

## Corrigendum



## Corrigendum to “A numerical model of dust particle impacts during a cometary encounter with application to ESA’s Comet Interceptor mission” [Acta Astronaut. 195 (2022) 243–250]

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The authors would like to report two errors in the original article. The units of the attitude perturbations in Figure 4 and 5 should be radians instead of degrees. The scaling law exponent of the dust production rate  $Q_d$  listed in Table 4 should be 0.92 instead of 0.82. The corrected Figures and Tables are shown below (see Figs. 1 and 2 and Table 1).

We note that the errors do not change the conclusions of the article.

The authors regret this mistake and would like to apologize for any inconvenience caused.

**Table 1**

Exponents  $b$  fitted to the medians based on a power law of the form  $f(x) = a \cdot x^b$  using a least-squares fit as seen in Fig. 1.

Parameter	$Q_d$	$v$	$\Delta T$	R
Scaling law exponent $b$	0.92	3.61	2.85	3.63

### CRedit authorship contribution statement

**Nico Haslebacher:** Conceptualization, Investigation, Software, Validation, Visualization, Writing – original draft, Methodology. **Selina-Barbara Gerig:** Methodology, Writing – review & editing. **Nicolas Thomas:** Supervision, Writing – review & editing. **Raphael Marschall:** Writing – review & editing. **Vladimir Zakharov:** Writing – review & editing. **Cecilia Tubiana:** Writing – review & editing.

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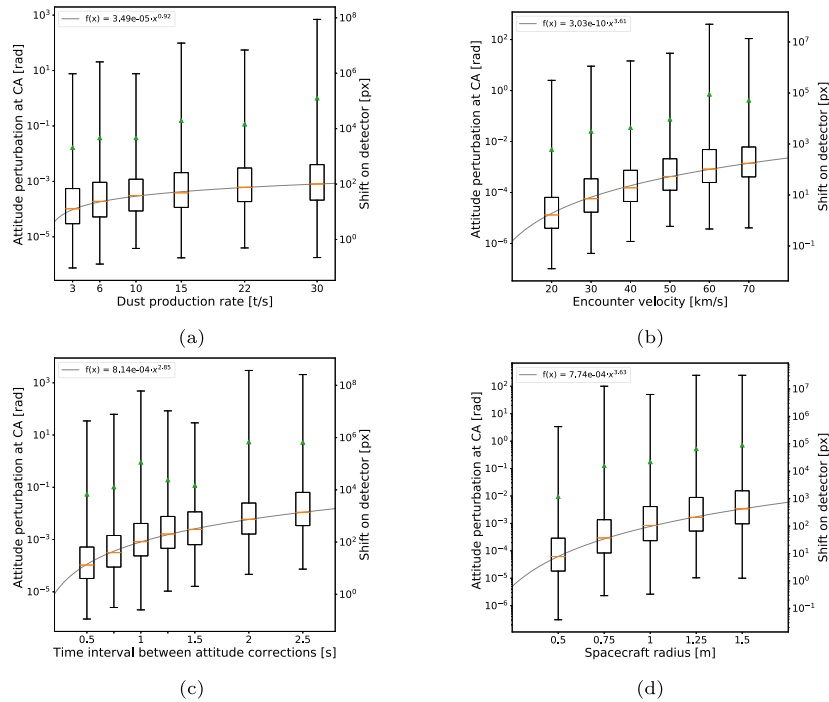
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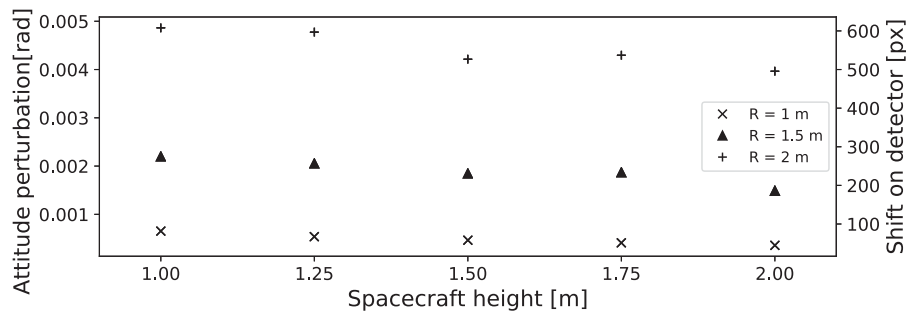
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**Fig. 1.** Boxplots showing the attitude perturbations at closest approach in dependence of (a) dust production rate, (b) encounter velocity, (c) time interval between the attitude corrections and d) spacecraft radius. The boxplots show minimum, 25th percentile, median, 75th percentile, mean (green triangle) and maximum. The trendlines are fitted to the medians based on a power law of the form  $f(x) = a \cdot x^b$  using a least-squares fit. The input parameters are set as  $\Delta T = 1$  s,  $M = 500$  kg,  $Q_d = 30000$  kg/s,  $H = 1.5$  m,  $\Delta_{CA} = 1000$  km,  $v = 60$  km/s,  $R = 1$  m.



**Fig. 2.** Median attitude perturbation at closest approach for different combinations of the spacecraft radius and height. The other input parameters are set as  $\Delta T = 1$  s,  $M = 500$  kg,  $Q_d = 30000$  kg/s,  $\Delta_{CA} = 1000$  km,  $v = 60$  km/s.