

Rainfall at *Penrhyn Quarry*,

Bethesda.

Carnarvon.

J. Francis Esq.

Diameter of Gauge, in.

Height above Ground, ft. *5* in.

Above Mean Sea Level, *1200* ft.

Month - 3.

YEAR - -					1864	1865	1866	1867	1868	1869	MEANS.
January - -						5.06	8.53	8.94	6.52	<i>no return</i>	
February - -						3.33	4.70	3.62	4.70	6.46	
March - - -						2.43	5.29	4.10	7.12	<i>no return</i>	
April - - -						1.20	1.67	8.38	2.42	3.67	
May - - - -						8.94	2.31	1.85	2.83	3.27	
June - - - -						1.54	7.43	1.51	.69	1.99	
July - - - -						4.53	1.47	6.35	1.88	1.89	
August - - -						5.59	5.02	2.42	4.91	4.08	
September -					<i>5.24</i>	.68	8.91	5.55	2.40	10.71	
October - - -					4.42	5.45	3.07	7.57	5.26	5.61	
November - -					8.36	7.49	5.25	2.24	4.76	5.72	
December - -					6.22	5.53	4.43	5.24	13.82	6.80	
TOTALS - -						51.99	58.08	57.77	57.31		

1865. May 30. 2.06

1860 Aug. first or second return. Total 52.40

RAINFALL AT *Bethesda Penrhyn Quarry*

Lat.....

Lon.....

County of.....

Carmarthen

Rain Gauge, by.....

Observer.....

*John Jones
Major Mathew**Wm - 3*

Diameter	5											
Height	5											
Altitude	1000											
YEAR	1870	1871	1872	1873	1874	1875	1876	1877	1878	1879	MEANS	
January.....	5.81	4.76	12.45	11.29	6.52	8.07						
February	6.09	5.56	7.72	2.10	5.35	2.76						
March	4.61	4.47	5.73	3.21	4.13	3.48						
April	4.13	3.89	2.80	2.45	3.36	1.82						
May	2.50	1.02	4.12	2.17	3.74	3.98						
June	2.29	1.88	6.42	2.46	1.21	4.28						
July	2.05	6.20	7.11	4.18	3.10	6.36						
August	2.42	2.13	3.90	6.53	7.31	1.59						
September.....	4.32	3.70	8.73	5.22	8.03							
October	4.25	7.71	12.47	6.50	8.93							
November.....	6.85	2.11	8.86	3.92								
December.....	5.04	7.48	9.29	2.98								
TOTALS	50.70	50.91	89.60	53.01								

RAINFALL AT

Langa Bethesda Penrhyn Quarries

Lat.

Lon.

County of

Carnarvon

Standard

Rain Gauge, by

Stanley

Observer

The Meteor Council

Inventor stands - 3.

E. A. Young

Diameter ..	...	8										
Height ....	...	10										
Altitude ..	...	528										
Year	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	MEANS.	
January ..	6.09	3.60	5.13	10.61	8.12	4.68	9.69	2.91	6.00	4.55	6.138	
February ..	5.14	2.63	1.92	7.73	4.41	2.81	5.38	2.97	4.17	1.87	3.903	
March	1.33	6.89	4.07	12.12	4.63	7.62	5.59	4.18	6.64	4.21	5.728	
April	2.63	4.16	3.46	2.85	5.19	5.87	2.17	2.89	3.07	4.83	3.712	
May	3.51	1.73	5.86	3.35	2.77	1.48	5.66	3.29	2.79	1.59	3.203	
June	2.44	4.11	3.53	1.58	3.35	2.79	2.39	5.89	3.41	3.57	3.306	
July	1.70	1.58	3.04	4.16	3.52	3.56	1.99	2.15	4.86	5.73	3.259	
August	8.16	5.94	3.11	7.61	4.44	5.60	6.42	5.50	5.90	4.68	5.736	
September ..	4.71	3.50	2.91	6.41	3.94	3.98	1.08	.84	4.95	4.80	3.702	
October	8.06	6.95	4.49	10.97	2.86	5.62	9.81	10.30	1.57	10.21	7.084	
November ..	6.24	9.15	4.97	5.70	4.41	7.47	4.36	4.42	6.64	3.84	5.720	
December ..	9.53	7.54	5.66	5.65	5.89	1.85	5.79	5.23	4.72	8.29	6.015	
TOTALS ..	59.54	57.78	48.15	78.74	53.83	53.23	60.33	50.57	54.72	58.17	51.506	

#

1899 Dec. 14. 88 in.

1908 Flanogwen Church 1/2 mile NE
 Bethesda Station 1/4 " N
 Home 18 ft high 30 ft NE
 Tree 60. " 40. " E
 Wall 15. " 72. " W

3 daily values in bound volume, shelf C3, R. 14.

RAINFALL at Bethesda Penahyn QuarriesCounty of CassamassonObserver W. J. Gaffikin Esq forRiver Basin Mernai Shute 3Lord Penahyn
for W. D. Hobson EsqRain Gauge, by Stanley

Diameter ...	8											
Height	1.0											
Altitude ...	528 ft											
Year ...	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	MEANS.	1916-1919
January ...	6.14	2.52	5.62	8.95	5.28	8.92	4.46	3.27	7.71	7.49	23.23	
February ...	8.43	5.28	4.87	2.55	9.55	10.35	9.11	1.93	8.64	2.57	22.25	
March	5.16	3.35	11.13	7.01	7.48	2.77	3.25	3.95	2.84	9.57	19.64	
April	6.94	5.33	.78	7.71	1.42	4.41	4.98	3.94	1.62	5.48	16.02	
May	3.32	2.74	1.53	3.95	3.71	2.69	5.63	3.33	4.65	1.32	14.93	
June	3.32	4.83	8.21	5.74	4.36	1.11	4.64	3.16	3.48	3.70	14.98	
July	6.58	1.22	7.63	1.99	4.62	4.87	2.83	2.56	4.70	4.33	14.42	
August	8.28	4.63	9.29	3.90	2.94	5.20	6.38	11.94	3.55	6.25	28.12	
September ...	.57	5.53	2.01	5.70	3.73	3.69	4.56	3.28	10.74	6.03	24.61	
October ...	5.44	5.75	7.94	5.57	3.55	3.42	9.65	10.75	9.28	4.12	33.80	
November ...	8.24	8.79	6.60	7.76	7.54	5.47	5.67	6.23	5.45	4.58	21.93	
December ...	12.63	12.44	7.15	4.20	14.33	14.92	4.04	4.10	9.94	11.28	29.36	
TOTALS ...	75.05	62.41	72.76	65.59	68.95	67.82	65.50	58.47	72.60	66.72	263.29	
	D	D	D	D	D	D	D	D	D	D		

1912 House 18 ft high 30 ft NE
 Tree 60 ft 40 ft E
 Wall 15 ft 72 ft W

1910-15 Daily values in bound volume, shelf C4, R14.

Date.	Lat. N.	Long.	Railway Station.	Distance.	Direction.	Church.	Distance.	Direction.
1911	53° 10'	4° 3' W	Bethesda	1 1/4 mi	N	Glanogwen	1/2 mi	NE

RAINFALL at *Bethesda (Penryn Quays)*County of *Gloucester*Observer *W.D. Hobbs, Esq.*
*M.J. Griffiths.*River Basin *Mersey - J*GLAISHER Rain Gauge, by *Stanley**A. F. Richards (1923)*

Diameter ...	8																			
Height	1.0																			
Altitude ...	528		527																	
Year	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930 1930		1920-30 Totals							
January ...	8.07	9.81	7.36	6.49	6.04	5.80	7.91	7.13	12.00	2.51	13.51		86.63							
February ...	5.30	9.5	8.62	13.19	1.33	9.65	4.66	5.15	8.01	9.74	.62		59.22							
March	11.22	8.97	4.18	2.43	1.71	2.93	2.09	9.91	5.61	1.26	3.94		54.25							
April.....	8.35	2.79	4.95	5.79	4.44	4.27	3.41	2.88	2.54	1.29	3.11		43.82							
May	6.40	3.42	.92	5.24	9.05	5.67	4.71	2.56	2.32	4.22	2.65		47.16							
June	4.00	.71	3.61	2.34	5.12	.21	5.12	6.28	9.67	2.50	2.74		42.30							
July	13.53	3.55	5.28	4.96	4.55	4.74	5.53	4.88	4.27	3.95	6.62		61.86							
August	5.18	9.63	3.98	6.38	9.52	4.26	4.95	10.69	7.43	6.41	8.29		75.82							
September...	5.05	1.94	5.08	9.71	9.18	5.31	3.34	8.76	2.38	3.26	4.89		58.90							
October.....	5.11	4.52	2.17	10.93	5.21	8.48	4.82	6.58	10.25	9.96	11.87		79.92							
November...	4.46	3.82	3.93	10.96	4.36	6.72	9.09	9.63	12.13	13.85	8.38		87.33							
December...	4.62	7.65	11.06	7.32	12.49	6.38	2.33	2.98	5.32	14.08	9.22		83.45							
TOTALS...	81.29	57.76	61.14	85.76	72.00	64.52	57.96	77.43	81.93	65.03	75.84		780.66							
	D	D	D	D	D	D	D	D	D	D	D									

1921. House 18 ft high 35 ft NE
 Trees 60 - 79 - E
 Wall 15 - 67 - N.

1929. House surrounded by trees, 20 ft high, 20 ft wide, 20 ft deep.

780.67

Position of Station on reduced Ordnance Survey } No. of Map

Map, 2 miles to 1 inch Series

Reference No.

Date.	Lat. N.	Long.	Railway Station.	Distance from gauge	Direction from gauge	Parish Church.	Distance from gauge	Direction from gauge
	53° 10'	4° 6'	Bethesda	1 1/2 m.	N.	Glanogwen	1/2 m.	N.E.
1925			-do-	2 M	NE	-do-	1 1/4 m	NE

RAINFALL at Bethesda (Penryn Quaries)

County of CornwallObserver A. H. Richards (died 1937)River Basin 3. Menai StraitsTo General ManagerType of Gauge GlaisherAnnual Average in. based on years obs. un-weighted. Period of average Ref.

934.422/39

Diameter	8.											
Height	1.0.											
Altitude	527.											
Year	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	Means	
January	6.56	12.92	9.13	7.73	4.93	8.33	6.07	6.92	11.03	3.30	7592	
February	5.49	3.6	4.06	8.4	9.79	5.51	7.64	2.46	7.04	4.52	4771	
March	1.60	4.31	4.34	4.99	88	4.53	1.88	3.72	6.34	3.72	3631	
April	6.56	6.16	1.34	4.81	4.93	2.43	4.32	.92	3.01	3.26	3834	
May	3.61	4.70	2.04	8.08	2.65	2.63	1.27	3.38	1.86	3.41	3418	
June	4.89	2.44	4.45	2.53	6.19	7.06	2.03	8.10	3.62	(1.93)	4324	
July	4.34	7.29	3.12	2.66	2.11	5.76	2.21	6.91	8.71	(5.30)	4841	
August	9.02	1.85	2.72	7.44	2.32	2.49	1.82	3.02	2.28	(.92)	3388	
September	6.42	5.76	2.97	6.19	9.08	3.77	4.86	4.24	1.83	4.79	4991	
October	4.49	9.98	6.21	9.27	11.22	4.67	5.66	9.60	5.18	(5.49)	7177	
November	13.88	4.85	3.04	4.98	8.70	9.62	1.80	6.94	10.40	(9.00)	7321	
December	4.79	5.12	1.46	12.86	3.39	6.82	4.68	6.93	5.92	(6.00)	5797	
TOTALS	71.65	65.44	45.68	72.38	66.19	63.67	43.24	63.14	67.82	(51.64)	61085	K
	2	2	0	0	0	0	0	2	2	np.		

1934. House 18' high 35' N.E. Trees 60' high 79' E. Wall 10' high 67' N.

1940 { Record useless, gauge leaking.
np too many adjustments.Position of Station on reduced Ordnance Survey Map,
1 mile to 1 inch Series

No. of Map.....

Reference No.....

Date.	Lat. N.	Long.	Railway Station.	Distance from gauge	Direction from gauge	Parish Church.	Distance from gauge	Direction from gauge
			Bethesda	2m.	N.E.	Llanogwen	1 1/4 m	N.E.
				1 1/2	N		1 m	N.E.

BRITISH RAINFALL ORGANIZATION, EXHIBITION ROAD, LONDON, S.W.7.

Station No. M 4375RAINFALL at Bethesda (Penryn Quarry)

41

County of CornwallObserver The General ManagerRiver Basin 3 - Looe StraitType of Gauge GlaisherAnnual Average 15.8 in. based on years obs. un-weighted. Period of average Ref File No. 934422/39

Diameter	8				533	911								
Height	1.0					1								
Altitude	527					41								
Year	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	Means	1949-50	1949	
January	2.46	8.82	9.62	8.82	6.62	9.37	9.54	14.81	3.47	1.65	73.16	11.45	1949	
February	6.77	2.43	5.44	2.43	5.37	7.08	(2.00)	3.85	4.29	5.66	43.55	2.22	1949	
March	5.38	4.80	1.81	1.28	1.77	1.47	9.46	3.79	8.66	4.35	38.03	3.92	1949	
April	2.33	3.99	2.68	2.20	2.94	2.16	(4.66)	2.42	5.24	2.80	31.87	5.69	1949	
May	2.93	7.12	5.57	2.66	3.13	2.72	(4.78)	1.84	2.79	1.24	35.20	3.21	1949	
June	0.40	0.52	4.27	2.57	3.58	4.78	2.08	6.07	0.60	2.88	27.78	1.63	1949	
July	2.71	5.28	3.12	3.56	4.66	3.42	2.70	3.56	1.46	2.95	36.38	4.02	1949	
August	4.97	5.65	5.36	2.73	0.68	3.67	0.00	5.85	2.21	7.85	40.62	3.86	1949	
September	1.56	6.17	7.77	6.63	3.12	7.65	4.46	4.84	1.71	11.59	56.10	2.01	1949	
October	5.61	8.00	7.12	6.49	5.38	6.8	0.65	3.58	8.30	5.07	53.34	10.76	1949	
November	4.82	1.88	3.44	10.05	0.09	10.32	7.71	4.32	5.36	7.17	55.20	5.40	1949	
December	3.80	10.72	2.94	7.74	5.67	6.75	2.34	8.66	7.26	5.02	61.08	7.44	1949	
TOTALS	43.74	65.68	59.14	57.16	40.01	60.07	(50.68)	63.59	45.35	58.23	552.31	54.91	1949	

1945 Jan. part cut off for snow.

40004

26004

5.7.47. Gauge slightly repaired. New measure supplied.

1947 Jan. Feb. cut off for snow. April & May cut. Gauge leaking & measure broken

* Origin unknown. Printed in BR in India.

Record low up to. since the 1930s. (Ref P.B. 538) about 10%
 1.8.50 Manager Station gauge moved to street of State waste during 30's. Rubbish floor 50yds N.
 20yds high; wall 4yds SE, 4-5' high. A pole (high tension cables) 30yds W, 30' high. Readings
 in future to be taken by office staff instead of pumpmen as this may be cause of deficiency

Position of Station on reduced Ordnance Survey Map, }
 1 mile to 1 inch Series

No. of Map.....

Reference No.....

Date.	Lat. N.	Long.	Railway Station.	Distance from gauge	Direction from gauge	Parish Church.	Distance from gauge	Direction from gauge

BRITISH RAINFALL ORGANIZATION

Station No. 4375

51

RAINFALL at Bethesda (Penshyn Quarries)

County of Caernarfonshire Observer General Manager

River Basin 3 - Menai Straits

Type of Gauge Glacier

Annual Average 68.8 in. based on years obs. un-weighted. Period of average Ref.

" 64.57 " " 23 " " within 1916-57. " " 1916-50 File No. 934422/39

Diameter ...	8"				533	911			5"		
Height ...	1'0"					1			8"		
Altitude ...	527'					51			527'		
Year ...	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	Means
January ...	5.26	6.70	2.54	5.04	5.04	4.33	7.89	6.33	8.19	10.49	61.81
February ...	8.99	2.34	3.81	4.74	2.96	0.74	6.47	9.67	1.05	11.57	52.34
March ...	7.46	3.18	2.36	5.45	2.72	2.42	5.78	1.29	2.77	2.66	36.29
April ...	3.55	3.74	4.92	2.18	3.78	2.07	0.68	1.78	7.42	6.24	36.36
May ...	2.94	3.16	3.38	4.72	4.86	2.43	4.13	8.21	2.53	2.15	38.50
June ...	1.46	4.09	3.05	4.19	5.56	3.12	2.08	5.43	3.15	3.28	35.91
July ...	2.57	2.92	5.12	6.97	1.49	6.68	9.73	5.19	2.59	4.45	47.63
August ...	8.25	5.15	3.26	8.85	1.92	11.96	8.93	4.75	1.28	5.07	59.42
September ...	8.25	6.45	6.80	7.00	3.65	4.89	7.21	8.98	1.23	8.05	62.41
October ...	1.78	6.58	4.05	12.53	6.10	4.57	9.26	7.10	9.54	6.33	66.84
November ...	11.26	4.57	8.50	11.30	2.94	2.64	3.61	4.24	13.9	14.16	76.67
December ...	11.87	4.65	2.98	4.95	6.63	7.33	7.26	4.64	14.26	6.95	71.52
TOTALS ...	73.58	53.53	50.77	77.92	46.54	53.18	73.03	68.11	67.66	81.40	64.572

* Origin Unknown. Printed in B.R. italics. - deleted therefore from 1955
 1950. Manager states gauge moved to shelter of slate waste dump 30 ft. Rubbish
 floor 50 yds N. 20 yds high; waste 20 yds S.E. 4-5' high; H Poly (high tension cable)
 30 yds W. 20' high. Readings in future to be taken by office staff instead
 of pumpmen as there may be cause of deficiency

Inspected 3-12-59 by Mr. H. H. H. On quarry shelf. 300' hole to S.E. (at 50') up again in distance. 1/2 to S.E. Not a good site
 but available. Rec. rising 12'.

Position of Station on Ordnance One-Inch map :

No. of Map.....

National Grid Reference (23)611653

Date.	Lat. N.	Long.	Railway Station.	Distance Direction from gauge	Parish Church.	Distance Direction from gauge.

Summary of Earlier Records from 10-year Sheets :

Record D, or d	1910-19	1920-30	1931-40	1941-50	1951-60
	D	D	1931-38 D 1939 d 1940 N.P.	1941 - d 1942 - 45 - d 1946 - 47 - d 1948 - d 1949 - NP 1950 - d	