

U. S. Ship Vincennes,
At Sea, August 8th, 1839.

In order more effectually to observe the periodical meteors which may be repeated, on the nights of the 8th, 9th, and 10th of August, the following officers will keep watch on those nights, and assist the officers of the watch in making observations.

With the 1st watch, Mr. Couthouy and Mr. Elliott.

With the 2d watch, Dr. Pickering and Mr. Howison.

With the 3d watch, Mr. Drayton and Dr. Fox.

With the 4th watch, Dr. Gilchrist and Dr. Whittle.

The officer of the watch will assign a quarter of the heavens to each person in his watch, who will note at once on paper, any meteors that may be visible, viz., their size; with or without train; their height; the points of appearance and disappearance; and the time of flight.

Although it may seem difficult to accomplish all this on a meteor, yet it is possible, and even easy, viz., by noting the star of the constellation near which it appears and disappears; counting until its disappearance; the arc may be accurately measured by a sextant; the bearing of the two stars gives the direction; and the counting compared with a chronometer gives the true time; and yet one has time to examine its length of train, brilliancy, &c.

CHARLES WILKES,
Commanding Exploring Expedition.

MODE OF SURVEYING THE CORAL ISLANDS.

As the surveys of islands are frequently spoken of in the body of the work, I have deemed it proper to give in this place a concise explanation of the method employed for this purpose, and applied particularly to the low coral islands, together with an example to serve as an illustration of the mode in which it was carried into effect.

In consequence of the time that could be allotted to such examinations being limited, it became desirable that such a course should be pursued in our surveys as should unite to the utmost expedition the greatest attainable accuracy. A method, which it is trusted united these requisites, was, therefore, devised and communicated to the officers of the squadron in the shape of a syllabus. In this I pointed out the mode of operating, and it was recommended to their study, in order that all might become familiar with its details. The basis of this method rested upon the measure of distances by sound. For this we had ready means by firing guns alternately from the different