



UNIBAP

# SpaceCloud<sup>®</sup>



## On-board Cloud Computing and AI

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# SpaceCloud<sup>®</sup>



DATA  
PROCESSING

ANALYTICS

STORAGE

APPS

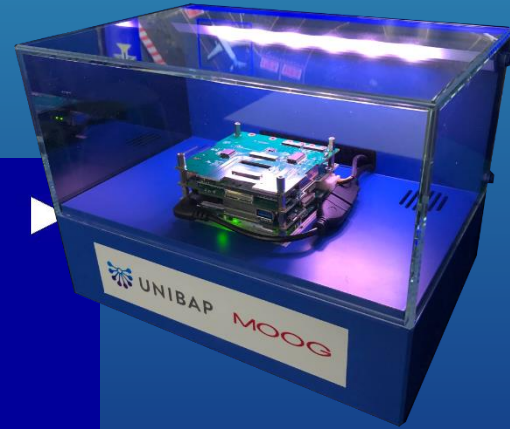


## SpaceCloud™ Demo Apps

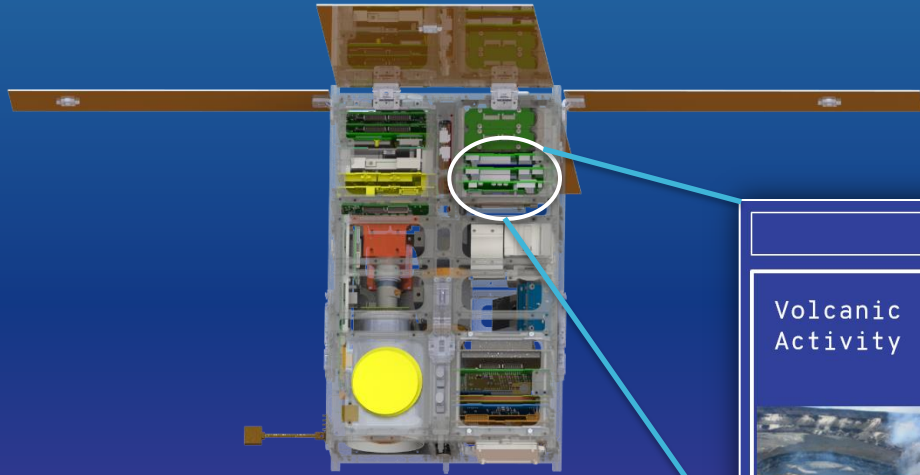


### Unibap SpaceCloud™ Services Intelligent Onboard Data Processing

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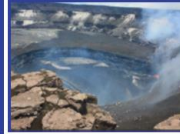


# NASA HYTI satellite mission with SpaceCloud



## Onboard satellite image processing

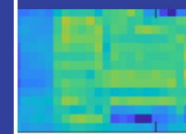
Volcanic  
Activity



Forest  
Fires



Precision  
Agriculture



Oil spill  
detection





# Key innovation factors

- Early support from Swedish National Space Agency (both financial and name recognition)
- Aggressive development and flight schedule, Unibap founded 2013, first AI compute hardware in space 2016 on commercial EO satellite (part of a constellation)
- Early interest and adoption in the US
- Experienced team, prior start-ups, high-tech dev & manufacturing, and academic relations



# A clear vision and ambition

- Democratize space through a digital ecosystem and enable low-latency data products (< 1 min)
- Enable cloud computing in space with the same tools and processes found on ground (e.g. AWS Greengrass)
- Enable radiation tolerance management and handling in the background transparent to the Application developers. Make sure it covers reliable AI execution



<https://www.atlanticcouncil.org/event/on-orbit-ai-cloud-computing/>

# Success factors so far

- Attracted international talent
- Access to venture capital
- ESA BIC Sweden + Swedish Scale-up
- A decadal technology roadmap

