Diameter of Gauge, ..... in.

Height above Ground, ..... ft. ..... in.

Above Mean Sea Level, ........... ft.

YEAR	1850	1851	1852	1853	1854	1855	1856	1857	1858	1859	MEANS
January		3						4.75			
February		B	3,15	2.30	3.66	.72	2.33	3.10	1.10	2.60	
March	9	3	.5->	1.94	1.36	2.42	. 20	3.48	2.41	3.79	
April	3	4	.12	3.45	1.46	1.91	121	1.14	.50	3.74	
May	13	1.05								. 18	
June	3									1.96	
July	10							12000		2.34	
August	0,							3.02			
September -	3	1								2.05	
October										6.29	
November -								1.74			
December -										3.84	
TOTALS -										35.76	

× From 15th May

# M. J. Sutherland Orkney + Sea Level 28

YEAR	18/10	1861	1862	1863	1864	1865	1866	1867	1868	1869	MEANS.
January										3. 27	
February-	1.88	1.10	2.19	3.01	4.80	2.04	3.98	1.95	4.62	4.05	2.962
March										1.12	
April										1.98	
May										.40	
June										1.23	
July										2.48	
August	,				The Part of the Pa					1.69	
September -										5.46	
October										2. 83	
November -										6.13	
December -	31.73	2.54	4.04	5.49	3.28	2.60	2.07	3.14	3.45	3.19	3-32/
Totals -	31.73	36.85	3385	38.86	34.83	26.32	29.75	25.86	35:05	33.83	32693

70

### RAINFALL AT Graemsay Low W.

| Diameter | Diameter

Height 1875 1876 1870 1871 1872 1873 1874 1.38 3.10 1.81 3.72 444 3.57 279 406 293 1.37 29.17 2.53 2 33 1.85 70 137 1.79 3.10 364 1.41 69 19.41 04 1.31 1.54 3.15 2.63 98 4.61 2.24 1.73 1.60 20.63 1.16 .67 1.07 1.56 229 2.28 3.55 1.30 .50 1.16 15.54 1.11 52 .28 9.28 93 1.73 1 25 2.47 2.53 1.18 15.23 42 .66 1.19 2.36 1.60 1.83 1.36 2.64 1.38 .80 14-24 July ..... - 47 1.63 4.33 2.53 2.97 2.48 2.59 2.40 1.46 August ...... 1.27 2.25 2.19 367 2.77 2.89 2.98 1.11 3.45 September..... 1.64 .63 1.10 521 3.30 3.22 2.55 5.48 3.34 October ..... . 92 1 . 15 2 . 96 473 363 366 362 395 258 November ..... 2,27 2.74 3.65 326 4.38 6 247 40 436 3.02 December .... 3. 62 1.34 4.70 2.28 3.07 5.53 5.80 4.87 2.32 TOTALS ..... 17.63 10.53 26.67 3494 32.30 406841.29 32.65 22 97 30

July-Aco 1873 roughly estimated from bracusay High to

		Rain Ga	wje, by					Ork	the	rther	x Li
Diameter											
Height	3.4										
Altitude											
Year	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	MEANS.
January	2.55	1.58	3 54	3.14	5.73	2.06	5.05	3.28	2.53	2.83	3.22
February									2.59	4.24	
March									3.03	2.08	2.74
April									2.09	2.45	
May									2-41		2.03
June									1.13	-71	1.61
July						4.00			2.29	1.37	2.67
August	41	2.94	2.98	3.90	3.04	126	1.94	2.49	2.24	4.38	2.55
September							'/		1.20	2.88	2.62
October	4.98	3.40	269	3.91	588	448	234	3.07	3.29	3.45	3.74
November									4:56	2.88	3.86
December									2.10	3-72	4.21
TOTALS	33.17	33.38	4219	27.30	38.81	2016	3/37	33.03	29.46	31.83	33.95

## RAINFALL AT Low Graemaag Sound West - Low Lat. Lom. County of Orkney Bain Gange, by Observer S. o and of Morthson Lights

	A STATE OF THE PARTY OF THE PAR	-	THE RESERVE				-	THE OWNER OF TAXABLE PARTY.	Total Control of		
Diameter											
Height	3 4										
Altitude											
Year	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	MEANS.
January	3.98	2.58	3-60	2.39	431	3.29	4-03	1.43	2.94	4.01	3.256
February											2.608
March											5.128
April											1.801
May											2.060
June											1.851
July											2.674
August											2.901
September											4.154
October											4.388
November											3. 444
December	1.66	4.12	3-24	3.89	3.87	4.05	5.08	3.45	7.24	6.45	4.305
Totals	40-22	34.39	35-41	3551	28.46	30.33	38.63	30-40	46.77	48.58	36.870

### RAINFALL AT Hoy Grammay Sound West Low Lat. Low County of Orkney Rain Gauge, by Overver Borard of Howkern Lights

Diameter		8									
Height	3 4	4.3									
Altitude		27						55			
Year	1900	1901	1902	1903	1994	1905	1906	1907	1908	1909	MEAN
January	,										
February .				3.78							
	3.35	3.51	1.01	5.21	4.03	4.36	6.00	3.00	370	1.73	
March				3.40						- 000	
April				2.88		1000					
May				1.23							
June											
July				. 90				H. Constitution			
August				3.80							
	2.27	3.77	2-95	4.60	2.96	3.13	4.06	4.67	2.06	2:68	3.31
September	5.28	1.49	2.45	3.60	4.80	4.01	3.28	1.50	2.96	2:30	3-16
October				6.60							
November				4.78							
December							1				
	6.29	6.82	3.09	4.40	3.48	2.81	2.16	2.60	2.93	4.51	426
Totals		202.		~		,	100	22/2			

RA	INPALL at	Hoy, Maemsay sound, West = 2000	0
unty of	Orkney	Hoy, Graemsay Sound, West = Low H	20
ver Basin	1		

Diameter	8										
Height	4 3										
Altitude	55										
Year	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	MEANS
January	3.83	4.45	2.67	2.12	3.11	3.44	5.93	4.86	1.17	3.35	
February											
March	1.01	222	2.66	3.42	4.03	1.69	1.21	2.64	2.36	2.96	
April	1.89	3.17	1.45	z.33	1.19	1.76	1.50	2.41	1-17	2.93	
May	1.47	2:32	1.15	1.81	2.74	. 36	1.52	1.16	1-92	. 43	
June											
July	1.46	2:58	.99	.91	2.62	1.14	1.26	.58	5-32	.71	
August	3.82	2:04	214	.88	.95	86	.92	2.10	3.83	6.37	
September											
October											
November											
December	3.07	4.89	3:24	4.70	3.98	7.13	3.84	2.97	481	7.62	
Totals	28.54	39.04	25:05	29.96	32-65	29.68	33.39	35: 2.2	38-53	42.60	79.

Date.	Lat. N.	Long-	Railway Station.	Distance.	Direction.	. Church.	Distance.	Direction.
					2000000		7 300	

#### RAINFALL at Hoy, Graemsay Sound, Low Low.

County of Onkney. Observer Board of northern Lights
River Basin

Rain Gauge, by

Diameter	8										
Height	4 3						4.4				
Altitude	5-5-			Tres.			29				
Year	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	MEANS
January	4.23	5.34	3.56	5.09	3.87	3.54	4.69	3.50	5.82	1.76	3.77
February											1.41
March					2.64						2.27
April					1.87						1.95
May					2.02						303
June					1.84						1.66
July					2.22						175
August											6.83
September	2.77	4.20	2.41		5.03						409
October					3.07						551
November					2.99					1	6.11
December											468
TOTALS		110						20.	21.00		

Cateching 1926 & in certic of yorden 54 yes syrace, groundland of surroundedly wallo y (k. 649h.

4. with like - take + tim 4 (k. 4 in . above ground Mo this . new 6 in gauge installed Dec. 26.

Position of	Station on Map, 2 mile	reduced O. s to 1 inch	rdnance Survey }  Series	No. of Map	Reference No	0
Date.	Lat. N.	Long.	Railway Station.	Distance Direction from gauge	Parish Church.	Distance Direction from gauge
	BAL					

Ann

orm 135	6.		A	ir M	inistr	y, M	eteor	ologi					58:
RA	IN	FA	LL	at	Hay	(grae	moay	Sound	( , Low		(م		3
				reney.							ghthou	ses,	
River	Ba	sin											
Type	of C	Jaug	ıe										
ual Avera	ge 35	5.9	.in. basec	on 3.5.	years obs.	un-weigh	ted. Pe	riod of as		881-19 mputed		Ref	<b>A</b> ,
Diameter			8.										
Height			4. 4										
Altitude			29'										
Year			1931	1932	1933	1934	1935	1986	1937	1938	1939	1940	Means
January			5.73	6.84	3.68	3.31	3.78	5.03	5-88	6.66	4.93	1.77	
February			5.96	.83	4.28	471	5.97	3.49	4.59	3.65	4.03	1.57	
March			1.71	3.86	2.96	4:35	392	2.13	3.01	3.69	2.28	390	
April			1.80	3.50	3.90.	6.63	382	1.84	1.01	2.18	2.42	3.29	
May			5.02	2.30	0.47	2.61	1.03	2.30	79	3.01	.92	1.99	
June			2.65	.56	0.27	1.41	219	-86	3.50	475	2.04	1.72	
July	****		3.60	3.00		2.56	/			4.55	4.48	9.05	
August			.43	2.98	3.24	5.58	4.88	2.92	2.60	2.80	2.25	4.49	
September	r		1.01	5.55	0.84	3.93	5.42	3.52	3.48	2.69	1.61	462	
October			4:31	5.76	3.91	6.23	7.05	5.04	3.97		2.31	3-69	
November			3.07	5.05	4.46	4.71	552	3.62	2.40	6.35	5.92	6.05	
December			5.89	3.04	1.12.	3.10	3.54	4.46	2.24	4.18	4.68	466	
									1		E CONTRACTOR OF THE PARTY OF TH		

Position of Station on reduced Ordnance Survey Map, 1 mile to 1 inch Series No. of Map.. Reference No ... Distance Direction Distance Direction Date. Lat. N. Long. Railway Station, Parish Church from gauge from gauge

31.39. 49.13 50.48 39.07 35.94 52.74 37.90

March .... 2.01 3.68 3.93 1.54 2-23 368 3.12 2.19 2.87 3-67 April .... 3.29 2.38 164 4.46 304 2.91 2.61 4.32 1.98 2.11 May .... 1.73 4.84 1-13 1-16 1.66 259 2.83 3.56 2.93 2.15 June .... 394 0.54 240 1.54 3.09 3.04 4.13 1.64 1.71 1.41 July .... 356 2.98 3-67 1.79 3.16 2.12 4.30 1.52 2.22 2-20 August 3.95 2.59 278 3.11 2.20 2.31 2.65 '07 3.50 2.45 September 6.99 2.31 3.27 5.08 5.62 4.64 680 5-64 4.05 2.92 October 3.95 3.29 663 4-19 4-60 455 0.78 2-59 7.19 2.55

December ... 508 526 3.74 4.84 6.90 4.66 4.29 5.60 5.30 4.88

TOTALS ... 36.66 45.18 46.05 46.41 47.04 45.77 35.83 44.64 38.80 49.09

1945 or p. high.

X/46 Extract from letter from N.L. Bd: Gauge cound Regarding low soundable accounted for to 1946 or p. high.

2.58 7.39 6.03 3.54

5-65

(3.20

1947 up high invaded at for spray mist.

284 6-47 6-73

Position of Station on reduced Ordanance Survey Map., No. of Map. Reference No.

1 mile to 1 inch Series

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

Parish Church. Distance Direction from gauge.

November

5.16

RAINFALL at Hoy Graemsay Sound, how Observer Comits of In dighthouses River Basin  Type of Gauge  Innual Average 389 in based on 385 years obs. un-weighted. Period of average 1881-1915 Ref. S. 41.08 - 29 - 27 thin 1918-53 File No.  Diameter 8" 768 046 1918-53 File No.  Wear 1951, 1952, 1983, 1954, 1955, 1956, 1957, 1958, 1959, 1960, Means  January 4.08 5.58 4.38 3.32 2.73 1.01 4.67 3.95 5.74 3.79  February 4.43 4.01 2.76 4.53 3.52 ( 91 2 30 3.85 1.17 3.81)  March 5.06 5.20 1.90 3.14 2.66 2.54 5.65 3.10 1.14 1.79  April 4.31 1.16 3.65 1.98 1.43 2.01 [ 95 1.41 2.67 2.68  May 5.50 2.83 2.47 2.34 2.46 2.54 5.65 3.10 1.16 1.79  June 2.08 3.67 1.27 4.16 1.30 3.41 2.66 1.91 4.46 2.30 1.16  June 2.08 3.67 1.27 4.16 1.30 3.41 2.56 1.43 3.61 1.47 3.61 1.81  August 3.53 6.49 2.22 2.46 1.86 3.41 3.55 2.54 2.54 2.36  September 3.01 4.16 3.96 4.39 6.36 3.12 3.70 2.68 1.76 2.49  October 3.54 4.41 5.76 7.77 2.24 3.96 4.34 1.10 5.03 3.80  Totals 47.83 48.44 37.71 52 48 38.66 4445 4.71 3.55 8.87 3.421	M. Form 19				-			-	Statio	m No	58	20
Type of Gauge    1981   1915   1915   1915   1915   1915   1915   1916   1916   1916   1916   1917   1918	County	of	Ork	ney			Observe	Comi	• d	n. ti	ghtho	
1												
Height 4 4 4 4 1 1952 1953 1954 1955 1956 1957 1958 1959 1960 Means  January 4 68 5 58 4 38 3 32 2 2 7 3 1 0 0 4 6 7 5 4 5 5 7 4 3 7 9  February 4 4 3 4 0 1 2 7 6 4 5 3 5 6 3 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1	nnual Average	359 in.	based on	35 year	rs obs. un	r-weighted	d. Perio	od of aver	age File	881-1 1916 - 3 No.	915	Ref. S.
Altitude 29'   1953   1954   1955   1958   1957   1958   1959   1960   Means	Diameter	8"				768	046					
Altitude  <	Height	4' 4"					1					
Year 1981 1982 1983 1984 1985 1986 1987 1988 1989 1980 Means  January 4 08 5 58 4 38 3 32 2 73 1 00 4 67 5 95 5 74 3.79  February 4 43 4 01 2 76 4 53 5 53 (91 2 30 385 1 77 3 81 1 16 3 65 1 98 1 143 2 00 1 16 1 179  April 4 31 1 16 3 65 1 98 1 143 2 00 1 196 1 116 2 30 1 16 1 179  April 2 08 3 2 7 2 3 4 2 4 2 2 1 1 1 1 2 2 3 1 1 16 2 3 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Altitude	29'					51					
February 4 43 401 2.76 4.53 3.53 (.91 2.30 3.85 1.17 3.81  March 5 06 5.20 1.90 3.14 2.66 2.54 5.65 3.10 1.16 1.79  April 4.31 1.16 3.65 1.98 1.43 2.01 [.95 1.41 2.67 2.68  May 5 0 2.83 2.47 2.34 2.46 2.66 (.91 4.46 2.30 1.16  June 2.08 3.67 1.27 4.76 1.30 3.41 2.31 1.18 2.18 2.50  July 3.91 2.25 4.21 3.34 0.41 4.68 3.67 1.47 3.81 1.81  August 3.53 6.49 2.22 2.46 1.16 3.41 3.56 2.44 2.56 2.49  September 2.01 4.16 3.96 4.39 6.36 3.17 3.70 2.68 1.76 2.49  October 2.57 4.57 1.97 7.60 6.92 4.52 6.11 5.94 5.41 3.64  November 3.54 4.41 5.76 7.77 2.24 3.96 4.34 1.10 5.03 3.80  December 6.81 4.08 3.16 7.45 9.31 5.81 7.11 5.15 5.84 9.38	Year		1952	1953	1954	1955	1956	1957	1958	1959	1960	Means
March 5 · 66 5 · 20 1 · 90 3 · 14 2 · 66 2 · 54 5 · 65 3 · 10 1 · 14 1 · 79  April 4 · 31 1 · 16 3 · 65 1 · 98 1 · 43 3 · 0 1 1 · 95 1 · 41 2 · 67 2 · 68  May	January	4.08	5.58	4.38	3.32	2.73	1.02	4.67	5-95	5.74	3.79	
April 4.31 1.16 3.65 1.98 1.43 3.07 1.95 1.41 2.67 2.68  May	February	4.43	4.01	2.76	4.53	3.53	1.91	2.30	3.85	1.17	3.81	
May	March	5.06	5.20	1.90	3.14	2.66	2.54	5.65	3.10	1.14	1.79	
June 2.08 3.67 1.27 4.76 1.30 3.41 2.31 1.18 2.18 2.50  July 3.41 2.25 4.21 3.34 0.41 4.08 3.67 1.47 3.67 1.81  August 3.53 6.49 2.22 2.46 1.46 3.41 3.56 2.42 2.56 2.36  September 2.01 4.16 3.46 4.39 6.36 2.12 3.70 2.68 1.76 2.49  October 2.57 4.57 1.97 7.60 5.92 4.52 6.11 2.59 5.41 3.64  November 8.54 4.41 5.76 7.77 2.24 3.96 4.34 1.10 6.03 3.80  December 6.81 4.08 3.16 7.45 9.31 5.61 7.11 5.15 5.84 4.38	April	4.31	1.16	3.65	1.98	1.43	2.02	1.95	1-41	2-67	2.68	
July 3.91 2.25 4.21 3.34 0.41 4.08 3.67 1.07 3.81 1.81  Angust 3.53 6.49 2.22 2.46 1.16 3.41 3.56 2.94 2.36  September 3.01 4.16 3.96 4.39 6.36 3.12 3.70 2.68 1.76 2.49  October 2.57 4.57 1.97 7.60 5.92 4.52 6.11 2.39 5.41 3.64  November 8.54 4.41 5.76 7.77 2.24 3.96 4.34 1.10 6.03 3.80  December 6.81 4.08 3.16 7.45 9.31 5.61 7.11 5.15 5.84 4.38	May	0.50	2.83	2.47	2.34	2.46	2.66	1-91	4.46		1110	
August 3.53 6.49 2.22 2.46 1.16 3.41 3.58 2.84 2.54 2.36  September 2.01 4.16 3.46 4.39 6.36 3.12 3.70 2.68 1.76 2.49  October 2.57 4.57 1.97 7.60 6.92 4.52 6.11 5.94 5.41 3.64  November 8.54 4.41 5.76 7.77 2.24 3.96 4.34 1.10 5.03 3.80  December 6.81 4.08 3.16 7.45 9.31 5.81 7.11 5.15 5.84 4.38	June	2.08	3.67	1.27	4.16	1.30	3.41	2.31	1-18	2.18	2.50	
September 3 · 01 4 · 16 3 · 96 4 · 39 6 · 36 3 · 12 3 · 70 2 · 68 1 · 76 2 · 49  October 3 · 57 4 · 57 1 · 97 7 · 60 6 · 92 4 · 52 6 · 11 5 · 36 4 3 · 64  November 8 · 54 4 · 41 5 · 76 7 · 77 2 · 24 3 · 96 4 · 34 1 · 10 5 · 03 3 · 80  December 6 · 81 4 · 08 3 · 16 7 · 45 9 · 31 5 · 81 7 · 11 5 · 15 5 · 84 4 · 38	July	3.91	2.25	4.21	3.34	0.41	4.08	3.67	1.47	3.81	1.81	
October 3.57 4.57 1.97 7.60 6.92 4.52 6.11 5.99 5.41 3.64  November 8.54 4.41 5.76 7.77 2.24 3.96 4.34 1.10 5.03 3.80  December 6.81 4.08 3.16 7.45 9.31 5.61 7.11 5.15 5.84 4.38	August	3.53	6.49	2.22	2.46	1.66	3.41	3.88	2.84	2.54	2.36	
November 6.81 4.08 3.16 7.45 9.31 5.61 7.11 5.15 5.84 4.38	September	2.01	4.16	3.96	4.39	6.36	3.12	3.70	2-68	1.76	2.49	
December 6.81 4.08 3.16 7.45 9.31 5.61 7.11 5.15 5.84 4.38	October	2.57	4.57	1.97	7.60	5.92	4.52	6.11	\$-39	1000	3.64	
7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	November	8.54	4.41	5.76	7.77	2.24	3.96	4.34	1-10	6.03	3.80	
47.02 (4.4) 57.71.52 419	December	6.81	4.08	3.16	7.45	9.31	5.81	7.11	5-15	5.84	4.38	
TOTALS 17. 83 46 41 37. 11 22 40 32.65 174.43 17 1 4 1 30 30 10 10 10 10 10 10 10 10 10 10 10 10 10	TOTALS	47.83	48.41	37.71	52 .48	38.65	44.45	47.27	38-58	39.63	34.21	

1952 . n. p. high. 1953 . Pinto. 1955 Nr. big. 1955 Nr. big.

National Grid Reference N 30 346065 Position of Station on Ordnance One-Inch map : No. of Map .. Distance Direction from gauge Distance Direction from gauge. Date. Lat. N. Long. Railway Station. Parish Church. Summary of Earlier Records from 10-year Sheets: 1941-50 1951-60 1910-19 1920-30 1931-40

D 28

1948-50 1945-44

NP

(62) Wt. 13072-389 10M 6/50 T.S. 841

Record D, or d