

Lost Land and the Myth of Kumari Kandam

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Abstract: The concept of Lemuria was born in the 1860s when certain British geologists noted the striking similarity between rock formations and fossils found in India and Africa. There is confusion between the concept of the lost land south of India linked with the literary history of Tamil tradition and the myth of the lost land of Lemuria. With reference to the records of sea level fluctuations, climatic changes, glacial advances and glacial retreats, this article tries to trace the factors that had given rise to the myth of Kumari Kandam and briefly touches upon the development of the European concept of Lemuria that found its way into the Tamil literary tradition.

There is a tradition among the Tamils to believe that their ancestors came from a large continent, which was destroyed by deluges. The Tamil *Sangam* classics refer to a populated land, which was submerged in the sea. The core of this tradition is that a substantial land mass was swallowed by the ocean in bygone ages. There is an obvious confusion between the above tradition and the myth of the lost land of Lemuria that was perpetuated by certain European mystics. Maps of the lost land were produced taking the idea from the palaeo-continent of Gondwana that existed about 350 millions years ago, which broke up into the different continents.

The concept of the lost land south of India is linked with the literary history of the Tamil language. The crucial question is whether the land referred to as *Kumari* was as large as a continent. If the oral traditions and the subsequent writings exaggerated the size and age of that landmass, what was the background of this exaggeration? This paper traces the factors that had given rise to the myth of *Kumari Kandam*. In the process it briefly touches upon the development of the European concept of Lemuria that found its way into the Tamil literary tradition.

is a reference to a Pandya King who won over kingdoms in *Imayam* (The Himalayas) and *Gangai* (River Ganges) to compensate for his land that was lost to the deluge. Certain scholars such as Devaneyya Pavaanar consider that the deluge under reference was probably the one that destroyed Thenmadurai, which had the *Mudal Tamil Sangam*.

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(Óø " Ä ì , Äô Ä j¼ø 10:1-4)

Mullai Kalipaadal 104: 1-4.

When the southern part of Kumari was swallowed by the sea, Kapatapuram (otherwise referred to as *Kathavam* or *Akdvaai*) was reported to have been made the capital of the Pandyas. This also went underwater in subsequent floods. According to Adiyarku Nallar, this poem from *Mullai Kalipaadal* indicates that the Pandya King resettled the survivors of the deluge in certain Chera and Chola territories.

There are references to deluges in the early Tamil literature. Those who wrote the commentaries centuries later exaggerated the references to deluges in *Silapathigaram* and *Kalithogai*. According to the commentators there were 49 (*Nadu*) countries in the lost land of Kumari. The advocates of Kumari Kandam interpreted the term *Nadu* as country. There are many small towns and villages referred to as *Nadu* in Tamil and more in Malayalam. *Nadu* basically referred to a settlement as opposed to *Kadu*, forest. In the above references there is no mention of the term *Kandam*, referring to land the size of a continent, though according to *Pingala Nikandu* (457) *Kandam* means a country. According to Aravanan, (*Thamilargalin Thayagam*) the term *Nadu* probably refers to areas the size of a present day *Taluk* (Taluk is an administrative unit consisting of a cluster of villages in a district) and should not be mistaken for the size of a country. According to commentators, the distance between the river Kumari and the river Pahruli was 700 *Katham*, which according to one calculation is about 770 km. Was there a land this size south of Tamil Nadu? And if not, what was the land that was exaggerated by the commentators of Sangam literature?

The concept of the lost continent of Lemuria:

The concept of Lemuria was born in the 1860s when certain British geologists noted the striking similarity between rock formations and fossils found in India and Africa. It was also noticed that the formations of the Permian age in India, South Africa, Australia and South America had similar formations and index fossils. Since continents at that time were thought to be immobile and the flora and fauna of the land could not have crossed the oceans, the

possible existence of land bridges like the one that probably connected India and Southern Africa and continents that went under water were postulated. Ernst Heinrich Haeckel referred to this hypothetical land bridge in his theory on the distribution of lemurs that were found in Madagascar, since the other pro-simians related to the lemur, like the Loris are distributed in Africa, India and the Malayan Peninsula. According to Haeckel, the hypothetical bridge stayed above water long enough for the migration of the lemur. Philip L. Sclator christened this hypothetical land bridge 'Lemuria' because of its association with lemurs. This happened long before the concepts of continental drift and plate tectonics provided the explanations for the similarity and distribution of formations and fossils in different strata in different continents. It was clarified that the continents did not submerge or disappear and a land bridge like Lemuria never existed.

In 1888, Helena Blavatsky, the founder of the Theosophical Society, incorporated the concept of the lost continents of Lemuria and Atlantis in her controversial **Secret Doctrines** while explaining the evolution of man, with the aim of establishing the superiority of Aryans. Her information, it was claimed, was based on esoteric ancient books from the East and messages received through transference and clairvoyant trances. Later, some members of the Theosophical Society published many essays on the lost lands of Lemuria and Atlantis, adding more details and embellishments.

According to the teachings of Theosophical Society, man evolved through seven successive root races each of which populated and occupied different continents. The lost continent of Lemuria, which eventually submerged, was occupied by the third root race called the Lemurians, primitive beings. They were followed by the fourth sub-race who interbred with beasts, and the more advanced Atlanteans, who inhabited the continent of Atlantis, replaced them. The Aryans, descendants of Atlanteans, are the fifth root race and were considered as the pinnacle of evolution as it were. W. Scott Elliot, a staunch Theosophist published in 1904 '**The Lost Lemuria with Two Maps Showing Distribution of Land Areas at Different Periods**'. The racial undertones of the following sentences from his book need to be noted: "It may be remembered from previous writings on the subject that it was from the fifth or Semitic sub-race of the Fourth Root Race that was chosen the nucleus destined to become our great Fifth or Aryan Root race". (p42) This book does not mention the Dravidians or the ancient language, Tamil anywhere in its far-fetched explanations. The book also states: "Students of Theosophy are aware that, up to the present day, no one belonging to our humanity has been in a position to undertake the exalted office of Manu, though it is stated that the founding of the coming Sixth Root Race will be entrusted to the guidance of one of our Masters of Wisdom - one who, while belonging to our humanity, has nevertheless reached a most exalted level in the Divine Hierarchy", which makes it clear that this

writing is basically esoteric in nature though a scientific veneer was given to this information.

In 1931, Harvey Spencer Lewis, the founder of the mystical society called the Rosicrucians wrote under the pseudonym 'Wishar S. Cerve'. '**Lemuria, The Lost Continent of Pacific**. Though in his introduction he wrote that he 'had not attempted to make the book a treatise on the subjects of anthropology or anthropometry, nor in the fields of archaeological and geological research', he wrote elaborately on the evolution of Lemurians and gave details of their lifestyle, their high development, advanced technology and their comprehensions of the psychic and spiritual laws. He also wrote about floating continents, California and the West coast of the United States as being parts of Lemuria and of their subsequent destruction. He wrote, "The Indians or Hindus, constituting perhaps the purest blood of the Lemurians and known as the pure line of Aryan speaking people, were found in a more or less primitive state in India in 2000 BC". (P-143). Though he has never mentioned the Dravidians or Tamil, the advocates of the Kumari Kandam concept, eager to establish the antiquity of Tamil, profusely quoted him. Certain scientists branded theories postulated by Wishar Cerve as pseudo scientific later on. Maps of the lost land were produced, taking the idea from the palaeo continent of Gondwana, which had existed long before the advent of human ancestry. The narratives about a lost land called Lemuria, which was speculated in the 1880, found their way into colonial India. This was about the time when the *Puranas* and folklore began to permeate historic and geographic knowledge as though they were scientific facts. For instance, the Puranic geography of an axial mountain called *Meru* as the centre of *Jambudvipa* (Sanskrit) or *Navalan Theevu* (Tamil) was accepted and later on these names were attributed to certain parts of Lemuria giving it acceptability among the Tamils. The speculations about drifting continents and submerged land bridges also fuelled the speculations of catastrophes that destroyed the land.

In the 1920s, with Tamil revivalism and the efforts to counter Aryan and associated Sanskrit dominance, the concept of Lemuria was married to the notion of the lost land referred to in Sangam literature. To this land, the name *Kumari Kandam* was given, though nowhere in literature is this referred to as *Kandam*, meaning a continent. The writings of Wishar Cerve and maps of Scott Elliot were brought into Tamil writings by K. Appadurai in his book *Kumari Kandam allathu Kadal Konda Thennadu*. Lemuria was given the Tamil name *Kumari Kandam*, meaning the continent of Kumari and was hailed as the Tamil homeland and for some, as the cradle of civilisation. Names from *Sangam* classics were given to the mountain ranges, rivers, places and areas. In the 1930s, the term found its way into certain Tamil textbooks. Filmmaker P. Neelakandan made a 30-minute short film titled **Kumari Kandam** under the auspices of the Fifth Tamil International Conference. This film depicts Lemuria with its northern part being Tamil

land, the cradle of civilisation that existed before the Himalayas rose as mountains from the sea of Tethys. This is a classic example of how the geological time scale was misunderstood. The sea of Tethys existed about 135 millions years ago and the appearance of human beings on earth happened only fifty million years back. Thus, Tamil enthusiasts linked Lemuria, a figment of European imagination, inadvertently, to the lost land referred to in the Sangam literature. In the middle of the last century, when theories of continental drift, plate tectonics and sea floor spreading, gave an understanding of the distribution of plant and animals, different formations and fossils, the speculations about land bridges and lost continents like Lemuria faded into obscurity elsewhere in the world, but not quite as yet in Thailand.

The lost land - Sea level changes:

Geology emerged as a professional scientific discipline in the late 19th century. During this time both the scientific and popular imagination were dominated by Biblical accounts of creations and deluges. Dramatic geological events were attributed to catastrophes like earthquakes and volcanic eruptions. Eventually the catastrophic theories were dismissed by sound geological explanations. Since the early part of the last century, major strides have been made in geological and geophysical understanding of the earth. The major findings are as follows: 1) In 1912, Alfred Wegener, a German meteorologist explained the continental drift and reconstructed the ancient landmasses carefully, on the basis of geological, geophysical and palaeontological evidences. F.B Taylor, an American had also independently put forward a similar theory about the same time. 2) In 1924, British geologist Arthur Holmes explained that the convection current in the mantle could cause continents to drift. 3) The pattern of ridges and trenches of the convection currents were discovered in the 1940s and 1950s. 4) The theory of plate tectonics advanced in the late 1960s has had a revolutionary effect on earth sciences. In 1962, the American Geologist Harry Hess explained that continental drift could be explained by sea floor spreading. Frederick Vine and Drummond Mathews, two students of Cambridge University, pointed out the zebra patterns of the mapped magnetic anomalies of the ocean floor to support sea floor spreading. In 1966, the concept of sea floor spreading was established by independent oceanographic data involving micro fossils, sediments of the sea floor, measure of heat flow from the earth's interior, palaeo magnetic and seismic study. Finally in 1968, the United States commissioned the deep-sea drilling ship *Glomar Challenger* that drilled and collected core samples from the sea floor. This major exercise in oceanographic exploration proved beyond doubt the validity the global tectonic theory. 5) The study of oceans, including their chemistry, biology, geology and physics has highly developed in the last century since the first oceanic sounding in 1840 by James Clark, who measured a depth of 3,700m

below sea level. Subsequently, improved coring devices enlarged our collective knowledge of the oceans. The actual topography of the deep oceans had been mapped by echo-soundings and ultra-sonic signals. And in the 1940s, seismic methods were also used to understand the ocean floor. 6) Evidence of former glaciations on a wide scale became overwhelmingly conclusive in the last century. The last Ice Age caused the fragmentation of *homo sapiens*, and the enormous environmental changes that took place with global warming caused profound influence on the pre-history of mankind.

During the past two million years, there have been five major glacial advances and five glacial retreats as the globe began to warm, the last of the period is our present, Holocene. Extensive studies have been made to understand global warming during the interglacial periods, and interglacial sediments have been subjected to meticulous research to establish the age and palaeo-geographical conditions in many parts of the world. In the pre-historic studies of coastal areas, it is crucial to understand the sea level changes. For instance, about 18,000 years back, during the time of the last Ice Age, the ice sheets in the poles spread much wider and the sea level was more than 100m lower than the present day sea level, exposing a large area of land along the continental shelf. At this time, Siberia was connected to Alaska and along this land bridge, the peopling of the Americas and migrations of animals happened over a long period. At this time, the landmass of the present day Papua New Guinea, Australia and Tasmania were joined together as were the British Isles with Europe. Since the last Ice Age, the level of the Indian Ocean was lowered just as that of the rest of the oceans of the world. Sri Lanka was connected to the Indian Peninsula by a landmass, which now lies under the Gulf of Mannar. In the following 8,000 years, as the globe warmed large icy masses and glaciers melted resulting in sea levels rising in stages and inundating low lying lands, the portion of the continental shelf of the South Indian Peninsula and the land that connected to Sri Lanka also went underwater as the sea level rose.

Records of sea level fluctuations and related climatic changes are preserved in the seabed in the form of layered sediments. They can be studied through data like faunal contents and nature of sediments. Rajiv Nigam and Hashimi of the National Institute of Oceanography, Goa have done extensive work on the sea level rise, analysing sediments for microfossils such as pollens and *foramanifera* to determine palaeo climate and also to date corals from the continental shelf in the west coast of peninsular India. The team studied marine sediments to generate proxy climate records to decipher the changes in palaeo sea levels. Nigam and Henriques had developed regional models for palaeo depth determination, based on planktonic percentage of *foraminifera* in surface sediments of the Arabian Sea. The significant results of the study on palaeo sea levels are i) that the sea level was lower by 100 m about 14,500 years before present, and

ii) 60m about 10,000 years before present and iii) that during the last 10,000 years, there has been three major episodes of sea level fluctuations. These changes in sea levels have affected human settlements.

Now that the status of the periodic sea level rise had been established, it is easy to decipher the configuration of the coastline, giving certain allowances to tectonic activities and deposition of silt at the confluence of rivers, wherever applicable. The Naval Hydrographic Institute, Dehradun has produced hydro-graphic charts (INT 717071 - X986 to the scale 1:10,000,000 and INT 7007706-1973 of scale 1:3,500,000) pertaining to the Cape Comarin - Gulf of Mannar, where the depth to the sea floor was surveyed basically with echo-sounders to indicate the sea floor contours with great accuracy. It is possible to demarcate the land lost to the sea from inundation maps that indicate that the significant changes in the coastline south of India because of post-glacial inundation. The author has prepared inundation maps based on the bathymetric contours and taking sea level curve of Central West Coast of India (Rajiv Nigam *eta*/ Refer to plate 1) to work out the configuration of the coastline of south of India since the last Ice Age.

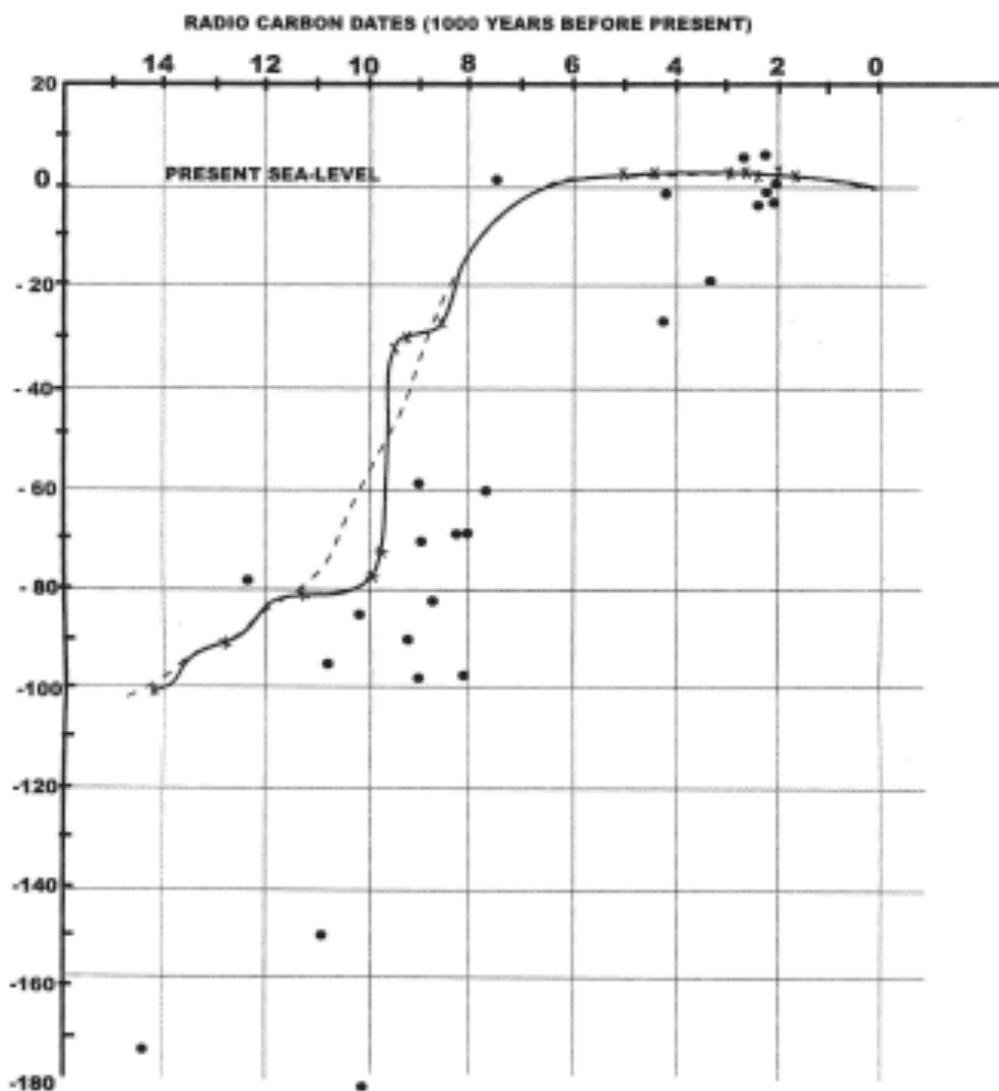
According to this graph, for example, about 14,500 years ago, the sea level was lower by approximately 100m than the present sea level. The land between the present coast and the bathymetric contour of 100 m roughly indicates the land that was exposed during that time. In other words, if you were to hypothetically remove 100 m of seawater from the sea, the land that went under water will be exposed (Refer to Plate 2). That time, the present Gulf of Mannar was a landmass connecting Sri Lanka with Peninsular India and approximately 36,000 sq. km. of land mass was exposed. The sea was about 80 km east, south and west of the present day Cape Comarin, exposing a triangular mass of 6,500 sq. km adjoining the Cape. The sea was 25-35 km wider near Cuddalore and about 25 km wider near Colombo (Refer to plate -3). Due to the increased rate of global warming between 12,000 to 10,000 years BP (before present), the sea level rose almost 50 m inundating the low lying lands and covering a major part of the exposed continental shelf.

About 10,000 years ago, the sea level was about 50 m lower than the present sea level. At this time, the land extended about 25 km south of the Cape and the coast was about 40 km broader than the present coastline along the east and west, which made about 1,000 sq. km. of land exposed near Cape Comarin. Rameswaram and Mannar were joined by land and the land that extended in the present day Gulf of Mannar was a 2,500 sq. km stretch of land marked by sedimentary formations and coral reefs. As the research of Rajiv Nigam indicates, sea levels continued to rise and reached the present level around 6,000 years back. This is about the time when Sri Lanka evolved as an island.

Between 4,000 to 3,500 years ago, heavy rains apart from melting of snow also contributed to the sea level rise. As a result, the sea level rose

above the present level by a couple of meters and fell to the present level about 2,000 years back. Sea level changes had left their signature on archaeological events. Recent studies, including DNA analyses of fossils of early men, indicate that they came out of Africa as early as 800,000 years before. Their descendants migrated to the Far East, probably along the coastal areas adjacent to Arabian Sea and Bay of Bengal, and then north into China and south into Sumatra. As the sea levels rose, resulting in periodic flooding and deluges, pre-historic settlements that were located in the low lying coastal lands and the exposed continental shelf were inundated by the rising water. The people who lived in the coastal area of the Indian peninsula and Sri Lanka, and who escaped the deluges, perpetuated the oral tradition of lost land. This, in my opinion, gave rise to the legend of Kumari.

Graham Hancock, the author of the well-known book **Underworld**, which deals with the mysterious origins of civilisation, in the chapter titled **The Quest of Kumari Kandam** has the following to say: “The work of Glenn Milne and other inundation specialists confirms that between 12,000 and 10,000 years ago, India’s Dravidian peninsula and its overlying islands would indeed have been far larger than they are today, but were in the process of being swallowed by the rising seas at the end of the Ice Age. The inundation maps show that significant coastline changes took place in the south during the last millennia or so of the Last Glacial Maximum.”

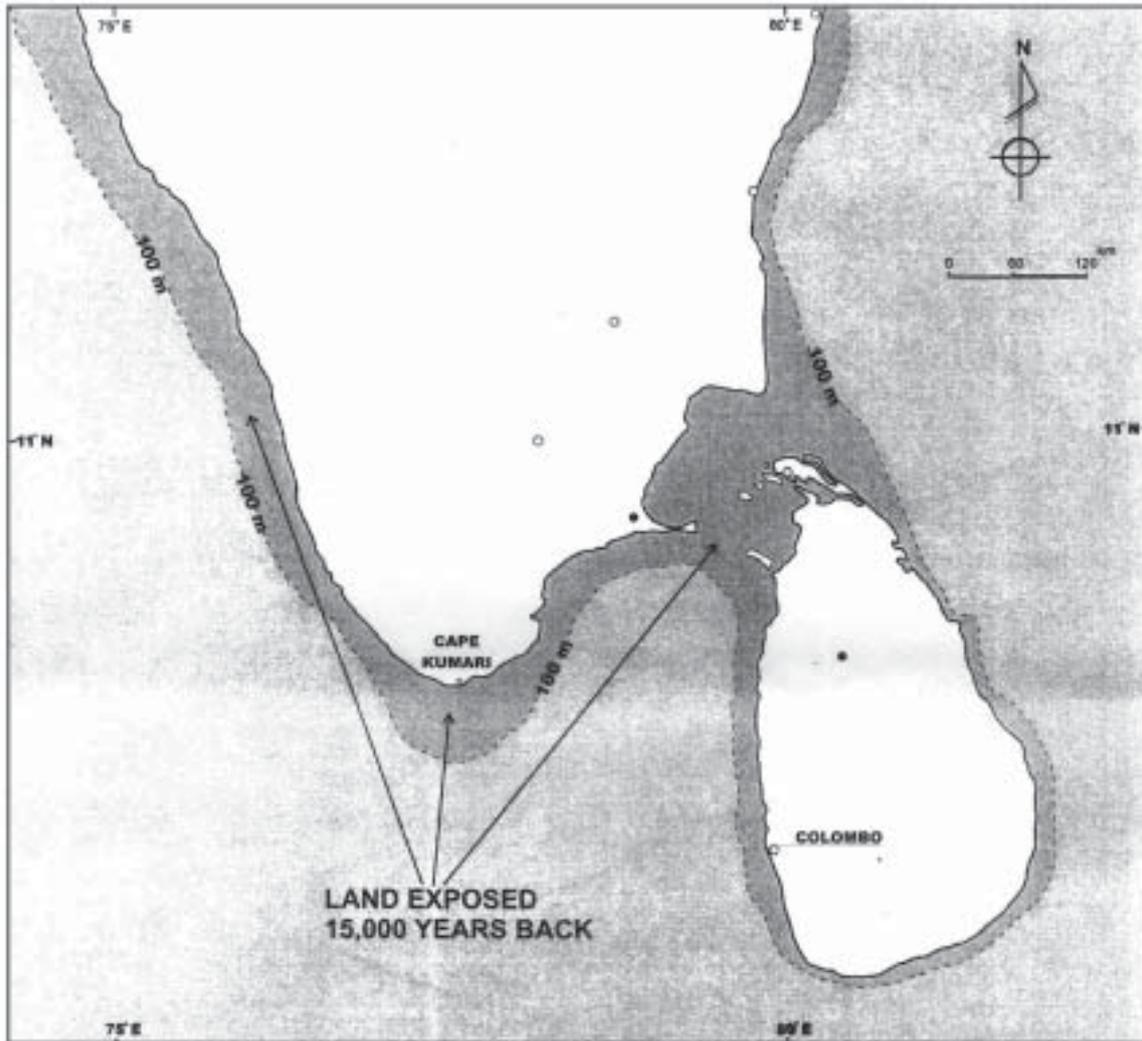


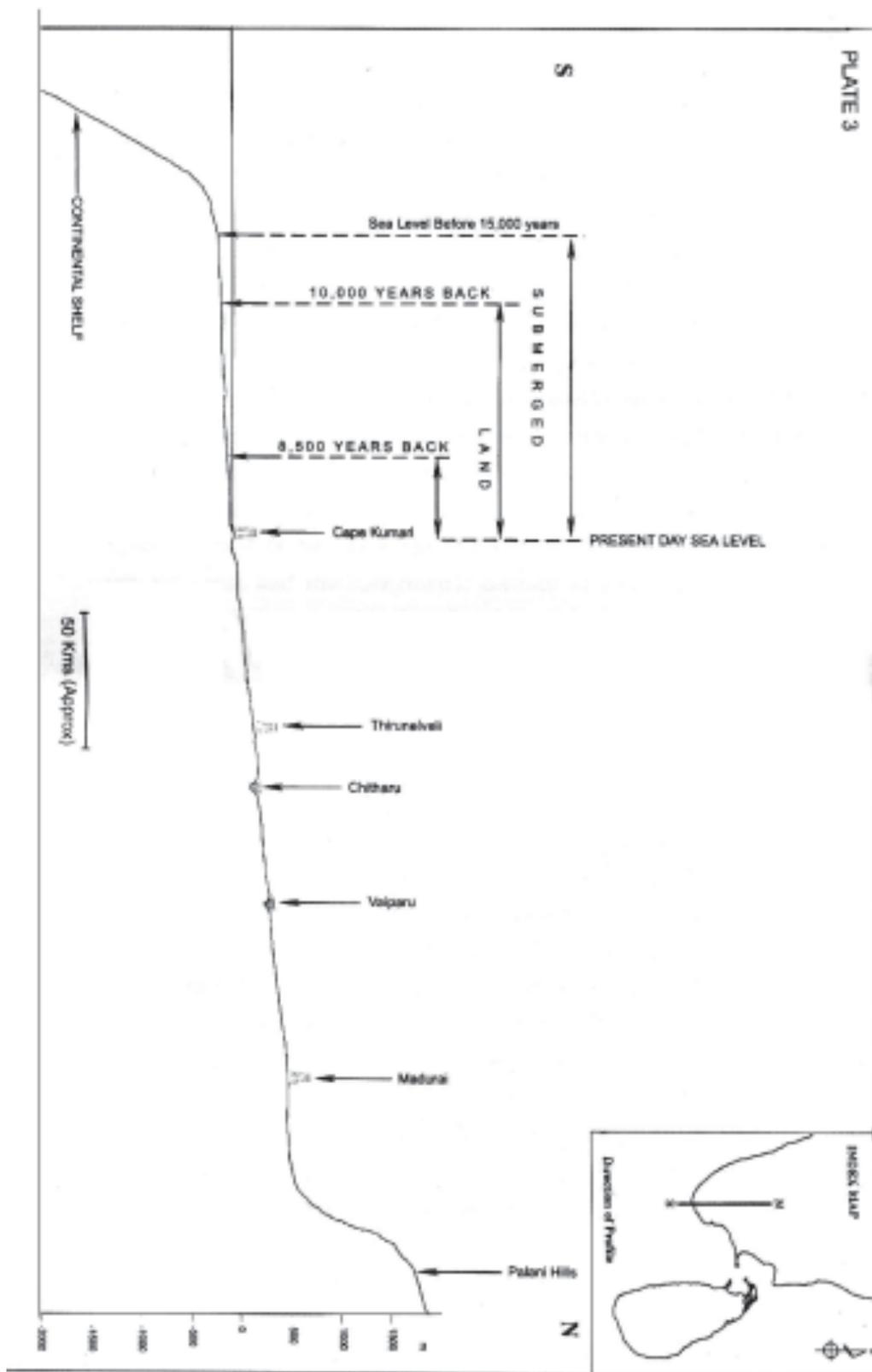
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GRAPH SHOWING SEA LEVEL CHANGES

PLATE 2

COASTLINE CONFIGURATION OF INDIAN PENINSULA AND SRI LANKA (15,000 YEARS BACK)





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