様式 2 (Form 2)

（2015 年 11 月改定）

国立天文台滞在型研究員報告書
Activity Report for the NAOJ Visiting Fellows Program

所　　属 (Institution)	ALMA Regional Center Allegro, Leiden University
氏　　名 (Name)	Yanett Contreras
研究課題名 (Research subject)	Star Formation
滞在期間 (Period of stay)	年　月　日～　年　月　日 2016　11　25　2016　12　10
受入責任者氏名 (NAOJ host researcher)	Patricio Sanhueza

１．滞在型研究員として国立天文台滞在中に行った活動について簡単にお書きください。
(Summarize your activities during the stay using the NAOJ Visiting Fellows Program.)

I visited NAOJ to work in the ALMA project “A survey of prestellar, high-mass cluster-forming clumps: constraining models of high-mass star formation” (2015.1.01539.S; PI: Sanhueza). I was in charge of developing an automatic data reduction script (with the help of Andres Guzman, also a visiting fellow). This script included the data combination of molecular lines from the 12 and 7 m arrays. Using the combined C18O J=2-1 data, I analyzed the filamentary structures that composed Infrared Dark Clouds. The data is certainly promising and I will finish a more quantitative analysis at my home institution.

２．今回滞在型研究員として得られた成果について簡単にお書きください。
(Summarize your research products from the stay.)

The science products correspond to cleaned images for all molecular lines for the 12 and 7 m arrays. Clean images are automatically created with an adaptive mask that evolves according to the residual. Momemts 0, 1, and 2 were also automatically created. After having these products, every person in the team can start doing scientific analysis. Proposals for ALMA Cycle 5 were also drafted.

様式 2 (Form 2)

３．この制度について何か御意見がありましたら、お書きください。 (Please provide any comments about this program.)
The program is very useful to encourage international collaborations. From this point of view, the program is a success. I also was introduced to the Japanese scientific community with which I intensively interacted (including Professors and students). A weak point could be that it does not always cover the complete amount of the stay at COSMOS. If single rooms are not available, the larger amount to use other COSMOS rooms is not included.