



## ORGANIZACION HIDROGRAFICA INTERNACIONAL

Dossier del BHI No. S3/2705

CIRCULAR No. 04/2012  
09 de Enero del 2012

### DATOS HISTORICOS DE MAREOMETROS EN FORMA NO DIGITAL QUE NECESITAN SER RESCATADOS

Referencia: Circular del BHI No. 48/2009 del 7 de Julio del 2009.

Estimado(a) Director(a),

1. El Grupo de Trabajo sobre las Mareas y el Nivel del Mar (TWLWG) coopera estrechamente con el Sistema Mundial de Observación del Nivel del Mar (GLOSS) de la Comisión Oceanográfica Intergubernamental (COI) de la UNESCO, con representación cada uno en las reuniones del otro.
2. Un área de interés común es el estudio de los cambios del nivel del mar. Un elemento esencial en cada estudio de este tipo es la disponibilidad de registros de mareómetros de hace tiempo. Muchos de estos registros históricos existen en forma impresa y puede que estén olvidados en algún rincón de las oficinas desde hace tiempo. En el 2001 GLOSS hizo una solicitud para recuperar estos registros. Dicha solicitud tuvo éxito, como puede verse en el Anexo. Sin embargo, GLOSS sigue opinando que existen muchos registros que no están en su base de datos y ha solicitado su apoyo a la OHI para recuperar los datos, cuando sea posible. Se llamó la atención de los Estados Miembros sobre este asunto en el párrafo 3 de la Circular de la referencia, que informaba sobre las conclusiones de la 11<sup>a</sup> Reunión del Grupo de Expertos de GLOSS.
3. En su 12<sup>a</sup> Reunión de Noviembre del 2011, GLOSS decidió intentar de nuevo recuperar los datos que faltaban y publicó la carta que se adjunta en el Anexo A (*en Inglés*). Los Estados Miembros serán conscientes de la importancia del estudio de los cambios del nivel del mar y se les ruega que presten su asistencia a GLOSS para recuperar estos datos, cuando sea posible.

En nombre del Comité Directivo  
Atentamente,

Vice-Almirante Alexandros MARATOS  
Presidente

Anexo A: Solicitud del Grupo de Expertos GLOSS de la COI (*en Inglés únicamente*).

**Anexo A a la Circular del BHI No. 04/2012**

December 2011  
From: GLOSS Group of Experts  
To: GLOSS country contacts  
Subject: Request for Information:  
Inventory of Sea Level Data in Need of Rescue



Dear GLOSS colleague,

In 2001, the Global Sea Level Observing System (GLOSS) and the International Data and Information Exchange program (IODE) developed an inventory by means of a questionnaire to GLOSS and IODE contacts for information about historic tide gauge data in non-digital form and in need of rescue. Reports from the 2001 endeavor are given at [www.gloss-sealevel.org/data](http://www.gloss-sealevel.org/data). In total, rescued hourly data since 2001 have extended 91 tide gauge series backwards in time for 1,411 years, and subsequently, the quality-controlled versions have been ingested into GLOSS data centers.

At the 12<sup>th</sup> session of the GLOSS Group of Experts (GLOSS GE XII, 7-11 November, 2011, Paris), the topic of rescue of tide gauge data in non-computer form (charts, tabulations, etc.) was discussed. It was noted that a large amount of historic data remain in paper form and have been identified in non-oceanographic facilities such as the US National Archives and the French Prefecture Archives. The mostly paper-based tide gauge data sets are of potential great value to the sea level community in a range of applications including the extension of existing sea level time series as far back as possible in order to understand more completely the time scales of sea level change. The GLOSS GE XII recommended an update to the 2001 inventory. The goal is to seek support from funding agencies for rescue by detailing the vast amount of known non-electronic data. Greater exposure of the inventory will be possible through the GLOSS collaboration with the Data At Risk Task Group of the Committee on Data for Science and Technology (CODATA) of the International Council for Science (ICSU).

On behalf of the GLOSS GE, we would like to ask for your support in furthering the inventory of historic, non-digital tide gauge data. If your agency/institute/facility holds historic sea level data in non-computer form, could you please fill in this questionnaire? If you are aware of other facilities in your country that have such non-digital tide gauge records, could you please give us contact information? We are most thankful to those who responded to the 2001 questionnaire. If select questions of the new questionnaire have already been answered, please reply by stating "see 2001".

Please send comments, questions, contacts for additional historic data, and/or the completed new questionnaire by May 1, 2012 to Mr. Patrick Caldwell, University of Hawaii Sea Level Center (UHSLC). See contact information below.

It is preferred to receive an electronic copy of your responses to this questionnaire. Thank you in advance for your support.

Sincerely,

Dr. Gary Mitchum  
GLOSS Chair  
University of South Florida  
140 7<sup>th</sup> Avenue South  
St. Petersburg, Florida USA 33701  
[mitchum@marine.usf.edu](mailto:mitchum@marine.usf.edu)

Dr. Lesley Rickards  
Director  
Permanent Service for Mean Sea Level  
J.Proudman Bldg., 6 Brownlow Street  
Liverpool, UK L3 5DA  
[ljr@bodc.ac.uk](mailto:ljr@bodc.ac.uk)

Dr. Thorkild Aarup  
Technical Secretary for GLOSS  
Intergovernmental Oceanographic Commission  
UNESCO, 1 rue Miollis, F-75 732  
Paris, cedex 15, France

[t.aarup@unesco.org](mailto:t.aarup@unesco.org)  
Mr. Patrick Caldwell  
Data Manager  
Joint Archive for Sea Level (UHSLC/NOAA)  
1000 Pope Road, MSB 318  
Honolulu, Hawaii, 96822 USA  
[caldwell@hawaii.edu](mailto:caldwell@hawaii.edu)

# **Request of Information: Inventory of Sea Level Data in Need of Rescue**

Please complete the following questionnaire and return the electronic document to Mr. Patrick Caldwell, University of Hawaii Sea Level Center, [caldwell@hawai.edu](mailto:caldwell@hawai.edu) by **May 1, 2012**.

## General Questions

1. Please provide the name of facility/agency/institute/office/department/organization/etc. (referred to as "agency" below) where non-computerized data reside. Include a contact name and email address. For multiple choice questions below, please place an X in front of the letter(s) as your response and/or describe.
  2. Please indicate what media the data are stored on?
    - a. Paper
    - b. Microfiche
    - c. Film
    - d. Other, please explain?
  3. What is the overall condition of the media?
    - a. All are in good condition
    - b. All are near non-readability
    - c. Other, please describe:
  4. Are there multiple copies?
    - a. No, only one copy and it resides here
    - b. Yes, copies also reside at (name of location):
    - c. In the past, are you aware if copies were sent to a hydrographic agency or other tide facility in order to produce tidal predictions, if so, where?

5. For each tide gauge station (option A: cut and paste this section for each site, or option B: do this section once if most answers are the same for all stations, though please give time spans specifically for each station, and point out where there are different answers depending on the station)

- a. Station name and location? Are maps of station location in harbor available?
- b. Time span of non-digital data and list of major missing data periods (~years)?
- c. Form of tide data (analog pen trace on charts, tabulated hourly values, high and low tides, etc.)? (For charts, please give chart manufacturer, size, scale factor, and replacement frequency)
- d. Clearness of pen ink, height markings, scale factor, calibration points, date/time stamps? - good or bad, explain
- e. Type, make, and model of tide gauge?
- f. Why were the data collected (hydrography, tide predictions, etc.)?
- g. Are tide staff (pole) readings available, if so, how often made?
- h. Are other notes on station maintenance available (clock checks,etc)?
- i. Were ancillary parameters recorded, such as water temperature or salinity?
- j. Are historic geodetic surveys available?
- k. Are or can the benchmarks be linked to the existing benchmark network?

6. What is the overall volume of the holdings? (number of boxes, number of rolls each X by Y dimension, etc.)
7. Are there any plans by your agency or other (please name) to rescue these data into computer ready form, if so, on what time line?
8. If funding were available for photocopying (or making digital camera images) and postal charges, would your agency allow observations to be made available through a GLOSS data center?