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A Guide to the
Flower and Cook Observatory Records, 1875 - 1987

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Prepared by Kaiyi Chen
2001
Guide to the
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PROVENANCE

Transferred to the University Archives in 1999.

ARRANGEMENT

The collection has been arranged alphabetically by subject.

AGENCY HISTORY

In 1897, the University of Pennsylvania formally dedicated its observatory on a 100-acre farm bequeathed by Mr. Reese Wall Flower, whose great uncle, George Graham, had been an astronomer in London. The initial establishment consisted of three buildings on the Flower farm in Upper Darby and was equipped with an 18” aperture Warner and Swasey refractor. One of the three buildings, devoted
to precise positioning and time observations of stars, also contained several astronomical clocks, a
prism transit, a meridian circle and later, also a zenith telescope.

Meanwhile, Gustavus Wynne Cook, an avid amateur astronomer and wealthy Philadelphia
businessman, established an observatory in his own home. When he moved to an estate in Wynnewood
during the depression, he constructed two buildings to accommodate his hobby. Equipped with a 28.5”
reflector (J. W. Fecker Company), a unique 15” siderostat refractor, and a wide assortment of camera
and telescopes, his installation became one of the best equipped amateur observatories in the world.
When Mr. Cook died in 1940, he left all his astronomical instruments to the University of Pennsylvania.

In the late 1940s, Charles P. Olivier, then Chairman of the Astronomy Department and Director
of the Flower Observatory, urged the University administration to purchase a plot of land in Willistown
Township, Chester County, bounded by Providence Road and Warren Avenue. The Flower
Observatory site was abandoned, its equipment stored and the proceeds from the sale to be used for
the construction of a new observatory at the site near Providence Road.

In 1954, simultaneous with the completion of the new Physical Science Building (later called the
David Rittenhouse Laboratory), an on-campus observatory was established on the rooftop of the
building. In 1956, a new off-campus Flower and Cook Observatory was finally constructed with funds
from the sale of the Flower Observatory property.

SCOPE AND CONTENT

The collection includes a fairly complete set of Flower and Cook Observatory publication
reprints from 1929 to 1987; a publishing file related to C. P. Olivier’s work on EZ Aquilae; notebooks
and log books kept by Olivier, R. Stanley Alexander, and several other astronomers from 1933 to
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1951; records of the program of resolving time by the Pierce Photometer from 1958 to 1975; teaching material of two astronomy courses; and the file of a grant project financed by the National Science Foundation in the 1960s.

Also included are two memorabilia items originally belonging to Olivier and two sets of photographs—one of the solar eclipse observation in 1932 and the other of Frank Bradshaw Wood (a Penn faculty member being the 1957 research scholar in Astronomy at the Australian National University, Canberra) showing his work at the Mount Stromlo Observatory.
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INVENTORY

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FF 4 Photometric Study of EZ Aquilae, by Philip H. Taylor and Charles P. Olivier, 1941

FF 5 Pierce Photometer construction, Invoices and purchase requisitions, 1952 Feb. - 1955

FF 6 Pierce, Newton L., Correspondence, 1948-1950

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FF 8 Second Catalog of Hourly Meteor Rates, by Charles P. Olivier, [1964?]

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FF 4 Star Atlas, by Winslow Upton, 1896

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FF 27 Tables for light-time corrections, 1964

FF 28 Zimmermann, H., Rechentafel, 1899

Attachment

List of Flower and Cook Observatory Reprints, 1929-1987

1 Olivier, C.P. 1929, "The American Meteor Society Bulletin No. 10". (FLOWER OBS.)

2 Olivier, C.P. 1929, "Influences of Meteoric Astronomy on Evolution," Journal of the Franklin institute 207, No.6, 733. (FLOWER OBS.)

3 Olivier, C :P. 1928, "Unprofitable Meteors Pay Large Dividends", Science LXIX, No.1780, 165. (FLOWER OBS.)

3A Barton, S.G. 1929, "Double Stars in the Astrographic Catalogue Hyberadad Section," Astronomische Nachrichten 235, Nr. 5640, 426. (FLOWER OBS.)

4 Olivier, C.P; 1929 "Results Derived from 8600 Meteor Observations Made During the Years 1919-1925," Publs. Leander McCormick Observatory of the Univ. of Virginia V, Part 1, 1. (FLOWER OBS.)


6 Olivier, C.P. 1930, "The American Meteor Society Bulletin No. 11." (FLOWER OBS.)


20 Wilson, Jr. R.H. 1933, "The Orbit of Z 2294," A.J., 43, No. 998, 41. (FLOWER OBS.)


29 Olivier, C.P. 1935, "Problems Presented by a Study of Fireballs Recently Observed in America" Proceedings American Philosophical Society, LXXV, No.6, 483. (FLOWER OBS.)


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33 Olivier C.P. 1936, "Corrections and Additions to the Double Stars Found by Olivier," Astr. Nach. 258, Nr. 6192, 410. (FLOWER OBS.)


38 Olivier, C.P. 1937, "Results of the Yale Photographic Meteor Work, 1893-1909," A.J. 46, No. 1061, 41. (FLOWER OBS.)


40 Wilson, Jr. R.H. 1937, "Orbital Motion of ADS 9744 (Serpentis)," A.J. 46, No. 1072, 153, (FLOWER OBS.)

41 Olivier, C.P. 1937, "Meteor Notes from the American Meteor Society," Popular Astronomy, 45, 42, 97, 159, 203, 266, 324, 441, 496, 553. (FLOWER OBS.)


42A Olivier C.P. 1938, "Fourteen New Double Stars Found at Flower Observatory," A.J. XLVII, No. 1088, 100, (FLOWER OBS.)

43 Olivier, C.P. 1945, "The American Meteor Society Bulletin no. 16." (FLOWER OBS.)

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44A  Mohler 0, 1938, "Measures of Effective Wave Length with Wide Angle Lenses," Lancaster Press, Inc. (COOK OBS.)

44B  Tabor, L.P. 1938? "The Electronically Controlled Telescope Clock at the Cook Observatory," Lancaster Press, Inc. (COOK OBS.)


49  Olivier, C.P. 1939, "Meteor Notes From the American Meteor Society, Popular Astronomy, 47, 40, 89, 145, 204, 264, 318, 380, 434, 46, 556. (FLOWER OBS.)


52  Olivier, C.P. 1940, "Meteor Notes From the American Meteor Society,"Popular Astronomy, 48, 38, 90, 149, 203, 261, 325, 379, 430, 490, 553, (FLOWER OBS.)
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55  Barton, S.G. 1943, "The Pronunciation of the Names of the Navigational Stars", Ensign XXX, No.7. (FLOWER OBS.)


57  Reilly, E.F. 1944, " A Statistical Study Based Upon Four Methods far Computing Meteor Heights," Popular Astronomy L11, No.6, 288. (FLOWER OBS.)


63  Olivier, C.P. 1942 "Meteor Notes from the American Meteor Society,” Popular Astronomy 50 41,93,153,211, 265,327,383,4 6,497,556. (FLOWER OBS.)


66 Olivier, C.P. 1945 "Meteor Notes from the American Meteor Society,' 53, 36, 136, 182, 235, 349, 399, 455, 508. (FLOWER OBS.)


71 Barton, S.G. 1947, '~It’s a Date " Scientific Monthly LXV, No. 5, 408. (FLOWER OBS.)

72 Barton, S.G. 1947, "Durer and Early Star Maps," Sky and Telescope, 6, No. 11, 6, and No. 12, 12. (FLOWER OBS.)


74 Barton S.G. 1949, "The Quaker Calendar," Proceedings of the American Philosophical Society 93, No.1, 32, (FLOWER OBS.)

75 Olivier, C.P. 1948, "Meteor Notes from the American Meteor Society, Popular Astronomy 56, 39,106,151,212,319, 381,431,491,542. (FLOWER OBS.)

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77 Olivier, C.P. 1949, "Meteor Notes from the American Meteor Society," Popular Astronomy 57, 82,132,242,337,393, 446,503. (FLOWER OBS.)


79 Olivier, C.P. 1959, "Some Results from Data Secured by the American Meteor Society," Proceedings of the American Philosophical Society, 94, No.4, 327. (FLOWER OBS.)


85 Olivier, C.P. 1951, "Meteor Notes from the American Meteor Society, Popular Astronomy 59,34,158,217,270,329, 443,482,542. FLOWER OBS.)

86 Koch, R.H. 1955, "Times of Minima of Selected Eclipsing Variables, " Astronomical Journal 61, No.1235, 47. (COOK OBS.)


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95 Olivier, C.P. 1953, "Reports of the American Meteor Society, " Meteoritics I, No. 1, 81. (FLOWER OBS.)


101 Binnendijk, L. 1955, 


103 Olivier, C.P. 1955, "Reports of the American Meteor Society," Meteoritics 1, No.3, 366. (FLOWER OBS.)
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120 Binnendijk, L. 1960; "The Light Variation and Orbital Elements of AH Virginis," Astronomical Journal 65, No.6, 358. (FLOWER AND COOK OBS.)


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143 Olivier, C.P. 1962, "Meteor Reports, American Meteor Society." (FLOWER AND COOK OBS.)


149 Olivier, C.P. 1963, "Meteor Reports, American Meteor Society." (FLOWER AND COOK OBS.)


164 Olivier, C P. 1965, "Meteor Reports, American Meteor Society." (FLOWER AND COOK OBS.)


169 Leung, Kam-Ching 1967, "E Intensities of AD Stars with Known Periods," The Magnetic and Related Stars (Robert C. Cameron, Editor), P. 449. (FLOWER AND COOK OBS.)
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175 Chambliss, C.R., "The Eclipsing System BV 419," Astronomical Journal, 72, No. 4, 518. (FLOWER AND COOK OBS.)


178 Harris, A.J. 1967, "A Program to Calculate Theoretical Light Curves by the Chi Functions," Contributions of the Observatory, New Mexico State University, 1, No. 1. (FLOWER AND COOK OBS.)

179 Olivier, C.P. 1966, "Meteor Reports, American Meteor Society." (FLOWER AND COOK OBS.)


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182B  Binnendijk, L. 1967, "The Light Variation and Orbital Elements of 00 Aquilae," Astronomical Journal 73, No. 1, 32. (FLOWER AND COOK OBS.)


184  Olivier, C P. 1967, "Meteor Reports, American Meteor Society." (FLOWER AND COOK OBS.)


190  Olivier, C P. 1968, "Meteor Reports American Meteor Society." (FLOWER AND COOK OBS.)


192  Binnendijk, L. 1969, "The Light Variation and Orbital Elements of TZ Bootis Astronomical Journal 74, No. 2, 211. (FLOWER AND COOK OBS.1

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251 Koch, R.H. and Pfeiffer, R.J. 1976, "The Linear Polarization of BY Draconis," Astrophysical Journal 204, L47. (FLOWER AND COOK CBS.)

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258  Pfeiffer, R.J. 1976, "Intrinsic Linear Polarization of the Eclipsing System AO Cas," Astronomical Journal 81, No.11, 1000. (FLOWER AND COOK OBS.)


263  Pfeiffer, R.J. and Koch, R.H. 977 "On the Linear Polarization of Close Binaries," Pub!. Astr: Soc. Pacific 89, 147. (FLOWER AND COOK OBS.)


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286 Struble M.F. 1979, "Velocity Dispersion Profiles of N-Body Simulations," Astrophysics and Space Science 64, 319. (FLOWER AND COOK OBS.)


312 Wiita, P.J. 1982 "Thick Supercritical Accretion Disks and Active Galactic Nuclei," Comments Astrophysics 9, 251. (FLOWER AND COOK OBS.)


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327  Ftaclas, C. 1983 "Tidal Compression of the Local Supercluster," M.N.R.A.S. 202, 7P.


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357 Koch, R.H. 1987 "Polarisation in contact binaries" Comments on Astrophysics 12, No. I., 1.

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