



CALAKMUL
4D GIS

CALAKMUL 4D GIS project

Belgian Science Policy Office & UNESCO

Belgian EO day – April 2009



Overview

- R&D cooperation agreement BELSPO - UNESCO/WHP
 - Financing by BELSPO of research projects to support UNESCO
 - Conservation management of UNESCO listed sites



- Partnership

- 4 Belgian partners: GIM, UG, ULg and KUL
- 3 Mexican partners: INAH, CONANP and UACAM

- Goal

- Develop and implement an "Information Management System" to support the conservation authorities of the Calakmul site



Calakmul site

- Mexico - Yucatan Peninsula
- Calakmul Biosphere Reserve + Calakmul World Heritage site (mixed)



Tasks

- GIM nv
 - Use of satellite images (Formosat 2 and Spot) for land-use map production, time series analysis, change detection and archaeological analysis
 - Calakmul 4D GIS development





Tasks

- University of Ghent

- Spatio-temporal analysis of archaeological data using the triangular model approach combined with GIS
- Posters production



- University of Liège

- Archaeological database development (2D + time)
- Visualisation and GIS integration



- University of Leuven

- 3D acquisition service development based on the Arc3D tool
- Demonstration of the use of 3D objects in Calakmul 4D GIS





Key aspects of Calakmul 4D GIS

- Centralized and Web based
- Based on Open Source and Open Standards
- Reusable, vendor independent and easy to use
- Different scales integration
- 2D and 3D integration
- Time integration
- Data/Metadata management
- Access rights management