Glycine

The glycine molecule has been chosen as another stereographic example because of the variety of atoms present and its relatively small size. In the following figures, the carboxylic carbon atom has been selected as the origin of the stereographic projection sphere. Figure 8 represents the same map as the leftmost one of Figure 9, showing the same DF stereographic projection, but seen from above. The atoms attached to each peak are labeled, as well as the reference C atom located at the center of stereographic plane. Figure 9 represents the picture sequence obtained when leaving unaltered the stereographical sphere center, while the sphere radius is varied from left to right with values *R=3.6, R=3.9* and *R=4.2.*

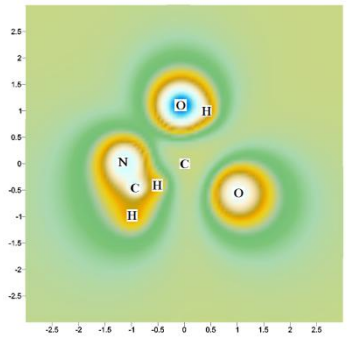

Figure 8. Stereographic map of the glycine molecular structure DF obtained centering the sphere at the carboxylic carbon atom with a sphere radius *R= 3.6*. It can be seen the labeling of the atoms responsible of the density peaks, the ones which are also found in the first left draw of Figure 9.

In the leftmost draw of Figure 9, the most structured peak corresponds to the global N-CH_2 group bond density and the other remaining two peaks are attached to the O atoms features. In Figure 9, proceeding from left to right stereographic projections, the spherical surface approaches both N and C atoms. The density of the C=O bond is represented by the peak placed in the lower-right position in each drawing. In the central projection surface the N peak acquires a relevant role, which becomes dominant in the rightmost projection plane.

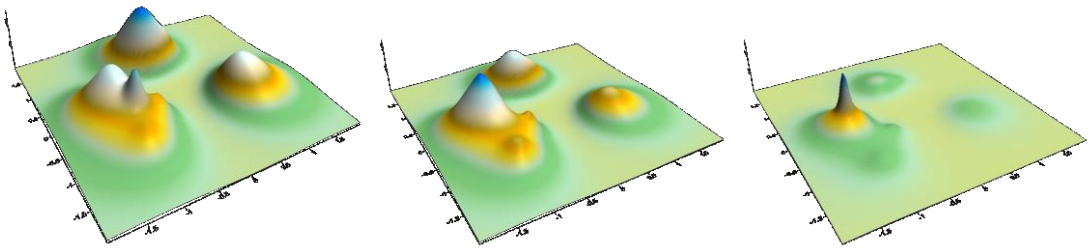

Figure 9. Stereographic maps of the glycine molecular structure DF obtained centering the sphere at the carboxylic carbon atom and varying the radius as: *R=3.6*, *R=3.9* and *R=4.2*. The maps from right to left corresponds to this radii sequence. To interpret the peaks and associate them to the glycine atoms, see Figure 8, which is a top view of the leftmost stereographic plane in this figure.