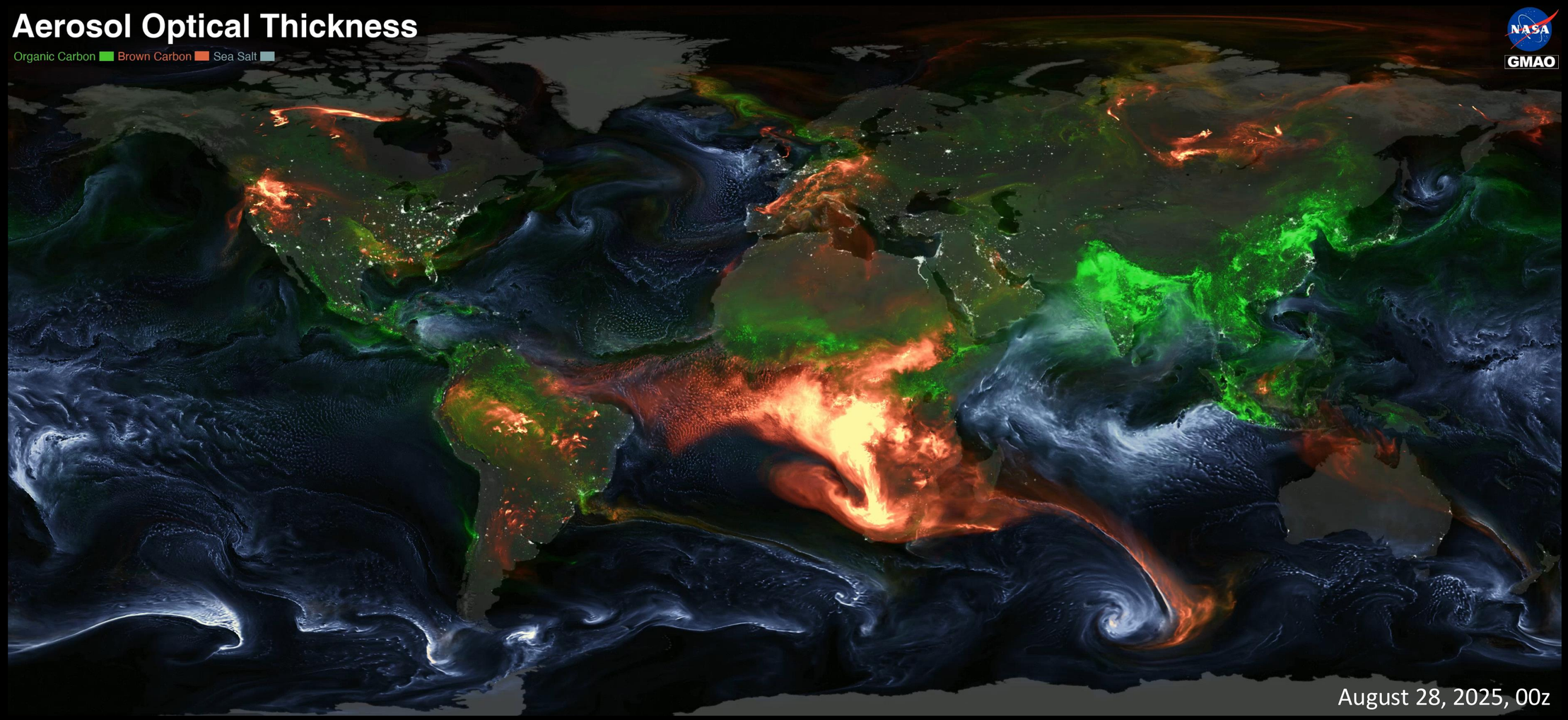
Splitting Anthropogenic and Biomass Burning Sources of Organic Carbon in GOCART-2G

NASA's GMAO has now implemented the second generation of its aerosol module, GOCART-2G, to its GEOS model. The most substantial change in this update is the split of organic carbon into components of biomass burning – also called brown carbon – and anthropogenic sources. This split allows for a more clear delineation between organic carbon sources such as wildfires (orange) and human activity (green).



Aerosol optical depth associated with organic carbon, brown carbon, and sea salt from a GEOS simulation with GOCART-2G, on August 28, 2025, at 00z. Orange shading indicates brown carbon (smoke) while green shading depicts organic carbon associated with anthropogenic emissions.