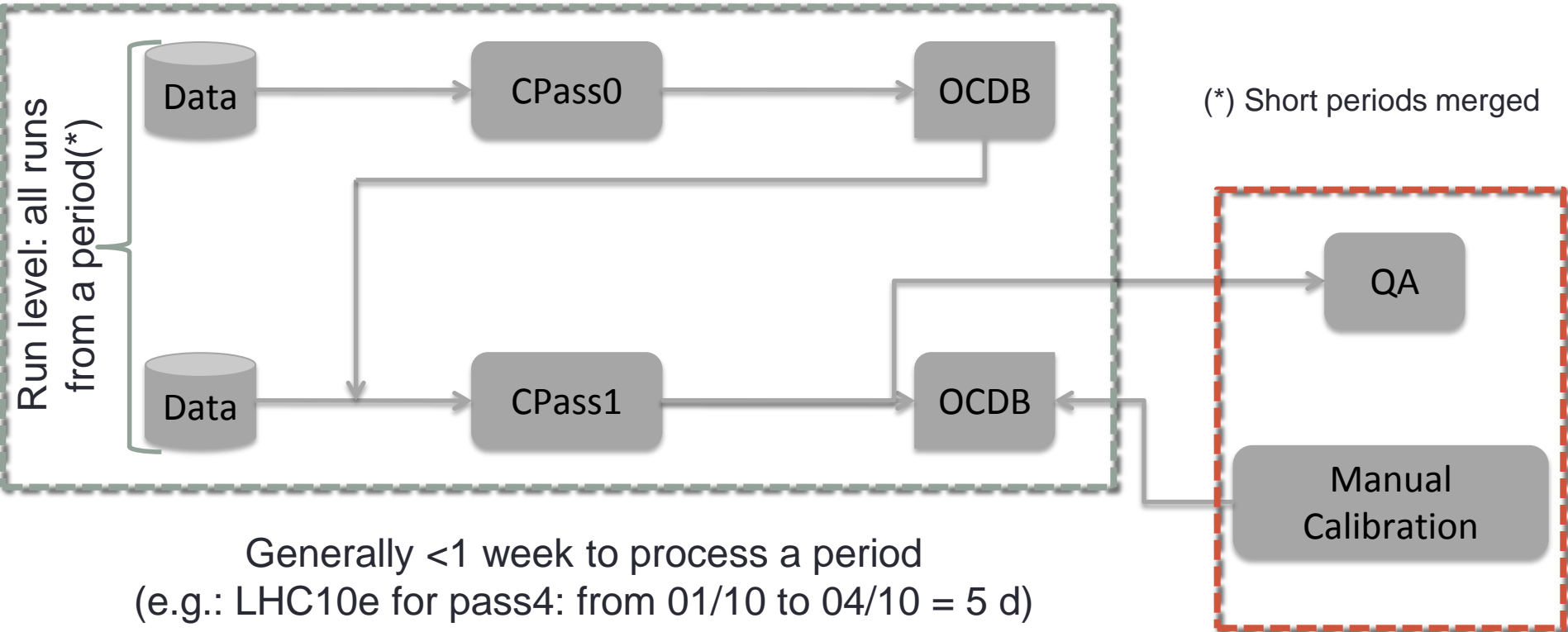


REPROCESSING PLANNING: CONSIDERATIONS for DISCUSSION

Offline Week, 19-21 November 2014

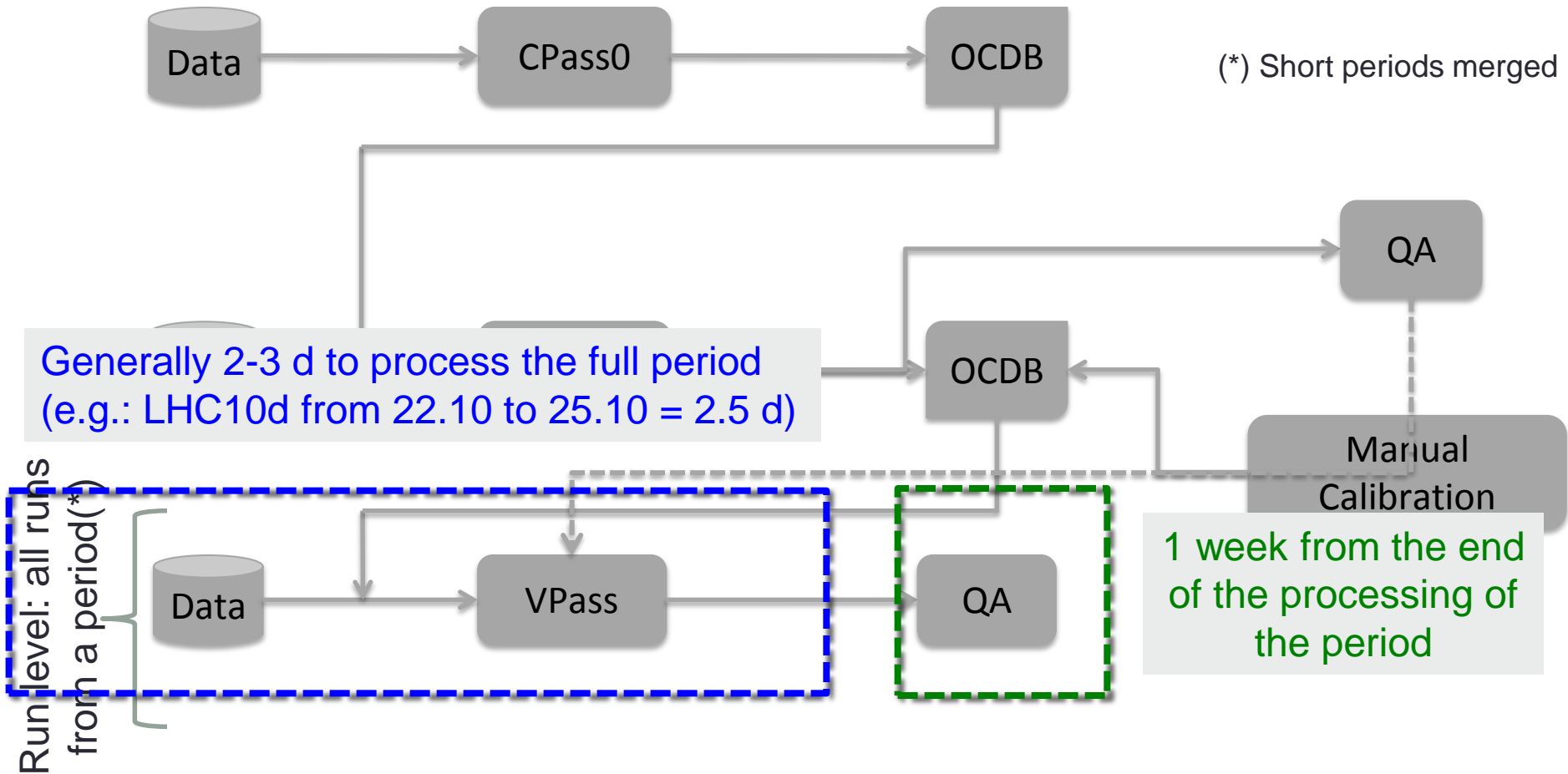
C. Zampolli

Reprocessing: Timing 1

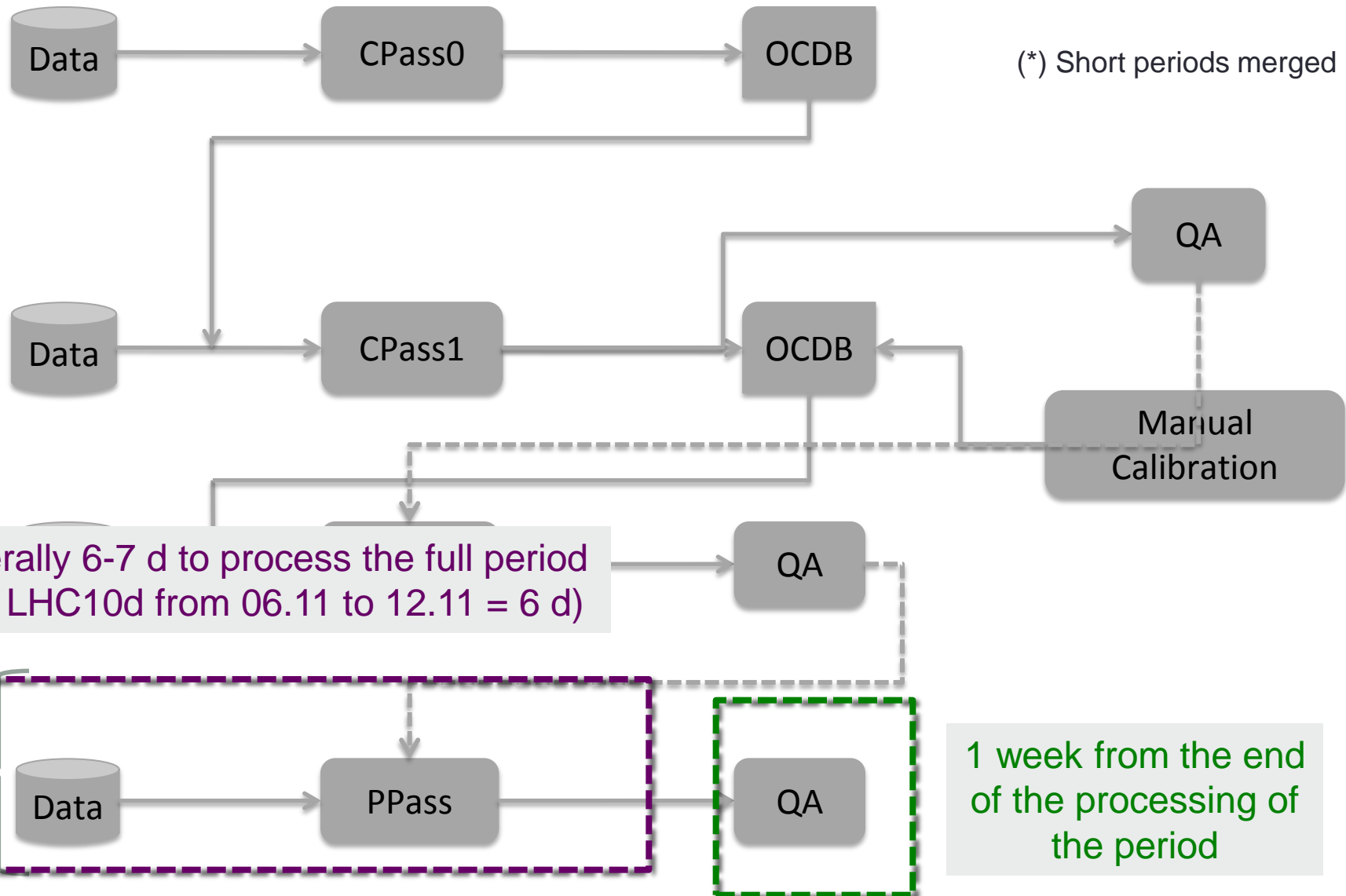


1 week from the end
of the processing of
the period

Reprocessing: Timing 2



Reprocessing: Timing 3



Reprocessing: Delays with Current Approach

- Requires to wait for calibration and QA readiness
 - After CPass1 → to start VPass
 - After VPass → to start PPass
- 1 week given, but very often more time needed
 - E.g. LHC10e: from CPass1 to VPass: 18 d
 - E.g. LHC10e: from VPass to PPass: 12 d

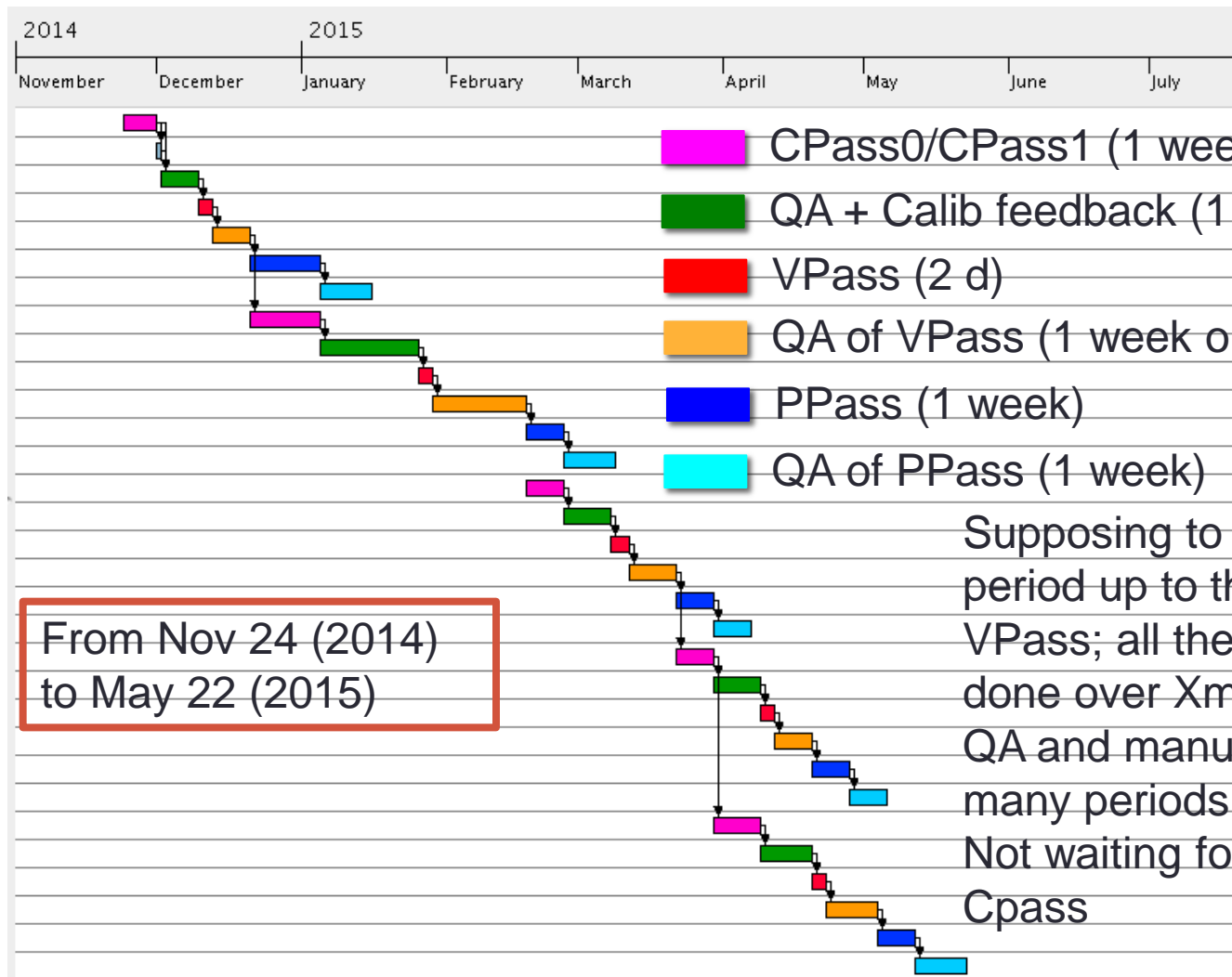
Reprocessing: Data Samples

- 2012, 2011
 - 2012 has higher priority
 - 2012 more under control – the whole chain was already processed, we have some experience
 - 2011 was high-rate, many TPC HV trips, missing chambers...
 - Could be challenging in the procedures, higher probability of failure
- From summer 2014, processing of 177011 (LHC12a) and 188362 (LHC12g) for TRD alignment: 1y 86d (not including snapshots, Calib Merging, QA merging)
 - 2012 has 565 runs → ~350y

Dependencies (main ones)

- Filtering of TPC high-occupancy events [PWGPP-71](#)
 - Status:
 - Laser events were not filtered → understood, threshold for filtering to be modified
 - Memory increase during processing → autoexpansion of TClonesArray, can be improved
 - Physics events with high memory allocation → HLT reconstruction (which was not showing up for 2010 reprocessing, since HLT was not used here) → under investigation
 - All technical fixes, should take till Monday 24.11 (hopefully)
- TPC space point distortion calibration using outer detectors (TRD, TOF) for involving TRD in tracking ([ATO-98](#))
 - Status:
 - Not yet completed, time estimate unknown (needs to create new TPC calibration + realign TRD and TOF)
 - Needs reprocessing (CPass0 and CPass1 only) of 3 runs from LHC12 ($B \geq 0$) which currently have problems

First Estimate (2012+2011)



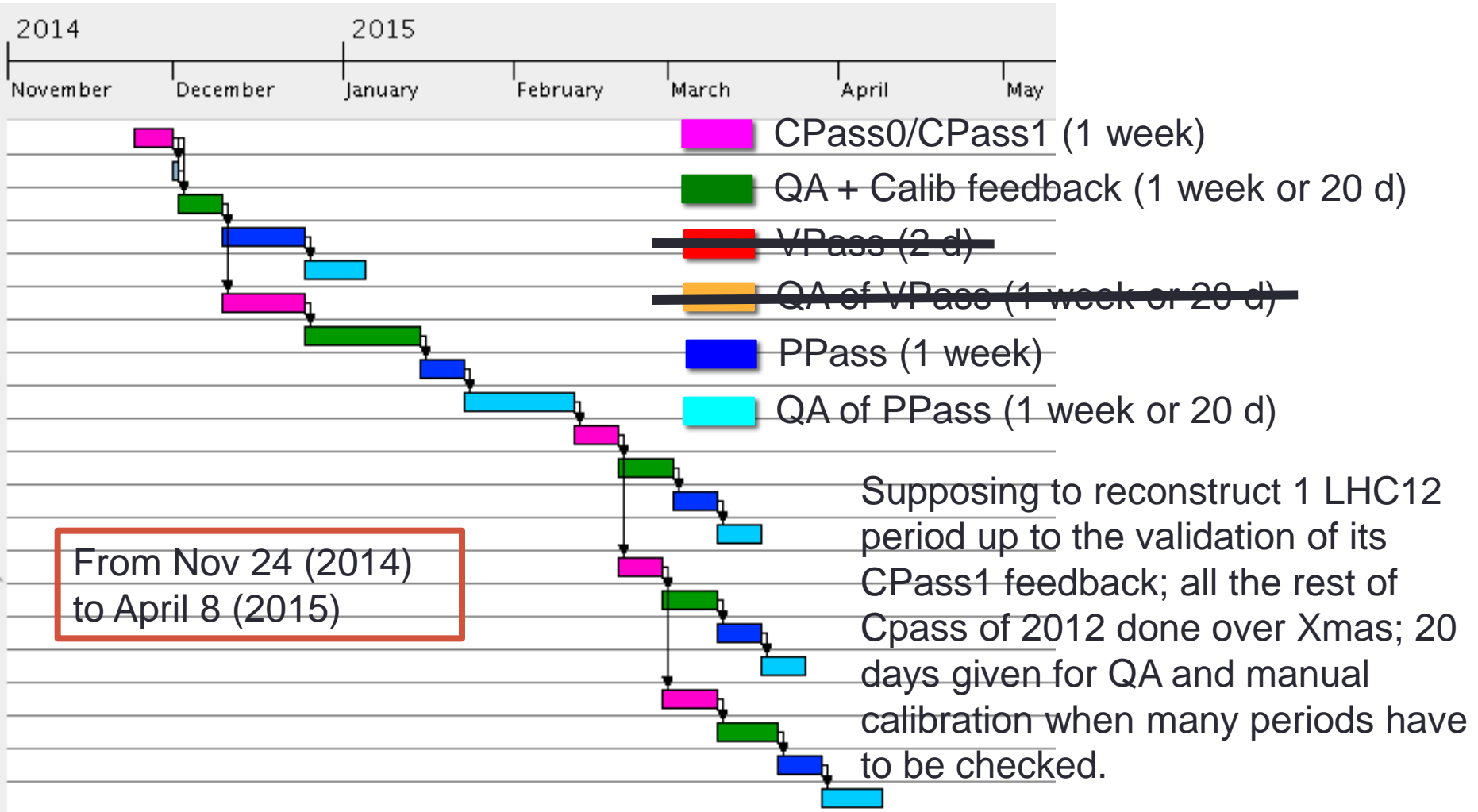
From Nov 24 (2014)
to May 22 (2015)

Supposing to reconstruct 1 LHC12 period up to the validation of its VPass; all the rest of CPass for 2012 done over Xmas; 20 days given for QA and manual calibration when many periods have to be checked
Not waiting for PPass to start next Cpass

Rough estimates!

For 2011, CPasses in cascade, w/o waiting

Second Estimate: Skipping VPass (2012+2011)



Rough estimates!

For 2011, CPasses in cascade, w/o waiting

BACKUP
