Production in triggered and streaming mode together

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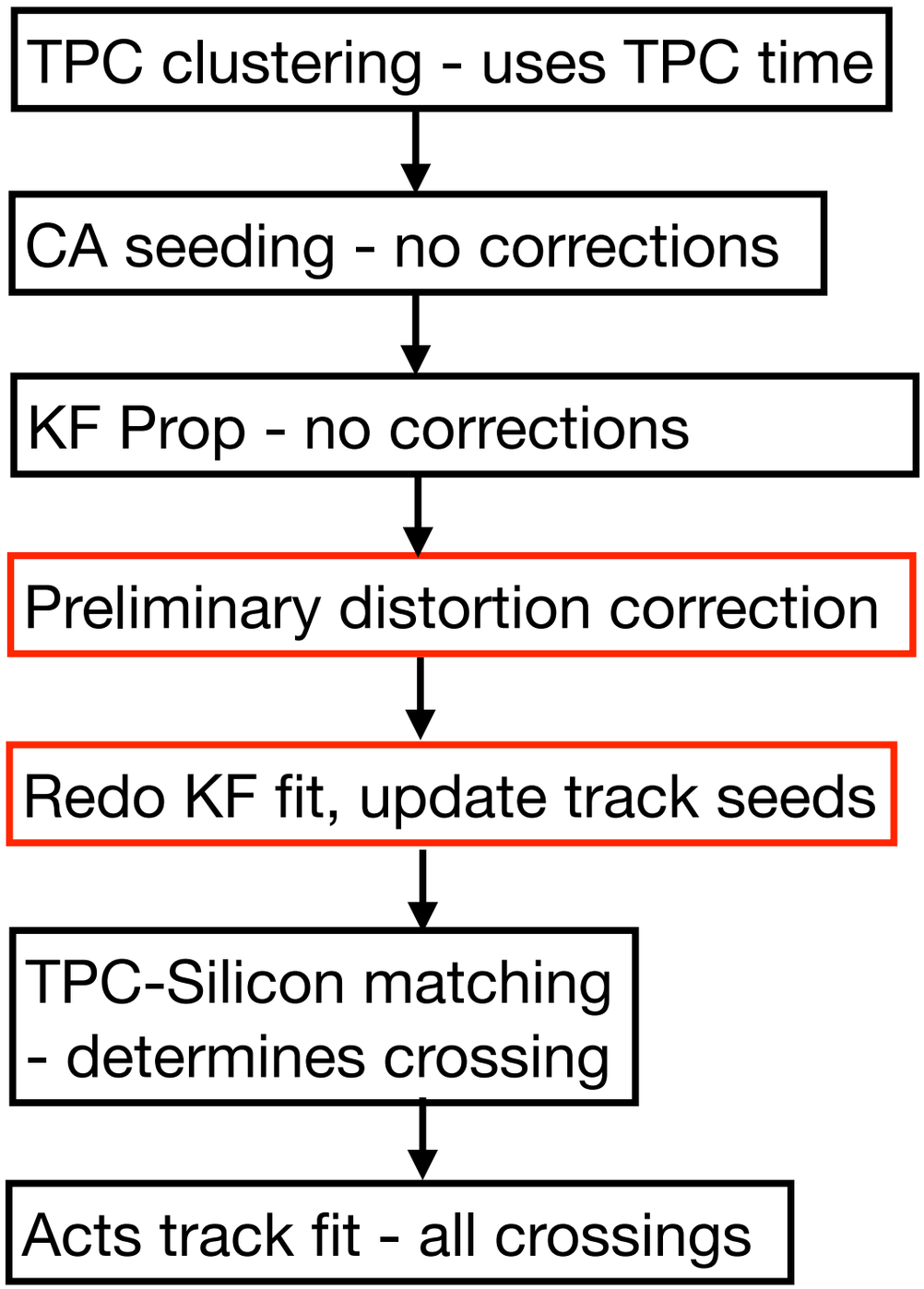
Production: triggered and streaming mode together?

We plan to start the pp run by focusing on triggered event data, since we expect this to be easier to understand. But we will take both triggered and streamed data.

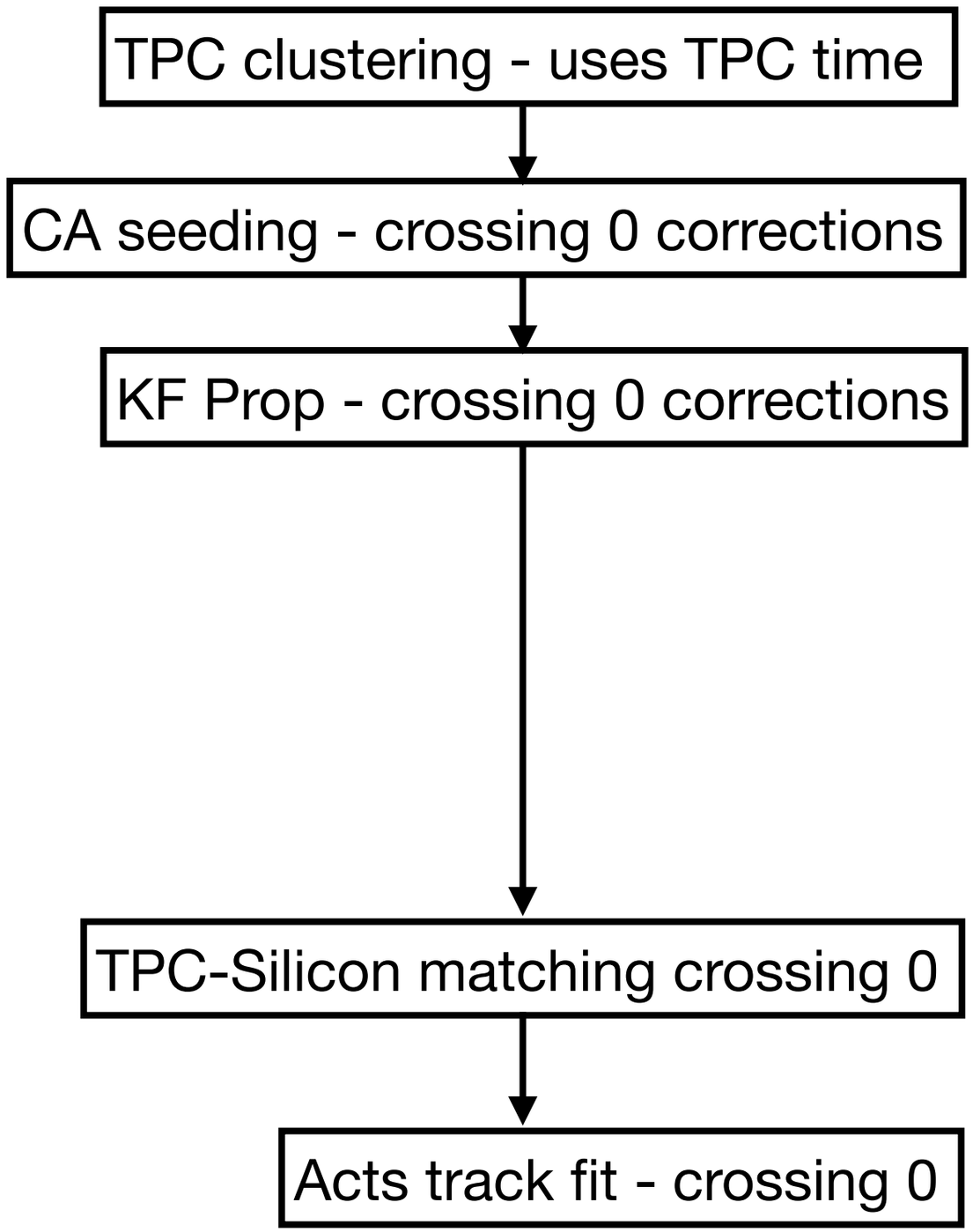
If we can run the triggered tracking production and streaming tracking production as part of the same process, we would save reading the entire data set twice.

I think that should be possible with the existing offline reconstruction code.

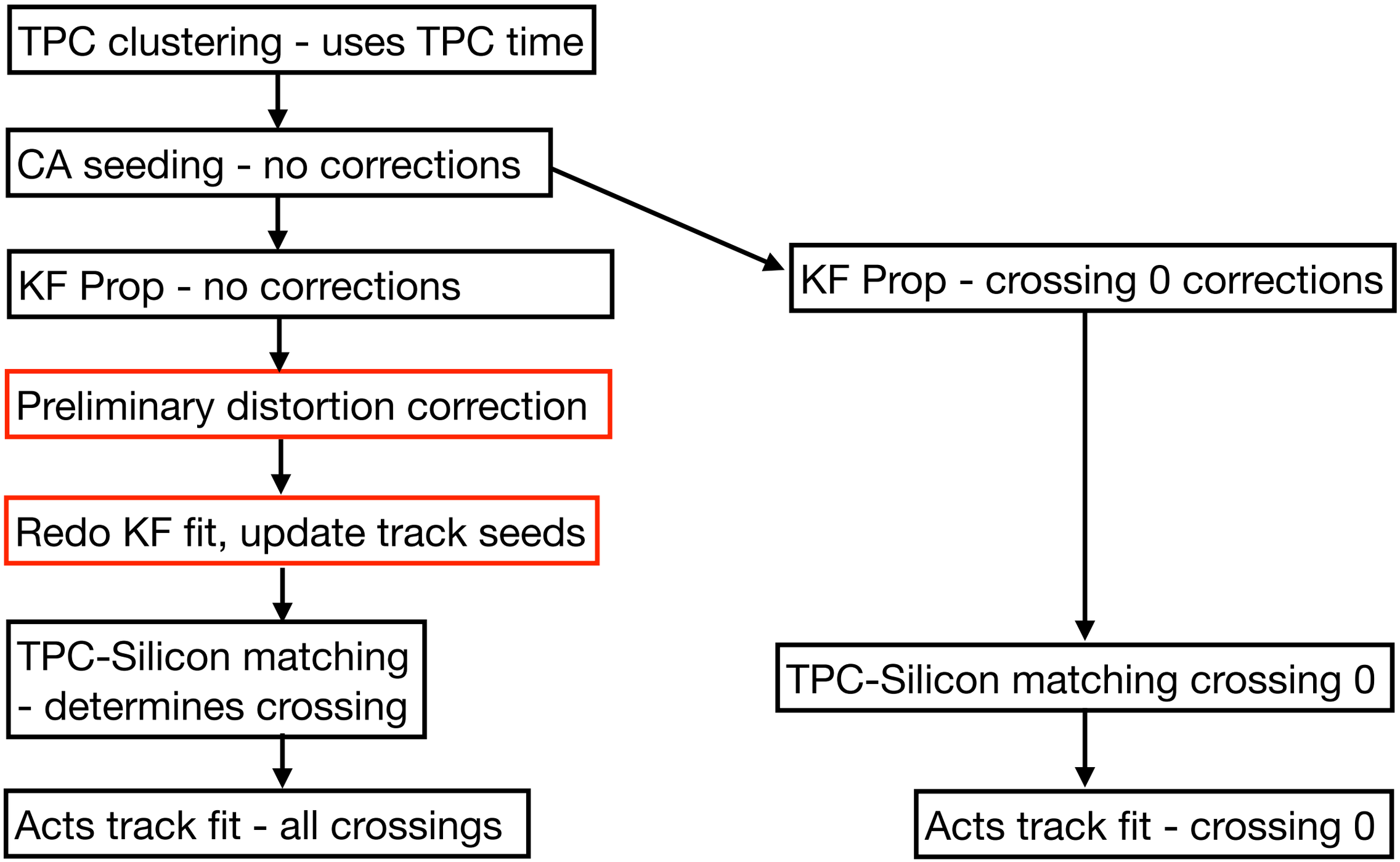
Streaming workflow



Triggered workflow



Streaming + triggered workflow



Streaming + triggered workflow

What changes would be needed?

Start from the streaming workflow.

- Add a second node for triggered (TPC) TrackSeeds.
- Add a second node for triggered full SvtxTrackSeeds.
- Add a second node for triggered final track fits.
- Add a 2nd node for collision vertices.
- Create 2nd KF Prop in triggered mode, writes 2nd TPC TrackSeed node.
- Create 2nd TPC-silicon matcher in triggered mode, reads 2nd TPC TrackSeed node, writes 2nd SvtxTrackSeed node.
- Create 2nd Acts Fitter in triggered mode, reads 2nd SvtxTrackSeed node, writes 2nd SvtxTrack node.
- Create 2nd collision vertexer, reads 2nd SvtxTrack node, writes 2nd vertex node.

Write separate output files for streamed and triggered tracks.

The size of the additional triggered nodes would be:

TrackSeed: ~ same size as streamed TPC TrackSeeds.
SvtxTrackSeed: ~ 1/10 of streamed version.
SvtxTracks: ~ 1/10 of streamed version.

Backup