



Before leaving for the New World, Christopher Columbus used to stop one last time at the Island La Gomera, second to westernmost island of the Canarias Archipelago. We can easily imagine the three Caravels languishingly swinging in the natural port of San Sebastien when winds between the islands of La Gomera and Tenerife increase by ten knots. The legend says that he enjoyed the company of the Governor's Widow. More surely, she gave him water, wood, goat cheese that stayed good till Hispaniola (Saint-Domingue-Haïti nowadays) and small black pigs which became famous in a specific bay South of Cuba.

Today, the natives' tribute to the only hero which ever came to the island can be seen through shops selling products from Cuba or Peru as many peasants immigrated to South America at the beginning of the XX<sup>th</sup> century. The island, having successfully escaped touristic overexploitation, is very dolce vita.



Passengers disembark ferries 4 or 5 times a day for one day stops. Twisting roads discourage long car rides. Temperature drops one degree every 100 meters and the highest peak is 1 400 meters. It is very low comparatively to the Pico del Tiede on Tenerife island, the highest mountain of Spain which is covered with snow during winter and that we glimpse from the tracks in the Garajonay park in the middle of the Laurasilva forest (a humid forest of laurel from the Tertiary era).



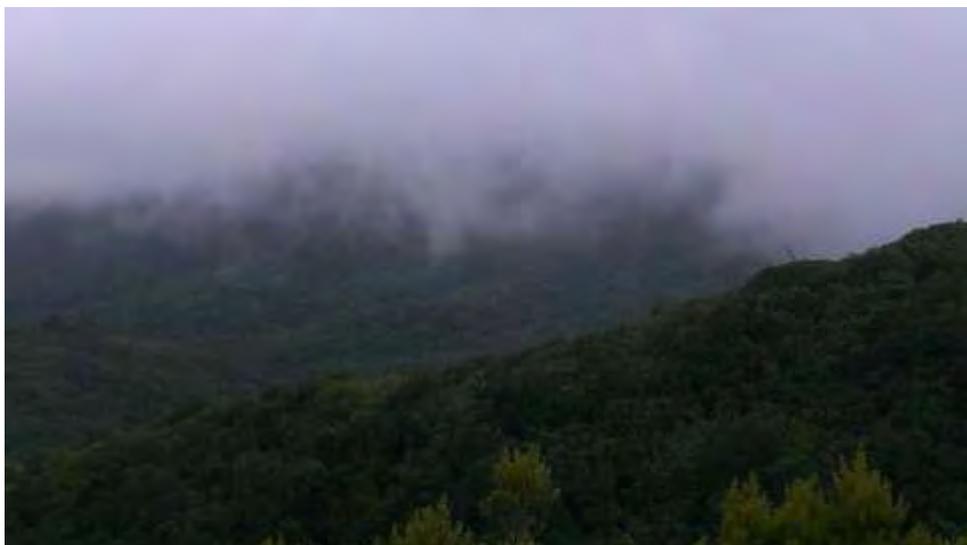
Then clouds slowly uncover valleys reminiscent of Asia.



But no paddy fields here, only a few terraces where banana trees, palm trees, cabbage or cress might be found.



In the gardens, exotic flowers grow along hydrangeas, a mixed flora thanks to the horizontal rain which hangs on the mountains and flows downhill.





An island so quiet that we decide to stay for 3 weeks; a choice largely dictated by administrative constraints which made a quick trip to France mandatory. Being on the dole in France means that you have to meet your personal counselor once a month and listen to him once again saying he is so sorry he cannot do anything for you. It makes the abnormality of the system all the more sensitive: high allocations financed by even higher taxes, high unemployment and absurd administrative red tape. A strange system where work is available for at most 5 to 600 000 people when the age bracket is of 800 000. Hence young people stay late at school, waiting to be old enough to get the minimum living allowance, as if the main aspiration was not to live a simple life in a decent house and to get a job to raise one's family. This kind of problem is similar in bee hives where hyperactive bees take the entire job letting nothing to do to the slowest. When they die of exhaustion, the others replace them, no question asked. The main difference is that all the bees belong to the same social organization and that all get access to the same resources. To the contrary the human species maintains a class consciousness leading to the rat race for status. It's high time to debate the link between activity and wage.

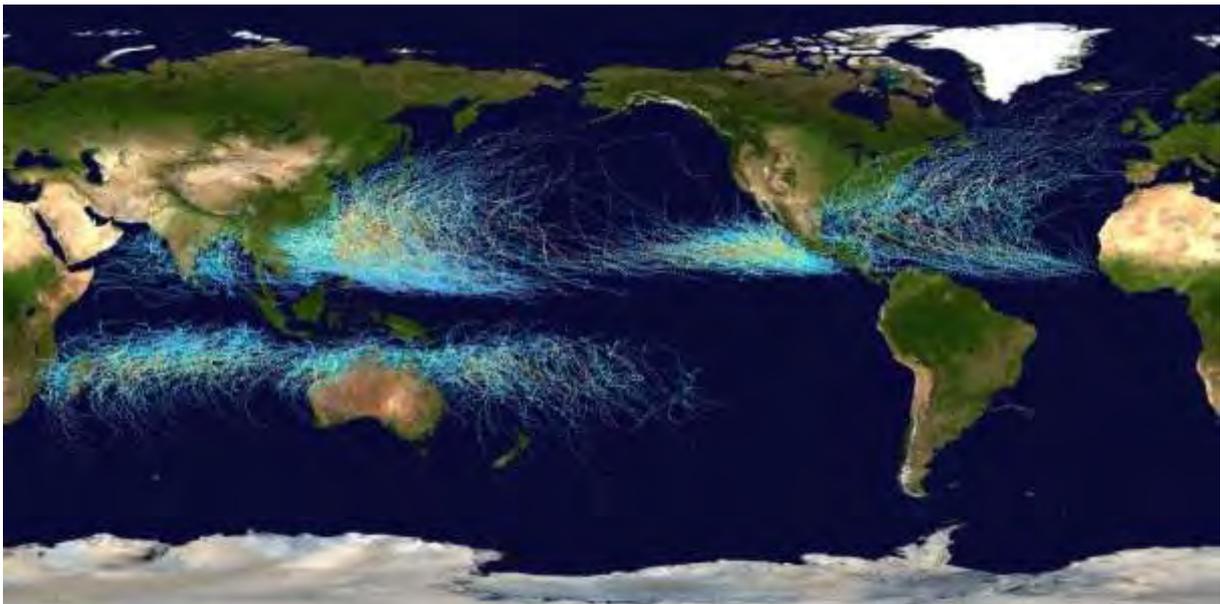
This forced "Dolly" stop gives us an ultimate possibility to add some essential spare parts in trunks and to evaluate how ready we are to cross the Atlantic Ocean before the end of the year. Yo! has never been so close to world cruisers, 3 Ovnis among them. The harbor of La Gomera is a renowned stop on the way to the West, less binding or flashy than the big marinas of Arrecife or Las Palmas where all the cruisers registered at the ARC (Atlantic Rally for Cruisers) meet. These rallies have been initiated by Jimmy Cornel the pope of amateur cruising. They afford a feeling of security to all the boats: pre-booking in marinas, technical audits, follow-up beacon, weather watching, networking and social events. Three departures for almost 200 cruisers are expected by the end of November, which target an arrival at Rodney Bay (Sainte Lucie) or at the Marin (Martinique) before Christmas, with an optional stop at Mindelo in the Cape Verde Archipelago.

A survey of hurricanes frequencies in the last twenty years out of [www.cyclonextreme.com](http://www.cyclonextreme.com), the delayed departure of the mini-transat because of endlessly tempests in the Gulf of Biscay and the violence of the Haiyan typhoon lead us to reflect again on the genesis of hurricanes.

In the North Atlantic, hurricanes kick off the coast of Cape Verde islands, and move slowly at a speed of 5 to 15 knots to the West. They come from atmospheric disturbance out of the doldrums. The conditions are strict:

- The sea temperature must be higher than 26°C for more than 60 meters deep (the Ekman layer)
- High humidity and instability are necessary to form cumulonimbus (ok in the doldrums zone).
- The Coriolis deviation must be significant enough to amplify the revolving move (the tropical convergence zone, ITCZ, must be above the equator).
- There is not a too important contrast between low and high altitude winds which would prevent the rising of the hot air column necessary to the amplification of the phenomenon.

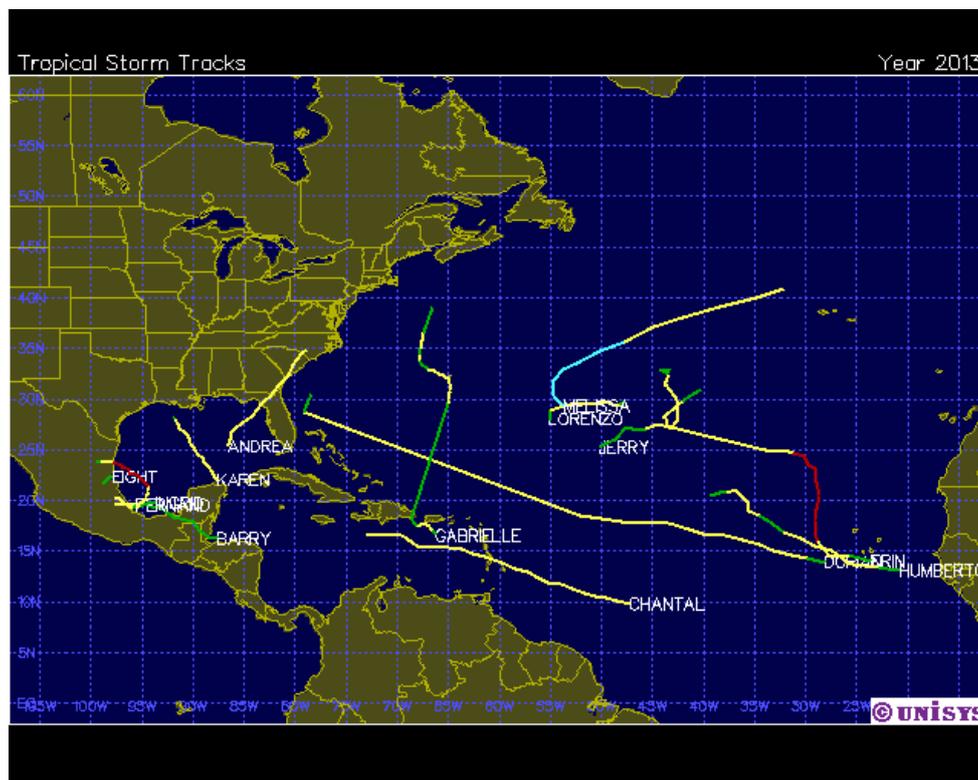
A huge cloudy bulk of a diameter of 500 km to 1000 km, organized in large spirals around a central ring called the eye can be up to 15 km thick with winds that can reach 300 km/h in gusts and torrential rains. At final the power can be compare to many atomic bombs a second flying over the ocean at a speed of 0 to 20 km/h. It is similar to an enormous chimney sucking large quantity of humid and hot air and rejecting it in the atmosphere, shortly a kind of hellish steam engine going West before turning to the pole of its own hemisphere.



Historical hurricanes tracks in the last twenty years.

The high season in the North Atlantic is between June and November. Roughly we get 9 systems of which 2 hurricanes between 1985 and 1994, 14 systems of which 4 hurricanes between 1995 and 2004 and 17 systems of which 8 hurricanes between 2005 and 2012. Some may estimate that an anthropic origin of the global warming is still to be demonstrated... our intuition screams Vigilante! We'll talk about it again another time, an opportunity to have fun with the Bayesienne theory of Reverend Tom.

Systems are spotted and given name (alternatively boy or girl) when winds exceed 33 knots. Hurricanes present winds over 63 knots. For the moment, in 2013 we count 13 systems of which 2 are hurricanes: Humberto and Ingrid – tracks below.



Scientists now all agree to a rise in the ocean temperature in the last 30 years, but the variation is not regular. This year it is very high in the Pacific Ocean which could explain the number and violence of systems in this region compensated by a slight decrease in the Atlantic. The number of system is related to the global state of the atmosphere and oceanographic southern oscillation like El Nino/La Niña (hot/cold) at Christmas on the West coast of South America. Seems that no impact is foreseen in 2013, despite number 13...

In any case we hope that Nestor won't come to say hello in the middle of the ARC fleet which just went as the end of the hurricane season is not yet announced (usually by the end of November) and that the trade winds are not settled (rather in December).

One must say that Christopher Columbus got lucky. The duration of his crossings are not ridiculous (around 20 days) when one compares the look of the Caravels to our boats, but he crossed right in the middle of the hurricane season in complete ignorance.

What is certain is that he had no tool of weather watching, which helps greatly. That's why –and to confirm our parents that everything is ok- we decided to acquire a sat phone: to call (1€ per minute), to send SMS, to send and receive e-mails (in text format, no attached document). After the Red Sea experience (Iridium vs Turaya), configuration seems quick and easy. In fact, we spent days exploring the mysteries of communication protocols, lost among ISP and mail services like Gmail, Free or Hotmail only to discover that the world got tougher in 5 years, and that under false excuses of higher security, the conspiracy theory of mickey mouse hears was highly plausible. If not, how to explain that sending a mail of a few bytes weights and costs 20 times more, through authentication and control processes with high risks of disconnection ? To get reasonable time response, there is one alternative to setting up a private server (just do it): you use a service provider that can guaranty quick and secure mails through a simplified identification protocol. You just pay and accept being dependent! We did it. It works.

One of the pleasures of sailing is exploring complex, unpredictable and diverse subjects from the more poetic to the more down to earth. The crew must then act in cold blood and be highly creative: how comes that, only when entering a port at night with gusts of 35 knots and a ferry maneuvering, the sea water cooling system does not operate ? Immediate question: how long can you operate the engine without cooling system without blowing it off?

Once safe in the marina and following the recommendations of our favorite auditor, the captain made mysterious enthalpy calculations (energy evaluation of a thermodynamic system) and we made a PIR (Post Implementation Review). Conclusion: the temperature rise in the engine is approximately of 5°C per minute. It can work for 10 minutes without any worry if it was cold.



Stops enable all crews to discuss the interest of a stock of "Henaf" pate, of a fruit net suspended at the back of the boat or how many lime to take to eliminate the risk of scurvy when crossing the Atlantic Ocean. Mainly it is the opportunity to tell stories. The one about the customized boat that sails at 18 knots even when in port. Or the transmission heard on the security channel at night between a 34' cruiser and a cargo where the watch man, pidgin speaking, confirms that: "Yes, he saw the little cruiser which is about to collide with him and that he will re-route." And then to check that everyone knows the hoax about the US Navy, the lighthouse keepers and their canary off the coast of Galicia, here after.

Best wishes, Sanity and Sobriety,

Stéphanie / Christophe

Ilha Sao Nicolau - Tarrafal

28 Novembre 2013

Just a reminder:

**An ALLEGED conversation between Americans and Galicians recorded off the coast of Finisterre, Galicia.**

Galician: "This is A-853, please change your course fifteen degrees South to avoid colliding with us. You are coming straight towards us, distance 25 nautical miles."

American: "We recommend that you change your course fifteen degrees North to avoid a collision."

Galician: "Negative. We repeat, change your course fifteen degrees south to avoid a collision."

American: "You are talking to the captain of a ship of the United States of America. We insist you turn your course fifteen degrees North to avoid a collision."

Galician: "We do not consider that feasible or advisable; we suggest that you change your course fifteen degrees South to avoid colliding with us."

American (very angry): "You are talking to Captain Richard James Howard, at the bridge of the aircraft carrier USS Lincoln of the USA Navy, the second biggest warship of the North American fleet. We are escorted by two battleships, three destroyers, five cruisers, four submarines and numerous amphibious support vessels. We are on our way to the Persian Gulf to prepare military maneuvers before a possible attack on Iraq.

I am not *suggesting*, I am *ordering* you to change your course fifteen degrees North! Otherwise we will be forced to take any measures necessary to guarantee both the safety of this ship and the force of this coalition. You belong to an allied country and a member of NATO, so obey immediately and get out of our way!"

Galician: "You are speaking to Jose Manuel Otero-Rivas. We are two. We are escorted by our dog, our food, two beers and a canary that is currently asleep. **We have the support of Radio Coruña FM and Channel 16 for marine emergencies.** We are not intending to move anywhere as we are speaking to you from the mainland, from lighthouse A-853 of Finisterre on the coast of Galicia, and we don't have a f\*cking clue what our ranking is of Spanish lighthouses.

You may take whatever measures you consider opportune and bloody well feel like to guarantee the safety of your goddamn ship, which is about to shred itself on the rocks, but what we continue to insist and suggest as the best, most sane and more recommendable course of action, is to turn fifteen degrees South to avoid colliding with us."

American: "OK. Received. Thank you."