

Tutorial del WCS para la DSI

Las instrucciones en inglés son perfectas, las he seguido paso a paso y han funcionado muy bien. Para el caso del VISAC las correcciones son tal y como menciona el software de Red → Green si se utilizan estrella en el sur y en el este.

Pongo los datos técnicos para poder extrapolar a cualquier época del año.

Inicio de la calibración 27-7-2008 22:30 aprox.

Fin de la calibración 28-7-2008 00:24

DSI calibrada (movimiento horizontal paralelo a la RA izq der → izq der de la ventana) con una estrella en el sur. Cebalrai de magnitud 2,8 en Oficus.

Estrellas utilizadas para los ajustes de azimut y altitud.

Azimut **Cebalrai 2,8 a 4,5° DEC** hacia el sur, (hubiera sido mejor elegir una estrella justo del lado W del meridiano local como **Marfic 3,8 a 2° DEC**, de esta forma hubiera evitado el cruce del meridiano y hubiera mejorado la precisión de la corrección)

Altitud **Enif 2,4 en Pegaso** hacia el este. En las siguientes pasadas utilicé una estrella más al este puesto que Enif ya se había desplazado bastante hacia el SE. **Markab 2,5 también en Pegaso**. No importa cambiar, puesto que WCS no sabe con qué estrella trabajamos para la corrección de altitud.

Para las correcciones en altitud volvía a la estrella utilizada en RA, Cebalrai, corregía y luego hacía de nuevo un GOTO a Enif o Markab para volver a realizar el test de comprobación.

Llega un momento en que la corrección es inferior a la resolución de los mandos físicos de la montura y por tanto es muy fácil acabar generando un error mayor al medido. Comprobar siempre con una última pasada, cada vez que se toquen los ajustes mecánicos de la montura.

DSI-Cam: DS1

DSI-WCS



Exposure: 0,50s Gain: 100%



Gamma: 1

Observation place:

Latitude: **43° 15' 16"**

Adjusting:

Azimuth (Star on N/S axis)

Star declination **4,5**

Pole height (Star on E/W axis)

WCS

Calib Start Stop Path

show Crosshair

Analysis:

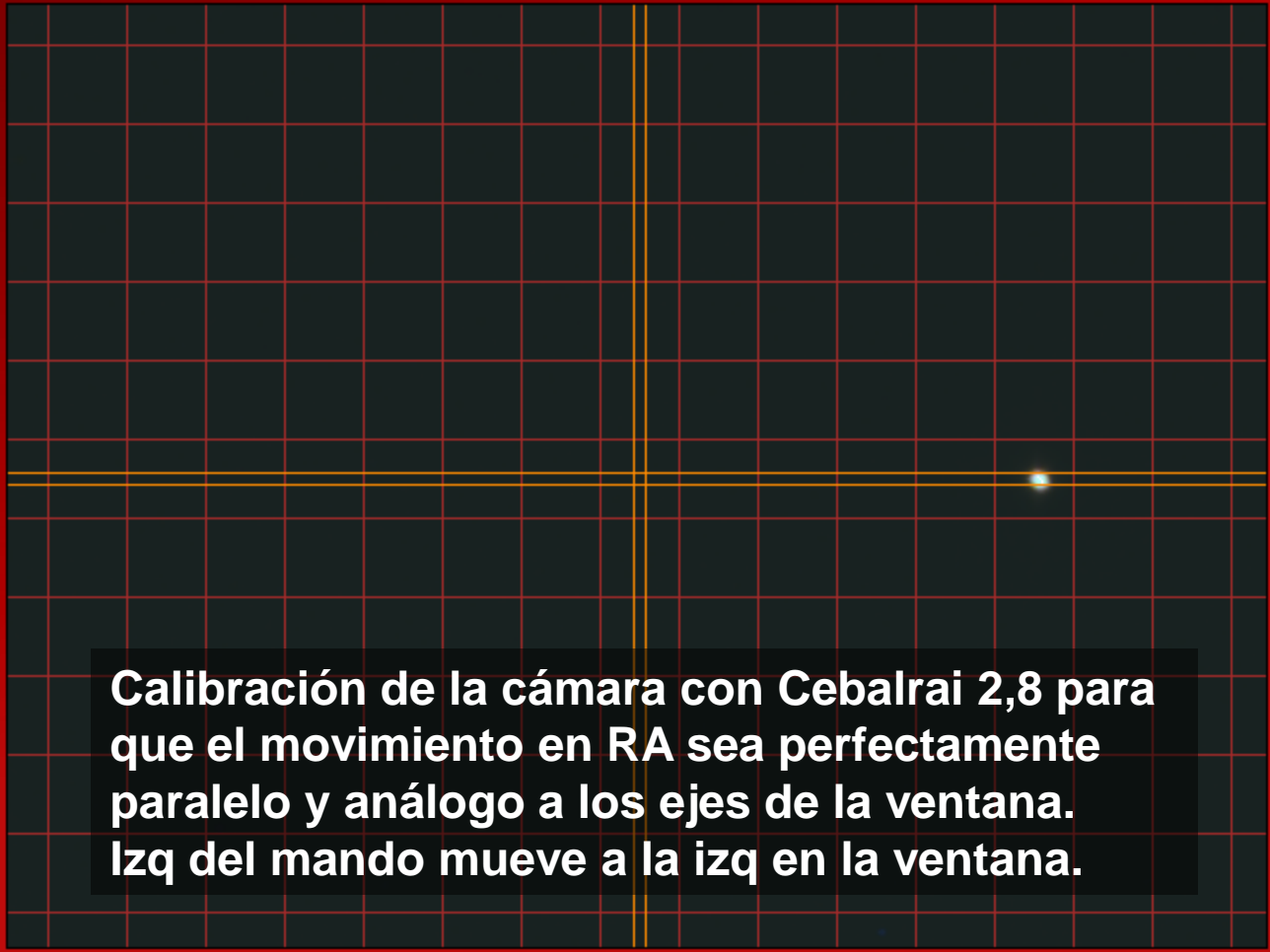
Staranalysis 3D

Fullsize High-Res

Status:

Waiting for star coordinates...

Cebalrai
Ophiucus



Calibración de la cámara con Cebalrai 2,8 para que el movimiento en RA sea perfectamente paralelo y análogo a los ejes de la ventana. Izq del mando mueve a la izq en la ventana.



Arrange your telescope so that the choosen star is approximately in the picture middle. Choose the brightness of the Webcam so the star is well lifted off from the background and no hissing is seen. (a.e. with Vproperties for TouCAM) After that click on the star and the program begins with the drift calculation. The longer the measurement lasts, the more precise and more stable the determined value becomes. If the correction displayed levels on a certain value Click on [Correction].

Info

Correction

DSI-Cam: DS1

DSI-WCS

Exposure: 0,50s

Gain: 100%



Gamma: 1

Observation place:

Latitude: **43° 15' 16"**

Adjusting:

 Azimuth (Star on N/S axis)Star declination **4,5** Pole height (Star on E/W axis)

WCS

Calib

Start

Stop

 Path show Crosshair

Analysis:

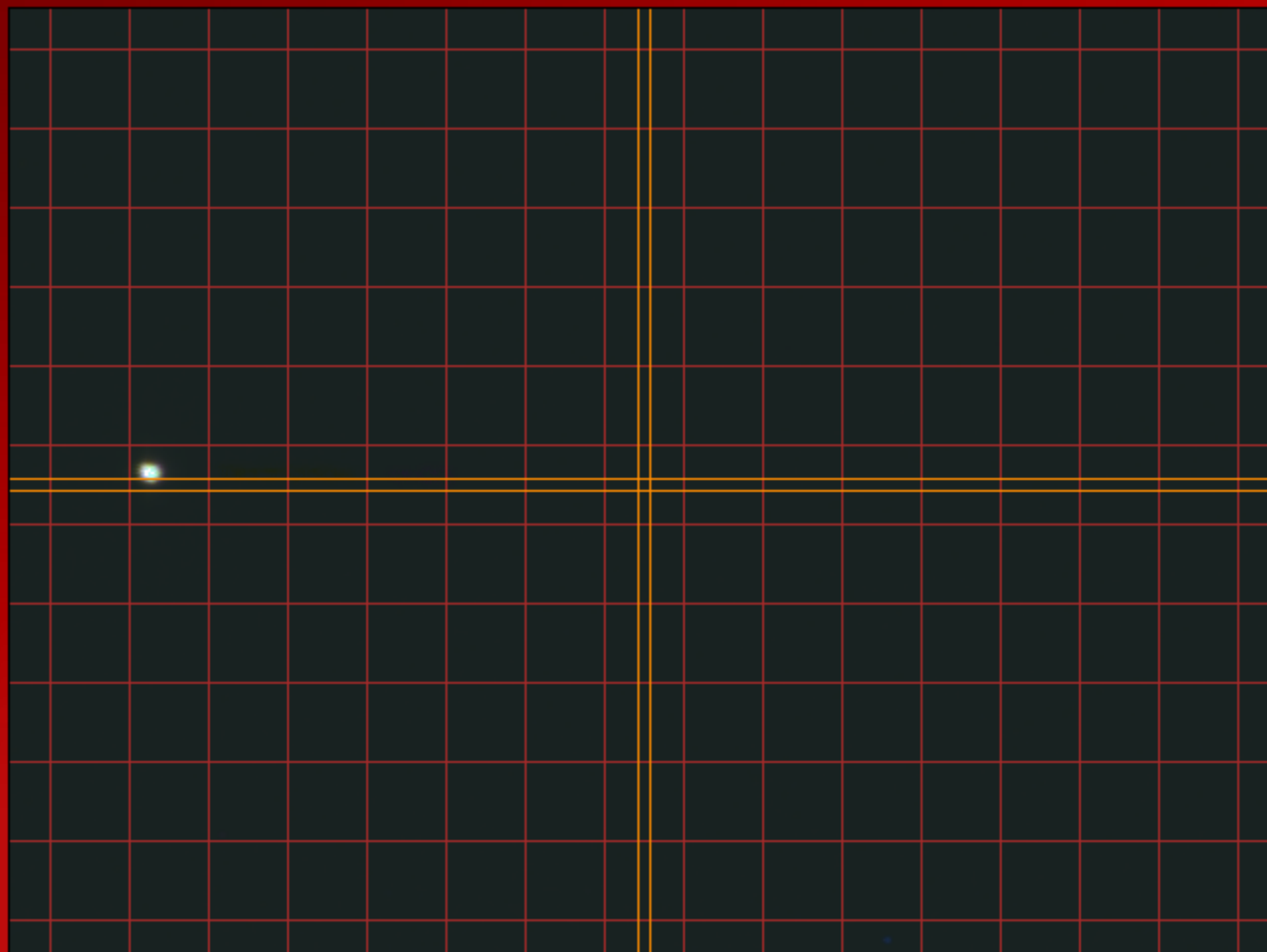
 Staranalysis 3D Fullsize High-Res

Status:

Waiting for star coordinates...

Info

Correction



Arrange your telescope so that the chosen star is approximately in the picture middle. Choose the brightness of the Webcam so the star is well lifted off from the background and no hissing is seen. (a.e. with Vproperties for TouCAM) After that click on the star and the program begins with the drift calculation. The longer the measurement lasts, the more precise and more stable the determined value becomes. If the correction displayed levels on a certain value Click on [Correction].

DSI-Cam: DS1

DSI-WCS



Exposure: 0,50s

Gain: 100%



Gamma: 1

Observation place:

Latitude: **43° 15' 16"**

Adjusting:

Azimuth (Star on N/S axis)

Star declination **4,5**

Pole height (Star on E/W axis)

WCS

Calib Start Stop Path

show Crosshair

Analysis:

Staranalysis

3D

Fullsize

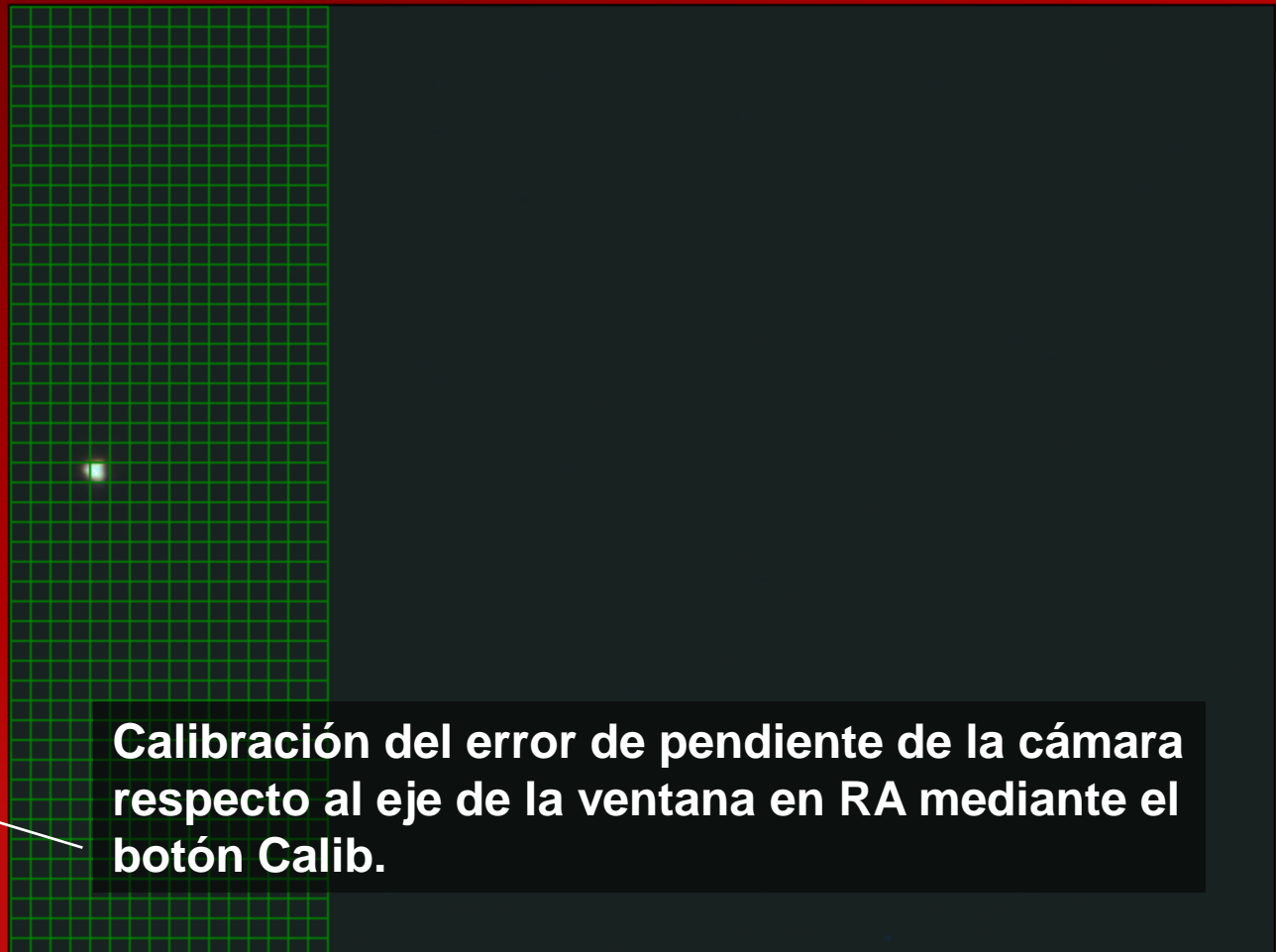
High-Res

Status:

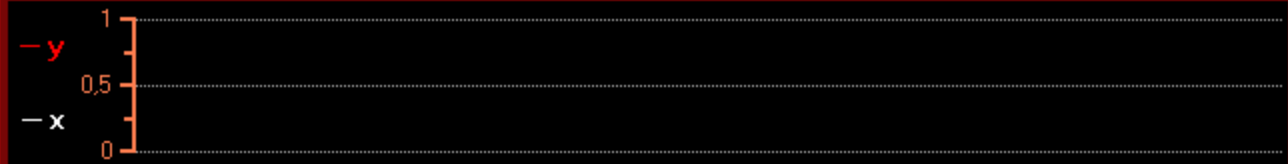
Stopped

Info

Setup



Calibración del error de pendiente de la cámara respecto al eje de la ventana en RA mediante el botón Calib.



Calibration started. Start with an star in the north/south in the left, green cam-area and click on it to mark it's position.

DSI-Cam: DS1

DSI-WCS



Exposure: 0.50s

Gain: 100%



Gamma: 1

Observation place:

Latitude: **43° 15' 16"**

Adjusting:

 Azimuth (Star on N/S axis)Star declination **4.5** Pole height (Star on E/W axis)

WCS

 Path show Crosshair

Analysis:

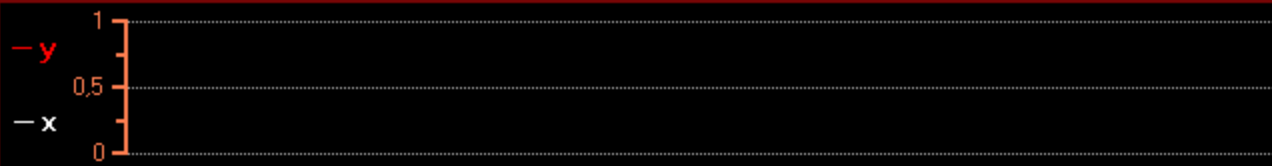
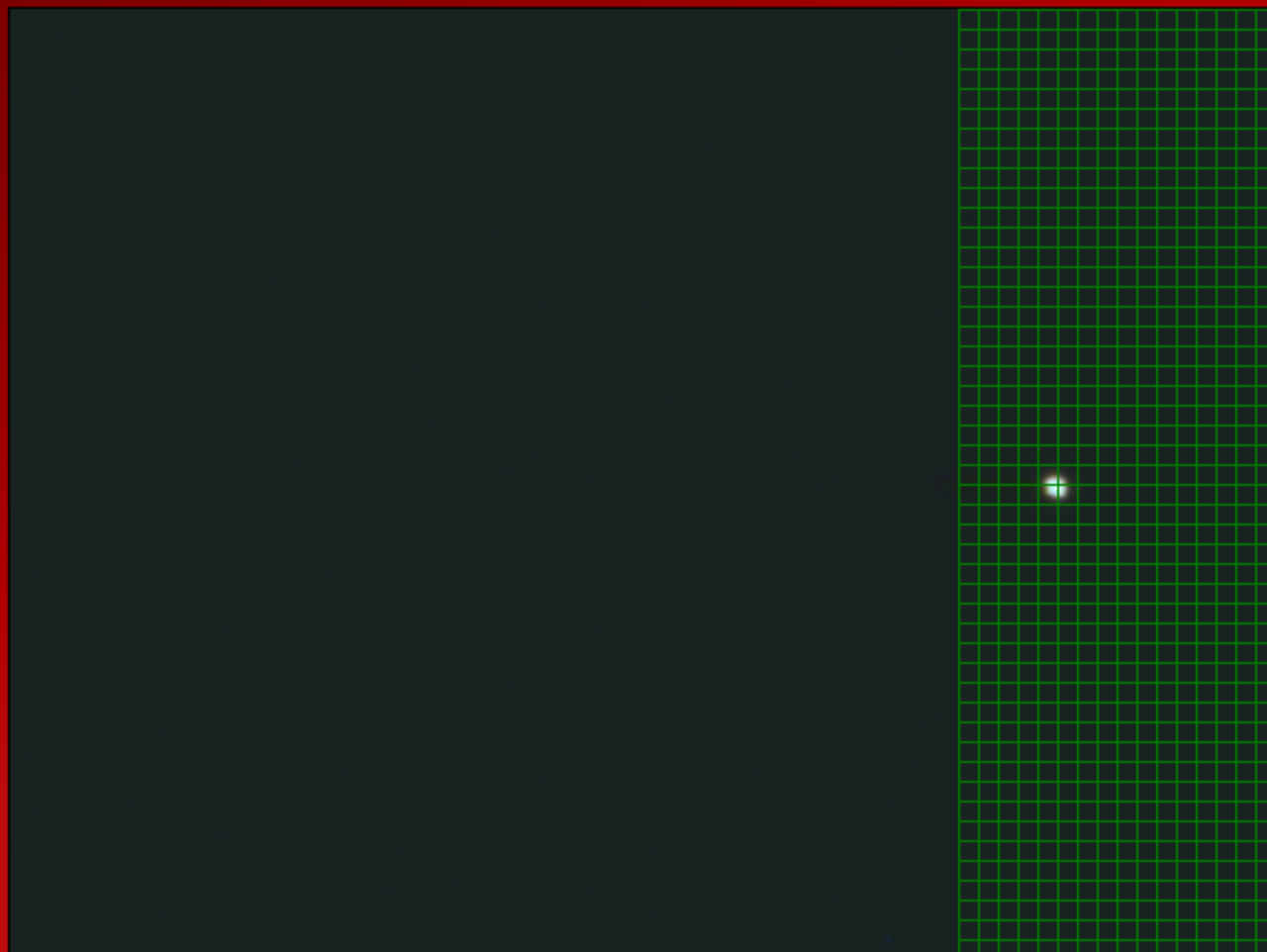
 Staranalysis 3D Fullsize High-Res

Status:

Stopped

Info

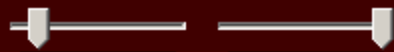
Setup



Move the star to the right, green cam-area and click on it to mark the 2nd position. If the star moves out of the screen press [Stop] and Start the calibration again. Choose the 1st position for the star the way, that it will stay on screen when moving the RA-Axis to the 2nd position. If this is not possible, you've to rotate the cam an make the angle smaller.

DSI-Cam: DS1

DSI-WCS



Exposure: 0,50s

Gain: 100%



Gamma: 1

Observation place:

Latitude: **43° 15' 16"**

Adjusting:

Azimuth (Star on N/S axis)

Star declination **4,5**

Pole height (Star on E/W axis)

WCS

Calib

Start

Stop

Path

show Crosshair

Analysis:

Staranalysis

3D

Fullsize

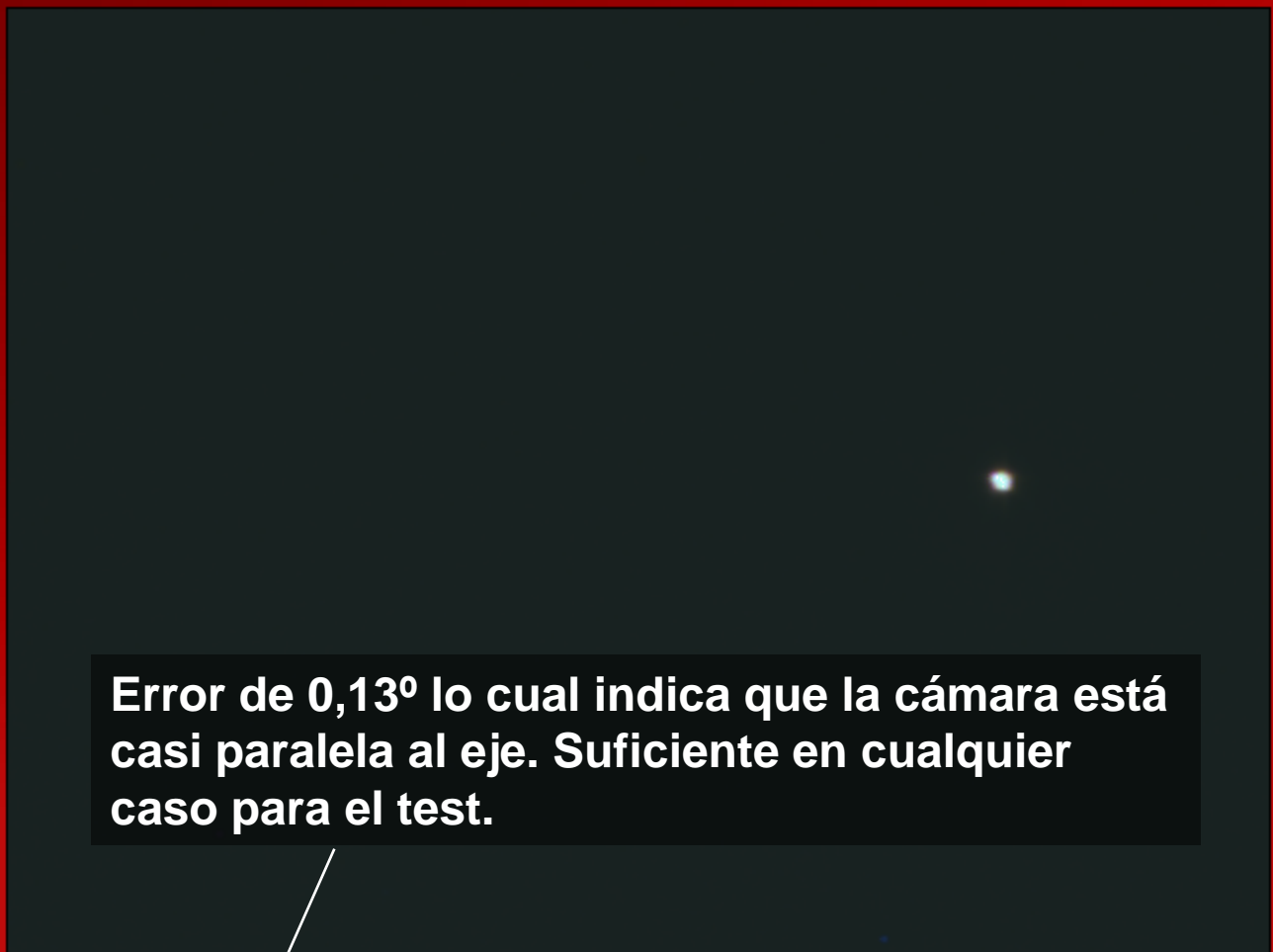
High-Res

Status:

Stopped

Info

Setup



Error de 0,13° lo cual indica que la cámara está casi paralela al eje. Suficiente en cualquier caso para el test.



Calibration done. Angle= 0,13°

DSI-Cam: DS1

DSI-WCS

Exposure: 0,50s

Gain: 100%



Gamma: 1

Observation place:

Latitude: **43° 15' 16"**

Adjusting:

 Azimuth (Star on N/S axis)Star declination **4,5** Pole height (Star on E/W axis)

WCS

 Path show Crosshair

Analysis:

 Staranalysis 3D Fullsize High-Res

Status:

Waiting for star coordinates...

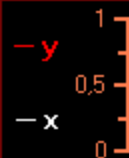
Info

Correction

AJUSTE DEL AZIMUT

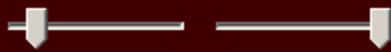
Entrar la latitud del lugar y la dec en grados decimales de la estrella a utilizar para la corrección en azimut, en este caso Cebalrai.

1- Centrado en la ventana de Cebalrai con los botones del mando de la montura para comenzar el test en azimut.



Arrange your telescope so that the chosen star is approximately in the picture middle. Choose the brightness of the Webcam so the star is well lifted off from the background and no hissing is seen. (a.e. with Vproperties for TouCAM) After that click on the star and the program begins with the drift calculation. The longer the measurement lasts, the more precise and more stable the determined value becomes. If the correction displayed levels on a certain value Click on [Correction].

DSI-Cam: DS1

DSI-WCS

Exposure: 0,50s

Gain: 100%



Gamma: 1

Observation place:

Latitude: **43° 15' 16"**

Adjusting:

 Azimuth (Star on N/S axis)Star declination **4,5** Pole height (Star on E/W axis)

WCS

 Path show Crosshair

Analysis:

 Staranalysis 3D Fullsize High-Res

Status:

Origin [x/y]: 312/237

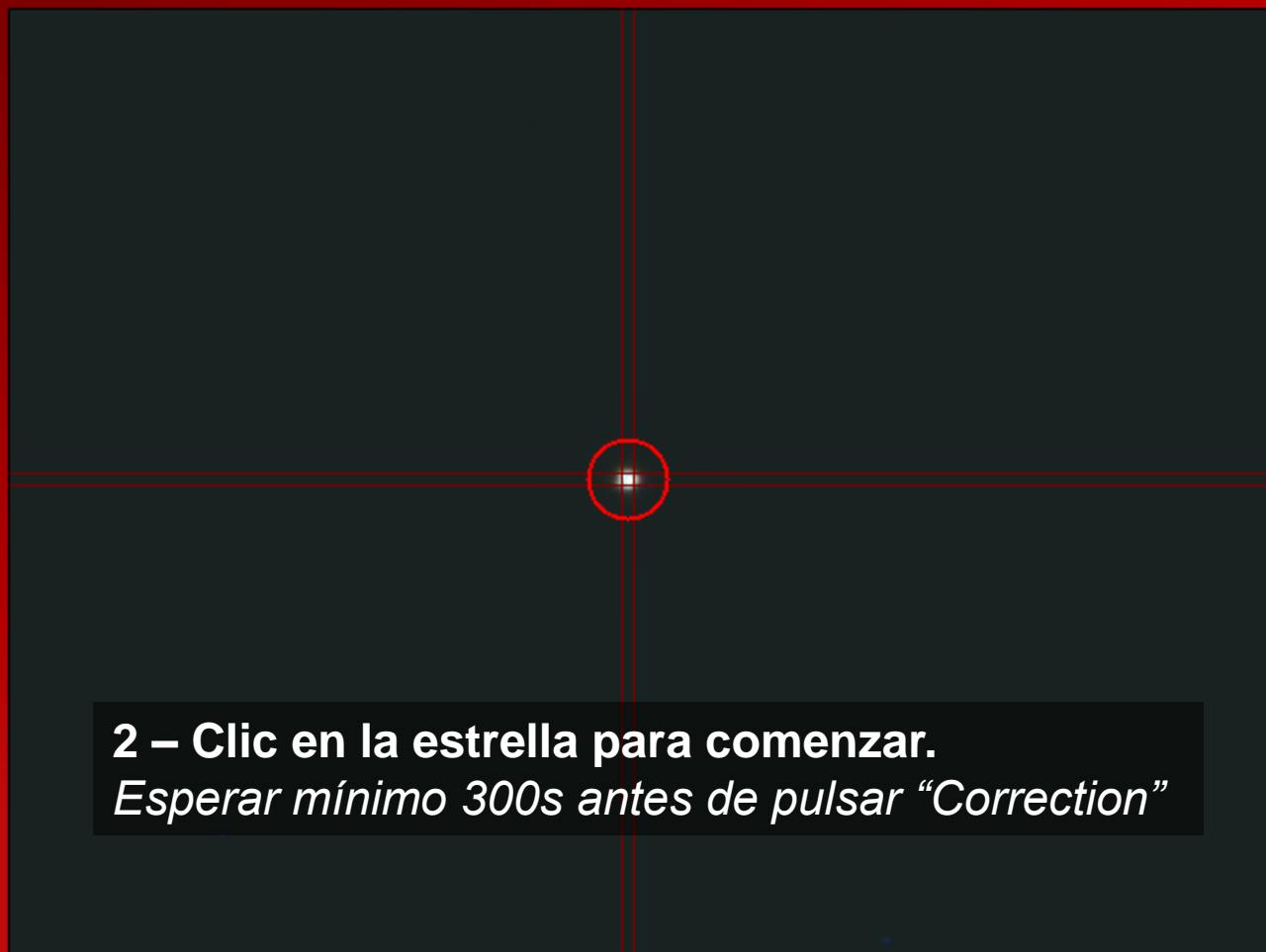
Current [x/y]: 312/237 (14px x 12px)

Difference [dx/dy]: -2/2, B:765

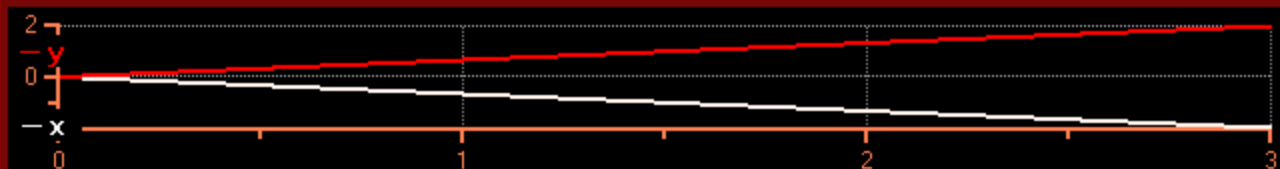
Starting time: 27/07/2008 22:40:03

Current: 27/07/2008 22:40:07

dt: 3 Sekunden



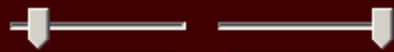
2 – Clic en la estrella para comenzar.
Esperar mínimo 300s antes de pulsar "Correction"



The first adjustment values and tendencies are displayed after 20 seconds. Wait some minutes, until the determined adjustment value levelled out in a certain field and then click on [Correction]

DSI-Cam: DS1

DSI-WCS



Exposure: 0,50s Gain: 100%



Gamma: 1

Observation place:

Latitude: **43° 15' 16"**

Adjusting:

Azimuth (Star on N/S axis)

Star declination **4,5**

Pole height (Star on E/W axis)

WCS

Path

show Crosshair

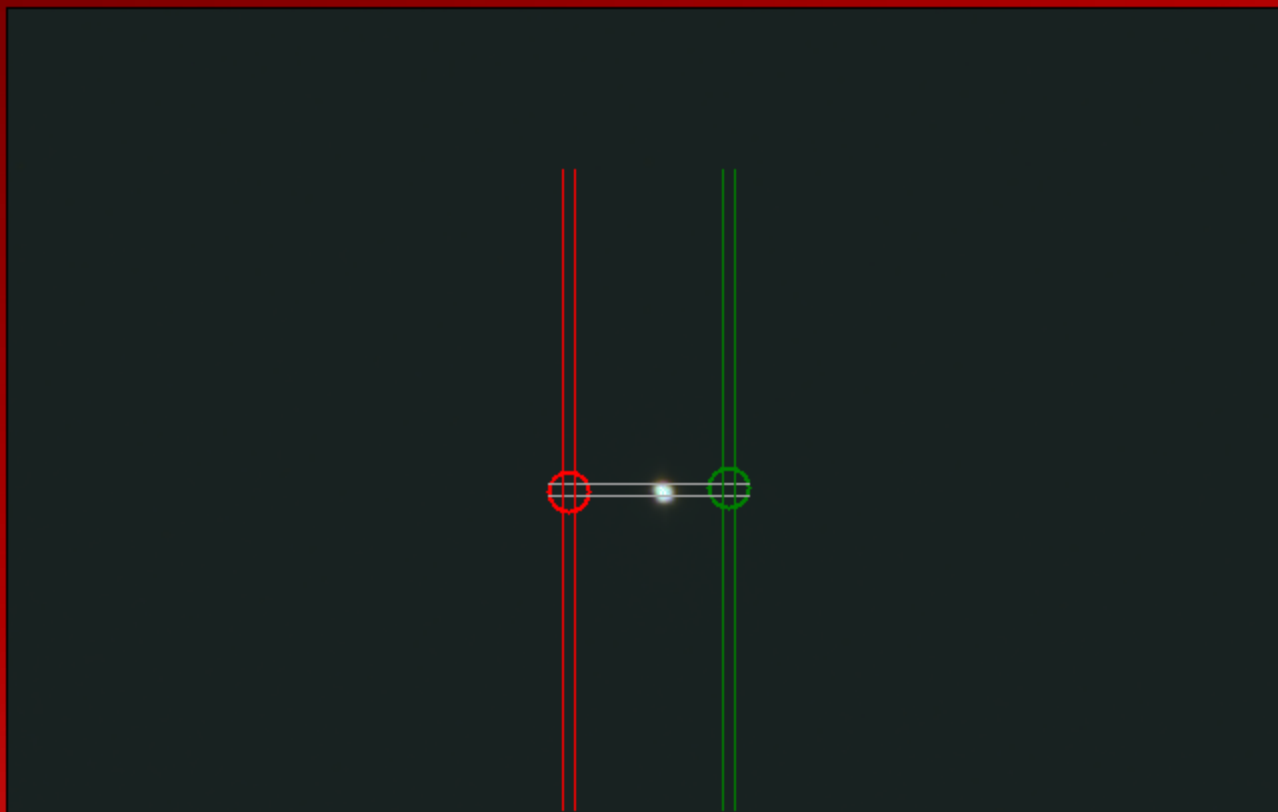
Analysis:

Staranalysis 3D
 Fullsize High-Res

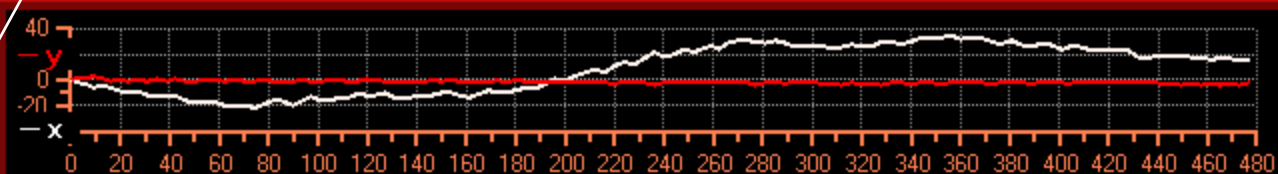
Status:

Origin [x/y]: 310/236
Current [x/y]: 326/240 (14px x 12px)
Difference [dx/dy]: 15/-2, B:765
Starting time: 27/07/2008 22:40:03
Current: 27/07/2008 22:48:00
dt: 477 Sekunden
ddA: -49
MW5: -80

Info



3 – Tras un mínimo de 300s pulsar el botón "Correction".



Use your handcontrol to bring your star onto the Red Line. Turn the screws for azimuth axis until the star has moved between the two green lines.

DSI-Cam: DS1

DSI-WCS

Exposure: 0.50s

Gain: 100%



Gamma: 1

Observation place:

Latitude: 43° 15' 16"

Adjusting:

 Azimuth (Star on N/S axis)

Star declination 4.5

 Pole height (Star on E/W axis)

WCS

Calib

Start

Stop

 Path show Crosshair

Analysis:

 Staranalysis 3D Fullsize High-Res

Status:

Origin [x/y]: 310/236

Current [x/y]: 326/240 (14px x 12px)

Difference [dx/dy]: 15/-2, B:765

Starting time: 27/07/2008 22:40:03

Current: 27/07/2008 22:48:00

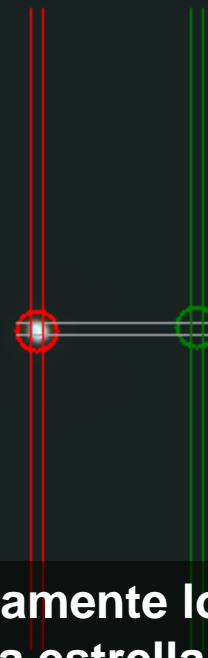
dt: 477 Sekunden

ddA: -49

MW5: -80

Info

Correction



4 – Utilizando únicamente los botones de RA del mando, llevar la estrella entre las líneas rojas.



Use your handcontrol to bring your star onto the Red Line. Turn the screws for azimuth axis until the star has moved between the two green lines.

DSI-Cam: DS1

DSI-WCS

Exposure: 0.50s

Gain: 100%



Gamma: 1

Observation place:

Latitude: 43° 15' 16"

Adjusting:

 Azimuth (Star on N/S axis)

Star declination 4.5

 Pole height (Star on E/W axis)

WCS

Calib

Start

Stop

 Path show Crosshair

Analysis:

 Staranalysis 3D Fullsize High-Res

Status:

Origin [x/y]: 310/236

Current [x/y]: 326/240 (14px x 12px)

Difference [dx/dy]: 15/-2, B:765

Starting time: 27/07/2008 22:40:03

Current: 27/07/2008 22:48:00

dt: 477 Sekunden

ddA: -49

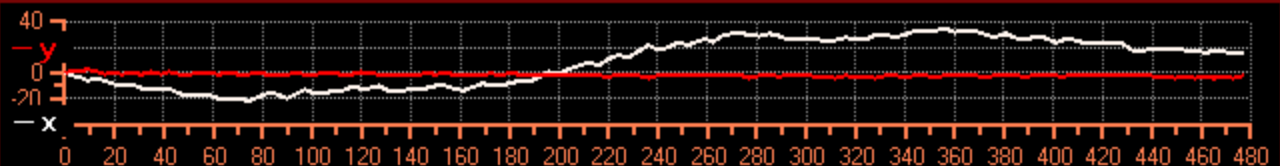
MW5: -80

Info

Correction

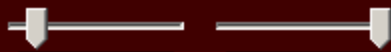


5 - Con las ruedas de ajuste de azimut de la montura, llevar la estrella entre las líneas verdes.



Use your handcontrol to bring your star onto the Red Line. Turn the screws for azimuth axis until the star has moved between the two green lines.

DSI-Cam: DS1

DSI-WCS

Exposure: 0.50s

Gain: 100%



Gamma: 1

Observation place:

Latitude: 43° 15' 16"

Adjusting:

 Azimuth (Star on N/S axis)

Star declination 4.5

 Pole height (Star on E/W axis)

WCS

 Path show Crosshair

Analysis:

 Staranalysis 3D Fullsize High-Res

Status:

Origin [x/y]: 317/245

Current [x/y]: 318/246 (13px x 12px)

Difference [dx/dy]: 2/-1, B:765

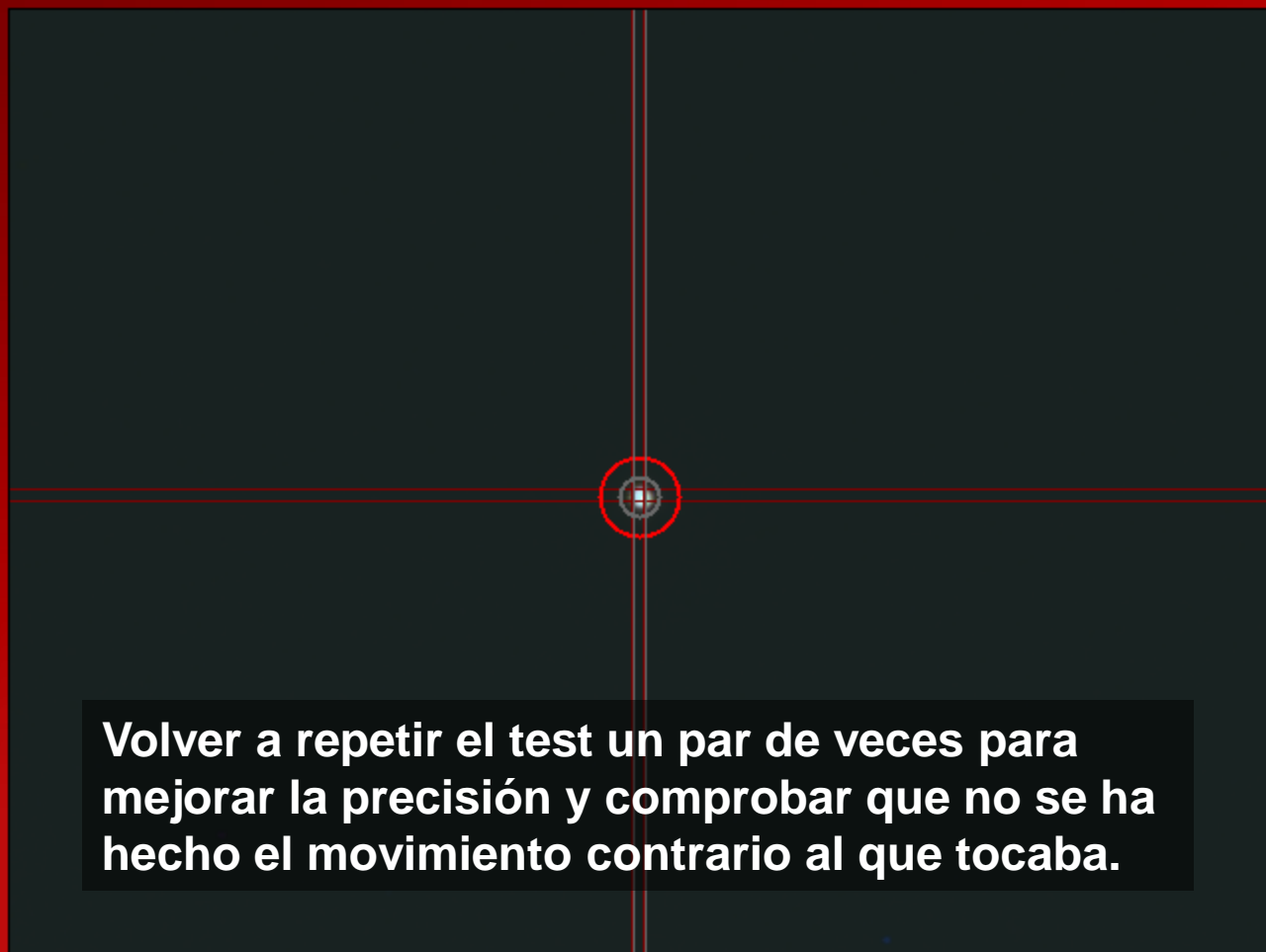
Starting time: 27/07/2008 22:52:35

Current: 27/07/2008 22:59:45

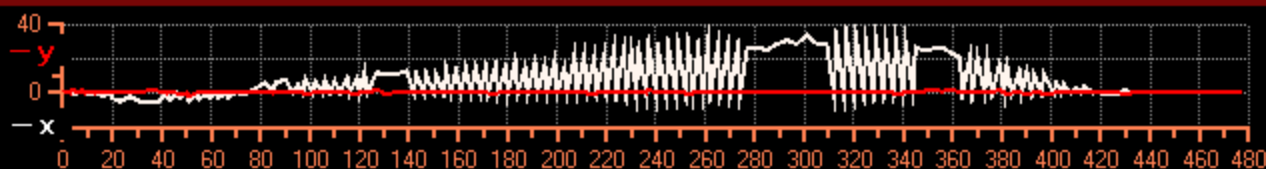
dt: 430 Sekunden

ddA: -27

MW5: 0



Volver a repetir el test un par de veces para mejorar la precisión y comprobar que no se ha hecho el movimiento contrario al que tocaba.



Wait some minutes, until the determined adjustment value levelled out in a certain field and then click on [Correction]. From experience the value is quite well stabilized after approx. 5 minutes (300 sec.)

DSI-Cam: DS1

DSI-WCS

Exposure: 0.50s

Gain: 100%



Gamma: 1

Observation place:

Latitude: 43° 15' 16"

Adjusting:

 Azimuth (Star on N/S axis)

Star declination 4.5

 Pole height (Star on E/W axis)

WCS

 Path show Crosshair

Analysis:

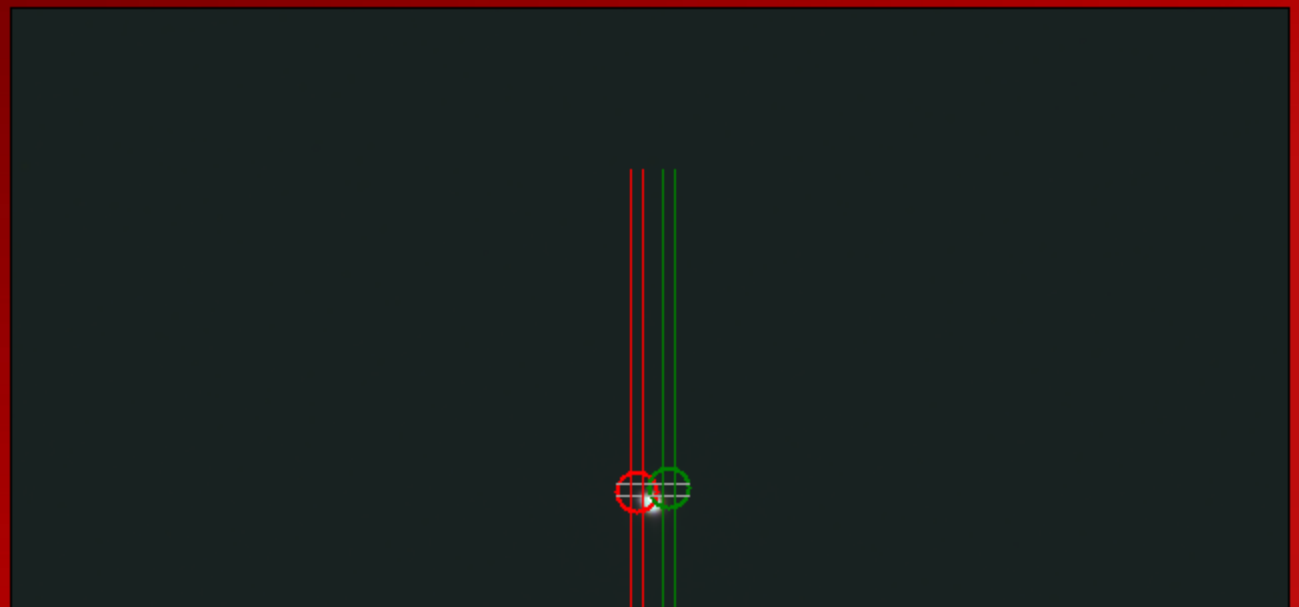
 Staranalysis 3D Fullsize High-Res

Status:

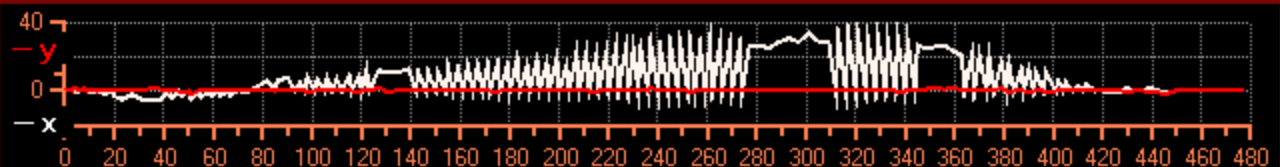
Origin [x/y]: 317/245
Current [x/y]: 318/248 (13px x 11px)
Difference [dx/dy]: -1/-2, B:765
Starting time: 27/07/2008 22:52:35
Current: 27/07/2008 23:00:00
dt: 445 Sekunden
ddA: -53
MW5: -16

Info

Correction



**A mayor tiempo de espera, mejor precisión en el cálculo de corrección.
Al final se observa una mejora importante respecto a la pasada inicial. Señal de que el movimiento de corrección realizado se hizo en el sentido adecuado.**



Use your handcontrol to bring your star onto the Red Line. Turn the screws for azimuth axis until the star has moved between the two green lines.

DSI-Cam: DS1

DSI-WCS

Exposure: 0.50s

Gain: 100%



Gamma: 1

Observation place:

Latitude: **43° 15' 16"**

Adjusting:

 Azimuth (Star on N/S axis)Star declination **4.5** Pole height (Star on E/W axis)

WCS

 Path show Crosshair

Analysis:

 Staranalysis 3D Fullsize High-Res

Status:

Origin [x/y]: 317/245

Current [x/y]: 318/248 (13px x 11px)

Difference [dx/dy]: -1/-2, B:765

Starting time: 27/07/2008 22:52:35

Current: 27/07/2008 23:00:00

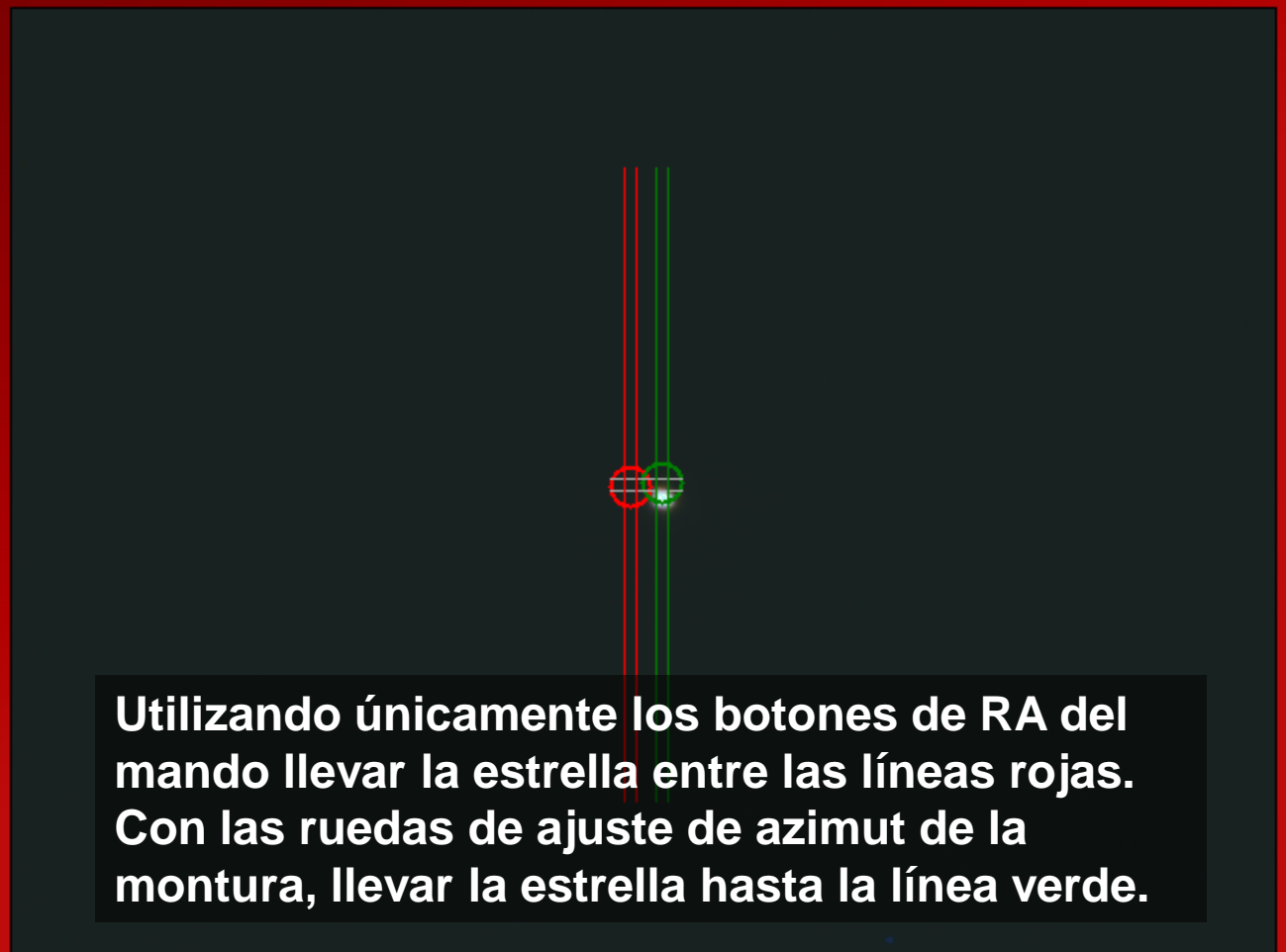
dt: 445 Sekunden

ddA: -53

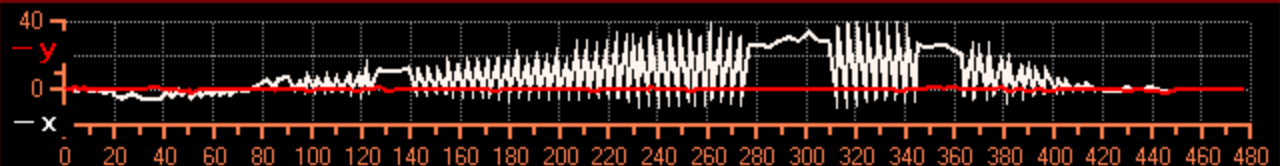
MW5: -16

Info

Correction

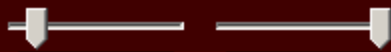


Utilizando únicamente los botones de RA del mando llevar la estrella entre las líneas rojas. Con las ruedas de ajuste de azimut de la montura, llevar la estrella hasta la línea verde.



Use your handcontrol to bring your star onto the Red Line. Turn the screws for azimuth axis until the star has moved between the two green lines.

DSI-Cam: DS1

DSI-WCS

Exposure: 0.50s

Gain: 100%



Gamma: 1

Observation place:

Latitude: **43° 15' 16"**

Adjusting:

 Azimuth (Star on N/S axis)Star declination **4,5** Pole height (Star on E/W axis)

WCS

 Path show Crosshair

Analysis:

 Staranalysis 3D Fullsize High-Res

Status:

Origin [x/y]: 324/245

Current [x/y]: 324/246 (13px x 13px)

Difference [dx/dy]: -1/-1, B:765

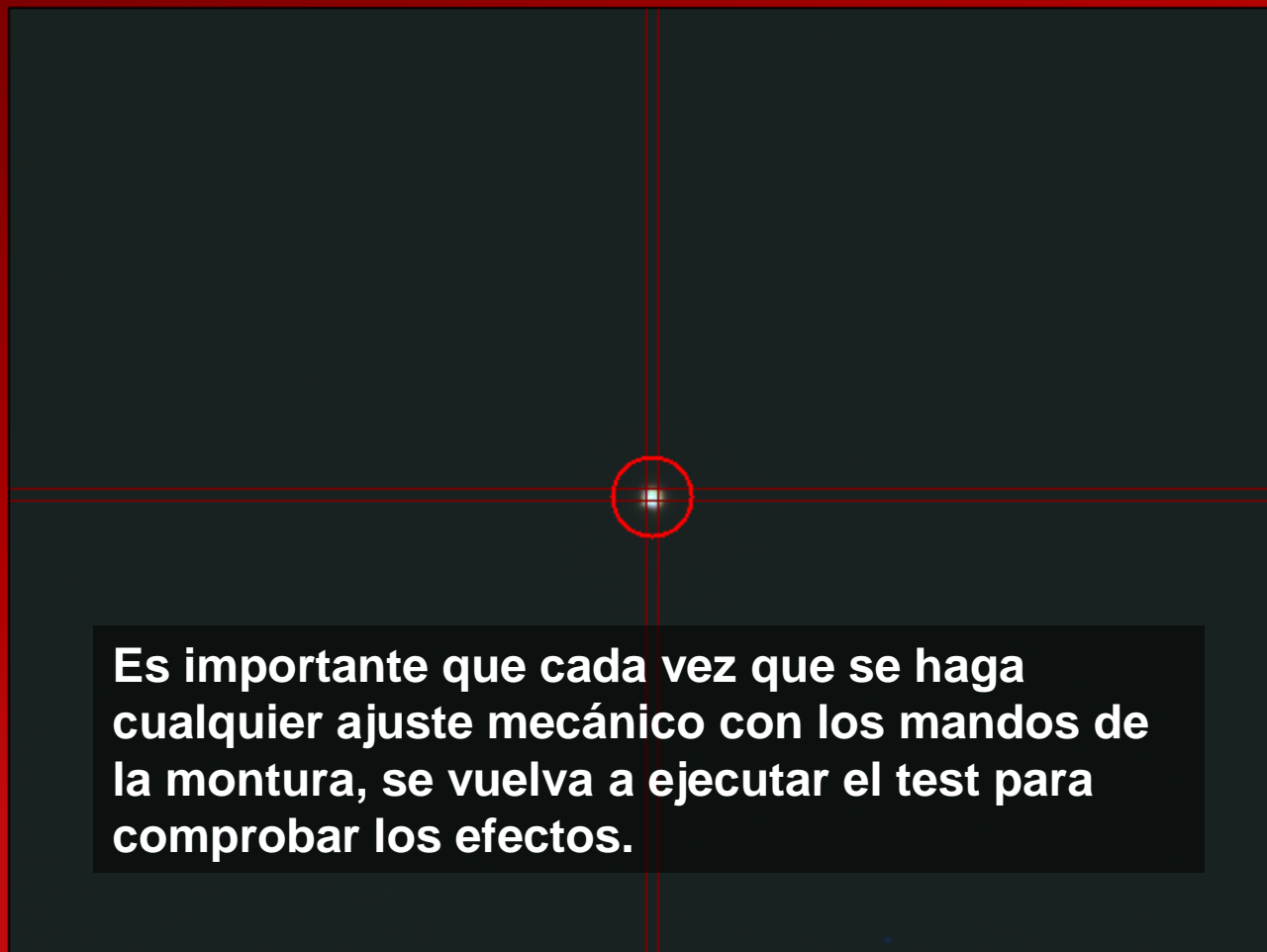
Starting time: 27/07/2008 23:02:56

Current: 27/07/2008 23:02:57

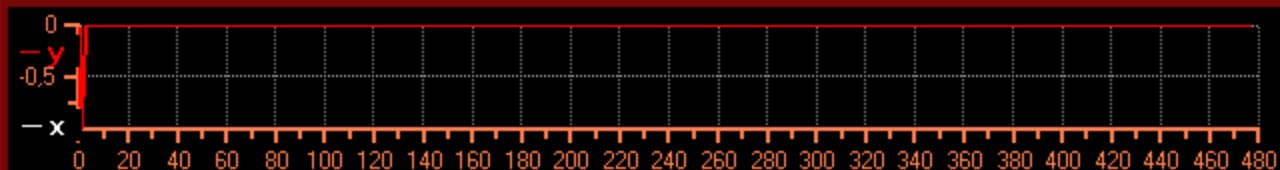
dt: 1 Sekunden

Info

Correction



Es importante que cada vez que se haga cualquier ajuste mecánico con los mandos de la montura, se vuelva a ejecutar el test para comprobar los efectos.



The first adjustment values and tendencies are displayed after 20 seconds. Wait some minutes, until the determined adjustment value levelled out in a certain field and then click on [Correction]

DSI-Cam: DS1

DSI-WCS



Exposure: 0.50s

Gain: 100%



Gamma: 1

Observation place:

Latitude: **43° 15' 16"**

Adjusting:

Azimuth (Star on N/S axis)

Star declination **4.5**

Pole height (Star on E/W axis)

WCS

Path

show Crosshair

Analysis:

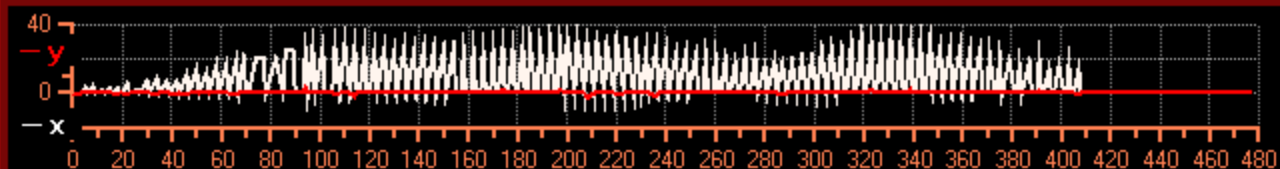
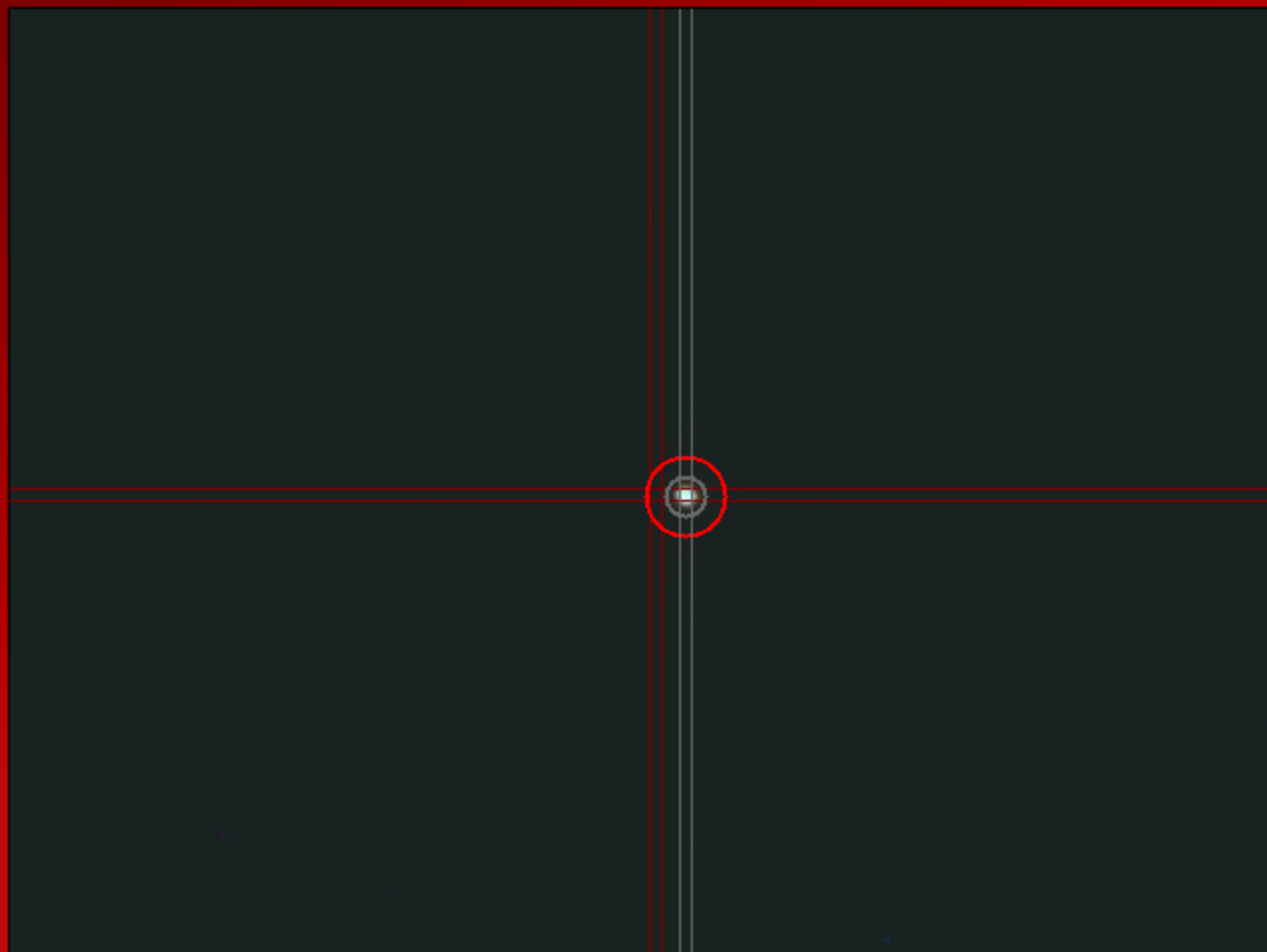
Staranalysis 3D
 Fullsize High-Res

Status:

Origin [x/y]: 326/245
Current [x/y]: 341/246 (12px x 11px)
Difference [dx/dy]: 14/-1, B:765
Starting time: 27/07/2008 23:02:56
Current: 27/07/2008 23:09:44
dt: 407 Sekunden
ddA: -29
MW5: 0

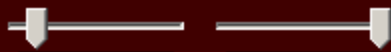
Info

Correction



Wait some minutes, until the determined adjustment value levelled out in a certain field and then click on [Correction]. From experience the value is quite well stabilized after approx. 5 minutes (300 sec.)

DSI-Cam: DS1

DSI-WCS

Exposure: 0.50s

Gain: 100%



Gamma: 1

Observation place:

Latitude: 43° 15' 16"

Adjusting:

 Azimuth (Star on N/S axis)

Star declination 4.5

 Pole height (Star on E/W axis)

WCS

 Path
 show Crosshair

Analysis:

 Staranalysis 3D Fullsize High-Res

Status:

Origin [x/y]: 326/245

Current [x/y]: 344/246 (12px x 12px)

Difference [dx/dy]: 16/0, B: 765

Starting time: 27/07/2008 23:02:56

Current: 27/07/2008 23:09:54

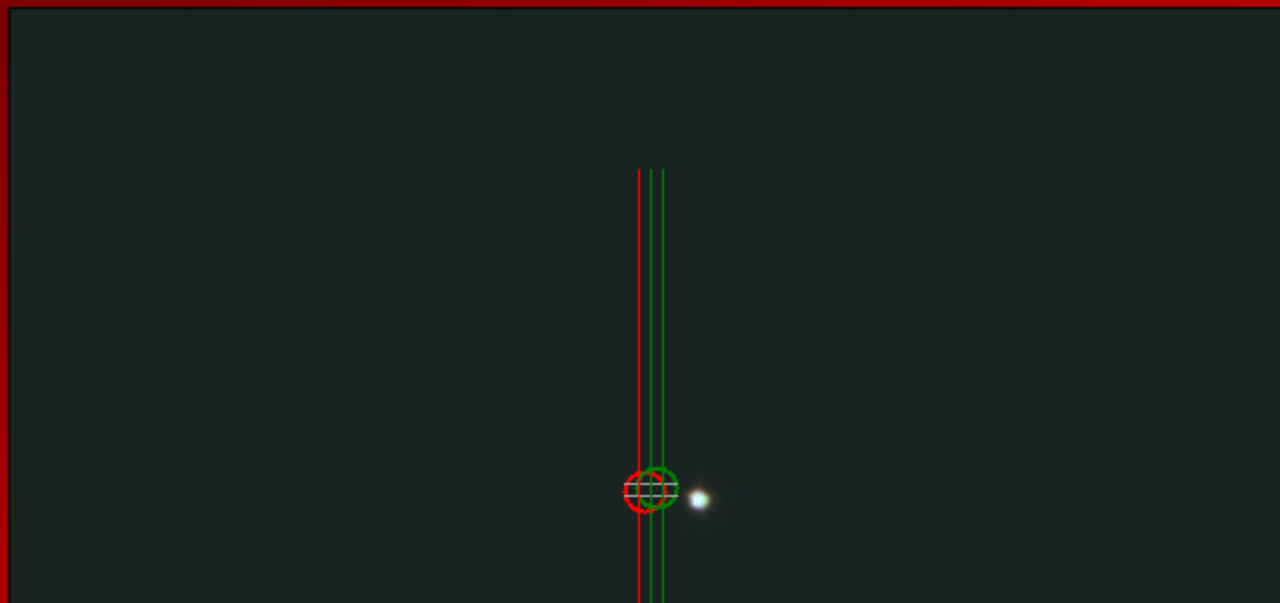
dt: 417 Sekunden

ddA: 0

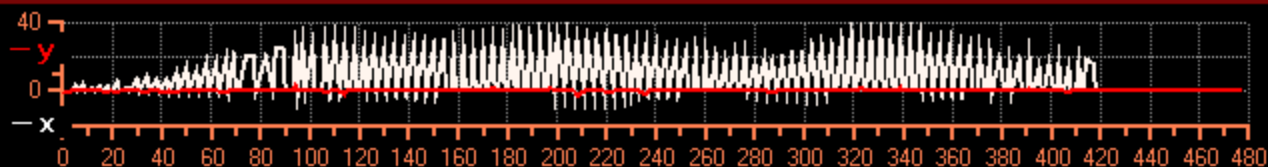
MW5: -6

Info

Correction



Llega un momento en que la corrección es inferior a la sensibilidad de la montura y por tanto es el momento de darla por buena, de lo contrario, aumentaremos el error involuntariamente. Así se queda.



Use your handcontrol to bring your star onto the Red Line. Turn the screws for azimuth axis until the star has moved between the two green lines.

DSI-Cam: DS1

DSI-WCS



Exposure: 0,50s Gain: 100%



Gamma: 1

Observation place:

Latitude: **43° 15' 16"**

Adjusting:

Azimuth (Star on N/S axis)

Star declination **4,5**

Pole height (Star on E/W axis)

WCS

Path

show Crosshair

Analysis:

Staranalysis 3D
 Fullsize High-Res

Status:

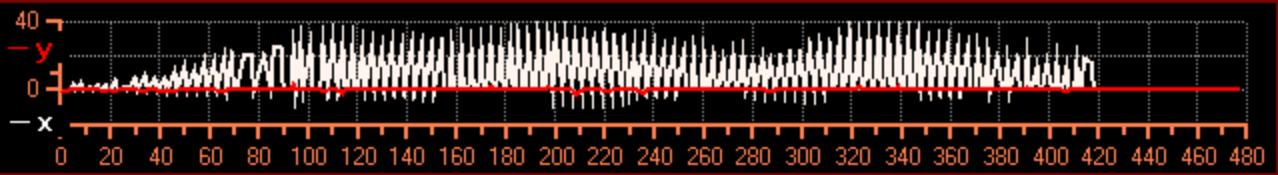
Waiting for star coordinates...

Info

Correction

AJUSTE DE LA ALTURA

- 1- Selección del radio button de Pole height.
- 2- Goto a Enif 2,4 en el E.
- 3- Centrar la estrella en el campo de la cámara.



Arrange your telescope so that the chosen star is approximately in the picture middle. Choose the brightness of the Webcam so the star is well lifted off from the background and no hissing is seen. (a.e. with Yproperties for TouCAM) After that click on the star and the program begins with the drift calculation. The longer the measurement lasts, the more precise and more stable the determined value becomes. If the correction displayed levels on a certain value Click on [Correction].

DSI-Cam: DS1

DSI-WCS



Exposure: 0,50s Gain: 100%



Gamma: 1

Observation place:

Latitude: **43° 15' 16"**

Adjusting:

Azimuth (Star on N/S axis)

Star declination **4,5**

Pole height (Star on E/W axis)

WCS

Path

show Crosshair

Analysis:

Staranalysis 3D

Fullsize High-Res

Status:

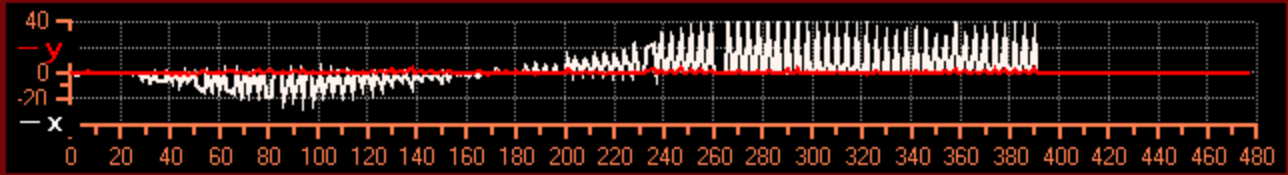
Origin [x/y]: 299/237
Current [x/y]: 328/236 (12px x 13px)
Difference [dx/dy]: 27/4, B:765
Starting time: 27/07/2008 23:17:51
Current: 27/07/2008 23:24:22
dt: 390 Sekunden
ddA: 141
MW5: 101

Info

Correction



4 – Clic en la estrella para comenzar.
Esperar como mínimo 300s antes de corregir.



Wait some minutes, until the determined adjustment value levelled out in a certain field and then click on [Correction]. From experience the value is quite well stabilized after approx. 5 minutes (300 sec.) If the star moves up, the pole height must be reduced (twist screw at the south side of the mount left. - Star in the south must move down at the display)

DSI-Cam: DS1

DSI-WCS

Exposure: 0.50s

Gain: 100%



Gamma: 1

Observation place:

Latitude: **43° 15' 16"**

Adjusting:

 Azimuth (Star on N/S axis)Star declination **4.5** Pole height (Star on E/W axis)

WCS

 Path
 show Crosshair

Analysis:

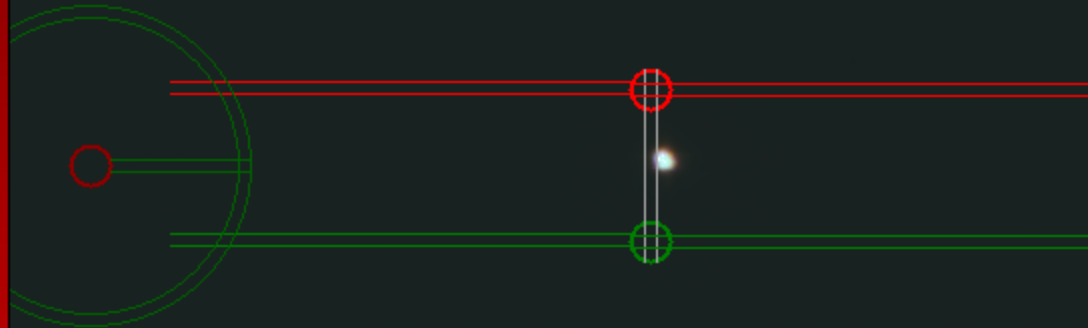
 Staranalysis 3D
 Fullsize High-Res

Status:

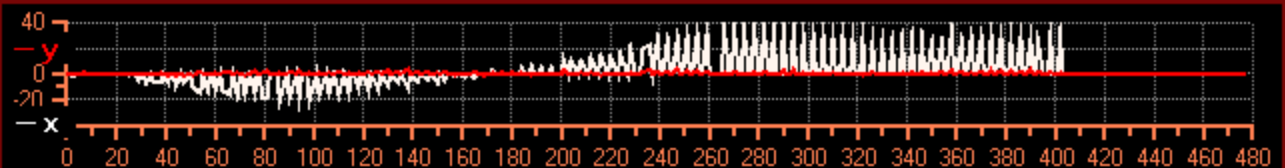
Origin [x/y]: 299/237
 Current [x/y]: 328/236 (13px x 13px)
 Difference [dx/dy]: 29/1, B:765
 Starting time: 27/07/2008 23:17:51
 Current: 27/07/2008 23:24:33
 dt: 402 Sekunden
 ddA: 34
 MW5: 77

Info

Correction



5 – GOTO a la misma estrella que habíamos utilizado para la corrección en azimut.



Choose a bright star in the south, then align the chosen star onto the Red Line with your handcontrol. Turn the correction screws for the pole height until the star is aligned between the two green lines. The pole height must be reduced. For this purpose twist the screw at the south side of the mount left.

DSI-Cam: DS1

DSI-WCS

Exposure: 0.50s

Gain: 100%



Gamma: 1

Observation place:

Latitude: **43° 15' 16"**

Adjusting:

 Azimuth (Star on N/S axis)Star declination **4.5** Pole height (Star on E/W axis)

WCS

 Path
 show Crosshair

Analysis:

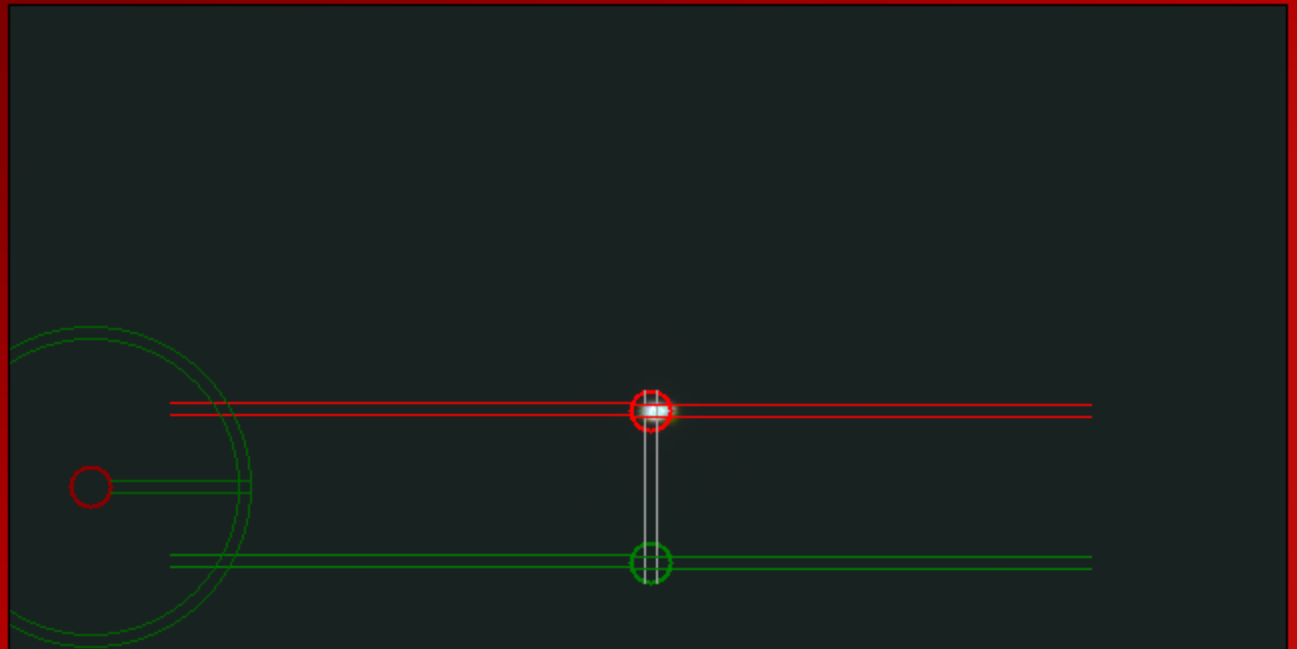
 Staranalysis
 3D
 Fullsize
 High-Res

Status:

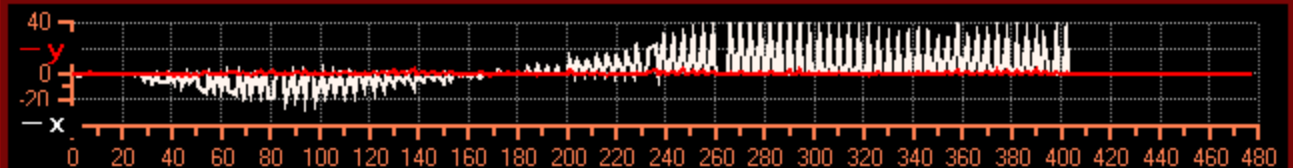
Origin [x/y]: 299/237
 Current [x/y]: 328/236 (13px x 13px)
 Difference [dx/dy]: 29/1, B:765
 Starting time: 27/07/2008 23:17:51
 Current: 27/07/2008 23:24:33
 dt: 402 Sekunden
 ddA: 34
 MW5: 77

Info

Correction



6 – Utilizando únicamente los botones de RA del mando de la montura, llevar la estrella entre las líneas rojas.



Choose a bright star in the south, then align the chosen star onto the Red Line with your handcontrol. Turn the correction screws for the pole height until the star is aligned between the two green lines. The pole height must be reduced. For this purpose twist the screw at the south side of the mount left.

DSI-Cam: DS1

DSI-WCS

Exposure: 0.50s

Gain: 100%



Gamma: 1

Observation place:

Latitude: **43° 15' 16"**

Adjusting:

 Azimuth (Star on N/S axis)Star declination **4.5** Pole height (Star on E/W axis)

WCS

 Path
 show Crosshair

Analysis:

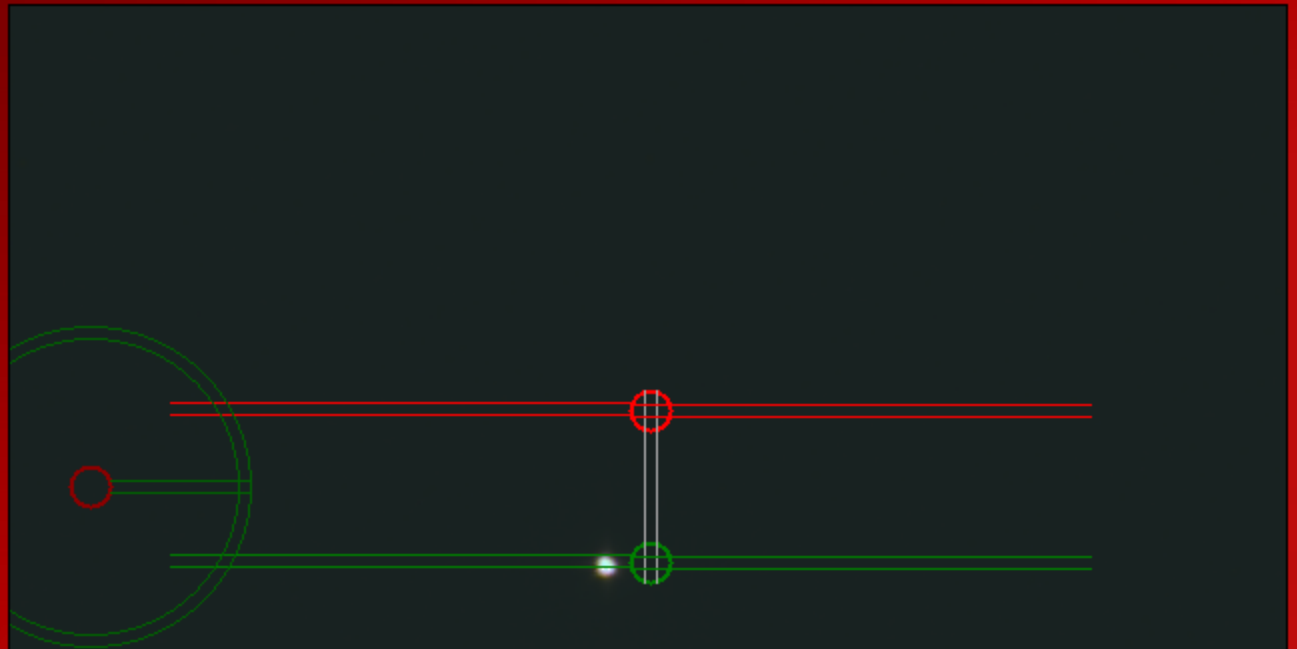
 Staranalysis
 3D
 Fullsize
 High-Res

Status:

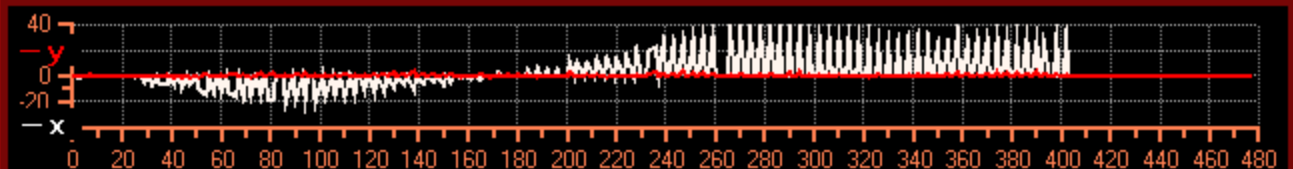
Origin [x/y]: 299/237
 Current [x/y]: 328/236 (13px x 13px)
 Difference [dx/dy]: 29/1, B:765
 Starting time: 27/07/2008 23:17:51
 Current: 27/07/2008 23:24:33
 dt: 402 Sekunden
 ddA: 34
 MW5: 77

Info

Correction



5 - Con los mandos de altitud de la montura, llevar la estrella entre las líneas verdes.



Choose a bright star in the south, then align the chosen star onto the Red Line with your handcontrol. Turn the correction screws for the pole height until the star is aligned between the two green lines. The pole height must be reduced. For this purpose twist the screw at the south side of the mount left.

DSI + WCS DSI-WCS 2.02

DSI-Cam: DS1

DSI-WCS

Exposure: 0,50s Gain: 100%

Gamma: 1

Observation place:
Latitude: **43° 15' 16"**

Adjusting:
 Azimuth (Star on N/S axis)
Star declination **4,5**
 Pole height (Star on E/W axis)

WCS
 Path
 show Crosshair

Analysis:
 Staranalysis 3D
 Fullsize High-Res

Status:
Waiting for star coordinates...



8 – Volver a Enif, o a la estrella que estemos utilizando en el E, para hacer una segunda pasada de comprobación.



Arrange your telescope so that the chosen star is approximately in the picture middle. Choose the brightness of the Webcam so the star is well lifted off from the background and no hissing is seen. (a.e. with Yproperties for TouCAM) After that click on the star and the program begins with the drift calculation. The longer the measurement lasts, the more precise and more stable the determined value becomes. If the correction displayed levels on a certain value Click on [Correction].

DSI-Cam: DS1

DSI-WCS

Exposure: 0,50s

Gain: 100%



Gamma: 1

Observation place:

Latitude: **43° 15' 16"**

Adjusting:

 Azimuth (Star on N/S axis)Star declination **4,5** Pole height (Star on E/W axis)

WCS

 Path show Crosshair

Analysis:

 Staranalysis 3D Fullsize High-Res

Status:

Origin [x/y]: 324/242

Current [x/y]: 288/244 (13px x 14px)

Difference [dx/dy]: -36/0, B: 765

Starting time: 27/07/2008 23:34:16

Current: 27/07/2008 23:41:17

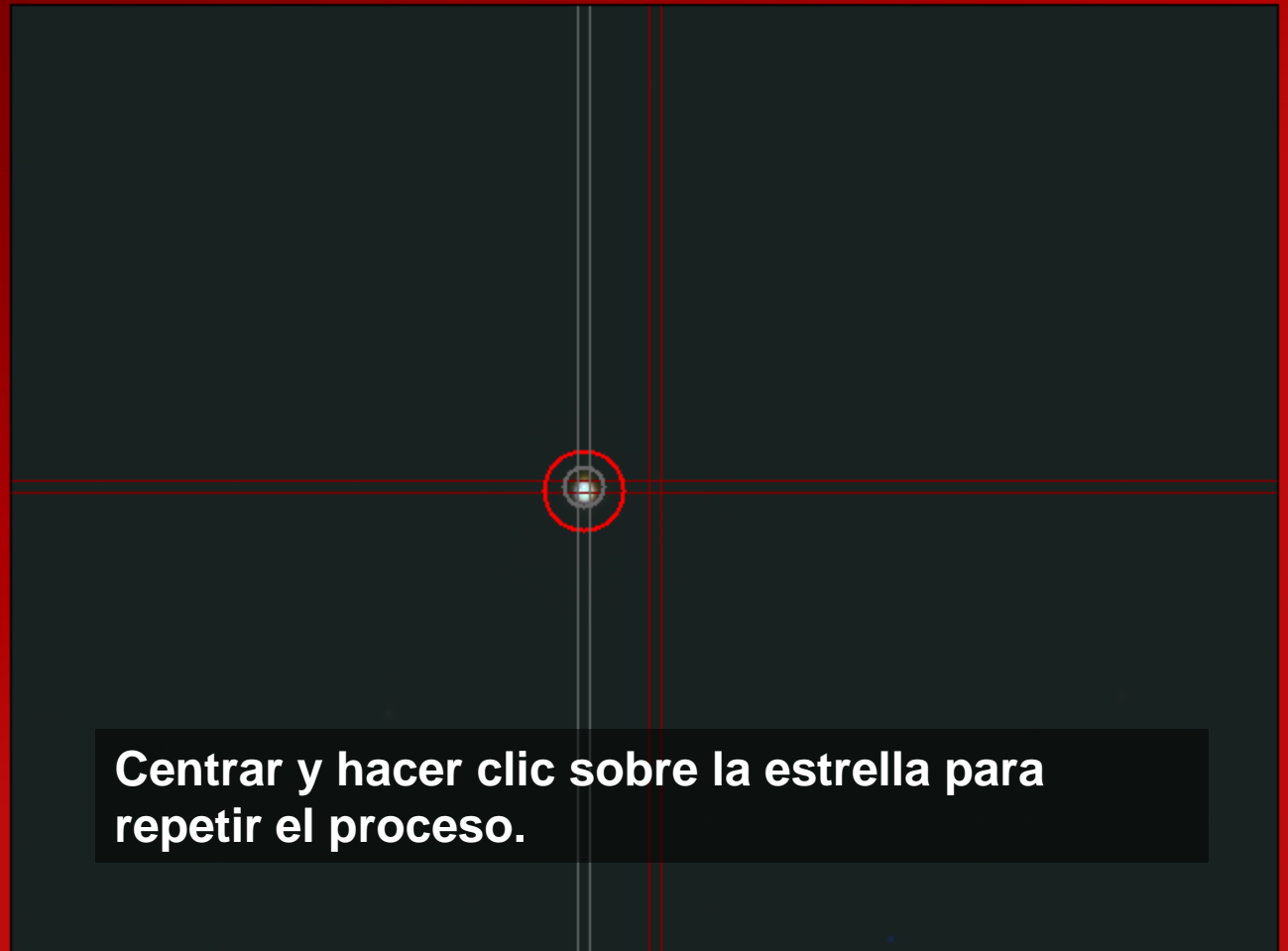
dt: 420 Sekunden

ddA: 0

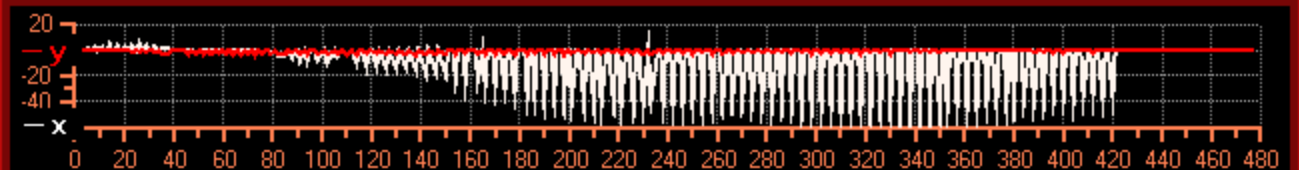
MW5: 0

Info

Correction



Centrar y hacer clic sobre la estrella para repetir el proceso.



Wait some minutes, until the determined adjustment value levelled out in a certain field and then click on [Correction]. From experience the value is quite well stabilized after approx. 5 minutes (300 sec.) If the star moves down, the pole height must be increased (twist screw at the south side of the mount right, - star in the south must move up at the display)

DSI-Cam: DS1

DSI-WCS



Exposure: 0,50s Gain: 100%



Gamma: 1

Observation place:

Latitude: **43° 15' 16"**

Adjusting:

Azimuth (Star on N/S axis)

Star declination **4,5**

Pole height (Star on E/W axis)

WCS

Path

show Crosshair

Analysis:

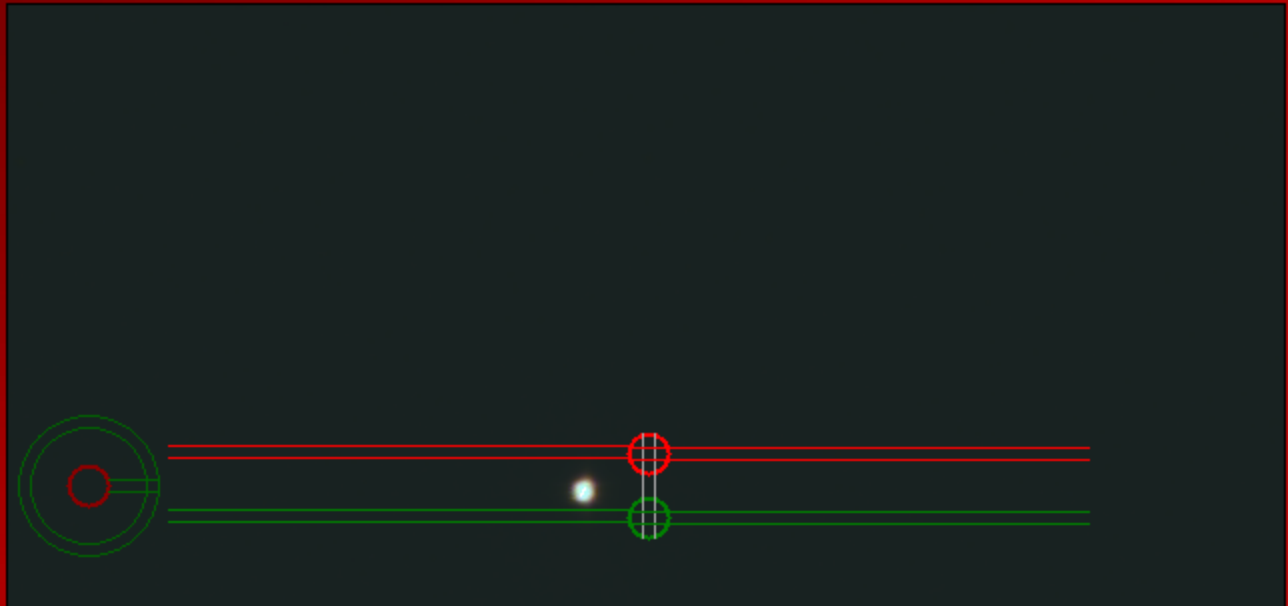
Staranalysis 3D
 Fullsize High-Res

Status:

Origin [x/y]: 324/242
Current [x/y]: 288/244 (16px x 14px)
Difference [dx/dy]: -37/2, B:765
Starting time: 27/07/2008 23:34:16
Current: 27/07/2008 23:41:30
dt: 433 Sekunden
ddA: 63
MW5: 32

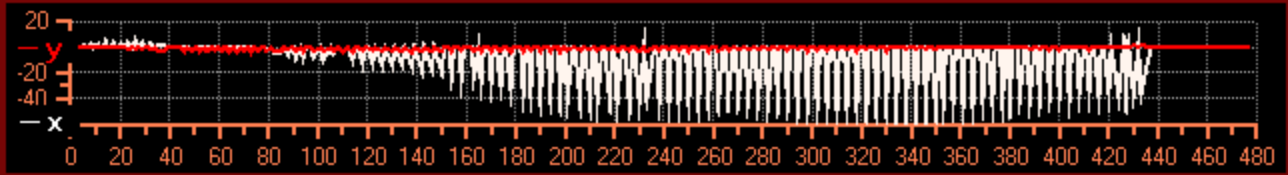
Info

Correction



Si el error es menor significa que hemos hecho la corrección en el sentido adecuado rojo → verde.

volver a la estrella utilizada en RA y corregir la altitud de la montura de rojo a verde.



Choose a bright star in the south, then align the chosen star onto the Red Line with your handcontrol. Turn the correction screws for the pole height until the star is aligned between the two green lines. The pole height must be reduced. For this purpose twist the screw at the south side of the mount left.

DSI-Cam: DS1

DSI-WCS



Exposure: 0.50s

Gain: 100%



Gamma: 1

Observation place:

Latitude: **43° 15' 16"**

Adjusting:

 Azimuth (Star on N/S axis)Star declination **4.5** Pole height (Star on E/W axis)

WCS

Calib

Start

Stop

 Path show Crosshair

Analysis:

 Staranalysis 3D Fullsize High-Res

Status:

Origin [x/y]: 324/242

Current [x/y]: 288/244 (16px x 14px)

Difference [dx/dy]: -37/2, B:765

Starting time: 27/07/2008 23:34:16

Current: 27/07/2008 23:41:30

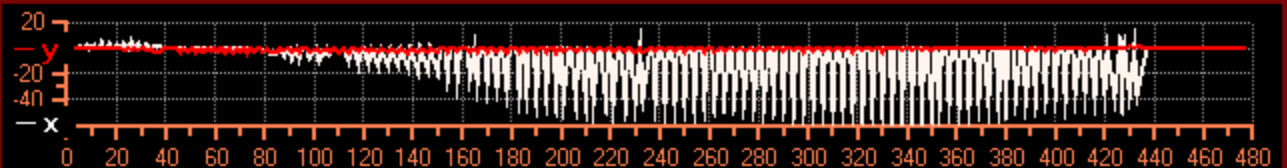
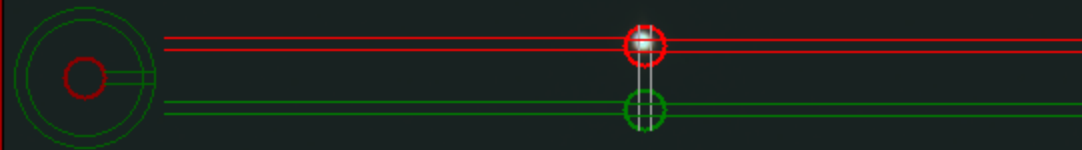
dt: 433 Sekunden

ddA: 63

MW5: 32

Info

Correction



Choose a bright star in the south, then align the chosen star onto the Red Line with your handcontrol. Turn the correction screws for the pole height until the star is aligned between the two green lines. The pole height must be reduced. For this purpose twist the screw at the south side of the mount left.

DSI-Cam: DS1

DSI-WCS



Exposure: 0.50s

Gain: 100%



Gamma: 1

Observation place:

Latitude: **43° 15' 16"**

Adjusting:

 Azimuth (Star on N/S axis)Star declination **4.5** Pole height (Star on E/W axis)

WCS

 Path show Crosshair

Analysis:

 Staranalysis 3D Fullsize High-Res

Status:

Origin [x/y]: 324/242

Current [x/y]: 288/244 (16px x 14px)

Difference [dx/dy]: -37/2, B:765

Starting time: 27/07/2008 23:34:16

Current: 27/07/2008 23:41:30

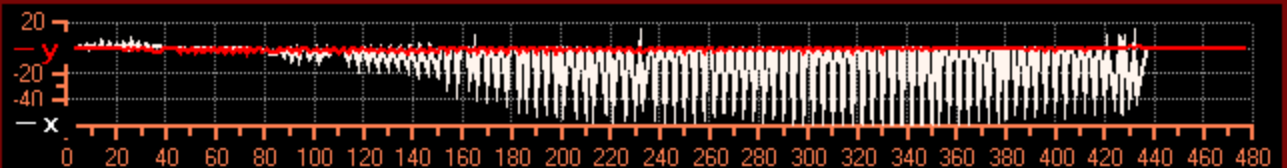
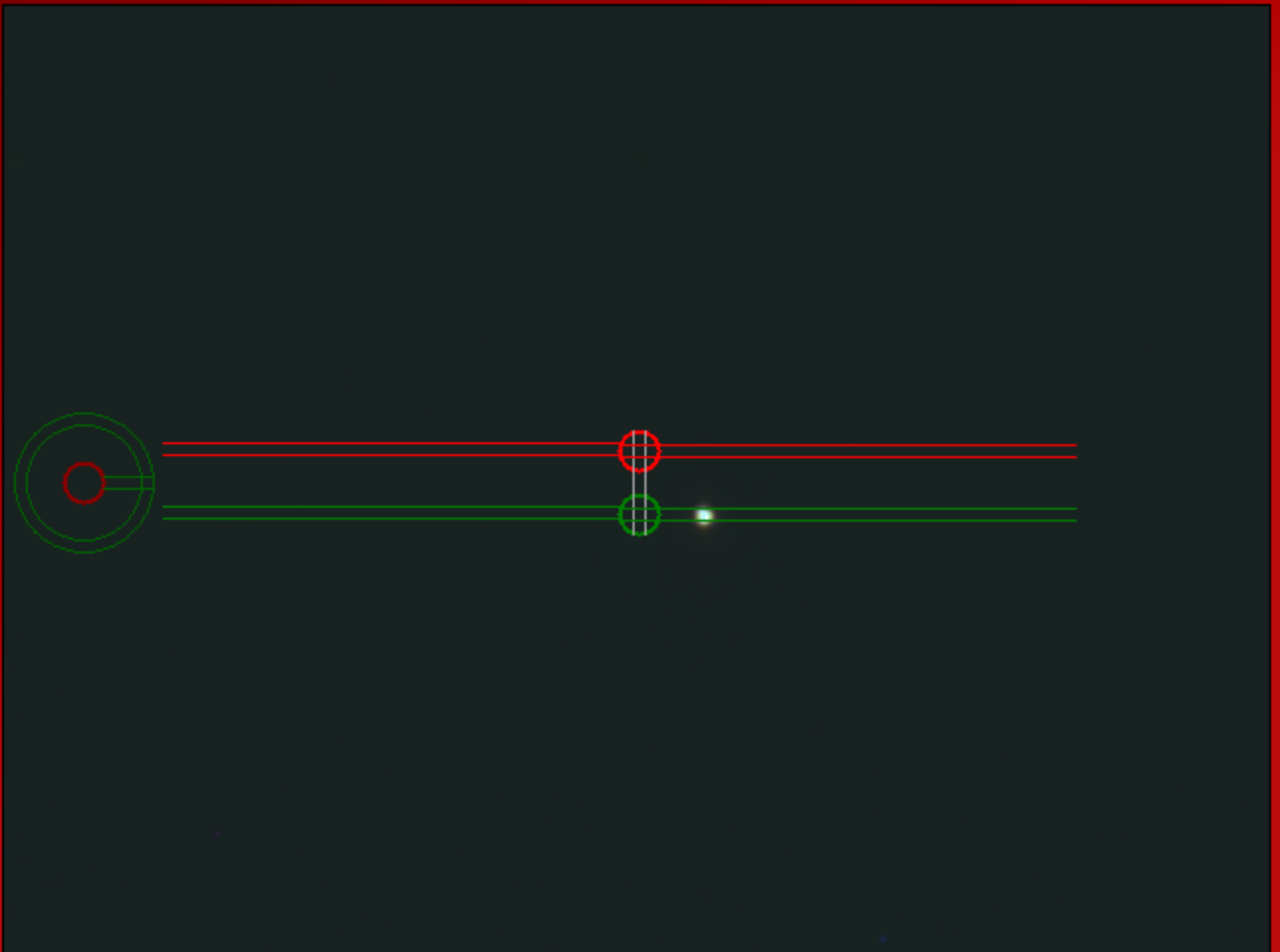
dt: 433 Sekunden

ddA: 63

MW5: 32

Info

Correction



Choose a bright star in the south, then align the chosen star onto the Red Line with your handcontrol. Turn the correction screws for the pole height until the star is aligned between the two green lines. The pole height must be reduced. For this purpose twist the screw at the south side of the mount left.

DSI-Cam: DS1

DSI-WCS



Exposure: 0.50s Gain: 100%



Gamma: 1

Observation place:

Latitude: **43° 15' 16"**

Adjusting:

Azimuth (Star on N/S axis)

Star declination **4.5**

Pole height (Star on E/W axis)

WCS

Path

show Crosshair

Analysis:

Staranalysis 3D

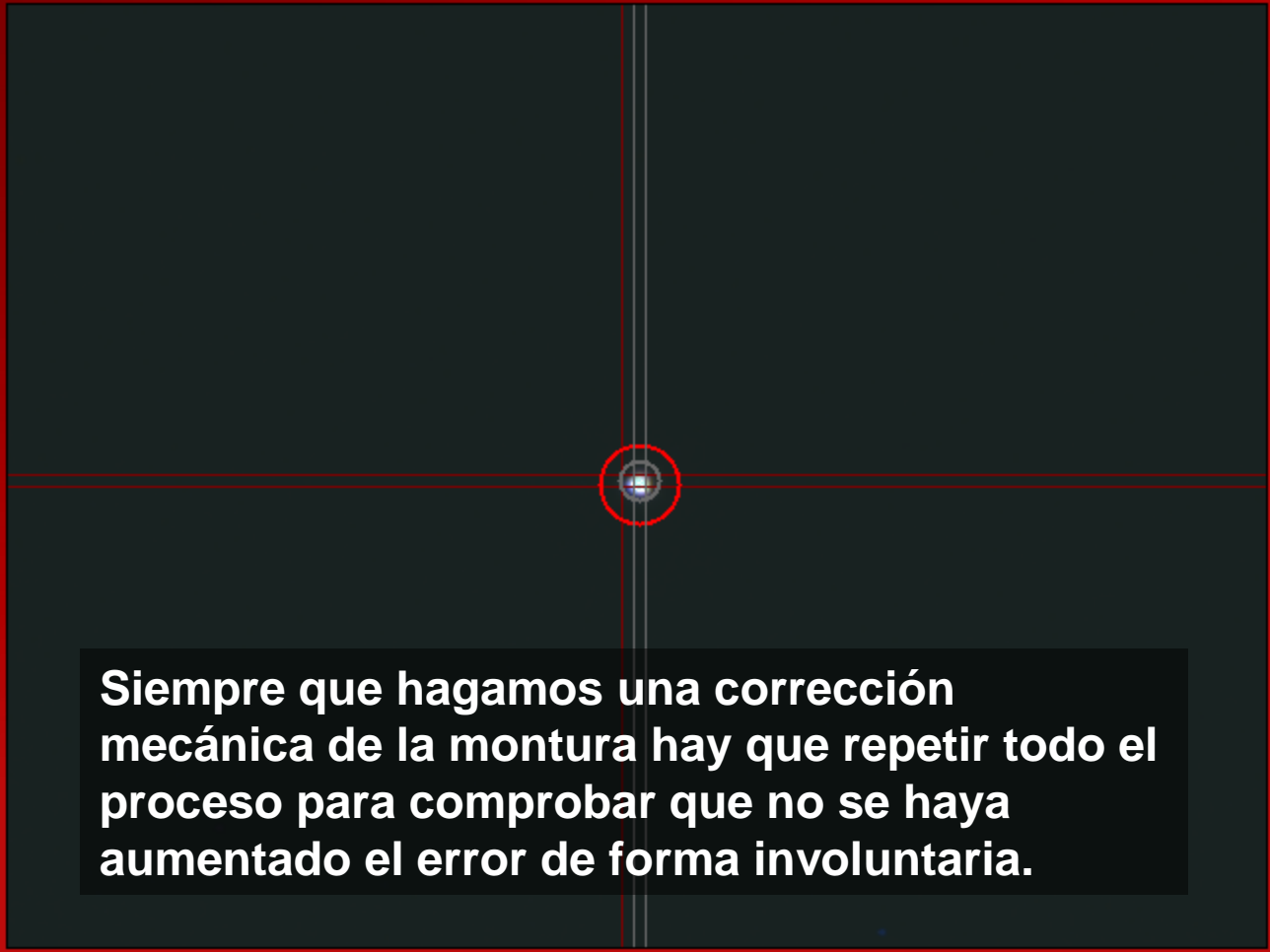
Fullsize High-Res

Status:

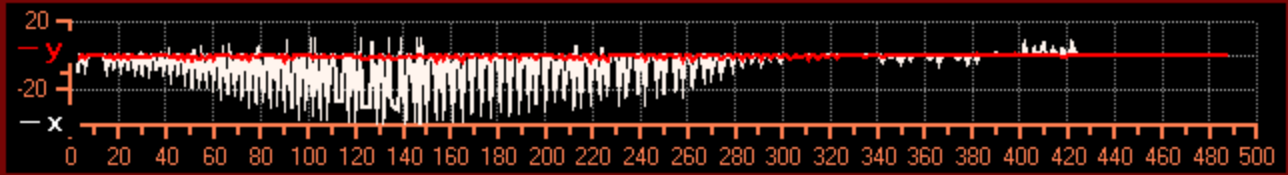
Origin [x/y]: 314/241
Current [x/y]: 320/243 (15px x 14px)
Difference [dx/dy]: 7/0, B:765
Starting time: 28/07/2008 0:17:08
Current: 28/07/2008 0:24:10
dt: 422 Sekunden
ddA: 0
MW5: 0

Info

Correction



Siempre que hagamos una corrección mecánica de la montura hay que repetir todo el proceso para comprobar que no se haya aumentado el error de forma involuntaria.



Wait some minutes, until the determined adjustment value levelled out in a certain field and then click on [Correction]. From experience the value is quite well stabilized after approx. 5 minutes (300 sec.) If the star moves up, the pole height must be reduced (twist screw at the south side of the mount left. - Star in the south must move down at the display)

DSI-Cam: DS1

DSI-WCS

Exposure: 0.50s

Gain: 100%



Gamma: 1

Observation place:

Latitude: **43° 15' 16"**

Adjusting:

 Azimuth (Star on N/S axis)Star declination **4.5** Pole height (Star on E/W axis)

WCS

 Path
 show Crosshair

Analysis:

 Staranalysis 3D Fullsize High-Res

Status:

Origin [x/y]: 314/241

Current [x/y]: 316/243 (14px x 14px)

Difference [dx/dy]: 0/1, B:765

Starting time: 28/07/2008 0:17:08

Current: 28/07/2008 0:24:24

dt: 436 Sekunden

ddA: 31

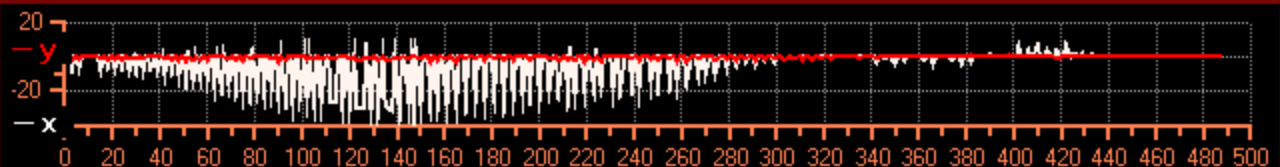
MW5: 6

Info

Correction

**Perfecto!!!**

Y ahora se para el ASCOM del software si lo hubiera y se hace un alignment con 3 estrellas para tener un goto más preciso.



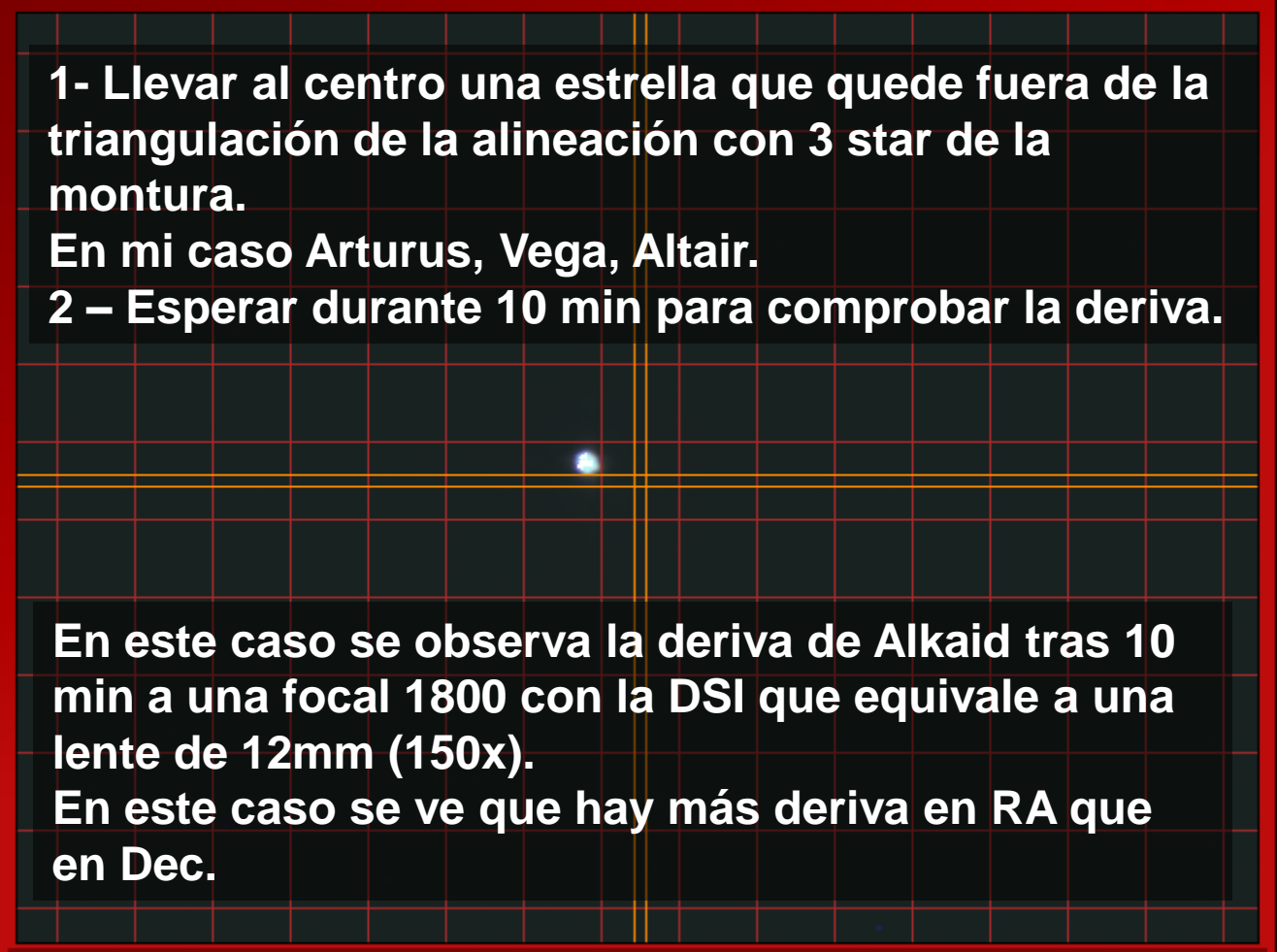
Choose a bright star in the south, then align the chosen star onto the Red Line with your handcontrol. Turn the correction screws for the pole height until the star is aligned between the two green lines. The pole height must be reduced. For this purpose twist the screw at the south side of the mount left.

Test final de la corrección de la deriva

1- Llevar al centro una estrella que quede fuera de la triangulación de la alineación con 3 star de la montura.

En mi caso Arturus, Vega, Altair.

2 – Esperar durante 10 min para comprobar la deriva.



En este caso se observa la deriva de Alkaid tras 10 min a una focal 1800 con la DSI que equivale a una lente de 12mm (150x).

En este caso se ve que hay más deriva en RA que en Dec.