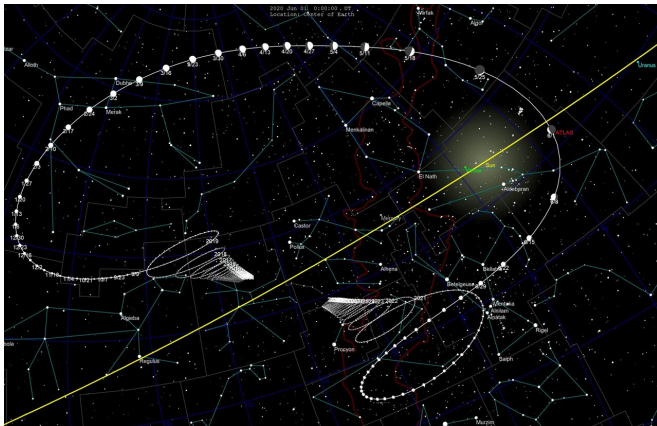


Comet ATLAS may put on quite a show

23 March 2020, by Bob Yirka



Comet's trajectory in the sky with 7-day markers. Credit: Tomrueen/CC BY-SA 4.0/Wikimedia Commons

A comet called Atlas is currently heading toward the sun, and it just might put on a really good show in a couple of months. Discovered last December by the Asteroid Terrestrial-impact Last Alert system in Hawaii (thus the name C/2019 Y4 (ATLAS) for the comet), the comet has been growing much brighter than experts had predicted. If it manages to hold its shape as it moves nearer to the sun, it could grow brighter than Venus.

Shortly after its discovery, C/2019 Y4 (ATLAS) began growing brighter than expected—a lot brighter. So bright that it can now be seen by [amateur astronomers](#) with binoculars. It is [expected to reach](#) its peak brightness at the end of May. Making it even more exciting is its color—slightly green.

Those who have been tracking the [comet](#) note that it jumped from magnitude +17 in February to +8 just a month later—a 4000-fold increase in brightness. At such a rate, it could be visible to people in zones free from [light pollution](#) with their naked eyes in just a couple of weeks.

A comet grows brighter as it moves closer to the

sun because it burns more intensely and releases more frozen volatiles. But because of their nature, it is impossible to predict whether they will remain intact—many comets burn up entirely and simply disappear. If Atlas manages to remain intact, some in the field have suggested it could grow from magnitude +1 to possibly -5. At the brightest extreme, it could be visible even during the day.

The location of the comet is also notable—unlike more recent comets, it will be best viewed in the Northern Hemisphere. If the comet lives up to its potential, it could put on a show not seen since Comet Hale-Bopp back in 1997. Interestingly, the comet is following a nearly identical path to the famous Great Comet of 1844—a trajectory that would give the comet a 6,000-year orbit that would take it out of the solar system. Some have suggested an ancient super-comet may have once broken apart along the same trajectory, leaving the smaller comets for us to observe.

© 2020 Science X Network

APA citation: Comet ATLAS may put on quite a show (2020, March 23) retrieved 4 December 2022 from <https://phys.org/news/2020-03-comet-atlas.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.