Monthly Burned Area Report

August 2013
**Introduction**

This burned area report is issued by the Directorate of Forestry’s National Remote Sensing Centre on a monthly basis from June to December, and complements the active fire bulletins that are produced and distributed daily. Each report presents the burned area situation from the start of the fire season up to the preceding month. The first report is issued in June and shows burned areas and statistics for the period from January to May. The last report appears in December and presents the situation for the entire season up to the end of November.

Burned areas in Namibia have been mapped from NOAA AVHRR and MODIS satellite data since 1994. This 18 year data archive was used to calculate long term mean (LTM) values for each of the 13 political regions in Namibia. These LTM values represent the “normal” or expected situation in the same way that we often hear or read in the papers: “Normally, ‘so many’ hectares burn every year”. The burned area reports compare the current situation to these “normal” values, and also present the current situation in map form. This allows the reader to see at a glance, whether the current situation in a particular region is better, worse or the same as “normal”.

**Map layout**

The report has one map sheet per political region\(^1\).

All map sheets contain the following elements:

1. Title and political region
2. Burned area figures
3. Acknowledgement
4. Burned area map
5. Simple column chart
6. Line chart
7. Map legend
8. Combination column chart
9. Reporting period

Please note that the legend and charts may be in different positions on the map sheets, in order to fit around the shape of the region.

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\(^{1}\) Only those regions with a monthly LTM burned area greater than 100 km\(^2\) are included in the report
This chart compares the size of the area burned per month.

Values are based on the long term average for that month.

For example, the indicated value of +2000 km\(^2\) for July means that on average, over the last 18 years, about 2000 km\(^2\) burns in this region during July.

Based on these figures, if about 500 km\(^2\) burns in this region during June, we could see this as average, “normal” or “as expected”.

This chart compares the size of the area burned per year.

The burned area is expressed as a percentage of the region’s total area.

Additionally, a trend line to shows whether the burned area is increasing or decreasing over the long term.

For example, the high peak shows that more than 60% of the region burned in 1999 while the deep trough shows that only about 5% of the region burned in 1995.

The upward sloping trend line shows that the burned area is increasing.

This chart compares the current situation to the long term mean.

The green bar shows the % of the region that would “normally” be burned by now.

The orange bar shows the % of the region that has burned so far this year.

The red bar shows the % of the region that has burned this month, compared to the long term mean.

In other words, we expect 15.3% of this particular region to be burned by this time of the year. However, the data shows that 17.2% has actually burned already. Furthermore, the area burned in this month is 31% more than normal.
**BURNED AREA – ZAMBEZI REGION**

1 JANUARY TO 31 AUGUST 2013

Burned area to date: 2122 km²
Burned area this month: 1258 km²

Mapped by the NRSC from satellite images received on the AMESD system.
Queries and comments to Dr Johan le Roux jllrx@gmail.com

**Legend**
- **Towns**
- **Roads**
  - Trunk road
  - Main road
  - Other road
  - State Forests
  - Community Forests
  - Protected Areas
  - Burned area

**Current season and month vs long term mean**

<table>
<thead>
<tr>
<th>Percentage of region burned</th>
<th>LTM</th>
<th>This year</th>
<th>This month</th>
</tr>
</thead>
<tbody>
<tr>
<td>0%</td>
<td>23.9%</td>
<td>14.7%</td>
<td>80.3%</td>
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</tbody>
</table>

**Chart Title**
Long term trend (blue) with annual totals (red)

**Burned area to date:** 2122 km²
**Burned area this month:** 1258 km²

**Long term mean (LTM)**

- Jan
- Feb
- Mar
- Apr
- May
- Jun
- Jul
- Aug
- Sep
- Oct
- Nov
- Dec

**Long term trend (blue) with annual totals (red)**

**Current season and month vs LTM**

- LTM
- This year
- This month

**Burned area to date:** 2122 km²
**Burned area this month:** 1258 km²

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Burned area to date: 4725 km$^2$
Burned area this month: 4369 km$^2$

Mapped by the NRSC from satellite images received on the AMESD system.
Queries and comments to Dr Johan le Roux, jllrxx@gmail.com

Burned area to date: 4725 km$^2$
Burned area this month: 4369 km$^2$

Mapped by the NRSC from satellite images received on the AMESD system.
Queries and comments to Dr Johan le Roux, jllrxx@gmail.com
Burned area to date: 1850 km²
Burned area this month: 1724 km²
Mapped by the NRSC from satellite images received on the AMESD system.
Queries and comments to Dr Johan le Roux jllrrx@gmail.com
Burned area to date: 13 km²
Burned area this month: 0 km²

Mapped by the NRSC from satellite images received on the AMESD system.
Queries and comments to Dr Johan le Roux jllrrx@gmail.com
Burned area to date: 188 km²
Burned area this month: 47 km²

Mapped by the NRSC from satellite images received on the AMESD system.
Queries and comments to Dr Johan le Roux  jllnx@gmail.com

1.3% 0.2% 5.2%
0%
20%
40%
60%
80%
100%
0.00%
0.20%
0.40%
0.60%
0.80%
1.00%
1.20%
1.40%

Current season and month vs long term mean

Long term mean (LTM)

Long term trend (blue) with annual totals (red)
Burned area to date: \(8.24 \text{ km}^2\)
Burned area this month: \(8 \text{ km}^2\)

queries and comments to Dr Johan le Roux jllrx@gmail.com
Burned area to date: 54.18 km²
Burned area this month: 0.18 km²

Burned area to date: 54.18 km²
Burned area this month: 0.18 km²

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Regions covered by this report