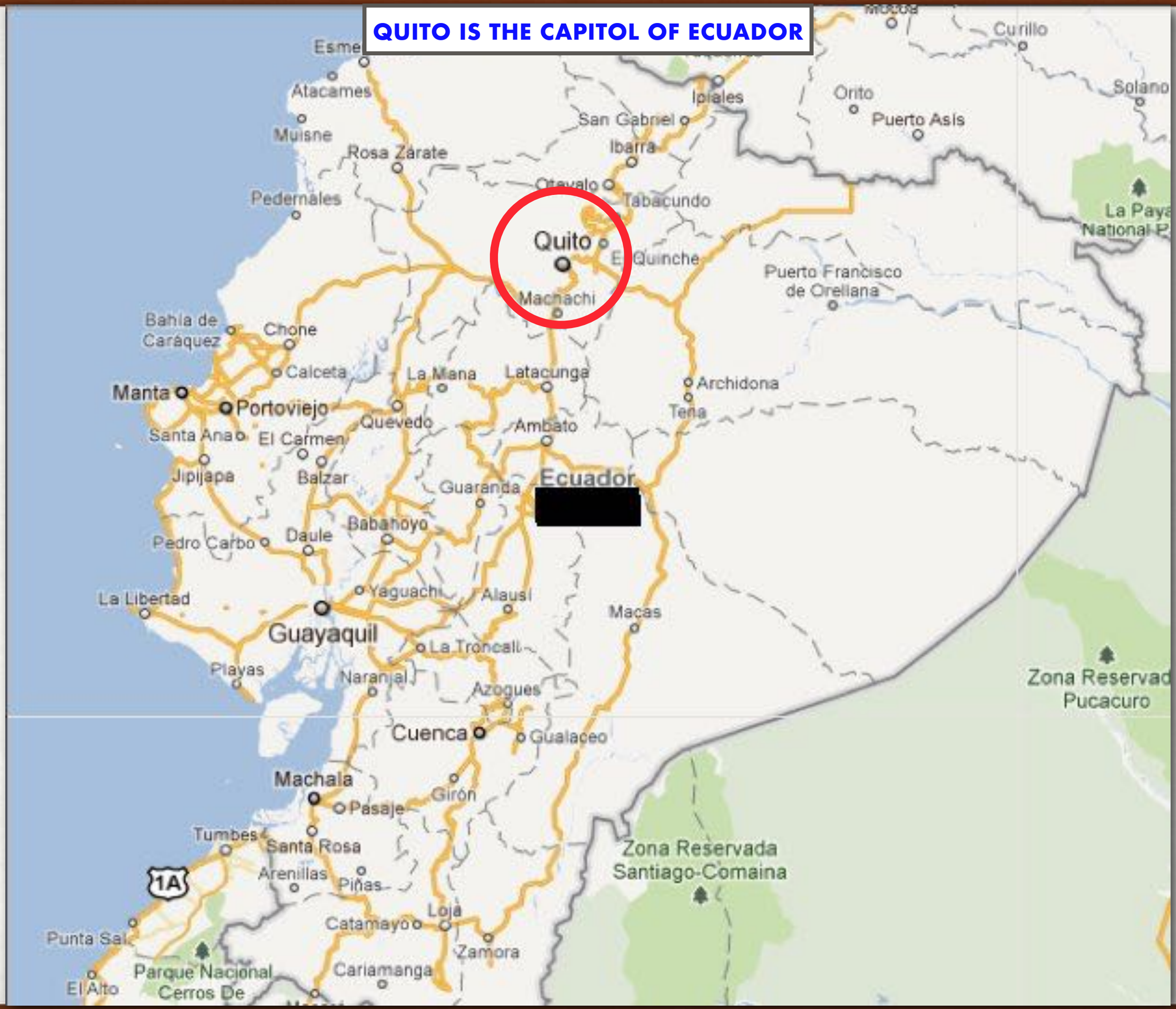
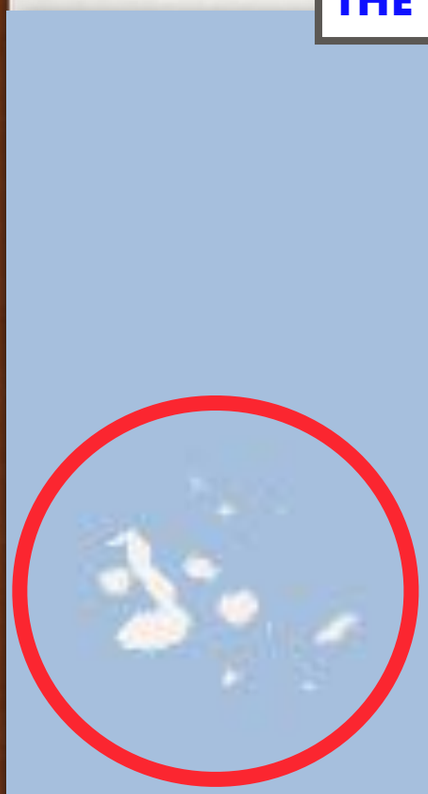
THE LOGISTICS OF THE TRIP TO THE GALAPAGOS ISLANDS

ECUADOR IS BOUNDED BY COLOMBIA TO THE NORTH AND PERU TO THE SOUTH

QUITO IS THE CAPITOL OF ECUADOR



THE GALAPAGOS ISLANDS ARE LOCATED 1000K DUE WEST OF THE ECUADOR COAST



Tuluá
Buenaventura
Ibagué
Villavicencio
Colombia
Neiva
Cali
Popayán
Pitalito
Tumaco
Pasto
Florencia
Esmeraldas
Puerto Asis
Rosa Zárate
Quito
Chone
Portoviejo
Ecuador
El Carmen
La Libertad
Guayaquil
Machala
Cuenca
Iquitos
Leticia
Tumbes
Loja
Huangala
Paita
Chulucanas
Piura
Cartagena
Tarapoto
Cajamarca
Cruzeiro do Sul
Trujillo
Pucalpa
Vitória
Acre
Chimbote
Huaraz
Barranca
Perú
Huaral
Tarma
Pu


GALAPAGOS EXPERIENCE
MARCHENA
TOWER
SANTIAGO
BARTOLOME
SEYMOUR
BALTRA
SANTA CRUZ
SANTA FE
FERNANDINA
ISABELA
PINZON
ECUADOR
GALAPAGOS

THE GALAPAGOS ISLANDS LIE ON THE EQUATOR

DAY 1....FLY FROM QUITO OUT TO THE GALAPAGOS ISLANDS

DAY 1....LAND AT BALTRA AIRPORT ON THE GALAPAGOS ISLANDS

Isla Santa Cruz

GOBIERNO MUNICIPAL
DE SANTA CRUZ

Santa Cruz

Canal de Itabaca

Baltra

Usted está aqui

42 Km

Los Gemelos

Cerro Crocker

Cerro Mesa

Media Luna

Puntudo

Santa Rosa

El Carmen

Camote

Cascajo

Reserva "El Chato"

Guayabillos

Bellavista

Playa El Garrapatero

Puerto Ayora

Playa Tortuga Bay

Ruta Ciclistica
Carretera
Población
Sitios de visita
Usted está aqui

DAY 1....COACH AND FERRY FROM BALTRA AIRPORT DOWN TO PUERTO AYORA


COOP. CITY

DAY 1....PUERTO AYORA

DAY 1....PUERTO AYORA

DAY 1....PUERTO AYORA

DAY 1....PUERTO AYORA

DAY 1....PUERTO AYORA

DAY 1....PUERTO AYORA

DAY 1....PUERTO AYORA.....LONESOME GEORGE DIED IN 2012

El Solitario George / *Lonesome George*

El Solitario George es el último sobreviviente de la dinastía de tortugas terrestres de la Isla Pinta. Fue encontrado en diciembre de 1971 y trasladado a la Estación Científica Charles Darwin en marzo de 1972. Todos los esfuerzos por encontrar otros ejemplares de la isla han sido en vano. Hoy en día comparte el corral con dos tortugas hembras de la población del volcán Wolf.

Lonesome George is the last survivor of the dynasty of land tortoises from Pinta Island. He was found in December 1971 and taken to the Charles Darwin Research Station in March 1972.
All efforts to find other specimens from that island have been in vain. He is now sharing his pen with two female tortoises of the population from Wolf Volcano.

DAY 1....PUERTO AYORA

Lonesome George

He was the only single male of the species “Geochelone abingdoni” tortoise left in the world. Lonesome George was immediately brought into captivity at the Charles Darwin Research Station (CDRS) on the island of Santa Cruz where he was housed with two female tortoises from a species found on the neighbouring island of Isabela.

Lonesome George, weighed 90kg (14st 2lb) was a native of Pinta

George was aged between 90 and 100, when he

Died in 2012

DAY 1....PUERTO AYORA

DAY 1....PUERTO AYORA

DAY 1....TRANSIT BY RIB FROM PUERTO AYORA TO THE SHIP

DAY 1....TRANSIT BY RIB FROM PUERTO AYORA TO THE SHIP

DAY 1....TRANSIT BY RIB FROM PUERTO AYORA TO THE SHIP

DAY 1....TRANSIT BY RIB FROM PUERTO AYORA TO THE SHIP

DAY 1....THE SHIP.....ISABELA II

DAY 1....THE SHIP.....ISABELA II

DAY 1....THE SHIP.....ISABELA II

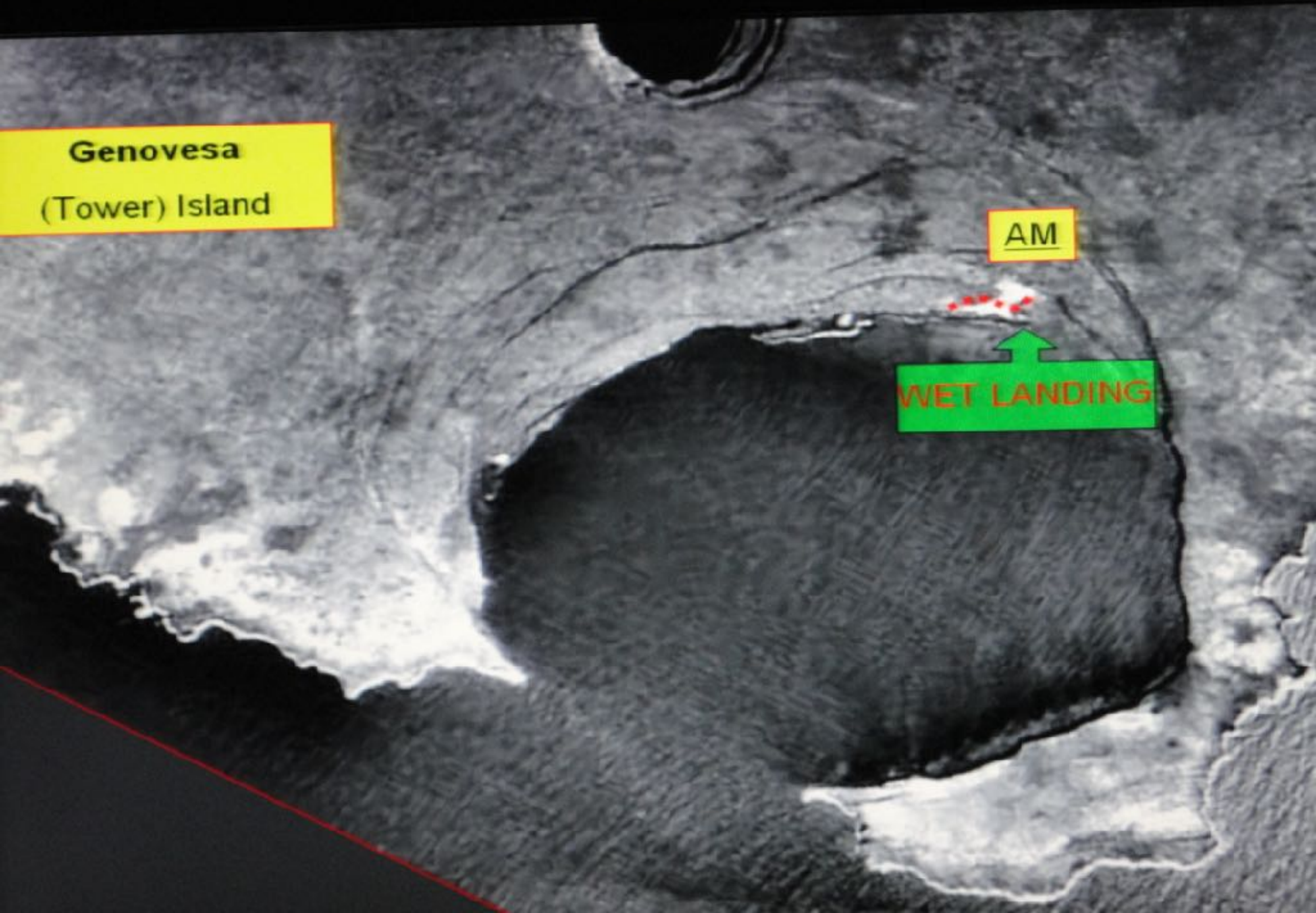
DAY 1....THE SHIP.....ISABELA II

NIGHTTIME DAY 1 INTO DAY 2....THE SHIP TRANSITS TO GENOVESA

DAY 2....AM ACTIVITY FROM THE SHIP

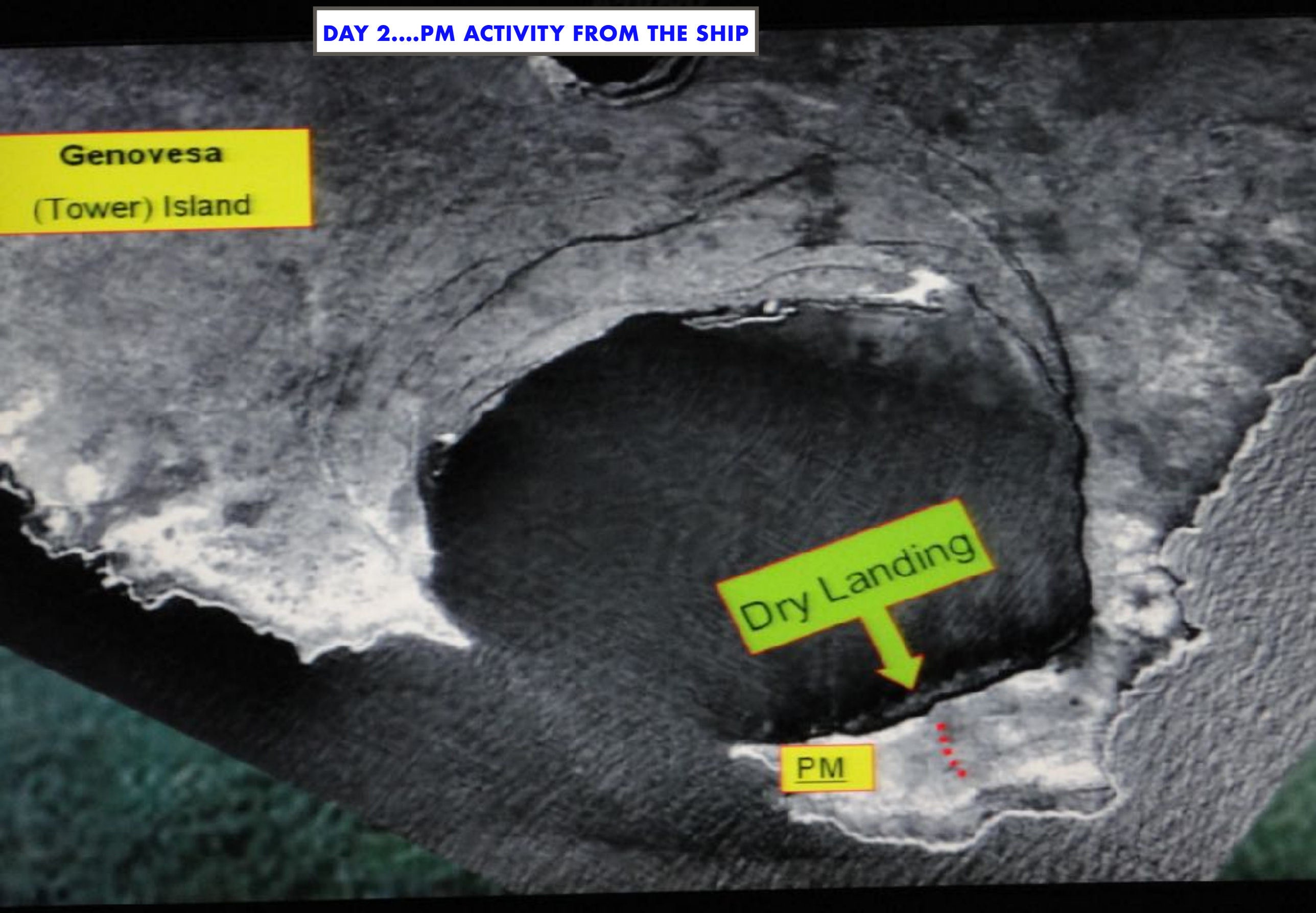
DAY 2....AM ACTIVITY FROM THE SHIP

DAY 2....AM ACTIVITY FROM THE SHIP



DAY 2....AM ACTIVITY FROM THE SHIP

DAY 2....PM ACTIVITY FROM THE SHIP

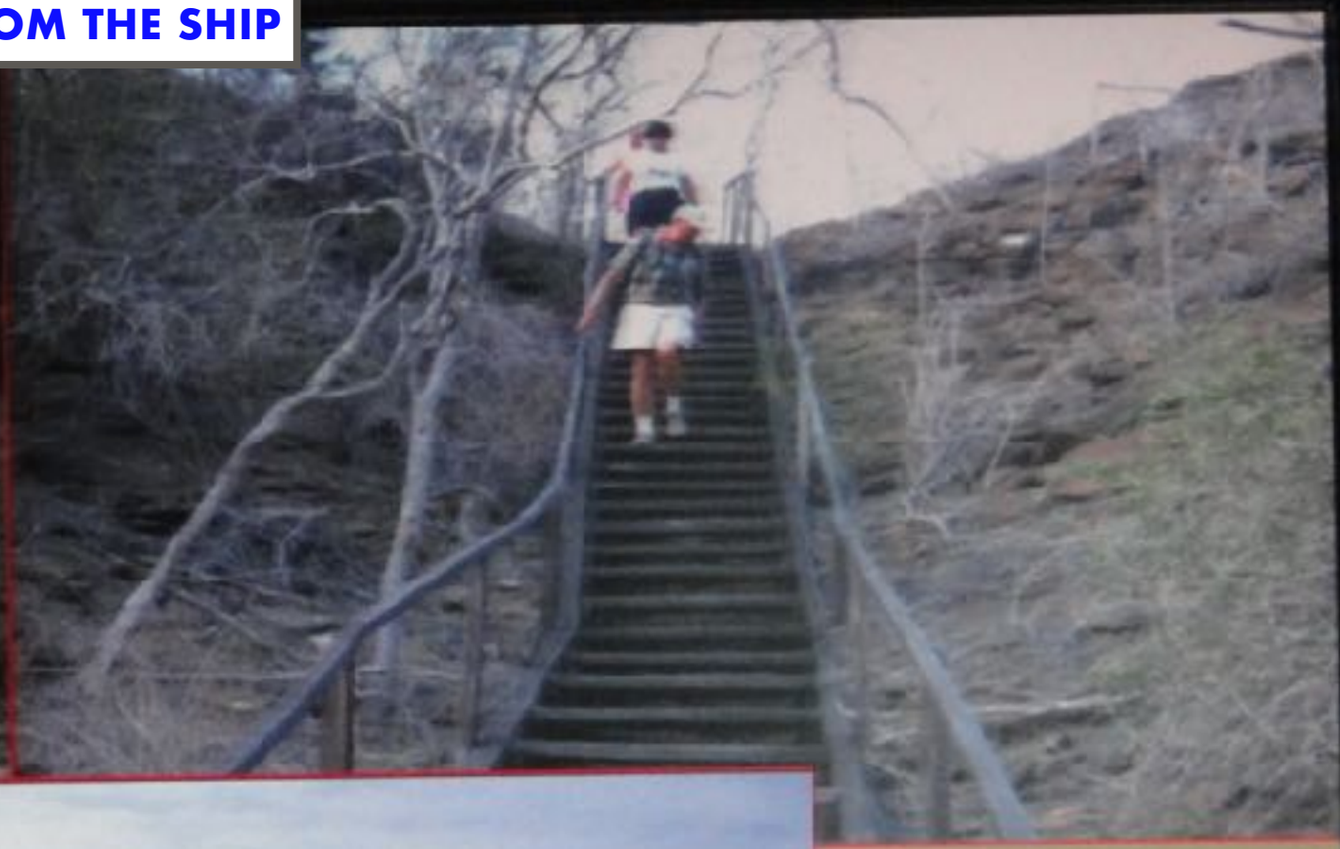


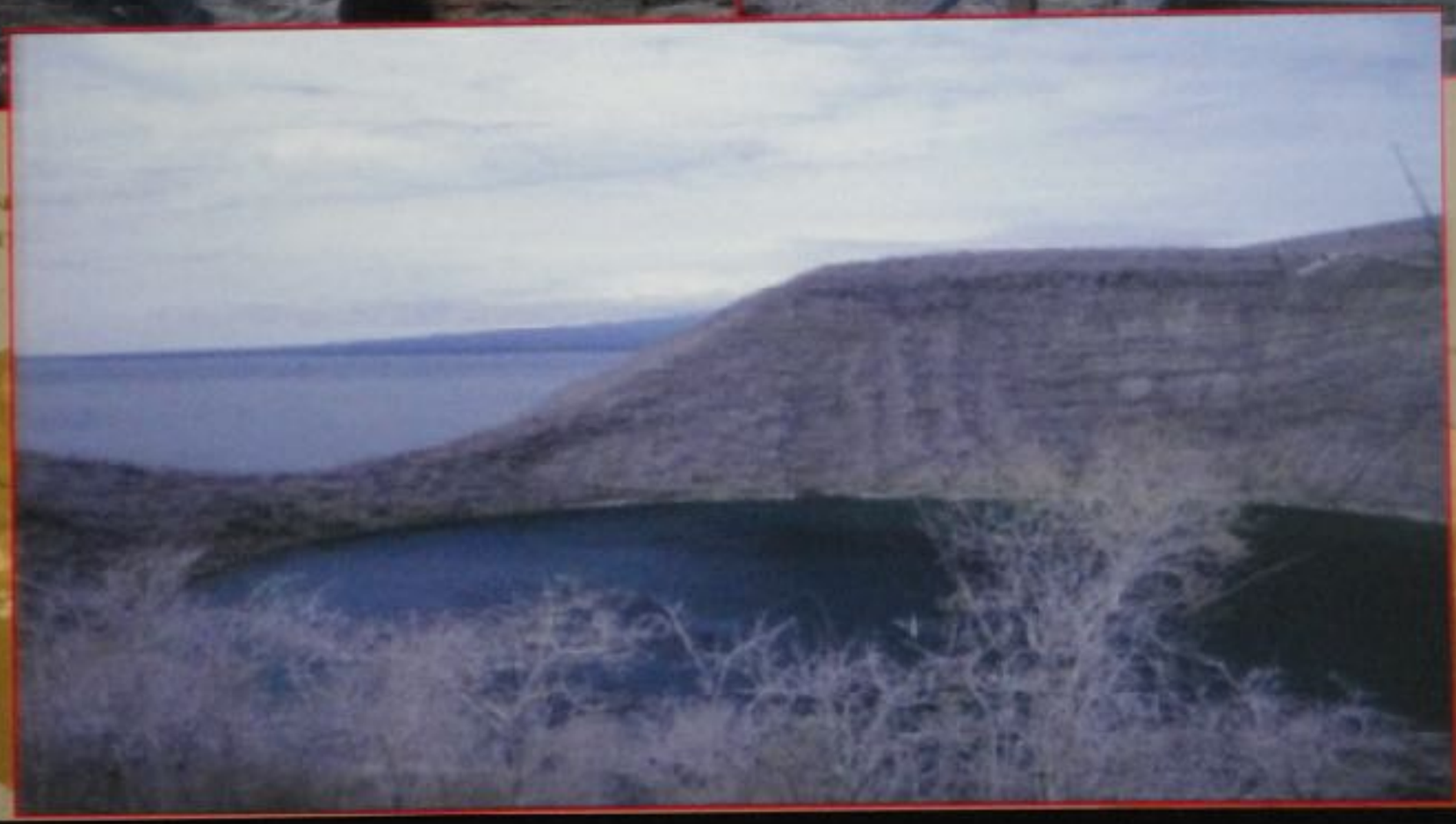
DAY 2....PM ACTIVITY FROM THE SHIP

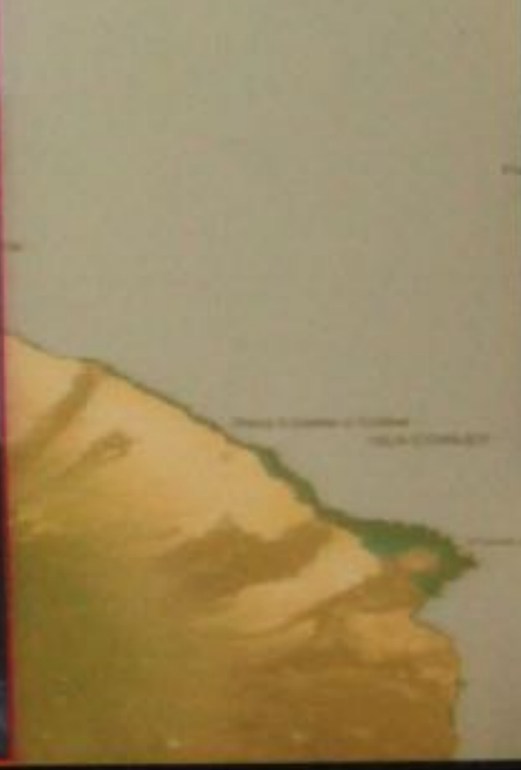
NIGHTTIME DAY 2 INTO DAY 3....THE SHIP TRANSITS TO ISABELA

DAY 3....AM ACTIVITY FROM THE SHIP

DAY 3....AM ACTIVITY FROM THE SHIP



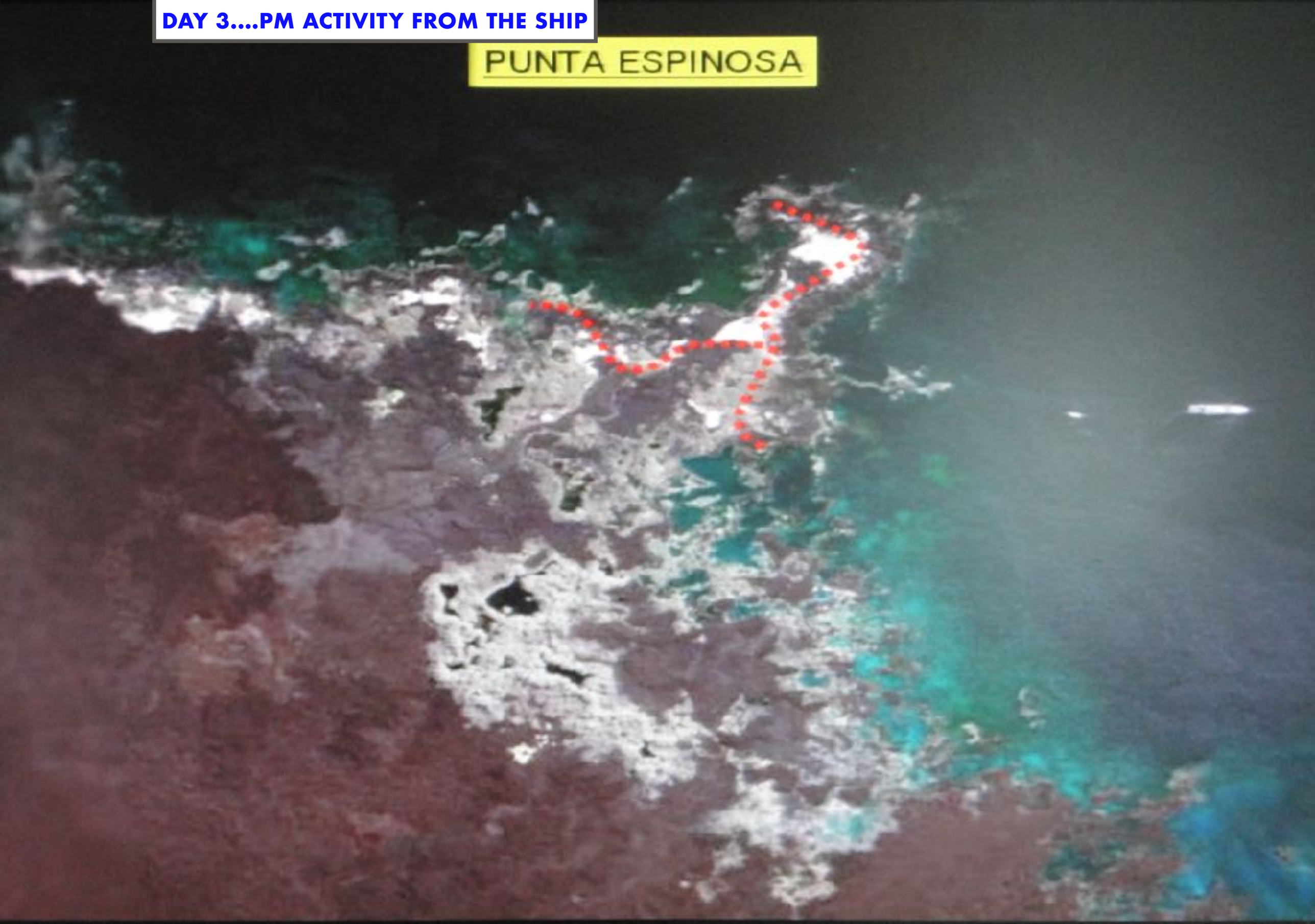




DAY 3....AM ACTIVITY FROM THE SHIP

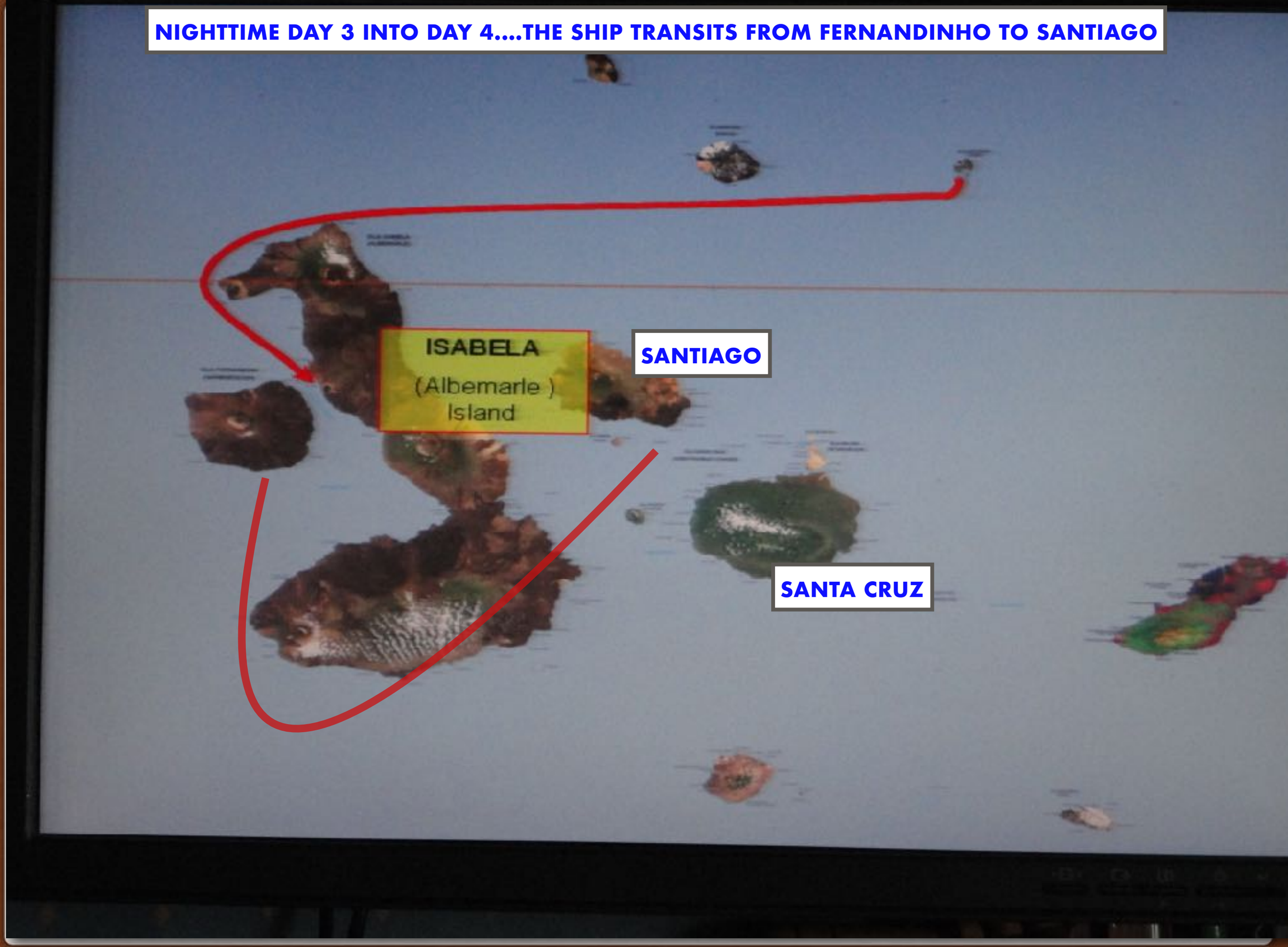
DAY 3....PM ACTIVITY FROM THE SHIP

DAY 3....PM ACTIVITY FROM THE SHIP

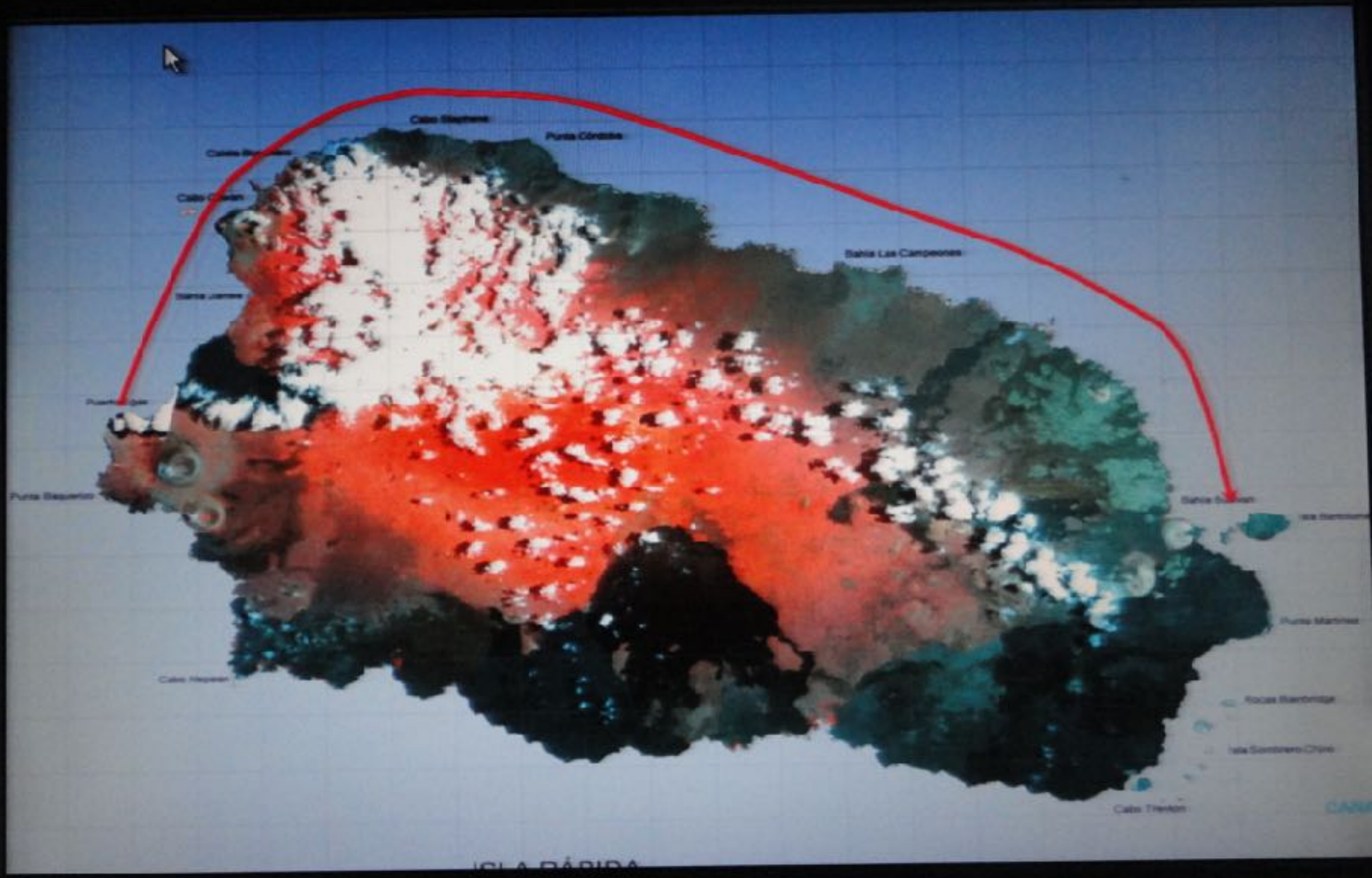


DAY 3....PM ACTIVITY FROM THE SHIP

NIGHTTIME DAY 3 INTO DAY 4....THE SHIP TRANSITS FROM FERNANDINHO TO SANTIAGO



DAY 4....THE SHIP TRANSITS AROUND SANTIAGO BEFORE RETURN TO SANTA CRUZ



DAY 4....EXAMPLE OF DAILY ITINERARY

07h00	Wake-up call
07h30	Breakfast
08h30	**JAMES ISLAND: Wet landing**. Somewhat easy walk, tidal pools, and the surroundings can be slippery. Comfortable footwear is recommended. Walk of 1 km or 0.5 mile.
10h00	**Swimming, snorkeling and kayaking off the beach (sign up at reception for kayaking please)**
11h00	**Back on board.**
12h30	Lunch
15h00	**Deep Water Snorkeling and GBB. (Sign up at reception please)**
16h30	**Dry Landing walk to the top of Bartholomew Island.**
18h00	**Back on board.**
19h15	**Departure Briefing and Slide Show**
19h45	**Farewell cocktail**
20h00	**Dinner**

AT THE LOBBY YOU WILL FIND A BASKET FOR THINGS YOU DON'T WANT TO TAKE WITH YOU, IT DOES NOT HAVE TO BE CLEAN JUST IN GOOD CONDITIONS.

HISTORY OF THE GALAPAGOS ISLANDS

The islands are located roughly 1000 km straight west of mainland Ecuador. There are 19 major islands and many smaller islets, whose land mass together covers 7880 km2 over an area of

50,000 km2 of Pacific ocean. Isabela is the largest of the islands, having an area of 4590 km2. It also boasts the highest elevation in the archipelago with Wolf volcano reaching 1645 m.

(Galapagos Population:- 25,000 – 30,000)

Isabela was formed by the merging of 6 volcanoes 5 of which are still active. Isabela is the only Galapagos Island to straddle the equator. Noted for it's untouched and rugged beauty Isabela is home to one of 4 permanent settlements in the Galapagos at Puerto Villamil and Santo Tomas on the South Eastern edge of the island.

Beginning in the late 16th century, the Galapagos became a base of operations for many English **pirates**. Fresh meat, in the form of the giant tortioses, was another valuable commodity to be had in the Galapagos. The giant tortoises were highly prized by mariners because they could be kept alive in the holds of ships for many months without food or water. As many as 200,000 tortoises may have been taken over the course of the 19th Century alone.

By 1790 pirates were being replaced by whalers.


SABINA PER
OLIVER AMANDA
ANDREAS S.97
POSTOFFICE
BOX

Whaling ships used the Galapagos as a base from 1790 – 1830's

In 1832, they were claimed by the 2 year

old Republic of Ecuador. Post Office Box was used in the old days by whalers

and others to stay in touch with their loved ones at home. Leaving the letters behind in the wooden barrel, other sailors returning home took it with them.

Darwin and Evolution

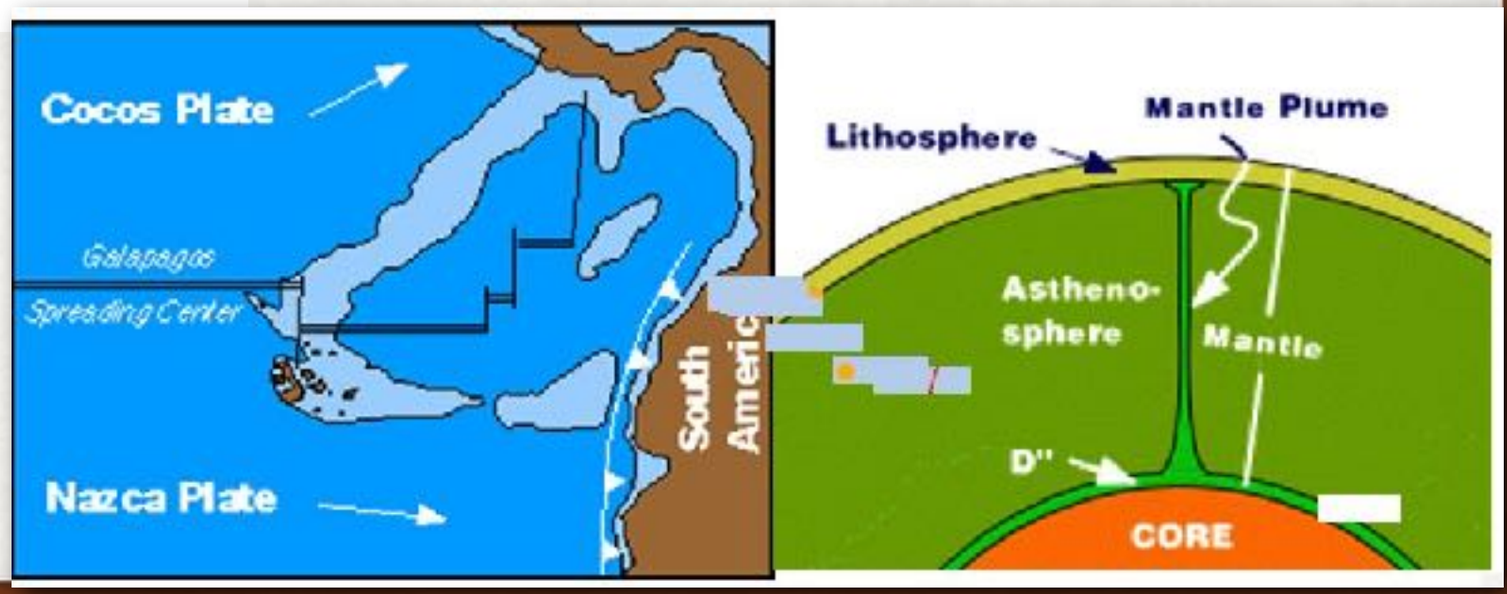
In June 1831, the *H.M.S. Beagle* set sail from England under the command of Commander Robert Fitz Roy on a 4 year surveying mission (Fitz Roy was promoted to Captain during the cruise). Fitz Roy had decided to take along some one who would "profit from the opportunity of visiting different countries yet little known." The person who took up this unpaid position was 22 year-old Charles Darwin. Darwin had begun his studies as a medical student, then became a divinity student at Cambridge. Neither field has excited him, and his father, a physician, considered him something of a disgrace. Darwin had become interested in geology and spent some time studying geology informally with the great Scottish geologist Charles Lyell (geology was not yet a formal field of study). He was an avid beetle collector as well. After three years of surveying the South American coast, the Beagle reached San Cristobal (Chatham) in September 1835. The *Beagle* spent 5 weeks in the Galapagos carefully charting the archipelago. Fitz Roy's chart was remarkably accurate and remainded in use until the U.S.S. Bowditch recharted the area in 1942.

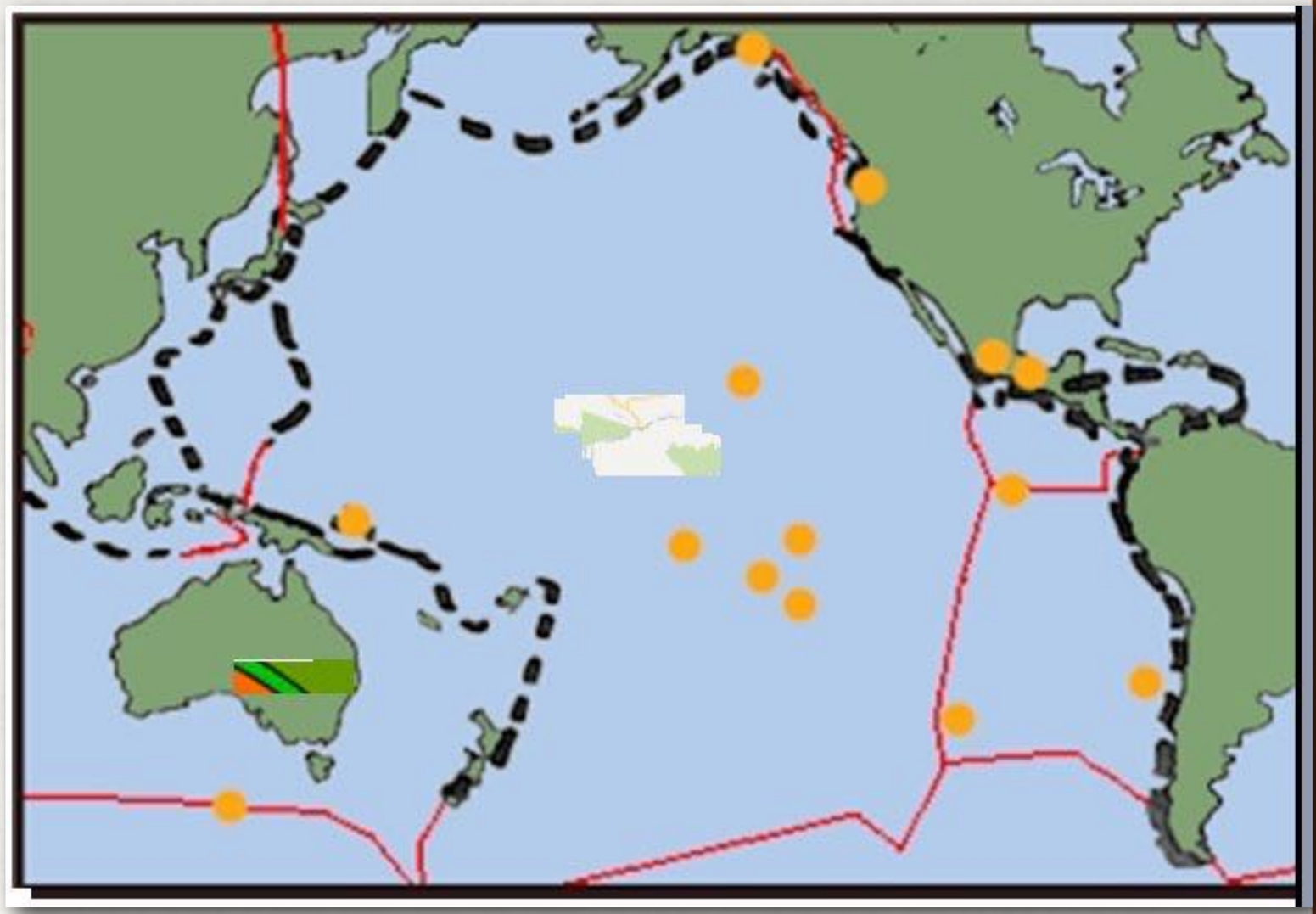
The Galapagos Mantle Plume

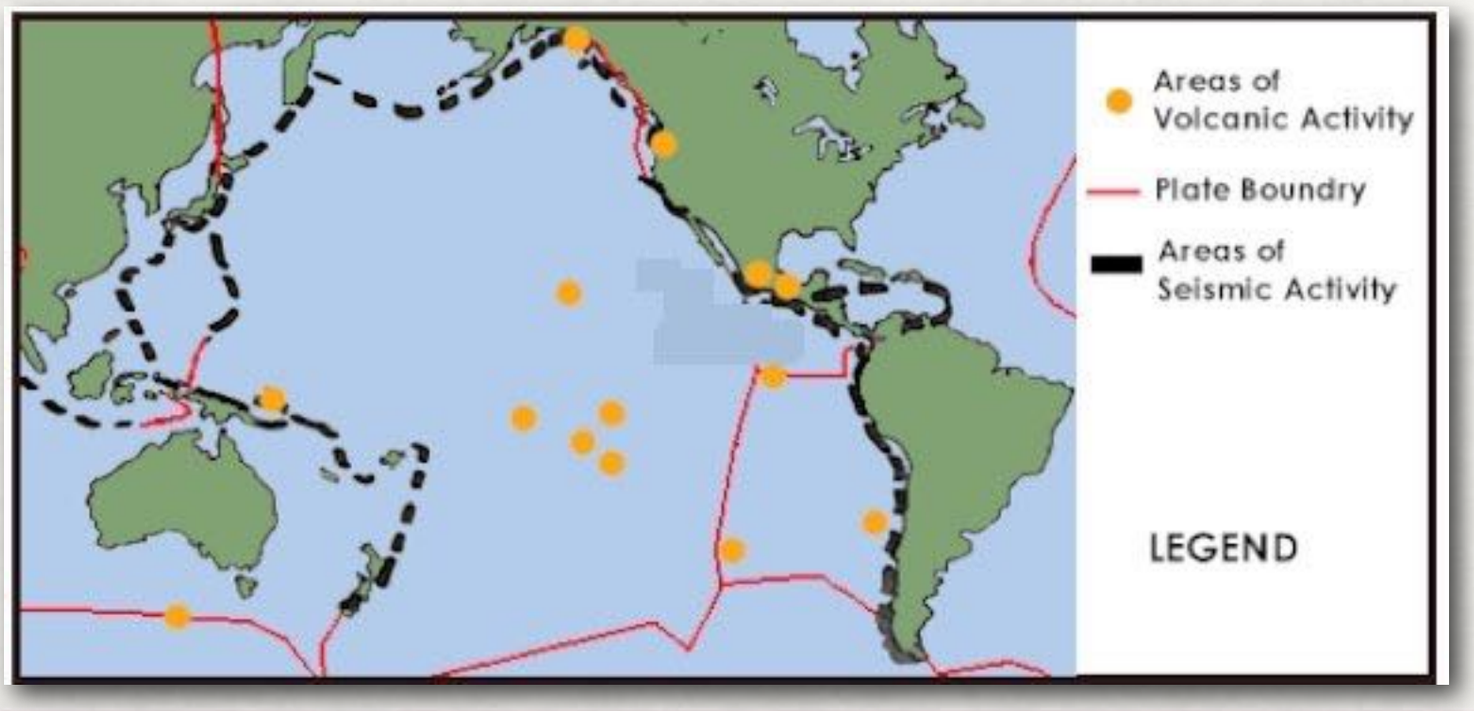
The Galapagos are a group of volcanic islands located on the equator. Like many oceanic islands, such as Hawaii, the Azores, and Reunion, the Galapagos are thought to be the product of a *mantle plume*. Mantle plumes are columns of hot rock, roughly 100 km

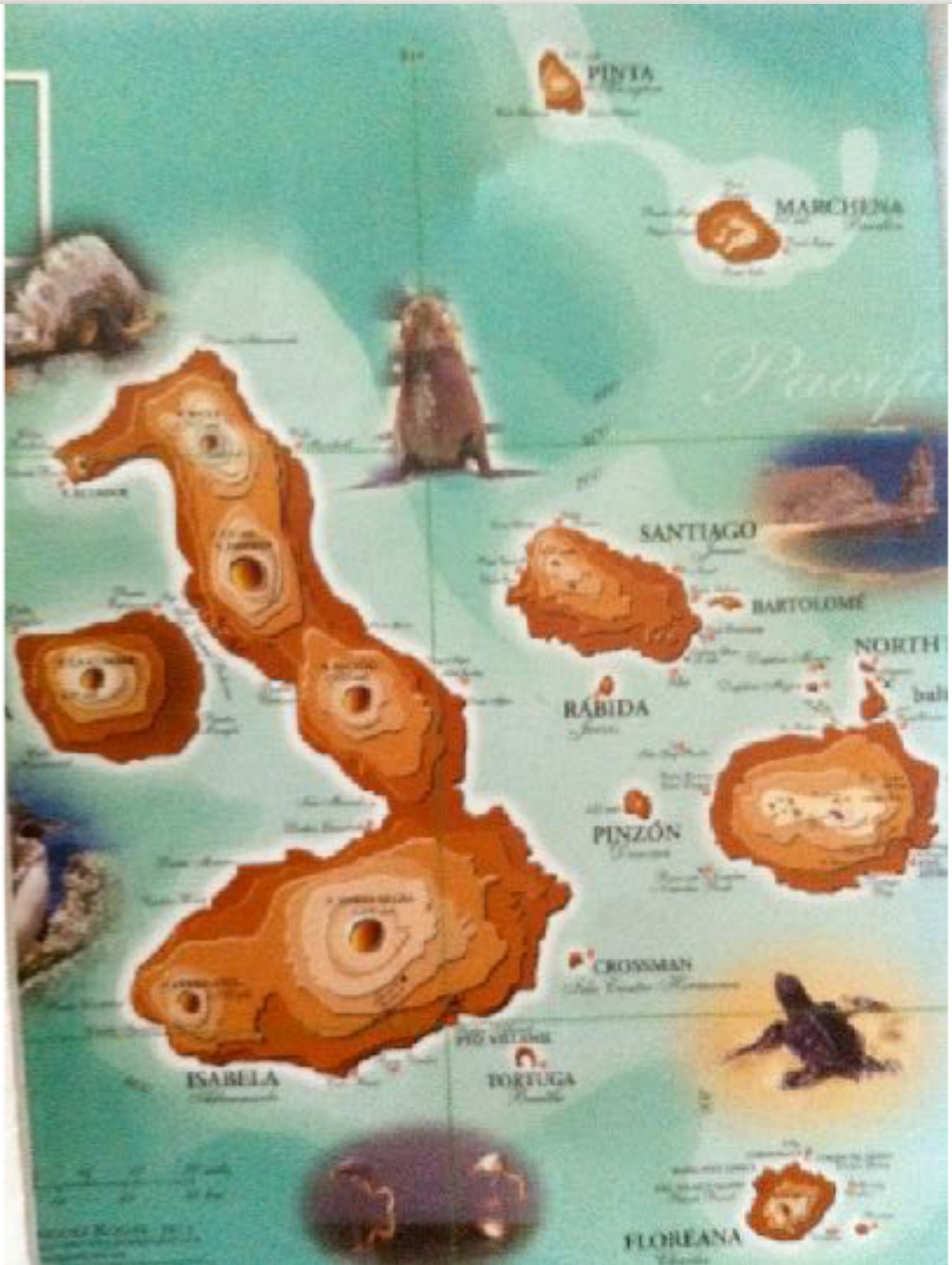
in diameter, that rise from deep within the Earth. These plumes rise because they are hotter (by perhaps as much as 200 degrees centigrade) and therefore less dense, than the surrounding rock. The rate of ascent is about 10 cm/year or so. The depth from which mantle plumes rise is, however, still a matter of scientific debate; some believe that

plumes originate at a shallower depth, such as the boundary between the upper and lower mantle at 670 km, others believe they come from greater depth. One idea is that mantle plumes form at the base of the Earth's mantle, at a depth of 2900 km, where a layer of rock called D'' (D-double prime) is heated by the Earth's liquid iron core beneath it. One reason scientists believe that mantle plumes come from great depth is that they remain fixed relative to one and other over many tens of millions of years, even though the lithospheric plates above them move thousands of kilometres in this time. Thus the distance between the active Galapagos and Hawaiian volcanoes has remained fixed, even though the volcanos are carried off in opposite directions by lithospheric motion.






Areas of
Volcanic Activity
Plate Boundry
Areas of
Seismic Activity
LEGEND



The Galapagos *hot spot* is located to the east of Fernandina, the youngest of the islands is approx
1 million years of age. The islands are being created and shifted westerly, reducing in height as they do so. The oldest of the Galapgos islands is only 5 million years of age. As this process continues into the future the oldest will eventually go sub-marine as they reduce and migrate they will end up being the sea mounds of the future.

As the *hot spot* discharges materials it begins accumulating, spreading and rising. The discharged materials reach a level of 6,000 to 10,000 ft (2,000 to 3,000 m) from the ocean floor. As the *Plate* at the ocean floor moves at a rate of 3 inches per year or (5 cm) the volcano breaks free of the stationary *hot spot* forming an independent island. As the *hot spot* continues to emit material a new island is born using this process. As new islands are formed and the plate continues to move a chain of islands is formed. The Galapagos *hot spot* is located to the east of Fernandina, the youngest of the islands at approximately 1 million years of age.

Control and eradication of introduced species

Goats are one of the most destructive introduced species because of their ability adapt to hostile environments. They are mainly herbivores and feed on many types of plants. They even feed on the bark of trees, thereby altering the habitat of native and endemic animals that inhabit the Galapagos Islands

- AERIAL HUNTING
- HUNTING BY LAND
- "JUDAS" GOATS

Surface area of Isabela north is 240 (ha)

~30,000 goats were eradicated on Isabela in 2010

Other Species for eradication:- cats, dogs, rats

Control and eradication of introduced species.....continued

The Galapagos National Park Service began implementing a massive ecological restoration project by removing introduced rodents.

This ambitious plan, developed for the first time in South America, in a first phase, focuses on the total eradication of introduced rats and mice on small and medium-sized islands of the Galapagos

The Park learned that the species at highest risk was the hawk, as it may capture and feed on rodents that have consumed the bait. Adequate measures to avoid this eventuality were needed. These consisted of live capturing hawks, and keeping them in cages specifically designed to hold them under optimal conditions, during the rat baiting periods.

Turtles versus Tortoises

Turtles and Tortoises are closely related reptiles.

Turtles usually live in salt water and have large blade shaped flippers for swimming. They find it very hard to walk on land.

Tortoises usually live on land or in fresh water.
They have legs rather than flippers and can walk quiet well on land.

The sex of a turtle is determined by the temperature the egg incubated at. It varies by the species of turtle. 84 degrees F is about the middle of the range for our turtles so either sex may develop. At 84 degrees, we can have box turtles hatch in 50 days.

If turtle eggs are incubated at 76 – 78 degrees the resultant turtles will be Male.
If turtle eggs are incubated at 88 – 90 degrees the resultant turtles will be Female.

DAY 5....FLY FROM THE GALAPAGOS ISLANDS BACK TO QUITO