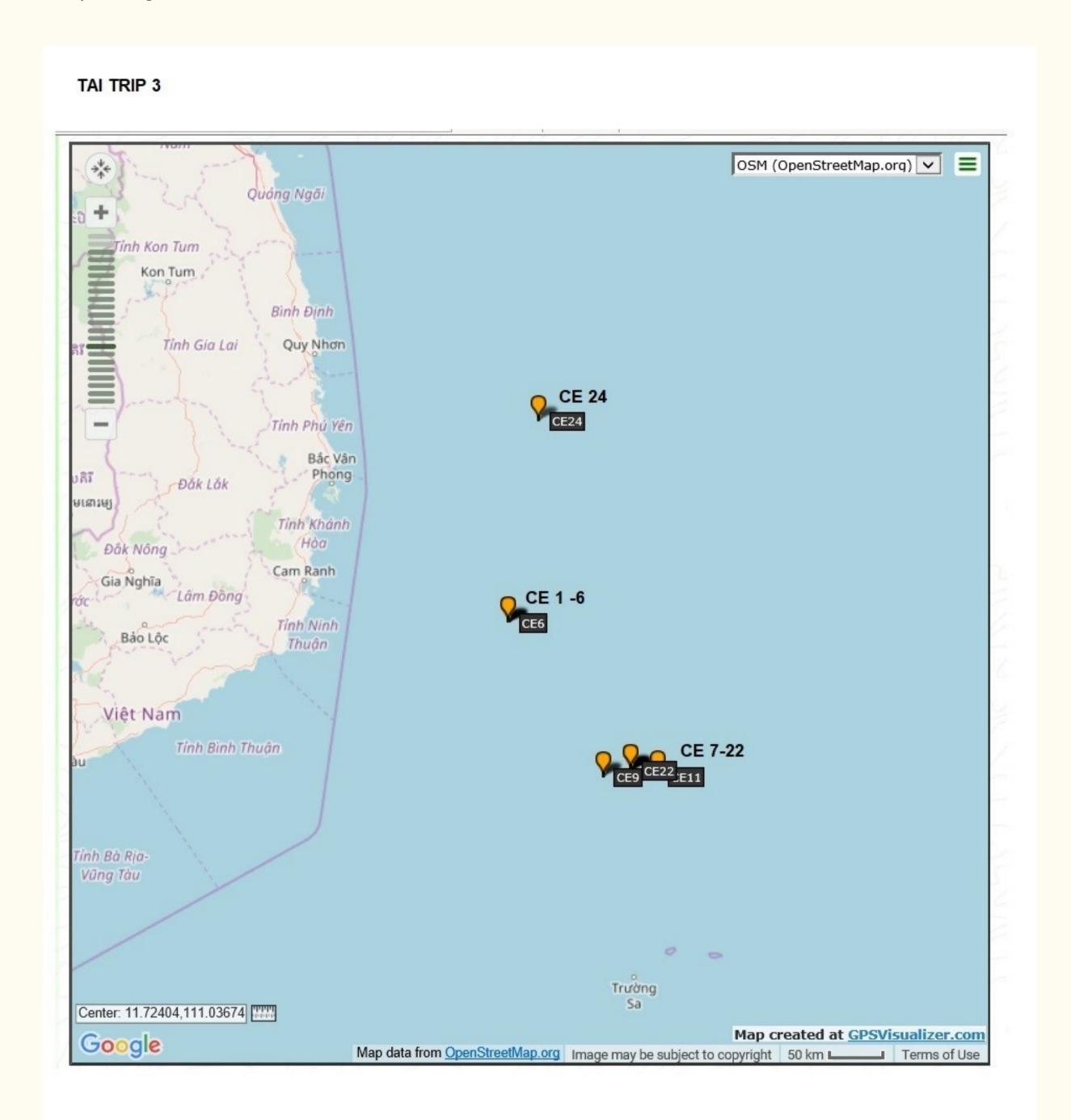


SEPTEMBER 30, 2019

## THIRD ROUND OF COPPA TRIPS RETURN SUCCESSFULLY TO NHA **TRANG**

September 25, 2019. The 2 handline tuna and swordfish vessels conducting trials with the Crew Observer Photographic Protocol Application (COPPA) have returned from their third trips and submitted the first fully documented Trip Reports.

The simple Android app allows fishers to collect data on their catch quickly and take photos of the catch as needed. As the data and photos are entered into the Android device the time, date and GPS location of the catch event are recorded automatically by the app. The data, photos and catch information can then be used by fishery managers to supplement official onboard observer data, develop measures to conserve catch species and evaluate the effect the fishery may have on bycatch species.



Actual trip map from Trip 3, location info changed slightly for proprietary reasons

One of the unexpected challenges found with using an Android platform was acquiring satellite linkage for GPS location service. The Android devices are factory set to use WIFI, cellphone and GPS satellites to locate the device but there is no WIFI or cell signal at sea. The default settings also lead the operator to go to "save battery" mode whenever the device's battery is low. Using this feature resets the device to a 10 second "sleep" function. This makes acquiring a GPS satellite at sea impossible.



With trial, error and training the fishers now understand how to set the devices to find location by "GPS only" and to

reset the sleep function to 30 minutes in the case of an accidental reset due to low battery. The Sea Delight team also installed a separate satellite location app in the devices that allows the fishers to see in real time how may satellites are available above them and to provide a solid GPS link for using COPPA at sea. Sea Delight will evaluate the results of the next trip when the vessels return in mid-October and then begin expanding

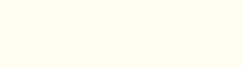
W/kg Longitude Latitude Date/Time L/cm SPECIES #

the COPPA program to more handline tuna and swordfish vessels in Nha Trang and in the other ports in Phu Yen and

Binh Din provinces. As always, the progress of this program will be reported here.

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