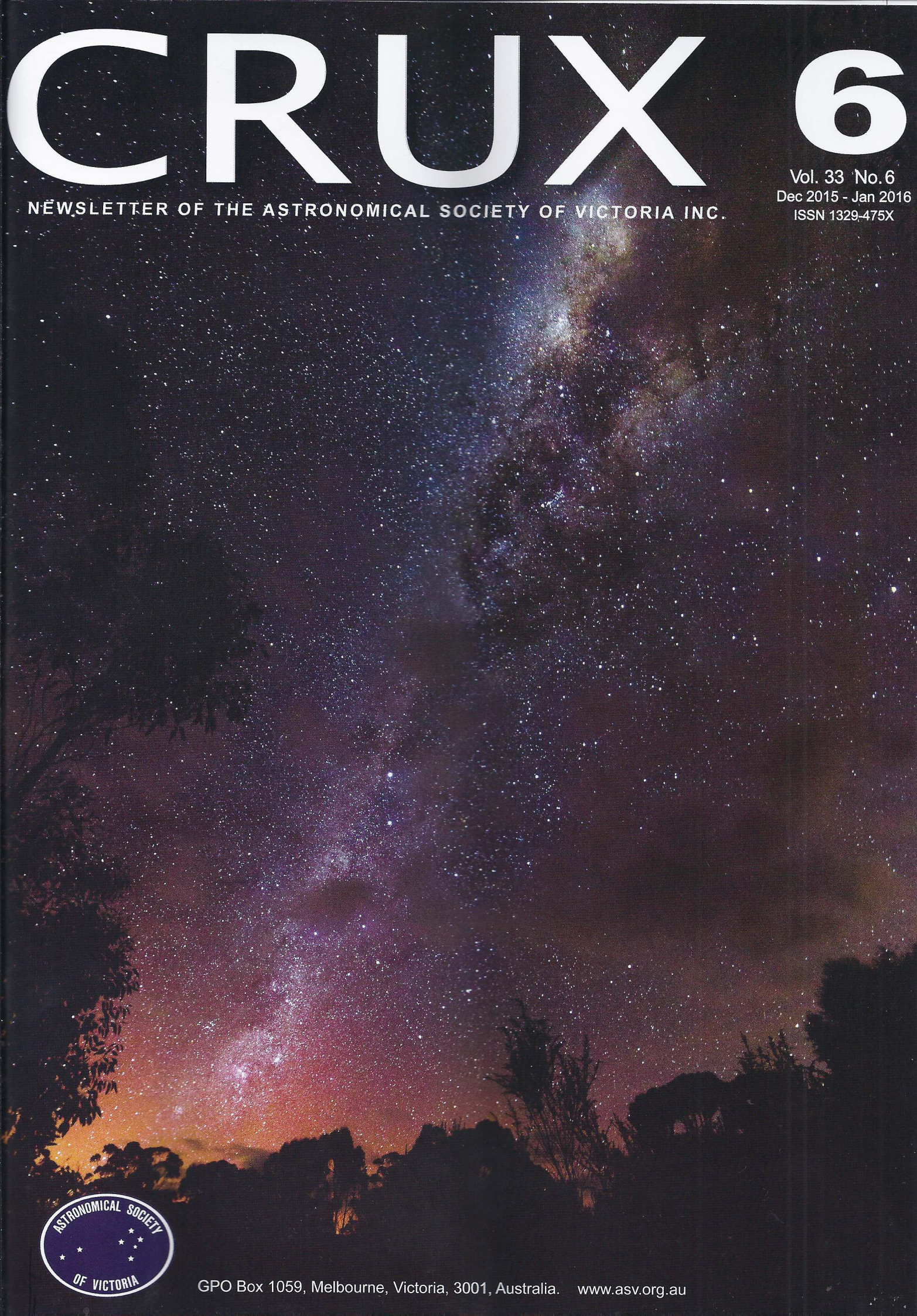


CRUX 6

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Cover Photo: *Simone Lau had her Canon EOS 6D at the LMDSS on 15 August, shooting the magnificent centre of the Milky Way. Checking back later on her images, she found revealed auroral activity that had been invisible on the night, glowing like the promise of a new dawn. This was a 30 second exposure at ISO 1600 with a 14mm lens at T3.1 (about f/2.8), taken at 10.47pm.*

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Phone 0409 339 744 (M).

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MEMBERSHIP - Anyone interested in becoming a member can do so in one of the following ways:

1. Contact the ASV Public Relations Officer, Linda Mockridge, on (03) 9596 5884 (AH), and ask for the ASV's membership brochure to be mailed to you.
2. Come along to a Monthly Meeting in Melbourne, and introduce yourself to an ASV official. Visitors are always most welcome at these meetings.
3. Consult the ASV's website.

FURTHER INFORMATION

With around 960 members, people are the key to the ASV. So, come along and get to know us, particularly at Monthly Meetings and Club Nights. Look out for the Section Directors who are keen to have you participate in their group activities. You'll find all their contact details in the Yearbook. Joining a Section of your choice, or attending one of the many education groups, is a great way to meet others and share your interests. The Events Calendar in Crux has upcoming meeting times.

INFORMATION SERVICES - The ASV has a number of services that supply information to members:

ASV WebSite

Located at <http://www.asv.org.au>

RADIO ASV - VK3EKH

Amateur Radio station VK3EKH broadcasts every Friday night at 10:00 PM in the 80 meter radio band on 3.541 MHz Lower Side Band and on VK3RTV2 Digital ATV Repeater on 446.5 MHz DVB-T.

More information can be found at <http://www.qrz.com/db/vk3ekh>

Yearbook

Comprehensive almanac of Victoria's astronomical phenomena - free to members.

This article is aimed at drawing members' attention towards the existence of archaeoastronomical sites in Western Victoria – recently discovered, lost, as well as to-be discovered, and possibly built by the Gunditj-mara as well as the Wathaurong peoples, or their relations, in an unknown time.

The very first European colony in Victoria was called Sullivan Bay, adjacent to Sorrento. It enjoyed only a one-year existence with a poor harvest. In 1803, convict William Buckley, on being informed of his impending relocation to Van Diemen's Land, bolted from the doomed colony, vanishing into the bush. Initially hiding from the aborigines (unsuccessfully), he soon befriended them. For 30 years he lived with them near the lakes of South Western Victoria.

He was finally informed of the arrival of white men there. In 1835 he walked into the camp of the Port Phillip Association at the former Yarra falls, several kilometres up the Yarra from the coast and somewhere near Market Street in today's CBD. He claimed to be a shipwrecked sailor. On realising he was no longer a hunted man, he revealed his identity and a pardon was arranged. For years he worked as an intermediary between the aboriginal people and the migrants, eventually settling in Tasmania.

Some may have wondered why William Buckley chose to live in Western Victoria. It turns out there had been many artificial and natural lakes, canals and ponds dedicated to eel farming. Settlers began to drain these in the late 19th century. 'We weren't nomads. We didn't wander all over the bloody place and go walkabout. We had an existence here,' remarked an elder, Ken Saunders, quoted in various c-2003 newspaper articles on the subject. The aborigines claim they lived in villages and had an eel export industry. Archaeologist Dr Heather Builth marvelled at the stories, eventually locating the remains of hundreds of houses as well as 75 square kilometres of artificial channels and ponds. Though the word 'civilisation' is reserved for obviously elaborate ancient sites, there is an impending awareness that something resembling a kind of polity, ruled by powerful chiefs, once existed here. Apparently the society crumbled when the chiefs were eliminated.

It is also apparent that they paid attention to the stars.

A 2012 article by prominent archaeoastronomer Ray Norris et al., analyses a stone circle, Wurdi Youang, located in a somewhat secret location between Melbourne and Geelong. (Tourists might destroy it before protections are instituted.) There are about 50 basalts, all between 0.5 and 1 metre in size. The 'circle' is skewed east-west in alignment, about fifty metres in length. Straighter sections of the circle are associated with astronomical phenomena. These more

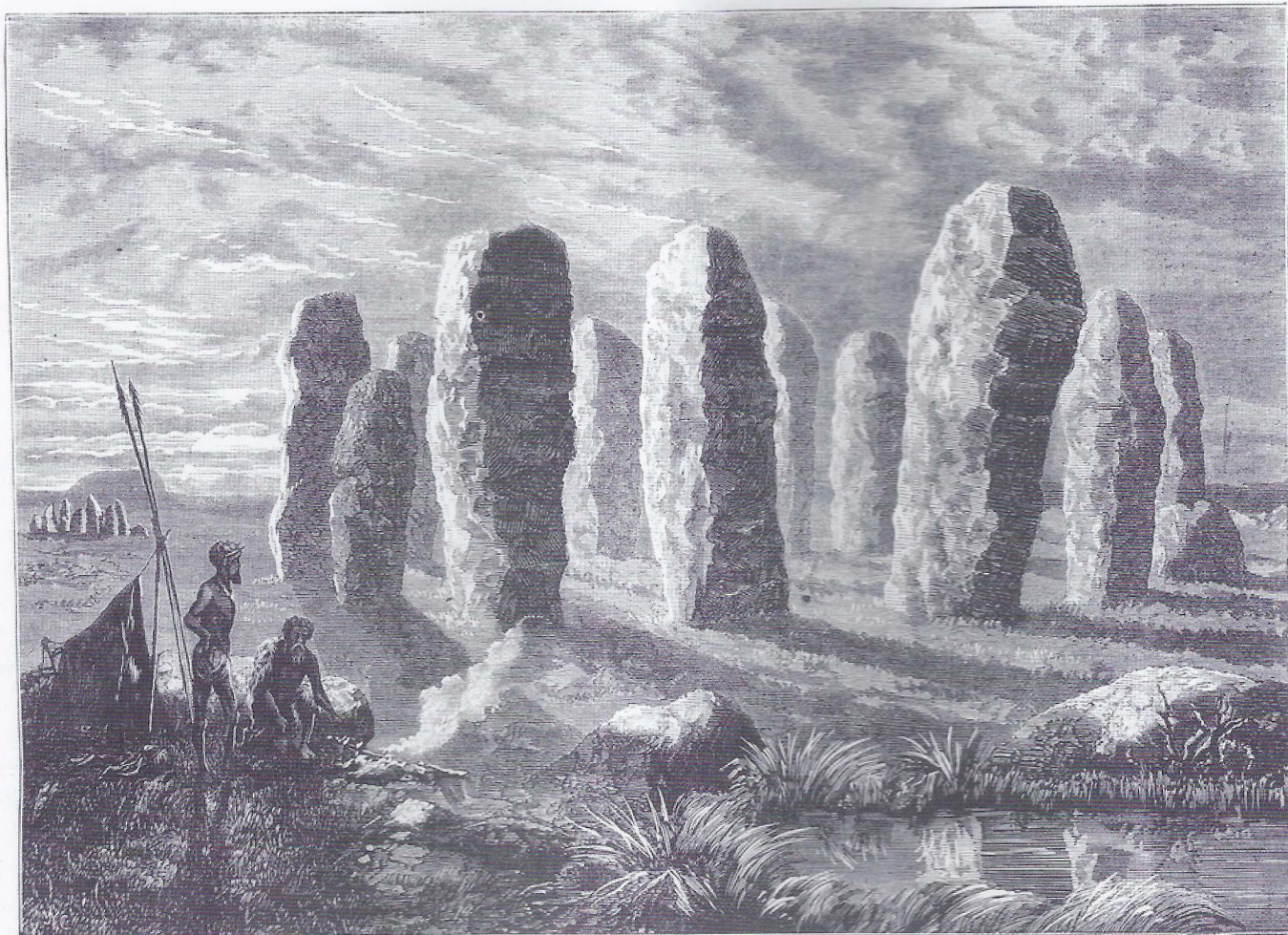
linear arrangements point towards the summer and winter solstices, with the equinox in between. Such alignments would seem to be more important to the farmer than to the hunter gatherer, who would perhaps have had less time for the practice of astronomy.

A while ago I noticed a website which contained an image of an engraving of 'stonehenges,' supposedly found on the plains near Mount Elephant, Western Victoria, which has the town of Derrinallum next to it. As we know, today there is no trace of such a thing. This drawing was to be found in a 1 May 1877 newspaper article from the New Zealand Standard, and possibly reproduced elsewhere, originating through an Australian press office and published by Ebenezer and David Syme. A book on Derrinallum, co-authored by my former school principal, contains the article, but no further mention of the circles. The article claims many circles near Mount Elephant, from ten to a hundred feet in diameter, and of which the local aborigines have no traditions. The word 'stonehenge' is possibly used because it relates to the fact some of the circles allegedly even contained an inner circle.

I was eager to trace these structures. I drove to Mount Elephant with some friends for a Sunday viewing of the volcano. Asking where the stone circles used to be, I was informed by the organiser, a member of Mount Elephant Community Management Inc., that they had been located on a property two kilometres to the northeast, which had actually been called 'stonehenges.' I walked up a slope to have a look at the view. 'No traces remain, but if you find them, please let us know!' Looking in the appropriate direction, I noticed two lakes, at least reflecting the presence of water as seen in the diagram. 'Well, that certainly narrows it down a bit', the organiser remarked.

There had been a quarry established on the north side of the volcano in 1910, to dig for railway ballast, with another to follow on the south side. I feel that any stray stonehenges, of which there may have been several, may unfortunately have been seen as too tempting a target. Aborigines themselves then, may have been the first to quarry the mountain.

I found a better version of the 1877 artwork on the State Library of Victoria website. Entitled Stone Circles Near Mount Elephant, it was drawn by a newspaper artist, James Waltham Curtis (1839-1901) and released about 16 April 1877 for the press. The artist seems to have been a witness to some of what he drew, since he drew other far more familiar wonders, such as an engraving of Hanging Rock and also the You Yangs. Other events he would not have witnessed though, such as icebergs in collision with the deck of a ship called the Grandee.



STONE CIRCLES NEAR MOUNT ELEPHANT.

Figure 1: Stone Circles Near Mount Elephant. James Waltham Curtis

In looking at the engraving, it would seem that the stones appear to be several times taller than the figures in the foreground. Their location in front of the image suggests this is a site of some significance for them. In addition the Sun is shown as setting or rising next to a mountain in the background. It occurred to me this would possibly be Mount Elephant, as the contour matches a Google Earth view from the lakes' location. The setting Sun is possibly shown drawn rather strongly to the southeast, but then again it is all artistic licence and it is hard enough trying to imagine what is supposed to be happening, let alone whether or not it was real.

Had they once existed, I would imagine that the circles would possibly have been on the shores of either Deep Lake or Lake Logan. Perhaps geophysics work might resolve the riddle. Additionally, if one is going to place a stone circle on the plains surrounding a mountain as spectacular as Mount Elephant, why not use its unique contour in an archaeoastronomical alignment? The gap between the head and body of the 'elephant' may even have been employed for this purpose. In Curtis' drawing, the aborigines are presented as standing next to the circle with a possible setting or rising Sun in the background, which is next to the mountain. Why show that in relation to the circle? One might ask: 'Are they observing a ritual which was sacred to their ancestors?' Apparently there are some of what are

known as 'Earth Rings' nearby as well, though I only investigated them in Sunbury.

Sunbury

The Sunbury Earth Rings were discovered in the 1970s. Searching Google Scholar, there appears to be only one prominent archaeological article on the Sunbury Earth Rings. This is Earth Rings at Sunbury, by D. Frankel, 1982. It contains overhead shots of the three circles at Jackson Creek, as well as surveys, contours and excavation details. These circles are not like British henges, which give the appearance of a sort of moat. Here the entire area of the circle is excavated, with the sides once possibly in excess of forty centimetres deep.

The opinion of the researcher is that these are for ceremonies, possibly initiation. No archaeoastronomy is mentioned, but this is an old paper, and aboriginal archaeoastronomy is a new field. The Northern-Australia version of Earth Rings are called 'Bora Rings'—possibly having been for initiations—and these often have a path to a smaller circle found in the southwest. With the idea of the importance of compass direction in mind, I found the Sunbury circles on Google Earth and drove over for a little peek.

I went for the most spectacular site, with three circles in



Figure 2: Looking to the west from the Earth Circle is a larger hill, the highest in the vicinity

close proximity near Jackson Creek. However, instead of a bucolic afternoon spent pondering antiquities next to the creek, I was met with barbed wire and multiple 'no trespassing' signs. Perhaps there is another entrance elsewhere.

I was lucky at one site. This is the Reservoir Road Earth Ring on Fullwood Drive. There is a fence around the site. Beer bottles litter the area, and there are holes in the fence through which people come and go, but one can see the circle. A sign informs people that this is Aboriginal land, and exhorts them to please leave the site as they find it. I got out my compass and found that a possible very-slightly longer axis, which I noticed from the ground, is (magnetically) north-south oriented. The circle was also seemingly widened at one stage, along the E-W, to make it more circular, but this is conjecture. At least that is the impression I received, but my observations of the site are not dependent on this and the grass is too long to see anything definitively, so no conclusion.

I find several indications the circle was used for astronomy. I did a 'double take' walking back to the car, and realised that I was on top of a huge hill. Not only is the circle on the south side of the hilltop, but as can be seen in the diagram of the satellite view, (not to scale due to possible tilt) the south of the circle protrudes somewhat. In the photo of a hill, we see the view looking to the west of the circle. I am tempted to say the slopes of the hill to the west somehow measure the time of year, marked off by the position of sunsets, but have not checked this out. Nor do I know the position of solstices in relation to this. Would someone like to investigate? The nearby hill is so large that it would indicate a setting of the Sun over it for much of the year, as it was doing on my July trip. Possibly, more work is required to find what it really going on.

As can be seen in the satellite view, where top is north, there is also a possibly significant extra notch in the circle to the due south. Does this mean anything? I do not attach too much significance to these details, merely concluding that the site is very suitable for astronomy. The Reservoir

Rd Earth Circle might even have been a dwelling—albeit a rather large one—the circle being about 20 metres in diameter. The location faces the south celestial pole, and then there's the other side of the hill, if one is interested in the northern stars.

One cannot see a north-horizon view from the site. There is a house or two in the way, emanating kitchen smells and noises. I walked down the street to the north slope of the hill. There is one empty block with a sign, 'Build your dream home here.' That block did not seem to exhibit any archaeological surface details, and soon enough its rustic yellowing native grass will be removed. I wonder if the future owners will ever dream of the original inhabitants. ☺

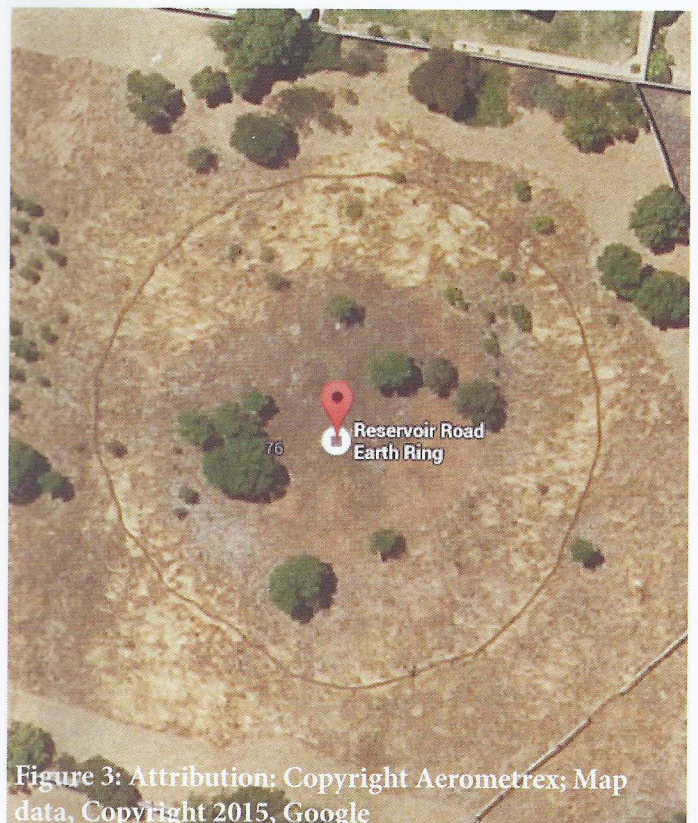


Figure 3: Attribution: Copyright Aerometrex; Map data, Copyright 2015, Google