**Report Form version 5.5.5A**

PLEASE read these instructions carefully. YOU are responsible for knowing your equipment and how it operates. This is important knowledge when filling out this NEW Form. If in doubt, PLEASE seek help.

All cells at the top of the Form are identical to those used before. Fill these in as usual. Once you get to the line that begins with "Timing", extra care must be taken when filling in each cell.

Almost all the changes on the new Form involve how the event times are determined. The Form makes corrections based on the camera being used, the Video Time Inserter (VTI) used, the exposures (integration), and the method used to analyze the video.

Once filled in correctly, the Form will make all the needed corrections due to integration (or not), the VTI being used, and the analysis method.

For these directions to apply, Timing must be "GPS - Time inserted". None of these directions apply to any other observation method.

The Timing Device is next. Use the drop-down list to select the correct Video Time Inserter. IOTA-VTI and KIWI are the standard IOTA methods.

Under Method, these new procedures only apply for "Video with Frame Analysis".

The OTE (Occultation Timing Extraction) application is next. This is very important to getting all the corrections properly applied. Choose your analysis software from the drop-down list carefully. If Corrections have already been applied by the OTE program, such as with AOTA or R-OTE, then select the ‘w/CamDelay Corrections’ option. If none of applications used fit what you did, use Manual.

Select your Detector Model/Type next. The drop-down lists should provide all the needed possibilities. If you don't find your camera, please choose "Other" and show it in the Comments at the bottom. You will be asked to provide additional information. [Note: the camera and video format selected must match the Exposure Integration setting or an error message will appear and corrections will not be applied.]

Next, use your mouse to HOVER over the Exposure Integration cell to see a yellow Comments box with suggestions. ALL exposure settings are now in FIELDS. Frames are no longer used and are not an option. Look at the choices shown in the yellow comments box to determine your exposure setting.

Now select the Exposure Integration from the drop-down list. If you choose an Exposure/Camera combination that is not compatible, you will get an error message. Nothing else on the Form will work properly if this is the case and corrections will not be applied. Go back and check your entries.

With the RunCamNight Eagle Astro, you will need to provide additional information about the y-position of the star on the frame from LiMovie (or Tangra) at the time of the D and R. The RunCam has a rolling shutter that must have a correction applied. When you choose the RunCam camera, cells will appear prompting you to include the y-positions from LiMovie (or Tangra). Be sure to choose the correct exposure as mentioned above.

Complete the other boxes on the Form as usual.

\*\*\*\*\*\* When placing Times for D and R on the Form, ONLY place your Times in the UNCORRECTED GRAY rows for D and R, even if the D and R times have corrections applied from AOTA or R-OTE. If corrections have already been applied, no further corrections will be applied and the value will be copied directly into the Green Cells. On the other hand, if corrections are needed, they will be applied and the corrected results copied into the Green Cells.

For example, a program like PYOTE creates a LOG file with all the needed information near the bottom of the file. These are uncorrected values. These are the values to enter in the GRAY cells.

\*\*\*\*\*\* DO NOT attempt to type ANYTHING in the GREEN cells. These are reserved for the corrected values the Report Form finds based on your input of all the previous information. If you enter anything in the green cells (hopefully we have eliminated that possibility), you will corrupt the worksheet and will need to start over. Exit out of the Form WITHOUT saving and re-open to start again.

It is suggested that you create a Template by filling in the Form with your usual information. Even things like the camera and VTI can often be placed in the Template. Once that is complete, Save this new Form with the name Template in it. Use this one for future events.

Once you understand these basics, go to the DATA tab at the bottom to begin entering observation information. For future use, Save the Form from the DATA Sheet and it will open there next time.

Need help? Send an email to: reports@asteroidoccultation.com and someone will respond.