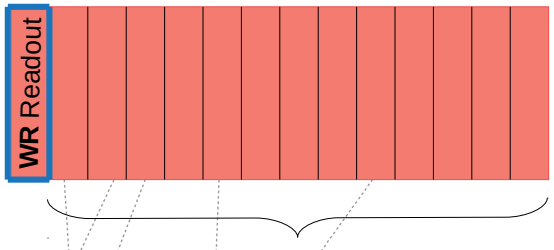
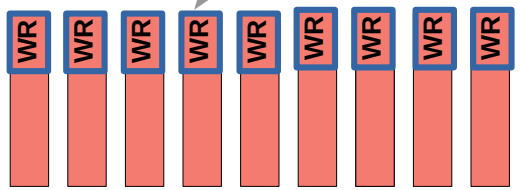
Data Acquisition/Event Building until 2020

CALIFA DAQ (Multi Event Readout)



Hit Block from ME or WIX
(not time sorted)

“Häcksler”



- **Splits up the Hit Block**
- **Time sorting**
  (Febex time interpolation to WR)

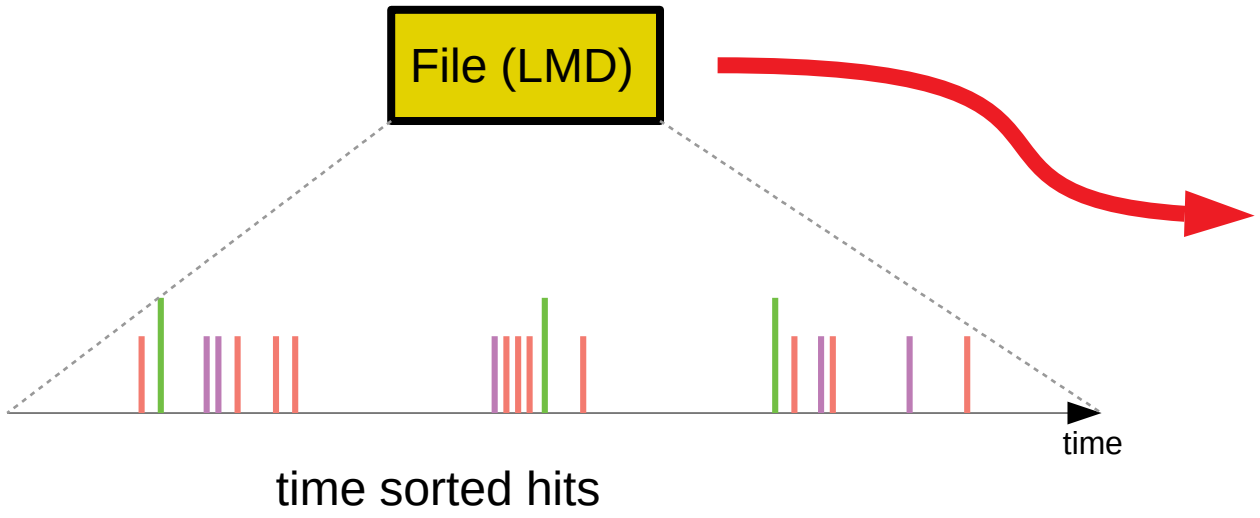
MAIN DAQ

Other Detectors

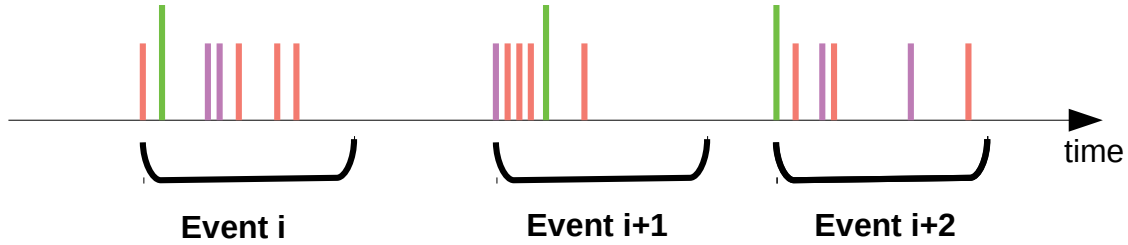
DRASI TO
(time order)

File (LMD)

Offline Time Stitching until 2020



Ucesb Time Stitcher

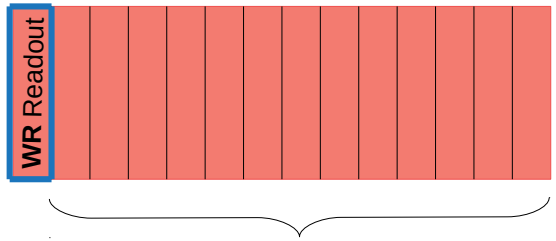


Time Stitching Algorithm

- First detected hit opens event window
- Time Stitcher **does not distinguish** between CALIFA, Main DAQ,.. hits
- Event window is closed after predefined time (eg. 8 µs)

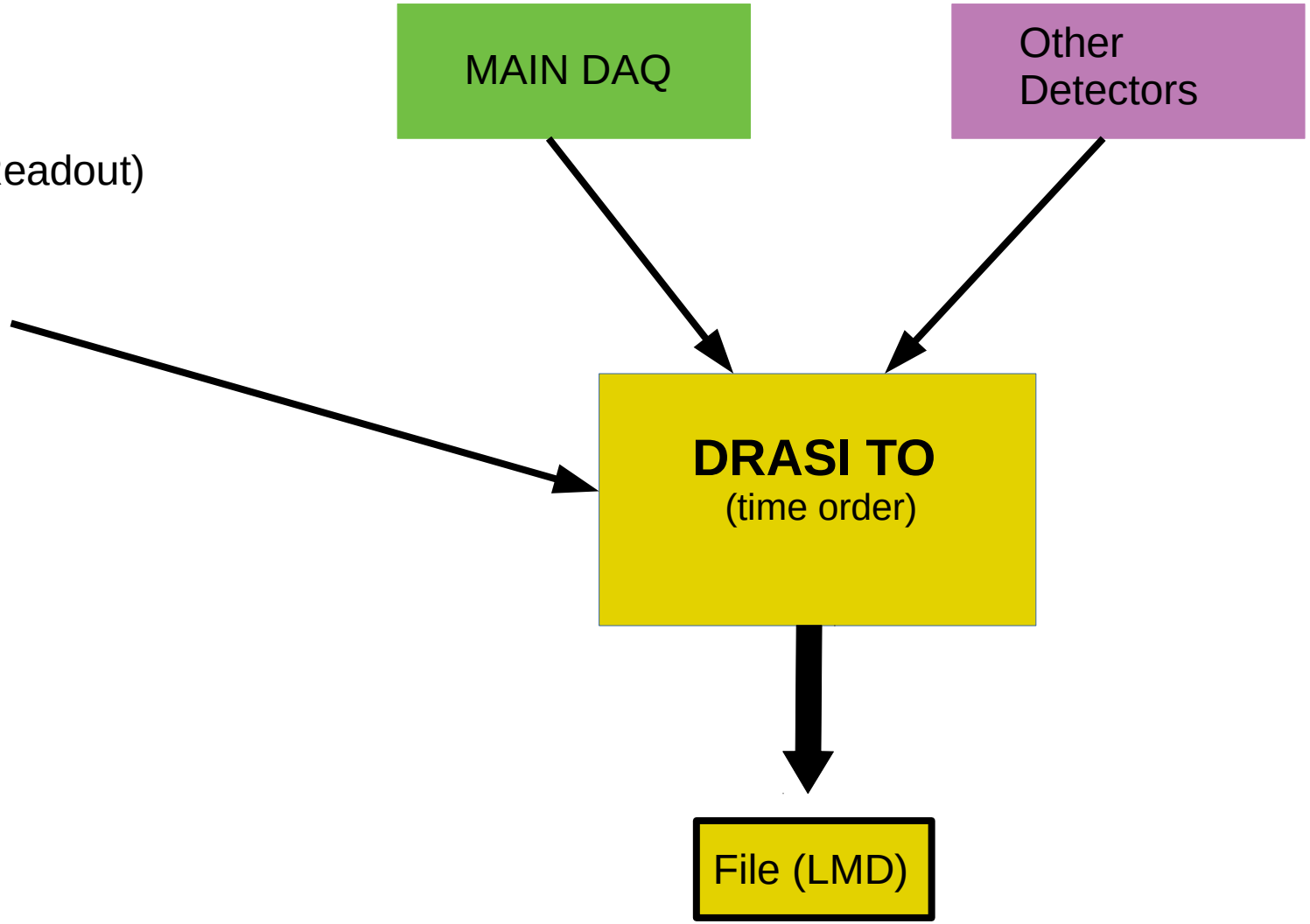
Data Acquisition/Event Building since 2021

CALIFA DAQ (Multi Event Readout)



Hit Block from ME or WIX
(not time sorted)

NO HÄCKSLER!



Output LMD File since 2021

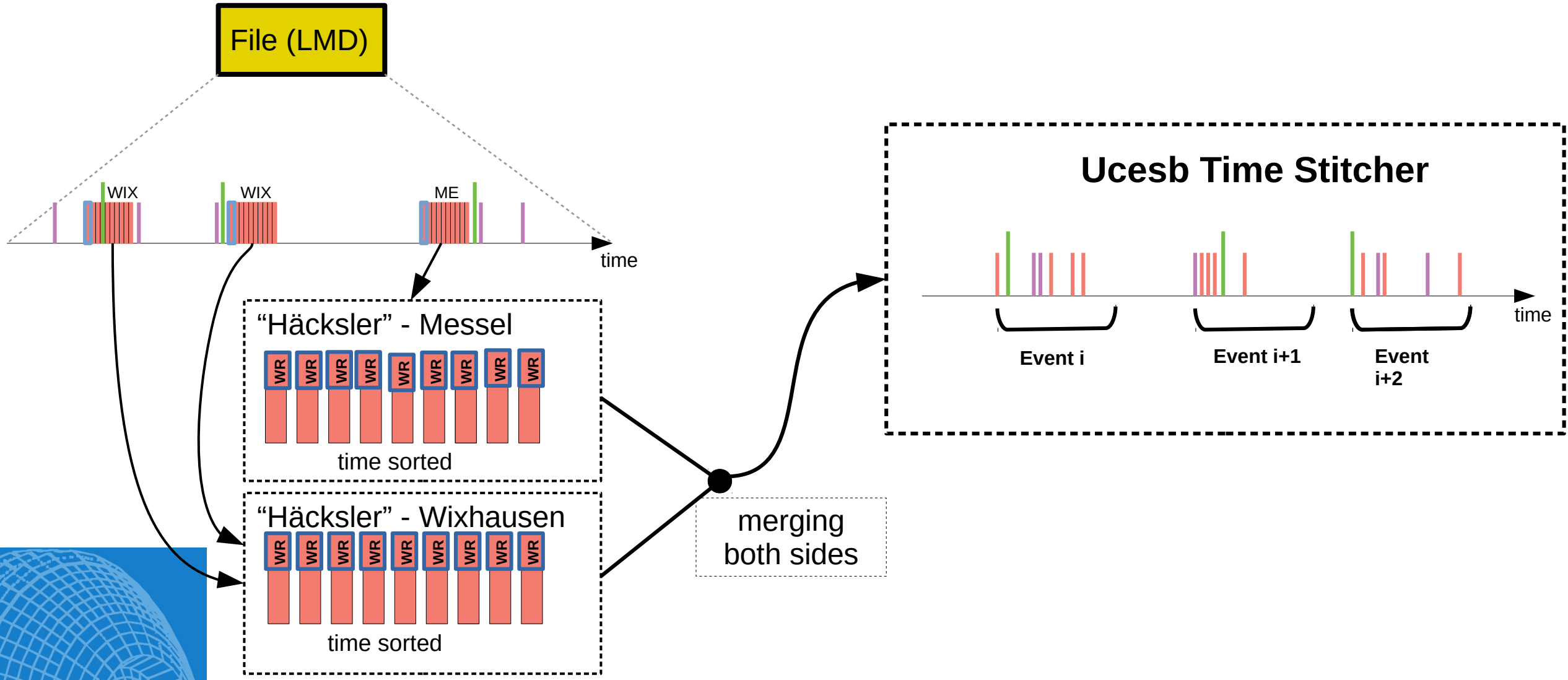
File (LMD)

- CALIFA Hits are collected to Hit Blocks (Messel or Wixhausen)
- Hit Blocks are sorted according to the WR Readout timestamp (▮)
- **Hits inside Block are not time sorted !**

⬇

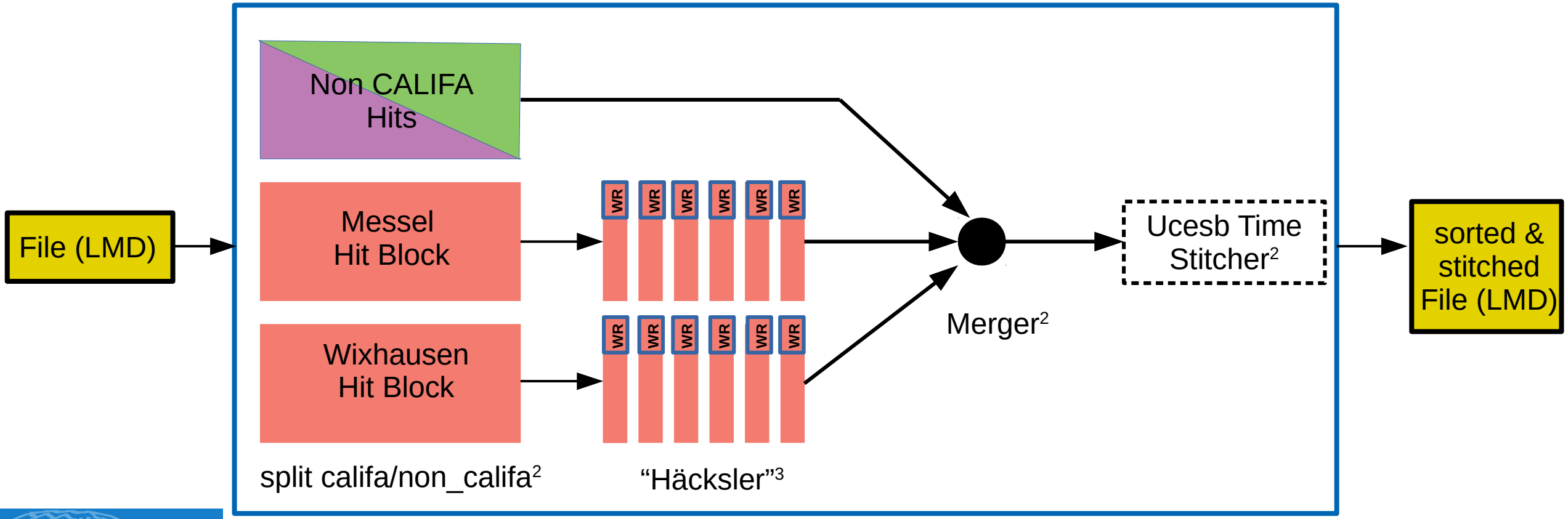
CALIFA single hit time sorting needed!

Offline Time Sorting and Stitching since 2021



Time Sorting and Stitching with Philipp‘s script

califa_merge_stitch.bash[1]



[1]You can find it: */u/land/lynx.landexp/202105_s494/scripts/califa_merge_stitch.bash*

[2]Unpacker: */u/land/klenze/ucesb_gcc6/empty/empty*

[3]Unpacker: */u/land/landexp/202105_s494/x86l-76/daq_bootstrap/ucesb_wip/empty/empty*