

ASI Science Program

Rosetta ExoMars GAIA

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SAiT

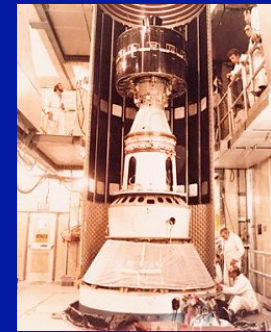
15-5-2014

ASI: the Origins



ASI has been created in 1988 merging two experiences: CNR-PSN and S. Marco program. Both organization basically devoted to research in space.

This heritage has been maintained although the programs devoted to the applications in space have gradually increased, playing today an important role.



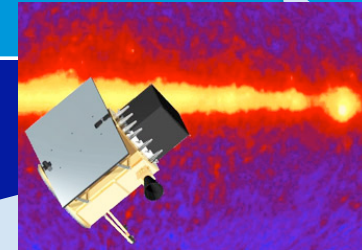
CNR-PSN SIRIO satellite

Currently ASI has scientific programs either within the mainframe of ESA, either in bilateral cooperation (NASA/RSA/JAXA/CSA) or at national level.



S. Marco Launch Base

Some major steps in ASI science program



2007 Agile

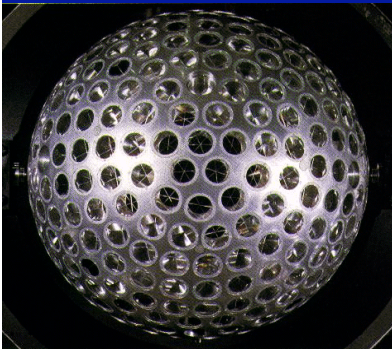
2005
MRO

1997
Cassini-
Huygens

1996 SAX



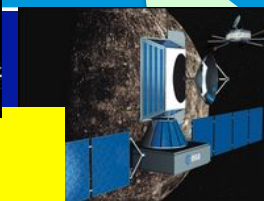
1992 Lageos2



Some major steps in ASI science program



2014
GAIA

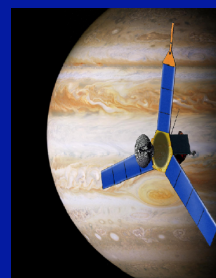


2016
Bepicolombo

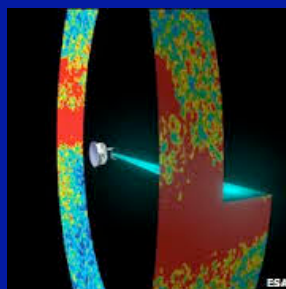


2011
Juno
AMS

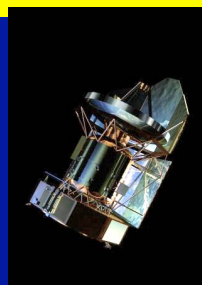
2012
Lares on Vega
NUSar



2009
Herschel
Planck



2007
Dawn



Rosetta and Philae

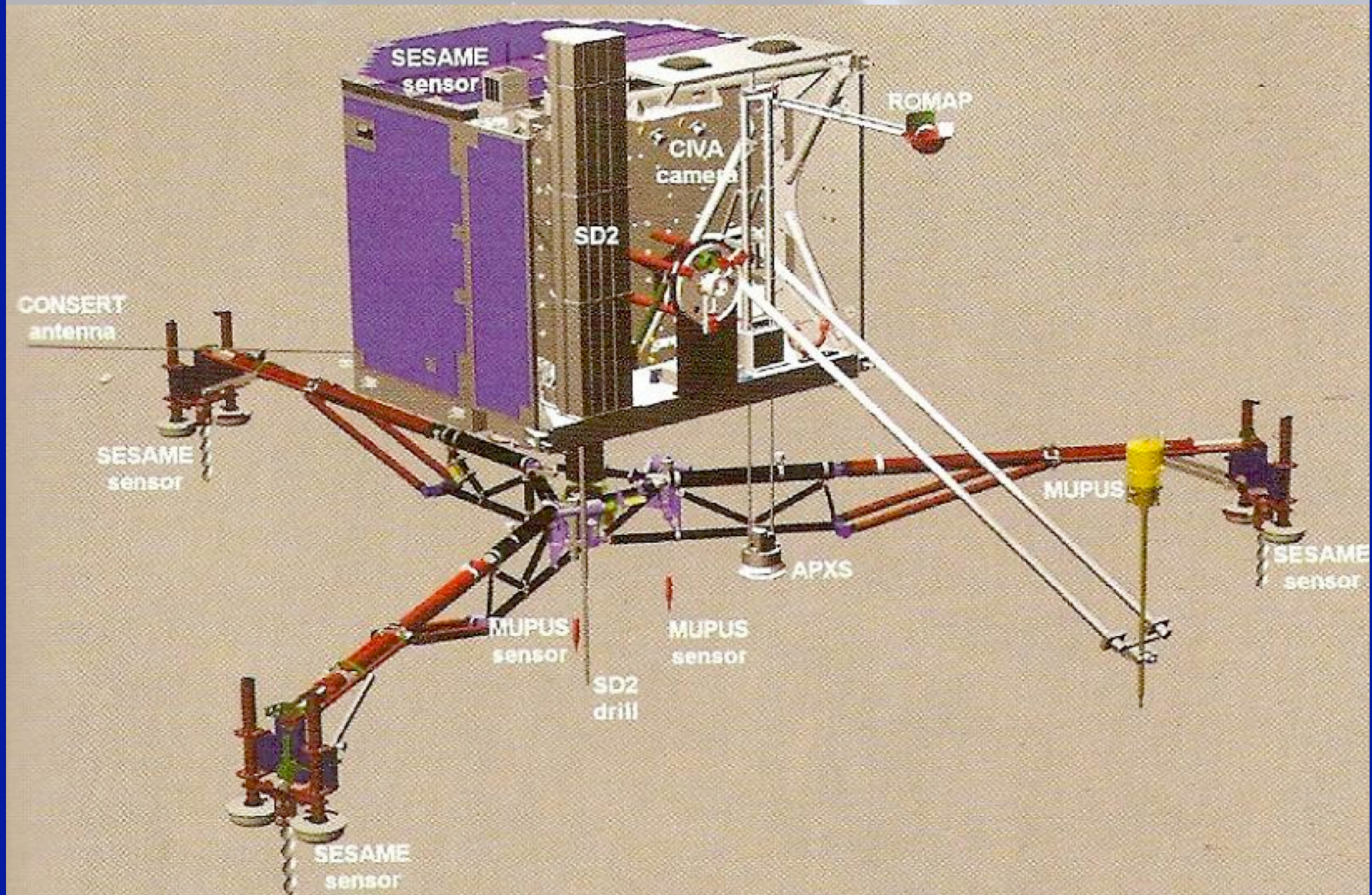


2 strumenti PI su Rosetta orbiter :
VIRTIS
GIADA
Plus WAC on Osiris
1 PI instrument on Philae: SD2

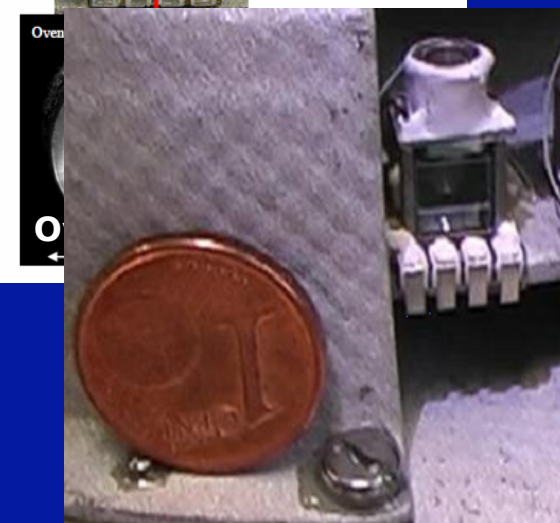
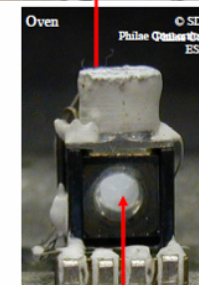
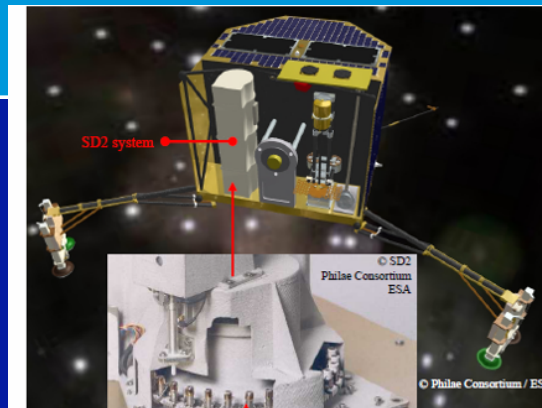
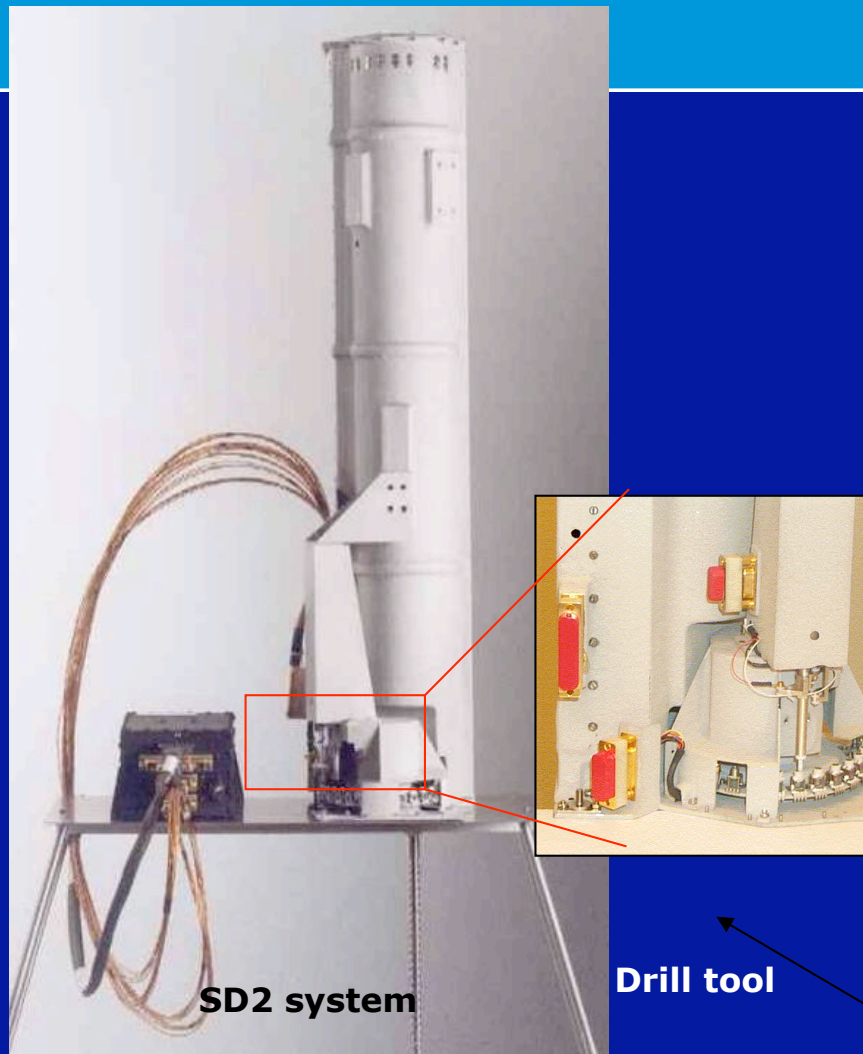
2014
February: Rosetta out of Hibernation
April-May: approaching the Comet
July-October: operation around the Comet
November :
Philae landing: Planetary deep drill first

PHILAE

Philae Lander



SD2: un trapano spaziale



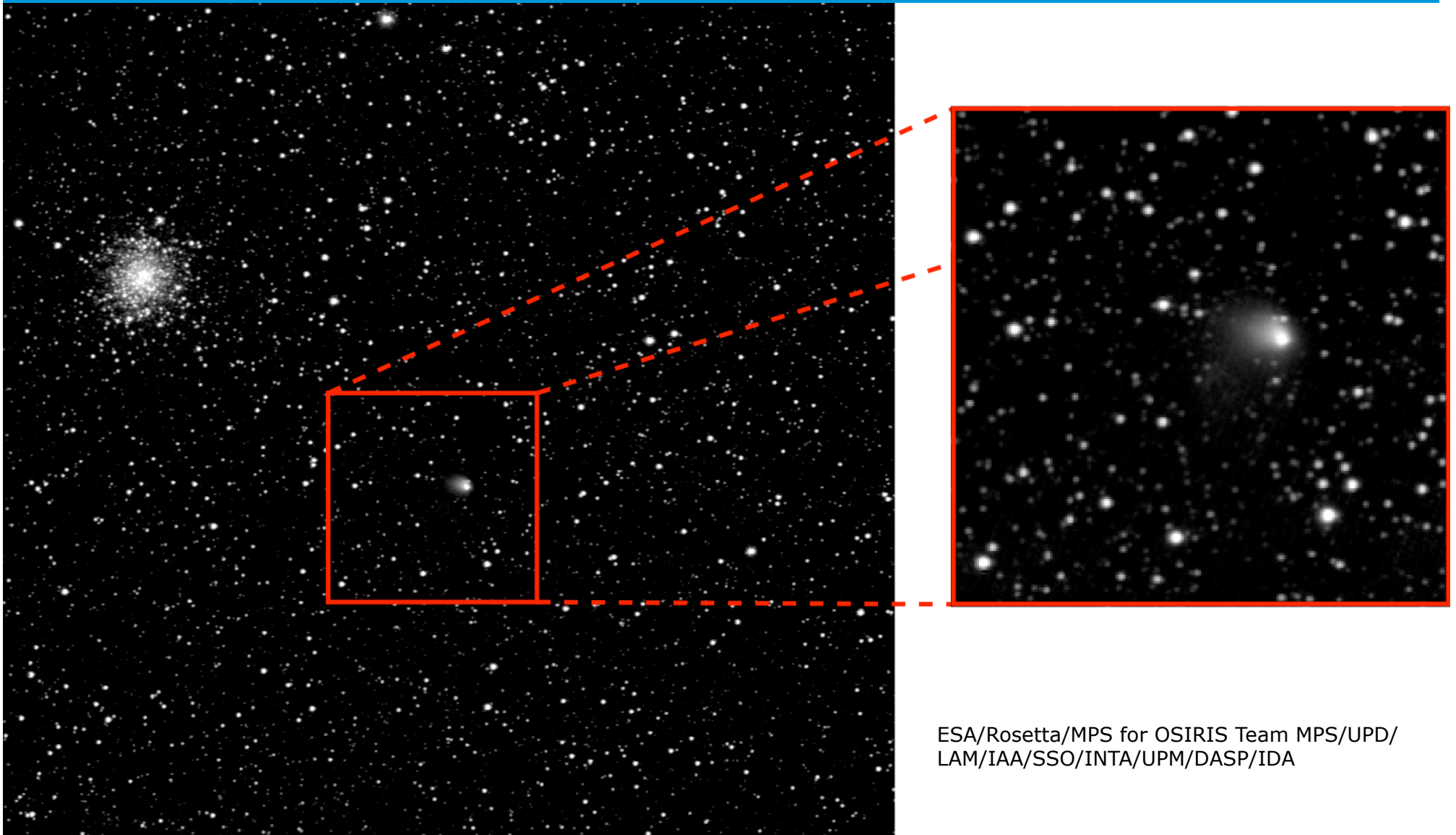
Single stroke technology
Overall mass: 5kg
Penetration depth: 20 to 30 cm
Sample size $d=3\text{mm}$, $l=6\text{ mm}$
Power: 5 to 15 W
External Dimension: H 70 cm diam. 12

Chi l'ha realizzato?



1. Philae è un Principal Investigator Instrument
2. Il PI proponente è stato prof. Rosembauer del Max Plank Institute
3. DLR, CNES e ASI hanno formato un consorzio insieme a FMI, MPE, PPARC, IRL e ESA
4. Il consorzio è guidato da uno Steering Committee
5. Il progetto controllato da un Program manager del DLR e due deputy uno CNES ed uno ASI

Un bell'esempio di collaborazione europea!!!



ESA/Rosetta/MPS for OSIRIS Team MPS/UPD/
LAM/IAA/SSO/INTA/UPM/DASP/IDA

One of a kind: 19 October 2014
Mars and the comet

