

Technologies for Hyperspectral Earth Observation

2014-2017



Axe(s)

Space Applications
& Systems

Industries

Deltatec
AMOS
Spacebel

Research Bodies

ULg-CSL
UCL
ULg

Total Budget

2,8 M€

Type

R&D

The objective is to provide a new generation of Earth observation instruments which will allow the development of a broader set of applications.

The client, typically an emerging country, will use the data provided by the satellite for various useful purposes useful to its development.

To meet this trend, we must use more sensors (panchromatic, hyperspectral and infrared) and comply with the constraint of using a micro-satellite required to combine these sensors in a single instrument.

Another requirement of the market concerns the need of increasing spatial resolution provided by the sensors. This point will be another important objective of the project.

Both requirements have direct consequence of an extremely large increase in the number of information generated by the instrument, which require new methods of data compression: it is requested to process images on board and no longer automatically but taking into account the demands of the applications that will use the data.