How to merge a RGB image with a L2 product in BEAM

Task: We want to merge a level 1 RGB image of MERIS with a level 2 water product, i.e. chlorophyll concentration, so that all non water surfaces are visible as the RGB image and all water pixels are visible as the chlorophyll concentration product.

First we produce a chlorophyll map from level 1 data by using the C2R processor, which is available in Beam under the menu TOOLS.

After running the processor, which may take a few minutes, you can open the result, which is a level 2 product.

Here we open the product band chl_conc. All parts of the scene, which are not water, are marked as no_data. You can highlight the no data pixels by activate under VIEW the Show No-Data Overlay entry. These pixels will be later replaced or overlayed by the RGB image.
We can now apply a colour scale to get the chlorophyll concentration colour coded.

The colour coded chlorophyll concentration product. All black areas in the scene are no data pixels.

The next step is to produce the RGB image from the level 1 data.

We open a band of the level 1 product and then open the RGB selection window under VIEW. Click Open RGB Image View and click ok, without altering the band selection.

Open the RGB image and select the layer manager.
Now add the chlorophyll layer of the RGB image by clicking on the + symbol in the layer manager.

A window opens, here select image of band and then select the chlor_conc band.

Finally the Layer manager should look like the next figure.
Finally the image should look like:

This image can now we saved with a right mouse click and selection of Export View of Image.

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