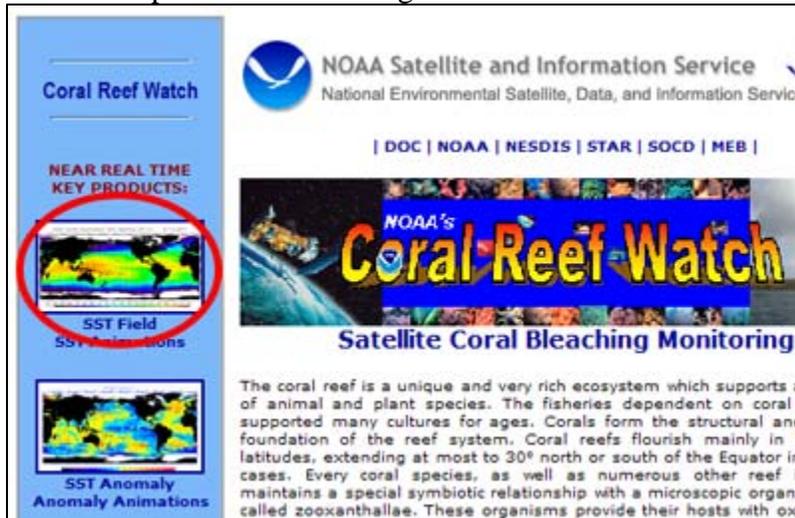




The goal of these hands-on exercises is to reinforce the concepts taught in the online tutorial, using simple examples, and to familiarize users with our website so they will know where to find each of the products. For each exercise, please follow along, starting from the main page of the NOAA Coral Reef Watch website:
<http://coralreefwatch.noaa.gov/satellite>.

SST product exercises

1. What was the temperature around the Galapagos Islands on March 4th, 2006?
 - a. On the front page of the CRW website, look for the blue navigation bar on the left-hand side. Each of the operational products is listed here: images and animations for the global products, plus Virtual Station data products.
 - b. Click on the first product in this navigation bar: **SST Field**.



- c. This takes you to this year's page for the sea surface temperature product. The image at the top will show the latest global SST, and the table underneath links to archived images for the current year.

NOAA Satellites and Information
 National Environmental Satellite, Data, and Information Service
 Office of Satellite Data Processing & Distribution

Information Processing Division

Product Systems Branch | Computer Operations Branch | CLASS

Current Operational 50 km Nighttime SST Charts for the year 2007

Click on the map to go to your region of interest.

NOAA/NESDIS 50 km Nighttime SST (C), 12/10/2007

For information about these images, go to the [methodology](#) webpage.

January	1	5	9	13	15	20	23	26	30
February	3	5	10	13	17	20	23	27	

- d. Scroll down this page, until you get to the bottom of the archive table. You will see links to previous years; click on **2006 50km Nighttime SSTs** to navigate to that year.



- e. Here you will see links to the global images, two per week for the whole year. Find the link for **March 4th**, and click to access the global image. Locate the Galapagos Islands, off the west coast of South America.



- f. Using the color bar at the bottom of the image, determine the sea surface temperature in the pixels closest to the Galapagos Islands. (Look at Answer #1 on the answer page to see if you got it right!)

2. Which summer was hotter in US Virgin Islands: 2004 or 2005? Look at the entire summer season, not just the maximum temperature.

- a. The easiest way to answer this question is to use the time series graphs for the USVI Virtual Station. Return to the website's front page using your browser's "Back" button, and scroll down to find **Time Series at 24 Sites** in the left-hand navigation bar. Click on the **Current** icon.

The screenshot shows a navigation menu on the left with the following items: 'Coral Bleaching Virtual Stations', 'Current' (circled in red), 'Retrospective', 'Time Series at 24 Sites', 'SST and DHW', 'Retrospective SST', and 'Subscribe E-mail Alert Alert Summaries'. The main content area includes a photo of coral labeled 'Bleached Brain Coral', a paragraph about coral bleaching events, and a 'MARK TRAIL' logo.

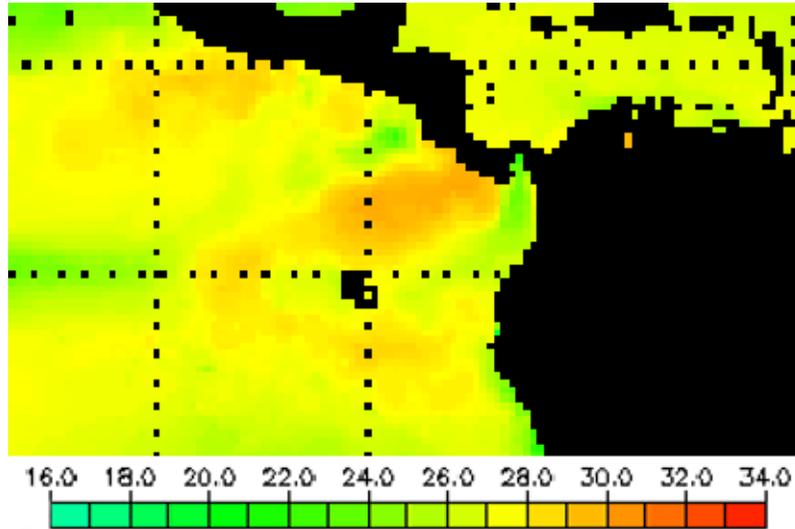
- b. This takes you to a page that lists our 24 Virtual Station sites around the world. Find the cell in the table that says **Virgin Islands, US**. Below the title will be a link that says **Graphs**; click on that link.

<p>Virgin Islands, US</p> <p>Graphs Data* Alerts</p>	<p>American Samoa-ofu</p> <p>Graphs Data* Alerts</p>
<p>Glovers, Belize</p> <p>Graphs Data* Alerts</p>	<p>Tahiti-Moorea</p> <p>Graphs Data* Alerts</p>

- c. This page shows time series graphs for the US Virgin Islands pixel, starting in 2000. Find the 2004 and 2005 graphs, and compare the summer seasons. Remember that the dark-blue line shows the sea surface temperature from NOAA satellites. Which year had the warmer summer? (*See #2 on the answer page.*)

SST PRODUCT ANSWER SHEET

1. The pixels closest to the Galapagos are pale green to yellow, which indicates temperatures around 27°C.



2. The summer of 2005 was consistently above average throughout the spring and summer, definitely warmer than 2004. In fact, there was significant coral bleaching in the US Virgin Islands in late summer 2005.

