Proposed filters: based on CR workshop Oct. 7

- **IceTopNHLCTank10_22**: All events in which NHLCTanks >= 10, with WF's saved for *all* of the events
  - Similar, but not exactly the same, as the old IceTopSTA5, which excluded infill tanks. This would not. This would include all events "reconstructible with full Laputop", including small ones that land in the infill region.
  - More meaningful in terms of potential reconstruction quality. Not just shower size.
  - Would extend the "standard" analysis to lower energy, and overlap with 2- and 3-station low-energy analyses.
  - Analysis would have to be smarter about theshhold behavior and efficiency — not simple anymore.
  - The old IceTopSTA5 would be a subset of this… a "legacy boolean" could be computed for anyone interested in it. <—Needs study.
- **IceTopNHLCTank6_22**: All events with NHLCTanks >= 6 trigger AND pass SmallShowerFilter
  - Like the above, would be similar to the old IceTopSTA3, but more inclusive because not excluding infill tanks. And again, representative of potential reconstruction quality, rather than shower size.
  - Currently, the SmallShowerFilter (which requires clustering of the 3 stations) is applied in L3 processing, and 3-station events that don't pass are thrown out. So we'd just be doing this earlier in the process.
  - Both the old IceTopSTA3 and IceTop_InFill_STA3 filters would (again) be a subset of these, and "legacy booleans" for non-infill and infill could be generated. <—Needs study.
- **IceTop_InFill_STA2_17**: Infill-only events >= 2 station trigger (unchanged)
- **IceTop_SouthwestNHLCTank1_22**: Events that have an HLC in any one of these stations: [43, 33, 34]. These are the "trio" of stations surrounding the IceAct field telescope, and also closest to the scintillators.
  - This is a kind of "limited 1-station" filter. Although designed for use by Scintillator/IceAct folks, it could be used for a variety of use-cases (including single-tank calibration R&D).
  - Will likely produce a lot of events. But the IceTop hits will be properly calibrated etc. and ready for use for surface array R&D. <—Needs study.
  - Can quickly produce a "Level4" containing only high-energy events, for those who don't want to wade through all of these.

Events that pass one of these go into the "IceTop stream", and will be properly calibrated (VEMCal, SLCCal, reco if possible) two weeks later

- **Moon/Sun**: add our booleans to a generic in-ice stream
- **GoodFitInIce_IceTopCoincidenceHits_22**: Events that have a good reco in-ice and also have >= <N> hits (SLCor HLC) in time with the reco track — having this flagged will just make them easier to find later
- Any other booleans that might be of interest… write 'em!

(Regular) InIce data, which will be available immediately, can have these flags present. IceTop hits will NOT be calibrated, but can be used for veto, anisotropy, etc.