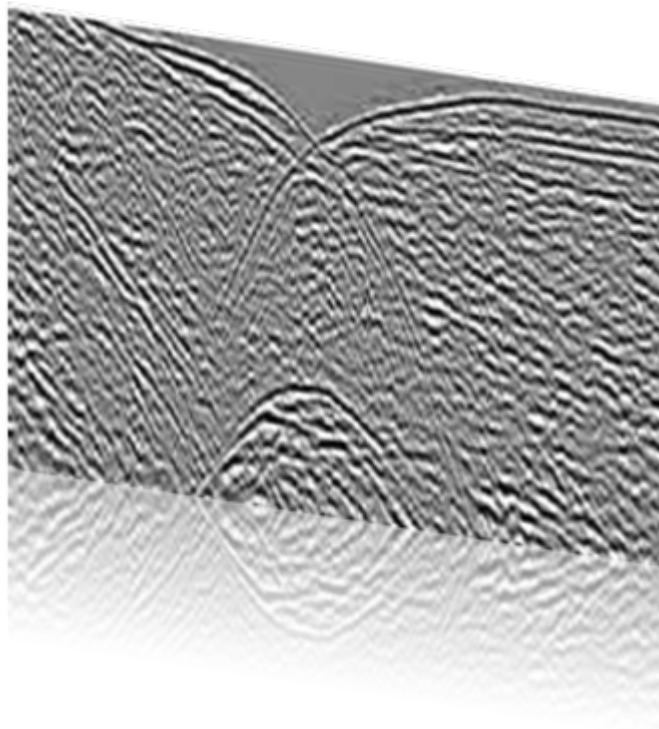




Seismic viewing service



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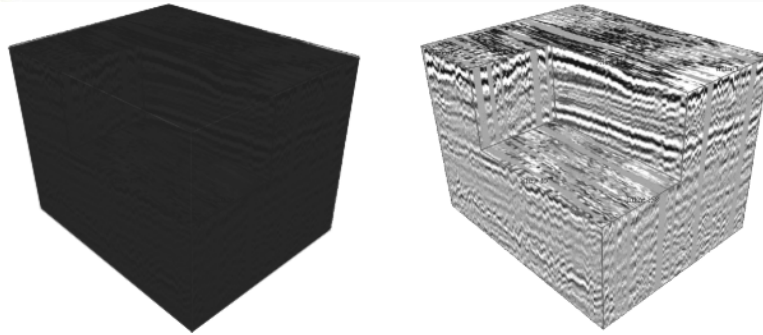


Seismic data need something more



Seismic data pose issues in handling its value:

- Foster scientific collaboration
- Commercial use (oil companies)
- Technical issues (file size)



Data Transparency: possibility to access the work of the data provider



In fostering scientific collaborative attitude it is a delicate activity that needs careful balance

Has to be modulated upon the **desired “social” result**

it is a **general problem** from Medicine to Physics

References: Olson et al. (2008), Pratt et al. (2004), Nentwich (2004), Kötter (2001), Orłowski (1992), Birnholtz (2006), Ribes and Bowker (2009)

In commercial environments...no need to mention

Why do we disseminate data?:

- 1) Because it is the mission of our institute (Geological Survey) there's specific funding for this
- 2) Because data was acquired with public fundings and the government asks for this.

- 3) Because gathering our data and data from other institutes we can create a bigger dataset.
- 4) To attract collaborations → position the institute in the community → participate in new projects → fundings
- 5) Data licensing can be an important revenue

Download

No payback

payback

Control
data
access

There can be legal issues:

Different countries can have different legislation
(2003/98/EC, 2007/2/CE Directives do not cover all cases)

EEZ: Exclusive Economic Zones (mineral exploration)

There can be different motivations for data sharing

There are different policies in data sharing

If the solution does not allow different policies to be implemented ,
providers might not be motivated to share data (empty boxes)
-> Motivation of providers is very important<-





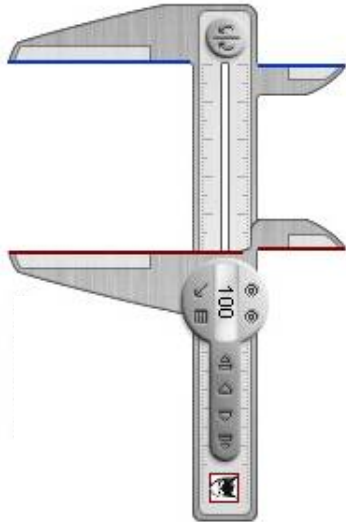
Understanding end user point of view

GeoSeas developed a Questionnaire (WP10) that has been submitted to a wide range of end users to understand the needs of the community (How to visualize data, need to georeference data, what different data types are needed ...)

Many commercial and non-commercial (also internal Ifremer, OGS..) similar solutions already existing have been considered and evaluated (possibility to handle SEG-Y data, georeferencing, GUI..)

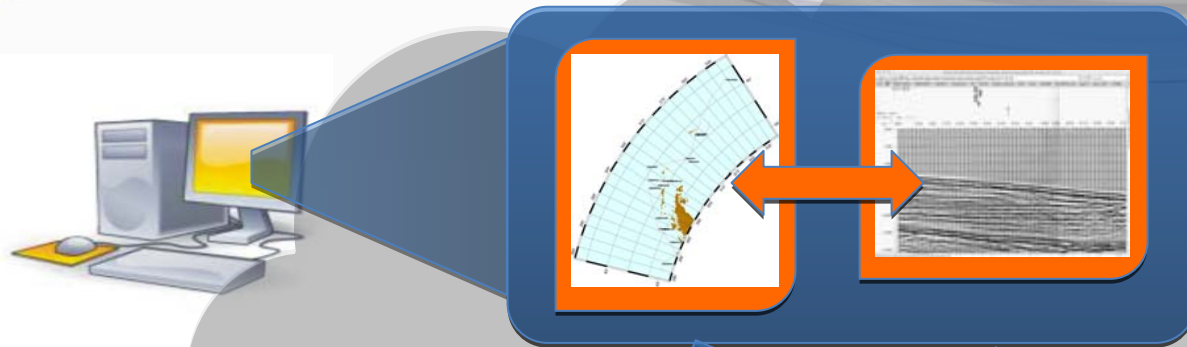
Develop a new solution from scratch having this analysis in mind.

Practically we need a system that :



- Allow end user to access directly data (visualization, QC, simple processing)
- Allow providers to control user access
- Is integrated with the Geo-Seas infrastructure
- Deals with the large file size of seismic data

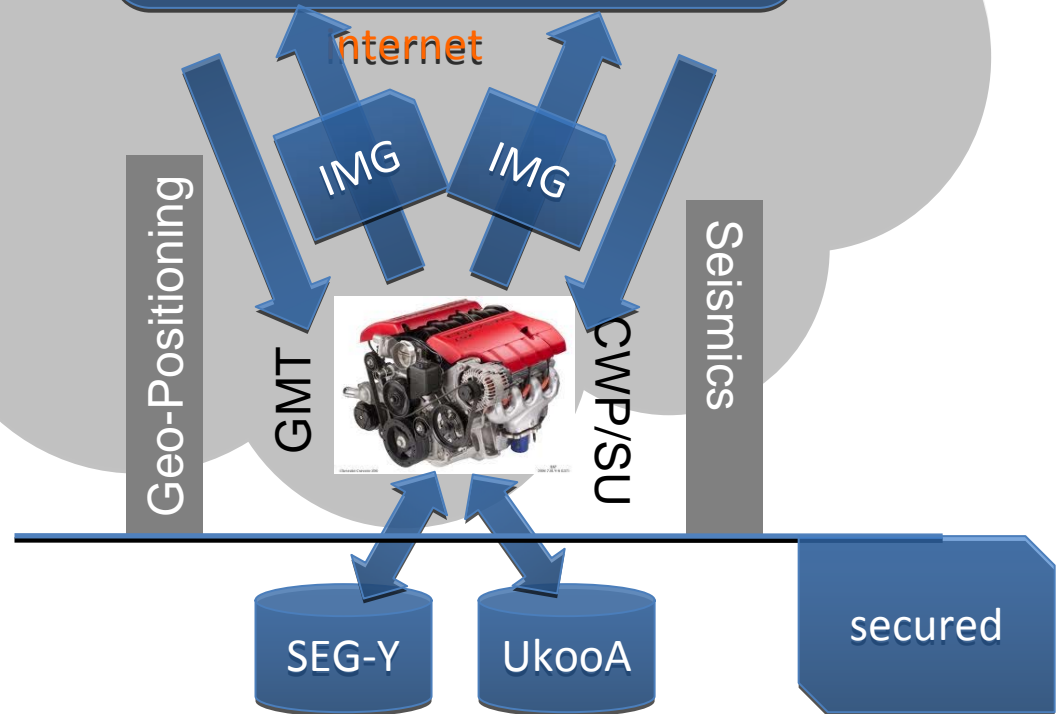
This is a viewer to help in discovery
It is not an interpretation or processing tool that substitute
Any software the end user might use

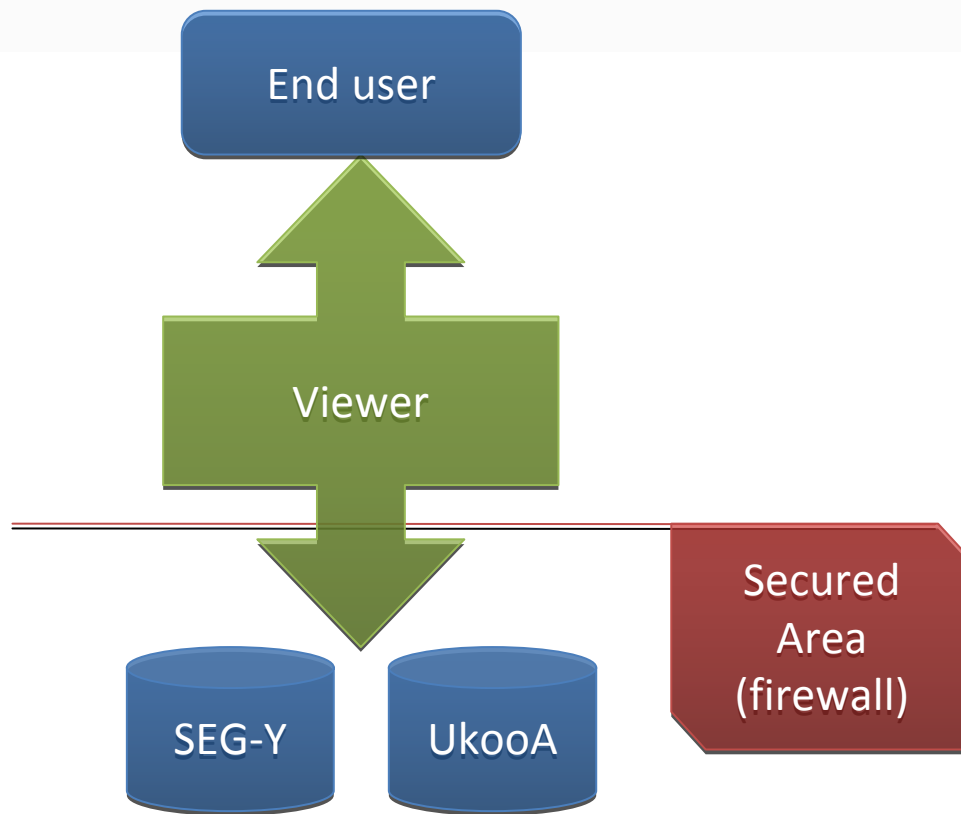


- Georeference data
- Zoom
- Pan
- Change presentation mode
- Gain
- Layers

- User Identification
- Access control

...Collaborative functions





Some technicalities

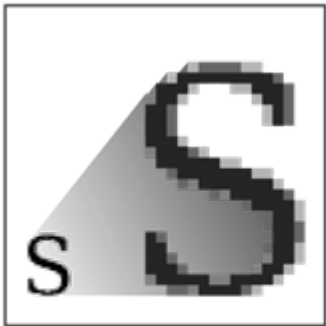


Development platform Java

- Run on linux/win/mac servers
- Runs on virtual machines on the client
- Solves many security issues
- Sufficiently fast
- Allows to create windows in the application (seis/geo)

The viewer is an applet that is sent to the clients

The applets connect to JMS broker (server side) that manages requests and isolates the viewer from the data



BITMAP
.jpeg .gif .png



OUTLINE
.svg

Mapping in SVG:

- Vectors not pixels
- Client side rendered = lightspeed
- Object remain identified(not pixels)



Data Access

Workflow for free Data access



Workflow for controlled Data access





Geo-Seas



discovery

CDI

iso19115

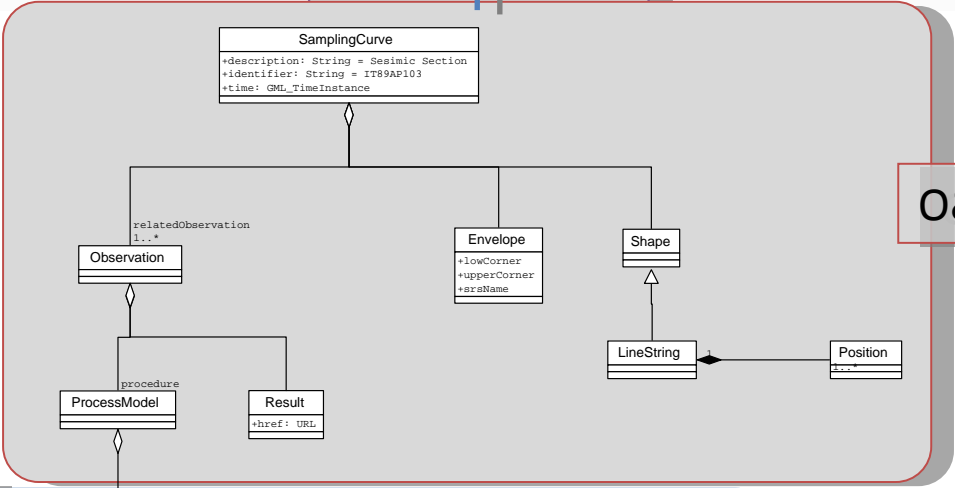
RSM/DM

agreement

Visualization services

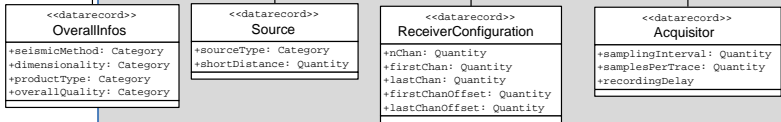
O&M

Download



Domain specific parameters

SensorML





Geo-Seas

Geo-Seas Common Data Index (CDI) V2

http://www.geo-seas.eu/v_cdi_v2/result.asp

Tools:

Layer control: Expand Add layer

- CDI entry Points
- CDI entry Tracks
- CDI entry Areas
- Grid Lines
- Regional sea
- Regional sea labels
- Main sea
- Main sea labels
- Bathymetry

DETAILS

WHAT?

Data set name	D-466
Discipline	Marine geology
Category	Field geophysics Sonar and seismics
Variables measured	Seismic reflection
Abstract	ZONA F
Data format	Tagged Image File Format Version 6
Data set creation date	20060826

WHERE?

Map

Service central d'authentification de l'Ifremer

STAMPI in POLI java awteventlis swing - how to Confederazione Acquisto prima Request Status Service central

https://auth.seadatanet.org/login?service=http://seadatanet.maris2.nl/v_rsm/caslogin.asp?returnurl=...

Più visitati Come iniziare Ultime notizie

SeaDataNet

PAN-EUROPEAN INFRASTRUCTURE FOR OCEAN & MARINE DATA MANAGEMENT

RSM

Inserisci login e password

Par motivi di sicurezza dovresti effettuare il logout e chiudere tutte le finestre del browser quando hai finito di utilizzare servizi che necessitano autenticazione.

Login:

Password:

Avvisami prima di autenticarmi su un altro sito

LOGIN ANNULLA

[I want to register](#) - [I forgot my password](#) - [I want to check/change my personal information](#)

seadatanet.maris2.nl/v_rsm/welcome.asp

Trova: tavolo

Successivo Precedente Evidenzia Maiuscole/minuscole Inizio della pagina raggiunto; si continua dalla fine



SEADATANET RSM

Request Status Manager

PAN-EUROPEAN INFRASTRUCTURE FOR OCEAN & MARINE DATA MANAGEMENT

SeaDataNet

Overview of completed data set requests and resulting status for all users of your Data Centre

25 50 100 RECORDS (FOUND 4) CURRENT PREVIOUS NEXT

C_user_login	User_name	Downloaded	Access denied	All
Mr Boris PETELIN - petelin@mbas.org	SONR01,SONR02,SONR03,SONR07,SONR08	13		13
Dr Eric MOURSAT - Eric.Moursat@ifremer.fr	SONR07,SONR03	1		1
Mr Florian Gheorghe - florian@maris.it				
Robot User - robot@maris.it				

Download

userab123cd-data_centre456-2010-02-24_result.zip

Download

Remove

userab123cd-data_centre456-2010-02-23_result.zip

Download

Remove

userab123cd-data_centre456-2010-02-22_result.zip

Download

Remove

Geo-Seismic Visualization

ABCDEF

Go

Remove

ZYX

Go

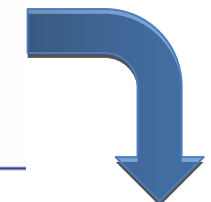
Remove

AZERTY Visualization

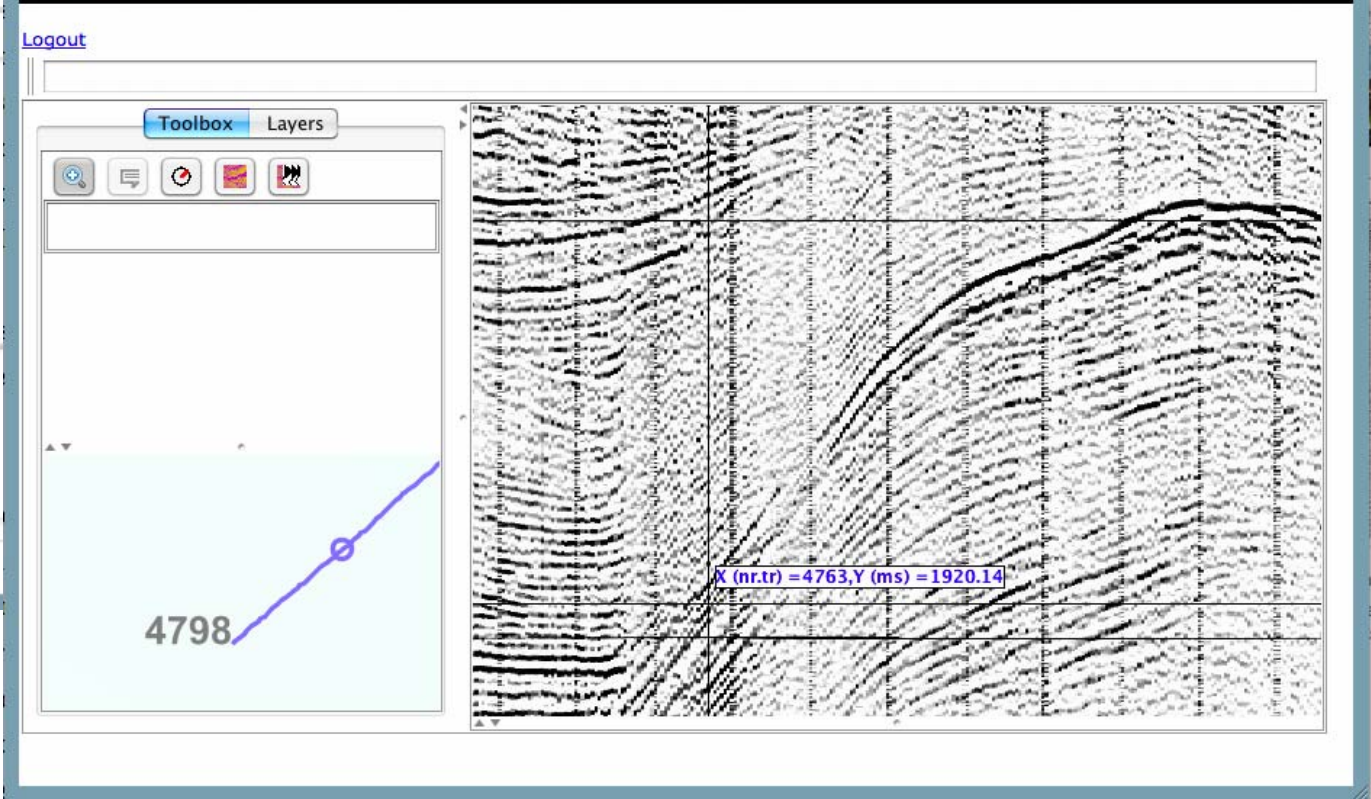
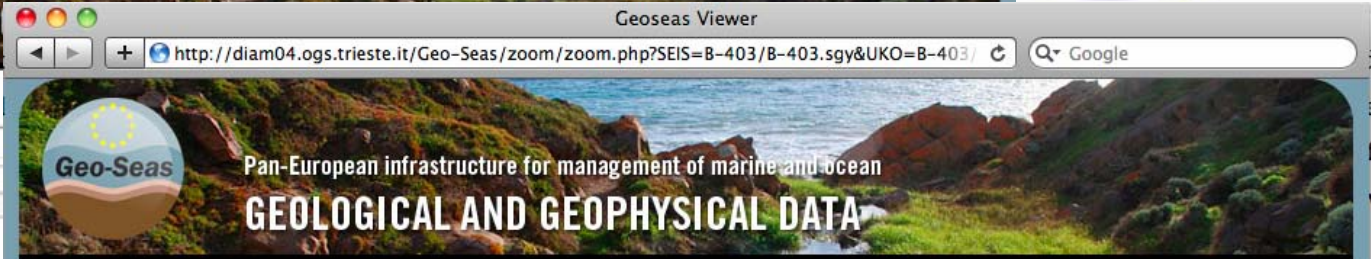
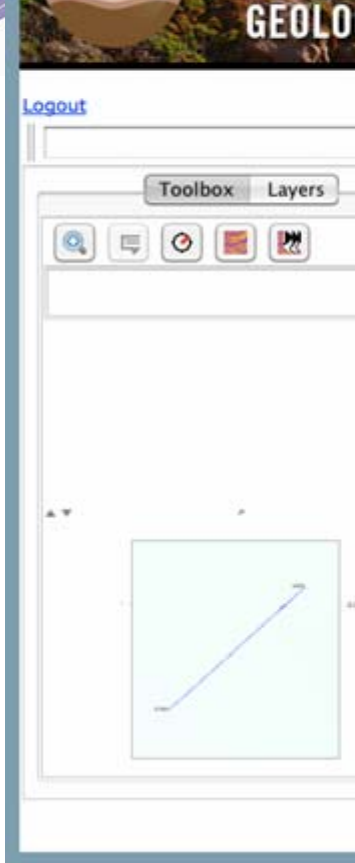
ABCDEF

Go

Remove



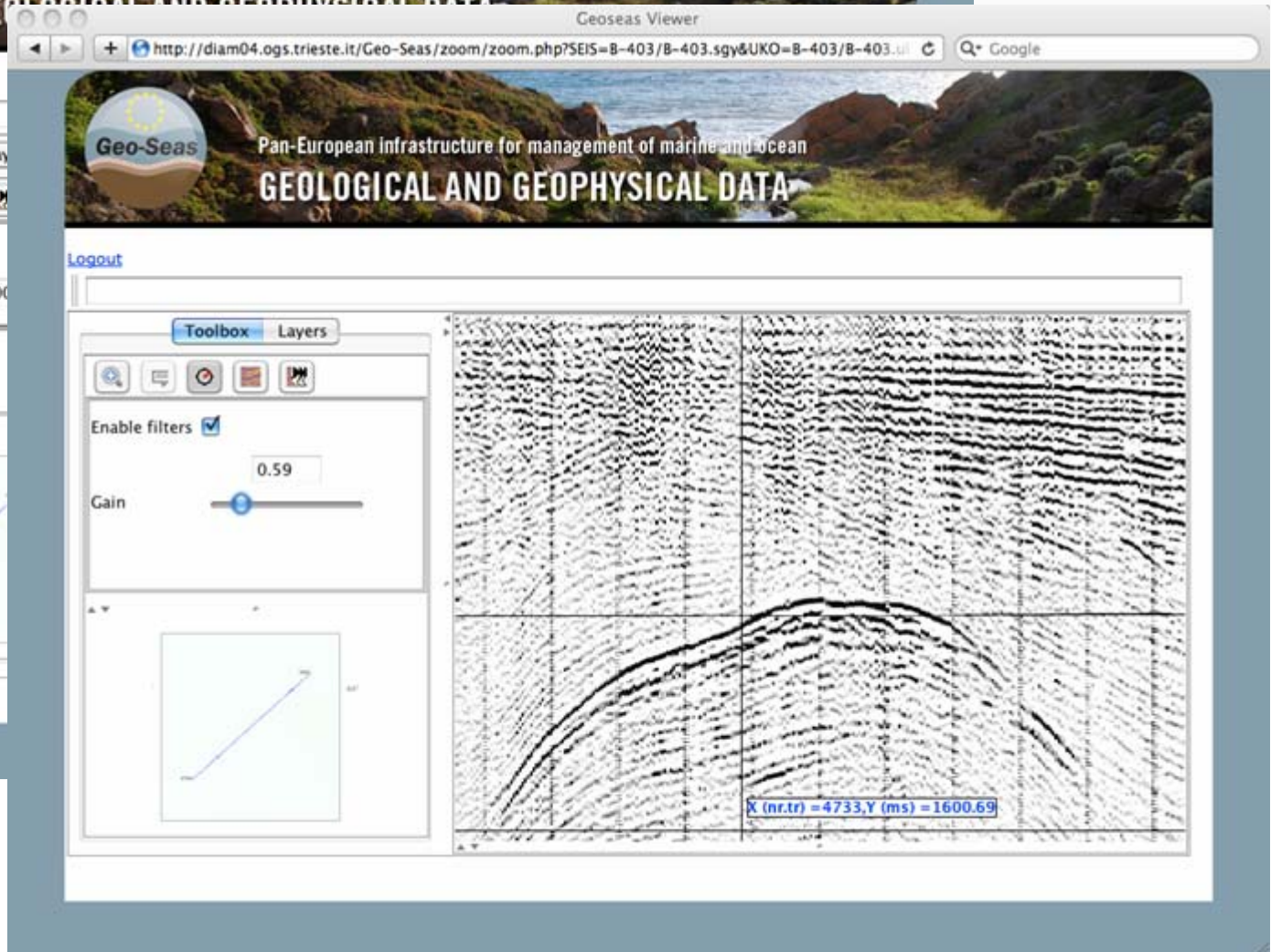
negotiation



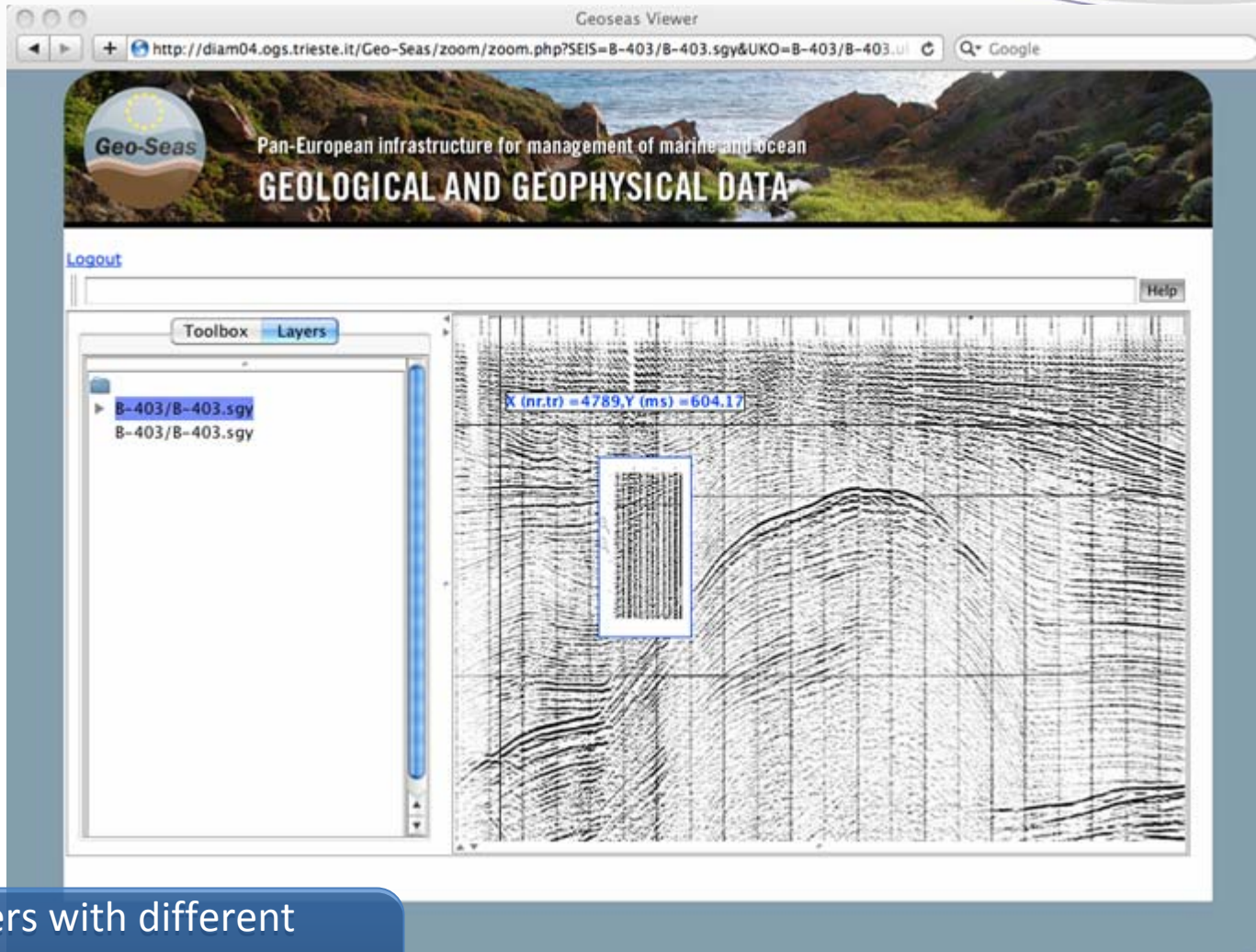
Zoom & Pan
Georeference



Geo-Seas



Gain



Layers with different presentations (wiggle, color...)



Conclusions

The seismic viewer :

- Allow end user to access directly data (visualization, QC, simple processing)
- Allow providers to control user access
- Is integrated with the Geo-Seas infrastructure (metadata)
- Deals with the large file size of seismic data

Under development:

- Integration with GeoSeas infrastructure for user identification and authorization