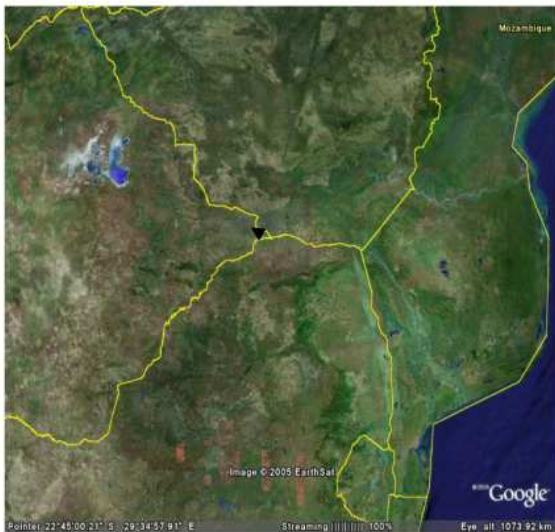


NITANI'S GEOLOGICAL COMPRESSION ZONE

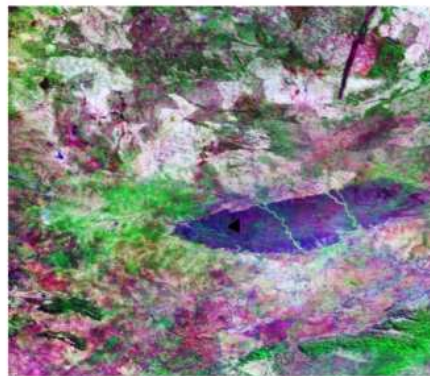
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Limpopo Mobile Belt in the Contact Zone Between the Zimbabwe and Kaapvaal Cratons



Eastern section of southern Africa showing Indian Ocean, Mozambique, Zimbabwe, Botswana & South Africa. Magadigadi pans stand out as the blue patch NE of Nitani.



Nitani

False Colour Landsat Image showing compression zone between two cratons. Shashe River NE of Nitani. Scene approximately 200 km x 200 km.

Many guests have requested further information on the geological talk that I do, so I thought it was time I put pen to paper and added some photos.

As you can see from the above two photos, one taken from 1000 miles showing the Magadigadi Pans, Nitani and the Mozambique coastline and the other taken from 250 miles above Nitani, showing a very distinctive and rectangular, compression zone.

It developed during the "Archean" period, circa, 2500 million years ago when the "Limpopo Belt", was formed.

There was a major rift between what is now South Africa, Botswana & Zimbabwe, and this is where the Limpopo River now resides.

The earth's surface literally cracked, forming mountains as it pushed upwards and depressing valleys & rifts where it moved downwards.

An enormous amount of energy is displaced as a result of this process and where heat is displaced within mother earth; all sorts of interesting things begin to take shape within the rock structures.

Nitani is situated north of the Limpopo River, which forms the southern rift of the compression zone in the photo.

Some 700 million years later we experienced another period of considerable instability at Nitani, with the onset of the "Crystalline Period".

This resulted in hundreds of mini volcanic eruptions occurring all over Nitani, with the lava being pushed approximately, 5000km from the earth's core to the surface.

What happens in these volcanic lava pipes is very interesting as this is where all our gemstones are born.

Bubbles move from the core, in varied sizes, all the way up to the surface where they are blown out into the air or just spill out onto the ground.

Sometimes they are trapped in the black lava rock but mostly they are found on the surface of the ground in the form of 'GEODES'. Opening a geode is a little like a Pandora's box as all nature of gems are found inside them as a result of the varied heat within the volcanic pipe. Appreciate that there is a vast variation in the temperature of the lava over a 5000km area.

At Nitani we find plenty of Carnelian (orange colour), moss agate (green & white), Amethyst (Purple colour), Quartz crystal (clear and yellow color) and the very rare Botswana Pink agate that occurs nowhere else on earth.

Homo Erectus, the hairy guy that walked upright, was able to make his Stone Age tools from the quartz. Since these quartz are almost as hard as diamonds, they are almost indestructible. There are many samples of these tools at Nitani.