```
Applying pre-filtering techniques...

Transforming keypoints ...

100% | 545059/545059 [00:18<00:00, 30036.55it/s]

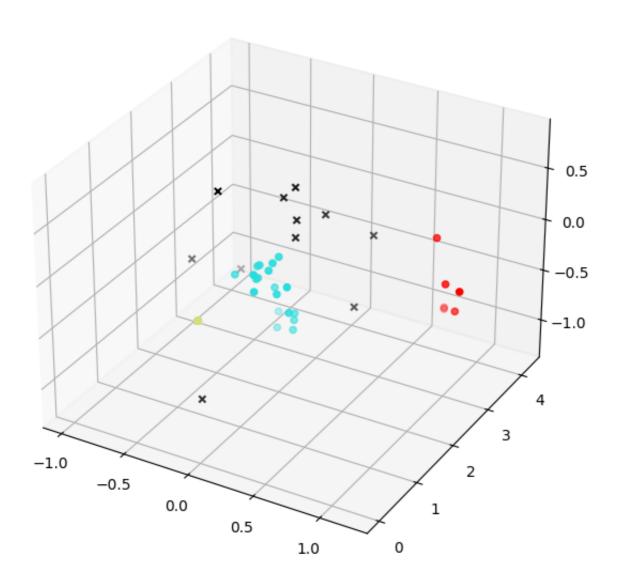
Stacking and padding frames...

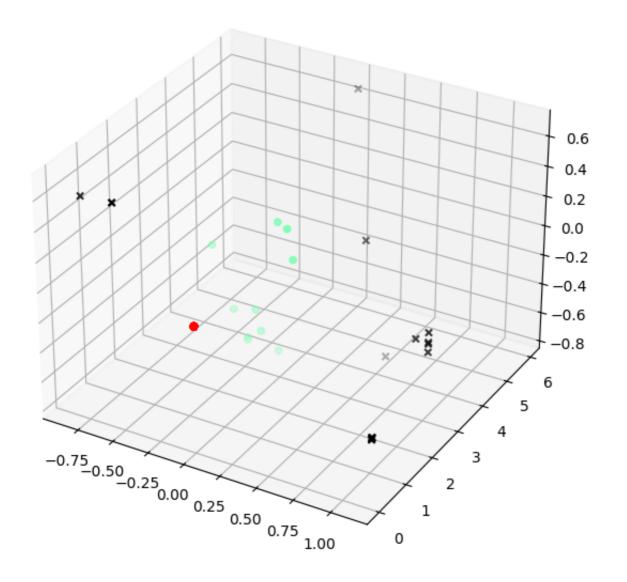
100% | 545059/545059 [03:09<00:00, 2869.45it/s]

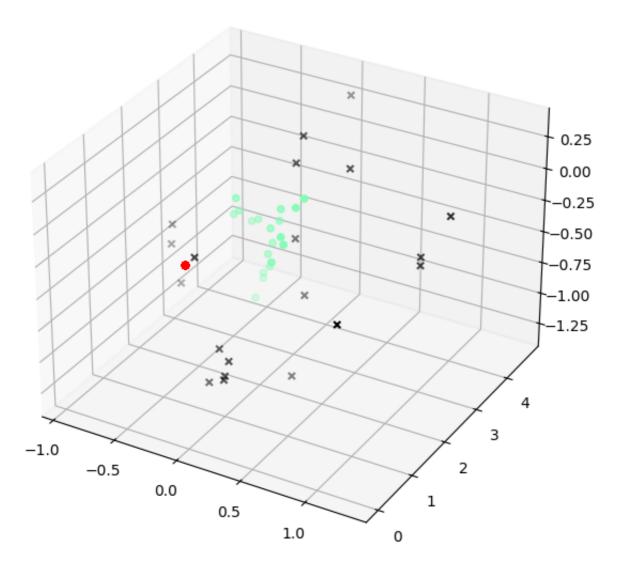
Applying DBSCAN clustering with weighted coordinates...

100% | 545059/545059 [25:56<00:00, 350.25it/s]
```

Visualization without noise reassignment:



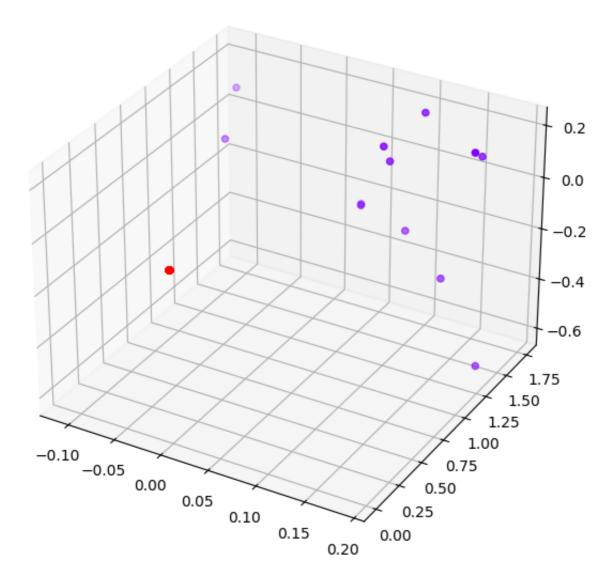


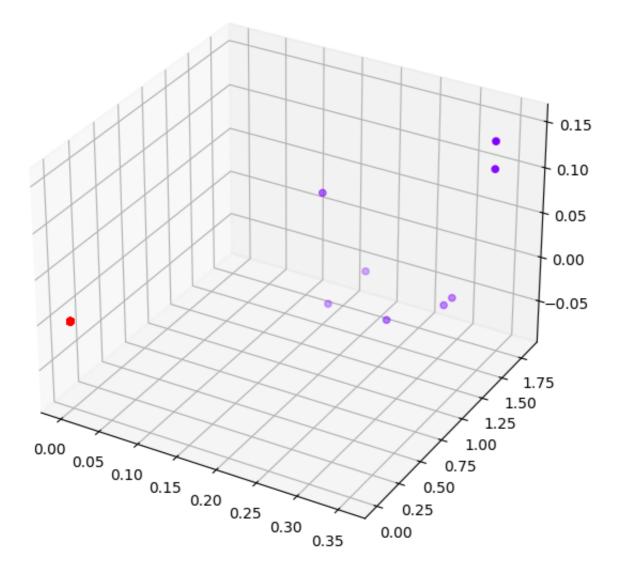


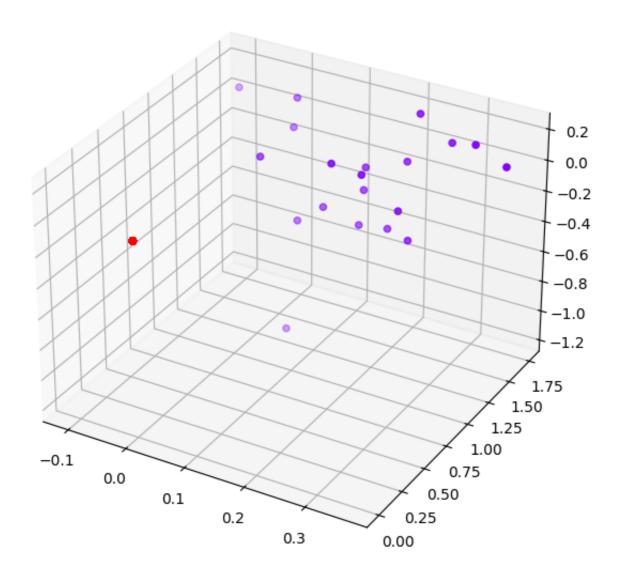
Applying DBSCAN clustering with weighted coordinates...

100% | 545059/545059 [30:42<00:00, 295.79it/s]

Visualization with noise reassignment:







Cluster Analysis Report:

Total Points Before Clustering: 59956490 Total Points After Clustering: 59956490

Total Points Reassigned: 0

Remaining Outliers: 0

Points per Cluster:

- Cluster 0: 8022270 points
- Cluster 1: 33824370 points
- Cluster 2: 15819505 points
- Cluster 3: 2107252 points
- Cluster 4: 172283 points
- Cluster 5: 10677 points
- Cluster 6: 133 points

Stacking and padding frames...

100% | 166880/166880 [00:59<00:00, 2797.41it/s] Applying DBSCAN clustering with weighted coordinates... 100% | 166880/166880 [10:40<00:00, 260.54it/s]