



YOU CAN'T PLAN THE  
WEATHER - BUT YOU  
CAN PLAN TO BE  
READY WHEN THE  
WEATHER COOPERATES

## PRE-DEPARTURE CHECKLIST

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Successful observing rarely happens by chance. It begins with good preparation, thoughtful planning and a consistent routine. Whether you're observing from the garden or travelling to a remote dark-sky site, spending a little time preparing in advance will help you make the most of every clear night.

## PRACTICAL ASTRONOMY GUIDE #4

This guide outlines a practical workflow that begins well before an observing session and finishes when you leave the observing site. By developing a few simple habits, you'll spend less time solving avoidable problems and more time enjoying the night sky.



GOOD WEATHER IS  
NEVER CERTAIN, BEING  
READY AND AVAILABLE  
WHEN FAVOURABLE  
CONDITIONS ARRIVE IS  
ABOUT GOOD  
PLANNING.

## EVERY FULL MOON

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Clear, moonless nights are too valuable to lose because of poor planning.

### PROTECT YOUR OBSERVING OPPORTUNITIES

At the start of each new lunar month (Full Moon), review the synodic month ahead and identify those evenings most likely to provide favourable observing conditions. Remember certain objects require the darkest of nights, while other objects aren't always completely washed out by moonlight.

Go beyond the moon phase, consider how the timing of moonrise and moonset affects the available hours of darkness. A full Moon that rises late may still leave several excellent hours for deep-sky observing, while a last-quarter Moon that sets before darkness can provide unexpectedly conditions throughout much of the night. At the same time, consider your personal commitments. Business travel, evening meetings, family responsibilities and social events can all reduce your availability. By identifying potential observing nights in advance, you can often avoid unnecessary conflicts before they arise

### CHECKLIST

- ☐ Review the lunar cycle.
- ☐ Identify potential observing nights.
- ☐ Block time in your schedule to prevent new work or social commitments.
- ☐ Coordinate family responsibilities.
- ☐ Check for astronomy club events or organised observing sessions.

## 24 HOURS BEFORE

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### PLANNING

Once a promising observing opportunity has emerged, it's time to develop a realistic plan. Begin by checking the latest weather and astronomy forecasts to confirm that conditions remain favourable. Next, determine when you want to begin observing. Rather than calculating your departure time from when you intend to leave home, work backwards from the point at which you want your telescope to be fully assembled, aligned and ready to observe.

For many observers, arriving before sunset or during civil twilight provides ample time to set up equipment in natural light, allowing darkness to be devoted entirely to observing. Remember, depending on your latitude, sunset occurs much earlier during the winter months, making timeline planning an essential part of your routine.

### CHECKLIST

- ☐ Check the latest weather forecast.
- ☐ Review the astronomy forecast.
- ☐ Confirm moonrise and moonset times.
- ☐ Calculate your departure time.
- ☐ Finalise your observing list.

FAILURE TO PREPARE  
IS ESSENTIALLY  
PREPARING TO FAIL





DARKNESS IS FOR  
OBSERVING,  
NOT ASSEMBLING  
EQUIPMENT

## 24 HOURS BEFORE

### TIMELINE

Make a clear timeline and stick to it. Exactly how long you'll need for each step will vary depending on the complexity of your visual astronomy / astrophotography rig. Initially allow more time for setup, adjusting later as you become more proficient.

| MILESTONE                                 | TIME  |
|-------------------------------------------|-------|
| Astronomical darkness begins              | 21:05 |
| Telescope acclimatized & ready to observe | 21:00 |
| Polar alignment complete                  | 20:40 |
| Equipment assembled                       | 20:30 |
| Arrive at observing site                  | 20:10 |
| Drive time (40 minutes)                   |       |
| Leave home                                | 19:30 |

### EQUIPMENT PREPARATION

- ☐ Inspect optics.
- ☐ Clean optics if necessary.
- ☐ Charge all batteries / power stations.
- ☐ Charge phone, tablet and laptop.
- ☐ Check cameras and available memory (astrophotography only).
- ☐ Confirm all equipment is functioning correctly.



CREATE A  
CONSISTENT  
ROUTINE SO YOU  
CAN CONCENTRATE  
ON ENJOYING THE  
NIGHT SKY

## BEFORE DEPARTURE: VISUAL OBSERVATION

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Pack methodically, only after your equipment has been checked and prepared. Working methodically reduces the likelihood of leaving essential items behind.

### VISUAL TRAIN & ACCESSORIES

- ☐ Telescope
- ☐ Mount
- ☐ Tripod or Column
- ☐ Counterweights & Bar (if applicable)
- ☐ Finder scope or reflex sight
- ☐ Polar alignment scope / equipment (if required)
- ☐ Visual back
- ☐ Diagonal
- ☐ Eyepieces
- ☐ Coma Corrector (Newtonian / Dobsonian telescopes)
- ☐ Optical Extenders / Reducers
- ☐ Barlow lens
- ☐ Moon & Planetary Filters
- ☐ Dew shield
- ☐ Dew heater bands & controller
- ☐ Dust caps
- ☐ Observing chair
- ☐ Batteries / Power Station
- ☐ Primary & Spare Cables



IMAGING TIME IS  
PRECIOUS.  
ASSEMBLE, TEST  
AND VERIFY YOUR  
COMPLETE IMAGING  
TRAIN BEFORE  
LEAVING HOME

## BEFORE DEPARTURE: ASTROPHOTOGRAPHY

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Pack methodically, only after your equipment has been checked and prepared. Working methodically reduces the likelihood of leaving essential items behind.

### IMAGING TRAIN & ACCESSORIES

- ☐ Telescope
- ☐ Mount
- ☐ Tripod or Column
- ☐ Counterweights & Bar (if applicable)
- ☐ Field flattener or coma corrector
- ☐ Optical Extender / Reducer
- ☐ Controller (mini PC) and laptop/tablet
- ☐ Guide scope or off-axis guider
- ☐ Guide camera
- ☐ Imaging camera
- ☐ Filter drawer or filter wheel
- ☐ LRGB and Narrowband Filters
- ☐ Electronic focuser or Bahtinov mask
- ☐ Dew heater bands & controller
- ☐ Batteries / Power Station
- ☐ Primary & Spare Cables
- ☐ Dust caps



YOUR COMFORT  
NATURALLY  
INFLUENCES THE  
DURATION OF YOUR  
EVENING UNDER THE  
STARS

## BEFORE DEPARTURE: ESSENTIAL FIELD-KIT

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Pack methodically, only after your equipment has been checked and prepared. Working methodically reduces the likelihood of leaving essential items behind.

### NAVIGATION & REFERENCE

- ☐ Printed observing list
- ☐ Star atlas or observing guide
- ☐ Planetarium app
- ☐ Notebook & Pencil
- ☐ Compass (initial alignment)

### LIGHTING

- ☐ Red torch
- ☐ White torch
- ☐ Spare batteries

### MAINTENANCE & TOOLS

- ☐ Lens cloth
- ☐ Blower bulb
- ☐ Multi-tool
- ☐ Band Wrenches (rubber)
- ☐ Small screwdriver or Allen keys
- ☐ Spare cables or adapters

### CLOTHING & COMFORT

- ☐ Warm layered clothing
- ☐ Waterproof jacket
- ☐ Hat
- ☐ Gloves
- ☐ Warm socks
- ☐ Sturdy footwear
- ☐ Adjustable observing chair
- ☐ Hot drink
- ☐ Snacks
- ☐ Drinking water
- ☐ Insect repellent (seasonal)
- ☐ Hand warmers (winter)
- ☐ Tissues or Toilet Paper
- ☐ First aid kit



LEAVE YOUR  
OBSERVATION SITE  
AS YOU FOUND IT.  
TAKE YOUR RUBBISH  
HOME OR BIN IT.

## FINAL CHECKS

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### BEFORE LEAVING HOME

- ☐ Nothing left on charge.
- ☐ Vehicle fuelled or charged.
- ☐ Equipment securely loaded.
- ☐ Someone knows where you're going and when you expect to return.
- ☐ Bio-break.

### BEFORE LEAVING THE OBSERVING SITE

Leave nothing behind. After several hours beneath the stars it's surprisingly easy to overlook something small you might have dropped by accident. Before driving away, perform one final walk around your observing area using a white torch.

- ☐ Replace all dust caps.
- ☐ Return every eyepiece to its case.
- ☐ Disconnect all power supplies.
- ☐ Pack all cables.
- ☐ Fold chairs and tables.
- ☐ Check for forgotten accessories.
- ☐ Walk around the observing area with a white torch.
- ☐ Leave the site exactly as you found it – take your rubbish home or bin it

Remember ... The best sessions begin long before darkness falls. By identifying suitable dates, protecting time in your diary, working backwards from astronomical darkness and preparing your equipment methodically, you'll arrive relaxed, fully prepared and ready to make the most of every clear night.

# ABOUT NSO

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## Our Vision

We envision a world where anyone with an interest in astronomy can begin their journey with confidence and enjoy rewarding first light experiences. Where choosing equipment is exciting rather than overwhelming, expert guidance is always within reach, and every astronomer has a trusted partner throughout their journey under the stars.

## Our Commitment

We believe our responsibility doesn't end with a sale. We are committed to supporting our customers throughout their astronomy journey.

- Expert Guidance
- Carefully Selected Stock
- Accessible Value
- Long-Term Partnership

