









Figure 5 The identification of rotamers and major secondary structures of CG distribution in C_{β} frame (Color online) In a) the α -helices, in b) the β -strands. In c) all prolines, and in d) prolines divided according to their α -helical (blue) and β -stranded (green) assignment in PDB. Some apparent outliers have been high-lighted with red circles.



Figure 6 Outliers of C_{γ} atoms in C_{β} frame (Color online) An example of a group of five far away outliers in CG distribution, made visible by rotating the sphere and highlighting with red circle. They all correspond to the same protein but with different PDB codes: 1FN8, 1FY4, 1FY5, 1GDN and 1GDQ. In each case, the outlier is in the residue number 65 A. Note that there are also several other far away outliers.







Figure 9 Identification of the regions of CD distributions according to the level- γ rotamers (Color online) The level- δ distribution of non-aromatic C atoms, in the stereographic projection and divided according to the level- γ rotamers. In figure a) we show the *g*- rotamer, in figure b) we show the *t* rotamer, in figure c) we have the *g*+ rotamer and in figure d) we show the *cis*-proline. The radii of the (black) circles coincide with the average latitude. Some outliers have also been encircled.





