General procedures for eye data scoring

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Several notes:
1. This document only lists the general procedures for eye data scoring for SZ study. For instructions on How to Score Eye Data, please Click Here.
2. We need log book to track the scoring procedures. See log file here !
3. **Please scroll down for instructions for EyeLink and Tempo data scoring.**

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SMI eye data: (data from scanner)

After data recording, **experimenter** should do:

1. Data converting.

The **SMI iView X** eye tracker system creates files in **IDF** format. We need to convert them into ascii format using the program named **IDF Converter**.

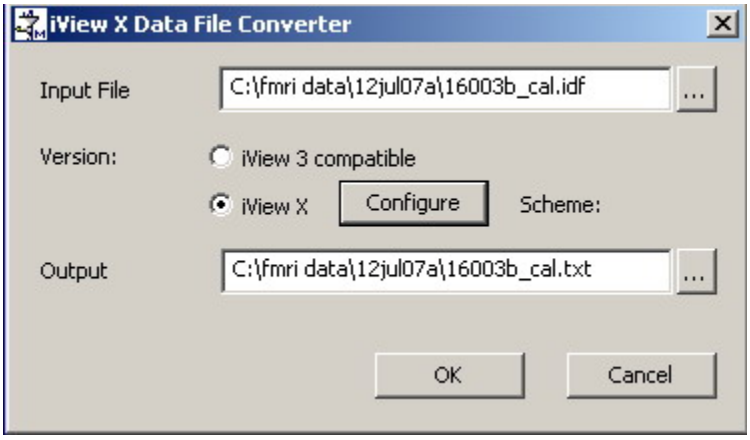

Figure1: convert files for IDF to ASCII format.

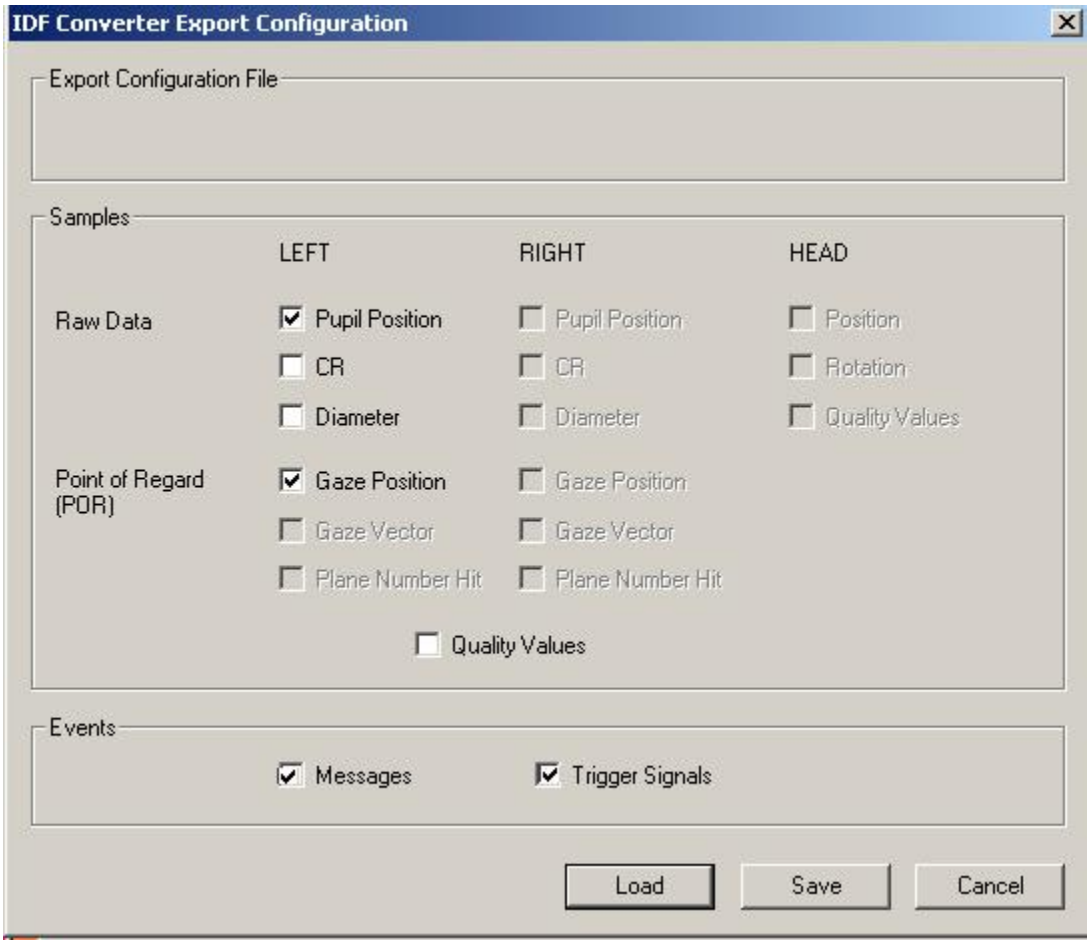

Figure 2: options to check.

2 Transfer the eye data (raw and converted ones) from the desktop PC and logfiles (logfiles only) to the matlab server
The destination folder is "/birc/jemlab/sz07/eye_data/SMI/scoring/data"
Open the eye data scoring log file and enter the subID or file name you just uploaded in the "to be scored" sheet.

Scorer should :
3 Check the eye data scoring log file for the list of unscored data. Then, get the eye data and logfiles from Matlab server to the scoring PC.
Please make sure that all the files are saved in the right folder. For example, if the subject ID is "16004",then the subject's eye data should be saved in the folder like "C:\CCNL\sz07**SMI**\scoring\data**16004**\16004a", his logfiles will be in "C:\CCNL\sz07**SMI**\scoring\data**16004**\".
This is important: If these files are not in the right folder, the scripts can not find them.

4. Calibration scoring
a.open matlab7.0
b.Open matlab file "SMI_01_eyecal.m". This scripts should be in the folder "C:\CCNL\sz07**SMI**\scoring\"

c.Change line 18 and 19 to reflect current subject and session, and Save
d.Run it.
e.A graph will pop up. The eye calibration data is plotted in blue line. The line should step up from left to right
f.Select a point at each of 5 steps on calibration on the plot.
g.A blue line will appear. Pick a polynomial to fit this line. (Usually choose from 1 (line is strait) to 2 (The blue line is like a C curve).
h.A red line will appear. If the two lines match, then calibration is done.
If the two lines do not match well, you should redo the calibration.
i. Close the figure.

5. eye movement scoring.

a. Open matlab file. (SMI_02_fa.m is for fix/anti run; SMI_02_fp.m is for fix/pro run; and SMI_02_pa.m is for Pro/anti run.). This scripts should be in the folder "C:\CCNL\sz07**SMI**\scoring\"
b.Change line 18 and 19 to reflect current subject and session.
c.Save and run.

Please click HERE for more specific instructions (Start at page 8).

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EyeLink eye data: (data from 6th floor lab)

After data recording, **experimenter** should do:

1. Data converting

Use application "Visual EDF2ASC" to convert EDF files to text files which can be read by Matlab.
P.S.: on the new laptop, "Visual EDF2ASC" could be found by clicking
start>programs>SR Research>EyeLink>Utilities>Visual EDF2ASC

See the figure below for the settings of the "Visual EDF2ASC". - very important.

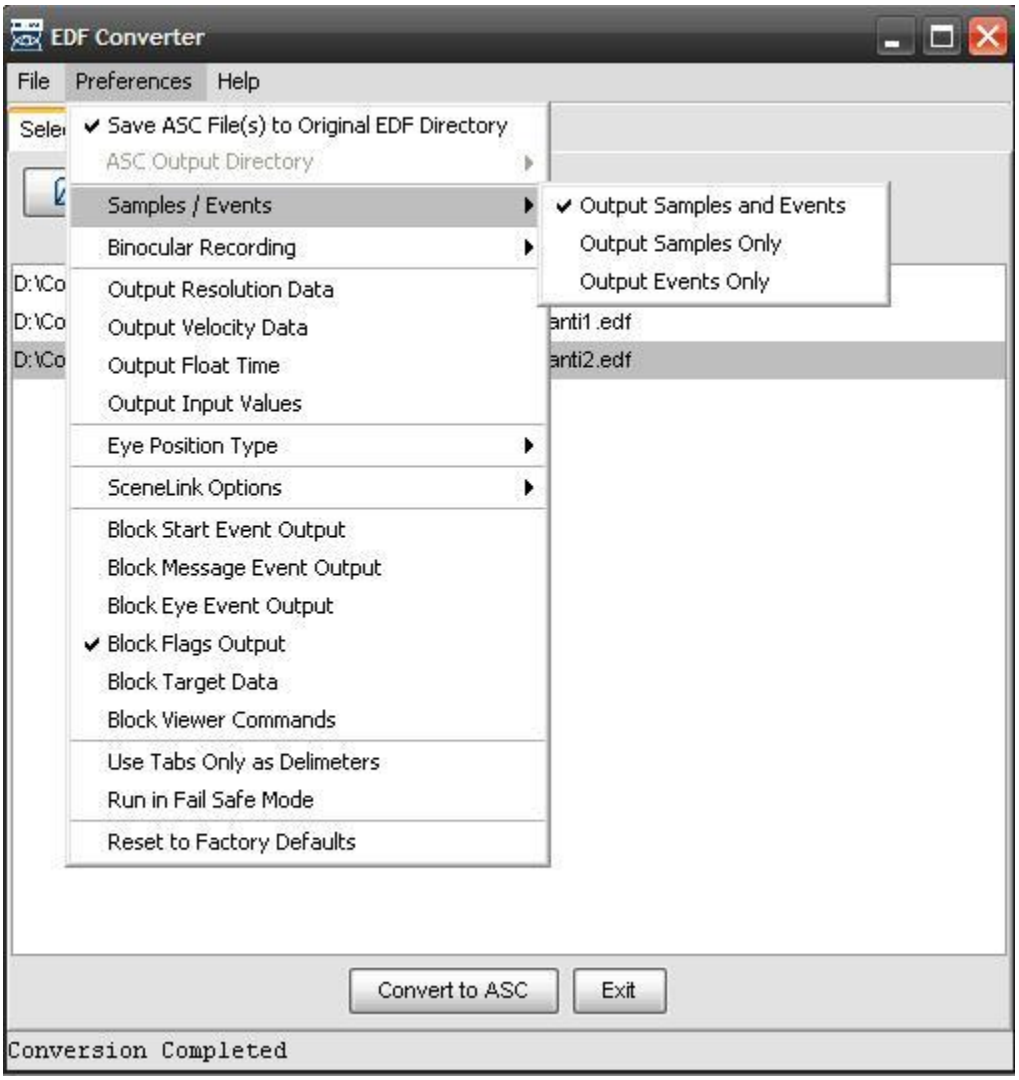

Figure 3: options to check for "Visual EDF2ASC".

2 Transfering eye data and logfiles to the matlab server.
The destination folder is /birc/jemlab/sz07/eye_data/**EyeLink**/scoring/data
Open the eye data scoring log file and enter the subID or file name you just uploaded in the "to be scored" sheet.

Scorer should :
3 Check the eye data scoring log file for the list of unscored data. Then, get both the eye data and the logfiles from Matlab server to the scoring PC.
Please make sure that all the files are saved in the right folder. The subject's eye data should be saved in the folder like "C:\CCNL\sz07**EyeLink**\scoring\data\", his/her logfiles will be in "C:\CCNL\sz07**EyeLinks**\scoring\data\logfiles".
This step is very important: If these files are not in the right folder, the scripts can not find them.

The eye data file should be named like:

1609911a.asc, 16099p.asc or 1609902o.asc.
We call the first seven digits as "subid" .
The letter followed the subid indicates the task: a= Fix-**a**nti task, p= Fix-**p**ro, o= **O**DR task.

4. Eye data scoring

a.open matlab7.0
b.Open matlab scripts.[scripts beginning with "FA" are for Fix-Anti data scoring, scripts beginning with "FP" are for Fix-Pro task and scripts beginning with "ODR" are for ODR task]. The scripts should be in the folder "C:\CCNL\sz07**EyeLink**\scoring\scripts"
c. In each script, change line 24 to reflect current subject and session. Save the scripts.
d. The number in the filename of scripts indicates the order in which these scripts should be run. Run the scripts one after another please (00->01->02).

Please click HERE for more instructions (Start at page 8).

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Tempo eye data: (data from ABH)

There is no need to convert the eye data. **Experimenter** need to:
1 Transfer eye data and logfiles to the matlab server.
The destination folder is /birc/jemlab/sz07/eye_data/**Tempo**/scoring/data
Open the eye data scoring log file and enter the subID or file name you just uploaded in the "to be scored" sheet.

Scorer should :
2 Check the eye data scoring log file for the list of unscored data. Then, get both the eye data Matlab server to the scoring PC.
Please make sure that all the files are saved in the right folder. The subject's eye data should be saved in the folder like "C:\CCNL\sz07**Tempo**\scoring\data\", his/her logfiles will be in "C:\CCNL\sz07**Tempo**\scoring\data\logfiles".
This step is very important: If these files are not in the right folder, the scripts can not find them.

The eye data folder should contains at least one file whose suffix is ".ps0", ".as0" or "mm0".
The letter followed the subid indicates the task: ".ps0"= Fix-**a**nti task, ".ps0"= Fix-**p**ro, "mm0"= **O**DR task.
The file name starts with 7 numbers
We call the first seven digits as "subid", the following 2 digits as session number .

3. Eye data scoring

a.open matlab7.0
b.Open matlab scripts.[The name of scripts files begin with "Tempo" and end with "Fix-Anti", "Fix-Pro", "ODR" or "eyecal"]. The scripts should be in the folder "C:\CCNL\sz07**Tempo**\scoring\"
c. In each script, change line 8 and 9 to reflect current subject and session. Save the scripts.
d. The number in the filename of scripts indicates the order in which these scripts should be run. Run the scripts one after another please (01->02).

Please click HERE for more instructions (Start at page 8).