

Cassini, Jean-Dominique (Cassini IV) | Encyclopedia.com

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(b. Paris, France, 30 June 1748; d. Thury, near Clermont, Oise, France, 18 October 1845),

astronomy, geodesy.

The son of César-François Cassini (Cassini III) and Charlotte Drouin de Vandeuil, Cassini was born at the Paris observatory and received his secondary education at the Collège du Plessis in Paris and at the Oratorian *college* at Juilly. He then studied under the physicist Nollet, the mathematician Antoine Mauduit, and the astronomers Giovanni Maraldi and J. B. Chappe d'Auteroche. In 1768, on a cruise in the Atlantic, he was in charge of continuing the attempts to test a marine chronometer of Pierre Le Roy. Elected *adjoint* by the Académie des Sciences on 23 July 1770 (he became *associé* in 1785), he was put in charge of the publication of Chappe's *Voyage en Californie*. Assured from 1771 of succession to the directorship of the Paris observatory, a post created for his father, he gradually assumed its responsibilities before being officially appointed in 1784, upon the death of Cassini III.

In 1773 Cassini married Claude-Marie-Louise de la Myre-Mory, who died in 1791, leaving him with five young children: Cécile, Angélique, Aline, Alexis, and Alexandre Henri Gabriel, later a jurist and botanist, with whom the French branch of the Cassini family died out.

In 1784 Cassini persuaded [Louis XVI](#) to agree to the restoration and reorganization of the observatory, a project, however, that he was able to realize only partially. He occupied himself with the completion of the great map of France undertaken by his father and in 1787, with A.-M. Legendre and Méchain, participated in the geodesic operations joining the Paris and Greenwich meridians.

Cassini accepted some political duties at the beginning of the Revolution, and directed the execution of a portion of the new administrative maps and participated for several months, in 1791, in the work of the commission of the Academy responsible for preparing a new metrological system. He was firmly attached to the monarchy, however, and, little by little, adopted an attitude of hostile reserve toward the Revolution. From March 1793 he opposed the reforms that the authorities wanted to introduce at the observatory, and he attempted to maintain his former authority. However, after bitter polemics he gave up his duties on 6 September 1793 and a few weeks later left the Paris observatory, which for 120 years had practically been the property of his family.

Denounced by the revolutionary committee of Beauvais, Cassini was arrested in Paris on 14 February 1794 and imprisoned. On 5 August 1794, he retired to the family château of Thury, in the Oise. He participated in local affairs as a member of the board of examiners of the primary schools and of the école Centrale de l'Oise but declined his nomination to the Bureau des Longitudes at the end of 1795 and to the astronomy section of the new Institut National in January 1796.

A few years later Cassini attempted to resume his career. He accepted election as *associé* of the experimental physics section on 24 April 1798 and then as member of the astronomy section of the Institute on 24 July 1799, but he strove in vain to secure renomination to the Bureau des Longitudes. Renouncing further pursuit of his scientific work, he assumed the presidency of the Conseil Général de l'Oise from 1800 to 1818. Pensioned and decorated by Napoleon and [Louis XVIII](#), Cassini devoted himself to local politics and to polemical writings aimed at combating liberal ideas, defending his family's scientific prestige, and justifying his attitude.

Besides his efforts to modernize and reorganize the Paris observatory during the last years of the *ancien Régime* and to complete the map of France, Cassini's personal works are basically limited to accounts of astronomical and geodesic expeditions and to reports of observations.

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1. Original Works. An important part of Cassini's scientific work is the many memoirs and communications presented to the Académie des Sciences. Their titles may be found in *Table générale des matières contenues dans l'Histoire et dans les Mémoires de l'Académie des sciences*, VIII-X (Paris. 1774–1809). His principal works are *Voyage fait par ordre du roi en*

1768 pour éprouver les montres marines inventées par M. Le Roy... (Paris, 1770); *Exposé des opérations faites en France, en 1787, pour la jonction des observatoires de Paris et de Greenwich* (Paris, n.d. [1792]), written with Méchain and A.-M. Legendre; and *Mémoires pour servir à l'histoire des sciences et à cell de l'Observatoire de Paris, suivis de la vie de J. D. Cassini* (Paris, 1810). He was editor of Chappé d'Auteroche's *Voyage en Californie pour l'observation du passage de Vénus sur le disque du soleil, le 3 juin 1769...* (Paris, 1772); *Extrait des observations astronomiques et physiques, faites à l'Observatoire royal*, 5 vols, for 1785, 1787–1791 (Paris, 1786–1791), in collaboration with J. Perny de Villeneuve, N.-A. Nouet, and A. Ruelle; and *Carte géométrique et topographique de la France... publiée sous les auspices de l'Académie des sciences...* (Paris, 1784–1793). In addition, Cassini collaborated on the *Dictionnaire de physique of the Encyclopédie méthodique*, 4 vols. (Paris, 1793–1822). Many of his MSS are in the library of the Paris Observatory, the library of the Institut de France, and the library of Clermont, Oise.

II. Secondary Literature On Cassini or his work see the following, listed chronologically: J. F. S. Devic, *Histoire de la vie et des travaux scientifiques et littéraires de J. D. Cassini IV* (Clermont, 1851); C. Delacour, "Le dernier des Cassini," in *Mémoires de la Société académique... de L'Oise*, 2 (1853), 67–92; F. Hofer, in *Nouvelle biographie générale*, IX (Paris, 1854), cols. 52–54; Poggendorff, I, cols. 392–393; J. Houzeau and A. Lancaster, *Bibliographie générale de l'astronomie*, 3 vols. (Brussels, 1882–1889; repr. London, 1964), see index; J. Guillaume, *Procès-verbaux du Comité d'instruction publique de la Convention nationale*, 7 vols. (Paris, 1891–1957), see VII, index, 232; C. Wolf, *Histoire de l'Observatoire de Paris, de sa fondation à 1793* (Paris, 1902); G. Boquet, *Histoire de l'astronomie* (Paris, 1924), pp. 471–473; N. Nielsen, *Géomètres français sous la Révolution* (Copenhagen, 1929), pp. 54–57; F. Marguet, *Histoire générale de la navigation du X^e au XVIII^e Siècle* (Paris, 1931), *passim*; and M. Prévost, in *Dictionnaire de biographie française*, VII (Paris, 1956), cols. 1331–1332.

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