

M4 MISSION

from ESA
COSMIC VISION
program

ARIEL: FRENCH RESPONSIBILITY

Telescope with 2 main
instruments

FGS, AIRS

First CNES activities in
2000

PI

G.Tinetti/Univ College London

CoPI

JPBealieu IAP, POLagage CEA

Multi-lateral agreement (ESA/ASI/CNES/MICINN/UK Space Agency):

“CNES will develop, integrate, verify and deliver the following hardware and associated payload software elements:

- AIRS instrument optical module to be delivered to the UK Space Agency;
- AIRS DCU, to be delivered to ASI;

CNES, as part of the AMC SGS, will:

- Contribute to the management and systems engineering of the IOSDC;
- Contribute to algorithms, software definition and data processing of the SGS and to the observations and scheduling.

Mission
4 years

1000
exoplanets

FRENCH INCREDIBLE TEAM

JOINT-EFFORT AND CO-FUNDING

BETWEEN CNES AND FRENCH LABORATORIES

CNES: Contracting authority, Project Management, Expertise, ESA Steering Committee, AMC ...

CEA: Co-PI and Prime contractor for AIRS development with
IAS: AIRS optical, thermal and mechanical; provides optical elements
LIRA: AIRS calibration activities
LAB: provides mechanical parts of the cold unit

IAP: Co-PI; Involved in pipeline activities, IOSDC, Ariel School

INSU Laboratories: involved in science activities Working Groups and data treatment

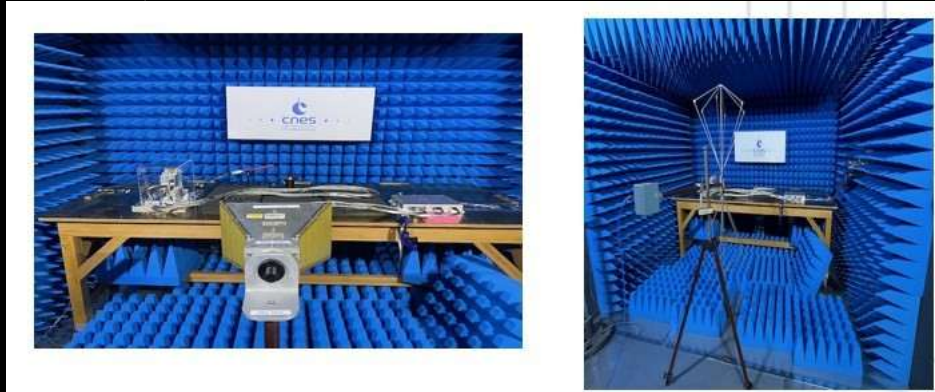


SOME CNES EXPERTISES FOR ARIEL

Detectors

Conducted EMC tests

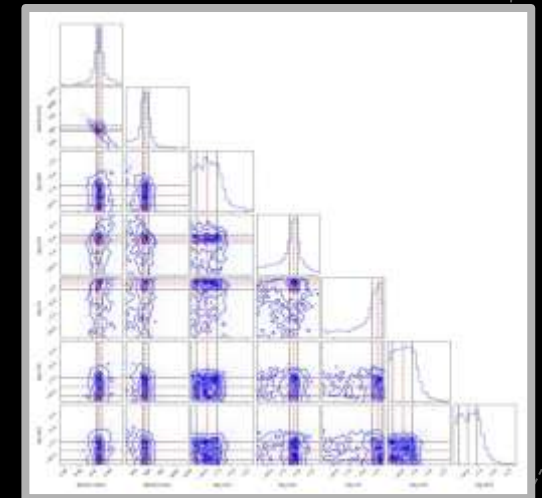
FPGA



Machine Learning

Optical

Contamination



ANY QUESTIONS?

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