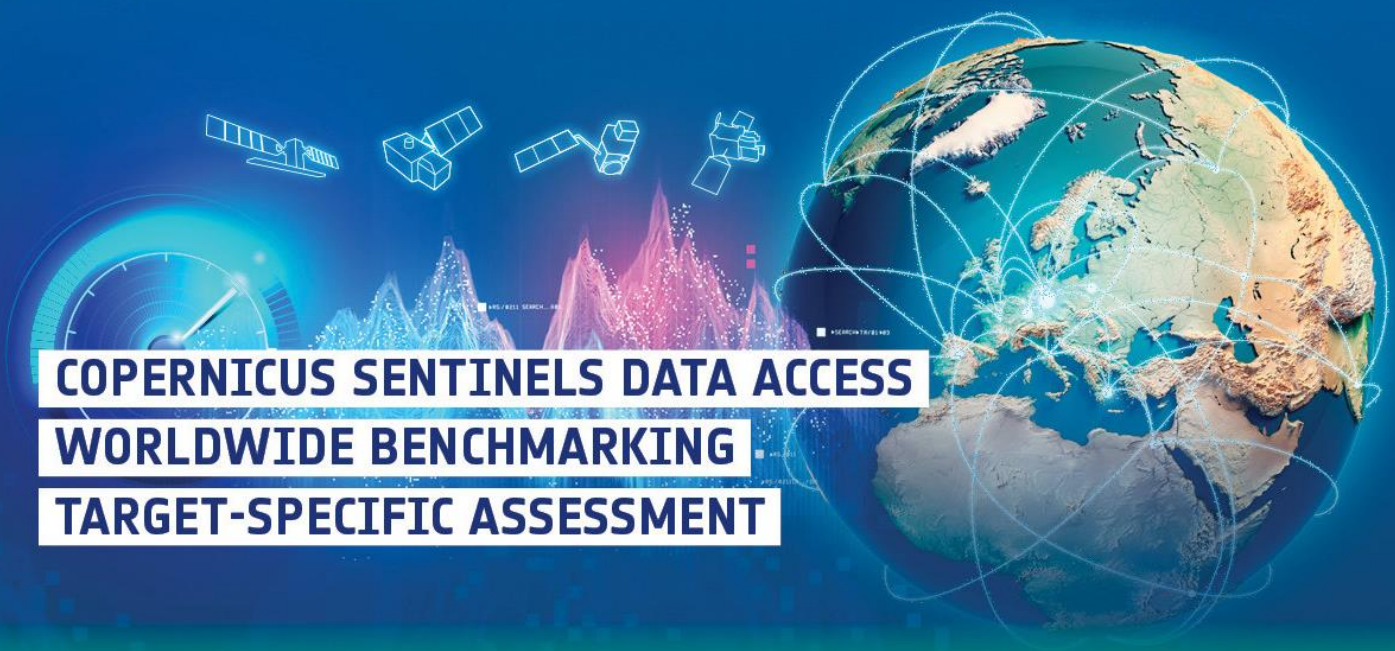
exprivia

TERRADUE



COPERNICUS SENTINELS DATA ACCESS WORLDWIDE BENCHMARKING TARGET-SPECIFIC ASSESSMENT

CREODIAS

Excellent overall performances coupled with a very large online Copernicus data collection and outstanding service support.

> *Our family of cloud platforms spearheaded by CREODIAS, successfully hosts hundreds of large projects carried out by specialists from scientific institutions, ESA, EC and private companies. Our goal is to make sure that all users can work efficiently with our rich Copernicus data archive and we hope to continue serving the global Earth Observation community in many years to come.*
>
> – Alek Cesarz, Senior Project Manager at CREODIAS/CloudFerro

The benchmarking results were shared with the target site Service Provider. The above statement was received for this report.

Visit: https://github.com/esa-cdab

The Copernicus Sentinels Data Access Worldwide Benchmark aims at establishing a robust and widely-shared reference frame to assess Sentinels data accessibility performances. The service operates an independent benchmarking of ESA's hubs and DIASes from a worldwide network of 25+ user test sites.

Acknowledgments

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European Union

opernicus Europe's eyes on Earth

esa

Suitability for NDVI computation (E1) — 85% (+1%)
Full availability and very good performance for the required collection, while object store access was slower. Data sharing tutorial was not successfully completed.

Suitability for Rapid Mapping (E2) — 78% (-5%)
Very limited local data availability for this scenario, but performances were equally good.

Suitability for large-scale mosaicking (E3) — 73% (N/A)
Again full data offering with very good performances, except slower cloud resources creation. Somehow confusing documentation on storage setup.

Suitability for trends computation (E4) — 79% (N/A)
Outstanding data performances, while cloud resources were slowed down. More documentation on advanced development tools would be appreciated.

Suitability for interferogrammes computation (E5) — N/A
Evaluation of this indicator could not be completed because of issues with billing of cloud resources, which provider support did not settle in time for the report.

Collections Richness (Q1) — 91% (+4%)
Very complete data offer with fast availability latency. Also includes NRT products not found on Open Hub, but some obsolete products are not removed.

Reactivity (Q2) — 99% (==)
Consistent outstanding fast site reactivity, with only few sporadic slow responses and no errors.

Discoverability (Q3) — 95% (-2%)
Quick response time to catalogue queries and high reliability of results set CREODIAS in Class A for this indicator.

Data Download (Q4) — 86% (+11%)
Good throughput but single connection per user limits bandwidth exploitation. Availability of offline products was sometimes very slow, even days.

Cloud Computing (Q5) — 83% (-3%)
Cloud resources are cost-efficient even though provisioning can get slower during intensive usage. Data throughput from within the cloud was lower than expected.

Time Stability (Q6) — 95% (-2%)
Very stable performance across all indicators, apart from a drop in cloud download throughput towards the end of the period.

Geographic Variability (Q8)
Best results from France (Paris) and Finland, followed by Poland, near to the provider's infrastructure. Very good results from all EU test sites.

Complementary Offer (Q9) — 90% (-1%)
Very complete offer, lacking only in some non-Copernicus data and a few specific development tools.

Service Support (Q10) — 100% (==)
Quick and effective support, fast and convenient registration process and payment methods.

Benchmarking Details	
Target Site URL: https://creodias.eu	Service Design Document Version: 2.0
Campaign period: 16/03/2021 00:00 – 23/05/2021 24:00 (UTC)	Benchmarking Report: CDAB-RP-EXP-0309 Specific Report 5
Reference Test Sites locations: Bari, Brussels, Gravelines, Magdeburg, Warsaw	System SW Configuration: Client 1.3.16, Remote client 1.40
	Release Date: July 2021