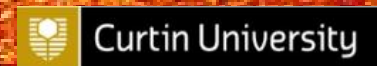


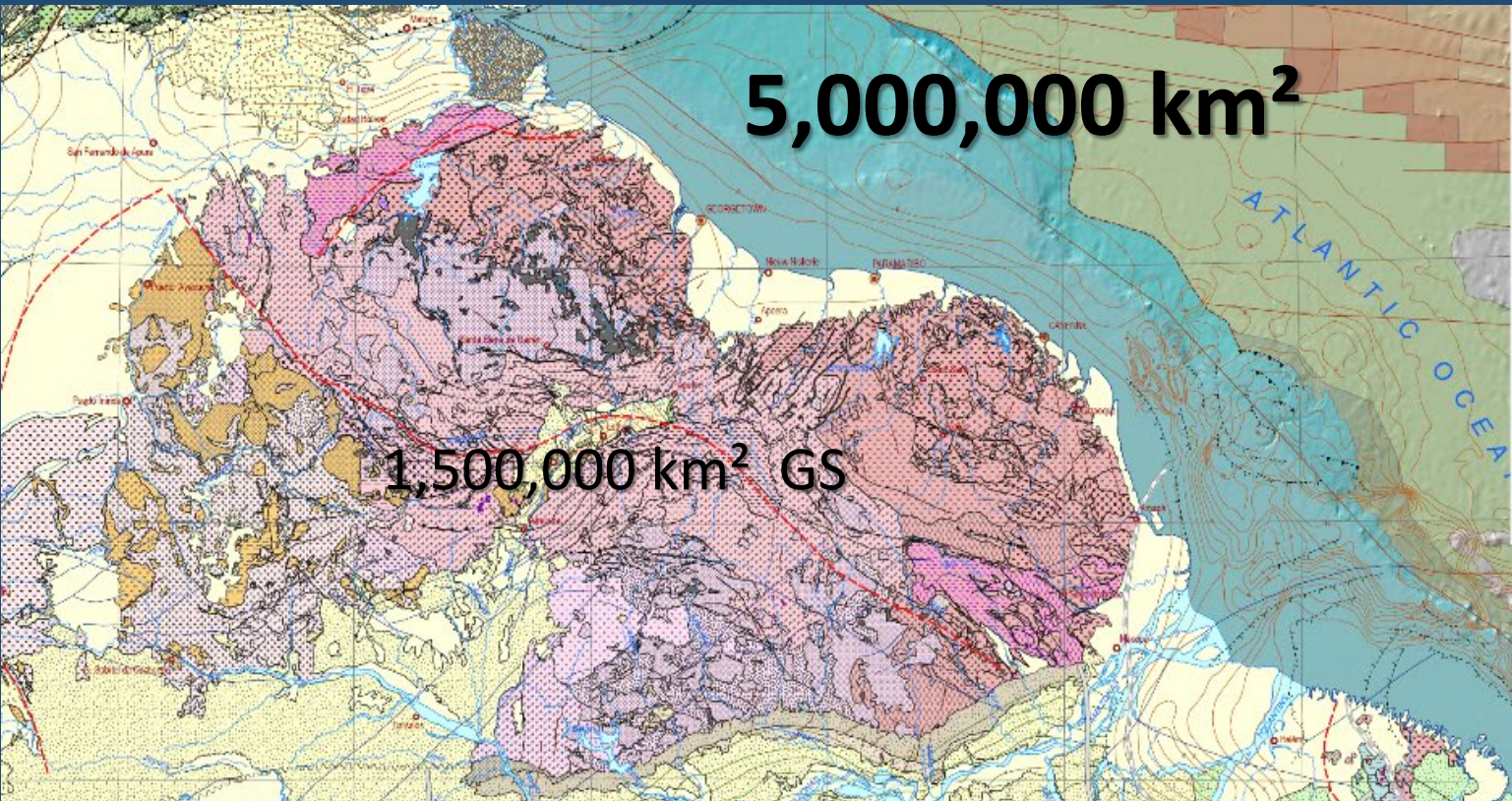
SAXI:

The South American Exploration Initiative



Mark Jessell, SAXI Team





COMMISSION FOR THE GEOLOGICAL MAP OF THE WORLD COMMISSION DE LA CARTE GEOLOGIQUE DU MONDE

President
PHILIPPE ROSSI

Secretary General
MANUEL PUDELLER

Vice-President for South America
CARLOS SCHOBENHAUS

CGM
CGMW

Secretary General for South America
JORGE GOMEZ TAPIAS

TECTONIC MAP OF SOUTH AMERICA
MAPA TECTÓNICO DE AMÉRICA DEL SUR
MAPA TECTÓNICO DA AMÉRICA DO SUL

2016 Second Edition
Scale 1:5,000,000

0 100 200 300 400 500 600 km

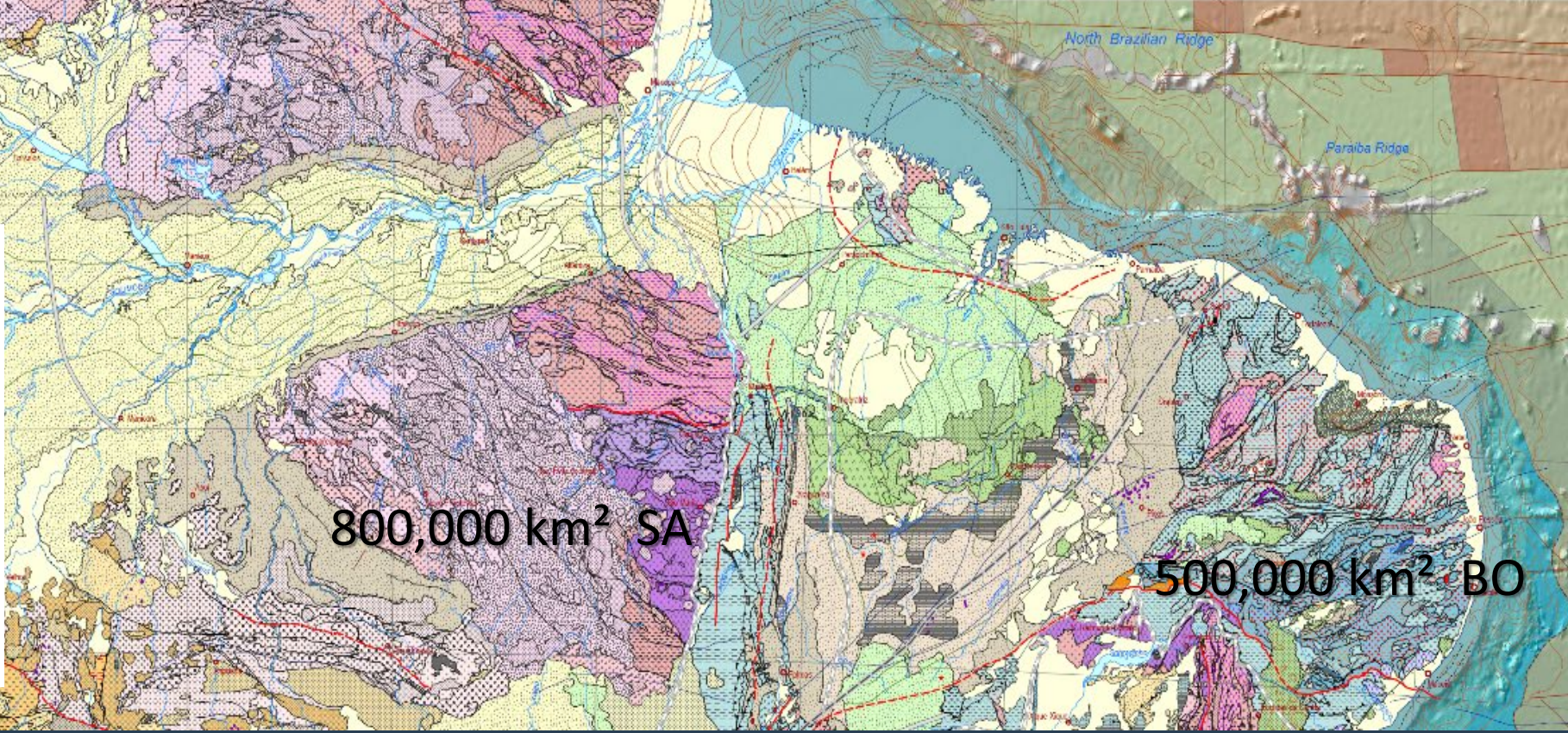
Coordinate System: World Polyconic Projection: Polyconic
Datum: WGS 1984 Central Meridian: 58°00'00"

USP
UNIVERSIDADE DE SÃO PAULO

General Coordinators
UMBERTO G. CORDANI VICTOR A. RAMOS

Deputy-Coordinators
LÉIDA MARIA FRAGA MARCELO CEGARRA INÁCIO DELGADO

Offshore Areas
KAISER, G. DE SOUZA FRANCISCO EDSON M. GOMES



1. What is SAXI?
2. What is AMIRA?
3. SAXI Structure
4. SAXI 1 Goals
5. SAXI 2 Goals

SAXI AIMS

*The overall aim of South American Exploration Initiative is to **enhance the exploration potential of North Eastern South America** through an integrated program of research and data gathering into its “anatomy”.*

*Key motivations for undertaking this initiative are to **assist exploration companies** in focusing their activities in areas of maximum prospectivity and to **help local Geological Surveys and Universities** in their role of collecting and providing pre-competitive data and information.*

AMIRA International Core purpose –

Creating a better future through collaboration

By developing and managing collaborative projects and other activities, to enable:

- The sustainable development of the minerals and associated industries that is acceptable to society;
- Enhanced standing of the minerals and associated industries amongst stakeholders locally and globally; and
- Deliver new data, knowledge, technologies, products and services in order to help members, or other organisations as approved by the Board, to improve all aspects of their businesses including providing opportunities to educate the next generation of industry leaders, operators and researchers.



Operational focus



Exploration / Discovery

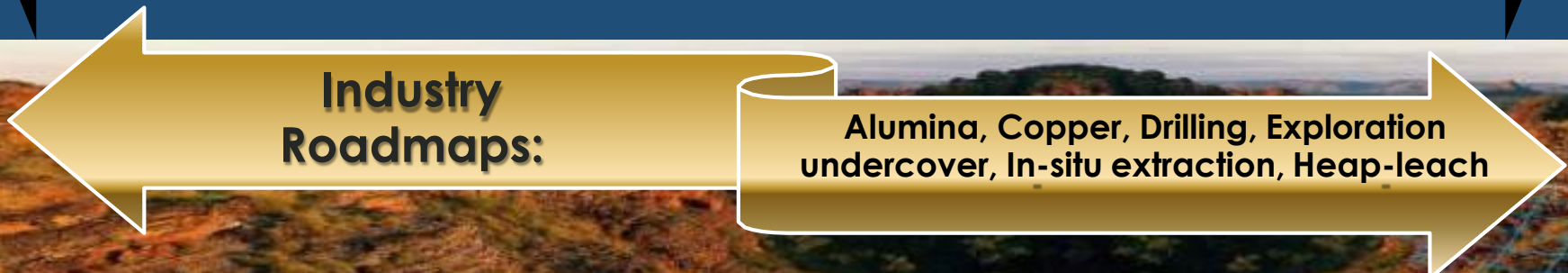
Development
Design/Construction

Operations
Mining
Mineral Processing & Metallurgy

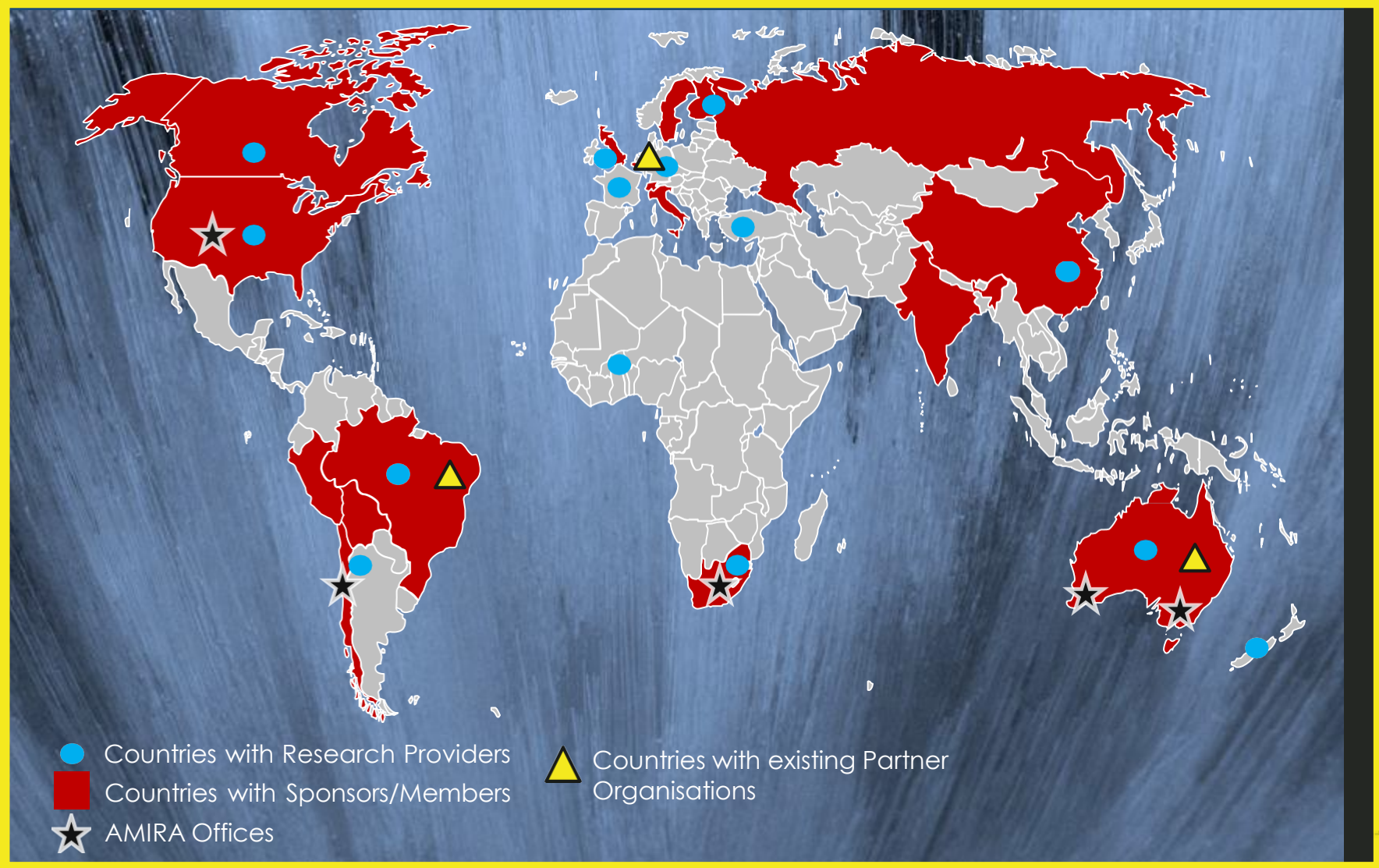
Closure /
Reclamation



Sustainability: Licence to Operate; New management practices



Global network which our Members access





Project Broker & Coordinator



Industry Sponsors

SAXI

Research Organisations



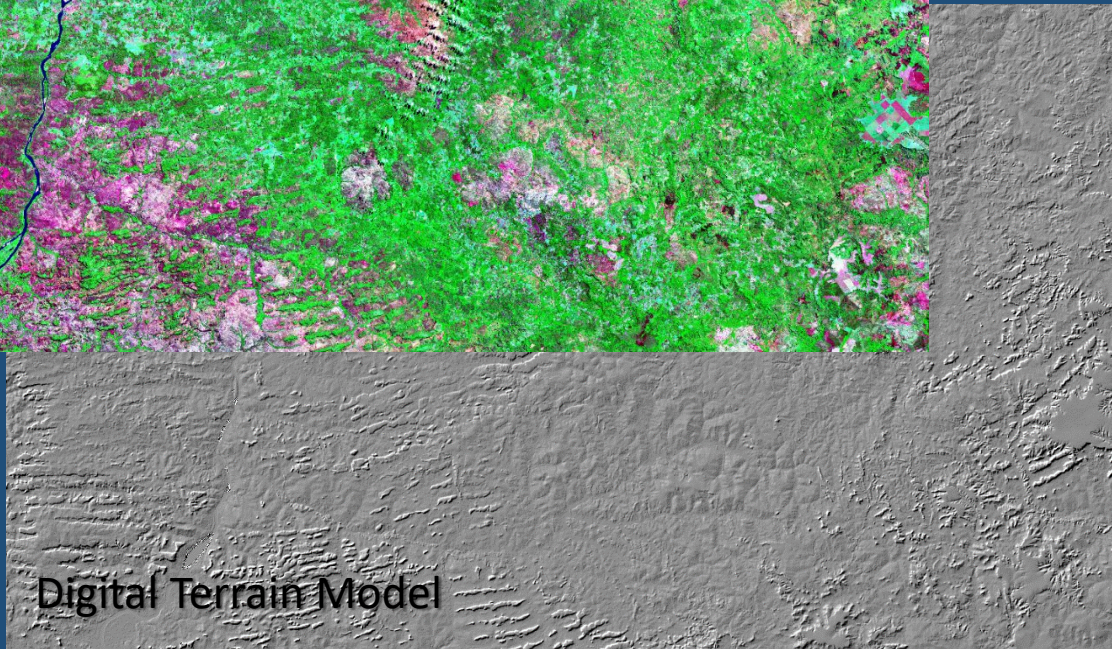
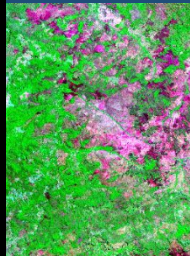
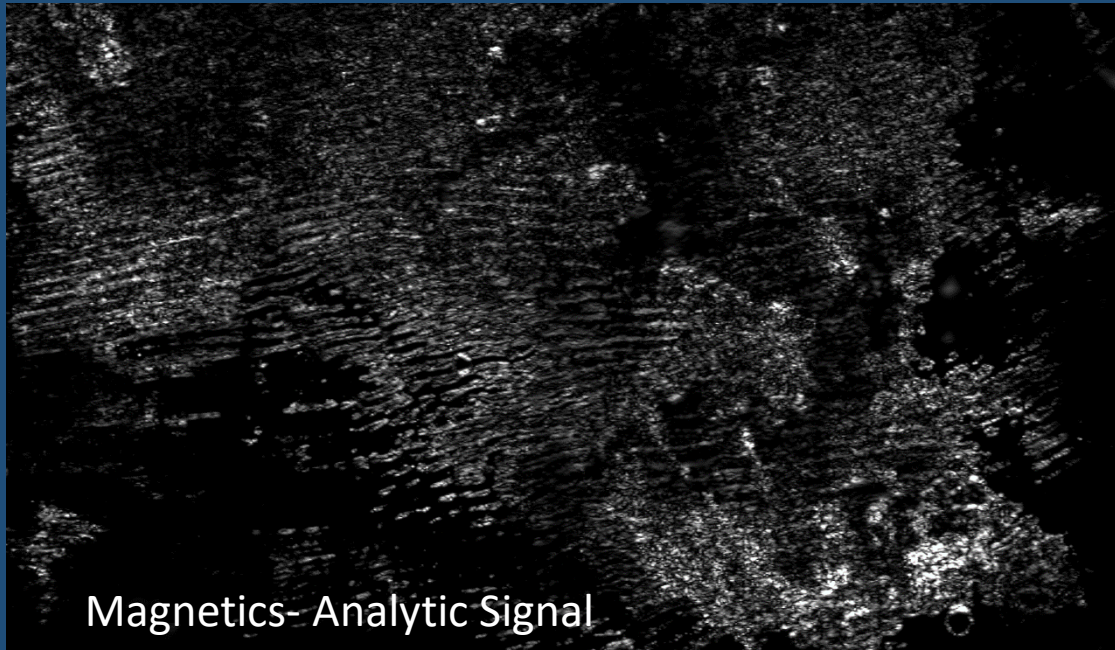
Sponsors in Kind



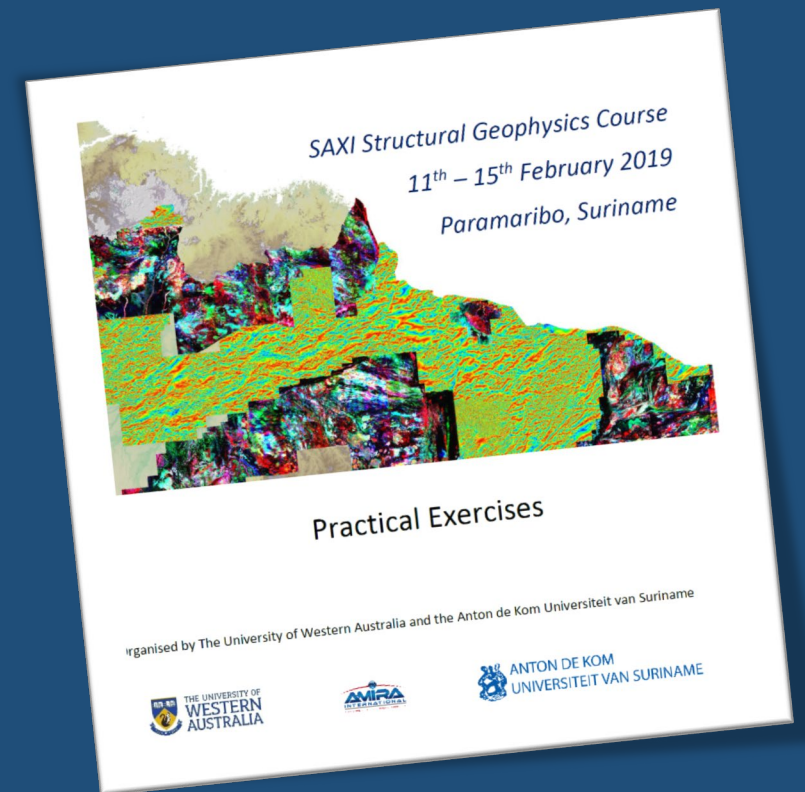
Stage 1 Work program

1. Exploration geoscience gap analysis leading to Exploration GIS, integrating with WAXI 2 West African data
2. Targeted geochronological studies
3. Craton-scale structural interpretation of geophysical data
4. Seminar and workshop for potential stakeholders with training course leading to draft Stage 2 project proposal

Structural Geophysics Training




Chapadas das Mesas



SAXI Structural Geophysics Course
11th – 15th February 2019
Paramaribo, Suriname

Practical Exercises

Organised by The University of Western Australia and the Anton de Kom Universiteit van Suriname



Exploration GIS

Scope:

- ❖ Country
- ❖ (West Africa)
- ❖ North East South America
- ❖ South America
- ❖ (Africa)
- ❖ Global
- ❖ Marine

Themes:

- ❖ Geography
- ❖ Geology
- ❖ Geophysics
- ❖ Mineralisation
- ❖ (Tectonics)

Format:

- ❖ 60 layers plus 200 WAXI 2 layers
- ❖ 370 Gb plus 350 Gb WAXI data
- ❖ ArcMap and MapInfo



WAXI - West African Exploration Initiative

IXOA - L'Initiative d'Exploration Ouest Africaine

Project Broker & Coordinator



12 Sponsors in kind (Geological Surveys)



Liberia



Mali



Guinea



Niger



Burkina Faso



Ghana



Senegal



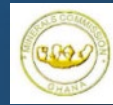
Togo



Sierra Leone



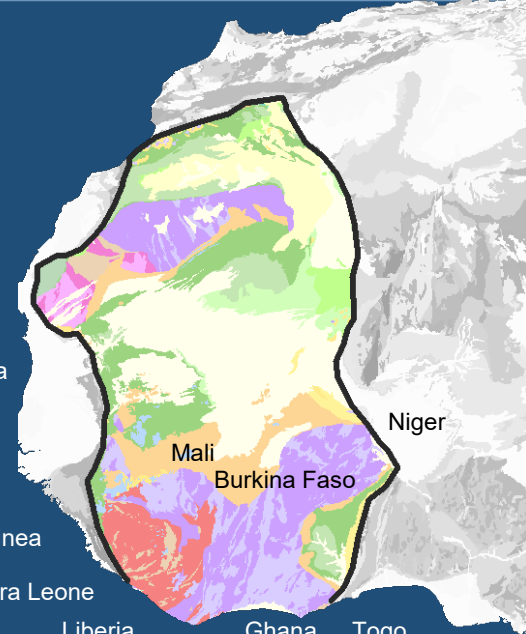
Mauritania



Minerals Commission



Côte d'Ivoire



Mauritania

Niger

Senegal

Mali

Burkina Faso

Guinea

Sierra Leone

Liberia

Côte d'Ivoire

Ghana

Togo

36 Industry & Government Sponsors

WAXI 1

WAXI 2

WAXI 3

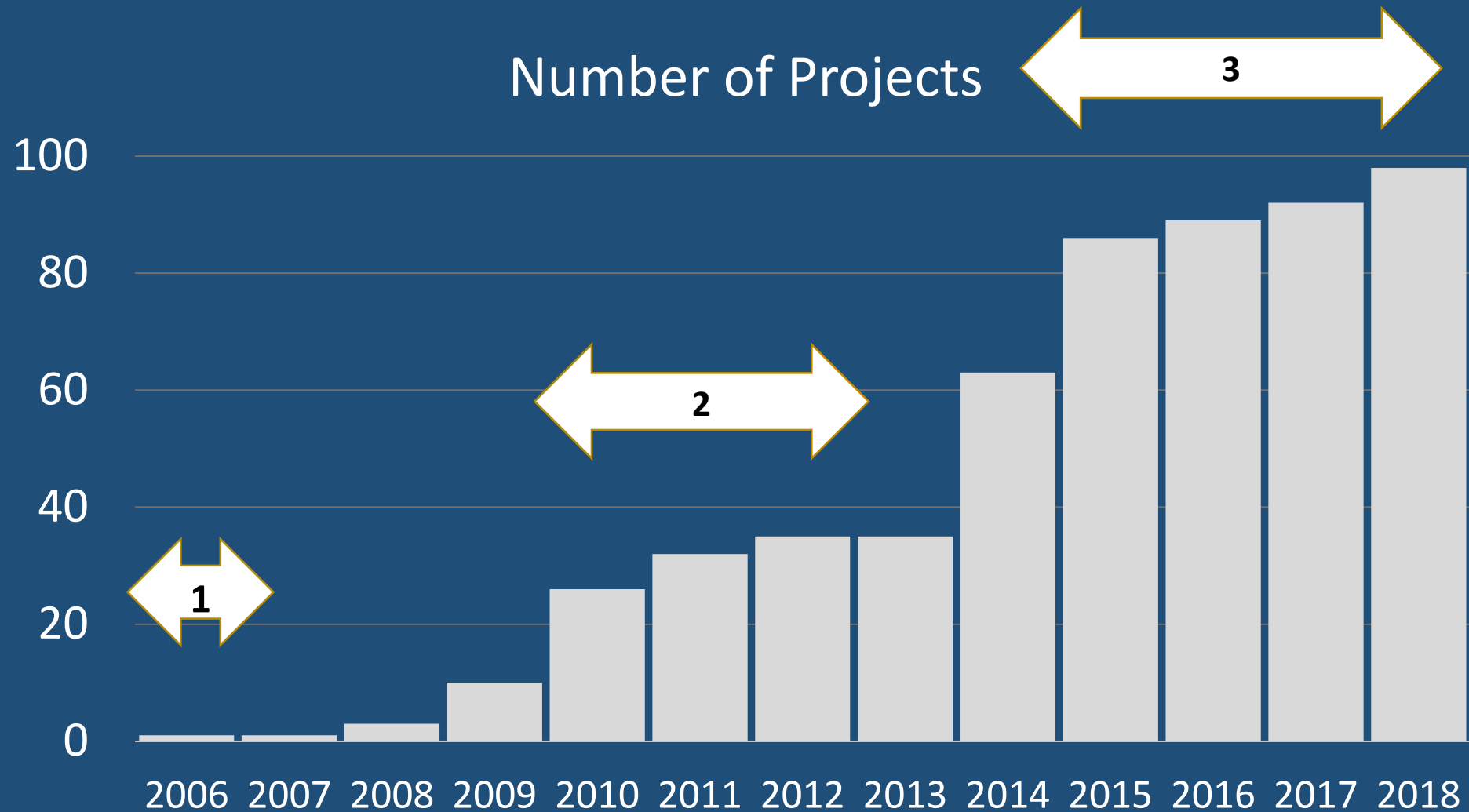
2006-2018

24 Research and Capacity Building Partners

73 partners over 10 years



Hons, MSc, PhD & Postdoctoral Projects over life of WAXI 1-3



Integration of Research and Capacity Building

- **Multi-dimensional:** 1D (Geochron), 2D (Map), 3D (3D Models)
- **Multi-scale:** Grain, Deposit, Belt, Craton
- **Multi-data & Technique:** grav, mag, em, mt, field, geochron, geochem
- **Multiple hypotheses:** tectonics, 3D
- **Multiple organisations:** Research, Geosurvey, Exploration, NGO

The success of the WAXI project has come from the recognition of the **different drivers** of the partner organisations, but **common interests** in improving the research capacity and knowledge base for West Africa

The WAXI project in numbers

12 *countries*

73 *partner organisations over 11 years*

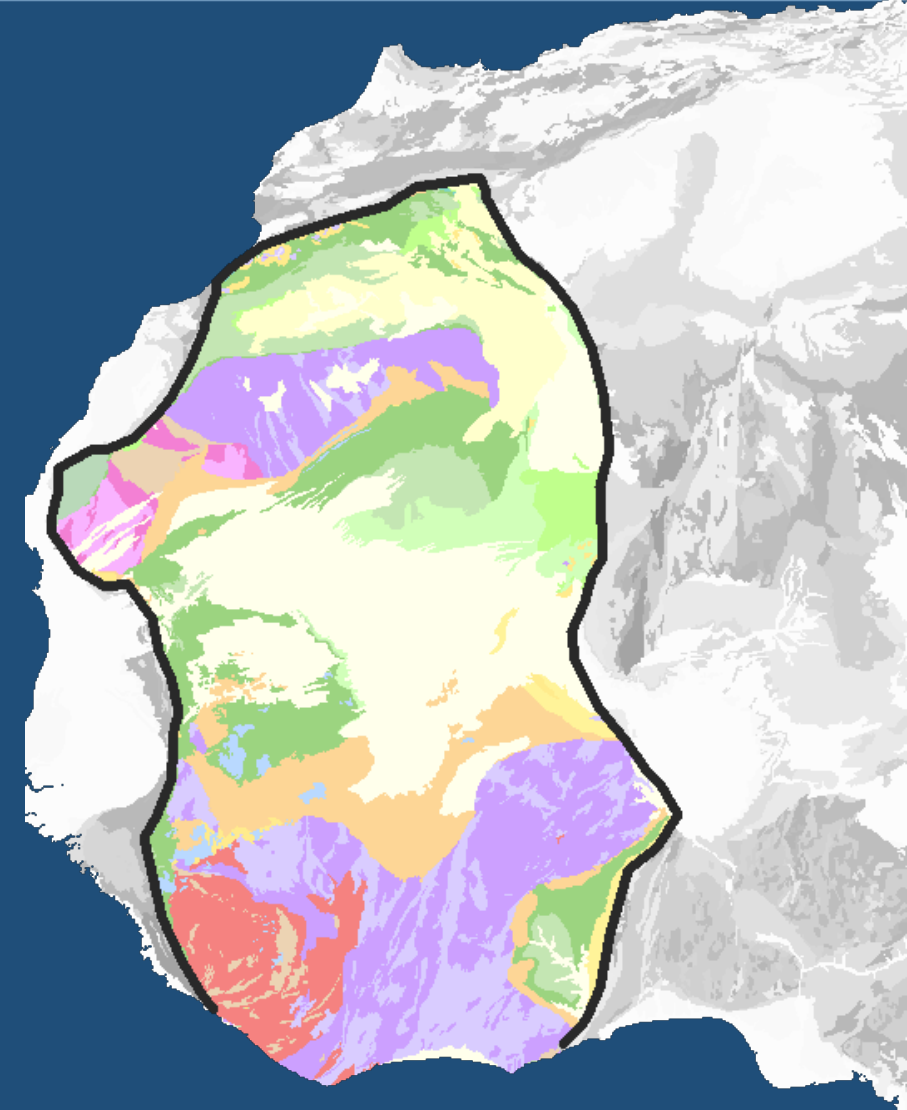
81 *International Publications*

90 *Postdoc, PhD, MSc & Hons projects*

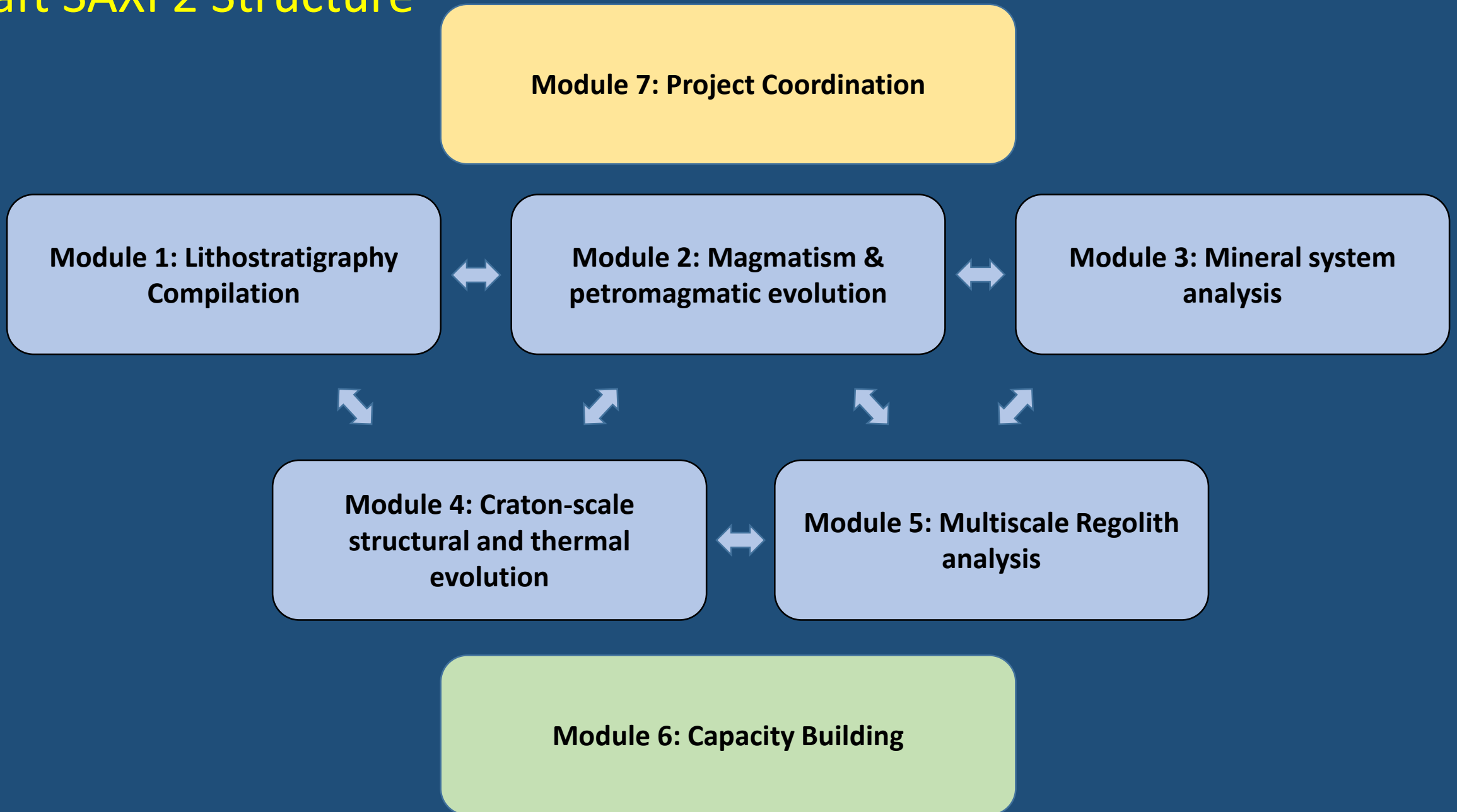
650 *GB exploration geoscience database*

1800 *person-days of technical training in West Africa*

650,000 *km² of geophysically constrained geological mapping*



Draft SAXI 2 Structure



SAXI:

The South American Exploration Initiative



www.saxiproject.org