



Surf the Plumes!

Catch sight of aerosols like never before

PACE's Ocean Color Instrument and polarimeters work together to track atmospheric aerosols as they flow across the globe like invisible currents. These tiny particles, including dust, smoke, sea spray, and pollution, ride atmospheric winds while playing crucial roles in cloud formation, weather patterns, and climate regulation. By measuring how sunlight scatters off different aerosol types, PACE can determine their size, composition, and concentration as they surf through Earth's atmosphere. This detailed aerosol data helps scientists understand how human activities and natural processes affect air quality and climate. The satellite's advanced instruments reveal the complex pathways these particles follow, from their sources through their atmospheric journey to their ultimate impact on Earth's energy balance and weather systems.