# Article information:

Atmospheric correction of satellite ocean color imagery using the ultraviolet wavelength for highly turbid waters
[https://opg.optica.org/oe/fulltext.cfm?uri=oe-20-18-20754=240957](https://opg.optica.org/oe/fulltext.cfm?uri=oe-20-18-20754&id=240957)

# Article summary:

1. An alternative atmospheric correction algorithm using the ultraviolet wavelength (UV-AC) is proposed for satellite ocean color imagery in highly turbid waters.

2. The UV-AC algorithm uses the ultraviolet band to estimate the aerosol scattering radiance empirically, and does not need any assumption of the water’s optical properties.

3. Validations by both simulated data and in situ data show that the algorithm is appropriate for retrieving water-leaving radiance in turbid waters.

# 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:

The article provides a detailed description of an alternative atmospheric correction algorithm using the ultraviolet wavelength (UV-AC) for satellite ocean color imagery in highly turbid waters. The authors provide evidence from simulations and in situ data to support their claims that this algorithm is appropriate for retrieving water-leaving radiance in turbid waters. However, there are some potential biases and missing points of consideration that should be noted when evaluating this article.

First, it is important to note that the authors do not provide any evidence or discussion regarding possible risks associated with using this algorithm, such as potential errors due to incorrect assumptions about aerosol scattering or water absorption at UV wavelengths. Additionally, while the authors provide evidence from simulations and in situ data to support their claims, they do not discuss any potential counterarguments or explore other methods of atmospheric correction that may be more suitable for certain conditions or environments. Furthermore, while the authors mention that this algorithm can be used for all current satellite ocean color sensors, they do not provide any details on how it would work with different sensors or what modifications may need to be made depending on sensor type or environment.

In conclusion, while this article provides a detailed description of an alternative atmospheric correction algorithm using the ultraviolet wavelength (UV-AC), there are some potential biases and missing points of consideration that should be noted when evaluating its trustworthiness and reliability. It is important to consider possible risks associated with using this algorithm as well as explore other methods of atmospheric correction that may be more suitable for certain conditions or environments before implementing it on a large scale.

# Topics for further research:

* Atmospheric correction algorithm risks
* Alternative atmospheric correction methods
* UV-AC algorithm limitations
* Satellite ocean color sensor modifications
* Aerosol scattering assumptions
* Water absorption at UV wavelengths

# Report location:

<https://www.fullpicture.app/item/f8badd006e3ef84260f6a1d7ae2d118a>