## Astronomy Talk 10<sup>th</sup> August 2021

## **Astronomical Events that Influenced History**

Graham Bryant gave this Zoom talk. There were 75 attendees.

To start, Graham discussed some of the orbital factors of the Earth and the Moon, and the resultant tidal effects.

Then he went on to cover several specific events. The first was the battle of Milvian Bridge, which was won by the emperor Constantine, claiming he'd seen a cross in his dream and then saw one in the sky. Graham suggested it could be a parhelic circle which can have the cross effect, and as a result Christianity became the established religion.

Graham covered a lot of the connections between Shakespeare's Hamlet and Tycho Brahe.

He then went on to cover the battle of Chancellorsville in the American civil war. General "Stonewall" Jackson was shot by his own side as he returned from a reconnaissance. Graham suggested that he was backlit by the full moon, and so was unrecognisable. As a brilliant general, who knows how the war would have progressed had he survived?

Did the moon sink the Titanic? The previous year had a very warm summer and the strong spring tides may have caused more calving of icebergs than usual. In addition, there was no moonlight and no bright stars low on the horizon, so the horizon would have been very dark: they hence couldn't have seen the iceberg till it was too late.

D-day involved a lot of necessary timing in relation to needing a full moon, the right tides, and long daylight hours.

Another WWII event was the sinking of The USS Indianapolis. After delivery of the atom bomb components to Tinian, it sailed on at full speed to Leyte. Visibility was poor that night, so it didn't zigzag. Then the clouds cleared momentarily and a Japanese submarine that was nearby saw it and was able to sink it. A sad aftermath is that a large percentage of the crew survived the attack but were killed by sharks.

Finally, Graham mentioned a few things that could have changed history but didn't. The Tunguska event in 1908 over Siberia was not a problem, but had it happened over London, London would have been wiped out. Various other meteoric events could potentially have triggered a war.

Quite a few questions, and many thank you notes on Chat, so much appreciated.