

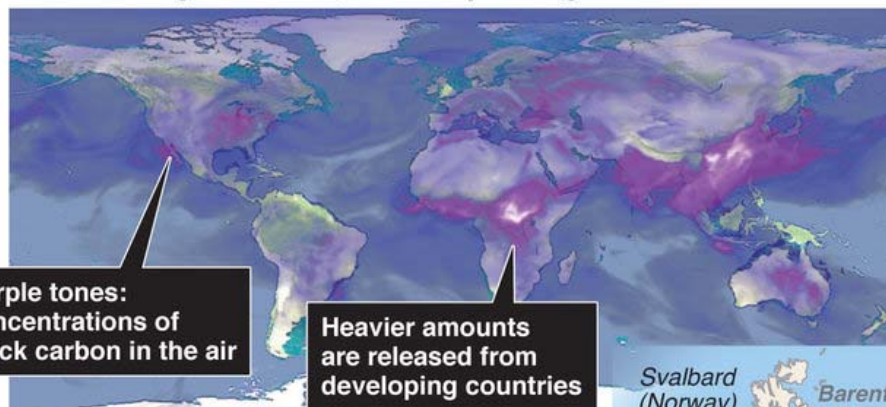
Scientists study black carbon effect in Arctic

American scientists recently measured particulate black soot that had fallen from the atmosphere onto snow fields and ice on a chain of islands above the Arctic Circle, to gauge its effect on increased melting activity.

How black carbon affects Arctic areas

- Tiny carbon particles absorb sunlight and retain heat
- When layered atop snow or ice, this speeds the melting process

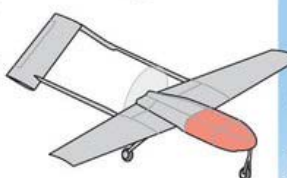
Enhanced image from NASA/Goddard Space Flight Center



- Black carbon comes from diesel engines, dirty cookstoves (burning dung or wood), open burning
- Particles stay aloft at about 4,000 ft. (1,219 m) for a week to 10 days
- Drift thousands of miles from their source

Sources: United Nations Environment Program, Encyclopedia of Earth, NASA, ESRI, MCT Photo Services
 Graphic: Robert Dorrell
 © 2011 MCT

Scanning in the air



Manta unmanned aerial vehicle carried carbon sensors to detect layers of particles.

