

Figure 5. Different choices for the off-center value given a reasonable setting for the radius of the enclosing ball structure. In (a) the off-center value is chosen too small and holes appear in the surface where it is expected to be connected. In (b) the off-center value is too large so that surface is bounded only by the enclosing sphere structure. The off-center value in (c) shows a reasonable choice.

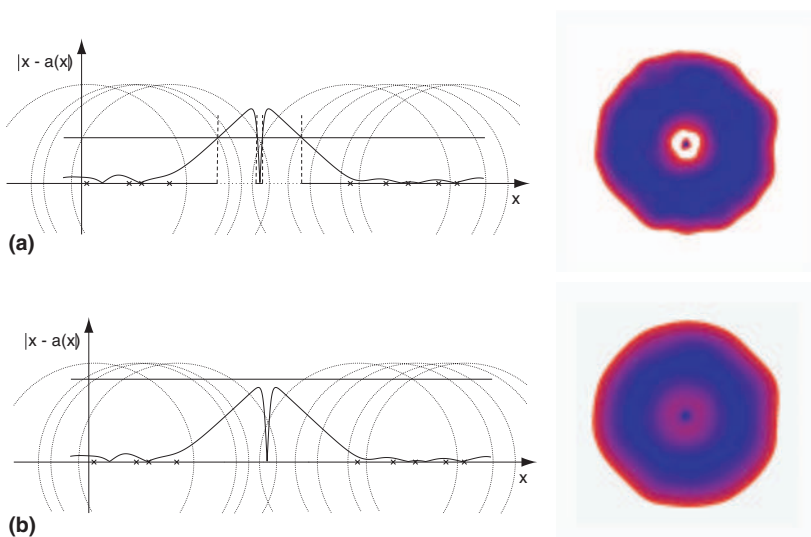


Figure 6. The enclosing ball structure just covers the hole in the point set. If the off-center value is too small (a), an island appears, however, we can estimate a sufficient condition for practical cases (b) so that no islands appear. Note that this entails that surface is closed wherever it is contained in the enclosing sphere structure.

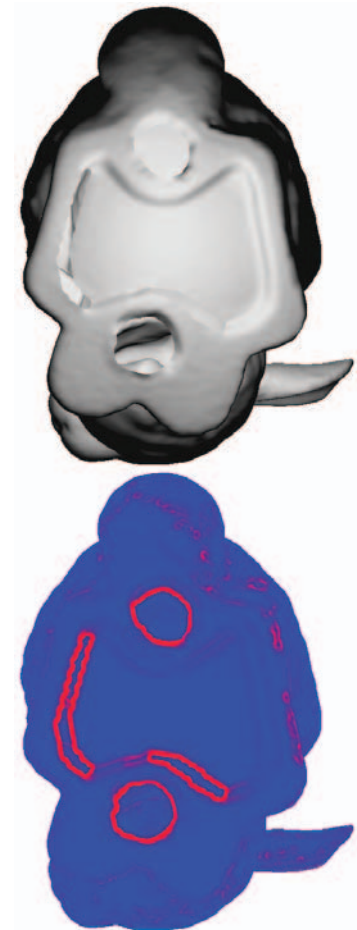


Figure 7. Renderings of the Stanford bunny model showing the holes in the bottom. The first image shows a rendering resulting from ray casting including shadow rays. The second image is color coded depicting the offcenter value.