



# KADAMOS

## MULTI MISSION DATA PROCESSING & HARMONIZATION AS A SERVICE

In a scenario where data are increasingly becoming a commodity and EO data providers are exponentially growing, Kadmos offers a suite of services that enables the combined and synergistic use of products from different missions, ranging from medium-resolution optical hyper-spectral to high-resolution multi-spectral to synthetic aperture radar.

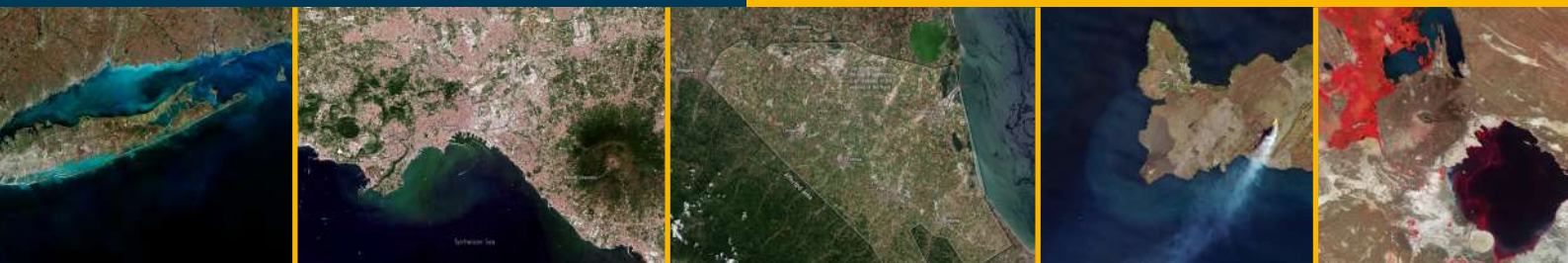
Kadmos is able to use Copernicus missions and New Space data together, building a common reference layer with a uniform quality and a harmonised metadata set. The precise coregistration and intercalibration operations between the different sensors are required to normalise custom responses and prepare the reference for information extraction and data exploitation in general.

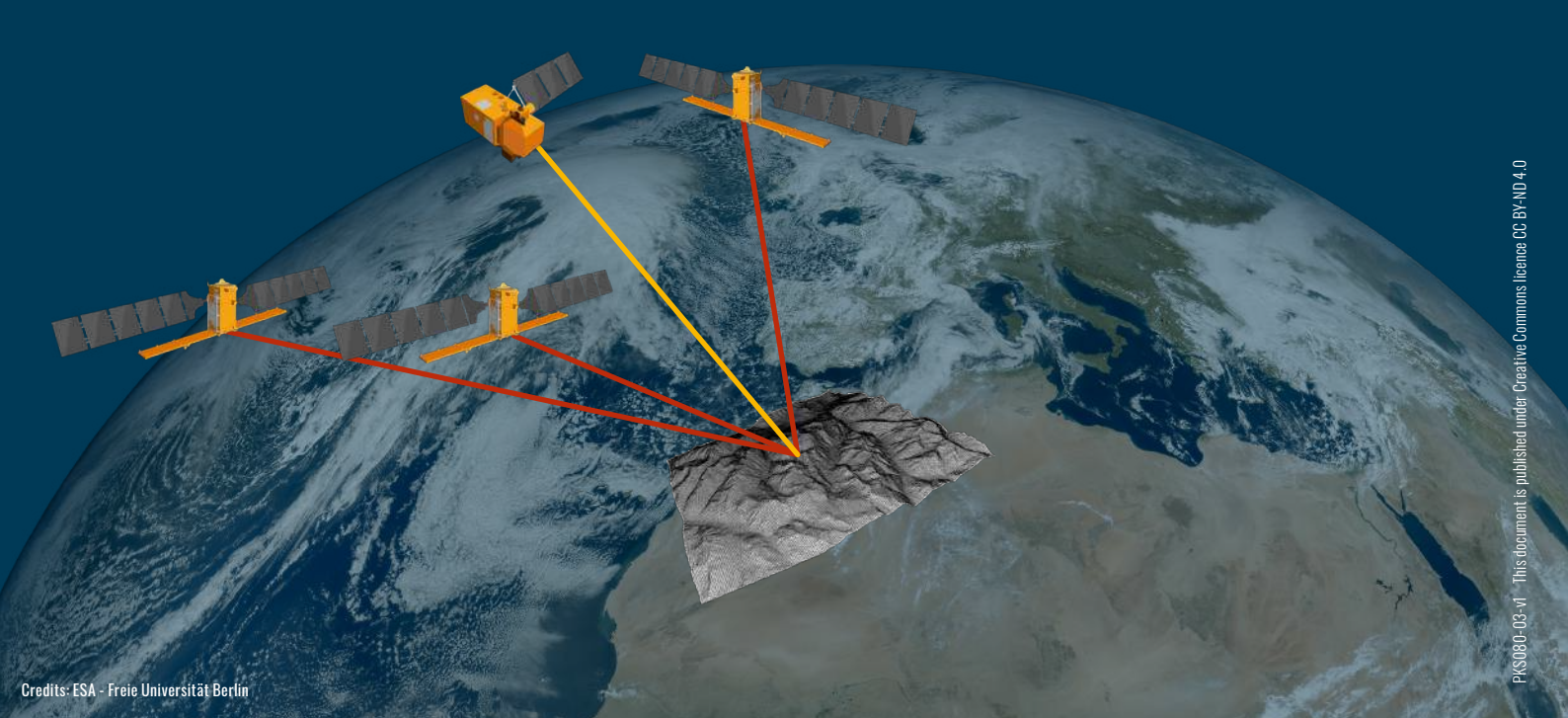
Services include a set of capabilities ranging from Level-0 to Level-2 "standard" processing steps, implementing correction algorithms for residual geometrical deformation and radiometric inaccuracies, relying on knowledge base with a worldwide coverage, made by a set of targets and control points of well assessed and maintained quality. This base is automatically built and updated, thanks to the combined usage of time series from different missions on specific "ground control truths" characterized by the precise knowledge of their geometrical position or stable radiometric response.

### CHECK THE QUALITY OF OFF-THE-SHELF EO DATA PRODUCTS:

- **Optical multi- & hyper-spectral**
- **Synthetic Aperture Radar**

**Enhance radiometric & geometric performances  
of optical data**





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Credits: ESA - Freie Universität Berlin

## KADMOS SERVICE SUITE

### Innovative EO services

- Provide EO payload data processing as a service
- From raw to analysis ready data (ARD)
- Process satellite data from any platform and any provider to ARD level guaranteeing uniform quality and consistent metadata set
- Define a base information layer to build added value services on top of it



Credits: ASI

### Check and enhance the quality of off the shelf EO data products

- Ready for Integration in any Mission Ground segment and processing workflow
- Available in a Cloud Infrastructure

## WORLDWIDE GCPs REPOSITORY

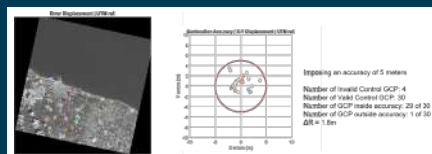


KADMOS provides a global coverage GCPs database, also including inaccessible areas of the Earth and several versions of the same GCP (covering different time ranges or quality).

An easy-to-use interface enables requesting, visualizing, and downloading the data, also by machine-to-machine interfaces.

The GCPs-based service provides ground control points chips with a spatial resolution and a geolocation accuracy better than five meters.

Kadmos services exploit these components to provide the precise geocoding, orthorectification and co-registration operational service.



### Optical/SAR images co-registration

3D information derived from SAR data are associated to an optical image chip centered at the control point position, after a fine registration of the SAR and optical datasets.

Such registration can be applied to any acquisition times, sensors, and viewpoints combinations.



### Optical images orthorectification and co-registration

Kadmos performs an automatic matching between the optical image and the SAR-Optical reference datasets that the customer can even provide.

The matching conditions allow us to refine the image's geocoding model or to build a new Rational Polynomial Coefficients model for non-geocoded images.

Effedemme | Brand builders



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**FOR FURTHER INFORMATION**  
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