

滞在型研究員報告書

国立天文台滞在型研究員の方には、期間中の成果について報告をしていただくことになっております。このフォームに記入のうえ、滞在期間終了後 2 週間以内に受入責任者を通じて国立天文台総務課研究支援係へご提出ください。枠の大きさは随時変更して構いません。

なお、この報告書は研究成果の論文掲載前でも研究交流委員会の web 上に公開することがありますので、研究内容の詳細について記入していただく必要はありません。この研究の成果を学術誌等で発表するときは、その旨を謝辞に記載してください。

所 属	Institute of Astronomy, University of Cambridge
氏 名	Douglas O. Gough
受入責任者氏名	関井 隆
滞在期間	2014 年 10 月 4 日～2014 年 10 月 26 日

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。

My main activity during the stay of course was collaboration with my host, Takashi Sekii. One additional formal activity was delivering an NAOJ Colloquium, on 10 Oct 2014, which was entitled 'On the main-sequence age of the Sun'. I also interacted daily with people in NAOJ, including visitors, and discussed a variety of topics. A more systematically organized interaction was with the helio- and asteroseismology group in the Department of Astronomy, University of Tokyo. A few times each we visited each other and discussed topics of common interest.

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。

The primary purpose of the proposed collaboration with Takashi Sekii was to estimate the position and extent, in latitude, of the shear-free region in the solar tachocline. This is a very delicate matter because the seismic signal is weak; yet the dynamical implications are important. We have not yet completed the research, partly because, after discussion during the first few days, we decided to change our tactic to what we believe to be a more robust method of analysis. Nevertheless, we made substantial progress: helioseismic inversions and averaging kernels, which are the bases of our analysis, were partly recalculated and prepared. A new analysis programme was written and tested. Towards the end, we discussed near-future plans, including publication strategy.

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。

It was very generous and kind of NAOJ to give me this opportunity to visit Mitaka. I would like to express my deepest gratitude to everybody involved in this scheme.