How to export C-POD data into MS Access then plot charts for Diel (24hr average), daily, weekly and monthly activity

If you don't have Microsoft Access or Excel you can download OpenOffice which is free and very similar: http://www.openoffice.org/download/

1. Export from cpod.exe

a. Hourly DPM totals
   i. Open a cp1 and cp3 file pair
      Files > Open a file set > select either CP1 or a CP3 (it will open both which ever you choose)
   ii. Apply some train filters e.g. Hi and Mod quality, NBHF
   iii. Go to Export tab
      Under Data select "DPM"
      Under Period select "hours"
      Under To select "Text file"
      Tick "omit headers"
      Click "Export from batch of files"
      Select the .cp3 files you want to export with the above filters applied
      There will now be a .txt file in the same directory as the .cp3 files
      Rename your text file to something meaningful like "NBHFDPMPerHour.txt"

b. Daily DPM totals
   i. Open a cp1 and cp3 file pair
      Files > Open a file set > select either CP1 or a CP3 (it will open both which ever you choose)
   ii. Apply some train filters e.g. Hi and Mod quality, NBHF
   iii. Go to Export tab
      Under Data select "DPM"
      Under Period select "days"
      Under To select "Text file"
      Tick "omit headers"
      Click "Export from batch of files"
      Select the .cp3 files you want to export with the above filters applied
      There will now be a .txt file in the same directory as the .cp3 files
      Rename your text file to something meaningful like "NBHFDPMPerDay.txt"

2. Import into Microsoft Access

a. Hourly DPM totals table
   i. Go to External Data menu > Text file
   ii. Browse to one of the text file exports above
   iii. Select "Import the source into a new table in the current database."
   iv. Click OK
   v. Check that Delimited is selected, click Next
   vi. Check that Tab is selected
   vii. Tick "First row contains field names", click Next
   viii. Click Next on the next screen
   ix. Click Next again on the next screen

x. Leave Import to table as "NBHFDPMPerHour". Click Finish
xi. Click Close on last dialogue, you should now see your new table in the left pane under Tables. You can delete the one that says Table1.

b. Daily DPM totals table
   i. Repeat same steps above for "NBHFDPMPerDay" text file.

3. Create queries in MS Access

a. Diel NBHF DPM query
   i. Go to Create menu
   ii. Click Query Design
   iii. Close the Show Table dialog box
   iv. Right click on the Query1 name and select SQL View
   v. Delete text that's already there (probably says SELECT;)
   vi. Paste in the following into the Query1 window:

```
SELECT Hour([ChunkEnd]) AS [HourOf Day], Sum(NBHFDPMPerHour.DPM) AS TotalDPM
FROM NBHFDPMPerHour
WHERE File= "my_file_name.CP3"
GROUP BY Hour([ChunkEnd]);
```

   vii. Replace my_file_name.CP3 with a CP3 file name you've exported, you'll see these in the data table if you double click on the table, or just copy from Windows Explorer where you've got your files listed.
   viii. Press ctrl+s to save the query, name it something like diel_my_file_name

b. Daily NBHF DPM query
   i. Go to Create menu
   ii. Click Query Design
   iii. Close the Show Table dialog box
   iv. Right click on the Query1 name and select SQL View
   v. Delete text that's already there (probably says SELECT;)
   vi. Paste in the following into the Query1 window:

```
SELECT perday.Date, perday.DPM
FROM (SELECT FORMAT(ChunkEnd, "yyyy") AS [year], FORMAT(ChunkEnd, "mmm") AS [month],
FORMAT(ChunkEnd, "dd") AS [day], FORMAT(ChunkEnd, "dd/mm/yyyy") AS [date],
FORMAT(ChunkEnd, "yyyy/mm/dd") AS rev_date, * FROM NBHFDPMPerDay)  AS perday
WHERE ((perday.[File])= "my_file_name.CP3")
GROUP BY perday.Date, perday.DPM, perday.rev_date;
```

   vii. Replace my_file_name.CP3 with a CP3 file name you've exported, you'll see these in the data table if you double click on the table, or just copy from Windows Explorer where you've got your files listed.
   viii. Press ctrl+s to save the query, name it something like daily_my_file_name

c. Weekly NBHF DPM query
   i. Go to Create menu
   ii. Click Query Design
   iii. Close the Show Table dialog box
   iv. Right click on the Query1 name and select SQL View
   v. Delete text that's already there (probably says SELECT;)
   vi. Paste in the following into the Query1 window:

```
SELECT perday.Year, perday.Week, (perday.Year & " week " & perday.Week) AS Period,
Sum(perday.DPM) AS Total_DPM
```

```
FROM (SELECT FORMAT(ChunkEnd, "yyyy") AS [year], FORMAT(ChunkEnd, "ww") AS week, *
FROM NBHFDPMPerDay)  AS perday
WHERE perday.File = “my_file_name.CP3”
GROUP BY perday.Year, perday.Week
```

vii. Replace my_file_name.CP3 with a CP3 file name you've exported, you'll see these in the data table if you double click on the table, or just copy from Windows Explorer where you've got your files listed.

viii. Press ctrl+s to save the query, name it something like weekly_my_file_name

d. Monthly NBHF DPM query
   i. Go to Create menu
   ii. Click Query Design
   iii. Close the Show Table dialog box
   iv. Right click on the Query1 name and select SQL View
   v. Delete text that's already there (probably says SELECT;)
   vi. Paste in the following into the Query1 window:

```
SELECT perday.year, perday.month, (perday.year & "-" & perday.month) AS Period,
Sum(perday.DPM) AS Total_DPM, perday.MM
FROM (SELECT FORMAT(ChunkEnd, "yyyy") AS [year], FORMAT(ChunkEnd, "mmm") AS [month],
FORMAT(ChunkEnd, "mm") AS MM, * FROM NBHFDPMPerDay)  AS perday
WHERE File = “my_file_name.CP3”
GROUP BY perday.year, perday.MM, perday.month;
```

   viii. Replace my_file_name.CP3 with a CP3 file name you've exported, you'll see these in the data table if you double click on the table, or just copy from Windows Explorer where you've got your files listed.
   ix. Press ctrl+s to save the query, name it something like monthly_my_file_name

4. Plot data in MS Excel

a. Open MS Excel
b. Go to your new MS Access database
c. Under Queries double click a query e.g. diel_my_file_name
d. Select all the results by clicking the top left corner symbol (just the left of the Date column heading)
e. Now right click in the same place and select copy
f. Go to a new sheet in Excel and paste in the data
g. Select all your data and go to Insert > Chart, I usually select a basic line chart.
   Repeat for other queries

Remember when repeating all the above steps for dolphin data change the queries to look at DolphinDPMPerHour and DolphinDPMPerDay if that's what you named the txt files from steps 1 a iii and 1 b iii.