/pi/MB-System) by the program *mbgrid* using a Gaussian weighted mean gridding algorithm. DTMs of land topography are based on SRTM data (Shuttle Radar Topography Mission, www2.jpl.nasa.gov/srtm/) and calculated on a regular grid with grid cell sizes of 90 m by 90 m.

Detailed information about the map sheets are given in table 1. Map sheets are calculated for A0 page size, the included printouts are reduced in size and may show slight distortions and artifacts due to the reduction. Full size pdf files of all sheets of the chart can be downloaded from https://oceanrep.geomar.de/14299/. DTMs of the bathymetry data are available at PANGAEA (www.pangaea.de).

The data are not to be used for navigation or for any other purpose involving safety at sea.

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Die Verantwortung für den Inhalt dieser Veröffentlichung liegt bei den Autoren.

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Sheet lines

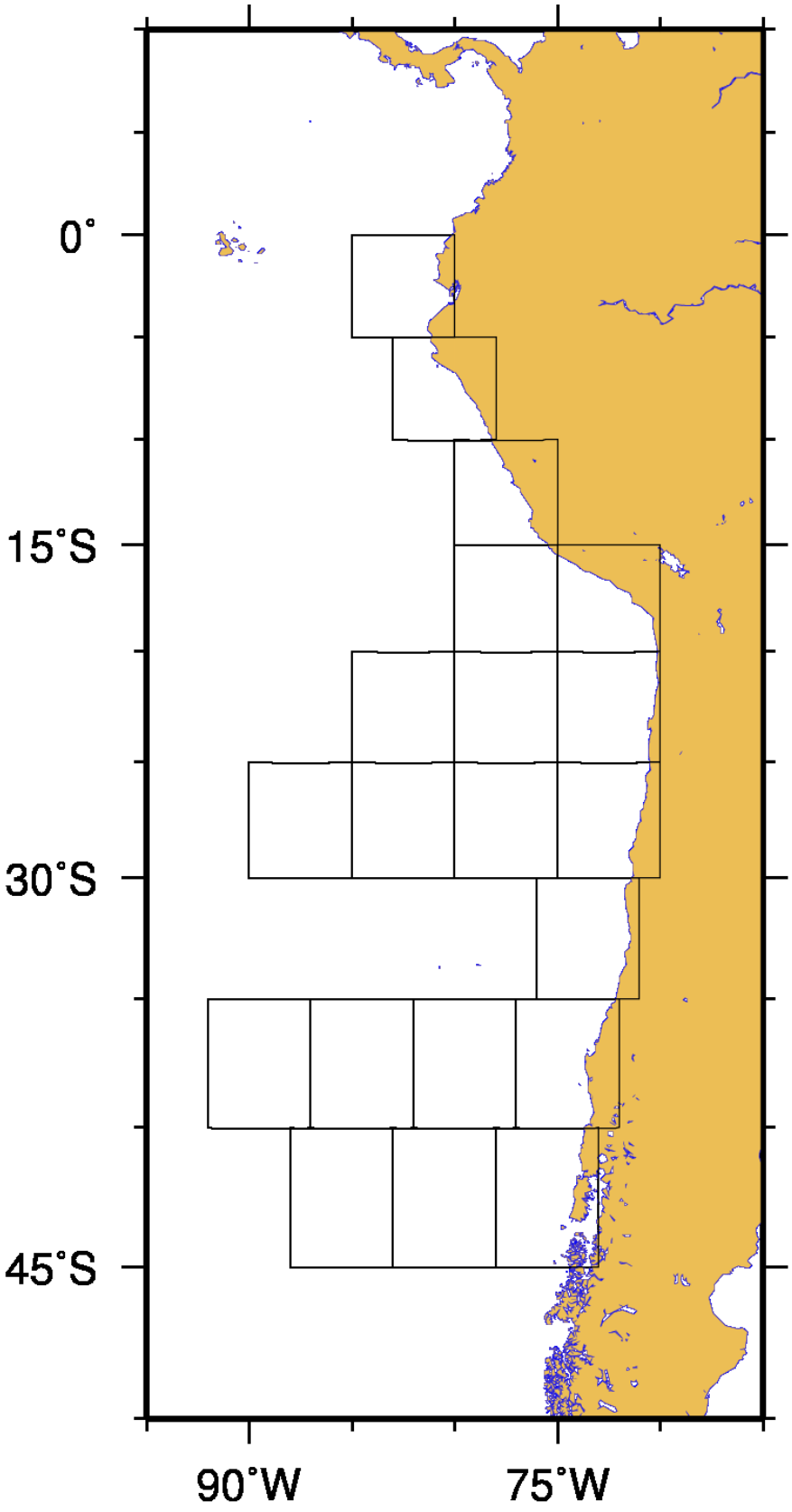

Table 1:

chart name	longitude range	latitude range	reference latitude	release	cruises
s05w85	W85° – W80°	S05° – S00°	S02°30’	3	SO158, SO159, SO160, SO209, M77/2
S10w83	W83° – W78°	S10° – S05°	S07°30’	2	SO162, SO209, M77/2
S15w80	W80° – W75°	S15° – S10°	S12°30’	2	SO162, SO209, M77/1, M77/2
S20w75	W75° – W70°	S20° – S15°	S17°30’	2	SO104, SO146, SO147, SO162, SO209, M77/1
S20w80	W80° – W75°	S20° – S15°	S17°30’	3	SO146, SO160, SO162, SO209, M77/1, M77/2
S25w75	W75° – W70°	S25° – S20°	S22°30’	2	SO104, SO147, SO160, SO162, SO209
S25w80	W80° – W75°	S25° – S20°	S22°30’	2	SO102, SO104, SO160
S25w85	W85° – W80°	S25° – S20°	S22°30’	2	SO102, SO180
S30w75	W75° – W70°	S30° – S25°	S27°30’	2	SO102, SO104, SO147, SO161, SO162, SO180, SO209
S30w80	W80° – W75°	S30° – S25°	S27°30’	2	SO102, SO104, SO180
S30w85	W85° – W80°	S30° – S25°	S27°30’	2	SO102
S30w90	W90° – W85°	S30° – S25°	S27°30’	2	SO102
S35w76	W76° – W71°	S35° – S30°	S32°30’	3	SO101, SO102, SO103, SO104, SO147, SO161, SO162, SO180, SO181, SO210, M67/1, JC23
S40w77	W77° – W72°	S40° – S35°	S37°30’	2	SO102, SO161, SO181, SO210, M67/1, JC23, Vidal Gormaz
S40w82	W82° – W77°	S40° – S35°	S37°30’	2	SO102, SO181
S40w87	W87° – W82°	S40° – S35°	S37°30’	2	SO102
S40w92	W92° – W87°	S40° – S35°	S37°30’	2	SO102
S45w78	W78° – W73°	S45° – S40°	S42°30’	2	SO102, SO161, SO181, Vidal Gormaz
S45w83	W83° – W78°	S45° – S40°	S42°30’	2	SO102, SO181
S45w88	W88° – W83°	S45° – S40°	S42°30’	2	SO102