

Sequencer with Live Stacking

SharpCap 4.0.7728, Win 10/64

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The Problem

For example, to observe the famous Tabby's Star and other variable stars with my ZWO ASI174MM camera, I tried to live stack a couple of images and save the stacks as fits files say every minute.

Liveaddition

This works with *Liveaddition* (Live Stack, Live Stacking). But each stack is saved in its own folder (with *Subfolder* On) – or all subsequent stacks are overwritten (*Subfolder* Off). Instead, the stacks should be saved in a single folder for further processing (with Tangra, for example).

Sequencer

The sequencer does not help either, because after the first loop the reminder *Live Stacking Paused. Press the 'Resume' button to continue.* appears. But there is no such command in the *Sequencer*.

Thanks to a suggestion by Robin Glover, the problem can be fixed by a change in *Edit Filename Templates Manually!* – See <https://docs.sharpcap.co.uk/3.2/#Filename%20Templates>

Accordingly you have to move the {Time} tag from the folder name to the file name. And that actually works: **the stacks are now saved in a single folder** both with the *Sequencer* and with *Liveaddition* (tick *every n minutes*). I would never have found this solution myself.

Change in Section Filenames

File > SharpCap Settings > Filenames > set check mark at Create subfolder for each sequence > set check mark at Edit Filename Templates Manually > Live Stack:

Original: {Date:SZ}\{TargetName}\{Time:Z}\{AutoSave}\
 Stack_{BitDepth}bits_{StackedFrames}frames_{TotalExposure}
Change to: {Date:SZ}\{TargetName}\{AutoSave}\
 Stack_{BitDepth}bits_{StackedFrames}frames_{TotalExposure}_{Time:Z}

Then press *OK*. This saves the new setting until the next *OK*.

Saving the new setting: mark the changed line > Ctrl C > ... > Ctrl V

If necessary, play the line back later on and hit *OK*.

Restoring the original setting

As soon as the tick is removed from *Edit Filename Templates Manually*, the original setting is restored, but does not take effect until *OK* is pressed.

Live Stacking is slightly different between *Sequencer* and *Liveaddition*.

Sequencer with Liveaddition

The commands used here

Misc > Wait until <Delay> seconds
Processing > Live Stacking > ...

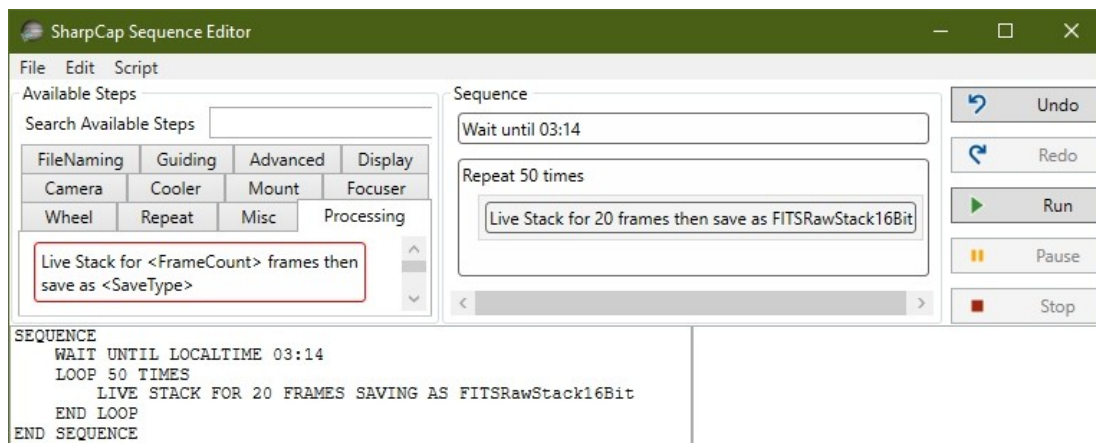
Results

- * All stacks are saved in a single folder. Nevertheless, *Liveaddition* immediately jumps to *Pause*, but without any effect. – Strange, but no problem.
- * Times and time formats
 - # Time in filename: Start time, example: 14_38_12Z
 - # Time in txt-file: End time / saving time T14:38:22.8236958Z
 - # Time in header: Start time T14:38:12.7842651,
 - # Effective expo time: 10 s dt = 10.0394307 s
 - # The first frame was 0,64 s after <WAIT UNTIL LOCALTIME>
 - ! The start time via <WAIT UNTIL LOCALTIME> is UTC + 2 (in my case), the file times are in UTC.
- * When restarting, the new files are attached to the same folder!

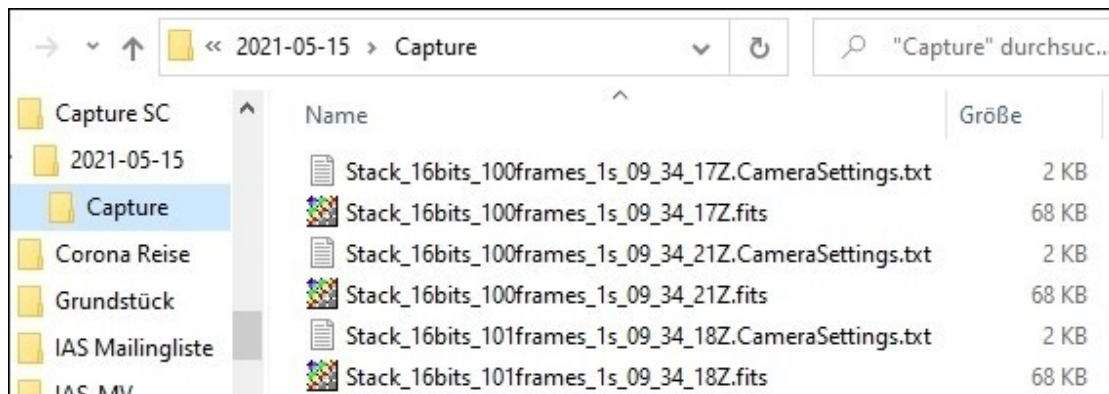
Sequencer with Live Stacking – a Working Example

```
SEQUENCE
  WAIT UNTIL LOCALTIME 03:14
  LOOP 50 TIMES
    LIVE STACK FOR 20 FRAMES SAVING AS FITSRawStack16Bit
  END LOOP
END SEQUENCE
```

Sequencer with Liveaddition



Results



Liveaddition / Live Stacking

- * Also in *Liveaddition*, all stacks are now saved in a single folder.
- * Each stack is saved as 16 bit and additionally as 32 bit version (2^{16} and 2^{32} with double file size), regardless of the settings.
- * With *<Save and Reset every n Minutes>* a new stack is started every n minutes.