



Environmental Informatorium: Demonstration and Future Approach

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(presenter)



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Plan

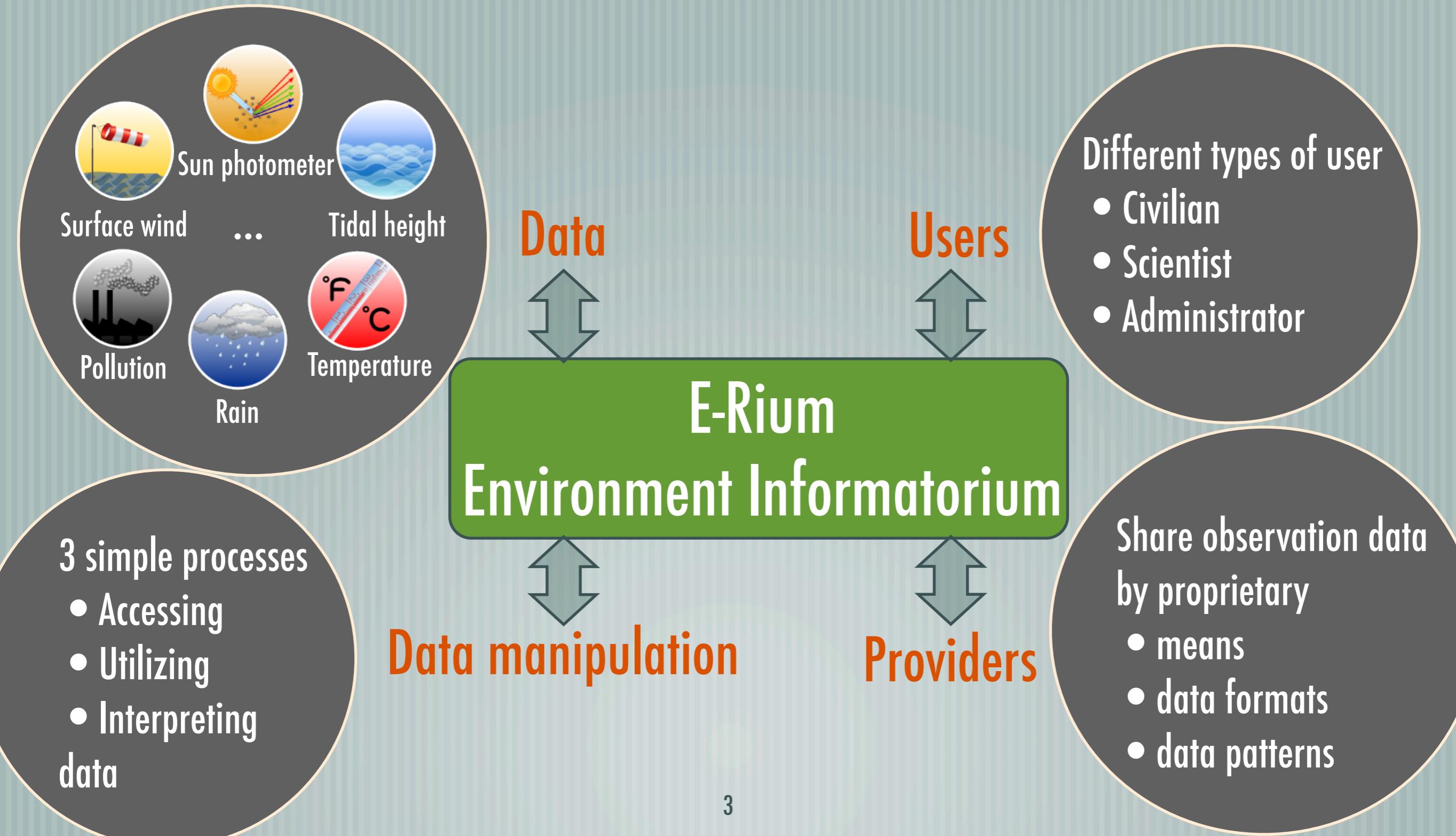


[E-Rium]

- Brief introduction of E-Rium
- E-Rium Demonstration
- Future works

[FloodSign Application]

E-Rium connecting...



One-stop service



1. Easy data access across repositories
2. On-the-fly data integration
3. User-oriented data visualization

E-Rium

- [provides a single stop service for
 - accessing environmental data
 - different types of data user
 - different data providers

Multi-disciplined Technique

[The virtualization of repositories

— to enable one-stop data access

[The data standardization

— to enable data interoperability & integration within single domain

[The harmonization of two given standards

— to enable data interoperability & integration across multiple domain

[The visualization of any data in a user-oriented manner

— to welcome any data consumers to explore the data on demand

[The honor of data providers (ownership)

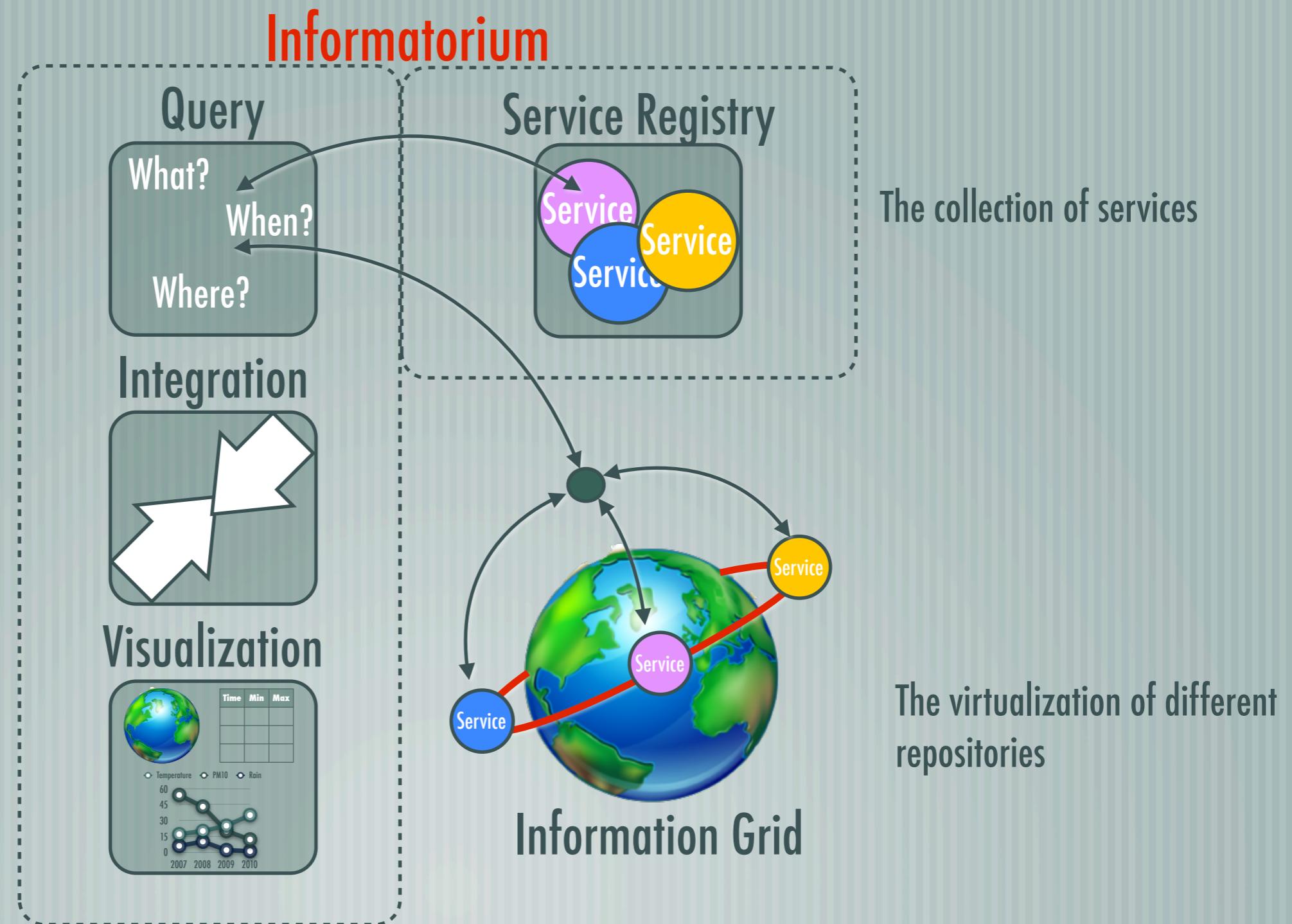
— to promote collaboration by publishing the data

Overview of E-Rium

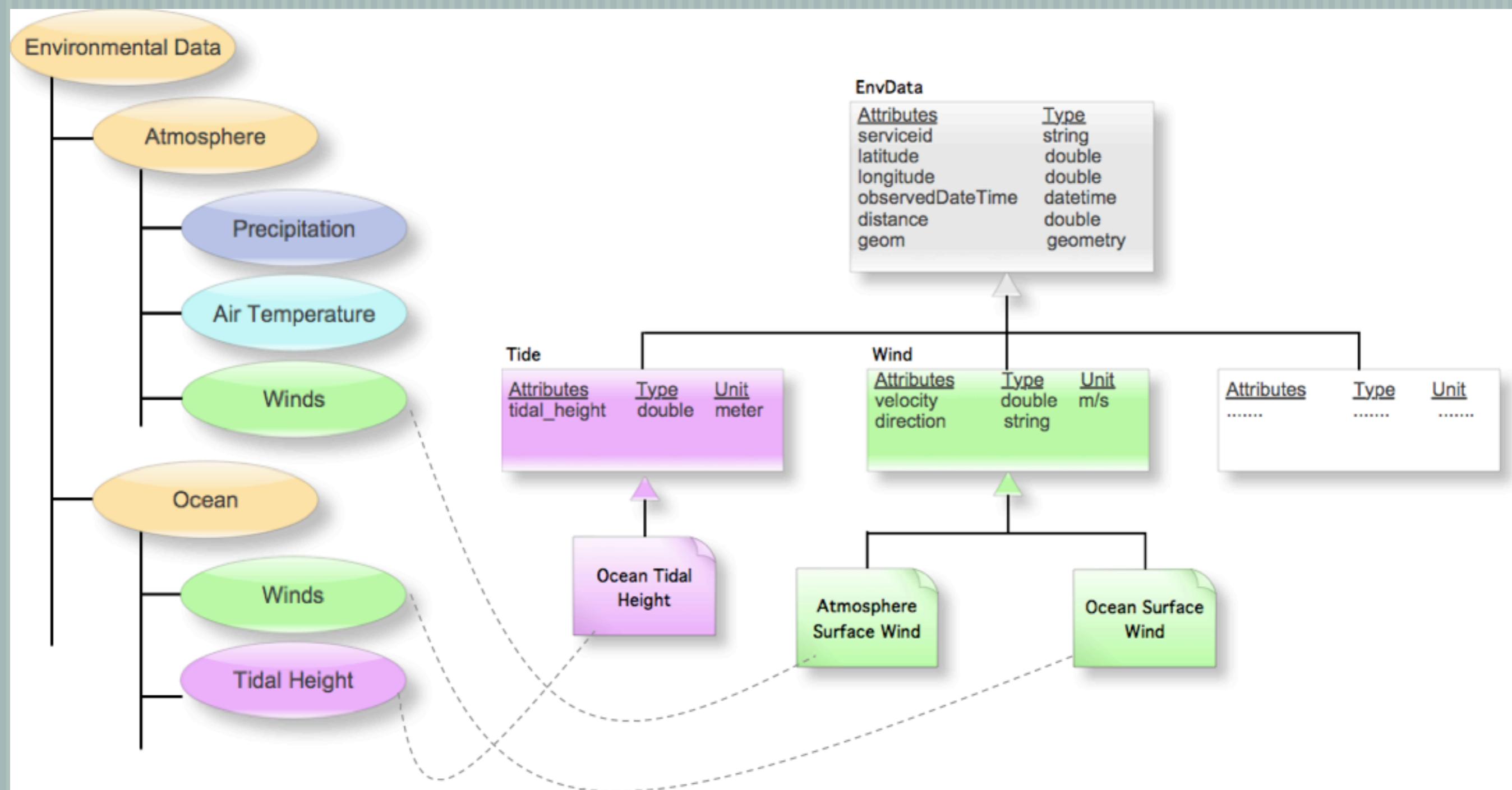
Access data across repositories
Emphasize the ownership

Harmonize two given standard

Visualize data in a user-oriented manner
Provide 'Data Exploration'



Environmental data types & standard



Service Registry

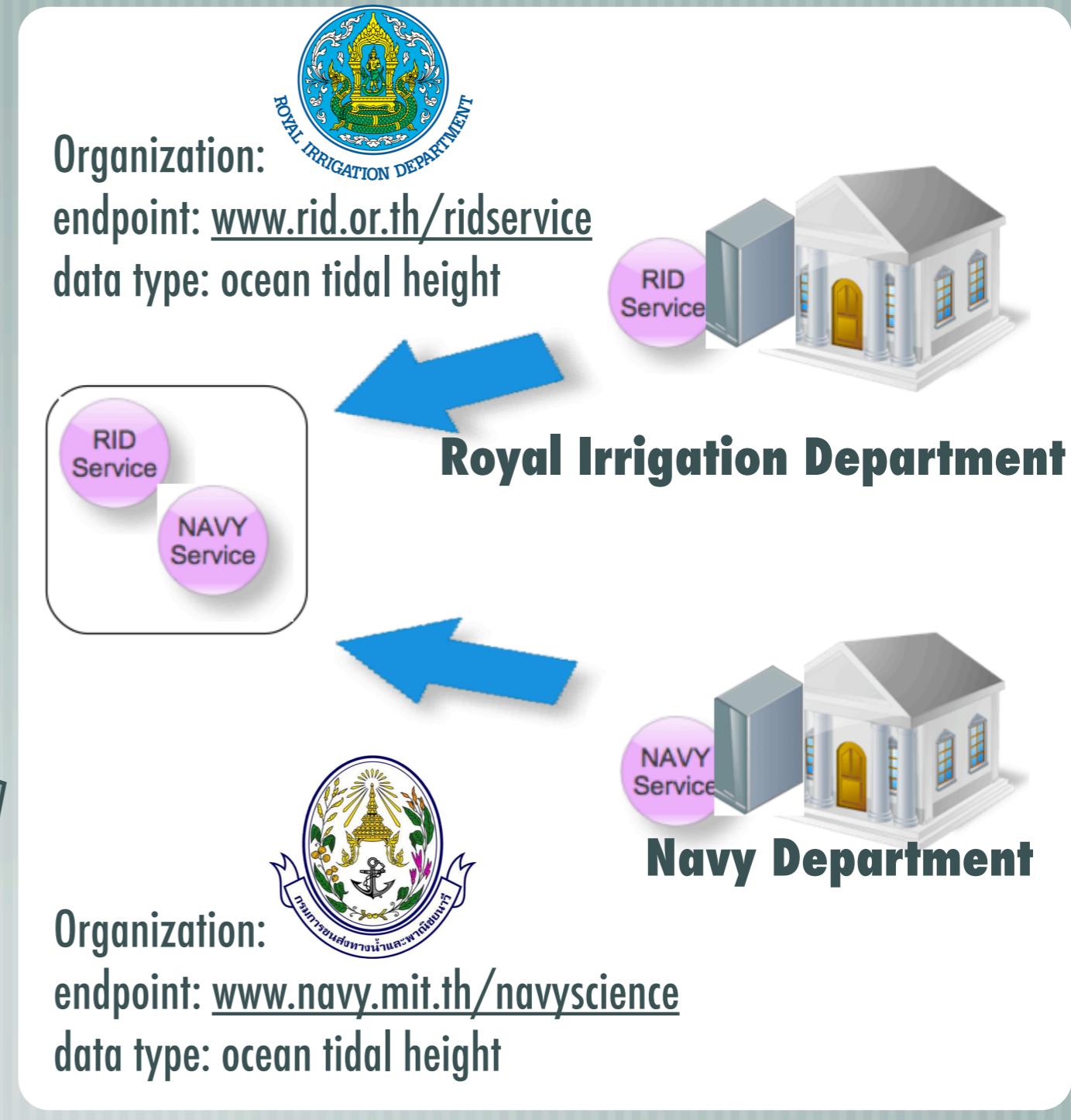
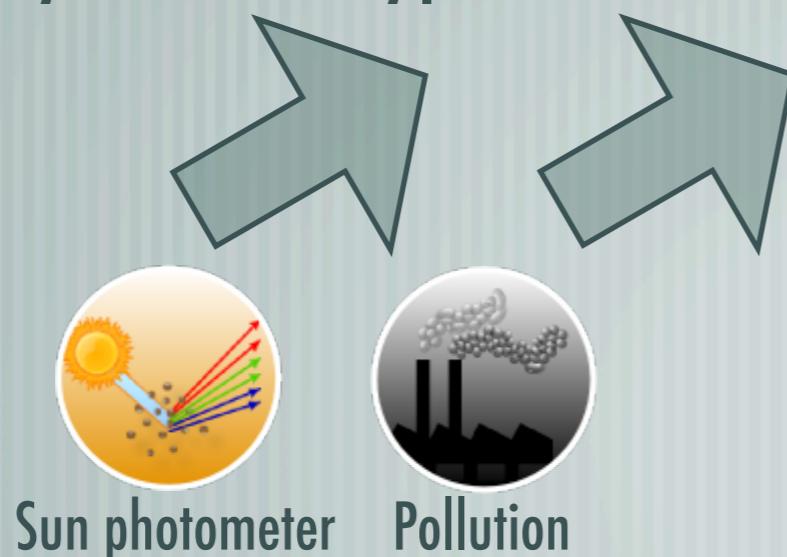


Simple steps to register service

logon E-Rium

specify service endpoint

specify the data types



Query

What?
When?
Where?

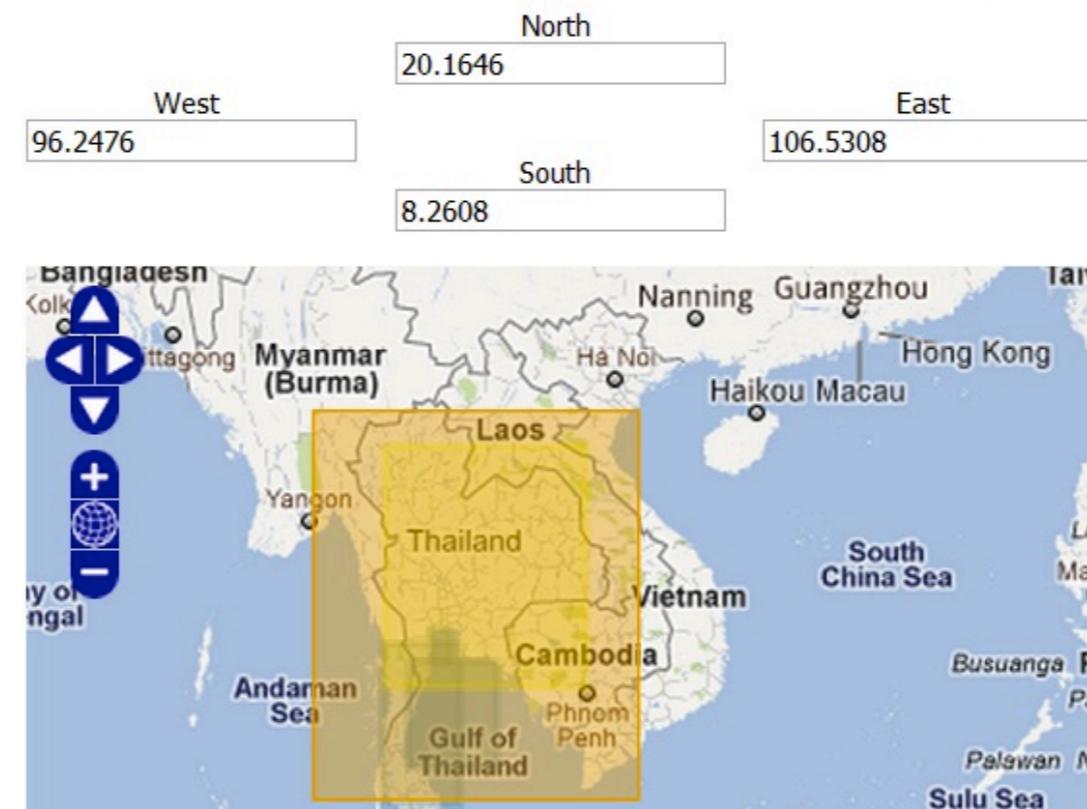
Create New Project

New MyInformatorium Name

Data Categories

- ocean
 - ocean winds
 - tides
 - tidal height
- atmosphere
 - atmospheric winds
 - precipitation
 - aerosol
 - atmospheric temperature
 - air temperature
 - atmospheric pressure
 - atmospheric water vapor

Geographical Coverage

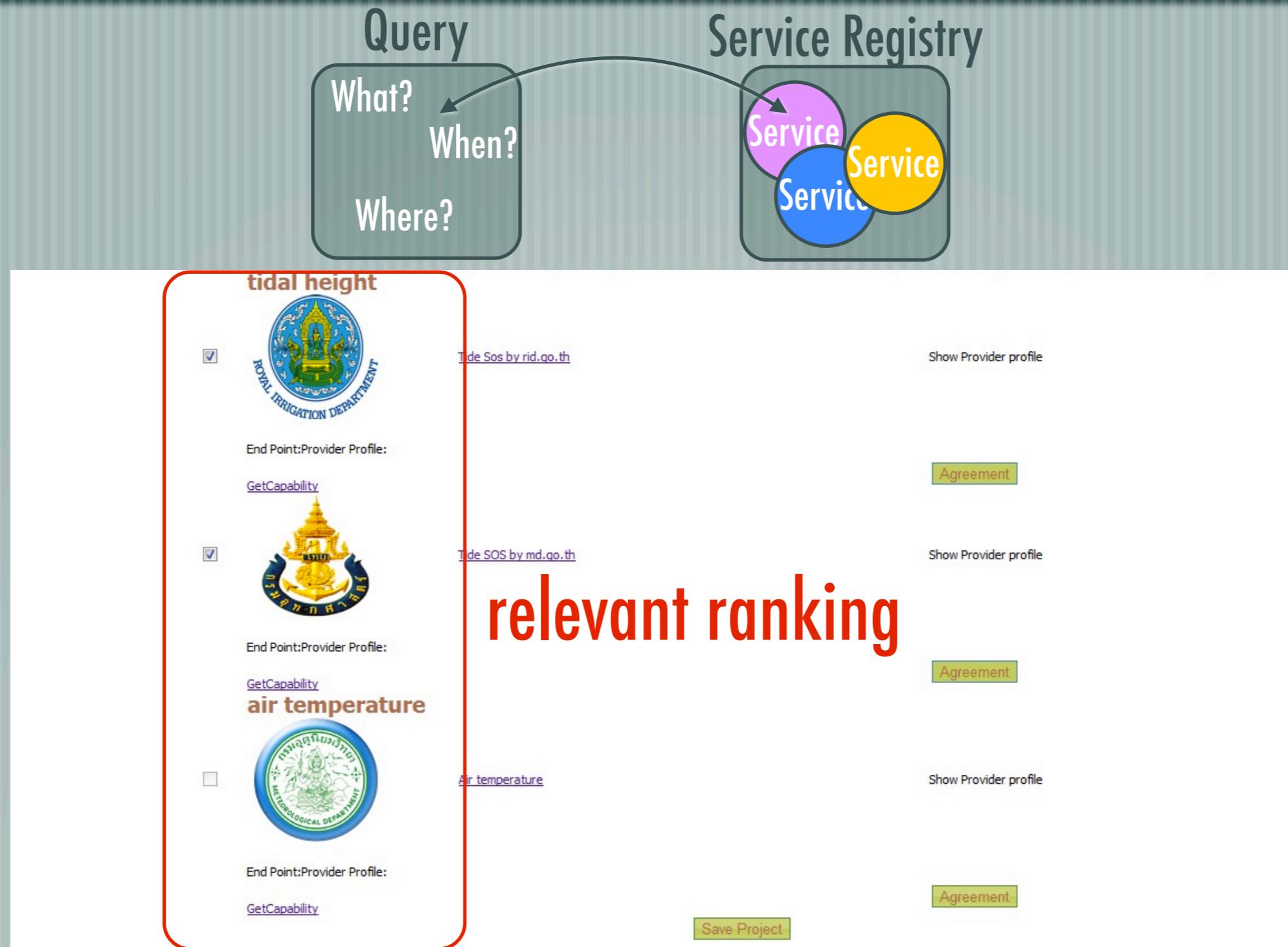


Temporal Coverage

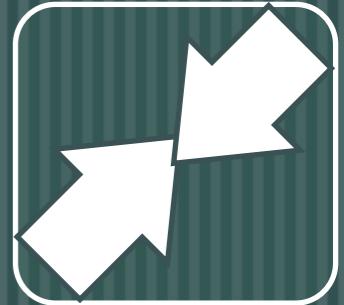
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Ownership of data

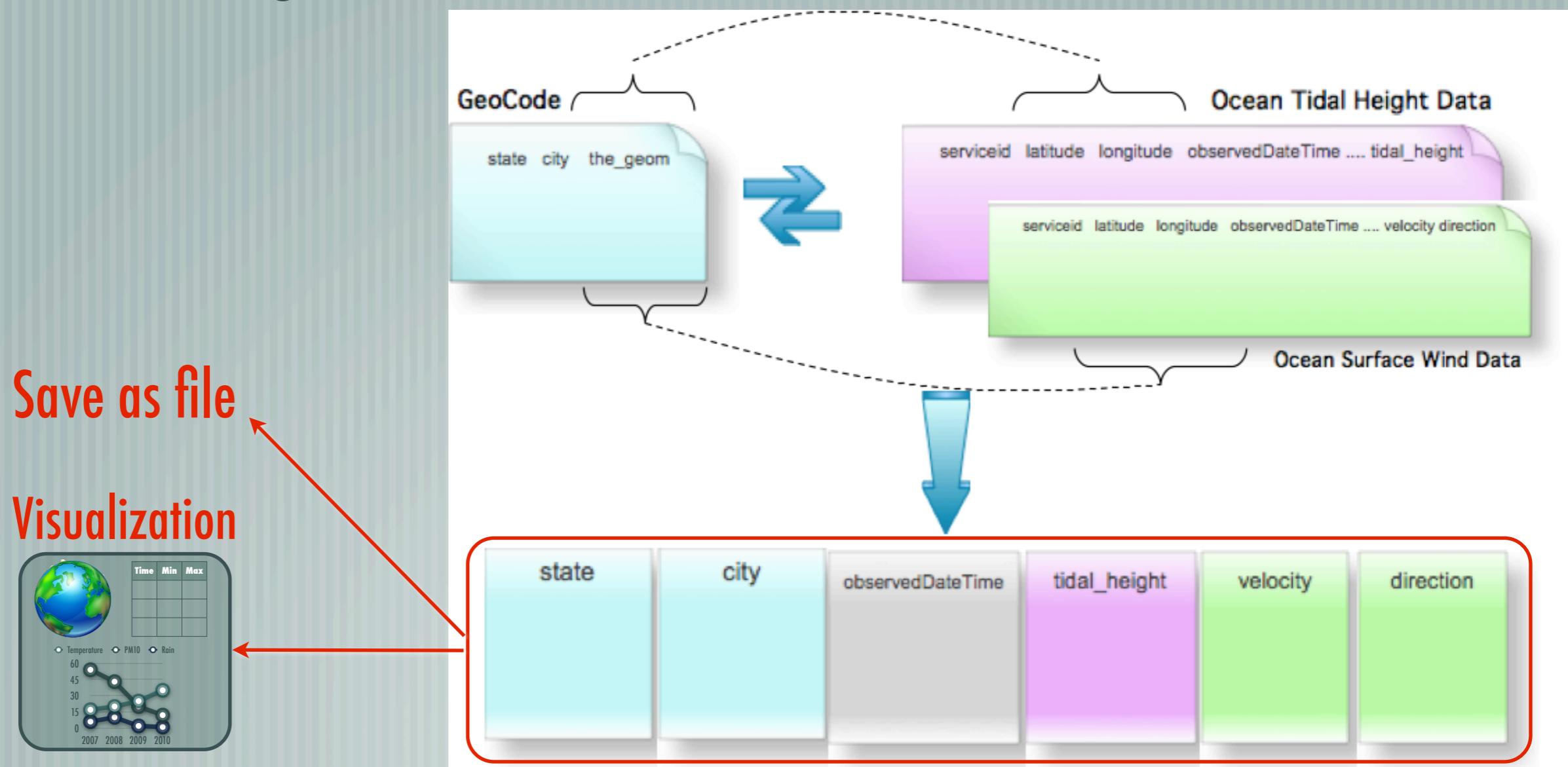
What?
When?
Where?



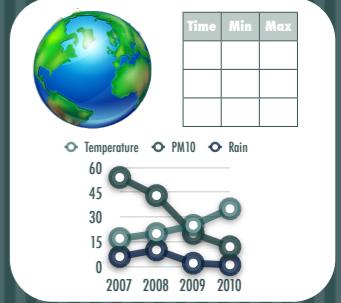
Data Integration



Multi-integration with GeoCode

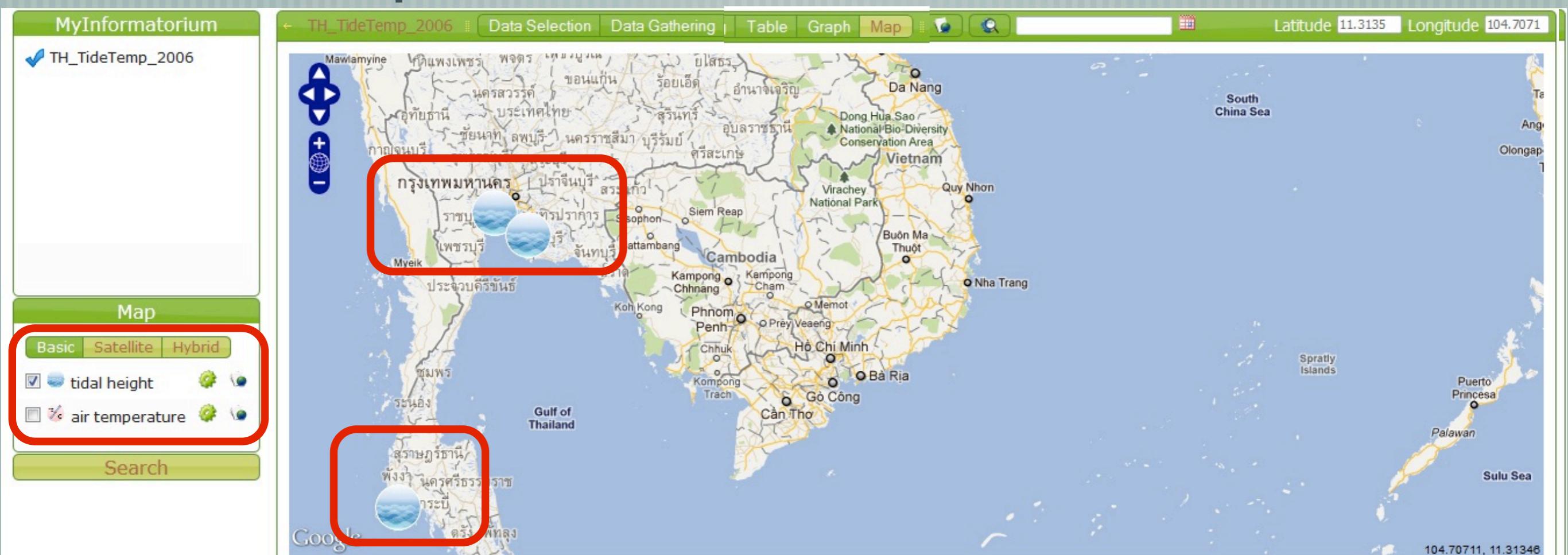


Data visualization

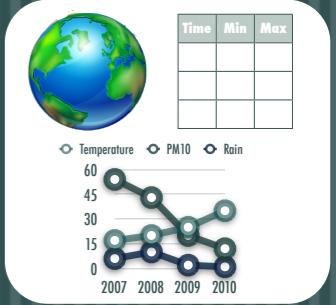


Works with data integration

“Data exploration”



Data visualization



Works with data integration

“Data exploration”



Short demonstration

[<http://203.185.96.70/ERiumPortal/>

Next Step...

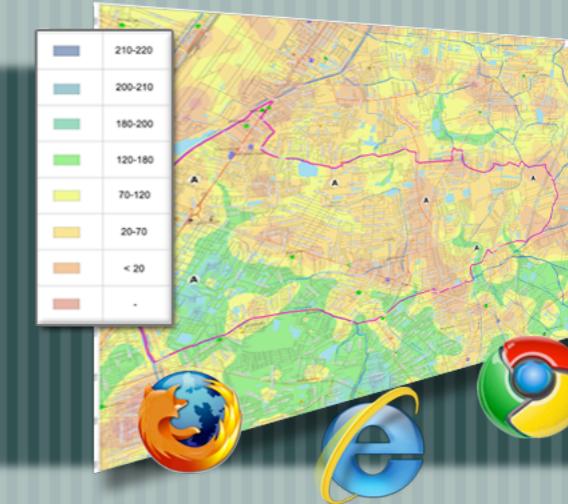
Seek for collaboration

- Road show is planned for Thais providers within 3 months
- Already provide online data?
- Already use SOS / Web Service?

Extend E-Rium for WMS / Satellite image

Crowd sourcing & disaster management

Flood Sign App.



Flood Sign application

- is an application on smart phone and web browser
- collecting the highest water level of Thai flood in 2011
- encouraging the use of crowd sourcing for disaster management in Thailand
- generating a norm of practice and a ready system when situation arise
- overviewing situation by means of data visualization
- i.e. illustrating contour line of the water level

Flood Sign App.



- [via web >> <http://thaimet.hpcc.nectec.or.th/ushahidi/main>]
- [in corporate with traffy (future) >> <http://info.traffy.in.th/>]

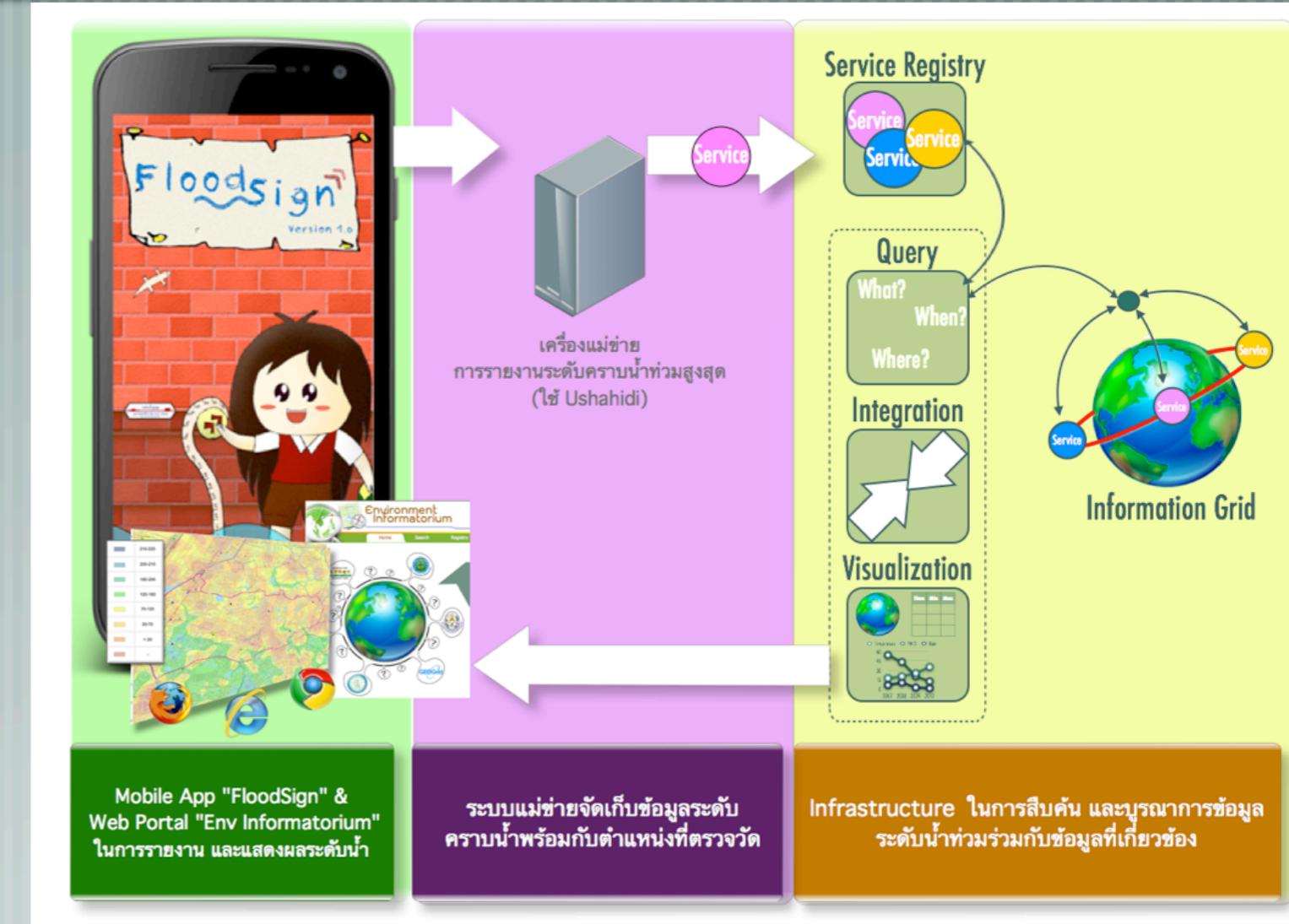
Flood Sign App.

To E-Rium,
Flood Sign application acts...

As a data source

As an application using environment data

As an application using E-Rium framework



Thank you