

You asked: How did October to December 2022 in Marsabit, Kenya compare with a normal year?

October to December 2022: rain in Marsabit was below normal, and vegetation was much less green than usual.

Marsabit had about 86 mm of rain, 54% of the usual amount for these months. 7 of the 30 years from 1991–2020 were drier.

Crops and plants on vegetated land were much less green than usual: the satellite greenness score (NDVI) was 0.17, against a usual 0.28. None of the 20 years from 2001–2020 were less green.

Rain

86 mm

54% of usual (161 mm)

Against 1991–2020

7 of 30 years drier

below normal

Greenness (NDVI)

0.17

usual 0.28 (-0.11)

Against 2001–2020

0 of 20 years less green

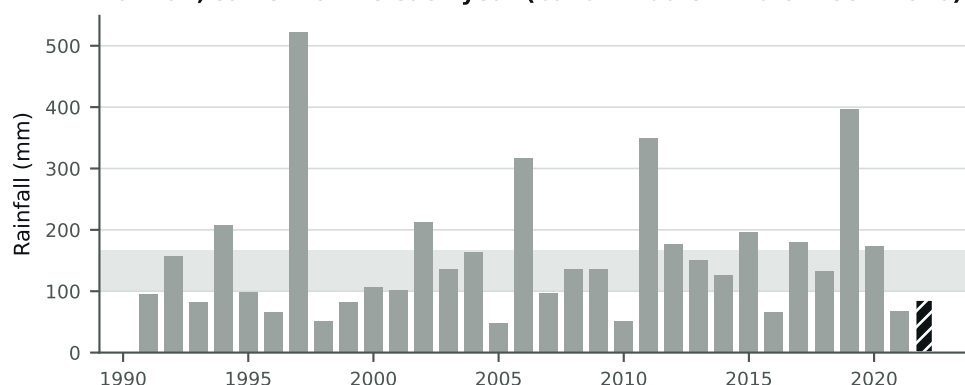
much less green than usual, on vegetated land

District area

75,938 km²

Marsabit, Kenya

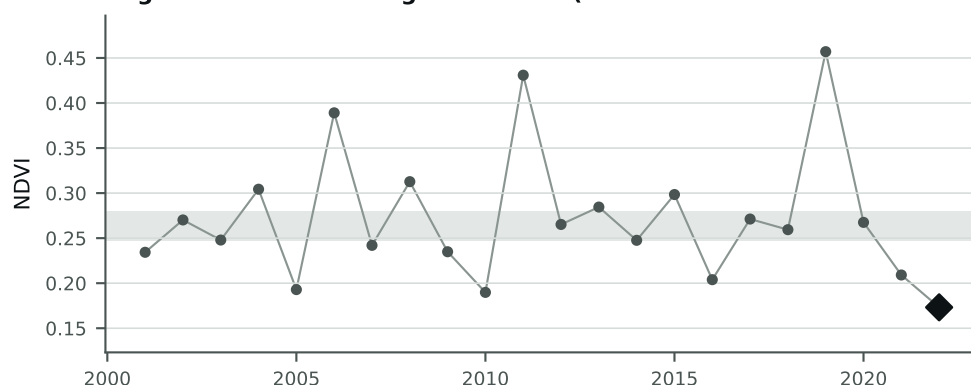
Rainfall, same months each year (band: middle third of 1991–2020)



Marsabit



Vegetation index on vegetated land (band: middle third of 2001–2020)



Good guide. Satellite estimate — check it against what you see on the ground.

- Rain figures come from CHIRPS, which combines satellite readings with rain gauges. The comparison with past years is more dependable than the exact total.
- Crops take a few weeks to respond to rain, so early in a season rain and greenness can disagree.
- Greenness comes from MODIS images at about 927 m (5 of 5 images were clear enough to use).
- Little farmland is mapped here (less than 1% of the district), so we used all vegetated land.

Data and credits

CHIRPS v3 rainfall. CC BY 4.0. UCSB Climate Hazards Center CHIRPS version 3.0, processed by dynamical.org. Funk, C. et al. (2026), Sci Data 13, 718. <https://doi.org/10.15780/G2JQ0P>. CC BY 4.0.

MODIS MOD13Q1 v061 vegetation index. NASA open data, no restrictions on use. MODIS MOD13Q1 v061: Didan, K. (2021). NASA EOSDIS LP DAAC. <https://doi.org/10.5067/MODIS/MOD13Q1.061>. Accessed via Microsoft Planetary Computer. Use does not imply endorsement by NASA.

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geoBoundaries Kenya ADM1 (2020). Public Domain. Boundary source: RCMRD GeoPortal, Africa GeoPortal. Runfola, D. et al. (2020) geoBoundaries: A global database of political administrative boundaries. PLoS ONE 15(4): e0231866.