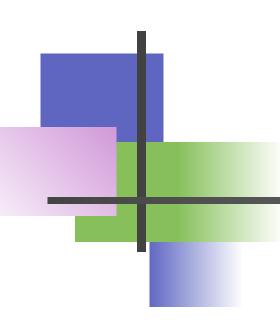


Long Exposure Photography

Southern Highlands Photographic Society

20th July 2021



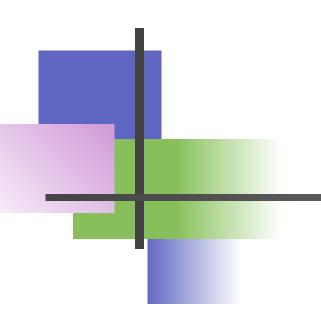
Long Exposure Photography

Steve Mullarkey

email: stevemul@ozemail.com.au

website: http://www.stevemul.com.au/

A PDF copy of this presentation will be available from your club.



Long Exposures

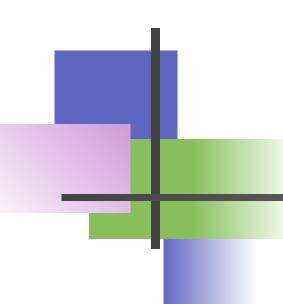
Long Exposures are like Oysters.

An Acquired Taste!

Long Exposures

I like Oysters!

I also like Long Exposures!



Now, we'd better get serious!

Normal Exposure - 1/50 Sec

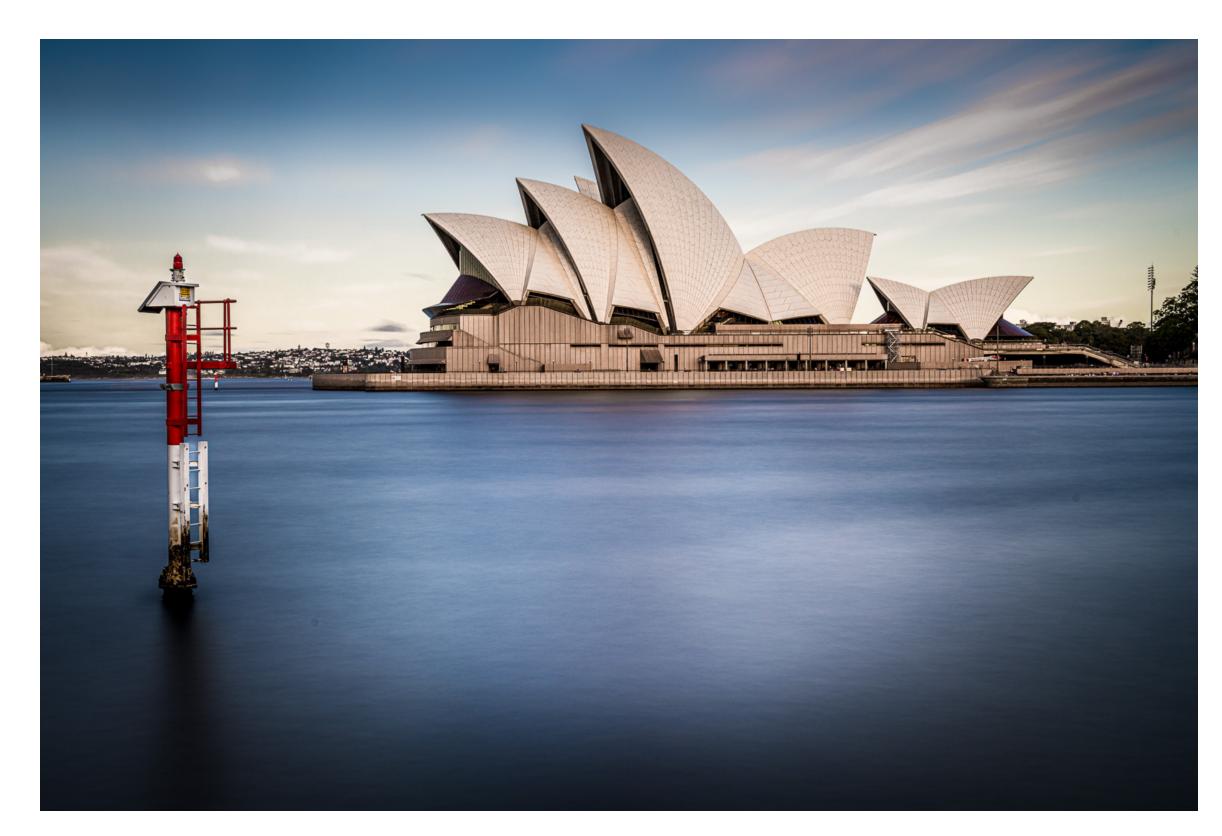


Long Exposure - 4 Minutes



Let's Compare Them





Normal Exposure - 1/200 Sec



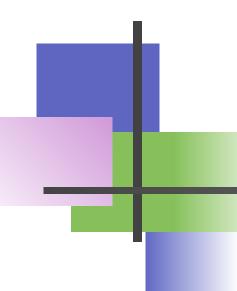
Long Exposure - 30 Seconds



Let's Compare Them

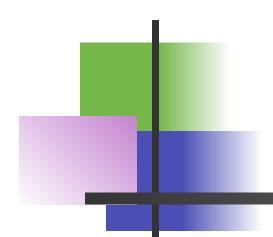




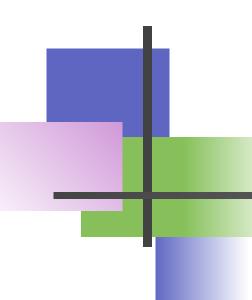


What We Will Cover This Evening

- Some Images with Different Exposure Lengths
- Equipment Required for Long Exposures
- Shooting Techniques
- Using Photoshop to Simulate Long Exposures
- An Audio Visual of Long Exposure Images
- Q & A



Long Exposure - Equipment



A Tripod



Tripods

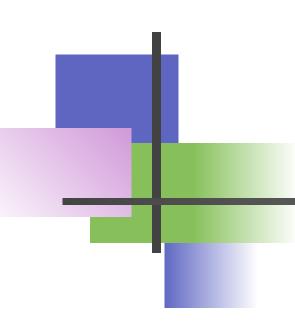
- The Big Names
 - Manfrotto
 - Gitzo
 - Really Right Stuff
- My Personal Favourite ~ Sirui
 - Carbon Fibre, Well Made, Good Value

A Ball Head





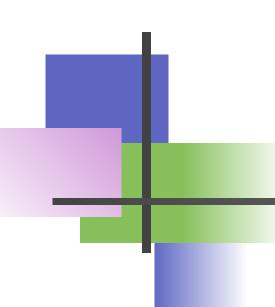
- I Hated Tripods until I Bought a Ball Head
 - Now I'm Fine



A Camera Plate



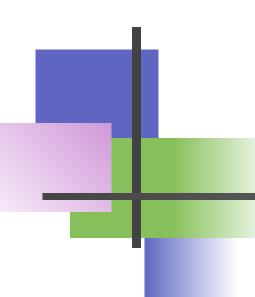
- Screws into your Camera
- Attaches to Ball Head



I Prefer an L-Plate



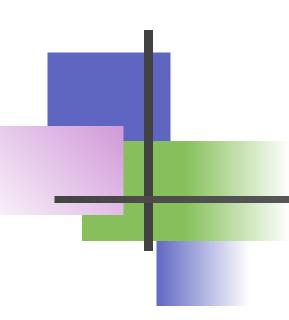




The Advantage of an L-Plate

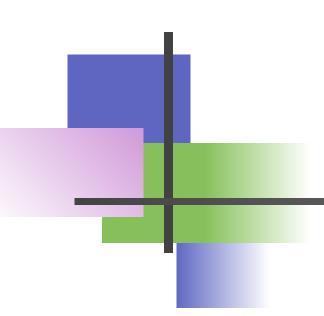


Your Camera is always Balanced over the Tripod



Two Types of Plate

- Manfrotto
- Arca
- Choose One Type
- And Stick with It



Neutral Density (ND) Filters

- Cut Down the Amount of Light
 - 3ND 3 Stops
 - 6ND 6 Stops
 - **10ND 10 Stops**
 - **15ND 15 Stops**
 - Variable ND Typically 1-8 Stops

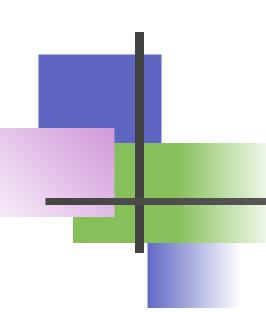
Two Types of Filters





Square Filters

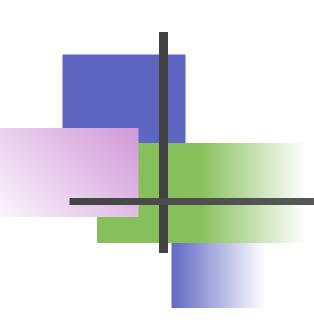
Screw-On Filters



Square Filters

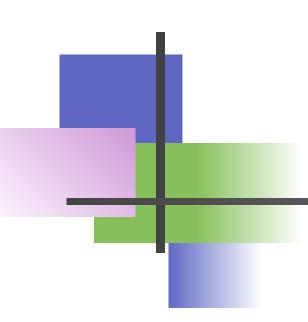






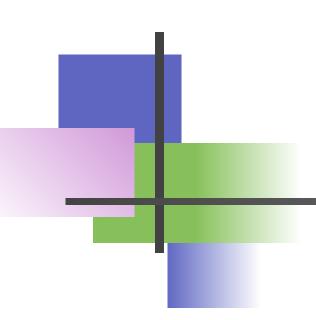
Square Filters - Pros

- No Vignetting
- Quick Stacking of Multiple Filters
- One Set of Filters Fits Most Lenses
- Can be used with Graduated ND



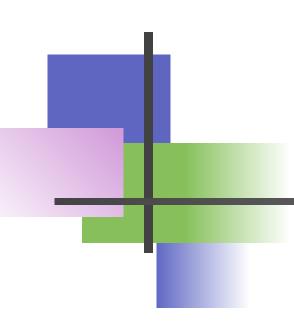
Square Filters - Cons

- Can't Use Lens Hood
- More Expensive
- Bulkier to Carry Around
- Does not Protect your Lens



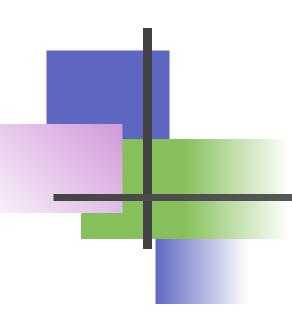
Screw-In Filters - Pros

- **Easier to Carry Around**
- No Light Leakage
- Protects the Lens
- Compatible with Lens Hood
- Can be used with Variable ND



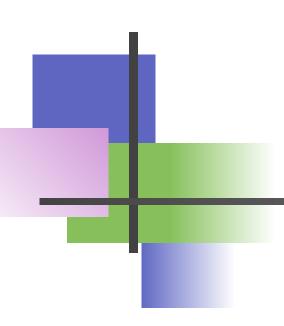
Screw-In Filters - Cons

- Possible Vignetting when Stacked
- Fixed Thread Size
- A Bit Fiddly to Screw On & Off



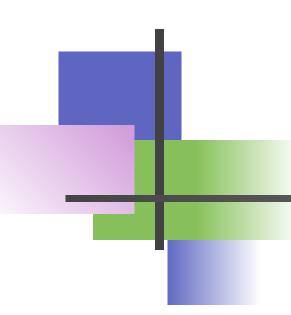
Colour Cast ~ A Warning

- Some Older & Cheaper ND Filters
 - Have a quite strong colour cast



ND Filters ~ Recommended Brands

- NISI ~ My Personal Favourite
- Cokin, Hoya, Lee, Formatt-Hitech
- Urth ~ Australian Brand

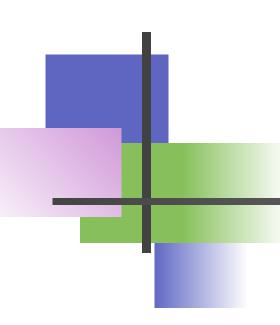


ND Filters - My Kit





Includes 3ND, 6ND+CPL, 10ND, 15 ND



Remote Controls



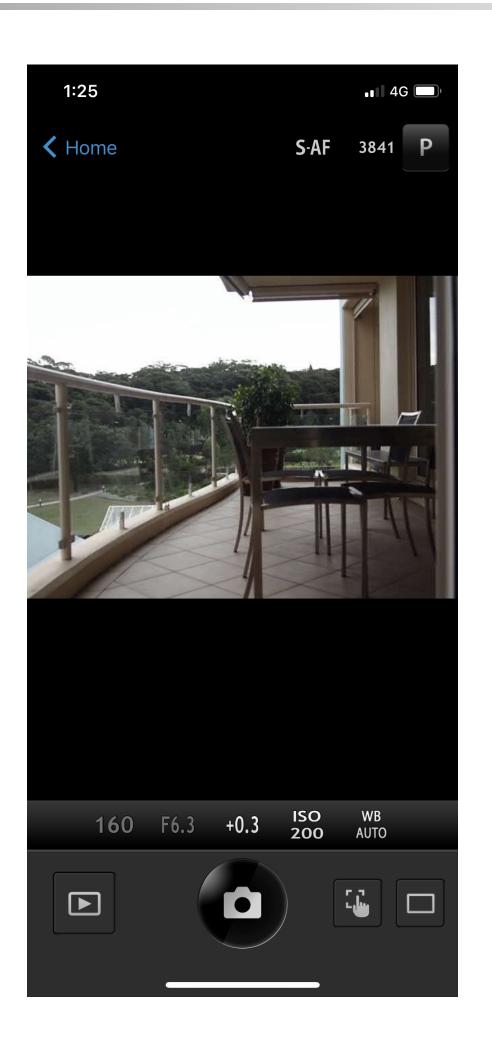
Wired Remote



Wireless Remote

Remote Control ~ My Preference



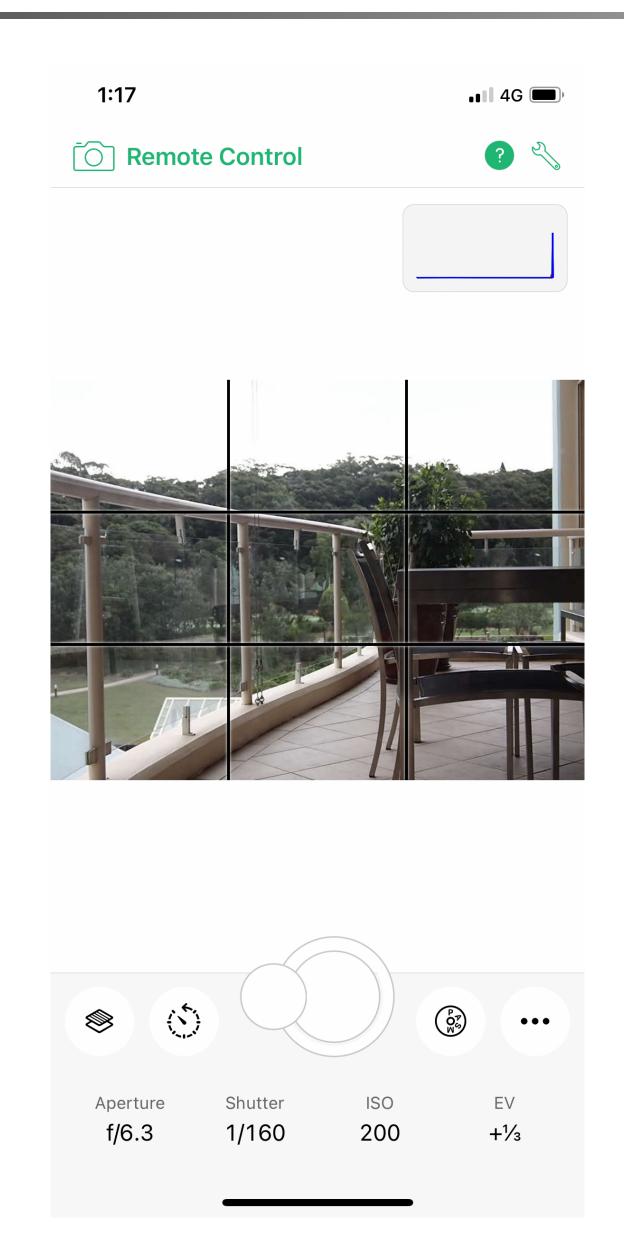


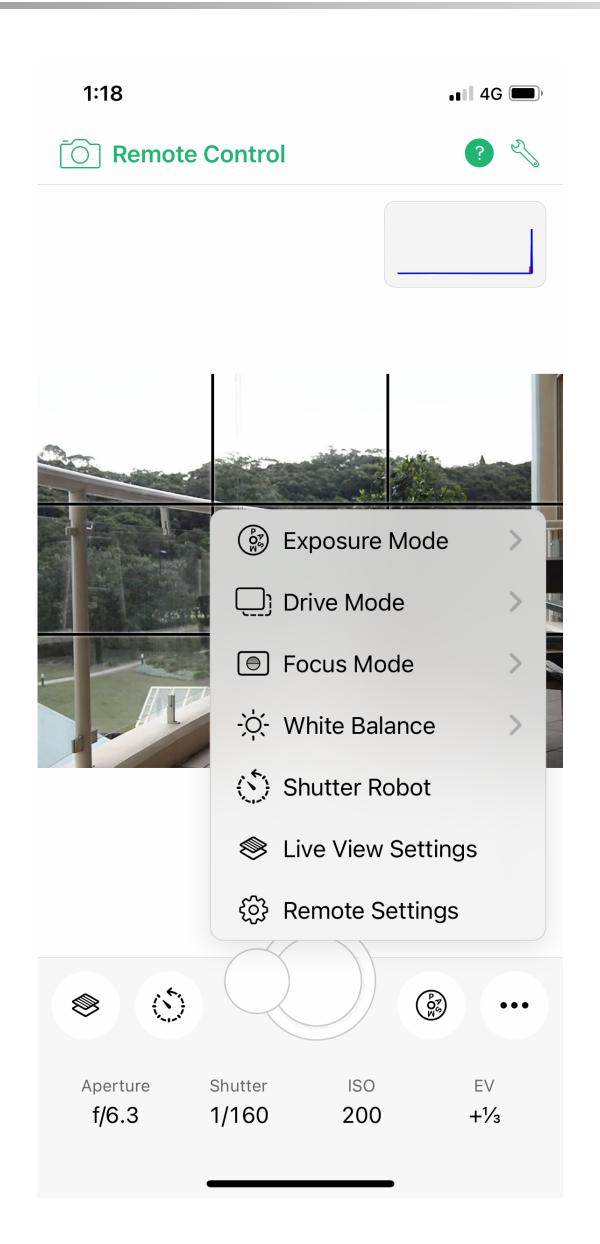
My iPhone ~ Simple, Powerful, Versatile

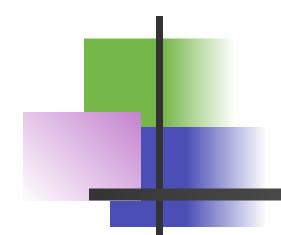
Remote Control ~ Mobile Phone

- Nikon "Snapbridge"
- Canon "Camera Connect"
- Sony "Play Memories"
- Olympus "OI.Share"
- Fuji "FujiFilm Camera Remote"
- 3rd Party "CasCable"

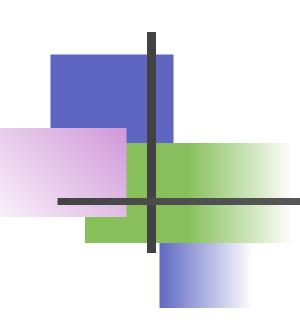
Remote Control ~ "CasCable"





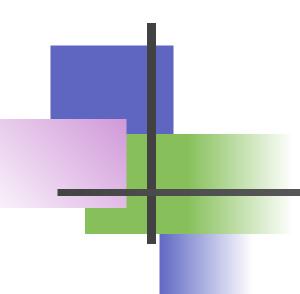


Long Exposure - Shooting Techniques



Avoid Camera Shake

- Turn Off IS when on a Tripod
- Use 2 Second Shutter Release, OR
- Use a Remote Control



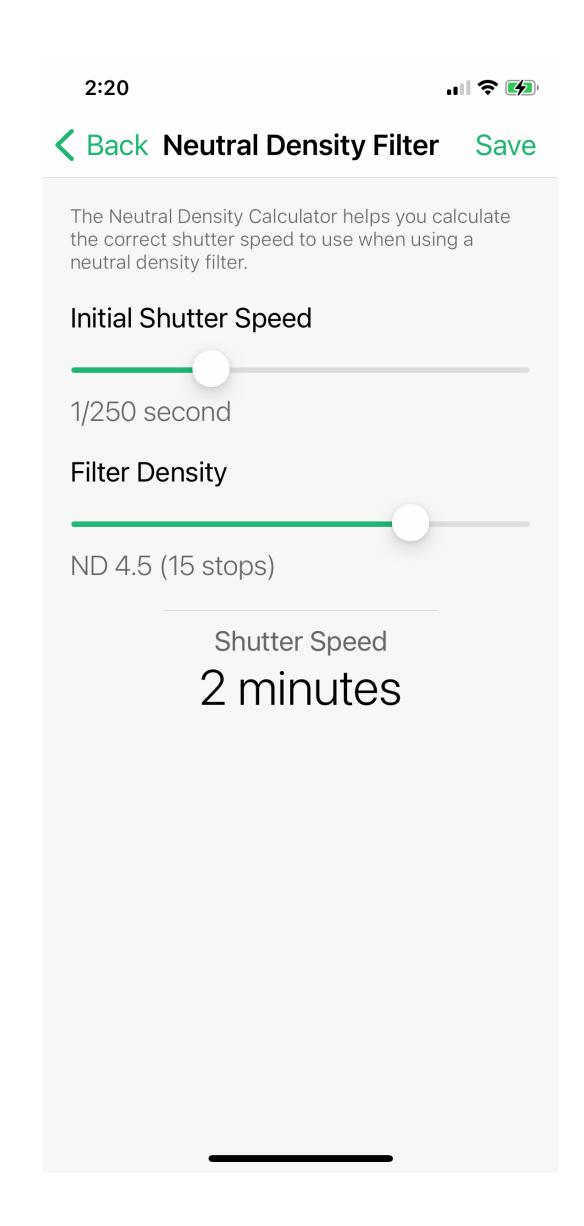
Focusing

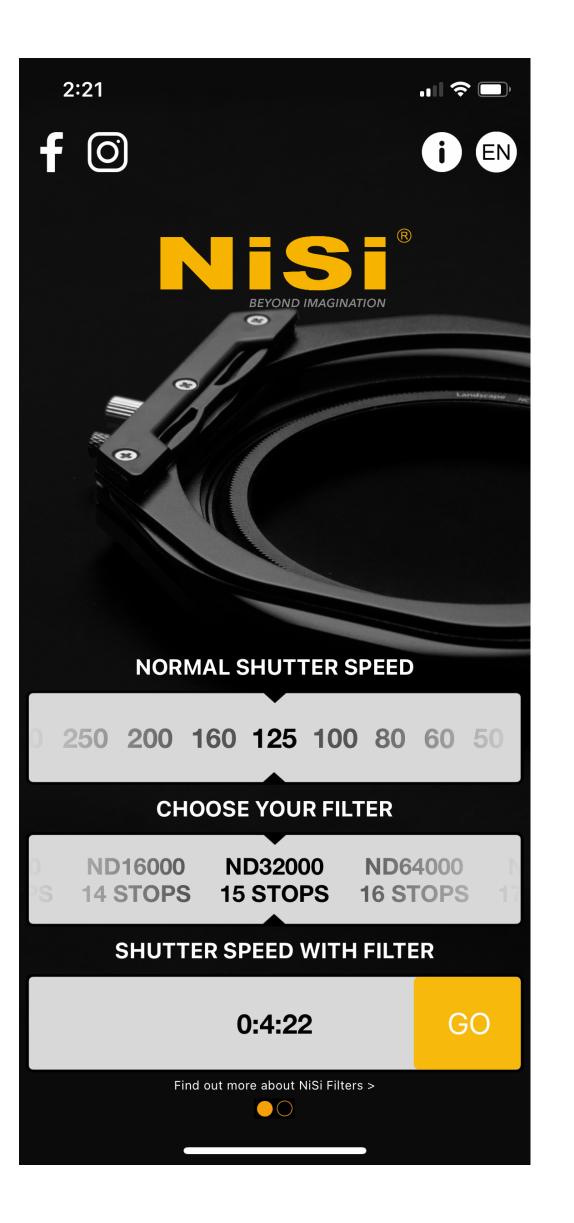
- Most Cameras won't Focus with 6ND or more
- Focus Manually without Filter(s)
- Add Filter(s)
- Take your Shot

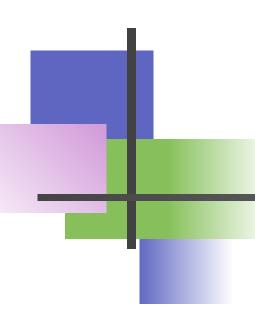
Calculating Exposure

- Every 1 Stop of ND doubles exposure time
 - If Normal Shot is 1 Second
 - IND will be 2 Seconds
 - 3ND will be 8 Seconds
 - 10ND will be 512 Seconds
 - Etc., etc.. but ... it is much easier to ...

Calculating Exposure ~ Use Your Phone

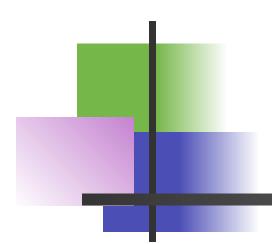






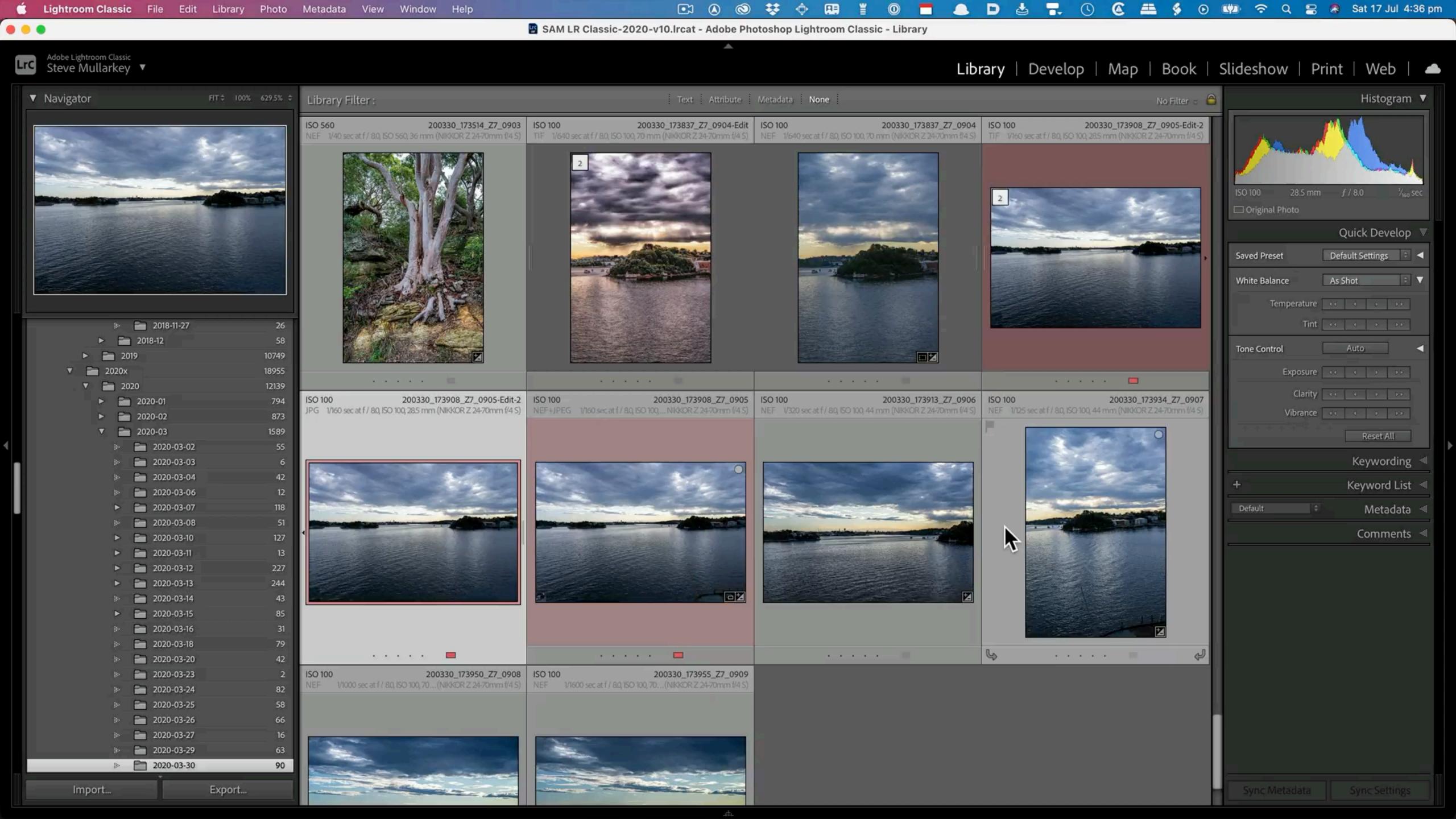
Calculating Exposure ~ Use Your Phone

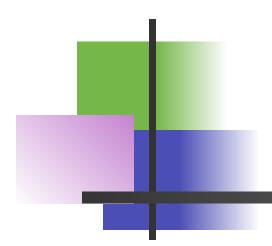
- Many Apps Available
 - "NISI Filters"
 - "Cascable"
 - "Photo Pills"
 - "Long Exposure Calculator"
 - Etc.



Long Exposure - I Forgot my Filters, Tripod,

Cheating with Photoshop





Sydney Harbour ~ Long Exposures

An Audio-Visual



- That's Yer Lot!
- Thank you for listening
- Thank you for looking
- Good Luck with your own Long Exposures!