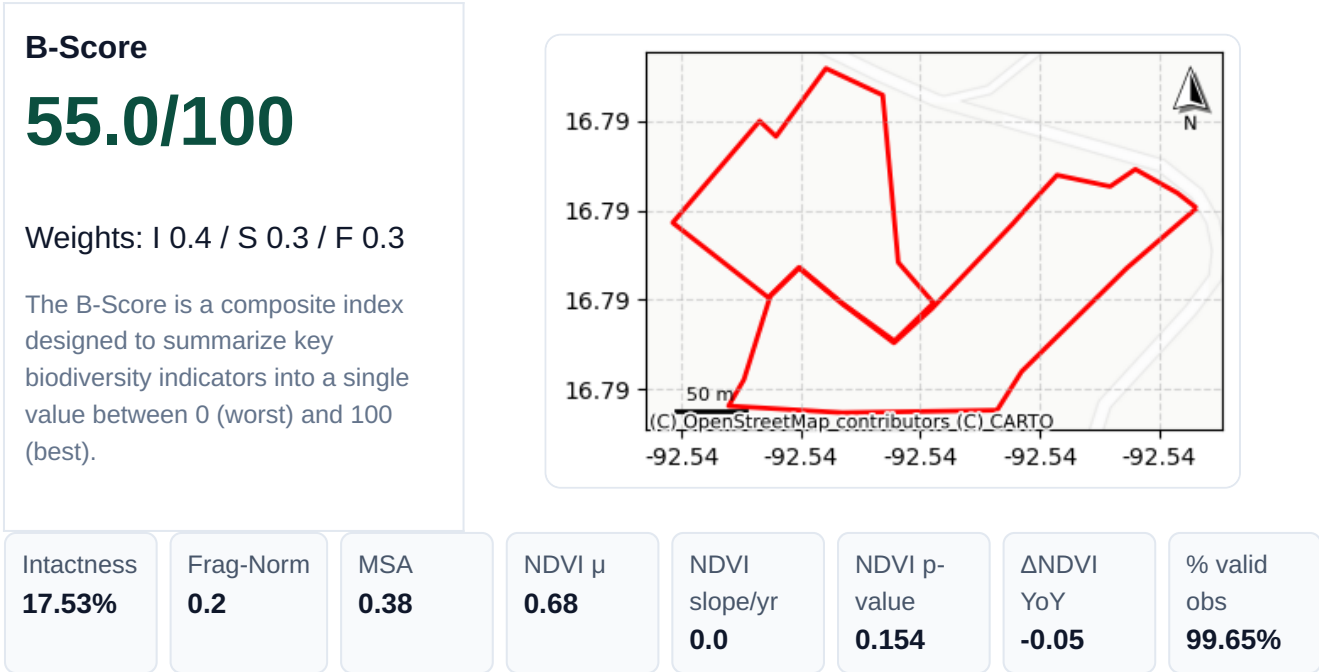


Biodiversity & Forest-Health Screening

CSRD/TNFD-friendly indicators. Screening-grade; best for forests. Not a species inventory.



Refer to the Glossary in the Appendix for all terms and abbreviations.

The executive summary below is AI-generated from your validated metrics. Please check the wording for context and add company-specific governance/targets if using for CSRD/TNFD/GRI disclosures.

The analysis of the DemoProject area of interest (AOI) from January 2019 to December 2024 indicates a moderate level of ecological integrity, with an intactness percentage of 17.53%. The NDVI (Normalized Difference Vegetation Index) values show variability over the years, with a mean NDVI of 0.68, suggesting healthy vegetation in certain periods. However, the NDVI trend indicates fluctuations, with a notable decline in some months. The Shannon diversity index is high at 0.95, indicating a diverse ecosystem. The bscore of 54.59 reflects a moderate ecological condition, while the fragmentation index of 0.20 suggests some level of habitat fragmentation. Overall, the area shows potential for ecological recovery with appropriate management actions.

Context: Protected & Sensitive Areas

Inside PA?	Nearest PA	Distance	Nearest KBA	Distance
No	—	0.0 km	—	0.0 km

AOI Metrics

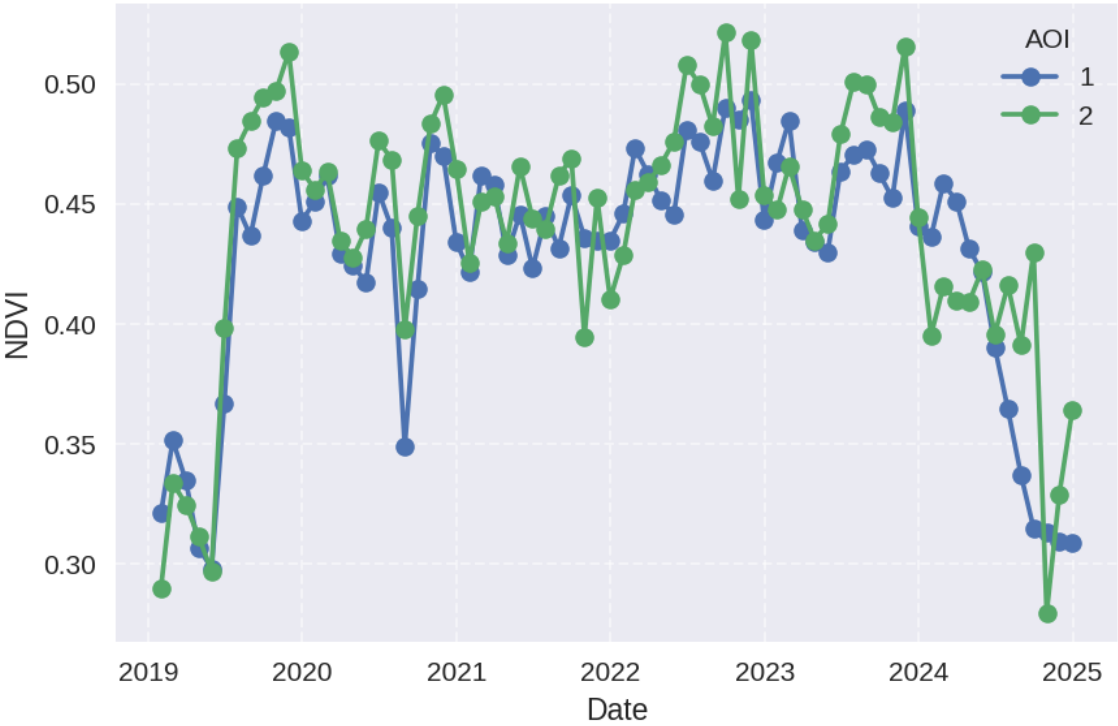
Biodiversity

AOI	B-Score	Intactness %	Frag-Norm	Shannon H'	MSA
1	56.21	21.64	0.18	0.95	0.38
2	52.97	13.42	0.22	0.95	0.38

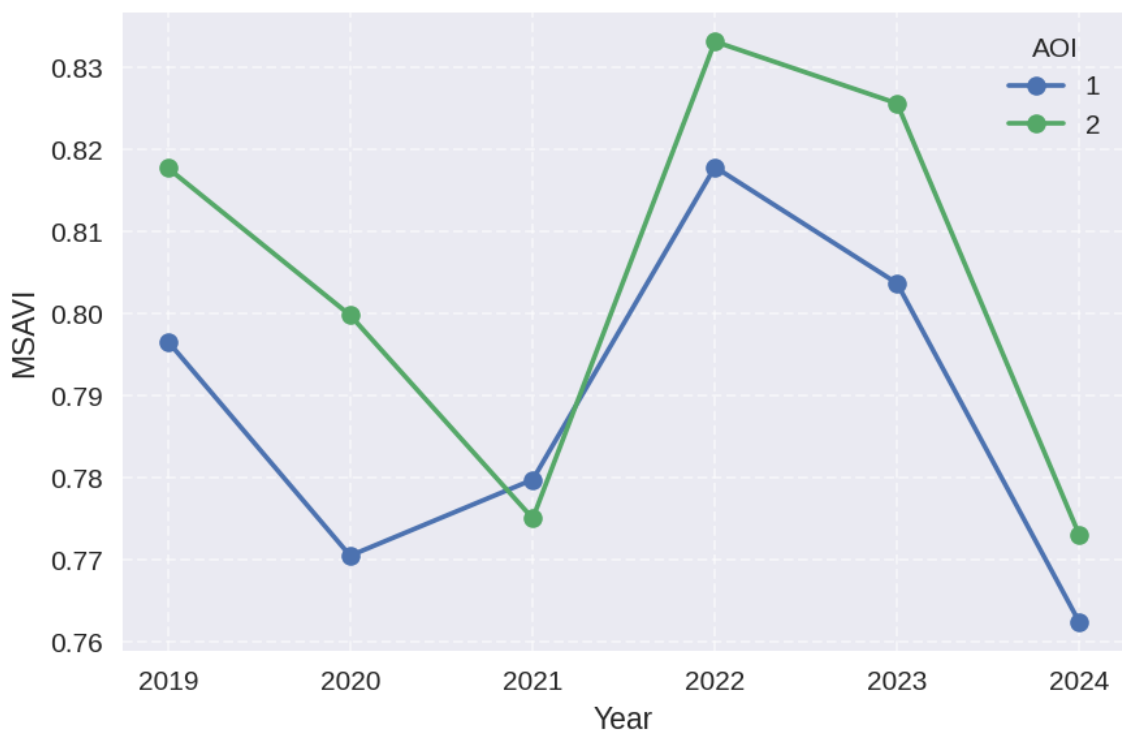
Vegetation Health

AOI	NDVI μ	NDVI slope/yr	Δ NDVI (YoY)	NDVI p-value	MSAVI μ	# obs	% valid obs
1	0.67	0.00	-0.04	0.025	0.79	72	99.31
2	0.69	-0.00	-0.06	0.284	0.80	72	100.00

Vegetation Trends



NDVI trend for all AOIs.



Yearly mean MSAVI for all AOIs.

ESRS E4 Mapping (screening)

Extent & Condition	The extent condition of the AOI is moderate, with an intactness percentage of 17.53%.
Pressures	The area faces pressures from habitat fragmentation and variability in vegetation health, as indicated by the NDVI fluctuations.
Targets	Targets for improvement include increasing the intactness percentage and reducing habitat fragmentation.
Actions & Resources	Recommended actions include habitat restoration and monitoring of vegetation health to enhance ecological integrity.
Anticipated Financial Effects	Financial effects of implementing these actions may include costs associated with restoration efforts but potential long-term benefits from improved ecosystem services.

Screening-grade outputs. Field validation recommended for regulatory sign-off.

Methods & Limitations

- AOI aggregation to handle mixed resolutions (10 m ↔ 300 m); report pixel counts and % valid observations.
- MSA 2015 (300 m) used as pressure context; vintage and coarseness disclosed.

- NDVI saturation in dense canopies considered in interpretation; seasonal decomposition applied.

Data lineage

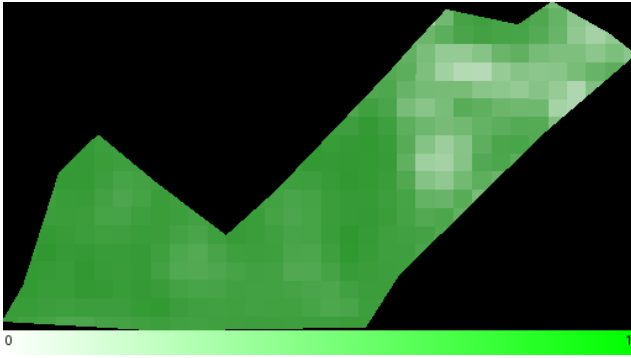
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Sources

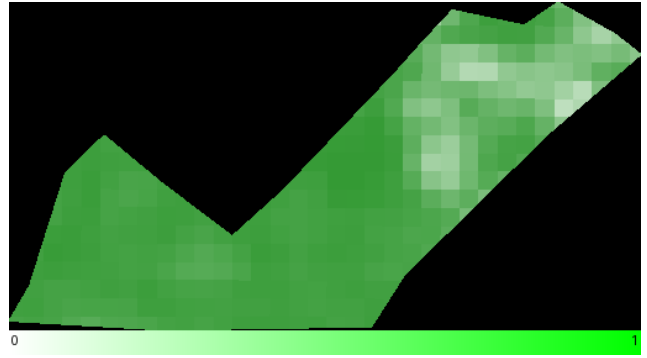
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Sentinel-2 L2A	v2024	2017–present	10 m	NDVI/MSAVI composites

Appendix: Yearly Composites

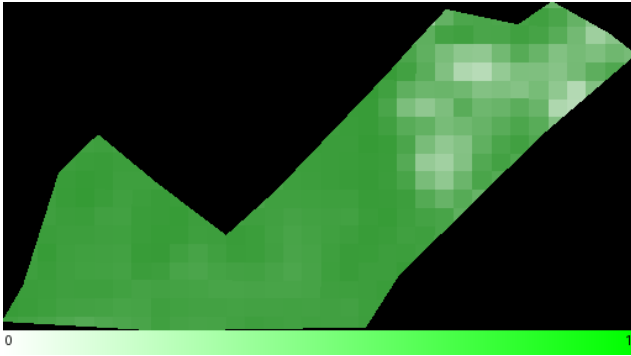
Yearly NDVI composites derived from cloud-free Sentinel-2 imagery. The white → green color scale (0–1 NDVI) highlights vegetation condition across the project area and helps monitor change through time.



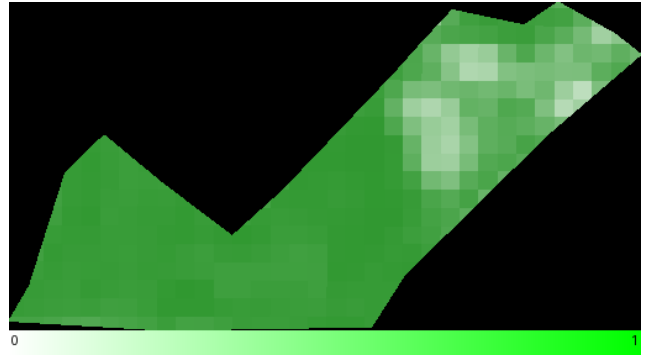
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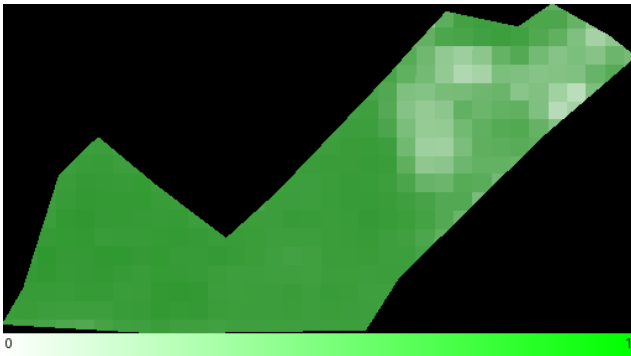
1 2020



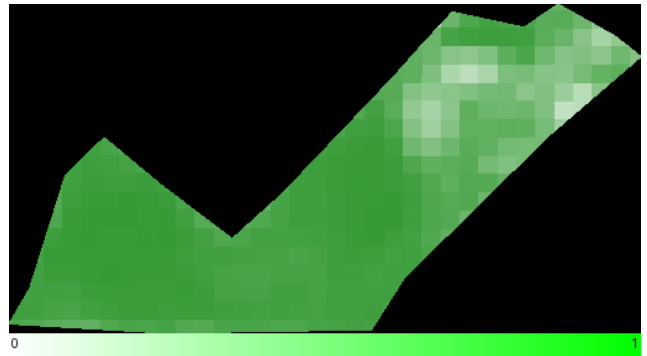
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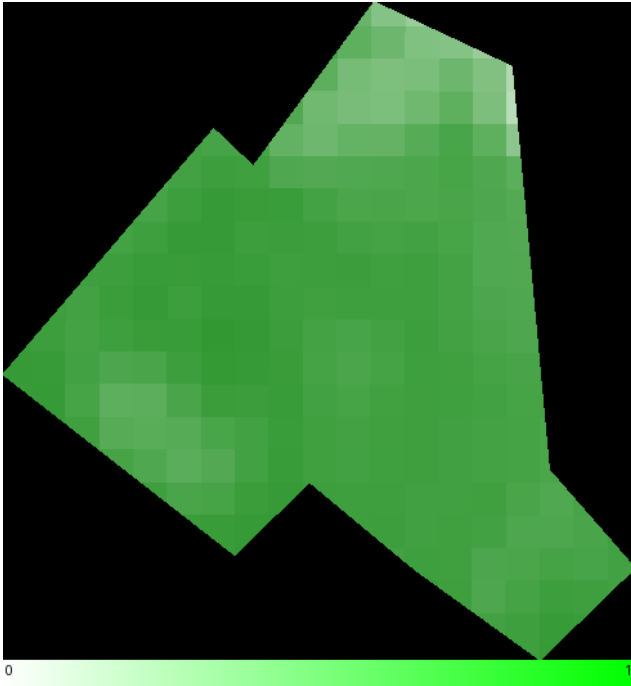
1 2022



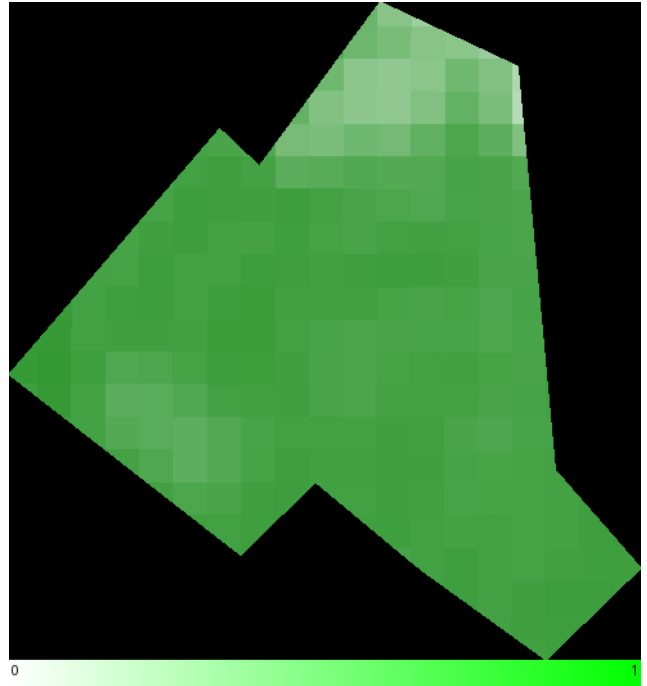
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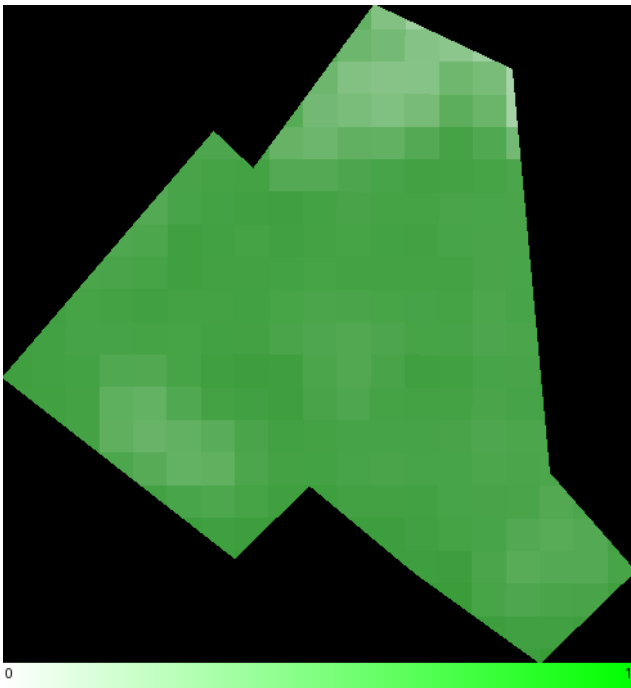
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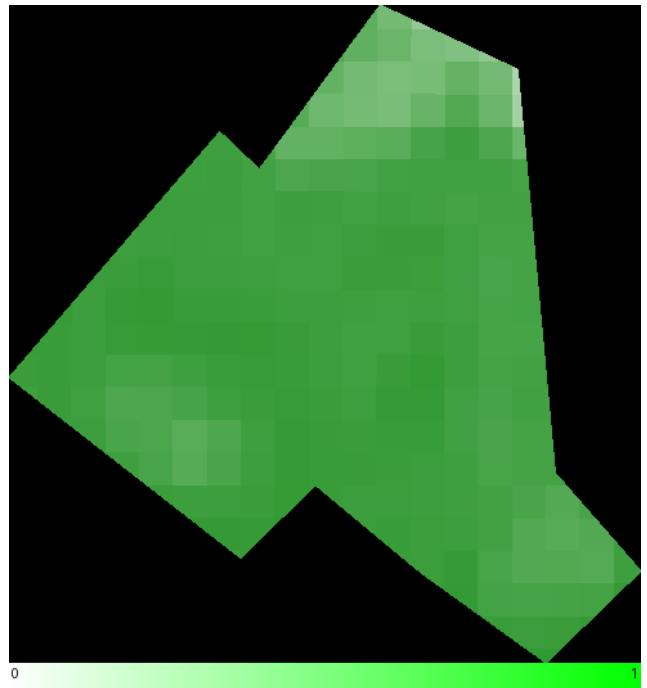
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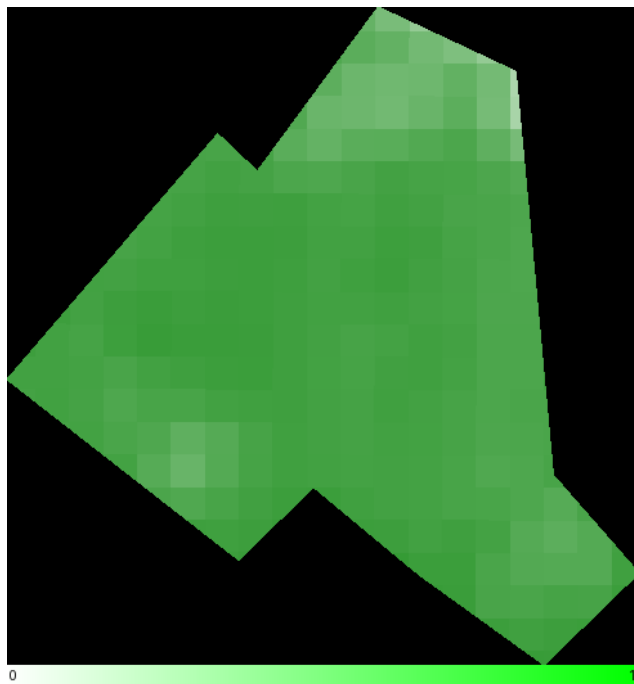
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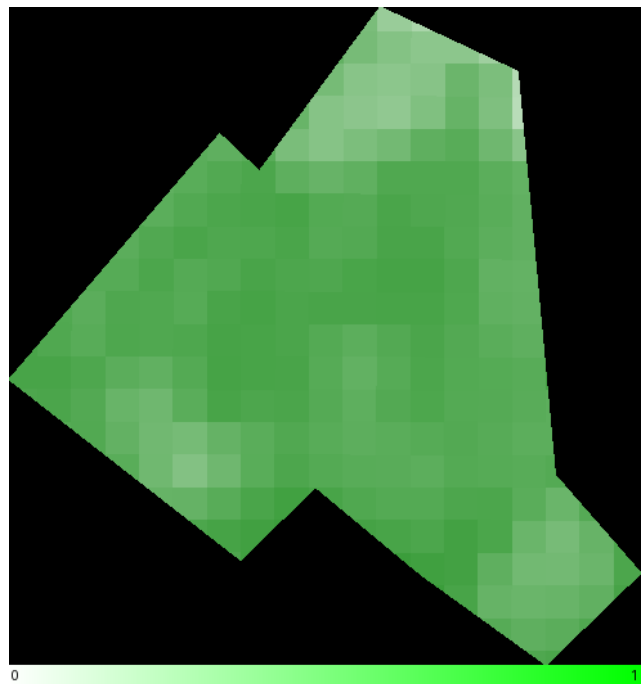
2 2021



2 2022



2 2023



2 2024

Appendix: Glossary

AOI

Area of Interest

B-Score

Composite index summarizing key biodiversity indicators (0 worst – 100 best).

CSRD

Corporate Sustainability Reporting Directive

TNFD

Taskforce on Nature-related Financial Disclosures

GRI

Global Reporting Initiative

MSA

Mean Species Abundance

NDVI

Normalized Difference Vegetation Index

MSAVI

Modified Soil Adjusted Vegetation Index

Frag-Norm

Fragmentation normalized index

KBA

Key Biodiversity Area

PA

Protected Area

