RSS
HYDROSENS
ENVIRONMENTAL MONITORING REPORT

REGION : Name_ABALOU Abla - Autre parcelle

TIME PERIOD : 23 DEC 2024 - 27 JAN 2025

OVERVIEW

This report analyzes environmental conditions in Name_ABALOU Abla - Autre parcelle from December 23, 2024, to January 27, 2025. The analysis includes NDVI, vegetation fraction, soil fraction, precipitation, temperature, and curve number. The data indicates moderate vegetation health with negligible rainfall and stable temperature, suggesting a need for water management strategies and soil conservation practices.

KEY INSIGHTS

1. **Moderate Vegetation Health**
   NDVI values indicate moderate vegetation density with a slight fluctuation observed over the period.

2. **Negligible Rainfall**
   Precipitation remained virtually zero throughout the reporting period, which might stress the vegetation.

3. **Stable Temperature**
   Temperature remained relatively constant, which can be good for stable crop developement if water demand is satisfied.

4. **High vegetation cover fraction**
   Vegetation fraction is high (above 0.75) suggesting dense vegetation cover

NORMALIZED DIFFERENCE VEGETATION INDEX

Indicates vegetation health from 0 to 1.

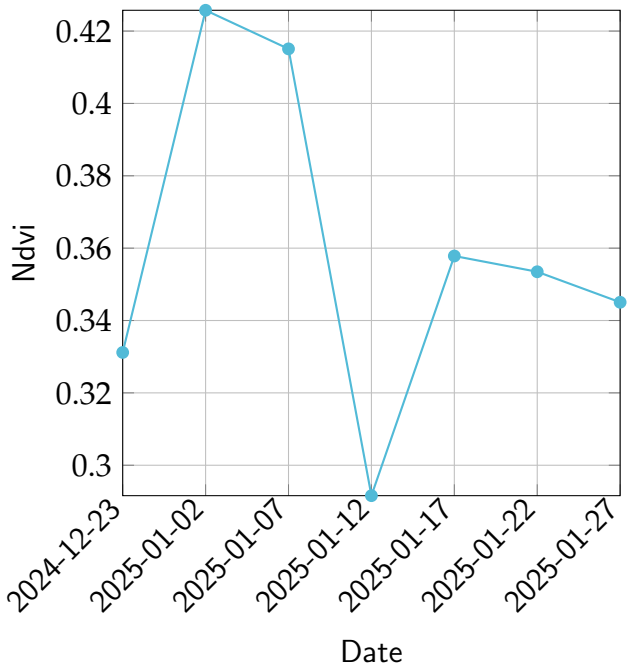
0.36 MEAN VALUE

An average NDVI of 0.36 suggests moderate vegetation density for Name_ABALOU Abla - Autre parcelle, indicating some vegetative activity but potentially below optimal levels.

TIME SERIES INSIGHT

NDVI values fluctuated between 0.29 and 0.43 during the reporting period. There was an increase in NDVI in early January, followed by a gradual decline towards the end of January, suggesting a potential response to environmental conditions or management practices.

NORMALIZED DIFFERENCE VEGETATION INDEX



VEGETATION FRACTION

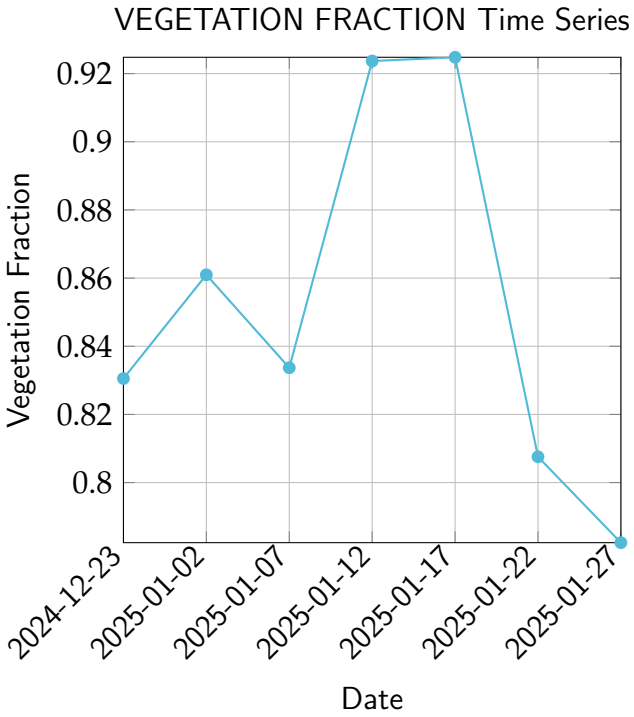
Proportion of ground covered by vegetation.

0.85 MEAN VALUE

An average vegetation fraction of 0.85 indicates a high proportion of ground cover by vegetation in Name_ABALOU Abla - Autre parcelle, suggesting dense vegetation.

TIME SERIES INSIGHT

Vegetation fraction remained high throughout the period, ranging from 0.78 to 0.92. There was a peak in mid-January, indicating a period of high vegetation cover, followed by a slight decrease towards the end of the month.



SOIL FRACTION

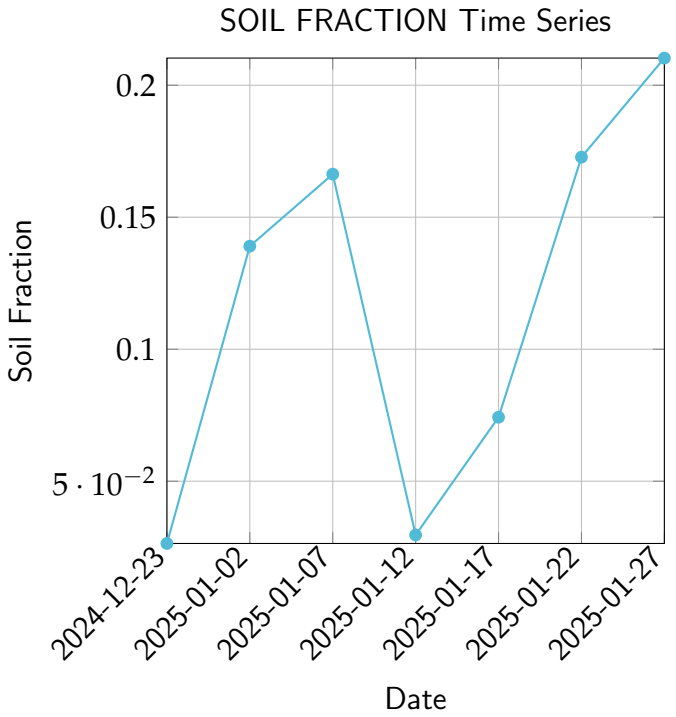
Volumetric water content in the soil.

0.11 MEAN VALUE

The average soil fraction of 0.11 indicates low water content in the soil of Name_ABALOU Abla - Autre parcelle during the reporting period. This suggests relatively dry soil conditions.

TIME SERIES INSIGHT

Soil fraction values fluctuated throughout the period, ranging from approximately 0.03 to 0.21. The soil fraction was relatively low at the beginning of the period, showed a general increase towards the end of the period, indicating a slow gain in the water content. Further monitoring would be needed.



PRECIPITATION

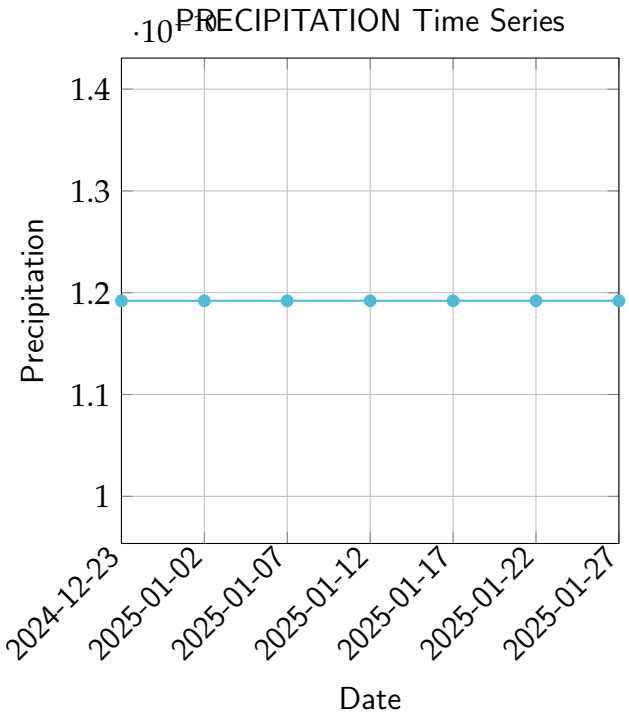
Amount of rainfall in millimeters.

0.00 MEAN VALUE

An average precipitation of 0 mm indicates virtually no rainfall in Name_ABALOU Abla - Autre parcelle during the reporting period, which may cause dry soil condition.

TIME SERIES INSIGHT

Precipitation remained negligible (close to zero) throughout the entire reporting period, indicating very dry conditions. Irrigation strategies might be necessary to sustain vegetation.



TEMPERATURE

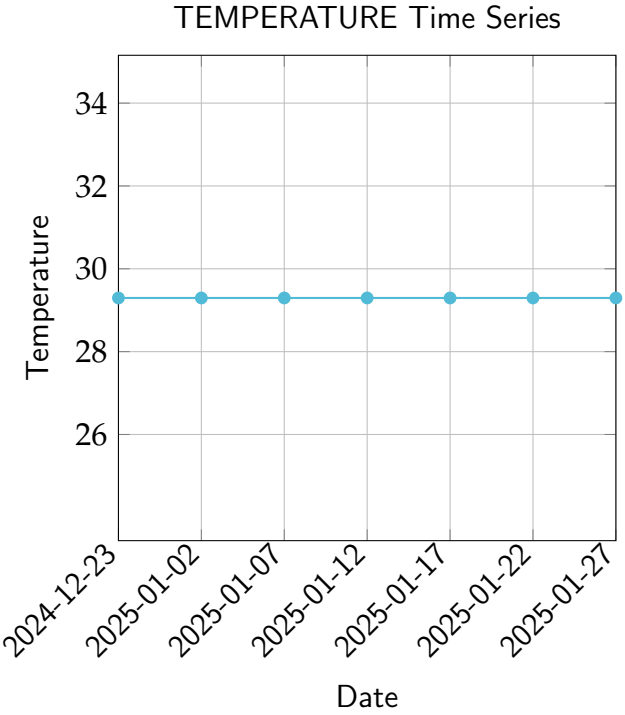
Average surface temperature in degrees Celsius.

29.30 MEAN VALUE

An average temperature of 29.30°C suggests warm conditions in Name_ABALOU Abla - Autre parcelle during the reporting period, influencing vegetation growth and water demand.

TIME SERIES INSIGHT

Temperature remained consistently around 29.30°C throughout the reporting period. This stable and warm temperature may be suitable for vegetation if water requirements are met.



CURVE NUMBER

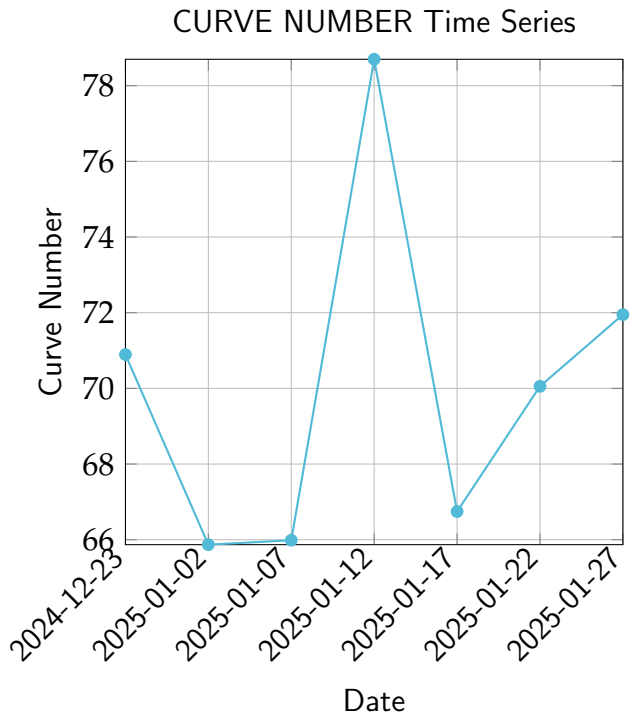
Runoff potential.

70.03 MEAN VALUE

An average curve number of 70.03 indicates a moderate runoff potential in Name_ABALOU Abla - Autre parcelle. This suggests that a moderate amount of rainfall would result in surface runoff.

TIME SERIES INSIGHT

Curve number values fluctuated throughout the period, ranging from approximately 65.87 to 78.70. The variation suggests differences in runoff potential depending on short-term changes.



ACTION PLANS

Based on the data, the following actions are suggested:

- **Implement efficient irrigation practices to address the lack of rainfall and ensure adequate water supply for vegetation.**
- **Monitor soil moisture levels regularly and adjust irrigation strategies as needed.**
- **Consider implementing soil conservation measures to minimize runoff potential and improve water infiltration.**
- **Select drought-resistant vegetation species for future plantings to reduce water demand.**
- **Conduct further investigation into the factors causing NDVI fluctuation and the runoff potential change.**