



Astrolog's Observing Logs

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To log or not to log... that is the question.

All amateur astronomers will ask themselves this question at least once during their astronomy hobby journey. On the one hand, simply grabbing a scope and observing at whim has its charms. It's unfettered, it's simple and it allows you to let go of your right brain routines and simply relax in the views. We all need such evenings of observing, as they can be the most relaxing.

However, there are some very good reasons to not allow the above to become your sole observing habit. Over the years I've found three solid reasons why logging your observing sessions is beneficial to you in the long term. Consider these reasons with some observers care.

Why Log

1. Logging is the most straightforward way to increase your observing skills. Notes and sketches force you to notice details that you never will if you are just casually glancing at objects.
2. Logging is the best way to increase your knowledge about the objects you are observing. Taking notes forces you to look up variables such as; magnitude, separation of doubles, object size, etc. By looking these variables up, you will soon be able to estimate these variables when in the field
3. Logging allows you to keep track of where you are at in your own observing program. Observing programs give structure to your sessions and your notes are your record of this.

For me, I find I log while pursuing a structured observing program. Observing programs can be a pleasure in their own right, and I find each program teaches me many things. Between observing programs, I let my left brain loose and I enjoy whatever sights strike my fancy each evening.

Beyond the simple question, there are the more complex issues to consider: What should I log? How much detail is necessary, for my comparison needs or my satisfaction? Do I want to sketch, and if so, in how much detail? Am I considering certifications that might require this documentation? Your answers to these questions will determine what sort of volume to carry with you. Amateur astronomy can require a lot of equipment and supporting electronics, and every volume you add to your load must be carefully considered.

Meet the Logs

Telosnet Astrolog offers two types of observing logs. The main difference between them is the room in the book to sketch observing sessions. In brief:

Astronomical Observers Diary: a general observational log for any object you observe but NOT sketch.

Deep Sky Observers Logbook: Used when you are viewing deep sky objects AND you wish to sketch them. Astronomical Observers Diary

Astronomical Observers Diary (AOD)

The Astronomical Observers Diary is more than simply a bound set of forms to record your observations. Astrologs has gone beyond that and created 10 useful reference tables in the beginning of the AOD. They are:

OBSERVING SITES

| Location | Elevation | Longitude | Latitude | Observatory Code |
|----------|-----------|-----------|----------|------------------|
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UNIVERSAL TIME CONVERTER

| Time Zone | EST | EDT | CST | CDT | MST | MDT | PST | PDT | HI (S) | HI (D) |
|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|
| Add to Local = UT | 5 hrs | 4 hrs | 6 hrs | 5 hrs | 7 hrs | 6 hrs | 8 hrs | 7 hrs | 10 hrs | 9 hrs |
| Local at 0:00 UT | 7 pm | 8 pm | 6 pm | 7 pm | 5 pm | 6 pm | 4 pm | 5 pm | 2 pm | 3 pm |

SEEING / TRANSPARENCY SCALES

[Or create your own, from 1—5 or 1—10]

| Astronomical Seeing (Atmospheric Stability) | |
|---------------------------------------------|-----------------------------------------|
| 1 | Severely disturbed: Low powers unsteady |
| 2 | Poor: Medium powers unsteady |
| 3 | Good: High powers unsteady |
| 4 | Excellent: High powers soft |
| 5 | Superb: All powers steady |

| Transparency (Clarity) Scale | |
|------------------------------|--------------------------------------|
| 1 | Mostly Cloudy |
| 2 | 1 or 2 Little Dipper Stars Visible |
| 3 | 3 or 4 LD Stars visible |
| 4 | 5 or 6 LD Stars visible |
| 5 | 6 LD Stars; Milky Way averted vision |
| 6 | Milky Way & M-31; 7 LD stars |
| 7 | M-33 and/or M-81 visible |

LIMITING MAGNITUDE—TEST STARS

| Mag | Name | RA | Dec | Mag | Name | RA | Dec |
|-----|------|----|-----|-----|------|----|-----|
| 7 | | | | 5 | | | |
| 7 | | | | 5 | | | |
| 7 | | | | 5 | | | |
| 7 | | | | 5 | | | |
| 6 | | | | 4 | | | |
| 6 | | | | 4 | | | |
| 6 | | | | 4 | | | |
| 6 | | | | 4 | | | |

1. Calculating eyepiece magnification and FOV
2. Universal Time Converter

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The top section of each form contains entries for the particular observing session (time, date, location, seeing/transparency, limiting magnitude, etc).*

The main observing form is an extended table with room for 20 separate observations. The form has 5 fields:

1. Object name
2. Type/constellation
3. Time
4. Description (your notes)
5. Ref/sketch (a cross-reference for where a sketch is in another log, if your sketch)

One thing I like about the AOD is that the description section has enough room for 2 sentences. If you are a person who records lengthy and detailed observations, the Astronomical Observers Diary is not for you. I keep my descriptions short and to the point. The AOD is small (~6"x8") and allows for my style of journaling without encumbering me with a larger book with space that I do not use or need.

Thinking about not filling in these variables? Don't think you need to know what the limiting magnitude was last Thursday? Well, think again. Only by recording these valuable variables will you later be able to figure out why an object appeared the way it did. Over time you will gain a sense of how seeing, transparency, temperature, phase of the moon, etc interact and impact your observing.

Deep Sky Observers Logbook

Ok, this is for the serious deep sky hunter. Like the AOD, it's more than simply a bunch of bound forms.

A word of criticism first. You know those 10 really useful charts found in the AOD? Well, they are not in the Deep Sky Observers Logbook. The DSOL instead refers you over to the AOD if you need to reference those charts. This is a shortcoming that can be easily remedied by the folks over at Astrologs and would immensely help out the owners of the DSOL.

Ok, now that we have that nit out of the way, let's look at the DSOL in some detail.

The DSOL has two parts:

1. The actual observing log pages themselves
2. An index by NGC, IC, Messier, & UGC # of where in the DSOL your observation of it is contained.

The log page of the DSOL is designed for maximum information keeping. There are no fewer than 17 listed variables (RA, DEC, Object Size, etc), 7 lines for writing your comments and a circle for sketching the object under study.

Obviously you don't have to fill in all the variables nor use all seven lines for your comments. Choose what you need, but I recommend that you consistently fill in the same variables for each and every observing session. This will help you avoid frustration when you are comparing sessions or equipment.

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| DEEP SKY OBSERVATIONS | | | | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|--|
| OBJECT: Visual Map: _____ Type(s): <input type="checkbox"/> OC <input type="checkbox"/> GC <input type="checkbox"/> GK <input type="checkbox"/> PH <input type="checkbox"/> BH <input type="checkbox"/> DH Other: _____ | Constellation: Chart/Page: RA: _____ DEC: _____ Object Size: _____ | Obs Location: Date/Time: ___ UT ___ T ___ / ___ / ___ : : : Seeing: _____ Transp: _____ | Aperture: _____ mm f / : _____ Eyepieces: _____ mm _____ mm _____ mm Filters: _____ | Comments: _____ _____ _____ _____ _____ _____ _____ | |
| OBJECT: Visual Map: _____ Type(s): <input type="checkbox"/> OC <input type="checkbox"/> GC <input type="checkbox"/> GK <input type="checkbox"/> PH <input type="checkbox"/> BH <input type="checkbox"/> DH Other: _____ | Constellation: Chart/Page: RA: _____ DEC: _____ Object Size: _____ | Obs Location: Date/Time: ___ UT ___ T ___ / ___ / ___ : : : Seeing: _____ Transp: _____ | Aperture: _____ mm f / : _____ Eyepieces: _____ mm _____ mm _____ mm Filters: _____ | Comments: _____ _____ _____ _____ _____ _____ _____ | |
| OBJECT: Visual Map: _____ Type(s): <input type="checkbox"/> OC <input type="checkbox"/> GC <input type="checkbox"/> GK <input type="checkbox"/> PH <input type="checkbox"/> BH <input type="checkbox"/> DH Other: _____ | Constellation: Chart/Page: RA: _____ DEC: _____ Object Size: _____ | Obs Location: Date/Time: ___ UT ___ T ___ / ___ / ___ : : : Seeing: _____ Transp: _____ | Aperture: _____ mm f / : _____ Eyepieces: _____ mm _____ mm _____ mm Filters: _____ | Comments: _____ _____ _____ _____ _____ _____ _____ | |
| OBJECT: Visual Map: _____ Type(s): <input type="checkbox"/> OC <input type="checkbox"/> GC <input type="checkbox"/> GK <input type="checkbox"/> PH <input type="checkbox"/> BH <input type="checkbox"/> DH Other: _____ | Constellation: Chart/Page: RA: _____ DEC: _____ Object Size: _____ | Obs Location: Date/Time: ___ UT ___ T ___ / ___ / ___ : : : Seeing: _____ Transp: _____ | Aperture: _____ mm f / : _____ Eyepieces: _____ mm _____ mm _____ mm Filters: _____ | Comments: _____ _____ _____ _____ _____ _____ _____ | |

The DSOL covers a needed area for experienced amateurs that prefer a more detailed approach, or are pursuing a certification. It would also suit the beginner whose personality or observing goals require a more detailed log. Of course, it is also appropriate for making sketches if another volume is not maintained for that purpose.

The outside cover of each book is waterproof and the books themselves are spiral bound, allowing you to flip the cover all the way over. These books are very durable, with heavier weight paper and a quality binding. They will certainly outlast their mission and will serve as good reference later.

If you are thinking of logging your observations, either one of these products is a great place to start.

Happy logging!

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