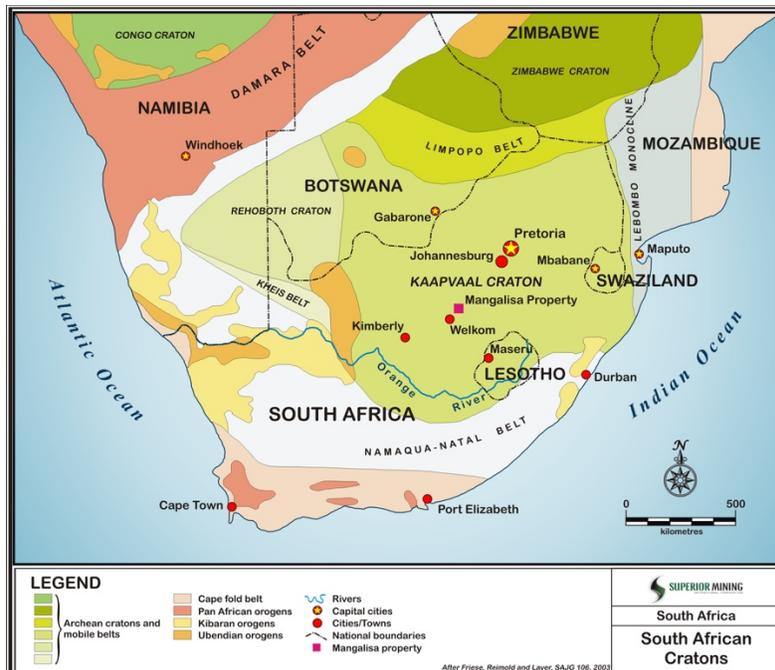


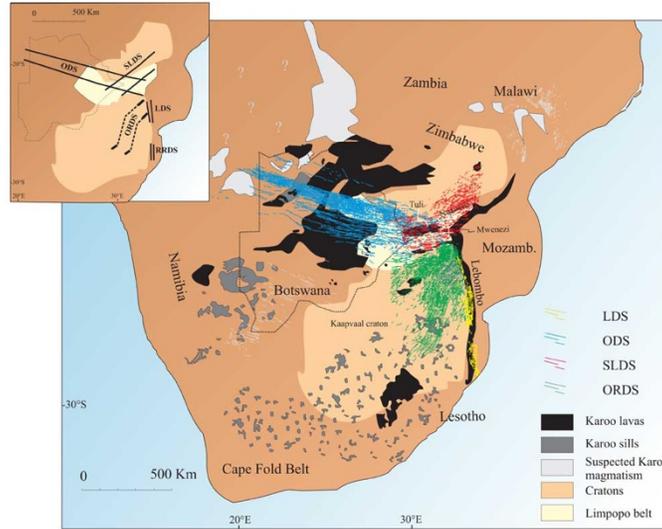
Geology of Africa II: Southern Africa

with Kirt Kempter

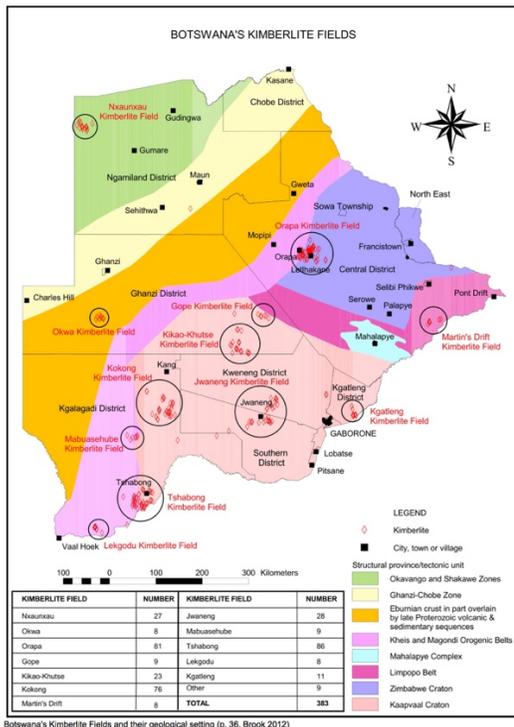
For this presentation we will be highlighting the ancient geologic history of southern Africa, including continental crust that dates to over 3 billion years ago. Collision between 2 of these ancient continental crust blocks (the Congo and the Kapvaal cratons), produced an elongated mountain range along the Damara fold and thrust belt.



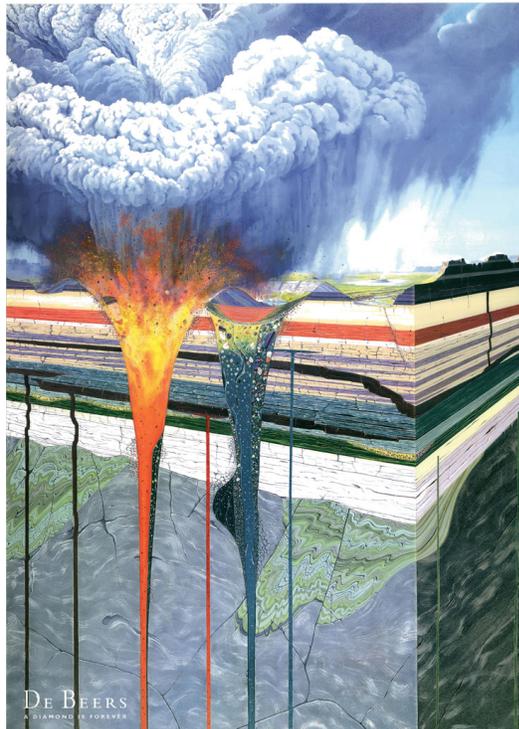
We will also be exploring the much younger volcanic history of southern Africa, driven by the plate tectonic break up of Pangea. Voluminous eruptions occurred along rift boundaries with India, Antarctica, and South America. One large igneous province in western Namibia, the Etendeka, has counterpart lava fields in South America. The widespread Karoo lavas and sills were emplaced ~180 million years ago, as India and South Africa separated.



Another, more unusual type of volcanic eruption across southern Africa produced kimberlite volcanoes, many of which transported diamonds to the surface.



Botswana's Kimberlite Fields and their geological setting (p. 36, Brook 2012)



Another topic for this presentation is the geologic story of the Zambezi River and Victoria Falls. The Zambezi is the 4th largest river in Africa, and a driving force for many of the primary game parks in Botswana, Zimbabwe, and Zambia.

