

SERVIR-Africa

Regional Visualization and Monitoring System



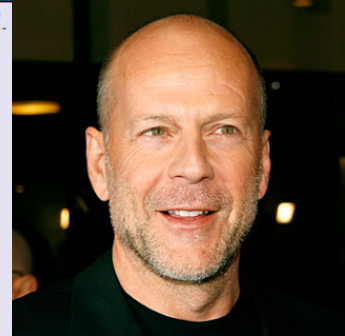
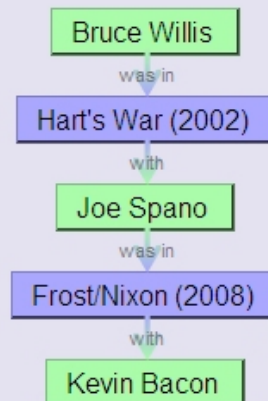


Degrees of separation (Hollywood version)

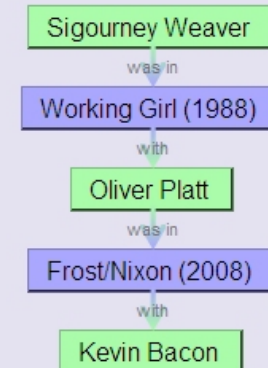
- We're separated from anyone on the planet by, at most, six people.
- In "Kevin Bacon" version, Hollywood stars are interconnected via Kevin Bacon.
- The Bacon number of an actor is number of degrees of separation from Bacon, based on movies in which the actor has been.
- Average path length to Kevin: 2.96.



Bruce Willis has a Bacon number of 2.



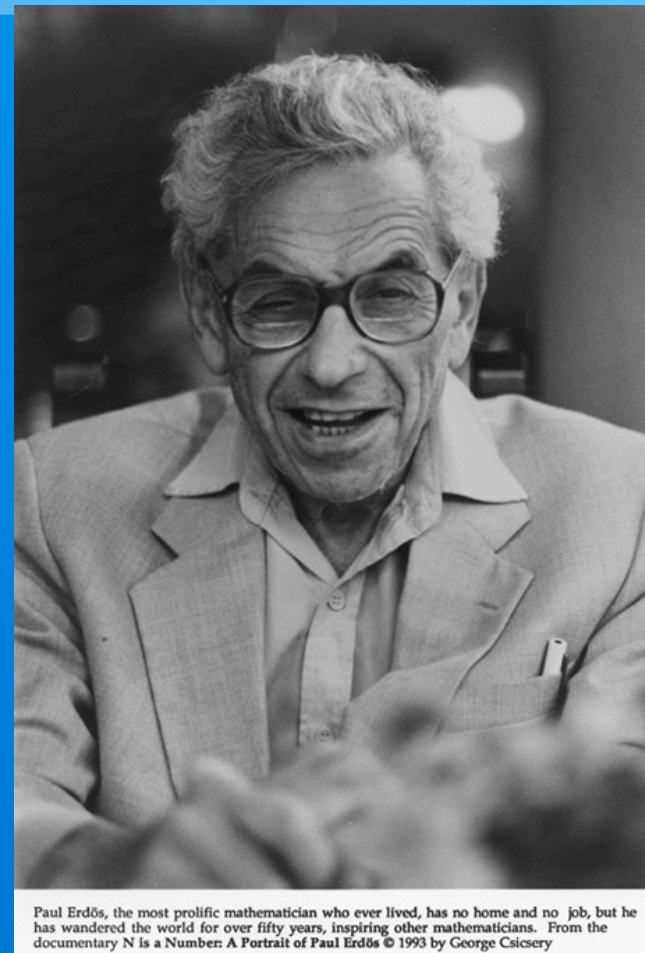
Sigourney Weaver has a Bacon number of 2.





Degrees of separation (Erdős version)

- Erdős (mathematician) wrote 1500+ papers with 507 co-authors.
- Erdős number - number of links required to connect scholars to Erdős via co-authorship of papers.
- The average is 4.65.



Paul Erdős (1913-1996)



Degrees of separation (SERVIR version)

Community groups, scientists, decision-makers connected through SERVIR

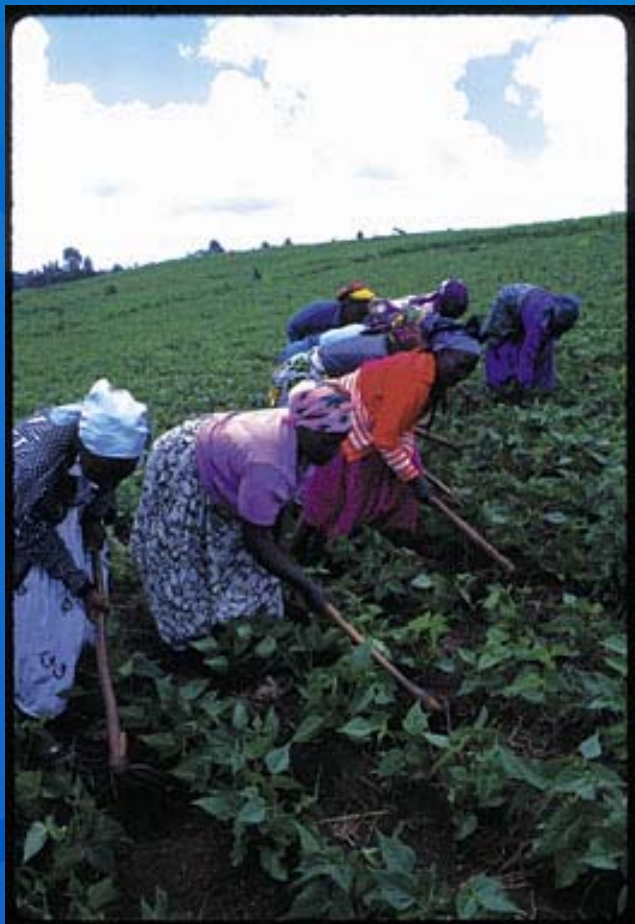
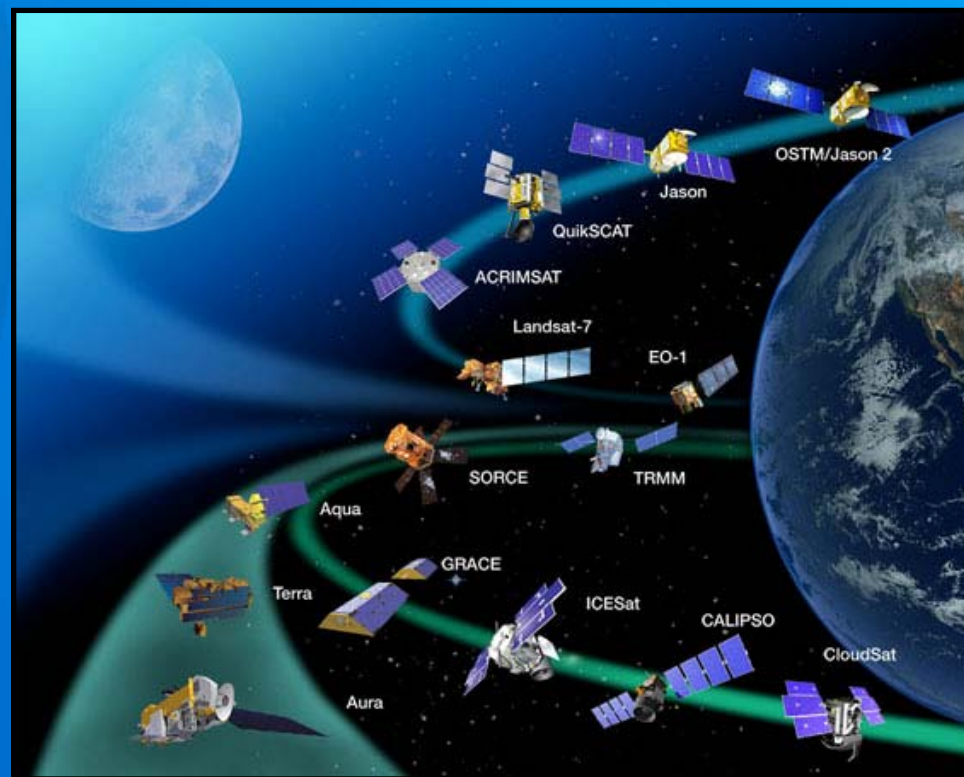


Photo: Sean Sprague

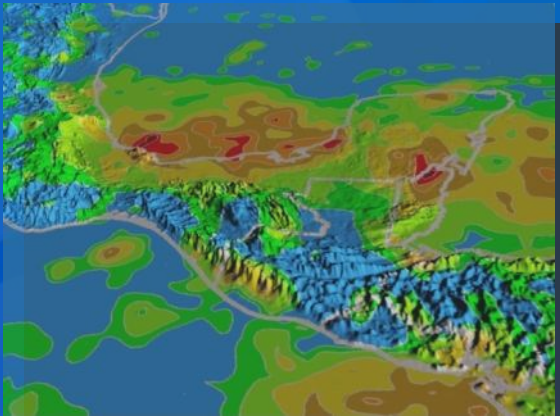




SERVIR

Regional Visualization and Monitoring System “to serve”

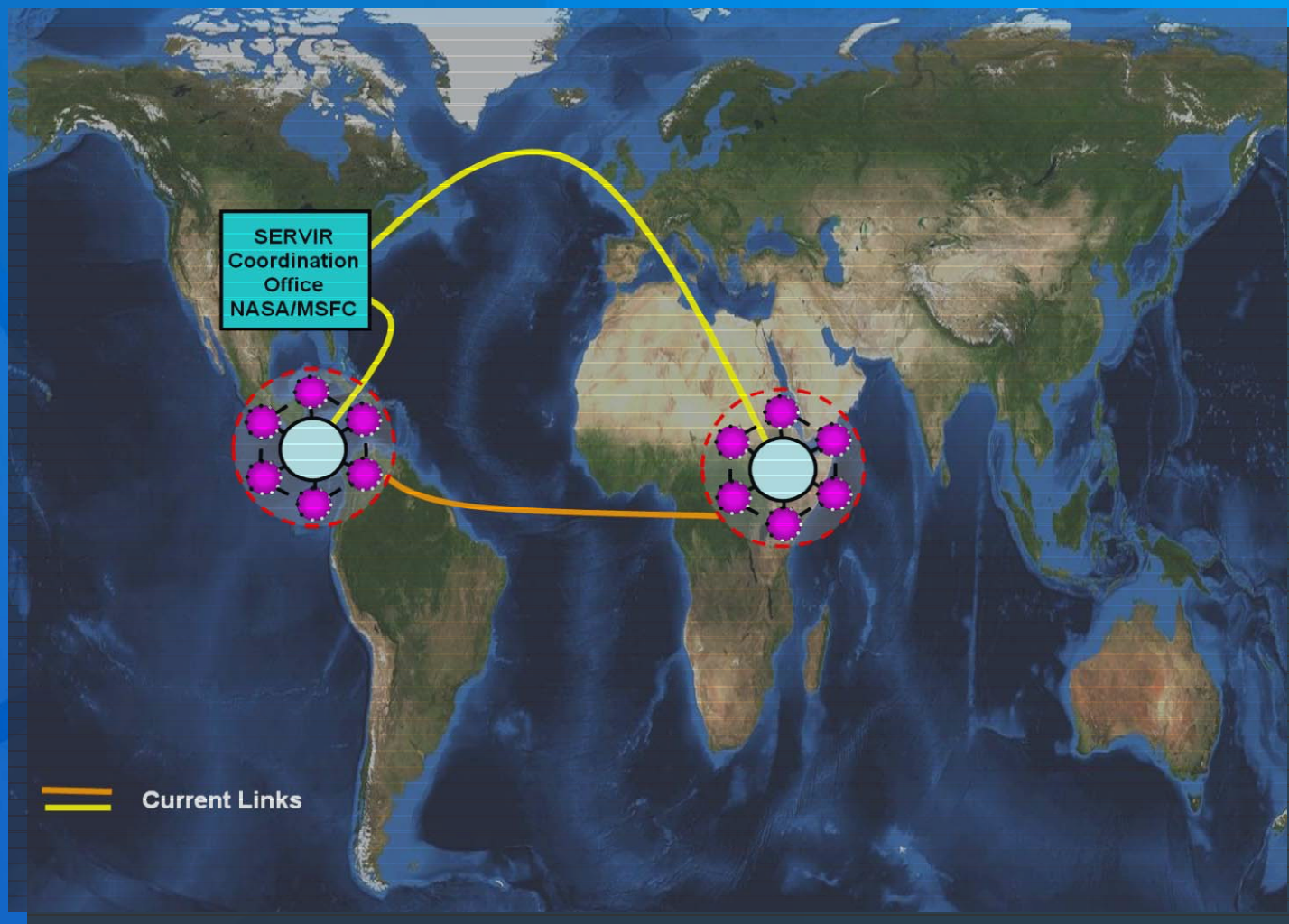
*Enabling the use of earth observations and models
for timely decision making to benefit society*



- Data and Models
- Online Maps
- Visualization
- Decision Support
- Training
- Partnerships



SERVIR Nodes and Coordination Office

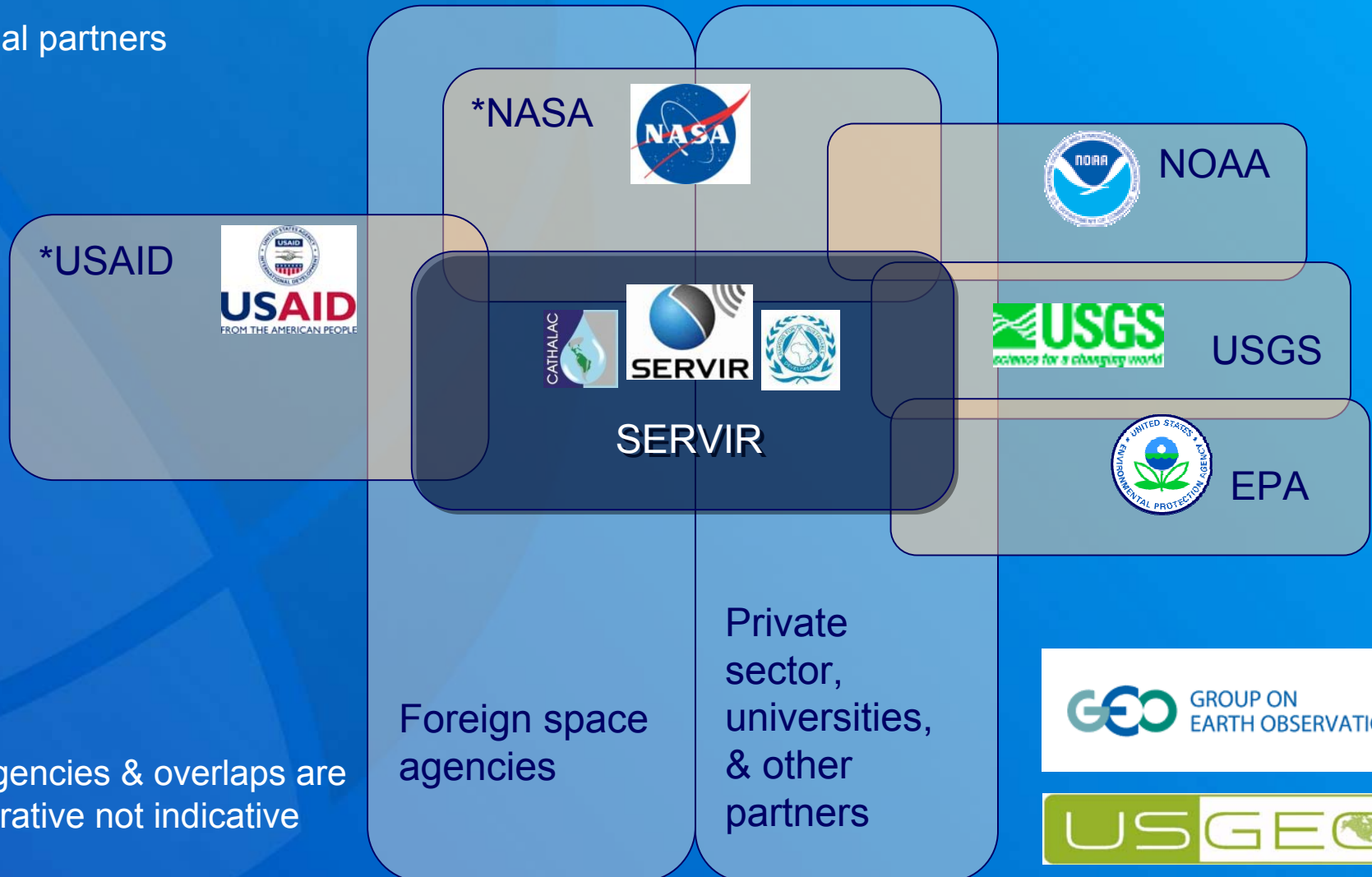




SERVIR – platform for collaboration

Opportunity for USGEO coordination of foreign assistance for earth observation applications

* Initial partners



** Agencies & overlaps are illustrative not indicative



Partnerships (horizontal coordination) in a vertical environment





SERVIR platform: user perspective

Share

- **Metadata authoring tools**
- Community building tools
- Feedback mechanisms
- Reducing barriers to sharing

Discover

- Managed knowledge base
- **Catalog services**
- **Directory services**
- Notification services
- Browse & search function

Acquire

- Ground receiving station
- **Data acquisition services**
- Data processing services
- **Data archive**
- **Geodata services**

Web portal

Use / Create

- Visualization tools
- Decision support tools
- **Forecasts and models**
- **Support for interoperability**
- Support for product use

Current Priorities



Discover: geospatial 'one-stop'

01

Egyptian Geography Network

Search | Advanced

Home

Ceaser-web.com - Online source for Geo-Information & Maps to Nigeria

ADDRESS SEARCH | ROUTE PLANNING | FIND BY NEAREST | POINTS OF INTEREST | POSTCODE SEARCH | GET A MAP | Contact Us | Make us your home page | Bookmark Us | Feedback | Tell a Friend

Explore Lagos via our Satellite Imagery | Lagos driving directions

See Icons | More Pages | Please leave a feedback

FIND A PLACE
Simply enter name of place

MAP TOOLS - mouse cursor over tool for help
Zoom In Zoom Out

Use four cardinal arrows to move map (Zoom in to see street level maps & POI)
Choose town of choice

Selected layers to see on main map
UPDATE MAP LAYERS

- ☒ Nigeria_All_POI
- ☒ Nigeria_All_Railway
- ☒ Nigeria_All_Airports
- ☒ Nigeria_Street_Level
- ☒ Nigeria_All_Towns
- ☒ Nigeria_All_Roads
- ☒ Nigeria_Buildup_Area
- ☒ Nigeria_All_Rivers
- ☒ Nigeria_All_Waters
- ☒ Nigeria_All_States
- ☒ Nigeria_Boundary

Click for Map Legend

CEASERMOBILE IN CAR NAVIGATION

Click here for a range of our Garmin In-

(e) Third Dimension Technologies

OVERVIEW MAP - move main map new position on overview

FEATURED PLACE

WHERE IS THIS

CEASERWEB HOTLINKS

- [www.3dtechnologies](#)
- [Lagos spatial que](#)
- [Nigeria GPS Ma](#)
- [Spatial Technologie](#)
- [National Bureau of St](#)

LAGOS 200 km

GLC2000 Home map

View Details View Map



Discover: directory services (e.g., African geospatial diaspora)

SERVIR AFRICA - Diaspora Community of African Geospatial Scientists (DCAGS) - Windows Internet Explorer



http://www.servir.net/africa/index.php?option=com_content&task=view&id=107&Itemid=93

File Edit View Favorites Tools Help

SERVIR AFRICA - Diaspora Community of African Geos...

Home » Community » Geospatial Diaspora

Diaspora Community of African Geospatial Scientists (DCAGS)

  Jointly with the Department of Geography at the University of North Alabama (USA), SERVIR-Africa is providing a platform for academic and research collaboration through mobilizing the professional, technological, and entrepreneurial expertise and resources of the African Diaspora. The African Diaspora is operationally defined as "people of African origin living outside the continent, irrespective of citizenship and nationality, who are willing to contribute to the development of the continent." [More...](#)



All can give the search function a try from the diaspora map. And if you are a geospatial scientist of the African diaspora, please log into the SERVIR site (at bottom of page) and register with DCAGS! Kindly note that in order to demonstrate the functionality of the mapping tool, we initially sourced a sample set of diaspora colleagues from the Internet. We welcome your comments.

Geospatial Diaspora Menu

- [About the DCAGS](#)
- [Diaspora map & registry](#)
- [Scientific & geospatial literature](#)
- [Call for papers](#)
- [Events](#)
- [Grants, scholarships, & fellowships](#)
- [Research programs in Africa](#)
- [Research status in Africa](#)

Search

Map Satellite Hybrid Terrain

 **Francis Koti**  Publications

Company Affiliation: Assistant Professor of Geography, University of North Alabama

Country of Origin: Kenya

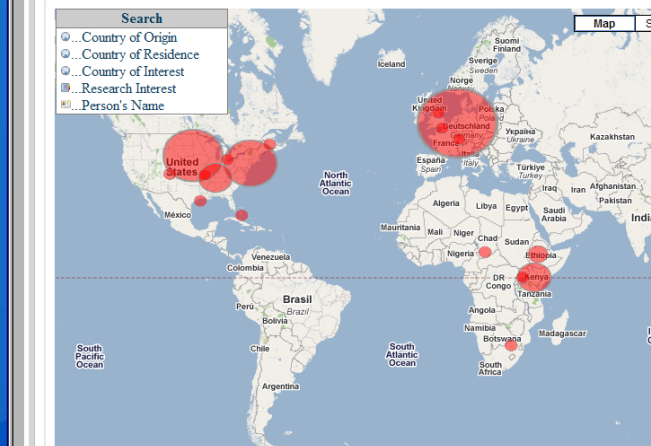
Country of Residence: United States

Residence City: Florence

Email: fkoti@una.edu

Location of Interest: Kenya, Tanzania, United Republic of Uganda, United States, South Africa, Zambia, Zimbabwe

Map data ©2009 Tele Atlas - Terms of Use



Register

Fields with an asterisk (*) are required.

* First Name:

* Last Name:

* Current institutional affiliation:

* Country of origin:

* Country of current residence:

State of current residence:

* City of current residence:

* Email:

Alternate Email:

Research interests:

Locations (regions, countries) of interest:

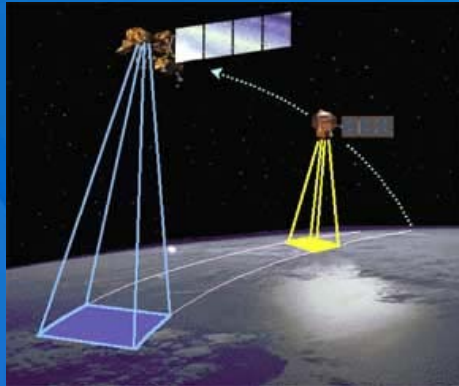
Languages spoken:

Upload picture:

You may only upload a picture after you have created a location marker using the Set Location and (if needed) Set Marker buttons above.



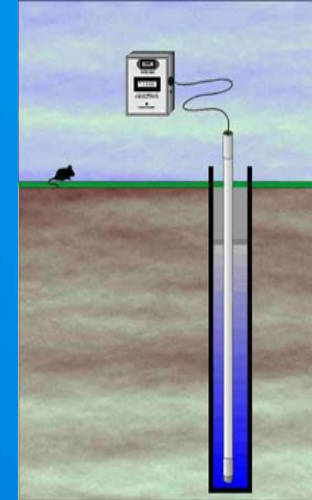
Acquire: data sources



satellite observations



humans sensors



in-situ instruments



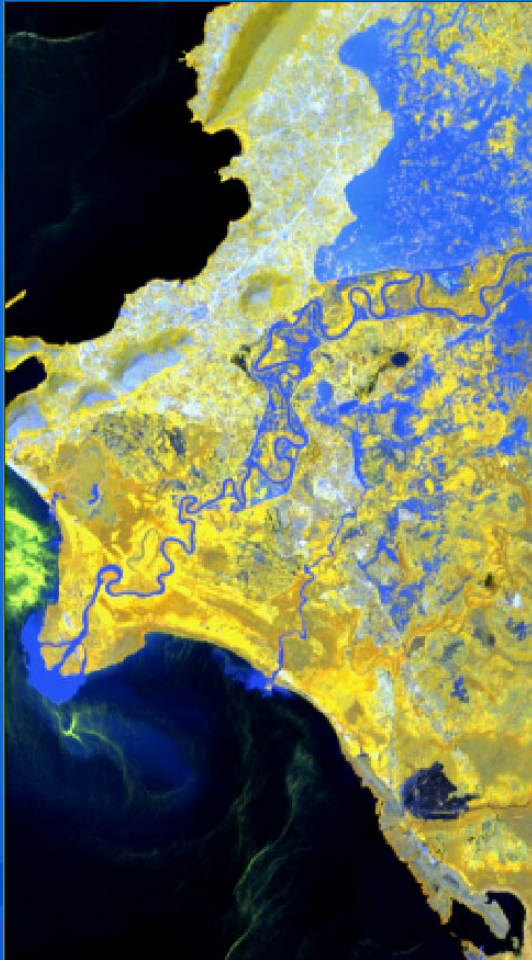
historical data



aerial vehicles



Acquire: new opportunities



Budalang'i Floods
November 13, 2008



NASA's tasking request system for EO-1 to acquire baseline and post-event imagery of flooded areas.

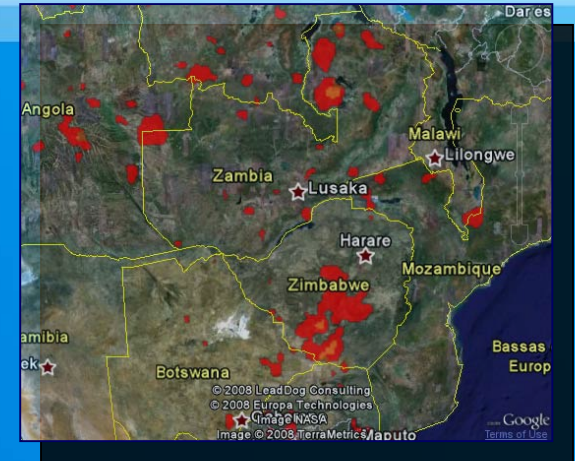


ENVISAT & GEONETcast receivers
installed at RCMRD

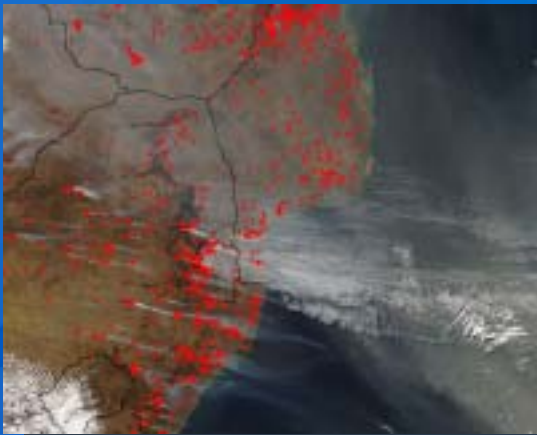


Use: forecasts & decision support

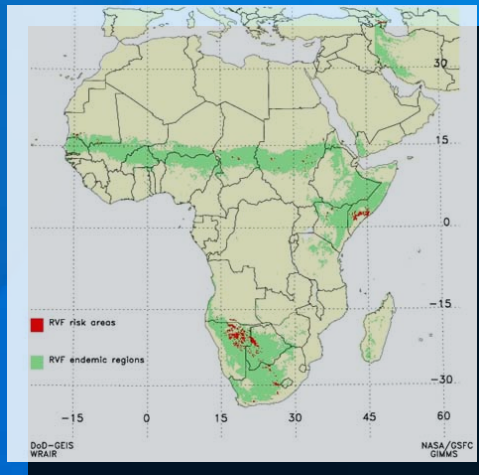
- Disaster Analyses
- Environmental Monitoring
- Health Risk Assessments
- Climate Change and Biodiversity



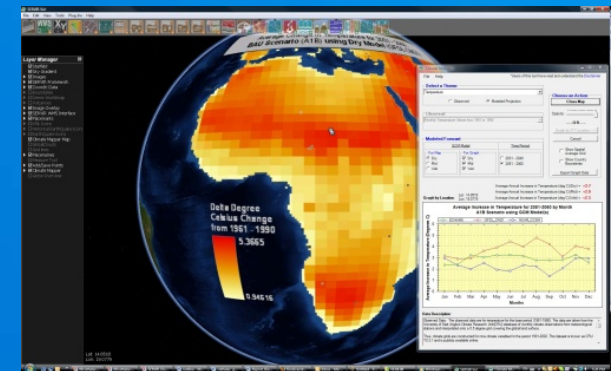
Flood forecasting and post-event flood mapping



Fire 'hot spot' monitoring



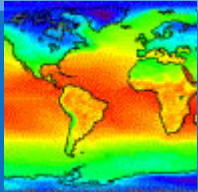
Rift Valley Fever risk mapping



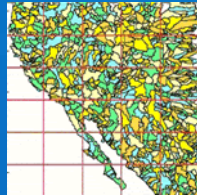
Potential impacts of climate change on biodiversity



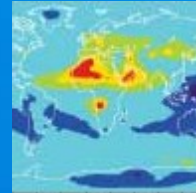
Use: earth science research models



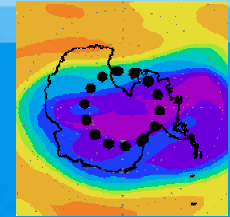
CASA Model



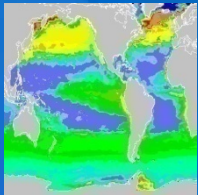
Catchment



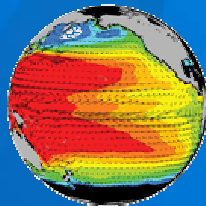
GSFC Aerosol Model



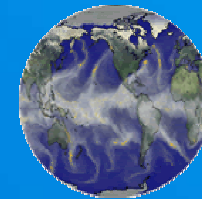
Ozone Assimilation



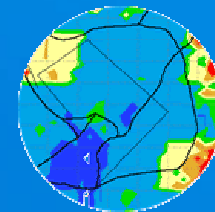
Ocean Biology Model



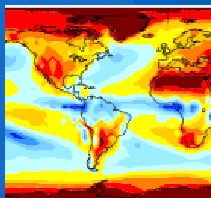
ECCO Ocean State



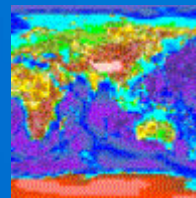
GMAO Atmosphere Model



GSFC LIS Model



GISS Model E



GSFC GOCART Model

and many others....



Use: training, building on capacity

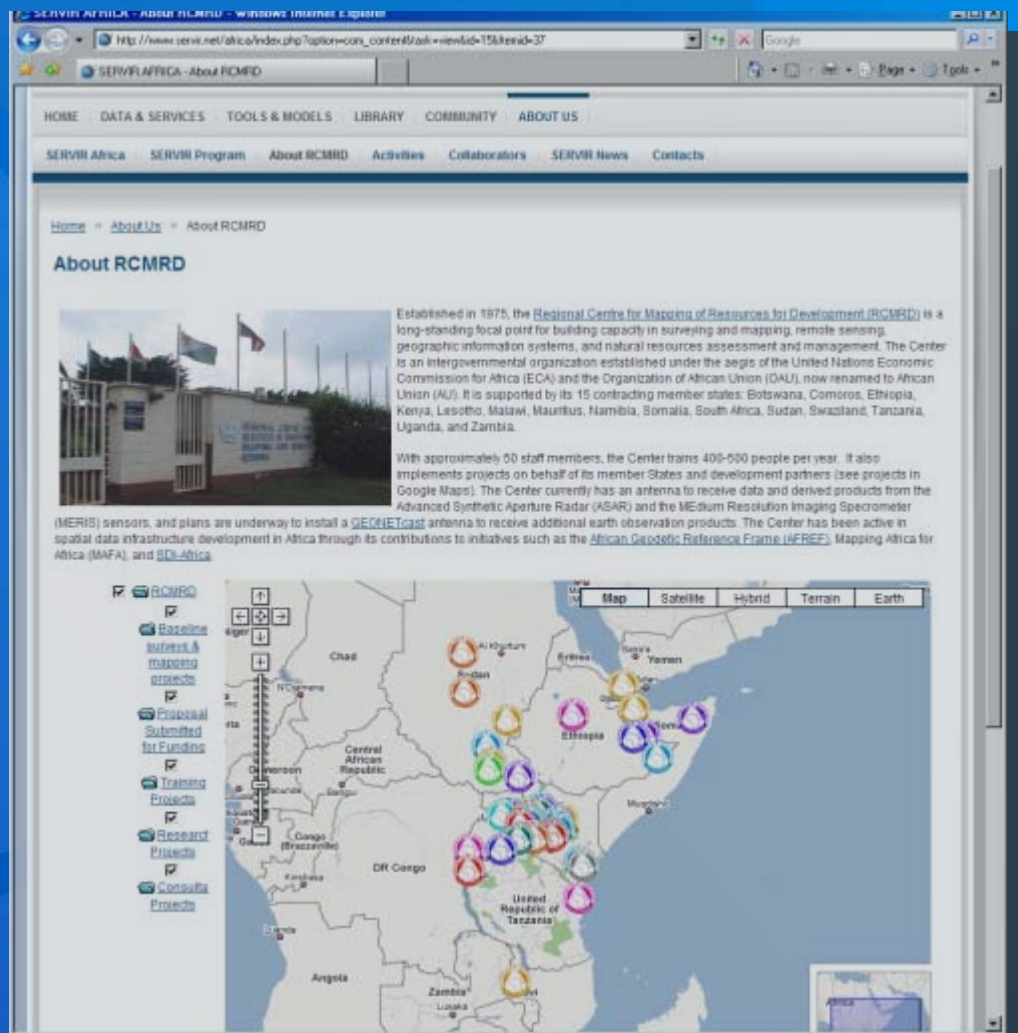
- Metadata & web services development training
- MyCOE/SERVIR Biodiversity Initiative
- Flood modeling seminar
- Rapid land cover mapping course
- Ecosystem Mapping
- GEONETCast installation
- University-based SERVIR-Africa module



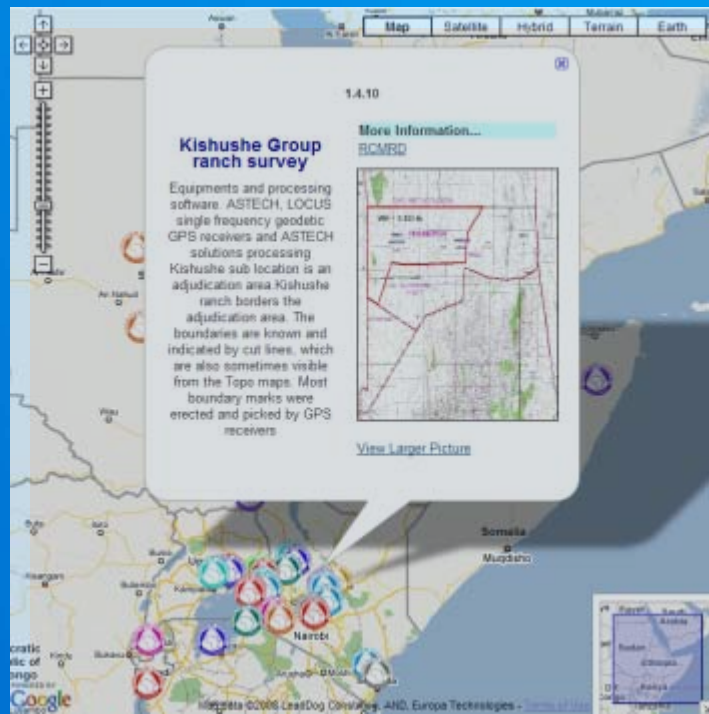


Share: who is doing what where?

Tools and services to facilitate networking and cooperation among African geospatial scientists, projects and organizations



Mapping projects previously conducted by RCMRD





Share: volunteered data “human sensor web”

Communication with people on Livelihoods (water, education, health, extension, services, socio-economy, environment, etc.)

**NO
WATER?
sms “no”
to 4411**

**DIRTY
WATER?
sms “dirty”
to 4422**



New! Experience the [Tour de France](#) from a 360-degree view.
Location:

Search Maps

☒ Make this my default location

Examples:

- glasgow
- buckingham palace road SW1

**NO
WATER?**
sms "no"
to 4411

**DIRTY
WATER?**
sms "dirty"
to 4422

Web server
Processing

Google
community

SMS alert
community

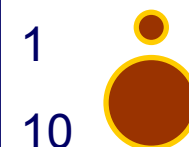
June 2008

No water



June 2008

Dirty water





RCMRD SERVIR-Africa team



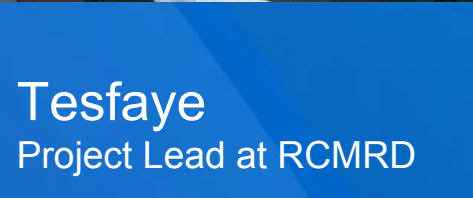
Daniel
Database Mgt
Specialist



Erick
Remote
Sensing
Specialist



Catherine
Remote
Sensing
Analyst



Tesfaye
Project Lead at RCMRD



Lawrence
RCMRD
Database
Manager



Wafula
IT System
Administrator



John
Web services
Specialist



Questions?



SERVIR-AFRICA
Regional Visualization and Monitoring System

