# Trip to Old Astronomical Map: Development and Application of Equation to Convert from 2D to 3D

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From ancient times to modern times, Observation Astronomy have left us various astronomical charts. Among these charts is china's celestial map known to be the oldest ever. But a chart named 'Cheonsangyeoulchabunya-map' seems to have been made more than 200 years earlier than this. In terms of the map which was the first thing, it has a huge significance in History of Observation Astronomy. In addition to scientific meaning, this map can be applied in various ways. It can provide a yardstick for judgment for those days' Observation Astronomy-technology. And also can show relationship of three countries at east Asia -Korea, China and Japan-. Actually, in those countries have old-astronomy maps that seem like which Korea make. Naturally, those maps have similar expression way so that they can be a good-comparison target. Till now, some studies had researched for Korea's 'map'. However, those studies almost belong to Historical or Cultural study. Of course, astronomical analysis attempts and studies were preceded. But it was just original map -2Dimension thing- that their analysis's base is. This paper do change from 2D to 3D map and analysis that changed map. When maps are changed, we can compare old-astronomical celestial bodies' position with nowadays or in those days -estimate with calculated-.

**Awards Won:**