

CCD Guide 2024



Image: Messier 82 (M82) by BTB-Astroteam Brentenriegel

CCD Guide 2024



CCD
GUIDE ccdguide.com

Images:

- 5000 images from 58 astrophotographers

Software:

- Image + data browser
- Deep sky object database
- Easy to search and to filter
- Slide show
- Input your own images
- Planner including ObjectTracker
- Object identification with ObjectMarker



Video tutorials

Introduction & Highlights:

CCD Guide - Video Tutorial #1 In...
Später ans... Teilen

Your Window Into The Universe
CCD GUIDE
planning software for astrophotographers

- 1 Introduction
- 2 First Steps
- 3 Browser
- 4 Planner
- 5 Edit Setup
- 6 Edit Object
- 7 Edit Picture
- 8 Object Tracker
- 9 Object Marker / Viewer

CCD GUIDE ccdguide.com

Ansehen auf YouTube

First Steps:

CCD Guide - Video Tutorial #2 Fi...
Später ans... Teilen

Your Window Into The Universe
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planning software for astrophotographers

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Video tutorials on ccdguide.com



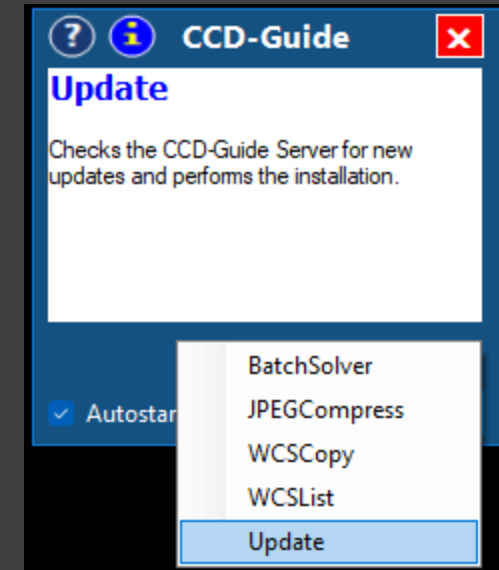
CCD-Guide 2024 – First steps

- Download software from ccdguide.com
 - Zip file (approx. 40MB)
 - Extract zip and download images with CCD-Guide software (approx. 13GB)
- USB-Stick (16GB)
 - Delivery only to Europe (except UK)





CCD-Guide 2024 software







Browser – Overview

CCD Guide Browser, Version 4.2.8766.26454

File Options About

M020-019.jpg M020-019_crop.jpg

Extended Information

Photographer
Schedler Johannes

Additional objects
more...

Alias of M 20
CED 151
GN 17.59.5
GUM 76
LBN 27
NAME TRIFID NEBULA
NGC 6514
RCW 147
SH2- 30

Objectname Filter: M 20 [X] [Set Filter] [Reset Filter] [Browse] [Database] [Master]

Image filename	Object name	Object type	Object class	Ra	Dec	Constellation	Object size
M020-019.jpg	M 20	Emission Nebula	EN+OCL	18h 02m 42.0s	-22° 58' 18"	Sagittarius	
M020-020.jpg	M 20	Emission Nebula	EN+OCL	18h 02m 42.0s	-22° 58' 18"	Sagittarius	
M020-021.jpg	M 20	Emission Nebula	EN+OCL	18h 02m 42.0s	-22° 58' 18"	Sagittarius	
M020-024.jpg	M 20	Emission Nebula	EN+OCL	18h 02m 42.0s	-22° 58' 18"	Sagittarius	
M020-025.jpg	M 20	Emission Nebula	EN+OCL	18h 02m 42.0s	-22° 58' 18"	Sagittarius	
M020-026.jpg	M 20	Emission Nebula	EN+OCL	18h 02m 42.0s	-22° 58' 18"	Sagittarius	

Set Filter

Filename

Object Criteria

RA2000 > 20 [h] < 22 [h]

DE2000 [] []

Object Size [] []

Constellation []

Catalogue []

Excellent Image of Object
 Exist
 Not Exist
 Full

Objecttype

- Comet
- Constellation
- Dark Nebula
- Emission Nebula
- Galaxy
- Galaxy Cluster
- Galaxy Group
- Globular Cluster
- Milky Way
- Minor Planet
- Moon
- Not Found
- Open Star Cluster
- Part of Galaxy

[All] [None]

Images Criteria

Observer [] Date from [] to []

Camera [] Focal Length [] [mm] [] [mm]

Telescope []

Additional Images
 Exist
 Not Exist
 Full

Additional Objects
 Exist
 Not Exist
 Full

[Reset Criteria] [Set Filter] [Cancel]


[Save Filter] [Delete Filter]



Browser – Images delivered with wcs

CCD Guide Browser, Version 4.2.8766.26454

File Options About



[ARP085-001.jpg](#)

Objectname Filter:

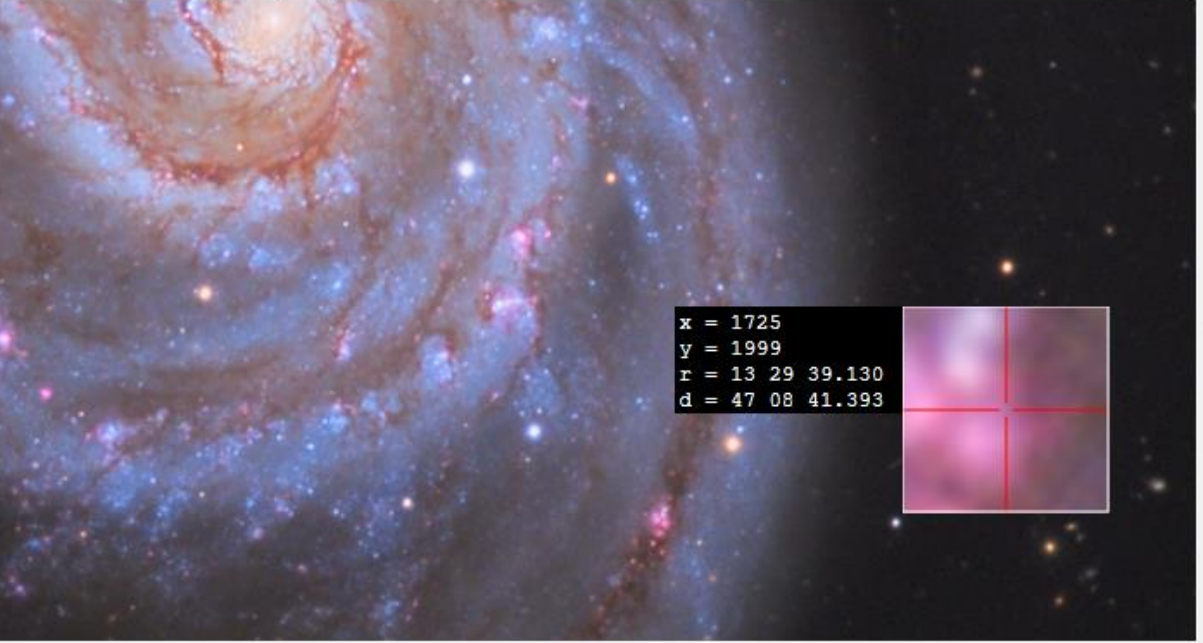
Image filename	Object name	Object type	Object class	Ra	Dec	Constellation
ARP085-001.jpg	ARP 85	Galaxy Group	GPair	13h 29m 55.7s	47° 13' 53"	Canes Venatici
M051-025.jpg	M 51	Galaxy	Sbc	13h 29m 52.6s	47° 11' 44"	Canes Venatici
M051-027.jpg	M 51	Galaxy	Sbc	13h 29m 52.6s	47° 11' 44"	Canes Venatici
M051-028.jpg	M 51	Galaxy	Sbc	13h 29m 52.6s	47° 11' 44"	Canes Venatici

ObjectViewer, Version 4.2.8771.18335

File Options About

1:1 Zoom: 55% Search:

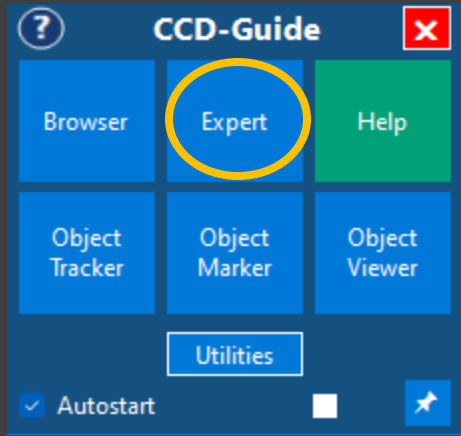
ARP085-001



$x = 1725$
 $y = 1999$
 $r = 13\ 29\ 39.130$
 $d = 47\ 08\ 41.393$



Planning with Expert



- Create setups (= telescope + camera)

Setups

Name: Telescope:

Camera: Focallength [mm]:

NAME	TELESCOPE	CAMERA
▶ Namibia_Newt12_QSI	Newtonian	QSI 660wsg
Namibia_Newt12_piggy	Vixen FL55SS	Nikon Z6
Namibia_Newt10_Trius	Newtonian	Starlight Triu
Namibia_Tak130_G2-8300	Takahashi Epsilon-130 ED	Moravian G:
Namibia_TS130_8300	TS Apo 130/780mm	QSI 583wsg
TEC_QSI660	Refractor	QSI 660wsg

Save Delete New



Planning with Expert

CCD-Guide Expert 4.2

Planner | Edit Setup | Edit Object | Edit Picture | Options | Help | About

Edit

Setupname: **Namibia_Newt12_QSI** | Telescope = Newtonian
 Camera = QSI 660wsg
 Focallength = 1200mm / FOV = 35,8'x28,6'

Objectname: **GUM 20** | Set Object | Objectname

State: **0 - Image is missing**

Image From: **FDV Image**

Imagename: **Ref Image**

Planner Comm.: RA: 08h 59m 21s, DE: -43° 44' 32"

FDV Image | Ref Image

OBJECTALIAS

- ▶ GN 08.57.8
- GUM 20
- RCW 36

OBJECTRELATION

- ▶

Objectname Filter: [] **Set Filter** Reset Filter

Slide Show >>> Listview = Standard

4/37

PlannerData

SETUPNAME	STATE	PLANERCOMMENT	OBJNAME	OBJECTTYPE	OBJCLASS	RATXT	DETXT	CONSTELLATI
Namibia_Newt12_QSI	0		ARP 244	Galaxy Group	GPair	12h 01m 53.3s	-18° 52' 37"	Corvus
Namibia_Newt12_QSI	0	RA: 09h 14m 50s, DI CG 7		Dark Nebula	Density A	09h 14m 07.1s	-42° 30' 04"	Vela
Namibia_Newt12_QSI	1	RA: 08h 56m 36s, DI GUM 19		Emission Nebula	HII	08h 56m 28.0s	-43° 05' 54"	Vela
▶ Namibia_Newt12_QSI	0	RA: 08h 59m 21s, DI GUM 20		Emission Nebula	HII	08h 59m 36.0s	-43° 44' 42"	Vela
Namibia_Newt12_QSI	0	Sakib Rasool	GUM 46	Emission Nebula	HII	12h 50m 18.0s	-61° 35' 18"	Crux
Namibia_Newt12_QSI	0	RA: 13h 19m 17s, DI GUM 48a		Emission Nebula	HII	13h 19m 46.0s	-62° 30' 42"	Centaurus
Namibia_Newt12_QSI	1	Sakib Rasool	GUM 49	Emission Nebula	HII	15h 55m 36.0s	-54° 38' 48"	Norma
Namibia_Newt12_QSI	0	Sakib Rasool	IC 2531	Galaxy	Sc	09h 59m 55.7s	-29° 37' 04"	Antlia
Namibia_Newt12_QSI	0	RA: 10h 28m 36s, DI IC 2580		Galaxy	SBc	10h 28m 17.7s	-31° 31' 04"	Antlia
Namibia_Newt12_QSI	0	Sakib Rasool	IC 2631	Reflection Nebula	EN	11h 09m 50.5s	-76° 36' 41"	Chamaeleon
Namibia_Newt12_QSI	4	Thackeray Globulen,	IC 2948	Emission Nebula	HII	11h 39m 05.0s	-63° 26' 36"	Centaurus
Namibia_Newt12_QSI	1		IC 4605	Reflection Nebula	RN+*	16h 30m 12.5s	-25° 06' 53"	Scorpius
Namibia_Newt12_QSI	0		M 62	Globular Cluster	IV	17h 01m 12.6s	-30° 06' 42"	Ophiuchus
Namibia_Newt12_QSI	0	Sakib Rasool	M 68	Globular Cluster	X	12h 39m 28.0s	-26° 44' 32"	Hydra

Export

Export OT

Save

Delete

New

Clone



ObjectTracker

CCD-Guide

Browser Expert Help

Object Tracker Object Marker Object Viewer

Utilities

Autostart

ObjectTracker, Version 4.2.8835.32567

Altitude of GUM 20 and Moon over 12 hours

■ Deep Sky Object ■ Moon ■ Horizon

Deep Sky Object		Date, Time and Location		Object Time Window		GUM 20 from 2024-03-31 12:00 to 2024-04-01 12:00			
Find Name <input type="radio"/> Select Ra/Dec Name: <input type="text" value="GUM 20"/> x <input type="button" value="Find"/> <input type="button" value="Near Ra/Dec"/> <input type="button" value="Browse"/>		Date: <input type="text" value="2024-03-31"/> Location: <input type="text" value="Namibia DeepSkySafaris"/> Edit TZone: <input type="text" value="2 hours"/> <input type="checkbox"/> Daylight Saving Time Lat: <input type="text" value="-23 17 15.000"/> Lon: <input type="text" value="16 06 22.800"/> Height: <input type="text" value="1000 meters"/>		Availability Total: 02:57 From: 20:10 To: 23:07 Culmination: 21:16 Constraints Object Altitude Limit [°]: 40 Moon Distance Limit [°]: 30 Moon Illumination Limit: 30 Sun Altitude Limit [°]: -18 Horizon Limit <input checked="" type="checkbox"/>		Summary 2024-03-31/01 <hr/> Moon Set: 12:25 Rise: 23:07 Transit: 06:14 Alt 84.64° (next day) Phase angle: 75.02 [°] Average illumination: 60.44 [%] Moon GUM 20 distance: 95.78 [°] Moon Earth distance: 385290.90 [km]		New Moon: 2024-03-10 11:01:32 First Quarter: 2024-03-17 06:11:54 Full: 2024-03-25 09:01:29 Last Quarter: 2024-04-02 05:15:55 <hr/> Sun Sun Earth distance: 149597870.70	

JD 2460385.86623 LST 22:33:59



ObjectMarker

CCD-Guide

Browser Expert Help

Object Tracker **Object Marker** Object Viewer

Utilities

Autostart

ObjectMarker, Version 4.2.8779.18869

File Options About

M064-1_full.jpg File Explorer Catalog Full name Change

Solve View Output: Color Quit

Filter: prim. id

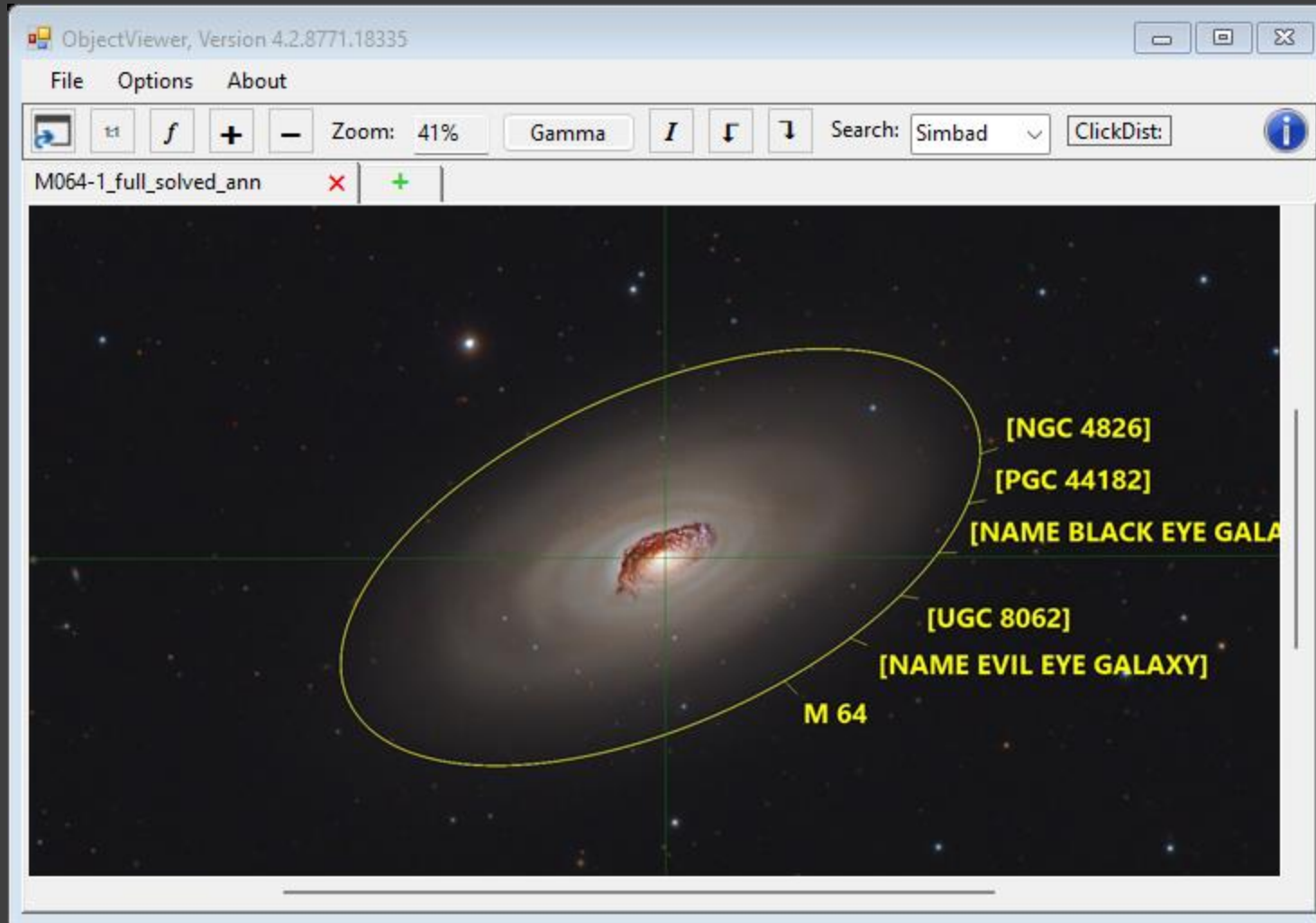
include	Catalog	Min. Diameter all: 0	Draw Labels
<input checked="" type="checkbox"/>	ABELL	0	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	ARP	0	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	BARNARD	0	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	CED	0	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	CG	0	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	COMETS	0	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	CONST	0	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	DCLD	0	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	DG	0	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	DWB	0	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	GCL	0	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	GN	0	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	GUM	0	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	HCG	0	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	HH	0	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	IC	0	<input checked="" type="checkbox"/>

```

Astrometry completed
=====
FileName:.....M064-1_full.jpg
Ra:.....12 56 43.489
Dec:.....21 40 58.302
Image width:.....2758
Image height:.....2208
FoV:.....30.564' x 24.475'
Image scale:.....0.665 arc seconds
PosAngle:.....269.959°
Rotation:.....179.959°
WCS stored in:.....D:\ccd-guide\output\markerimages\M064-1_full.jpg
SolvedTime:.....26.1792297 seconds
    
```



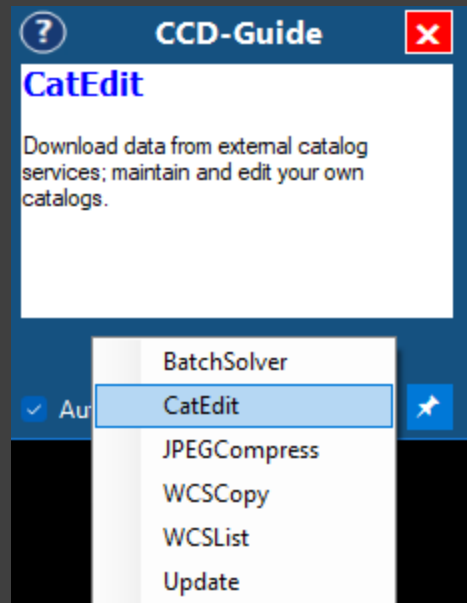
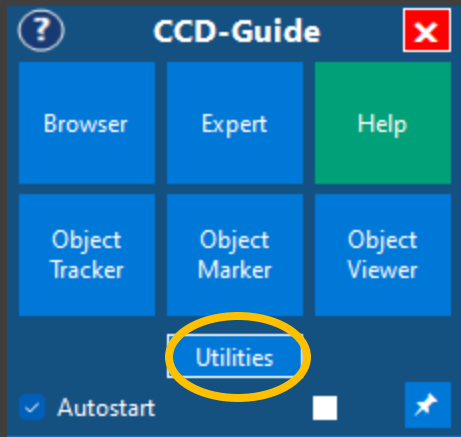
ObjectViewer



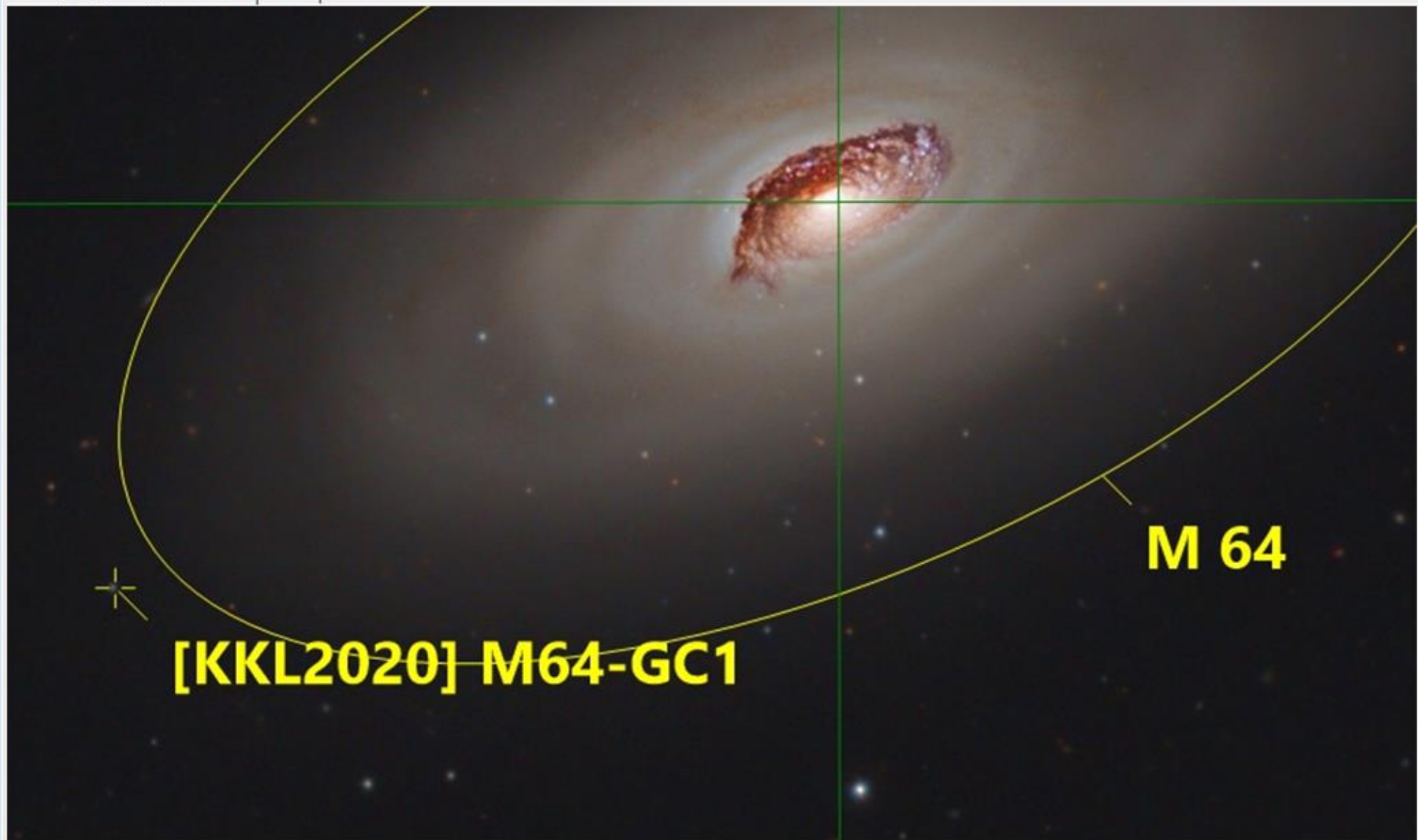
What about
globular clusters
in M64?



CatEdit – New Utility



- Download object data from external services
 - VizieR
 - HyperLEDA
- Maintain and edit own catalogs



M064-1_full_solved.jpg

Filter: all

include	Catalog	Min. Diameter
<input checked="" type="checkbox"/>		all: <input type="text" value="0"/>
<input checked="" type="checkbox"/>	DWB	0
<input checked="" type="checkbox"/>	GCL	0
<input checked="" type="checkbox"/>	GN	0
<input checked="" type="checkbox"/>	GUM	0
<input checked="" type="checkbox"/>	HCG	0
<input checked="" type="checkbox"/>	HH	0
<input checked="" type="checkbox"/>	IC	0
<input checked="" type="checkbox"/>	LBN	0
<input checked="" type="checkbox"/>	LDN	0
<input checked="" type="checkbox"/>	M	0
<input checked="" type="checkbox"/>	M064_GCL	0
<input checked="" type="checkbox"/>	NAME	0
<input checked="" type="checkbox"/>	NGC	0
<input checked="" type="checkbox"/>	OCL	0
<input checked="" type="checkbox"/>	PGC	0
<input checked="" type="checkbox"/>	PK	0

Hands on CCD-Guide

CCD Guide 2024



Image: Messier 82 (M82) by BTB-Astroteam Brentenriegel

How to buy CCD-Guide?

CCD Guide 2024



Image: Messier 82 (M82) by BTB-Astroteam Breitenriegel

- www.ccdguide.com
- Standard price:
 - Download 29 EUR
 - USB stick 39 EUR
- Special CEDIC price at our booth:
 - USB stick 29 EUR