

Leiden Observatory Archives,
E.F. van de Sande Bakhuyzen Archive (EB)

Inventory by David Baneker, 2010

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Introduction

This is the inventory of the papers of E.F. van de Sande Bakhuyzen (1848-1918), observer at Leiden Observatory and from 1908-1918 director of that institute. The archive includes professional correspondence, correspondence and papers regarding the management of the Observatory, and papers regarding the maintenance of the scientific instruments and the building. It also includes papers regarding of two international committees: the International Time Conference and the Fundamental Star Committee.

The papers also include correspondence by C. Sanders, who performed observations from Matuba in Portuguese Congo, Africa. Later letters from Sanders can be found in the W. de Sitter papers.

The papers are preserved at Leiden University Library, Western Manuscript Collection. The E. Bakhuyzen papers contain c. 0,8 meters of archive material.

References to the archive in published credits must include the following information: Leiden University Library, E. Bakhuyzen papers (EB), [call number].

Ernst Frederik van de Sande Bakhuyzen (1848-1918) was appointed as observer at Leiden Observatory by his brother Hendrik, who was the director from 1872. He participated in the Venus transit expedition of 1874-75 to Réunion. In 1908 he succeeded his brother as director of the Observatory. He did not become professor of astronomy, as his brother had been; that position went to Willem de Sitter.

Like his brother, Ernst Bakhuyzen worked mainly on the elimination of systematic errors from astronomical measurements. His directorate is generally considered to be a period of decline of the Observatory, in which hardly any scientific work was published.

Ernst Bakhuyzen died unexpectedly in 1918. He was succeeded by Willem de Sitter.

Provenance

The archive was formed by Bakhuyzen in the course of his work. The papers have been bequeathed to the Observatory and were preserved there until they were transferred to the University Library. Some papers were found in the collections of Museum Boerhaave. These papers have been indicated in the inventory.

The archive was transferred to Leiden University Library in 2010, by agreement between Leiden Observatory and the University Library.

Notes for users

The archive has been reordered and repacked. Most of the folders were created by Bakhuyzen himself. The original files were maintained as much as possible. Correspondence has been ordered chronologically.

To facilitate researchers, each file has been given a short title. In some cases these titles were original designations by the authors. The other titles are mine. The main subject of each file is indicated in the inventory. This is not an exhaustive description, but a first indication, intended for researchers.

Correspondence has been ordered alphabetically by correspondent, following the Dutch system (disregarding prefixes such as *van*, *van der*, etc.).

Within the files, correspondence has been ordered chronologically. Other papers are preserved in the order in which they were found.

“Correspondence with ...” indicates that the file contains letters from both correspondents; “letters from ...” indicates that only one side of the correspondence has been preserved in this archive.

Selected literature

[Gent, R. van], *De reizende astronoom. Nederlandse sterrenkundige expedities naar de Oost en de West* (Leiden 1993).

Herk, G. van, H. Kleibrink en W. Bijleveld, *De Leidse sterrewacht. Vier eeuwen wacht bij dag en nacht* (Zwolle 1983).

Sitter, W. de, *Short history of the observatory of the university at Leiden 1633-1933* (Haarlem 1933).

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inv.no.	title	no. of letters	date	description
<i>Correspondence by correspondent</i>				
1	Albrecht	1	1911	Letter from Th. Albrecht, Potsdam
2	Backlund	2	1913-1914	Letters from O. Backlund, Pulkovo
3	Banachiewicz	2	1913-1914	Letters from Th. Banachiewicz, Engelhardt Observatory (Russia)
4	Bilt, van der	3	1910,1917	Letters from J. van der Bilt, Utrecht
5	Bolt	4	1912-1913	Letters from J.C. Bolt, Rotterdam
6	Braak	2	1909	Letters from C. Braak, Weltevreden and Batavia (Dutch East Indies)
7	Brandt	5	1905-1906	Letters from J. Brandt, Amsterdam, possibly a computer
8	Brown	1	1914	Letter from E.W. Brown, New Haven
9	Buszczyński	1	1909	Letter from B. Buszczyński, Dresden
10	Chatelu	1	1912	Letter from L. Chatelu, Paris
11	Cohn	5	1909-1917	Letters from F. Cohn of the Königliches Astronomisches Rechen-Institut, Berlin
12	Déville	2	1912-1913	Letters from E. Déville, Ottawa
13	Eberhard	1	1917	Letter from G. Eberhard, Potsdam
14	Enschedé	19	1909, 1912-1917	Correspondence with publishing company Joh. Enschedé
15	Fayel	2	1914	Letters from G. Fayel, Nice
16	Gautier	26	1883-1890	Letters from R. Gautier, Geneva
17	Haga	2	1911	Letters from the physicist H. Haga, Groningen
18	Helmert	1	1911	Letter from F.R. Helmert, Potsdam
19	Heuvelink	1	1912	Letter from H.J. Heuvelink of the <i>Rijkscommissie voor Graadmeting en Waterpassing</i> (Geodetic Committee)
20	Kam	21	1892-1894	Letters to N.H. Kam. Includes one letter from observer J.H. Wilterdink.
21	Kapteyn, J.C.	13	1894, 1909-1918	Letters from J.C. Kapteyn, Groningen
22	Kapteyn, W.	13	1911-1912,1914	Letters from mathematician W. Kapteyn, Utrecht
23	Kamerlingh Onnes	1	1911	Letter from H. Kamerlingh Onnes, Leiden
24	Kobold	4	1908-1913	Letters from H. Kobold, Kiel
25	Küstner	2	1913-1914	Letters from F. Küstner, Bonn
26	Lecointe	2	1914	Letters from G. Lecointe, Uccle (Belgium), with some reports on calendar reform
27	Maanen, van	11	1911-1913	Letters from A. van Maanen, from Utrecht, Yerkes and Mount Wilson
28	Meesters	6	1916-1918	Letters from amateur astronomer P. Meesters, Halfweg

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29 Mooijman	7	1913-1917	Letters from W.J. Mooijman, presumably a computer. Includes one letter from Mooijman's physician, R.H. van Dorsten
30 Morvan, le	1	1914	Letter from C. le Morvan, Paris
30A Neelmeyer	5	1912, 1917	Letters from the brothers P.C. and J.H. Neelmeyer, Dresden and Utrecht, concerning a vacancy at the Observatory
31 Nijland	6	1911-1916	Letters from A.A. Nijland, Utrecht
32 Noorduyn	1	1915	Letter from W. Noorduyn, Rotterdam
33 Pannekoek	28	1908-1917	Letters from A. Pannekoek, from Bremen and various places in Holland. Includes a manuscript by Pannekoek on the variability of Polaris (9pp), and a reprint of his article 'Researches into the structure of the galaxy' in the proceedings of the Royal Academy of Sciences
34 Pfeiffer	2	1913	Letters from F. Pfeiffer, Scheveningen, about the eclipse of 1914
35 Rabe	1	1914	Letter from W. Rabe, Breslau
36 Rhijn, van	2	1916	Two letters from P.J. van Rhijn, Groningen. Includes a sheet with tables of star positions
37 Sanders			
37_1 Sanders	7	1892-96	Letters from C. Sanders in Portuguese West-Africa. Includes two letters from M. Snellen of the KNMI, Utrecht
37_2 Sanders	17	1899-1900	Letters and manuscripts from C. Sanders
37_3 Sanders	11	1901	Letters and manuscripts from C. Sanders
37_4 Sanders: manuscripts and notes		1901	Manuscripts and notes concerning the position fixing of Chiloango
37_5 Sanders: map Chiloango		1901?	Map of Portuguese Congo and the Chiloango river
37_6 Sanders	22	1901-04	Letters and manuscripts from C. Sanders
37_7 Sanders	6	1906-07	Letters and manuscripts from C. Sanders. Includes notes by E.F. van de Sande Bakhuyzen on Sanders' work.
37_8 Sanders	12	1907-10	Letters and manuscripts from C. Sanders
37_9 Sanders	21	1911-1914	Correspondence with C. Sanders in Portuguese Congo, 1911-1914, about his observations. Includes some letters of Sanders' brother A.J. Sanders and of several instrument manufacturers (esp. concerning clocks). Also includes one letter from Sanders to H.G. van de Sande Bakhuyzen from 1896.
37_10 Sanders	12	1914-1915	Correspondence with C. Sanders (who temporarily stayed in Amsterdam). Also includes a letter from F.W. Dyson (Greenwich) and two letters from instrument maker Sartorius (Göttingen).

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37_11 Sanders		1907-1915	Observations and manuscripts by C. Sanders, including observations of Halley's comet in 1910
37_12 Sanders	6	1915-1916	Correspondence with C. Sanders in Portuguese Congo, about his observations. Includes attached notes of his observations.
37_13 Sanders	5	1916	Correspondence with C. Sanders in Portuguese Congo, about his observations. Includes attached notes of his observations.
37_14 Sanders		1915-1916	Summaries and transcriptions by Bakhuyzen of 10 letters from C. Sanders, 1915-1916
37_15 Sanders	6	1917	Correspondence with C. Sanders in Portuguese Congo, about his observations. Includes attached notes of his observations.
37_16 Sanders	16	1917-18	Letters from C. Sanders. Includes letters from Sanders to Willem de Sitter, and copies of letters to H. Spencer Jones (Greenwich)
37_17 Sanders: manuscripts and notes		1917-18	Manuscripts from C. Sanders and calculations concerning his observations
37_18 Sanders		1930-31	Three letters to C. Sanders
38 Scheltema	23	1909-1914	Correspondence with diplomat and amateur astronomer N. Scheltema, mainly from Jeddah. Includes a short manuscript about the position fixing of Mecca. Also includes one letter from arabist C. Snouck Hurgonje, Leiden
39 Schröder	1	1915	Letter from [?] Schöder, The Hague
40 Smeding	6	1917	Letters from S.S. Smeding, who had applied for a job as computer at the Observatory
41 Struve	3	1901, 1911	Letters from H. Struve
42 Tintern	2	1910	Letters from W. Tintern[?], Vienna
43 Triebart	5	1914-1917	Letters from J.K.E. Triebart, Voorburg, about his experiments to measure the velocity of gravitation. Includes pictures and drawings of his experiments
44 Trowbridge	1	1910	Letter from C.C. Trowbridge, New York
45 Tydeman	3	1917	Letters from navy officer G.F. Tydeman
46 Valentiner	2	1909	Letters from W. Valentiner, Heidelberg
47 Vening Meinesz	77	1913-1917	Letters from geophysicist F. Vening Meinesz, Delft
48 Vos van Steenwijk, de			
48_1 Vos van Steenwijk, de	36	1912-1915	Letters from J.E. De Vos van Steenwijk, student at Leiden
48_2 Vos van Steenwijk, de	47	1916	Letters from J.E. De Vos van Steenwijk, student at Leiden, who was drafted into the army at this time
48_3 Vos van Steenwijk, de	14	1917	Letters from J.E. De Vos van Steenwijk. Includes reprints of two papers by Bakhuyzen and De Vos van Steenwijk in the Proceedings of the Royal Academy of Sciences
49 Voûte	5	1913-1914, 1917	Letters from former Leiden observer J.G.E.G. Voûte, South Africa

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50 Walstra	2	1914 Letters from K.W. Walstra, Alkmaar
51 Woltjer	25	1916-1918 Letters from J. Woltjer jr.
52 Wulfften Palthe, van	4	1912 Letters from A.A.W. van Wulfften Palthe on his eclipse observations

Correspondence by institution

53 German Navy	2	1913-1914 Letters from the German Imperial Navy
54 Government publications	8	1909-1913 Letters to various Dutch government departments, concerning the sending of publications such as the annual report of the Topographical Service in the East Indies; includes one answer from the Department of Colonies.
55 Ministry of Foreign Affairs	6	1909-1915 Correspondence with the Ministry of Foreign Affairs, concerning Scheltema's position fixing of Mecca
56 Ministry of the Interior	7	1909-1912 Correspondence with the Ministry of the Interior
57 Nautical Almanac	3	1910 Letters from the Nautical Almanac Office
58 NNGC	2	1916 Correspondence about a subsidy for the Observatory from the <i>Nederlandsch Natuur- en Geneeskundig Congres</i> (Netherlands Society for Science and Medicine)
59 Royal Academy	2	1918 Letters from the Royal Academy of Sciences, Amsterdam
60 Various institutions	10	1909-1917 Official letters from scientific institutions (observatories and academies), for example invitations

Correspondence by subject

61 Greenwich: Moon	7	1903-1906 Correspondence regarding Bakhuyzen's work on the motion of the moon, related to work by P.H. Cowell of Greenwich. Correspondents: W.H.M.Christie, P.H. Cowell and H.P. Hollis (Greenwich), and H. Battermann (Berlin)
62 Time signals	16	1909-1913 Correspondence regarding time signals and pendulum clocks. Correspondents: F. Vening Meinesz (Delft), various telegraph officials
63 University fund	6	1908-1909 Correspondence with the Leiden University Fund
64 Stieltjes publication	11	1911-1914 Correspondence regarding the publication of work of T.J. Stieltjes. Correspondents: L. Stieltjes (probably widow of Tom Stieltjes), W. Kapteyn (Utrecht), D.J. Korteweg (Amsterdam), Noordhoff (publisher).
65 Scheltema expedition	21	1909-1912,1915 Correspondence about N. Scheltema's observations of the position of Mecca. Correspondents: H.J. Heuvelink (Delft), J.J.A. Muller (Zeist), shipbroker Meyer & co (Amsterdam), mrs N. Scheltema (Ameland), navy officer S.P. L'Honoré Naber, J. Van Breugel (The Hague), navy officer J. de Jong, E.F. van de Sande Bakhuyzen, J.J. Hess (Zürich), and various instrument manufacturers

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66 Verhaar planetarium	6	1916-1917	Correspondence about a fundraising campaign to purchase a planetarium made by P. Verhaar for the Education Museum in The Hague. Correspondents: J.A. van der Star and A.J.E.A. Bik
67 Exhibitions	16	1910-1911, 1913, 1916	Letters concerning the loan of Observatory instruments, books and Bleau globes for various exhibitions
68 Moon 1912	12	1912, 1914, 1923	Correspondence regarding observations and calculations concerning the moon, surrounding the eclipse of 1912. Correspondents: E. Kohlschütter (Berlin), H. Battermann (Königsberg), F. Banachiewicz (Russia), F.W. Dyson (Greenwich), W.H. Julius (Utrecht). Includes one letter from Kohlschütter, dated 1923, presumably to H.G. van de Sande Bakhuyzen.
69 International time conference		1912-1913	Correspondence regarding the international time conference
70 Eclipse 1912	40	1912	Correspondence regarding the eclipse of 1912 in Maastricht. Correspondents: A.A.
71 Publications	63	1908-1917	Correspondence regarding the exchange of publications between astronomical institutes and libraries
72 Various correspondence	22	1909-1917	Various correspondence, including unidentified correspondents. Includes some letters that Bakhuyzen identified as 'astronomical nonsense'

Committees, notes and observations

73 Fundamental star committee			
73_1 Fundamental star committee		1909-1910	Papers of the fundamental star committee of the <i>Carte du Ciel</i>
73_2 Fundamental star committee		1909-1910	Transcripts of papers of the fundamental star committee of the <i>Carte du Ciel</i> , not included in previous folder
73_3 Fundamental star committee		1910-1911	Papers of the fundamental star committee of the <i>Carte du Ciel</i>
73_4 Fundamental star committee			Maps of standard stars from the Backlund catalogue
73_5 Fundamental star committee		1910	Two reports for the fundamental star committee by Bakhuyzen, July and September 1910. Includes notes for the first report
74 International time conference			

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74_1 International time conference	1912 Papers regarding the first international time conference in Paris, 1912. Includes reports about the conference by Bakhuyzen, (?) Van Everdingen and (?) Cosyn to various Dutch ministers
74_2 International time conference	1912 Papers regarding the first international time conference in Paris, 1912
74_3 International time conference	1912-1913 Papers regarding the international time conference
74_4 International time conference	1913 Papers regarding the second international time conference in Paris, 1913
74_5 International time conference	1913 Papers regarding the second international time conference in Paris, 1914
75 Observations 1864-68	1882 Notes and calculations regarding observations from 1864-68. Originally from Boerhaave Museum Collection
76 Jupiter Satellites	1900 Notes and calculations about the satellites of Jupiter, for the 1900 prize contest of the <i>Hollandsche Maatschappij van Wetenschappen</i> . Includes one letter from J.C. Kapteyn
77 Fundamental catalogue	1905 Manuscript and notes on the observations methods for the fundamental catalogue. Includes notes by observer A. Pannekoek
78 Moon radius	1910 Notes on calculations of the radius of the moon, 1910
79 Polar star observation	1911 Notes on differences between polar star observations of several observers, including Bakhuyzen, A. Pannekoek and J. Weeder
80 Observations Smid	1911 Observations by E.J. Smid. Includes two letters from her (1911)
81 Paramaribo longitude	1912 Notes on the longitude of Paramaribo (Surinam)
82 Eclipse 1912: observations	1912 Observations of the eclipse of 1912
83 Comparing star catalogues	Notes on how to obtain proper motions by comparing different star catalogues
84 Precession and proper motion	Notes on the influence of galactic latitude on proper motion and precession, by Bakhuyzen and (?) de Jong
85 Oudemans' method	Notes on Oudemans' methods to calculate star occultations
86 Moon observations	Notes on moon observations from Greenwich and Washington

Observatory management

87 Construction contracts	1897, 1908-1911 Five contracts in which the Ministry of the Interior specified plans, prices and conditions ('bestek en voorwaarden') for construction and maintenance work at the Observatory
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88 Observatory maintenance		1908-1917	12 little books with requests by Bakhuyzen for maintenance and small repairs at the Observatory. In 3 folders
89 University Buildings	14	1909-1912	Correspondence with the University buildings service about the maintenance of the Observatory building and grounds
90 Line of sight Witte Singel		1910-1911	Papers regarding the protection of the line of sight from the Observatory towards the south, across the Witte Singel. Includes several maps
91 Observer vacancy 1911	11	1911-1912	Correspondence concerning candidates who applied for a job as observer in Leiden. Correspondents: H.A. Weersma, A.A.Nijland, J. Stein, [?], G.W. Fabius, J.C. Van de Linde, J. Woltjer, J.E. De Vos van Steenwijk
92 Telegraph sevice	16	1901, 1910-1917	Correspondence regarding the astronomical telegraph service from Kiel. Correspondents: W. Kobold (Kiel), L. de Rees[?], Utrecht, W. Förster, Berlin, W.H. Kluit. Includes attached notes and bills
93 Telephone company	5	1907, 1915, 1917	Correspondence with and bills of the telephone company. Includes envelopes with bills for specific telephone conversations
94 <i>Annalen</i>		1908-1910	Lists of institutes that requested copies of the <i>Annalen der Sternwarte in Leiden</i>
95 Annual report			
95_1 Annual report		1908-1909	Drafts and notes for the annual report
95_2 Annual report		1908-1910	Manuscript of the annual report
95_3 Annual report		1909-1910	Drafts and notes for the annual report
95_4 Annual report		1910-1911	Manuscript of the annual report
95_5 Annual report		1910-1912	Drafts and notes for the annual report

Instruments

96 Instrument maker: Hensoldt & sons	6	1908	Correspondence with M. Hensoldt & sons, Wetzlar
97 Importing instruments		1910-1913	Papers regarding tax exemptions for importing some astronomical instruments
98 Suppliers			Correspondence with various suppliers and instrument makers. Includes correspondence from both Bakhuyzen and J.H. Wilterdink
98_1 Suppliers	17	1906, 1908	Correspondence with various suppliers and instrument makers. Includes correspondence from both Bakhuyzen and J.H. Wilterdink
98_2 Suppliers	43	1909	Correspondence with various suppliers and instrument makers. Includes correspondence from both Bakhuyzen and J.H. Wilterdink
98_3 Suppliers	42	1910	Correspondence with various suppliers and instrument makers. Includes correspondence from both Bakhuyzen and J.H. Wilterdink

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98_4 Suppliers	50	1911 Correspondence with various suppliers and instrument makers. Includes correspondence from both Bakhuyzen and J.H. Wilterdink
98_5 Suppliers	31	1912 Correspondence with various suppliers and instrument makers. Includes correspondence from both Bakhuyzen and J.H. Wilterdink
98_6 Suppliers	17	1913 Correspondence with various suppliers and instrument makers. Includes correspondence from both Bakhuyzen and J.H. Wilterdink
98_7 Suppliers	24	1914 Correspondence with various suppliers and instrument makers. Includes correspondence from both Bakhuyzen and J.H. Wilterdink
98_8 Suppliers	14	1915 Correspondence with various suppliers and instrument makers. Includes correspondence from both Bakhuyzen and J.H. Wilterdink
98_9 Suppliers	15	1916 Correspondence with various suppliers and instrument makers. Includes correspondence from both Bakhuyzen and J.H. Wilterdink
98_10 Suppliers	13	1917-1918 Correspondence with various suppliers and instrument makers. Includes correspondence from both Bakhuyzen and J.H. Wilterdink
98_11 Suppliers		Undated and/or unidentified correspondence with suppliers
99 Meridian Circle corrections		Notes on the corrections of observations with the meridian circle for different systematic errors, for example by comparing measurements made with different measuring methods, at different times of day, at different temperatures, etc. In two
100 Equitorial instrument		Manuscript on the theory of the equitorial instrument