Geosci. Instrum. Method. Data Syst. Discuss., 3, C212–C213, 2013 www.geosci-instrum-method-data-syst-discuss.net/3/C212/2013/ © Author(s) 2013. This work is distributed under the Creative Commons Attribute 3.0 License.



## GID

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Interactive Comment

## Interactive comment on "Autonomous thermal camera system for monitoring the active lava lake at Erebus volcano, Antarctica" by N. Peters et al.

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This paper presents valuable result of the process of design and implementation of the thermal camera system for long, uninterrupted monitoring of the lava lake in the crater of Erebus volcano. Technical characteristics of the new thermal camera system are presented in every detail starting from component's brand and software solutions to power consumption and telemetry issues. Field experiment results as well as possible applications of obtained data in the interests of fundamental scientific research are discussed in a balanced way with appropriate references. The manuscript is perfectly written, structured and illustrated. It is important, that authors provide free access not only the data archive but also to the source code of main software components so that

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the experimental set can be duplicated by future researchers and maybe even configured with other hardware components. Low power consumption, usage of open source software solution, specific protection solutions from truly extreme environmental conditions (volcanic + Antarctic) as well as useful technical tricks for nearly-uninterrupted operation may have done the resulting system the very robust piece of modern engineering. At the same time this study provides an excellent starting point for future developers of various monitoring systems in geosciences. Results are of specific importance for hardware solutions to withstand extreme environmental conditions. The actual contribution is perfect for publication in GI.

Interactive comment on Geosci. Instrum. Method. Data Syst. Discuss., 3, 627, 2013.

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