## M51, The Whirlpool Galaxy

**The Whirlpool Galaxy** is actually two galaxies in the process of merging with each other and is easily observable in most amateur telescopes. NASA reports that it is about 31 million light years away from Earth and since we can see it face on, its spiral structure has been actively studied.

This image was captured on my remotely operated setup in Castilléjar, Spain.

 Exposure times:

 Red
 68 x 300 sec

 Green
 65 x 300 sec

 Blue
 70 x 300 sec

 Lum
 68 x 300 sec

 Ha
 104 x 300 sec

Total 31 hours 15 minutes

Link to my Astrobin page: https://astrob.in/b081tk/0/

**Processing Notes:** 

I shot a lot of Ha and wanted to merge it into the star forming nodes only, so I used Adam Block's Combining Ha by Continuum Subtraction. Star light in many galaxies often contains a full continuum of the visible spectrum, including Ha. If I added it in as shot, it would have turned the entire galaxy pink. Adam's method subtracts that continuum, so all you have left is Ha in the nebular nodes. It is an interesting process that requires watching his video to understand it but I recommend it. I also used color corrected HDRMT, which I recommend as well.

Tom Engwall

