



A Visitor from the Oort Cloud

IT'S POSSIBLE THAT by the time you read this, Comet PanSTARRS (C/2021 O3) will have disintegrated. But if it survives its close brush with the Sun on April 21st, during the first week of May it will quickly move northward and perhaps brighten to 6th magnitude and sprout a short tail.

PanSTARRS could make its first appearance during evening twilight in late April. On April 30th, it stands about 5° high one hour after sunset. That same evening, it passes some 3°

▲ The comet's position is plotted for 0^h UT.

west of the Pleiades (and a little more than 4° west of Mercury) while speeding north-northeast into Perseus at a rate of about 3° per day. On May 8th, the same day it passes closest to Earth at 90 million kilometers, PanSTARRS becomes circumpolar for observers at mid-northern latitudes. On the 27th it passes closest to Polaris (8.5°), but by then it's expected to have faded considerably from its peak brightness.

Action at Jupiter

THROUGHOUT MAY, Jupiter slowly gains altitude and telescopic appeal. At mid-month it rises around 3:30 a.m. local daylight time and climbs to nearly 20° above the east-southeastern horizon at the start of civil twilight. On the 15th, the planet displays a disk 36" across and shines at magnitude -2.2. It'll be at its biggest and brightest at opposition, on September 26th.

Any telescope reveals the four big Galilean moons, and binoculars usually show at least two or three. The moons orbit Jupiter at different rates, changing positions along an almost straight line from our point of view on Earth. Use the diagram on the facing page to identify them by their relative positions on any given date and time. All the observable interactions between Jupiter and its satellites and their shadows are tabulated on the facing page. Find events timed for when Jupiter is at its highest.

Features on Jupiter appear closer to the central meridian than to the limb for 50 minutes before and after transiting. Here are the times, in Universal Time, when the Great Red Spot should cross Jupiter's central meridian. The dates, also in UT, are in bold. (Eastern Daylight Time is UT minus 4 hours.)

April 1: 7:36, 17:31; **2:** 3:27, 13:23, 23:19; **3:** 9:15, 19:10; **4:** 5:06, 15:02; **5:** 0:58, 10:54, 20:49; **6:** 6:45, 16:41; **7:** 2:37, 12:33, 22:28; **8:** 8:24, 18:20; **9:** 4:16, 14:12; **10:** 0:08, 10:03, 19:59; **11:** 5:55, 15:51; **12:** 1:47, 11:42, 21:38; **13:** 7:34, 17:30; **14:** 3:26, 13:21, 23:17; **15:** 9:13, 19:09; **16:** 5:05, 15:00; **17:** 0:56, 10:52, 20:48; **18:** 6:44, 16:39; **19:** 2:35, 12:31, 22:27; **20:** 8:23, 18:18; **21:** 4:14, 14:10; **22:** 0:06, 10:02, 19:57; **23:** 5:53, 15:49; **24:** 1:45, 11:40, 21:36; **25:** 7:32, 17:28; **26:** 3:24, 13:19, 23:15; **27:** 9:11, 19:07; **28:** 5:03, 14:58; **29:** 0:54, 10:50, 20:46; **30:** 6:42, 16:37

May 1: 2:33, 12:29, 22:24; **2:** 8:20, 18:16; **3:** 4:12, 14:08; **4:** 0:04, 9:59, 19:55; **5:** 5:51, 15:47; **6:** 1:42, 11:38, 21:34; **7:** 7:30, 17:25; **8:** 3:21, 13:17, 23:13; **9:** 9:08, 19:04; **10:** 5:00, 14:56; **11:** 0:52, 10:47, 20:43; **12:** 6:39, 16:35; **13:** 2:30, 12:26,