

Adrian NEESEMANN

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Adrian Neesemann received his Diploma (equivalent to M.Sc.) in Geology in May 2011 from the Freie Universität Berlin, with a focus on remote sensing and planetary sciences. After a gap year in Australia, he started to work as a research associate at the Planetary Sciences and Remote Sensing Group at Freie Universität Berlin. In the course of this position, he has been an associate of NASA's DAWN Science Team since February 2013.

Since 2007, Adrian has been working on planetary image data processing, planetary mapping, and refinements of the Martian stratigraphy by extensive crater-based age dating. His present scientific research focuses on a broad range of aspects of the crater-based age determination methodology and its reliability and accuracy, in particular issues of statistical and metrological nature that influence the outcome of crater-based surface dating. In this context, he examines the influence of secondary crater contamination, the traditional subjective "cherry-picking" of crater count areas in contrast to a systematic, semi-objective selection, the influence of topography-model-related image projection distortions and resulting measurement errors, or the influence of illumination conditions on the feature detection rate, just to name a few.

Although, as a member of DAWN's "Age determination group" he is primarily studying the geologic history of asteroid Vesta and dwarf planet Ceres, he is also working on generalized planetary age dating methodologies, which includes many case studies on Mars and the Moon.