# A Monte-Carlo based approach for estimating remote sensing reflectance uncertainty

Erdem M. Karaköylü<sup>1,2</sup> Bryan Franz<sup>1</sup>

1: Ocean Biology Processing Group - NASA Goddard Space Flight Center 2: Science Applications International Corporation

#### Objectives

- Quantify uncertainty due to atmospheric correction.
- Generate remote sensing reflectance uncertainty product.
- Characterize uncertainty with respect to potential drivers

#### Introduction

- Ocean color missions are subject to pre-specified uncertainty requirements.
- Requirements are borne out of guesswork
- Typical uncertainty estimation uses problematic comparison with in-situ data;
- in-situ data sampling is potentially biased to easily accessible areas,
- difficult to separate noise from in-situ and satellite measurements
- differences in sampling scale also confounding.

This statement requires citation [?].

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Figure 1: Figure caption

#### Materials

The following materials were required to complete the research:

- Curabitur pellentesque dignissim
- Eu facilisis est tempus quis
- Duis porta consequat lorem
- Eu facilisis est tempus quis

The materials were prepared according to the steps outlined below:

- 1 Curabitur pellentesque dignissim
- 2 Eu facilisis est tempus quis
- 3 Duis porta consequat lorem
- 4 Curabitur pellentesque dignissim

#### Methods

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#### Important Result

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#### Mathematical Section

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$$E = mc^2 (1)$$

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$$\cos^3 \theta = \frac{1}{4} \cos \theta + \frac{3}{4} \cos 3\theta \tag{2}$$

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#### Results

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### Image

Figure 2: Figure caption

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Treatments	Response 1	Response 2
Treatment 1	0.0003262	0.562
Treatment 2	0.0015681	0.910
Treatment 3	0.0009271	0.296

#### Conclusion

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#### Additional Information

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- Curabitur pellentesque dignissim
- Eu facilisis est tempus quis
- Duis porta consequat lorem

#### References

#### Acknowledgements

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#### Contact Information

- Web: oceancolor.gsfc.nasa.gov
- Email: erdem.m.karakoylu@nasa.gov
- Phone: +1 (301) 286 0501

