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Atmospheric angular momentum variations of Venus

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The atmospheric angular momentum of Venus varies due to the dynamic interaction of the atmosphere with the solid planet and this is reflected in the changes of solid planet's rotation. Here we study the distribution and variation of the global atmospheric angular momentum of Venus with the help of the General Circulation Model of the Laboratoire de Meteorologie Dynamique. The major atmospheric angular momentum variations occur over a solar day (117 days) due to the diurnal variations of the zonal winds. In addition, the deviations from the uniform rotation (Length-of-Day variations) and the motion of the rotation axis in a reference frame tied to the planet (Polar motion) will be presented.