

AURORA BOREALIS.

GENERAL REMARKS.

SO few observations of the Aurora Borealis in high northern latitude have been recorded, that I trust a minute account of the various appearances it exhibits, will not be thought superfluous or uninteresting. The remarks of the late Lieutenant Hood are copied verbatim from his journal. They speak sufficiently for themselves, to render any eulogium of mine unnecessary.* To this excellent and lamented young officer, the merit is due of having been, I believe, the first who ascertained by his observations at Basquiau-Hill, (combined with those of Dr. Richardson at Cumberland-House,) that the altitude of the Aurora upon these occasions was far inferior to that which had been assigned to it by any former observer. He also, by a skilful adaptation of a vernier to the graduated circle of a Kater's Compass, enabled himself to read off small deviations of the needle, and was the first who satisfactorily proved, by his observations at Cumberland-House, the important fact of the action of the Aurora upon the compass-needle. By his ingenious Electrometer invented at Fort Enterprize, he seems also to have proved the Aurora to be an electrical phenomenon, or at least that it induces a certain unusual state of electricity in the atmosphere.

The observations of Dr. Richardson, independent of their merit in other respects, point peculiarly to the Aurora being formed at no great elevation, and that it is dependent upon certain other atmospheric phenomena, such as the formation of one or other of the various modifications of cirro-stratus.

With respect to my own observations, they were principally directed to the effects of the Aurora upon the magnetic needle, and the connexion of the amount, &c., of this effect, with the position and appearance of the Aurora. I have been anxious to confine

* The publishers of the present edition of Franklin's Narrative have been induced to omit the greater part of the Appendix, comprising Observations on the Aurora Borealis, and on the Magnetic Needle, by Lieutenant Hood, Captain Franklin, and Dr. Richardson; Remarks and Tables connected with Astronomical Observations; a Zoological Appendix; Notes of Fishes, and a Botanical Appendix; from a conviction that its contents, besides being uninteresting to the general reader, would so greatly enhance the price of the work as effectually to retard its general circulation and utility.