# Article information:

Estimation of Particulate Organic Carbon in the Ocean from Satellite Remote Sensing | Science
<https://www.science.org/doi/abs/10.1126/science.285.5425.239>

# Article summary:

1. Measurements from the Southern Ocean show that particulate organic carbon (POC) concentration is correlated with optical backscattering by particles suspended in seawater.

2. Satellite imagery from SeaWiFS reveals a seasonal progression of POC, with a zonal band of elevated POC concentrations in December coinciding with the Antarctic Polar Front Zone.

3. An algorithm has been developed to estimate surface POC from satellite data of ocean color, which can be used to measure the POC pool within the top 100 meters of the entire Southern Ocean south of 40°S.

# Article rating:

May be slightly imbalanced: The article presents the information in a generally reliable way, but there are minor points of consideration that could be explored further or claims that are not fully backed by appropriate evidence. Some perspectives may also be omitted, and you are encouraged to use the research topics section to explore the topic further.

# Article analysis:

This article provides an overview of research into estimating particulate organic carbon (POC) concentrations in the ocean from satellite remote sensing. The authors present evidence that suggests a correlation between POC and optical backscattering by particles suspended in seawater, and provide an algorithm for estimating surface POC from satellite data of ocean color. The article is well-written and provides clear explanations for its claims, as well as references to previous studies on this topic.

The article does not appear to be biased or one-sided, as it presents both sides of the argument fairly and objectively. It also does not appear to contain any promotional content or partiality towards any particular viewpoint or opinion. Furthermore, all potential risks associated with this research are noted and discussed in detail throughout the article.

The only potential issue with this article is that it does not explore any counterarguments or alternative points of view regarding its claims or conclusions. While this is understandable given the scope and length of the article, it would have been beneficial if some counterarguments had been presented in order to provide a more comprehensive overview of this topic.

# Topics for further research:

* Satellite remote sensing of particulate organic carbon
* Estimating particulate organic carbon concentrations
* Optical backscattering and ocean color
* Algorithms for estimating surface POC
* Potential risks of satellite remote sensing
* Counterarguments to satellite remote sensing of POC

# Report location:

<https://www.fullpicture.app/item/96915d72d77065a96e4cc316aa28349d>