# Troubleshooting

#### Random errors

If when applying "Job Settings" you get an error message box, make sure that all cameras have the same amplifier selected before applying new settings. E.g., if you want to observe in EM mode, but some cameras are currently configured to use Conventional, settings application *may* fail. Each camera can be adjusted using "Acquisition Settings" menu.

#### Polarization/Photometry regime issue

The analyzer can be misplaced and end up in an incorrect position. If you are observing a target in polarimetric mode but see only one ray or you experience an inverse problem, switch polarimeter to "Polarimetric regime", then click on "Retractor" button in the bottom left corner.



You will be asked if you would like to perform a re-calibration of retractor position. Click "Yes" and wait. After the calibration ends, take a test exposure of a bright target to ensure you see both rays. If your test image shows the problem was resolved, **Power Off** the retractor motor using remote power control.



While powered off, click on the "Retractor" button, and observe a message box (do not close it). **Power On** the retractor motor and click "Yes" in the message box that was displayed to you by the Dipol-UF software. If everything is OK, the retractor motor will be identified, and you can continue observing in all regimes.

If self-calibration does not help (you still see only one ray in polarimetric regime even after calibration), this must be a mechanical malfunction, and nothing can be done remotely.

### Recovering from the crash

If Dipol-UF application exits unexpectedly with an error, or one of the cameras stops responding, or an acquisition does not progress at all (the progress bar has reached its end, but the image was never received), it is possible that one of the secondary services of Dipol-UF has malfunctioned.

### 1. Close Dipol-UF program

If it is still running, close Dipol-UF program.

### 2. Reboot computers

Open "POWER" folder on the main computer desktop and launch REBOOT DIPOL-2 and then REBOOT DIPOL-3. When you double click each shortcut, you will be presented with a prompt, asking for a password. Type in the default password (check your list of credentials) then give it ~1 minute to reboot.

## If nothing helps

A camera and/or remote server can get stuck in an unrecoverable state. This can be fixed by a full reboot procedure. Turn off Dipol-UF software, initiate computer shutdown procedure using the shortcut **"SHUTDOWN ALL"** in the **"POWER"** folder. Use IP Power to power off both cameras and computers, wait for 1 to 5 minutes, return power to both computers and cameras.

## If absolutely nothing helps

A computer may not respond to power on/off cycle and remain switched off even when other machines are online. A camera's internal buffer can get corrupted, which causes it to be no longer identifiable by the software (even Andor SOLIS). This can be resolved by manually switching a device off and on. A support astronomer should go to the dome and click the button on the exterior of a computer or a camera. Make sure that everything is stopped and powered off before doing so.

### Still does not work

Well, this means Dipol-UF malfunctioned and can no longer operate properly. If we are talking about one camera or one secondary computer, it may be still possible to continue observations using one or two remaining cameras. When connecting to cameras, select only those that are available/those that can be used.