



Fig. 4. Spherical surface area.

IV. CONCLUSION

In this paper, we propose the method of determining the surface type of each block for the depth image segmented by blocks. In the depth image segmented by blocks, we model the the plane and the spherical surface to find the plane and the spherical surface which is closest to the surface consisting of the depths in captured depth image. Then, we obtain the error between the measured depth and the depth of the modeled plane or the depth of the modeled spherical surface. We determine whether the surface of the block is the plane or the spherical surface using the error. The proposed method can be coding the depth image more efficiently. The proposed method may be used in various areas such as the object detection.

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