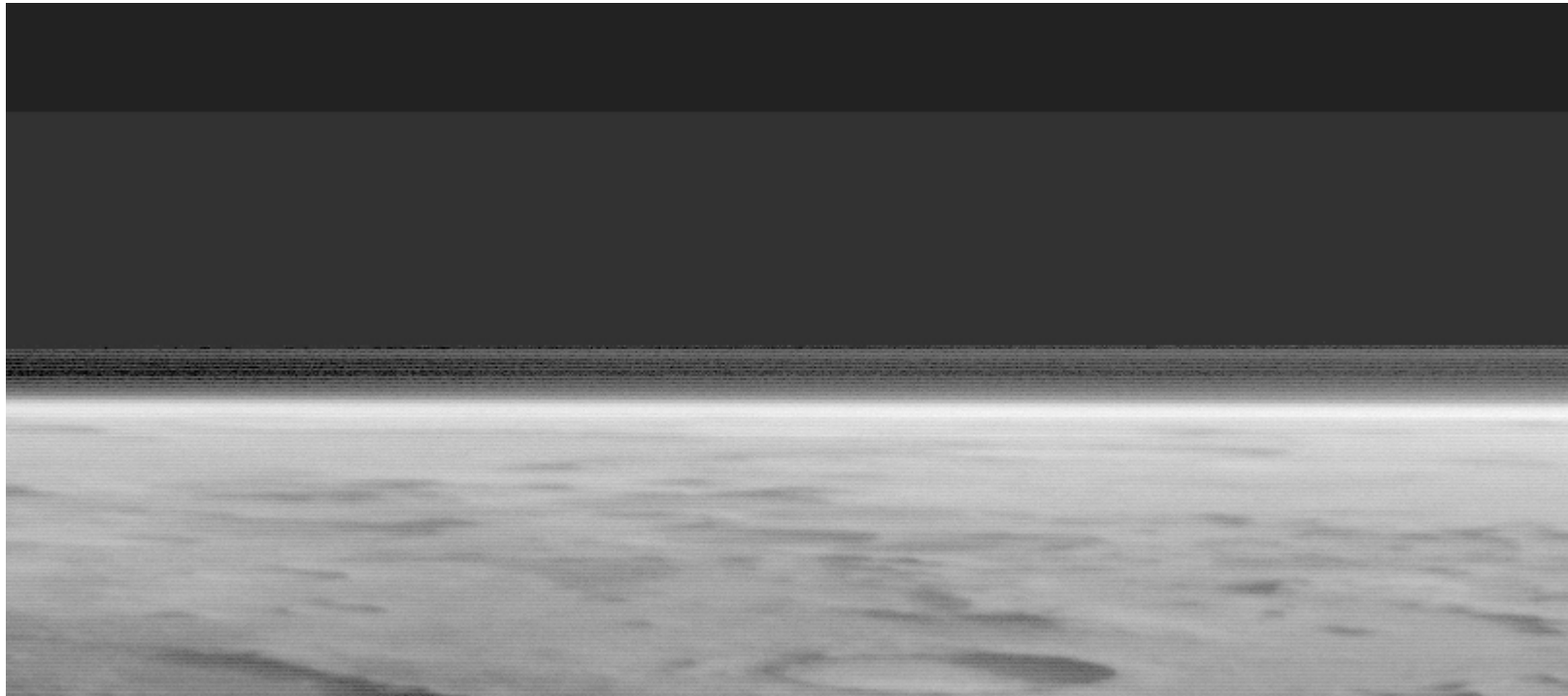


POSSIBLE INFLUENCES OF AEROSOL LOADING ON THE MEASURED COLUMNS OF MARTIAN ATMOSPHERIC CONSTITUENTS INCLUDING METHANE .

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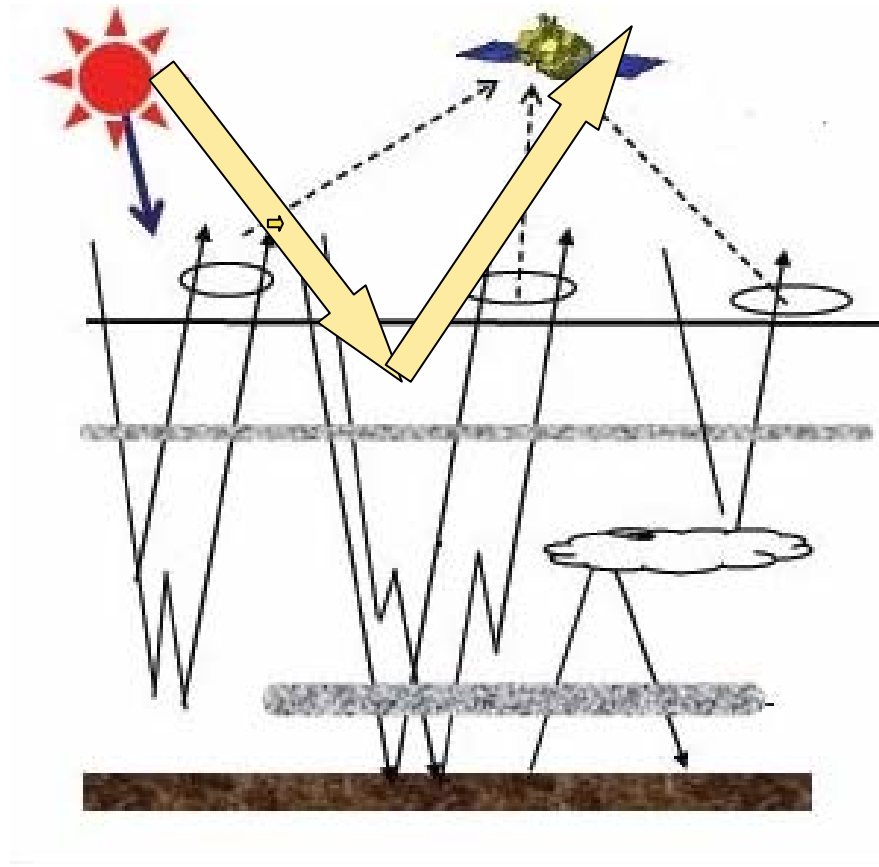


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Martian radiative transfer: adapted from GOSAT (JAXA) description.

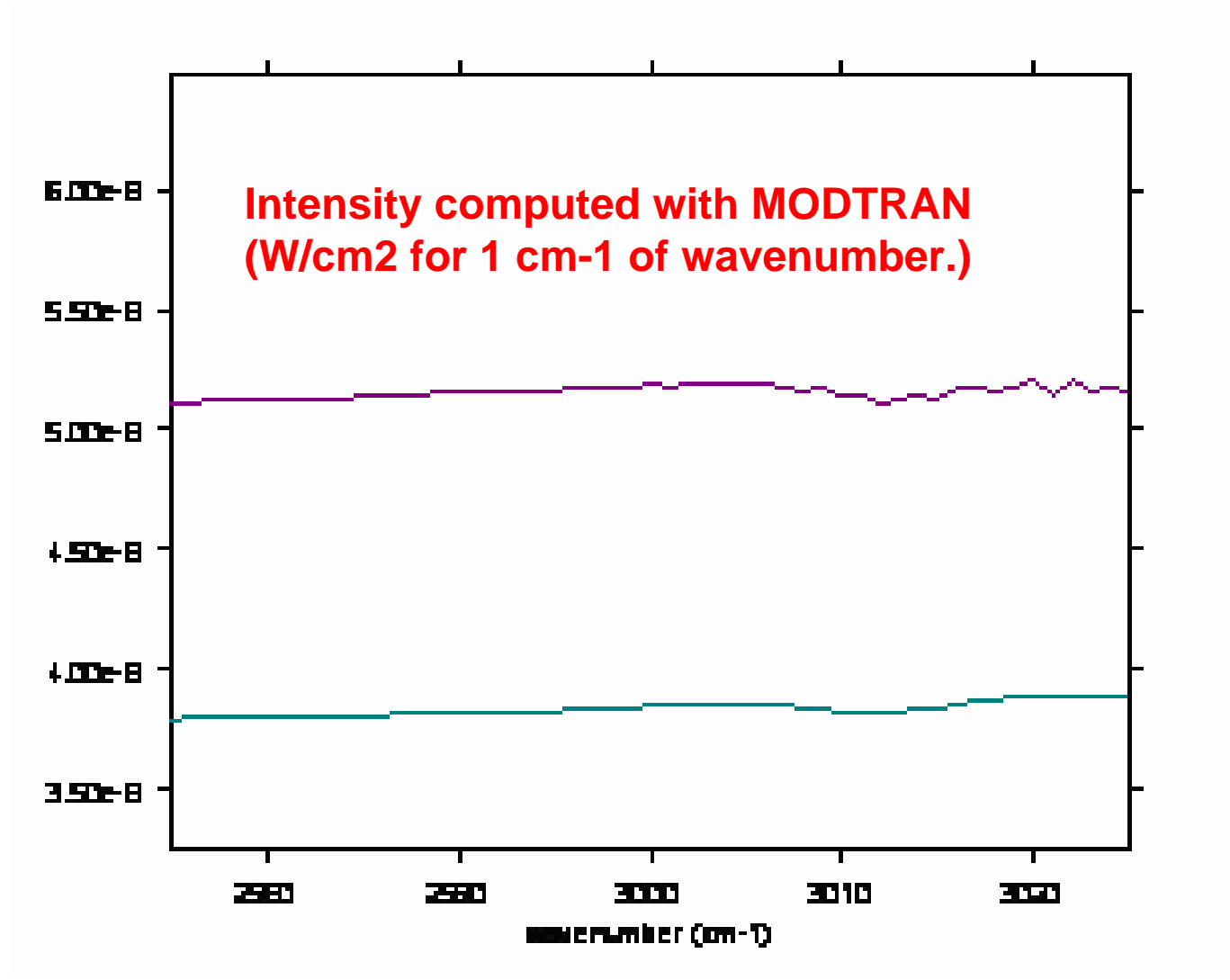


Aerosols and clouds:
If they both absorb
and reflect:
tropospheric methane
is not seen!

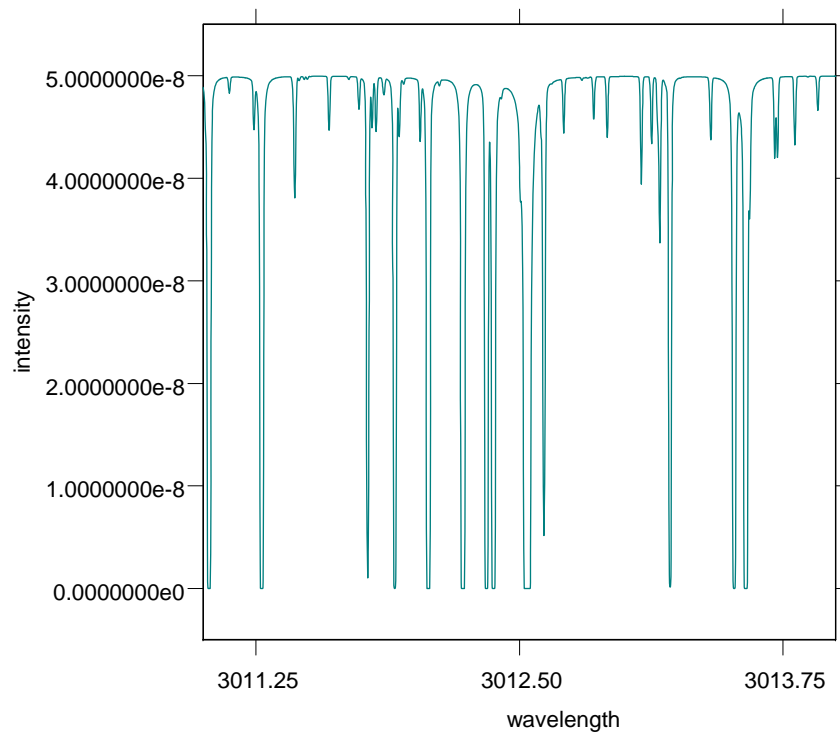
Surface albedo, can be
variable, tropospheric
aerosol: variable also.

The yellow arrow corresponds to a mechanism which is not present on earth: absorbing and reflecting aerosols in the infrared.

**Martian aerosols, even if neutral in the infrared have
An impact on signal value.**



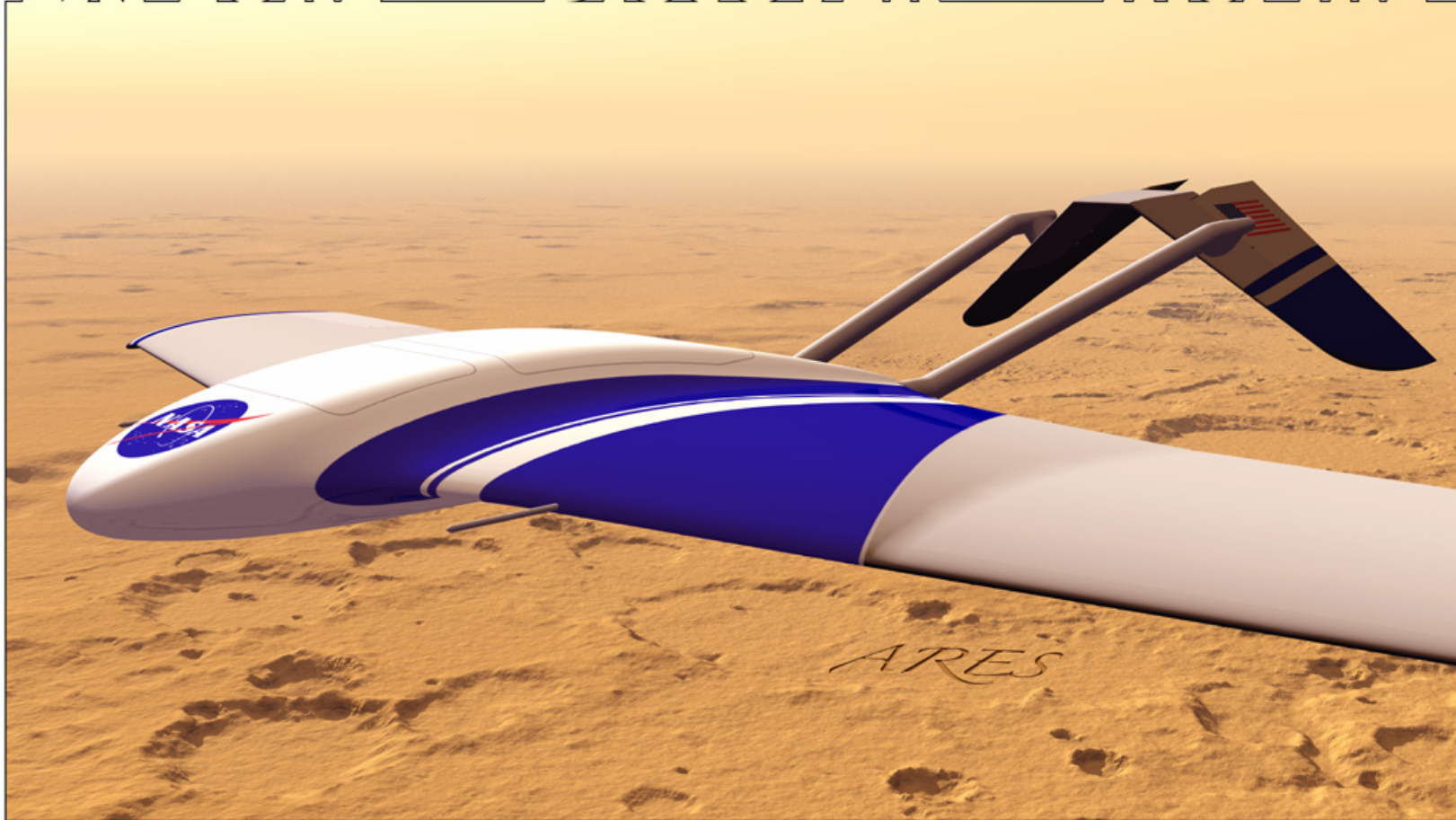
Methane signal is of course a high resolution surimposed signal.



- Question marks?
- What are the actual influences of water, spectral aerosol absorption and other organics?
- Is there really a high altitude reflective layer? What are the consequences of albedo variations?

The solution: in situ characterization of aerosols and gases together with remote cartography.

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