

## **Quick and Dirty Photo Tips for Capturing Quick and Dirty Comets**

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Comet Lulin C/2007 N3 is our first photo friendly comet of 2009 so let's talk about a few ways to make the most of its visit.

By the end of February it should be within naked-eye visibility range or at least an easy target for binocular wielding comet stalkers. Comets are very unpredictable so be prepared for anything. It may sizzle or fizzle, but whatever it does, it will be fun to hunt and watch.

Currently it's visible as a morning object. I easily saw it as a faint blob at 6 AM, with 15 x 70 binoculars northeast and in the same field of view with Lambda Libra. This is just outside the border of Scorpius, (near the scorpion's head) so it's an easy field to locate.

Before we talk about photographing a comet, let's do a quick comet anatomy check.

The **nucleus** or body of a comet is commonly described as being similar to a dusty or dirty snowball. It's made up of tiny frozen rocky bits and pieces in an icy/gassy mass. The **coma** is a gas cloud surrounding the nucleus. Hydrogen gas sometimes wraps around the coma of a comet. If you saw Comet Holmes last year, it was wearing a large hydrogen cloud.

The **tail** appears when comets are near the Sun. The Sun vaporizes the comet material and we see the reflected vapor being pushed by the solar wind away from the Sun.

An ephemeris can be found at

<http://www.cfa.harvard.edu/iau/Ephemerides/Comets/2007N3.html>

Or if you just want a simple chart look here

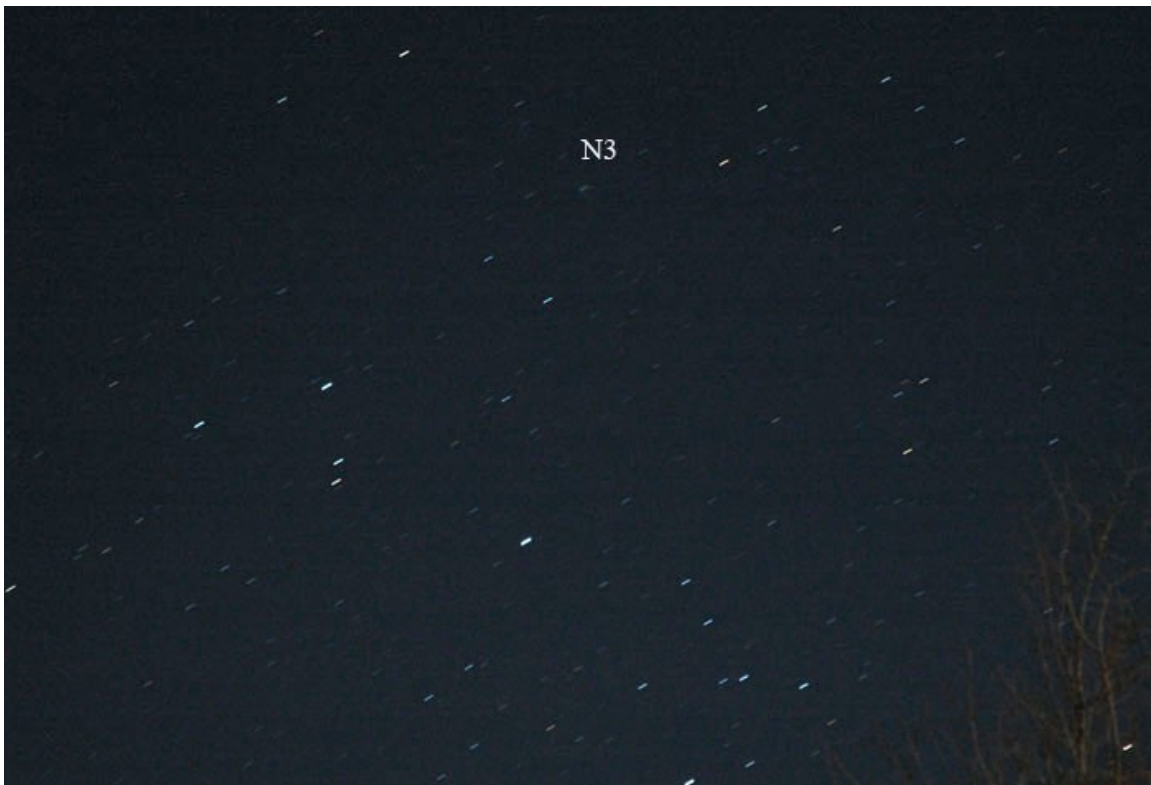
[http://www.spaceweather.com/images2009/15jan09/skymap\\_north\\_lulin.gif?PHPSESSID=d93ntf2c3gaplilolfji6gj6c5&PHPSESSID=qfs3q34hj2advqi3pcl3oi4045](http://www.spaceweather.com/images2009/15jan09/skymap_north_lulin.gif?PHPSESSID=d93ntf2c3gaplilolfji6gj6c5&PHPSESSID=qfs3q34hj2advqi3pcl3oi4045)

Now for the quick and dirty tips:

1. Heads or tails? Do you want the coma or the comet tail to be the main feature of your photo? If you are planning on capturing the tail, then you'll just need a good telephoto lens. If you're going after a head shot, then you'll need a telescope and camera combo to grab all the fascinating details.
2. Make a movie. Comets are great action figures and play great starring roles in movies. They are ideal for showing motion. Not only are they noticeably moving through a star field, but often they display detachments or tail fragments break off. The coma often shows odd features and intricate characteristics.
3. Plot and plan out the comet's track and photograph the comet in a pleasing star field. This doesn't always come into play, but being prepared ahead of

time for a comet encounter with the Pleiades or Beehive is always a good idea.

4. Speaking of stars. Comets offer a variety of photographic scenes all at once. You can guide on the comet and make the comet the in focus subject and have a smeared star background. Or guide on the stellar background and keep the stars sharp and have a smeared comet. Either way is pleasing and makes a stunning photo. Just be warned that guiding on the head of the comet is more difficult because it is usually more diffuse than a stellar point of light.
5. Even if you can't see the comet, the photo has a good chance of being interesting and may turn out okay. Low surface brightness objects stand out on a long exposure better than what the human eye can detect. The example shown below gives you a rough idea of this.



6. Comets are colorful. In most cases the comet will appear teal or blue (see above) depending on the mix of elements making up the comet.