

Why not USB 3.0?

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Generally for deep-sky imaging, USB2.0 is the most stable option, for the following reasons:

The huge bandwidth of USB3.0 isn't required to control a mount, filter wheel, motor focuser, guide camera, nor download an image from a deep-sky camera.

USB2.0 is more stable and less error prone, permitting longer cables. USB2.0 cables do not require the same amount of shielding as USB3.0 cables (which are very thick) and therefore become very stiff in the cold, which causes cable-pull and tracking errors.

Finally USB3.0 cables are limited to about 3m length due to signal reflection problems from the end of the cable (in fact they are most reliable at around 1.8m) but USB2.0 cables can be up to 5m long for non-bandwidth critical use, making them far more suitable.

Finally, USB3.0 ports can often be quite glitchy when sharing multiple devices. So that's why USB2.0 is the way to go for mount control.

Obviously if you are using your USB3.0 camera for high speed solar or planetary imaging, you would connect it directly to the computer via a single cable, but for USB2.0 you would connect it to the hub.