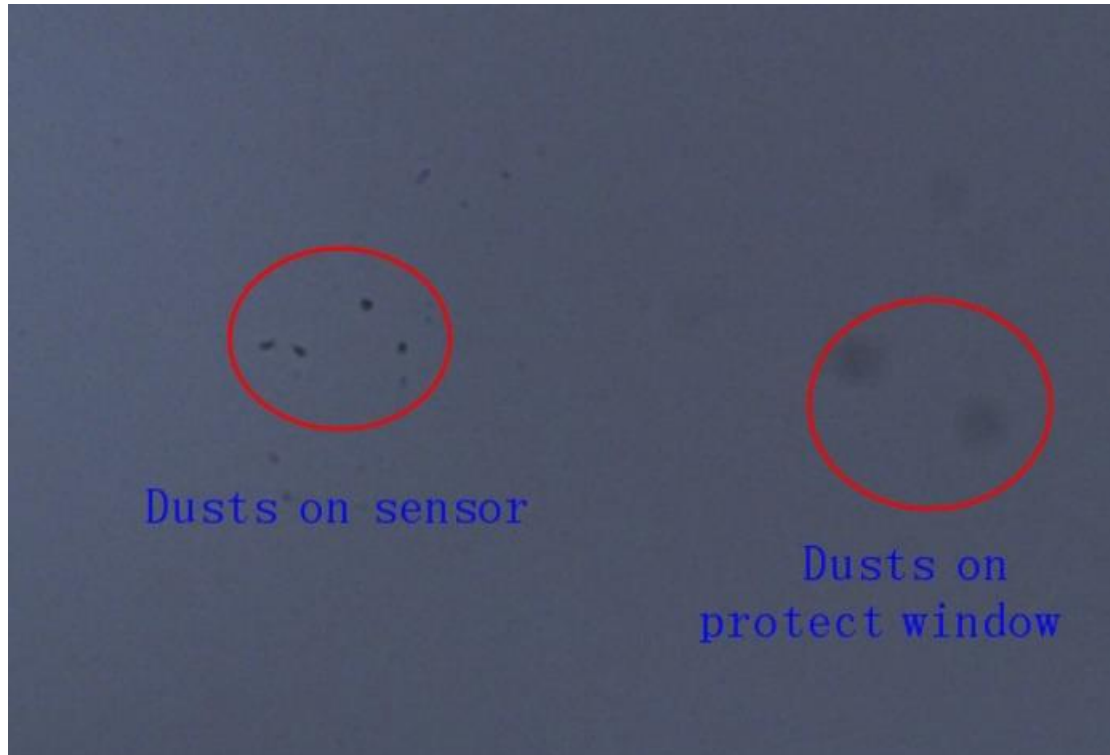


How to clean ASI cameras and redry the desiccants

The camera comes with a protective window, which can protect the sensor from dust and humidity. If you need to clean the sensor, it's better to do so during the daytime. To see the dust, you just need to setup your telescope and point it to a bright place. A Barlow is required to see these dusts clear. Then attach the camera and adjust the exposure to make sure not over exposed. You can see an image like below if it's dirty.



The big dim spot on the image (at right) are the shadows of dust on the protect window.

The very small but very dark spot in the image (at left) are the shadows of the dusts on the sensor.

The suggested way to clean them is try to blow them away with a manual air pump. To clean the dust and spots on the sensor, you will need to open the camera chamber.

Please read the following steps carefully, and follow our instructions to clean a cooled camera.

Step1: Preparation

- 1) Cleaning kit for cameras (including the cleaning solution and cleaning swab)
- 2) Screwdriver (optional)
- 3) Air blower



Step2: Open the chamber of cooled camera

- 1) For the old versions of cooled cameras, screw off the front piece in an anticlockwise direction.



- 2) For uncooled cameras, do as above.



3) For cooled cameras like ASI183/1600/294/533, take off the 4 sealing screws on the front piece with the screwdriver or the hexagon wrench coming with the camera.



4) For cooled cameras with larger sensors like ASI071/2600/6200/2400, it will take two steps to open the chamber.

- ◆ Take off the 3 screws on the sensor tilt plate with the screwdriver or the hexagon wrench coming with the camera.



◆ Take off the 6 screws on the camera sealing plate.



Step3: Remove the front piece

Remove the front piece carefully after the chamber is unlocked.

1) This is how the ASI183/1600/294/533 will be like:



2) This is how the ASI071/2600/6200/2400 will be like:



Step4: Clean the dust on sensor

Take the ASI2600MC Pro for example:

Squeeze the air blower to direct a stream of air to blow away dirt and dust from the camera sensor.



Step5: Clean the spots on sensor

- ◆ Drip 1 or 2 drops of the sensor cleaner on the cleaning swab



- ◆ Use the cleaning swab to gently sweep the sensor in a continuous and paralleled motion.



Step6: Clean the dust on the inner surface of protective window

Take off the desiccants and use the air blower to blow away the dust.



Step7: Clean the spots on the inner surface of protective window

Clean the protective window softly with the sensor cleaner.



Step8: Redry the desiccants

Usually, the air will come in and lead to dew problem when you open the chamber. That's why you need to redry the desiccants or replace new desiccants to keep the chamber in a dry state.

1) Take out the desiccants from camera (if you haven't done this in Step 6).



2) Put them into microwave oven, medium power, heat for 2 minutes.



3) Put them back when it is still warm.

Step9: Reseal the chamber immediately

Reseal the chamber as soon as possible when you done putting back the desiccants. Be aware that

the desiccants will not work if they are exposed in air for long.

NOTICE: If you want to change the desiccants, please MAKE SURE the new desiccants have the same thickness with old ones. The chamber won't be well sealed if the desiccants are too thick. And the action of tightening the screws forcibly will only damage the sensor board and desiccants.

1) For the old modules, screw off the front piece in an anticlockwise direction.



2) For cooled cameras like ASI183/1600/294/533, install the 4 sealing screws onto the front piece.



3) For cooled cameras with larger sensors like ASI071/2600/6200/2400,

- ◆ Fix the front piece to the camera.



- ◆ Be mindful of the direction of desiccants - Make sure you align the part marked on the piece with that on the board.



- ◆ Fix the sensor tilt plate to the camera with screws. Please note that the 6 little screws should be installed after you done installing the 3 major screws to the sensor tilt plate.



Congratulations!

You've successfully cleaned the camera sensor and redry the desiccant!

The camera is now resurrected with full HP!