

## Activity Report of Commission J November 2009 – February 2010

25 February, 2010

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### ALMA project

One of major radio astronomy project in the world is ALMA (Atacama Large Millimeter and sub-millimeter Array), which will be 66-element radio interferometer at Atacama Desert in Chile. It uses millimeter and sub-millimeter bands at 5000 meter high site. On 20 November 2009, the third ALMA antenna was brought to the Array Operations Site (AOS) at 5000m. And visibilities, which were made by correlation between received signals of two antennas, were obtained by using strong celestial objects. Closure phase analysis was done by using observed visibilities for Quasar 1924-292 and showed good stability of instrument system. A plot of closure phase is shown in Figure 1.

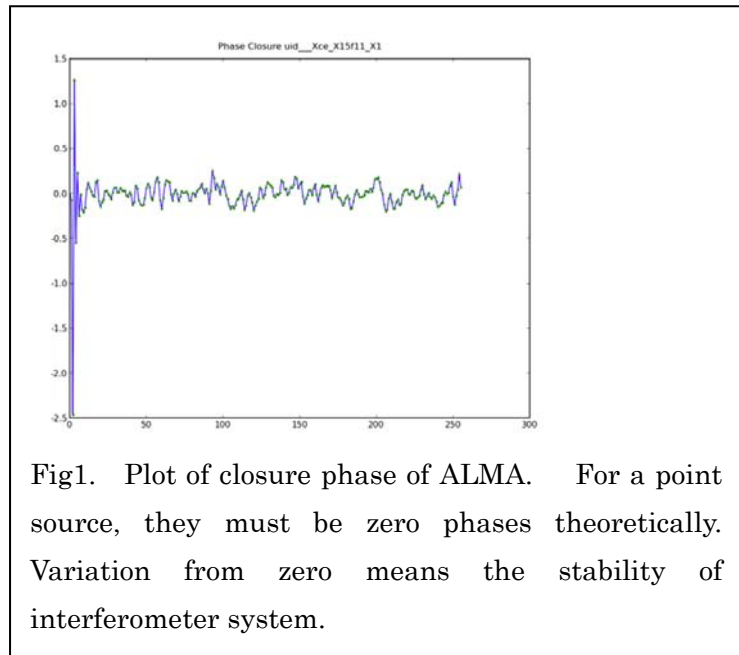


Fig1. Plot of closure phase of ALMA. For a point source, they must be zero phases theoretically. Variation from zero means the stability of interferometer system.

### Activities of meetings

#### •Symposium of Japanese VLBI consortium

Date; 3-5, December, 2009

Place; Mizusawa VLBI Observatory, National Astronomical Observatory of Japan

Aims; Exchange information of research results and station status related VLBI

research field. Especially, research plan by using Astro-G satellite, which is a space VLBI satellite, were discussed.

- ALMA-J workshop of late type stars

Date: 07-08, December, 2009

Place; National Astronomical Observatory of Japan

Aims: This meeting is to review the progress of late type star research and discuss about the strategy of research by using ALMA.

- ALMA-J workshop of galaxies

Date: 18-19, December, 2009

Place Astronomy education and research center, University of Tokyo

Aims: Discussion of research strategies for galaxy research.

- ALMA users meeting

Date: 21-23, December, 2009

Place; National Astronomical Observatory of Japan

Aims; ALMA first call for proposal will be released in 2010. This meeting aims to review the current status of ALMA construction and verifications of performances. The method of application of proposals were shown and research plans were discussed..

- Workshop of Takahagi and Hitachi 32-m telescopes

Date; 24-25, December, 2009

Place: Ibaraki University

Aims: Takahagi and Hitachi 32-m antennas are converted to radio telescopes. This meeting aims to discuss about research plans by using them

- International Winter school on the Interstellar Medium

Date: 22-26, February, 2010

Place: Hotel Kintetsu Aquavilla Ise-Shima

. Aims: Winter school for the interstellar medium aims to review the recent research results and future perspectives for graduated students and young researchers.