On 25 May 2007, the MODIS instrument obtained this spectacular image of the Atlantic Ocean's Gulf Stream. The false colors represent the brightness temperature values in °C, which combine the heat radiation received from the sea surface and from the overlying moist atmosphere. Red pixels indicate the warmer waters moving along with the current.

http://www.earsel.org/?target=earsel/imagereferences
As the Gulf Stream flows, its path does not remain constant. Instead, it changes position from day to day, meandering like the jet stream in the atmosphere or a like river on Earth. As it does so loops, called meanders, occasionally "pinches off" either to the north or to the south. When the Gulf Stream does this, it leaves behind eddies, or rings of captured water that continue rotating. These eddies consist of water that is of different temperature than the water that surrounds them, therefore they show up well on SST images. On the surface, eddies are usually about 100–300 km in diameter. However, they are not just surface features. They are cylinders of water that can reach to depths of almost 4000 m. These eddies drift very slowly, traveling less than a few kilometers, and possibly only centimeters, each day.

Animation: [http://www.suscom-maine.net/~cdorsey/core/intro.htm](http://www.suscom-maine.net/~cdorsey/core/intro.htm)

Interactive image: [http://www.classzone.com/books/earth_science/terc//content/investigations/es2403/es2403page06.cfm](http://www.classzone.com/books/earth_science/terc//content/investigations/es2403/es2403page06.cfm)