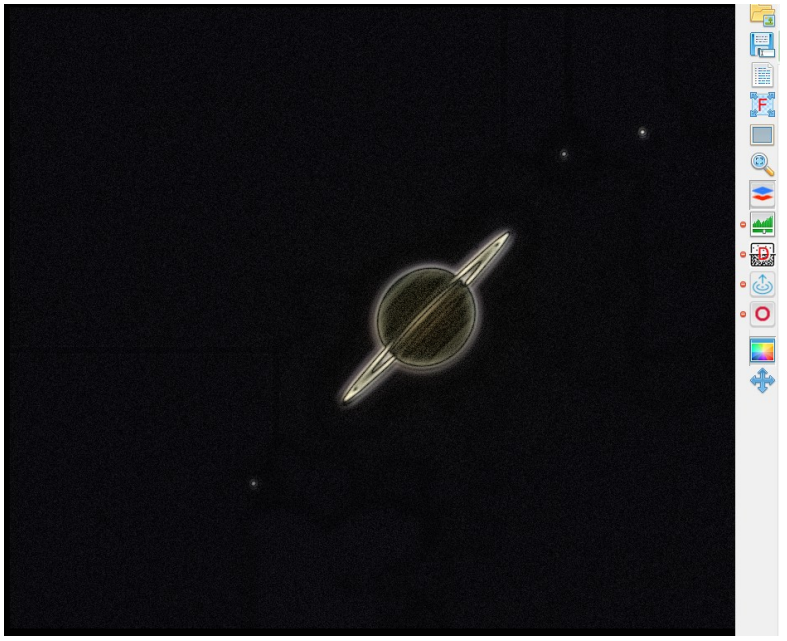
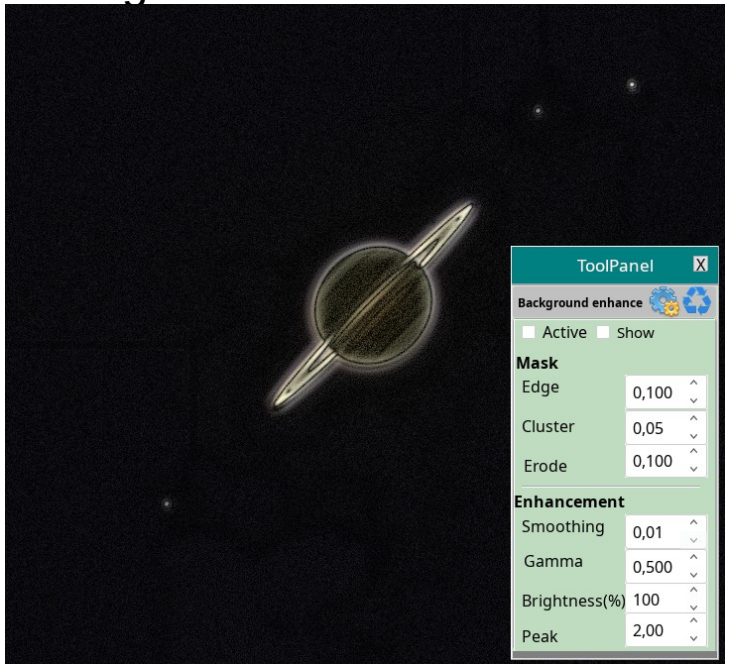
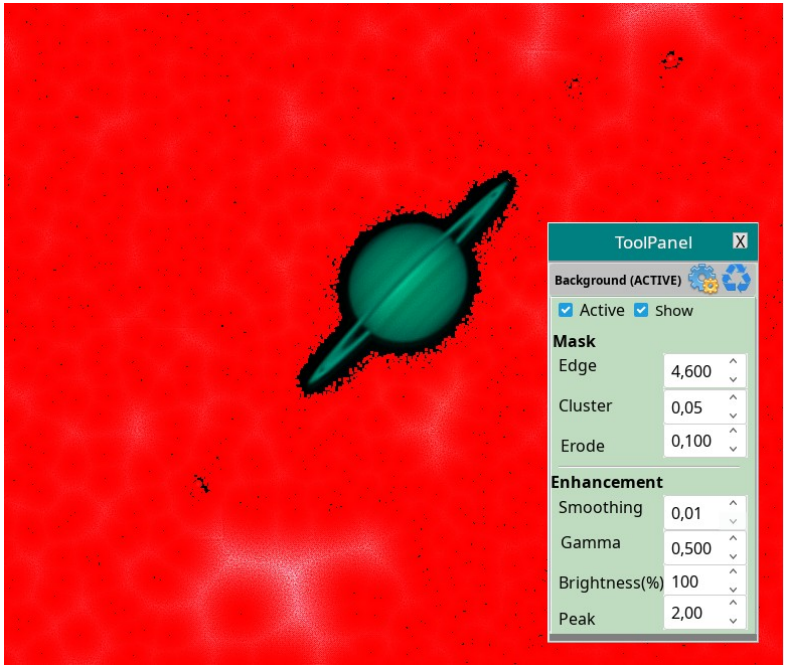
Background enhancement 1



Background enhancement is mainly used to show dimmer moons around planets. The image on the left shows the sharpened view. On the right we see the “disable background” view of the same image. This “view” shows all data in an image that will be sharpened, its very sensitive to changes in image intensity and thus can be used to check if/where the moons are.

Background enhancement 2



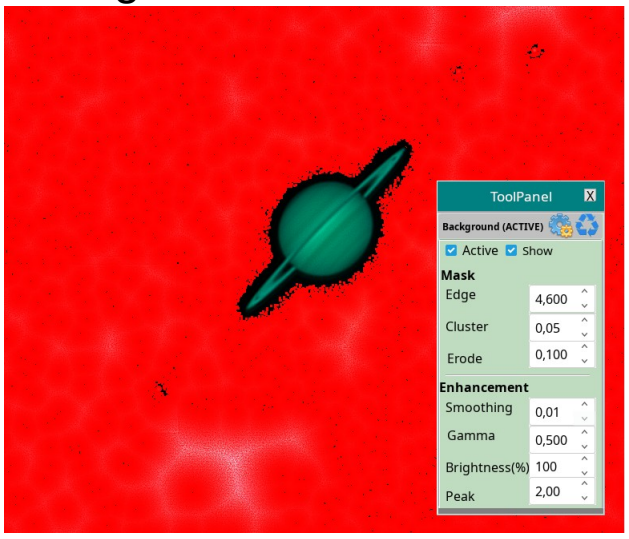


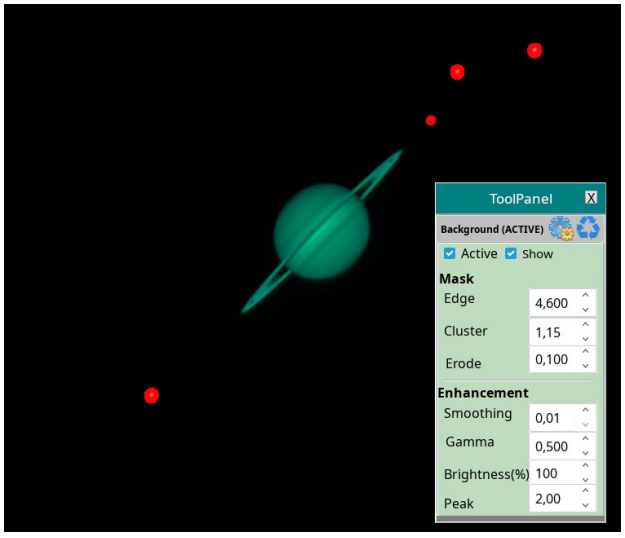
Using the background tool is a two-step process. We first create a mask that isolates the moons from the planet and after that enhance the moons.

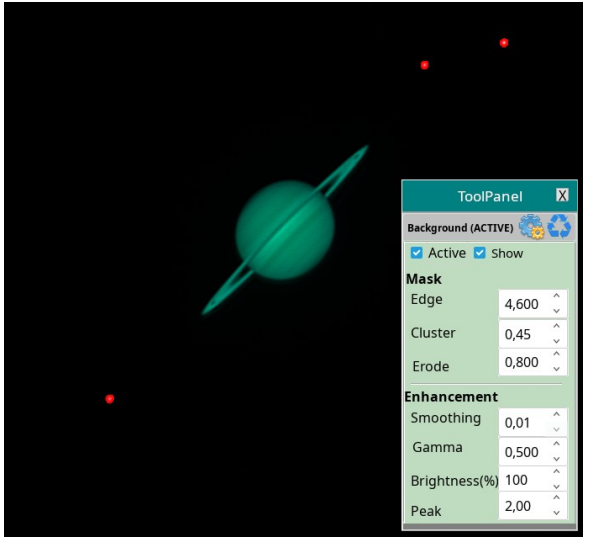
Creating a mask

To create a mask checkmark ACTIVE and SHOW and increase the EDGE value until it covers covers the moons but does NOT touch the planet or its rings. The SHOW function makes the mask visible as bright red-pixels.

Background enhancement 3

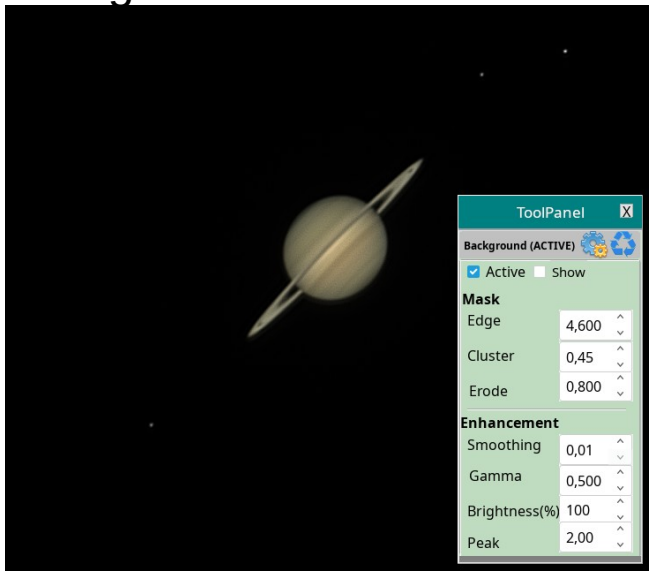


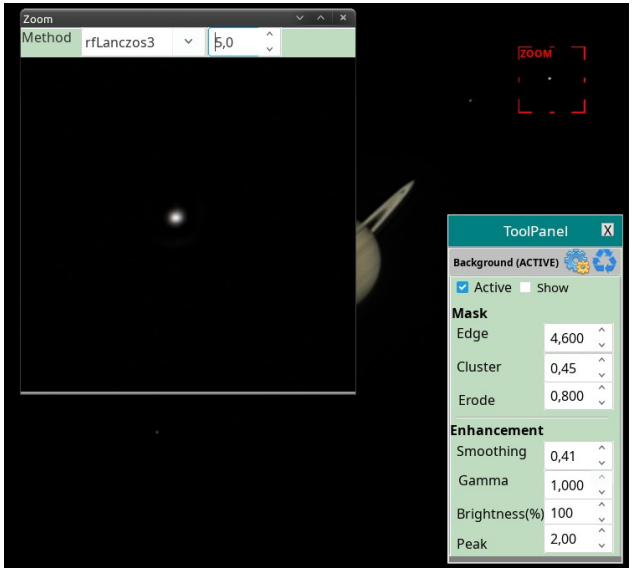


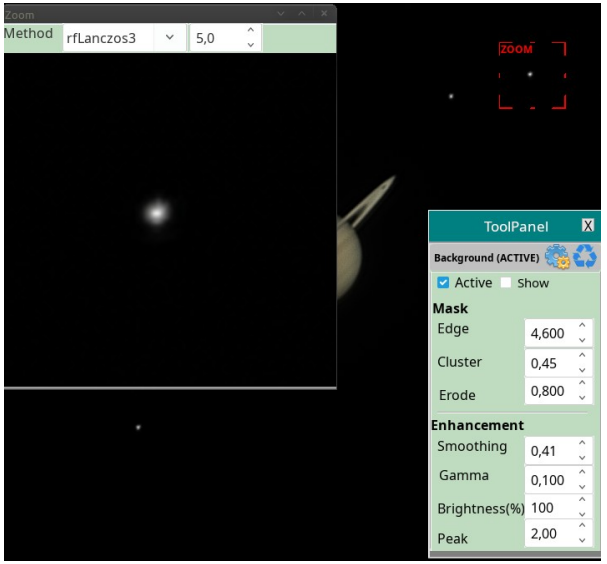


After creating the mask (left) we use **CLUSTER** to limit the mask to only cover the moons. You ne
to make sure that ONLY moons are left after this step. After this use **ERODE** to shrink the mask.
We now see 3 moons. Inside the mask we see bright white dots.

Background enhancement 4







Now we can further enhance the moons. Start by unchecking “SHOW” so the mask is not visible anymore. Its wise to use the ZOOM window to look at the enhancement in more detail

The controls of enhancement have the following functionality:

- Smoothing: creates a smoothened moon (often enlarges the moon slightly) (middle image)
- Gamma: Lowering the gamma creates less differences in intensity between the moons(see middle and right image).
- Brightness: overall maximum brightness of the moons vs the brightest pixel on the planet.
- Peak: When increased this function will make the moons look smaller