USGS
science for a changing world

Earthquake Shaking Green Alert

GSN ANSS USAID FROM THE AMERICAN PEOPLE

M 5.9, LAKE VICTORIA REGION, TANZANIA

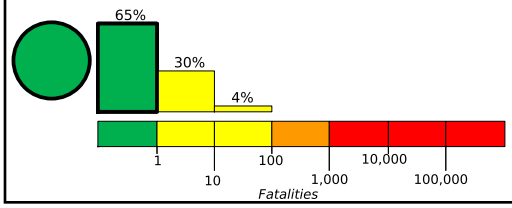
Origin Time: Sat 2016-09-10 12:27:33 UTC (15:27:33 local)
Location: 1.03°S 31.62°E Depth: 40 km

PAGER Version 8

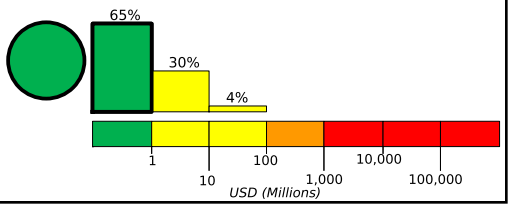
Created: 5 weeks, 6 days after earthquake

Estimated Fatalities

Green alert for shaking-related fatalities and economic losses. There is a low likelihood of casualties and damage.



Estimated Economic Losses



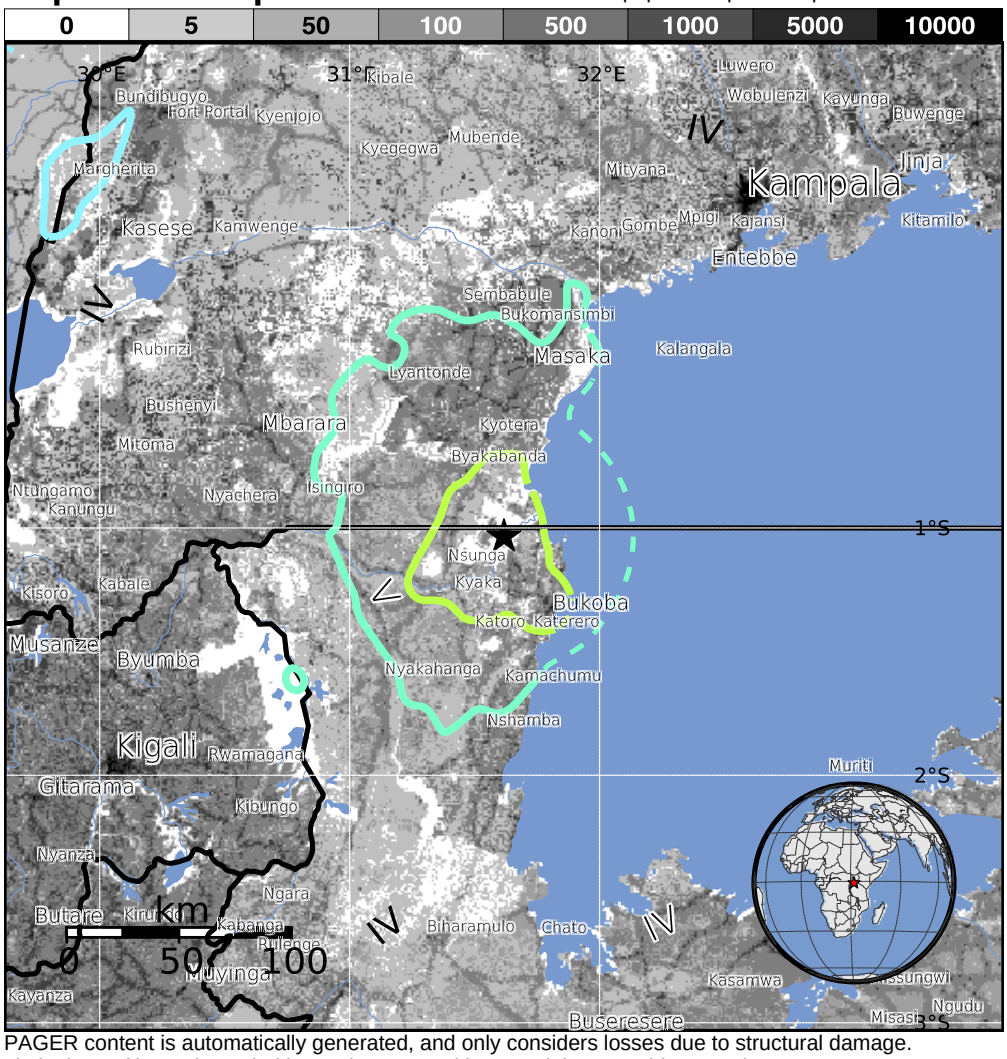
Estimated Population Exposed to Earthquake Shaking

ESTIMATED POPULATION EXPOSURE (k = x1000)		- -*	377k*	36,645k*	2,352k	505k	3k	0	0	0
ESTIMATED MODIFIED MERCALLI INTENSITY		I	II-III	IV	V	VI	VII	VIII	IX	X+
PERCEIVED SHAKING		Not felt	Weak	Light	Moderate	Strong	Very Strong	Severe	Violent	Extreme
POTENTIAL DAMAGE	Resistant Structures	none	none	none	V. Light	Light	Moderate	Moderate/Heavy	Heavy	V. Heavy
	Vulnerable Structures	none	none	none	Light	Moderate	Moderate/Heavy	Heavy	V. Heavy	V. Heavy

*Estimated exposure only includes population within the map area.

Population Exposure

population per ~1 sq. km from Landscan



Structures:
Overall, the population in this region resides in structures that are vulnerable to earthquake shaking, though some resistant structures exist.

Historical Earthquakes (with MMI levels):

Date (UTC)	Dist. (km)	Mag.	Max MMI(#)	Shaking Deaths
2002-01-21	297	5.1	VII(3k)	0
2002-05-18	320	5.5	VIII(867)	2
2004-02-24	350	4.7	VI(260k)	3

Recent earthquakes in this area have caused secondary hazards such as landslides that might have contributed to losses.

Selected City Exposure

from GeoNames.org

MMI	City	Population
VII	Bukoba	71k
VI	Kyaka	14k
VI	Katerero	18k
VI	Byakabanda	8k
V	Nsunga	20k
V	Kyotera	8k
IV	Mbarara	98k
IV	Mwanza	437k
IV	Kampala	1,353k
IV	Jinja	93k
IV	Kigali	745k

bold cities appear on map (k = x1000)

PAGER content is automatically generated, and only considers losses due to structural damage. Limitations of input data, shaking estimates, and loss models may add uncertainty.

http://earthquake.usgs.gov/earthquakes/eventpage/us10006nkx

Event ID: us10006nkx