

L'ESPERIENZA DELLA SPIN-OFF ARPISOFT

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Arpsoft was born in 2010, after a long-standing work experience in navigation and signal processing, consolidated in prestigious Italian and foreign institutions (University Sapienza of Rome, INAF, Jet Propulsion Laboratory). While in the Radio Science Laboratory of Sapienza the staff has worked on:

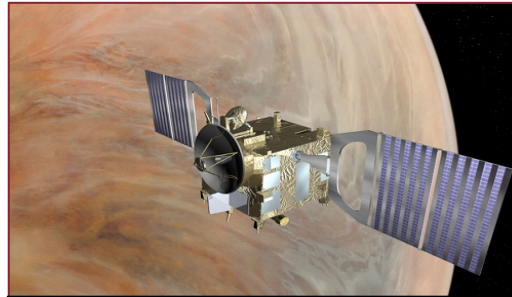
- important ESA and NASA projects, like Cassini, SMART-1, JUNO, JUICE, BepiColombo, JUICE;
- ESA ITT regarding flight dynamics and deep space tracking (DDOR, advanced ranging schemes).

The establishment of Arpsoft is tightly related to the participation to an ESA ITT about the development of the DDOR S/W Correlator.

DDOR is an interferometric technique to estimate the angular position in the sky of a deep space probe.

2005
Correlator development
for ESA (DIAA, INAF)

Contacts with
Engineering Section in
ESA and British
Aerospace (BAE)



2006
Venus Express orbit insertion

2007-2008
First enhancement (DIAA)



2005
Rosetta test



2006-2007
Translator development
(DIAA)

Contacts with **Jet**
Propulsion Laboratory
and **Japan Aerospace**
Exploration Agency



2008
ESA - JAXA operability – Hayabusa
ESA - NASA operability - Phoenix

**2010
Arpsoft S.r.l
established**



2012
ESA-NASA WB test - Juno



**2010-2012
Second Enhancement
(DIMA – ARPSOFT)**

**2014-2016
IDE-ONE ESA study
(DIMA, ARPSOFT, BAE,
THALES)**

The collaboration between Arpsoft and DIMA is still on-going on other projects/studies:

- **RESCUe (Arpsoft, DIMA, THALES, CNIT): telecommunication link during solar superior conjunction;**
- **PROTOCOL-A.3 (Arpsoft, DIMA, Zelinda, CNIT, INAF, UCLouvain): tool for antenna array.**

Training to Callisto (participation to ITT as SubContractor on SBI) and BRIT.

Services/Activities:

- Participation to ESA ITT (interferometry, TT&C).
- Software maintenance/development: Arpsoft maintains some software tools used operationally at ESA.

RFIAT (Radio Frequency Interference Assessment Tool): tool used by ESA and other European space agencies/private companies to carry out interference studies on satellites.

Goal: market the tool at the end of this year.

- Development of control software for scientific instrumentation:

Astronomy-Telescope: SHARK-VIS (INAF) control software, adaptive optics instrument to be installed at Large Binocular Telescope (Arizona).

Optics-Beamline: AMOS (India) optics control software. XMCD (India) optics control software.



SAPIENZA
UNIVERSITÀ DI ROMA

Callisto

cnit

BAE SYSTEMS



UCL
Université
catholique
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ThalesAlenia
A Thales / Finmeccanica Company Space





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