

The island of Grigan appears to be about eight miles in width, seen from the north, and has the form of a dome. Its height, by a very unsatisfactory observation, was two thousand three hundred feet. It was my intention to stop and make it a magnetic station; but the weather appeared so thick as to threaten delay; and this I could ill afford, so I gave up the idea.

There is said to be no other settlement than one small village, on the southwest side of Grigan, where a few individuals dwell, and I understood that they were headed by an American; its shores are almost perpendicular, and it has no coral reefs to form harbours; so that in this respect it is not so much favoured as the southern isles of the same group. The passage between Grigan and Assumption is free from dangers, and I am well satisfied that no shoal exists where Freycinet has laid down the Mangs, for we passed directly over the locality, and saw nothing of the kind. The Mangs were seen in their true position, to the northward of Assumption.

The wind was light and variable. On the 1st of January, 1842, it changed to the southwest; with this change of wind we experienced a fall both of the thermometer and barometer, and excessive dampness; we had some lightning, and at midnight a violent squall with rain burst upon us, attended by a shift of wind to the northward and westward, which afterwards hauled to the northward and eastward. A slight current was felt setting to the eastward.

We now steered for the most eastern position assigned to Copper's Island, as it will no doubt be recollected that we ran over its supposed position in west longitude, on the passage between San Francisco and Oahu, mentioned in the first part of this chapter. On the 4th, we ran over the position in longitude $131^{\circ} 54'$ E., and latitude $20^{\circ} 11'$ N. The Abajos Shoal of Arrowsmith has no existence; its position was passed over in broad daylight.

On the 5th, we felt a current to the west of fifteen miles. The variations of the compass were now to the westward; much phosphorescence in the water; its temperature was 75° . The slight current continued until the 8th, when we made the islands of Sabtang and Batan on the starboard side, and the Richmond Rocks on the larboard, steering a westerly course through the Balintang Straits. The weather being remarkably fine, we had excellent observations on transit bearing. The longitude of the west point of Sabtang is $121^{\circ} 50' 30''$ E., the latitude is in $20^{\circ} 18'$ N., instead of $20^{\circ} 11'$ N. In the strait we had strong ripples, and occasionally felt the influence of the current, as we passed through them.

We had now left the Pacific Ocean, and I could not but rejoice that we had all the results of our cruise up to this time quite safe.