

How to Photograph Meteor Showers

With the Perseid meteor shower coming up in August it is a great time to get out and practice using your camera. The first thing to be aware of is imaging meteors involves patience and a bit of luck. However, to increase your chances of catching a meteor on camera here are a few guidelines to help you get started.

You will need a camera that will allow manual focus and to expose for longer than 15 seconds. You will also need a tripod. The best equipment choice is a DSLR camera with a fast wide-angle lens mounted on a sturdy tripod. It is also very handy to have a cable release or intervalometer. When you are talking about 15-30 second exposures, you don't want ANY vibration on the camera, including your finger on the shutter button. An intervalometer also allows you to set the number of images to take and you can just leave the camera to get on with snapping images once you are happy with the settings.

Selecting where to point the camera :

A good place to aim the camera is 50-60 degrees elevation from the horizon and 30-40 degrees from the radiant of the meteor shower. Do not be tempted to chase the meteors around the sky. We all know it is Sod's law that wherever you point your camera the meteors will always appear in the other part of the sky. Set your position and stick to it for as long as possible.

Camera Settings :

The trickiest part of night time imaging is getting focus, if your camera has Live View it makes everything a lot easier, if not you will have to spend some time getting it right. It can be tricky but time spent here is fundamental to getting an image that you are really pleased with. Believe me there is nothing more heart breaking than thinking you have caught a corker of an image to find out that it is not in focus. You will kick yourself!!! So please take the time to learn how to get good focus.

To image stars you need to have your focus set to manual and set at infinity. If you have never tried to focus your camera at night, I really suggest that you practice a few times before heading out to image meteors. It will be very frustrating if you are fiddling about trying to get focus whilst everyone else is oooooohhhhing at the all the meteors you could be imaging. A really good and detailed guide can be found at

http://www.astropix.com/HTML/I_ASTROP/FOCUS/Live_View_Focusing.HTM

Without going into too much detail what you want is to catch as much light as possible without over exposing. Have your camera setting switched to manual and open up your aperture as wide as possible by selecting the lowest f number possible. A minimum aperture of 2.8 or lower is recommended however something similar to the stock Canon EF-5 18-55mm f/3.5-5.6 IS II lens would be OK, and is commonly used for low-light night photography.

Set your ISO. Test your camera's ISO settings starting with an ISO of at least 800, preferably higher. The amount of noise you get will depend largely on your camera model, as some cameras are simply better low-light performers than others.

Set your exposure settings. You are trying to capture those beautiful light trails, and to do that you will need to set your exposure to 15-30 seconds depending on your camera set up. Experiment with different exposure times, depending on the effect you are looking for in your photograph.

The settings suggested here are just a baseline to get started. As with all photography you will have to make adjustments depending upon your conditions at the time. Don't be scared to make adjustments, just do so one at a time so you can learn what each setting does and how it benefits your image. Take a notepad and pencil and write down the settings you have tried and note which ones worked best. You will find that once you have found your best settings, it will become the starting point for all your night time images.

Happy Imaging :) and don't forget to share your results, good or bad!!!