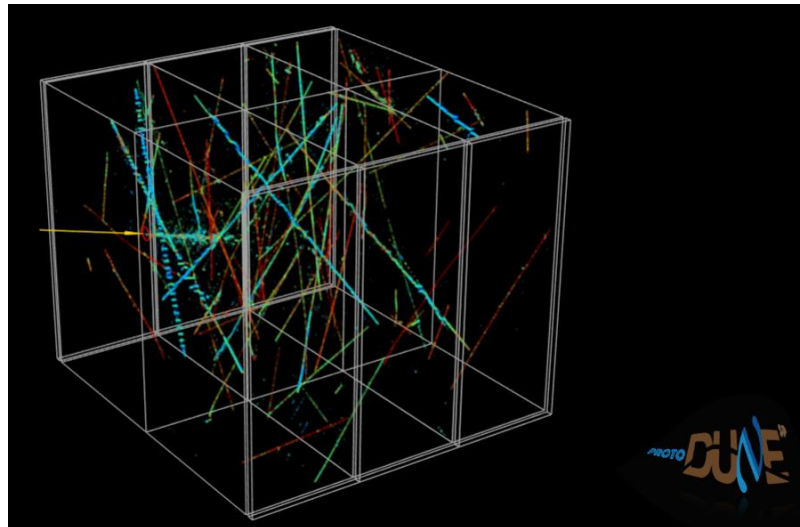
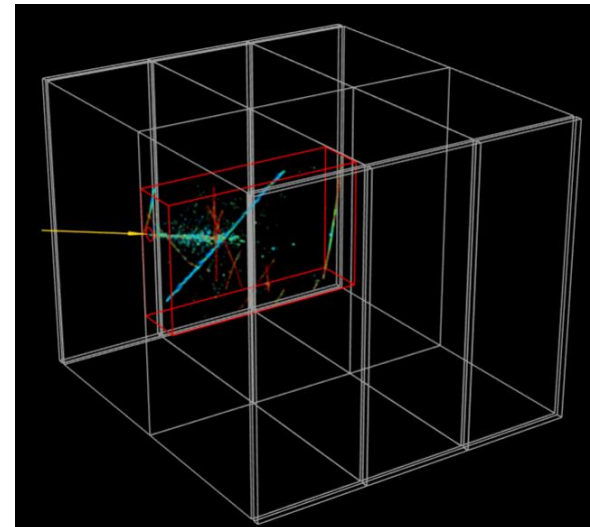


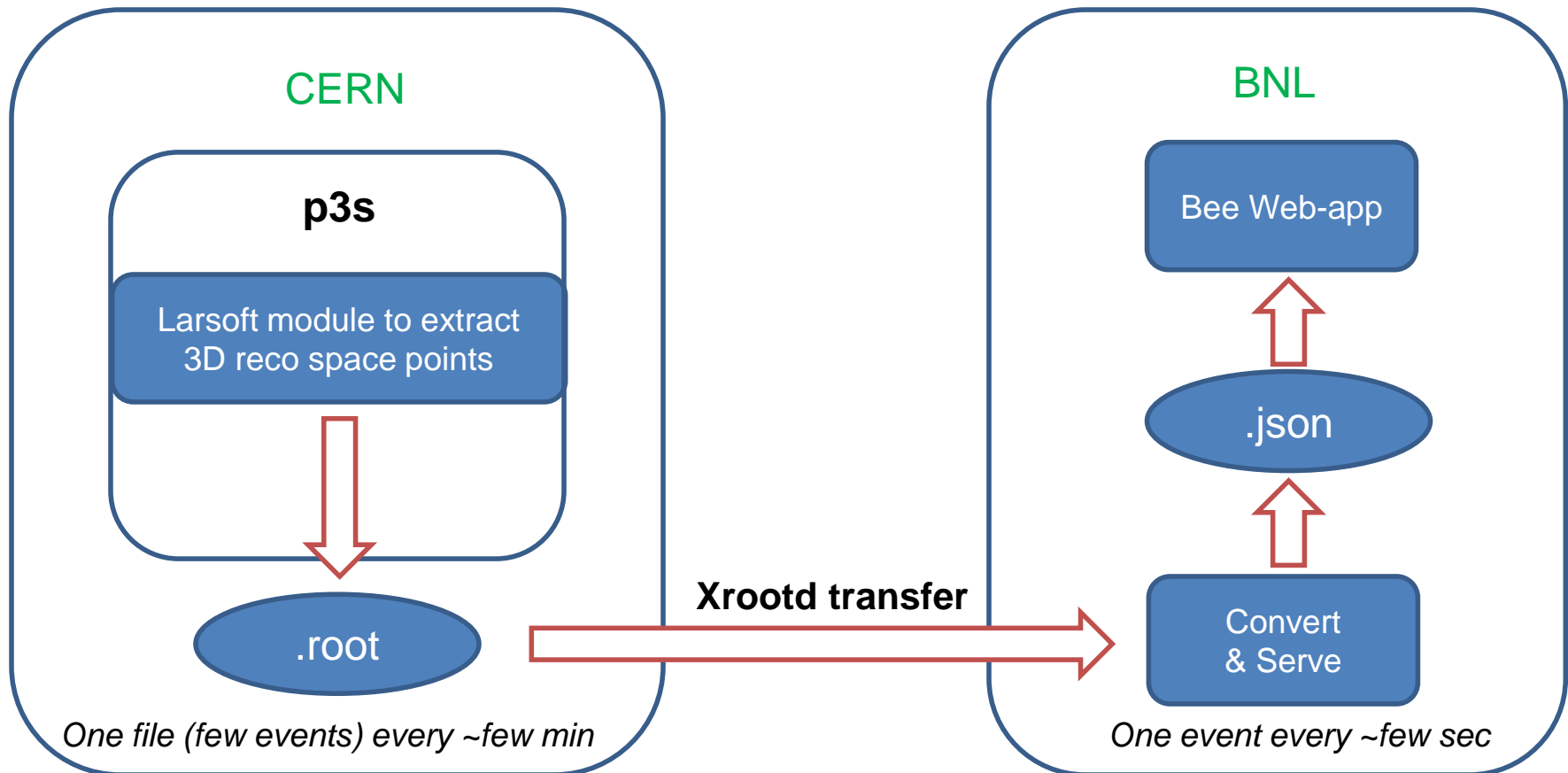
ProtoDUNE Web-based 3D Event Display “Bee”

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- ❑ “Bee” is a general web-based 3D event display for LArTPC
 - Currently supports microboone, protoDUNE, dune35t, etc.
- ❑ Created a special application for protoDUNE live-stream monitor
 - <https://www.phy.bnl.gov/twister/bee/set/protodune-live/event/0/?camera.ortho=false>
 - Demo with simulated events
- ❑ Special features for protoDUNE monitor:
 - Live-stream: update every few seconds (configurable)
 - Box-view: only show region mostly related to beam activity
 - Full screen: Menu -> Camera -> Play (Fullscreen)

Normal View**“Box” View**

How did it work



- This flow can in principle be simplified to have everything live in CERN.
 - File transfer is small anyway (<1MB per event)

Comments on the Reconstruction

- The 3D event display can only work as well as the 3D reconstruction does
 - Currently use the LArSoft “SpacePointSolver” algorithm from Chris Backhouse
 - Requires good noise removal and signal processing on all three wire planes to match their measured charges
 - Need prompt development on this front with the real data