

DataMARES: Connecting users with coastal and marine ecosystem's data in the Gulf of California and Pacific Ocean, Mexico

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Scripps Institution of Oceanography, University of California San Diego



Gulf Program

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Gulf of California Marine Program, Center for Marine Biodiversity and Conservation
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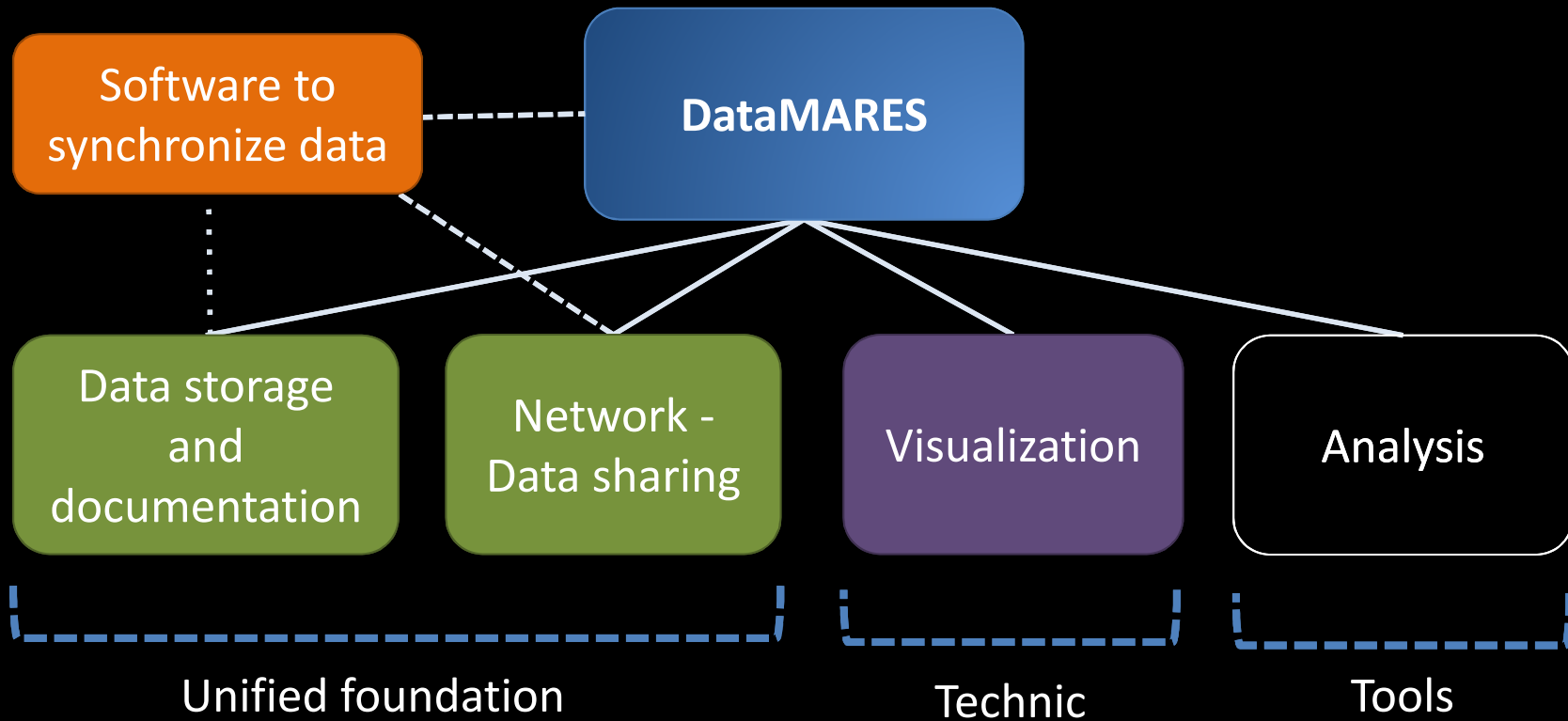
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Marcia Moreno-Báez

The critical responsibility for our generation is to help provide the direction and the support for those generations who come behind. Hence we seek to communicate better our science.

- Metadata
- Archives
- Queries
- Themes
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Disciplines

- Natural Resource Management
- Conservation
- Geography
- Data Management

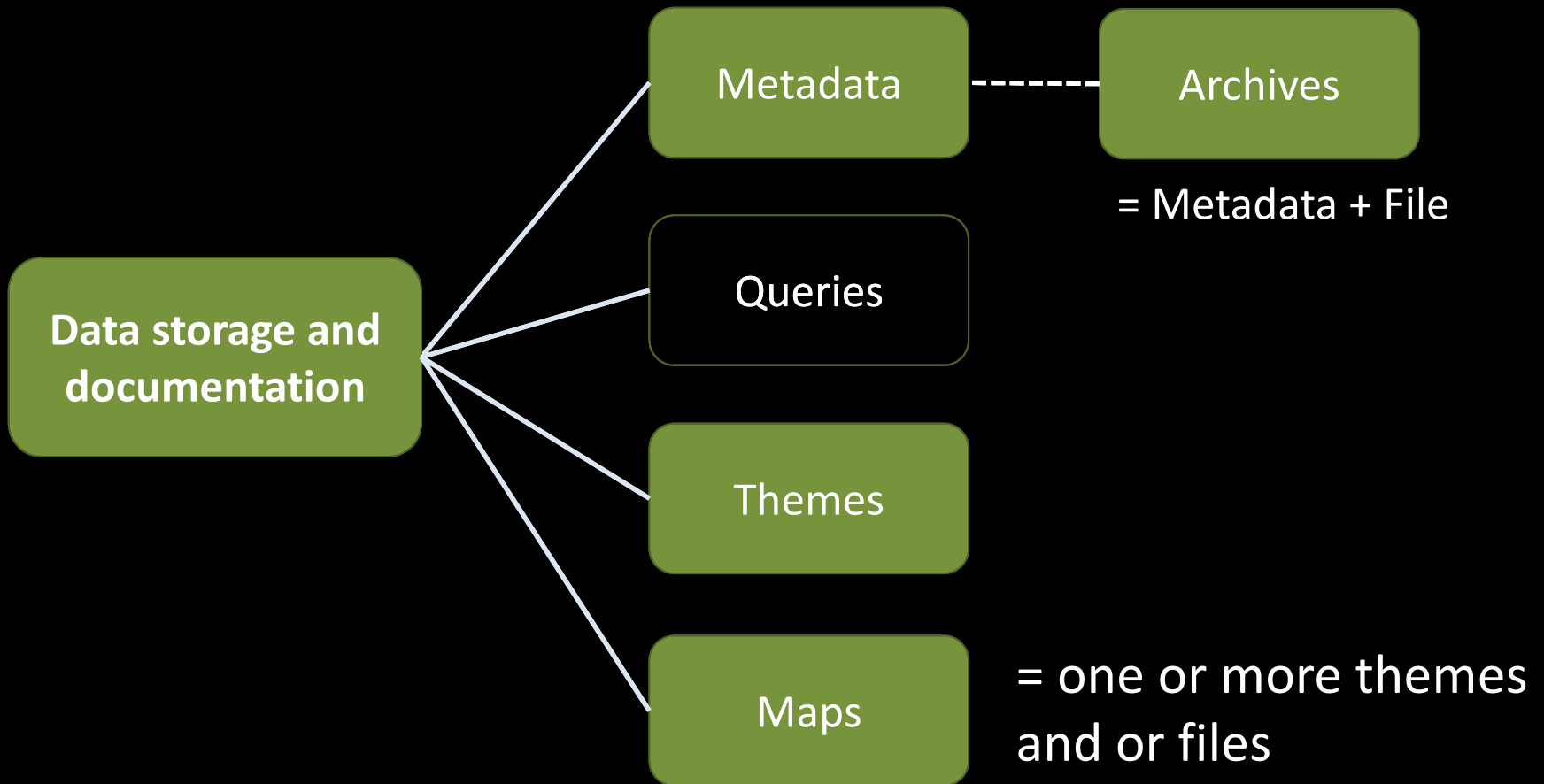
Website

http://bit.ly/11aemMI

Metadata

New metadata

Name	Modification Date
ProMonitor - Rocky Reef and Coastal Zones Monitoring Program by Administrator View Download	2013-09-09 16:17:54
Trackers Upper Gulf 2009-2013 by Victoria Jimenez Esquivel View Download	2013-06-05 16:04:30



- Users
- Disciplines
- Groups
- Projects

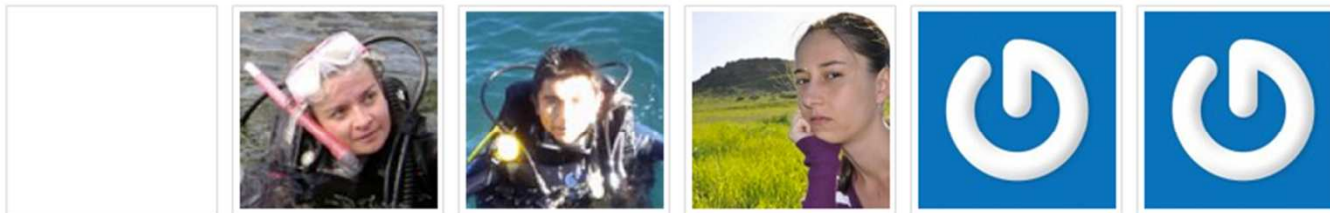
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The goal of DataMARES is to encourage accessibility to science and geospatial information, promoting collaboration among all people including scientist, decision-makers and stakeholders. The success of DataMARES depends on the equal opportunity to design, create, and disseminate data and information, which are essential for productive research and policy-making efforts.

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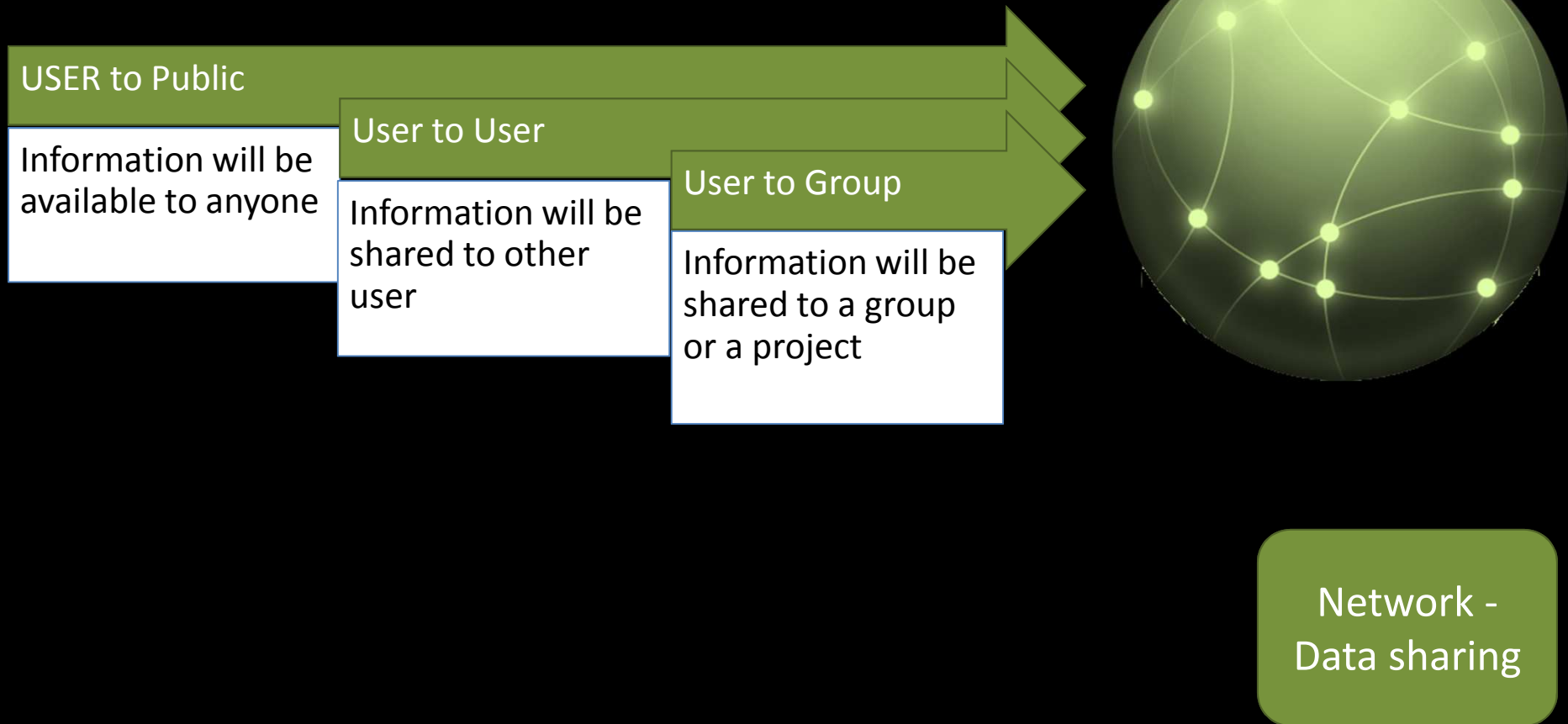
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Network -
Data sharing

Data Sharing Network



/Projects

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Projects

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Name	Users
An Analysis of Gulf of California Estero / Estuary Systems by Administrator <input type="button" value="Join"/>	Members: Vicente Obregon
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Rocky Reef Monitoring Program, Gulf of California, Mexico by Administrator <input type="button" value="Join"/>	Members: Alexandra Sánchez

Network -
Data sharing

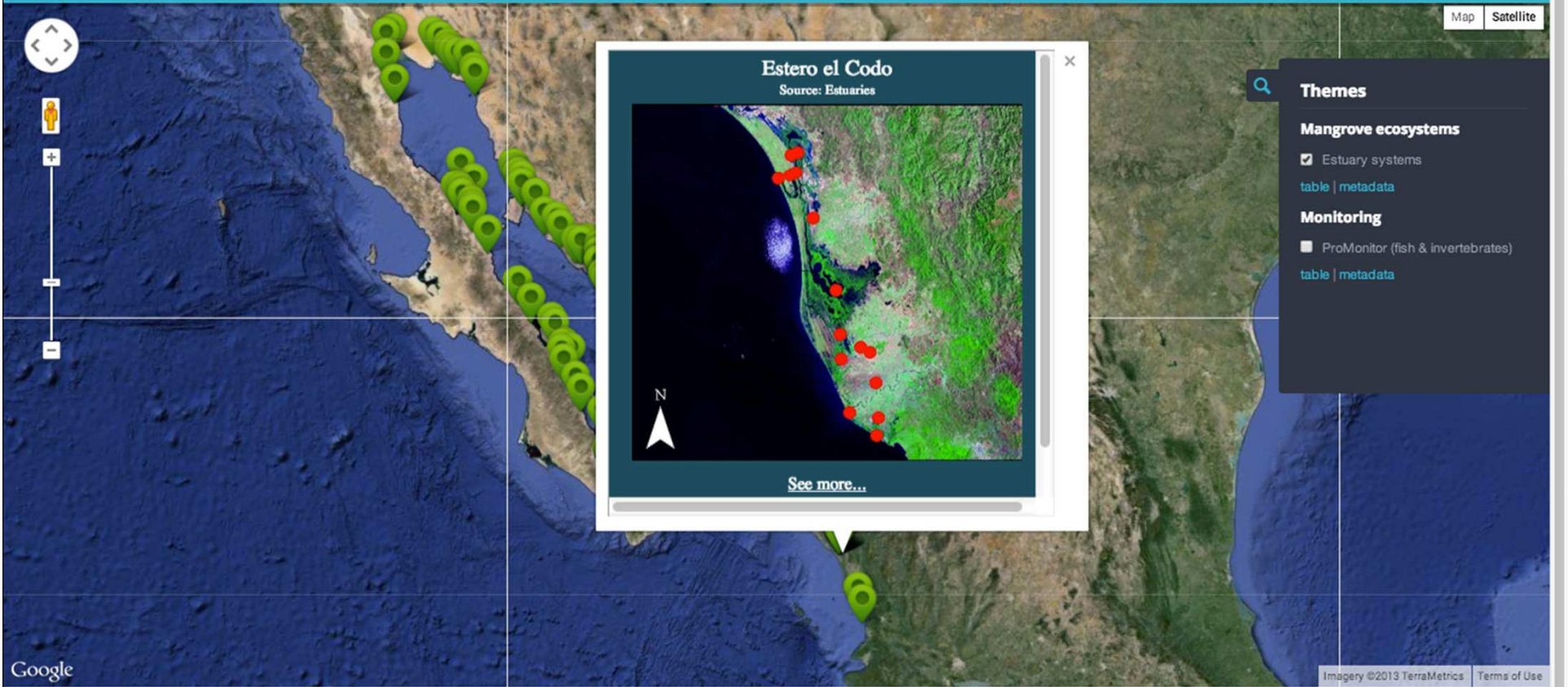
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Visualization

/Estuaries

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Estero Agua Grande, Estero el Maiz, Estero Rueda del Rio, Estero Teacapan, Estero Auta, Estero Toluca, Estero Grande, Estero Mez

GULF OF CALIFORNIA ESTUARIES / ESTEROS WORKSHOP

Estuary Name(s):	Estero Agua Grande, Estero el Maiz, Estero Rueda del Rio, Estero Teacapan, Estero /	
Estuary System:	Teacapan-Agua Brava-Marismas Nacionales	
Code:	ESR4015	<input checked="" type="checkbox"/> Included in digital GIS database?
Region:	Image	Photo
1		UNDEFINED
2		
3		
4		



Visualization

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Isla Socorro, Pedro
Source: ProMARES



Gulf Program
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Site monitored since: 2006



Themes

Mangrove ecosystems

- Estuary systems

[table](#) | [metadata](#)

Monitoring

- ProMonitor (fish & invertebrates)

[table](#) | [metadata](#)



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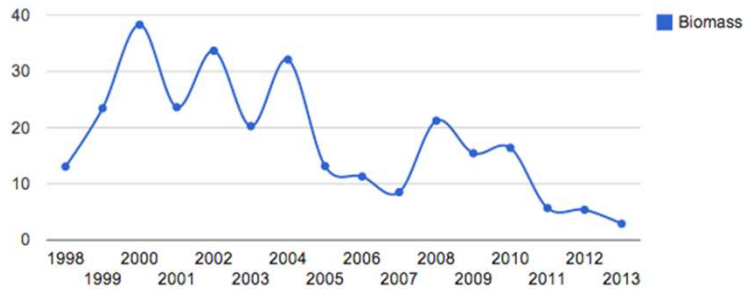
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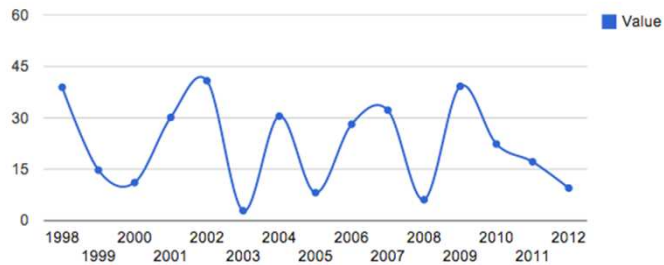
Visualization

Mean biomass by site



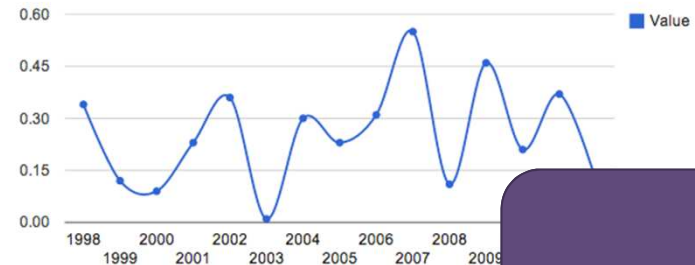
Biomass per reef and species

Reef: Isla Espiritu Santo, Pailebote (5m prof.) BLOQUES
Species: Abudedefduf troschelii



Density per reef and species

Reef: Isla Espiritu Santo, Pailebote (5m prof.) BLOQUES
Species: Abudedefduf troschelii



Visualization

ecMonitor - admin

File

Sync

Users: admin

Label: -- Any label -- Species: -- Any species -- Size: -- Any size --

Year: 1998 Month: -- Any month --

Region: -- Any region -- Top: -- Any site --

Reef: -- Any reef --

Area: -- Any area -- Transect: -- Any transect --

Edit transect in matrix Export all Export

Species list:

- Any species --
- Abudefduf troschelii
- Acanthaster planci
- Acanthurus nigricans
- Acanthurus xanopterus
- Alphhestes immaculatus
- Anarchias galapagensis
- Anisotremus interruptus
- Aplysina fistularis
- Aplysina gerardogreeni
- Apogon pacificus
- Apogon retrosella
- Apogon sp.
- Arothron meleagris
- Asteropsis carinifera
- Balistes polylepis
- Bodianus diplotaenia
- Calamus brachysomus
- Cantherhines dumerillii
- Canthigaster punctatissima
- Caranx caballus
- Caranx sexfasciatus
- Caranx sp.
- Cephalopholis panamensis
- Chaetodon humeralis
- Chilomycterus reticulatus
- Chromis atrilobata
- Chromis limbaughi
- Cirrhithus rivulatus
- Cirrhitichthys oxycephalus

Sample ID	Year	Region Code	Region Name	Toponym Name	Site Code	Site Name	Reef Code	Reef Name	Latitude	Longitude	Depth
1	1998	1 CSL	Cabo San Lucas	Bahia San Lucas	LA ANEGADA	La Anegada	ANEG_05_PARED	Cabo San Lucas...	22.878553	-109.898835	
2	1998	1 CSL	Cabo San Lucas	Bahia San Lucas	LA ANEGADA	La Anegada	ANEG_05_PARED	Cabo San Lucas...	22.878553	-109.898835	
3	1998	1 CSL	Cabo San Lucas	Bahia San Lucas	LA ANEGADA	La Anegada	ANEG_05_PARED	Cabo San Lucas...	22.878553	-109.898835	
4	1998	1 CSL	Cabo San Lucas	Bahia San Lucas	LA ANEGADA	La Anegada	ANEG_05_PARED	Cabo San Lucas...	22.878553	-109.898835	
5	1998	1 CSL	Cabo San Lucas	Bahia San Lucas	LA ANEGADA	La Anegada	ANEG_05_PARED	Cabo San Lucas...	22.878553	-109.898835	
20	1998	1 CSL	Cabo San Lucas	Bahia San Lucas	LA ANEGADA	La Anegada	ANEG_05_PARED	Cabo San Lucas...	22.878553	-109.898835	
17	1998	1 CSL	Cabo San Lucas	Bahia San Lucas	LA ANEGADA	La Anegada	ANEG_05_PARED	Cabo San Lucas...	22.878553	-109.898835	
6	1998	1 CSL	Cabo San Lucas	Bahia San Lucas	LA ANEGADA	La Anegada	ANEG_05_PARED	Cabo San Lucas...	22.878553	-109.898835	
26	1998	1 CSL	Cabo San Lucas	Bahia San Lucas	LA ANEGADA	La Anegada	ANEG_05_PARED	Cabo San Lucas...	22.878553	-109.898835	
21	1998	1 CSL	Cabo San Lucas	Bahia San Lucas	LA ANEGADA	La Anegada	ANEG_05_PARED	Cabo San Lucas...	22.878553	-109.898835	
7	1998	1 CSL	Cabo San Lucas	Bahia San Lucas	LA ANEGADA	La Anegada	ANEG_05_PARED	Cabo San Lucas...	22.878553	-109.898835	
8	1998	1 CSL	Cabo San Lucas	Bahia San Lucas	LA ANEGADA	La Anegada	ANEG_05_PARED	Cabo San Lucas...	22.878553	-109.898835	
24	1998	1 CSL	Cabo San Lucas	Bahia San Lucas	LA ANEGADA	La Anegada	ANEG_05_PARED	Cabo San Lucas...	22.878553	-109.898835	
9	1998	1 CSL	Cabo San Lucas	Bahia San Lucas	LA ANEGADA	La Anegada	ANEG_05_PARED	Cabo San Lucas...	22.878553	-109.898835	
18	1998	1 CSL	Cabo San Lucas	Bahia San Lucas	LA ANEGADA	La Anegada	ANEG_05_PARED	Cabo San Lucas...	22.878553	-109.898835	
19	1998	1 CSL	Cabo San Lucas	Bahia San Lucas	LA ANEGADA	La Anegada	ANEG_05_PARED	Cabo San Lucas...	22.878553	-109.898835	
25	1998	1 CSL	Cabo San Lucas	Bahia San Lucas	LA ANEGADA	La Anegada	ANEG_05_PARED	Cabo San Lucas...	22.878553	-109.898835	
23	1998	1 CSL	Cabo San Lucas	Bahia San Lucas	LA ANEGADA	La Anegada	ANEG_05_PARED	Cabo San Lucas...	22.878553	-109.898835	
22	1998	1 CSL	Cabo San Lucas	Bahia San Lucas	LA ANEGADA	La Anegada	ANEG_05_PARED	Cabo San Lucas...	22.878553	-109.898835	
10	1998	1 CSL	Cabo San Lucas	Bahia San Lucas	LA ANEGADA	La Anegada	ANEG_05_PARED	Cabo San Lucas...	22.878553	-109.898835	
11	1998	1 CSL	Cabo San Lucas	Bahia San Lucas	LA ANEGADA	La Anegada	ANEG_05_PARED	Cabo San Lucas...	22.878553	-109.898835	
12	1998	1 CSL	Cabo San Lucas	Bahia San Lucas	LA ANEGADA	La Anegada	ANEG_05_PARED	Cabo San Lucas...	22.878553	-109.898835	

Matrix Samples Catalogs ProMARES Data

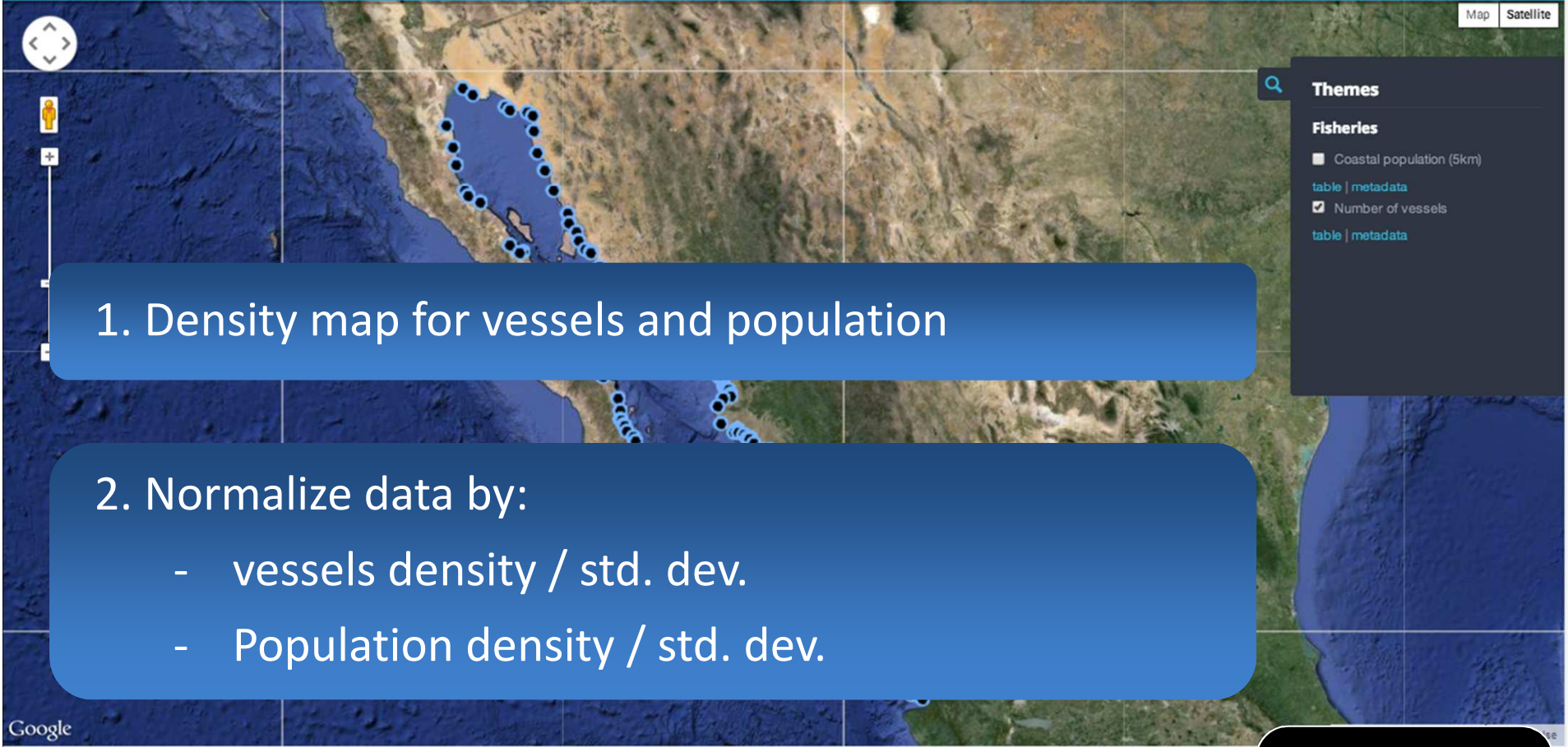
Ready

Records: 6666

EcMonitor 2013

Software to synchronize data

Analysis



1. Density map for vessels and population

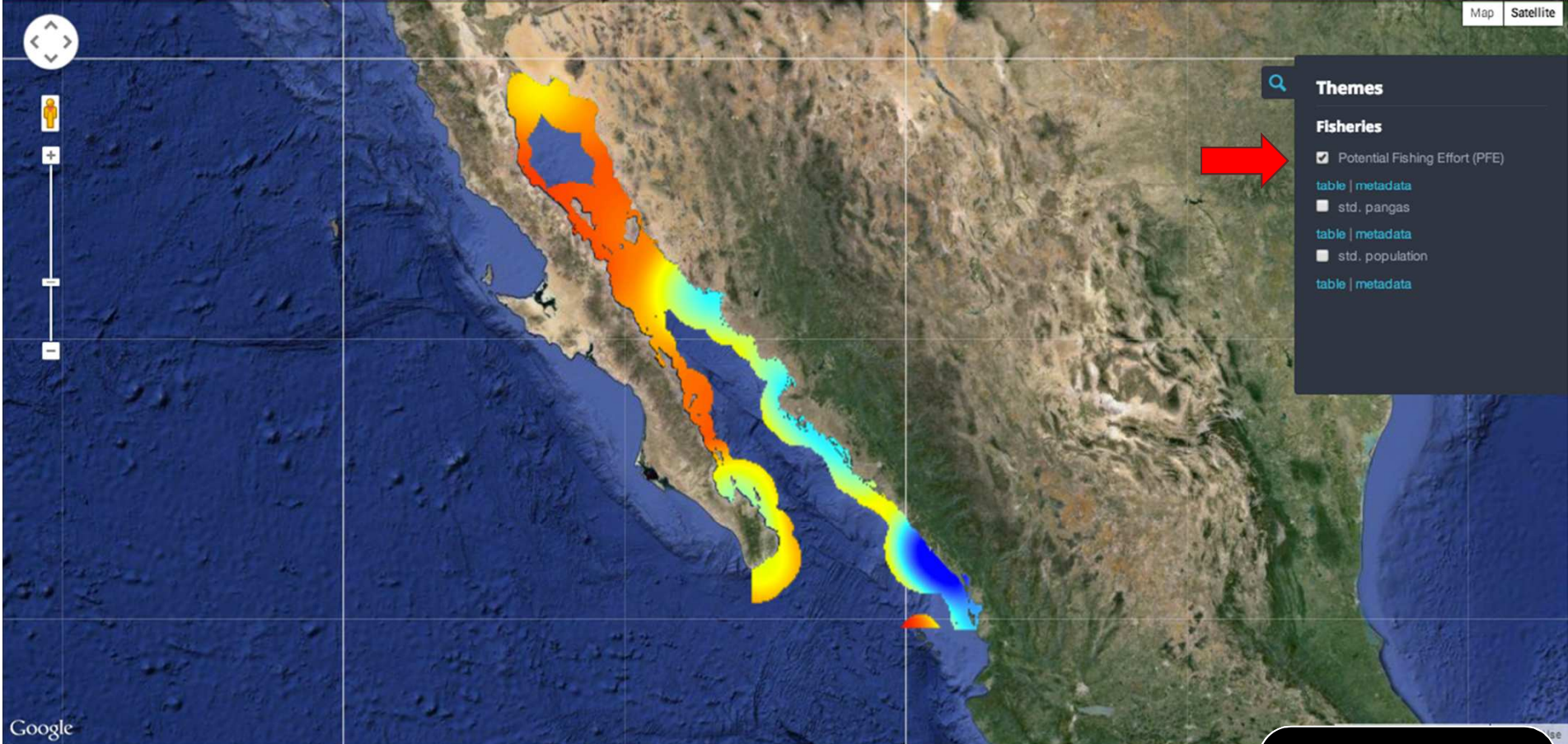
2. Normalize data by:

- vessels density / std. dev.
- Population density / std. dev.

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Themes

Fisheries

- Potential Fishing Effort (PFE)
[table](#) | [metadata](#)
- std. pangas
[table](#) | [metadata](#)
- std. population
[table](#) | [metadata](#)

$$\text{Potential Fishing Effort} = \text{Vess. STD} + \text{Pop. STD} / 2$$

Go **Analysis**

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Where we are and what's next?

- Ecological Metadata Language (EML)
- Data policy
- Help center
- Query improvements
- Tabular and spatial analysis
- Bring more human resources
- Connect with other initiatives