The Southern African Magnetotelluric Experiment (SAMTEX): Adding Electrical Measurements to the Kaapvaal Puzzle

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The largest regional magnetotelluric (MT) survey on land has been undertaken in Southern Africa in an effort to map the electrical structure of the Kaapvaal Craton and its bounding terrains. Electrical measurements can reveal the thermal structure, mineral composition and the interconnectivity of conductive phases within the lithosphere. This data will be integrated with a wealth of other geophysical and geological data that is available due to the commercial prosperity of this region, to further our knowledge of the internal structure and evolution of this region. We review some of the recent significant studies and introduce results from the ongoing Southern African Magnetotelluric Experiment (SAMTEX).