

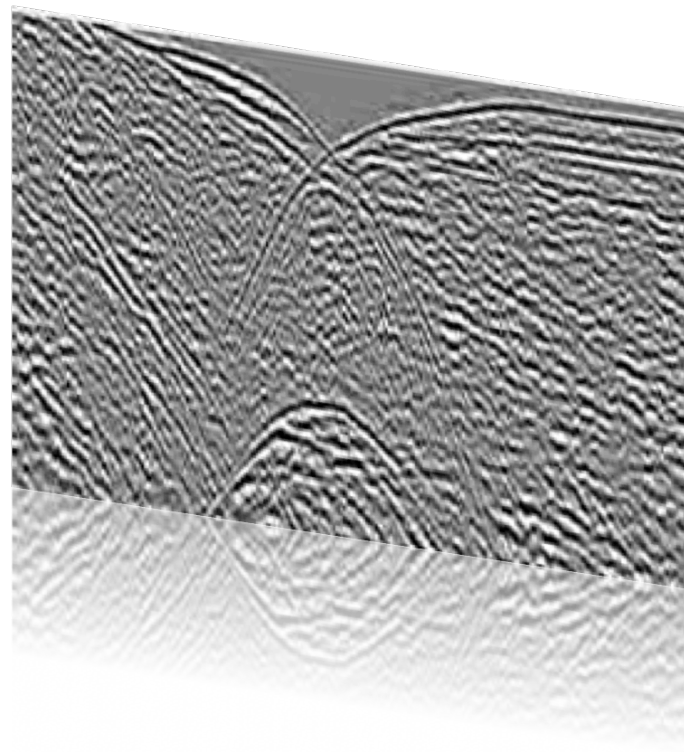


Geo-Seas

Seismic viewing service



Paolo Diviaco,
pdiviaco@ogs.trieste.it



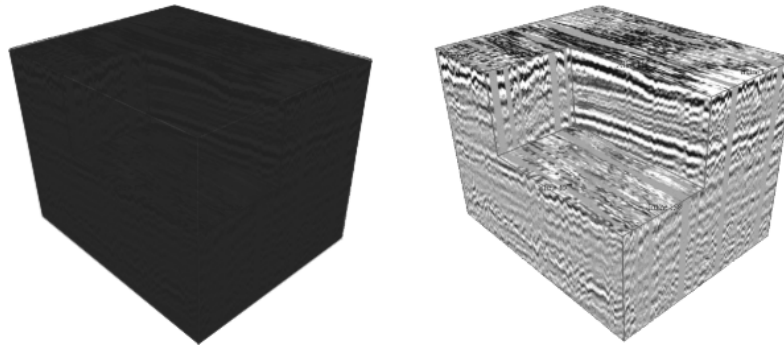


Seismic data need something more



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), Orlowski (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

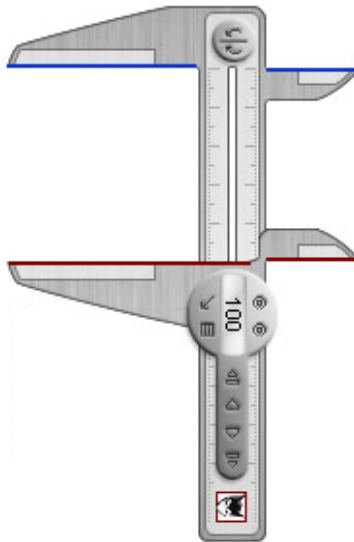
GeoSeas developed a Questionnaire (WP10) that has been submitted to a wide range of end users to understand the needs of the community (How to visualize data, need to georeference data, what different data types are needed ...)

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 :

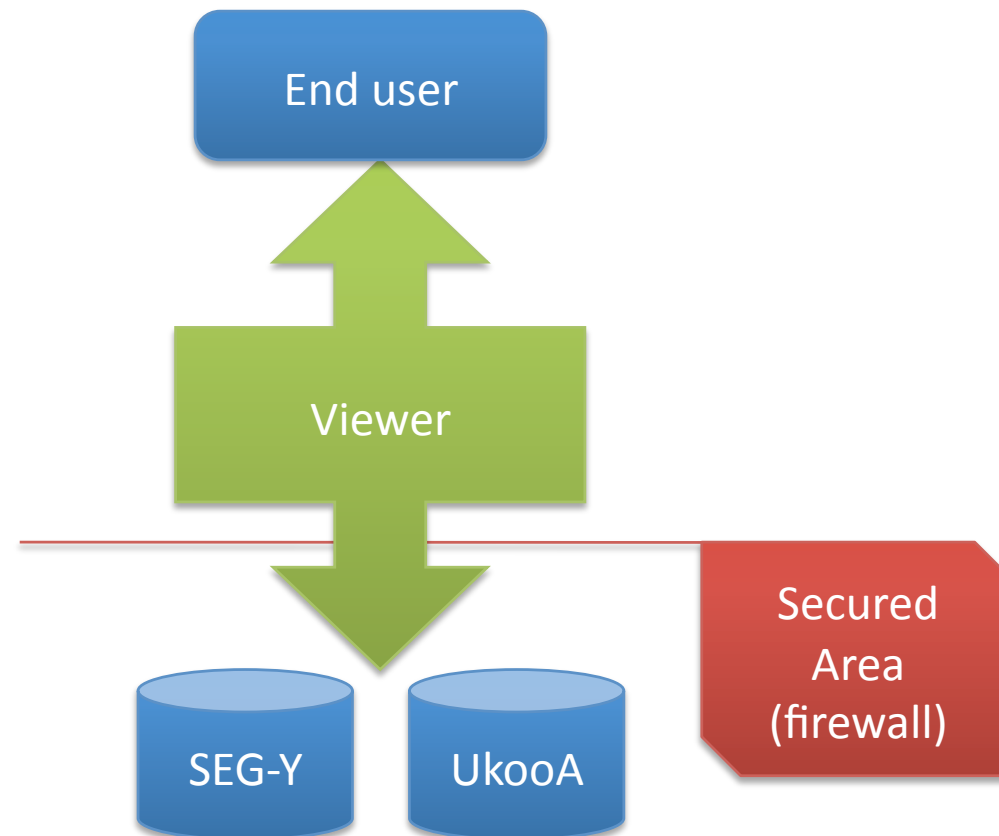


- Allow end user to access directly data (visualization, QC, simple processing)
- Allow providers to control user access (identify users, grant different levels of access one by one)
- Is integrated with the Geo-Seas infrastructure
- Deals with the large file size of seismic data

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



Geo-Seas



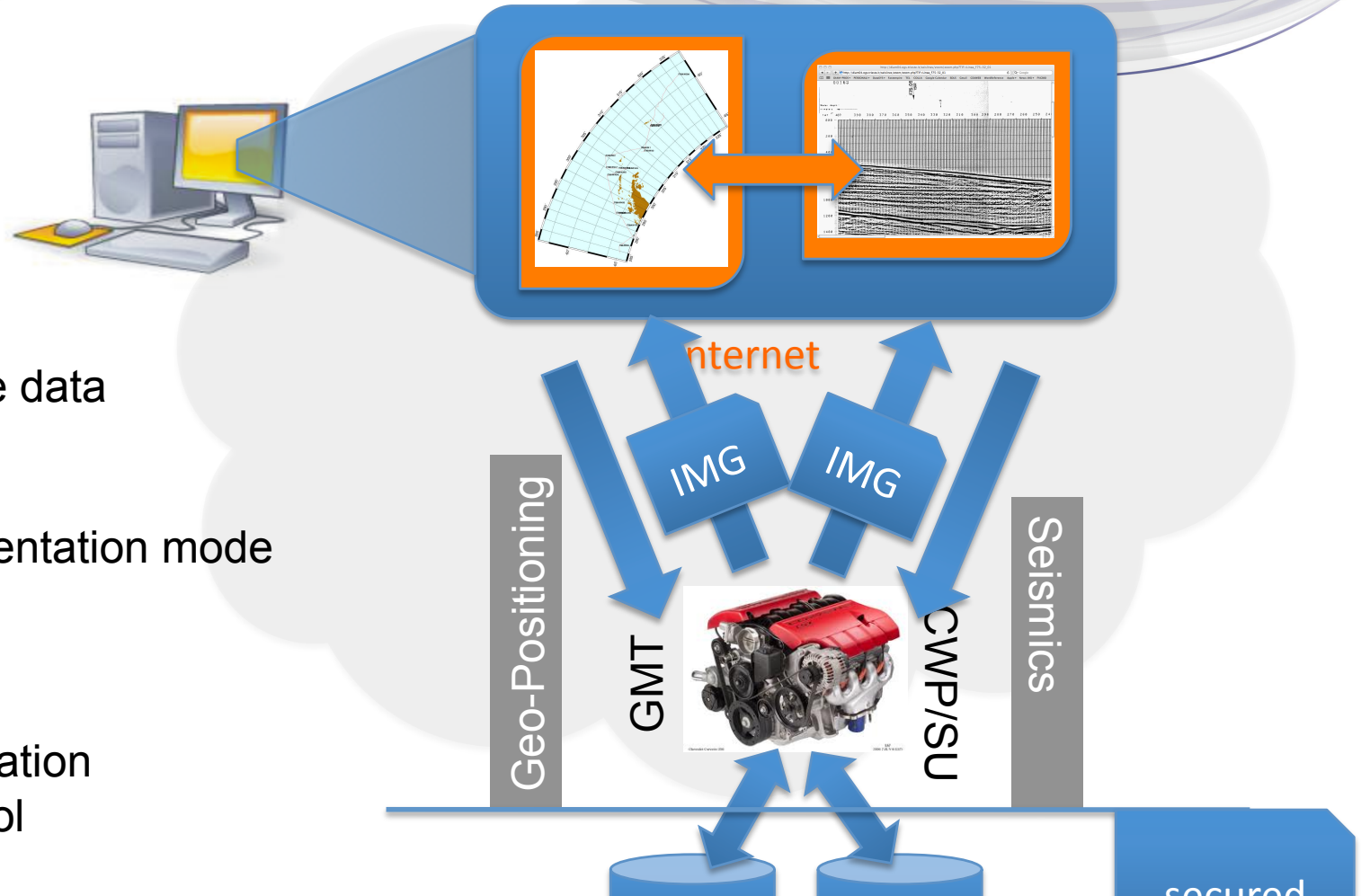


Geo-Seas

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

- User Identification
- Access control

...Collaborative functions



Prototye available since october 2011
In time with DOW (month 26)
Problem still open: integration



WP4 (sept 2009 to march 2010):

metadata model developed (CDI+O&M+SensorML)

Link to visualization already prepared.

Deliverable 4.2 (geoph. Metadata format)

OGS, CNRS provided scripts to create metadata (BGR,Lneg) but no official tool to produce them. (Mikado)

New version of Mikado will offer O&M+SensorML support

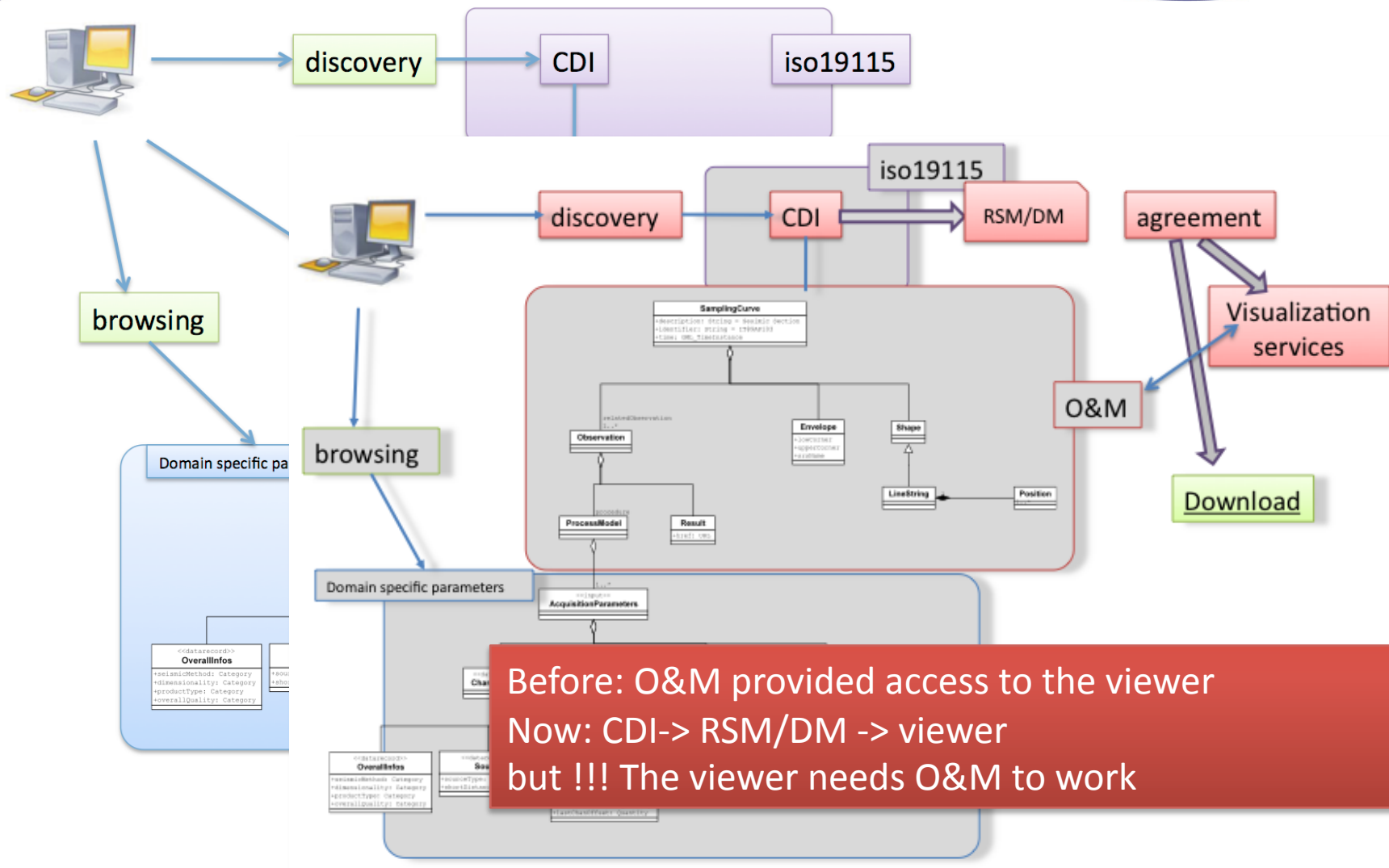
Suggestion to concentrate first on the CDI later on O&M and SensorML

Several partners with CDIs ready , few with O&M and SensorML

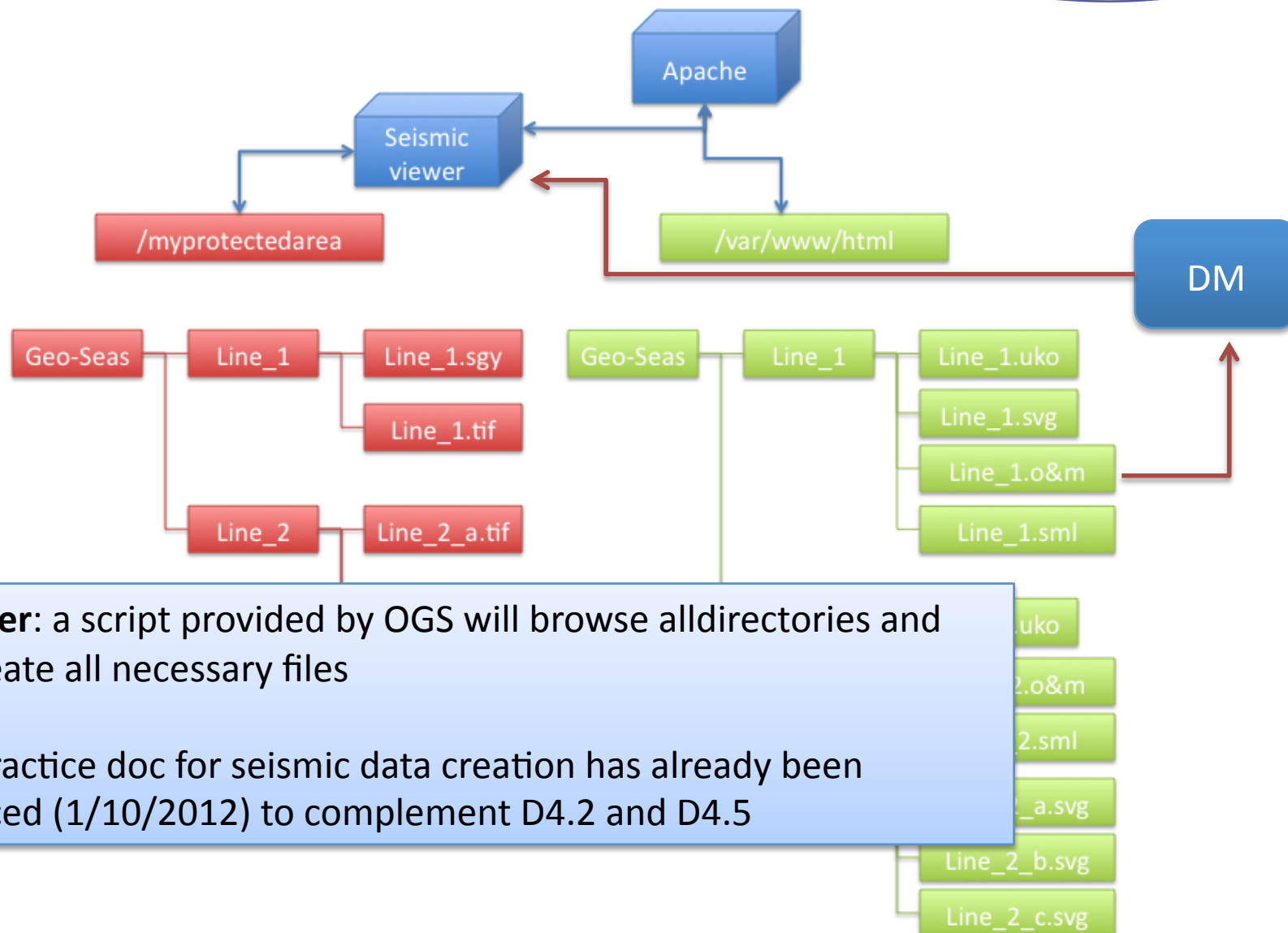
Change in the perspective of integration from original path devised in D4.2



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Before: O&M provided access to the viewer
Now: CDI-> RSM/DM -> viewer
but !!! The viewer needs O&M to work





Geo-Seas

Geo-Seas Common Data Index (CDI) V2

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

GeoSeas_local GEOSEAS OGS_DIAM wordreference Tel Apple Yahoo! Google Maps YouTube Wikipedia News (594) Popular Musica

Geo-Seas Common Data Index (CDI) V2

Tools

- Enlarge
- Help
- Position
- Index

Layer control

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

DETAILS

WHAT?

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

WHERE?

Map



PAN-EUROPEAN INFRASTRUCTURE FOR OCEAN & MARINE DATA MANAGEMENT

Operated in cooperation with



Personal overview of downloadable and viewable files at selected Data Centre

User: *ds1ee60*

Downloads

Zipfile name	Download	Remove from this list, once download complete
users1ee60-data_centre1229-2012-09-28_result.zip	Download >	Remove >

Views

Viewable files	View	Remove from this list, once done
users1ee60-data_centre1229-2012-09-28_result	Go >	Remove >
users1ee60-data_centre1229-2012-09-28_result	Go >	Remove >

Data sets, approved for downloading are combined in zip files, that you can download. The zip file builds up during the day and each new approved download request is added. Each zip file will be removed after 30 days!

Seismic data sets, approved for viewing are listed individually. Click on the View button for individual viewing. Each Viewable file will be removed after 5 days!

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Geo-Seas



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FOR OCEAN & MARINE DATA
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Personal overview of downloadable and viewable files at selected Data Centre

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Views

Viewable files

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Geo-Seismic Visualization

ABCDEF

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ZYX

[Go](#)

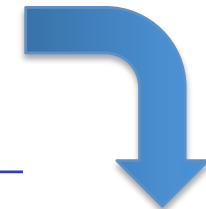
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AZERTY Visualization

ABCDEF

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negotiation



Geo-Seas



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MANAGEMENT

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usersds1ee60-data_centre1229-2012-09-28_result.zip

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Seismic data sets, approved for viewing.

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Geo-Seismic Visualization

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AZERTY Visualization

ABCDEF

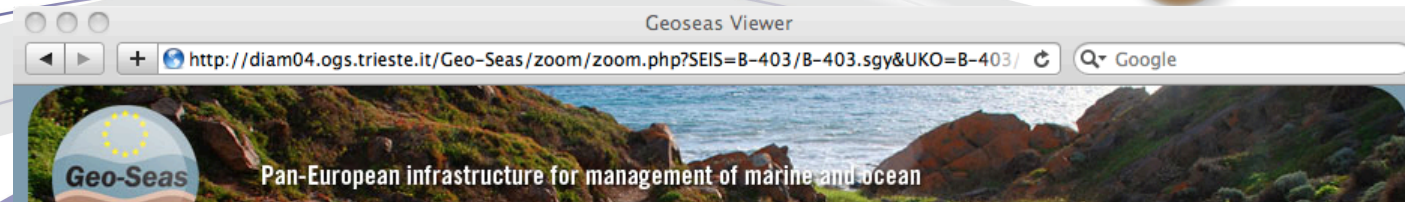
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The DM will call the HRSV

VIEWER (HRSV)

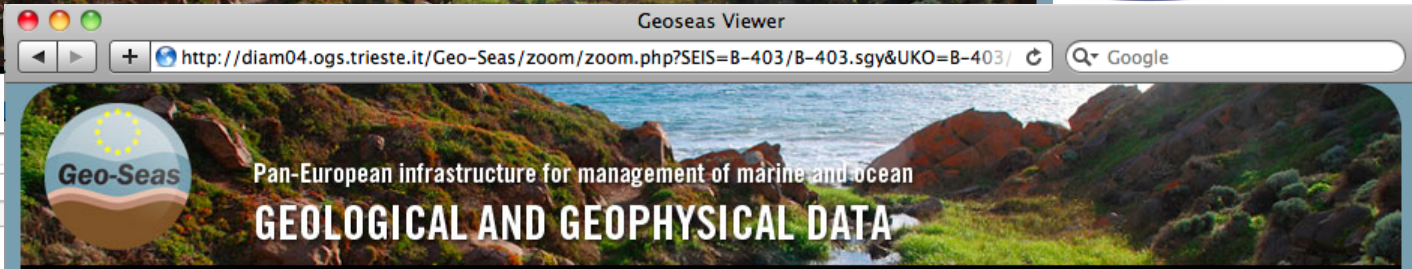
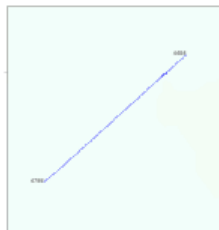


Geo-Seas



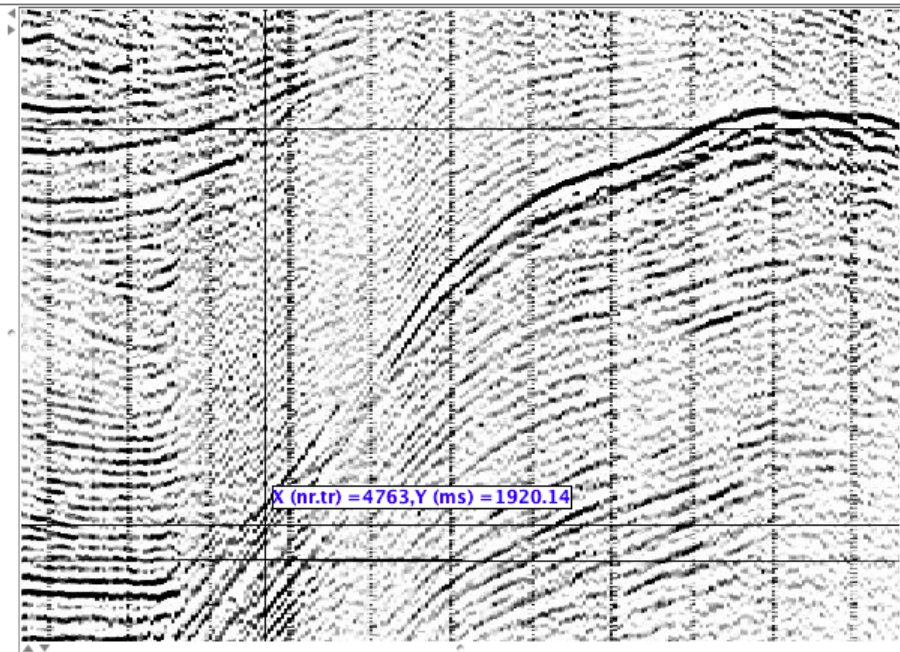
[Logout](#)

Toolbox Layers



[Logout](#)

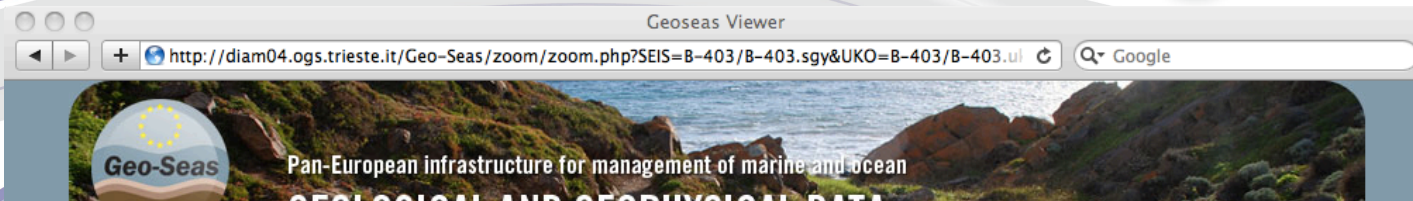
Toolbox Layers



Zoom & Pan
Georeference



Geo-Seas



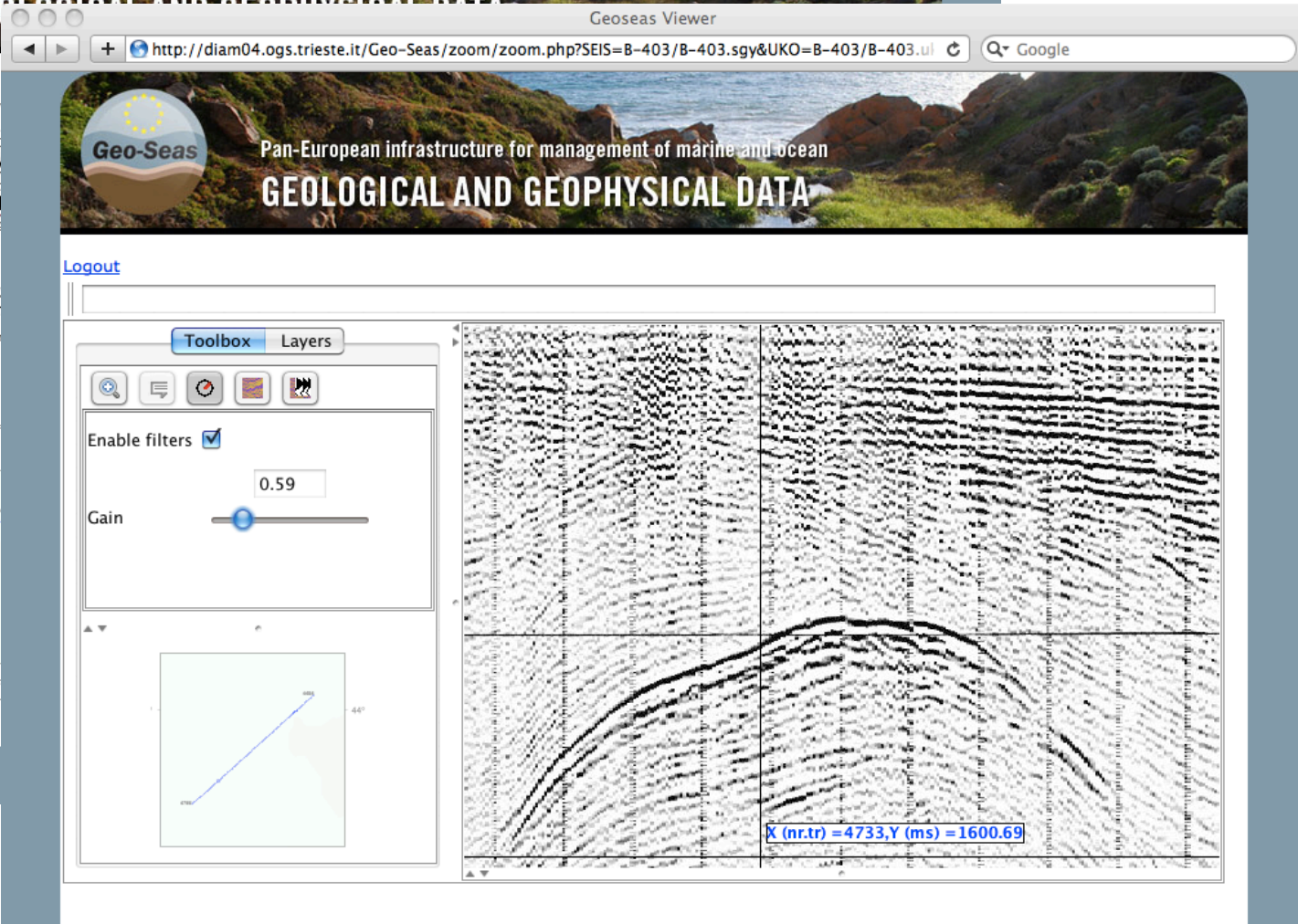
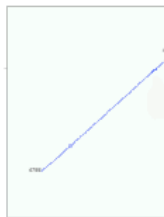
[Logout](#)

Toolbox Layers

Enable filters ☒

Gain

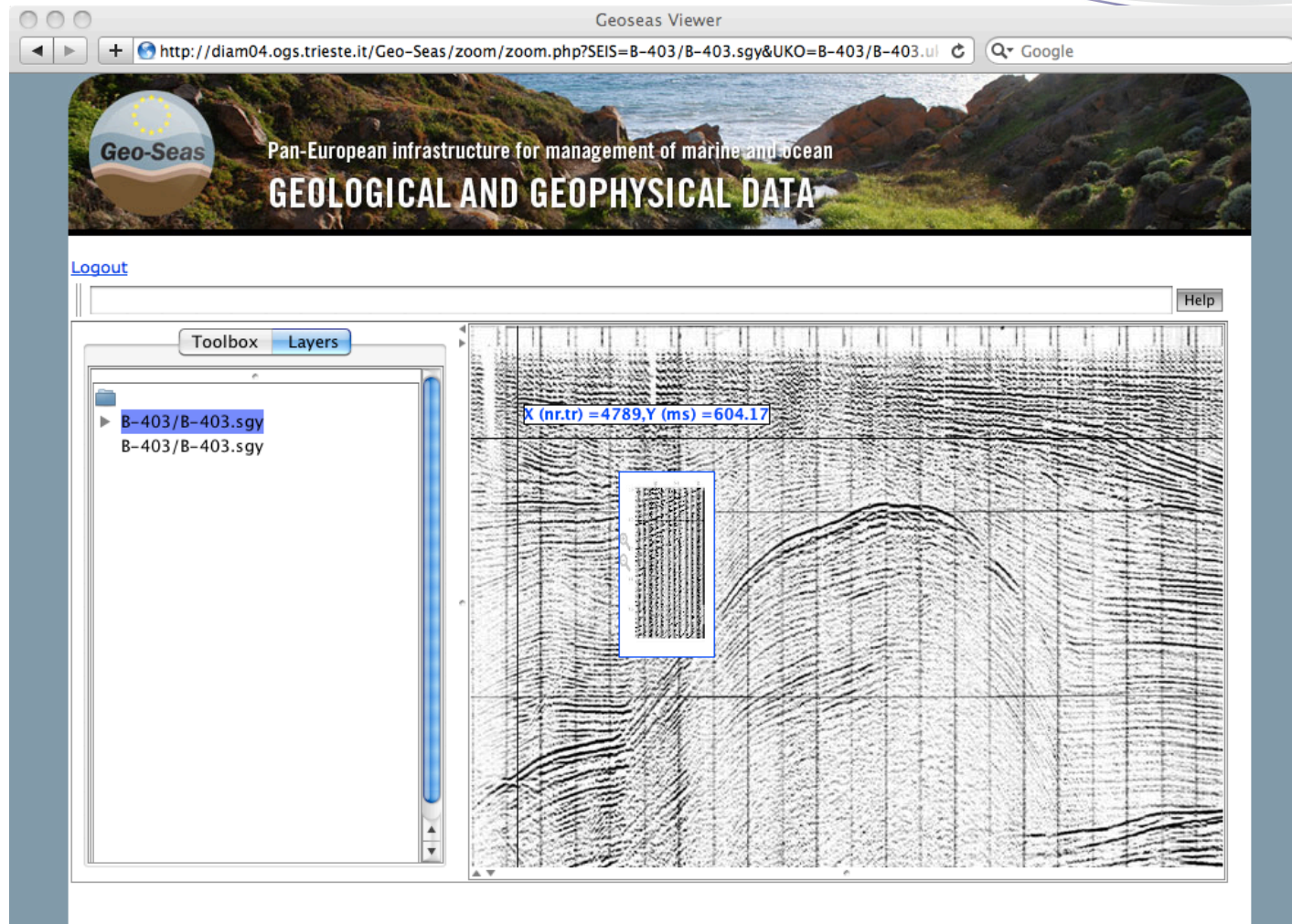
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Gain



Geo-Seas



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
(identify users, grant different levels of access one by one)
- Is (will soon be) integrated with the Geo-Seas infrastructure



Geo-Seas

THANK YOU