of space. Hence the longitude of the two Capes may be stated as follows:—

Cape of Good Hope	18°	29′	0″	
False Cape	18	50	30	east of Greenwich.

"This longitude of the Cape Point differs only one mile from that given by La Caille (16° 10′ east of Paris — *Memoirs of Academy of Sciences* for 1751, p. 425); and it is but justice to the memory of that distinguished astronomer to remark, that the lapse of eighty years, and the superior means which the present state of the science affords, have not been able to produce any improvement in the geographical position of this part of the world, as determined by him."

II. Positions of Stars near the South Pole, from Observations made at the Observatory at the Cape of Good Hope. By Mr. Henderson.

"It is well known that there is no conspicuous star near the South Pole, which can be observed in the day-time, even with the most powerful meridian telescopes that are used in observatories. In this respect astronomers in the southern hemisphere are not so fortunate as their northern brethren, who, in the stars α and δ *Ursæ Minoris*, possess two celestial objects that are admirably adapted for determining the polar positions of their instruments, not only from their visibility by day, but from their places having been correctly ascertained from numerous observations made in the first observatories.

"In the southern hemisphere it becomes necessary to have recourse to stars of lesser magnitude, and even to increase their number, in order that one or more of them may pass the meridian at a convenient time of the night. Since my arrival at this observatory, in April last, seven circumpolar stars have been frequently observed with Dollond's 10-feet transit telescope, and Jones's 6-feet mural circle, for the purpose of determining the positions of these instruments with regard to the Pole: and the observations above and below the Pole having been compared together, the places of the stars have been already determined with a considerable degree of accuracy; and though it may be expected that subsequent observations will produce small changes in the calculated value, yet, in their present state, I believe that they may be of considerable use to astronomers; and I therefore take an early opportunity of communicating them.

"The following is a catalogue of the mean positions of these stars, reduced to the beginning of 1832 (fictitious year of the Astronomical Society's Catalogue). In the reductions, the co-efficient of aberration was assumed to be 20″,5; the other elements of reduction are the same as in the Society's Catalogue. The columns entitled "annual change" denote the annual variations which take place in the yearly precessions, and which, being applied according to their signs to the precessions for the beginning of 1832, as in the

catalogue, give the yearly precessions for the beginning of 1833; and hence the catalogue may be carried on for a few years with tolerable accuracy. The columns entitled " mean difference " exhibit the means of the differences of the results of the single observations from the mean of the whole, and are intended to shew the probable accuracy of the determinations.

Positions of Stars near the South Pole for the beginning of 1832.

Stars.	Magnitude.	Right Ascension.					Declination.				
			Annual Precession.	Yearly change.	Number of Observations.	Mean Diff.		Annual Precession.	Yearly change.	Number of Observations.	Mean Diff.
		h m s	s	s		s	° ′ ″	″	″		″
o Octantis	6·7	0 14 45·7	− 3·94	+0·087	3 above 6 below	2·5	−89 17 49·8	+20·00	0·000	3 above 8 below	0·7
* Octantis	7	8 36 45·5	− 33·15	−0·155	9 above 9 below	1·1	−88 21 44·9	−12·66	+0·035	14 below	0·5
ϖ Octantis	7	14 14 13·5	+ 19·56	+0·064	6 above 2 below	0·9	−87 26 11·2	−16·70	+0·015	10 above 1 below	0·5
σ Octantis	6	16 58 31·2	+101·86	+0·394	24 above 2 below	2·5	−89 15 9·3	− 5·31	+0·143	25 above	0·7
* Octantis	7	19 31 44·5	+164·10	−1·570	26 above 4 below	3·8	−89 33 42·8	+ 7·81	+0·220	18 above	1·0
* Octantis	7	21 56 41·4	+ 15·36	−0·045	6 above 9 below	0·3	−86 48 32·7	+17·21	+0·010	5 above 2 below	1·0
τ Octantis	6	22 58 13·7	+ 15·81	−0·098	5 above 5 below	1·2	−88 23 59·4	+19·32	+0·006	10 above 9 below	0·9