

**Passage de Vénus, Mission de Santa
Cruz (Patagonie), Photograph Album
1903-1962
Mss.B.F63**

American Philosophical Society
2003
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Summary Information

Repository	American Philosophical Society
Creator	Fleuriais, Georges-Ernest, 1840-1895
Title	Passage de Vénus, Mission de Santa Cruz (Patagonie), Photograph Album
Date [inclusive]	1903-1962
Call number	Mss.B.F63
Extent	0.25 Linear feet
Extent	31 photographs; 0.25 linear feet
Location	LH-B-33-3
Language	French
Abstract	<p>The French Académie des Sciences organized a total of ten expeditions to observe the transit of Venus in 1882, including parties that set up in Haiti, Martinique, Mexico, Florida, Chile, and Cape Horn. The expedition to Santa Cruz on the Patagonian (Argentine) coast was led by the naval officer Georges-Ernest Fleuriais (1840-1895), director of the Cartography Department of the French Navy. Aboard the ship <i>Volage</i>, Fleuriais sailed to Argentina and made observations of the transit just before Venus passed its ascending node on December 6, 1882.</p> <p>The 31 albumen photographs bound into the album titled "Passage de Venus 1882 -- Mission de Santa Cruz (Patagonie)" document a French astronomical expedition of that year to the Argentine coast. Rather than photographs of the transit itself, the album contains images of the</p>

members of the expedition, the crew of the *Volage*, and the base camp. Only a few images contain captions (written in pencil on the mount).

Preferred Citation

Cite as: Georges-Ernest Fleuriais, Passage de Vénus, Mission de Santa Cruz (Patagonie), Photograph Album, 1882, American Philosophical Society.

Background note

Transits of Venus are uncommon events, occurring only four times every 243 years, however in the eighteenth and nineteenth centuries, these rare events were of considerable practical importance to astronomers. Precise measurements of the timing and position of the planet as it passed across the disk of the sun offered the best means available to resolve one of the classic problems in observational astronomy: the determination of the distance from the earth to the sun,

The transit in 1769 was a formative event in the history of the American Philosophical Society, which helped to organize observations in North America and to coordinate the analysis and distribution of the data. Securing funding for equipment from the provincial government on the pretext that their observations would aid in improving navigation, the APS sponsored groups of observers at Cape Henlopen, N.J., the State House Yard in Philadelphia, and most famously at David Rittenhouse's estate in Norriton, Pa., making the Transit of 1769 one of the first examples of a truly cooperative, American scientific enterprise. The precision of the measurements made by these teams turned out in the long run to have been less important than the vehicle for disseminating them. Meeting a long-cherished goal of Benjamin Franklin, the Society published the results of the Transit observations in the first volume of its *Transactions* in 1771, making it the first scientific journal published in North America and the surest sign to Europeans of institutional maturity in the colonies.

The next Transits of Venus, in 1874 and 1882, became the focus of a truly international effort to observe the transit from dozens of points in order to reduce observational error. The French Académie des Sciences organized a total of ten expeditions, including parties that set up in Haiti, Martinique, Mexico, Florida, Chile, and Cape Horn. The expedition to Santa Cruz on the Patagonian (Argentine) coast was led by the naval officer Georges-Ernest Fleuriais (1840-1895), director of the Cartography Department of the French Navy. Aboard the ship *Volage*, Fleuriais sailed to Argentina and made observations of the transit just before Venus passed its ascending node on December 6, 1882.

Although several sites were hampered by poor weather conditions, these expeditions generated valuable data that confirmed and refined the data gathered by the better known expeditions of 1874. In both years, photography was used as a key instrument for recording and measuring the transit, with the end result that the solar parallax was estimated at 8.847" plus or minus 0.012", corresponding to a distance of the Sun of 92,385,000 miles.

Scope & content

The 31 albumen photographs bound into the album titled "Passage de Venus 1882 -- Mission de Santa Cruz (Patagonie)" document a French astronomical expedition of that year to the Argentine coast. Rather than photographs of the transit itself, the album contains images of the members of the expedition, the crew of the *Volage*, and the base camp. Only a few images contain captions (written in pencil on the mount).

Administrative Information

Publication Information

American Philosophical Society 2003

Provenance

Acquisition Information

Acquired from William Reese, 2000 (accn. no. 2000-886ms).

Processing Information

Catalogued by rsc, 2004.

Indexing Terms

Corporate Name(s)

- Académie des sciences (France).

Genre(s)

- Photographs

Subject(s)

- Astronomy--France
- Scientific expeditions--France
- Venus (Planet)--Transit

Bibliography

Woolf, Henry, *The Transits of Venus: A Study of Eighteenth Century Science* (Princeton, 1959).

Mouchez, E. "Observation du Passage de Vénus dans la République Argentine" *Comptes Rendus Hebdomadaires des séances de l'Académie des Sciences* 95 (1882): 1182-1184.

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Collection Inventory

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Panorama of the coastline	1882 December
View of observation buildings at Santa Cruz(?) from above	1882 December
View of observation buildings at Santa Cruz	1882 December
"M. Le Pond"	1882 December
Unidentified expedition member, seated	1882 December
"M. Le Brun, naturaliste"	1882 December
Le Pond, Le Brun, "Moise," and unidentified	1882 December
Unidentified expedition member looking through transit, two other members seated	1882 December
Unidentified expedition member looking through transit, two other members seated	1882 December
Le Brun (?) seated at desk, specimen on wall behind	1882 December
"Hust, 2e mtr. de limonerie(?)"	1882 December
"Conan, q.m. armurier"	1882 December
"Le Guilcher, q.m. charpentier"	1882 December
Unidentified expedition member, seated, drumming	1882 December

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Expedition members drinking wine	1882 December
Expedition members climbing ladder	1882 December
Observation buildings	1882 December
"Ct. Blanco, Capt. Mojano" and three other expedition members	1882 December
"Sor. Williams"	1882 December
Man on horseback, dog	1882 December
View of ship	1882 December
"Mr. Inhouff, Ct. de Volage, de Lartigue, Couteaud, Gradin, Bracou" (ship's crew)	1882 December
Unidentified ship's officer	1882 December
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Unidentified expedition member, with rifle	1882 December
Unidentified expedition member	1882 December
"Etat major et equipage du Volage"	1882 December
Geological strata	1882 December
Rock outcropping	1882 December