



www.sirius-gmes.es

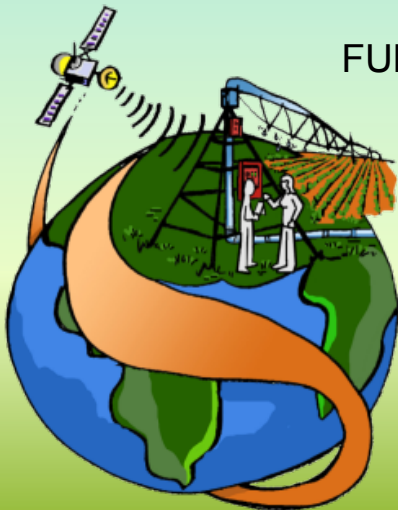
SIRIUS Project in Brazil

Milton Kampel

INPE – National Space Research Institute

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FUNCEME – Research Institute for Meteorology and Water Resources
Ceara State



Workshop INPE – União Européia
São José dos Campos, SP – Brazil - November 7th 2013



What is SIRIUS?

Sustainable Irrigation water management and River-basin governance: Implementing User-driven Services

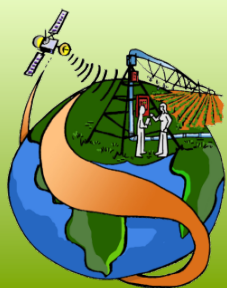
01/10/2010 – 30/09/2013

18 partners from 12 countries and 4 continents
coordinated by Universidad de Castilla - La Mancha

[Anna Osann & Alfonso Calera](#)

Estimated total cost: 2.934.817 €

EU Contribution: 2.499.997 €



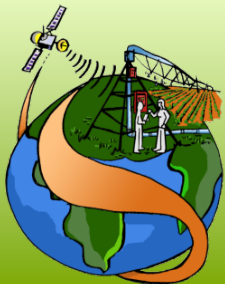


SIRIUS

Objectives

What is SIRIUS?

SIRIUS is developing and implementing
satellite-assisted services
for **efficient water resources governance**
in support of **food production**
in water-scarce environments



What is SIRIUS?

SIRIUS users are **water managers** of

Water users association:

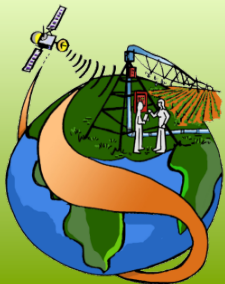
monitor irrigation water consumption

River-basin authority:

hydrologic planning, drought management

Farm holding:

fine-tune irrigation applications; fertilizer/yield



What is SIRIUS?

Efficient & effective water governance for a sustainable agriculture

Participatory water
management

Optimized water
productivity

SIRIUS tools & services

PPGIS

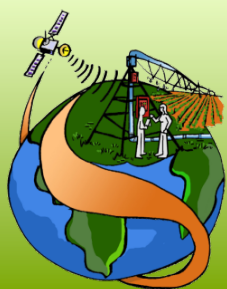
Earth
Observation
Satellites

Geographical
Information
Systems

Information &
Communication
Technologies

Integrated multi-
criteria Frameworks

Service Provider
networks

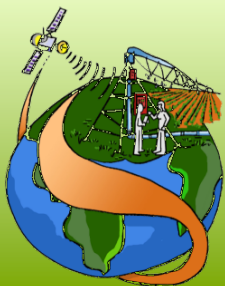




System

SPIDER

System of Participatory Information, Decision-Support, and Expert knowledge for River-basin management - SPIDER



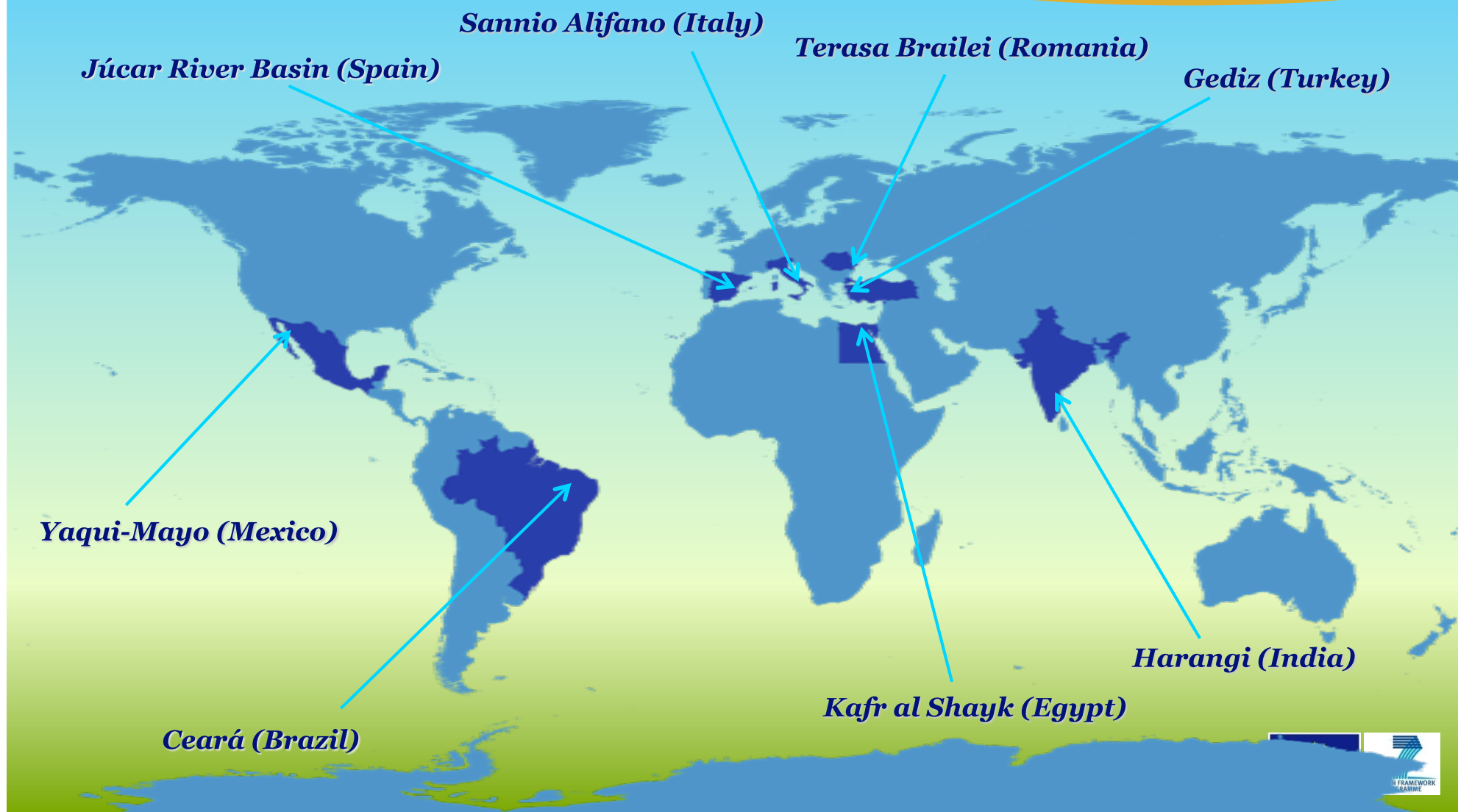
SPIDER



SIRIUS

Pilot Areas

8 Countries

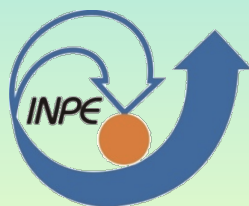
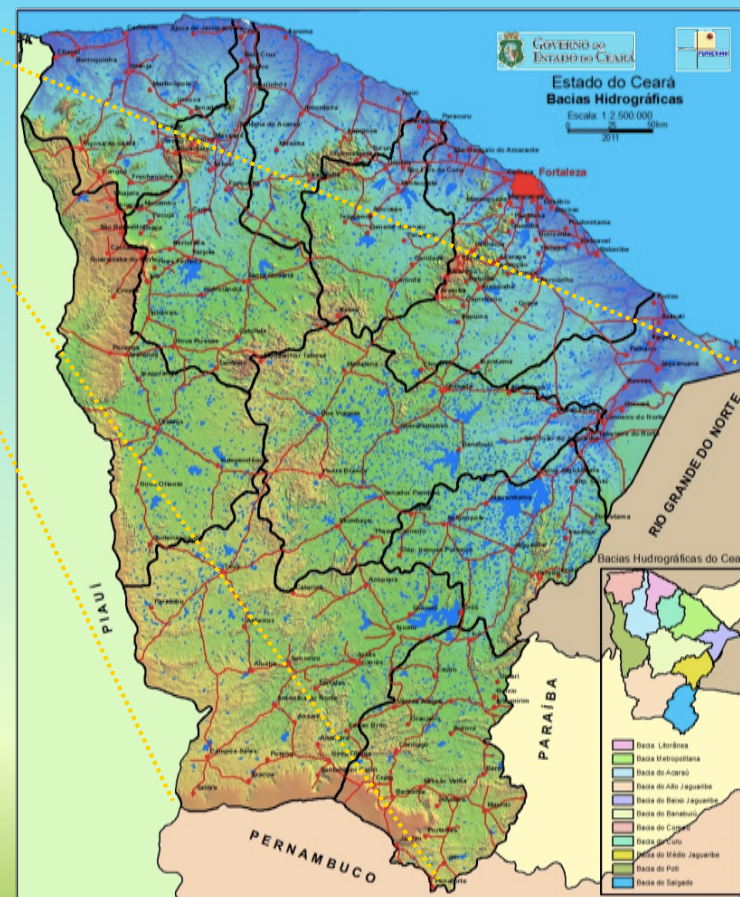


SIRIUS

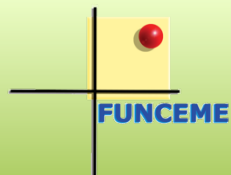
Brazil



Ceará State



National Institute for Space Research



Research Institute for Meteorology and
Water Resources (Ceará State)





SIRIUS

Brazil

Forquilha

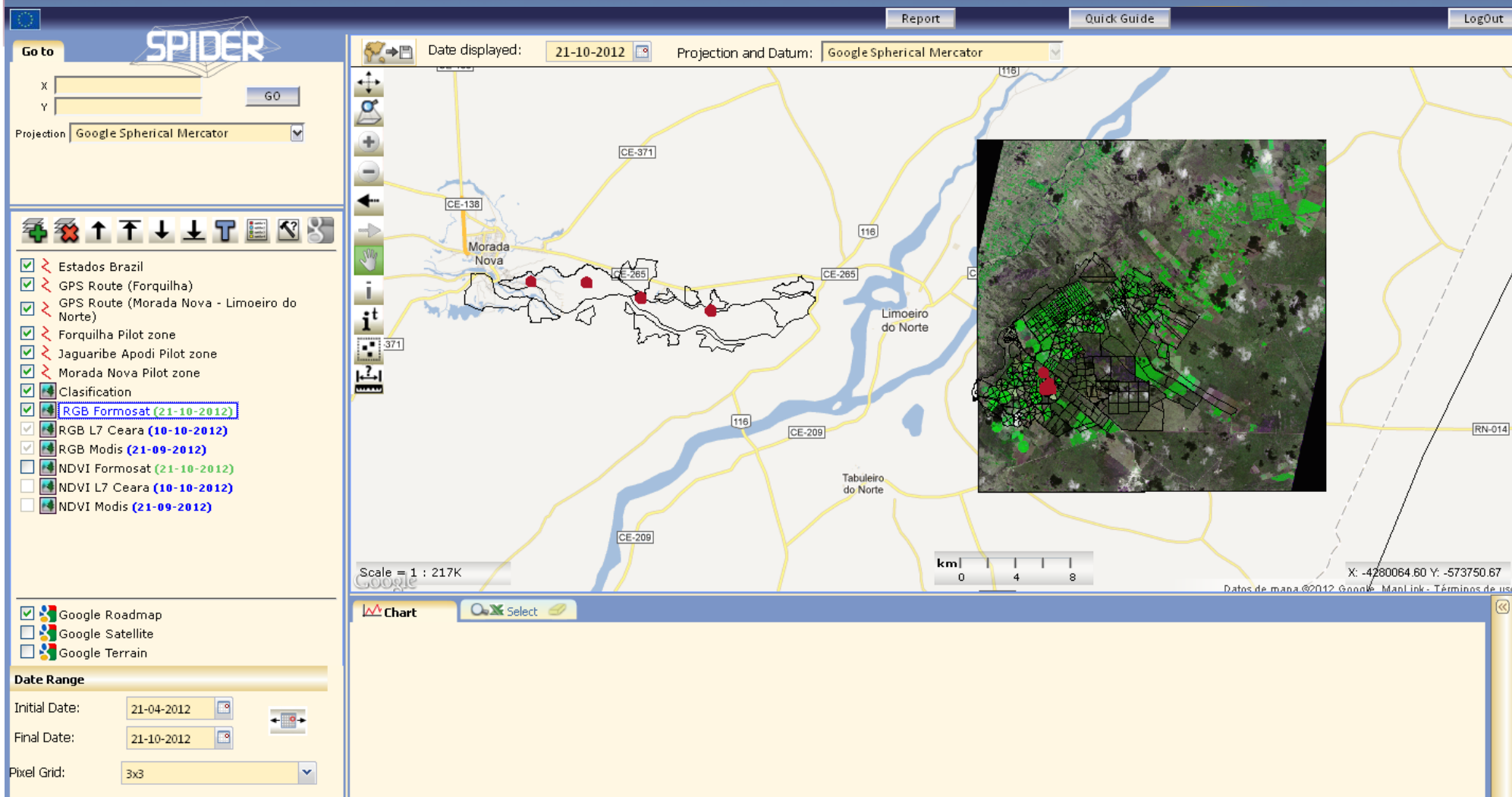
Morada Nova

Jaguaribe-Apodi



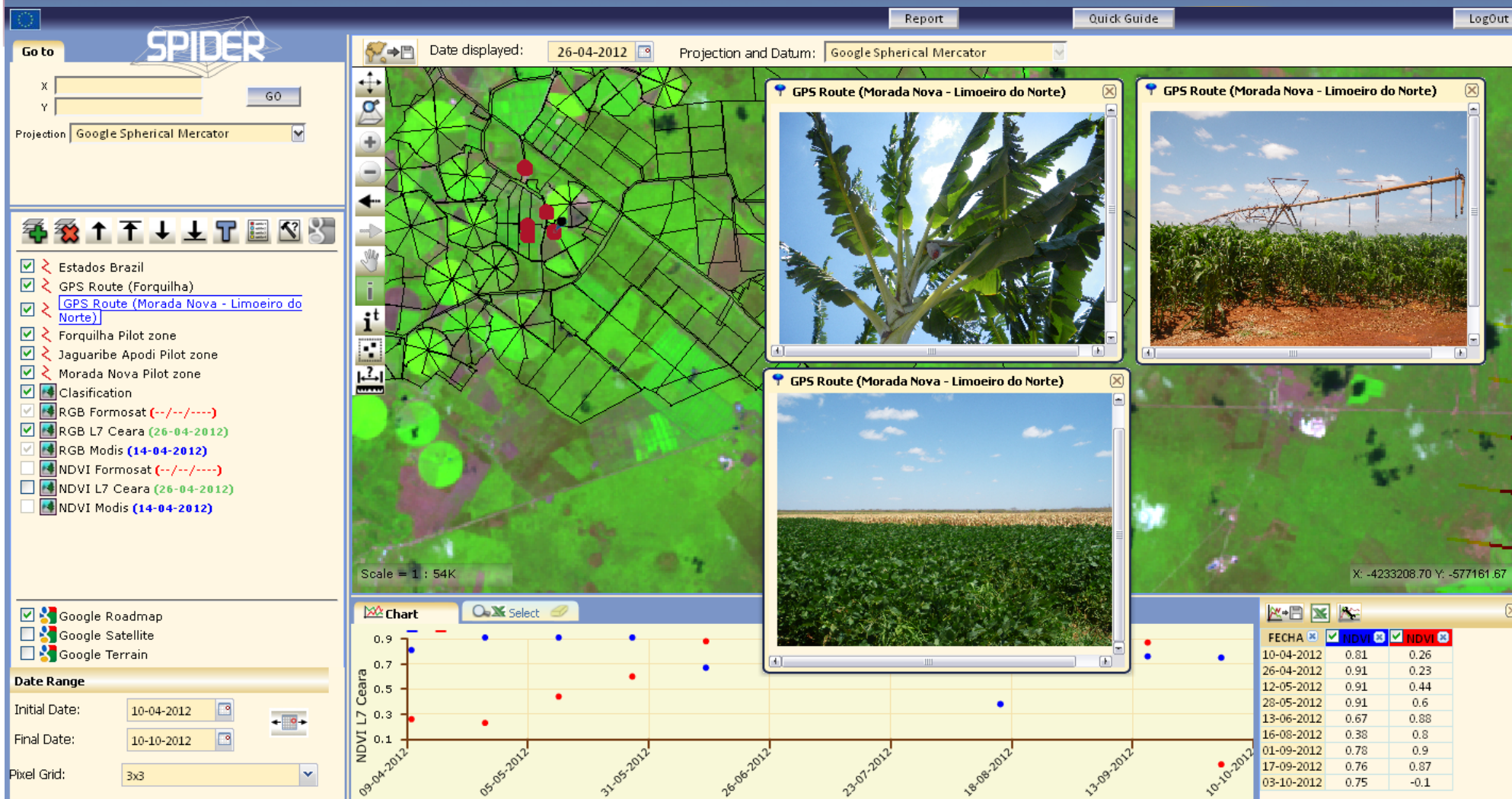
SIRIUS

SPIDER Brazil



SIRIUS

SPIDER Brazil



SIRIUS Services

Earth Observation and webGIS for River Basin Governance



Pedro Gata

**INTEGRATED IRRIGATION WATER
MANAGEMENT SERVICE (IWMS):**
Crop inventory
Mapping Crop Water Consumption
Mapping Irrigation Water Requirements
Mapping Fertilizer and Yield

**INTEGRATED FARM ADVISORY
SERVICE (IFAS)**

**INTEGRATED DROUGHT
MANAGEMENT SERVICE (IDMS)**

Users and Service Providers are
linked through SPIDER webGIS



SIRIUS Project

Children's view

Thank you!

