

Allen Hwangs Findings:

There are 3 main panels; one each on 2 large boulders at the base of a small cliff and one located on the cliff itself. We believe that these panels depict the predawn sky when the supernova was first sighted and then depicts the scene again after several weeks had passed. Our interpretation of the dates is probably a little controversial but we believe there is factual data to support it.

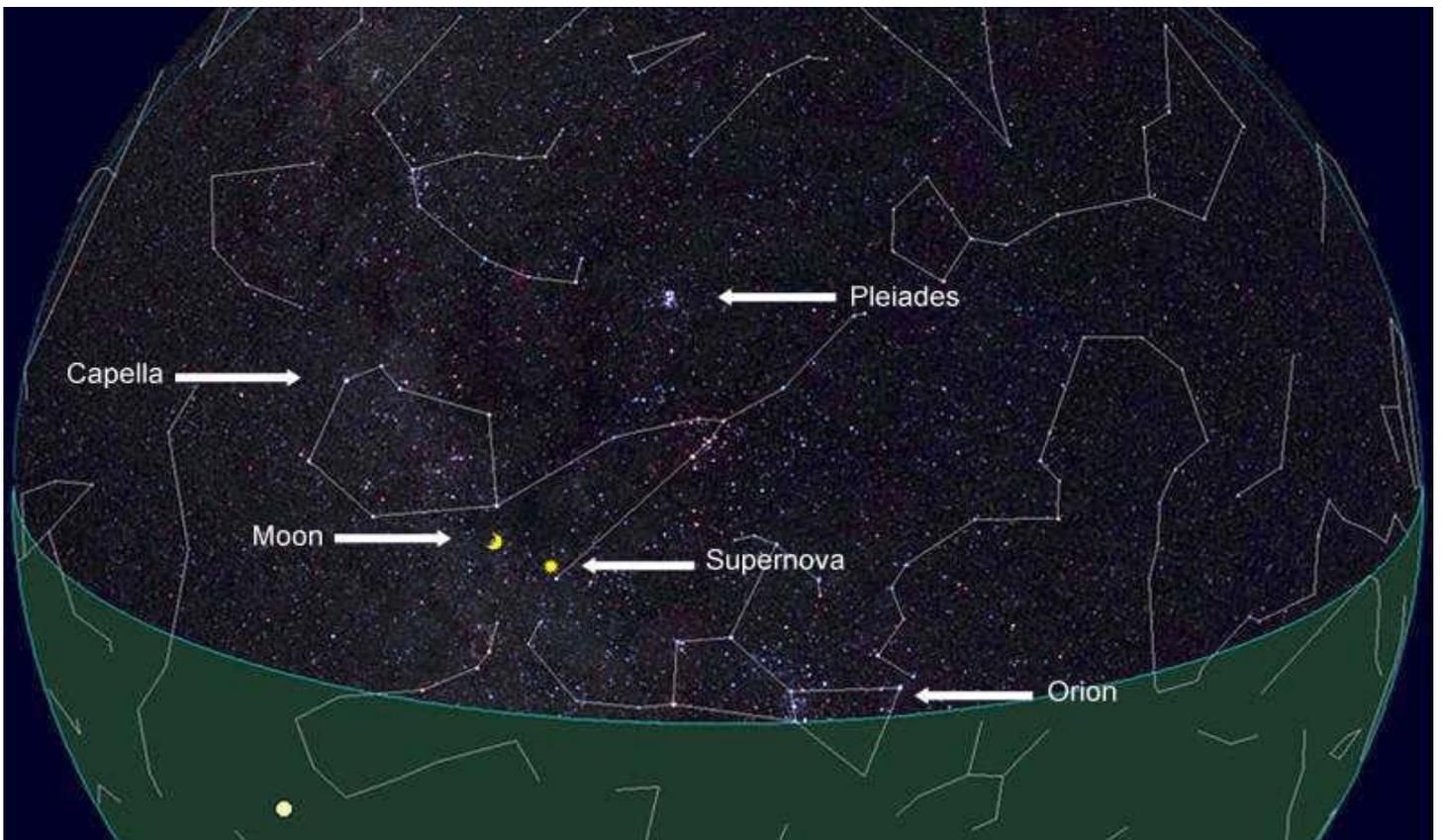
The generally accepted date of the supernova sighting was July 4th, 1054 A.D. as seen and recorded by the Chinese. It was estimated to be at least 4 times brighter than Venus and was visible during daylight for 23 days. It faded from view on April 17, 1056 A.D. almost 2 years later. This information is based on the work of J.J.L. Duyvendak who translated Chinese and Japanese literature in 1942 and almost all subsequent research refer back to his translation and interpretation. There are no original records of the event and all of the available references are derivative from earlier sources that were written 2-3 centuries after the event. Reference: (Further Data Bearing on the Identification of the Crab Nebula with the Supernova of 1054 A.D. Part I. The Ancient Oriental Chronicles. J.J.L. Duyvendak. Astronomical Society of the Pacific).

These are our photos of the petroglyphs and our interpretation. They could only record what the Native Americans saw with their eyes (no telescopes). Thus, they would probably record very distinctive objects visible in the sky such as; 1. The moon or a planet. 2. Prominent and bright constellations (The Big Dipper, Orion, Scorpius) that are easily recognized or easily recognized asterisms or grouping of stars (The Pleiades), and 3. Very bright stars that are easily recognized (Such As Sirius, Capella, etc.).

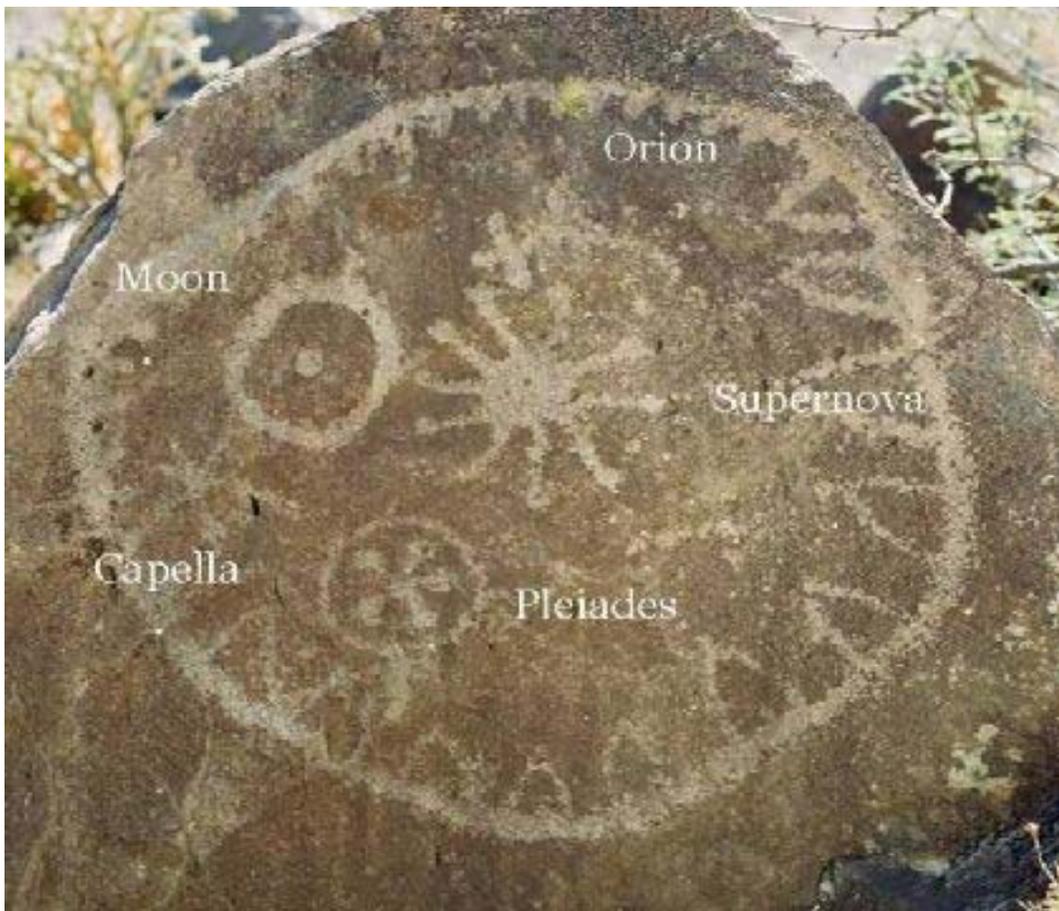
We believe that this rock art is trying to depict the predawn sky and represent the supernova of 1054 A.D. in relation to prominent objects, constellations, and stars in the sky. We also think that it represents a much earlier sighting than July 4th, 1054 A.D.



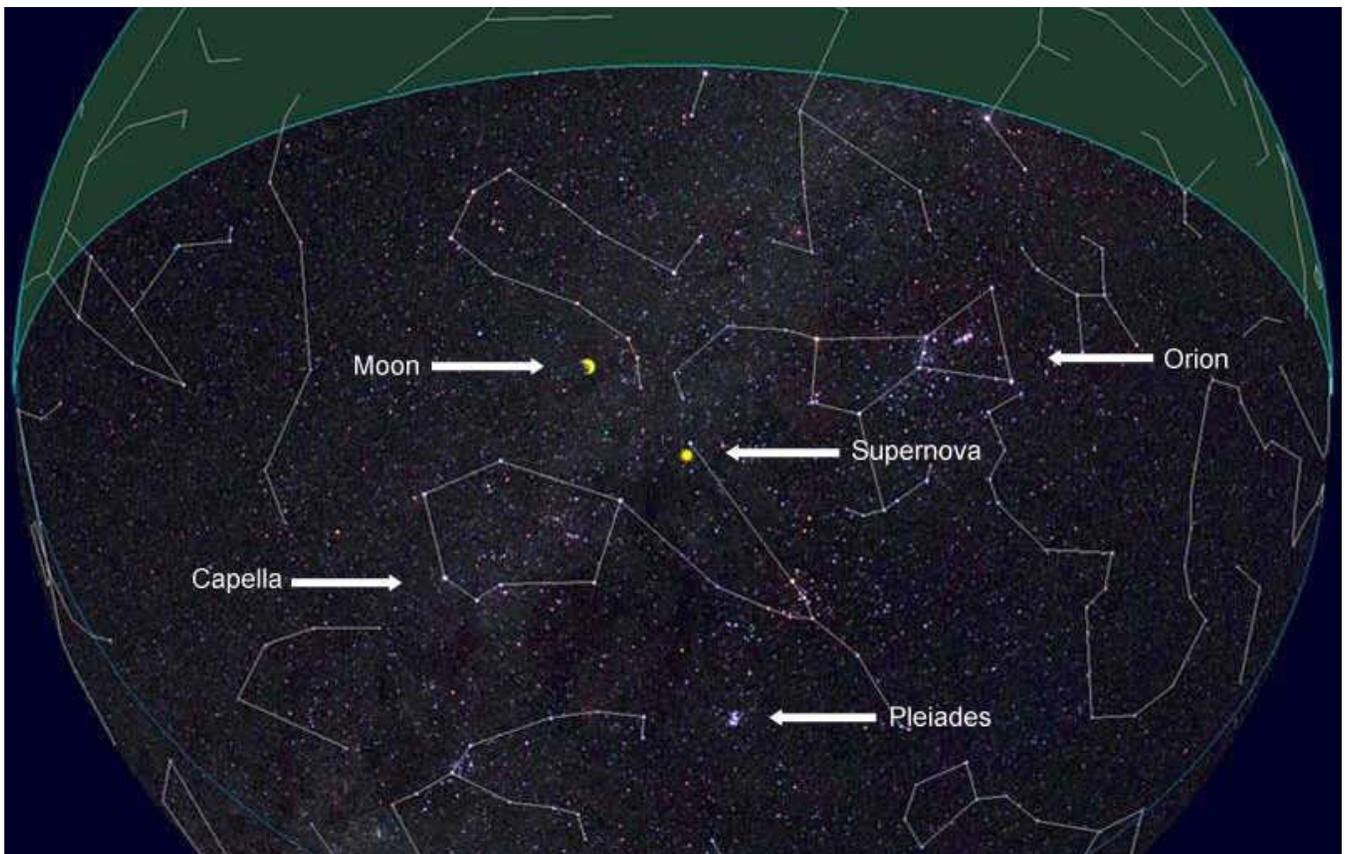
“Big Deer” Petroglyph Number One



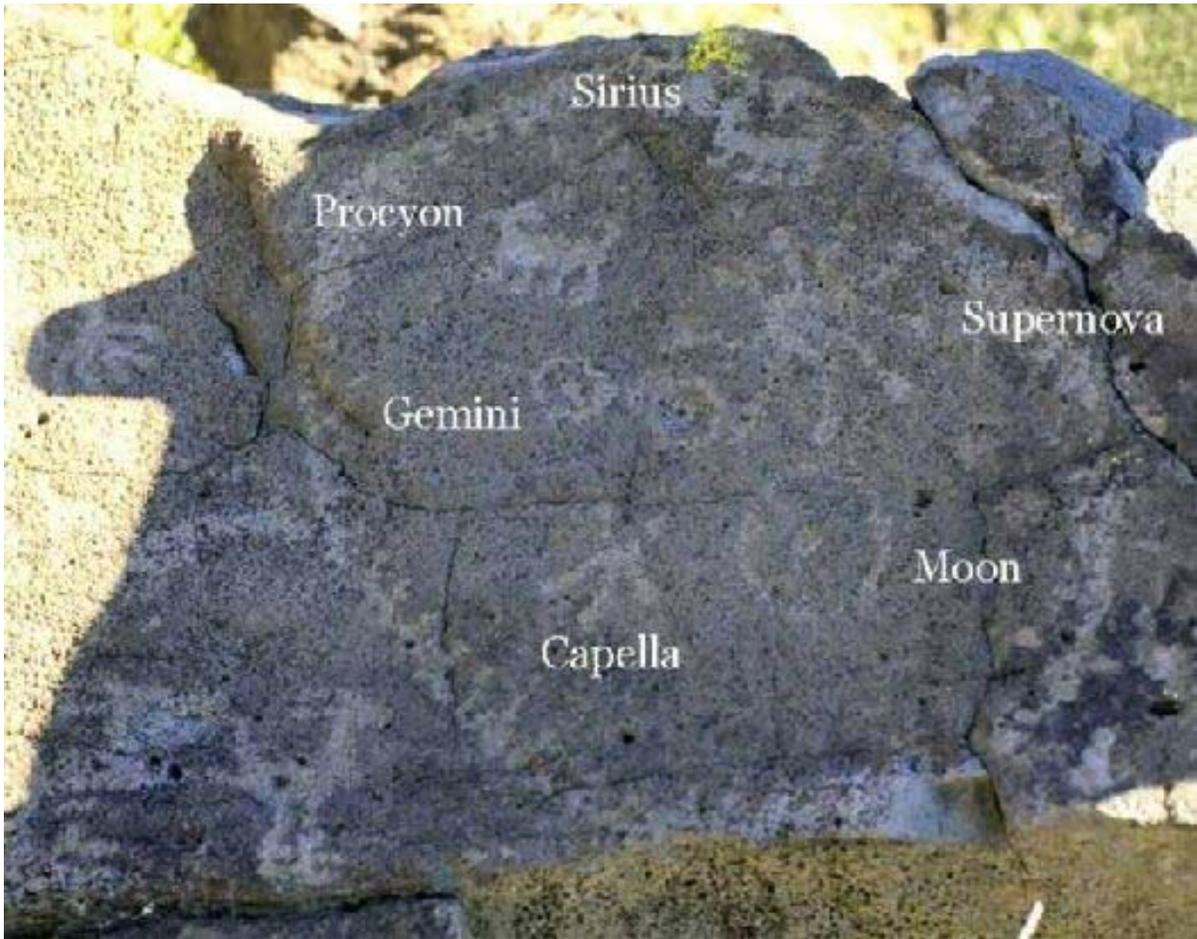
Predawn Sky; July 1054 A.D. Computer Generation. (TheSky©)



Names of Prominent Objects Displayed On Petroglyph One.



Mirror image of above (date advanced 1 month to move it higher above the artificial horizon) showing relative positions of prominent objects in the sky. The petroglyph objects appear to match the night sky. Computer Generated. (TheSky©)



Petroglyph Two: that we believe shows the supernova at least 1 month after July 1054. Different constellations and bright stars would have risen above the horizon in the months after July. We believe that this shows very bright and prominent 1st magnitude stars, constellation (Gemini the twins), and moon that would be universally recognized.

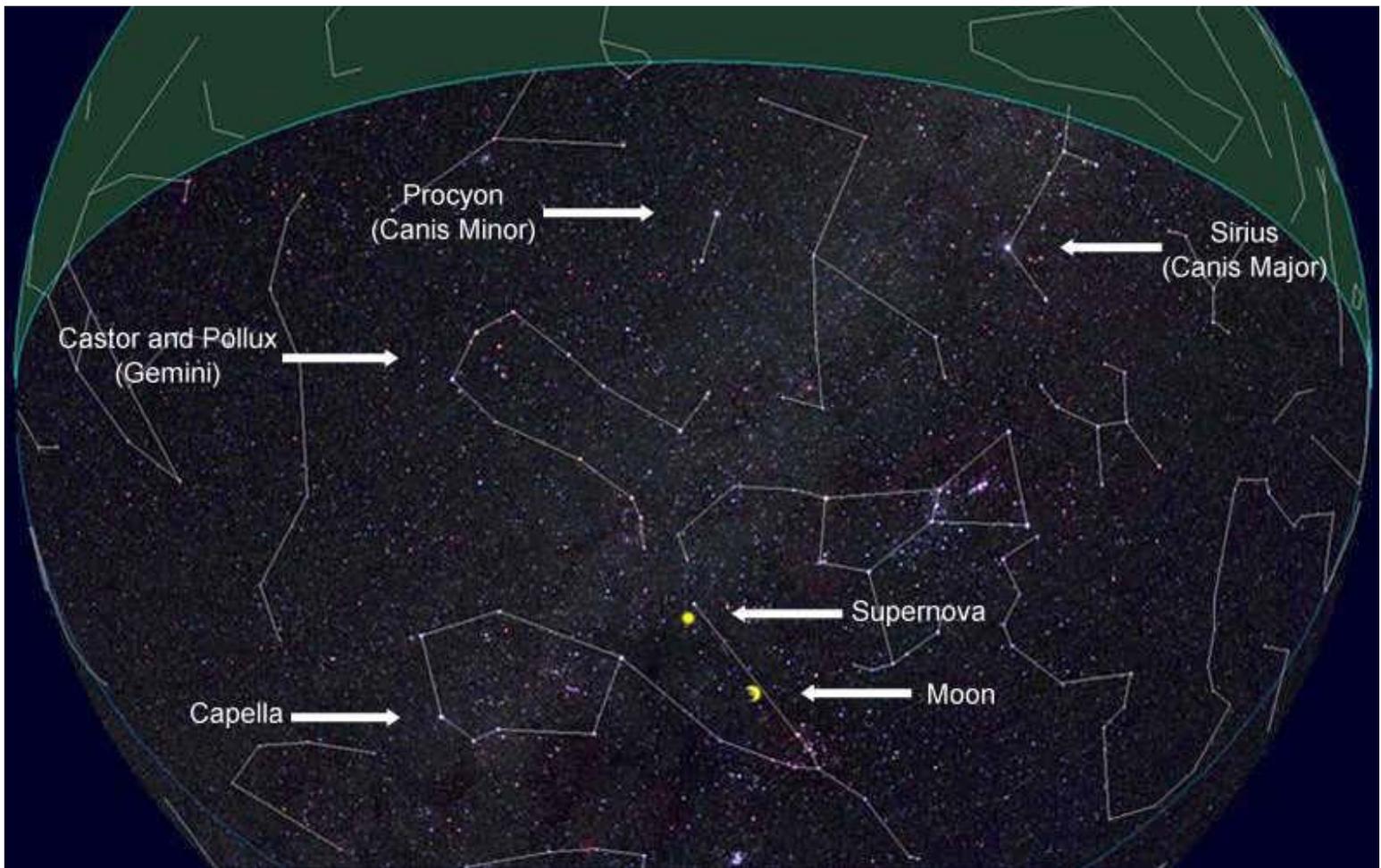
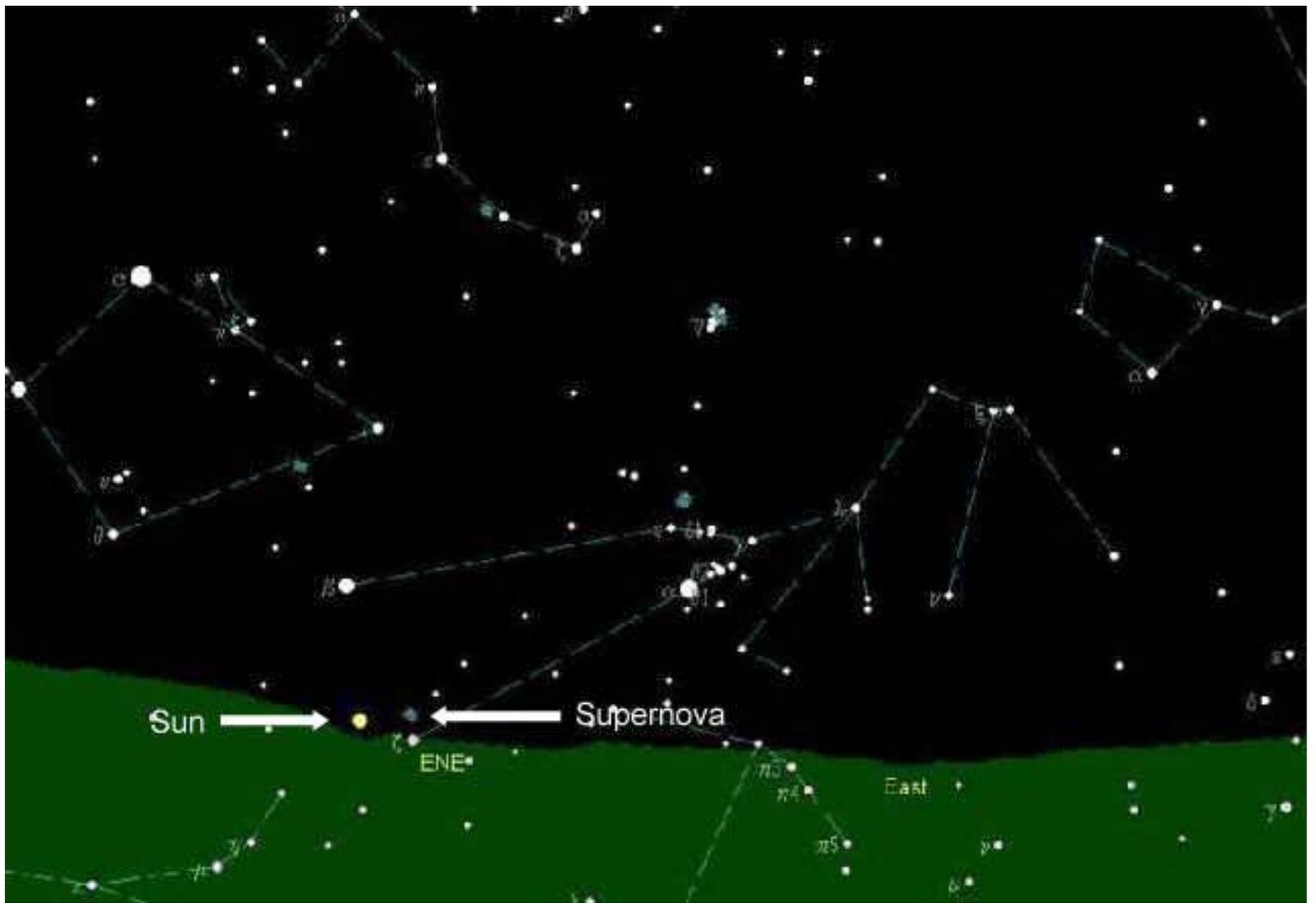


Image of how the predawn sky would have appeared in August or afterwards in 1054 A.D. Computer Generated. (TheSky©)

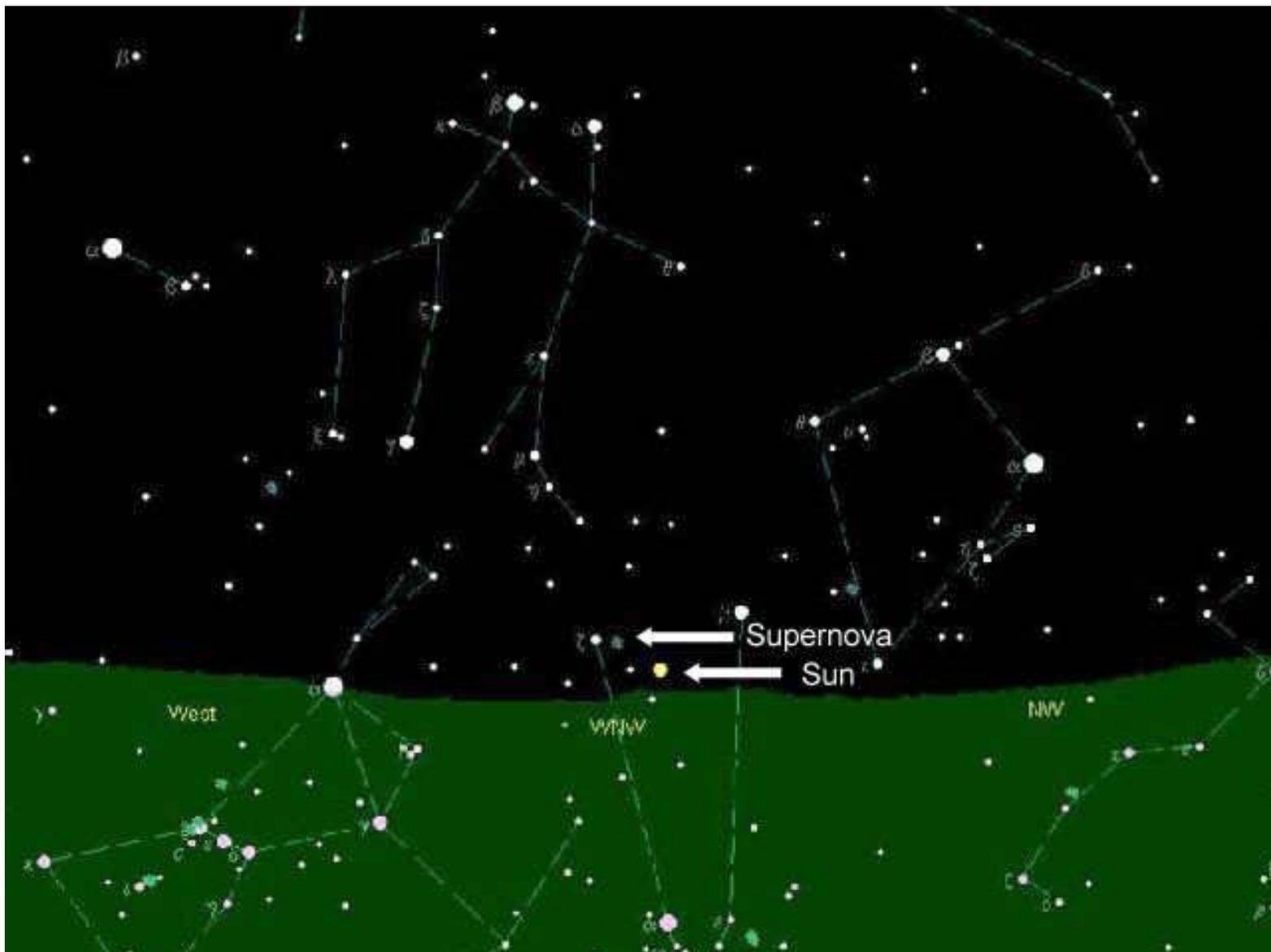
Petroglyph Number Three looks like 2 suns colliding. If you look closely, one is larger (brighter) than the other. They are also next to each other (conjunction of astronomical objects). Since all 3 of these petroglyphs are together, we believe it must represent the sighting of the same event. There were no solar eclipses visible in the Big Deer area in 1054 A.D. The third petroglyph puts some constraints on when it could have been observed. It had to be visible during the day (next to the sun). There are only certain dates when the sun would have been very close to the position of the supernova. It also had to be very close to the horizon (the sun is too bright when it is high in the sky to allow visualization of an object next to it). Taking these things into consideration, we believe that this third petroglyph represents the earliest sighting of the supernova (May 1054 A.D.) and is an original record, not a derivative written 2-3 centuries after the event.



Petroglyph Number Three.



May 29, 1054 A.D. at dawn. Computer Generated. (TheSky©)



May 24, 1054 A.D. at sunset. Computer Generated. (TheSky©)



Just a sunset picture to show how a bright object could have been visible when the sun was at the horizon and not so bright.



Picture of the nearly full Moon and Mars demonstrating how a fainter object can be visible next to much brighter object.

**A Re-interpretation of Historical References
to the
Supernova of 1054 AD**

by

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Abstract. In this paper we re-examine historical references to the supernova event of 1054 AD with a view to establishing a sequence astronomical events which minimizes apparent conflicts between the various sources. We find that the explosion of the supernova is likely to have occurred weeks to months before the commonly accepted date of July 4th 1054. This view is strongly supported by a number of European references to events visible in the evening sky during the spring which are likely to be associated with the appearance of the supernova. We find the best fit to the light curve based on Chinese observations and a maximum visible apparent magnitude for a supernova located at the distance to the Crab Nebula also confirms the earlier explosion date.

Table 1

A Chronology of possible Supernova Sightings

Date	Location	Source	Appearance
April 11 th	Constantinople	Diary of Ibn Butlān	Star
April 19 th	Flanders	<i>Tractatus de ecclesia</i>	Bright Light
April 24	Ireland	Irish Annals	Fiery Pillar
Late April	Rome	<i>De obitu santi Leonis pp IX</i>	Bright Light
May 10 th	China	<i>Sung-shih hsin-pien</i>	Star
May 14 th	Armenia	Ծրյւմ Փատմիչ	Star
May 20 th	Italy	Rampona Chronicles	Very Bright Star
Late May	Japan	<i>Mei Getsuki</i>	New Star
June	Japan	<i>Mei Getsuki</i>	Star
July 4 th	China	<i>Sung hui-yao</i>	Star/Comet
July 27 th	China	<i>Sung hui-yao</i>	Star
April 1055	Constantinople	Diary of Ibn Butlān	Star
April 17 th 1056	China	<i>Sung hui-yao</i>	Star

To quote Allen Hwang: “I understand that the interpretation of rock art is speculative but I believe that these petroglyphs may be the finest original record of the supernova event of 1054 A.D. They appear to accurately represent the appearance of the predawn sky and show the position of the supernova in relation to the most prominent naked eye objects that would be universally recognized. They also appear to record the event over time from at least May through August or later in 1054 A.D. An earlier sighting than July 4th 1054 A.D. is also supported by professional astronomers (Collins, et. al.) who analyzed the records and supernova light curves as well as other references to earlier dates in the ancient literature.”