DAVID DUNLAP DOINGS

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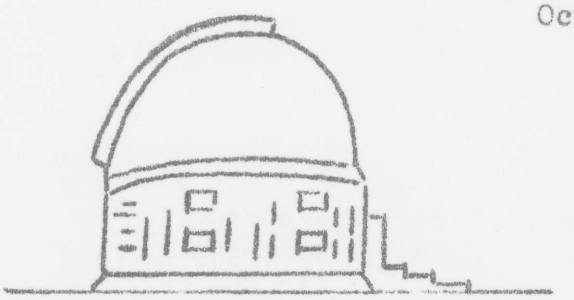

EDITORIAL

MORE ABOUT THE 1882 TRANSIT OF VENUS

Last month I wrote about our 6-inch refractor which had been purchased for the Toronto Observatory for the observation of the Dec. 6, 1882 Transit of Venus but not, apparently, used for that purpose. Since then Dr. Fernie has drawn to my attention a file in our library on the Transit, and I have visited the Library of the new Atmospheric Environment headquarters on Dufferin Street and consulted some old references.

The original hand-written record book of Toronto Meteorological Observations confirms clearly that it was cloudy in Toronto during the whole of that day, 10/10 with snow at 6:50 a.m., and 10/10 at 2:50 p.m. and 10·50 pm. the temperature ranging from 30.2 to 24.5 and the barometer fairly steady. (On the 7th it was clear all day!) The Transit was predicted to take place between 8:40 and 14:55 Toronto time.

Mr. Charles Carpmael, Director of the Toronto Observatory and Superintendent of the Meteorological Service, was appointed by the Department of Marine and Fisheries in May 1882 to be in charge of the Canadian Transit observations and was given an appropriation of $5000 for the purpose. He sent his deputy, Lt. Gordon, R.N. to England where he attended a meeting of English observers at Oxford and borrowed a "model of the Transit" which was brought to Canada and set up in September for practice purposes at McGill University; on this same trip to England Lt. Gordon ordered the 6-inch Cooke refractor which was delivered and erected in November. The model, having served the eastern observers for practice in September, was sent on to Toronto and erected in Toronto for practice by the Ontario observers.

The following were the sites, equipment and chief observers chosen by Carpmael for the observations:

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Winnipeg: (near St. John's College in a temporary shelter erected by his Lordship the Bishop of Rupert's Land); a 4-inch achromat in altazimuth mount, a transit instrument and two chronometers; Prof. McLeod of McGill.

Toronto: 6-inch Cooke equatorial, 3-inch transit by Trougton and Simms; sidereal and mean time clocks, chronometers; Mr. Carpmael.

Whitby, Ont: (Ladies' College); 6-inch telescope by Fitz of N. Y.; Prof. Hare.

Woodstock, Ont.: (Baptist College); 8-inch refractor by Fitz; Prof. Wolverton.

Cobourg, Ont. : (Victoria University); 4 1/4-inch telescope by Smith, Beck & Beck, London; Prof. Bain.

Kingston, Ont.: (Queen's University); 6 1/2-inch equatorial by Alvan Clark, transit instrument, clock by Prof. Dupuis; Prof. Williamson.

Belleville, Ont.: 4-inch achromat; Mr. Shearman.

Ottawa: 4-inch McGill achromat; transit instrument; F. L. Blake, D.L.S.

Montreal (McGill); 6 1/4-inch achromat, transit instrument, etc.; Prof. Johnson.

Quebec; 8-inch equatorial by Alvin Clark; Lt. Gordon.

Halifax; 4-inch achromat by Dolland; Mr. A. Allison.

Charlottetown; 4-inch achromat; H. J. Cundall, C.E.

Fredericton (U.N.B.); 7-inch equatorial, transit instrument, etc; Prof. Jack.

(Bearing in mind that in 1882 there were only four telescopes in the world of aperture exceeding 20-inches, is it not amazing that so many telescopes of reasonable size and competent persons to man them could be mustered in Canada?)

Elaborate arrangements were made for the determination of time at those stations suitably equipped and for the interchange of time signals by telegraph both among the Canadian stations and with Prof. Hough of Dearborn Observatory, the telegraph companies in both countries placing their wires at disposal and making no charge.

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The outcome of the Canadian program was successful observations of from one to three contacts at Winnipeg, Cobourg, Belleville (imperfect) Kingston and Ottawa - not bad for Canadian December weather. The four good sets of observations were reported to Prof. Stone of Oxford who was coordinating the total British effort, and they were incorporated into his analysis which yielded the result for the solar parallax of 8".832 (AU. = 92,560,000 mi.).

The four observers who had clear views of internal contacts made special mention of not having seen the so-called "black drop", and all seem to have believed that they had timed the contacts to within one second accuracy. - Except, that is, for Blake's observation of first contact at Ottawa; he had the candour to admit that his "attention was called away just at the moment of contact" and when he again put his eye to the telescope the notch was already formed, leaving his estimate uncertain "by five or six seconds at the most". It is tempting to speculate as to what called his attention away during that critical fraction of a minute: a tear-filled eye, a coughing spell, a sneeze?

J. F. H.

COMINGS AND GOINGS

Dr. van den Bergh attended the Kitt Peak Users' Committee meeting in Tucson on Oct. 6, a meeting of the Telescope Sub- Committee of the N.R.C. Associate Committee with a delegation of French astronomers in Ottawa on October 20-21, gave an invited paper on "Star Formation in Radio Galaxies" at the High Energy Astrophysics Division meeting of the AAS in Pasadena on October 23, and gave a talk on "The Evolution of Galaxies" in Victoria on October 26.

Barry Madore returned from a successful observing session at Las Campanas on October 16.

Dr. Hogg returned from visits to Green Bank and Massachusetts on October 25.

Dr. Seaquist returned from observing at Algonquin on October 26 and left on the 28th for a session at Green Bank.

Dr. Heard attended a meeting of the Council of the Science Section of the Royal Society of Canada in Ottawa on October 20.

Dr. Sanyal is observing at Las Campanas until Nov. 13. On Oct. 9 he talked at the University of Texas at Austin on "Studies on Nova Delphini 1967".

Dr. Hogg spoke at "Astronomy Club Day" at the Ontario Science Centre on October 28th. Globular Cluster, Beautiful Satellites of our Galaxy".

SEMINARS

October: As announced in September DDD.

November

Tues., 7th D.D.O.	Dr. P. P. Kronberg "How Radio Astronomy Tests for Evolution and for the Density of the Intergalactic Gas"
Tues., 14th D.D.O.	Dr. H. C. King, "Analog Computers or Childish Playthings: Clocks, Planetaria, orreries, Copernican Spheres, etc."
Thurs. 16th McLennan	Dr. D. Pines, University of Illinois, "Star Quakes and Planet Quakes". (Joint with Physics).
Tues. 21st D.D.O.	Dr. A. H. Bridle, Queen's University. "Observations of Clusters of Galaxies at KeV Energies"
Tues., 28th	Dr. R. Schild, Smithsonian Ap. Obs. (Title to be announced).

PAPERS SUBMITTED IN OCTOBER

S. van den Bergh,	"Resolution of one of the Companions of M31". "Some very Tentative Evidence for Recent Star Formation in Elliptical Galaxies". "The Age of the Universe".
P.C. Gregory	"Large Outburst of Cygnus X-3" (Nature, Oct. 20/72)
P.C. Gregory, P.P. Kronberg, E.R. Seaquist, et al:	"Discovery of Giant Radio Outburst from Cygnus X-3" (Nature, Oct. 20/72)
Bolton, T.	"Statistical Absolute Mag. of Mira Variable I. The Near Infrared Photometry"
R.F. Garrison	"Calibration of MK Types by Fitting the HR Diagrams of Three Moving Clusters"
S. van den Bergh, R. Racine, et al.	"New Southern Planetary Nebulae"
R. Roeder & Dyer	"Distance Redshift Relations for Universes with Some Intergalactic Medium"
R. Racine	"Intrinsic Colors of Globular Clusters in the UBV System"

MISCELLANEOUS

Departure and Arrival

On Oct. 10 we bade farewell to Sheila Smolkin at a party in the library where she was presented with a sign reading "No Smolkin in the Library", a model volleyball court and a prepaid choice of 1973 license plate number. On the same occasion we welcomed the new librarian, Miss Priscilla Wagner.

Resignations

Anson Moorhouse, longtime photographer at the Observatory has resigned, effective today, to accept a position in the medical electronics equipment field. Jaye Thackeray, our beauteous and cherry assistant secretary on campus, has resigned to accept a position in Lausanne, Switzerland.

Appointment

Miss Elisabeth Sawicki has accepted a position as Dr. van den Bergh's secretary.

Born

To Philip and Connie Gregory on October 17th, a daughter, Irene Samantha.

DDO Down Under

Word has come from the Gorza family that they are settled at 33 Seddon Crescent, Gisborne, N. Y. where Walter is now teaching form 6 and 7 physics in Boys' High and where Nancy has given birth to a daughter, Sherin Ruth, on Sept. 28.

Retirement in Ottawa

A graduate of U. of T. in Astronomy and long-time friend of some of us, R. W. (Dick) Tanner has recently retired (at 60) from the Earth Physics Branch of E. M. R., Ottawa. Winner of the RASC Gold Medal in the M. & P. course in 1948, Dick stayed on to write an excellent master's thesis on "Spurious Periods of Spectroscopic Binaries". Then, being particularly interested in classical astronomy, he accepted an appointment in Position Astronomy at the Dominion Observatory where he was closely involved with the innovations developed there in methods and instrumentation, particularly the PZT program. Dick had many interests outside of astronomy, particularly languages, and his colleagues in Ottawa have presented him with a set of up-to-date French and German dictionaries, anticipating a second career in scientific translating. Whatever he does, DDD wishes him well.

1972 Gold Medallist

Mark McCutcheon on Oct. 20 was presented with the RASC Gold Medal for proficiency in the astronomy program at U. of T. Dr. Fernie, as Vice-President of the RASC made the presentation; and at the same meeting Dr. Nolan Walborn gave a talk on "Some Recently Discovered Phenomena among the O- and early B-Stars".