

Grids & Datums

REPUBLIC OF SEYCHELLES

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The Seychelles islands first appeared on Portuguese charts in 1505, but remained uninhabited for more than a century and a half after they became known to Western explorers. The islands may have had visitors from Arabia much earlier, but there is no known record. In 1742 the French Governor of Mauritius (PE&RS, February 1999), Mahé de Labourdonnais, sent an expedition to the islands. A second expedition in 1756 reasserted formal possession by France and bestowed upon the islands their present name in honor of the French Finance Minister under King Louis XV. The French being the first to colonize the Seychelles, maintained control for a 50-year period. Official land surveys for property subdivision are known from the 1780s and 1790s. A triangulation may have been observed, as in Mauritius, but no permanently marked stations survived into the twentieth century and no old trig records were kept. The new colony barely survived its first decade and did not really flourish until 1794, when Queau de Quincy became Commandant. After being captured and freed several times during the French Revolution and the wars of Napoleon, the islands

grants of land, known as 'habitations,' and in 1787 a survey plan of Mahé was made which showed 29 such habitations of irregular shape and size. The survey resulted from formal orders issued by the Commandant, who was also charged with the task of drawing up deeds and rectifying or disallowing all bad titles. There is virtually no record available in Seychelles that throws much light upon these early surveys and the methods by which they were made. An overall plan of Mahé was made in 1829 and portrays all the properties for which information was then available, but the representation is in graphical form only. The earliest land measurements employed in Seychelles are the French foot or pied, the toise which contains 6 pieds, the perche of 20 pieds, and l'Arpent common which has 40,000 pieds². In addition to these measurements the meter and English foot have also been used.

The British Royal Navy was very active in Seychelles waters during the nineteenth century, suppressing the slave trade between Africa and Arabia (slave trading and slavery having been abolished within

In my opinion, the transformation parameters listed in TR 8350.2 appear to be grossly incorrect for "MAHE 1971" to WGS84 because of the very close agreement in different surveys and adjustments carried out over several years by the various United Kingdom survey units.

passed officially to the British under the Treaty of Paris in 1814. From the date of its founding until 1903, the Seychelles was regarded as a dependency of Mauritius. However, in 1888, a separate Administrator nominated Executive and Legislative Councils which were established for the archipelago. Nine years later, the Administrator was given the full powers of a Governor, and on 31 August 1903, the Seychelles became a separate British Crown Colony. The coralline islands were added to the colony in 1903, and the whole territory became an independent republic within the Commonwealth in 1976.

The Seychelles are comprised of an archipelago in the Indian Ocean, northeast of Madagascar (PE&RS, February 2000), and have a total land area of 455 km² or 2.5 times the size of Washington, D.C., with a coastline of 491 km. The lowest point is the Indian Ocean (0 m), and the highest point is Morne Seychellois (905 m). The Mahé Group is granitic with a narrow coastal strip that is rocky and hilly. The other islands are coral, flat elevated reefs. In total, there are 41 granitic islands and about 75 coralline islands.

The colony's administration continued the property surveying that had begun in French times, but surveys were done in isolation in the absence of a triangulation network. The early settlers received free

the British Empire in 1807 and 1833, respectively). Therefore extensive Admiralty hydrographic surveys were carried out throughout the islands, based on coastal astro fixes and small local trig schemes for harbor surveys. The HMS Stork surveyed Mahé and the adjacent islands in 1890. The positions were not reliable, and a survey by HMS Enterprise in 1931 of Curieuse Bay showed that latitudes should be decreased by 47" and longitudes increased by 34". Mahé itself required a correction of about 10" in latitude in 1943.

The first modern, permanently marked, triangulation of the Seychelles Group was carried out by a British military unit, the East Africa Survey Group, in 1943. The object was to provide a mapping and artillery grid for coastal batteries. The HMS Challenger observed an astro station on South East Island in 1943, and that has served as the exclusive local datum for the islands on the Seychelles bank, that is, those islands north of 5°S and between 55°E and 56°E. The South East Island Datum of 1943 originates on an astrofix taken by the crew of HMS Challenger where: $\Phi_0 = 4^\circ 40' 39.460'' S$, $\Lambda_0 = 55^\circ 32' 00.166'' E$, and the ellipsoid of reference is the Clarke 1880 where $a = 6378249.145$ meters, and $1/f = 293.465$. The Seychelles Belt Grid is based on the Gauss-Krüger

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