

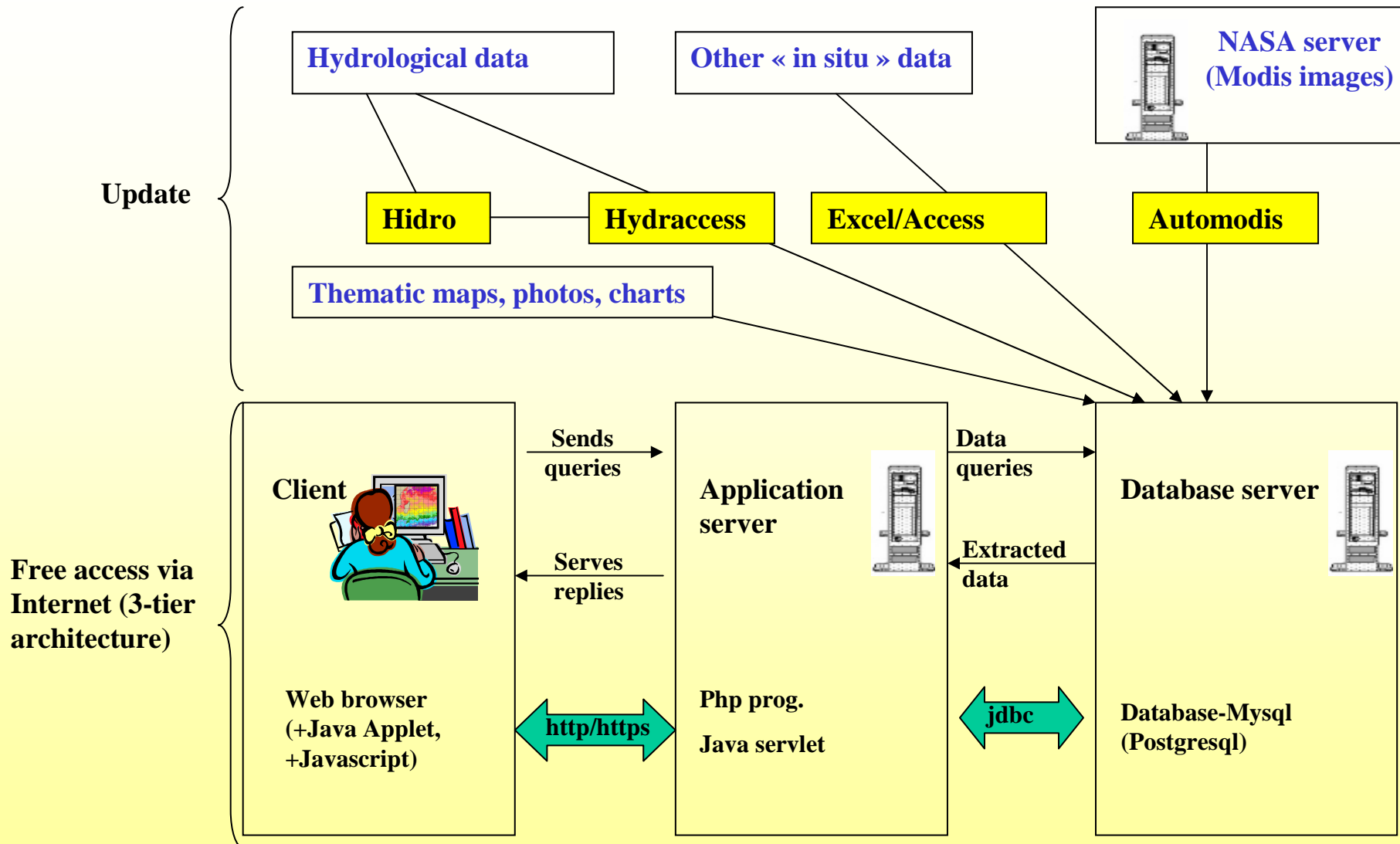


Ore-Hybam database and web site

<http://www.ore-hybam.org>

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Guyot(LMTG Lima), Francis Sondag (LMTG Toulouse)
& Hybam participants.

ORE HYBAM : information system architecture



ORE-HYBAM - "in situ" parameters

Parameter	Time step	Instrument/method
(Sampling and analysis procedures are described at the ORE HYBAM web site)		
Hydrology: Water level Discharge	Daily	Staff gauge/recorders Rating curve/ADCP measurement
Physical chemistry: Water temperature Conductivity pH	10 days/monthly	Thermo-conductivity meter Thermo-conductivity meter pH-meter
Sediments: Surface suspended solid concentration Total suspended solid concentration Suspended solid load	10 days/monthly Field campaign Daily	Surface sampling Section sampling SS total=f(SS surface)
Geochemistry: Major elements (Ca, Mg, K, Na, HCO ₃ , Cl, SO ₄ , Fe, AL, Si, Sr, NO ₃ , F, PO ₄) Trace elements, rare earths (Ti, V, Cr, Mn, Co, Ni, Cu, Zn, As, Rb, Zr, Mo, Cd, Ba, U, La, Ce, Pr, Nd, Sm, Eu, Gd, Tb, Dy, Ho, Er, Yb, Lu, Tm) Silica Organic Carbon (Dissolved, Particulate) Isotopes (Sr)	Monthly Monthly Monthly Monthly Quarterly	HPLC, ICP-AES ICPMS ICP-AES IR Spectrometry TIMS, MS

Web site ORE HYBAM

In english, french, portuguese and spanish

General information about objectives, sampling, analysis, etc...

Links to ORE portal, partners

ORE Hybam - Mozilla Firefox

Echier Edition Affichage Aller à Marque-pages Outils Z

http://www.ore-hybam.org/protoc_p.php?lang_config=fr

ORE HYBAM

Observatoire de Recherche pour l'Environnement
Geodynamical, hydrological and biogeochemical control of erosion/alteration and material transport in the Amazon basin.

France Brazil Bolivia Peru Ecuador Colombia

Home Mission Technic Data Documents Contacts

23/11/2006

The ORE package:
Environmental Research Observatories

The ORE portal

HYBAM research program at LMTG

Other HYBAM program networks:
Complementor network in Congo/Orioco

HYBAM and GBFY reference networks

Operating mode, analysis procedures-Samplings

During the field campaigns performed to setup the stations; the sampling feasibility was tested at each gauge station, especially:

- to ensure access to the sampling place;
- to have a clean place to perform the filtrations;
- to train someone responsible.

Each operator received the equipment needed to sample during a whole year and a document with instructions for sampling and filtration (see framed text), in Spanish or Portuguese language. The equipment consists of:

- a manual vacuum pump;
- a water proof thermometer -- conductivity meter;
- a 1-litre sampling bottle made of HDPE;
- 12 filtration kits with : 1 disposable sterilized filtration set with 0.2 µm cellulose acetate filter, one 125 ml bottle made of HDPE for the major elements; one 60 ml bottle made of brown glass for the COD; one 125 ml bottle made of HDPE for the trace elements;
- aluminum film to package the DOC bottles;
- adhesive tape to protect the labels and seal the bottles;
- a cooler to keep the samples and the equipment;
- 100 l trash bags to unfold on the worktop in order to insure the cleanliness.

The sampling equipment must have been prepared at UnB according to the following procedure:

- sampling bottles for the major elements: HNO3 2N bath during 48h, milli-Q water bath during 48 h, dry in a laminar flow hood;
- DOC bottles: 8 hours in an oven at 450°C;
- trace elements bottles: aqua regia on each face and the bottom during 2 h, HNO3 2N N bath during 48h, milli-Q water bath during 48 h, dry in a laminar flow hood;
- DOC caps and bottles for isotopes : HCl 2N bath during 48h, milli-Q water bath during 48h, dry in a laminar flow hood.

Conductivity measurement

Water sampling

Terminé 128

Web site ORE HYBAM

General information about the station are displayed : position, photos, Diagrams, thematic maps, thematic class distribution, etc...

The screenshot shows the ORE HYBAM website interface. At the top, there is a navigation bar with the site logo and a menu for different countries: France, Brazil, Bolivia, Peru, Ecuador, and Colombia. Below this is a header section with the site's mission statement: "Observatoire de Recherche pour l'Environnement Geodynamical, hydrological and biogeochemical control of erosion/alteration and material transport in the Amazon basin." The main content area is titled "General Information" and includes a table of station data, a map of the Solimoes River basin, and a legend for the map's thematic classes.

Station Id	14100000
Name	Manacapuru
River	Rio Solimoes
Basin	Amazone
Country	Brésil
Latitude (°)	S03°20'43"
Longitude (°)	W060°33'12"
Area (km²)	2 147 740
Altitude (m)	20
Manager	ANA
Mean discharge (m³/s)	102470
Specific discharge (l/s/km²)	49

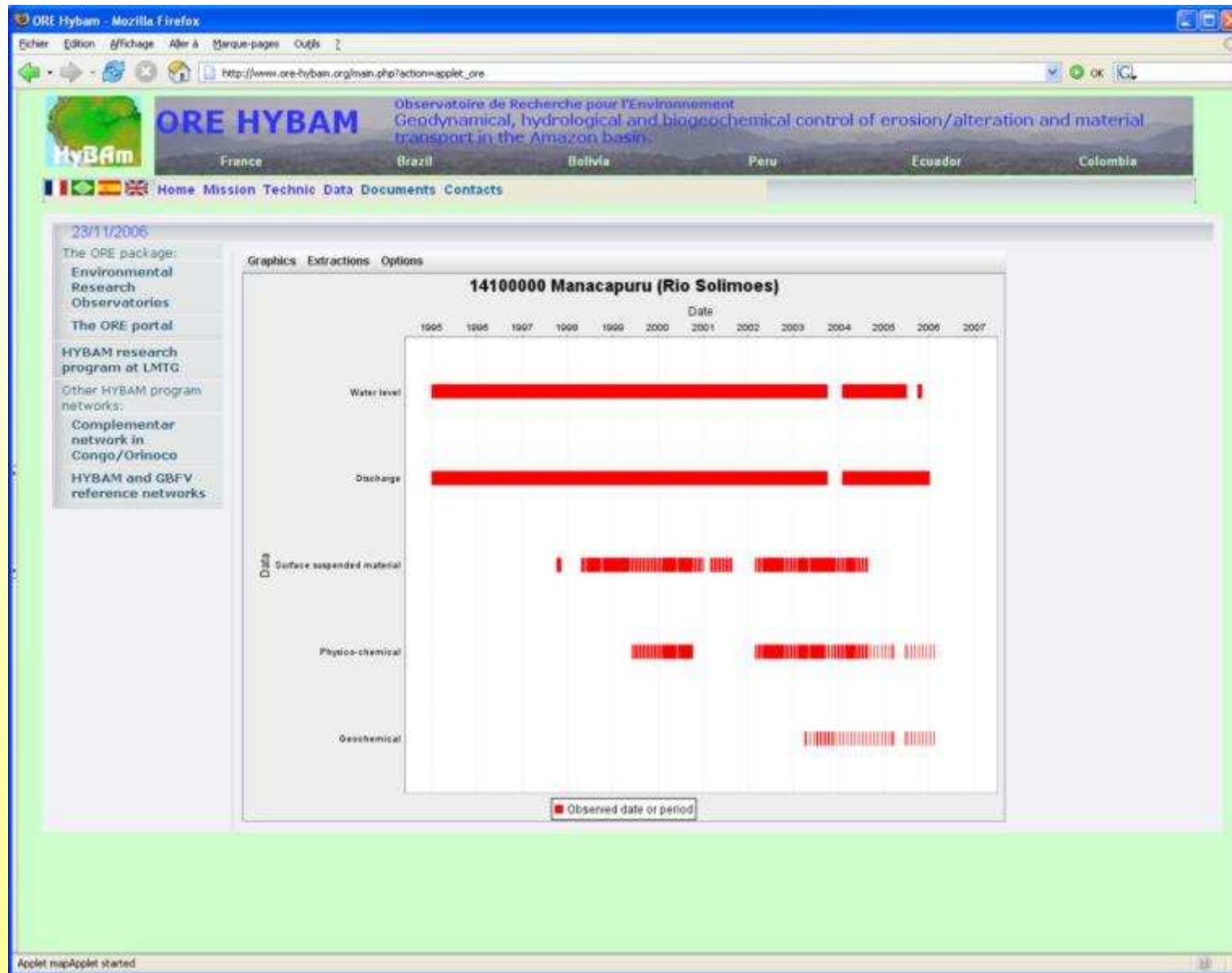
Legend

Hydrographic network	10 - 100	100 - 200	200 - 300	300 - 400	400 - 500
Country	1 500 - 2 000	2 000 - 2 500	2 500 - 3 000	3 000 - 4 000	4 000 - 4 500

Web site ORE HYBAM

Access to the database:

-a grantt chart to show the available data



Web site ORE HYBAM

Access to the database:

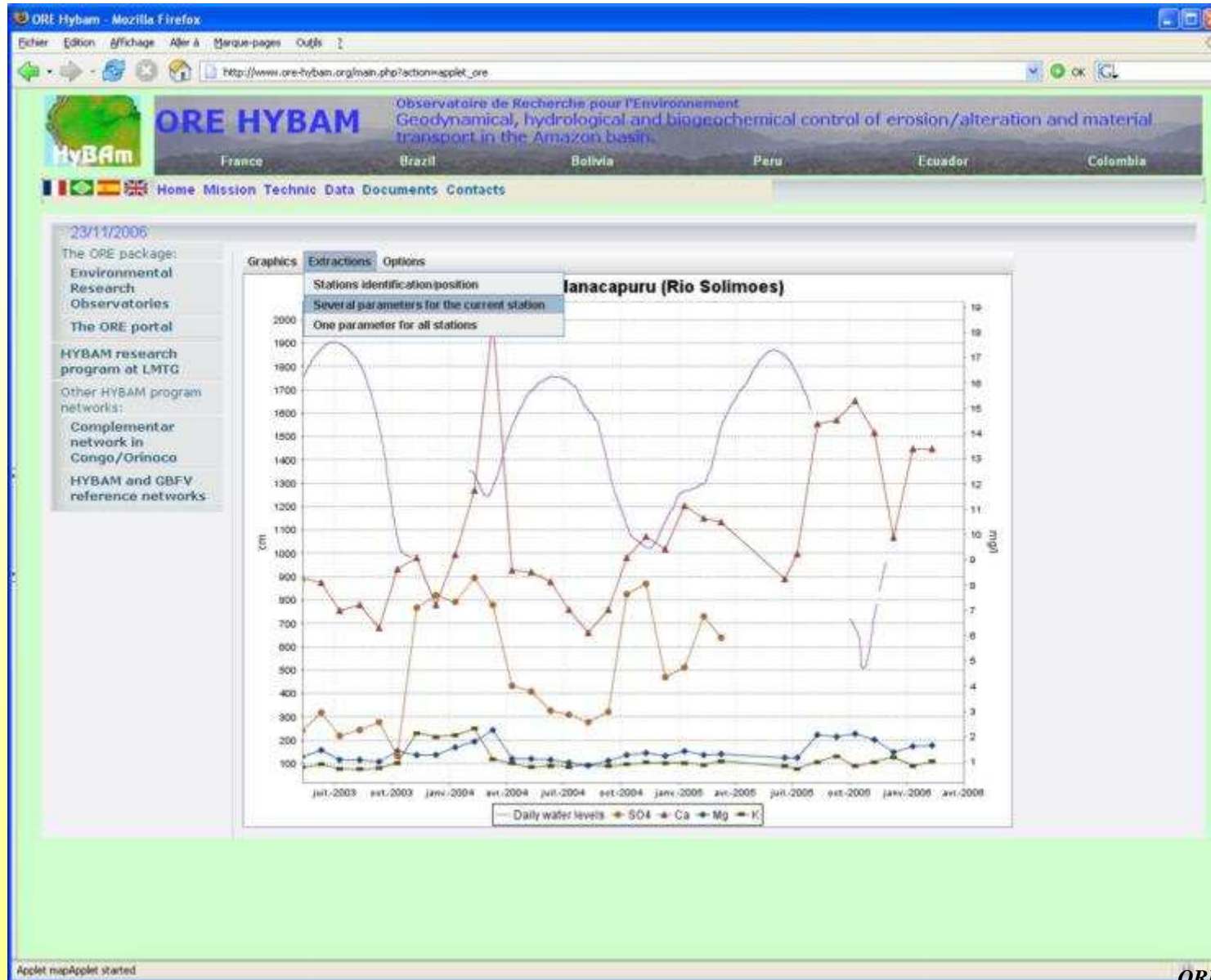
-dynamic charts can be required by the user, choosing the parameters and the time period



Web site ORE HYBAM

Access to the database:

-the data can be extracted and downloaded in ASCII files



Web site ORE HYBAM

Access to the database:

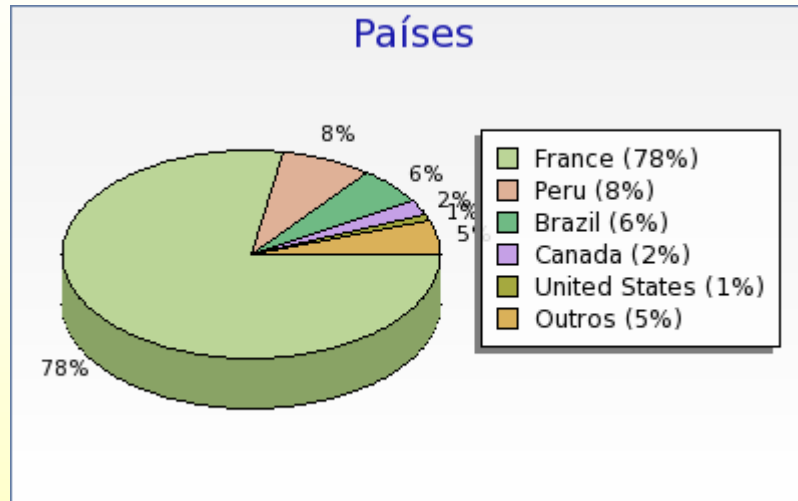
-the data can be extracted and downloaded in ASCII files

The screenshot shows a Microsoft Excel spreadsheet with the following data:

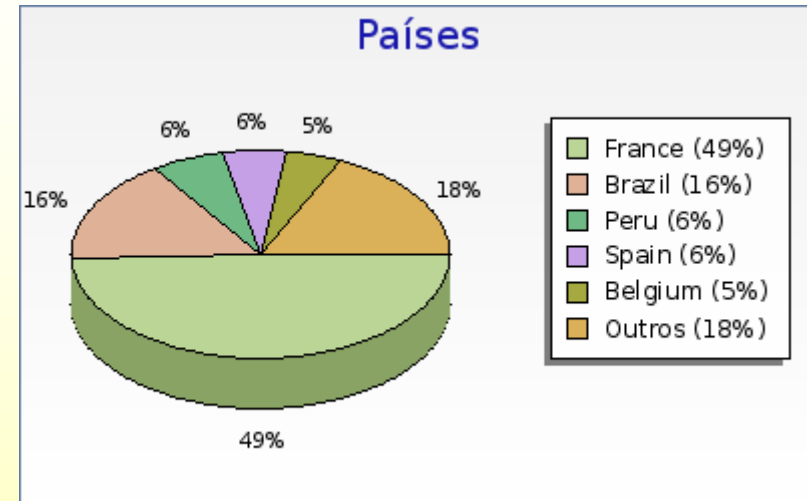
1	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1	Id_Station	Nom	DateHeure	Ca	Mg	K	Na	F	HCO3	Cl	PO4	SO4	NO3	Fe	AL	Si	Sr	
2				(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	
3	10064000	Borja	30/03/2004 00:00	10.24669	1.18198	0.62756	3.04861	0.02814	58.40000	2.19194	<0.1	7.70712	1.07731	<0.01	0.04979	3.12828	0.05190	
4	10064000	Borja	10/04/2004 00:00	14.27734	2.12672	0.97381	4.62941	0.03373	59.20000	3.66339	<0.1	9.72960	<0.1	<0.01	0.06982	4.43096	0.07776	
5	10064000	Borja	10/05/2004 00:00	10.01986	1.24278	0.88721	2.45552	0.03085	56.00000	1.59025	<0.1	5.76866	0.07554	<0.01	0.04588	3.00764	0.04901	
6	10064000	Borja	10/06/2004 00:00	13.05602	1.15957	0.99567	3.56345	0.02758	73.60000	2.07699	<0.1	6.51793	0.45447	<0.01	0.02563	3.16985	0.04651	
7	10064000	Borja	10/07/2004 00:00	11.51905	1.59621	0.93035	4.41330	0.07404	55.20000	3.33903	<0.1	7.99342	0.38532	0.01469	0.12598	4.48773	0.06042	
8	10064000	Borja	10/08/2004 00:00	13.01146	1.59623	0.83252	3.77877	0.19000	36.80000	2.68000	<0.1	7.00000	<0.1	0.00652	0.04033	5.13548	0.06407	
9	10064000	Borja	10/09/2004 00:00	13.93315	1.46264	0.87066	3.93046	0.14000	40.40000	2.98000	<0.1	6.63000	0.30000	0.01222	0.09124	4.81952	0.06426	
10	10064000	Borja	10/10/2004 00:00	22.50684	1.87738	1.06510	4.73397	0.45000	65.20000	5.29000	<0.1	8.79000	0.09000	<0.01	0.08717	4.69451	0.08542	
11	10064000	Borja	10/11/2004 00:00	20.36673	2.13412	1.13962	2.98283	0.16000	58.80000	2.36000	<0.1	12.33000	0.03000	<0.01	0.10246	4.36651		
12	10064000	Borja	10/12/2004 00:00	17.34808	1.64225	0.90186	3.30005	0.14000	50.80000	3.18000	<0.1	8.60000	0.36000	0.01226	0.11185	4.37587	0.07946	
13	10064000	Borja	10/01/2005 00:00	23.30400	3.11700	1.23217	6.38072		81.83500	5.62261		15.56314	0.70537	0.04653	0.08885	6.31500	0.13123	
14	10064000	Borja	10/02/2005 00:00	15.48300	1.65600	0.95606	2.61173		51.91000	1.67183		7.47673	0.45882	0.05071	0.11635	3.95000	0.06991	
15	10064000	Borja	10/03/2005 00:00	23.06800	2.81900	1.36203	4.16771		79.19500	2.51724		14.84052	<0.1	0.07105	0.06711	4.91300	0.14512	
16	10064000	Borja	10/04/2005 00:00	16.01500	1.77700	1.05829	2.85665		54.96400	1.59679		8.12713	0.22991	0.04521	0.07363	4.26000	0.07408	
17	10064000	Borja	10/05/2005 00:00	17.79000	2.17700	0.90380	4.16100		63.45900	2.56700		8.82890	<0.1	<0.01	0.45770	5.42200	0.08330	
18	10064000	Borja	10/06/2005 00:00	18.68000	2.08300	0.92770	3.91600		64.67900	2.56110		9.44120	<0.1	0.06330	0.67830	5.15700	0.09060	
19	10064000	Borja	10/07/2005 00:00	12.41000	1.73800	0.67510	3.62600		45.15300	2.64580		7.32510	0.30370	0.01910	0.45880	4.67000	0.06710	
20	10064000	Borja	10/10/2005 00:00	20.15000	2.38200	0.94900	5.23000		70.17000	3.29020		12.26730	0.34030	0.03860	0.56610	5.22200	0.09420	
21																		
22																		
23																		
24																		
25																		
26																		
27																		

Estatísticas das visitas ao site Ore-hybam

780 visitas
03 até 12/2006



1150 visitas
01 até 10/2007



Em 10% dos casos chagada por busca na Internet (Google, Yahoo)

Palavras-chave utilizadas :

-ore hybam 13.9%

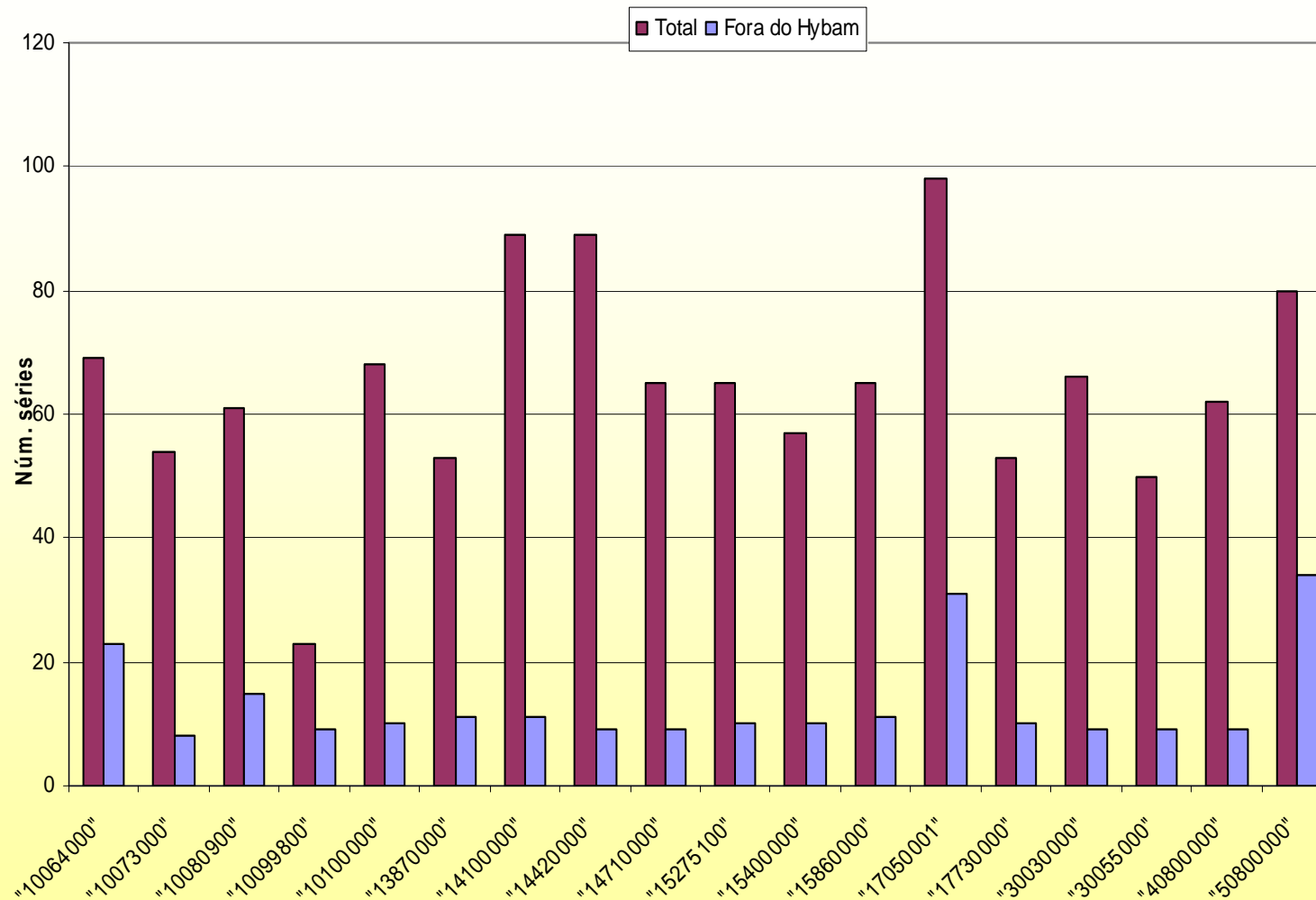
-hybam 8.6%

-ore 2.2 %

-ore-hybam 1.7%

-outras 73.7%

Dados carregados pelos usuários



Parâmetros
Cota diária
Cota mensal
Vazão diária
Vazão mensal
Cdv
Mes
pH
T
PO4
Si
SO4
COD
el. maiores
el. traços
terras raras

~50 usuários cadastrados (40% fora do Ird/Hybam).

Os dados também foram disponibilizados no site do programa GEMSWater (gemstat.org).

Desenvolvimentos previstos

Melhorar o acesso aos dados, beneficiando-se de alguns desenvolvimentos realizados na plataforma de modelagem.

Colocar no site dados de concentração de MES de superfície provenientes das imagens MODIS (estações virtuais).

Transferir a hospedagem do site Ore-Hybam da Maison de la Télédétection (operacional atualmente) para o centro IRD de Montpellier (em fase de teste).