What causes OTB pansharpening ERROR Inputs do not occupy the same physical space?

When I try to use the OTB pansharpening tool an error comes up and I don not really know what the problem is.

I have a RGB and a Band8 map (both from Landsat8) which I want to use for the tool. All the maps have the same projection.

> 2014 Dec 12 12:52:06 : Application.logger (FATAL) The following error occurred during application execution : c:\users\jmalik\dashboard \src\itkv4\modules\core\common\include\itkImageToImageFilter.hxx:248: itk::ERROR: BayesianFusionFilter(0000000001026680): Inputs do not occupy the same physical space! InputImage Origin: [5.1780000e+005, 6.1611000e+006], InputImage_2 Origin: [5.1780000e+005, 6.1611000e+006] Tolerance: 3.0000000e-005 InputImage Spacing: [3.0000000e+001, -3.0000000e+001], InputImage_2 Spacing: [1.5000000e+001, -1.5000000e+001] Tolerance: 3.0000000e-005

qgis orfeo-toolbox pansharpening

edited Dec 13 '14 at 13:54
underdark ♦
50.1k 9 113 221

asked Dec 12 '14 at 11:59
Pimpel
693 5 18

Update: After resampling with the extent of the band8 Landsat map It workt. But only with 2.6.0. With version 2.6.1 it doesn't work. Could anybody test it? If that is an issue we should open a ticket. I did the following steps: 1. downloading Landsat8 scene; 2. resampling red, green and blue maps (extent from band8); 3. composite RGB with the resampled maps (reclass 0-255); 4. using otb-pansharpening tool – Pimpel Dec 16 '14 at 8:39

how did you resample your rasters? I have the same issue. – SS_Rebelious Jan 29 '15 at 19:57

1 Answer

This issue is caused by the workflow intended by OTB developers. Pan-sharpening in OTB is meant to be performed using console command *BundleToPerfectSensor*:

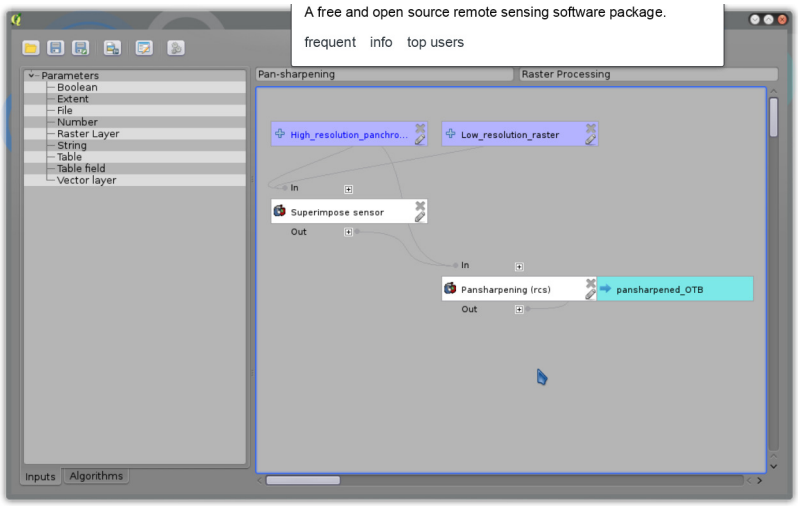
```
otbcli_BundleToPerfectSensor -inp pan_image -inxs xs_image -out output_image .
```

As described corresponding section of the manual - if one wants to perform pansharpening using GUI (Monteverdi), one have to do it in two steps:

1. Use *Superimpose* module to make multi-spectral imagery to have the same extent and resolution as the panchormatic one.
2. Use Simple RCS Pansharpening module on panchromatic and resampled multi-spectral imagery.

In QGIS in *Processing* available these Monteverdi-GUI modules, not the console commands. So you have to perform both of the steps described above.

In order to make pansharpening in QGIS using OTB more convenient you should create a model with the initial rasters as input and process multispectral one with *Superimpose* module and then use the output for pansharpening module. Here you are the screenshot with such model I made for myself:



edited Feb 2 '15 at 9:24

answered Jan 31 '15 at 11:31

SS_Rebelious

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