

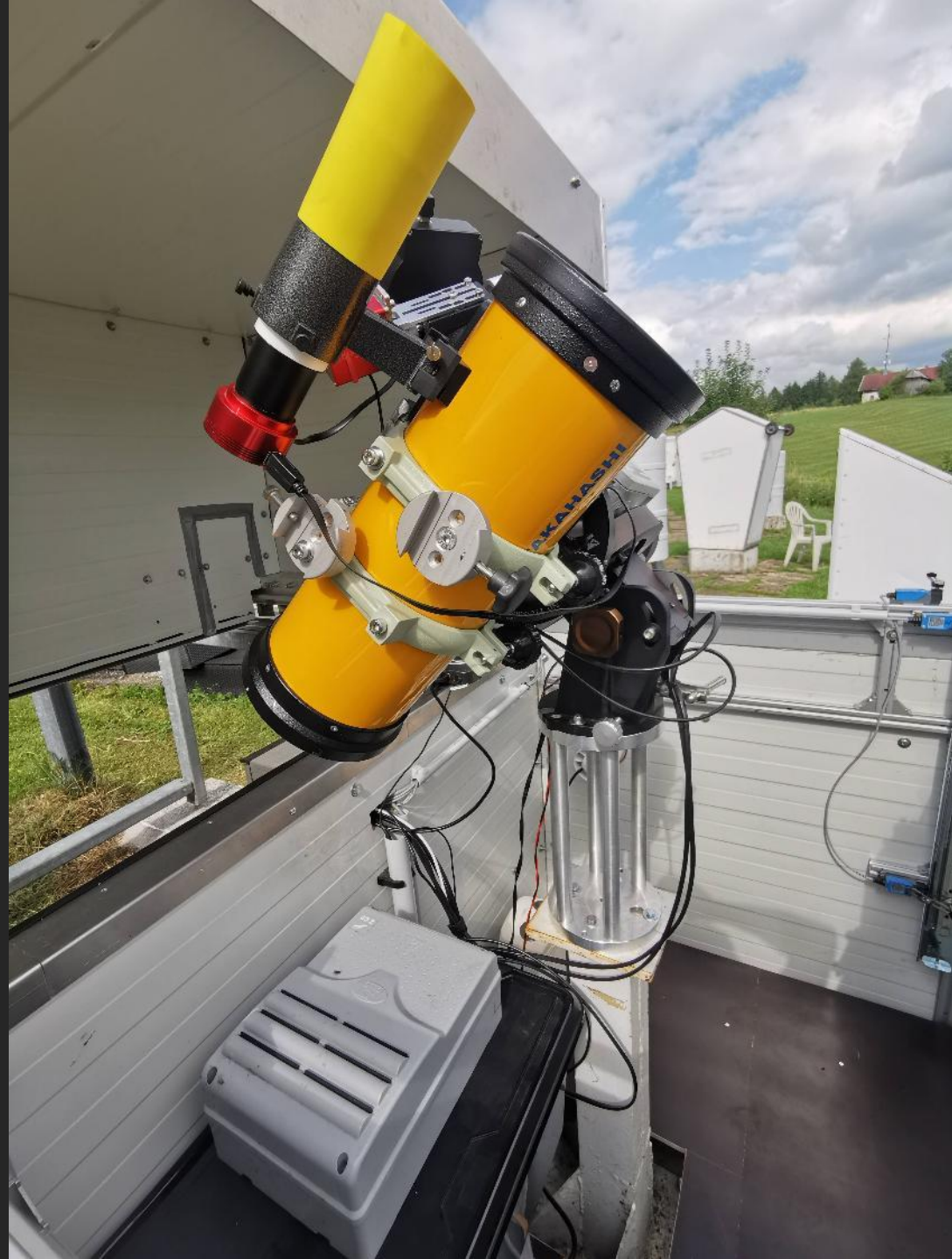
DR0.2

# Ein Geschenk des Himmels

Oliver Schneider / AAS







Datum und Uhrzeit

Datum und Uhrzeit			Julianischer Tag		
2025	-	7	-	27	
	:	19	:	4	:
					12



# M 3 - NGC 5272 - Mel 119

Größenklasse: 6.30  
 Rekt/Dekl (J2000.0): 13h42m10.28s / +28°22'48.3"  
 Azimut/Höhe: +276°50'25.0" / +33°12'55.4"  
 Aufgang: 5h58m  
 Transit: 14h23m  
 Untergang: 22h47m  
 Größe: +0°18'00.00"

Abell 1800  
 PGC 49049  
 PGC 93741

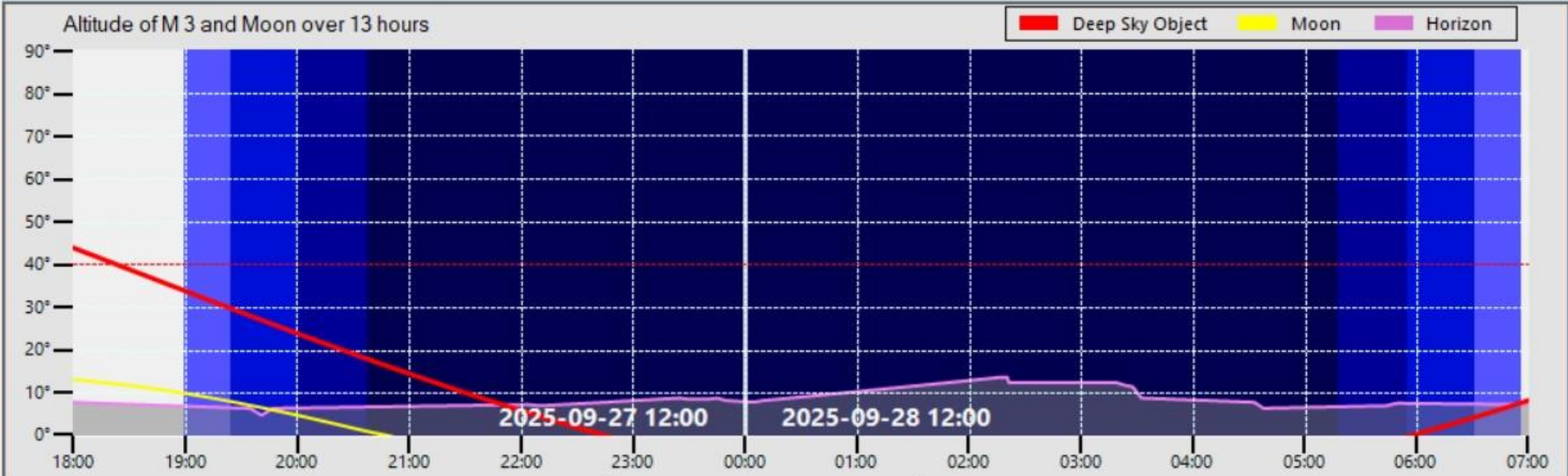
Rekt/Dekl (J2000.0) des Kreuzes:  
 13h42m10.09s / +28°22'46.1" 0.0°



Segment #0: ZWO 533  
 Bildfeld: 1°28.74' x 1°28.74'  
 Binning: 1 x 1  
 X-Maßstab: 1.7701"/px  
 Y-Maßstab: 1.7701"/px  
 Drehung: 0°  
 Julianischer Tag: 2457547.5  
 Teleskop #0: E1300  
 Zw-Linse #3: My Lens  
 Verlängerungsfaktor: 1x

Datum und Uhrzeit: 2025 - 9 - 27 19 : 12

PGC 1875422 PGC 48566 NGC 5271 PGC 48432  
 NGC 5272 NGC 5274 NGC 5275  
 PGC 1877927 PGC 48336 PGC 48327 PGC 1897293  
 PGC 48304  
 PGC 48347  
 PGC 48270  
 PGC 48138  
 PGC 47938  
 PGC 48276 PGC 93724 PGC 48312  
 Abell 1769  
 PGC 48235 PGC 48145  
 PGC 48150  
 PGC 48547  
 PGC 1854931




#### Deep Sky Object

Find Name  Select Ra/Dec  
 Name

Ra   
 Dec   
 Epoch 2025-09-27  
 Ra   
 Dec

#### Date, Time and Location

Date    
  
 Location    
   
 TZone   
 Daylight Saving Time  
 Lat   
 Lon   
 Height

#### Object Time Window

**Availability**  
 Total   
 From   
 To   
 Culmination

**Constraints**  
 Object Altitude Limit [°]   
 Moon Distance Limit [°]   
 Moon Illumination Limit   
 Sun Altitude Limit [°]   
 Horizon Limit

#### M 3 from 2025-09-27 12:00 to 2025-09-28 12:00

Summary 2025-09-27/28

---

**Moon**  
 Rise 13:11  
 Transit 17:01 Alt 14.43°  
 Set 20:49  
 Phase angle -113.10 [°]  
 Average illumination 29.18 [%]  
 Moon M 3 distance 69.83 [°]  
 Moon Earth distance 404,296.68 [km]

New Moon 2025-09-21 21:55:11  
 First Quarter 2025-09-30 01:54:51  
 Full 2025-10-07 05:48:42  
 Last Quarter 2025-10-13 20:13:52

**Sun**  
 Sun Earth distance 149,920,623.31 [km]

**Bildquelle**  
 Ausrichtung: Offline-Himmelskarte

**Koordinaten**

Name	M 3		
RA	13 h	42 m	11.2 s
Dek	28 d	22 m	31.5 s
Bildfeld	2.00 °		

**Camera Parameters**

Breite	3008
Höhe	3008
Pixelgröße	3.76 µm
Brennweite	430 mm

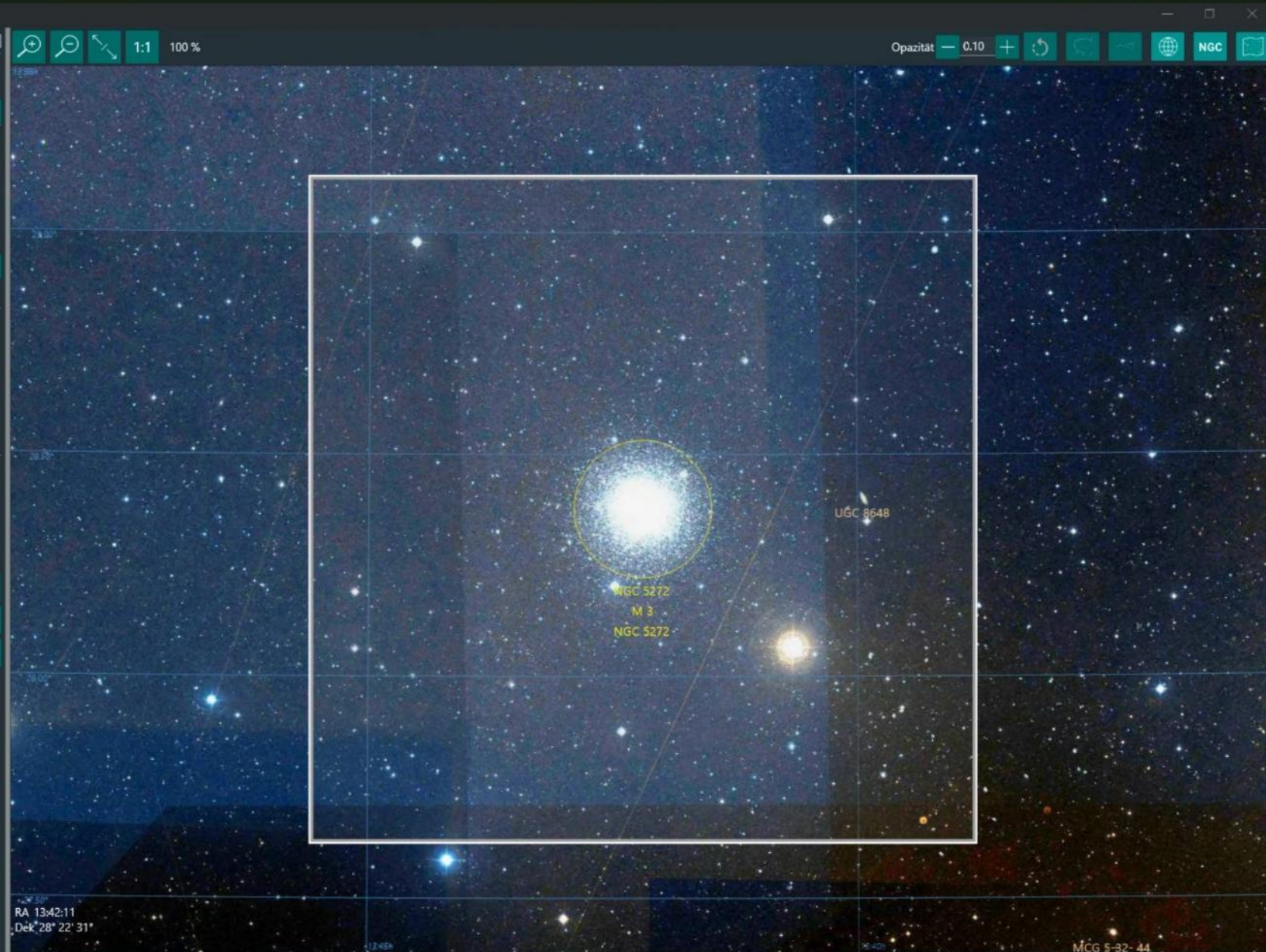
**Ziele**

Horizontale Felder: 1  
 Vertikale Felder: 1  
 Drehung: 0 °

Drehung der Kamera bestimmen  
 Schwenken und Zentrieren  
 Ziel zu Sequenz hinzufügen

Toggle Catalogue Display

Sync Service: Idle



DR0.2

# Ein Geschenk des Himmels

Oliver Schneider / AAS

# Astrophotography by Stefan Ziegenbalg

Identifier or coordinate query ?

Emission lines  Continuum  Both Identifier:    
RA/GLN:  DEC/GLT:  Diameter:

## Categories



Northern Sky Narrowband Survey



Nebulae: small-field (< 1°)



Nebulae: medium-field (> 1°)



# Northern Sky Narrowband Survey: DR0.2

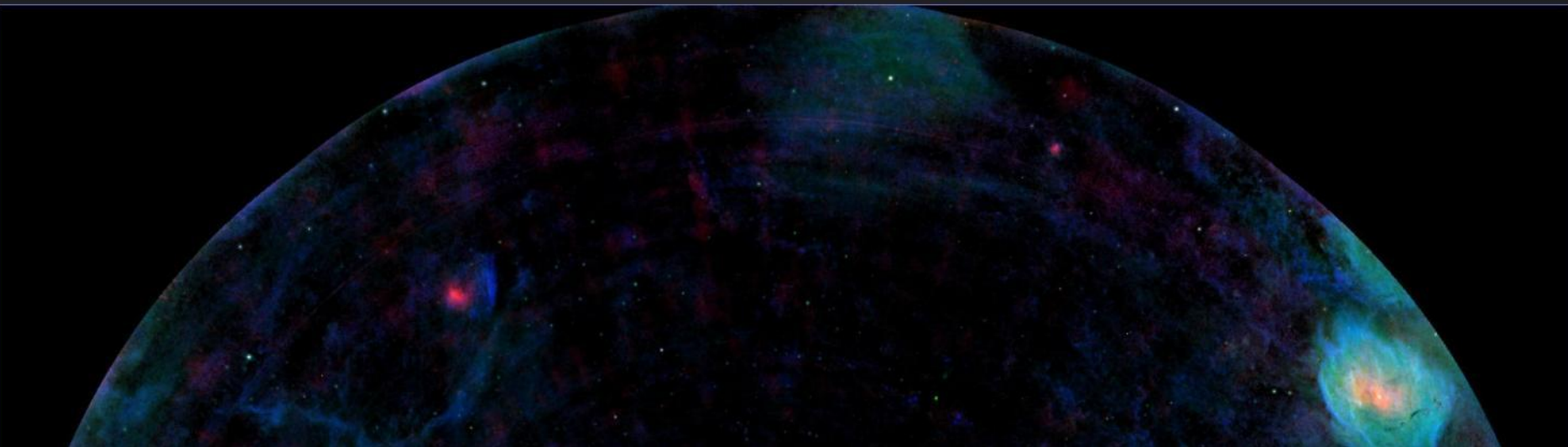
Data release DR0.2 contains the first complete data set of the emission line [OIII] at 500.7 nm and the [SII] doublet at 671.7 nm and 673.0 nm from [instruments 6a and 6b](#), as well as updated results for H $\alpha$  (instrument 3). A general description of the project can be found on page [Northern Sky Narrowband Survey](#). Changes compared to DR0.1 are listed in section [Changes](#).

The pre-processed data published here was calculated on 47 overlapping tiles with a size of  $31^\circ \times 31^\circ$ . Compressed 8-bit color images can be accessed in sections [Overview images](#) and [Tile images](#). Full dynamic range images with linear intensity can be retrieved from an [HiPS \(Hierarchical Progressive Survey\) repository](#). In order to assess the reliability of the data, sections [Data acquisition and processing](#) and [Artifacts and limitations](#) provide a brief description of the image processing and a detailed description of all known artifacts.

## Overview images

The overview images shown below are  $212^\circ$  stereographic projections of the entire surveyed region. The projection type was used because it preserves shapes. Maximum image resolution in the JavaScript viewer (click on the images) is  $30''$  at the center ( $\delta=90^\circ$ ) and about  $11''$  at boundary ( $\delta=-16^\circ$ ). In the navigation mode of the Javascript viewer (press the 'N' key or click the 'N' button) it is also possible to browse to other views on this site (including the tile images).

Click on the images to load a high-resolution (1.3 GP) versions using a JavaScript viewer.



### Northern Sky Narrowband Survey: DR0.2

- [Overview images](#)
- [Tile images](#)
- [HiPS \(Aladin, Stellarium, ...\)](#)
- [Data description](#)
  - [H \$\alpha\$](#)
  - [\[OIII\] and \[SII\]](#)
  - [Continuum](#)
  - [Photometrical calibration of \[OIII\], \[SII\], and continuum](#)
- [Data acquisition and processing](#)
- [Artifacts and limitations](#)
  - [Suppression of large structures due to background estimation](#)
  - [Reflections between filter and sensor](#)
  - [Satellite trails and other temporary effects](#)
  - [PSF variations](#)
  - [Starlight contamination and limits of the star subtraction](#)
  - [Elimination of small H \$\alpha\$  sources](#)
  - [Continuum and H \$\alpha\$  subtraction in saturated regions \(near M42\)](#)
  - [Variable stars](#)
  - [Grid artifacts](#)
  - [Reddening](#)
- [Software](#)
- [Discoveries and remarks](#)
- [Statistics](#)
- [Changes](#)
- [Outlook](#)
- [Citing / persistent resources](#)
- [Acknowledgements](#)
- [References](#)
- [Monitor calibration](#)

background estimation and the [associated limitations](#). Thus, data from this instrument is not used, and the filter was replaced with a normal H-alpha filter in September 2024.

### Images of the instruments

Since 2022, the instruments are arranged in two arrays. Photos of them can be found below. Click on the images for higher resolution versions.



All instruments are distributed across two arrays which are shown above.



H $\alpha$  instruments (3 and 4, the four smaller lenses) and the continuum cameras (5a to 5c, the three large lenses).



## Northern Sky Narrowband Survey: Instruments

A survey of the northern sky, focusing on emission lines H $\alpha$  (656.3 nm), [OIII] (500.7 nm), and [SII] (671.7 nm and 673.0 nm), but also collecting continuum data, started at the end of 2018. The entire northern hemisphere down to a declination of -16° is being surveyed.

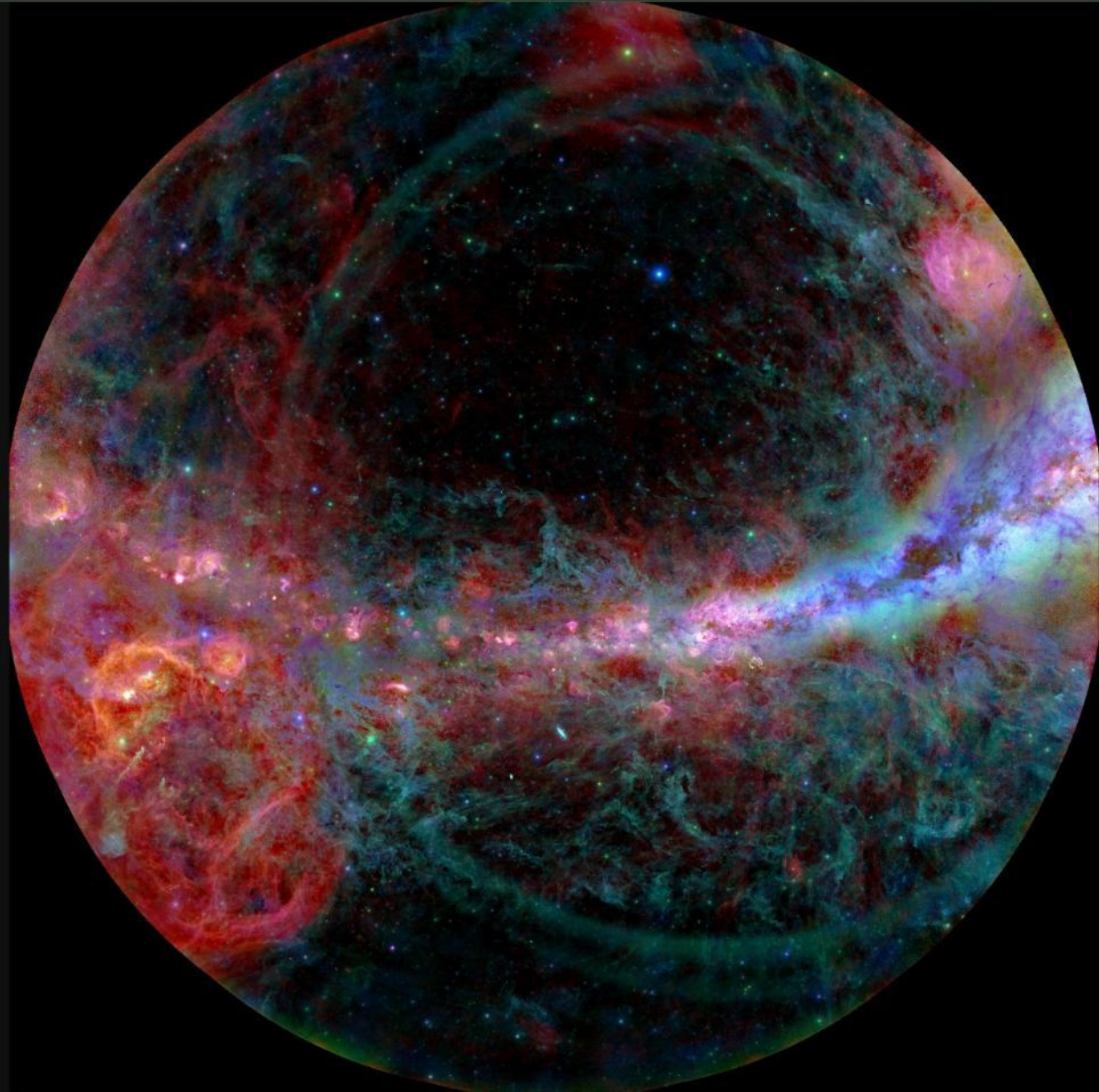
This page gives an overview of the instruments. Results of the survey can be found in the sections [data releases](#) and [images](#).

### Instruments

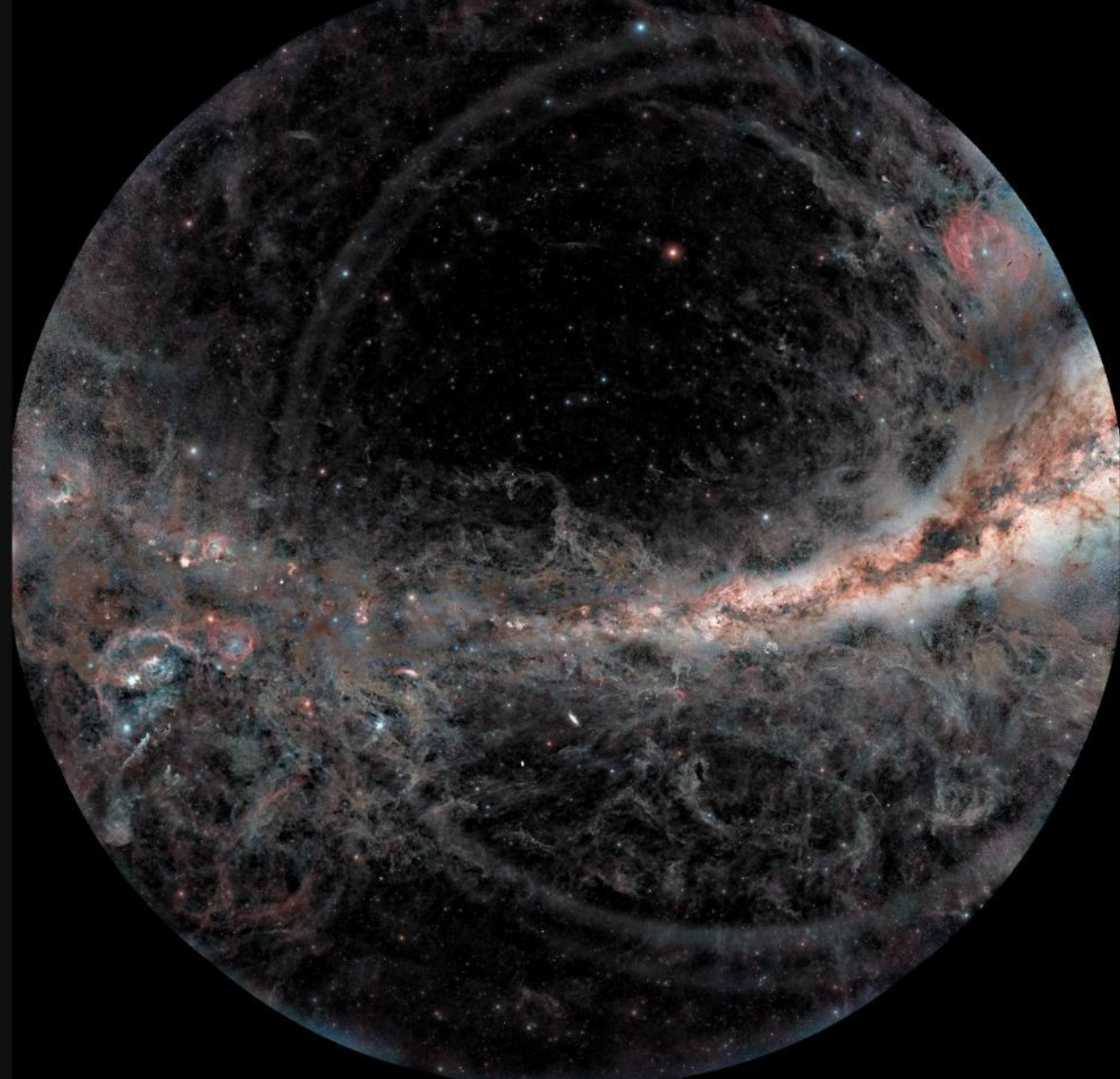
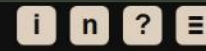
Below are two tables. The first describes the different instruments, and the second lists how many of the instruments from the first table were active during each period. The column *angular resolution* in the first table contains the FWHM of a point source.

Instrument index	Emission line, FWHM Bandwidth / Passband / Filter	Field of view	Aperture	Focal length	Angular resolution	Comment
1	656.3 nm (H $\alpha$ , emission line of HII), 3.5 nm	7.6° × 5.8°	5 cm	135 mm	9"	Panasonic MN34230 sensor
2	Bayer CFA + Light pollution filter	115.5° × 10.3°	7 cm	135 mm	17"	DSLR camera
3	656.3 nm (H $\alpha$ , emission line of HII), 3.5 nm	7.6° × 5.8°	6 cm	135 mm	9"	Panasonic MN34230 sensor
4	656.3 nm, 35 nm	7.6° × 5.8°	5 cm	135 mm	9"	Panasonic MN34230 sensor. See <a href="#">below</a> .
5a	410 nm to 550 nm (SDSS G')	6.8° × 4.5°	10 cm	300 mm	7"	Sony IMX455 sensor
5b	555 nm to 650 nm (SDSS R' + 400 nm to 650 nm bandpass)	6.8° × 4.5°	10 cm	300 mm	7"	Sony IMX455 sensor, H $\alpha$ is blocked
5c	695 nm to 845 nm (SDSS I')	6.8° × 4.5°	10 cm	300 mm	7"	Sony IMX455 sensor
6a	505.7 nm (emission line of OIII), 4 nm	10° × 6.8°	6 cm	135 mm	10"	Sony IMX571 sensor
6b	671.7 nm and 673.0 nm (emission lines of SII), 4 nm	10° × 6.8°	6 cm	135 mm	10"	Sony IMX571 sensor

Instrument index:	1	2	3	4	5a	5b	5c	6a	6b
Nov 2018 to Apr 2020	4	2							
Apr 2020 to Jul 2020	1	2	3						
Jul 2020 to Jan 2022		2	3	1					
Jan 2022 to Sep 2022		2	3	1	1	1	1		
Sep 2022 to Dec 2023			3	1	1	1	1		
Dec 2022 to Apr 2023			3	1	1	1	1	1	1
Apr 2023 to Jan 2024			3	1	1	1	1	2	3
Jan 2024 to Sep 2024			3	1	1	1	1	3	3
Since Sep 2024			4		1	1	1	3	3



Overview image of DR0.2 of Northern Sky Narrowband Survey in RGB without H-alpha. (Zoom: 1:37.13)





Datum und Uhrzeit

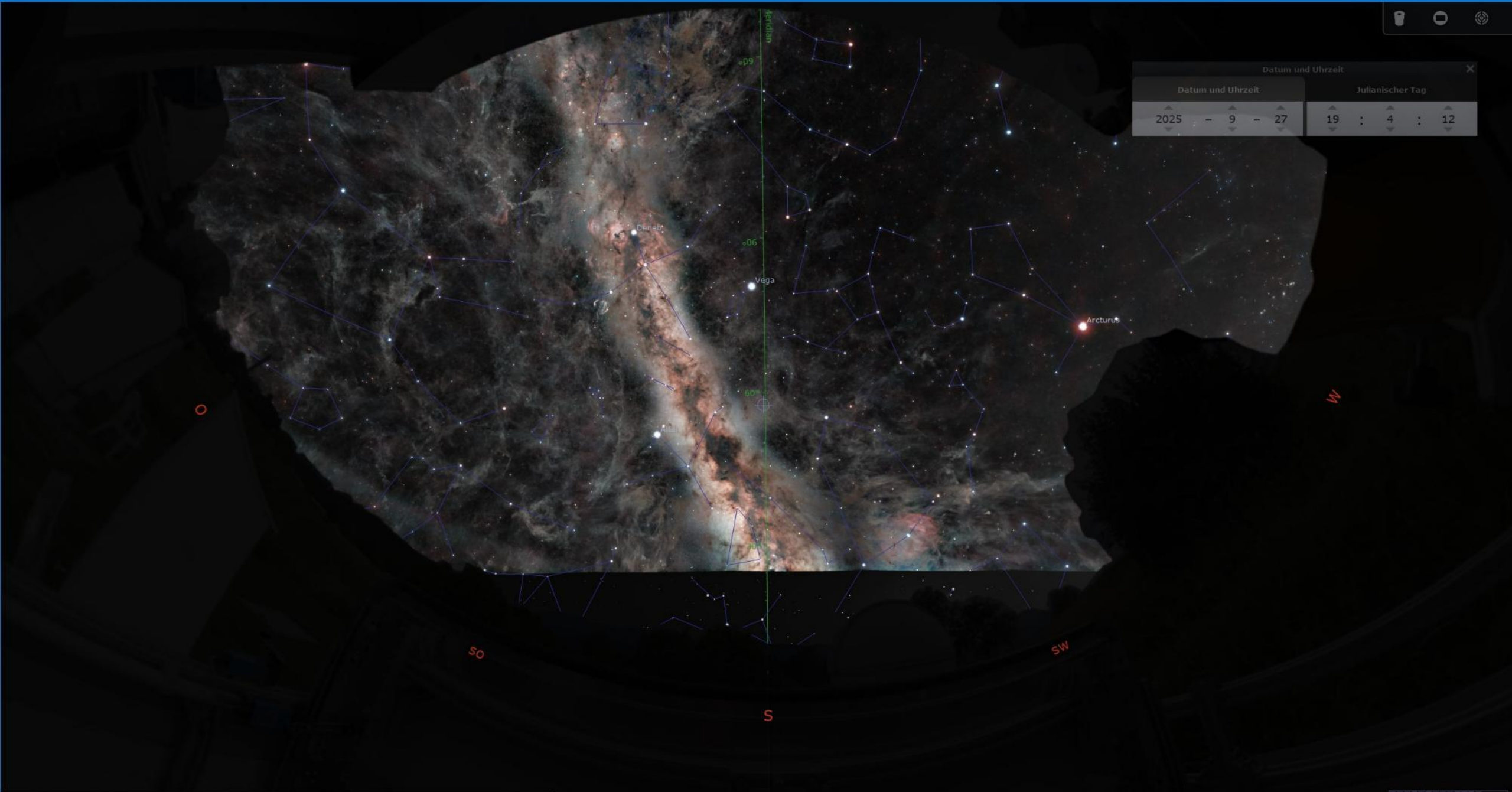
Datum und Uhrzeit			Julianischer Tag		
2025	-	9	-	27	
	:	19	:	4	:
				12	



Datum und Uhrzeit

Datum und Uhrzeit				Julianischer Tag					
2025	-	9	-	27	19	:	4	:	12





Datum und Uhrzeit

Datum und Uhrzeit			Julianischer Tag		
2025	-	9 - 27	19	:	4 : 12

Datum und Uhrzeit						
Datum und Uhrzeit				Julianischer Tag		
2025	-	9	-	27	19	: 4 : 12

Konfiguration

Allgemein
 Information
 Extras
 Zeit
 Werkzeuge
 Skripte
 Erweiterungen

**Zusätzliche Einstellungen für Information.**

- Verwende Maßeinheit mag/arcsec<sup>2</sup> für Flächenhelligkeit
- Kurznotation für Einheit zum Messen der Oberflächenhelligkeit benutzen
- Verwende Tabellenformat für Koordinaten und Zeitangaben
- Verwende symbolische Bezeichnungen für Koordinatensysteme

**Zeige zusätzliche Schaltflächen**

<input type="checkbox"/> Sternbildgrenzen	<input checked="" type="checkbox"/> Himmelsrichtungen	<input type="checkbox"/> Schaltfläche für Deep-Sky-Bilder
<input type="checkbox"/> Asterismen-Linien	<input type="checkbox"/> Kompass-Markierungen	<input type="checkbox"/> Spiegelungsschaltflächen
<input type="checkbox"/> Asterismen-Bezeichnungen	<input checked="" type="checkbox"/> Nachtmodus	<input checked="" type="checkbox"/> DSS-Gesamtaufnahme
<input type="checkbox"/> Ekliptikales Gradnetz	<input checked="" type="checkbox"/> Zentrier-Schaltfläche	<input checked="" type="checkbox"/> HIPS-Gesamtaufnahmen
<input type="checkbox"/> ICRS-Gradnetz	<input checked="" type="checkbox"/> Vollbild-Schaltfläche	<input type="checkbox"/> Beobachtungslisten
<input type="checkbox"/> Galaktisches Gradnetz	<input checked="" type="checkbox"/> Beenden-Schaltfläche	<input checked="" type="checkbox"/> Hintergrund für Schalter

**Sternkatalog-Aktualisierungen**

Alle verfügbaren Sternkataloge wurden installiert.



Einstellungsfenster [F2]



# DST 2026

## Bebra

### 20.-22.11.2026



[Start](#) [Einführung](#) [Artikel](#) [Deep Sky Treffen](#) [Projekte ▼](#) [Mitglieder](#) [Kontakt](#)



Letzte Aktualisierung: 28.01.2026

## Deep Sky Treffen 2026

20. - 22.11.2026

Ort: Hotel Sonnenblick

Haus Sonnenblick 1, 36179 Bebra

[Anmeldung](#)

Zur Diskussion im [astrotreff](#)