Mississippi River Delta

Latitude: 29.5°N  Longitude: 89.5°W
Date: January, 1985
Type of Image: Shuttle astronaut photo
Image ID #: STS051C-143-027

This image, taken in January, 1985, shows the delta of the Mississippi River where it empties into the Gulf of Mexico. The bird’s foot shape of the delta is due to the tremendous amount of sediment in the river. The branching is created as individual channels become clogged with mud, forcing the river to cut new channels. The sediment plume (a)—the muddy water surrounding the delta—is usually big during the winter (rainy season in the South) and spring (season of snow melt and run-off from the Midwest).

The delta itself shifts along the coast every few hundred years as the sediment builds up. The coastline still has the branching shape, and the long, skinny islands fanning out offshore suggest the limits of a former delta (b). Today, the Mississippi River seeks another new route, just west of this image, through the Atchafalaya River. Human construction (levees and channels) maintains the current course.

Other human-made structures in the image include the city of New Orleans (c), roads, petrochemical industry structures (d), and intracoastal waterways (e).

Additional information:
EarthKAM images and lessons:
http://www.earthkam.ucsd.edu
JSC Earth From Space image database:
http://earth.jsc.nasa.gov
NASA Spacelink:
http://spacelink.nasa.gov

New Orleans
Why is New Orleans located here? What effects does it have on the river?

low and swampy regions that are unsuitable for construction.

agricultural smoke plumes

Gulf of Mexico

c. New Orleans
Where does the Mississippi sediment come from?

b. former delta

127 Kilometers
168 Kilometers

a. sediment plume

d. petrochemical industry structures (bright white structures along the lower Mississippi)

e. intracoastal waterways

clouds

Which way is the current flowing in the Gulf of Mexico?