



## SEISMOLOGY BULLETIN

MARCH 2024

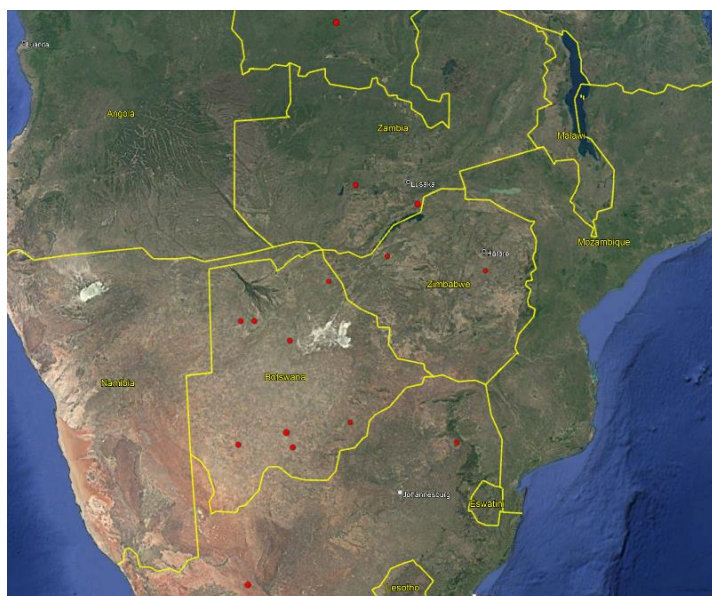
### DESCRIPTION OF THE SEISMIC EVENTS

During the month of March 2024, a total of 15 events were recorded and analyzed, with 2 local and 13 regional events. Most of the regional events were from Botswana. The biggest local earthquakes were of magnitude 2.9 and the epicenter was in Binga. Binga is part of the Zambezi Basin which is influenced by the Kariba Dam (reservoir induced seismicity) and the Deka fault (plate tectonics). This area extends from the northern tip of the country, in a south-westerly direction through Lake Kariba, Devil's Gorge, the Deka Fault, to the Westerly edge of the country. This region is the most active seismic region in Zimbabwe. Most of the earthquakes in South Africa and Botswana are mining induced events.

### LOCAL EVENTS

Table 1: Epicenters of Local Events

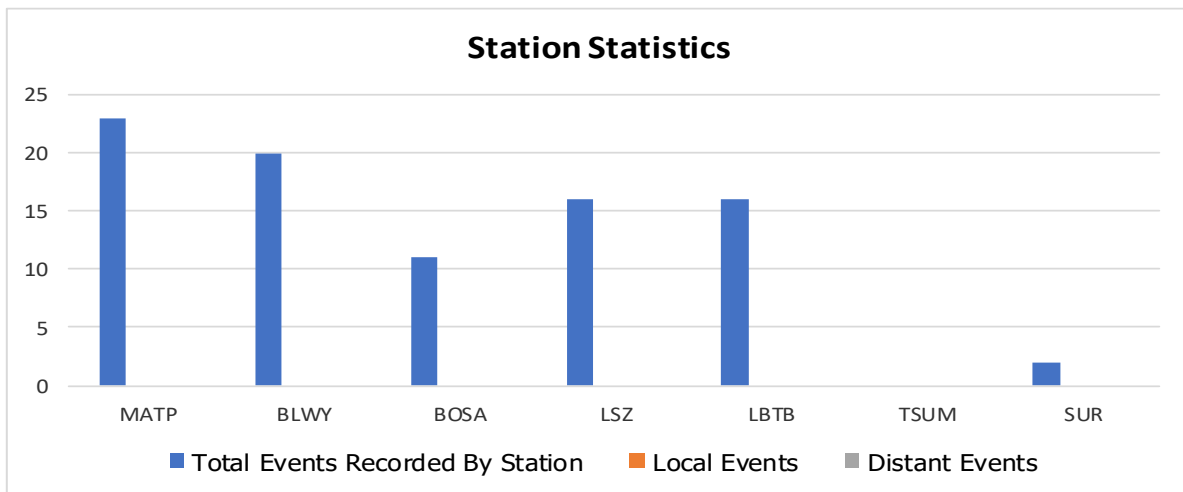
No. Of events	Areas felt in Zimbabwe	Date	Time (UTC)	Location of events	X	Y	Magnitude
1.	Non	16/03/24	1047hrs	Binga	-18.040	27.630	2.9
2.	Non	28/03/24	1613hrs	Wedza	-18.462	31.412	2.6



## CURRENT NETWORK STATUS

MATP is the only station currently functioning effectively. The battery for BLWY is non-operational, so it only functions when there's electricity. We no longer have KRI and CHIP stations. Our coverage and station network are very poor, this adversely impacts the accuracy of our results, particularly the locations of local events. Additionally, the limited number of stations hinders our ability to analyse a number of events.

## STATISTICS OF STATIONS USED IN DATA ANALYSIS



Number of events selected with given stations	15
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Number of events with no phases	0
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Number of events with waveforms	15
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Number of events with only waveforms	0
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Total number of waveform files	15
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Total number of local events	2
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Total number of regional events	13
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Total number of distant events	0
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Total number of events	15
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