

## 金星大気の微量成分分布：大気大循環モデルを用いた計算

### Distribution of minor constituents in Venus' atmosphere calculated by an atmospheric general circulation model

\*桑山 慎也<sup>1</sup>、はしもと じょーじ<sup>1</sup>、樫村 博基<sup>2</sup>、杉本 憲彦<sup>3</sup>、高木 征弘<sup>4</sup>

\*KUWAYAMA Shinya<sup>1</sup>, George L HASHIMOTO<sup>1</sup>, Hiroki Kashimura<sup>2</sup>, Norihiko Sugimoto<sup>3</sup>, Masahiro Takagi<sup>4</sup>

1. 岡山大学大学院自然科学研究科、2. 神戸大学大学院理学研究科、3. 慶應義塾大学法学部、4. 京都産業大学大学院理学研究科

1. Department of Earth Sciences, Okayama University, 2. Department of Earth Sciences, Kobe University, 3. Department of Law, Keio University, 4. Department of Earth Sciences, Kyoto Sangyo University

Venus is covered with thick clouds of sulfuric acid droplets, and the atmospheric motion below the cloud tops is hidden from observation. However, some minor constituents in the lower atmosphere are observed from above the clouds. Since distributions of materials are affected by advection, we may infer the atmospheric circulation from the distribution of minor constituents. In this study, we have developed an atmospheric general circulation model with chemistry in Venus' atmosphere, and calculated three-dimensional distributions of CO, H<sub>2</sub>O, and H<sub>2</sub>SO<sub>4</sub>. The general circulation in Venus' atmosphere is examined based on a comparison of the calculated distribution and observation.

キーワード：金星、大気の運動、物質循環

Keywords: Venus, general circulation, material circulation