F.I.S.P.

Fremont Indian State Park

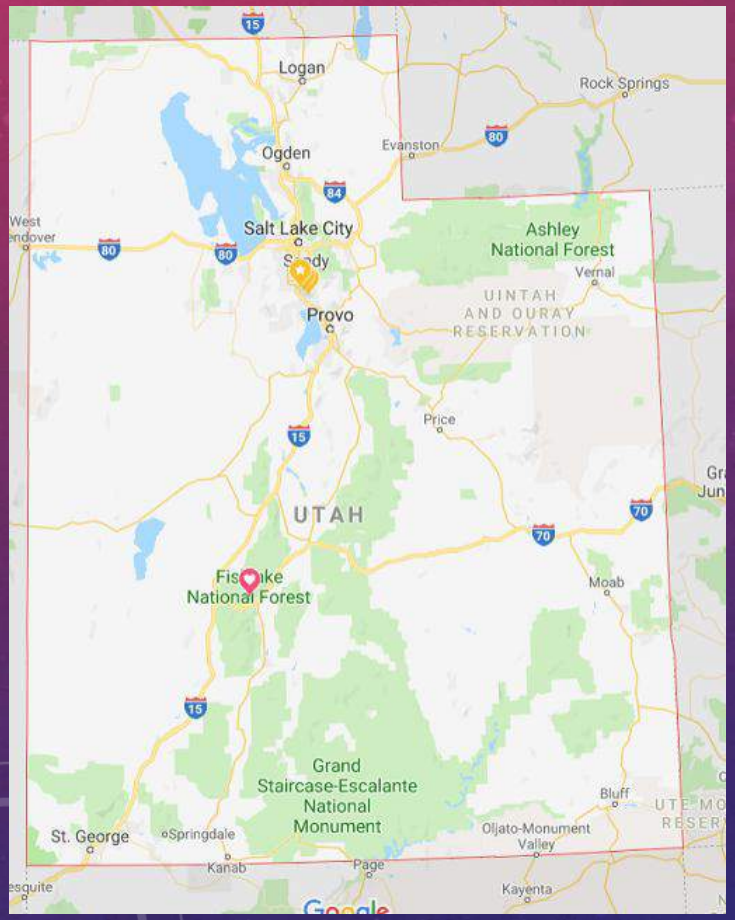
Archaeoastronomy Project

THE SHEEP SHELTER

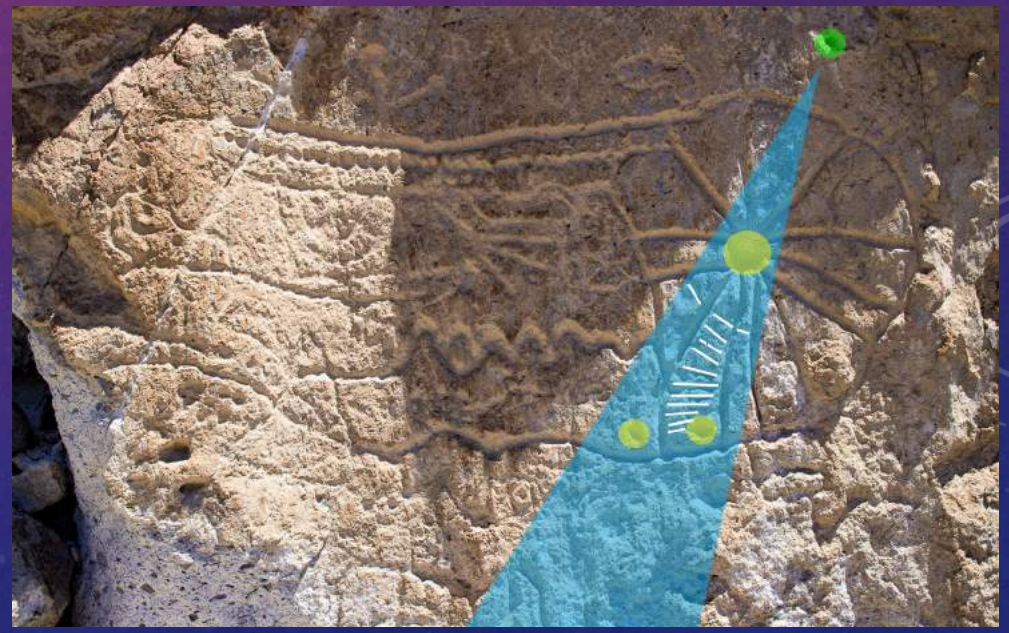
AN OBSERVATORY INTO THE PAST

CLEAR CREEK CANYON

FREMONT INDIAN STATE PARK (FISP)



SUN WHEEL PETROGLYPH



SHEEP SHELTER CAVE

SHEEP SHELTER

- East end of the canyon
- Faces south to southeast
- Measures ~ 26 ‘ X 5’ X 6’
- Early habitation, with hearth ash layers dating back to 3500 BCE
- Latest ash layer is 500 CE or about the time the Fremont inhabit the canyon
- The Fremont use the rock cave for something else and carve petroglyphs inside it

CAVE PETROGLYPHS

The cave interior is covered with petroglyphs, and a mirror is placed at the back wall to reflect the rock art that is carved on the cave ceiling facing into the cave that an observer cannot see whilst standing outside the cave

CAVE CEILING FACING OUT (SOUTH)

BACK OF CAVE

WINTER SOLSTICE

For a few weeks before and after Winter Solstice the sun can be seen drifting south to its solstice position on the horizon. Only during this time of the year does sunlight enter the cave.

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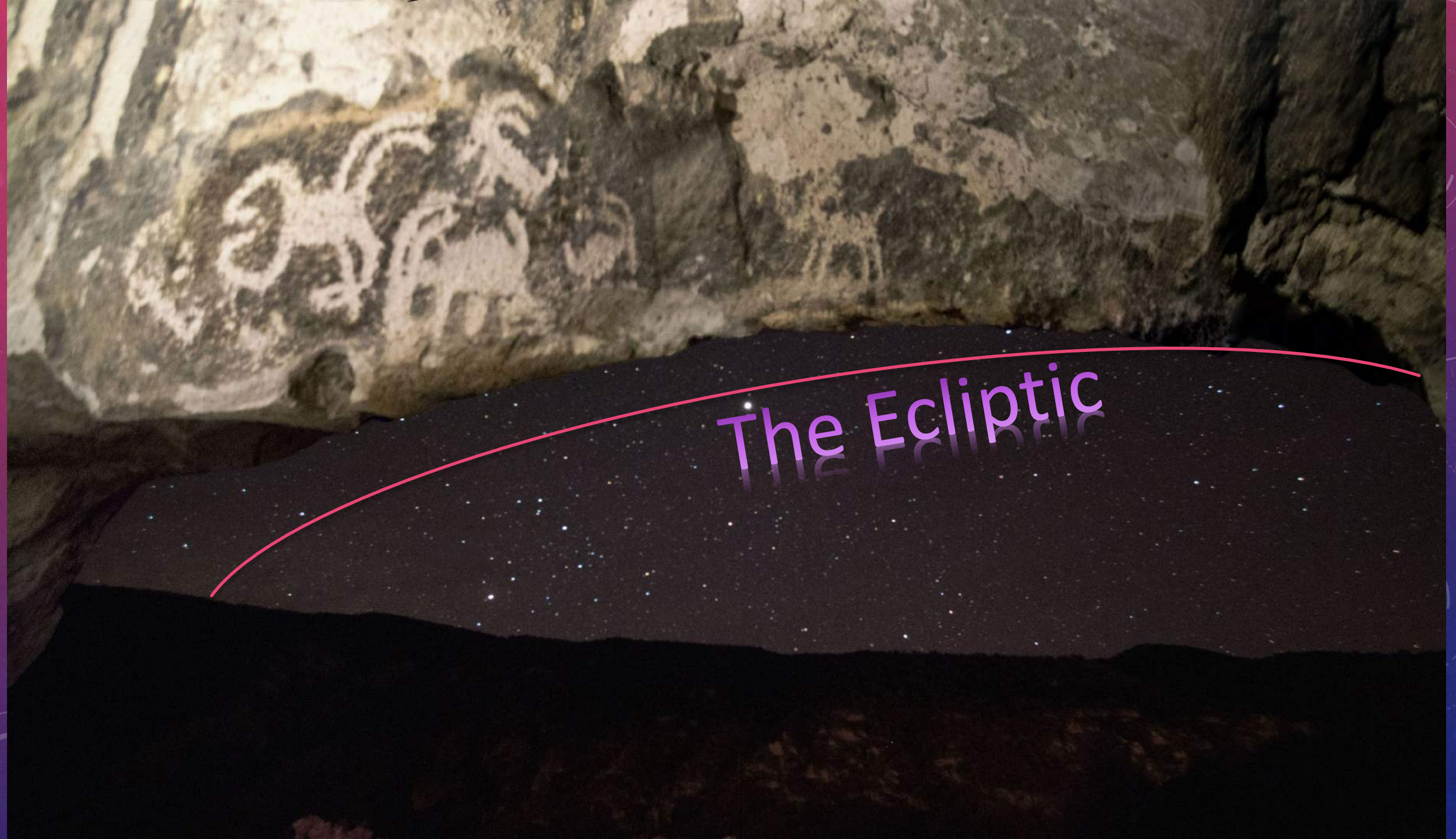
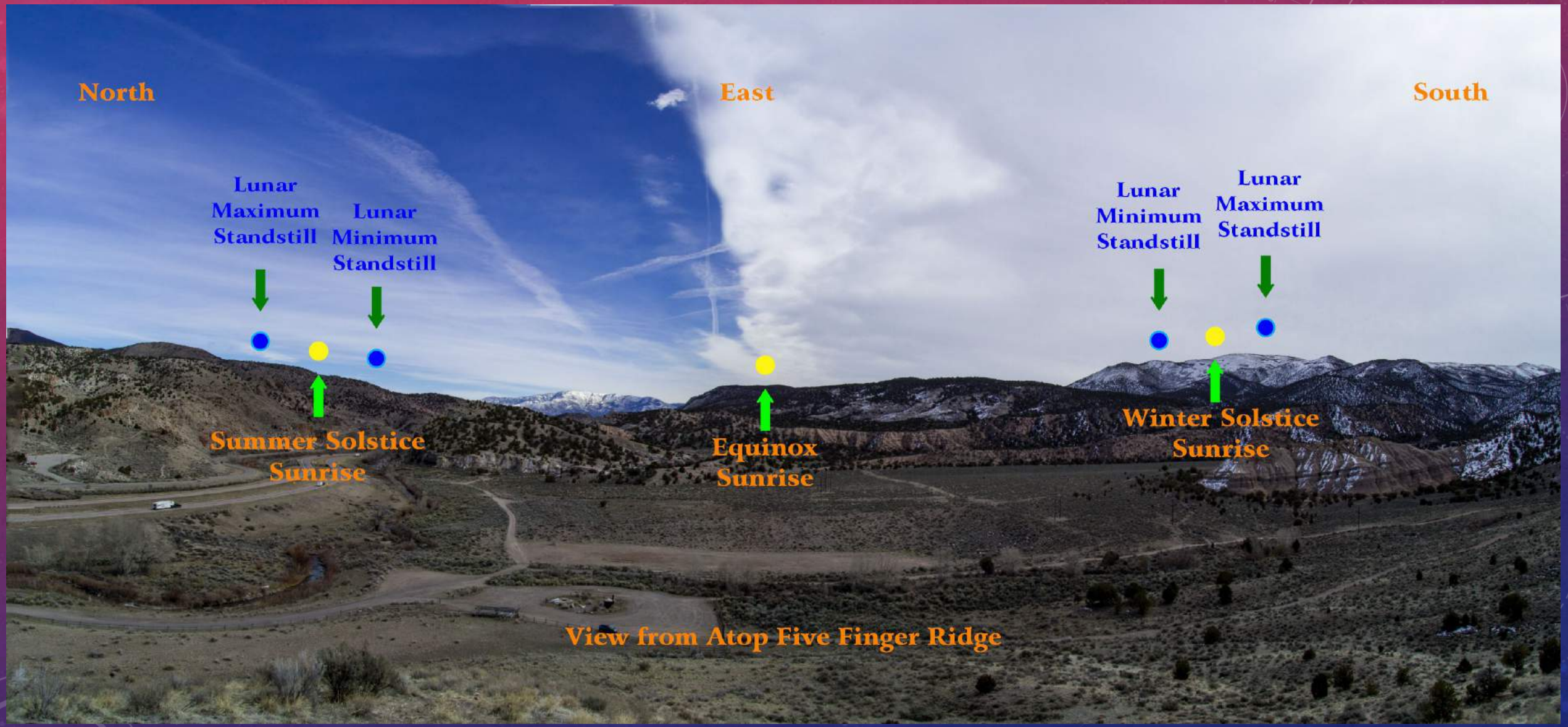
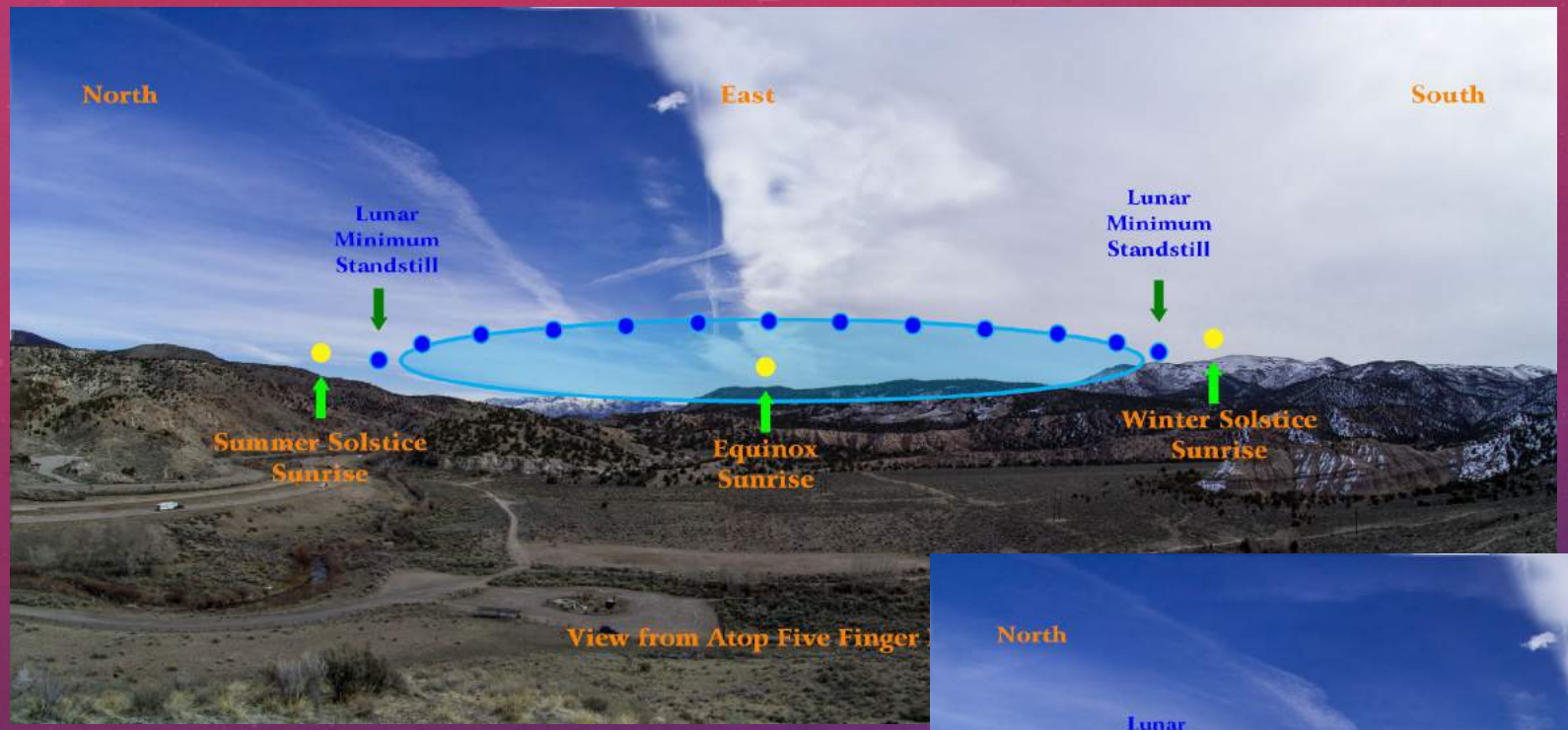
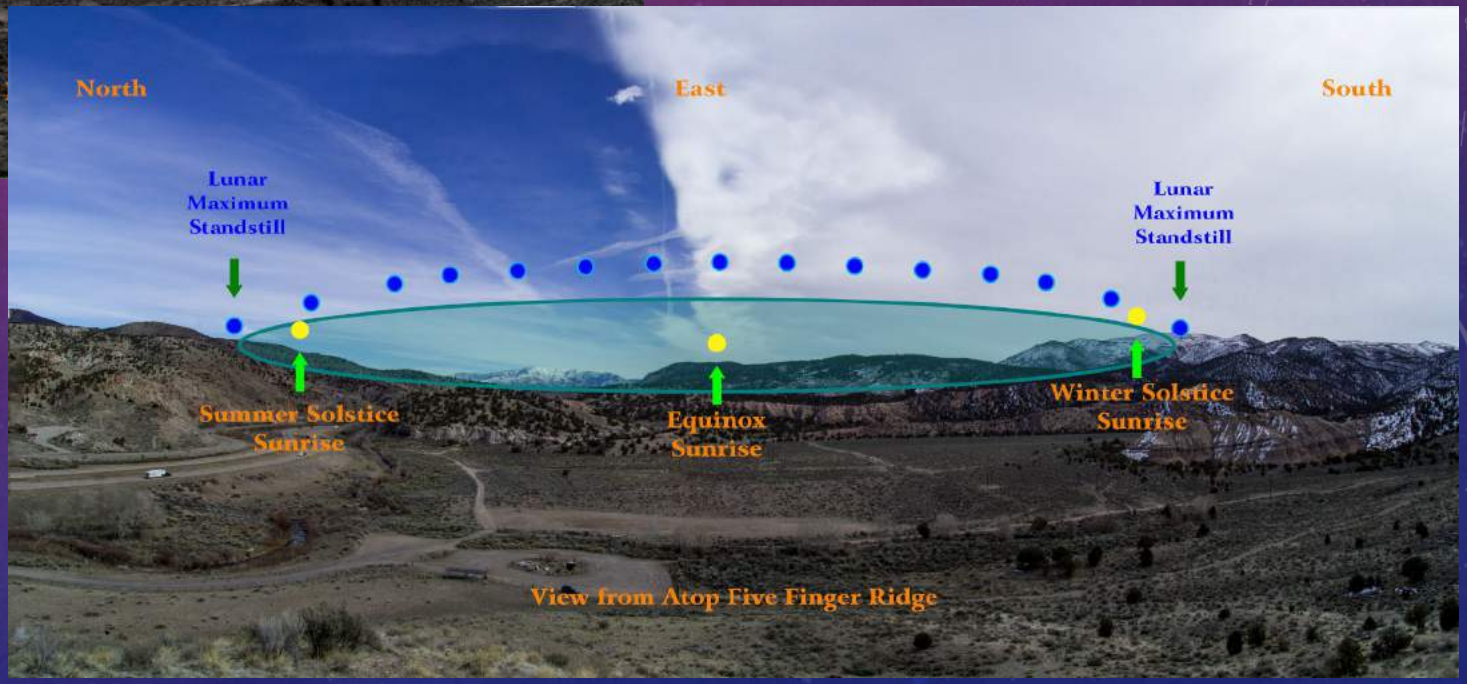

The Ecliptic

Mars
Saturn
Moon
Jupiter

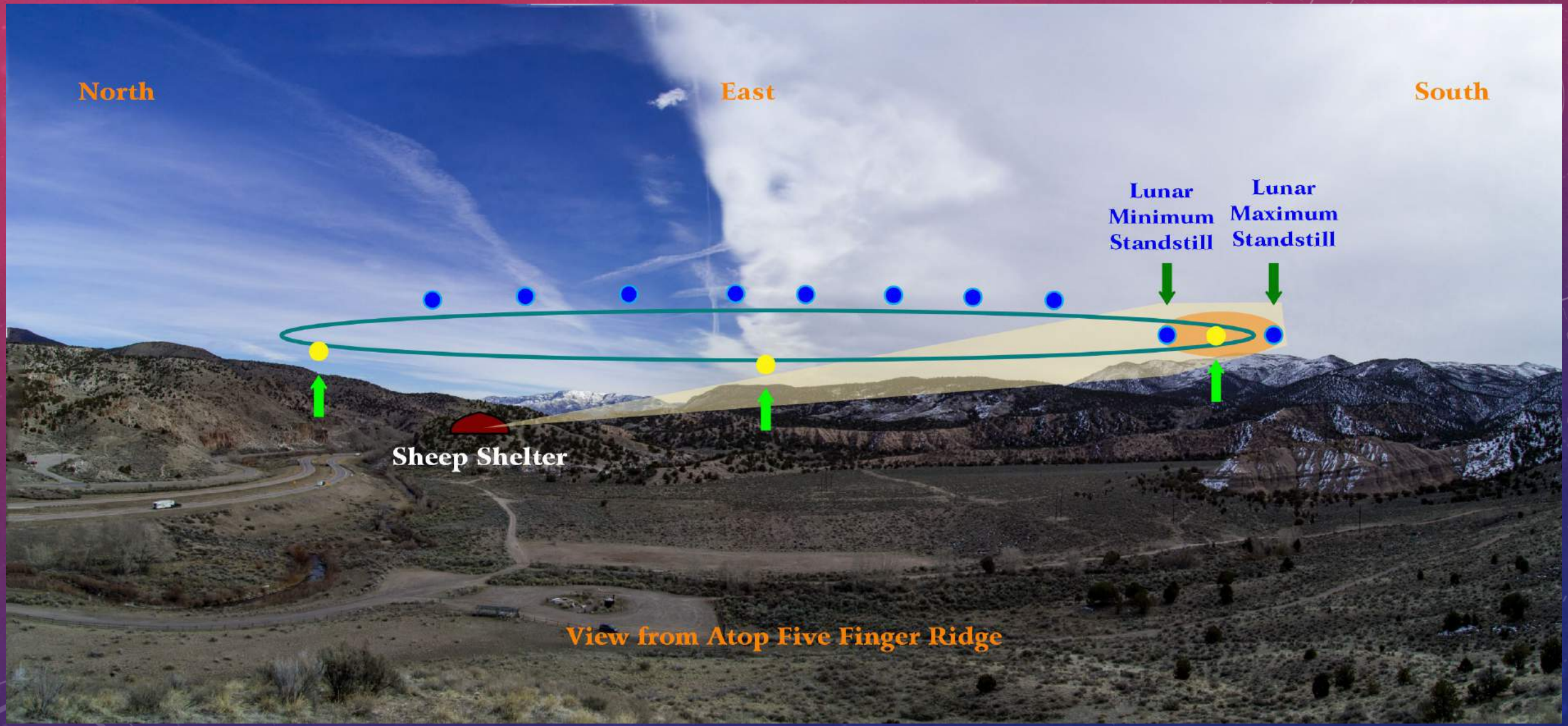
LUNAR PENDANT

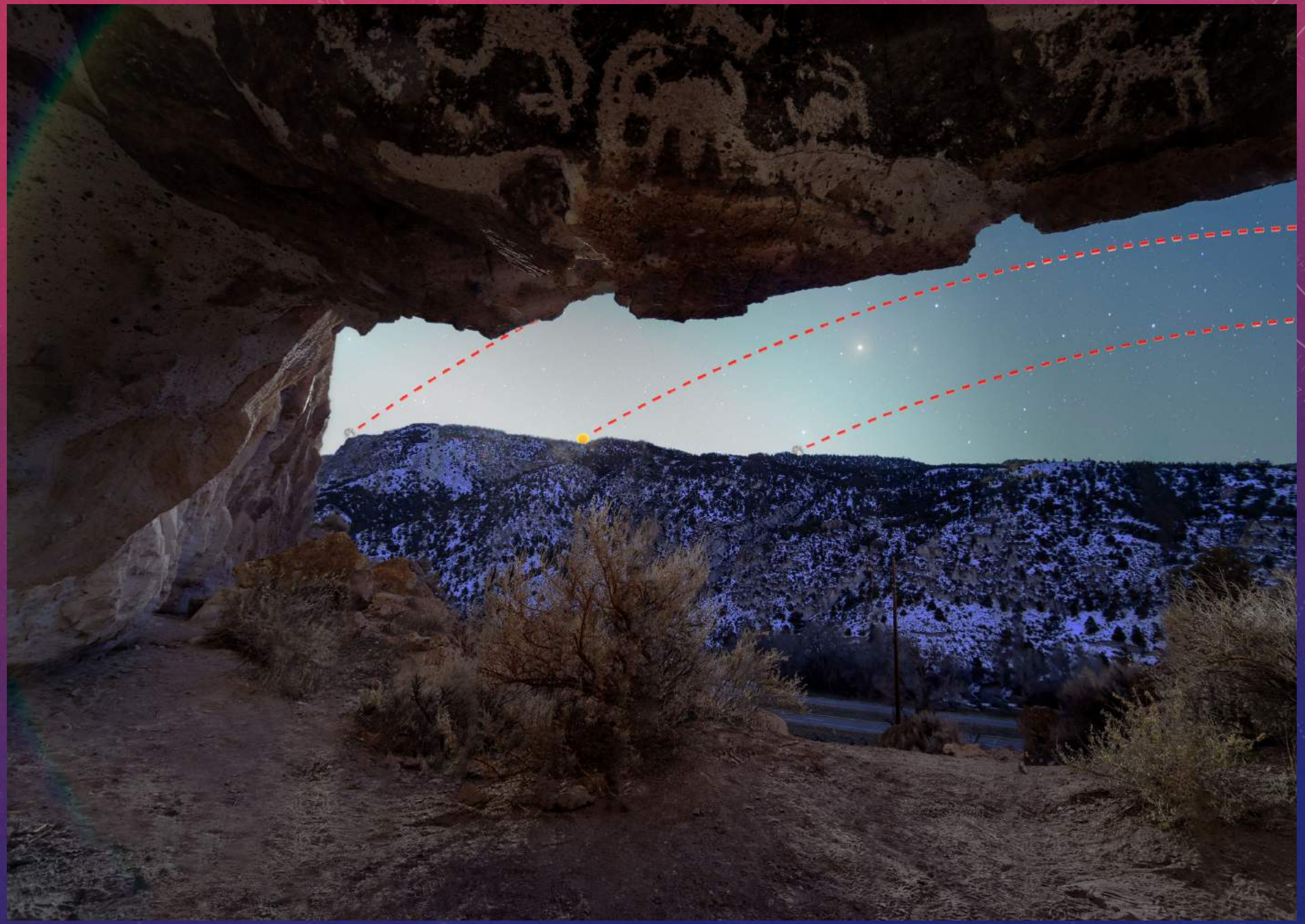

North
East
South
Lunar Maximum Standstill
Lunar Minimum Standstill
Lunar Minimum Standstill
Lunar Maximum Standstill
Summer Solstice Sunrise
Equinox Sunrise
Winter Solstice Sunrise
View from Atop Five Finger Ridge





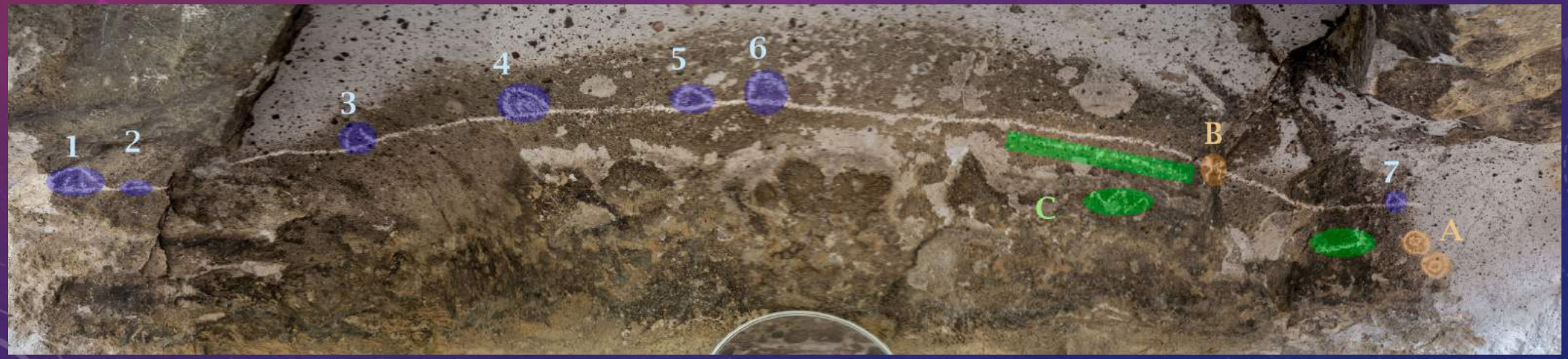
Lunar Standstill Cycle


North
East
South
Lunar Minimum Standstill
Lunar Maximum Standstill
Sheep Shelter
View from Atop Five Finger Ridge



1. LUNAR MINIMUM STANDSTILL
2. WINTER SOLSTICE SUNLIGHT MARKER
3. WINTER SOLSTICE SUNRISE
4. LUNAR MAXIMUM STANDSTILL
5. WINTER SOLSTICE SUNLIGHT MARKER
6. CAVE CENTER
7. WINTER SOLSTICE SUNSET

SIMPLE OBSERVATION REFERENCES



SHEEP SHELTER CAVE

- A natural observatory
- Winter Solstice Calendar
- Sun / Shadow effects within the cave on Winter Solstice
- Perfect view of the Ecliptic throughout most of the year
- Perfect view of lunar standstill positions throughout the 18.6 year Metonic Cycle
- Solar / Lunar / Stellar Observatory
- Cosmological Petroglyphs?

THANK YOU!

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