

GLOSS - French contribution up to 2001
Note prepared by C. Le Provost and R. Leroy

The 15 stations under the responsibility of French agencies are:

Gloss 242	Brest	responsibility	SHOM
Gloss 205	Marseille		IGN
Gloss 123	Nouméa		SHOM /Univ. de Hawaii
Gloss 142	Nuku Hiva (Marquises)		Univ. de Hawaii
Gloss 138	Rikitea (Gambier)		„
Gloss 140	Matavaï (Tahiti)		„
Gloss 23	Kerguelen		INSU-IFRTP
Gloss 24	Amsterdam St Paul		„
Gloss 21	Crozet		„
Gloss 131	Dumont D'Urville		„
Gloss 165	Clipperton		not installed
Gloss 204	Fort de France (à la place du Robert) (Martinique)		?
Gloss 17	Pointe des Galets (La Réunion)		DDE
Gloss 202	Cayenne		?
Gloss 96	Dzaouzi Mayotte		?

GLOSS 205 and 242:

The data from the two stations are collected by SHOM and transmitted to PSMSL. Brest has been equipped with a new acoustic station since 1993. Marseille was equipped with such an acoustic station in June 1998.

GLOSS 123:

The station 123 (Nouméa) is composed of an American tide gauge, under US responsibility, and a French one, under SHOM responsibility. The data from the American tide gauge is sent regularly to the University of Hawaii via satellite. The French tide gauge is used only to control the American tide gauge. People from the the hydrographic base in Nouméa (depending from SHOM), and people from IRD have a regular look after the two tide gauges.

The SHOM has decided to install a new modern tide gauge in order to replace the two presently in place, which get older. This new tide tide gauge could be placed in Numbo, that is 20 km from the actual tide gauges locations, Chaleix. This tide gauge will be included in the French network of permanent tide gauges (currently 17 tide gauges). It could be equipped with permanent GPS by IRD.

GLOSS 138, 140, 142

The University of Hawaii maintains these three stations.

GLOSS 21, 23, 24, 131

The four stations of the South Indian Ocean are part of the ROSAME network (Réseau d'Observation Subantarctique et Antarctique du Niveau de la Mer). They are equipped with

pressure sensor (water level pressure, seawater temperature, and atmospheric pressure). These stations are automatic and transmit the data through ARGOS. The hourly data, after validation, are transmitted to the Hawaii Centre.

-Station 23 (Kerguelen) is operational since April 1993, with only a short gap of a few days in January 2000.

-Station 21 (Crozet) is in place since December 1994. It has been operational from November 1995 to February 1997, from December 1998 to June 1999, from March 2000 to June 2000. It is now again operational since September 2000.

-Station 24 (Amsterdam-St Paul) is operational since October 1994, with a gap from April 1999 to June 1999.

-Station 131 (Dumont d'Urville) was installed in February 1997. It has been operational from February 1997 to August 1997, from February 1998 to May 1998, and from February 1999 up to now, with a short gap in January and February 2000.

GLOSS 165

Nothing new at Clipperton.

GLOSS 17, 96, 202, 204

The four last stations (17, 202, 96, 204) are problematic. SHOM receives some tide sheets from these ports but they are not digitised for several reasons: the digitisation of these ports is not a priority, and some problems in the way the data are processed lead to doubt about the quality of the data:

- **Fort-de-France:** tide sheets from 1993 to 1998 wait for being digitised. Since 1998, SHOM does not receive any more tide sheet.

The Martinique Authorities informed the SHOM that a pressure tide gauge is to be installed (or has already been installed) in PRECHEUR. This is located in the North West of Martinique (20 km from Fort-de-France). This tide gauge concerns primarily IPG (Institut Physique du Globe). They asked to SHOM if this station could be integrated in RONIM network. SHOM indicated it was not interested in this station, Fort de France would be better because it is a principal port of SHOM tide time tables.

In the future (2003), a digital permanent tide-gauge should be install in Fort-de-France. This tide-gauge will be added to RONIM French network and managed from the SHOM in Brest.

- **Pointe-des-Galets:** SHOM received two years of tide-sheets (1998 and 2000). They have not been digitised yet.

- **Cayenne** (Degrad des Cannes): the SHOM has not received any tide sheet since 1996. In 2002, a digital tide-gauge will be install at " Ile Royale " in Guyana, with the collaboration of local authorities (DDE Cayenne). This permanent digital gauge will be added to RONIM French network and managed from the Hydrographic Service in Brest. What about its integration to GLOSS?

- **Dzaoudzi:** some tide sheets are to be digitised at SHOM. Non regular reception, doubt about quality of data. There is no project of a new tide-gauge there.

GPS Stations

Brest and Marseille have been equipped with permanent GPS since 1998. GPS campaigns were done in Brest (86, 89, 93, 94, 97), Crozet (92, 94, 95), Dumont d'Urville (95), Kerguelen (92, 94, 95), Marseille (86, 88, 93, 94), Nouméa (90, 91), Papeete (90, 91), Pointe des Galets (93). The following stations are now equipped with permanent stations GPS (G), and DORIS (D): Brest (G), Dumont d'Urville (G, D), Kerguelen (G, D), Marseille (G), Nouméa (G, D), Papeete

(G, D).

Ajaccio

A permanent tide gauge (June 2000) and a permanent GPS station have been installed in Ajaccio. Is it interesting to introduce this tide-gauge in GLOSS network? Marseille is close to this tide-gauge.

PSMSL

In July of 2000, SHOM has sent to PSMSL the daily, monthly and annually average level for the following stations :

Dunkerque (98, 99),

Calais (98, 99),

Le Havre (99),

Cherbourg (99),

Roscoff (99),

Le Conquet (99),

Brest (97-98-99),

Concarneau: 1971 (4months), 1973 (9 months), 1987 (4 months), 1999 (7 months),

Les Sables d'Olonne (99, 99),

La Rochelle-Pallice (97, 98, 99),

Bayonne-Boucau (99),

Sète (96, 97, 98, 99),

Marseille (98, 99),

Toulon: 81 (7mths), 82 (10 months), 84 (10 months), 91 (3 months), 92 (3 months), 93, 94, 95, 96, 97, 98, 99

Nice: 98, 99

ftp server

□ Data from the ROSDAME network are available at the anonymous ftp site:

Spike.cst.cnes.fr

Login: anonymous

Password: email address

Cd pub/techine/rosame

□ By 2002, SHOM should have set up a data server available on Internet. This server would provide hourly data for some tide gauges, especially those connected to a permanent GPS station. This server would also provide other kind of data such average sea level data. This server should be administrated under a national structure, SONEL, whose aim is to collect permanent GPS data and permanent tide-gauge data. The access to tide data would be protected by passwords and keys. This server should interest GLOSS.