# Ceres and Vesta in Virgo in 2014 

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During the first week of July or so, Ceres and Vesta put on a close encounter with each other and a bunch of galaxies in Virgo as they approached to within 15 arc-minutes of each other. These two get close to each other only every 17 years, but are usually separated by many degrees, so for them to appear so close together is RARE. I have not run across a similar close encounter in recent memory. For a period of a week or so, the two are less than 14 arc-minutes apart, well within the field-of-view of any telescope large enough to show these two pinpoints of light. Although both asteroids will appear as stars, their motion should be detectable against the background of fixed stars in about an hour or so. Unfortunately, they're in the southern skies past the meridian as the sun sets, so the observing period is only a few hours, from the end of twilight until midnight.

I used the STScI database of images to generate charts with lots of low magnitude stars to help find them, using Starry $\mathcal{N}$ ight Pro to find their positions at 9:00 PMM on the nights of July $3^{\text {rd }}$ and $5^{\text {th }}$. The $4^{\text {th }}$ I skipped for obvious reasons. The chart for the $3^{\text {red }}$ is below. $\mathcal{N}$ otice the relatively large galaxy $\mathcal{N} G C$ 5184 in the same field of view, as well as a number of smaller and much fainter galaxies sprinkled across the field-of-view. The view corresponds with my telescope/camera combination, 18 arc-minutes wide by 14 arc-minutes in height.


And here is my image of the event on the $3^{r d}$.


The positions of Ceres and Vesta differed from the predicted ones because the charts were made for 9:00 PMM, but I didn't get this image until 11:07 PPM due to equipment issues. Also faintly visible is $\mathcal{N G C}$ 5184. This is a 30 second exposure. What surprised me was that Ceres and Vesta were the brightest objects in the field of view! However, they're traveling through a relative barren region of the sky, looking out past the galaxy, and a long ways away from the Milky Way.

