The Winter Solstice at Little Black Mountain

We were told of a possible winter solstice site at the Little Black Mountain petroglyph site and a group from DAS went to investigate on December 22nd.

The rock in question has two eroded petroglyphs (Figure 1 and 2) that are very difficult to see because of the lack of patina on the rock surface. This is not one of the "major" rocks at the site and is likely missed by most visitors.

Figure 1 is a generally circular shaped glyph with some lines in the center.



Figure 1

Figure 2 is also circular with a "star burst" pattern or "spoke" pattern of 11 or 12 lines radiating from the center.



Figure 2

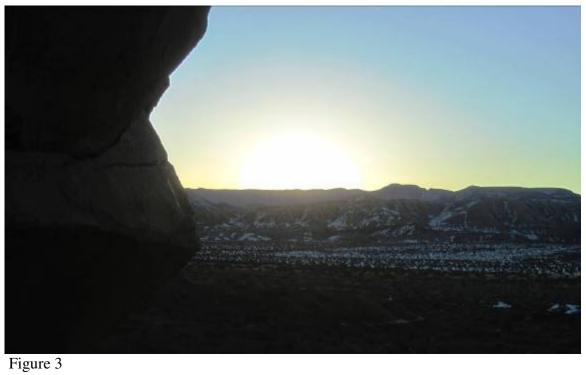


Figure 3 is the horizon just prior to sunrise. The diagonal shaped rock (at the left) will play a part in the "show".

Just after sunrise, a light beam appears on the rock surface (Figure 4). The light is focused through two rocks (Figure 5).



Figure 4

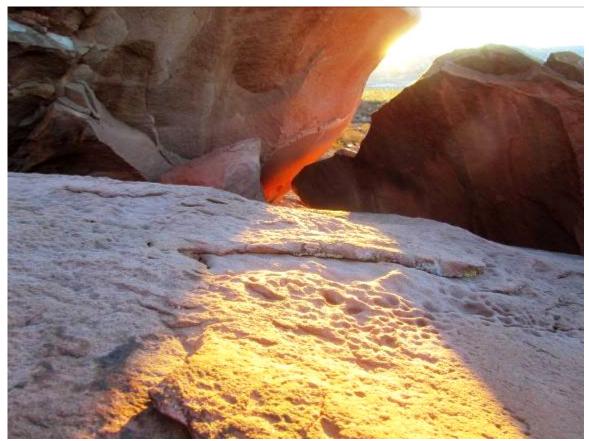


Figure 5

The light first hits the Figure 1 glyph as shown in Figure 6 and 7 and perfectly frames the glyph. The light touches the extreme left edge and the extreme right edge of the glyph in Figure 6. The light also touches the inner circle of the glyph on the right side.

Figure 7 shows a close up image where the light is touching the top edge and the bottom edge. Note that the bottom of the glyph in Figure 7 is NOT a complete circle, but rather the circle is stopped at the two points where the light touches it. Also note how the light touches the inner circle (or line).

Figure 8 shows that the light beam is relatively straight and complexly misses the glyph in Figure 2. That glyph is shown to be to the right of the light beam.



Figure 6



Figure 7



Figure 8

After about 30 minutes, the light beam begins to widen at the top and moves to the right, Figure 9, and approaches the second glyph. This is where the saw "diagonal" shaped rock shown in Figure 3 begins to come into play.

The light at first appears to move around the outer diameter of the second glyph, Figures 9 and 10.

The light then passes through the center of the glyphs and appears to follow one of the radiating lines, Figures 11 and 12.

The light continues to move and finally appears to "bend" so that it conforms to the opposite side of the glyph, Figure 13.

At this point the show was over.



Figure 9



Figure 10



Figure 11



Figure 12



Figure 13

As we were viewing other glyphs, we observed the light striking the very top portion of one of the large boulders, Figure 14. The significance of this was that the light appeared very near to a glyph of the Venus start or the "morning star". As we watched, the light touched the portions of the glyph.

We did not wait to see if the sun engulfed the glyph (likely) and we are not sure if this is a winter solstice marker. More observations will need to be made.



Figure 14