

Siboga-Expeditie.

SIBOGA-EXPEDITION.

AVIS AUX COLLABORATEURS.

Les matériaux fournis par l'expédition du "Siboga" sont conservés dans de l'alcool de 70—90%, à moins que les étiquettes n'indiquent autre chose. S'ils sont conservés dans du formaldéhyde de 4%, les étiquettes portent le plus souvent "Formol 4%". Des particularités éventuelles de la façon de fixer seront portées à la connaissance de ceux qui se chargeront des sections où il y en a à signaler.

Les étiquettes renvoient à la liste des stations ci-jointe et qui contient des renseignements sur la date, sur la localité, la profondeur et la nature du fond des stations et sur la nature des travaux exécutés.

On est prié de retourner les matériaux, quand on n'en aura plus besoin, à l'adresse du soussigné, au Laboratoire de Zoologie de l'Université d'Amsterdam.

Les matériaux étudiés seront déposés au Musée Zoologique d'Amsterdam. Pour ce qui est des duplicata, des arrangements pourront être faits avec ceux des collaborateurs qui le désirent, par l'intermédiaire du soussigné. Pour le reste, les duplicata seront offerts

MITTHEILUNG AN DIE MITARBEITER.

Das Material ist, wo nicht anders auf den Etiketten angegeben in Alcohol von 70—90% conservirt. Die Conservirung in Formaldehyd 4% ist auf den Etiketten meist durch "Formol 4%" ange deutet. Besonderheiten in der Fixirung wird den Bearbeitern der Abtheilungen, wo solche geschahen, mitgetheilt werden.

Die Etiketten beziehen sich auf die beigeigfugte Stationsliste, die eine Übersicht giebt über Datum, Position, Tiefe, Art des Bodens der Stationen, sowie über die Art der Arbeiten, die ausgeführt wurden.

Nach vollendeter Bearbeitung wird das Material zurückbetragen an die Adresse des Unterzeichneten, Zoologisches Laboratorium der Universität Amsterdam.

Das bearbeitete Material wird deponirt im Zoologischen Museum der Universität Amsterdam. Bezüglich der Duplicate können nach Rücksprache mit dem Unterzeichneten specielle Übereinkommen getroffen werden mit den Bearbeitern, im Ubrigen werden die

INSTRUCTIONS FOR COLLABORATORS.

The material is preserved in 70—90% alcohol, except where otherwise stated on the labels. Preservation in formic aldehyde 4% is noted on the labels, mostly by "Formol 4%". Should any special mode have been adopted in the fixing of material of a group, information to this effect will be supplied.

The labels refer to the accompanying *List of Stations*, which gives the date, position, depth, nature of bottom of each station, as well as the character of operations carried out.

On completion of the work, it is requested that the material be returned to the undersigned, Zoological Laboratory of the University Amsterdam.

The material after having been worked out, will be deposited in the Zoological Museum of the University, Amsterdam. As regards duplicates, special arrangements may be made between the workers and the undersigned, but as a rule the duplicates will so far

autant que possible au Musée de l'Etat à Leyde, et au Laboratoire Zoologique d'Utrecht.

Les résultats zoologiques, botaniques, géologiques et océanographiques de l'expédition du Siboga seront réunis dans un ouvrage qui sera publié par la „Librairie et Imprimerie ci-devant E. J. Brill à Leyde.”

Le soussigné se charge de la rédaction de cet ouvrage. Toutes les correspondances qui s'y rapportent, aussi bien que celles qui ont rapport à la collection ou, en général, à l'expédition du Siboga doivent lui être adressées à Eerbeek (Hollande).

Déjà 41 savants ont consenti à se charger de l'étude d'une partie des matériaux.

Leurs travaux feront partie de la publication mentionnée ci-dessus et pourront être écrits en français, en allemand ou en anglais, au choix des auteurs. Chaque travail, gros ou petit, consacré à un groupe déterminé et formant un tout, sera publié à part sous une couverture et avec une pagination spéciales. Il sera mis en vente isolément.

Chaque collaborateur reçoit gratuitement 25 exemplaires de son travail et un exemplaire de l'ouvrage entier¹⁾.

Afin de donner aux monographies une certaine uniformité, du moins dans les grandes lignes, on recommande de suivre dans l'ordre

1) Si l'auteur désire d'autres exemplaires de son travail, il est prié de s'adresser à l'éditeur, qui est tout disposé à les lui céder au prix de revient.

Duplicates soweit möglich abgegeben an das Reichs-Museum in Leiden und an das Zoologische Institut in Utrecht.

Die zoologischen, botanischen, geologischen und oceanographischen Resultate der „Siboga-Expedition“ sollen in einem *Werke* vereinigt werden, das bei der Firma „Librairie et Imprimerie ci-devant E. J. Brill à Leyde“ erscheinen wird.

Der Unterzeichnete sorgt für die Redaktion dieses Werkes. Alle Correspondenz, die Bezug hat auf dieses Werk sowie auf die Sammlung oder andere Punkte die Expedition betreffend sind an Unterzeichneten nach Eerbeek (Holland) zu adressiren.

Bereits haben sich 41 Mitarbeiter bereit erklärt das wissenschaftliche Material zu bearbeiten. Ihre Publicationen in obengenanntem Werke erscheinen in der französischen, deutschen oder englischen Sprache entsprechend dem Gutfinden des Autors und zwar in der Weise, dass jede Arbeit über eine Gruppe oder über ein abgeschlossenes Thema, gleichgültig ob der Umfang gross oder klein ist, selbstständig herausgegeben wird in eigenem Umschlag und mit selbstständiger Paginirung. Sie wird auch apart verkäuflich gestellt.

Jeder Bearbeiter erhält 25 Frei-Exemplare¹⁾ und ein Exemplar des gesamten Werkes.

Um wenigstens in den Hauptzügen einige Uniformität in den Monographien zu wahren, wird für die *Anordnung* der Beschrei-

possible be handed over to the Zoological Museum in Leyden and to the Zoological Laboratory in Utrecht.

The zoological, botanical, geological and oceanographical results of the Siboga-Expedition will be united in one work, which will be published by the firm „Librairie et Imprimerie ci-devant E. J. Brill à Leyde.“

The undersigned will superintend the editing of this work. All correspondence connected with it, as well as with the collections or any other points regarding the Expedition, should be addressed to the undersigned, Eerbeek, Holland.

Forty-one specialists have already undertaken to assist in working out the material. Their results will be published in the above-mentioned work in French, German or English according to the choice of the author; and each paper, whether large or small, on any group, will appear independently in a separate cover and with separate pagination. They will be sold separately.

Each author will receive 25 free copies and one copy of the complete work¹⁾.

It is desired to preserve a certain uniformity in the different papers. For this purpose a specimen description is enclosed

1) Should any author require extra copies of his paper, he is requested to communicate with the publisher who is prepared to supply them at cost price.

des descriptions le modèle ci-joint. Par suite, on est prié de faire suivre le nom de l'espèce par les renseignements bibliographiques, d'indiquer ensuite le lieu d'origine et de finir par la description ou la notice. On est prié aussi de munir d'un numéro les espèces qui appartiennent au même genre.

Le format et l'impression seront conformes à la page spécimen.

La feuille ci-jointe indique la dimension des *planches*. Les collaborateurs sont priés de réunir les dessins en couleur, autant que possible, sur une même ou sur plusieurs planches.

Dans les indications de mesures on recommande l'emploi du système métrique. L'échelle des agrandissements doit être indiquée, non par le nom du système optique employé, mais en chiffres.

Si l'on est amené par les matériaux à parler de la distribution verticale des organismes, le soussigné recommande de prendre comme limite supérieure de la „mer profonde“ 200 mètres de profondeur, ce qui correspond environ à la ligne de 100 brasses, se conformant à la proposition de J. Murray, A. Günther et d'autres.

Quand on a des comparaisons à faire avec la Faune d'autres parties de la Mer on est prié d'employer la nomenclature internationale¹⁾, telle qu'elle a été proposée par la Société Géographique de Londres en 1847.

bungen das nebengehende Beispiel anempfohlen. Es wird demnach gebeten auf den Namen der Species die Literatur-Angaben folgen zu lassen, darauf die Fundorts-Angaben und schliesslich die Beschreibung oder Besprechung. Auch wird gebeten die zu einem Genus gehörigen Species zu nummeriren.

Format und Druck sind conform der vorliegende Mittheilung.

Über das Mass der *Tafeln* gibt das beigeigute Blatt Auskunft. Die Mitarbeiter werden ersucht Abbildungen in Farben soweit möglich auf einer oder mehreren Tafeln zu vereinigen.

Bei Massangaben wird das metrische System empfohlen auch sollten die Vergrösserungen der Abbildungen nicht durch Mittheilung der optischen Systeme sondern in Zahlen gemacht werden.

Giebt das Material Anlass zu Besprechungen über die vertikale Verbreitung der Organismen so empfiehlt der Unterzeichnate die Tiefsee bei 200 M. beginnen zu lassen, ungefähr der 100 Faden-Linie entsprechend und demnach dem Vorschlag von J. Murray, A. Günther und Anderen folgend.

Bei eventueller Vergleichung mit der Fauna anderer Meerestheile wird empfohlen die international angenommene Nomenclatur, wie sie von der Commission der Geographical Society of London im Jahre 1847 vorgestellt wurde, zu gebrauchen¹⁾.

showing the arrangement which should be followed.

It is requested that the name of the species be followed by the references to literature, the habitat and finally the diagnostic or remarks. It is also requested that the species belonging to each genus be numbered.

The size and type of the publication will be the same as those of this communication.

The enclosed sheet gives the size of the *plates*. The authors are requested to keep their coloured figures so far as possible on the same plate or plates.

The metrical system is recommended for measurements and the magnification should be expressed in numbers, not by the optical system.

In the event of the material giving rise to a discussion on the vertical distribution of the organisms the undersigned suggests, that the "deep-sea" should begin at 200 M., corresponding almost with the 100 fathom line and consequently agreeing with the suggestion of J. Murray, A. Günther and others.

In a comparison with the fauna of other seas, the accepted international nomenclature¹⁾ is recommended, as laid down by the Commission of the Geographical Society of London in 1847.

1) 1. *Atlantique*: Entre les cercles polaires, limité à l'ouest par le côté orientale de l'Amérique Septentrionale et Meridionale et par le méridien du Cap Horn jusqu'au cercle polaire méridional, et à l'est par la

1) 1. *Atlantic*: Between the Polar circles, bounded on the west by the E. coast of N. and S. America and by the meridian of Cape Horn to the Antarctic Circle on the East by the W. coast of Europe and Africa

Le soussigné se charge de mettre sur l'épreuve à la place de l'orthographe hollandaise des noms géographiques, telle qu'elle se trouve le plus souvent sur les étiquettes, celle qui a été adoptée par la Société Géographique de Paris et qui est recommandée aussi dans les „Règles de la Nomenclature zoologique”.

On s'adressera au soussigné pour l'indemnité à laquelle on aura droit, soit pour des honoraires qu'on aura payés aux dessinateurs soit pour des frais qu'exigeait l'élaboration des matériaux.

côte occidentale de l'Europe et de l'Afrique et par le méridien du cap Agulhas jusqu'au cercle polaire méridional;

2. *Pacifique*: Frontière du nord, le détroit de Behring; celle de l'est, la côte occidentale de l'Amérique Septentrionale et Méridionale et le méridien du Cap Horn jusqu'au cercle polaire méridional; frontière de l'ouest, la côte orientale de l'Asie, l'Archipel malais, la Nouvelle Guinée, l'Australie et le méridien du Cap Sud de Tasmanie jusqu'au cercle polaire méridional, ce dernier forme la frontière méridionale;

3. *Indien*: Au nord limité par les côtes de l'Asie, à l'est par les îles Sunda, l'Australie et le méridien du Cap Sud de Tasmanie jusqu'au cercle polaire méridional; à l'ouest par l'Afrique et le méridien du Cap Agulhas jusqu'au cercle polaire méridional, qui forme la frontière méridionale;

4 et 5. *Antarctique*: s'étend au nord du cercle arctique, l'*Antarctique* sud du cercle antarctique.

Bei der Correctur wird Unterzeichneter dafür sorgen, dass an Stelle der holländischen Schreibweise der geographischen Namen, wie sie vielfach auf den Etiketten sich findet, die Schreibweise in Anwendung kommt, die von der Geographischen Gesellschaft in Paris angenommen und auch in den „Regeln der Zoologischen Nomenclatur“ befürwortet wurde.

Vergütungen für Ausgaben für Zeichner oder für Ausgaben, die unvermeidlich aus der Bearbeitung des Materials hervorgehen, sind mit dem Unterzeichneten zu regeln,

und Afrika's und vom Kap Agulhas durch dessen Meridian bis zum südlichen Polarkreis,

2. *Pacifik*: Nordgrenze: die Beringstrasse; Ostgrenze: die Westküste von Nord- und Süd-Amerika und der Meridian von Kap Horn bis zum südlichen Polarkreis; Westgrenze: die Ostküste von Asien, der malaysische Archipel, Neu-Guinea, Australien und der Meridian vom Südkap von Tasmanien bis zum südlichen Polarkreis; letzteres bildet die Südgrenze;

3. *Indien*: Nach Norden begrenzt durch die Küsten von Asien, nach Osten durch die Sunda-Inseln, Australien und den Meridian vom Südkap von Tasmanien zum südlichen Polarkreis, im Westen durch Afrika und den Meridian von Kap Agulhas zum südlichen Polarkreis, der die Südgrenze bildet;

4 und 5. Der *Arktik* erstreckt sich nördlich vom nördlichen der *Antarctique* südlich vom südlichen Polarkreis;

The undersigned undertakes to correct in the proofs the Dutch spelling of the geographical names which occur frequently on the labels and to substitute the spelling recommended by the Geographical Society of Paris and by the "Rules of Zoological Nomenclature".

The undersigned begs that all expenses incurred in the employment of an artist, and other unavoidable expenses which may arise during the working out of the material, may be arranged with him,

and by the medium of Cape Agulhas to the Antarctic Circle,

2. *Pacific*: Northern boundary: the Bering-Strait; Eastern boundary, the W. coast of N. and S. America and the meridian of Cape Horn to the Antarctic Circle; Western boundary: the E. coast of Asia, the Malay Archipelago, New Guinea, Australia and the meridian of the South Cape of Tasmania to the Antarctic Circle. The latter forms the Southern boundary.

3. *Indian*: Bounded on the North by the coast of Asia, on the East by the Sunda Islands, Australia and the meridian of the South Cape of Tasmania to the Antarctic Circle. On the West by Africa and the meridian from Cape Agulhas to the Antarctic, which forms the Southern boundary.

4 and 5. The *Arctic* stretches north from the Arctic Circle, the *Antarctic* south from the Antarctic Circle,

MAX WEBER.

Eerbeck, 15. IX. 1900.

 Voir pour le choix des types la fin de la page-spécimen.

DIE HOLOTHURIOIDEN.

1^o Ordnung. ACTINOPODA. Ludwig.

I. Familie HOLOTHURIIDAE Ludwig (ASTROCHIOTAE Grube).

2^o Subfamilie SYNALLACTINAE Ludwig.

Paelopatides Theel.

1. *Paelopatides confundens*, Theel.

Theel. Challenger Reports, Holothurioidea, Part. II. 1886, p. 154.

Ludwig. Report on the "Albatross" Exploration, Mem. of the Museum of Comp. Zool. at Harvard College, Vol. XVII, N° 3, 1894, p. 14.

Stat. 38. $7^{\circ}35'4''S.$, $117^{\circ}28'6''O.$, 521 Meter, 1 Ex.

Stat. 401. $6^{\circ}15'N.$, $120^{\circ}21'0''O.$, 1270 Meter, 7 Ex.

Stat. 74. $5^{\circ}3'5''S.$, $119^{\circ}0'0''O.$, 450 Meter, 2 Ex.

Stat. 214. $6^{\circ}30'8''S.$, $121^{\circ}55'0''O.$, 2796 Meter, 1 Ex.

Stat. 316. $7^{\circ}19'4''S.$, $116^{\circ}49'5''O.$, 538 Meter, 1 Ex.

Das grösste Exemplar war 230 mm. lang und 98 mm. breit. Die übrigen Exemplare von 190—200 mm. lang und 60 mm. breit. Beim grössten Tier war der ventrale Mund 38 mm. vom Vorderrande entfernt, der dorsale After 26 mm. vom Hinterrande. Ich zählte im Ganzen 26 bis 28 Füsschen im mittleren ventralen Radius, welche weit auseinander liegen und nicht ganz regelmässig in zwei Reihen angeordnet sind, die ungefähr 15—18 mm. von einander entfernt stehen. Das vordere Drittel der Bauchfläche ist ganz ohne Füsschen. Die Kalkkörper der Haut stimmen so wohl in Form als Vorkommen genau mit Ludwig's Beschreibung überein. Auf der Bauchseite sind die in Alkohol conservierten Tiere dunkelviolet, der Rücken war bei den meisten viel heller, verursacht dadurch dass die auessere Hautschicht grösstenteils abgeschnert war. Das Exemplar von Station 214, war in Formol 4% aufbewahrt und hatte über den ganzen Körper sehr schön die violette Farbe bewahrt. Bei den beiden Exemplaren von Station 74 waren die Kalkkörperchen in der Haut nur sehr wenig zahlreich, obgleich ganz intact. Sowohl bei diesen beiden letzteren als bei dem Exemplar von Station 214 war der Darm nicht ausgeworfen, ich suchte daher nach dem von Theel erwähnten Divertikel, habe aber nichts finden können, was darauf zu beziehen wäre.

Die Grösse der von der Siboga-Expedition erbeuteten Tiere, steht etwa in der Mitte zwischen den Challenger-Exemplaren (300 mm.) und den Albatross-Exemplaren (55—116 mm.).

Der *Paelopatides confundens* hat eine sehr weite Verbreitung, da er nicht nur im östlichen Teile des Pacific, sondern auch in der Sulu-See und wie jetzt erhellt auch im Indischen Archipel vorkommt. Bekanntlich hat Theel schon eine *Paelopatides*, n.l. *P. aspera* aus der Sulu-See beschrieben, welche aber ganz verschieden ist von den uns vorliegenden Tieren, die ohne Zweifel zu *P. confundens* gehören. Da ferner die Bemerkung Ludwig's (l. c. p. 19), dass die *Benthodutes gelatinosa* Walsh zu der Gattung *Paelopatides* zu rechnen ist, und überhaupt kein Elpidiide sein kann, wohl ganz zutreffend ist, sind jetzt schon 3 *Paelopatides*-Arten aus dem Indischen Gebiet bekannt.

Synallactes Ludwig.

1. *Synallactes reticulatus* n. sp. (Taf. II, Fig. 3 Taf. IV, Fig. 3—5).

Stat. 254. $5^{\circ} 40' S.$ $132^{\circ} 26' O.$ 310 Meter. 1 Ex.

Das einzige erbeutete Exemplar ist 330 mm. lang und besitzt eine lang ausgezogene subcylindrische Gestalt, da das Tier nur ungefähr 40 mm. breit ist. Die ganze Oberfläche ist durch scharfe aufgerichtete Falten netzartig in viereckige Felder zerlegt, welche in der Mitte des Körpers auf der dorsalen Seite etwa 10 mm. lang und fast doppelt so breit sind. An der ventralen Seite sind sie beträchtlich kleiner, was auch an dem etwas verjüngten Vorder- und Hinterteil der Fall ist. Die Farbe war im Leben, nach der farbigen Skizze, die auf Bord gemacht wurde, rosa. Das in Formol 4% aufbewahrte Tier hatte aber diese Farbe völlig verloren und war weißlich grau.

On est prié d'employer le soulignement ci-dessous pour indiquer les types divers de l'impression.

Man wird gebeten für die verschiedenen Typen des Druckes sich der angedeuteten Unterstreichungen zu bedienen.

To indicate the different types of print authors are requested to make use of the following underlinings.

DIE HOLOTHURIOIDEN = —

ACTINOPODA = —

HOLOTHURIDAE = —

Synallactinae = —

Paelopatides = —

Paelopatides confundens = —

LISTE DES STATIONS

de la Campagne scientifique du „SIBOGA”

révisée

par le Commandant du „Siboga”,

M.-G. F. TYDEMAN,

Capitaine de frégate.

No.	DATE.	POSITION.		DEPTH IN M.	BOTTOM.	OPERATION.	REMARKS.
		LATITUDE.	LONGITUDE EAST.				
1	March, 7	7° 27'.5 S.	113° 8'.5	37	Grey mud with small, broken shells.	Trawl.	1400 M. distant from reef "Zwaantjes-droogte", Madura-strait.
2	" 8	7° 25' S.	113° 16'	56	Grey mud with some radiolariae.	Trawl.	Madura-strait.
3	" 8/9	7° 33' S.	113° 36'.5	67	Mud with very few radiolariae and diatoms.	Hensen quantitative net. From 36 M. to surface.	Madura-strait.
4	" 9	7° 42' S.	114° 12'.6	9	Coarse sand.	Dredge and shore-exploration.	Anchorage off Djangkar (Java).
5	" 10	7° 46' S.	114° 30'.5	330	Mud.	Deep-sea trawl.	—
6	" 10	7° 44'.5 S.	114° 29'	291	Mud.	—	—
7	" 11	7° 55'.5 S.	114° 26'	15 and more	Coral and stones.	Dredge and shore-exploration.	Near reef of Batjulmati (Java).
8	" 13	7° 54' S.	114° 48'.8	720	Fine, grey mud.	—	—
9	" 13	7° 44'.6 S.	114° 44'.6	353	Soft, fine grey mud.	—	—
10	" 13	7° 25' S.	115° 5'	600	Fine grey mud.	—	—
11	" 13	7° 16' S.	115° 12'.5	234	Coarse sand with broken shells.	—	—
12	" 14	7° 15' S.	115° 15'.6	289	Mud and broken shells.	Trawl.	—
13	" 14	7° 17'.6 S.	115° 16'.8	402	Mud.	—	—
14	" 14	7° 5'.5 S.	115° 13'.8	91	Mud (?)	—	2 miles from the reef of Urk-Island (Kemirian), Kangeang-group.
15	" 15	7° 2'.6 S.	115° 23'.6	100	Fine coralsand.	Trawl.	—
16	" 15/16	6° 59' S.	115° 24'.7	22	Mud.	Shore-expl. Hensen Vertical net.	Bay of Kankamaraän, S. coast of Kangeang. Electric light in vertical net. Part of cable in a tangle.
17	" 17	7° 28'.5 S.	115° 28'	1060	Fine grey mud.	Deep-sea trawl.	—
18	" 18	7° 28'.2 S.	115° 24'.6	1018	Fine grey mud.	Deep-sea trawl.	—
19	" 19/21	8° 44'.5 S.	116° 2'.5	18—27	River-mud, coral, coralsand.	Land-expl.; trawl and dredge.	Bay of Labuan Tring, west coast of Lombok.
20	" 22	8° 45'.8 S.	115° 46'.6	210	Hard; probably stone.	—	—
21	" 22	8° 46'.8 S.	115° 44'.1	193	Hard; small stones and coral.	—	—
22	" 22	8° 47'.7 S.	115° 41'.2	220	Not obtained.	—	Sounder caught in bottom; lost sounder thermometer, water-cup and 87 M. of wire.
22a	" 22	—	—	230	Stone and coral.	—	Nearly same position, as N°. 22.
23	" 22	8° 48'.5 S.	115° 40'	165	Hard; coral.	—	—
24	" 22	8° 48'.7 S.	115° 39'.5	312	Hard. Not obtained.	—	—
25	" 22	8° 48'.9 S.	115° 38'	118	Hard. Not obtained.	—	—
26	" 23	8° 35'.1 S.	115° 31'.2	305	Black sand.	—	—
27	" 23	8° 43'.5 S.	115° 21'.5	210	Coarse sand with small pieces of coral.	—	—
28	" 23	8° 43'.7 S.	115° 19'.5	143	Hard, coral bottom.	—	—
29	" 23	8° 42'.7 S.	115° 23'.5	178	Hard, coral and stone.	—	—
30	" 23	—	—	191	Coral.	—	Southern entrance of channel between Penida- and Jeningan-Islands.
31	" 23	8° 47'.5 S.	115° 39'.5	310	Hard, stone.	—	—

No.	DATE.	POSITION.		DEPTH IN M.	BOTTOM.	OPERATION.	REMARKS.
		LATITUDE.	LONGITUDE EAST.				
32	March, 23	9° 2' S.	115° 47'	842	Hard sand.	—	In a first attempt to obtain this sounding stray line broke in consequence of heavy swell; lost sounder and thermometer.
33	" 24/26	—	—	22 and less	Mud, coral and coralsand.	Trawl, dredge and shore-exploration.	Bay of Pidjet, Lombok.
34	" 27	—	—	18	Coral reef.	Shore-exploration.	Anchorage off Labuan Pandan, Lombok.
35	" 28	8° 0'.3 S.	116° 59'	1310	Fine, grey mud, with dark red brown stripes.	Deep sea trawl.	—
36	" 29	7° 38' S.	117° 31	640	Hard.	—	—
37	" 30/31	—	—	27 and less	Coral and coralsand.	Dredge. Monaco-trap in 100 M.	Sailus ketjil, Paternoster-islands. Close to reef.
38	April 1	7° 35'.4 S.	117° 28'.6	521	Coral.	Trawl.	—
39	" 1	7° 31'.2 S.	117° 42'	667	—	—	—
40	" 2	—	—	12	Coral reef.	Townet. Shore-exploration.	Anchorage off Pulu Kawassang, Pater noster-islands.
41	" 3	7° 25' S.	117° 50'.5	96	Sand (?)	Trawl.	—
41a	" 3	7° 23'.7 S.	117° 52'.6	313	Coral.	—	—
42	" 3	7° 20'.7 S.	117° 58'.3	571	Coral.	—	—
42a	" 3	7° 12'.6 S.	118° 7'.7	30	Coral.	—	—
43	" 4/5	—	—	up to 36	Coral.	Dredge. Hensen vertical net.	Anchorage off Pulu Sarassa, Postillon-islands. Electric light in vertical net.
43a	" 5	7° 14'.6 S.	118° 10'.7	33	Hard, coral sand.	—	—
43b	" 5	7° 15'.5 S.	118° 12'.3	66	Sand.	—	—
43c	" 5	7° 17'.4 S.	118° 14'	32	Coral sand und coral.	—	—
43d	" 5	7° 19'.8 S.	118° 14'.5	868	Mud.	—	—
44	" 5	7° 18'.2 S.	118° 13'.6	883	Soft grey mud.	Trawl.	Lost trawl in consequence of change of bottom (rocky slope) during this haul.
45	" 6	7° 24' S.	118° 15'.2	794	Fine grey mud, with some radiolariae and diatomites.	Deep sea trawl.	—
45a	" 6	7° 36'.5 S.	118° 15'.5	450	—	—	—
46	" 7	7° 52'.2 S.	118° 34'.8	3100	Fine, grey mud.	—	—
46a	" 7	8° 0'.5 S.	118° 34'.7	1600	Mud.	Deep sea trawl.	Brake not being strong enough, cable paid out too quickly and part of it kinked.
47	" 8/12	—	—	55	Mud with patches of fine coral sand.	Trawl, dredge and shore-exploration.	Bay of Bima; near south fort. Trawl torn. — Bima-anchorage.
47a	" 12	—	—	320	Fine sand.	Dredge.	Off Batu Putih, entrance Bay of Bima.
47b	" 12	—	—	296	Fine sand with mud. (coral).	Trawl.	Trawl torn on coral slope, reached during haul. 47 ^b is 0,5 mile north of 47 ^a .
48	" 13	8° 4'.7 S.	118° 44'.3	2060	Fine, grey mud; partially green.	Deep sea trawl.	Trawl brought up pumice stone.
49	" 14	8° 20'.5 S.	119° 4'.5	369	Coral and shells.	—	—
49a	" 14	8° 23'.5 S.	119° 4'.6	69	Coral and shells.	Dredge.	Sapeh-Straight.

No.	DATE.	POSITION.		DEPTH IN M.	BOTTOM.	OPERATION.	REMARKS.
		LATITUDE.	LONGITUDE EAST.				
50	April 16/18	—	—	up to 40	Mud, sand and shells, according to locality.	Dredge, trawl and shore-exploration.	Bay of Badjo, West coast of Flores.
51	" 19	—	—	From 69 to 91	Fine grey sand; coarse sand with shells and stones.	Dredge and trawl. Shore-explor.	Madura-bay and other localities in the southern part of Molo-strait.
52	" 20	9° 3'.4 S.	119° 56'.7	959	Globigerina ooze.	Deep sea trawl.	—
53	" 21/22	—	—	up to 36	Coral sand; near the shore mud.	Trawl and Shore-explor.	Bay of Nangamessi, Sumba.
54	" 23	10° 21' S.	121° 1'.8	779	Fine, grey mud. Sand whit fine mud.	—	Position from bearings. According to observations of the sun the real longitude was 4' more to the West.
55	" 23	10° 24'.8 S.	121° 11'.5	1456	Fine grey mud.	—	Wire parted, lost thermometer, lead and 500 M. of wire.
56	" 23	10° 27'.3 S.	121° 24'.2	1480	Fine grey mud; foraminiferae.	—	—
57	" 24	10° 29' S.	121° 28'.7	1419	Foraminiferae ooze.	—	—
58	" 25	—	—	up to 27	Sand.	Dredge and shore-exploration.	Anchorage off Seba, Savu.
59	" 26	10° 22'.7 S.	123° 16'.5	390	Coarse coralsand with small stones.	Dredge.	Western entrance Samau-strait.
60	" 27/28	—	—	23	Lithothamnion in 3 M. and less. Reef.	Shore-exploration.	Haingsisi, Samau Island, Timor.
61	May 1/2	—	—	20	Coral and sand.	Shore-exploration.	Lamakwera, Solor-Island.
61a	" 2	—	—	31	Coral.	Shore-exploration.	North coast of Adonara.
62	" 3	7° 57'.3 S.	122° 9'	2570	Fine, grey mud.	—	—
63	" 3	7° 37'.2 S.	122° 3'.5	2560	Fine, grey mud.	—	—
64	" 4/5	—	—	up to 32	Coral, coralsand.	Trawl, dredge and shore-exploration.	Kambaragi-bay, Tanah Djampeah.
65	" 6	7° 0'S.	120° 34'.5	510	Pale, grey mud.	—	—
65a	" 6	very near station 65	—	From 400	Same, changing during haul into coral bottom.	Dredge.	Depth changed rapidly during haul, diminishing to 120 M. coral bottom, in which dredge was caught and broke.
66	" 7/8	—	—	8 to 10	Dead coral; Halimeda; Lithothamnion.	Dredge.	Bank between islands of Bahuluwang and Tambolungan, south of Saleyer.
67	" 9	6° 26'.1 S.	120° 41'	1627	Foraminif. ooze.	—	—
68	" 9	6° 1'.5 S.	120° 45'.5	3110	Globigerina ooze.	—	—
69	" 9	5° 35'.2 S.	120° 42'.1	1196	Fine, grey mud.	—	—
70	" 10	6° 19'.5 S.	119° 52'	1091	Fine, grey mud.	—	—
71	" 10— June 7	—	—	up to 32	Mud. Sand with mud. Coral.	Dredge, townet and shore-exploration.	Makassar and surroundings. (Pulu Barang, Samalona, Ley-Ley, mouth of Tello-river).
72	" 8	5° 9'.2 S.	119° 8'.2	58	Hard.	Hensen quantitative net.	From 45 M. to surface.
73	" 8	5° 8'.5 S.	119° 2'.5 (chart)	360	Hard.	Hensen quantitative net.	From 45 M. to surface. 2 miles West of edge of Spermonde-bank.
74	" 8	5° 3'.5 S.	119° 0' (chart)	450	Globigerina ooze (obviously a thin layer).	Trawl.	—

No.	DATE.	POSITION.		DEPTH IN M.	BOTTOM.	OPERATION.	REMARKS.
		LATITUDE.	LONGITUDE EAST.				
75	June 8	4° 57'.4 S.	119° 2'.8	18	—	Hensen vertical net.	From 11 M. to surface; electric light in net.
76	" 9	4° 22'.1 S.	118° 16'.9	2029	Fine, grey mud. (Globigerina).	Deep sea trawl.	—
77	" 10	3° 27'S.	117° 36'	59	Fine, grey coralsand.	Dredge.	Borneo-bank.
77a	" 10	3° 24'S.	117° 36'	59	Fine, grey coralsand.	Trawl. Hensen quantitative net.	Borneo-bank. These catches were numbered 77.
78	" 10/11	—	—	34	Coral and coralsand.	Shore-exploration.	Lumu-Lumu-shoal, Borneo-bank.
79	" 12	2° 43'S.	117° 44'	From 41 to 54	Fine coralsand.	Trawl. Hensen quantitative net.	Borneo-bank.
79a	" 12	2° 38'.5 S.	117° 46'	54	Fine coralsand.	Trawl. Hensen quantitative net.	Borneo-bank; 5 miles N NE from station 79.
79b	" 12/13	—	—	22	Coralsand.	Shore-explor.	Pulu Kabala-dua, Borneo-bank.
80	" 13	2° 25'S.	117° 43'	From 50—40	Fine coralsand.	Trawl. Hensen quantitative net.	Borneo-bank.
81	" 14	—	—	34	Coral bottom and Lithothamnion.	Hensen vertical net. Dredge, and shore-exploration.	Quantit. net From 34 M. to surface. Electric light in vertical net.
82	" 15/16	—	—	—	—	Collecting fishes, etc.	Pulu Sebangkatan, Borneo-bank.
83	" 16	0° 40'.5 S.	118° 26'.6	2400	Fine, grey mud.	—	Batu Pangal, Kutei-(Mahakkam-) river.
84	" 17	0° 40'.5 S.	119° 4'	1624	Fine, grey mud.	—	—
85	" 17	0° 36'.5 S.	119° 29'.5	724	Fine, grey mud.	Trawl.	—
86	" 18/19	—	—	36	Fine, grey mud (river-mud).	Trawl, and Shore-exploration.	Anchorage off Dongala, Palos-bay, Celebes.
87	" 19	0° 32'S.	119° 39'.8	655	Fine, grey mud.	Trawl.	Trawl was evidently overset before reaching bottom; net came up in pieces.
88	" 20	0° 34'.6 N.	119° 8'.5	1301	Fine, grey mud.	Deep sea trawl.	—
89	" 21	—	—	11	Trawl chiefly brought up yellow mud.	Shore-exploration.	Pulu Kaniungan ketjil.
90	" 21	1° 17'.5 N.	118° 53'	281	Coral.	Dredge.	Dredge came up with one arm broken.
91	" 22	—	—	up to 54	Coral sand and stones.	Trawl and dredge.	Moearas-reef, inner side: East coast of Borneo.
92	" 23	3° 7' N.	119° 22'	3975	Hard coral sand. Coral at anchorage. Lithothamnion near the islands.	Shore-explor.	Karang Lintang and Pulu Palabangan. Island.
93	" 24/25	—	—	12	Bluish mud, mixed with yellow-red patches and stripes.	Deep sea trawl.	In consequence of defective working of brake cable evidently kinked and parted, when hauling in, net being very heavy and nearly at the surface.
94	" 26	5° 11'.2 N.	119° 35'.4	450 (chart).	Lithothamnion-bottom Sand and coral.	Dredge, town-net, Shore-explor.	Pulu Sanguisiapo, Tawi-Tawi-islands, Sulu-archipelago.
95	" 26	5° 43'.5 N.	119° 40'	522	Apparently sand and stone.	Trawl.	Trawl was overset before reaching bottom.
96	" 27	—	—	15	Stony bottom.	Dredge.	—
97	" 28	5° 48'.7 N.	119° 49'.6	564	Lithothamnion-bottom.	Dredge. Tow-net.	South-east side of Pearl-bank. Sulu-archipelago.
98	" 28	6° 9' N.	120° 21'	350	Coarse, coralsand.	Dredge.	Dredge-net torn to pieces.
					Sand.	Dredge.	Contained nothing but fine sand.

No.	DATE.	POSITION.		DEPTH IN M.	BOTTOM.	OPERATION.	REMARKS.
		LATITUDE.	LONGITUDE. EAST.				
99	Juny 28/ 29/30	6° 7'.5 N.	120° 26'	16—23	Lithothamnion-bottom.	Dredge. Tow-net.	Anchorage off North-Ubian. June 28 and 29 to the West; June 30 to the East of the island.
100	" 29	6° 11' N.	120° 37'.5	450 (chart).	Dead coral.	Dredge.	Dredge full of dead coral; nearly no animals.
101	" 30	6° 15' N.	120° 21'	1270	Fine, grey mud. (Globigerinae).	Deep sea trawl.	Sulu-sea.
102	July 1	6° 4'.1 N.	120° 44'	535	Fine, yellow sand.	Dredge.	Dredge full of fine yellow sand; nearly no animals.
103	" 1	6° 4'.2 N.	120° 51'.3	126 (chart).	—	Dredge.	Came up quite empty.
104	" 2/3	—	—	14	Sand.	Dredge and Tow-net.	Sulu-harbour, Sulu-island.
105	" 4	6° 8' N.	121° 19'	275	Coralbottom.	Dredge.	Very short haul, dredge nearly immediately being caught in the bottom.
106	" 4	—	—	13	Coralbottom.	Dredge. Townet.	Anchorage off Kapul-island, Sulu-archipelago.
107	" 5	6° 1'.5 N.	121° 28'	580 (chart).	Probably hard rock.	Dredge.	Channel between the islands of Sulu and Bangalao.
108	" 5	6° 10'.3 N.	121° 32'	73 (chart).	Hard, probably coral.	Dredge.	Dredge broken and lost.
109	" 5/6	—	—	13	Lithothamnion-bottom.	Dredge, Townet.	Anchorage off Pulu Tongkil, Sulu-archipelago.
110	" 6	4° 34' N.	122° 0'	—	—	Townet.	—
111	" 7	3° 19' N.	122° 2'	• 4902	—	Townet.	No more wire on drum.
112	" 7	3° 1' N.	122° 2'	—	—	Horizontal cylinder.	Towed over, a distance of 7 miles.—
113	" 8	1° 37' N.	122° 37'	—	—	Fowler closing net.	Closing net from 600 to 300 M. depth.
114	" 8	0° 58'.5 N.	122° 55'	75 (chart).	Hard sand, very fine.	Dredge.	From 600 to 300 M. depth. Net quite empty, was supposed to be closed accidentally in consequence of the short, high sea.
115	" 9/11	—	—	—	—	Reef-exploration.	Kwandang-bay-entrance.
116	" 12	0° 58'.5 N.	122° 42'.5	72 (chart).	Fine sand with mud.	Dredge.	East side of Pajunga I. Kwandang-bay.
117	" 12	1° 0'.5 N.	122° 56'	80 (chart).	Sand and coral.	Trawl.	West of Kwandang-bay-entrance.
117a	" 12	1° 15' N.	123° 37'	—	—	Townet.	Kwandang bay-entrance.
118	" 13	1° 38' N.	124° 28'.2	—	—	Hensen vertical net.	—
119	" 13	1° 33'.5 N.	124° 41'	1901	Stony bottom.	—	From 900 M. to surface.
120	" 13	1° 33'.7 N.	124° 46'.5	368	Stone.	Deep sea trawl.	—
121	" 14/16	—	—	55	—	Shore-exploration.	Trawl came up in an oblique position binding being broken.
122	" 17	1° 58'.5 N.	125° 0'.5	1264— 1165	Stone.	Deep sea trawl.	Menado-anchorage.
123	" 17/18	—	—	36—27	Stone and Lithothamnion-bottom.	Dredge.	Depths according to chart.
							North-bay. Biaru-island.

No.	DATE.	POSITION.		DEPTH IN M.	BOTTOM.	OPERATION.	REMARKS.
		LATITUDE.	LONGITUDE EAST.				
124	July 18	2° 27' N.	125° 35'	1327 (chart).	Stone.	Deep sea trawl.	Trawl-iron bent.
125	" 18/19	—	—	27	Stone and some Lithothamnion.	Reef-exploration. Dredge. Townet.	Anchorage off Sawan, Siau-island.
126	" 20	3° 27'.1 N.	125° 18'.7	2053	Hard. (Traces of fine dark, hard sand).	Monaco-trap. Deep sea trawl.	In 90 M. depth, came up empty. —
127	" 20/21	—	—	45	Fine, darkcoloured sand.	Trawl.	Taruna-bay, Great-Sangir-island.
128	" 22	4° 27' N.	125° 25'.7	1645	Globigerina ooze.	Reef-exploration. Hensen vertical net.	From 700 M. to surface.
129	" 22/23	—	—	23-31	Sand.	Reef-exploration. Dredge. Townet.	Anchorage off Kawio- and Kamboling-islands, Karkaralong-group.
130	" 23	5° 0' N.	125° 26'.5	1638	Hard shell-bottom.	—	—
131	" 24/25	—	—	13	Mud and sand.	Reef-exploration.	Anchorage off Beo, Karakelang-islands.
132	" 25	5° 56'.7 N.	126° 25'	3302	Fine, grey and blueish mud.	—	—
133	" 25/27	—	—	up to 36	Mud and hard sand.	Trawl, dredge and reef-exploration. Townet.	Anchorage off Lirung, Salibabu-island.
134	" 28	2° 50'.5 N.	126° 53'.7	2291	Fine, brown mud.	Deep sea trawl.	Trawl did not reach the bottom. —
135	" 29	1° 34' N.	126° 54'	1994 (chart).	Coarse grey, sandy bottom.	Deep sea trawl.	—
136	" 29— August 3	—	—	23	Mud and stone.	Townet.	Ternate anchorage.
137	" 3	0° 23'.8 N.	127° 29'	472	Fine, dark muddy sand.	Dredge.	Channel between Makjan and Halmaheira.
138	" 3	—	—	66	Coral.	Townet.	Anchorage on the east coast of Kajo-island.
139	" 4	0° 11' S.	127° 25'	397	Mud stones and coral.	Trawl.	—
140	" 4/5	—	—	13	Mud.	Tow-net.	Bay of Batjan.
141	" 5	1° 0'.4 S.	127° 25'.3	1950	Very fine, hard sand.	Hensen vertical net.	From 1500 M. depth to surface.
142	" 5/7	—	—	23	Mud.	Hensen vertical net Townet, dredge and reef-explor.	Anchorage off Laiwui, coast of Obi Major. Electric light in vertical net.
143	" 7	1° 4'.5 S.	127° 52'.6	1454	Fine, grey mud.	Hensen vertical net.	From 1000 M. depth to surface.
144	" 7/9	—	—	45	Coral bottom and Lithothamnion.	Dredge, townet and reef-explor.	Anchorage north of Salomakiëe-(Damar-) island.
145	" 9	0° 54' S.	128° 39'.9	827	Hard. Pumicestone.	Deep sea trawl.	Lost water-cup and thermometer in consequence of bad working of counter.
146	" 9	0° 36' S.	128° 32'.7	512	Coral sand, fine and coarse.	Townet.	2½ miles north of eastern Widi-group.
147	" 10	0° 22'.7 S.	128° 52'.7	2039	Fine bluish mud.	—	—
148	" 10	0° 17' 6S.	129° 14'.5	1855	Fine, grey and green mud.	Hensen vertical net.	From 1000 M. depth to surface.
149	" 10/11	—	—	31	Coral.	Townet. Reef-exploration.	Fau-anchorage and lagune. West coast of Gebé-island.
150	" 11	0° 6' N.	129° 7'.2	1089	Yellow grey mud and sand. Stones.	Trawl.	Trawl torn to pieces; fore-beam bent; obviously met with very rough bottom.

No.	DATE.	POSITION.		DEPTH IN M.	BOTTOM.	OPERATION.	REMARKS.
		LATITUDE.	LONGITUDE EAST.				
151	August 12	0° 12'.6 S.	129° 48'	845	Fine grey mud with coarse particles.	—	—
152	" 12/13	—	—	32	Lithothamnion-bottom.	Dredge, tow-net and reef-explor.	Wunoh-bay, N.W.-coast of Waigeu-island.
153	" 14	0° 3'.8 N.	130° 24'.3	141	Fine and coarse sand with dead shells.	Dredge.	—
154	" 14	0° 7'.2 N.	130° 25'.5	83	Grey muddy sand, shells and Lithothamnion.	Dredge.	Depth decreased till 59 M. during this haul.
155	" 14	—	—	58	Coral sand.	Shore-exploration.	Anchorage in Piapis-bay (Telok Sapira) Northwest coast of Waigeu-island.
156	" 15	0° 29'.2 S.	130° 5'.3	469	Coarse sand and broken shells.	Dredge.	Dredge-net came up in pieces.
157	" 15/16	0° 32'.9 S.	130° 14'.6	45	Stone and coarse sand.	Tow-net, Shore-exploration.	4½ cables N.N.W. of the North point of Great Fam-island. (Jef-Fam-besar).
158	" 16	0° 43'.5 S.	129° 56'.5	391	Coral.	—	—
159	" 16	0° 59'.1 S.	129° 48'.8	411	Coarse sand.	Dredge.	—
160	" 16/17	—	—	31	—	Shore-exploration.	North-coast of Kofiau-island near Kampong Hebara.
161	" 17	1° 10'.5 S.	130° 9'	798	Muddy sand.	Deep sea trawl.	—
162	" 18	—	—	18	Coarse and fine sand with clay and shells.	Dredge.	Between Loslos and Broken-islands, West-coast of Salawatti.
163	" 18/20	—	—	29	Sand and stone, mixed with mud.	Dredge, reef-exploration.	Anchorage near Seget, West-entrance Selee (Galewo-)strait.
164	" 20	1° 42'.5 S.	130° 47'.5	32	Sand, small stones and shells.	Dredge.	—
165	" 20/22	—	—	49	—	Dredge, Tow-net, Reef-exploration.	Anchorage on North-east side of Daram-island (False Pisangs), East-coast of Misool.
166	" 22	2° 28'.5 S.	131° 3'.3	118	Hard, coarse sand.	Trawl.	—
167	" 22	2° 35'.5 S.	131° 26'.2	95	—	Trawl.	—
168	" 22/23	—	—	63	—	Tow-net.	Anchorage North of Sabuda-island.
169	" 23/25	—	—	57	Mud.	Trawl, dredge, tow-net, reef-explor.	Anchorage off Atjatuning, West-coast of New-Guinea.
170	" 26	3° 37'.7 S.	131° 26'.4	924	Fine grey mud.	Deep sea trawl.	—
171	" 26	3° 46'.3 S.	131° 9'.3	470	Fine grey mud.	—	—
172	" 26/28	—	—	18	Coral- and Lithothamnion-bottom.	Tow-net, reef-exploration.	Gisser; anchorage between this island and Ceram-Laut.
173	" 28	3° 27'.0 S.	131° 0'.5	567	Fine, yellow grey mud.	Deep sea trawl.	—
174	" 28/29	—	—	18	Mud.	Dredge. Tow-net. Reef-exploration.	Waru-bay, North coast of Ceram.
175	" 30	2° 37'.7 S.	130° 33'.4	1914	Fine, grey and green mud.	Deep sea trawl.	—
176	" 30/31	—	—	36	Mud and stones.	Shore- and reef-exploration.	Anchorage off Lilintah, South coast of Misool.
177	Sept. I	2° 24'.5 S.	129° 38'.5	1633	Dead coral and stones, covered with manganese.	Dredge.	Dredged a large quantity of dead coral and stones with very few animals. During haul depth diminished till 1300 M.
177a	" I	2° 30'S.	129° 28'	—	—	Tow-net.	—

No.	DATE.	POSITION.		DEPTH IN M.	BOTTOM.	OPERATION.	REMARKS.
		LATITUDE.	LONGITUDE EAST.				
178	Sept. 2	2° 40' S.	128° 37'.5	835	Blue mud.	Deep sea trawl.	—
179	" 2/3	—	—	36	Stony bottom.	Dredge, tow-net and Shore-exploration.	Kawa-bay, West coast of Ceram.
180	" 4	—	—	48	Stone and sand.	Land-exploration.	North coast of Pulu Kelang.
181	" 5/11	—	—	36—54	Mud, sand and coral.	Dredge and trawl, reef-exploration.	Ambon-anchorage.
182	" 11	3° 46' S.	127° 42'	3702	Bluish grey mud.	—	—
183	" 11	3° 29' S.	127° 33'	1820	—	—	—
184	" 11/12	—	—	36	Coral, sand.	Dredge, Tow-net.	Anchorage off Kampong Kelang, South coast of Manipa-island.
185	" 12	3° 20' S.	127° 22'.9	1536	—	Hensen vertical net.	Manipa-strait. From 1536 M. to surface.
186	" 12	3° 10'.5 S.	127° 20'.5	940	Rock.	—	North side of Manipa-strait.
187	" 12	3° 12'.8 S.	127° 26'	1195	Hard. (Rock?)	—	North side of Manipa-strait.
188	" 12	3° 13' S.	127° 13'.8	1067	Gravel coarse sand.	—	North side of Manipa-strait.
189	" 12	2° 48'.3 S.	127° 13'	2124	Fine, grey mud.	—	—
189a	" 12	2° 22' S.	126° 46'	—	—	Tow-net.	—
190	" 13	2° 19' S.	126° 23'.5	4082	Fine bluish green mud.	—	—
191	" 13	2° 8'.7 S.	126° 10'.4	2694	Bluish green mud.	—	—
192	" 13	2° 6'.3 S.	126° 5'.5	1020	Fine sand.	—	5 miles East of Sula Besi-island.
193	" 13/14	—	—	22	Mud.	Reef-exploration.	Sanana-bay, East coast of Sula Besi
194	" 15	1° 53'.5 S.	126° 39'	1504	Stone.	Tow-net.	Cylinder towed over a distance of 25 miles, with a speed of 7 to 8 knots.
195	" 15	1° 55' S.	126° 50'.7	1476	Stone.	Tow-net.	—
196	" 15	1° 52'.8 S.	127° 6'	2001	Stone.	Tow-net.	—
197	" 15	1° 45'.3 S.	127° 8'.3	680	Not obtained.	Tow-net.	From this station towed horizontal cylinder over a distance of 90 miles.
198	" 16	2° 49'.4 S.	126° 17'	4113	Bluish, green mud.	Tow-net.	—
199	" 16	2° 55'.5 S.	126° 4'.5	2000	—	Tow-net.	Wire parted, close to stray line (twisted off by strong rotation, probably caused by thermometer-screw).
200	" 16/17	—	—	up to 54	Mud and stone.	Dredge and Shore-exploration.	Bara-bay, North coast of Buru-island.
201	" 18	3° 3'.9 S.	125° 59'	2693	Green mud.	—	—
202	" 18	3° 15' S.	125° 43'.8	3088	Grey and green mud.	Horizontal cylinder.	Towed cylinder over a distance of about 23 miles (speed 7 knots).
202a	" 18	3° 18' S.	125° 18'	500	—	—	—
202b	" 18	3° 19' S.	125° 9'.5	500	—	—	—
202c	" 18	3° 19' S.	125° 4'.5	500	—	—	—
202d	" 18	3° 14'.2 S.	124° 59'	500	—	Horizontal cylinder.	Towed cylinder over a distance of about 50 miles, with a speed of 8 knots.

No.	DATE.	POSITION.		DEPTH IN M.	BOTTOM.	OPERATION.	REMARKS.
		LATITUDE.	LONGITUDE, EAST.				
203	Sept. 19	3° 32'.5 S.	124° 15'.5	4892	—	Hensen vertical net.	No more wire on drum. Vertical net from 1500 M. depth to surface.
204	" 20	4° 20' S.	122° 58'	From 75—94	Sand with dead shells.	Dredge and tow-net.	Between islands of Wowoni and Buton; Northern entrance of Buton-strait.
205	" 20	—	—	22	Sandy mud.	Dredge and tow-net.	Lohio-bay, Buton-strait.
206	" 21	4° 58' S.	122° 42'	51	Fine, green mud.	Trawl.	Buton-strait. Trawl was overset and came up torn to pieces.
207	" 21	5° 7'.5 S.	122° 39'	148	Grey mud.	Trawl.	Buton-strait. Net torn.
208	" 22	5° 39' S.	122° 12'	1886	Solid green mud.	Deep sea trawl.	—
209	" 23	—	—	22	Coarse sand.	Dredge. Reef-exploration.	Anchorage off the south point of Kabaëna-island.
210	" 24	5° 28' S.	121° 23'.5	2218	Grey mud, upper layer more liquid and brown.	—	—
210a	" 24	5° 26' S.	121° 18'	1944 (chart)	Same as at preceding station; pumice-stone.	Deep sea trawl.	—
211	" 25	5° 40'.7 S.	120° 45'.5	1158	Coarse grey mud, superficial layer more liquid and brown.	Deep sea trawl.	—
212	" 26	5° 54'.5 S.	120° 19'.2	462	Fine grey and green mud.	Deep sea trawl.	—
213	" 26—Octob. 26	—	—	up to 36	Coral reefs, mud and mud with sand.	Trawl, tow-net, reef-exploration.	Saleyer-anchorage and Surroundings, including Pulu Pasi Tanette, near the North point of Saleyer-island.
214	" 27	6° 30' S.	121° 55'	2796	Grey and green mud superficial layer more liquid and brown.	Deep sea trawl.	Cable kinked, net fouled.
215	" 28/29	—	—	701	Stone.	Reef-exploration.	Sounding due West, 1300 M. distant from the North point of Kabia-island reef.
215a	" 29	—	—	500	Stone.	Manaco-trap.	West 1000 M. distant from North point of Kabia-island reef.
216	" 30	6° 49' S.	122° 43'	2190	Solid grey and green mud, superficial layer more liquid and brown.	Fowler closing net.	From 975—415 M. depth.
217	" 31	6° 40'.6 S.	123° 14'.7	2477	Same as at station 216.	Deep sea trawl.	—
218	Nov. 1	6° 24'.2 S.	123° 39'.1	3912	Solid bluish grey mud, 25 mM. thick, upper layer more liquid and brown.	Tow-net. Horizontal cylinder.	—
219	" 1	6° 2' S.	123° 57'.7	1573	Grey mud.	Horizontal cylinder.	About 5 miles Southwest of Binongka-island.
219a	" 1	—	—	323	Coral sand.	—	About 1000 M. Southwest of Popalihha, Binongka-island.
219b	" 1	—	—	292	Coral sand.	—	About 500 M. Southwest of Popalihha.
219c	" 1	—	—	307	Coral sand.	—	600 M. Southwest of Popalihha.

No.	DATE.	POSITION.		DEPTH IN M.	BOTTOM.	OPERATION.	REMARKS.
		LATITUDE.	LONGITUDE EAST.				
220	Nov. 1/3	—	—	278	Coral sand.	Townet. Reef-exploration. Dredge. Hensen vertical net.	Anchorage off Pasir Pandjang, west coast of Binongka. In 55 M. depth, close to the reef. By day from 200 M. depth; at night about 10 M. with electric light in net.
221	" 4	6° 24' S.	124° 39'	2798	Solid bluish grey mud with foraminiferae, covered by a 5 cM. thick layer of brown mud, uppermost layer of foraminiferae.	Deep sea trawl. Horizontal cylinder, towed during 4 hours.	Depth was presumed to have increased till 3112 M. during this haul.
222	" 5	6° 10' S.	125° 35'.5	3215	Same as at Station 221, without superficial layer of foraminiferae.	Townet. Horizontal cylinder, towed 50 miles.	—
223	" 6	5° 44'.7 S.	126° 27'.3	4391	A 14 cM. thick layer of brown and black mud, underneath gradually changing into bluish grey mud, the whole bottom specimen being 28 cM. high.	Deep sea trawl.	The fore trawl beam not being provided with openings, was totally crushed by the water pressure.
224	" 7	5° 34' S.	127° 4'	2952	Bluish grey mud with an upper layer of brown mud.	Horizontal cylinder.	—
225	" 8	5700 M. N. 279° E. from Southpoint of South-Lucipara-island.		894	Coral and shells.	Horizontal cylinder.	Towed for 4 hours.
225a	" 8	2100 M. N. 255° E. from same.		510	Small stones and shells.	—	—
225b	" 8	2100 M. N. 195° E. from same.		421	Coral and stone.	—	—
225c	" 8/10	2700 M. N. 185° E. from same.		646	Stone.	Townet and reef-exploration.	Anchorage south of Lucipara-group. (Stop-anchor with 1000 M. of cable).
225d	" 8	6900 M. N. 209° E. from same.		828	Stone.	—	—
225e	" 8	6000 M. N. 258° E. from same.		1047	Coral sand.	—	—
225f	" 11	11900 M. N 277° E. from same.		1702	A mixture of coral sand, mud and a solid calcareous sediment.	—	—
225g	" 11	16300 M. N. 280° E. from same.		1811	Hard.	—	—
225h	" 11	6900 M. N. 175° E. from same.		1092	Coral sand.	—	—
226	" 11 and 12	5° 26'.7 S.	127° 36'.5	1595	Hard. Obtained none but some small stones in dredge.	Dredge. Horizontal cylinder.	Mid channel between the Lucipara- and Schildpad-islands.
227	" 13	4° 50'.5 S.	127° 59'	2081	Grey mud with an upper layer of brown mud, both mixed with sand.	Deep sea trawl.	—

No.	DATE.	POSITION.		DEPTH IN M.	BOTTOM.	OPERATION.	REMARKS.
		LATITUDE.	LONGITUDE EAST.				
228	Nov. 14	4° 32'.5 S.	128° 30'.5	2527	Same as at Station 227, but without sand.	Horizontal cylinder.	—
229	" 14	4° 23' S.	128° 45'.5	1980	Brown and grey mud with much sand.	Townet.	—
230	" 14	3° 58' S.	128° 20'	—	—	Hensen vertical net. Horizontal cylinder.	From a depth of 2000 M. to surface.
231	" 14/18	—	—	40	Coralsand.	Reef-exploration.	Ambon-anchorage.
232	" 19	—	—	634	Coral sand and shells.	—	Mid channel in Ambon-bay-entrance.
233	" 19	3° 56' S.	128° 25'.5	4489	Fine bluish green mud, apparently of a uniform composition.	—	—
234	" 19/20	—	—	46	Stony.	Reef-exploration.	Nalahia-bay, Nusa-Laut-island.
235	" 21	3° 42' S.	129° 2'.9	1910	Grey mud, upper layer 5 cM. thick, coffee brown	—	Although weights did not slip, sounder contained a 18 cM. high bottom specimen
236	" 21	3° 45'.2 S.	129° 20'.2	3685	Fine, dark grey and green mud.	—	—
237	" 21	4° 2' S.	129° 20'.3	4507	Traces of dark grey mud.	—	—
238	" 22	4° 19'.5 S.	129° 20'.8	4428	Upper layer of mud liquid, dark greenish grey. Second layer: brown, 9 cM. thick, third layer: very fine bluish green.	—	Although weights did not slip, sounder contained a bottom-specimen of 36 cM. height.
239	" 22	4° 12' S.	129° 20',4	4446	Same as at station 238.	—	—
240	" 22 till Dec. 1	—	—	From 9 —45	Black sand. Coral. Lithothamnion bank in 18—36 M.	Trawl, dredge and reef-exploration.	Banda-anchorage.
241	Dec. 1	4° 24'.3 S.	129° 49'.3	1570	Dark sand with small stones.	Blake dredge.	—
242	" 2	4° 30' S.	129° 20'	4237	Upper layer: liquid, bluish green mud; second layer: brown mud, 4 cM. thick; third layer: brown- ish grey clotty clay.	—	—
243	" 2	4° 30'.2 S.	129° 25'	—	—	Hensen vertical net.	From a depth of 1000 M. to surface
244	" 3	4° 25'.7 S.	130° 3'.7	2991	Fine bluish green mud, with more solid particles.	—	—
245	" 3	4° 16'.5 S.	130° 15'.8	4956	Traces of bluish green mud.	Townet.	—
246	" 4	4° 38' S.	130° 42'	5684	Solid fine greyish green mud with a rather brown upper layer.	Horizontal cylinder.	Having been towed over a distance of 33 miles with a speed of 3 knots.
247	" 4	4° 41'.6 S.	131° 19'	4239	Fine bluish grey mud of uniform composition; upper layer of liquid brown mud.	—	—
248	" 4/5	—	—	Till 54	—	Dredge, townet and reef-exploration.	Anchorage off Rumah Lusi, North- point of Tiur-island.

No.	DATE.	POSITION.		DEPTH IN M.	BOTTOM.	OPERATION.	REMARKS.
		LATITUDE.	LONGITUDE EAST.				
249	Dec. 6	4° 56'.1 S.	131° 58'.4	192	Hard. Only traces of coral sand on sounder.	Blake dredge.	Depth being considerably increased during haul, dredge did not reach bottom with 520 M. of cable.
250	" 6/7	—	—	20—45	Coral and Lithothamnion.	Dredge and reef-exploration.	Anchorage off Kilsuin, West-coast of Kur-island.
251	" 8	5° 28'.4 S.	132° 0'.2	204	Hard coral sand.	Trawl.	Trawl brought up pieces of grey clay and manganese nodules, the interior of which consisted of dry clay.
251a	" 8	5° 28'.5 S.	132° 0'.5	238	Traces of hard coral sand.	Blake dredge.	Catch combined with preceding.
252	" 8/9	—	—	9—36	—	Dredge, tow-net and reef-exploration.	Dredge brought up dead shells, etc. West side of Taam-island.
253	" 10	5° 48'.2 S.	132° 13'	304	Grey clay, hard and crumbly.	Trawl.	—
254	" 10	5° 40' S.	132° 26'	310	Fine, grey mud.	Trawl.	—
255	" 11	—	—	22	Coral.	Dredge.	Anchorage off Er-island, Kei-islands.
256	" 11	5° 26'.6 S.	132° 32'.5	397	Greyish green mud.	Trawl.	—
257	" 11	—	—	Till 52	Coral.	Blake dredge.	In Du-roa-strait Kei-islands.
258	" 12/16	—	—	22	Lithothamnion; sand and coral.	Reef-exploration. Dredge.	Tual-anchorage, Kei-islands.
259	" 16	5° 29'.2 S.	132° 52'.5	487	Coral sand and dead coral.	Trawl with dredge.	Dredge-iron bent; trawl-net torn.
260	" 16 and 18	5° 36'.5 S.	132° 55'.2	90	Sand, coral and shells.	Blake dredge.	2,3 miles N. 63° W. from the North point of Nuhu Jaan, Kei-islands.
261	" 16/18	—	—	27	Mud.	Dredge, Reef-exploration.	Elat, West coast of Great-Kei-island.
262	" 18	5° 53'.8 S.	132° 48'.8	560	Solid bluish grey mud upper layer more liquid and brown mud.	Trawl.	—
263	" 18/19	—	—	27	Sand and coral.	—	Anchorage off Feer, West coast of Great Kei-island.
264	" 19	6° 8'.3 S.	132° 57'.8	2655	Fine, bluish green mud.	—	—
265	" 19	6° 3'.8 S.	132° 52'.8	3026	Fine, bluish green mud.	—	5 miles N. 130° E. from the South point of Great Kei-island.
266	" 19	5° 56'.5 S.	132° 47'.7	595	Grey mud with coral and stones.	Deep sea trawl.	Net came up torn to pieces.
267	" 20	5° 54' S.	132° 56'.7	984	Grey mud with a brown upper layer.	Trawl.	Net came up torn to pieces.
268	" 20	5° 53' S.	132° 56'.3	630	Yellowish grey mud with sand.	—	—
269	" 20	5° 49'.2 S.	133° 21'.7	2731	Bluish green mud, partially hard, 1 cM. thick, upper layer yellowish brown mud.	—	—
270	" 20	5° 47' S.	133° 39'	3565	Fine bluish green mud.	—	—
271	" 21	5° 46'.7 S.	134° 0'	1788	Bluish green mud of a uniform appearance.	Deep sea trawl. Horizontal cylinder.	In a depth of 1600 M. decreasing to 1520. Cylinder had been towed for 3 hours with a speed of 7 knots.

No.	DATE.	POSITION.		DEPTH IN M.	BOTTOM.	OPERATION.	REMARKS.
		LATITUDE.	LONGITUDE EAST.				
272	Dec. 21/23	—	—	31	—	Reef-exploration.	Dobo, Aru-islands.
273	" 23/26	—	—	13	Sand and shells.	Trawl, dredge and divers.	Anchorage off Pulu Jeden, East coast of Aru-islands. (Pearl-banks).
274	" 26 1900.	5° 28'.2 S.	134° 53'.9	57	Sand and shells. Stones.	Blake dredge.	—
275	January 8	4° 52'.5 S.	128° 37'	4914	Bluish grey mud with a brown upper layer.	—	—
276	" 9	6° 47'.5 S.	128° 40'.5	—	—	Hensen vertical net.	From a depth of 750 M.
277	" 9/11	—	—	45	Sand, white and black mixed.	Trawl, dredge, reef-exploration.	Kulewatti-(Sollot)-bay, Dammer-island.
278	" 11	7° 24'.9 S.	128° 2'.3	3518	Hard. Nothing obtained.	—	—
279	" 11/13	—	—	36	Mud and sand.	Dredge and reef-exploration.	Rumah-Kuda-bay, Roma-island.
280	" 15	8° 17'.4 S.	127° 30'.7	1224	Dredge brought up glossy, black manganese nodules.	Dredge.	—
281	" 15	8° 20'.6 S.	127° 25'.9	890	Only traces obtained; presumed to be the same as at station 280.	—	—
282	" 15/17	8° 25'.2 S.	127° 18'.4	27—54	Sand, coral and Lithothamnion.	Trawl, dredge and reef-exploration.	Anchorage between Nusa Besi and the N.E.-point of Timor.
283	" 18	8° 37'.3 S.	127° 18'.6	487	Hard. Not obtained.	—	—
284	" 18	8° 43'.1 S.	127° 16'.7	828	Grey mud.	Deep sea trawl.	Net torn.
285	" 18	8° 39'.1 S.	127° 4'.4	34	On the limit between mud and coral. Lithothamnion.	Dredge.	Anchorage South coast of Timor.
286	" 19	8° 50'.2 S.	127° 2'.2	883	Mud, evidently a thin layer.	Deep sea trawl.	—
287	" 19	8° 55'.2 S.	126° 35'.5	216	Fine, grey mud.	—	—
288	" 20	9° 0'.5 S.	126° 31'.2	869	Hard; not obtained.	—	—
288a	" 20	9° 0'.1 S.	126° 25'.6	100	Fine, grey mud.	—	—
289	" 20	9° 0'.3 S.	126° 24'.5	112	Mud, sand and shells.	Trawl.	—
290	" 20	9° 12'.3 S.	125° 56'.3	816	Not obtained.	—	—
291	" 20	9° 10'.3 S.	125° 55'.1	421	Very fine, grey mud.	Trawl.	Trawl did not reach te bottom.
292	" 21	9° 11'.7 S.	125° 47'.3	709	Very fine river-mud.	Trawl.	Net came up torn to pieces.
293	" 21/22	9° 29'.7 S.	125° 4',2	13	Mud with fine sand.	Tow net.	Anchorage South coast of Timor
294	" 23	10° 12'.2 S.	124° 27'.3	73	Soft mud with very fine sand.	Trawl.	—
295	" 24	10° 35'.6 S.	124° 11'.7	2050	Fine grey mud 3 cM. thick, upper layer more liquid, brown with black stripes.	Deep sea trawl.	—
296	" 24/26	10° 14' S.	124° 5'.5	8—36	Sandy mud.	Reef-exploration. Dredge and trawl.	Anchorage off Noimini, South coast of Timor.
297	" 27	10° 39' S.	123° 40'	520	Soft, grey mud with brown upper layer.	Deep sea trawl.	Trawl brought up a big piece of a trunk.
298	" 27	10° 50'.5 S.	123° 16'	230	Hard. Nothing obtained.	Blake dredge.	Dredge did not reach te bottom.

No.	DATE.	POSITION.		DEPTH IN M.	BOTTOM.	OPERATION.	REMARKS.
		LATITUDE.	LONGITUDE EAST.				
299	Jan. 27/29	10° 52'.4 S.	123° 1'.1	34	Mud, coral and Lithothamnion.	Dredge, reef-exploration, diving.	Bocka- or Cyrus-bay, South-coast of Rotti-island. Dived to a depth of 34 M.
300	" 30	10° 48'.6 S.	123° 23'.1	918	Fine grey mud.	Deep sea trawl.	Trawl brought up some stones and numerous plant-remains.
301	" 30— February 1	10° 38' S.	123° 25'.2	22	Mud, coral and Lithothamnion.	Dredge.	Pepela-bay, East coast of Rotti-island.
302	" 2	10° 27'.9 S.	123° 28'.7	216	Sand and coral sand.	Trawl.	Dredged in 27—45 M. —
303	" 2/5	—	—	up to 36	Lithothamnion.	Dredge.	Haingsisi, Samau-island.
304	" 6/8	—	—	16	Coral and sand.	Reef-exploration.	Lamararap, Lomblen-island. Lamakera, Solor-island. Cylinder towed over a distance of 36 miles.
305	" 8	—	—	113	Stony.	Horizontal cylinder.	Blake dredge.
306	" 8	8° 27' S.	122° 54'.5	247	Sandy mud.	Trawl.	Mid-channel in Solor-strait off Kampong Menanga. Dredge-iron broken.
307	" 9/11	—	—	27	Volcanic Sand.	Land-exploration.	After this haul anchored for some hours in 29 M. Lithothamnion-bottom near Mount Lobetobi. Ipih-bay, south coast of Flores.
308	" 10	9° 3' S.	121° 44'	2596	Not obtained.	—	Wire kinked, lost sounder and thermometer.
309	" 10	8° 58' S.	121° 41'	1918	Volcanic sand and ashes.	—	4½ miles South of Gunong Api.
309a	" 10	8° 54' S.	121° 43'	1150	—	—	2½ miles from the shore, Gunong Api bearing W.N.W.
310	" 12	8° 30' S.	119° 7'.5	73	Sand with few pieces of dead coral.	Dredge.	—
311	" 12/13	—	—	up to 36	Mud and sand.	Reef-exploration.	Sapeh-bay, East coast of Sumbawa.
312	" 14	8° 19' S.	117° 41'	274	Fine, sandy mud.	Dredge.	Trawl.
313	" 14/16	—	—	up to 36	Sand, coral and mud.	Dredge, trawl and reef-exploration.	Saleh-bay, North coast of Sumbawa. Anchorage East of Dangar Besar, Saleh-bay.
314	" 17	7° 36' S.	117° 30'.8	694	Fine, sandy mud.	Trawl.	—
315	" 17/18	—	—	up to 36	Coral and Lithothamnion.	Dredge.	Anchorage East of Sailus Besar, Paternoster-islands.
316	" 19	7° 19'.4 S.	116° 49'.5	538	Fine, dark brown sandy mud.	Trawl.	—
317	" 19/21	—	—	10	Mud and sand.	Land-exploration.	Ketapang-bay, West coast of Kan geang-island.
318	" 22	6° 36'.5 S.	114° 55'.5	88	Fine, yellowish grey mud.	Trawl.	—
319	" 22	6° 16'.5 S.	114° 37'	82	Fine, yellowish grey mud.	Trawl.	Trawl reached bottom upside down and came up torn to pieces.
320	" 23	6° 5' S.	114° 7'	82	Fine, grey mud.	Trawl.	—
321	" 23	6° 5'.5 S.	113° 30'	82	Fine, grey mud.	Trawl.	—
322	" 24	—	—	32	Coral.	Dredge.	1½ mile south of Tandjong Lajar, South coast of Bawean-island.
323	" 24/25	—	—	12	Mud.	—	Sangkapoera-roads, Bawean-island.