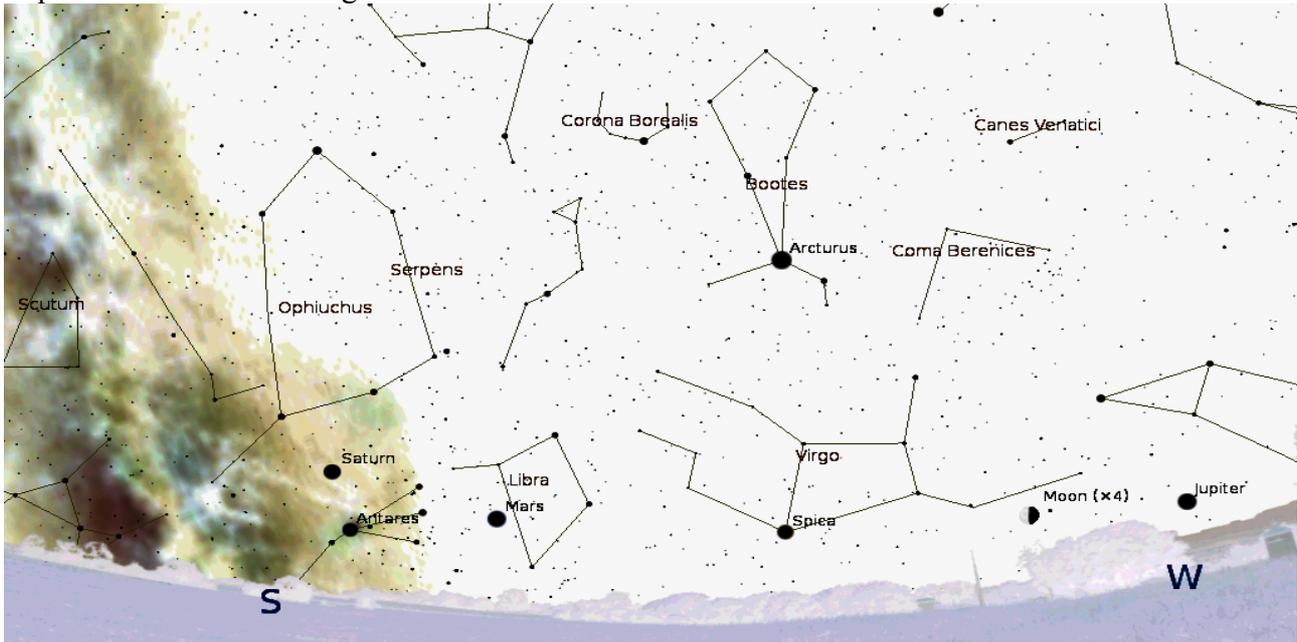


## Astronomy in the Two Dales

### June

As a great man once sung “ summer is here and the time is right for dancing in the street “ , although do be sure to get the councils permission to close the road first.

The 3<sup>rd</sup> of June is a good time to view Saturn , as it is at its closest approach to the sun and , with the new moon occurring on the 5<sup>th</sup> , the skies will be dark , giving us a good chance to see the ringed planet. This month we have Saturn , Mars and Jupiter all in the southern sky around midnight , so not too late , Jupiters moons will be visible through a pair of binoculars but a telescope will be required to see Saturns rings.



On the 20<sup>th</sup> of June the summer solstice occurs at 22.34 pm , the same day as the full moon , however as the night is the shortest of the year we will not see much of our nearest neighbour.

The summer is also the best time to admire our galaxy , the milky way , as it becomes more visible to us because of our planets position on its yearly orbit , look for the cloudy band overhead stretching from north to south.

While we are on the subject of neighbours , what do we know about the relationship between our planet Earth and the cosmos ? Well . Picture the following , our planet is 8000 miles in diameter , and it spins at 1000 mph , it orbits our sun every 365.25 days. At the same time , our sun is spinning at 4000 mph , the sun takes 27 days to spin once , and while it spins it is orbiting around the centre of our galaxy , the milky way.

Our sun and the entire solar system is moving at 514,000 mph through interstellar space on an orbit that takes 250,000,000 years to complete , this is known as a galactic year , as it is the time taken by our sun to complete one orbit of our galaxy.

The estimated age of our solar system is 5,000,000,000 years , which means that our sun is making it's twentieth trip around the galaxy and at present estimates will do so another twenty times before deciding to retire , claim it's pension and enter the great retirement home in the sky.