

## ロナクレーター堆積物を用いたインドモンスーン復元

### Indian monsoon variations obtained from Lonar crater lake in the Deccan Plateau, India

中村 淳路<sup>1\*</sup>, 横山 祐典<sup>1</sup>, 松井 孝典<sup>2</sup>, 関根 康人<sup>3</sup>, 後藤 和久<sup>2</sup>, 小松 吾郎<sup>4</sup>, Senthil P. Kumar<sup>5</sup>, 常<sup>6</sup>, 宮入 陽介<sup>1</sup>  
NAKAMURA, Atsunori<sup>1\*</sup>, YOKOYAMA, Yusuke<sup>1</sup>, MATSUI, Takafumi<sup>2</sup>, SEKINE, Yasuhito<sup>3</sup>, GOTO, Kazuhisa<sup>2</sup>, Goro Komatsu<sup>4</sup>,  
Senthil P. Kumar<sup>5</sup>, CHANG, Yu<sup>6</sup>, MIYAIRI, Yosuke<sup>1</sup>

<sup>1</sup> 東大大気海洋研, <sup>2</sup> 千葉工業大学惑星探査研究センター, <sup>3</sup> 東大新領域創成科, <sup>4</sup> IRSPS, Univ. G.d'Annunzio, <sup>5</sup> National Geophysical Research Institute, India, <sup>6</sup> Earth and Planetary Sci., Univ. of Tokyo

<sup>1</sup> AORI, Univ. of Tokyo, <sup>2</sup> PERC, Chiba Institute of Technology, <sup>3</sup> Complexity Sci. & Eng., Univ. of Tokyo, <sup>4</sup> IRSPS, Univ. G.d'Annunzio, <sup>5</sup> National Geophysical Research Institute, India, <sup>6</sup> Earth and Planetary Sci., Univ. of Tokyo

Indian monsoon is an important component of the Earth's climate system to understand regional and global climate dynamics. Various geological archives including marine sediment records from Indian Ocean reveal evolutions of the monsoon (e.g. Clemens and Prell, 2003) yet, few reconstructions are available from the Indian sub-continent. Therefore, we study geology of Lake Lonar in the Deccan Plateau, India. Lonar crater is one of the best-preserved impact structures on Earth and there is a saline lake with depth of 6 m in the center of the crater (Maloof et al., 2010). The crater cavity is filled with breccia overlain by 30 to 100 m of unconsolidated sediment (Fudali et al., 1980). <sup>40</sup>Ar/<sup>39</sup>Ar step heating experiments of the Lonar crater melt rocks yielded a precise and statistically robust combined isochron age of 570 ± 47 ka (Jourdan et al., 2011). This suggests that Lake Lonar sediment can possibly provide the records of Indian monsoon for the last 500,000 years or more.

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