

# Nightscapes Checklist

*These suggestions are for those just starting in Nightscape photography with basic equipment and experience.  
Experiment and change as you get comfortable.*

## Setup

- Camera Custom Functions and Presets
  - Learn Infinity Focus position
  - Mirror Lockup (no?)
  - Long Exposure Noise Reduction (yes?)
  - High ISO Noise Reduction (yes?)
  - LCD Viewfinder Brightness (Dim)
  - Auto Off (eight minutes +)
  - Review time (four seconds +)
  - Picture Quality/File Type (RAW + Large)
  - White Balance (Tungsten—3400-4400)
  - Function Dial (Manual)
  - Image Stabilizer (off)
  - Auto Focus (off)
  - Lens Hood (yes), Filter, (no)
  - Set Self-timer to 2 seconds or program remote release
- Mount Camera
  - Lock everything that can be locked on tripod
  - Tie down straps, remote, etc.

## Taking an Image

- Check Setup
- Focus
  - Aim at bright star (anywhere in sky)
  - Wide Angle/viewfinder/center and focus
  - Tele Angle/viewfinder/center and focus
  - Imaging Zoom Setting/LiveView-LCD Screen/Loupe
  - Find star/Position Magnify Box, Magnify by 10 (highest)
  - Focus Manually
  - Remove color fringe
- Test Image (*Composition*)
  - Aim at subject
  - Shutter at 10 seconds (more if needed)
  - Widest aperture (F smallest possible number)
  - Highest ISO available (6400/12800 is OK)
  - Take and Evaluate Image
    - composition
    - sweep corners

- lens aberrations at full aperture
- fill frame
- local lights/distractions, etc.
- Adjust/Repeat until happy
- Lock Tripod
- Test Image (*Exposure*)
  - Apply “Rule of 500” for shutter time
  - Exposure time=500/focal length
  - Widest aperture (F smallest possible number)
  - ISO 800 (more if camera is clean)
- Evaluate Image
  - Histogram—one third across
  - Star shapes—magnify and check corners
  - Adjust ISO higher if possible
  - Adjust/Repeat until happy
- Final Shots
  - Set self timer or remote release.
  - Take several images at any given setting
  - Do both Horizontal and Vertical Alignment
  - Vary ISO/Time/Aperture as you like
  - Take Notes
  - For Every Exposure:
    - Take a deep breath
    - Press shutter/remote button
    - Wait for self timer (if no remote)
    - Wait for shutter
    - Wait for “ICNR” time if used
  - Review
- Light Painting (Highlight foreground)
  - Diffused Flashlight (or Cellphone)
  - Wave and move to avoid harsh shadows
  - Experiment

## Processing

- Do Not Work on Originals*
- File Explorer or Image Viewer
- Fix
  - Use Filters and Adjustments
  - Move sliders to make pleasant picture
  - Change Exposure, Color Balance, etc.

## Resources



- Web:** The World At Night [twanight.org](http://twanight.org), Wally Pacholka [astropics.com](http://astropics.com) Any Search Engine for *Nightscape Photography*
- Print:** *Photography Night Sky*, Jennifer Wu/James Martin, Mountaineer Books
- The Astro Imaging Channel YouTubes:** [TheAstroImagingChannel.org](http://TheAstroImagingChannel.org)  
[2020.09.20 | Kerry-Ann Lecky Hepburn: Astro Landscape Planning - YouTube](https://www.youtube.com/watch?v=2020.09.20)  
[Alex Cherney - Nightscape Photography and Time-Lapse Animations - YouTube](https://www.youtube.com/watch?v=AlexCherney)  
[LIVE: Nightscapes - YouTube](https://www.youtube.com/watch?v=LIVE:Nightscapes)  
[Kerry-Ann Lecky Hepburn: Taking Night Sky Pictures in Less than Ideal Conditions - YouTube](https://www.youtube.com/watch?v=Kerry-AnnLeckyHepburn)
- Good People:** Riverside Astronomical Society [rivastro.org](http://rivastro.org)
- Presenter:** [alexmconahay@gmail.com](mailto:alexmconahay@gmail.com) [alexastro.com](http://alexastro.com)