

The pioneering nanosatellite of the University of Liège: A long, challenging, and fascinating scientific, technical, and human experience.

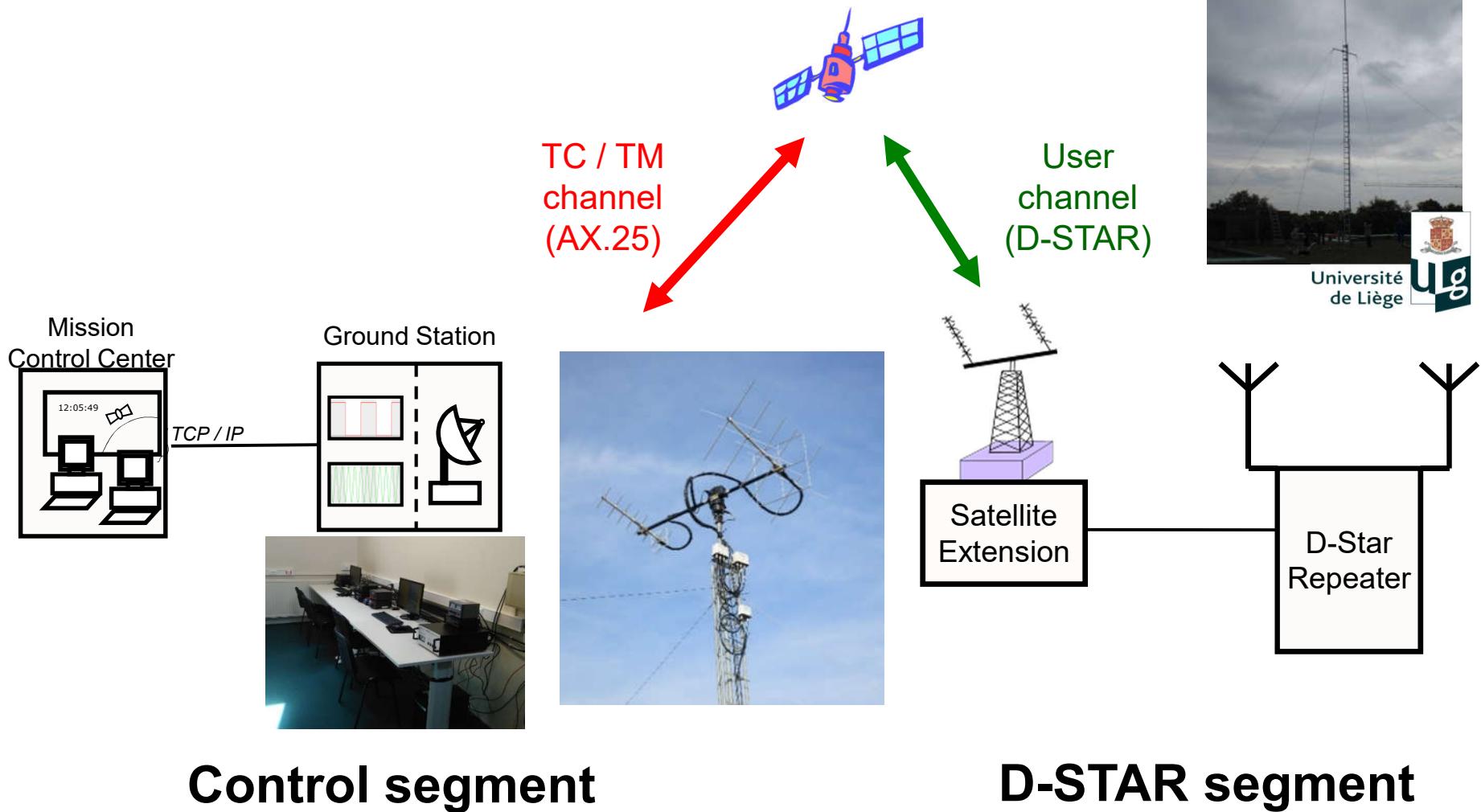
Jacques G. Verly, Gaëtan Kerschen, Xavier Werner, Sébastien Dedijcker, Valéry Broun

1. Sept 2007 - Genesis

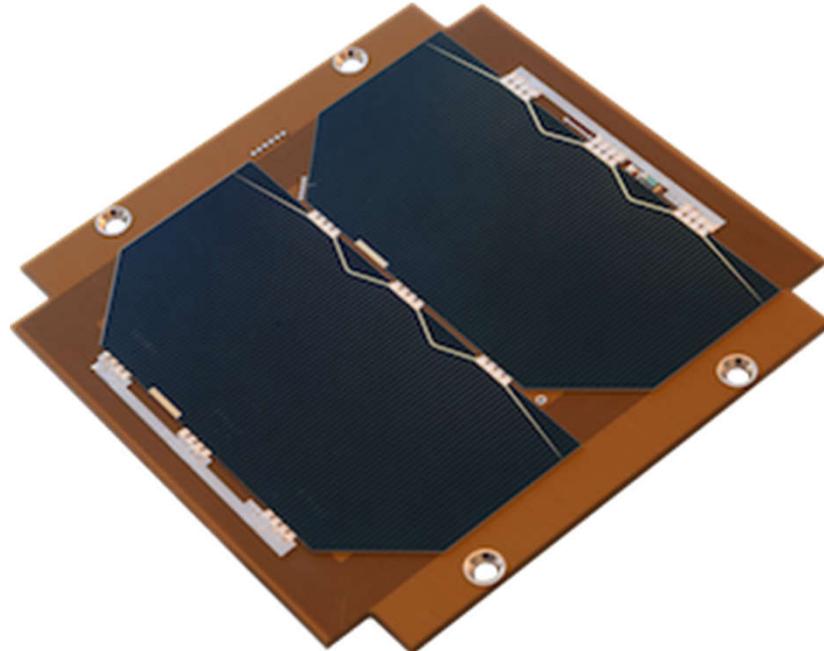


Educational project: > 45 master theses from 2007 to 2016

2. Primary mission - D-STAR space repeater



3. Secondary mission - High efficiency solar cells

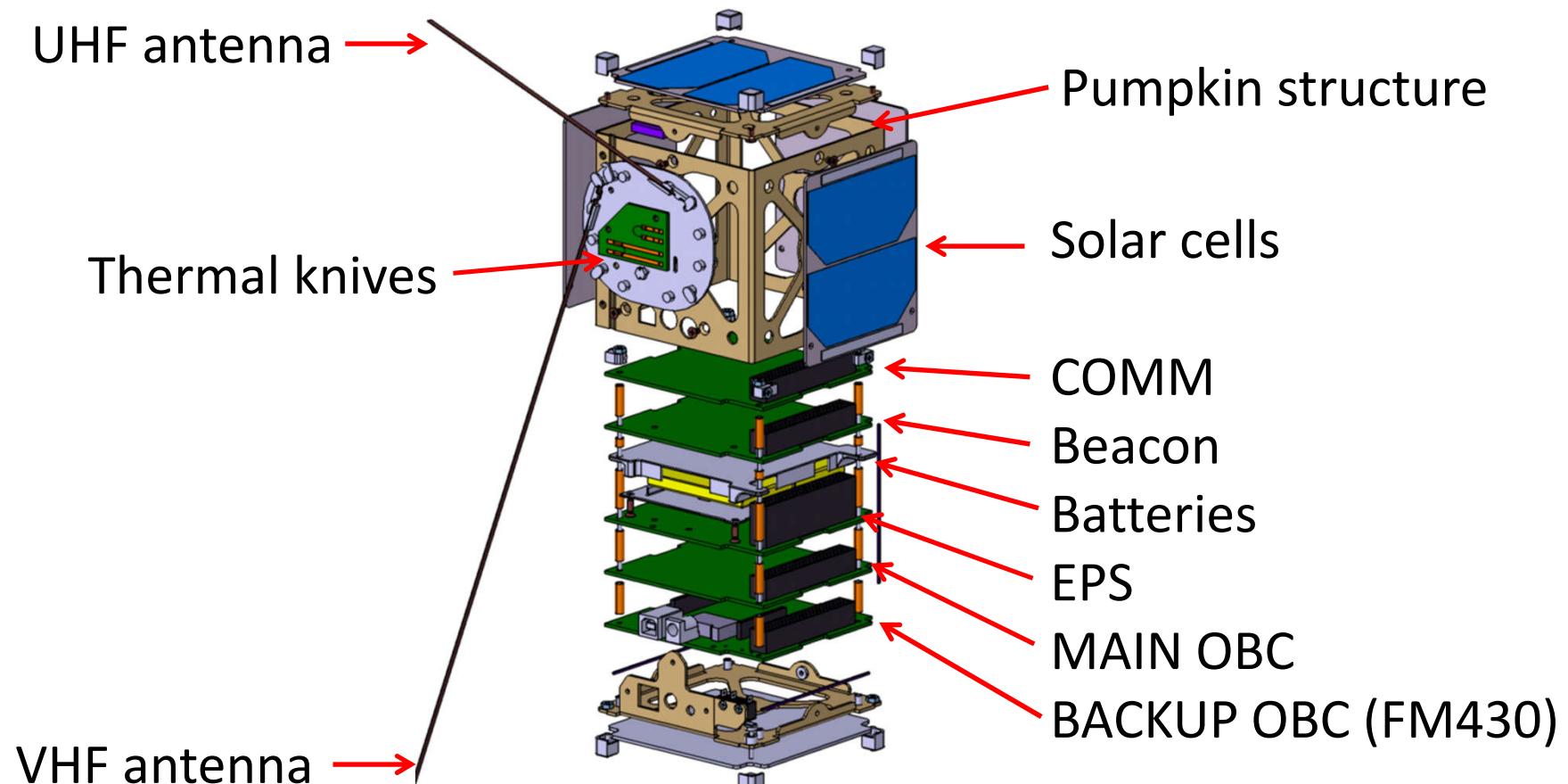


Efficiency > 30%



AZURSPACE

4. Architecture of OUFTI-1 CubeSat



5. June 2013 – We join ESA FYS! program



**fly your
satellite!**

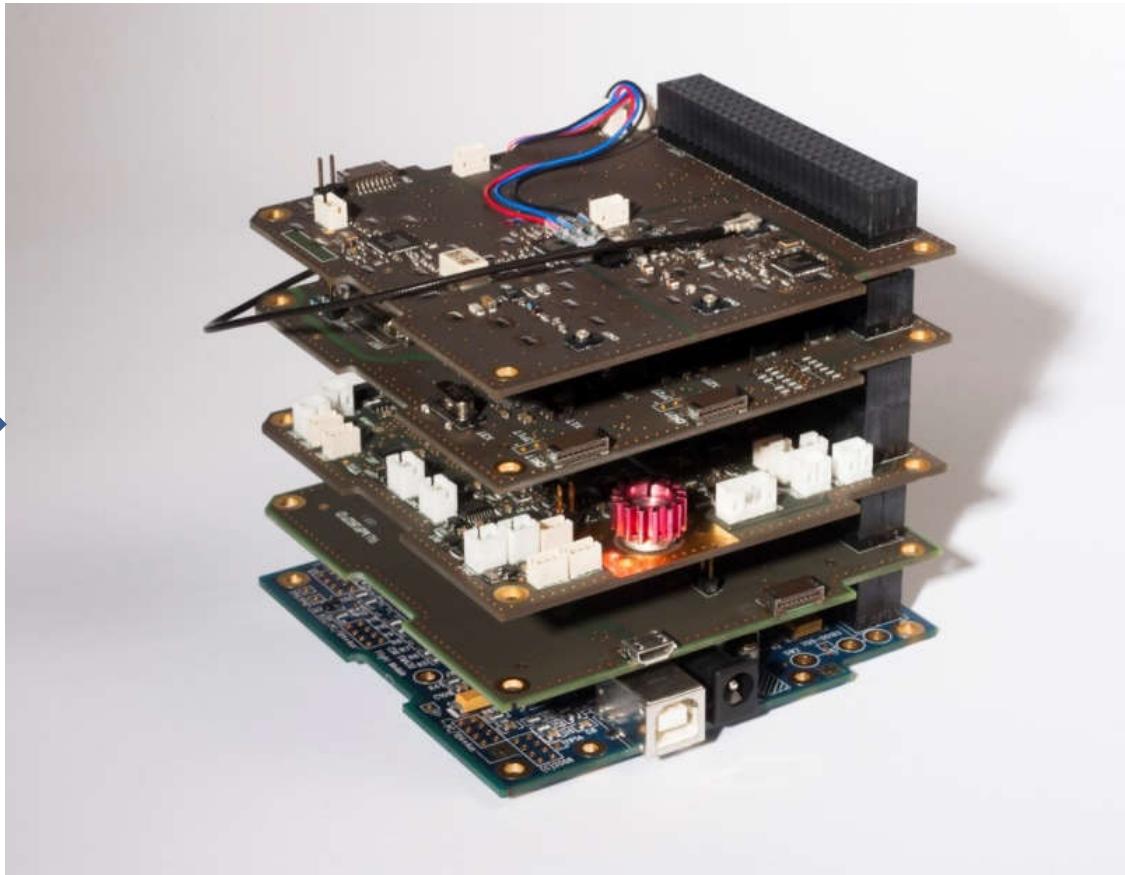
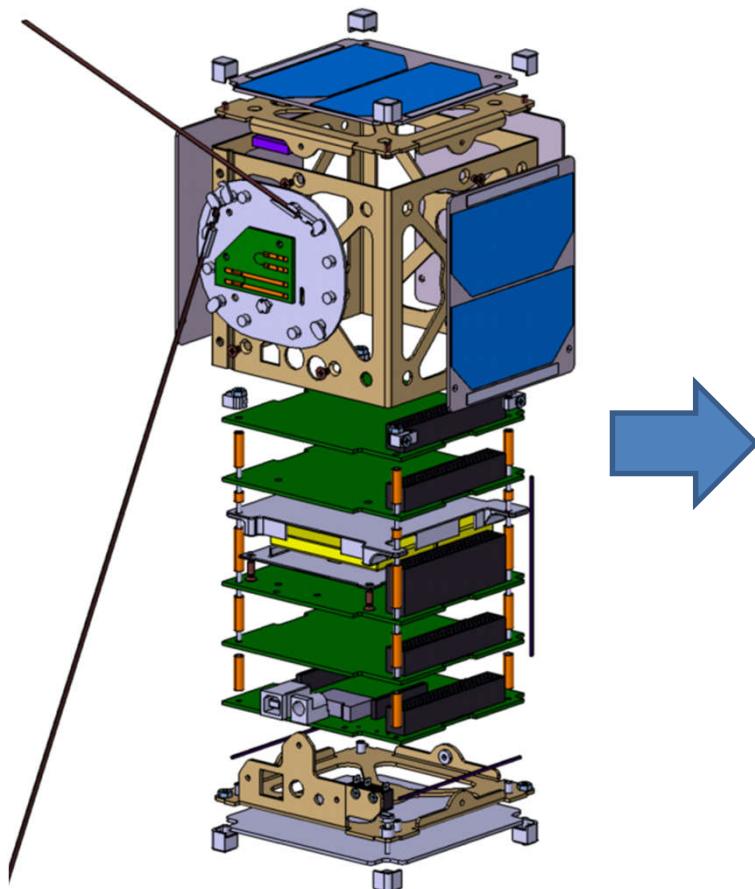
ESA educational program

Structured in 4 phases:

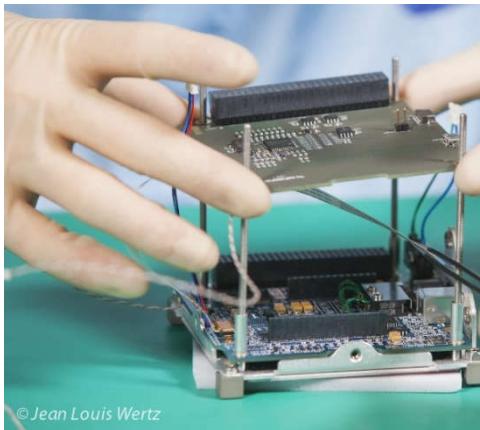
- **Build Your Satellite!**
- **Test Your Satellite!**
- **Ticket to Orbit!**
- **CubeSats in Space!**

OUFTI-1 selected in June 2013

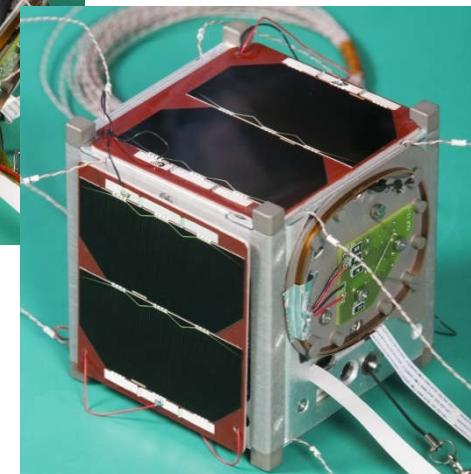
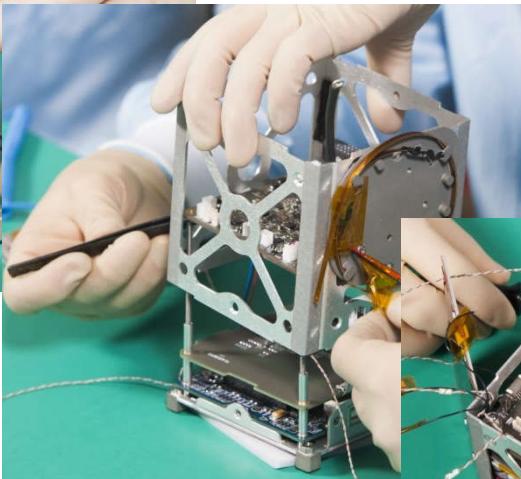
6. Summer 2013 - Engineering model (EM)



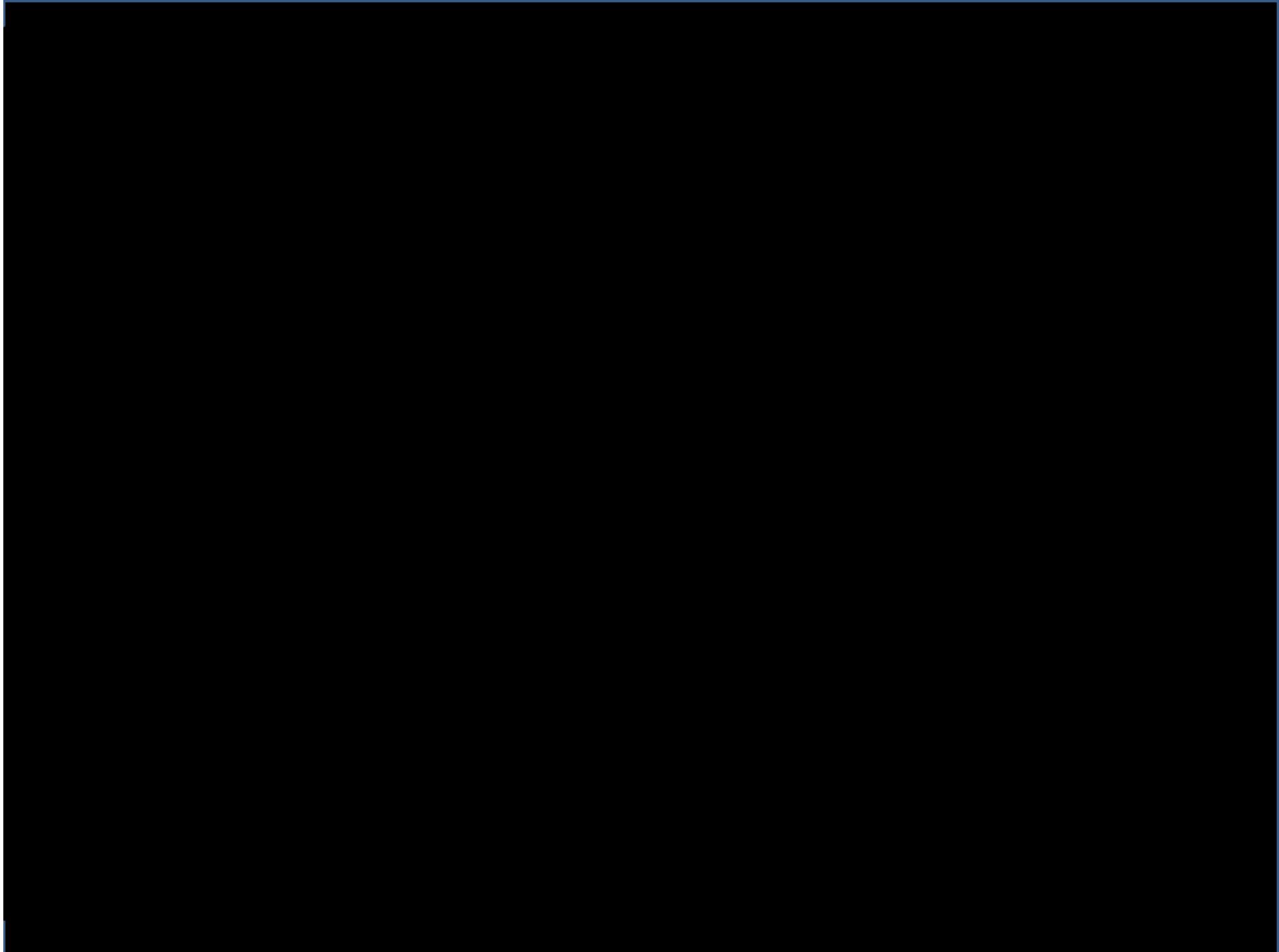
7. Oct 2013 - Integration



© Jean Louis Wertz



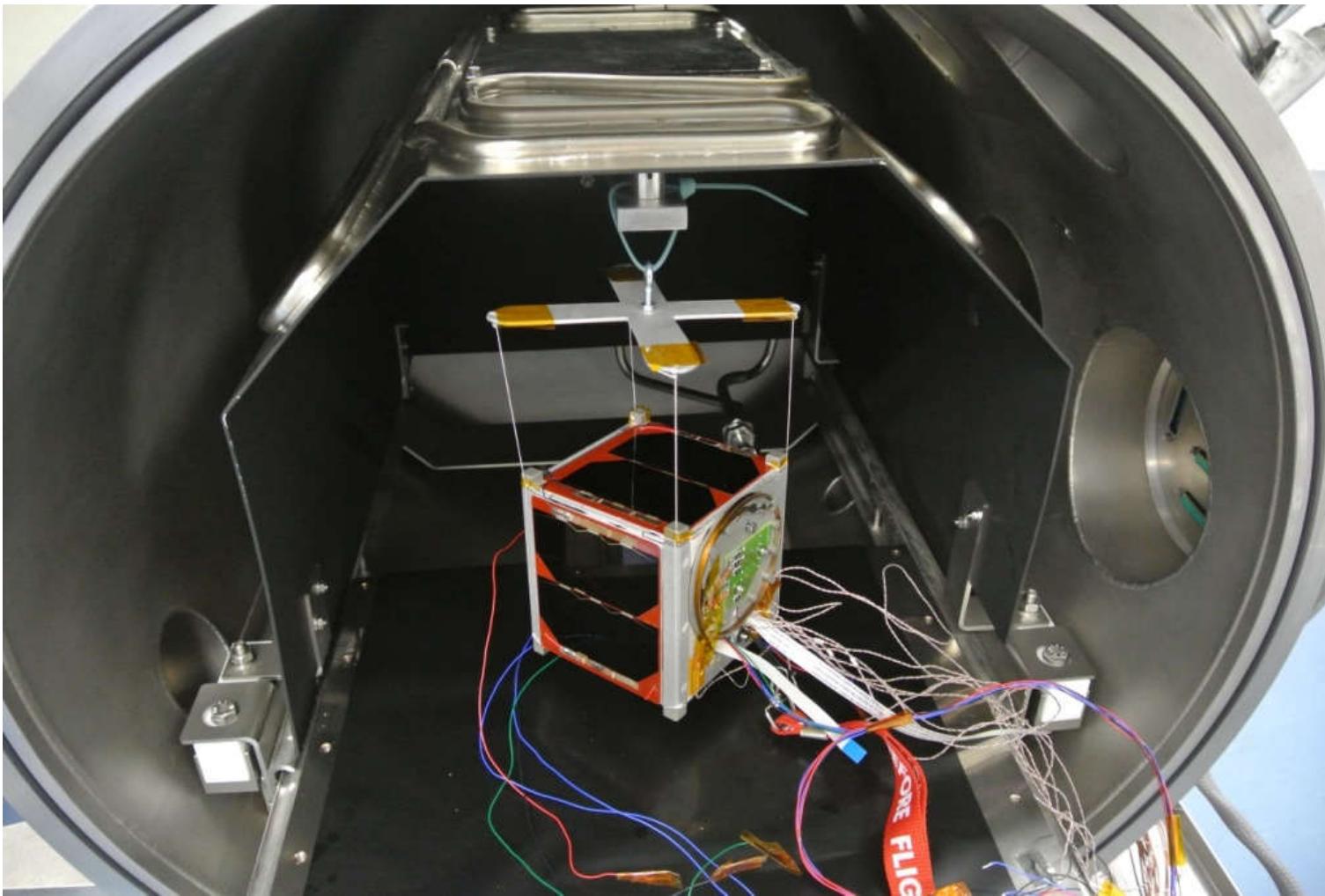
- Write, test, and correct integration procedures
- Perform integration at Centre Spatial de Liège (CSL) of ULg



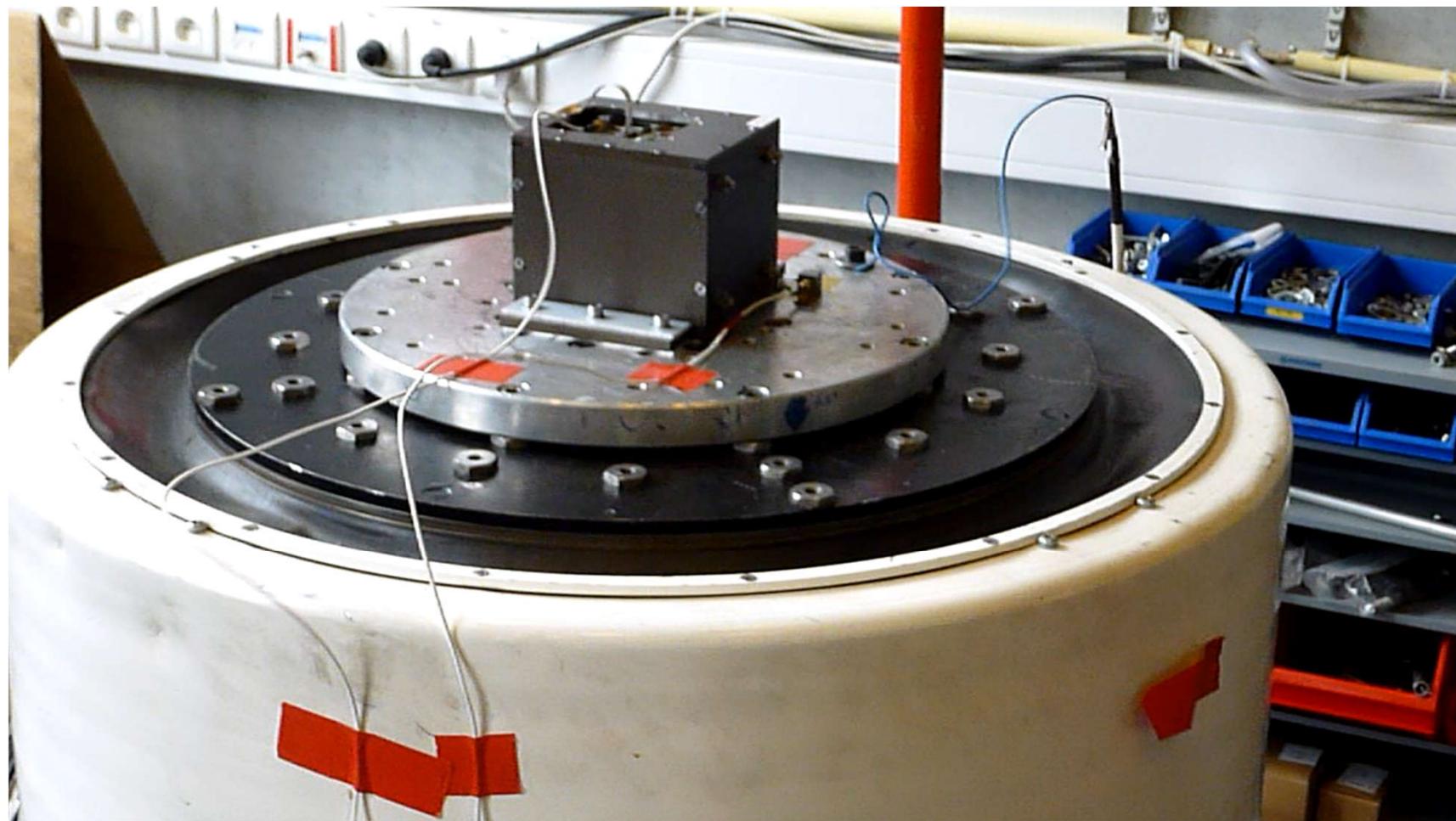
8. Dec 2013 - RF tests on EM (Euro Space Center, Transinne)



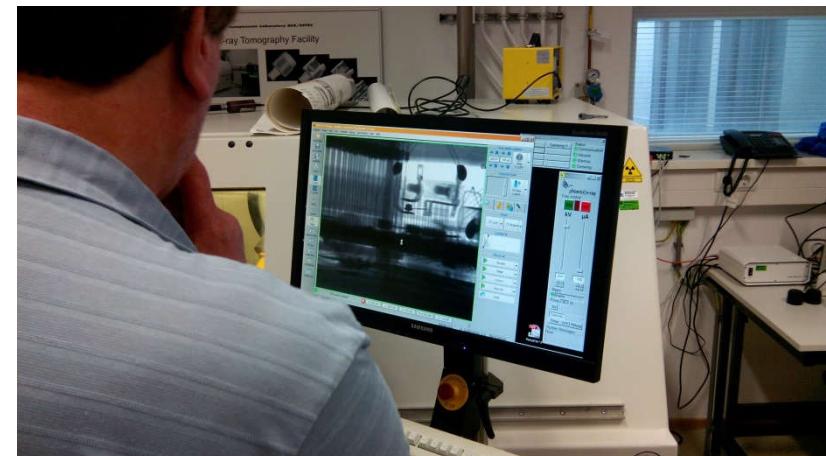
9. Sept 2014 - Thermal vacuum tests (ESA/ESTEC)



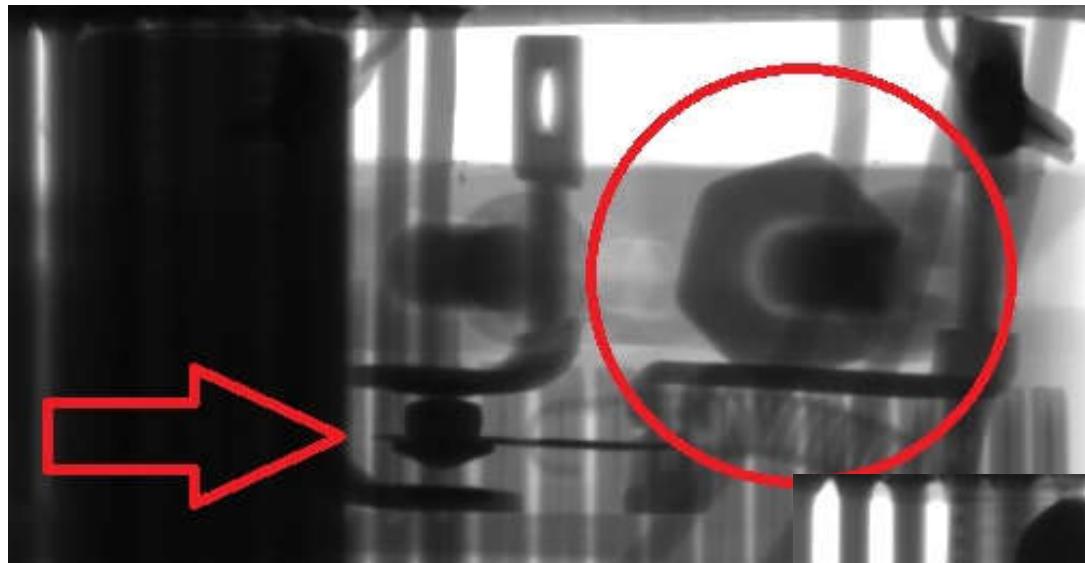
10. Mar-Apr 2015 - Vibration tests (ESA/ESTEC & V2I)



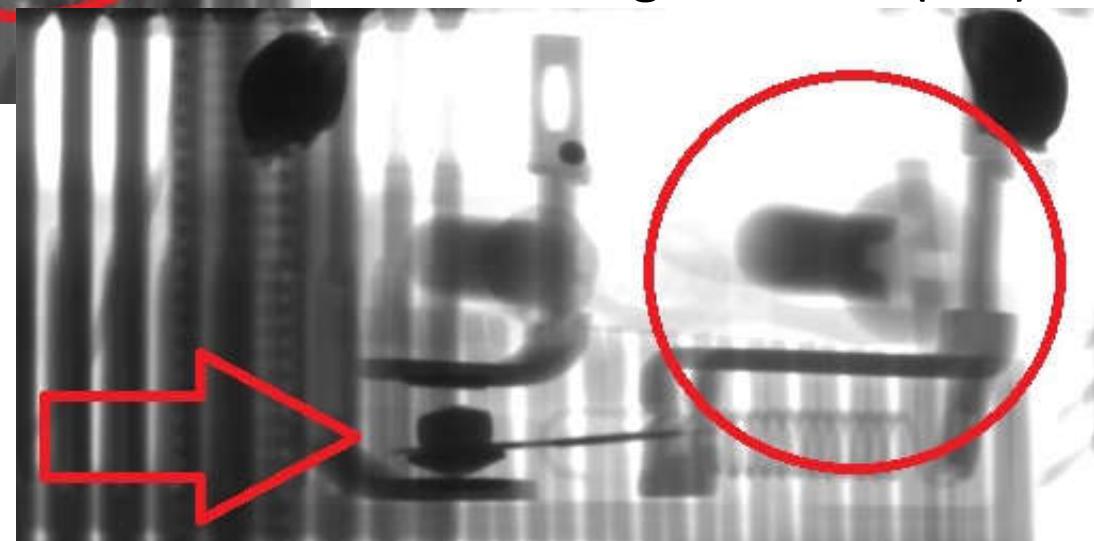
11. Some problems....



12. OUFTI-1 X-rayed! (ESA/ESTEC)



Engineering model (EM)



Flight model (FM)

13. 14-15 Mar 2016 - Integration in P-POD (ESA/ESTEC)

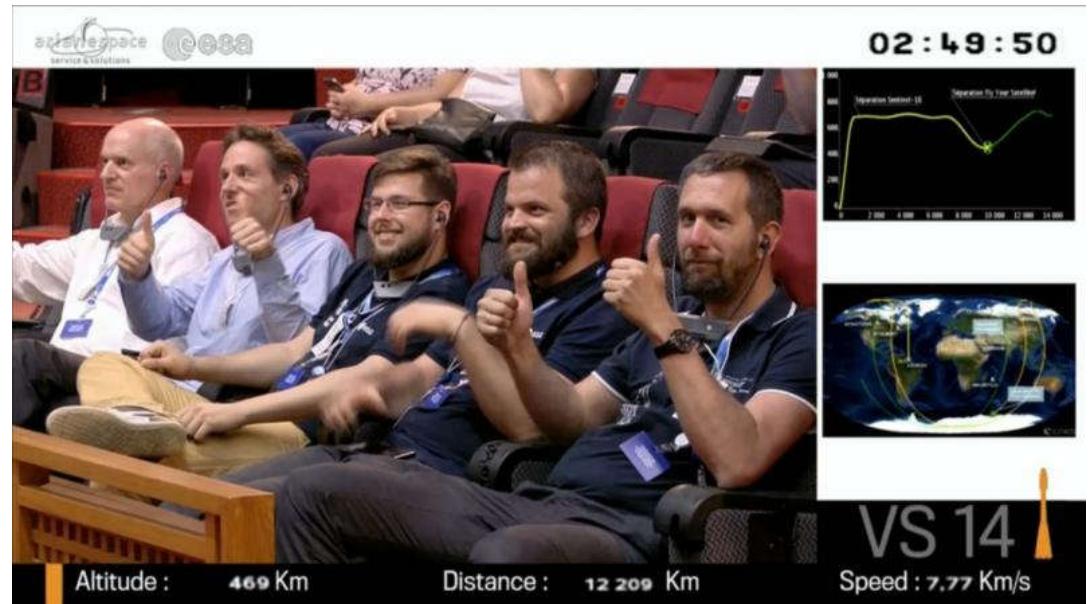
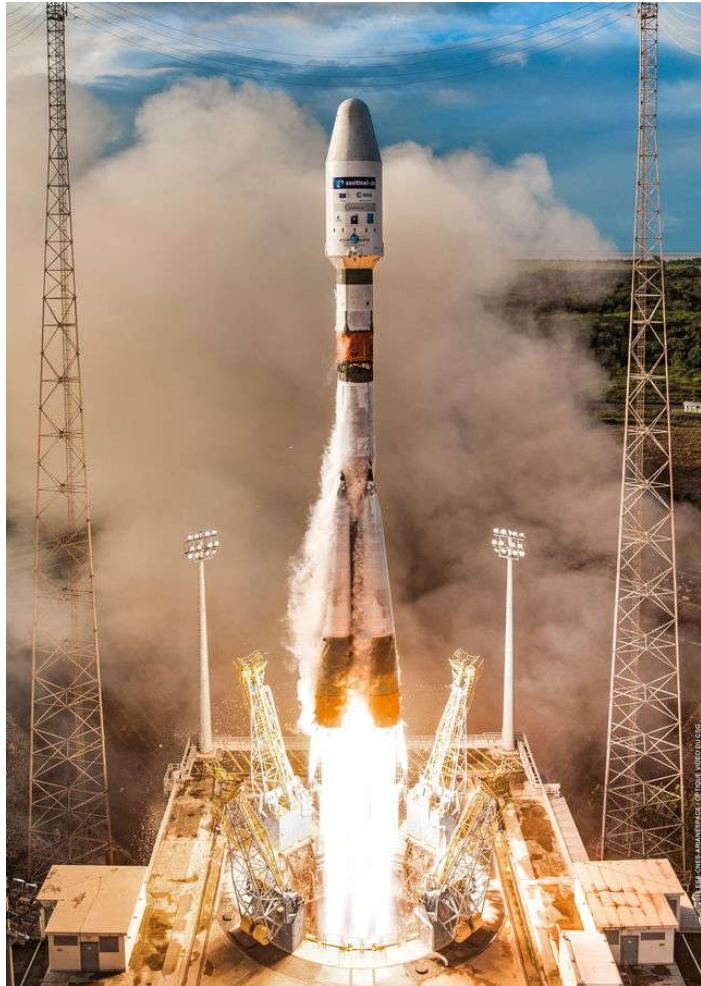


14. Apr 2016 - Integration of P-POD on ASAP-S

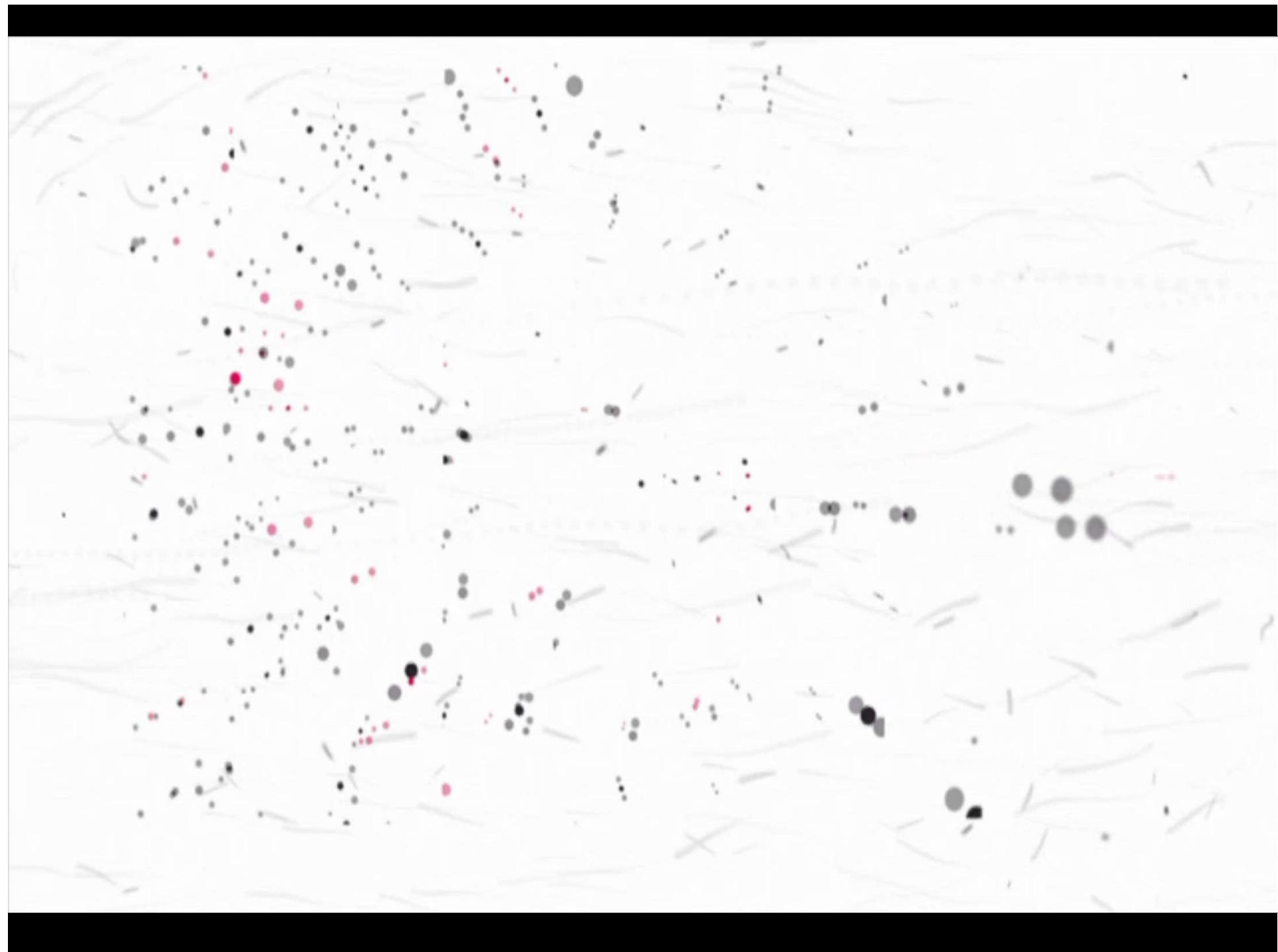


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15. 25 Apr 2016 – Launch!



Soyuz Flight VS14
Centre Spatial Guyanais, Kourou



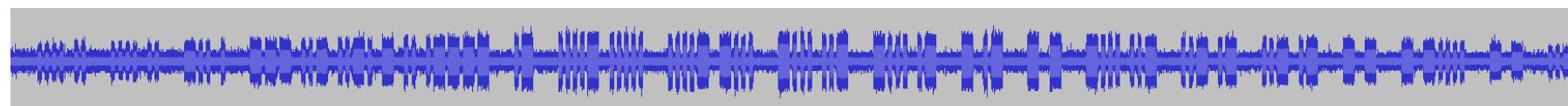
16. 26 Apr 2016, 5 AM - Students get first Beacon signals in Liège!



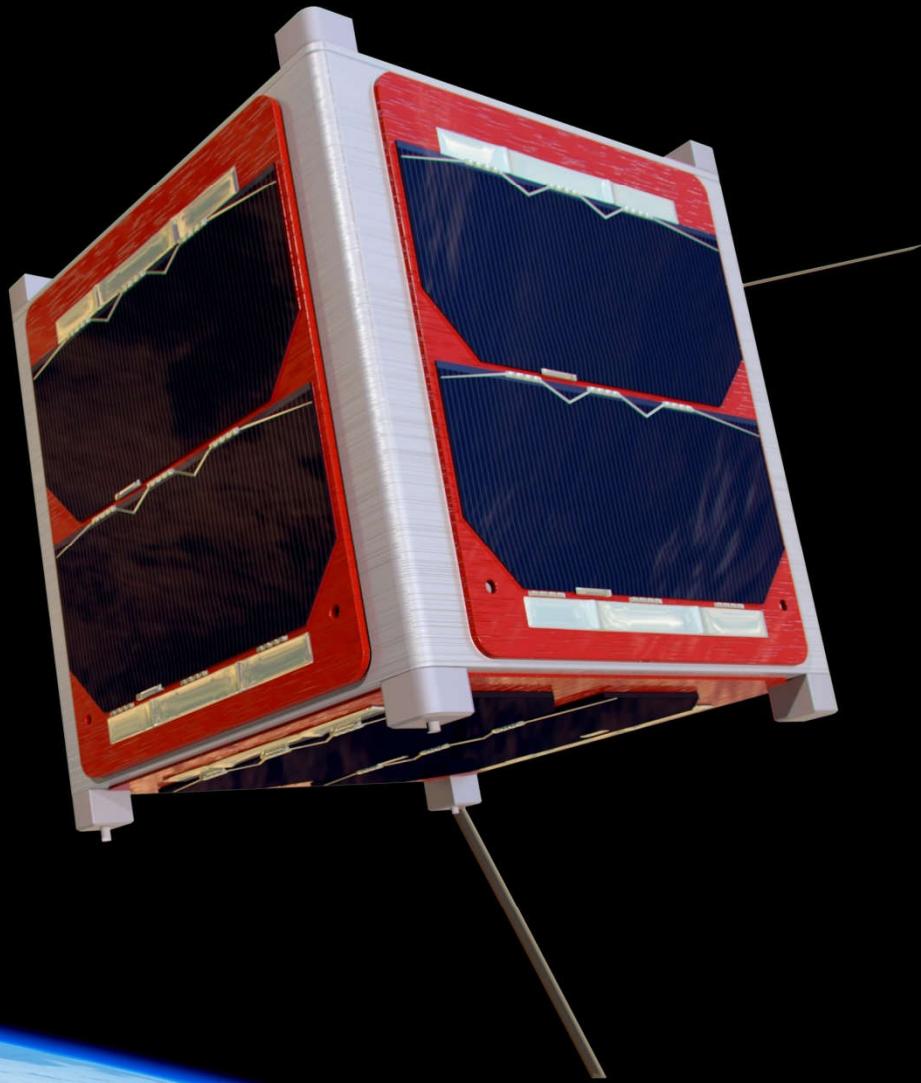
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17. Apr 2016 - OUFTI-1 heard all over the world

> 500 Beacon messages received from HAM operators



Thank you for your attention !



www.oufti.ulg.ac.be

