

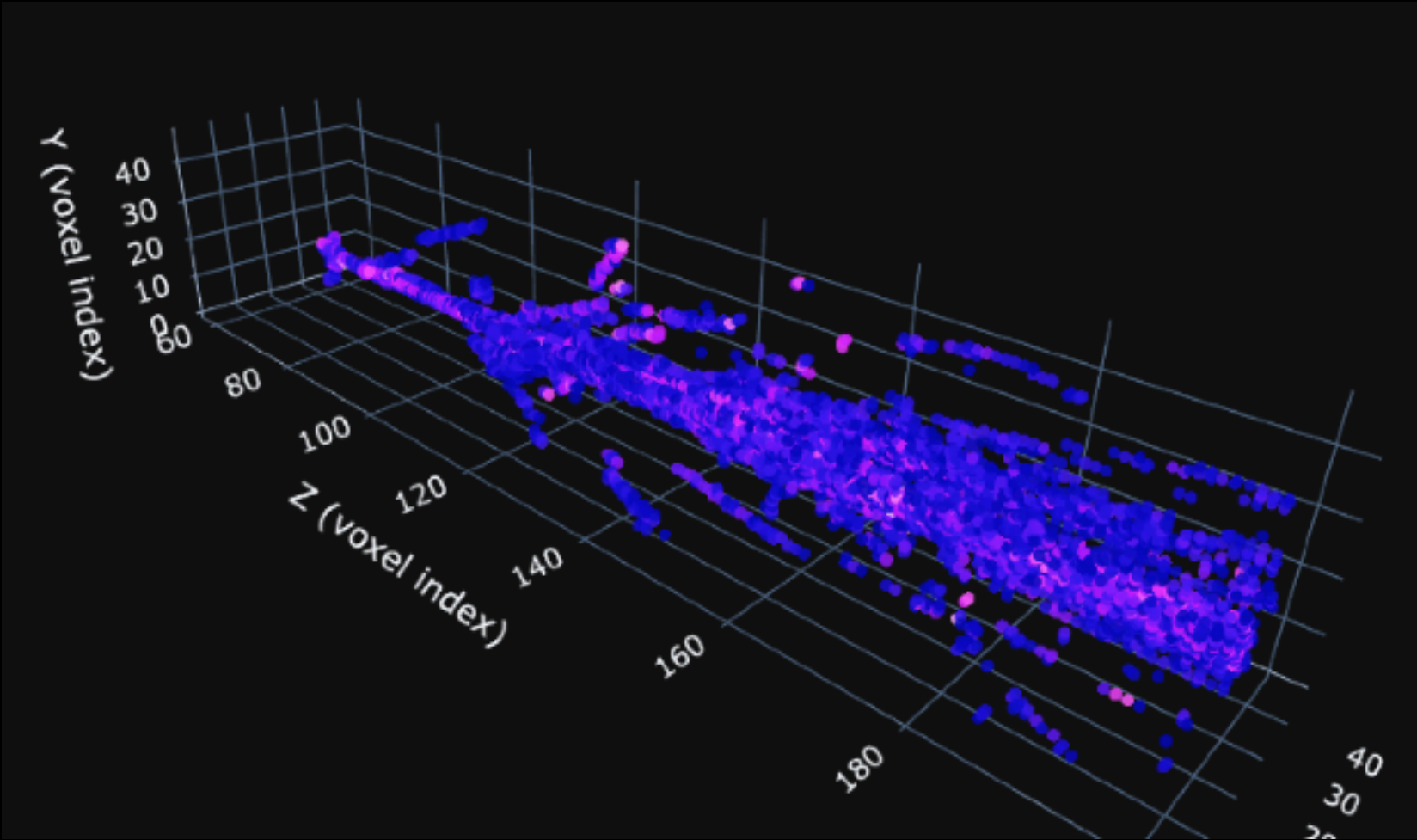
# Material of Cube; scintillator?

## Pipeline

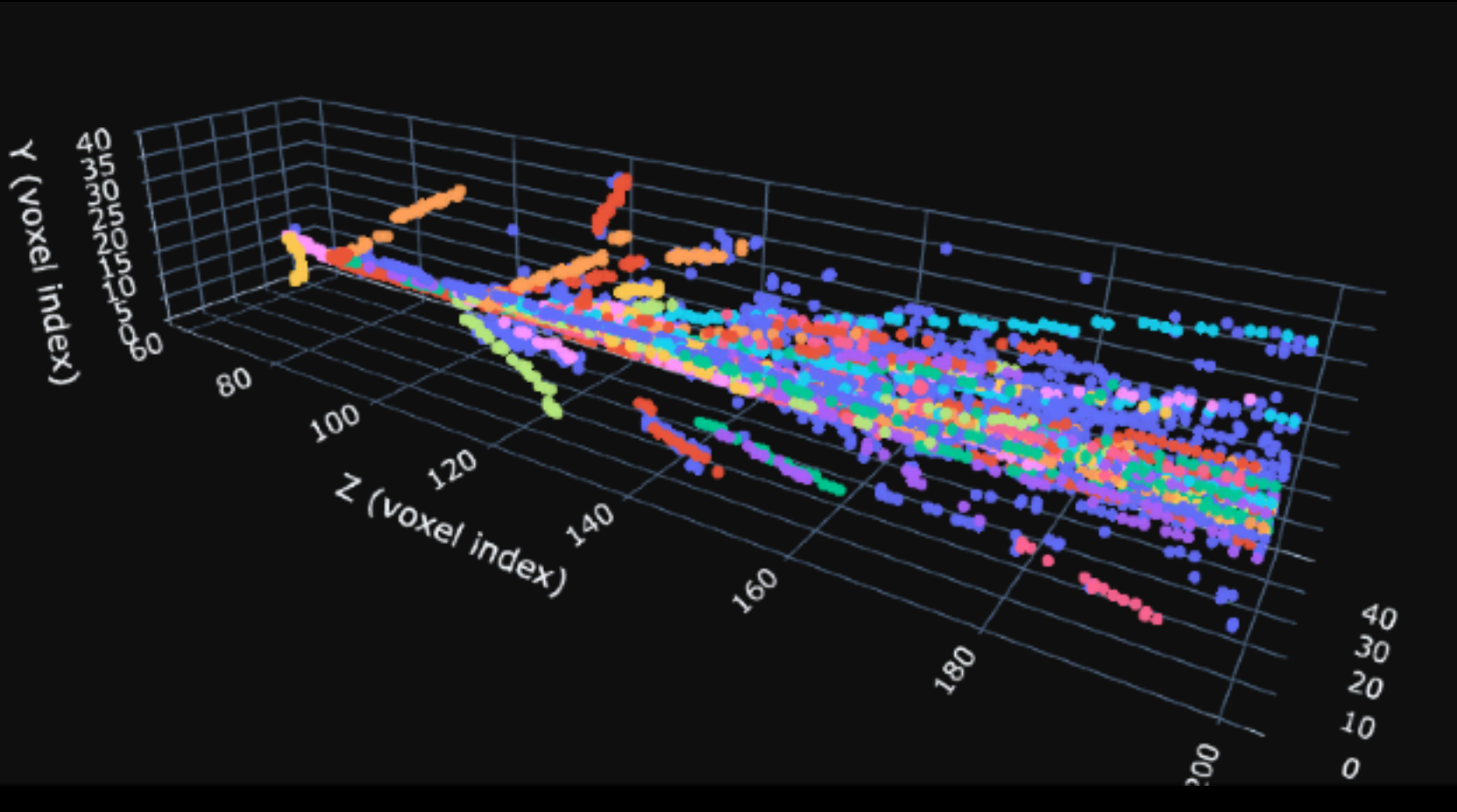
- 10 planned modules: 20 layers of 50x50 of 1 ×1 ×1 cm optically isolated plastic scintillator cubes (voxels).
- *The scintillator material:* follows the composition used for its predecessor, the *SuperFGD*
  - Polystyrene base doped with 1.5% p-terphenyl (PTP) as a primary fluor and 0.01% POPOP as a secondary wavelength shifter.
- *After production:* reflective layer on the surface, by chemical etching, forming a 50–80 μm thick white microporous polystyrene coating.
- 1.5 mm orthogonal holes for *Wavelength-Shifting (WLS) fiber*:
  - Ensure an optimal light yield of approximately 30 photoelectrons per Minimum Ionizing Particle (MIP) for a single 1-meter-long WLS fiber

# Event Displays

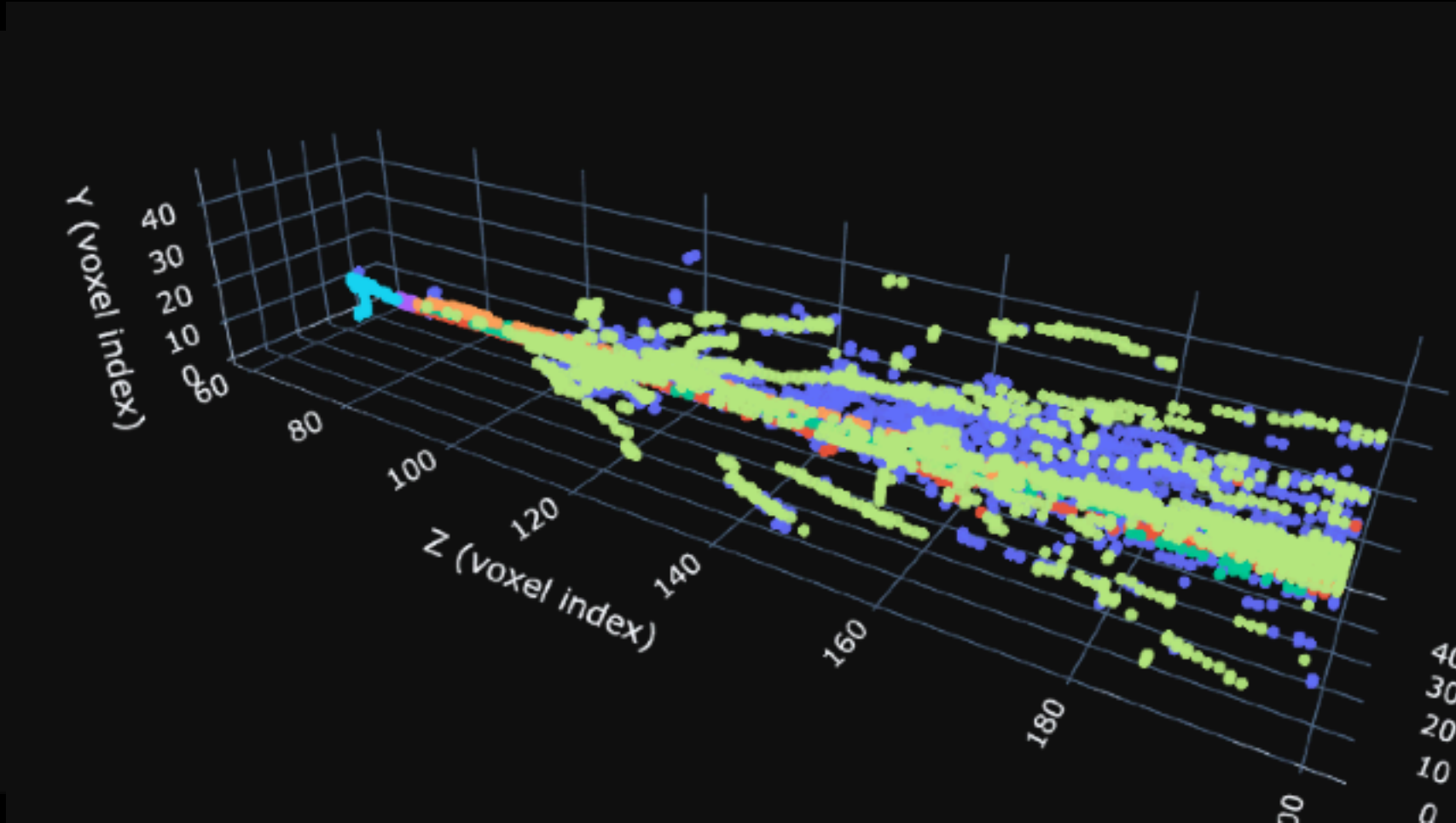
Voxel ID



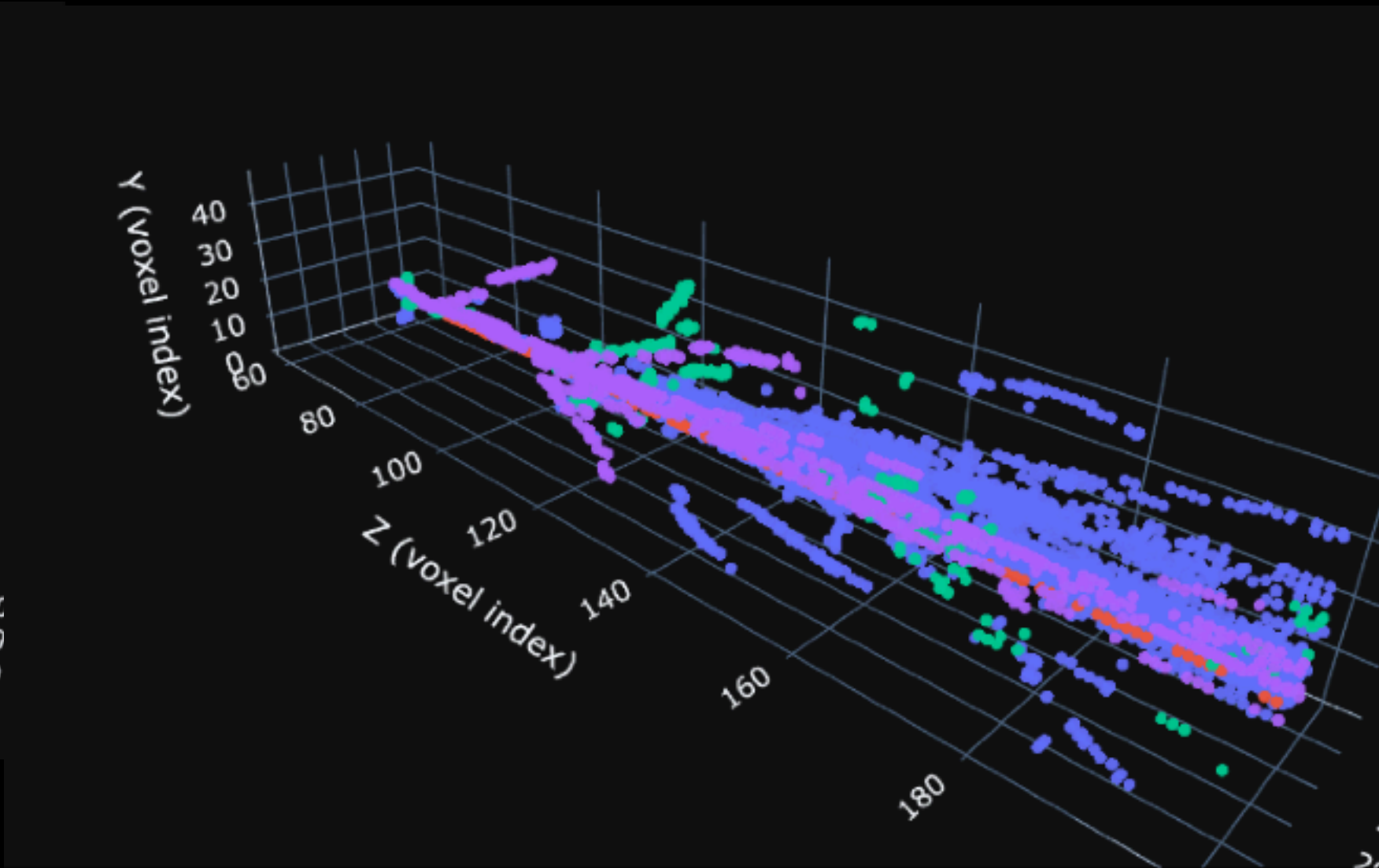
*Energy Plot*



*Track ID*



*Primary ID*



*Hit PDG ID*