



The goal of these hands-on exercises is to reinforce the concepts taught in the online tutorial, 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>.

Bleaching Threshold exercise

1. For the Oahu/Maui Virtual Station, which month is the warmest? What is the maximum monthly mean and what is the bleaching threshold temperature?

- a. We will answer this question by looking at the time series graphs. On the CRW website's front page, scroll down to find **Time Series at 24 Sites** in the left-hand navigation bar. Click on the **Current** icon.



- b. On this page, you will see each of the operational Virtual Stations listed. Find the cell in the table that says **Oahu-Mau, HI**. Below the title will be a link that says **Graphs**; click on that link.

<u>Oahu-Maui, HI</u> Graphs Data* Alerts	<u>Enewetok</u> Graphs Data* Alerts
<u>Palmyra Atoll</u> Graphs Data* Alerts	<u>Palau</u> Graphs Data* Alerts

- c. These graphs show the time series data at this station, with the mean for each month plotted as a light-blue cross. Use the graphs to answer these questions: Which month is the warmest on average? What is the maximum monthly mean? What is the bleaching threshold temperature? Hint: try using the 2000 graph at the bottom of the page, so you can clearly see the monthly means. Note that these values are fixed in that they do not change from year to year. (*see next page for the answer sheet.*)

ANSWER SHEET: Bleaching Threshold

1. The warmest month for the Oahu-Maui pixel, on average, is September. The mean for September is 27°C, so that is the maximum monthly mean (MMM). Note that the MMM is also depicted as a dashed light-blue line. The bleaching threshold temperature is 1°C above the MMM; so for the Oahu-Maui Virtual Station, the bleaching threshold is 28°C (shown as the solid light-blue line).

