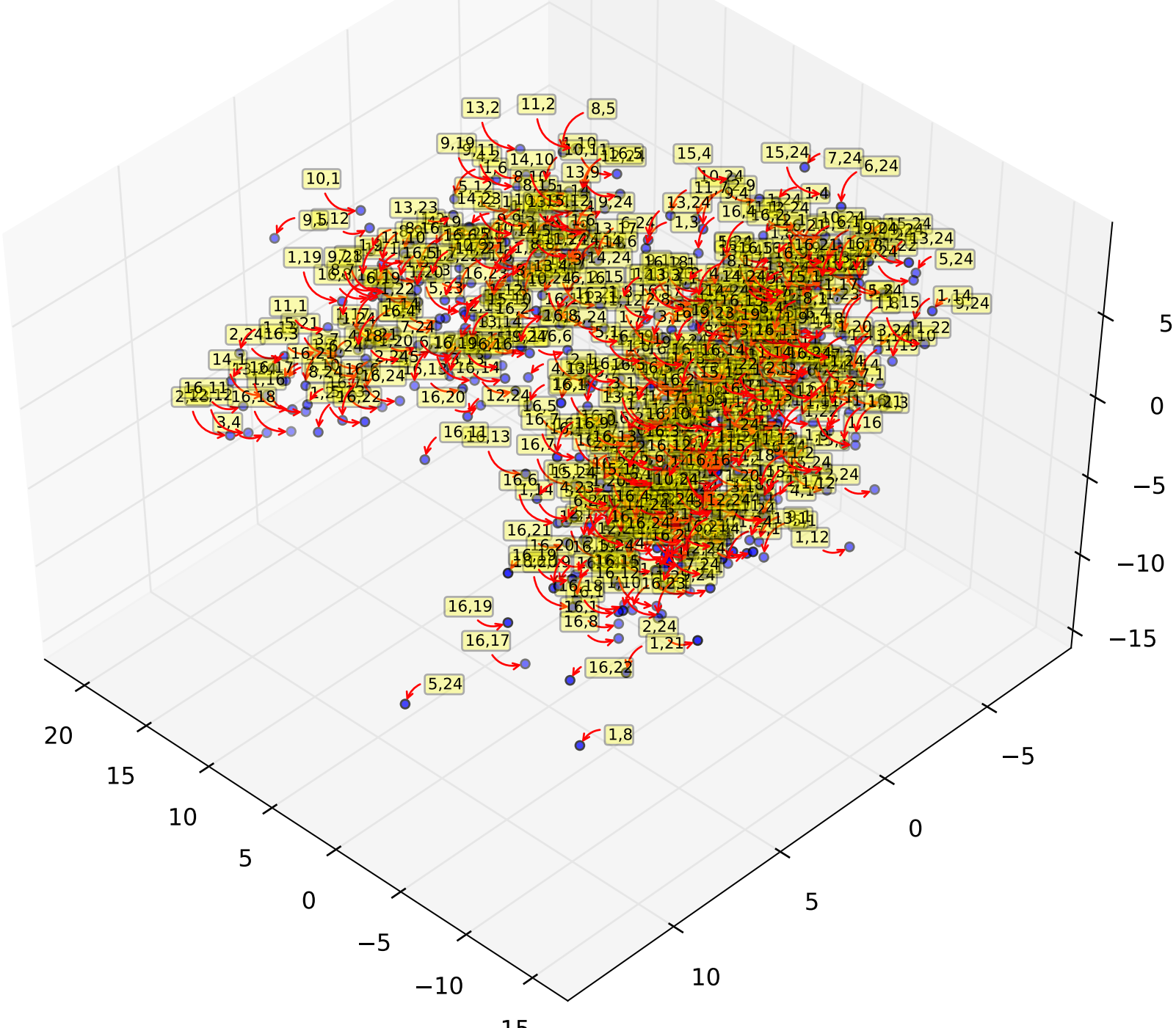3D PCA projection for joined_plates