

## Interactions with Chinese planetary scientists

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IPDA Steering Committee Meeting  
2 July 2009

## Initial interactions

- Reciprocal visits between Washington University in St. Louis and Shandong University, Weihai, in 2006
  - Discuss common research interests
  - Share Washington University approach to PDS planetary data archiving (not representing NASA)
  - Assist with design of data archiving system at Shandong University

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## MOU of Scientific Cooperation

- 2007: Memorandum of Understanding between Chinese Academy of Geological Sciences and Washington University
  - Planetary science
  - Geophysics
  - Mars analog site studies

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## Continued interactions

- Tutorials and undergraduate short courses offered at Shandong University in 2007, 2008, and 2009.
- Shandong students admitted to Washington University for graduate-level courses and degrees.
- Visits to Washington University by members of Chinese Academy of Geological Sciences.
- Ongoing field studies of Tibetan saline lake deposits.

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## June 2009 Beijing Lunar Workshop

- Attended by ~50 participants
  - China: Chinese Academy of Geological Sciences (CAGS); Academy of Surveying and Mapping; Center for Space Science and Applied Research of the Chinese Academy of Sciences) and several Chinese universities (a total of 42 institutions); ChangE-1 mission
  - India: Chandrayaan mission (could not attend)
  - Japan: Kaguya mission
  - U.S.: Washington University in Saint Louis; University of Notre Dame; Brown University; Applied Physics Laboratory (not representing NASA)

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## Chinese lunar roadmap

- ChangeE-2, a spare ChangE-1 orbiter, may be placed into lunar orbit within roughly a year (2010).
- ChangE-3 will consist of a lander and rover to be launched in the next several years.
- Discussion about a robotic sample return mission is ongoing (ChangE Program Phase-III).
- The ChangE Program roadmap for the Moon will likely be the roadmap for Chinese exploration of Mars.

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## Yinghuo-1 (Mars Orbiter)

- Will detach from Phobos-Grunt spacecraft and go into elliptical orbit to make joint measurements with instruments on the Russian spacecraft.
- Yinghuo-1 team will attend PDS workshop (at Shandong University, Weihai, July 2009) hosted by Geosciences Node; focused on helping team get ready to archive expected data sets using PDS standards.
- Yinghuo-1 team expects to make the data available through the WWW.

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