```
menu "Macros"
        "Create FFT", createFFTDialog()
end


Function createFFTDialog()

        //setDataFolder root:'frequency vector':
        //DFREF dfr = GetDataFolderDFR()
        //string path=dfr

        setDataFolder root:BOSS3_450sub:
        DFREF dfr = GetDataFolderDFR()

        string folderName
        variable numDataFolders = CountObjectsDFR(dfr, 4)

        string artRemovalWaveName, artRemovalWaveFFTName

        variable i, a, trialNumber

        for(i=0; i < numDataFolders; i += 1)

                folderName = getIndexedObjNameDFR(dfr, 4, i)
                SetDataFolder ":'" + folderName + "':"
                DFREF dfr = GetDataFolderDFR()

                for (trialNumber=1; trialNumber<=2; trialNumber +=1)          //process recording in trial 1
and 2

                        make/T testWave_eye = {"OD", "OS"}

                        dowindow/K layout0
                        newlayout/P=landscape
                        TextBox/C/N=text0/F=0/A=MT/X=0/Y=3 folderName+", trial"+num2str(trialNumber)

                        string trialName="trial"+num2str(trialNumber)
                        DFREF path= dfr:$trialName

                        for (a=0; a<=1; a +=1)          //process recording in OD and OS
```

```
                        //print testWave_eye[a]

                        string eyeName = testWave_eye[a]
                        artRemovalWaveName = "PDmm_"+eyeName+"_deBlinked_artRemoval"
                        wave artRemovalWave = $artRemovalWaveName

                        //print artRemovalWaveName


                        string artRemovalWave_postR1_FFTName = artRemovalWaveName+"_postR1_FFT"
                        wave artRemovalWave_postR1_FFT=$artRemovalWave_postR1_FFTName
                        string artRemovalWave_postB1_FFTName = artRemovalWaveName+"_postB1_FFT"
                        wave artRemovalWave_postB1_FFT=$artRemovalWave_postB1_FFTName
                        string artRemovalWave_postR2_FFTName = artRemovalWaveName+"_postR2_FFT"
                        wave artRemovalWave_postR2_FFT=$artRemovalWave_postR2_FFTName
                        string artRemovalWave_postB2_FFTName = artRemovalWaveName+"_postB2_FFT"
                        wave artRemovalWave_postB2_FFT=$artRemovalWave_postB2_FFTName

                        dowindow/K postR1_FFT
                        dowindow/K postB1_FFT
                        dowindow/K postR2_FFT
                        dowindow/K postB2_FFT

                        //obtain FFT and display in a graph

                        //postR1_FFT
                        FFT/OUT=2/DEST=artRemovalWave_postR1_FFT/RP=[600, 1085] artRemovalWave
                        DeletePoints 0,1, artRemovalWave_postR1_FFT
                        artRemovalWave_postR1_FFT = sqrt(artRemovalWave_postR1_FFT)


                        if (a==0)                       //plot FFT, OD remains red, make OS blue
                                display/N=postR1_FFT artRemovalWave_postR1_FFT vs root:'frequency
vector':f_postRed       //display FFT vs frequency vector
                                Label/W=postR1_FFT bottom "Frequency (Hz)"
                                Label/W=postR1_FFT left "Spectrum power (px\\S2\\M)"
                                ModifyGraph/W=postR1_FFT log(bottom)=1
                                ModifyGraph/W=postR1_FFT log=1
                                TextBox/W=postR1_FFT/C/N=text0/F=0/A=RB "postR1_FFT"
                        elseif (a==1)
```

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                                        appendtoGraph/W=postR1_FFT artRemovalWave_postR1_FFT vs
root:'frequency vector':f_postRed
                                        modifygraph/W=postR1_FFT rgb(artRemovalWave_postR1_FFT)=(1,4,52428)
                                else
                                endif


                                //postRB1_FFT
                                FFT/OUT=2/DEST=artRemovalWave_postB1_FFT/RP=[1980, 2915] artRemovalWave
                                DeletePoints 0,1, artRemovalWave_postB1_FFT
                                artRemovalWave_postB1_FFT = sqrt(artRemovalWave_postB1_FFT)

                                if (a==0)               //plot FFT, OD remains red, make OS blue

                                        display/N=postB1_FFT artRemovalWave_postB1_FFT vs root:'frequency
vector':f_postBlue
                                        Label/W=postB1_FFT bottom "Frequency (Hz)"
                                        Label/W=postB1_FFT left "Spectrum power (px\\S2\\M)"
                                        ModifyGraph/W=postB1_FFT log(bottom)=1
                                        ModifyGraph/W=postB1_FFT log=1
                                        TextBox/W=postB1_FFT/C/N=text0/F=0/A=RB "postB1_FFT"
                                elseif (a==1)
                                        appendtoGraph/W=postB1_FFT artRemovalWave_postB1_FFT vs
root:'frequency vector':f_postBlue
                                        modifygraph/W=postB1_FFT rgb(artRemovalWave_postB1_FFT)=(1,4,52428)
                                else
                                endif


                                //postR2_FFT
                                FFT/OUT=2/DEST=artRemovalWave_postR2_FFT/RP=[3360, 3845] artRemovalWave
                                DeletePoints 0,1, artRemovalWave_postR2_FFT
                                artRemovalWave_postR2_FFT = sqrt(artRemovalWave_postR2_FFT)

                                if (a==0)                       //plot FFT, OD remains red, make OS blue
                                        display/N=postR2_FFT artRemovalWave_postR2_FFT vs root:'frequency
vector':f_postRed       //display FFT vs frequency vector
                                        Label/W=postR2_FFT bottom "Frequency (Hz)"
                                        Label/W=postR2_FFT left "Spectrum power (px\\S2\\M)"
                                        ModifyGraph/W=postR2_FFT log(bottom)=1
                                        ModifyGraph/W=postR2_FFT log=1
```

```
                                        TextBox/W=postR2_FFT/C/N=text0/F=0/A=RB "postR2_FFT"
                                elseif (a==1)
                                        appendtoGraph/W=postR2_FFT artRemovalWave_postR2_FFT vs
root:'frequency vector':f_postRe
                                        modifygraph/W=postR2_FFT rgb(artRemovalWave_postR2_FFT)=(1,4,52428)
                                else
                                endif


                                //postB2_FFT
                                FFT/OUT=2/DEST=artRemovalWave_postB2_FFT/RP=[3360, 3845] artRemovalWave
                                DeletePoints 0,1, artRemovalWave_postB2_FFT
                                artRemovalWave_postB2_FFT = sqrt(artRemovalWave_postB2_FFT)

                                if (a==0)                       //plot FFT, OD remains red, make OS blue
                                        display/N=postB2_FFT artRemovalWave_postB2_FFT vs root:'frequency
vector':f_postBlue     //display FFT vs frequency vector
                                        Label/W=postB2_FFT bottom "Frequency (Hz)"
                                        Label/W=postB2_FFT left "Spectrum power (px\\S2\\M)"
                                        ModifyGraph/W=postB2_FFT log(bottom)=1
                                        ModifyGraph/W=postB2_FFT log=1
                                        TextBox/W=postB2_FFT/C/N=text0/F=0/A=RB "postB2_FFT"
                                elseif (a==1)
                                        appendtoGraph/W=postB2_FFT artRemovalWave_postB2_FFT vs
root:'frequency vector':f_postBlue
                                        modifygraph/W=postB2_FFT rgb(artRemovalWave_postB2_FFT)=(1,4,52428)
                                else
                                endif


                        endfor


                appendlayoutobject/F=0/R=(0, 60, 400, 310) graph postR1_FFT
                appendlayoutobject/F=0/R=(385, 60, 785, 310) graph postB1_FFT
                appendlayoutobject/F=0/R=(0, 320, 400, 570) graph postR2_FFT
                appendlayoutobject/F=0/R=(385, 320, 785, 570) graph postB2_FFT


                SavePICT/EF=1/P=home/E=-8/WIN=layout0 as folderName+"_trial"+num2str(trialNumber)+".pdf"
```

```
            killwaves testWave_eye

            endfor

            setDataFolder root:BOSS3_450sub:
            DFREF dfr = GetDataFolderDFR()


        endfor
```

End