

Table XI.—SECOND SUBANTARCTIC VOYAGE.

METEOROLOGICAL LOG KEPT ON BOARD S.Y. "AURORA."

AUSTRALASIAN ANTARCTIC EXPEDITION, 1911-14.

| Date.                  |          | Position.         |                    | Air Pressure in inches corrected and reduced. | Air Temperature in deg. F. | Humidity.    |                  | Clouds. |          |               | Weather. | Wind.                |                     | Sea Surface.    |                     |          |  | Remarks.  |
|------------------------|----------|-------------------|--------------------|---|----------------------------|--------------|------------------|---------|----------|---------------|----------|----------------------|---------------------|-----------------|---------------------|----------|--|---|
| Day.                   | Hour.    | S. Lat. deg. min. | E. Long. deg. min. |   |                            | Per-centage. | Vapour Pressure. | Upper.  | Lower.   | Amount, 0-10. |          | Direction from True. | Force, 0-12.        | Waves.          |                     | Swell.   |  |   |
|                        |          |                   |                    |   |                            |              |                  |         |          |               |          | Direction from—      | Dis-turbance, 0-10. | Direction from— | Dis-turbance, 0-10. |          |  |   |
| 1912.<br>November<br>2 | Noon     | ...               | ...                | ...   | ...                        | ...          | ...              | ...     | ...      | ...           | ...      | ...                  | ...                 | ...             | ...                 | ...      | Noon. Left wharf at Williamstown.<br>2 0 Wind veered into W. and freshening. Heavy rain.<br>3 0 Rain clearing off.<br>3 55 Wind veered into S. Squally with frequent rain.<br>8 10 Heavy swell and choppy sea. Threatening rain. |   |
|                        | 4        | ...               | ...                | 29-67   | 60                         | 93           | .480             | ...     | Nb.      | 10            | p o q    | S. by W.             | 4                   | S.W.            | 2                   | ...      |  |   |
|                        | 8        | ...               | ...                | 29-76   | 55                         | 80           | .348             | ...     | Nb.      | 10            | o c q    | S.W.                 | 5                   | S.W.            | 4                   | S.W.     | 6  |   |
|                        | Midnight | ...               | ...                | 29-78   | 54                         | 67           | .281             | ...     | Nb.      | 10            | o c q    | S.                   | 5                   | S.              | 3                   | S.S.W.   | 5  |   |
| 3                      | 4        | ...               | ...                | ...   | ...                        | ...          | ...              | ...     | Nb.      | 10            | o q      | S. by W.             | 5                   | S. by W.        | 2                   | S. by E. | 5  | Midnight. C. Schank abeam, distance 4 miles.<br>4 0 Overcast with occasional misty rain.<br>9 0 Sky clearing. Wind steady throughout. |
|                        | 8        | ...               | ...                | 29-83   | 52                         | 63           | .244             | ...     | Cu.-Nb.  | 9             | o e      | S. by W.             | 4                   | S. by W.        | 1                   | S. by W. | 4  |   |
|                        | Noon     | 38 59             | 145 57             | 29-89   | 52                         | 60           | .231             | ...     | Cu.      | 2             | b e      | S. by W.             | 4                   | S. by W.        | 1                   | S. by W. | 3  |   |
|                        | 4        | ...               | ...                | 29-89   | 54                         | 55           | .230             | ...     | Cu., St. | 2             | b e      | S.W. by S.           | 4                   | S.W. by S.      | 2                   | S.W.     | 3  |   |
|                        | 8        | ...               | ...                | 29-92   | 53                         | 64           | .255             | ...     | Cu., St. | 2             | b e      | Calm                 | ...                 | ...             | ...                 | S.W.     | 3  | 7 30 Wind dropped.<br>9 0 Sky overcast.   |
|                        | Midnight | ...               | ...                | 29-90   | 53                         | 60           | .243             | ...     | Nb., St. | 10            | o e      | N.                   | 1                   | ...             | ...                 | S.W.     | 1  | 11 55 Light breeze from N. Overcast throughout.   |
| 4                      | 4        | ...               | ...                | 29-87   | 53                         | 61           | .246             | ...     | Nb., St. | 10            | o e      | N.N.E.               | 1                   | ...             | ...                 | S.       | 1  | 4 0 Fine and overcast throughout.   |
|                        | 8        | ...               | ...                | 29-86   | 55.5                       | 66           | .294             | ...     | Cl.      | 4             | b e      | N.E. by N.           | 1                   | ...             | ...                 | S.       | 1  | 5 30 Sky clearing with sunrise.   |
|                        | Noon     | 38 12             | 148 45             | 29-82   | 60.2                       | 69           | .357             | ...     | Cl.      | 2             | b e      | N.                   | 2                   | ...             | ...                 | Confused | 1  | 12 30 Wind backed into E.<br>2 30 Overcast with Cl.-St.   |
|                        | 4        | ...               | ...                | 29-76   | 61                         | 66           | .353             | ...     | Cl.-St.  | 8             | b e      | E. by S.             | 2                   | E.              | 1                   | E.       | 1  |   |
|                        | 8        | ...               | ...                | 29-75   | 59                         | 76           | .379             | ...     | Cu.      | 1             | t        | N.E. by E.           | 3                   | ...             | ...                 | E.       | 2  | 8 0 Fine throughout. Swell increasing slightly.   |
|                        | Midnight | ...               | ...                | 28-74   | 58                         | 88           | .422             | ...     | Cl.      | 3             | b c l    | N.E.                 | 1                   | ...             | ...                 | E.       | 2  | Midnight. Heavy clouds low round E. horizon, with frequent lightning.   |
| 5                      | 4        | ...               | ...                | 29-73   | 56                         | 75           | .334             | ...     | St.      | 1             | b        | S.W.                 | 4                   | S.W.            | 1                   | S.       | 2  | 12 15 Wind veered into N.W., light.<br>1 25 Wind suddenly veered into S.W. (fresh), clearing clouds away on E. horizon.               |
|                        | 8        | ...               | ...                | 29-79   | 57                         | 69           | .321             | ...     | Cu.      | 3             | b e      | S. by W.             | 4                   | S.              | 2                   | S.       | 3  | 4 0 Fine and clear, occasional lightning.<br>9 40 Wind veered into S.E.   |
|                        | Noon     | 36 13             | 150 13             | 29-79   | 59                         | 68           | .337             | ...     | Cl.-St.  | 8             | b e      | S.E.                 | 3                   | S.E.            | 2                   | S.E.     | 3  | 11 40 Wind gradually veering throughout watch. Alto clouds passing over against wind.   |
|                        | 4        | ...               | ...                | 29-76   | 63.7                       | 58           | .348             | ...     | Cu.      | 5             | b e      | E.N.E.               | 3                   | E.N.E.          | 1                   | S.S.E.   | 2  | 4 0 Heavy clouds to S.E.<br>4 8 Wind very unsteady throughout watch.  |
|                        | 8        | ...               | ...                | 29-86   | 62.9                       | 47           | .269             | ...     | Cu.      | 2             | b e      | W. by N.             | 5                   | W. by N.        | 2                   | S.       | 1  | 8 0 Freshening breeze. Lightning to E.  |
|                        | Midnight | ...               | ...                | 29-96   | 59                         | 59           | .295             | ...     | ...      | 0             | b        | W. by N.             | 5                   | W. by N.        | 3                   | S.       | 1  | 11 50 Wind backing slightly.<br>1 30 Wind moderating.   |

METEOROLOGY.



Table XI.—SECOND SUBANTARCTIC VOYAGE—continued.

METEOROLOGICAL LOG KEPT ON BOARD S.Y. "AURORA."

AUSTRALASIAN ANTARCTIC EXPEDITION, 1911-14.

| Date.                   |          | Position.             |                    | Air Pressure in inches corrected and reduced. | Air Temperature in deg. F. | Humidity.    |                  | Clouds.         |                 |               | Weather. | Wind.                |                     | Sea Surface.    |                     |          |  | Remarks.   |
|-------------------------|----------|-----------------------|--------------------|---|----------------------------|--------------|------------------|-----------------|-----------------|---------------|----------|----------------------|---------------------|-----------------|---------------------|----------|--|--|
| Day.                    | Hour.    | S. Lat. deg. min.     | E. Long. deg. min. |   |                            | Per-centage. | Vapour Pressure. | Upper.          | Lower.          | Amount, 0-10. |          | Direction from True. | Force, 0-12.        | Waves.          |                     | Swell.   |  |  |
|                         |          |                       |                    |   |                            |              |                  |                 |                 |               |          | Direction from—      | Dis-turbance, 0-10. | Direction from— | Dis-turbance, 0-10. |          |  |  |
| 1912.<br>November<br>12 | 4        | ...                   | ...                | ...   | ...                        | ...          | ...              | ...             | ...             | ...           | ...      | ...                  | ...                 | ...             | ...                 | ...      |  |  |
|                         | 8        | ...                   | ...                | ...   | ...                        | ...          | ...              | ...             | ...             | ...           | ...      | ...                  | ...                 | ...             | ...                 | ...      |  |  |
|                         | Noon     | ...                   | ...                | ...   | ...                        | ...          | ...              | ...             | ...             | ...           | ...      | ...                  | ...                 | ...             | ...                 | ...      |  |  |
|                         | 4        | Departed from Hobart. |                    | ...   | ...                        | ...          | ...              | ...             | ...             | ...           | ...      | ...                  | ...                 | ...             | ...                 | ...      |  |  |
|                         | 8        | ...                   | ...                | 29.94   | 57.5                       | 72           | .342             | ...             | Cu.-Nb.         | 9             | o c      | W.                   | 2                   | ...             | S.                  | 2        | 8 0 Dark clouds on S. horizon throughout watch.<br>11 0 Out from lee of land, considerable S.W. swell coming up. |  |
|                         | Midnight | ...                   | ...                | 29.93   | 54                         | 80           | .334             | ...             | Cu.-Nb.         | 8             | b c      | W.S.W.               | 3                   | ...             | S.W.                | 4        | Midnight. Blue sky at intervals.   |  |
| 13                      | 4        | ...                   | ...                | 29.93   | 53                         | 80           | .320             | ...             | Nb., St.        | 5             | b c      | S.W. by W.           | 4                   | S.W.            | 1                   | S.W.     | 4  | 4 0 Very clear. Sky overcast at times.   |
|                         | 8        | ...                   | ...                | 29.96   | 53                         | 86           | .347             | Cl.-St.         | St., Cu.        | 7             | b c      | W.S.W.               | 3                   | ...             | W.S.W.              | 3        | 8 0 Fine with heavy clouds all round horizon.<br>11 30 Light airs from E.  |  |
|                         | Noon     | 44 21                 | 147 35             | 29.90   | 56.1                       | 81           | .363             | Cl.,<br>Cl.-Cu. | Cu.-St.         | 5             | b c      | E.                   | 1                   | ...             | W.S.W.              | 4        |  |  |
|                         | 4        | ...                   | ...                | 29.84   | 55                         | 84           | .362             | Cl.-St.         | St.             | 9             | c        | N.E. by N.           | 5                   | N.E.            | 3                   | N.E.     | 2  | 4 0 Wind freshening throughout.<br>4 45 Light rain squall.   |
|                         | 8        | ...                   | ...                | 29.76   | 55.5                       | 89           | .397             | Cl.-St.         | St.             | 5             | b c      | N.E. by N.           | 4                   | N.E.            | 1                   | N.E.     | 2  | 9 0 Wind falling to light.<br>10 30 Light wind from N.<br>11 10 Light airs from N.W.   |
|                         | Midnight | ...                   | ...                | 29.76   | 58                         | 88           | .422             | Cl.-St.         | St.             | 10            | o c m    | N.W.                 | 1                   | N.N.E.          | 1                   | N.N.E.   | 2  | Midnight. Dull and rainy appearance of weather.  |
| 14                      | 4        | ...                   | ...                | 29.76   | 56.8                       | 88           | .408             | ...             | Nb.             | 10            | o m r    | W.N.W.               | 3                   | W.N.W.          | 1                   | W.N.W.   | 1  | 3 0 Heavily overcast.  |
|                         | 8        | ...                   | ...                | 29.77   | 53.5                       | 96           | .395             | ...             | Nb.             | 10            | o m r    | N.W.                 | 3                   | ...             | W.N.W.              | 3        | 3 30 Rain set in.<br>8 0 Continuous steady rain throughout.  |  |
|                         | Noon     | 45 26                 | 147 26             | 29.69   | 54.5                       | 98           | .416             | ...             | St., Nb.        | 10            | o c      | N. by W.             | 2                   | ...             | W.N.W.              | 3        | 10 0 Rain clearing off.<br>1 30 Blue sky in places. Wind freshening.   |  |
|                         | 4        | ...                   | ...                | 29.46   | 54.5                       | 93           | .397             | ...             | St.             | 10            | o c      | N.E.                 | 5                   | N.E.            | 3                   | S.W.     | 3  | 4 0 Long swell from S.W.   |
|                         | 8        | ...                   | ...                | 29.39   | 56                         | 93           | .419             | ...             | Nb.             | 10            | o r      | Var.                 | 2                   | N.N.E.          | 1                   | Confused | 4  | 8 0 Light rain set in.<br>10 0 Showery.  |
|                         | Midnight | ...                   | ...                | 29.33   | 50                         | 100          | .360             | ...             | Nb.             | 10            | o c m p  | S.S.W.               | 3                   | W.              | 2                   | Confused | 3  | Midnight. Wind veering steadily throughout watch. Vessel rolling considerably.<br>2 0 Wind freshening from S.S.W.<br>3 30 Wind moderating. |
| 15                      | 4        | ...                   | ...                | 29.44   | 48                         | 85           | .284             | ...             | Nb.,<br>Cu.-Nb. | 10            | o c p q  | S.S.W.               | 3                   | S.S.W.          | 1                   | S.W.     | 4  | 4 0 Occasional light rain.   |
|                         | 8        | ...                   | ...                | 29.53   | 49                         | 85           | .296             | ...             | Cu.-Nb.         | 10            | o c q    | W.                   | 3                   | W.              | 2                   | W.S.W.   | 4  | 9 0 Sky clearing. Squalls at times.  |
|                         | Noon     | 47 7½                 | 147 31             | 29.58   | 49.2                       | 78           | .270             | ...             | Cu.,<br>Cu.-Nb. | 6             | b c q    | W.S.W.               | 6                   | W.S.W.          | 3                   | W.S.W.   | 4  | 10 0 Wind freshening.  |
|                         | 4        | ...                   | ...                | ...   | 49                         | 78           | .270             | ...             | Cu.             | 4             | b c      | W.S.W.               | 7                   | W.S.W.          | 4                   | W.S.W.   | 5  |  |
|                         | 8        | ...                   | ...                | 29.65   | 47.5                       | 81           | .266             | ...             | Cu.             | 2             | b c p q  | W.                   | 7                   | W.S.W.          | 4                   | Confused | 5  | 9 30 Overcast. Frequent light rain squalls.  |
|                         | Midnight | ...                   | ...                | 29.65   | 48                         | 85           | .284             | ...             | Nb.             | 10            | o d q    | W.                   | 7                   | Confused        | 6                   | Confused | 7  | Midnight. Ship rolling and pitching very violently.  |

METEOROLOGY.

Table XI.—SECOND SUBANTARCTIC VOYAGE—continued.

METEOROLOGICAL LOG KEPT ON BOARD S.Y. "AURORA."

AUSTRALASIAN ANTARCTIC EXPEDITION, 1911-14.

| Date.                   |       | Position.         |                    | Air Pressure in inches corrected and reduced. | Air Temperature in deg. F. | Humidity.    |                  | Clouds.         |                 |               | Weather.   | Wind.                |                     | Sea Surface.    |                     |                               |   | Remarks.   |
|-------------------------|-------|-------------------|--------------------|---|----------------------------|--------------|------------------|-----------------|-----------------|---------------|------------|----------------------|---------------------|-----------------|---------------------|-------------------------------|---|--|
| Day.                    | Hour. | S. Lat. deg. min. | E. Long. deg. min. |   |                            | Per-centage. | Vapour Pressure. | Upper.          | Lower.          | Amount, 0-10. |            | Direction from True. | Force, 0-12.        | Waves.          |                     | Swell.                        |   |  |
|                         |       |                   |                    |   |                            |              |                  |                 |                 |               |            | Direction from—      | Dis-turbance, 0-10. | Direction from— | Dis-turbance, 0-10. |                               |   |  |
| 1912.<br>November<br>16 | 4     | ...               | ...                | 29.67   | 48.5                       | 88           | .302             | ...             | Nb.             | 10            | o          | N.W. by W.           | 7                   | Confused        | 6                   | W.,<br>Confused.              | 7   | 4 0 Occasional misty rain during first part of watch.                      |
|                         | 8     | ...               | ...                | 29.66   | 49                         | 93           | .321             | ...             | Nb.             | 10            | o q        | W. by N.             | 7                   | Confused        | 6                   | Confused.<br>W.,<br>Confused. | 7   |  |
|                         | Noon  | 48 1              | 146 49             | 29.64   | 49.2                       | 92           | .318             | ...             | St., Nb.        | 10            | o c m      | W. by S.             | 7                   | Confused,<br>W. | 6                   | Confused,<br>W.               | 6   |  |
|                         | 4     | ...               | ...                | 29.61   | 49.2                       | 89           | .310             | ...             | Nb.             | 10            | o c p      | W.N.W.               | 7                   | Confused,<br>W. | 6                   | W. by S.                      | 6   | 4 0 Blue sky with cirrus clouds visible at times. Occasional rain squalls. |
| 8                       | ...   | ...               | 29.74              | 45  | 84                         | .250         | ...              | Cu.-Nb.         | 8               | b c p q       | W.         | 7                    | Confused            | 6               | W.S.W.              | 6                             | 9 15 Sky clearing. Ship labouring heavily throughout watch. |  |
| Midnight                | ...   | ...               | 29.83              | 44  | 84                         | .240         | ...              | Cu.-Nb.,<br>Nb. | 1               | b c q         | W.S.W.     | 7                    | Confused            | 6               | W.S.W.              | 7                             |   |  |
| 17                      | 4     | ...               | ...                | 29.95   | 45                         | 68           | .204             | ...             | Cu.-Nb.         | 8             | b c p q    | S.W. by W.           | 7                   | Confused        | 5                   | W.S.W.                        | 7   | 4 0 Frequent blue sky. Rain squalls at times.                              |
|                         | 8     | ...               | ...                | 30.06   | 47.5                       | 73           | .241             | ...             | Cu.-Nb.         | 7             | b c p q    | S.W. by W.           | 6                   | Confused        | 5                   | W.S.W.                        | 7   |  |
|                         | Noon  | 48 38             | 146 26             | 30.14   | 48.2                       | 77           | .256             | Cl.             | Cu.-Nb.         | 6             | b c p      | S.W. by S.           | 6                   | Confused        | 4                   | S.W. by W.                    | 6   | 12 15 Sky overcast.  |
|                         | 4     | ...               | ...                | 30.11   | 47.5                       | 81           | .266             | ...             | Nb., St.        | 10            | o c        | W.                   | 7                   | W.              | 4                   | S.W. by W.                    | 5   |  |
| 8                       | ...   | ...               | 30.13              | 48  | 78                         | .259         | ...              | Cu.             | 3               | b c           | W.         | 6                    | W.                  | 4               | W.S.W.              | 6                             | 9 0 Overcast.   |  |
| Midnight                | ...   | ...               | 30.11              | 49  | 85                         | .296         | ...              | Nb.             | 10              | o             | W.N.W.     | 6                    | W.N.W.              | 4               | W.                  | 6                             | 11 0 Wind W.N.W.  |  |
| 18                      | 4     | ...               | ...                | 30.11   | 47                         | 96           | .309             | ...             | Nb.             | 10            | o          | W. by S.             | 6                   | W. by S.        | 4                   | W.S.W.                        | 6   | 4 0 Frequent drizzling rain.   |
|                         | 8     | ...               | ...                | 30.19   | 47                         | 92           | .297             | ...             | Nb.             | 10            | o          | W.S.W.               | 6                   | W.S.W.          | 4                   | W.S.W.                        | 6   |  |
|                         | Noon  | 49 36             | 149 12             | 30.21   | 46.8                       | 94           | .299             | ...             | Nb.             | 10            | o c        | W. by S.             | 5                   | W. by S.        | 4                   | W.S.W.                        | 5   | 1 0 Wind and sea moderating.   |
|                         | 4     | ...               | ...                | 30.22   | 46.9                       | 94           | .300             | ...             | Nb.             | 10            | o c        | S.W.                 | 4                   | S.W.            | 3                   | S.W.                          | 5   |  |
| 8                       | ...   | ...               | 30.26              | 46  | 92                         | .285         | ...              | Cu.-Nb.         | 10              | o c           | S.W. by S. | 3                    | S.W. by S.          | 2               | S.W.                | 5                             |   |  |
| Midnight                | ...   | ...               | 30.26              | 45.5  | 88                         | .268         | ...              | Nb.             | 10              | o c           | W.S.W.     | 2                    | ...                 | ...             | S.W.                | 4                             |   |  |
| 19                      | 4     | ...               | ...                | 30.27   | 46.8                       | 94           | .299             | ...             | Nb.,<br>Cu.-Nb. | 10            | o c m      | N.W. by W.           | 2                   | ...             | ...                 | S.W.                          | 4   | Continuous misty rain up till 3 a.m.                                       |
|                         | 8     | ...               | ...                | 30.25   | 46                         | 92           | .285             | ...             | Nb.             | 10            | o m        | W. by N.             | 3                   | W. by N.        | 1                   | W. by S.                      | 3   |  |
|                         | Noon  | 50 36             | 151 43             | 30.20   | 47.5                       | 88           | .290             | ...             | Nb.             | 10            | o c        | N.W. by W.           | 3                   | N.W.            | 1                   | W.S.W.                        | 4   |  |
|                         | 4     | ...               | ...                | 30.14   | 44.5                       | 92           | .269             | ...             | Nb.,<br>Cu.-Nb. | 10            | o c p      | W.N.W.               | 4                   | W.N.W.          | 2                   | W.S.W.                        | 5   | 4 0 Passing misty rain showers. Swell increasing.                          |
| 8                       | ...   | ...               | 30.10              | 47  | 85                         | .272         | ...              | Cu.-Nb.         | 10              | o c           | W.N.W.     | 4                    | W.N.W.              | 2               | W.S.W.              | 5                             | 8 0 Occasional light misty rain.                            |  |
| Midnight                | ...   | ...               | 30.09              | 45  | 92                         | .274         | Cu.-St.          | Cu.-Nb.,<br>Nb. | 10              | o c           | S.W. by W. | 3                    | S.W.                | 3               | W.S.W.              | 4                             | Midnight. Lightly overcast.                                 |  |
| 20                      | 4     | ...               | ...                | 30.08   | 44.2                       | 98           | .285             | ...             | Nb.,<br>Cu.-Nb. | 10            | o c p      | S.S.W.               | 3                   | S.S.W.          | 2                   | S.W. by W.                    | 4   | 4 0 Occasional very light misty rain; wind veering through-out.            |
|                         | 8     | ...               | ...                | 30.14   | 42.4                       | 74           | .202             | Cl.             | Cu.             | 6             | b c        | S. by E.             | 3                   | S. by E.        | 1                   | S.                            | 4   |  |
|                         | Noon  | 51 50             | 155 17             | 30.16   | 44.5                       | 68           | .199             | Cl.             | St.             | 6             | b c        | S. by W.             | 3                   | S. by W.        | 2                   | S.                            | 3   |  |
|                         | 4     | ...               | ...                | 30.18   | 44.2                       | 69           | .198             | Cl.             | St., Cu.        | 4             | b c        | S.                   | 3                   | S.              | 2                   | S.S.W.                        | 4   |  |
| 8                       | ...   | ...               | 30.20              | 40  | 73                         | .180         | ...              | Cu.-Nb.         | 8               | b c           | S.         | 3                    | ...                 | ...             | Confused            | 5                             |   |  |
| Midnight                | ...   | ...               | 30.16              | 39  | 72                         | .172         | ...              | Cu.-Nb.         | 9               | c             | S.         | 2                    | ...                 | ...             | Confused            | 4                             | Midnight. Vessel rolling heavily.                           |  |

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| Date.                   |          | Position.                        |                    | Air Pressure in inches corrected and reduced. | Air Temperature in deg. F. | Humidity.    |                  | Clouds. |                     |               | Weather. | Wind.                |                 | Sea Surface.        |                 |                     |        | Remarks.   |                                |
|-------------------------|----------|----------------------------------|--------------------|---|----------------------------|--------------|------------------|---------|---------------------|---------------|----------|----------------------|-----------------|---------------------|-----------------|---------------------|--------|--|--------------------------------|
| Day.                    | Hour.    | S. Lat. deg. min.                | E. Long. deg. min. |   |                            | Per-centage. | Vapour Pressure. | Upper.  | Lower.              | Amount, 0-10. |          | Direction from True. | Force, 0-12.    | Waves.              |                 | Swell.              |        |  |                                |
|                         |          |                                  |                    |   |                            |              |                  |         |                     |               |          |                      | Direction from— | Dis-turbance, 0-10. | Direction from— | Dis-turbance, 0-10. |        |  |                                |
| 1912.<br>November<br>21 | 4        | ...                              | ...                | 30.14   | 39                         | 72           | .172             | ...     | Cu.                 | 9             | c        | S.                   | 1               | ...                 | ...             | Confused,<br>S.     | 4      |  |                                |
|                         | 8        | ...                              | ...                | 30.14   | 41                         | 65           | .167             | ...     | Cu.                 | 9             | c        | S.S.W.               | 1               | ...                 | ...             | S.                  | 4      |  |                                |
|                         | Noon     | 53 27                            | 157 39             | 30.09   | 42                         | 68           | .181             | ...     | Cu., St.            | 8             | bc       | W.S.W.               | 2               | ...                 | ...             | S.S.W.              | 4      |  |                                |
|                         | 4        | ...                              | ...                | 30.03   | 43.5                       | 71           | .201             | ...     | Cu.,<br>Cu.-St.     | 9             | bc       | W.                   | 2               | ...                 | ...             | S.W. by W.          | 4      |  |                                |
|                         | 8        | ...                              | ...                | 29.98   | 40.3                       | 80           | .198             | ...     | Cu.-Nb.             | 7             | bc       | N.W. by W.           | 3               | ...                 | ...             | W.S.W.              | 4      |  |                                |
|                         | Midnight | ...                              | ...                | 29.88   | 41                         | 82           | .211             | ...     | Cu.-St.             | 10            | oc       | N.W. by W.           | 3               | ...                 | ...             | W.                  | 3      |  |                                |
| 22                      | 4        | ...                              | ...                | 29.91   | 42                         | 83           | .220             | ...     | St.                 | 10            | oc       | N.W.                 | 3               | N.W.                | 1               | W.S.W.              | 2      |  |                                |
|                         | 8        | ...                              | ...                | 29.86   | 44                         | 75           | .217             | ...     | Cu.                 | 8             | bc       | W.N.W.               | 2               | ...                 | ...             | W.S.W.              | 2      |  |                                |
|                         | Noon     | 58                               | 159 5              | 29.85   | 45                         | 76           | .227             | ...     | St.                 | 10            | oc       | W.                   | 1               | ...                 | ...             | W.S.W.              | 3      |  |                                |
|                         | 4        | ...                              | ...                | 29.78   | 45                         | 92           | .274             | ...     | St., Nb.            | 9             | bc       | Calm                 | 0               | ...                 | ...             | S.W.                | 3      | 2 0 Heavy clouds gathering to W.<br>Land obscured by mist. |                                |
|                         | 8        | At anchor,<br>Macquarie Isld.    | ...                | ...   | 29.68                      | 44           | 92               | .264    | ...                 | Nb.           | 10       | om                   | N.              | 3                   | ...             | ...                 | N.N.E. | 2  | 10 0 Weather becoming showery. |
|                         | Midnight | "                                | "                  | 29.56   | 45                         | 92           | .274             | ...     | Nb.                 | 10            | omp      | N. by W.             | 3               | ...                 | ...             | N.N.E.              | 2      |  |                                |
| 23                      | 4        | "                                | "                  | 29.43   | 44.2                       | 98           | .285             | ...     | Nb.                 | 10            | om d     | N. by W.             | 3               | ...                 | ...             | N.E. by N.          | 1      | 12 15 Drizzling rain set in.                               |                                |
|                         | 8        | "                                | "                  | 29.35   | 45                         | 100          | .298             | ...     | Nb.                 | 10            | om d     | N.W.                 | 4               | ...                 | ...             | N.N.E.              | 1      | 2 0 Wind gusty, with almost con-<br>tinuous light rain.    |                                |
|                         | Noon     | "                                | "                  | 29.31   | 45.2                       | 95           | .291             | ...     | ...                 | ...           | m        | N.W.                 | 4               | N.W.                | 1               | N.N.E.              | 1      | 4 0 Light rain throughout watch.                           |                                |
|                         | 4        | "                                | "                  | 29.27   | 44.1                       | 91           | .263             | ...     | St.                 | 10            | om       | N.W.                 | 5               | N.W.                | 2               | N.N.E.              | 1      | Noon. Thick mist on hill tops.                             |                                |
|                         | 8        | "                                | "                  | 29.26   | 43.3                       | 85           | .238             | ...     | Ci.-Cu.,<br>Cl.     | 4             | bc       | W.                   | 6               | W.                  | 2               | N.                  | 2      | 2 0 Mist lifting a little.                                 |                                |
|                         | Midnight | "                                | "                  | 29.25   | 43.5                       | 79           | .224             | ...     | Cu.-Nb.,<br>Cu.     | 7             | bc       | W.                   | 6               | ...                 | 2               | N.                  | 2      |  |                                |
| 24                      | 4        | "                                | "                  | 29.18   | 43                         | 83           | .230             | ...     | Cu.                 | 6             | bc       | W.N.W.               | 3               | ...                 | ...             | Confused.<br>N.     | 2      | 1 0 Wind moderating.                                       |                                |
|                         | 8        | "                                | "                  | 29.16   | 46.4                       | 89           | .280             | ...     | A.-Cu.              | 9             | bc       | W.N.W.               | 2               | ...                 | ...             | N.N.E.              | 2      | 10 0 Sky clearing; weighed anchor.                         |                                |
|                         | Noon     | "                                | "                  | 29.10   | 45                         | 86           | .255             | ...     | St.                 | 1             | b        | N.N.W.               | 4               | N.N.W.              | 2               | N.N.W.              | 2      |  |                                |
|                         | 4        | "                                | "                  | 29.13   | 44.5                       | 88           | .257             | ...     | Cu.-St.,<br>Fr.-Cu. | 8             | bc       | N.N.W.               | 4               | N.N.W.              | 2               | N.N.W.              | 1      | 6 30 Anchorage N.E. Bay.                                   |                                |
|                         | 8        | "                                | "                  | 29.13   | 44                         | 92           | .264             | ...     | Cu.-Nb.             | 10            | oc       | N.W.                 | 3               | ...                 | ...             | N.N.W.              | 2      | 8 0 Mist hanging on S. part of<br>island.                  |                                |
|                         | Midnight | "                                | "                  | 29.16   | 36.5                       | 97           | .209             | ...     | Nb.                 | 10            | m o c r  | S. by E.             | 4               | S. by E.            | 2               | S.                  | 2      | 9 30 Wind dropping to light.                               |                                |
| 25                      | 4        | "                                | "                  | 29.25   | 35                         | 80           | .161             | ...     | Cu.-St.,<br>Nb.     | 10            | c        | S.S.E.               | 3               | S.S.E.              | 2               | S.E.                | 2      | 9 55 Sudden shift of wind into S.S.E.<br>with misty rain.  |                                |
|                         | 8        | "                                | "                  | 29.34   | 36.2                       | 68           | .146             | ...     | St.                 | 10            | o        | S.S.E.               | 3               | S.S.E.              | 1               | S.S.E.              | 1      | 11 40 Rain cleared off.                                    |                                |
|                         | Noon     | "                                | "                  | 29.40   | 38.7                       | 55           | .128             | ...     | Cu.-St.             | 10            | oc       | S. by E.             | 4               | S. by E.            | 2               | S.                  | 2      | 3 20 Wind dropping.  |                                |
|                         | 4        | Departed from<br>Macquarie Isld. | ...                | ...   | 29.46                      | 37.5         | 66               | .149    | ...                 | Cu.-Nb.       | 10       | c                    | S.S.W.          | 4                   | S.S.W.          | 2                   | S.     | 1  | 10 0 Proceeded to sea.         |
|                         | 8        | ...                              | ...                | 29.57   | 35.5                       | 95           | .196             | ...     | Nb.                 | 10            | sh       | S.                   | 3               | S.                  | 2               | S.                  | 2      | 8 0 Hail and snow starting to fall.                        |                                |
|                         | Midnight | ...                              | ...                | 29.63   | 39                         | 72           | .172             | ...     | Nb.                 | 10            | oc       | Var.                 | 1               | ...                 | ...             | S.                  | 2      | 9 0 Hail stopping and wind dying<br>away.                  |                                |
|                         |          |                                  |                    |   |                            |              |                  |         |                     |               |          |                      |                 |                     |                 |                     |        | 10 0 Light and variable airs.                              |                                |

METEOROLOGY.

Table XI.—SECOND SUBANTARCTIC VOYAGE—continued.  
 METEOROLOGICAL LOG KEPT ON BOARD S.Y. "AURORA." AUSTRALASIAN ANTARCTIC EXPEDITION, 1911-14.

| Date.                   |          | Position.         |                    | Air Pressure in inches corrected and reduced. | Air Temperature in deg. F. | Humidity.    |                  | Clouds. |                      |               | Weather. | Wind.                |                     | Sea Surface.    |                     |            |   | Remarks.  |
|-------------------------|----------|-------------------|--------------------|---|----------------------------|--------------|------------------|---------|----------------------|---------------|----------|----------------------|---------------------|-----------------|---------------------|------------|---|---|
| Day.                    | Hour.    | S. Lat. deg. min. | E. Long. deg. min. |   |                            | Per-centage. | Vapour Pressure. | Upper.  | Lower.               | Amount, 0-10. |          | Direction from True. | Force, 0-12.        | Waves.          |                     | Swell.     |   |   |
|                         |          |                   |                    |   |                            |              |                  |         |                      |               |          | Direction from—      | Dis-turbance, 0-10. | Direction from— | Dis-turbance, 0-10. |            |   |   |
| 1912.<br>November<br>26 | 4        | ...               | ...                | 29-68   | 38                         | 72           | -164             | ...     | St., Nb.             | 10            | o        | S.S.E.               | 1                   | ...             | ...                 | W.         | 1 |   |
|                         | 8        | ...               | ...                | 29-78   | 39-5                       | 77           | -187             | ...     | Cu.-Nb.              | 10            | c        | W. by S.             | 2                   | ...             | ...                 | W.S.W.     | 2 | 8 0 Dark clouds on E. horizon.                                      |
|                         | Noon     | 53 23             | 161 27             | 29-81   | 42                         | 74           | -198             | ...     | Cu.,<br>Cu.-Nb.      | 10            | p c      | W.S.W.               | 3                   | W.S.W.          | 1                   | W.S.W.     | 1 |   |
|                         | 4        | ...               | ...                | 29-84   | 42-1                       | 65           | -175             | ...     | Cu.,<br>Cu.-Nb.      | 10            | c v      | W.                   | 5                   | W.              | 2                   | W.N.W.     | 2 | 4 0 Wind freshening during after-noon. Exceptionally clear weather. |
|                         | 8        | ...               | ...                | 29-85   | 43                         | 75           | -207             | ...     | Cu.-Nb.              | 10            | o c      | N.W. by W.           | 4                   | N.W. by W.      | 2                   | W.N.W.     | 3 |   |
|                         | Midnight | ...               | ...                | 29-83   | 44                         | 88           | -253             | ...     | Cu.-Nb.              | 10            | o c      | W.N.W.               | 5                   | W.N.W.          | 3                   | W.N.W.     | 3 | 11 0 Wind increasing.   |
| 27                      | 4        | ...               | ...                | 29-82   | 43                         | 83           | -230             | ...     | St., Nb.             | 10            | o p      | S.W. by W.           | 6                   | Confused        | 3                   | W.         | 3 | 1 30 Wind veering into S.W. with frequent rain squalls.             |
|                         | 8        | ...               | ...                | 29-84   | 41-7                       | 75           | -200             | ...     | Cu.-Nb.,<br>St.      | 9             | c        | W.S.W.               | 6                   | W.S.W.          | 3                   | W.S.W.     | 3 | 4 0 No rain since 2-45. Sea rising.                                 |
|                         | Noon     | 51 51½            | 164 40             | 29-86   | 42-1                       | 69           | -185             | ...     | Cu., Nb.,<br>St.     | 8             | b c p    | S.W.                 | 6                   | Confused        | 3                   | W.         | 3 | Noon. Occasional hail squalls.                                      |
|                         | 4        | ...               | ...                | 29-91   | 44                         | 68           | -194             | ...     | Cu.,<br>Cu.-Nb.      | 7             | b c p    | S.W.                 | 6                   | S.W.            | 3                   | W.S.W.     | 4 |   |
|                         | 8        | ...               | ...                | 29-93   | 42-7                       | 69           | -189             | ...     | Cu.,<br>Cu.-Nb.      | 8             | b c      | S.W. by S.           | 6                   | S.W. by S.      | 3                   | Confused   | 4 |   |
|                         | Midnight | ...               | ...                | 29-96   | 43                         | 67           | -185             | ...     | Nb., St.             | 10            | o c      | S.W. by S.           | 5                   | S.W. by S.      | 2                   | S.W.       | 4 | Midnight. Ship rolling considerably.                                |
| 28                      | 4        | ...               | ...                | 29-94   | 43                         | 69           | -189             | ...     | St., Nb.             | 10            | o        | S.W. by S.           | 5                   | S.W. by S.      | 3                   | S.W. by W. | 4 |   |
|                         | 8        | ...               | ...                | 29-95   | 45                         | 76           | -227             | ...     | Cu.,<br>Cu.-St.      | 8             | b c      | S.W. by S.           | 4                   | S.W. by S.      | 2                   | S.W. by W. | 4 |   |
|                         | Noon     | 50 43             | 166 58             | 29-91   | 46                         | 77           | -237             | ...     | Cu.-Nb.,<br>Cu.-St.  | 10            | o c      | S.S.W.               | 4                   | S.S.W.          | 2                   | S.S.W.     | 3 | Sounding and dredging during morning.                               |
|                         | 4        | ...               | ...                | 29-86   | 47                         | 89           | -285             | ...     | Nb.                  | 10            | o m      | W.S.W.               | 4                   | W.S.W.          | 2                   | W.S.W.     | 2 | 2 0 Rain clouds gathering over land.                                |
|                         | 8        | ...               | ...                | 29-85   | 46                         | 92           | -285             | ...     | Cu.-Nb.              | 10            | o c p    | S.W. by S.           | 6                   | S.W. by S.      | 3                   | S.W. by S. | 3 | 3 30 Light misty rain.  |
|                         | Midnight | ...               | ...                | 29-83   | 45-4                       | 97           | -293             | ...     | Nb.                  | 10            | o c p    | S. by W.             | 7                   | S. by W.        | 4                   | S.S.W.     | 3 | 4 0 Mist over land.   |
| 29                      | 4        | ...               | ...                | 29-83   | 46-8                       | 86           | -275             | ...     | Nb.,<br>Cu.-Nb.      | 10            | o c p    | S.S.W.               | 7                   | S.S.W.          | 4                   | S.S.W.     | 5 | 6 0 Rain squalls.   |
|                         | 8        | ...               | ...                | 29-88   | 46                         | 84           | -261             | ...     | Cu.-Nb.,<br>Nb.      | 10            | o c p    | S.S.W.               | 7                   | S.S.W.          | 5                   | S.S.W.     | 6 | 8 0 Storm clouds on S. horizon.                                     |
|                         | Noon     | 49 48             | 165 43             | 29-91   | 47-9                       | 79           | -260             | Ci.-Cu. | Cu.,<br>Cu.-Nb.      | 8             | b c p    | S.S.W.               | 7                   | S.S.W.          | 6                   | S.S.W.     | 7 | 11 0 Wind increasing; squally with passing showers.                 |
|                         | 4        | ...               | ...                | 29-95   | 46-2                       | 91           | -285             | ...     | Nb., Cu.,<br>Cu.-Nb. | 8             | b c p    | S.S.W.               | 7                   | S.S.W.          | 6                   | S.S.W.     | 7 | 4 0 Frequent rain squalls.  |
|                         | 8        | ...               | ...                | 29-98   | 46                         | 84           | -261             | ...     | St.,<br>Cu.-Nb.      | 10            | o c      | S.W. by S.           | 6                   | S.W. by S.      | 4                   | S.W. by S. | 6 | 7 40 Wind moderating.   |
|                         | Midnight | ...               | ...                | 29-94   | 47                         | 84           | -277             | ...     | Nb.                  | 10            | o p      | S.W. by W.           | 5                   | S.W.            | 4                   | S.W. by S. | 5 | Midnight. Frequent misty rain.                                      |
| 30                      | 4        | ...               | ...                | 29-92   | 46                         | 89           | -275             | ...     | Nb., St.             | 10            | o c p    | W.S.W.               | 5                   | Confused        | 3                   | Confused   | 4 | 2 0 Sea and swell moderating. Occasional misty rain.                |
|                         | 8        | ...               | ...                | 29-92   | 47                         | 85           | -272             | ...     | Cu.-Nb.,<br>Nb.      | 10            | o c      | S.W.                 | 6                   | S.W.            | 4                   | S.W.       | 5 | 4 30 Wind increasing.   |
|                         | Noon     | 49 50             | 163 32½            | 29-91   | 45                         | 98           | -294             | ...     | Cu.-Nb.              | 10            | o c      | S.W.                 | 6                   | S.W.            | 5                   | S.W.       | 5 | 8 0 Heavily overcast throughout.                                    |
|                         | 4        | ...               | ...                | 29-88   | 47-8                       | 82           | -272             | ...     | Nb.,<br>Cu.-St.      | 10            | o c      | W.S.W.               | 5                   | W.S.W.          | 3                   | S.W.       | 5 |   |
|                         | 8        | ...               | ...                | 29-85   | 48-1                       | 73           | -246             | ...     | Nb.,<br>Cu.-St.      | 10            | o c      | W.S.W.               | 5                   | W.S.W.          | 2                   | S.W.       | 5 | 9 0 Wind and sea rapidly decreasing.                                |
|                         | Midnight | ...               | ...                | 29-84   | 47-3                       | 75           | -244             | ...     | Nb., St.             | 10            | o w      | W.S.W.               | 3                   | ...             | ...                 | S.W.       | 4 | 10 0 Gentle breeze from W.S.W.                                      |

Table XI.—SECOND SUBANTARCTIC VOYAGE—continued.

METEOROLOGICAL LOG KEPT ON BOARD S.Y. "AURORA."

AUSTRALASIAN ANTARCTIC EXPEDITION, 1911-14.

| Date.                  |          | Position.         |                    | Air Pressure in inches corrected and reduced. | Air Temperature in deg. F. | Humidity.    |                  | Clouds. |                     |               | Weather. | Wind.                |                     | Sea Surface.    |                     |            |   | Remarks.   |
|------------------------|----------|-------------------|--------------------|---|----------------------------|--------------|------------------|---------|---------------------|---------------|----------|----------------------|---------------------|-----------------|---------------------|------------|---|--|
| Day.                   | Hour.    | S. Lat. deg. min. | E. Long. deg. min. |   |                            | Per-centage. | Vapour Pressure. | Upper.  | Lower.              | Amount, 0-10. |          | Direction from True. | Force, 0-12.        | Waves.          |                     | Swell.     |   |  |
|                        |          |                   |                    |   |                            |              |                  |         |                     |               |          | Direction from—      | Dis-turbance, 0-10. | Direction from— | Dis-turbance, 0-10. |            |   |  |
| 1912.<br>December<br>1 | 4        | ...               | ...                | 29.83   | 46.2                       | 82           | .258             | ...     | Cu.-Nb.,<br>Nb.     | 10            | ocw      | W. by S.             | 2                   | ...             | ...                 | S.W.       | 3 | 4 30 Misty rain set in.  |
|                        | 8        | ...               | ...                | 29.85   | 45                         | 92           | .274             | ...     | Cu.-Nb.,<br>Nb.     | 9             | bcd      | S.S.W.               | 2                   | ...             | ...                 | S.W.       | 2 | 8 0 Frequent misty rain.   |
|                        | Noon     | 48 28             | 160 27             | 29.87   | 47                         | 89           | .285             | ...     | Cu.,<br>Cu.-St.     | 4             | bc       | S.S.W.               | 2                   | ...             | ...                 | S.W.       | 2 |  |
|                        | 4        | ...               | ...                | 29.88   | 48.5                       | 80           | .273             | ...     | Cu.                 | 2             | bc       | S.W.                 | 1                   | ...             | ...                 | W.         | 3 |  |
|                        | 8        | ...               | ...                | 29.88   | 48                         | 78           | .259             | ...     | Cu.                 | 2             | bc       | W.N.W.               | 1                   | ...             | ...                 | W.S.W.     | 2 | 8 0 Beautiful sunset.  |
|                        | Midnight | ...               | ...                | 29.89   | 47                         | 76           | .243             | ...     | Nb.                 | 10            | oc       | W.N.W.               | 3                   | ...             | ...                 | W.         | 2 | 9 0 Overcast and wind backed to W.N.W.   |
| 2                      | 4        | ...               | ...                | 29.83   | 47                         | 85           | .272             | ...     | Nb.,<br>Cu.-Nb.     | 7             | bcp      | N.W. by N.           | 3                   | N.W.            | 1                   | N.W.       | 1 | 4 0 Occasional misty rain.   |
|                        | 8        | ...               | ...                | 29.77   | 48.3                       | 90           | .305             | ...     | Nb.,<br>Cu.-Nb.     | 10            | oc       | N.W.                 | 3                   | ...             | ...                 | N.W.       | 1 |  |
|                        | Noon     | 49 2              | 156 53             | 29.71   | 52                         | 82           | .318             | ...     | Cu.,<br>Cu.-St.     | 10            | oc       | N.W.                 | 3                   | N.W.            | 1                   | N.W.       | 1 |  |
|                        | 4        | ...               | ...                | 29.67   | 49.6                       | 93           | .329             | ...     | Cu.-St.,<br>Nb.     | 10            | ocp      | S.W.                 | 4                   | Confused        | 2                   | W.S.W.     | 2 | 1 30 Wind veering into W. Sky clearing.  |
|                        | 8        | ...               | ...                | 29.72   | 47                         | 77           | .248             | ...     | Cu.-Nb.             | 4             | bcpq     | S.W.                 | 6                   | S.W.            | 3                   | S.W.       | 4 | 3 0 Swell from S.W.<br>3 15 Overcast from W.<br>4 0 Passing rain squalls. Wind freshening.   |
|                        | Midnight | ...               | ...                | 29.73   | 45                         | 78           | .234             | ...     | St.,<br>Cu.-Nb.     | 3             | bcpq     | S.W.                 | 6                   | S.W.            | 3                   | S.W.       | 5 | 4 40 Squally.<br>8 0 Sea making.<br>Midnight. Occasional rain squalls.   |
| 3                      | 4        | ...               | ...                | 29.72   | 44.8                       | 75           | .225             | ...     | Cu.-St.,<br>Cu.-Nb. | 7             | bcpq     | S.W.                 | 6                   | S.W.            | 4                   | S.W.       | 5 | 4 0 Frequent rain. Wind very squally.  |
|                        | 8        | ...               | ...                | 29.73   | 46                         | 66           | .202             | ...     | Cu.-Nb.             | 9             | coq      | S.W.                 | 7                   | S.W.            | 4                   | S.W.       | 5 |  |
|                        | Noon     | 48 35½            | 154 40             | 29.74   | 46                         | 77           | .237             | Ci.     | Cu.-Nb.,<br>Cu.     | 7             | bcpq     | S.W.                 | 6                   | S.W.            | 4                   | S.W.       | 4 | 1 0 Sky clearing.  |
|                        | 4        | ...               | ...                | 29.74   | 48.3                       | 70           | .238             | Ci.-Cu. | Cu.,<br>Cu.-Nb.     | 5             | bc       | S.W.                 | 5                   | S.W.            | 4                   | S.W.       | 4 | 2 15 Very fine cirro-cumulus clouds spreading out from a collection of heavy Cu. clouds at a point in the S.W. horizon and spreading right across the sky towards N.E. |
|                        | 8        | ...               | ...                | 29.74   | 46                         | 77           | .237             | ...     | Cu.-Nb.             | 7             | bcp      | S.W.                 | 4                   | S.W.            | 2                   | S.W.       | 4 |  |
|                        | Midnight | ...               | ...                | 29.74   | 45                         | 84           | .250             | ...     | St.,<br>Cu.-Nb.     | 9             | oc       | S.W.                 | 3                   | S.W.            | 1                   | S.W.       | 4 |  |
| 4                      | 4        | ...               | ...                | 29.75   | 46.4                       | 68           | .213             | ...     | Cu.-Nb.,<br>Cu.-St. | 10            | oc       | W.S.W.               | 2                   | ...             | ...                 | S.W.       | 4 | 4 0 Fine throughout watch.   |
|                        | 8        | ...               | ...                | 29.80   | 49                         | 72           | .248             | ...     | Cu.-St.             | 8             | bc       | N.W. by N.           | 3                   | ...             | ...                 | S.W.       | 3 | 10 0 Light rain squall.  |
|                        | Noon     | 48 25             | 152 5              | 29.76   | 50.5                       | 75           | .276             | ...     | Nb.,<br>Cu.-Nb.     | 10            | bcpq     | N.N.W.               | 4                   | Confused        | 2                   | Confused   | 3 | Noon. Occasional light showers.<br>1 0 Rain squalls becoming frequent.<br>Mist.<br>3 30 Sky clearing, revealing Ci. clouds.  |
|                        | 4        | ...               | ...                | 29.70   | 52.8                       | 87           | .350             | Ci.     | Cu.,<br>Cu.-Nb.     | 6             | bc       | N.W. by N.           | 4                   | Confused        | 2                   | Confused   | 3 | 4 0 Short confused swell. No rain since 2 p.m.   |
|                        | 8        | ...               | ...                | 29.71   | 52                         | 93           | .360             | ...     | St.,<br>Cu.-Nb.     | 10            | ocpe     | N.W. by W.           | 4                   | Confused        | 2                   | Confused   | 3 | 8 0 Clouding over with sunset. Very damp atmosphere.   |
|                        | Midnight | ...               | ...                | 29.71   | 52.4                       | 92           | .361             | ...     | Nb.                 | 10            | oqpm     | N.W. by W.           | 5                   | N.W.            | 3                   | N.W.       | 4 |  |
| 5                      | 4        | ...               | ...                | 29.71   | 52.3                       | 92           | .362             | ...     | Nb.                 | 10            | opm      | W. by N.             | 5                   | Confused        | 3                   | N.W. by W. | 4 |  |
|                        | 8        | ...               | ...                | 29.75   | 52.2                       | 94           | .368             | ...     | Nb., St.            | 10            | ocme     | N.W.                 | 4                   | Confused        | 2                   | W.N.W.     | 4 | 8 0 Very damp.   |
|                        | Noon     | 48 22             | 149 53             | 29.75   | 52.7                       | 94           | .372             | ...     | Nb.                 | 10            | ompd     | W.N.W.               | 4                   | Confused        | 2                   | W.N.W.     | 5 | Noon. Frequent light rain. Long heavy swell from W.  |
|                        | 4        | ...               | ...                | 29.67   | 52.5                       | 90           | .356             | Ci.     | St.                 | 3             | bcz      | W.N.W.               | 3                   | Confused        | 1                   | W.N.W.     | 6 | 1 0 Sky clearing, revealing Ci. clouds. Slight haze round horizon.   |
|                        | 8        | ...               | ...                | 29.56   | 51.5                       | 92           | .351             | ...     | Nb.                 | 10            | oce      | N. by W.             | 3                   | Confused        | 1                   | W.N.W.     | 5 | 6 0 Overcast.  |
|                        | Midnight | ...               | ...                | 29.43   | 52.1                       | 96           | .373             | ...     | Nb.                 | 10            | oce      | N.N.W.               | 4                   | Confused        | 2                   | W.N.W.     | 4 | Midnight. Frequent mist throughout watch.  |

METEOROLOGY.

Table XI.—SECOND SUBANTARCTIC VOYAGE—continued.

METEOROLOGICAL LOG KEPT ON BOARD S.Y. "AURORA."

AUSTRALASIAN ANTARCTIC EXPEDITION, 1911-14.

| Date.                  |          | Position.         |                    | Air Pressure in inches corrected and reduced. | Air Temperature in deg. F. | Humidity.    |                  | Clouds. |                         |               | Weather. | Wind.                |                     | Sea Surface.    |                     |            |   | Remarks.  |  |
|------------------------|----------|-------------------|--------------------|---|----------------------------|--------------|------------------|---------|-------------------------|---------------|----------|----------------------|---------------------|-----------------|---------------------|------------|---|---|--|
| Day.                   | Hour.    | S. Lat. deg. min. | E. Long. deg. min. |   |                            | Per-centage. | Vapour Pressure. | Upper.  | Lower.                  | Amount, 0-10. |          | Direction from True. | Force, 0-12.        | Waves.          |                     | Swell.     |   |   |  |
|                        |          |                   |                    |   |                            |              |                  |         |                         |               |          | Direction from—      | Dis-turbance, 0-10. | Direction from— | Dis-turbance, 0-10. |            |   |   |  |
| 1912.<br>December<br>6 | 4        | ...               | ...                | 29-25   | 52-2                       | 98           | -385             | ...     | Nb.                     | 10            | o c p m  | N. by W.             | 4                   | Confused        | 2                   | Confused   | 3 | 4 0 Continuous light rain from 1-2.                       |  |
|                        | 8        | ...               | ...                | 29-18   | 51-5                       | 99           | -378             | ...     | Nb.                     | 10            | o c m    | N.W. by W.           | 3                   | Confused        | 2                   | Confused   | 4 | 8 0 Damp and misty throughout watch.                      |  |
|                        | Noon     | 47 57½            | 147 41             | 29-24   | 50                         | 86           | -308             | ...     | Cu.,<br>Cu.-Nb.<br>Cu.  | 8             | b c      | W. by S.             | 5                   | W.              | 3                   | W.N.W.     | 4 | 10 30 Sky clearing.                                       |  |
|                        | 4        | ...               | ...                | 29-30   | 51-8                       | 80           | -310             | ...     | Cu.                     | 3             | b c      | W. by N.             | 5                   | W. by N.        | 3                   | W. by N.   | 4 |   |  |
|                        | 8        | ...               | ...                | 29-34   | 51                         | 86           | -320             | ...     | Cu., St.                | 3             | b c      | W. by S.             | 3                   | Confused        | 1                   | W.         | 4 |   |  |
|                        | Midnight | ...               | ...                | 29-35   | 51                         | 83           | -307             | ...     | St.                     | 5             | b c w    | N.W. by W.           | 3                   | Confused        | 2                   | W.         | 4 | Midnight. Fine and clear throughout.                      |  |
| 7                      | 4        | ...               | ...                | 29-32   | 51-2                       | 88           | -330             | ...     | Cu.-St.                 | 8             | b c w    | N.N.W.               | 4                   | N.N.W.          | 2                   | N.W.       | 4 | 4 0 Slightly overcast. Clear sky up till 3-30 a.m.        |  |
|                        | 8        | ...               | ...                | 29-27   | 51-3                       | 100          | -377             | ...     | Nb.                     | 10            | o r      | N. by W.             | 5                   | N. by W.        | 3                   | N.N.W.     | 4 | 5 0 Heavily overcast with freshening wind.                |  |
|                        | Noon     | 47 27½            | 149 5½             | 29-28   | 50-8                       | 83           | -307             | ...     | Cu.                     | 7             | b c p    | N.                   | 6                   | Confused        | 4                   | N.W. by N. | 5 | 6 30 Rain, wind and sea increasing.                       |  |
|                        | 4        | ...               | ...                | 29-32   | 53-2                       | 75           | -305             | ...     | Cu.                     | 2             | b c      | N.W.                 | 7                   | N.W.            | 5                   | N.W.       | 6 | 8 0 Continuous rain.                                      |  |
|                        | 8        | ...               | ...                | 29-36   | 52-1                       | 85           | -332             | ...     | Nb.,<br>Cu.-Nb.         | 7             | b c p    | N.W.                 | 6                   | N.W.            | 5                   | N.W.       | 6 | 10 0 Taking off and clouds clearing.                      |  |
|                        | Midnight | ...               | ...                | 29-38   | 51                         | 86           | -320             | ...     | Cu.                     | 2             | b c p    | W.                   | 4                   | Confused        | 1                   | Confused   | 6 | 9 0 Wind moderating rapidly.                              |  |
|                        |          |                   |                    |   |                            |              |                  |         |                         |               |          |                      |                     |                 |                     |            |   |   | 10 0 Moderate breeze. Ship rolling very heavily.     |
|                        |          |                   |                    |   |                            |              |                  |         |                         |               |          |                      |                     |                 |                     |            |   |   | Midnight. Occasional showers. Aurora lights visible. |
| 8                      | 4        | ...               | ...                | 29-36   | 50-3                       | 84           | -299             | ...     | Nb.,<br>Cu.-Nb.,<br>St. | 8             | b c w    | W.                   | 3                   | W.              | 1                   | W.N.W.     | 5 | 5 0 Clouds clearing off as sun rises.                     |  |
|                        | 8        | ...               | ...                | 29-37   | 54                         | 74           | -307             | ...     | Cu.                     | 2             | b c      | W.                   | 2                   | W.              | 1                   | W.N.W.     | 5 | 8 0 Fine and clear.                                       |  |
|                        | Noon     | 46 46½            | 148 23             | 29-33   | 53                         | 73           | -294             | ...     | Cu., St.                | 2             | b c      | N.W. by W.           | 4                   | N.W.            | 3                   | W.N.W.     | 4 |   |  |
|                        | 4        | ...               | ...                | 29-20   | 53                         | 80           | -320             | ...     | Ci.,<br>Ci.-Cu.         | 5             | b c      | N.W. by N.           | 5                   | N.W.            | 3                   | N.W.       | 4 |   |  |
|                        | 8        | ...               | ...                | 29-15   | 50-4                       | 76           | -277             | ...     | Cu.-Nb.                 | 4             | b c p    | W.                   | 5                   | Confused        | 3                   | W.N.W.     | 5 | 8 0 Frequent short hail and rain squalls.                 |  |
|                        | Midnight | ...               | ...                | 29-14   | 49-2                       | 84           | -296             | ...     | Cu.-Nb.                 | 4             | b c p q  | W.                   | 5                   | Confused        | 3                   | W.N.W.     | 5 | Midnight. Frequent short but heavy hail and rain squalls. |  |
| 9                      | 4        | ...               | ...                | 29-12   | 49                         | 75           | -258             | Ci.     | Cu., St.,<br>Cu.-Nb.    | 5             | b c p q  | W.                   | 6                   | Confused        | 4                   | W.         | 6 | 4 0 Frequent heavy but short rain squalls.                |  |
|                        | 8        | ...               | ...                | 29-19   | 51                         | 69           | -257             | Ci.     | Cu.-Nb.                 | 6             | b c p q  | W.                   | 6                   | Confused        | 4                   | W.         | 7 |   |  |
|                        | Noon     | 46 20             | 147 37             | 29-21   | 50-2                       | 79           | -287             | Ci.     | Cu.,<br>Cu.-Nb.         | 6             | b c p    | W.N.W.               | 7                   | W.N.W.          | 5                   | W.N.W.     | 7 | 3 30 Rain squall.   |  |
|                        | 4        | ...               | ...                | 29-19   | 53                         | 70           | -282             | ...     | Cu.,<br>Cu.-Nb.         | 6             | b c p q  | N.W.                 | 6                   | Confused        | 5                   | Confused   | 7 | 4 0 Long swell from W., short from N.W.                   |  |
|                        | 8        | ...               | ...                | 29-20   | 52                         | 70           | -269             | ...     | Cu.-Nb.                 | 4             | b c p q  | W.N.W.               | 5                   | W.N.W.          | 5                   | W.N.W.     | 7 | 9 0 Wind moderating.                                      |  |
|                        | Midnight | ...               | ...                | 29-22   | 51                         | 86           | -320             | ...     | Nb.                     | 10            | o p      | N.W. by N.           | 3                   | Confused        | 3                   | W.N.W.     | 6 | 11 0 Set in overcast.                                     |  |
|                        |          |                   |                    |   |                            |              |                  |         |                         |               |          |                      |                     |                 |                     |            |   | Midnight. Wind rapidly moderating.                        |  |
|                        |          |                   |                    |   |                            |              |                  |         |                         |               |          |                      |                     |                 |                     |            |   | 2 0 Calm.   |  |
|                        |          |                   |                    |   |                            |              |                  |         |                         |               |          |                      |                     |                 |                     |            |   | 3 30 Light S.E. airs.                                     |  |



Table XI.—SECOND SUBANTARCTIC VOYAGE—continued.

METEOROLOGICAL LOG KEPT ON BOARD S.Y. "AURORA."

AUSTRALASIAN ANTARCTIC EXPEDITION, 1911-14.

| Date.                   |          | Position.         |                    | Air Pressure in inches corrected and reduced. | Air Temperature in deg. F. | Humidity.    |                  | Clouds. |                 |               | Weather.  | Wind.                |              | Sea Surface.    |                     |                 |                     | Remarks.  |
|-------------------------|----------|-------------------|--------------------|---|----------------------------|--------------|------------------|---------|-----------------|---------------|-----------|----------------------|--------------|-----------------|---------------------|-----------------|---------------------|---|
| Day.                    | Hour.    | S. Lat. deg. min. | E. Long. deg. min. |   |                            | Per-centage. | Vapour Pressure. | Upper.  | Lower.          | Amount, 0-10. |           | Direction from True. | Force, 0-12. | Direction from— | Dis-turbance, 0-10. | Direction from— | Dis-turbance, 0-10. |   |
| 1912.<br>December<br>10 | 4        | ...               | ...                | 29-18   | 50.5                       | 75           | .276             | ...     | Nb.             | 10            | o d       | S.E.                 | 1            | ...             | ...                 | W. by N.        | 6                   | 4 0 Very frequent light misty rain.                     |
|                         | 8        | ...               | ...                | 29-11   | 51                         | 77           | .286             | ...     | Cu.-Nb.         | 10            | o c r     | S.                   | 5            | Confused        | 3                   | S.W. by W.      | 5                   | 6 0 Wind freshening from S.E.                           |
|                         | Noon     | 44 53             | 148 11             | 29-17   | 47                         | 97           | .311             | ...     | Nb.,<br>Cu.-Nb. | 10            | o c p     | W.S.W.               | 6            | Confused        | 4                   | W.S.W.          | 5                   | 8 0 Rain throughout.                                    |
|                         | 4        | ...               | ...                | 29-31   | 49                         | 86           | .298             | Cl.     | Cu.,<br>Cu.-Nb. | 5             | b c p q   | W.                   | 7            | Confused        | 5                   | W.S.W.          | 7                   | Noon. Frequent rain.                                    |
|                         | 8        | ...               | ...                | 29-37   | 50                         | 79           | .284             | Cl.     | Cu.,<br>Cu.-Nb. | 6             | b c p q   | W. by N.             | 7            | Confused        | 6                   | W.S.W.          | 7                   | 12 30 Sky clearing, wind and sea increasing.            |
|                         | Midnight | ...               | ...                | 29-45   | 49                         | 85           | .296             | ...     | Cu.,<br>Cu.-Nb. | 5             | b c p q l | W. by N.             | 7            | W. by N.        | 5                   | W.              | 6                   | 4 0 Frequent short rain squalls.                        |
| 11                      | 4        | ...               | ...                | 29-51   | ...                        | ...          | ...              | ...     | Cu.             | 7             | b c p     | W. by N.             | 6            | W. by N.        | 4                   | W.              | 5                   | 4 0 Lightning visible on N. horizon up till 2-30 a.m.   |
|                         | 8        | By bearings       |                    | 29-62   | 52                         | 70           | .269             | ...     | Cu.-Nb.<br>Cu.  | 7             | b c       | N.W. by W.           | 4            | W.N.W.          | 4                   | W.S.W.          | 5                   | High land round Cape Pilla visible at daylight.         |
|                         | Noon     | 43 13             | 148 32             | 29-72   | 51.8                       | 74           | .284             | Cl.     | Cu.-Nb.<br>Cu.  | 3             | b c       | W. by S.             | 6            | W.              | 5                   | S.W. by W.      | 6                   | 2 0 Got under lee of land, swell dying down.            |
|                         | 4        | ...               | ...                | 29-83   | 52.3                       | 75           | .293             | Cl.     | Cu.,<br>Cu.-Nb. | 7             | b c       | S.W.                 | 4            | S.W.            | 3                   | S.W.            | 1                   |   |
|                         | 8        | ...               | ...                | 29-93   | 53                         | 74           | .299             | ...     | Cu.,<br>Cu.-Nb. | 6             | b c       | S.                   | 3            | S.              | 1                   | S.              | 1                   | 8 0 Heavy clouds over land.                             |
|                         | Midnight | ...               | ...                | 30-01   | 53                         | 73           | .294             | ...     | Cu.             | 2             | b c w     | S.                   | 1            | ...             | ...                 | S.              | 1                   | Midnight. Heavy dew. Water highly phosphorescent.       |
| 12                      | 4        | ...               | ...                | 30-04   | 52                         | 76           | .295             | ...     | Cu.             | 1             | b c w     | Calm                 | 0            | ...             | ...                 | S.              | 2                   |   |
|                         | 8        | By bearings       |                    | 30-13   | 60.4                       | 52           | .276             | ...     | Cu.             | 1             | b c       | Calm                 | 0            | ...             | ...                 | S.              | 2                   |   |
|                         | Noon     | 42 44             | 148 41             | 30-13   | 58.5                       | 61           | .301             | ...     | Cu.             | 1             | b c       | Calm                 | 0            | ...             | ...                 | S.W.            | 2                   | Noon. Cu. clouds over land.                             |
|                         | 4        | ...               | ...                | 30-12   | 58                         | 67           | .323             | ...     | ...             | 0             | b         | N. by E.             | 3            | N. by E.        | 1                   | S.W.            | 2                   | 2 0 N./E. breeze.                                       |
|                         | 8        | ...               | ...                | 30-13   | 57                         | 81           | .377             | Cl.     | St.             | 2             | b c       | N. by E.             | 4            | N. by E.        | 2                   | N. by E.        | 2                   | 7 0 Breeze freshening.                                  |
|                         | Midnight | ...               | ...                | 30-13   | 57                         | 87           | .406             | ...     | St.             | 2             | b c w     | N. by E.             | 2            | N. by E.        | 1                   | N. by E.        | 2                   | 8 40 Wind moderating.                                   |
| 13                      | 4        | ...               | ...                | 30-11   | 56.2                       | 92           | .416             | Cl.-Cu. | St., Nb.        | 3             | b c w     | N.                   | 2            | ...             | ...                 | N.N.E.          | 1                   | 3 30 Very red sunrise. Nimbus clouds low on S. horizon. |
|                         | 8        | By bearings       |                    | 30-20   | 57.7                       | 83           | .396             | Cl.-Cu. | St.             | 6             | b c       | W.N.W.               | 2            | W.N.W.          | 1                   | Confused        | 1                   |   |
|                         | Noon     | 42 49½            | 148 41             | 30-16   | 60                         | 80           | .413             | Cl.     | St.             | 5             | b c       | N. by E.             | 2            | ...             | ...                 | N.              | 1                   |   |
|                         | 4        | ...               | ...                | 30-16   | 60.5                       | 82           | .434             | Cl.     | ...             | 4             | b c       | N.                   | 3            | N.              | 1                   | ...             | ...                 | 5 20 S.W. swell rising.                                 |
|                         | 8        | ...               | ...                | 30-15   | 60                         | 88           | .455             | Cl.     | St.             | 2             | b c       | N. by E.             | ...          | ...             | ...                 | W.S.W.          | 3                   | 8 0 Breeze dying away.                                  |
|                         | Midnight | ...               | ...                | 30-15   | 58                         | 91           | .436             | ...     | ...             | ...           | b w m     | W                    | 1            | ...             | ...                 | S.W.            | 3                   | Midnight. Water highly phosphorescent; heavy dew.       |
| 14                      | 4        | ...               | ...                | 30-13   | 56.5                       | 98           | .447             | ...     | ...             | ...           | f         | N. by E.             | ...          | ...             | ...                 | S.W. by S.      | 3                   | 3 30 Ran into fog. Long S.W. swell.                     |
|                         | 8        | ...               | ...                | 30-13   | 61.9                       | 83           | .459             | ...     | ...             | 4             | b c       | N. by E.             | 3            | N. by E.        | 2                   | ...             | ...                 | Noon. Berthed at King's Pier, Hobart.                   |

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