The Augrabies National Park in South Africa has recently been the subject of increased media attention due to unusual levels of seismicity, as well as extensive flooding. As part of its national monitoring programme, the Council for Geoscience (CGS) constantly monitors the seismic activity in the Augrabies area, where historical records of seismicity date back to an event being felt near Kakamas (40km from Augrabies) in 1918. The first recorded earthquake of the present seismic swarm occurred during February 2010, but it was only when the population felt an earthquake measuring 3.7 on the local magnitude scale on 26 July 2010, that people became aware of this seismic activity. Since then, at least five earthquakes exceeding magnitude 4 have occurred near Augrabies, the largest to date being magnitudes 4.2 and 4.4 events that occurred on 12 and 25 January, respectively.

In response to this extra-ordinary seismic activity in the region, a seismological station was installed at Keimoes, 50km from Augrabies, and the earthquake epicentres were assessed in relation to the geology of the area. The current view is that the area is experiencing an earthquake swarm and the epicentres tend to lie parallel to the Orange River, on both sides of the river. The structural maps indicate a number of faults striking parallel to this trend all along the river. Thus, a possible explanation is that the Orange River follows a weak zone in the area, caused by a relatively wide zone of faults, some of which are being activated.