

United Nations Convention on the Law of the Sea



Commission on the Limits of the Continental Shelf

SUMMARY OF RECOMMENDATIONS OF THE COMMISSION ON THE LIMITS OF THE CONTINENTAL SHELF IN REGARD TO THE PARTIAL SUBMISSION MADE BY THE KINGDOM OF TONGA IN RESPECT OF THE EASTERN PART OF THE KERMADEC RIDGE ON 11 MAY 2009¹

Recommendations prepared by the Subcommittee established for the consideration
of the Partial Submission made by Tonga

Approved by the Subcommittee on 21 November 2018

Approved by the Commission, with amendments, on 2 August 2019

¹ The aim of this Summary is to provide information which is not of confidential or proprietary nature in order to facilitate the function of the Secretary-General in accordance with paragraph 11(3) of annex III to the rules of procedure. This Summary is based on excerpts of the Recommendations and may refer to material not necessarily included either in the full Recommendations or this Summary.

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GLOSSARY OF TERMS

60 M formula line	The line delineated by reference to fixed points determined at a distance of 60 nautical miles from the foot of the continental slope
60 M formula point	Fixed point determined at a distance of 60 nautical miles from the foot of the continental slope
200 M line	The line at a distance of 200 nautical miles from the baselines from which the breadth of the territorial sea is measured
2,500 m isobath	A line connecting the depth of 2,500 metres
Article 76	Article 76 of the Convention
Baselines	The baselines from which the breadth of the territorial sea is measured
BOS	The base of the continental slope
Commission	The Commission on the Limits of the Continental Shelf
Convention	The United Nations Convention on the Law of the Sea of 10 December 1982
Depth constraint	The constraint line determined at a distance of 100 M from the 2,500 m isobath
Distance constraint	The constraint line determined at a distance of 350 M from the baselines
DOALOS	Division for Ocean Affairs and the Law of the Sea, Office of Legal Affairs, United Nations
FOS	Foot of the continental slope
Guidelines	The Scientific and Technical Guidelines of the Commission (CLCS/11 and CLCS/11/Add.1)
M	Nautical mile
Rules of procedure	The rules of procedure of the Commission (CLCS/40/Rev.1)
Secretary-General	The Secretary-General of the United Nations
Sediment thickness formula line	The line delineated by reference to the outermost fixed points at each of which the thickness of sedimentary rocks is at least 1 per cent of the shortest distance from such point to the foot of the continental slope
Sediment thickness formula point	Fixed point at which the thickness of sedimentary rocks is at least 1 per cent of the shortest distance from that point to the foot of the continental slope

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I. INTRODUCTION

- 1 On 11 May 2009, the Kingdom of Tonga submitted to the Commission, through the Secretary-General¹, information on the limits of the continental shelf beyond 200 M from the baselines in respect of the eastern part of the Kermadec Ridge, in accordance with paragraph 8 of article 76 (the "Submission").
- 2 The Convention entered into force for Tonga on 1 September 1995.
- 3 The Submission was made in respect of the eastern part of the Kermadec Ridge. According to the submitting State, this is a partial submission.
- 4 On 14 May 2009, the Secretary-General issued Continental Shelf Notification CLCS.46.2009.LOS² giving due publicity to the Executive Summary of the Submission in accordance with rule 50 of the rules of procedure. Pursuant to rule 51 of the rules of procedure, the consideration of the Submission was included in the agenda of the twenty-fifth session of the Commission, held from 15 March to 23 April 2010.
- 5 Pursuant to section 2 of annex III to the rules of procedure, a presentation of the Submission was made to the plenary of the twenty-fifth session of the Commission on 6 April 2010, by Siosaia Ma'Ulupekotofa Tuita, Minister for Lands, Survey and National Resources, Head of Delegation, Kelepi Mafi, Principal Geologist and 'Aminiasi Kefu, Solicitor-General. The Delegation of Tonga (the "Delegation") also included Sonatane T. Taumoepeau-Tupou, Permanent Representative of Tonga to the United Nations, and a number of advisers. In addition to elaborating on substantive points of the Submission, Mr. Tuita pointed out that the Submission was a partial submission in respect of the eastern part of the Kermadec Ridge and that it was without prejudice to a second submission in respect of any potential continental shelf spaces extending beyond 200 M in the western part of the Lau Ridge, which would be made at a later stage.³ Mr. Tuita indicated that Mr. Carrera, member of the Commission,⁴ had assisted Tonga by providing scientific and technical advice with respect to the Partial Submission. Mr. Tuita further stated that there were no boundary disputes or controversies in any portion of the outer limits of the continental shelf beyond 200 M. With respect to note verbale No. 06/09/09 dated 29 June 2009 from New Zealand, Mr. Tuita noted that it had raised no objection to the Commission considering and making recommendations on the Submission on the basis of article 76, paragraph 10.
- 6 The Commission received and took note of the contents of note verbale No. 06/09/09 dated 29 June 2009 from New Zealand, which was transmitted to the Commission in regard to the Submission, and of the views expressed by the Delegation in connection with this communication. In this note verbale, New Zealand informed the Secretary-General that it did not object to the consideration of the Submission and the issuing of recommendations by the Commission on the basis that, consistent with the provisions of article 76, paragraph 10, this was without prejudice to any

¹ On whose behalf the Submission was received by DOALOS.

² See Continental Shelf Notification CLCS.46.2009.LOS at http://www.un.org/depts/los/clcs_new/submissions_files/submission_ton_46_2009.htm

³ See Partial Submission made by Tonga in respect of the western part of the Lau-Colville Ridge on 23 April 2014 at http://www.un.org/depts/los/clcs_new/submissions_files/submission_ton_73_2014.htm

⁴ Galo Carrera was a member of the Commission from 1997-2017.

questions relating to the delimitation of a boundary between New Zealand and Tonga.⁵

- 7 The Commission addressed the modalities for the consideration of the Submission and decided that, as provided for in article 5 of annex II to the Convention and in rule 42 of the rules of procedure, the Submission would be addressed by a subcommission to be established in accordance with rule 51, paragraph 4 *ter*, of the rules of procedure, at a future session. The Commission decided to revert to the consideration of the Submission at the plenary level when it was next in line for consideration as queued in the order in which it was received.
- 8 The Subcommission for the consideration of the Submission made by Tonga in respect of the eastern part of the Kermadec Ridge was established on 9 February 2018 during the plenary of the forty-sixth session of the Commission. The following members of the Commission were elected as members of the Subcommission: Aldino Campos, Wenzheng Lyu,⁶ Estevão Stefane Mahanjane, Jair Alberto Ribas Marques, Marcin Mazurowski, Simon Njuguna and Carlos Marcelo Paterlini. The Subcommission elected Mr. Campos as its Chairperson, and Messrs. Marques and Mazurowski as its Vice-Chairpersons.
- 9 The Subcommission examined the Submission during the forty-sixth, forty-seventh, and forty-eighth sessions. During these sessions, the Subcommission held six meetings with the Delegation, posed questions in writing and presented preliminary considerations involving documents and presentations. During the course of the examination of the Submission by the Subcommission, the Delegation provided responses to the questions posed both in writing and as presentations, and provided additional material.
- 10 The Subcommission conducted its interactions with the Delegation according to the rules of procedure and practice of the Commission outlined in a presentation delivered to the Delegation at the first meeting held with the Subcommission.
- 11 Following its establishment, the Subcommission met from 26 February to 2 March 2018 to commence its consideration of the Submission and to conduct a preliminary analysis of the Submission pursuant to paragraph 5(1) of annex III to the rules of procedure. During the second week of work, from 12 to 16 March 2018, the Subcommission commenced the main scientific and technical examination of the Submission pursuant to paragraph 9 of annex III to the rules of procedure.
- 12 During the forty-seventh session, Fiji informed the Secretary-General in note verbale No. 438/2018 dated 9 July 2018 that the area of extended continental shelf contained in the Submission made by Tonga in respect of the eastern part of the Kermadec Ridge overlapped in part with the area contained in the revised executive summary submitted by Fiji on 30 April 2012, which amended the executive summary originally submitted on 21 April 2009. Having taken into account the statement made by Tonga in the executive summary of its Submission that the Submission had been made without prejudice to any questions relating to the delimitation of a boundary between Fiji and Tonga, consistent with the provisions of article 76, paragraph 10, Fiji indicated that it had no objection to the Commission considering and making recommendations with respect to the Submission of Tonga.

⁵ A subsequent note verbale dated 9 July 2018 from Fiji was received by the Commission after the establishment of a subcommission (see paragraph 12).

⁶ On 25 July 2018, during the forty-seventh session of the Commission, Mr. Lyu resigned as a member of the Commission, effective immediately.

- 13 On 18 October 2018, during the forty-eighth session of the Commission, the Subcommission provided a comprehensive presentation of its views and general conclusions arising from the examination of all of the Submission in accordance with paragraph 10(3) of annex III to the rules of procedure. On 22 October 2018, the Delegation confirmed in writing that, in light of the fact that agreement between the Delegation and the Subcommission had been reached, the Delegation would not avail itself of the opportunity to respond to the 10(3) presentation of the Subcommission, pursuant to paragraph 10(4) of annex III to the rules of procedure.
- 14 The Subcommission approved its Recommendations on 21 November 2018, and submitted them to the Commission on the same day for consideration and approval.
- 15 The Subcommission made a presentation to the Commission on the substance and rationale for its Recommendations on 5 March 2019, during the plenary of the forty-ninth session of the Commission. The Delegation subsequently made a presentation to the Commission on the same day in accordance with paragraph 15(1 bis) of annex III to the rules of procedure.
- 16 The Commission prepared these Recommendations, which were approved with amendments on 2 August 2019, taking into consideration article 76 and annex II to the Convention and the procedures and the methodology outlined in the rules of procedure and the Guidelines.
- 17 The Recommendations of the Commission are based on the scientific and technical data and other material provided by Tonga in relation to the implementation of article 76. The Commission makes these Recommendations to Tonga in fulfilment of its mandate as contained in article 76 and in articles 3 and 5 of annex II to the Convention.
- 18 The Recommendations of the Commission only deal with issues related to article 76 and annex II to the Convention and shall not prejudice matters relating to delimitation of boundaries between States with opposite or adjacent coasts, or prejudice the position of States which are parties to a land or maritime dispute, or the application of other parts of the Convention or any other treaties.
- 19 Pursuant to article 76, paragraph 8, the limits of the shelf established by the submitting coastal State on the basis of these Recommendations shall be final and binding.
- 20 Throughout the examination of the Submission, the Subcommission requested and received support from the Division for Ocean Affairs and the Law of the Sea, Office of Legal Affairs.

II. CONTENTS OF THE SUBMISSION

A. Original Submission

- 21 The original Submission received on 11 May 2009 contained three parts: an Executive Summary; a Main Body which is the analytical and descriptive part; and Scientific and Technical Data.

B. Communications and additional material

- 22 In the course of the examination of the Submission by the Subcommission, the Delegation submitted additional material, including responses to questions, to requests for clarifications and to written preliminary considerations of the Subcommission.

III. EXAMINATION OF THE SUBMISSION BY THE SUBCOMMISSION

A. Examination of the format and completeness of the Submission

- 23 Pursuant to paragraph 3 of annex III to the rules of procedure, the Subcommission verified the format and completeness of the Submission.

B. Preliminary analysis of the Submission

- 24 Pursuant to paragraph 5 of annex III to the rules of procedure, the Subcommission undertook a preliminary analysis of the Submission, in accordance with article 76 and the Guidelines and determined that:
- (i) The outer edge of the continental margin, established from the FOS by applying the provisions of paragraph 4 of article 76 of the Convention, extends beyond the 200 M line of Tonga. On this basis, the Subcommission recognized the entitlement of Tonga to delineate the outer limits of its continental shelf beyond its 200 M line in this region (i.e. the test of appurtenance was satisfied by Tonga in the eastern part of the Kermadec Ridge);
 - (ii) The proposed outer limits of the continental shelf of Tonga beyond 200 M in the eastern part of the Kermadec Ridge (**Figure 1**) are based on the application of the 60 M formula line located landward of the applicable distance constraint;
 - (iii) The construction of the outer limits contains straight lines not exceeding 60 M in length;
 - (iv) The cooperation of relevant international organizations, in accordance with rule 56 of the rules of procedure, or the advice of a specialist in accordance with rule 57 and/or of any other member of the Commission would not be sought; and
 - (v) Additional time would be required to review all the data and to prepare its Recommendations during future sessions of the Commission.

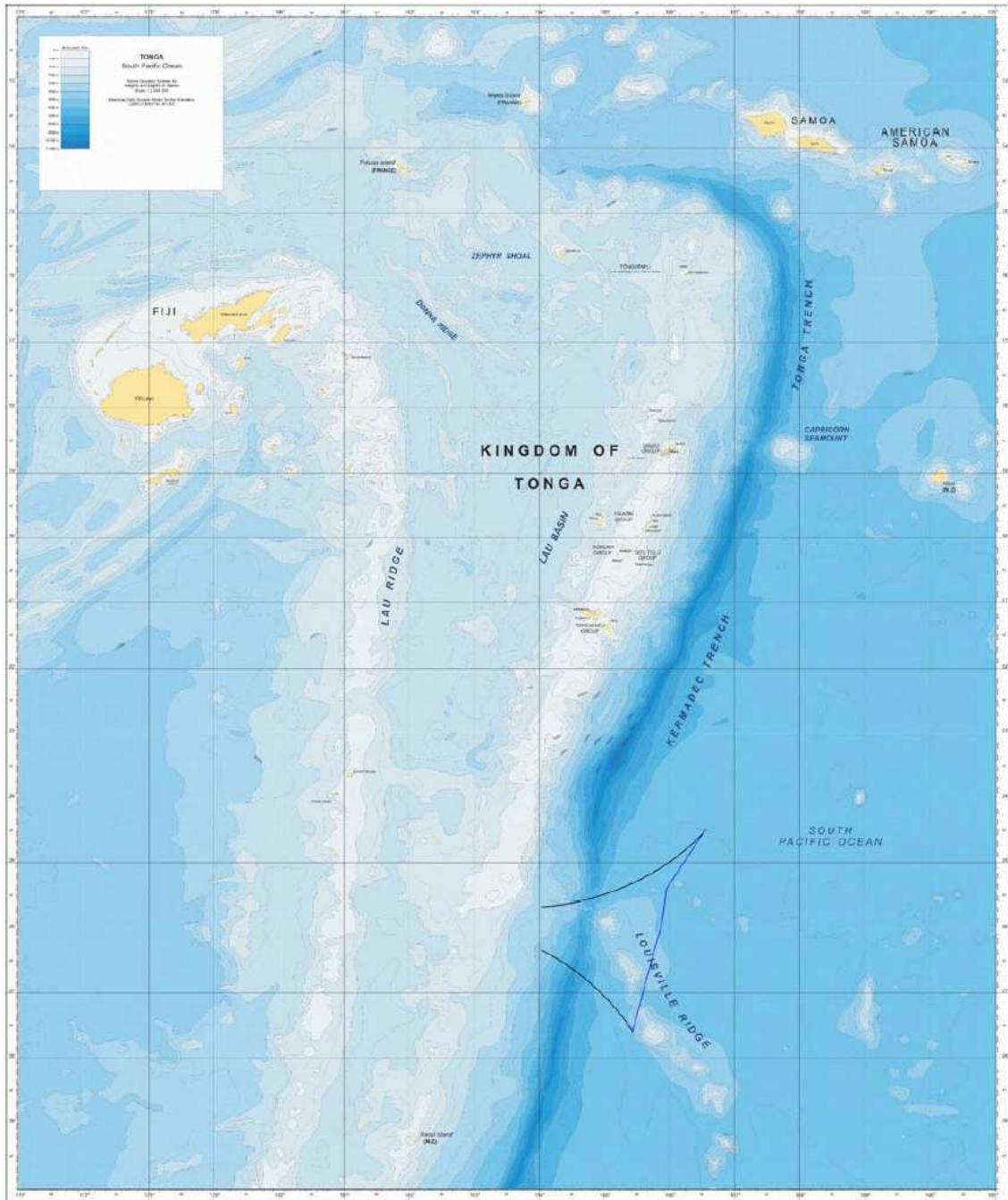


Figure 1. Map of the configuration of the outer limits of the continental shelf (blue line) as proposed in the Submission of Tonga made on 11 May 2009 in respect of the eastern part of the Kermadec Ridge (Figure 3, Executive Summary); 200 M lines of Tonga and New Zealand (black lines).

C. Main scientific and technical examination of the Submission

- 25 Pursuant to paragraph 9 of annex III to the rules of procedure, the Subcommission conducted an examination of the Submission in accordance with article 76 and the Guidelines and evaluated the following, as applicable:
- (i) The data and methodology employed by the coastal State to determine the location of the foot of the continental slope;
 - (ii) The methodology used to determine the formula line at a distance of 60 M from the foot of the continental slope;
 - (iii) The data and methodology used to determine the formula line delineated by reference to the outermost fixed points at each of which the thickness of sedimentary rocks is at least 1 per cent of the shortest distance from such point to the foot of the continental slope, or not less than 1 kilometre in the cases in which the Statement of Understanding applies;
 - (iv) The data and methodology employed in the determination of the 2,500 metre isobath;
 - (v) The methodology used to determine the constraint line at a distance of 100 M from the 2,500 metre isobath;
 - (vi) The data and methodology used to determine the constraint line at a distance of 350 M from the baselines;
 - (vii) The construction of the formulae line as the outer envelope of the two formulae;
 - (viii) The construction of the constraint line as the outer envelope of the two constraints;
 - (ix) The construction of the inner envelope of the formulae and constraint lines;
 - (x) The delineation of the outer limit of the continental shelf by means of straight lines not longer than 60 M with a view to ensuring that only the portion of the seabed that satisfies all the provisions of article 76 of the Convention and the Statement of Understanding is enclosed;
 - (xi) The estimates of the uncertainties in the methods applied, with a view to identifying the main source(s) of such uncertainties and their effect on the Submission; and
 - (xii) Whether the data submitted are sufficient in terms of quantity and quality to justify the proposed limits.
- 26 In conducting its examination of the Submission, the Subcommission:
- (i) Proceeded with a detailed examination of the data and information supporting every FOS point selected for the establishment of the outer edge of the continental margin;
 - (ii) Sought clarifications and additional data and information from the Delegation, where necessary, through exchanges with the Delegation;
 - (iii) Presented preliminary views and conclusions to the Delegation;
 - (iv) Made a comprehensive presentation of its views and general conclusions to the Delegation at an advanced stage of the examination of the Submission, as provided for in paragraph 10(3) of annex III to the rules of procedure.

IV. RECOMMENDATIONS OF THE COMMISSION WITH RESPECT TO THE EASTERN PART OF THE KERMADEC RIDGE

1. Geographical and geological description of the region

- 27 The Submission of Tonga made on 11 May 2009 concerns the continental margin of Tonga in the eastern part of the Kermadec Ridge.
- 28 The main physiographic features in the region are the Tonga and Kermadec Trenches, the Tonga and Kermadec Ridges and volcanic arc systems, the Lau Basin, the Lau and Colville Ridges, and the Louisville Ridge (**Figure 2**).
- 29 According to the Submission, the Tonga-Kermadec Trench is an oceanic trench located in the south-west Pacific Ocean. It is the deepest trench of the southern hemisphere and the second deepest on Earth. The Main Body notes that the estimated convergence rate is approximately 15 cm/yr, adding that recent GPS measurements indicate an instantaneous convergence of 24 cm/yr across the northern Tonga Trench, which is the fastest plate velocity yet recorded on the planet. At the Tonga-Kermadec Trench, the Pacific Plate is being subducted westward beneath the Indo-Australian Plate.

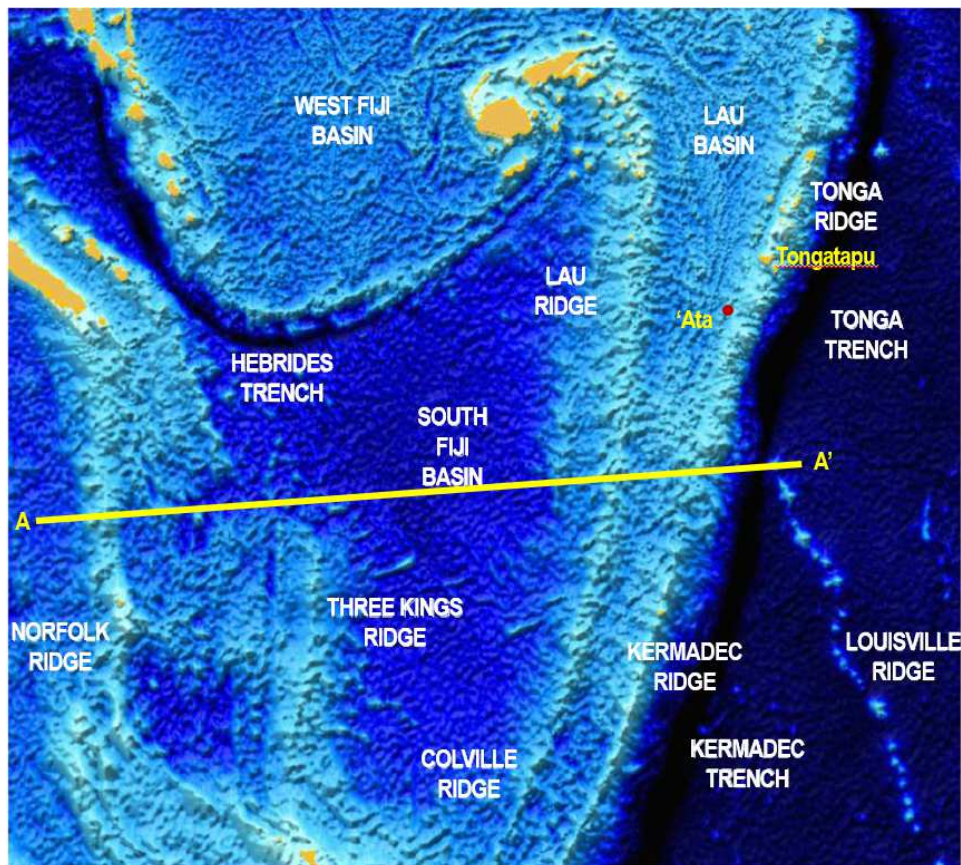


Figure 2. Map depicting the main physiographic features in the region of the Submission made by Tonga in respect of the eastern part of the Kermadec Ridge (after Figure 3.2, Main Body); islands of Tongatapu and 'Ata are highlighted with yellow labels; the yellow line (A-A') shows the approximate location of the schematic cross-section shown in **Figure 3**.

- 30 As described in the Main Body of the Submission, the zone where the Louisville Ridge is being subducted beneath the Tonga-Kermadec Ridge is the boundary between the northern Tonga and southern Kermadec segments of the ridge/arc/trench system.
- 31 The Tonga Ridge is described in the Main Body as an approximately 1000 km long and 70 km wide morphological feature with numerous small islands, some of which are the surface expression of a large volume of sedimentary material in an elongate forearc basin (Lau Basin) while others are part of the Tofua Volcanic Arc system, which is part of the Tonga-Kermadec ridge and arc system, forming a north-south chain of active and extinct volcanoes including 'Ata Island (**Figure 2**). The water depths along the ridge are variable, generally less than 200 m in the area north of Tongatapu Island (**Figure 2**), while maximum depths of 600 m are common in the south.
- 32 The region is dominated by subduction, extension and erosion (**Figure 3**). The crustal extension deformation processes identified in the Main Body are (1) the extinct spreading along the South Fiji Basin and (2) the active seafloor spreading in the Lau Basin. Formation of the Lau Basin is associated to southward rifting propagation developing the spreading centre west of the Tonga Ridge since the Miocene. New crust is thus produced west of the Tonga-Kermadec Ridge while old crust is consumed east of it in the trench.

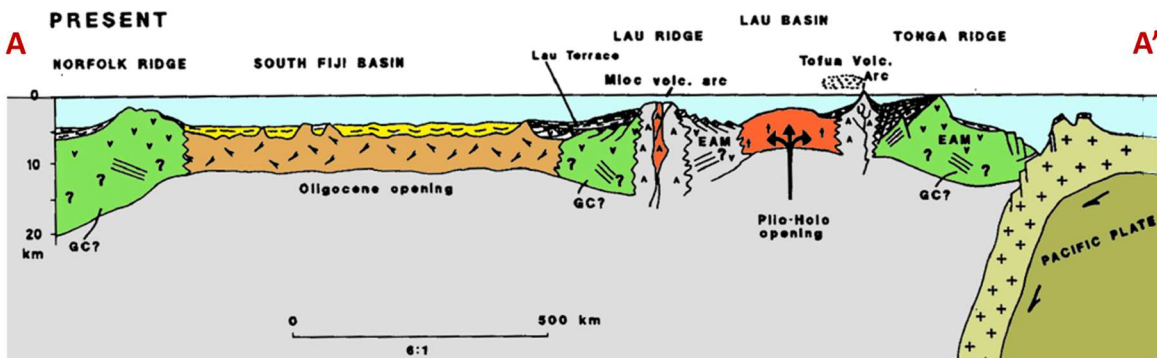


Figure 3. Schematic tectonic section from the Norfolk Ridge through the South Fiji Basin, the Lau Ridge and Basin, the Tonga Ridge and Trench, and the Louisville Ridge on the Pacific Plate (From Scholl, D.W. and R.H. Herzer (1992). *Geology and Resource Potential of the Southern Tonga Platform*. In Watkins et al., *Geology and Geophysics of Continental Margins*. AAPG Memoir 53) (Figure 3.5a, Main Body).

2. The determination of the foot of the continental slope (article 76, paragraph 4(b))

- 33 The FOS should be established in accordance with paragraph 4(b) of article 76.

2.1 Considerations

- 34 In the Submission, the continental margin is described as the submerged prolongation from 'Ata Island towards the eastern flank of the Tonga-Kermadec Ridge.

- 35 In order to demonstrate morphological continuity from the landmass of 'Ata Island, located on the Tofua Volcanic Arc (**Figure 3**), to the proposed BOS at the base of the Tonga-Kermadec Ridge, the Delegation submitted bathymetric profiles from the island along the ridge to the BOS in the Tonga-Kermadec Trench.
- 36 The search for the landward edge of the BOS started from the slope of the Tonga-Kermadec Ridge in the direction of the Tonga-Kermadec Trench axis, and the search for the seaward edge started from the deep ocean floor of the Pacific Plate towards the trench axis. The eastern flank of the Tonga-Kermadec Ridge is steep, and the BOS, located in the Tonga-Kermadec Trench, can be readily identified on a morphological basis (see example shown in **Figure 4**). The BOS was identified at the deepest part of the trench at water depths deeper than 6,000 m. The Subcommittee agrees with Tonga that there is morphological continuity from 'Ata Island along the Tonga-Kermadec Ridge to the proposed BOS.

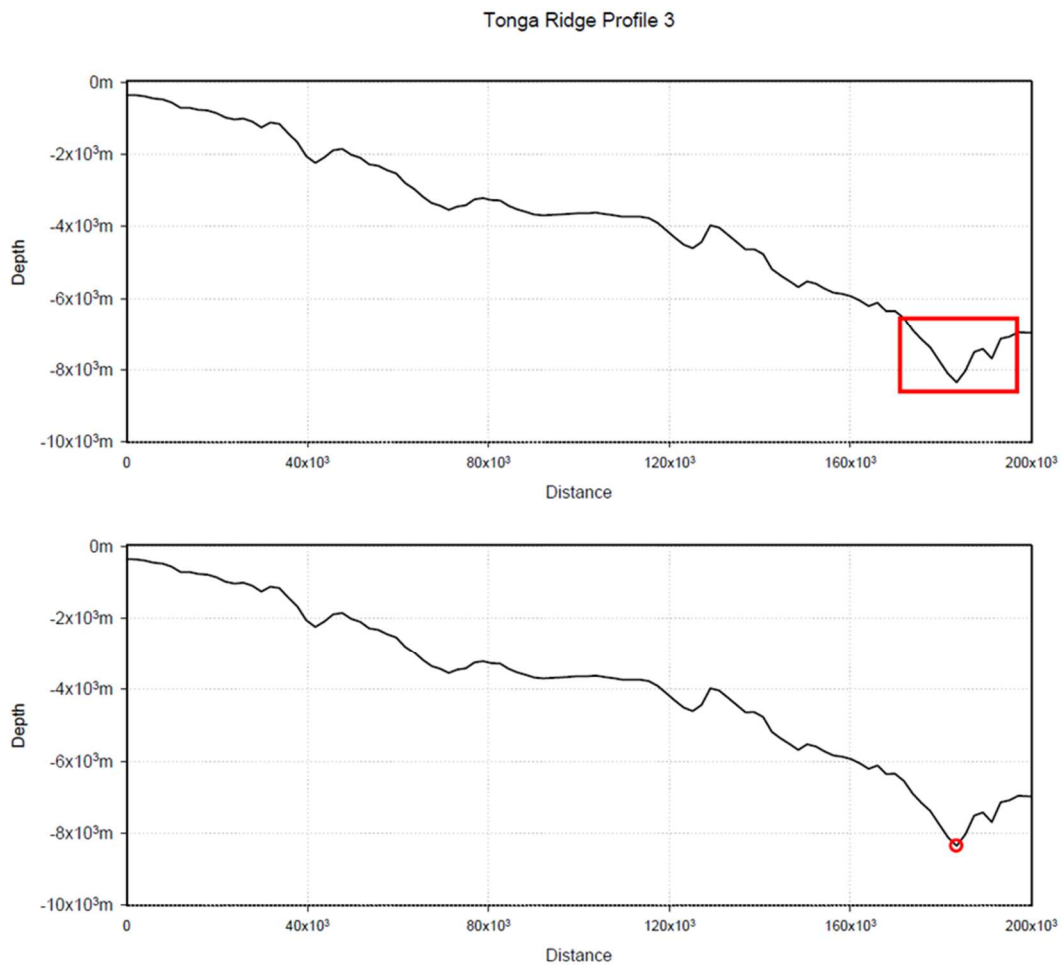


Figure 4. Base of the continental slope (upper panel) and foot of the continental slope (lower panel) as identified by Tonga along bathymetric profile 3 (RC1212), determining FOS 3 (taken from Figures 4.3 and 4.4 of the Main Body, respectively); distance in metres; for location see **Figure 5**.

- 37 In the Submission of 11 May 2009, Tonga had submitted three FOS points (FOS 1-3) determined on single-beam bathymetric profiles. In the course of the interactions between the Delegation and the Subcommittee, the Delegation submitted five additional FOS points determined on additional single- and multi-beam bathymetric data. Following further exchanges between the Delegation and the Subcommittee, the Delegation refined several of these additional FOS analyses and transmitted a final table of eight FOS points on 8 November 2018. From north to south, these are FOS points B, 1, 4, 2, D, 6, 3, and C (**Figure 5**). All submitted FOS points were determined at the maximum change in the gradient at the base of the continental slope.
- 38 Upon consideration of all data and information provided by Tonga, the Subcommittee agreed with Tonga on the locations of the eight FOS points B, 1, 4, 2, D, 6, 3, and C established by Tonga in this area (**Figure 5**). The Subcommittee took note that some of these FOS point locations were proximal to the locations of FOS points that had been earlier recommended for a neighbouring coastal State in this area.

2.2 Recommendations

- 39 Based on its consideration of the data and information contained in the Submission of Tonga and the additional data and information provided in the documents referred to in paragraphs 22 and 37 above, the Commission concludes that, in the eastern part of the Kermadec Ridge, the FOS points listed in Table 1 of Annex I fulfill the requirements of article 76 and Chapter 5 of the Guidelines (**Figure 5**). Two of these FOS points (FOS 2 and FOS 6) are not contributing to the construction of the outer edge of the continental margin. The Commission recommends that FOS points B, 1, 4, D, 3 and C should form the basis for the establishment of the outer edge of the continental margin in the eastern part of the Kermadec Ridge.

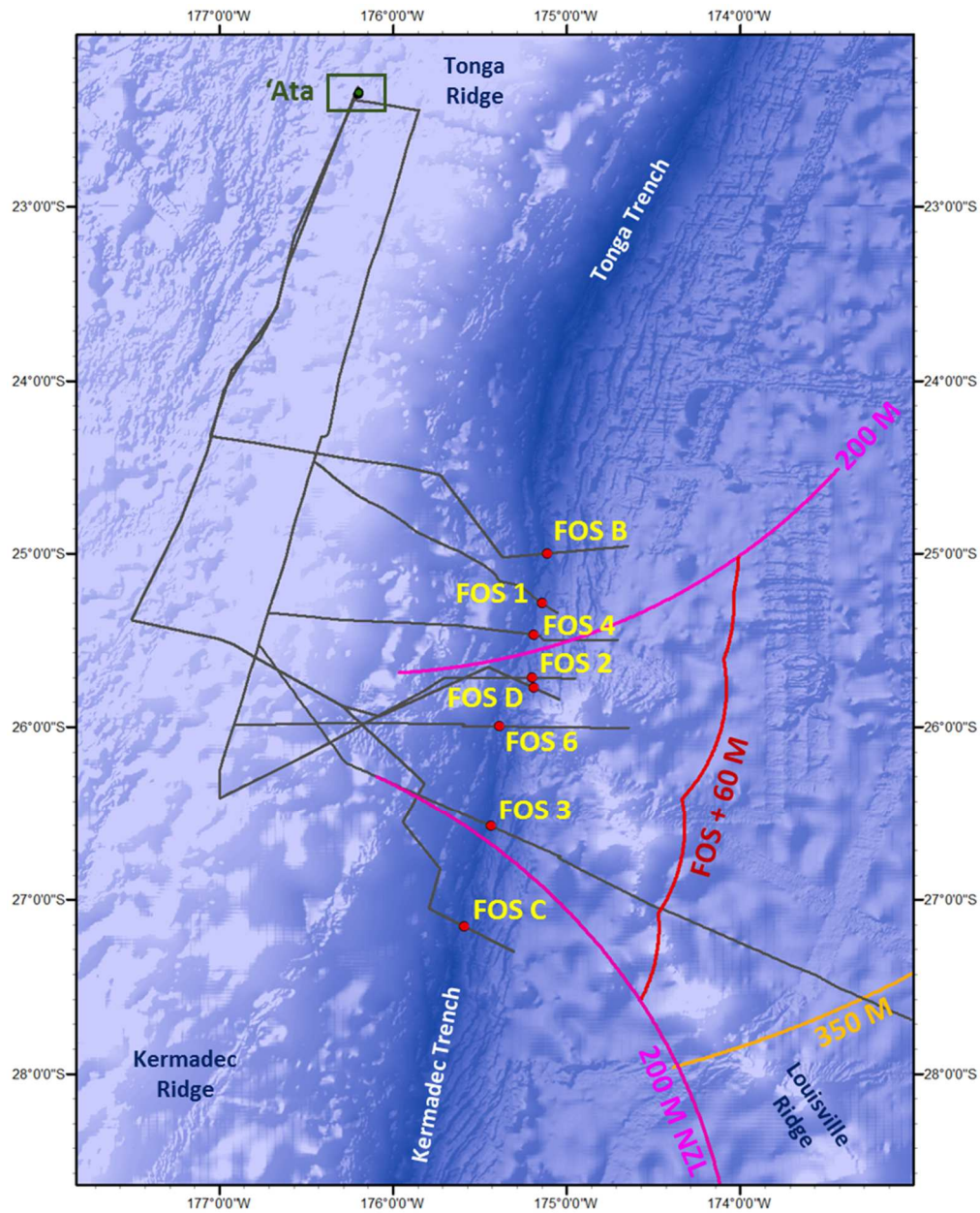


Figure 5.* Illustrative map of FOS positions in the eastern part of the Kermadec Ridge as received from the Delegation on 8 November 2018 (Table 1, Annex I). Also shown is the location of bathymetric profiles, that the FOS points were derived from (grey lines), and the 60 M formula line (red). FOS 2 and FOS 6 do not contribute to the construction of that line.

*This illustrative map was prepared by the Division for Ocean Affairs and the Law of the Sea, Office of Legal Affairs, United Nations, upon the request of the Subcommittee established to consider the Submission by Tonga in the eastern part of the Kermadec Ridge, on the basis of the submitted information. The designations employed and the presentation of material on this map does not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

3. The establishment of the outer edge of the continental margin (article 76, paragraph 4(a))

40 The outer edge of the continental margin of Tonga in the eastern part of the Kermadec Ridge should, for the purposes of the Convention, be established in accordance with paragraph 4(a) of article 76.

3.1 The application of the 60 M distance formula (article 76, paragraph 4(a)(ii))

41 In the eastern part of the Kermadec Ridge, the outer edge of the continental margin of Tonga is based solely on fixed points constructed at a distance of not more than 60 M from six FOS points on the continental margin of Tonga (FOS points B, 1, 4, D, 3 and C), in accordance with paragraph 4(a)(ii) of article 76 (**Figure 6**; Table 2, Annex I).

42 The Commission agrees with the procedure and its accuracy by which these points have been established by Tonga in the eastern part of the Kermadec Ridge.

3.2 Configuration of the Outer Edge of the Continental Margin

43 In the eastern part of the Kermadec Ridge, the outer edge of the continental margin of Tonga extends southward from the 200 M line of Tonga and is defined by 296 fixed points. At its southern end (point 1), the outer edge of the continental margin, as submitted by Tonga, is delineated to several hundred metres north of the 200 M line of New Zealand (**Figure 6**).

3.3 Recommendations

44 In the eastern part of the Kermadec Ridge, the outer edge of the continental margin of Tonga beyond 200 M is based on 296 fixed points on the 60 M formula line as described in Chapter IV.3.1 above, in accordance with paragraph 4(a)(ii) of article 76 (**Figure 6**). The fixed points are listed in Table 2 of Annex I to these Recommendations. The Commission recommends that these points be used as the basis for delineating the outer limits of the continental shelf in this region, subject to the application of the relevant constraints (see Chapter IV.4).

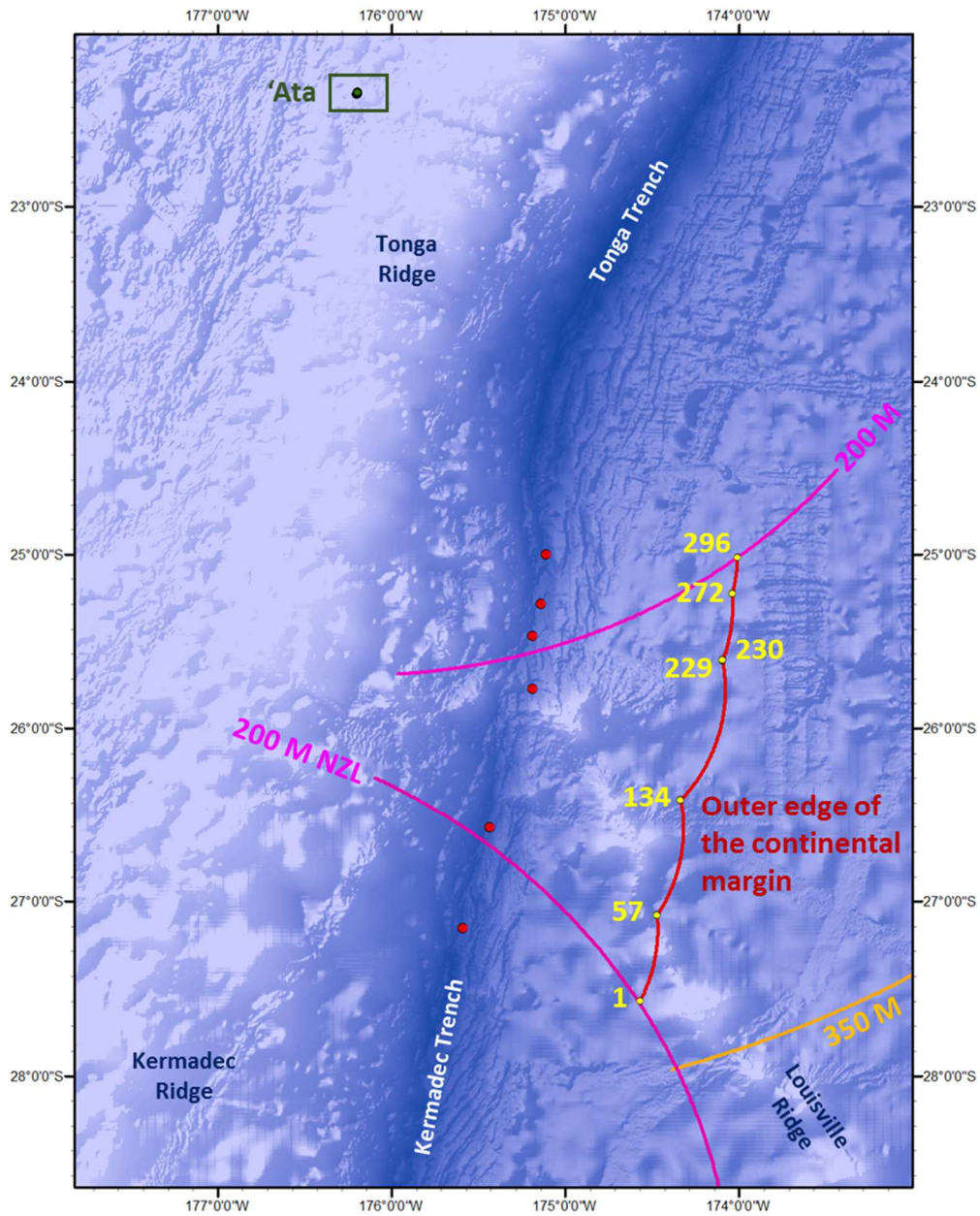


Figure 6.* Illustrative map of the outer edge of the continental margin of Tonga in the eastern part of the Kermadec Ridge (red line), constructed at a distance of 60 M from six critical FOS points (red dots), as provided by the Delegation on 8 November 2018 (Table 2, Annex I). Highlighted in yellow and labelled are the first and last of the established fixed points as well as any 60 M arc intersection points. The established outer edge of the continental margin is located entirely landward of the distance constraint (orange line).

4. The application of the constraint criteria (article 76, paragraphs 5 & 6)

- 45 The outer limits of the continental shelf cannot extend beyond the constraints as per the provisions contained in paragraphs 5 and 6 of article 76. The fixed points comprising the line of the outer limits of the continental shelf on the seabed, drawn in accordance with paragraph 4(a)(i) and (ii), either shall not exceed 350 M from the baselines, or shall not exceed 100 M from the 2,500 metre isobath.
- 46 For the outer limits of the continental shelf in the eastern part of the Kermadec Ridge, Tonga only invoked the distance constraint. Therefore, the consideration of the outer limits of the continental shelf in this Submission only involves an examination of the construction of the distance constraint line.
- 47 The distance constraint submitted by Tonga in the eastern part of the Kermadec Ridge was constructed by arcs at 350 M distance from the baselines of 'Ata Island (**Figure 6**). The Commission agrees with the procedure and its accuracy applied by Tonga in the construction of this constraint line.
- 48 The distance constraint is located entirely seaward of the outer edge of the continental margin of Tonga in that area (**Figure 6**).

5. The outer limits of the continental shelf (article 76, paragraph 7)

- 49 The outer limits of the continental shelf result from the application of the distance constraint determined according to paragraph 47, above. The outer edge of the continental margin, as amended by Tonga on 8 November 2018, is located entirely landward of this constraint. In the eastern part of the Kermadec Ridge, the outer limits of the continental shelf, as amended by Tonga on 8 November 2018, consist of 57 fixed points connected by straight lines not exceeding 60 M in length (**Figure 7**). These fixed points are listed in Table 3 of Annex I to these Recommendations. The fixed points are established in accordance with article 76 and are entirely based on the 60 M formula line as constructed from five critical FOS points (FOS B, 1, D, 3, and C). In the north, the outer limits intersect the 200 M line of Tonga in the eastern part of the Kermadec Ridge. In the south, the continental shelf of Tonga beyond 200 M in the eastern part of the Kermadec Ridge extends to the southernmost fixed point (point 1), several hundred metres north of the 200 M line of New Zealand.

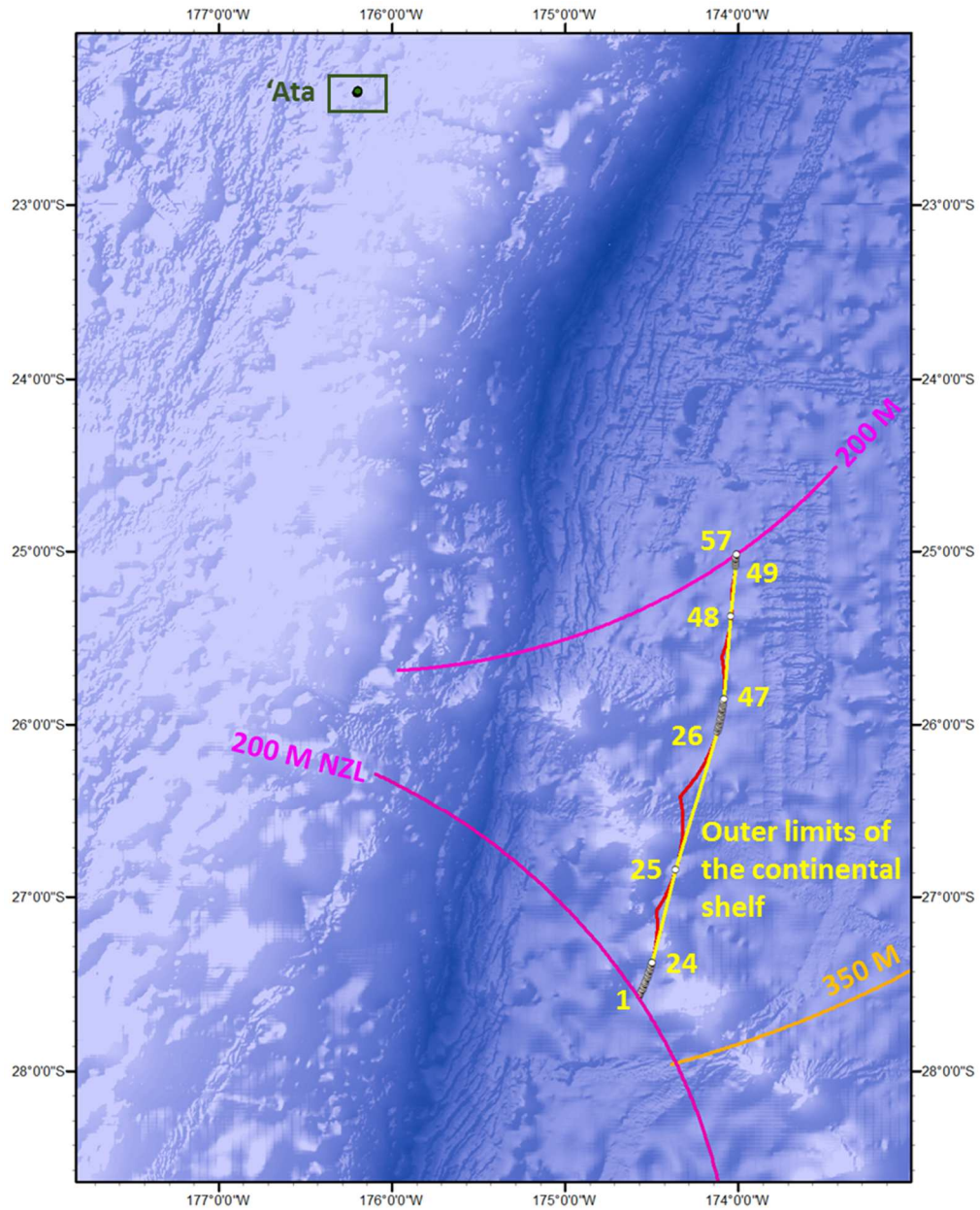


Figure 7.* Illustrative map of the outer limits of the continental shelf of Tonga in the eastern part of the Kermadec Ridge (yellow line), and its defining fixed points, connected with straight lines not exceeding 60 M in length, as provided by the Delegation on 8 November 2018 (Table 3, Annex I). Also shown is the 60 M formula line defining the outer edge of the continental margin (red).

6. Recommendations for Tonga in respect of the eastern part of the Kermadec Ridge (article 76, paragraph 8)

50 The Commission agrees with the determination of the fixed points listed in Table 2, Annex I, establishing the outer edge of the continental margin in the eastern part of the Kermadec Ridge (**Figure 6**). The Commission recommends that the delineation of the outer limits of the continental shelf in the eastern part of the Kermadec Ridge be conducted in accordance with paragraph 7 of article 76, by straight lines not exceeding 60 M in length, connecting fixed points, defined by coordinates of latitude and longitude. Further, the Commission agrees with the methodology and its accuracy applied in delineating the outer limits of the continental shelf in the eastern part of the Kermadec Ridge, including the determination of the fixed points listed in Table 3, Annex I, and the construction of the straight lines connecting those points (**Figure 7**). The establishment of the final outer limits of the continental shelf of Tonga in parts of the eastern part of the Kermadec Ridge may depend on delimitation between States. The Commission recommends, taking into consideration article 9 of annex II to the Convention, that Tonga proceeds to delineate the outer limits of the continental shelf in the eastern part of the Kermadec Ridge on the basis of:

- (i) the outer edge of the continental margin referred to in paragraph 44 above;
- (ii) the Commission's views on the outer limits of the continental shelf in the eastern part of the Kermadec Ridge as referred to in paragraph 49 above; and
- (iii) the provisions of paragraphs 7, 8, 9 and 10 of article 76.

ANNEX I

TABLES OF GEOGRAPHICAL COORDINATES OF: THE FOOT OF THE CONTINENTAL SLOPE POINTS, THE OUTER EDGE OF THE CONTINENTAL MARGIN BEYOND 200 M AND THE OUTER LIMITS OF THE CONTINENTAL SHELF BEYOND 200 M AS RECOMMENDED BY THE COMMISSION, BASED ON THE SUBMISSION BY THE KINGDOM OF TONGA IN THE EASTERN PART OF THE KERMADEC RIDGE

Table 1. Coordinates of the foot of the continental slope points

FOS point	Latitude	Longitude [0-360°]	Longitude ^c	Water depth [m]
B	-24.99868957	184.88688108	-175.11311892	-8313.585
1	-25.28710000	184.85790000	-175.14210000	-7606.000
4 ^a	-25.46710000	184.81020000	-175.18980000	-7182.000
2 ^{ab}	-25.71630000	184.80010000	-175.19990000	-6487.000
D	-25.77418682	184.81067537	-175.18932463	-6345.897
6 ^{ab}	-25.99680000	184.61500000	-175.38500000	-7125.000
3	-26.57490000	184.56250000	-175.43750000	-8346.000
C	-27.15441089	184.40845289	-175.59154711	-8709.416

^a Not contributing to the outer limits of the continental shelf

^b Not contributing to the outer edge of the continental margin

^c Column added by the Subcommission

Table 2. Coordinates of fixed points defining the outer edge of the continental margin beyond 200 M and their corresponding FOS points

Continental Margin Fixed Point	Latitude	Longitude [0-360°]	Longitude ^a	Distance to next CM Point [M]	Article 76 criterion	Relevant FOS Point
1	-27.5761692	185.4274841	-174.5725159	0.541	4 (a) (ii)	C
2	-27.5679320	185.4316727	-174.5683273	0.541	4 (a) (ii)	C
3	-27.5596614	185.4357771	-174.5642229	0.541	4 (a) (ii)	C
4	-27.5513580	185.4397971	-174.5602029	0.541	4 (a) (ii)	C
5	-27.5430225	185.4437323	-174.5562677	0.541	4 (a) (ii)	C

Continental Margin Fixed Point	Latitude	Longitude [0-360°]	Longitude ^a	Distance to next CM Point [M]	Article 76 criterion	Relevant FOS Point
6	-27.5346556	185.4475824	-174.5524176	0.541	4 (a) (ii)	C
7	-27.5262580	185.4513472	-174.5486528	0.541	4 (a) (ii)	C
8	-27.5178304	185.4550263	-174.5449737	0.541	4 (a) (ii)	C
9	-27.5093734	185.4586194	-174.5413806	0.541	4 (a) (ii)	C
10	-27.5008878	185.4621264	-174.5378736	0.541	4 (a) (ii)	C
11	-27.4923742	185.4655468	-174.5344532	0.541	4 (a) (ii)	C
12	-27.4838334	185.4688805	-174.5311195	0.541	4 (a) (ii)	C
13	-27.4752660	185.4721272	-174.5278728	0.541	4 (a) (ii)	C
14	-27.4666728	185.4752867	-174.5247133	0.541	4 (a) (ii)	C
15	-27.4580544	185.4783586	-174.5216414	0.541	4 (a) (ii)	C
16	-27.4494116	185.4813429	-174.5186571	0.541	4 (a) (ii)	C
17	-27.4407451	185.4842392	-174.5157608	0.541	4 (a) (ii)	C
18	-27.4320555	185.4870474	-174.5129526	0.541	4 (a) (ii)	C
19	-27.4233437	185.4897672	-174.5102328	0.541	4 (a) (ii)	C
20	-27.4146102	185.4923984	-174.5076016	0.541	4 (a) (ii)	C
21	-27.4058559	185.4949408	-174.5050592	0.541	4 (a) (ii)	C
22	-27.3970815	185.4973944	-174.5026056	0.541	4 (a) (ii)	C
23	-27.3882875	185.4997588	-174.5002412	0.541	4 (a) (ii)	C
24	-27.3794749	185.5020338	-174.4979662	0.541	4 (a) (ii)	C
25	-27.3706443	185.5042195	-174.4957805	0.541	4 (a) (ii)	C
26	-27.3617963	185.5063155	-174.4936845	0.541	4 (a) (ii)	C
27	-27.3529319	185.5083217	-174.4916783	0.541	4 (a) (ii)	C
28	-27.3440516	185.5102380	-174.4897620	0.541	4 (a) (ii)	C
29	-27.3351562	185.5120643	-174.4879357	0.541	4 (a) (ii)	C
30	-27.3262464	185.5138004	-174.4861996	0.541	4 (a) (ii)	C
31	-27.3173229	185.5154462	-174.4845538	0.541	4 (a) (ii)	C
32	-27.3083866	185.5170015	-174.4829985	0.541	4 (a) (ii)	C
33	-27.2994380	185.5184664	-174.4815336	0.541	4 (a) (ii)	C
34	-27.2904780	185.5198407	-174.4801593	0.541	4 (a) (ii)	C
35	-27.2815073	185.5211242	-174.4788758	0.541	4 (a) (ii)	C
36	-27.2725265	185.5223170	-174.4776830	0.541	4 (a) (ii)	C
37	-27.2635365	185.5234189	-174.4765811	0.541	4 (a) (ii)	C
38	-27.2545380	185.5244299	-174.4755701	0.541	4 (a) (ii)	C
39	-27.2455317	185.5253498	-174.4746502	0.541	4 (a) (ii)	C
40	-27.2365182	185.5261788	-174.4738212	0.541	4 (a) (ii)	C
41	-27.2274985	185.5269166	-174.4730834	0.541	4 (a) (ii)	C

Continental Margin Fixed Point	Latitude	Longitude [0-360°]	Longitude ^a	Distance to next CM Point [M]	Article 76 criterion	Relevant FOS Point
42	-27.2184732	185.5275634	-174.4724366	0.541	4 (a) (ii)	C
43	-27.2094430	185.5281189	-174.4718811	0.541	4 (a) (ii)	C
44	-27.2004087	185.5285833	-174.4714167	0.541	4 (a) (ii)	C
45	-27.1913710	185.5289565	-174.4710435	0.541	4 (a) (ii)	C
46	-27.1823306	185.5292385	-174.4707615	0.541	4 (a) (ii)	C
47	-27.1732883	185.5294293	-174.4705707	0.541	4 (a) (ii)	C
48	-27.1642449	185.5295289	-174.4704711	0.541	4 (a) (ii)	C
49	-27.1552010	185.5295373	-174.4704627	0.541	4 (a) (ii)	C
50	-27.1461573	185.5294546	-174.4705454	0.541	4 (a) (ii)	C
51	-27.1371148	185.5292807	-174.4707193	0.541	4 (a) (ii)	C
52	-27.1280739	185.5290157	-174.4709843	0.541	4 (a) (ii)	C
53	-27.1190356	185.5286596	-174.4713404	0.541	4 (a) (ii)	C
54	-27.1100005	185.5282126	-174.4717874	0.541	4 (a) (ii)	C
55	-27.1009693	185.5276746	-174.4723254	0.541	4 (a) (ii)	C
56	-27.0919428	185.5270457	-174.4729543	0.541	4 (a) (ii)	C
57	-27.0829218	185.5263260	-174.4736740	0.537	4 (a) (ii)	C and 3
58	-27.0751517	185.5313295	-174.4686705	0.537	4 (a) (ii)	3
59	-27.0673416	185.5362544	-174.4637456	0.537	4 (a) (ii)	3
60	-27.0594923	185.5411005	-174.4588995	0.537	4 (a) (ii)	3
61	-27.0516043	185.5458672	-174.4541328	0.537	4 (a) (ii)	3
62	-27.0436782	185.5505544	-174.4494456	0.537	4 (a) (ii)	3
63	-27.0357148	185.5551615	-174.4448385	0.537	4 (a) (ii)	3
64	-27.0277147	185.5596883	-174.4403117	0.537	4 (a) (ii)	3
65	-27.0196785	185.5641344	-174.4358656	0.537	4 (a) (ii)	3
66	-27.0116069	185.5684995	-174.4315005	0.537	4 (a) (ii)	3
67	-27.0035005	185.5727832	-174.4272168	0.537	4 (a) (ii)	3
68	-26.9953600	185.5769852	-174.4230148	0.537	4 (a) (ii)	3
69	-26.9871860	185.5811051	-174.4188949	0.537	4 (a) (ii)	3
70	-26.9789792	185.5851427	-174.4148573	0.537	4 (a) (ii)	3
71	-26.9707403	185.5890977	-174.4109023	0.537	4 (a) (ii)	3
72	-26.9624698	185.5929697	-174.4070303	0.537	4 (a) (ii)	3
73	-26.9541686	185.5967584	-174.4032416	0.537	4 (a) (ii)	3
74	-26.9458373	185.6004636	-174.3995364	0.537	4 (a) (ii)	3
75	-26.9374765	185.6040850	-174.3959150	0.537	4 (a) (ii)	3
76	-26.9290869	185.6076223	-174.3923777	0.537	4 (a) (ii)	3
77	-26.9206691	185.6110753	-174.3889247	0.537	4 (a) (ii)	3

Continental Margin Fixed Point	Latitude	Longitude [0-360°]	Longitude ^a	Distance to next CM Point [M]	Article 76 criterion	Relevant FOS Point
78	-26.9122240	185.6144436	-174.3855564	0.537	4 (a) (ii)	3
79	-26.9037521	185.6177271	-174.3822729	0.537	4 (a) (ii)	3
80	-26.8952541	185.6209255	-174.3790745	0.537	4 (a) (ii)	3
81	-26.8867308	185.6240385	-174.3759615	0.537	4 (a) (ii)	3
82	-26.8781827	185.6270659	-174.3729341	0.537	4 (a) (ii)	3
83	-26.8696107	185.6300075	-174.3699925	0.537	4 (a) (ii)	3
84	-26.8610153	185.6328631	-174.3671369	0.537	4 (a) (ii)	3
85	-26.8523973	185.6356324	-174.3643676	0.537	4 (a) (ii)	3
86	-26.8437574	185.6383153	-174.3616847	0.537	4 (a) (ii)	3
87	-26.8350963	185.6409116	-174.3590884	0.537	4 (a) (ii)	3
88	-26.8264146	185.6434210	-174.3565790	0.537	4 (a) (ii)	3
89	-26.8177131	185.6458435	-174.3541565	0.537	4 (a) (ii)	3
90	-26.8089924	185.6481787	-174.3518213	0.537	4 (a) (ii)	3
91	-26.8002533	185.6504266	-174.3495734	0.537	4 (a) (ii)	3
92	-26.7914965	185.6525870	-174.3474130	0.537	4 (a) (ii)	3
93	-26.7827226	185.6546598	-174.3453402	0.537	4 (a) (ii)	3
94	-26.7739325	185.6566447	-174.3433553	0.537	4 (a) (ii)	3
95	-26.7651267	185.6585416	-174.3414584	0.537	4 (a) (ii)	3
96	-26.7563060	185.6603505	-174.3396495	0.537	4 (a) (ii)	3
97	-26.7474711	185.6620712	-174.3379288	0.537	4 (a) (ii)	3
98	-26.7386227	185.6637036	-174.3362964	0.537	4 (a) (ii)	3
99	-26.7297615	185.6652475	-174.3347525	0.537	4 (a) (ii)	3
100	-26.7208883	185.6667029	-174.3332971	0.537	4 (a) (ii)	3
101	-26.7120037	185.6680696	-174.3319304	0.537	4 (a) (ii)	3
102	-26.7031084	185.6693477	-174.3306523	0.537	4 (a) (ii)	3
103	-26.6942032	185.6705369	-174.3294631	0.537	4 (a) (ii)	3
104	-26.6852889	185.6716372	-174.3283628	0.537	4 (a) (ii)	3
105	-26.6763660	185.6726486	-174.3273514	0.537	4 (a) (ii)	3
106	-26.6674353	185.6735710	-174.3264290	0.537	4 (a) (ii)	3
107	-26.6584975	185.6744044	-174.3255956	0.537	4 (a) (ii)	3
108	-26.6495535	185.6751486	-174.3248514	0.537	4 (a) (ii)	3
109	-26.6406037	185.6758037	-174.3241963	0.537	4 (a) (ii)	3
110	-26.6316491	185.6763696	-174.3236304	0.537	4 (a) (ii)	3
111	-26.6226902	185.6768463	-174.3231537	0.537	4 (a) (ii)	3
112	-26.6137279	185.6772338	-174.3227662	0.537	4 (a) (ii)	3
113	-26.6047628	185.6775320	-174.3224680	0.537	4 (a) (ii)	3

Continental Margin Fixed Point	Latitude	Longitude [0-360°]	Longitude ^a	Distance to next CM Point [M]	Article 76 criterion	Relevant FOS Point
114	-26.5957956	185.6777410	-174.3222590	0.537	4 (a) (ii)	3
115	-26.5868271	185.6778608	-174.3221392	0.537	4 (a) (ii)	3
116	-26.5778580	185.6778914	-174.3221086	0.537	4 (a) (ii)	3
117	-26.5688890	185.6778328	-174.3221672	0.537	4 (a) (ii)	3
118	-26.5599208	185.6776850	-174.3223150	0.537	4 (a) (ii)	3
119	-26.5509542	185.6774481	-174.3225519	0.537	4 (a) (ii)	3
120	-26.5419898	185.6771221	-174.3228779	0.537	4 (a) (ii)	3
121	-26.5330283	185.6767070	-174.3232930	0.537	4 (a) (ii)	3
122	-26.5240706	185.6762029	-174.3237971	0.537	4 (a) (ii)	3
123	-26.5151172	185.6756099	-174.3243901	0.537	4 (a) (ii)	3
124	-26.5061690	185.6749280	-174.3250720	0.537	4 (a) (ii)	3
125	-26.4972266	185.6741573	-174.3258427	0.537	4 (a) (ii)	3
126	-26.4882907	185.6732979	-174.3267021	0.537	4 (a) (ii)	3
127	-26.4793621	185.6723499	-174.3276501	0.537	4 (a) (ii)	3
128	-26.4704415	185.6713134	-174.3286866	0.537	4 (a) (ii)	3
129	-26.4615295	185.6701884	-174.3298116	0.537	4 (a) (ii)	3
130	-26.4526269	185.6689751	-174.3310249	0.537	4 (a) (ii)	3
131	-26.4437345	185.6676736	-174.3323264	0.537	4 (a) (ii)	3
132	-26.4348528	185.6662841	-174.3337159	0.537	4 (a) (ii)	3
133	-26.4259826	185.6648066	-174.3351934	0.537	4 (a) (ii)	3
134	-26.4171247	185.6632413	-174.3367587	0.539	4 (a) (ii)	3 and D
135	-26.4101590	185.6696003	-174.3303997	0.539	4 (a) (ii)	D
136	-26.4031418	185.6758888	-174.3241112	0.539	4 (a) (ii)	D
137	-26.3960737	185.6821062	-174.3178938	0.539	4 (a) (ii)	D
138	-26.3889552	185.6882520	-174.3117480	0.539	4 (a) (ii)	D
139	-26.3817871	185.6943258	-174.3056742	0.539	4 (a) (ii)	D
140	-26.3745698	185.7003270	-174.2996730	0.539	4 (a) (ii)	D
141	-26.3673039	185.7062553	-174.2937447	0.539	4 (a) (ii)	D
142	-26.3599901	185.7121100	-174.2878900	0.539	4 (a) (ii)	D
143	-26.3526289	185.7178908	-174.2821092	0.539	4 (a) (ii)	D
144	-26.3452209	185.7235971	-174.2764029	0.539	4 (a) (ii)	D
145	-26.3377668	185.7292286	-174.2707714	0.539	4 (a) (ii)	D
146	-26.3302672	185.7347848	-174.2652152	0.539	4 (a) (ii)	D
147	-26.3227226	185.7402652	-174.2597348	0.539	4 (a) (ii)	D
148	-26.3151338	185.7456695	-174.2543305	0.539	4 (a) (ii)	D
149	-26.3075012	185.7509971	-174.2490029	0.539	4 (a) (ii)	D

Continental Margin Fixed Point	Latitude	Longitude [0-360°]	Longitude ^a	Distance to next CM Point [M]	Article 76 criterion	Relevant FOS Point
150	-26.2998256	185.7562476	-174.2437524	0.539	4 (a) (ii)	D
151	-26.2921076	185.7614208	-174.2385792	0.539	4 (a) (ii)	D
152	-26.2843478	185.7665160	-174.2334840	0.539	4 (a) (ii)	D
153	-26.2765468	185.7715330	-174.2284670	0.539	4 (a) (ii)	D
154	-26.2687053	185.7764713	-174.2235287	0.539	4 (a) (ii)	D
155	-26.2608239	185.7813306	-174.2186694	0.539	4 (a) (ii)	D
156	-26.2529033	185.7861105	-174.2138895	0.539	4 (a) (ii)	D
157	-26.2449440	185.7908105	-174.2091895	0.539	4 (a) (ii)	D
158	-26.2369469	185.7954304	-174.2045696	0.539	4 (a) (ii)	D
159	-26.2289124	185.7999697	-174.2000303	0.539	4 (a) (ii)	D
160	-26.2208414	185.8044282	-174.1955718	0.539	4 (a) (ii)	D
161	-26.2127344	185.8088054	-174.1911946	0.539	4 (a) (ii)	D
162	-26.2045920	185.8131011	-174.1868989	0.539	4 (a) (ii)	D
163	-26.1964150	185.8173148	-174.1826852	0.539	4 (a) (ii)	D
164	-26.1882041	185.8214463	-174.1785537	0.539	4 (a) (ii)	D
165	-26.1799598	185.8254953	-174.1745047	0.539	4 (a) (ii)	D
166	-26.1716830	185.8294613	-174.1705387	0.539	4 (a) (ii)	D
167	-26.1633741	185.8333442	-174.1666558	0.539	4 (a) (ii)	D
168	-26.1550340	185.8371437	-174.1628563	0.539	4 (a) (ii)	D
169	-26.1466634	185.8408593	-174.1591407	0.539	4 (a) (ii)	D
170	-26.1382627	185.8444910	-174.1555090	0.539	4 (a) (ii)	D
171	-26.1298329	185.8480382	-174.1519618	0.539	4 (a) (ii)	D
172	-26.1213746	185.8515009	-174.1484991	0.539	4 (a) (ii)	D
173	-26.1128883	185.8548788	-174.1451212	0.539	4 (a) (ii)	D
174	-26.1043750	185.8581715	-174.1418285	0.539	4 (a) (ii)	D
175	-26.0958351	185.8613788	-174.1386212	0.539	4 (a) (ii)	D
176	-26.0872695	185.8645005	-174.1354995	0.539	4 (a) (ii)	D
177	-26.0786789	185.8675364	-174.1324636	0.539	4 (a) (ii)	D
178	-26.0700638	185.8704862	-174.1295138	0.539	4 (a) (ii)	D
179	-26.0614251	185.8733497	-174.1266503	0.539	4 (a) (ii)	D
180	-26.0527634	185.8761267	-174.1238733	0.539	4 (a) (ii)	D
181	-26.0440795	185.8788169	-174.1211831	0.539	4 (a) (ii)	D
182	-26.0353740	185.8814203	-174.1185797	0.539	4 (a) (ii)	D
183	-26.0266477	185.8839365	-174.1160635	0.539	4 (a) (ii)	D
184	-26.0179012	185.8863654	-174.1136346	0.539	4 (a) (ii)	D
185	-26.0091353	185.8887069	-174.1112931	0.539	4 (a) (ii)	D

Continental Margin Fixed Point	Latitude	Longitude [0-360°]	Longitude ^a	Distance to next CM Point [M]	Article 76 criterion	Relevant FOS Point
186	-26.0003507	185.8909607	-174.1090393	0.539	4 (a) (ii)	D
187	-25.9915481	185.8931268	-174.1068732	0.539	4 (a) (ii)	D
188	-25.9827282	185.8952048	-174.1047952	0.539	4 (a) (ii)	D
181	-25.9738918	185.8971948	-174.1028052	0.539	4 (a) (ii)	D
190	-25.9650395	185.8990964	-174.1009036	0.539	4 (a) (ii)	D
191	-25.9561720	185.9009097	-174.0990903	0.539	4 (a) (ii)	D
192	-25.9472902	185.9026345	-174.0973655	0.539	4 (a) (ii)	D
193	-25.9383947	185.9042707	-174.0957293	0.539	4 (a) (ii)	D
194	-25.9294862	185.9058181	-174.0941819	0.539	4 (a) (ii)	D
195	-25.9205655	185.9072766	-174.0927234	0.539	4 (a) (ii)	D
196	-25.9116332	185.9086462	-174.0913538	0.539	4 (a) (ii)	D
197	-25.9026901	185.9099267	-174.0900733	0.539	4 (a) (ii)	D
198	-25.8937370	185.9111181	-174.0888819	0.539	4 (a) (ii)	D
199	-25.8847745	185.9122203	-174.0877797	0.539	4 (a) (ii)	D
200	-25.8758035	185.9132333	-174.0867667	0.539	4 (a) (ii)	D
201	-25.8668245	185.9141569	-174.0858431	0.539	4 (a) (ii)	D
202	-25.8578383	185.9149911	-174.0850089	0.539	4 (a) (ii)	D
203	-25.8488457	185.9157359	-174.0842641	0.539	4 (a) (ii)	D
204	-25.8398474	185.9163912	-174.0836088	0.539	4 (a) (ii)	D
205	-25.8308442	185.9169570	-174.0830430	0.539	4 (a) (ii)	D
206	-25.8218366	185.9174332	-174.0825668	0.539	4 (a) (ii)	D
207	-25.8128256	185.9178199	-174.0821801	0.539	4 (a) (ii)	D
208	-25.8038118	185.9181171	-174.0818829	0.539	4 (a) (ii)	D
209	-25.7947958	185.9183247	-174.0816753	0.539	4 (a) (ii)	D
210	-25.7857786	185.9184427	-174.0815573	0.539	4 (a) (ii)	D
211	-25.7767608	185.9184711	-174.0815289	0.539	4 (a) (ii)	D
212	-25.7677430	185.9184100	-174.0815900	0.539	4 (a) (ii)	D
213	-25.7587261	185.9182595	-174.0817405	0.539	4 (a) (ii)	D
214	-25.7497108	185.9180194	-174.0819806	0.539	4 (a) (ii)	D
215	-25.7406978	185.9176899	-174.0823101	0.539	4 (a) (ii)	D
216	-25.7316879	185.9172710	-174.0827290	0.539	4 (a) (ii)	D
217	-25.7226817	185.9167628	-174.0832372	0.539	4 (a) (ii)	D
218	-25.7136800	185.9161653	-174.0838347	0.539	4 (a) (ii)	D
219	-25.7046835	185.9154786	-174.0845214	0.539	4 (a) (ii)	D
220	-25.6956929	185.9147027	-174.0852973	0.539	4 (a) (ii)	D
221	-25.6867090	185.9138378	-174.0861622	0.539	4 (a) (ii)	D

Continental Margin Fixed Point	Latitude	Longitude [0-360°]	Longitude ^a	Distance to next CM Point [M]	Article 76 criterion	Relevant FOS Point
222	-25.6777326	185.9128840	-174.0871160	0.539	4 (a) (ii)	D
223	-25.6687642	185.9118413	-174.0881587	0.539	4 (a) (ii)	D
224	-25.6598046	185.9107098	-174.0892902	0.539	4 (a) (ii)	D
225	-25.6508546	185.9094897	-174.0905103	0.539	4 (a) (ii)	D
226	-25.6419149	185.9081810	-174.0918190	0.539	4 (a) (ii)	D
227	-25.6329862	185.9067840	-174.0932160	0.539	4 (a) (ii)	D
228	-25.6240693	185.9052986	-174.0947014	0.539	4 (a) (ii)	D
229	-25.6151647	185.9037252	-174.0962748	0.495	4 (a) (ii)	D and 4
230	-25.6069769	185.9049969	-174.0950031	0.546	4 (a) (ii)	4 and 1
231	-25.5983061	185.9081242	-174.0918758	0.546	4 (a) (ii)	1
232	-25.5896097	185.9111639	-174.0888361	0.546	4 (a) (ii)	1
233	-25.5808886	185.9141158	-174.0858842	0.546	4 (a) (ii)	1
234	-25.5721434	185.9169798	-174.0830202	0.546	4 (a) (ii)	1
235	-25.5633749	185.9197556	-174.0802444	0.546	4 (a) (ii)	1
236	-25.5545839	185.9224429	-174.0775571	0.546	4 (a) (ii)	1
237	-25.5457709	185.9250416	-174.0749584	0.546	4 (a) (ii)	1
238	-25.5369368	185.9275514	-174.0724486	0.546	4 (a) (ii)	1
239	-25.5280824	185.9299723	-174.0700277	0.546	4 (a) (ii)	1
240	-25.5192082	185.9323039	-174.0676961	0.546	4 (a) (ii)	1
241	-25.5103152	185.9345462	-174.0654538	0.546	4 (a) (ii)	1
242	-25.5014040	185.9366990	-174.0633010	0.546	4 (a) (ii)	1
243	-25.4924753	185.9387620	-174.0612380	0.546	4 (a) (ii)	1
244	-25.4835299	185.9407352	-174.0592648	0.546	4 (a) (ii)	1
245	-25.4745686	185.9426185	-174.0573815	0.546	4 (a) (ii)	1
246	-25.4655921	185.9444115	-174.0555885	0.546	4 (a) (ii)	1
247	-25.4566011	185.9461144	-174.0538856	0.546	4 (a) (ii)	1
248	-25.4475964	185.9477268	-174.0522732	0.546	4 (a) (ii)	1
249	-25.4385788	185.9492488	-174.0507512	0.546	4 (a) (ii)	1
250	-25.4295489	185.9506802	-174.0493198	0.546	4 (a) (ii)	1
251	-25.4205075	185.9520208	-174.0479792	0.546	4 (a) (ii)	1
252	-25.4114554	185.9532707	-174.0467293	0.546	4 (a) (ii)	1
253	-25.4023934	185.9544297	-174.0455703	0.546	4 (a) (ii)	1
254	-25.3933221	185.9554978	-174.0445022	0.546	4 (a) (ii)	1
255	-25.3842424	185.9564748	-174.0435252	0.546	4 (a) (ii)	1
256	-25.3751550	185.9573608	-174.0426392	0.546	4 (a) (ii)	1
257	-25.3660606	185.9581557	-174.0418443	0.546	4 (a) (ii)	1

Continental Margin Fixed Point	Latitude	Longitude [0-360°]	Longitude ^a	Distance to next CM Point [M]	Article 76 criterion	Relevant FOS Point
258	-25.3569600	185.9588593	-174.0411407	0.546	4 (a) (ii)	1
259	-25.3478539	185.9594718	-174.0405282	0.546	4 (a) (ii)	1
260	-25.3387431	185.9599930	-174.0400070	0.546	4 (a) (ii)	1
261	-25.3296284	185.9604230	-174.0395770	0.546	4 (a) (ii)	1
262	-25.3205106	185.9607617	-174.0392383	0.546	4 (a) (ii)	1
263	-25.3113902	185.9610091	-174.0389909	0.546	4 (a) (ii)	1
264	-25.3022682	185.9611652	-174.0388348	0.546	4 (a) (ii)	1
265	-25.2931453	185.9612300	-174.0387700	0.546	4 (a) (ii)	1
266	-25.2840222	185.9612036	-174.0387964	0.546	4 (a) (ii)	1
267	-25.2748997	185.9610859	-174.0389141	0.546	4 (a) (ii)	1
268	-25.2657785	185.9608770	-174.0391230	0.546	4 (a) (ii)	1
269	-25.2566595	185.9605770	-174.0394230	0.546	4 (a) (ii)	1
270	-25.2475432	185.9601858	-174.0398142	0.546	4 (a) (ii)	1
271	-25.2384306	185.9597035	-174.0402965	0.546	4 (a) (ii)	1
272	-25.2293223	185.9591303	-174.0408697	0.539	4 (a) (ii)	1 and B
273	-25.2205284	185.9613278	-174.0386722	0.539	4 (a) (ii)	B
274	-25.2117168	185.9634380	-174.0365620	0.539	4 (a) (ii)	B
275	-25.2028883	185.9654607	-174.0345393	0.539	4 (a) (ii)	B
276	-25.1940436	185.9673959	-174.0326041	0.539	4 (a) (ii)	B
277	-25.1851834	185.9692433	-174.0307567	0.539	4 (a) (ii)	B
278	-25.1763084	185.9710028	-174.0289972	0.539	4 (a) (ii)	B
279	-25.1674193	185.9726744	-174.0273256	0.539	4 (a) (ii)	B
280	-25.1585169	185.9742578	-174.0257422	0.539	4 (a) (ii)	B
281	-25.1496018	185.9757531	-174.0242469	0.539	4 (a) (ii)	B
282	-25.1406749	185.9771600	-174.0228400	0.539	4 (a) (ii)	B
283	-25.1317368	185.9784785	-174.0215215	0.539	4 (a) (ii)	B
284	-25.1227882	185.9797085	-174.0202915	0.539	4 (a) (ii)	B
285	-25.1138299	185.9808499	-174.0191501	0.539	4 (a) (ii)	B
286	-25.1048626	185.9819027	-174.0180973	0.539	4 (a) (ii)	B
287	-25.0958871	185.9828667	-174.0171333	0.539	4 (a) (ii)	B
288	-25.0869040	185.9837420	-174.0162580	0.539	4 (a) (ii)	B
289	-25.0779140	185.9845284	-174.0154716	0.539	4 (a) (ii)	B
290	-25.0689180	185.9852260	-174.0147740	0.539	4 (a) (ii)	B
291	-25.0599167	185.9858347	-174.0141653	0.539	4 (a) (ii)	B
292	-25.0509107	185.9863544	-174.0136456	0.539	4 (a) (ii)	B
293	-25.0419008	185.9867851	-174.0132149	0.539	4 (a) (ii)	B

Continental Margin Fixed Point	Latitude	Longitude [0-360°]	Longitude ^a	Distance to next CM Point [M]	Article 76 criterion	Relevant FOS Point
294	-25.0328877	185.9871269	-174.0128731	0.539	4 (a) (ii)	B
295	-25.0238721	185.9873797	-174.0126203	0.321	4 (a) (ii)	B
296	-25.0185140	185.9874775	-174.0125225	n/a	4 (a) (ii)	B

^a Column added by the Subcommission

Table 3. Coordinates of fixed points defining the outer limits of the continental shelf beyond 200 M and their corresponding FOS points

Outer Limit Fixed Point	Latitude	Longitude [0-360°]	Longitude ^a	Distance to next OL Point [M]	Article 76 criterion	Relevant FOS Point
1	-27.5761692	185.4274841	-174.5725159	0.541	4 (a) (ii)	C
2	-27.5679320	185.4316727	-174.5683273	0.541	4 (a) (ii)	C
3	-27.5596614	185.4357771	-174.5642229	0.541	4 (a) (ii)	C
4	-27.5513580	185.4397971	-174.5602029	0.541	4 (a) (ii)	C
5	-27.5430225	185.4437323	-174.5562677	0.541	4 (a) (ii)	C
6	-27.5346556	185.4475824	-174.5524176	0.541	4 (a) (ii)	C
7	-27.5262580	185.4513472	-174.5486528	0.541	4 (a) (ii)	C
8	-27.5178304	185.4550263	-174.5449737	0.541	4 (a) (ii)	C
9	-27.5093734	185.4586194	-174.5413806	0.541	4 (a) (ii)	C
10	-27.5008878	185.4621264	-174.5378736	0.541	4 (a) (ii)	C
11	-27.4923742	185.4655468	-174.5344532	0.541	4 (a) (ii)	C
12	-27.4838334	185.4688805	-174.5311195	0.541	4 (a) (ii)	C
13	-27.4752660	185.4721272	-174.5278728	0.541	4 (a) (ii)	C
14	-27.4666728	185.4752867	-174.5247133	0.541	4 (a) (ii)	C
15	-27.4580544	185.4783586	-174.5216414	0.541	4 (a) (ii)	C
16	-27.4494116	185.4813429	-174.5186571	0.541	4 (a) (ii)	C
17	-27.4407451	185.4842392	-174.5157608	0.541	4 (a) (ii)	C
18	-27.4320555	185.4870474	-174.5129526	0.541	4 (a) (ii)	C
19	-27.4233437	185.4897672	-174.5102328	0.541	4 (a) (ii)	C
20	-27.4146102	185.4923984	-174.5076016	0.541	4 (a) (ii)	C
21	-27.4058559	185.4949408	-174.5050592	0.541	4 (a) (ii)	C
22	-27.3970815	185.4973944	-174.5026056	0.541	4 (a) (ii)	C
23	-27.3882875	185.4997588	-174.5002412	0.541	4 (a) (ii)	C

Outer Limit Fixed Point	Latitude	Longitude [0-360°]	Longitude ^a	Distance to next OL Point [M]	Article 76 criterion	Relevant FOS Point
24	-27.3794749	185.5020338	-174.4979662	32.872	4 (a) (ii)	C
25	-26.8437574	185.6383153	-174.3616847	49.563	4 (a) (ii)	3
26	-26.0440795	185.8788169	-174.1211831	0.539	4 (a) (ii)	D
27	-26.0353740	185.8814203	-174.1185797	0.539	4 (a) (ii)	D
28	-26.0266477	185.8839365	-174.1160635	0.539	4 (a) (ii)	D
29	-26.0179012	185.8863654	-174.1136346	0.539	4 (a) (ii)	D
30	-26.0091353	185.8887069	-174.1112931	0.539	4 (a) (ii)	D
31	-26.0003507	185.8909607	-174.1090393	0.539	4 (a) (ii)	D
32	-25.9915481	185.8931268	-174.1068732	0.539	4 (a) (ii)	D
33	-25.9827282	185.8952048	-174.1047952	0.539	4 (a) (ii)	D
34	-25.9738918	185.8971948	-174.1028052	0.539	4 (a) (ii)	D
35	-25.9650395	185.8990964	-174.1009036	0.539	4 (a) (ii)	D
36	-25.9561720	185.9009097	-174.0990903	0.539	4 (a) (ii)	D
37	-25.9472902	185.9026345	-174.0973655	0.539	4 (a) (ii)	D
38	-25.9383947	185.9042707	-174.0957293	0.539	4 (a) (ii)	D
39	-25.9294862	185.9058181	-174.0941819	0.539	4 (a) (ii)	D
40	-25.9205655	185.9072766	-174.0927234	0.539	4 (a) (ii)	D
41	-25.9116332	185.9086462	-174.0913538	0.539	4 (a) (ii)	D
42	-25.9026901	185.9099267	-174.0900733	0.539	4 (a) (ii)	D
43	-25.8937370	185.9111181	-174.0888819	0.539	4 (a) (ii)	D
44	-25.8847745	185.9122203	-174.0877797	0.539	4 (a) (ii)	D
45	-25.8758035	185.9132333	-174.0867667	0.539	4 (a) (ii)	D
46	-25.8668245	185.9141569	-174.0858431	0.539	4 (a) (ii)	D
47	-25.8578383	185.9149911	-174.0850089	28.964	4 (a) (ii)	D
48	-25.3751550	185.9573608	-174.0426392	17.301	4 (a) (ii)	1
49	-25.0869040	185.9837420	-174.0162580	0.539	4 (a) (ii)	B
50	-25.0779140	185.9845284	-174.0154716	0.539	4 (a) (ii)	B
51	-25.0689180	185.9852260	-174.0147740	0.539	4 (a) (ii)	B
52	-25.0599167	185.9858347	-174.0141653	0.539	4 (a) (ii)	B
53	-25.0509107	185.9863544	-174.0136456	0.539	4 (a) (ii)	B
54	-25.0419008	185.9867851	-174.0132149	0.539	4 (a) (ii)	B
55	-25.0328877	185.9871269	-174.0128731	0.539	4 (a) (ii)	B
56	-25.0238721	185.9873797	-174.0126203	0.321	4 (a) (ii)	B
57	-25.0185140	185.9874775	-174.0125225	n/a	4 (a) (ii)	B

^a Column added by the Subcommittee