PHOTOSHOP TUTORIAL 16B **(Revised Version)**
Merge to 32 bit HDR Pro in Photoshop 2023

Complete the Toning MANUALLY in Adobe Camera Raw (ACR) and output to Photoshop as 16 bit

1. IMPORTANT When using Photoshop Merge to HDR Pro the resulting image will be created in your selected **Working Color Space**, so it pays to check that you have the correct **working color Space** in place.
   To do this, open Photoshop and select Edit/Color Settings.

In the creation of my HDR images I wish to retain as much information in the image as possible, therefore as my Working Color Space, I choose to use ProPhoto RGB.
Please note: Adobe RGB 1998 Colour space is also fine to use.
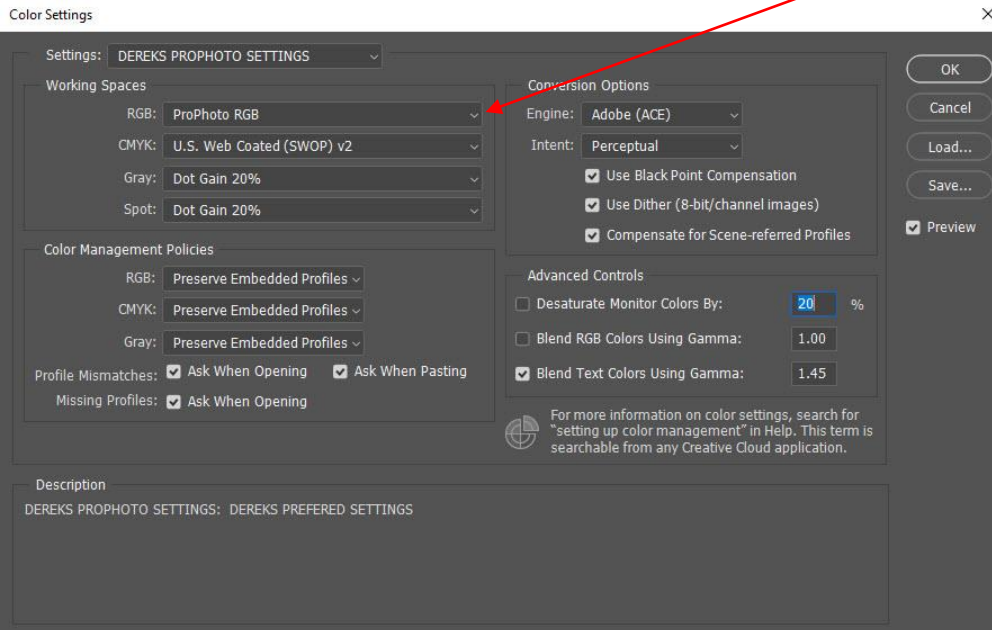
2. (When saving sets of images for converting to HDR, I find it best to put each set in its own folder to avoid selecting images from different sets).
Using Adobe Bridge, select your set of bracketed images for merging to HDR.
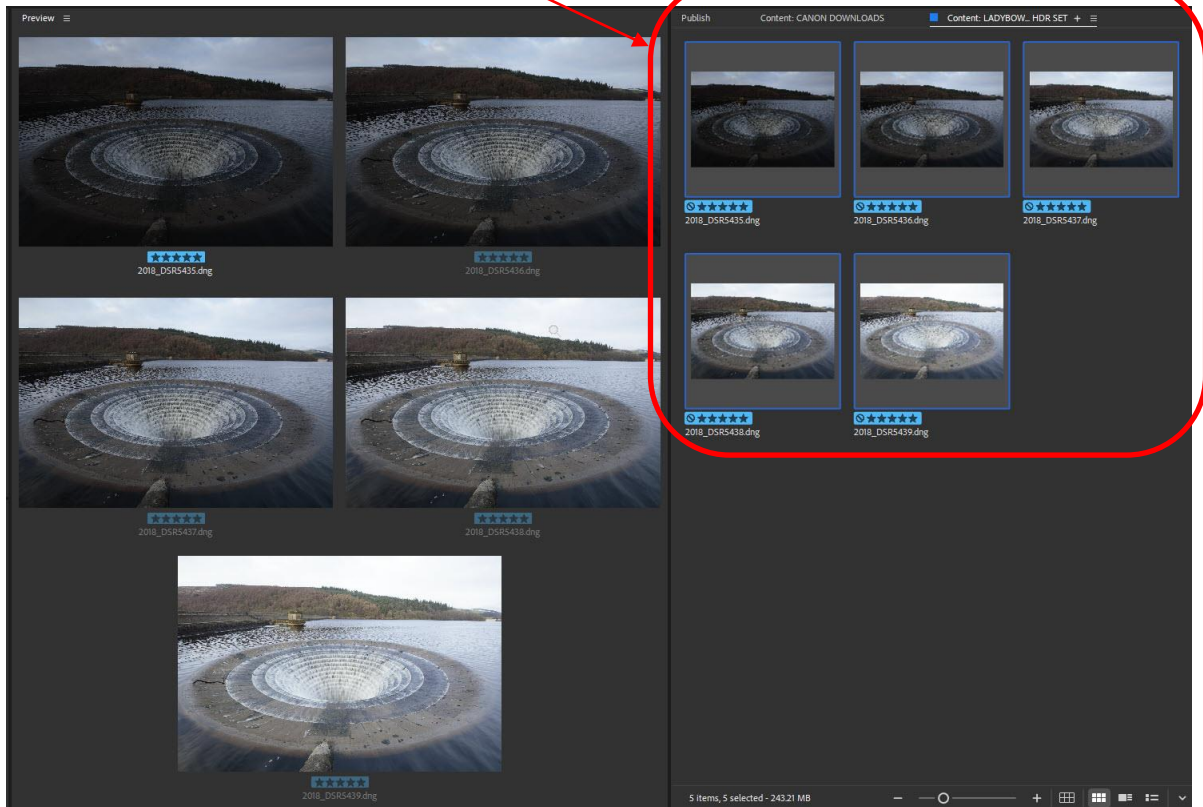
3. Before merging the raw files to HDR I find that it is best to apply Lens Profile and remove Chromatic Aberration in each raw file using Adobe Camera Raw, before merging to HDR. To do this select all the set of raw files as in step 1, then double left click on the thumbnail set and they will all open in Adobe Camera Raw with only the top thumbnail Selected.
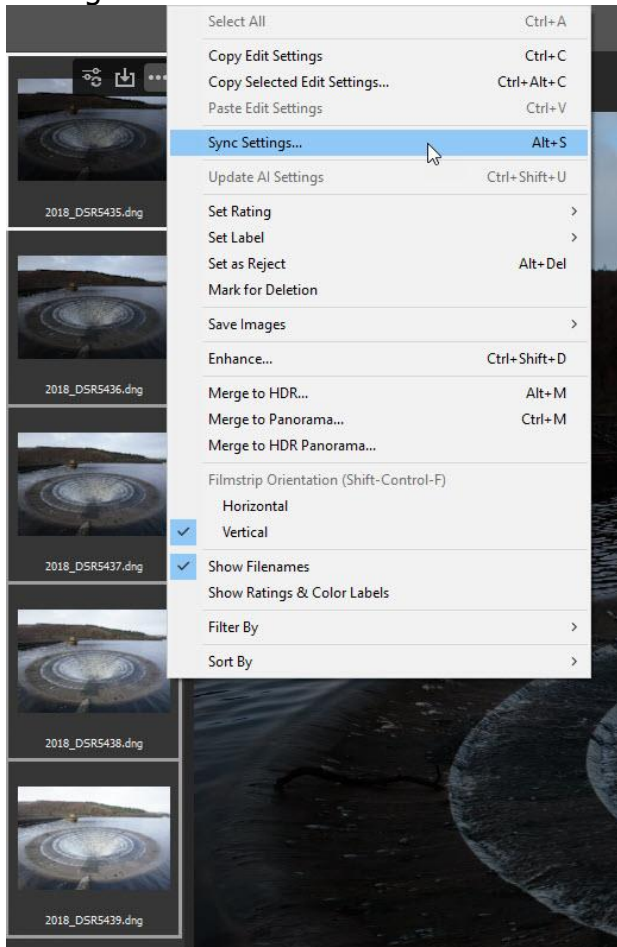
Click on the Optics down arrow.
Tick the Remove Chromatic Aberration box and tick the Use Profile Corrections box.
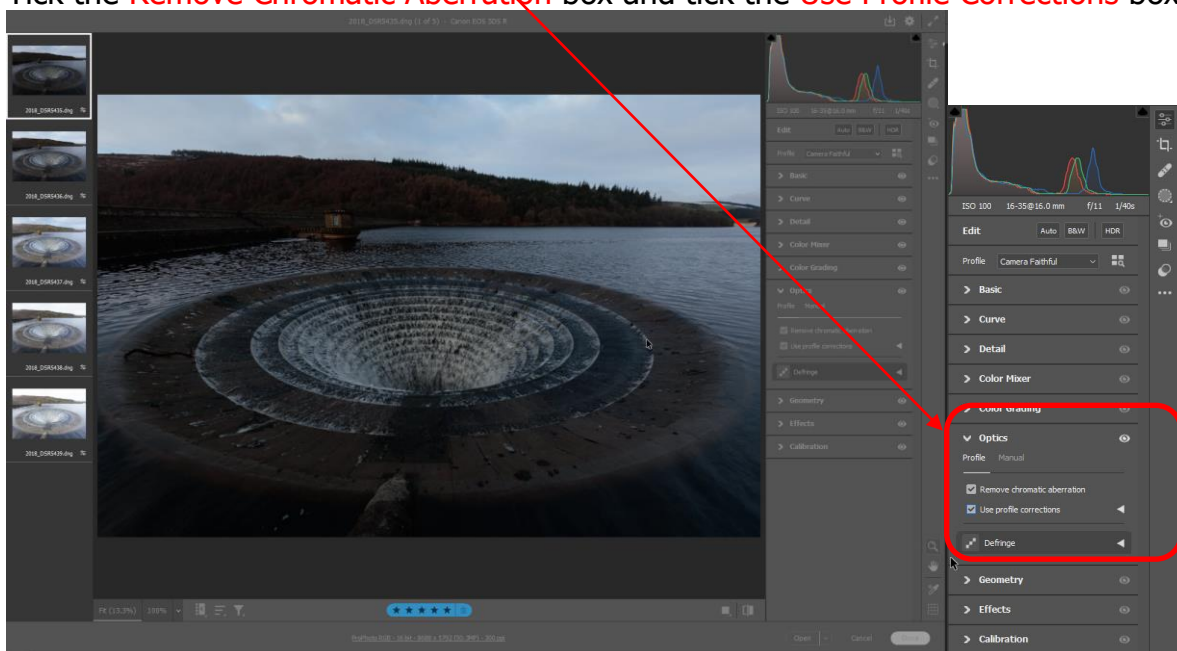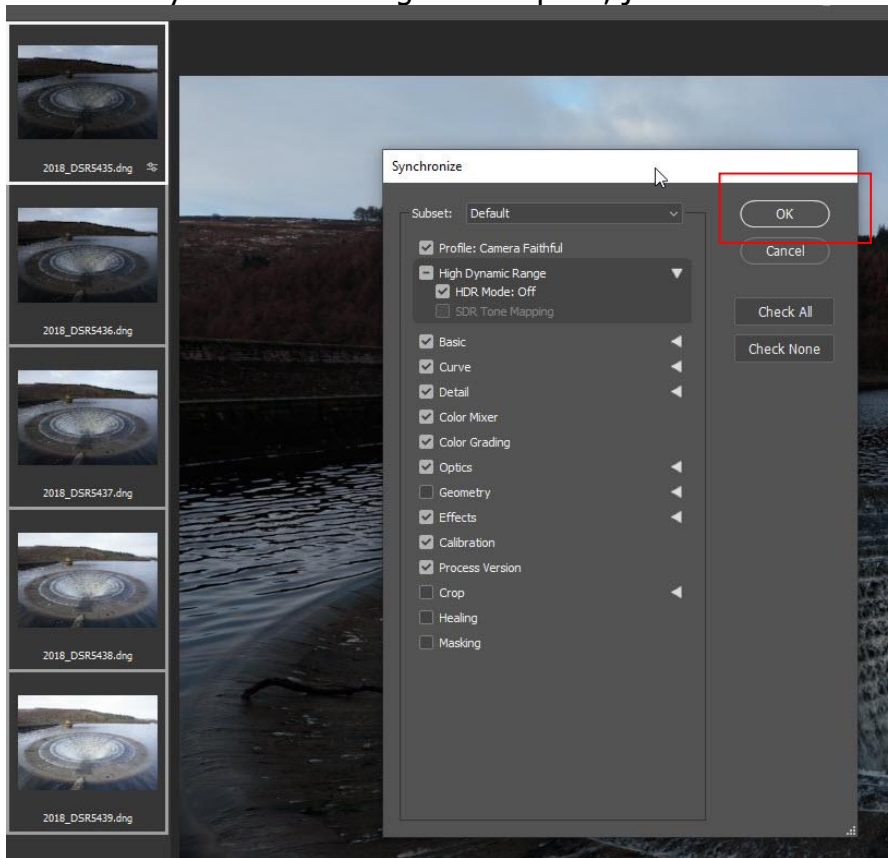
4. Click on the Select all button above the thumbnail set.
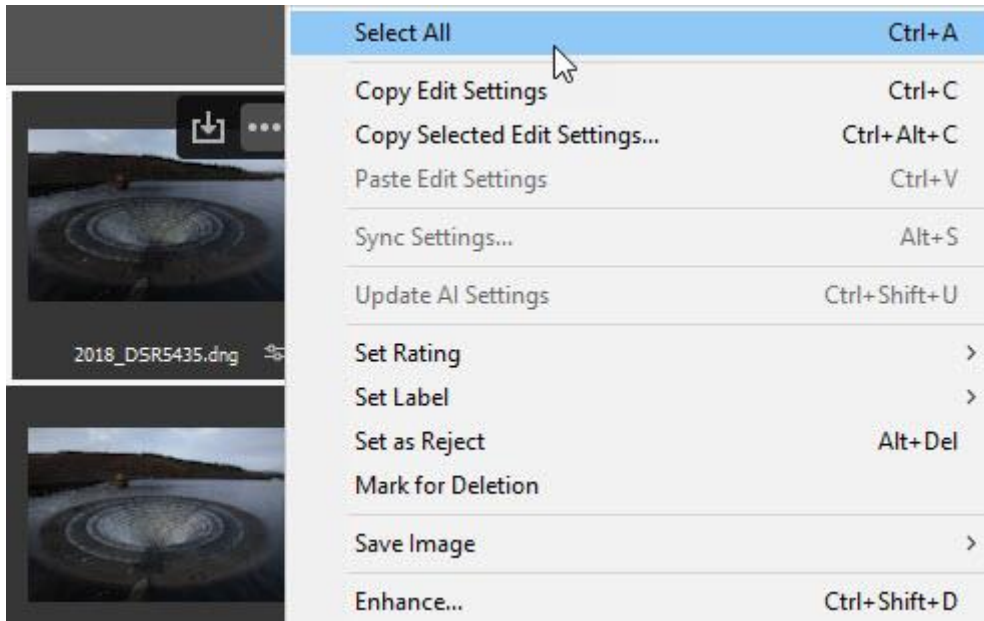
5. You will now see that all of the thumbnails are highlighted, so now click on Sync settings

6. When the synchronize dialogue box opens, just click **OK**

7. You should now see that all the thumbnails have this symbol that indicates camera raw adjustments have been applied. (In this case Remove Chromatic Aberration and Use Profile Corrections)
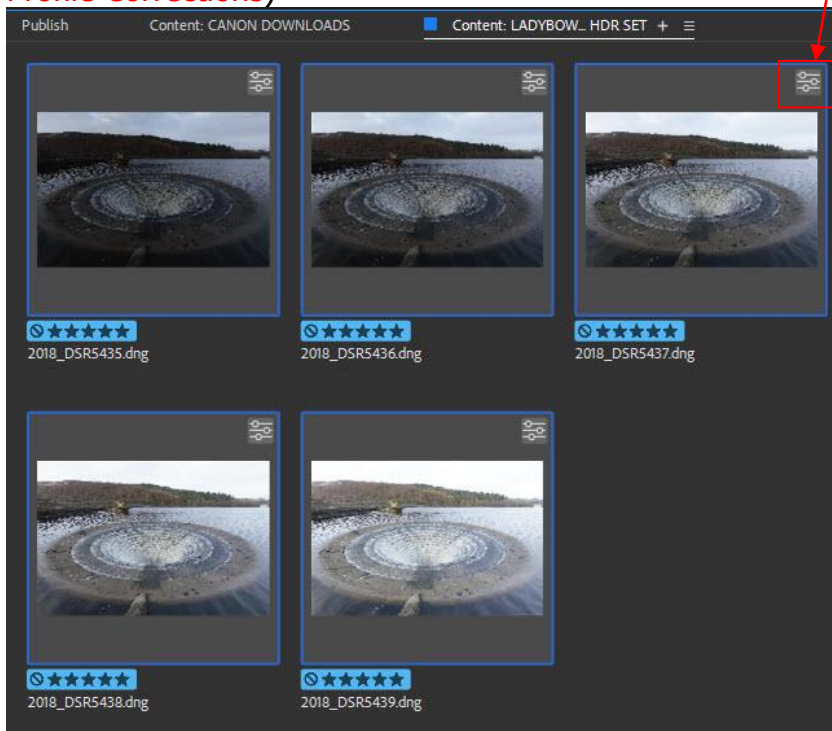
8. At this point it is best to make sure that the Adobe Camera Raw output Color Space matches your Photoshop preferred Color Space. Now click the **Done** button
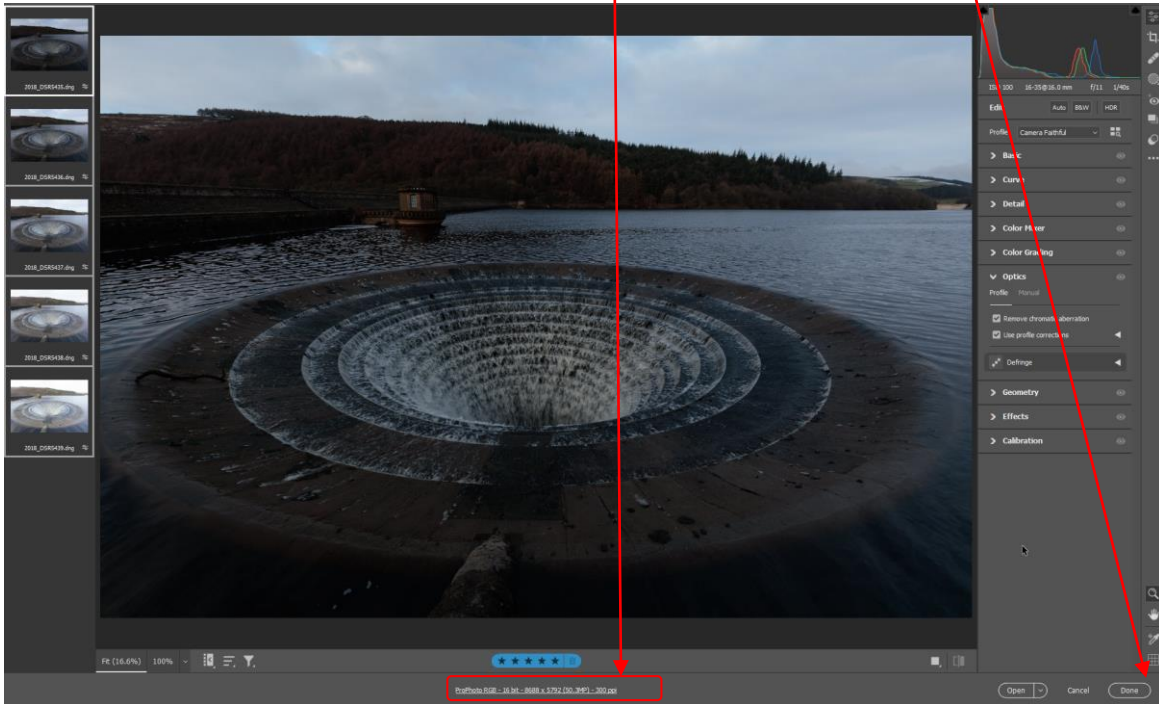
9. We now are back to Adobe Bridge and our selected raw files should now (where possible) have a lens profile applied and have been corrected for Chromatic Aberration.
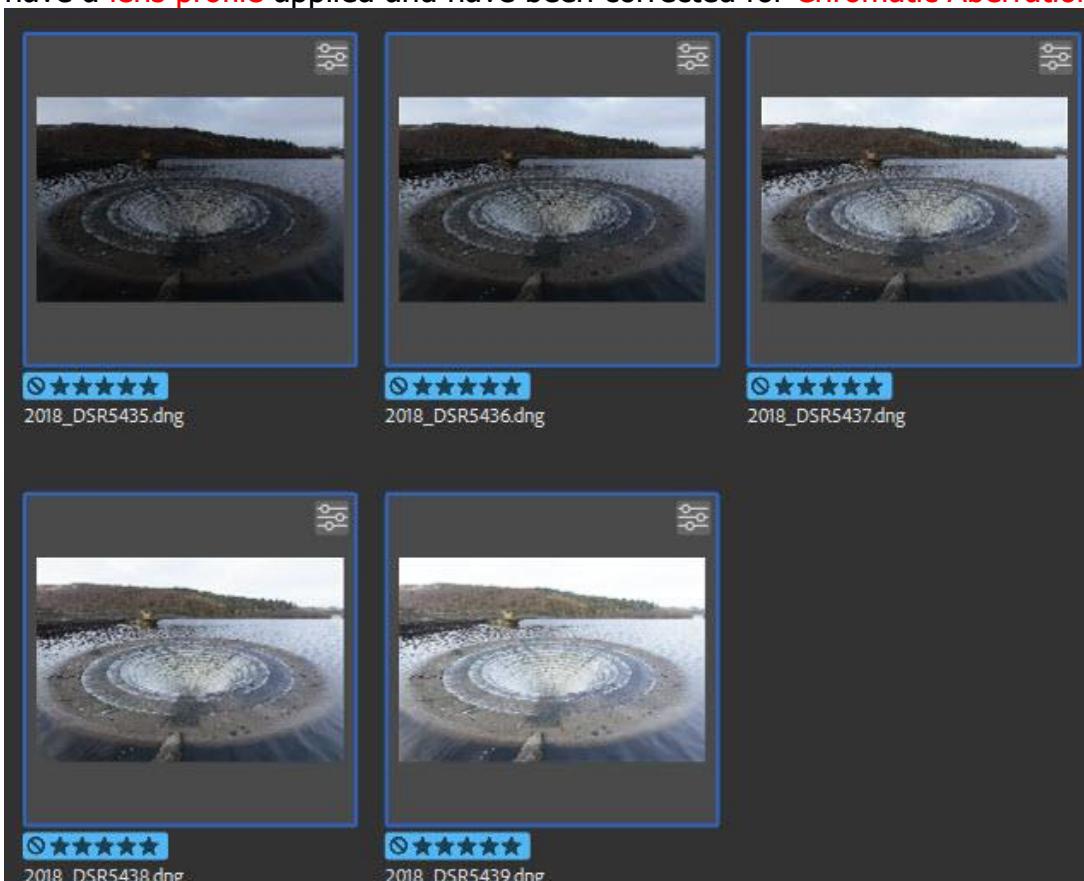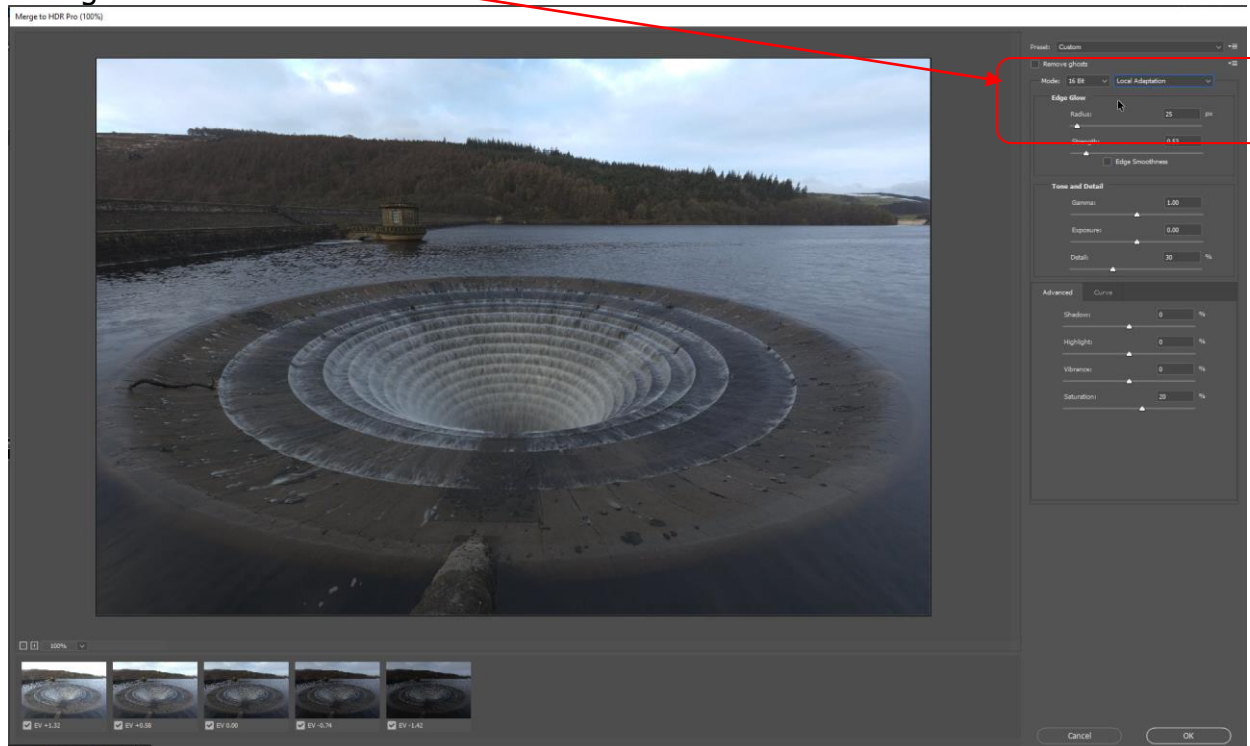
10. With the set of raw files selected, Select **Tools/Photoshop/Merge to HDR Pro...**
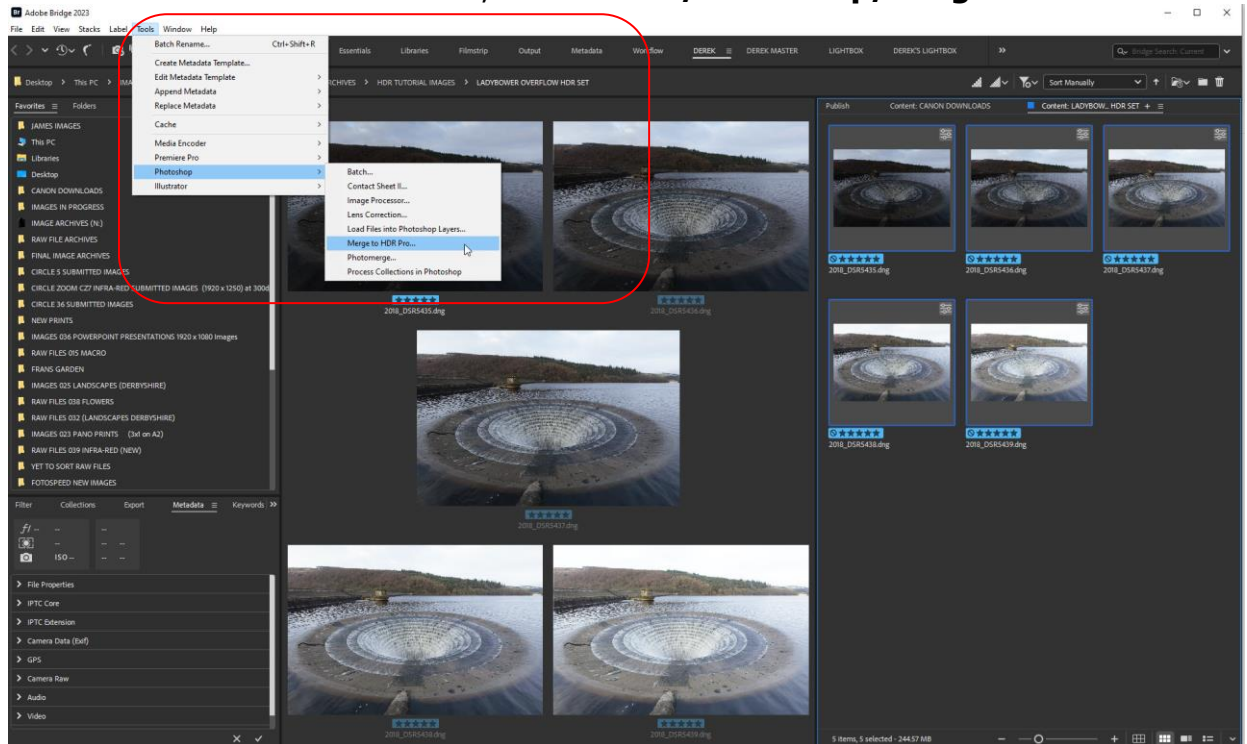
11. Photoshop will now load each image as a new layer and the present you with this new dialogue screen.
Change the mode to **32 bit**

12.

Having changed the mode to **32 bit** you will see this new dialogue screen
Select **Complete Toning in Adobe Camera Raw**
Now click **Remove ghosts**.
Notice that Photoshop has chosen to use the image in green to use as a default to remove ghosts to, but I want ghosting removal to take place on the centre image because I like the water flow effect better. So, select the centre image by clicking on it.
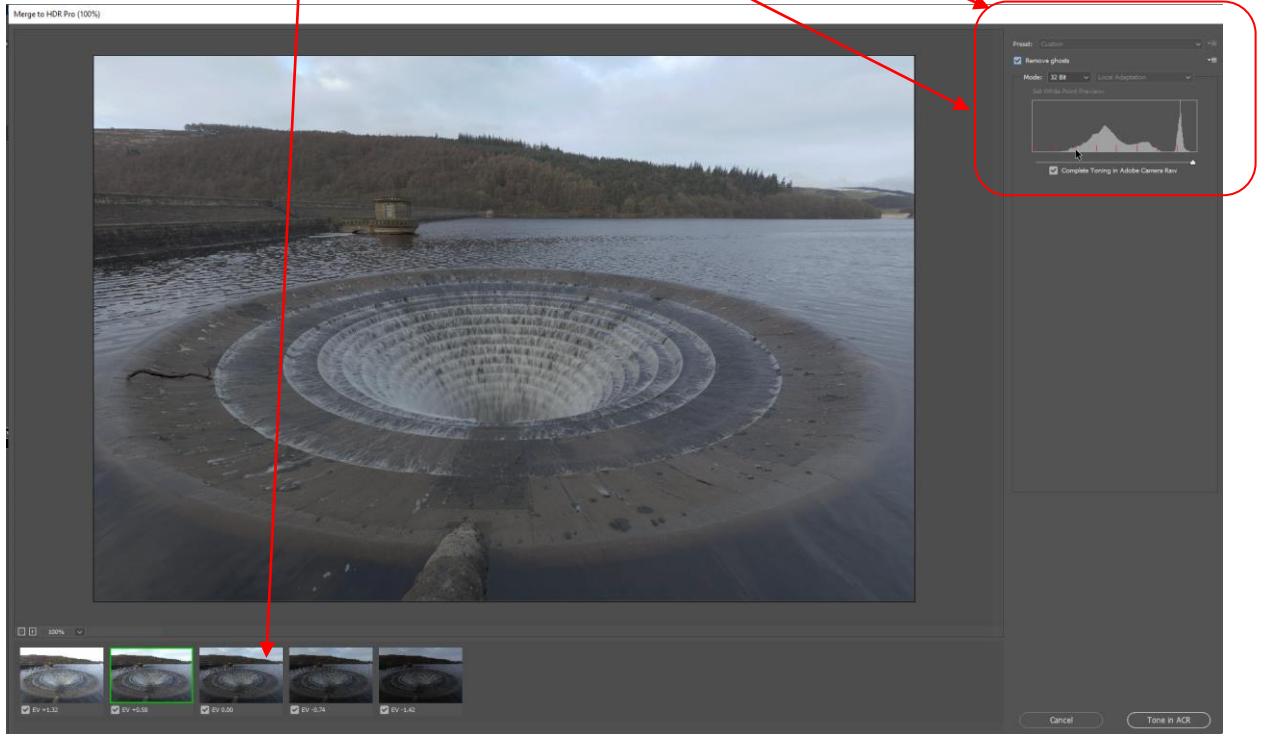
13. Note: If there is excessive movement between frames, such as cloud or water movement, you could manually select each thumbnail in turn (by clicking on it) to see which gives the best ghosts removal. You may see that a particular image in the set, displays coloured areas where the ghosts cannot be rectified effectively, avoid selecting this thumbnail if possible. Also note: selecting a darker thumbnail may increase noise
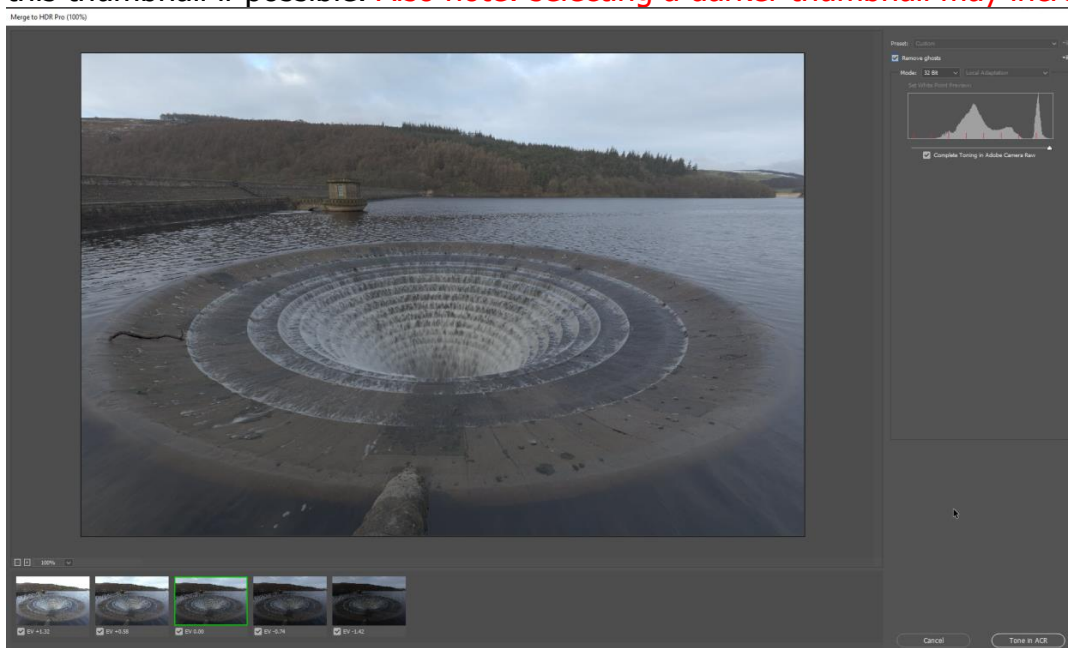
14. Once you have selected the frame that gives you the best ghost removal and at the water movement effect that you like, tick the Tone in ACR
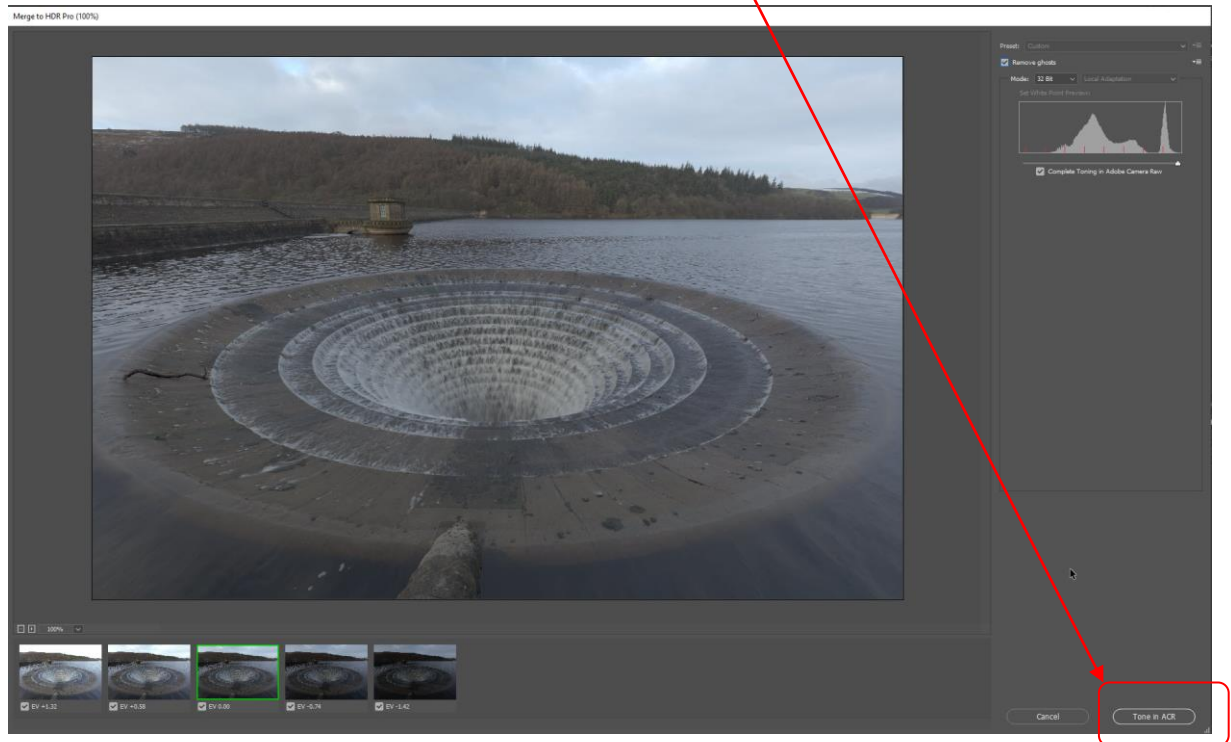

15. The merged 32 bit HDR image has now been opened in Adobe Camera Raw so you can process it. (This is what is referred to as Tone in ACR).

16. Make your preferred image adjustments, including Lens Correction, Sharpening, Noise Reduction, Tone Curve or any adjustments you would normally do in Adobe Camera Raw
(If I need to adjust the sky, this is where I do it)
(The green mask showing where the sky mask is to be added)
With your adjustments done, Click Ok.
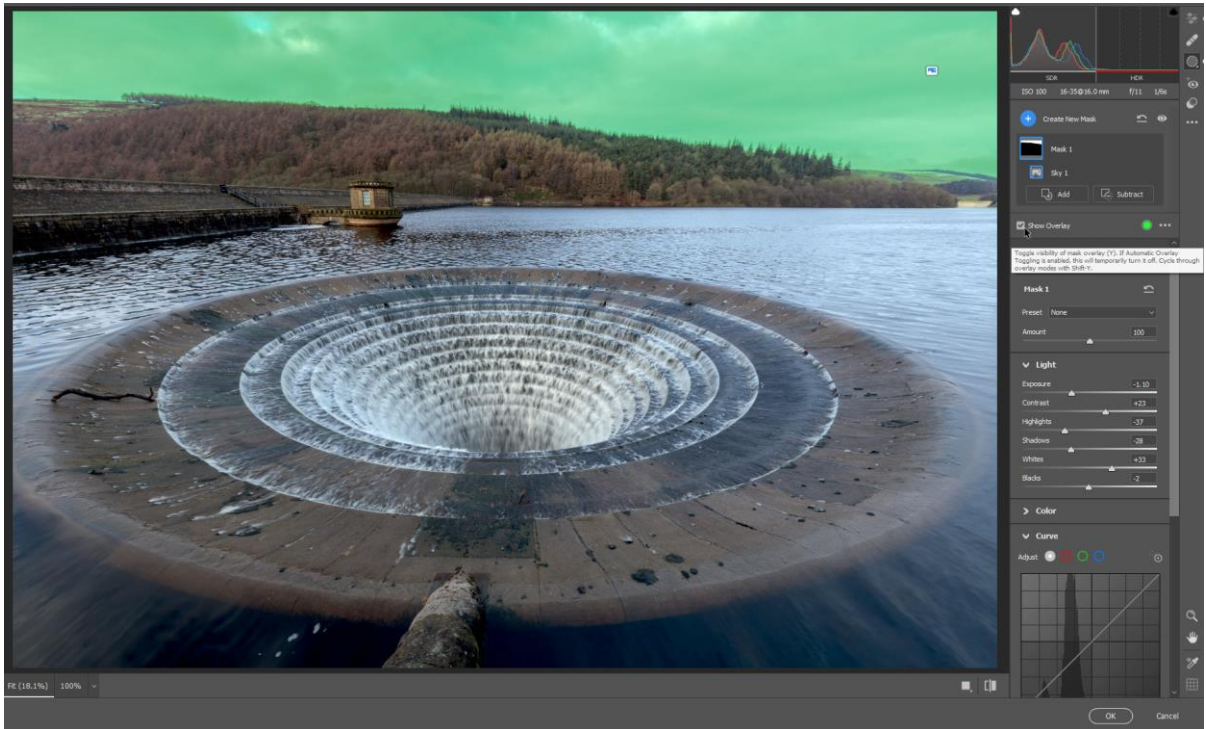
17. With the adjustments in Adobe Camera Raw done the image has now opened in Photoshop as a 16 bit file
(I set my output from Adobe Camera raw to give a 16bit file in Prophoto Colorspace)

18. Image now opened as a single layer in Photoshop
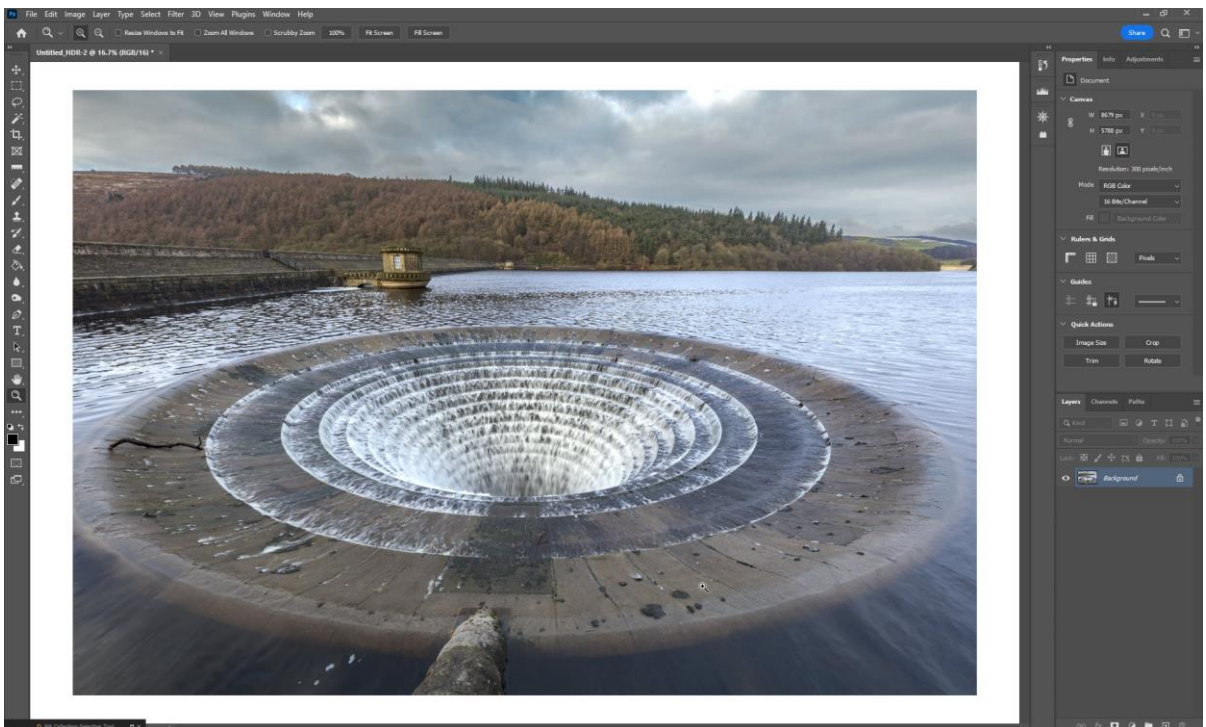
20. IMPORTANT NOTE:
(With Photoshop open, select **Edit/Preferences/File Handling**)
 Tick **Use Adobe Camera Raw to convert Documents from 32 bit to 16/8bit**
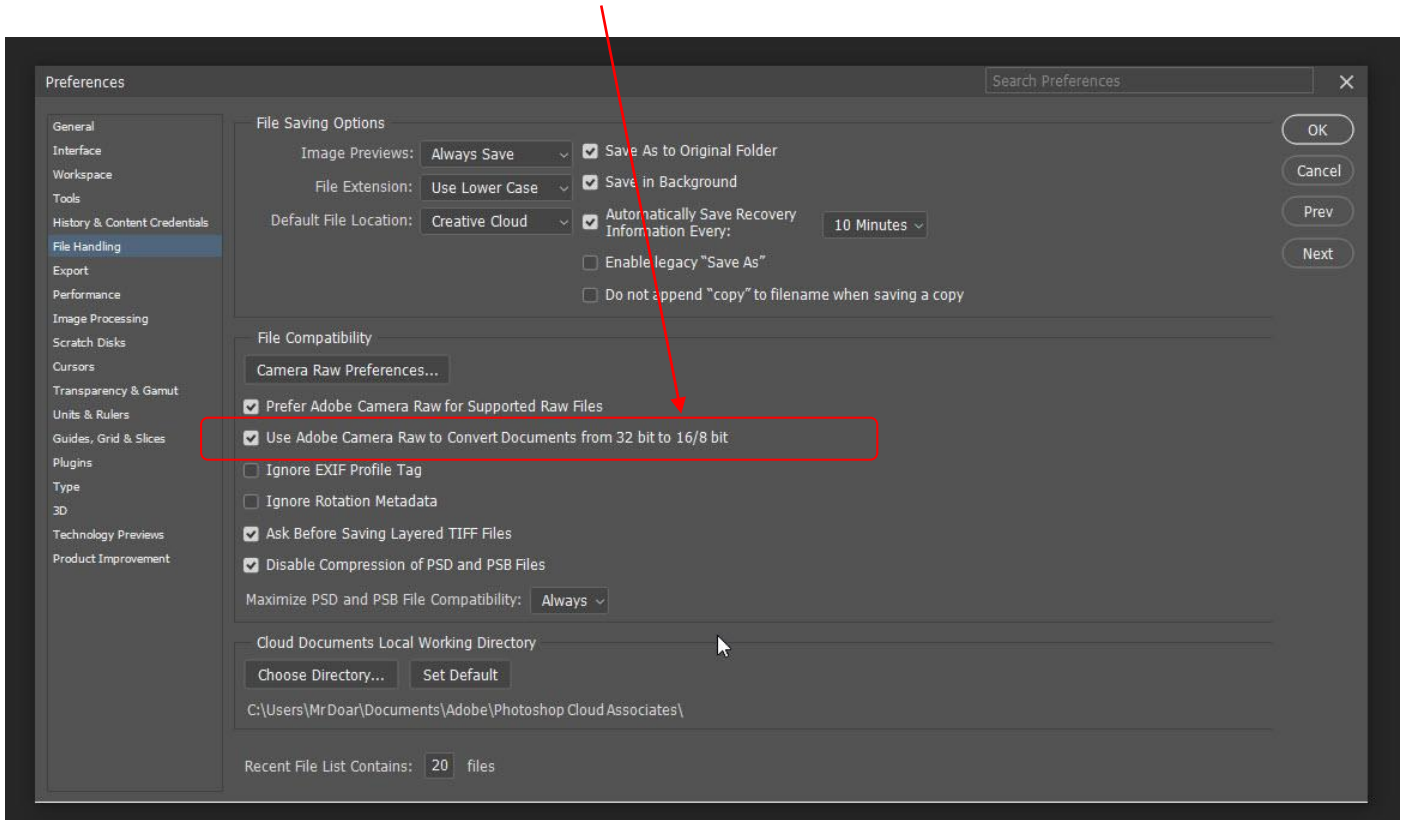
I do hope that you found this tutorial useful.

Derek Doar
www.ddimages.co.uk