Marc Rassel – November 8, 2025

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Shooting and Processing Aurora Timelapse

Advanced Timelapse Processing with LRTimelapse

Started

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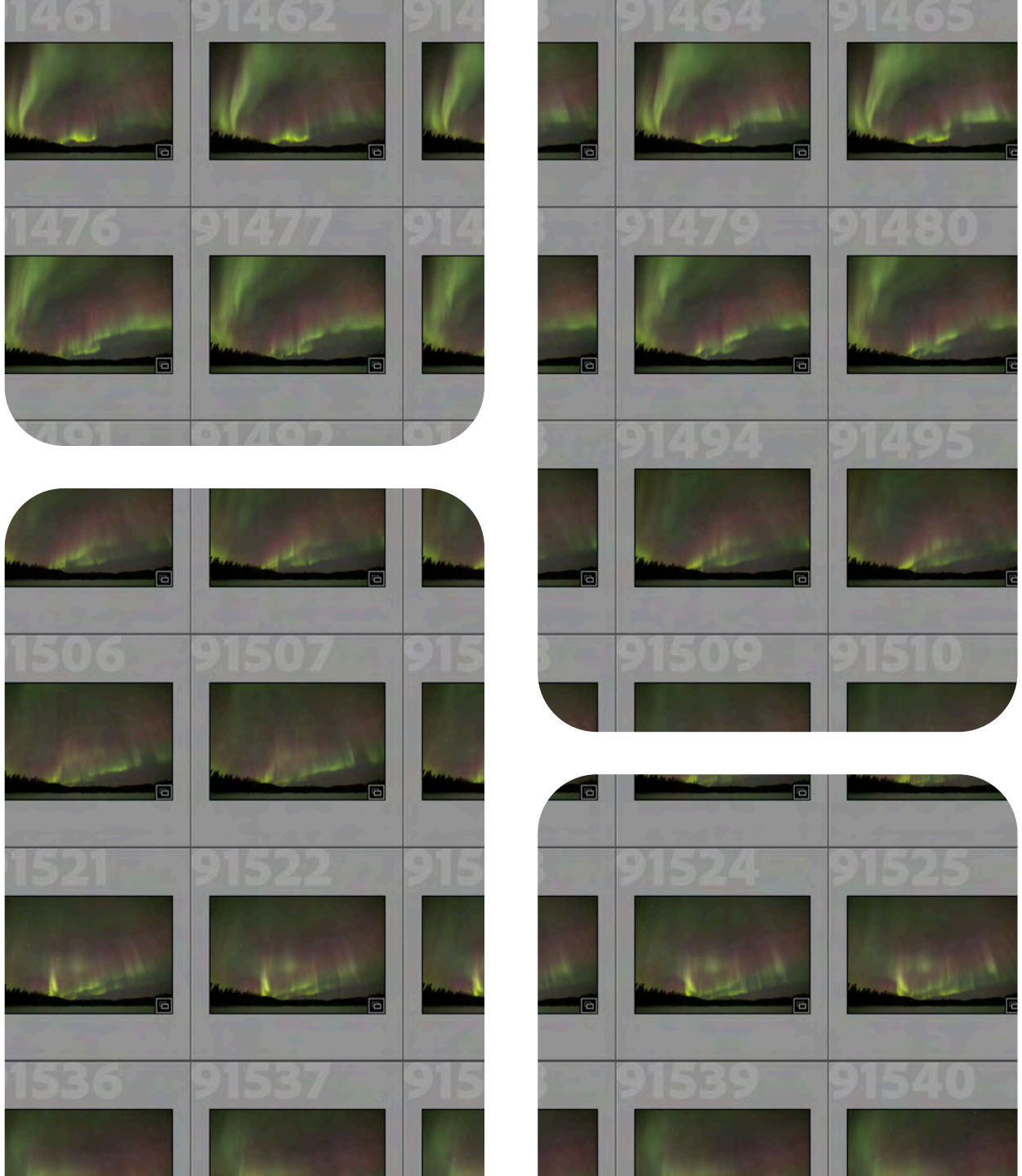
About Me

Welcome to Aurora Timelapse

I’m a photographer who focuses on the night sky and the wild landscapes that sit beneath it. Whether it’s an aurora storm over the Arctic, the Milky Way stretched across desert rock, a moonlit ridge line in the mountains, or the fleeting drama of a total solar eclipse, I’m drawn to moments where natural light and land meet in powerful, often unpredictable ways.

Let’s Go



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Setting the stage

What is "Advanced Timelapse"?

- **Basic**: Locked-off camera, full manual mode, static light (e.g., daytime clouds).
- **Advanced (Where we're going)**: Shooting through extreme light changes, manually ramping settings, and using specialized software (LRTimelapse) to smooth flicker and transitions.
- **The "Holy Grail" (The final boss)**: The term for a seamless day-to-night or night-to-day shot, which perfectly captures the transition.

Next →

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Advanced Timelapse

Today's Roadmap

What we'll cover

- **Part 1**: Shooting for changing light (In-camera techniques, settings, and methods)
- **Part 2**: The LRTimelapse "Visual Workflow" (A step-by-step guide from RAW to render)
- **Part 3**: Q&A (Time permitting at the end)

Let's Go →

Shooting for Changing Light

The Core Challenge

- **Managing a 15+ stop change** in dynamic range.
- Your camera's settings for a ***bright, explosive* aurora** (e.g., 1s, f/1.8, ISO 1600) are **completely different from settings for a discreet arc** (e.g., 20s, f/1.8, ISO 6400).
- **How do we bridge this gap smoothly**?

Shooting for Changing Light

Method 1: Aperture Priority (Av Mode)

The Simplest Method

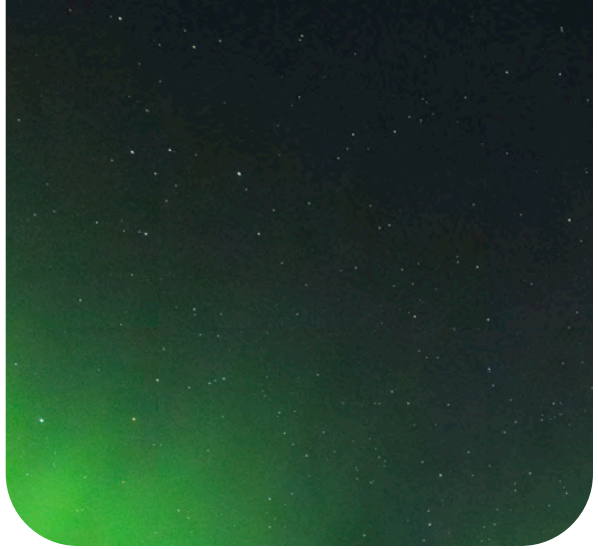
- **How**: Set Av, set ISO (e.g., 3200), set a fixed aperture (e.g., f/1.8). Let the camera automatically adjust the shutter speed.
- **Pros**: Simple, hands-off, good for beginners.
- **Cons**:
    - Creates *massive* flicker (camera meters slightly differently for each shot).
    - Loss of motion blur control (day shots are staccato, night shots are smooth).
    - Camera can hit its max shutter speed (e.g., 30s) and the sequence will go black.
- **Verdict**: Usable, but requires heavy post-processing. We can do better.

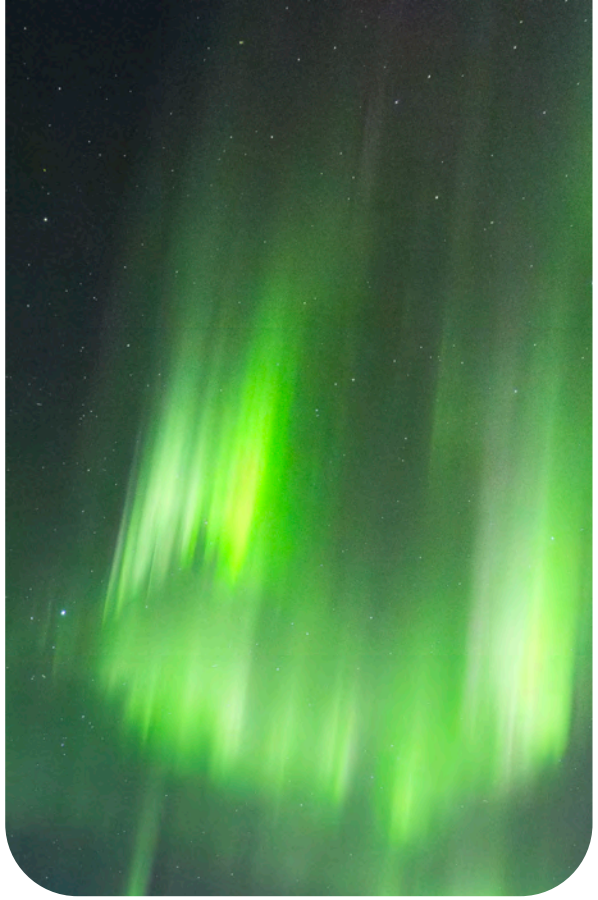
Shooting for Changing Light

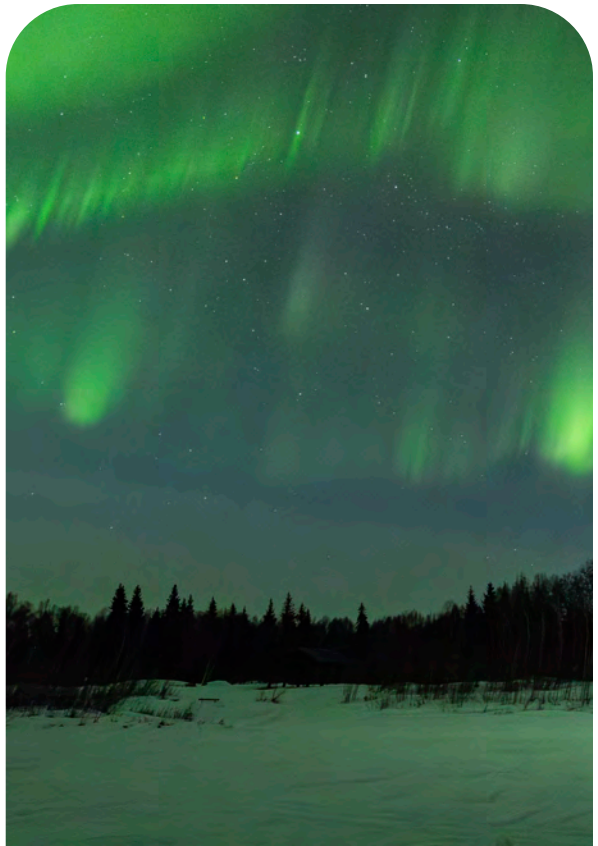
Method 2: Manual Ramping (The Pro Method)

Getting Pro Results

- **How**: Full Manual (M) Mode.
    - Start with your base settings.
    - As the aurora builds, watch your camera's light meter or histogram. Between intervals, manually adjust one setting at a time by 1/3 stop to keep the exposure correct.
    - ANTICIPATE the aurora and underexpose leading up to the substorm - try to NOT change settings during a substorm.
- **The Ramping Order (Crucial!)**:
    - **Aperture**: Don’t change this - keep it wide open!
    - **Shutter Speed**: Set this first, and try to avoid changing it.
    - **ISO**: Adjust this if you need to brighten or darken your exposure based on the changing light.







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Shooting for Changing Light

Essential In-Camera Settings

- **Interval is King**: Your interval MUST be longer than your longest exposure. (e.g., for a 20s exposure, set a 22s interval).
- **Shoot RAW**: Non-negotiable.
- **Manual Focus**: Set it, check it, and don't change it.
- **Fixed White Balance**: *Never use AWB*. Set to "Daylight" or a fixed Kelvin (e.g., 4500K). We will adjust this in post.
- **Turn OFF**:
  - **Image Stabilization** (IS/VR) - Wastes battery.
  - **Long Exposure Noise Reduction** - Doubles your shot time.
  - **Image Review** - Wastes battery and blinds you.

Shooting for Changing Light

So Where Do I Start?

Suggested Base Settings

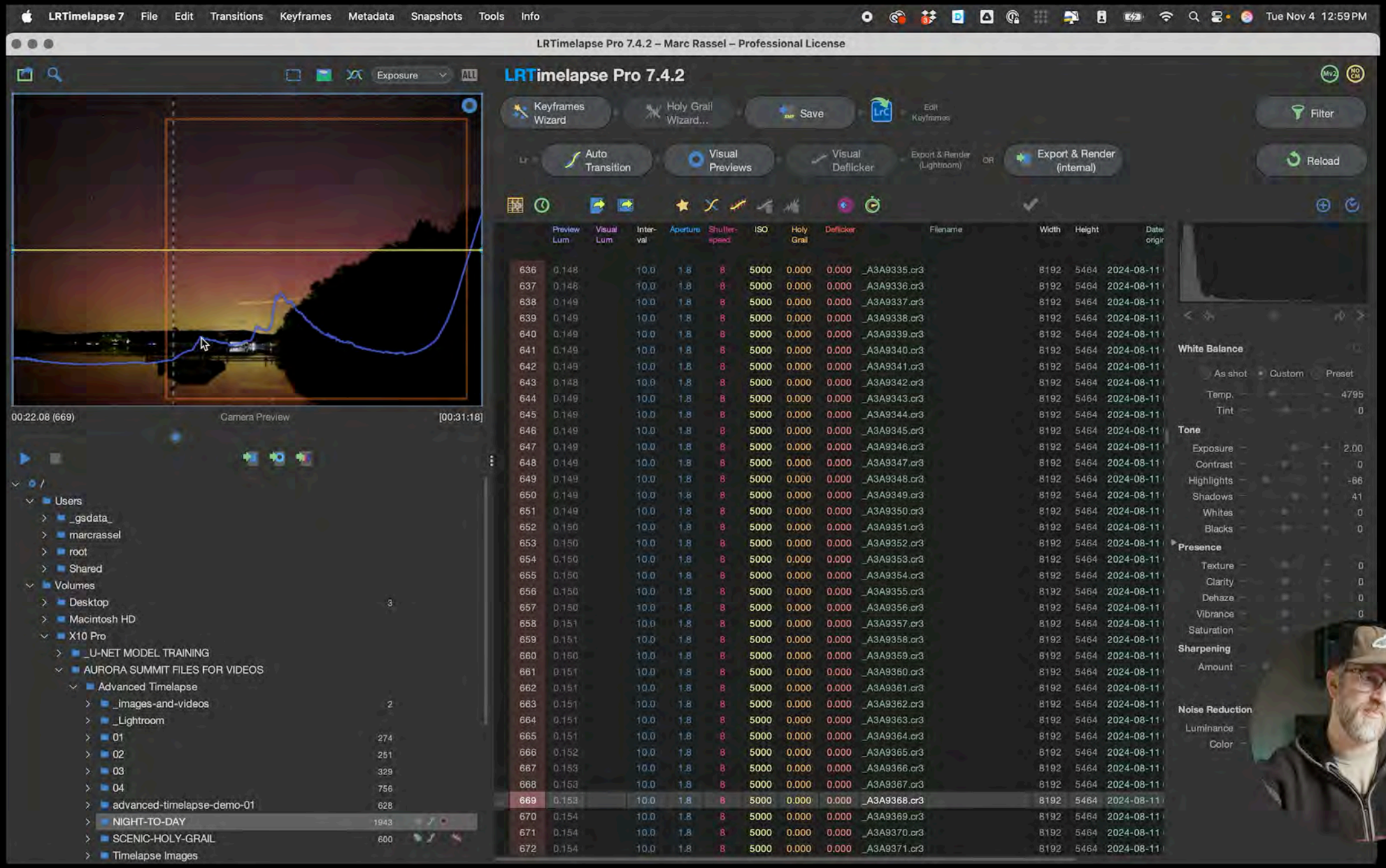
- **Aperture**: Wide open. Ideally, f/2.8 or faster (f/1.8 or f/1.4)
- **ISO**: 6400
- **Shutter Speed**: 4 seconds
- **Interval**: 6 seconds (*Adjust to suit your camera and card write speed)

Shooting for Changing Light

Why These Base Settings?

Here's the breakdown

- **Aperture should remain wide open**, as we've discussed.
    - We want to collect as much light as possible. It is exceptionally rare that you'd ever need to close down the aperture for aurora.
- **ISO should be as high as your camera will allow before** introducing an unusable amount of noise.
    - Most likely, your timelapse will start out when the aurora is still faint, nearer to the horizon.
- **Shutter Speed should be set in advance** for that speed in which you expect the aurora *could* be moving during a substorm.
    - If you DO need to shorten shutter speed to better freeze the motion of very fast-moving aurora, this will introduce jitter unless you ALSO change your interval.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Timelapse Images

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The Results

Why Bother With All this Extra Work?

Can't I just do this in-camera, Lightroom, or Photoshop?

- Yes, you can definitely do this with other methods. Depending on your preferences, this can be perfectly acceptable, but...
- Mastering these shooting methods and LRTimelapse processes is the pinnacle of smooth, clean timelapse videos used for professional industry applications.

Let's See →

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Thank you!

Any questions?

Let's keep in touch

Email: marc@marcrasselphoto.com

Web: www.marcrasselphoto.com

Instagram: @marcrasselphoto

Facebook: @marcrasselphotography