This is a chart of Humboldt’s journeys to and within the New World. This was quite an inspiration to Darwin’s own organized approaches to recording observations of lands, plants, animals and geological phenomena that were wildly novel to a young Briton who had studied Divinity at Cambridge.
We’ve also tended to forget exactly how Charles Darwin came to be eligible and eventually chosen to share a cabin with Robert FitzRoy on the second voyage in 1830. Darwin was hardly the first choice for that post, and could easily have stayed home to finish his career as a rural vicar for the Church of England. One who would have plenty of time to hunt and collect beetles, for his hobby of naturalism.

Henslow was Fitzroy’s first choice, but he opted for a teaching position over a 3-year voyage, and recommended Dr. Robert Darwin’s son, Charles, whom he knew as an enthusiastic collector and student at Cambridge. FitzRoy thought well of Darwin’s lineage, since Charles’ grandfather, Erasmus, had collaborated with Jean Baptiste Lamarck on theories about the mutability of living organisms a generation earlier.

When Charles Darwin was at length permitted to go by his father, FitzRoy was delighted, and welcomed his travelling companion with a gift of Charles Lyell’s first volume on geological interpretations of Earth forms and the paradigm of geological processes’ “uniformitarianism” that argued for great age of our planet.
The (ahem! Second) voyage of the **Beagle** was considerably more ambitious than Humboldt’s peregrinations three decades earlier. And it was better provided for, in no small part because Robert FitzRoy spent some of his own considerable fortune on instruments and supplemental gear, including ship’s boats, for better exploring and surveying capabilities.

That generosity was to haunt FitzRoy, when the Admiralty years later refused to reimburse him, driving him to seek a salaried civil service position.
It is impossible to do justice to all the things that Charles Darwin observed and contributed to natural philosophy during his 5-year voyage with *Beagle* and FitzRoy.

They covered a wide range of forms of life, phenomena, catastrophes, human conditions and cultures, and even interpersonal or personnel management situations.

Here, for example, fossil skeletal remains of *Mylodon*, an extinct Patagonian giant ground sloth, its reconstruction by mammal experts back in England after 1836, and one of the early examples of fossilized droppings collected by the sloth’s discoverer.
Darwin was infallibly miserable at sea, and relished time ashore, even when it exposed him to the unforgettable damage and human suffering and misery brought about by the 20th February 1835 earthquake in Chile. The city of Concepción was destroyed, and survivors were living in makeshift shelters at that port city at the time that Beagle picked up Darwin and headed farther north along the Pacific Coast of South America.

(Beagle’s departure from Concepción from Voyage of the Beagle by Darwin, p. 284, entry for 7th March 1835).

We stayed three days at Concepcion, and then sailed for Valparaiso. The wind being northerly, we only reached the mouth of the harbour of Concepcion before it was dark. Being very near the land, and a fog coming on, the anchor was dropped. Presently a large American whaler appeared close alongside of us; and we heard the Yankee swearing at his men to keep quiet whilst he listened for the breakers. Captain Fitz Roy hailed him in a loud clear voice, to anchor where he then was. The poor man must have thought the voice came from the shore: such a babel of cries issued at once from the ship—everyone halloing out, ‘Let go the anchor! Veer cable! Shorten sail!’ It was the most laughable thing I ever heard. If the ship’s crew had been all captains, and no men, there could not have been a greater uproar of orders. We afterwards found that the mate stuttered: I suppose all hands were assisting him in giving his orders.
HMS *Beagle*, as you surely know, made three epic voyages, not just the second voyage with Charles Darwin aboard. If that reality is blurred in most people’s minds, confusion has been sewn by illustrations such as this one depicting an event from the 1838 visit of the *Beagle* to Sydney, Australia on the vessel’s third voyage, while festooned with Darwin-related images of apes, orchids, Galapagos finches, marine iguanas, and hand cancelled postage stamps labelled ‘Darwin.’
We now leave Charles Darwin, for a while, once he is safely back in England and married to Emma Wedgewood, his first cousin and daughter of Uncle Josiah Wedgewood, who prevailed upon Dr. Robert Darwin to permit his son to sail away from a religious career as a country vicar for the Church of England in 1830.
Darwin and his wife settled comfortably in rural Kent, a good distance from the hustle of London. Darwin never again left Britain, and might have seemed like a recluse. But he was a fiercely productive worker, despite suffering from an undiagnosed disorder or series of disorders involving his digestion and metabolism. His outlook might be compared to that of Stephen Hawking, who was quoted recently as saying of his own life, “I was able to keep my considerable disability from being a handicap to my career.”

Darwin was a tireless letter and book writer, as Hawking was a tireless thinker who managed to compose, speak, and write in fields of theoretical physics.
As a young nation, the United States lagged behind European nations in many ways at the time of the British Admiralty’s ascendancy. Congress, the Navy, and the Executive Branch struggled mightily to fund and staff the country’s first serious exploratory expedition, in part because they were new at it, lacked the kind of social stability of British class system stratification, and had to make up the rules as they went along, before being able to join the comity of grown up nation states. Small wonder that mistakes were made, public service careers were severely hurt, and it took a whole troubled decade to field the U.S. Exploratory Expedition of 1838-1842. “The U.S. Ex. Ex.” as it became known.
As the U.S. Ex. Ex. took shape, it is useful to keep in mind three additional things.
1) It was a hugely (almost disastrously) ambitious first step at government-sponsored ocean exploration for the U.S. 2) It was the logical follow-on for the territorially expanding nation-state to the earlier land-based Lewis & Clark Expedition to the Oregon Territory (1803-1806). 3) It was the biggest event of its day that nobody remembers, as it has almost entirely slipped out of our historical awareness.