

## Interactive comment on "A fast SWIR imager for observations of transient features in OH airglow" by P. Hannawald et al.

## Anonymous Referee #1

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Journal: AMT Title: A fast SWIR imager for observations of transient features in OH airglow Author(s): P. Hannawald et al. MS No.: amt-2015-382 MS Type: Research article

This paper describes a new type of narrow-field IR imaging system called the Fast Airglow IMager 1 (FAIM 1). The imager has been designed to record atmospheric gravity waves in the mesospheric hydroxyl nightglow from the 85 km altitude region. In particular, the system yields high signal-to-noise images of OH gravity waves at  $\sim\!0.5$ s cadence and so can provide high time-resolution of local wave dynamics.

The paper begins with a discussion of the FAIM design and its field operation. A description is then made of the preliminary reduction and analysis of the data acquired by the by FAIM instrument using a pilot set of data. The results are shown and compared

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to temperature measurements obtained by a co-located spectrograph (GRIPS).

A minor comment would be that the comparison of the FAIM images and the GRIPS 13 temperatures on Pages 13-14 and in Figure 10 is poorly described and vague. The description needs to be clarified. Otherwise, I recommend that the paper be published.

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