

Erratum to: The Effects of the Earth's Curvature on Gravity and Geoid Calculations

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Erratum to: Pure Appl Geophys

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When this article was published online first, unfortunately there have been mistakes in the text and in the legend to Fig. 8.

Opposite of Fig. 3, right column eighteenth line: “in the Cartesian $-2,910.6858$ km” should read “in the Cartesian $-2,910.6838$ km”.

Legend to Fig. 8, second line: “Spherical $4.496580E$, $4.496580N$ ” should read “Spherical $4.49658^{\circ}E$, $4.49658^{\circ}N$ ”.

Unfortunately, an error occurred in Fig. 4 and Fig. 9. The correct Fig. 4 and Fig. 9 are given on the next page.

The online version of the original article can be found under
doi:[10.1007/s00024-011-0353-8](https://doi.org/10.1007/s00024-011-0353-8).

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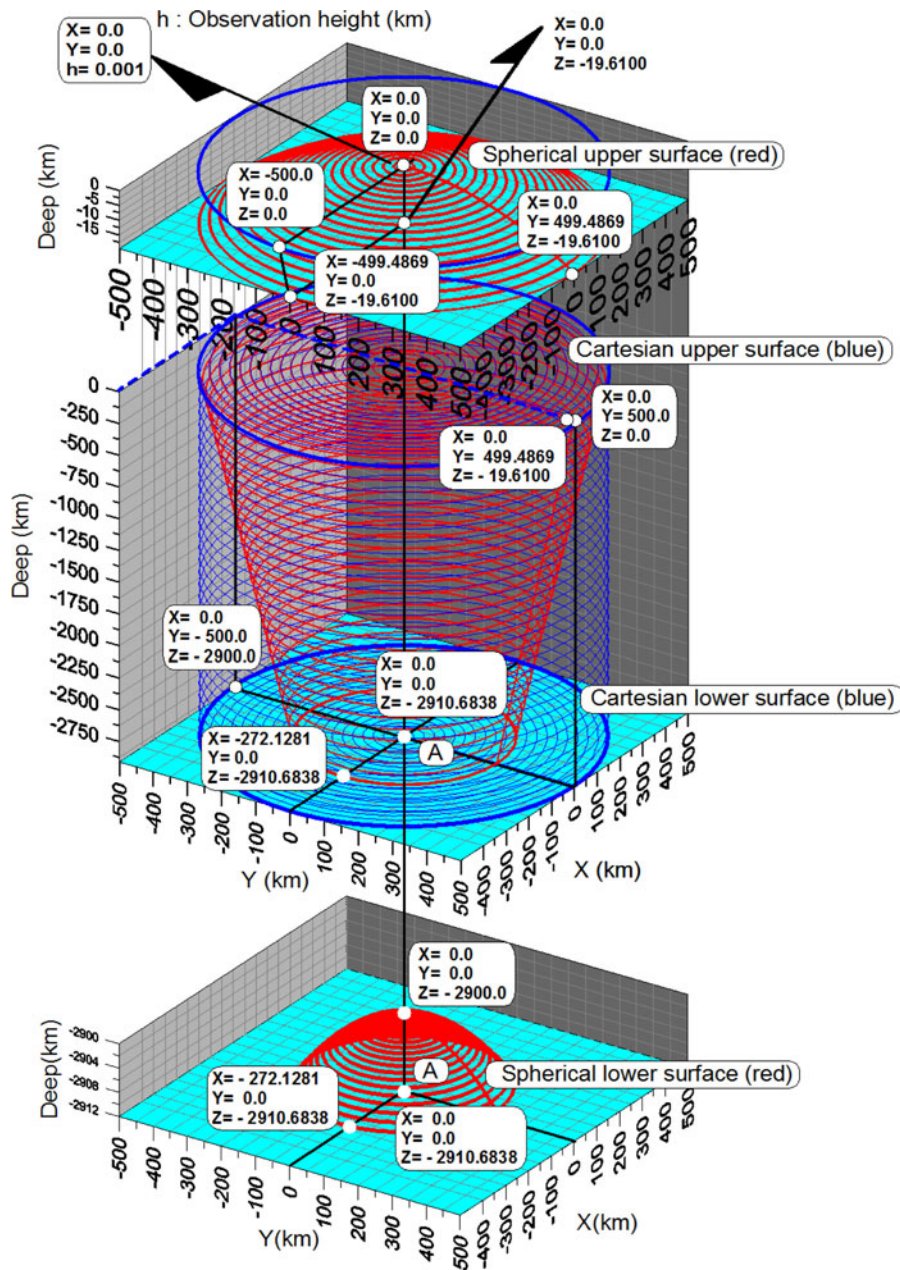


Figure 4

Model geometry of the cylinder. It can be seen how the cylinder in Cartesian coordinates (blue) is tapered into spherical coordinates (red) with the depth to the Earth's central point. Density difference of the cylinder: -0.2 g/cm^3 . Cartesian radius of the upper and lower surface: 500 km. Cartesian and spherical depth of the upper surface 0 km. Cartesian and spherical depth of the lower surface $-2,900 \text{ km}$. Spherical radius of the upper and lower surface 4.49658° . Spherical radius of the upper surface from $4.49658^\circ = 500 \text{ km}$ transformed into Cartesian is 499.4869 km (red). Spherical radius of the lower surface from $4.49658^\circ = 500 \text{ km}$ transformed into Cartesian 272.1281 km (red). Spherical depth of the lower surface from $-2,900 \text{ km}$ transformed into Cartesian $-2,910.6838 \text{ km}$ (red). 1° has been set to 111.19562 km

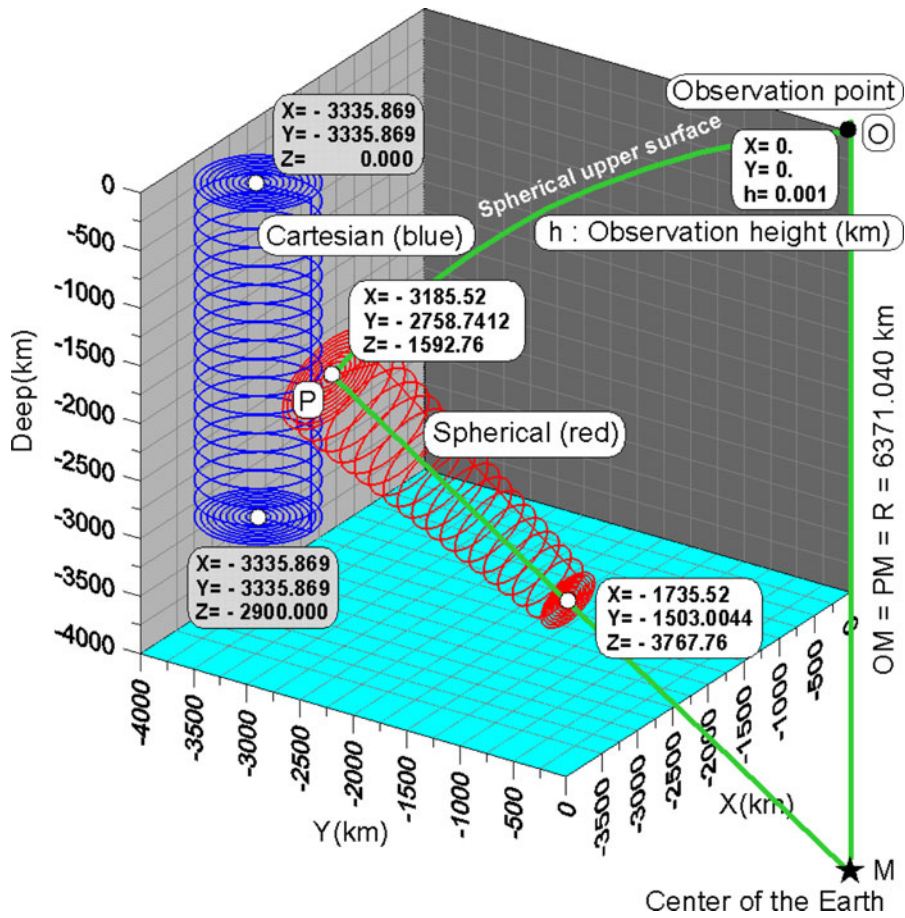


Figure 9

Position of the *spherical cylinder (red)* to the observation point. Spherical 30°E, 30°N. Cartesian 3,335.869 km E, 3,335.869 km N. (Only for demonstration. No gravity calculation)

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