

**RECOMMENDATIONS OF THE COMMISSION ON THE LIMITS OF  
THE CONTINENTAL SHELF (CLCS) IN REGARD TO THE  
SUBMISSION MADE BY NEW ZEALAND 19 APRIL 2006**

**Recommendations prepared by the Subcommittee established for the consideration of the Submission  
made by New Zealand.**

**Adopted by the Subcommittee on 2 April 2008, and submitted to the Chairman of the Commission on  
the Limits of the Continental Shelf for consideration and approval by the Commission.**

**Adopted by the Commission on 22 August 2008**

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## INTRODUCTION

- 1 New Zealand transmitted a Submission to the Commission on the Limits of the Continental Shelf (hereinafter “the Commission”), through the Secretary-General of the United Nations (hereinafter “the Secretary-General”), on 19 April 2006 by note verbale NZ-CLCS-TPN-01. This Submission was made pursuant to the provisions contained in article 76, paragraph 8, and article 4 of Annex II to the 1982 United Nations Convention on the Law of the Sea (hereinafter “the Convention”). References to article 76 and paragraphs therein shall be understood to mean article 76 of the Convention. The Submission contained: Part I - Executive Summary; Part II – Main Body which is the analytical and descriptive part and Part III- Scientific and Technical Data.<sup>1</sup>
- 2 On 19 April 2006 New Zealand also transmitted note verbale NZ-CLCS-TPN-02 relating to the part of the Submission concerning Antarctica, indicating that “New Zealand makes a partial submission [...] not including areas of continental shelf appurtenant to Antarctica, for which a submission may be made later”.<sup>2</sup>
- 3 On 21 April 2006 the Secretary-General gave due publicity to the Executive Summary of the Submission in accordance with rule 50 of the rules of procedure of the Commission on the Limits of the Continental Shelf (CLCS/40) (hereinafter “the rules of procedure”) through Continental Shelf Notification CLCS.05.2006.LOS.<sup>3</sup> The consideration of the Submission made by New Zealand was included in the agenda of the eighteenth session of the Commission, in conformity with rule 51 of the rules of procedure.
- 4 On 31 May 2006 New Zealand integrated the Submission providing missing copies of certain documents which had been originally provided either only in hard copy or only in electronic copy. On the same date, New Zealand also submitted corrigenda to the Executive Summary as well as to certain parts of the Main Body of the Submission.<sup>4</sup> On 31 July 2006 New Zealand provided a new corrigendum replacing the hard copy of the corrected coordinates for the fixed points of the outer limits of the extended continental shelf for the Northern Region.
- 5 On 7 August 2006 the Secretary-General gave due publicity to the corrigendum to the Executive Summary through Continental Shelf Notification CLCS.05.2006.Corr.1.LOS.<sup>5</sup>
- 6 The presentation on the Submission of New Zealand was made on 21 August 2006, during the first part of the plenary of the eighteenth session, by Gerard van Bohemen, International Legal Adviser and Director of the Legal Division of the Ministry of Foreign Affairs and Trade. The delegation of New Zealand also included a number of scientific, technical and legal advisers. In addition to elaborating on substantive points of the Submission, he indicated that no current members of the Commission had assisted New Zealand in the

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<sup>1</sup> The list of the materials included in the Submission is contained in Annex I to these Recommendations (on the CD-Rom enclosed with these recommendations).

<sup>2</sup> NZ-CLCS-TPN-02, available in the CD-Rom enclosed with these recommendations.

<sup>3</sup> CLCS.05.2006.LOS is available in the directory Annex\_IV\DOALOS\_Letters\_NVs of the CD-Rom enclosed with these recommendations.

<sup>4</sup> The Corrigenda is included in the directory Annex\_IV\Corrigenda\_to\_Submission\NZ-CLCS-CD\_DVD-01-Add.2 of the CD-Rom enclosed with these recommendations.

<sup>5</sup> CLCS.05.2006.Corr.1.LOS is available in the directory Annex\_IV\DOALOS\_Letters\_NVs of the CD-Rom enclosed with these recommendations.

preparation of the Submission. Following the presentation, the representatives of New Zealand responded to questions asked by the members of the Commission.

- 7 The Commission addressed the modalities for the consideration of the Submission. It decided that, as provided for in article 5 of Annex II to the Convention and in rule 42 of the rules of procedure of the Commission (CLCS/40), the Submission of New Zealand would be addressed through the establishment of a subcommission.
- 8 The following members of the Commission were elected as members of the Subcommission for consideration of the Submission made by New Zealand: Alexandre Tagore Medeiros de Albuquerque, Harald Brekke, Peter F. Croker, Fernando Manuel Maia Pimentel, Kensaku Tamaki, Naresh Kumar Thakur and Yao Ubuènalè Woeledji. The Subcommission elected Mr. Brekke as its Chairman, and Mr. Albuquerque and Mr. Tamaki as its Vice-Chairmen.
- 9 The Commission took note of the above-mentioned Note Verbale NZ-CLCS-TPN-02 from New Zealand on the issue of Antarctica. The Commission also took note of Note Verbale SC/06/459, dated 28 June 2006, from the Permanent Mission of Japan to the United Nations addressed to the Secretary-General in connection with this issue. In this context, the Commission also took note of the contents of Note Verbale DJZ-IR 178/2006 subsequently received from the Permanent Mission of the Kingdom of the Netherlands to the United Nations on 19 December 2006.<sup>6</sup>
- 10 The Commission took note of the contents of the following Notes Verbales concerning the existence of ongoing negotiations on maritime delimitation and overlapping claims related to the Submission: Note Verbale No. NY 6/10/8/5 from the Fiji Mission to the United Nations dated 23 June 2006; Note Verbale NZ-CLCS-TPN-03 from the Permanent Mission of New Zealand to the United Nations dated 10 July 2006; Note Verbale 422 from the Permanent Mission of France to the United Nations dated 13 July 2006.<sup>7</sup> The Commission decided to refer the matter to the Subcommission appointed to examine the Submission made by New Zealand.
- 11 The Subcommission met immediately to conduct its preliminary examination of the Submission and the data accompanying it. It was decided that given the volume and nature of the data contained in the Submission, the Subcommission would require additional time for the consideration of the Submission as well as intersessional meetings.
- 12 The Subcommission also prepared a set of procedures for meetings with the Delegation. During its preliminary examination of the Submission, the Subcommission held two meetings with the delegation of New Zealand, to ask questions and receive further clarifications.
- 13 At the twentieth session, in the light of the partial change in membership of the Commission, which resulted from the elections of members of the Commission held at the seventeenth Meeting of States Parties, it became necessary to fill certain vacancies in the Subcommission. Sivaramakrishnan Rajan and Michael Anselme Marc Rosette were appointed to replace Naresh Kumar Thakur and Yao Ubuènalè Woeledji.

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<sup>6</sup> The notes verbales from Japan and the Netherlands are available in the directory Annex\_II of the CD-Rom enclosed with these Recommendations.

<sup>7</sup> The note verbale from New Zealand is available in the directory Annex\_IV\Delegation\_Letters and the notes verbales from Fiji and France are available in the directory Annex\_II of the CD-Rom enclosed with these Recommendations.

- 14 The Subcommittee carried out its examination of the Submission during the following sessions: nineteenth, twentieth, resumed twentieth and twenty-first. During these sessions, as well as intersessionally the Subcommittee held 11 meetings with the New Zealand Delegation in which it presented 4 preliminary considerations and posed 9 questions<sup>8</sup> in writing. In response, the new Zealand Delegation provided to the Subcommittee 11 documents (with enclosures),<sup>9</sup> 12 PowerPoint presentations<sup>10</sup> as well as 16 CD/DVD-Roms.<sup>11</sup> In addition, the Commission held two meetings with the Delegation.
- 15 The Commission makes these Recommendations to New Zealand in fulfilment of its mandate established in article 76, paragraph 8, and articles 3 and 5 of Annex II to the Convention and in accordance with article 76.
- 16 The Commission prepared these Recommendations taking into consideration the internal procedures and the methodology outlined in article 5 of Annex II to the Convention, and in the following official documents of the Commission: rules of procedure; The Scientific and Technical Guidelines (CLCS/11 and CLCS/11/Add.1 – hereinafter “the Guidelines”).
- 17 The Commission makes its Recommendations recognizing the fact that the outer limits of the continental shelf as established by a coastal State on the basis of its Recommendations shall be final and binding according to article 76, paragraph 8.

## **I. EXAMINATION OF THE SUBMISSION BY THE SUBCOMMISSION**

### **A. Examination of the format and completeness of the Submission**

- 18 Pursuant to Annex III, section III of the rules of procedure, the Subcommittee examined and verified the format and completeness of the Submission.

### **B. Preliminary analysis of the Submission**

- 19 Pursuant to paragraph 5 of Annex III to the rules of procedure, the Subcommittee undertook a preliminary analysis of the Submission, in accordance with article 76 and the Guidelines and concluded as follows:
- 20 The outer edge of the continental margin as defined by both the 1 per cent sediment thickness and foot of slope plus 60 M formulae lies beyond 200 M, and therefore the test of appurtenance was satisfied by New Zealand;
- 21 The outer limit of New Zealand’s extended continental shelf consists of a combination of a 1 per cent sediment thickness point and foot of slope plus 60 M points;
- 22 The construction of the outer limits contains straight lines not longer than 60 M;
- 23 The advice of an expert in geodesy from the Commission should be sought;
- 24 Additional time would be required to review all data and to prepare the recommendations to the Commission during the following sessions of the Commission. An estimation of the time required would be reported to the Commission at a later stage.

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<sup>8</sup> See the directory Annex\_IV\Subcommission\_Questions\_to\_Delegation in the CD-Rom enclosed with these Recommendations.

<sup>9</sup> See the directory Annex\_IV\Delegation\_Documents in the CD-Rom enclosed with these Recommendations.

<sup>10</sup> See the directory Annex\_IV\Delegation\_Presentations in the CD-Rom enclosed with these Recommendations.

<sup>11</sup> See CD-Rom enclosed with these Recommendations.

### **C. Main scientific and technical examination of the Submission**

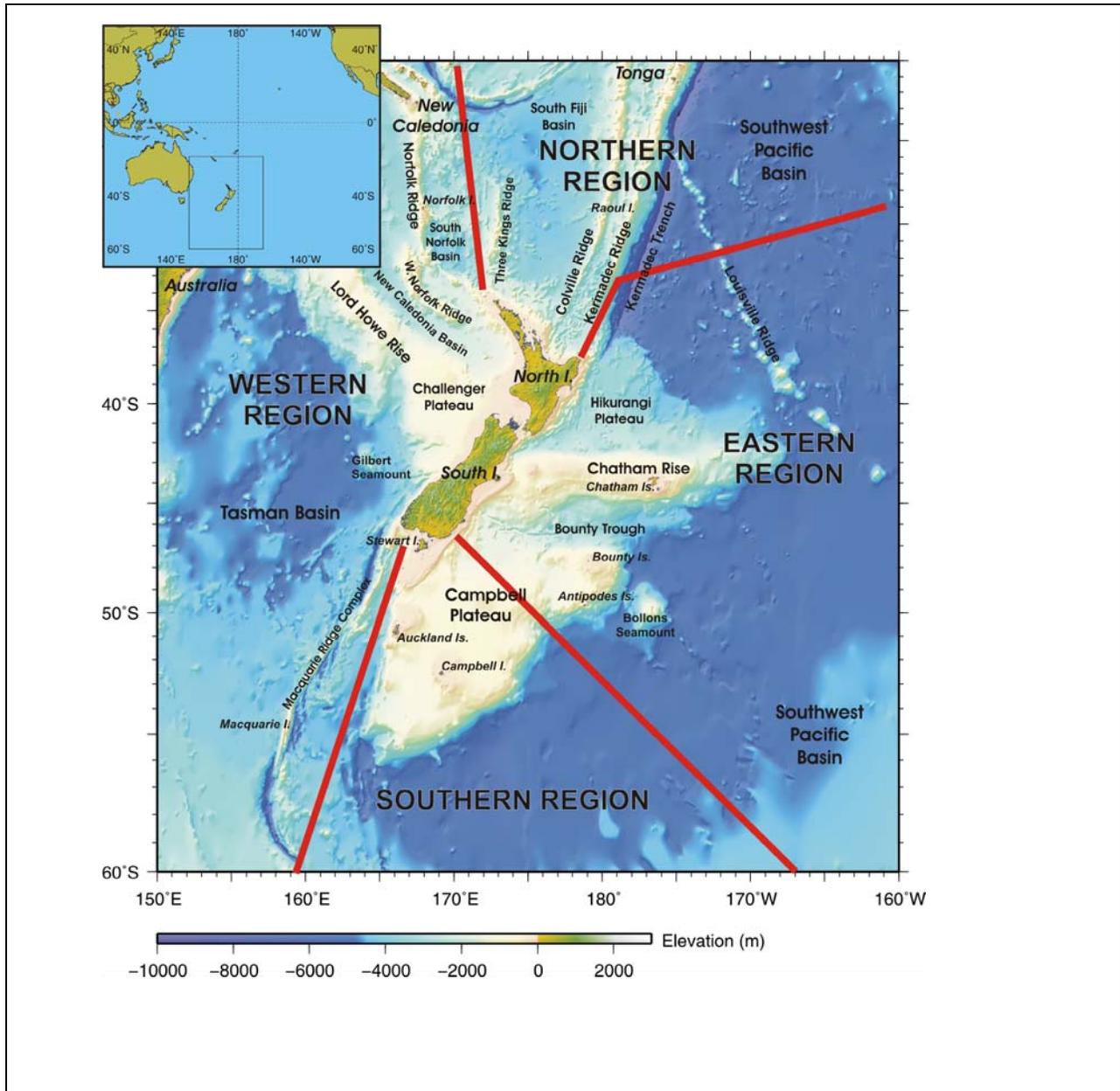
- 25 The Subcommission examined the Submission through the following processes:
- 26 Detailed examination of the data and information supporting every of the foot of the continental slope (hereinafter “FOS”) point, selected for the delineation of the proposed outer limits;
- 27 Raising questions on points for clarification for response by the delegation of New Zealand, and continuing to examine parts of the Submission and any further clarifications by the Delegation;
- 28 Requesting technical support from the GIS staff of DOALOS; and
- 29 Preliminary conclusions on all regions were presented to the New Zealand Delegation.
- 30 The processes described above were carried out for the four regions described in the sections below.

### **II. GENERAL PRINCIPLES ON WHICH THESE RECOMMENDATIONS ARE BASED**

- 31 It is hereby reiterated that the examination of New Zealand’s Submission by the Commission have been made in accordance with the mandate contained in article 76 and Annex II of the Convention. The examination of the Submission and the Recommendations of the Commission are based on the scientific and technical data provided by New Zealand in the application of article 76. The Recommendations of the Commission only deal with issues related to article 76 and Annex II to the Convention and are without prejudice to matters relating to delimitation between States or application of other parts of the Convention or any other treaties.

### **III. RECOMMENDATIONS**

- 32 New Zealand’s Submission has been divided into four regions (Fig.1 ):
- 33 **Northern** (which covers the Three Kings Ridge, Colville Ridge, and northern Kermadec Ridge and Kermadec Trench);
- 34 **Eastern** (which covers the southern Kermadec Ridge and Kermadec Trench, Hikurangi Plateau, Chatham Rise, Bounty Trough, and northern Campbell Plateau);
- 35 **Southern** (which covers the southern margin of the Campbell Plateau); and
- 36 **Western** (which covers the southern Norfolk Ridge System, New Caledonia Basin, Challenger Plateau, Lord Howe Rise, and the Macquarie Ridge Complex).



**Fig. 1. Regional subdivision and main geomorphological elements of the New Zealand continental margin**

## A. Northern Region

### 1. Geographical region description

37 The Northern Region covers the continental margin north of New Zealand, from the Kermadec Trench in the east to the Three Kings Ridge in the west. The region comprises two areas, which together are part of the same continental margin (Fig 1):

**a.** The prolongation along the Kermadec and Colville ridges, north of the line 200 nautical miles (hereinafter “M”) from the New Zealand territorial sea baseline (derived from basepoints on Raoul Island) to the intersection with the lines 200 M from the territorial sea baselines of Fiji and Tonga;

b. The prolongation along the Three Kings Ridge, north from the New Zealand 200 M line at about latitude 31°S, derived from basepoints on the North Island and Three Kings Islands, to the intersection with the line of the maritime boundary between New Zealand and Australia delimited by the Treaty line of the New Zealand-Australia 2004 Delimitation Treaty.

## 2. Notes verbales submitted by other States

- 38 In a note verbale of 23 June 2006 from the Permanent Mission of the Republic of the Fiji Islands to the United Nations,<sup>12</sup> Fiji informed the Secretary-General that “consistent with Article 76, paragraph 10, of the United Nations Convention on the Law of the Sea, delimitation of boundaries negotiations are still ongoing between the Republic of the Fiji Islands and New Zealand in relation to continental shelf entitlements on the area referred to in the New Zealand Executive Summary as the Kermadec Ridge, Havre Trough, and Colville Ridge. Consequently, the Submission made by New Zealand and any recommendation to be made by the Commission on the Continental Shelf regarding the same ought to be without prejudice to any further submission to be made by the Republic of the Fiji Islands nor to the delimitation of the continental shelf of the Kermadec Ridge, Havre Trough and Colville Ridge area between the Republic of the Fiji Islands and New Zealand.” The recommendations of the Commission relating to the Kermadec Ridge, Havre Trough and Colville Ridge area only deal with the outer limits of the continental shelf of New Zealand in this region and shall not prejudice any bilateral delimitation issues between States.
- 39 In a note verbale of 13 July 2006 from the Permanent Mission of France to the United Nations,<sup>13</sup> France stated that, according to their knowledge of the Submission made by New Zealand in the Three Kings Ridge region, there may be a potential overlap in the area of the extended continental shelf of the two States. France took note that, New Zealand in its note NZ-CLCS-NTP-03 of 10 July 2006 to the Division for Ocean Affairs and the Law of the Sea (hereinafter “the Division”), emphasises that its Submission for an extended continental shelf is without prejudice to any subsequent delimitation between the two States. The same note verbale confirmed that France had no objection to the Commission considering and making recommendations on those parts of the Submission that concern areas bordering on French territories, to the extent that such recommendations, in accordance with article 76, paragraph 10, of the Convention, are without prejudice to any final delimitation of the continental shelf concluded subsequently in these areas between France and New Zealand. The Recommendations of the Commission relating to the Three Kings Ridge area only deal with the outer limits of the continental shelf of New Zealand in this region and shall not prejudice any bilateral delimitation issues between States.
- 40 In a note verbale of 8 April 2008 from the Permanent Mission of the Kingdom of Tonga to the United Nations<sup>14</sup>, informed the Secretary-General that “...the Executive Summary presented as part of the Submission made by the Government of New Zealand to the CLCS includes portions of maritime spaces under the national jurisdiction of the Kingdom of Tonga. The designated Northern Region in the Submission specifically overlaps southern portions of the exclusive economic zone and the continental shelf within and beyond 200 M of the Kingdom of Tonga.” Furthermore, Tonga made reference to consultations with New Zealand

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<sup>12</sup> The note verbale is contained in Annex II to these Recommendations (on the CD-Rom enclosed with these recommendations).

<sup>13</sup> *Idem.*

<sup>14</sup> *Idem.*

and stated that "... the Government of the Kingdom of Tonga does not wish to jeopardize or to hamper in any way the consideration by the CLCS of the Submission made by New Zealand in the Northern Region. The Kingdom of Tonga takes this action also fully aware of the fact that the position of the Government of New Zealand is consistent with its interpretation of article 76, paragraph 10, in the sense that notwithstanding the outcome of the Recommendation made by the CLCS and the outer limit determined by the Government of New Zealand on those Recommendations, the delimitation of the exclusive economic zone and the continental shelf shall be effected by agreement on the basis of international law, as referred to in Article 38 of the Statute of the international Court of Justice, in order to achieve an equitable solution."

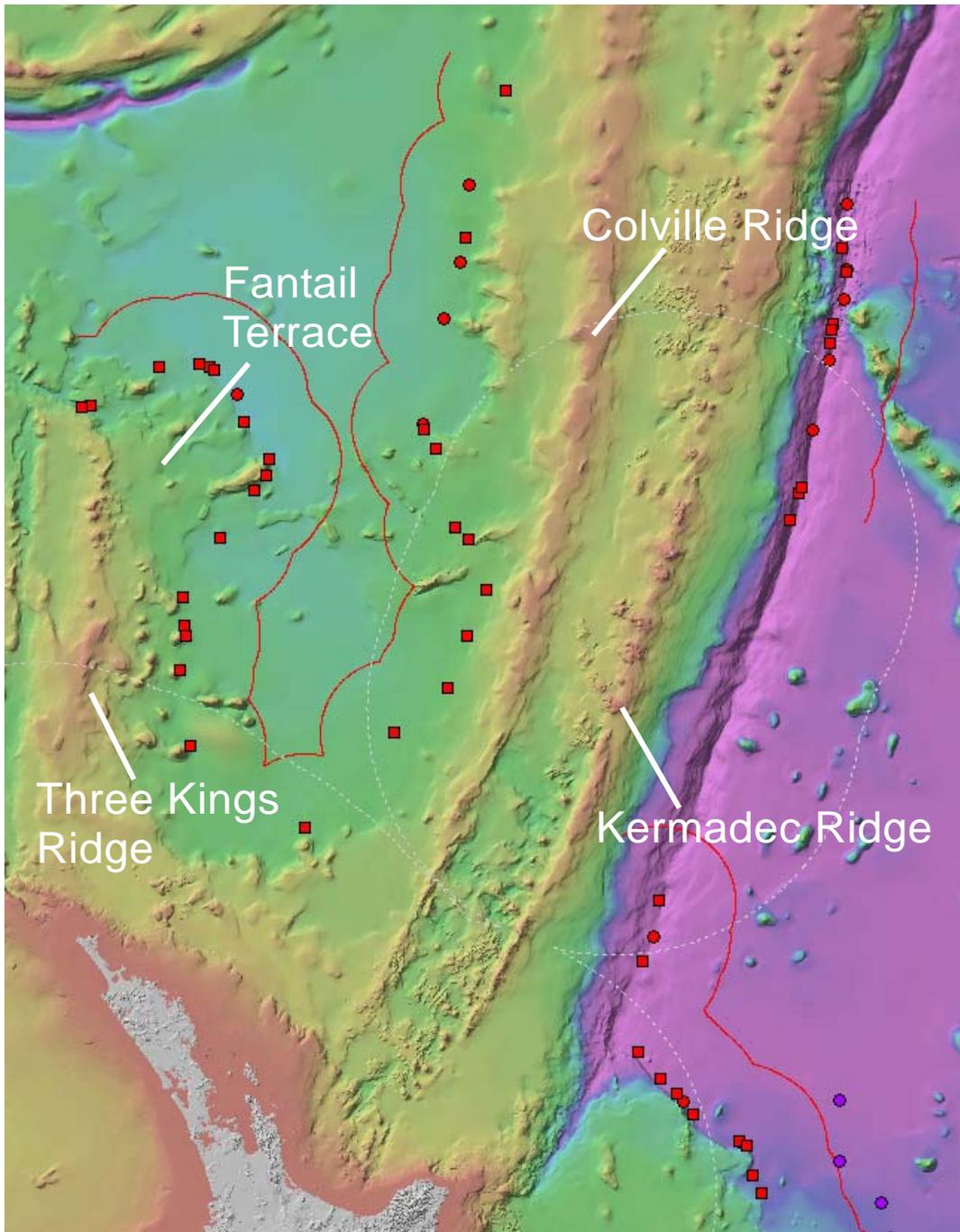
- 41 In a note verbale of 31 July 2008, the Permanent Mission of New Zealand to the United Nations<sup>15</sup> stated: "The Permanent Mission wishes further to reaffirm that, consistent with article 76, paragraph 10, of the Convention, the New Zealand submission has been made without prejudice to the eventual delimitation of boundaries between New Zealand and Tonga and without prejudice to Tonga's right to make its own submission to the Commission on the Limits of the Continental Shelf pursuant to article 76, paragraph 8, of the Convention. The Permanent Mission accordingly welcomes Tonga's confirmation that it has no objection to the Commission considering and making recommendations on the New Zealand submission on that basis."
- 42 It is reiterated, in relation to the above notes verbales from Tonga and New Zealand, that the recommendations of the Commission relating to the Kermadec Ridge, Havre Trough and Colville Ridge area only deal with the outer limits of the continental shelf of New Zealand in this region and shall not prejudice any bilateral delimitation issues between States.

### **3. Submarine prolongation of landmass and entitlement to the continental shelf beyond 200 M**

- 43 The outer edge of the continental margin, as generated from the foot of the continental slope of the Northern Region by applying the provisions of article 76, paragraph 4, extends beyond the 200 M limits of New Zealand. On this basis, the Commission recognises the legal entitlement of New Zealand to establish continental shelf beyond its 200 M limits in this region (Figure. A.1).

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<sup>15</sup> Idem.



**Figure A.1. Overview of the FOS points and the associated formula points that are the basis for demonstrating the submerged prolongation of the landmass of New Zealand and establishing the outer edge of its continental margin in the Northern Region. White line (stippled) is the 200 M line from the territorial sea baseline of New Zealand, Red circles and squares are critical and relevant FOS points, red line is arc of Hedberg points, purple circles are Gardiner points.**

#### **4. Recommendations regarding the determination of foot of the continental slope**

- 44 The foot of the continental slope should be established in accordance with article 76, paragraph 4(b).

##### **4.1 Considerations**

- 45 FOS points that generate formula points beyond 200 M in the Northern Region are found along the eastern and western flanks of the Kermadec and Colville Ridge pair on the eastern side of South Fiji Basin, and along the eastern flank of the Three Kings Ridge on the western.
- 46 The Kermadec and Colville Ridges form a set of coalesced ridges with the Kermadec Ridge facing the Pacific Ocean to the east and the Colville Ridge facing the South Fiji Basin to the west. The Kermadec Trough is the oceanic subduction zone along the eastern flank of the Kermadec Ridge. The eastern continental slope of the Kermadec Ridge is steep and the base of the slope, being the base of the subduction trough, is readily identified on a morphological basis. Accordingly, the eastern flank of the Kermadec Ridge may be readily delineated by its foot of the continental slope envelope and the Commission agrees with the way the foot of the continental slope is established by New Zealand in this area.
- 47 The location of the base of the continental slope towards the South Fiji Basin, i.e. the transition from the slope of the Colville to the deep ocean floor of the South Fiji Basin is generally easily identified on a morphological basis. Subcommission agreed in general with the way the foot of the continental slope is established by New Zealand in this area, except for the FOS points TKR-398, TKR-357, and TKR-110. These FOS points seemed to be established on the basis of features that are morphologically detached from the continental slope. The Subcommission conveyed its view to New Zealand. In its response contained in NZ-CLCS-DOC-08 New Zealand reported that the three points TKR-398, TKR -357, and TKR-110 should be deleted and replaced by the already existing points TKR-293, TKR-188 and TKR-328, respectively. They also reported that, as a consequence, point TKR 399 should also be deleted.
- 48 The Three Kings Ridge is an ancient island arc ridge extending northward from the North Island between the South Fiji Basin to the east and the Norfolk Basin to west. The northern end of the Three Kings ridge is dominated by the deeper Fantail Terrace. The location of the base of the continental slope, i.e. the transition from the slope to the deep ocean floor of the South Fiji Basin is identified on a morphological basis, recognising that the Fantail Terrace is an integral part of the Three King Ridge system. Accordingly, the eastern flank of the Three King Ridge may be readily delineated by its foot of the continental slope envelope and the Commission agrees with the way the foot of the continental slope is established by New Zealand in this area. The western flank is on the Australian side of the treaty line and is not dealt with in the Submission.

##### **4.2 Recommendations**

- 49 Based on its consideration of the technical and scientific documentation contained in the Submission of 19 April 2006 and the information provided in document NZ-CLCS-DOC-08, the Commission concludes that, in the Northern Region, the FOS points listed in Table 1.A, Annex III, fulfil the criteria in accordance with article 76 and Chapter 5 of the Guidelines. The Commission recommends that these FOS points should form the basis for the establishment of the outer edge of the continental margin of New Zealand, for the purposes of the Convention, in the Northern Region.

## **5. Recommendations regarding the establishment of the outer edge of the continental margin**

50 The outer edge of the continental margin of New Zealand in the Northern Region should, for the purposes of the Convention, be established in accordance with article 76, paragraphs 4 and 7.

### **5.1 The application of the 60 M distance criterion**

51 In the Northern Region, the outer edge of the continental margin is based on points on arcs constructed at 60 M distance from the FOS points (Table 1.A, Annex III) in accordance with the provision contained in article 76, paragraph 4(a)(ii) (Fig. A.1). The Commission agrees with the way these points have been established by New Zealand and recommends that they are used as the basis for establishing the outer limit of the continental shelf in this region.

## **6. Recommendations regarding the establishment of the outer limits of the continental shelf**

52 The outer limits of the continental shelf should be based on the established outer edge of the continental margin and taking into consideration the constraints provided in article 76, paragraphs 2, 5 and 6.

### **6.1 The application of constraint criteria**

53 The outer limits of the continental shelf cannot extend beyond the constraints as per the provisions of article 76, paragraphs 5 and 6. Accordingly, the provision that the outer limits of the continental shelf may not exceed 350 M distance from the territorial sea baselines (the distance criterion constraint) may be applied in all cases. Alternatively, the provision that the outer limits of the continental shelf may not exceed 100 M distance from the 2500 meters isobath (the depth criterion constraint) may be applied for those parts of the continental margin that are classified as natural components of that margin.

54 The application of the constraint criteria involves, firstly, the construction of the constraint line based on the distance criterion and the constraint line based on the depth criterion. Secondly, it involves the combination of these two constraint lines to establish a final combined constraint line to be applied in accordance with the provisions contained in article 76, paragraphs 5 and 6.

55 For the outer limits of the continental shelf in the Northern Region, New Zealand has invoked a combination of the distance criterion constraint and the depth criterion constraint. In the view of the Commission, the consideration of the application of depth criterion constraint involves the examination of whether the relevant seafloor highs in the Northern Region may be considered natural components of the continental margin. For the remaining parts of the outer limits the consideration involves an examination of the construction of the distance criterion constraint line.

#### **6.1.1 The construction of the distance criterion line**

56 The distance criterion constraint line submitted by New Zealand is constructed by arcs at 350 M distance from the territorial sea baselines included in the Submission. The Commission agrees with the procedure and methods applied by New Zealand in the construction of this constraint line.

#### **6.1.2 The construction of the depth criterion line**

57 The 2500 meters isobaths on which the depth criterion constraint line is based are located along the Colville Ridge and the Three Kings Ridge including the Fantail Terrace. Since all these isobaths are landward of the foot of the continental slope,

they conform to the general outline of the continental margin as defined for the purposes of the Convention. Therefore, the application of these isobaths as basis for the depth criterion constraint is in accordance with the Convention and with paragraphs 4.4.1 and 4.4.2 of the Guidelines and the Commission recommends that the depth criterion constraint line is constructed as submitted by New Zealand.

### **6.1.3 Consideration and classification of submarine highs**

58 Based on the literature and the evidence in the Submission, the Commission agrees that the Kermadec and Colville Ridge system, as well as the Three Kings Ridge with the Fantail Terrace are natural components of the continental margin of the North Island of New Zealand and may be classified as submarine elevations in the sense of article 76, paragraph 6. Hence, the depth constraint line originating from these elevations may be applied as submitted by New Zealand.

### **6.1.4 The application of the combination of the distance and the depth constraint criteria**

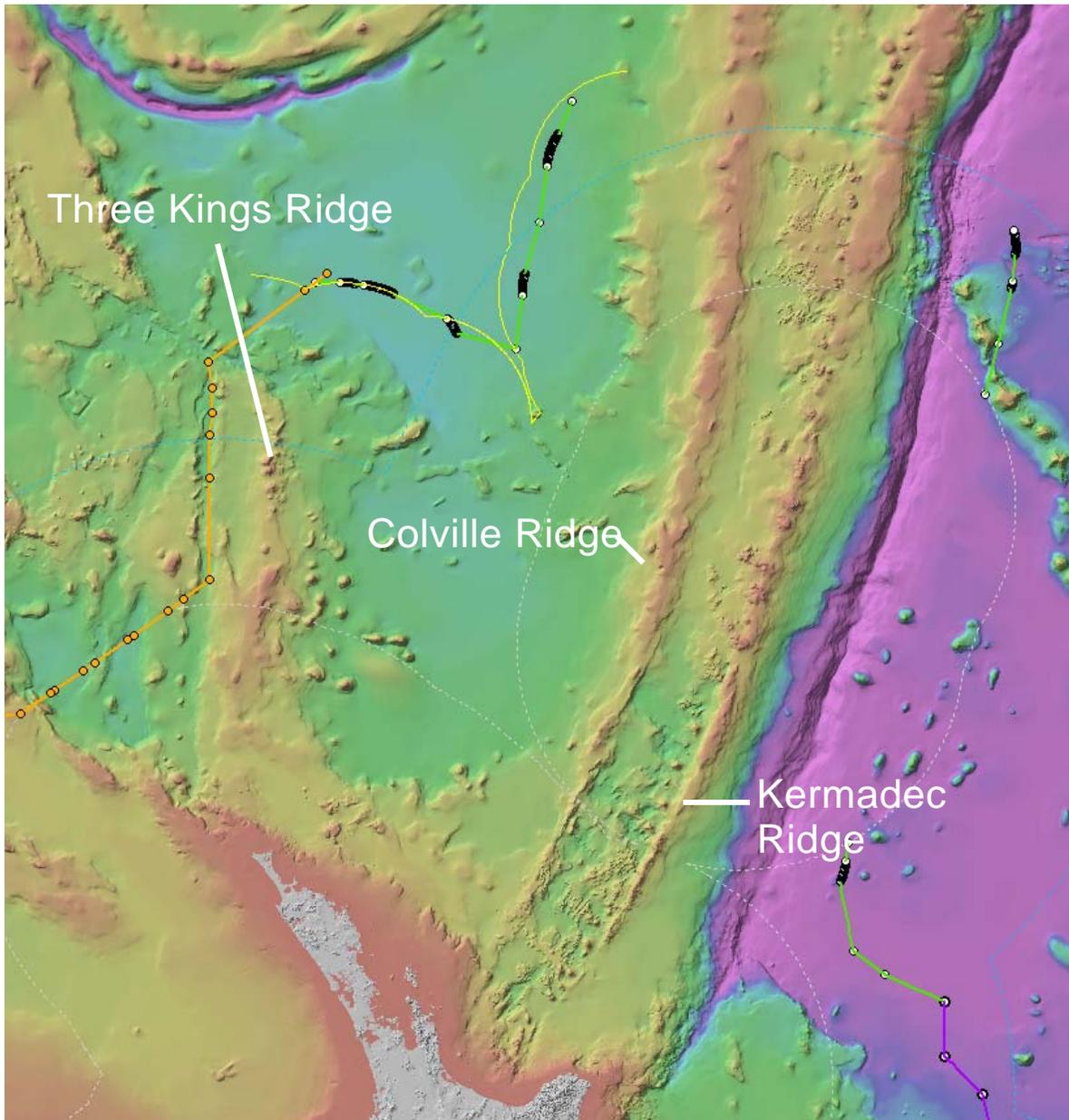
59 In the Northern Region, New Zealand has applied a constraint line based on the combination of lines constructed by the application of both the distance and depth criteria contained in article 76, paragraph 5 (see sections 6.1.1 and 6.1.2 above). The Commission agrees with the way this combined constraint line has been applied.

## **6.2 The outer limits of the continental shelf**

60 The outer limits of the continental shelf in the Northern Region as submitted by New Zealand in its Submission of 19 April 2006 and revised in NZ-CLCS-DOC-08 consist of fixed points connected by straight lines not exceeding 60 M in length (Fig. A.2). The fixed points are listed in Table 2, Annex III as submitted on 27 March 2008. The fixed points are formula points established by the provisions contained in article 76, paragraph 4(a) or points on the constraint line where the outer edge of the continental margin extends beyond the constraints. One point, N001 is located on the 200 M line of New Zealand; one point, N064 is located on the 200 M line of the Kingdom of Tonga; one point, N065, is located on the 200 M line of the Republic of the Fiji Islands; and one point, N284, is located on the treaty line with Australia (Fig. A.2).

## **6.3 Recommendations**

61 The Commission agrees with the determination of the fixed points listed in Table 1.A, Annex III, delineating the outer edge of the continental margin of New Zealand. However, the Commission does not agree to include the whole of that part of the South Fiji Basin that is located to the south of points N177 and N178 in Table 2, Annex III as part of the continental shelf of New Zealand. The Commission recommends that the delineation of the outer limit of the continental shelf in the South Fiji Basin be conducted in accordance with article 76, paragraph 7, by straight lines not exceeding 60 M in length, connecting fixed points, defined by coordinates of latitude and longitude. The establishment of the final outer limits of the continental shelf of New Zealand in this region may depend on delimitation between States. The Commission recommends, taking into consideration article 9 of Annex II, that New Zealand proceeds to establish the outer limits of the continental shelf in the Northern Region on the basis of the outer edge of the continental margin recommended in paragraph 50 and in accordance with article 76, paragraphs 7, 8, 9 and 10.



**Figure A.2. Final outer limit of the continental shelf in the Northern Region as submitted by New Zealand as at 27 March 2008. The outer limit fixed points are shown as white circles with black rims, the continental shelf outer limit line is shown in green, the 350 M constraint line in blue (stippled), the 2500 m isobath + 100 M constraint in yellow, the New Zealand-Australian Delimitation Treaty line in orange, and the 200 M lines of New Zealand and neighbouring States in white.**

## **B. Eastern Region**

### **1. Geographical region description**

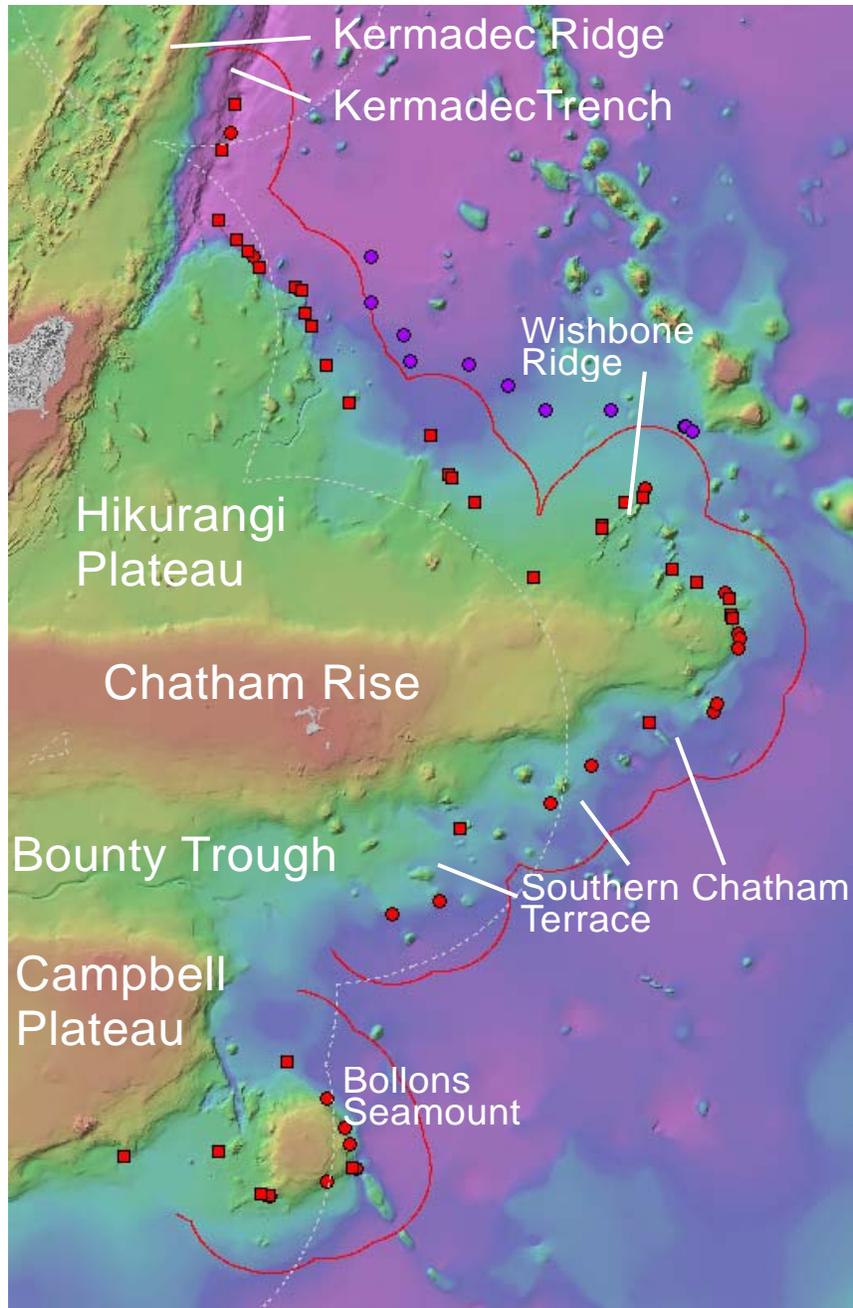
62 The Eastern Region covers the southern Kermadec Ridge and Kermadec Trench, Hikurangi Plateau, Chatham Rise, Bounty Trough, and northern Campbell Plateau (Fig 1).

### **2. Notes verbales submitted by other States**

63 No note verbale relating to the Eastern Region has been submitted by any State.

### **3. Submarine prolongation of landmass and entitlement to the continental shelf beyond 200 M**

64 The outer edge of the continental margin, as generated from the foot of the continental slope of the Eastern Region by applying the provisions of article 76, paragraph 4, extends beyond the 200 M limits of New Zealand. On this basis, the Commission recognises the legal entitlement of New Zealand to establish continental shelf beyond its 200 M limits in this region (Fig. B.1).



**Figure B.1.** Overview of the FOS points and the associated formula points that are the basis for demonstrating the submerged prolongation of the landmass of New Zealand and establishing the outer edge of its continental margin in the Eastern Region. White line (stippled) is the 200 M line from the territorial sea baseline of New Zealand, Red circles and squares are critical and relevant FOS points, red line is arc of Hedberg points, purple circles are Gardiner points.

**4. Recommendations regarding the determination of foot of the continental slope**

65 The foot of the continental slope should be established in accordance with article  
76, paragraph 4(b).

#### 4.1 Considerations

- 66 FOS points that generate formula points beyond 200 M in the Eastern Region are found along the Hikurangi Plateau, Chatham Rise and north Campbell Plateau areas. The character of the continental slope varies between these three areas of the Eastern Region.
- 67 The Hikurangi Plateau is a northward sloping plateau situated east of the North Island and north of the Chatham Rise. The location of the base of the continental slope, i.e. the transition from the slope to the deep ocean floor to the north of the Hikurangi Plateau is distinct and easily identified on a morphological basis. Accordingly, the plateau may be readily delineated by its foot of the continental slope envelope and the Subcommission agreed in general with the way this foot of the continental slope is established by New Zealand, except in the cases of FOS points CH-209 at the margin of the Hikurangi Plateau and CH-238 adjacent to the Wishbone Ridge. CH-209 is placed on the seaward side of a local high and does not seem to be in the area of the base of the slope, while the CH-238 seemed to be based on an erroneous spike in the data. The Subcommission conveyed its view to New Zealand. In its response contained in NZ-CLCS-DOC-05 of 15 December 2006, New Zealand reported that it had found data problems also with point CH-99, and that the three points CH-209, CH-238 and CH-99 should be deleted. Points CH-238 and CH-99 were replaced by already existing points CH-162 and CH-218.
- 68 The eastern end of the Chatham Rise is dominated by the Weta Seamount, separated from the rise to the west by a saddle area. The location of the base of the continental slope of the Weta Seamount and other seamounts in the area is distinct and easily identified on a morphological basis. Accordingly, the seamount area may be readily delineated by its foot of the continental slope envelope and the Subcommission agreed in general with the way this foot of the continental slope is established by New Zealand, except in the cases of FOS point CH-262 which seemed to be established on a feature not attached to the adjacent seamount.
- 69 The Southeast Chatham Terrace is situated along the south-eastern flank of the Chatham Rise, and defined in the Submission as a 100-200 km wide area at 4000 – 4800 m depth, separating the Chatham Rise main slope from abyssal water depths (i.e. >5000 m). New Zealand argues that the Southeast Chatham Terrace is part of the continental slope so that the FOS points in this area should be located along the seaward side of the terrace. The terrace is generally low lying with an outer slope of 300 - 1000 meters drop in elevation. In a series of exchanges of communications, the Subcommission wanted to satisfy itself that the areas of the relevant FOS points could be justified to represent the base of the continental slope by the bathymetric and geo-scientific data provided. Based on the Submission and the further information contained in documents NZ-CLCS-DOC-05, NZ-CLCS-DOC-07, NZ-CLCS-DOC-08 and NZ-CLCS-DOC-09, the Subcommission agreed with New Zealand that FOS points CH-80, -160, -247, -251, -262 and CH\_G-3 should be deleted, and that the outer limit in the area should be established based on points CH-72, -129, -154, -217, -248, -263, -264 and CH-287.
- 70 The Campbell Plateau is a submarine high that extends about 1000 km south and 900 km east of the South Island. It is separated from the Chatham Rise by the Bounty Trough. The location of the base of the continental slope of the northern Campbell Plateau, including the Bollons Seamount, is distinct and easily identified on a morphological basis. The saddle area between the plateau and the

Bollons Seamount is significantly shallower than the surrounding deep seafloor, and allows the seamount to be included in the foot of the continental slope envelope. Accordingly, the plateau may be readily delineated by its foot of the continental slope envelope and the Commission agrees in general with the way this foot of the continental slope is established by New Zealand.

#### **4.2 Recommendations**

- 71 Based on its consideration of the technical and scientific documentation contained in the Submission of 19 April 2006 and the information provided in documents NZ-CLCS-DOC-05, NZ-CLCS-DOC-07, NZ-CLCS-DOC-08 and NZ-CLCS-DOC-09, the Commission concludes that, in the Eastern Region, the FOS points listed in Table 1.B, Annex III, fulfil the criteria in accordance with article 76 and Chapter 5 of the Guidelines. The Commission recommends that these FOS points should form the basis for the establishment of the outer edge of the continental margin of New Zealand for the purposes of the Convention in the Eastern Region.

#### **5. Recommendations regarding the establishment of the outer edge of the continental margin**

- 72 The outer edge of the continental margin of New Zealand in the Eastern Region should, for the purposes of the Convention, be established in accordance with article 76, paragraphs 4 and 7.

##### **5.1 The application of the 60 M distance criterion**

- 73 In the Eastern Region, the outer edge of the continental margin is partly based on points on arcs constructed at 60 M distance from the FOS points (Table 1.B, Annex III) in accordance with the provision contained in article 76, paragraph 4(a)(ii). The Commission agrees with the way these points have been established by New Zealand.

##### **5.2 The application of the sediment thickness criterion**

- 74 In the Eastern Region adjacent to the Hikurangi Plateau, New Zealand has submitted 12 fixed points based on the sediment thickness provision of article 76, paragraph 4 (a)(i). New Zealand has established these sediment thickness points based on the seismic lines HKDC-1, -3, -4, -6, HKS-1A, CR3057-8B, -3, WB1A, WB1E and WB2A. The Commission agrees with the procedure applied by New Zealand to establish the sediment thickness points based on the FOS points contained in Table 1.B, Annex III, including the data provided, the seismic interpretation, the methods of depth conversion, and the distance calculations.

##### **5.3 Recommendations**

- 75 In the Eastern Region, the outer edge of the continental margin beyond 200 M is based on the arcs and points described in sections 5.1 and 5.2 above in accordance with article 76, paragraphs 4(a) and 7 (see Fig. B.1). The Commission recommends that these arcs and points are used as the basis for establishing the outer limit of the continental shelf in this region.

#### **6. Recommendations regarding the establishment of the outer limits of the continental shelf**

- 76 The outer limits of the continental shelf should be based on the established outer edge of the continental margin and taking into consideration the constraints contained in article 76, paragraphs 2, 5 and 6.

## **6.1 The application of constraint criteria**

- 77 The outer limits of the continental shelf cannot extend beyond the constraints as per the provisions contained in article 76, paragraphs 5 and 6. Accordingly, the provision that the outer limits of the continental shelf may not exceed 350 M distance from the territorial sea baselines (the distance criterion constraint) may be applied in all cases. Alternatively, the provision that the outer limits of the continental shelf may not exceed 100 M distance from the 2500 meters isobath (the depth criterion constraint) may be applied for those parts of the continental margin that are classified as natural components of that margin.
- 78 The application of the constraint criteria involves, firstly, the construction of the constraint line based on the distance criterion and the constraint line based on the depth criterion. Secondly, it involves the combination of these two constraint lines to establish a final combined constraint line to be applied in accordance with the provisions contained in article 76, paragraphs 5 and 6.
- 79 For the outer limits of the continental shelf in the Eastern Region, New Zealand has invoked a combination of the distance criterion constraint and the depth criterion constraint. In the view of the Commission, the consideration of the application of depth criterion constraint involves the examination of whether the relevant seafloor highs in the Eastern Region may be considered natural components of the continental margin. For the remaining parts of the outer limits the consideration involves an examination of the construction of the distance criterion constraint line.

### **6.1.1 The construction of the distance criterion line**

- 80 The distance criterion constraint line submitted by New Zealand is constructed by arcs at 350 M distance from the territorial sea baselines included in the Submission. The Commission agrees with the procedure and methods applied by New Zealand in the construction of this constraint line.

### **6.1.2 The construction of the depth criterion line**

- 81 The 2500 meters isobath on which the depth criterion constraint line is based are located along the Wishbone Ridge and the Chatham Bank including the Weta Seamount area. Since all these isobaths are landward of the foot of the continental slope, they conform to the general outline of the continental margin as defined for the purposes of the Convention. Therefore, the application of these isobaths as basis for the depth criterion constraint is in accordance with the Convention and with paragraphs 4.4.1 and 4.4.2 of the Guidelines and the Commission recommends that the depth criterion constraint line is constructed as submitted by New Zealand.

### **6.1.3 Consideration and classification of submarine highs**

- 82 Based on the literature and the evidence in the Submission, including the additional material provided in NZ-CLCS-DOC-05 and NZ-CLCS-DOC-07, the Commission agrees that the Wishbone Ridge is a natural component of the continental margin and may be classified as a submarine elevation in the sense of article 76, paragraph 6. Hence, the depth constraint line originating from the Wishbone Ridge may be applied as submitted by New Zealand.

### **6.1.4 The application of the combination of the distance and the depth constraint criteria**

- 83 In the Eastern Region New Zealand has applied a constraint line based on the combination of lines constructed by the application of both the distance and depth criteria contained in article 76, paragraph 5 (see sections 6.1.1 and 6.1.2 above).

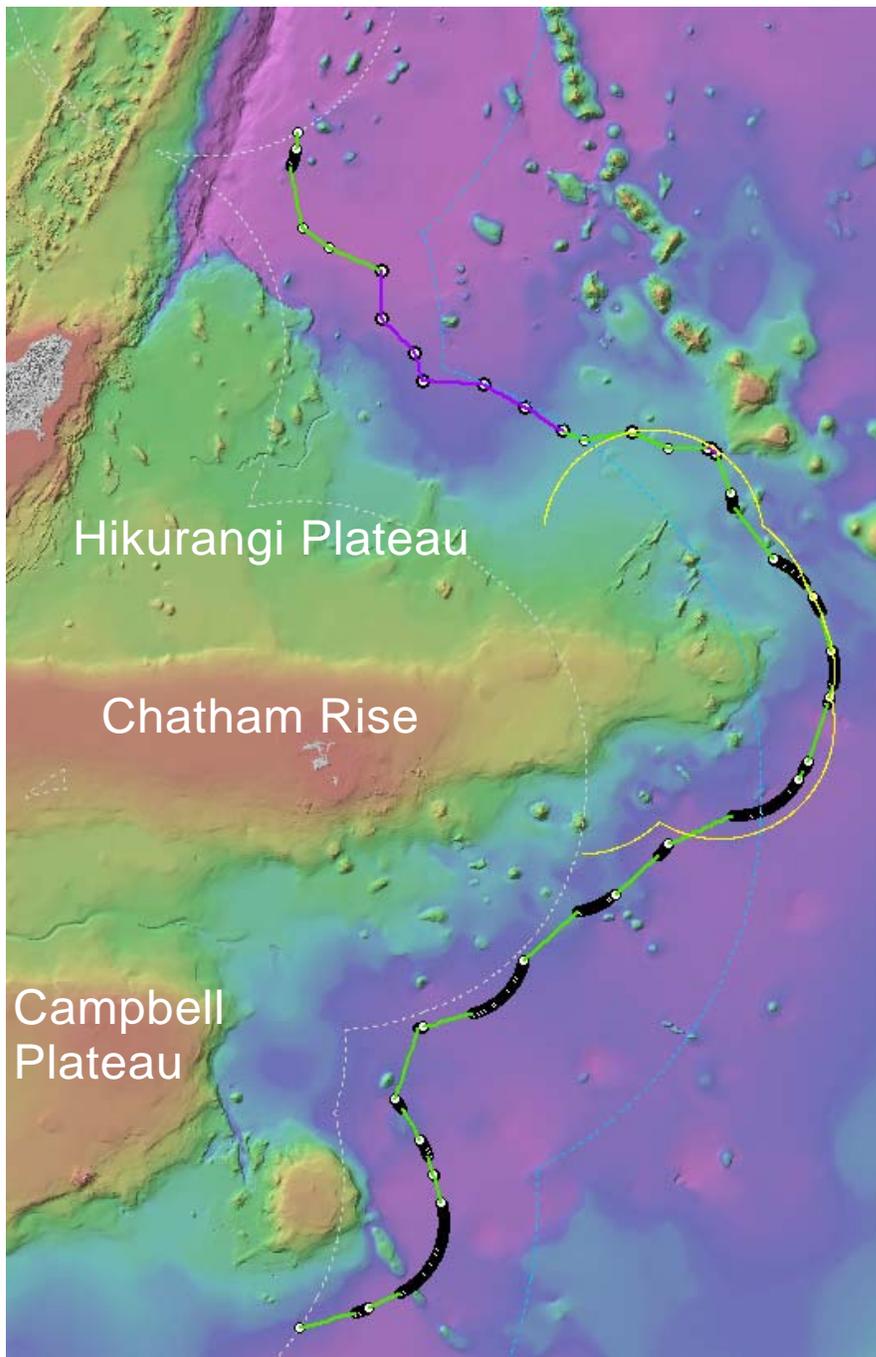
The Commission agrees with the way this combined constraint line has been applied (Fig. B.2).

## **6.2 The outer limits of the continental shelf**

- 84 The outer limits of the continental shelf in the Eastern Region as submitted by New Zealand in its Submission of 19 April 2006 and revised in NZ-CLCS-DOC-09 of 13 March 2008 consist of fixed points connected by straight lines not exceeding 60 M in length (Fig. B.2). The fixed points are listed in Table 2, Annex III, as submitted on 27 March 2008. The fixed points are formula points established by the provisions contained in article 76, paragraph 4(a), or points on the constraint line where the outer edge of the continental margin extends beyond the constraints. Two points E001 and E886 are located on the 200 M limit line (Fig. B.2).

## **6.3 Recommendations**

- 85 The Commission agrees with the principles applied in establishing the outer limits of the continental shelf in the Eastern Region, including the determination of the fixed formula points listed in Table 2, Annex III, and the construction of the straight lines connecting those points. The Commission recommends that New Zealand proceeds to establish the outer limits of the continental shelf in the Eastern Region accordingly. Further, the Commission also recommends that New Zealand includes in its continental shelf the seabed and subsoil of the polygon located beyond 200 M on the Chatham Rise as the natural prolongation of its land territory.



**Figure B.2. Final outer limit of the continental shelf in the Eastern Region as submitted by New Zealand as at 27 March 2008. The outer limit fixed points are shown as white circles with black rims, the continental shelf outer limit line where based on Hedberg points is shown in green, the continental shelf outer limit line where based on Gardiner points is shown in purple, the 350 M constraint line in blue (stippled), the 2500 m isobath + 100 M constraint in yellow, and the 200 M lines of New Zealand in white.**

## **C. Southern Region**

### **1. Geographical region description**

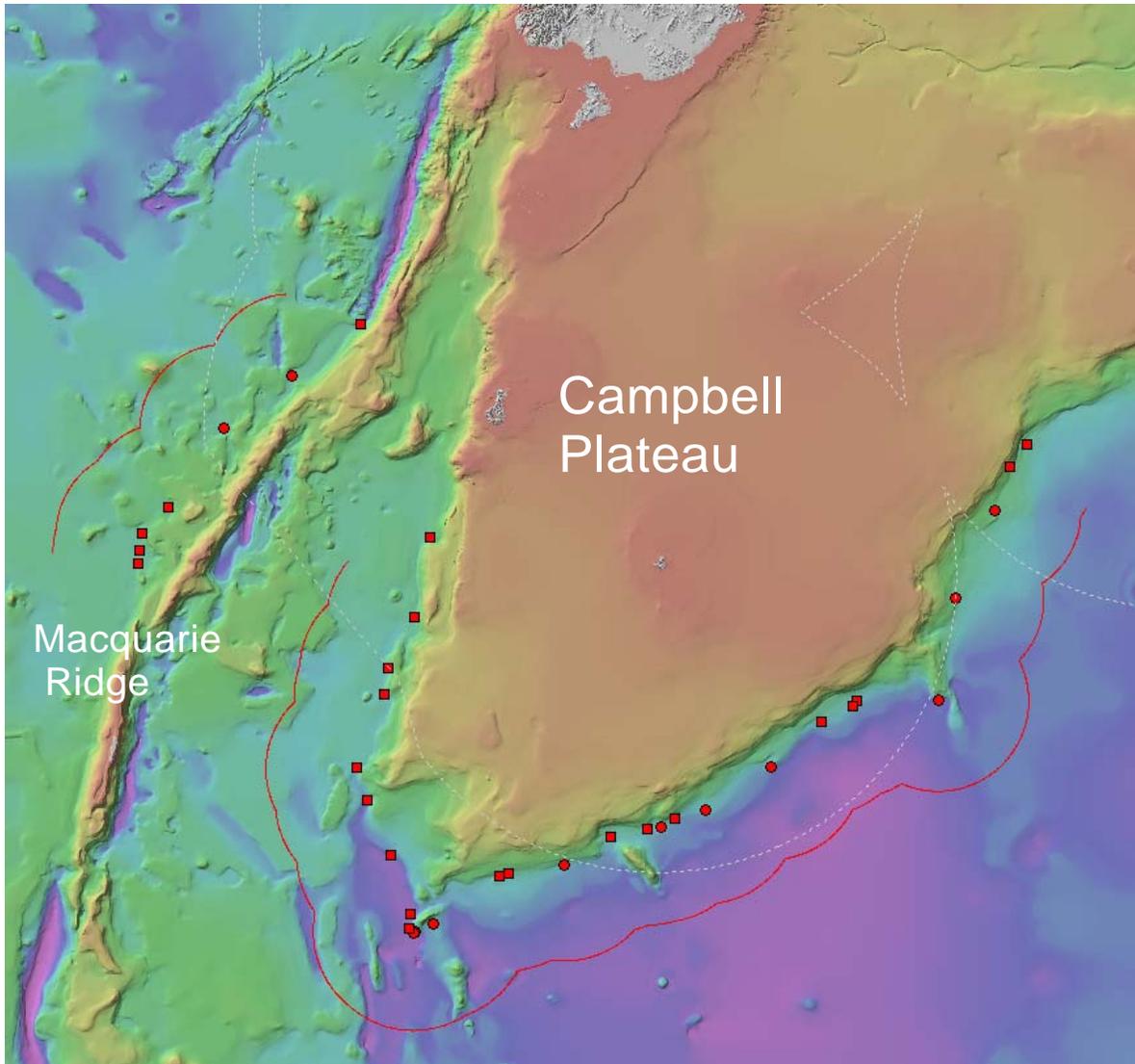
86 The Southern Region covers the southern margin of the Campbell Plateau (Fig. A.1), from its intersection with the negotiated maritime boundary with Australia in the west to the intersection with the line 200 M from New Zealand's territorial sea baseline at about 177°E longitude (Fig. 1).

### **2. Notes verbales submitted by other States**

87 No note verbale relating to the Southern Region has been submitted by any State.

### **3. Submarine prolongation of landmass and entitlement to the continental shelf beyond 200 M**

88 The outer edge of the continental margin, as generated from the foot of the continental slope of the Southern Region by applying the provisions of article 76, paragraph 4, extends beyond the 200 M limits of New Zealand. On this basis, the Commission recognises the legal entitlement of New Zealand to establish continental shelf beyond its 200 M limits in this region (Fig. C.1).



**Figure C.1. Overview of the FOS points and the associated formula points that are the basis for demonstrating the submerged prolongation of the landmass of New Zealand and establishing the outer edge of its continental margin in the Southern Region. White line (stippled) is the 200 M line from the territorial sea baseline of New Zealand, Red circles and squares are critical and relevant FOS points, red line is arc of Hedberg points, purple circles are Gardiner points.**

#### **4. Recommendations regarding the determination of foot of the continental slope**

89 The foot of the continental slope should be established in accordance with article 76, paragraph 4(b).

##### **4.1 Considerations**

90 The location of the base of the continental slope of the southern Campbell Plateau is distinct and easily identified on a morphological basis. Accordingly, the plateau may be readily delineated by its foot of the continental slope envelope and the Commission agrees in general with the way this foot of the continental slope is established by New Zealand, except for the FOS points RMC-17, -92, -20, and -16. The Subcommittee was concerned that the bathymetric profiles on which

these points were based, were too short to prove the continuity of this area with the continental slope. The Subcommittee conveyed its view to New Zealand. In its response contained in NZ-CLCS-DOC-05 of 15 December 2006, New Zealand provided further data and information. Based on the data provided, the Subcommittee then agreed with the establishment of the FOS points RMC-8, -17, -92, -20, and -16.

#### **4.2 Recommendations**

- 91 Based on its consideration of the technical and scientific documentation contained in the Submission of 19 April 2006 and the information provided in documents NZ-CLCS-DOC-05, the Commission concludes that, in the Southern Region, the FOS points listed in Table 1.C, Annex III, fulfil the criteria in accordance with article 76 and Chapter 5 of the Guidelines. The Commission recommends that these FOS points should form the basis for the establishment of the outer edge of the continental margin of New Zealand for the purposes of the Convention in the Southern Region.

#### **5. Recommendations regarding the establishment of the outer edge of the continental margin**

- 92 The outer edge of the continental margin of New Zealand in the Southern Region should, for the purposes of the Convention, be established in accordance with article 76, paragraphs 4 and 7.

#### **5.1 The application of the 60 M distance criterion**

- 93 In the Southern Region, the outer edge of the continental margin is based on points on arcs constructed at 60 M distance from the FOS points (Table 1.C, Annex III) in accordance with the provision contained in article 76, paragraph 4(a)(ii) (see Fig. C.1). The Commission agrees with the way these points have been established by New Zealand, and recommends that they are used as the basis for establishing the outer limit of the continental shelf in this region.

#### **6. Recommendations regarding the establishment of the outer limits of the continental shelf**

- 94 The outer limits of the continental shelf should be based on the established outer edge of the continental margin and taking into consideration the constraints contained in article 76, paragraphs 2, 5 and 6.

#### **6.1 The application of constraint criteria**

- 95 The outer limits of the continental shelf cannot extend beyond the constraints as per the provisions contained in article 76, paragraphs 5 and 6. Accordingly, the provision that the outer limits of the continental shelf may not exceed 350 M distance from the territorial sea baselines (the distance criterion constraint) may be applied in all cases. Alternatively, the provision that the outer limits of the continental shelf may not exceed 100 M distance from the 2500 meters isobath (the depth criterion constraint) may be applied for those parts of the continental margin that are classified as natural components of that margin.
- 96 The application of the constraint criteria involves, firstly, the construction of the constraint line based on the distance criterion and the constraint line based on the depth criterion. Secondly, it involves the combination of these two constraint lines to establish a final combined constraint line to be applied in accordance with the provisions contained in article 76, paragraphs 5 and 6.
- 97 For the outer limits of the continental shelf in the Southern Region, New Zealand has invoked the distance criterion constraint only.

### **6.1.1 The construction of the distance criterion line**

- 98 The distance criterion constraint line submitted by New Zealand is constructed by arcs at 350 M distance from the territorial sea baselines included in the Submission. The Commission agrees with the procedure and methods applied by New Zealand in the construction of this constraint line.

### **6.1.2 The application of the of the constraint criteria**

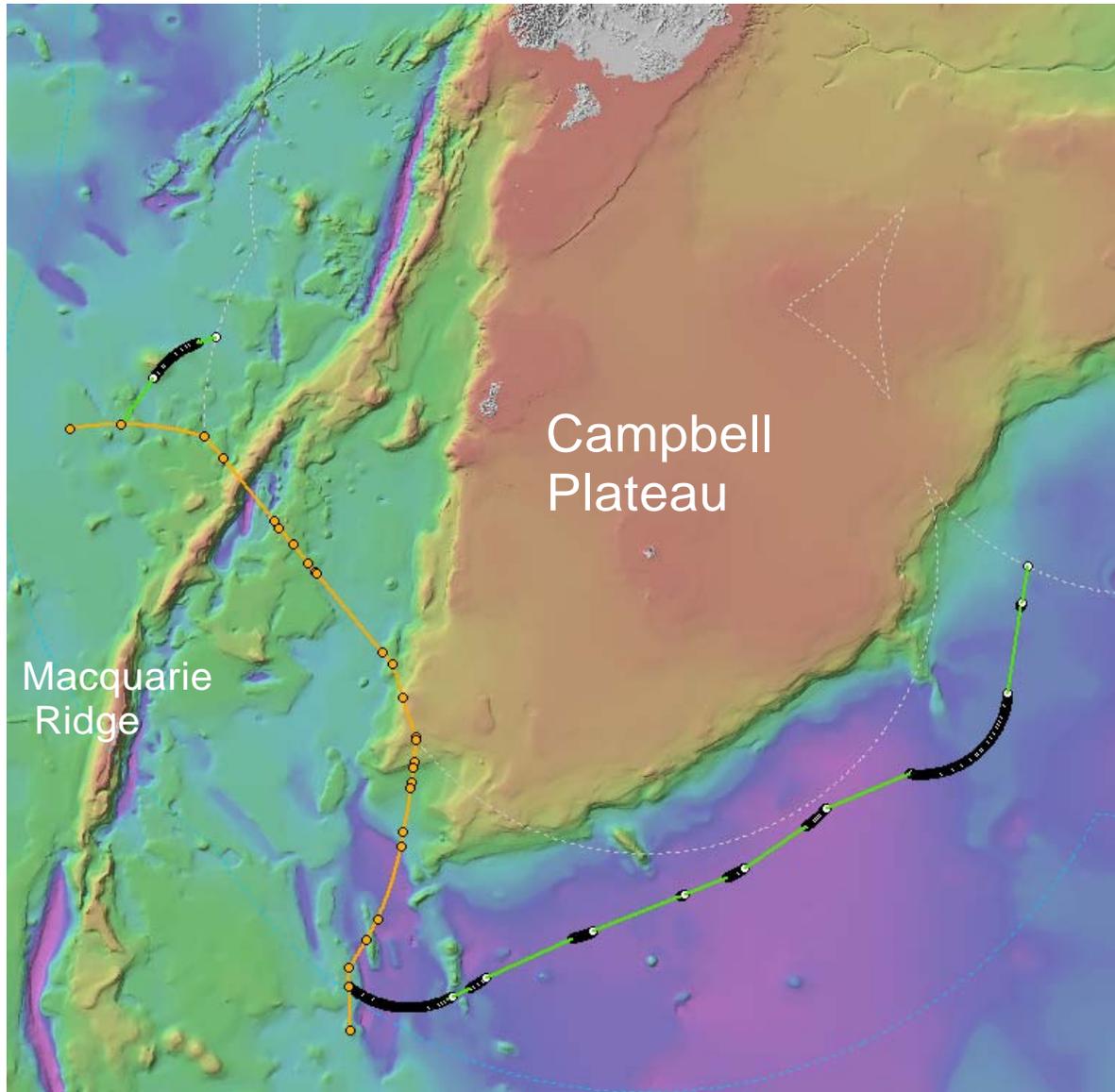
- 99 In the Southern Region New Zealand has applied a constraint line based on the distance criterion contained in article 76, paragraph 5 (see section 6.1.1 above). The Commission agrees with the way this constraint line has been applied (Fig. C.2).

## **6.2 The outer limits of the continental shelf**

- 100 The outer limits of the continental shelf in the Eastern Region as submitted by New Zealand in its Submission of 19 April 2006 consist of fixed points connected by straight lines not exceeding 60 M in length (Fig. C.2). The fixed points are listed in Table 2, Annex III, as submitted on 27 March 2008. The fixed points are formula points established by the provisions contained in article 76, paragraph 4(a) or points on the constraint line where the outer edge of the continental margin extends beyond the constraints. One point, S455, is located on the 200 M limit line, and one point, S001, is located on the treaty line with Australia (Fig. C.2).

## **6.3 Recommendations**

- 101 The Commission agrees with the principles applied in establishing the outer limits of the continental shelf in the Southern Region, including the determination of the fixed formula points listed in Table 2, Annex III, and the construction of the straight lines connecting those points. The Commission recommends that New Zealand proceeds to establish the outer limits of the continental shelf in the Southern Region accordingly. Further, the Commission also recommends that New Zealand includes in its continental shelf the seabed and subsoil of the polygon located beyond 200 M on the Campbell Plateau as the natural prolongation of its land territory.



**Figure C.2. Final outer limit of the continental shelf in the Southern Region as submitted by New Zealand as at 27 March 2008. The outer limit fixed points are shown as white circles with black rims, the continental shelf outer limit line is shown in green, the 350 M constraint line in blue (stippled), the 2500 m isobath + 100 M constraint in yellow, the New Zealand-Australian Delimitation Treaty line in orange, and the 200 M lines of New Zealand and neighbouring States in white.**

#### **D. Western Region**

##### **1. Geographical region description**

102 The Western Region covers the southern Norfolk Ridge System, New Caledonia Basin, Challenger Plateau, Lord Howe Rise, and the Macquarie Ridge Complex and may be subdivided into the two main areas (Fig. 1):

**a.** The area along the southwest margin of the Challenger Plateau, Lord Howe Rise, New Caledonia Basin and the Norfolk Ridge System, from New Zealand's 200 M line at about 172°E longitude to the New Zealand–Australia 2004 Delimitation Treaty line, and then along this treaty line to the intersection of the

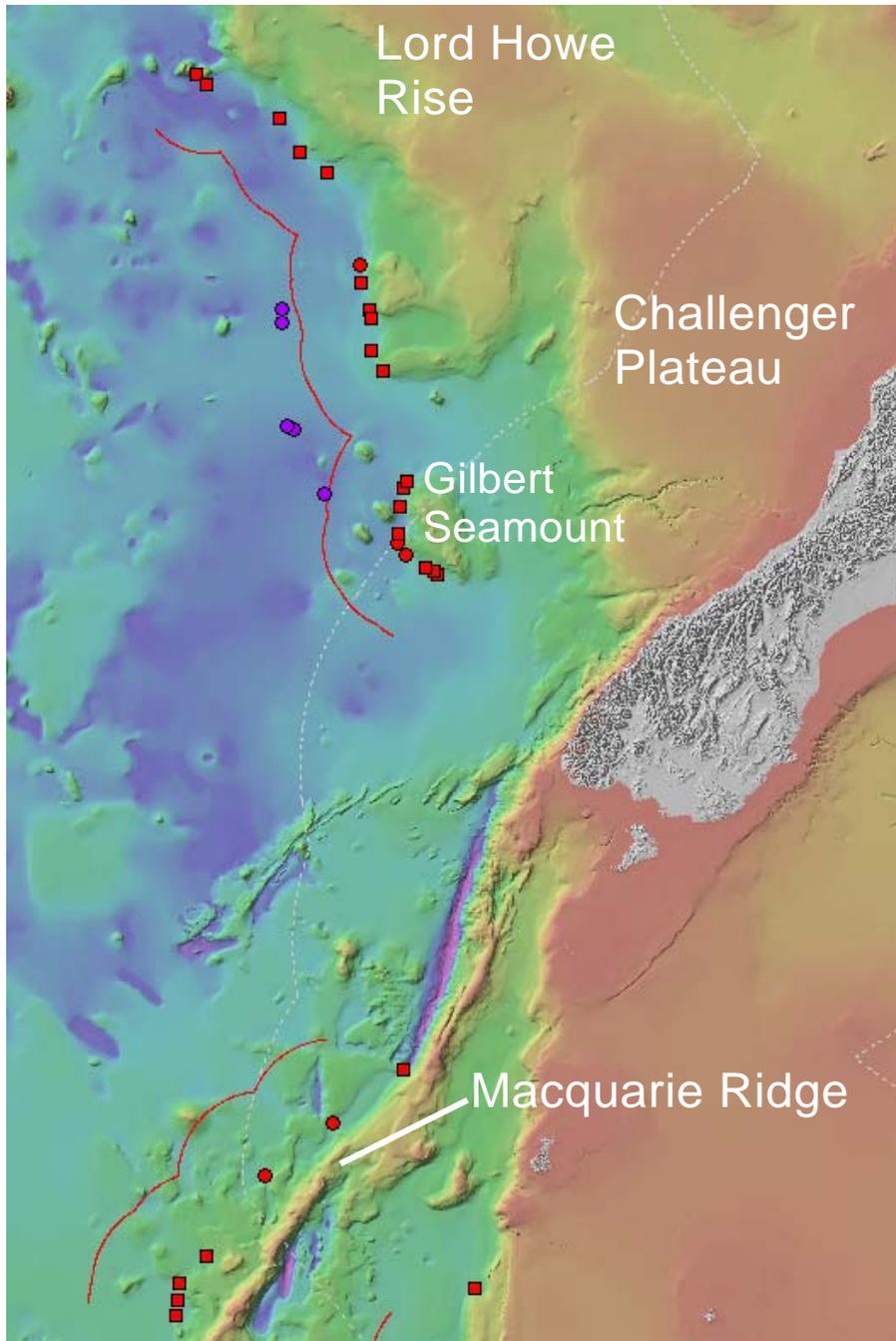
New Zealand and Australian 200 M lines near 166°E longitude.  
**b.** The area along the western margin of the Macquarie Ridge Complex, beyond the 200 nautical M lines of New Zealand and Australia.

**2. Notes verbales submitted by other States**

103 No note verbale relating to the Western Region has been submitted by any State.

**3. Submarine prolongation of landmass and entitlement to the continental shelf beyond 200 M**

104 The outer edge of the continental margin, as generated from the foot of the continental slope of the Western Region by applying the provisions of article 76, paragraph 4, extends beyond the 200 M limits of New Zealand. On this basis, the Commission recognises the legal entitlement of New Zealand to establish continental shelf beyond its 200 M limits in this region (Fig. D.1).



**Figure D.1. Overview of the FOS points and the associated formula points that are the basis for demonstrating the submerged prolongation of the landmass of New Zealand and establishing the outer edge of its continental margin in the Western Region. White line (stippled) is the 200 M line from the territorial sea baseline of New Zealand, Red circles and squares are critical and relevant FOS points, red line is arc of Hedberg points, purple circles are Gardiner points.**

#### **4. Recommendations regarding the determination of foot of the continental slope**

- 105 The foot of the continental slope should be established in accordance with article 76, paragraph 4(b).

##### **4.1 Considerations**

- 106 FOS points that generate formula points beyond 200 M in the Western Region are found along the western flanks of the Lord Howe Rise and the Challenger Plateau, including the Gilbert Seamount, and along the north-western flank of the Macquarie Ridge.
- 107 The Lord Howe Rise and the Challenger Plateau form a continuous continental slope adjacent to the Tasman Basin. The base of this continental slope is in general distinct and easily identified on a morphological basis, except in the area of the Gilbert Seamount. Accordingly, the Lord Howe Rise and the Challenger Plateau may be readily delineated by their foot of the continental slope envelope outside of the Gilbert Seamount area. In the view of the Subcommission, the establishment of the base of the continental slope along the flank of the Gilbert Seamount needed further supportive geological and geophysical data and information, especially with respect to the Gilbert saddle area. Such data and information was provided in documents NZ-CLCS-DOC-07, NZ-CLCS-DOC-08, and NZ-CLCS-DOC-09. After considering this supplementary data and information, the Subcommission accepted the establishment of the base of the continental slope along the flank of the Gilbert Seamount as submitted. Accordingly, the Commission agrees with the way this foot of the continental slope is established by New Zealand in the whole of this area of the Western Region.
- 108 The Macquarie Ridge Complex is a transform ridge system that extends southwards from the South Island. The base of the continental slope along the western flank of the Macquarie Ridge Complex is in general distinct and easily identified on a morphological basis. Accordingly, the western flank may readily be delineated by its foot of the continental slope envelope and the Commission agrees with the way the foot of the continental slope is established by New Zealand, except for the point RM-132. In the view of the Subcommission, the submarine high at which this point was established cannot be proven to be morphologically attached to the continental slope based on the data provided. In its communication NZ-CLCS-DOC-09 of 13 March 2008, New Zealand reported that the FOS point RM-132 shall be deleted and replaced by the already existing point RM-285.

##### **4.2 Recommendations**

- 109 Based on its consideration of the technical and scientific documentation contained in the Submission of 19 April 2006 and the information provided in document NZ-CLCS-DOC-07, NZ-CLCS-DOC-08 and NZ-CLCS-DOC-09 the Commission concludes that, in the Western Region, the FOS points listed in Table I.D, Annex III, fulfil the criteria provided for by article 76 and Chapter 5 of the Guidelines. The Commission recommends that these FOS points should form the basis for the establishment of the outer edge of the continental margin of New Zealand for the purposes of the Convention in the Western Region.

#### **5. Recommendations regarding the establishment of the outer edge of the continental margin**

- 110 The outer edge of the continental margin of New Zealand in the Western Region should, for the purposes of the Convention, be established in accordance with article 76, paragraphs 4 and 7.

### **5.1 The application of the 60 M distance criterion**

111 In the Western Region, the continental margin is partly based on points on arcs constructed at 60 M distance from the FOS points (Table 1.D, Annex III) in accordance with the provision contained in article 76, paragraph 4(a)(ii) (Fig.D.1). The Commission agrees with the way these points and lines have been established by New Zealand.

### **5.2 The application of the sediment thickness criterion**

112 In the Western Region adjacent to the Lord Howe Rise and the Challenger Plateau, New Zealand has submitted 9 fixed points based on the sediment thickness provision of article 76, paragraph 4 (a)(i) (Fig. D.1). New Zealand has established these sediment thickness points based on the seismic lines LHR-1, -2, -5, NZ-A, -J, -K, -L, -M, and TAS-94. The Commission agrees with the procedure applied by New Zealand to establish the sediment thickness points based on the FOS points contained in Table 1.D, Annex III, including the data provided, the seismic interpretation, the methods of depth conversion, and the distance calculations.

### **5.3 Recommendations**

113 In the Western Region, the outer edge of the continental margin beyond 200 M is based on the arcs and points described in sections 5.1 and 5.2 above in accordance with article 76, paragraphs 4(a) and 7 (see Fig. B.1). The Commission recommends that these arcs and points are used as the basis for establishing the outer limit of the continental shelf in this region.

## **6. Recommendations regarding the establishment of the outer limits of the continental shelf**

114 The outer limits of the continental shelf should be based on the established outer edge of the continental margin and taking into consideration the constraints contained in article 76, paragraphs 2, 5 and 6.

### **6.1 The application of constraint criteria**

115 The outer limits of the continental shelf cannot extend beyond the constraints as per the provisions contained in article 76, paragraphs 5 and 6. Accordingly, the provision that the outer limits of the continental shelf may not exceed 350 M distance from the territorial sea baselines (the distance criterion constraint) may be applied in all cases. Alternatively, the provision that the outer limits of the continental shelf may not exceed 100 M distance from the 2500 meters isobath (the depth criterion constraint) may be applied for those parts of the continental margin that are classified as natural components of that margin.

116 The application of the constraint criteria involves, firstly, the construction of the constraint line based on the distance criterion and the constraint line based on the depth criterion. Secondly, it involves the combination of these two constraint lines to establish a final combined constraint line to be applied in accordance with the provisions contained in article 76, paragraphs 5 and 6.

117 For the outer limits of the continental shelf in the Western Region, New Zealand has invoked a combination of the distance criterion constraint and the depth criterion constraint. In the view of the Commission, the consideration of the application of depth criterion constraint involves the examination of whether the relevant seafloor highs in the Western Region may be considered natural components of the continental margin. For the remaining parts of the outer limits the consideration involves an examination of the construction of the distance criterion constraint line.

### **6.1.1 The construction of the distance criterion line**

118 The distance criterion constraint line submitted by New Zealand is constructed by arcs at 350 M distance from the territorial sea baselines included in the Submission. The Commission agrees with the procedure and methods applied by New Zealand in the construction of this constraint line.

### **6.1.2 The construction of the depth criterion line**

119 The 2500 meters isobath on which the depth criterion constraint line is based are located along the Challenger Plateau and the Lord Howe Rise, including the Gilbert Seamount. Since all these isobaths are landward of the foot of the continental slope, they conform to the general outline of the continental margin as defined for the purposes of the Convention. Therefore, the application of these isobaths as basis for the depth criterion constraint is in accordance with the Convention and with paragraphs 4.4.1 and 4.4.2 of the Guidelines, and the Commission recommends that the depth criterion constraint line is constructed as submitted by New Zealand.

### **6.1.3 Consideration and classification of submarine highs**

120 Based on the literature and the evidence in the Submission, the Commission agrees that the Challenger Plateau and the Lord Howe Rise, including the Gilbert Seamount, are natural components of the continental margin of New Zealand and be classified as submarine elevations in the sense of article 76, paragraph 6. Hence, the depth constraint line originating from these elevations may be applied as submitted by New Zealand.

### **6.1.4 The application of the combination of the distance and the depth constraint criteria**

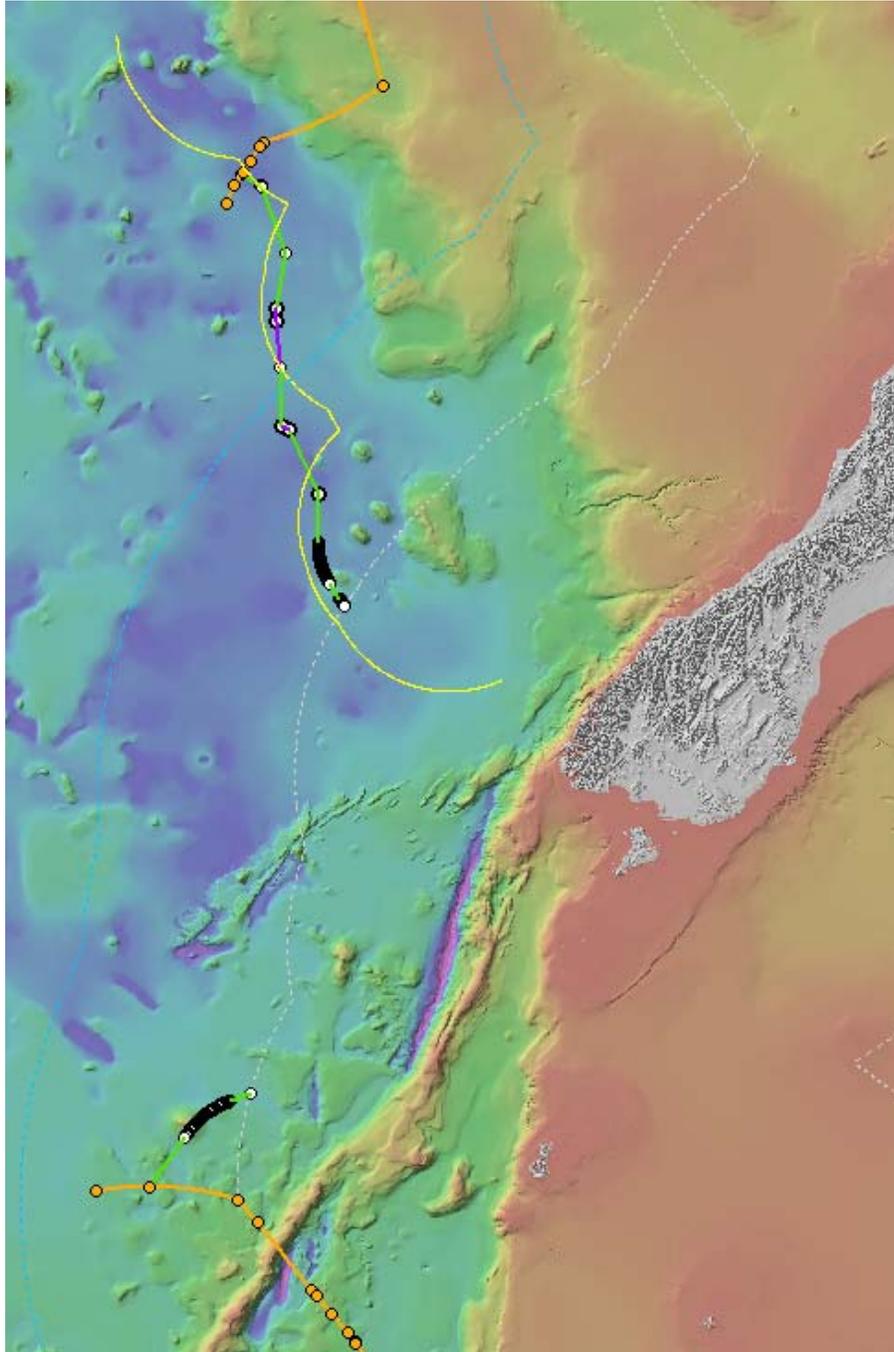
121 In the Western Region New Zealand has applied a constraint line based on the combination of lines constructed by the application of both the distance and depth criteria contained in article 76, paragraph 5 (see sections 6.1.1 and 6.1.2 above). The Commission agrees with the way this combined constraint line has been applied (Fig. D.2).

## **6.2 The outer limits of the continental shelf**

122 The outer limits of the continental shelf in the Western Region as submitted by New Zealand in its Submission of 19 April 2006 and revised in NZ-CLCS-DOC-09 consist of fixed points connected by straight lines not exceeding 60 M in length (Fig. D.2). The fixed points are listed in Table 2, Annex III as submitted on 27 March 2008. The fixed points are formula points established by the provisions contained in article 76, paragraph 4(a), or points on the constraint line where the outer edge of the continental margin extends beyond the constraints. Two points, W101 and W102 are located on the 200 M line of New Zealand and two points, W001 and W190, are located on the treaty line with Australia.(Fig. D.2).

## **6.3 Recommendations**

123 The Commission agrees with the principles applied in establishing the outer limits of the continental shelf in the Western Region, including the determination of the fixed formula points listed in Table 2, Annex III, and the construction of the straight lines connecting those points. The Commission recommends that New Zealand proceeds to establish the outer limits of the continental shelf in the Western Region accordingly.



**Figure D.2. Final outer limit of the continental shelf in the Western Region as submitted by New Zealand as at 27 March 2008. The outer limit fixed points are shown as white circles with black rims, the continental shelf outer limit line where based on Hedberg points is shown in green, the continental shelf outer limit line where based on Gardiner points is shown in purple, the 350 M constraint line in blue (stippled), the 2500 m isobath + 100 M constraint in yellow, the New Zealand-Australian Delimitation Treaty line in orange, and the 200 M line of New Zealand in white.**

**SUMMARY  
OF THE RECOMMENDATIONS OF THE COMMISSION ON THE  
LIMITS OF THE CONTINENTAL SHELF (CLCS) IN REGARD TO  
THE SUBMISSION MADE BY NEW ZEALAND 19 APRIL 2006 <sup>16</sup>**

**Adopted by CLCS on 22 August 2008**

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<sup>16</sup> 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 CLCS/40/Rev. 1, Annex III, Part V, Rule 11.3. The summary is based on excerpts of these Recommendations and should be made public together with the tables contained in Annex III of these Recommendations. Only additions to excerpted text are paragraph 126 and Figures 2 and 3.

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#### IV. INTRODUCTION

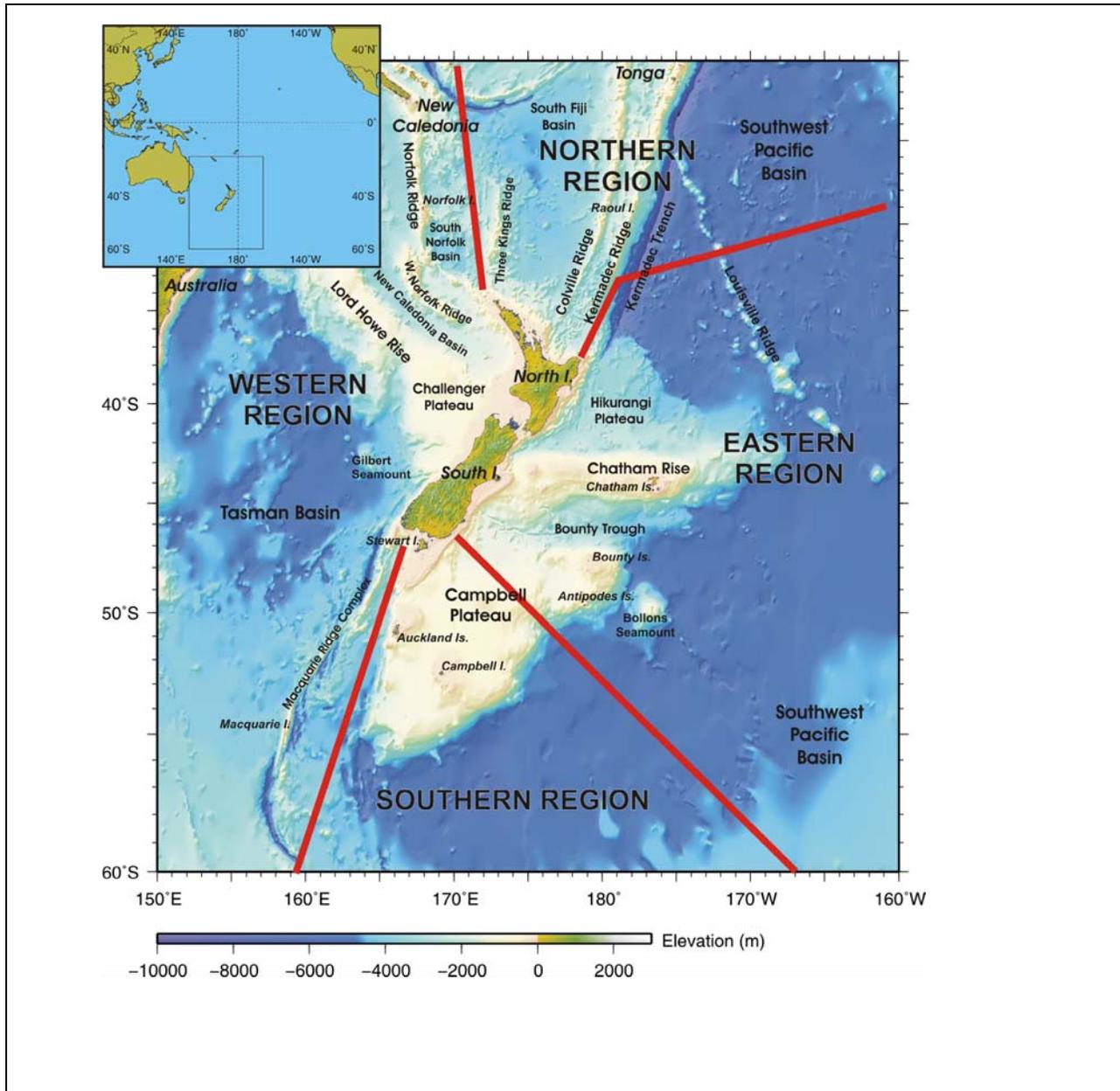
- 124 New Zealand transmitted a Submission to the Commission on the Limits of the Continental Shelf (hereinafter “the Commission”), through the Secretary-General of the United Nations (hereinafter “the Secretary-General”), on 19 April 2006 by note verbale NZ-CLCS-TPN-01. This Submission was made pursuant to the provisions contained in article 76, paragraph 8, and article 4 of Annex II to the 1982 United Nations Convention on the Law of the Sea (hereinafter “the Convention”). References to article 76 and paragraphs therein shall be understood to mean article 76 of the Convention. The Submission contained: Part I - Executive Summary; Part II – Main Body which is the analytical and descriptive part and Part III- Scientific and Technical Data.
- 125 The Subcommission carried out its examination of the Submission during the following sessions: nineteenth, twentieth, resumed twentieth and twenty-first. During these sessions, as well as intersessionally the Subcommission held 11 meetings with the New Zealand Delegation in which it presented 4 preliminary considerations and posed 9 questions in writing. In response, the New Zealand Delegation provided to the Subcommission 11 documents (with enclosures), 12 PowerPoint presentations as well as 16 CD/DVD-Roms. In addition, the Commission held two meetings with the Delegation.
- 126 The Commission took note of the notes verbales regarding possible overlapping continental shelf areas emanating from the Submission of New Zealand, submitted to the Secretary-General by the Republic of Fiji, France, the Kingdom of Tonga, and New Zealand. The notes verbales are posted on the website of the Commission.

#### V. GENERAL PRINCIPLES ON WHICH THESE RECOMMENDATIONS ARE BASED

- 127 It is hereby reiterated that the examination of New Zealand’s Submission by the Commission have been made in accordance with the mandate contained in article 76 and Annex II of the Convention. The examination of the Submission and the Recommendations of the Commission are based on the scientific and technical data provided by New Zealand in the application of article 76. The Recommendations of the Commission only deals with issues related to article 76 and Annex II to the Convention and are without prejudice to matters relating to delimitation between States or application of other parts of the Convention or any other treaties.

#### VI. RECOMMENDATIONS

- 128 New Zealand’s submission has been divided into four regions (Fig.1 ):
- 129 **Northern** (which covers the Three Kings Ridge, Colville Ridge, and northern Kermadec Ridge and Kermadec Trench);
- 130 **Eastern** (which covers the southern Kermadec Ridge and Kermadec Trench, Hikurangi Plateau, Chatham Rise, Bounty Trough, and northern Campbell Plateau);
- 131 **Southern** (which covers the southern margin of the Campbell Plateau); and
- 132 **Western** (which covers the southern Norfolk Ridge System, New Caledonia Basin, Challenger Plateau, Lord Howe Rise, and the Macquarie Ridge Complex).



**Fig. 1. Regional subdivision and main geomorphological elements of the New Zealand continental margin**

## A. Northern Region

### 1. Geographical region description

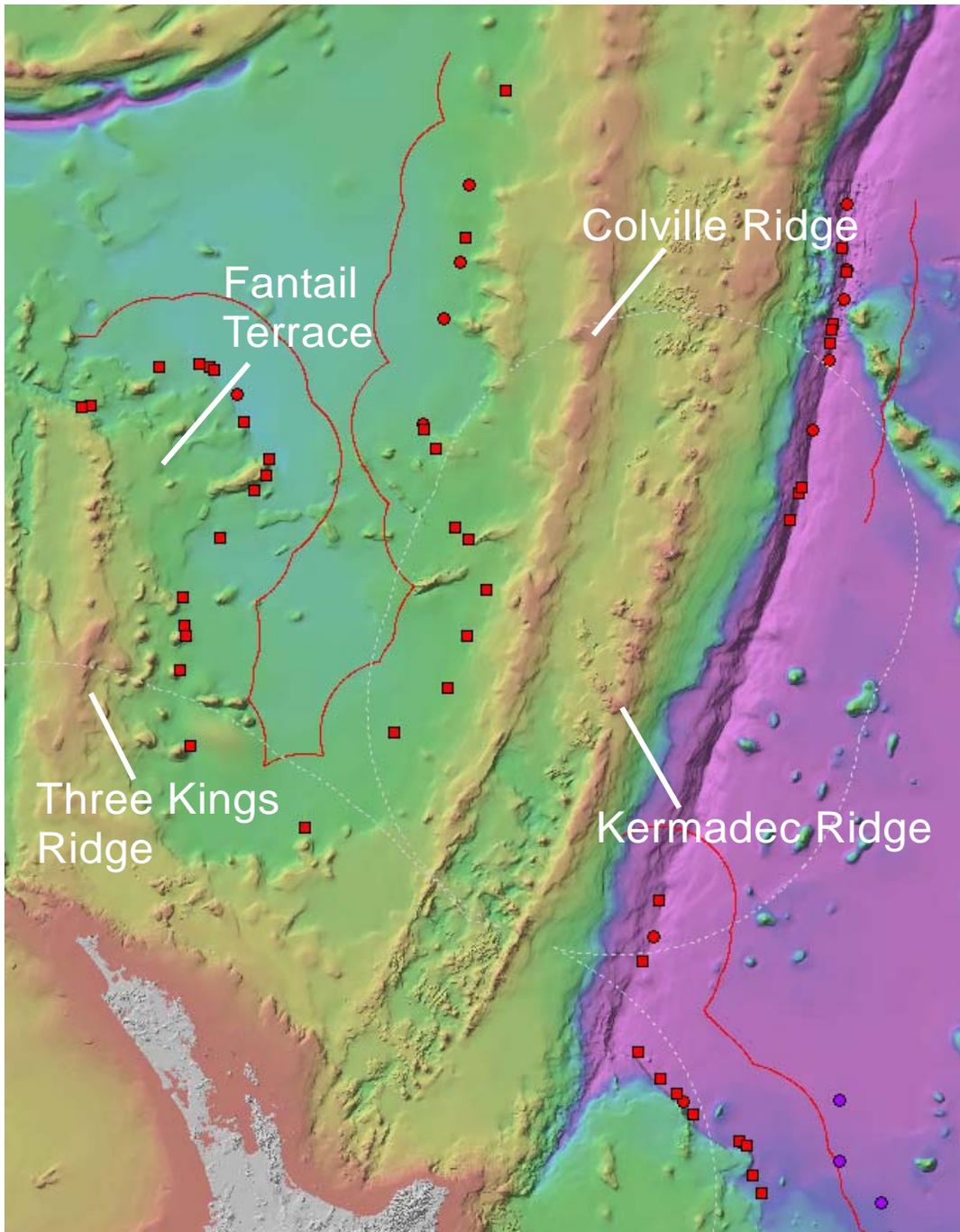
133 The Northern Region covers the continental margin north of New Zealand, from the Kermadec Trench in the east to the Three Kings Ridge in the west. The region comprises two areas, which together are part of the same continental margin (Fig 1):

**a.** The prolongation along the Kermadec and Colville ridges, north of the line 200 nautical miles (hereinafter “M”) from the New Zealand territorial sea baseline (derived from basepoints on Raoul Island) to the intersection with the lines 200 M from the territorial sea baselines of Fiji and Tonga:

**b.** The prolongation along the Three Kings Ridge, north from the New Zealand 200 M line at about latitude 31°S, derived from basepoints on the North Island and Three Kings Islands, to the intersection with the line of the maritime boundary between New Zealand and Australia delimited by the Treaty line of the New Zealand-Australia 2004 Delimitation Treaty.

**2. Submarine prolongation of landmass and entitlement to the continental shelf beyond 200 M**

134 The outer edge of the continental margin, as generated from the foot of the continental slope of the Northern Region by applying the provisions of article 76, paragraph 4, extends beyond the 200 M limits of New Zealand. On this basis, the Commission recognises the legal entitlement of New Zealand to establish continental shelf beyond its 200 M limits in this region (Figure. A.1).



**Figure A.1. Overview of the foot of the continental slope (FOS) points and the associated formula points that are the basis for demonstrating the submerged prolongation of the landmass of New Zealand and establishing the outer edge of its continental margin in the Northern Region. White line (stippled) is the 200 M line from the territorial sea baseline of New Zealand, Red circles and squares are critical and relevant foot of the FOS points, red line is arc of Hedberg points, purple circles are Gardiner points.**

### **3. Recommendations regarding the determination of foot of the continental slope**

#### **3.1 Considerations**

- 135 FOS points that generate formula points beyond 200 M in the Northern Region are found along the eastern and western flanks of the Kermadec and Coville Ridge pair on the eastern side of South Fiji Basin, and along the eastern flank of the Three Kings Ridge on the western.
- 136 The Kermadec and Colville Ridges form a set of coalesced ridges with the Kermadec Ridge facing the Pacific Ocean to the east and the Colville Ridge facing the South Fiji Basin to the west. The Kermadec Trough is the oceanic subduction zone along the eastern flank of the Kermadec Ridge. The eastern continental slope of the Kermadec Ridge is steep and the base of the slope, being the base of the subduction trough, is readily identified on a morphological basis. Accordingly, the eastern flank of the Kermadec Ridge may be readily delineated by its foot of the continental slope envelope and the Commission agrees with the way the foot of the continental slope is established by New Zealand in this area.
- 137 The location of the base of the continental slope towards the South Fiji Basin, i.e. the transition from the slope of the Colville to the deep ocean floor of the South Fiji Basin is generally easily identified on a morphological basis.
- 138 The Three Kings Ridge is an ancient island arc ridge extending northward from the North Island between the South Fiji Basin to the east and the Norfolk Basin to west. The northern end of the Three Kings ridge is dominated by the deeper Fantail Terrace. The location of the base of the continental slope, i.e. the transition from the slope to the deep ocean floor of the South Fiji Basin is identified on a morphological basis, recognising that the Fantail Terrace is an integral part of the Three King Ridge system. Accordingly, the eastern flank of the Three King Ridge may be readily delineated by its foot of the continental slope envelope and the Commission agrees with the way the foot of the continental slope is established by New Zealand in this area. The western flank is on the Australian side of the treaty line and is not dealt with in the Submission.

#### **3.2 Recommendations**

- 139 Based on its consideration of the technical and scientific documentation contained in the Submission of 19 April 2006 and the information provided in document NZ-CLCS-DOC-08, the Commission concludes that, in the Northern Region, the FOS listed in Table 1.A, Annex III, fulfil the criteria in accordance with article 76 and Chapter 5 of the Scientific and Technical Guidelines (hereinafter the "Guidelines"). The Commission recommends that these FOS points should form the basis for the establishment of the outer edge of the continental margin of New Zealand, for the purposes of the Convention, in the Northern Region.

### **4. Recommendations regarding the establishment of the outer edge of the continental margin - The application of the 60 M distance criterion**

- 140 In the Northern Region, the outer edge of the continental margin is based on points on arcs constructed at 60 M distance from the FOS points (Table 1.A, Annex III) in accordance with the provision contained in article 76, paragraph 4(a)(ii) (Fig. A.1). The Commission agrees with the way these points have been established by New Zealand and recommends that they are used as the basis for establishing the outer limit of the continental shelf in this region.

## **5. Recommendations regarding the establishment of the outer limits of the continental shelf**

141 The outer limits of the continental shelf should be based on the established outer edge of the continental margin and taking into consideration the constraints provided in article 76, paragraphs 2, 5 and 6.

### **5.1 The application of constraint criteria**

142 The outer limits of the continental shelf cannot extend beyond the constraints as per the provisions of article 76, paragraphs 5 and 6. Accordingly, the provision that the outer limits of the continental shelf may not exceed 350 M distance from the territorial sea baselines (the distance criterion constraint) may be applied in all cases. Alternatively, the provision that the outer limits of the continental shelf may not exceed 100 M distance from the 2500 meters isobath (the depth criterion constraint) may be applied for those parts of the continental margin that are classified as natural components of that margin.

#### **5.1.1 The construction of the distance criterion line**

143 The distance criterion constraint line submitted by New Zealand is constructed by arcs at 350 M distance from the territorial sea baselines included in the Submission. The Commission agrees with the procedure and methods applied by New Zealand in the construction of this constraint line.

#### **5.1.2 The construction of the depth criterion line**

144 The 2500 meters isobaths on which the depth criterion constraint line is based are located along the Colville Ridge and the Three Kings Ridge including the Fantail Terrace. Since all these isobaths are landward of the foot of the continental slope, they conform to the general outline of the continental margin as defined for the purposes of the Convention. Therefore, the application of these isobaths as basis for the depth criterion constraint is in accordance with the Convention and with paragraphs 4.4.1 and 4.4.2 of the Guidelines and the Commission recommends that the depth criterion constraint line is constructed as submitted by New Zealand.

#### **5.1.3 Consideration and classification of submarine highs**

145 Based on the literature and the evidence in the Submission, the Commission agrees that the Kermadec and Colville Ridge system, as well as the Three Kings Ridge with the Fantail Terrace are natural components of the continental margin of the North Island of New Zealand and may be classified as submarine elevations in the sense of article 76, paragraph 6. Hence, the depth constraint line originating from these elevations may be applied as submitted by New Zealand.

#### **5.1.4 The application of the combination of the distance and the depth constraint criteria**

146 In the Northern Region New Zealand has applied a constraint line based on the combination of lines constructed by the application of both the distance and depth criteria contained in article 76, paragraph 5 (see sections 6.1.1 and 6.1.2 above). The Commission agrees with the way this combined constraint line has been applied.

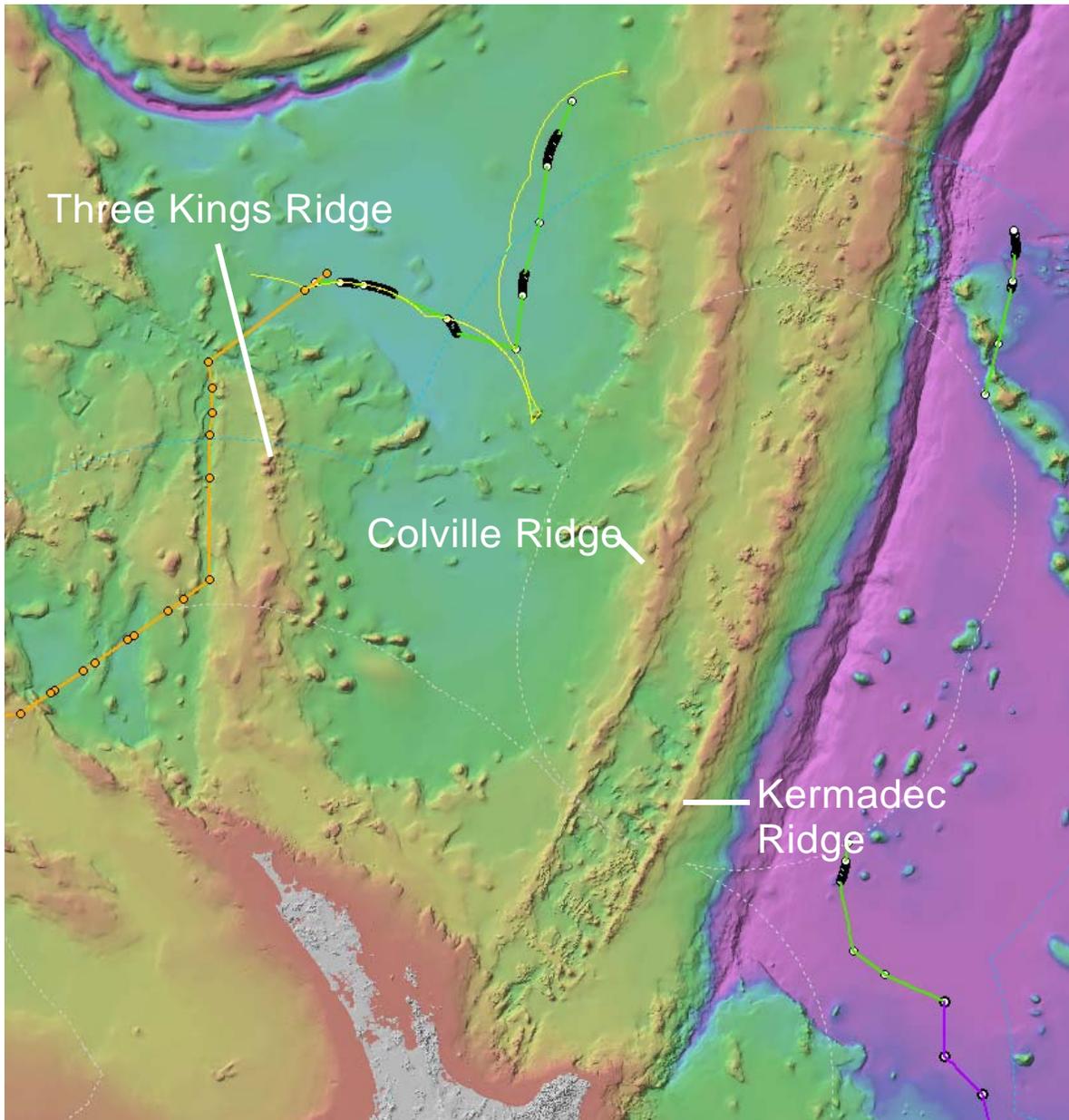
### **5.2 The outer limits of the continental shelf**

147 The outer limits of the continental shelf in the Northern Region as submitted by New Zealand in its Submission of 19 April 2006 and revised in NZ-CLCS-DOC-08 consist of fixed points connected by straight lines not exceeding 60 M in length (Fig. A.2). The fixed points are listed in Table 2, Annex III as submitted on

27 March 2008. The fixed points are formula points established by the provisions contained in article 76, paragraph 4(a) or points on the constraint line where the outer edge of the continental margin extends beyond the constraints. One point, N001 is located on the 200 M line of New Zealand; one point, N064 is located on the 200 M line of the Kingdom of Tonga; one point, N065, is located on the 200 M line of the Republic of the Fiji Islands; and one point, N284, is located on the treaty line with Australia.(Fig. A.2 ).

### **5.3 Recommendations**

- 148 The Commission agrees with the determination of the fixed points listed in Table 1.A, Annex III, delineating the outer edge of the continental margin of New Zealand. However, the Commission does not agree to include the whole of that part of the South Fiji Basin that is located to the south of points N177 and N178 in Table 2, Annex III as part of the continental shelf of New Zealand. The Commission recommends that the delineation of the outer limit of the continental shelf in the South Fiji Basin be conducted in accordance with article 76, paragraph 7, by straight lines not exceeding 60 M in length, connecting fixed points, defined by coordinates of latitude and longitude. The establishment of the final outer limits of the continental shelf of New Zealand in this region may depend on delimitation between States. The Commission recommends, taking into consideration article 9 of Annex II, that New Zealand proceeds to establish the outer limits of the continental shelf in the Northern Region on the basis of the outer edge of the continental margin recommended in paragraph 140 and in accordance with article 76, paragraphs 7, 8, 9 and 10.



**Figure A.2. Final outer limit of the continental shelf in the Northern Region as submitted by New Zealand as at 27 March 2008. The outer limit fixed points are shown as white circles with black rims, the continental shelf outer limit line is shown in green, the 350 M constraint line in blue (stippled), the 2500 m isobath + 100 M constraint in yellow, the New Zealand-Australian Delimitation Treaty line in orange, and the 200 M lines of New Zealand and neighbouring States in white.**

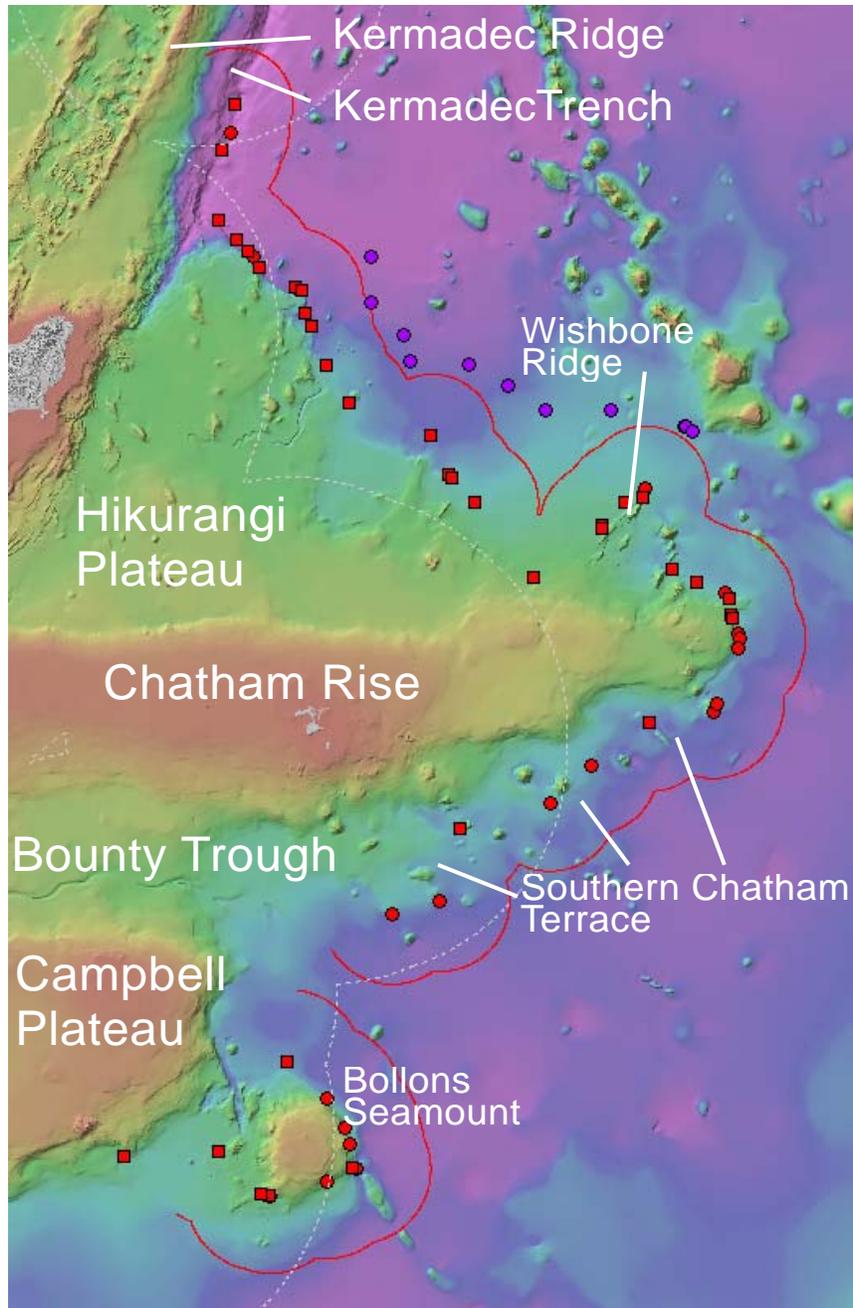
## **B. Eastern Region**

### **1. Geographical region description**

149 The Eastern Region covers the southern Kermadec Ridge and Kermadec Trench, Hikurangi Plateau, Chatham Rise, Bounty Trough, and northern Campbell Plateau (Fig 1).

### **2. Submarine prolongation of landmass and entitlement to the continental shelf beyond 200 M**

150 The outer edge of the continental margin, as generated from the foot of the continental slope of the Eastern Region by applying the provisions of article 76, paragraph 4, extends beyond the 200 M limits of New Zealand. On this basis, the Commission recognises the legal entitlement of New Zealand to establish continental shelf beyond its 200 M limits in this region (Fig. B.1).



**Figure B.1. Overview of the FOS points and the associated formula points that are the basis for demonstrating the submerged prolongation of the landmass of New Zealand and establishing the outer edge of its continental margin in the Eastern Region. White line (stippled) is the 200 M line from the territorial sea baseline of New Zealand, Red circles and squares are critical and relevant FOS points, red line is arc of Hedberg points, purple circles are Gardiner points.**

### **3. Recommendations regarding the determination of foot of the continental slope**

#### **3.1 Considerations**

- 151 FOS points that generate formula points beyond 200 M in the Eastern Region are found along the Hikurangi Plateau, Chatham Rise and north Campbell Plateau areas. The character of the continental slope varies between these three areas of the Eastern Region.
- 152 The Hikurangi Plateau is a northward sloping plateau situated east of the North Island and north of the Chatham Rise. The location of the base of the continental slope, i.e. the transition from the slope to the deep ocean floor to the north of the Hikurangi Plateau is distinct and easily identified on a morphological basis. Accordingly, the plateau may be readily delineated by its foot of the continental slope envelope and the Subcommittee agreed in general with the way this foot of the continental slope is established by New Zealand.
- 153 The eastern end of the Chatham Rise is dominated by the Weta Seamount, separated from the rise to the west by a saddle area. The location of the base of the continental slope of the Weta Seamount and other seamounts in the area is distinct and easily identified on a morphological basis. Accordingly, the seamount area may be readily delineated by its foot of the continental slope envelope and the Subcommittee agreed in general with the way this foot of the continental slope is established by New Zealand, except in the cases of FOS point CH-262 which seemed to be established on a feature not attached to the adjacent seamount.
- 154 The Southeast Chatham Terrace is situated along the south-eastern flank of the Chatham Rise, and defined in the Submission as a 100-200 km wide area at 4000 – 4800 m depth, separating the Chatham Rise main slope from abyssal water depths (i.e. >5000 m). New Zealand argues that the Southeast Chatham Terrace is part of the continental slope so that the FOS points in this area should be located along the seaward side of the terrace. The terrace is generally low lying with an outer slope of 300 - 1000 meters drop in elevation. In a series of exchanges of communications, the Subcommittee wanted to satisfy itself that the areas of the relevant FOS points could be justified to represent the base of the continental slope by the bathymetric and geo-scientific data provided. Based on the Submission and the further information the Subcommittee agreed with New Zealand that FOS points CH-80, -160, -247, -251, -262 and CH\_G-3 should be deleted, and that the outer limit in the area should be established based on points CH-72, -129, -154, -217, -248, -263, -264 and CH-287.
- 155 The Campbell Plateau is a submarine high that extends about 1000 km south and 900 km east of the South Island. It is separated from the Chatham Rise by the Bounty Trough. The location of the base of the continental slope of the northern Campbell Plateau, including the Bollons Seamount, is distinct and easily identified on a morphological basis. The saddle area between the plateau and the Bollons Seamount is significantly shallower than the surrounding deep seafloor, and allows the seamount to be included in the foot of the continental slope envelope. Accordingly, the plateau may be readily delineated by its foot of the continental slope envelope and the Commission agrees in general with the way this foot of the continental slope is established by New Zealand.

#### **3.2 Recommendations**

- 156 Based on its consideration of the technical and scientific documentation contained in the Submission of 19 April 2006 and the information provided in documents

NZ-CLCS-DOC-05, NZ-CLCS-DOC-07, NZ-CLCS-DOC-08 and NZ-CLCS-DOC-09, the Commission concludes that, in the Eastern Region, the FOS points listed in Table 1.B, Annex III, fulfil the criteria in accordance with article 76 and Chapter 5 of the Guidelines. The Commission recommends that these FOS points should form the basis for the establishment of the outer edge of the continental margin of New Zealand for the purposes of the Convention in the Eastern Region.

#### **4. Recommendations regarding the establishment of the outer edge of the continental margin**

##### **4.1 The application of the 60 M distance criterion**

157 In the Eastern Region, the outer edge of the continental margin is partly based on points on arcs constructed at 60 M distance from the FOS points (Table 1.B, Annex III) in accordance with the provision contained in article 76, paragraph 4(a)(ii). The Commission agrees with the way these points have been established by New Zealand.

##### **4.2 The application of the sediment thickness criterion**

158 In the Eastern Region adjacent to the Hikurangi Plateau, New Zealand has submitted 12 fixed points based on the sediment thickness provision of article 76, paragraph 4 (a)(i). The Commission agrees with the procedure applied by New Zealand to establish the sediment thickness points based on the FOS points contained in Table 1.B, Annex III, including the data provided, the seismic interpretation, the methods of depth conversion, and the distance calculations.

##### **4.3 Recommendations**

159 In the Eastern Region, the outer edge of the continental margin beyond 200 M is based on the arcs and points described in sections 4.1 and 4.2 above in accordance with article 76, paragraphs 4(a) and 7 (see Fig. B.1). The Commission recommends that these arcs and points are used as the basis for establishing the outer limit of the continental shelf in this region.

#### **5. Recommendations regarding the establishment of the outer limits of the continental shelf**

160 The outer limits of the continental shelf should be based on the established outer edge of the continental margin and taking into consideration the constraints contained in article 76, paragraphs 2, 5 and 6.

##### **5.1 The application of constraint criteria**

161 The outer limits of the continental shelf cannot extend beyond the constraints as per the provisions contained in article 76, paragraphs 5 and 6. Accordingly, the provision that the outer limits of the continental shelf may not exceed 350 M distance from the territorial sea baselines (the distance criterion constraint) may be applied in all cases. Alternatively, the provision that the outer limits of the continental shelf may not exceed 100 M distance from the 2500 meters isobath (the depth criterion constraint) may be applied for those parts of the continental margin that are classified as natural components of that margin.

##### **5.1.1 The construction of the distance criterion line**

162 The distance criterion constraint line submitted by New Zealand is constructed by arcs at 350 M distance from the territorial sea baselines included in the Submission. The Commission agrees with the procedure and methods applied by New Zealand in the construction of this constraint line.

### **5.1.2 The construction of the depth criterion line**

163 The 2500 meters isobath on which the depth criterion constraint line is based are located along the Wishbone Ridge and the Chatham Bank including the Weta Seamount area. Since all these isobaths are landward of the foot of the continental slope, they conform to the general outline of the continental margin as defined for the purposes of the Convention. Therefore, the application of these isobaths as basis for the depth criterion constraint is in accordance with the Convention and with paragraphs 4.4.1 and 4.4.2 of the Guidelines and the Commission recommends that the depth criterion constraint line is constructed as submitted by New Zealand.

### **5.1.3 Consideration and classification of submarine highs**

164 Based on the literature and the evidence in the Submission, including the additional material provided, the Commission agrees that the Wishbone Ridge is a natural component of the continental margin and may be classified as a submarine elevation in the sense of article 76, paragraph 6. Hence, the depth constraint line originating from the Wishbone Ridge may be applied as submitted by New Zealand.

### **5.1.4 The application of the combination of the distance and the depth constraint criteria**

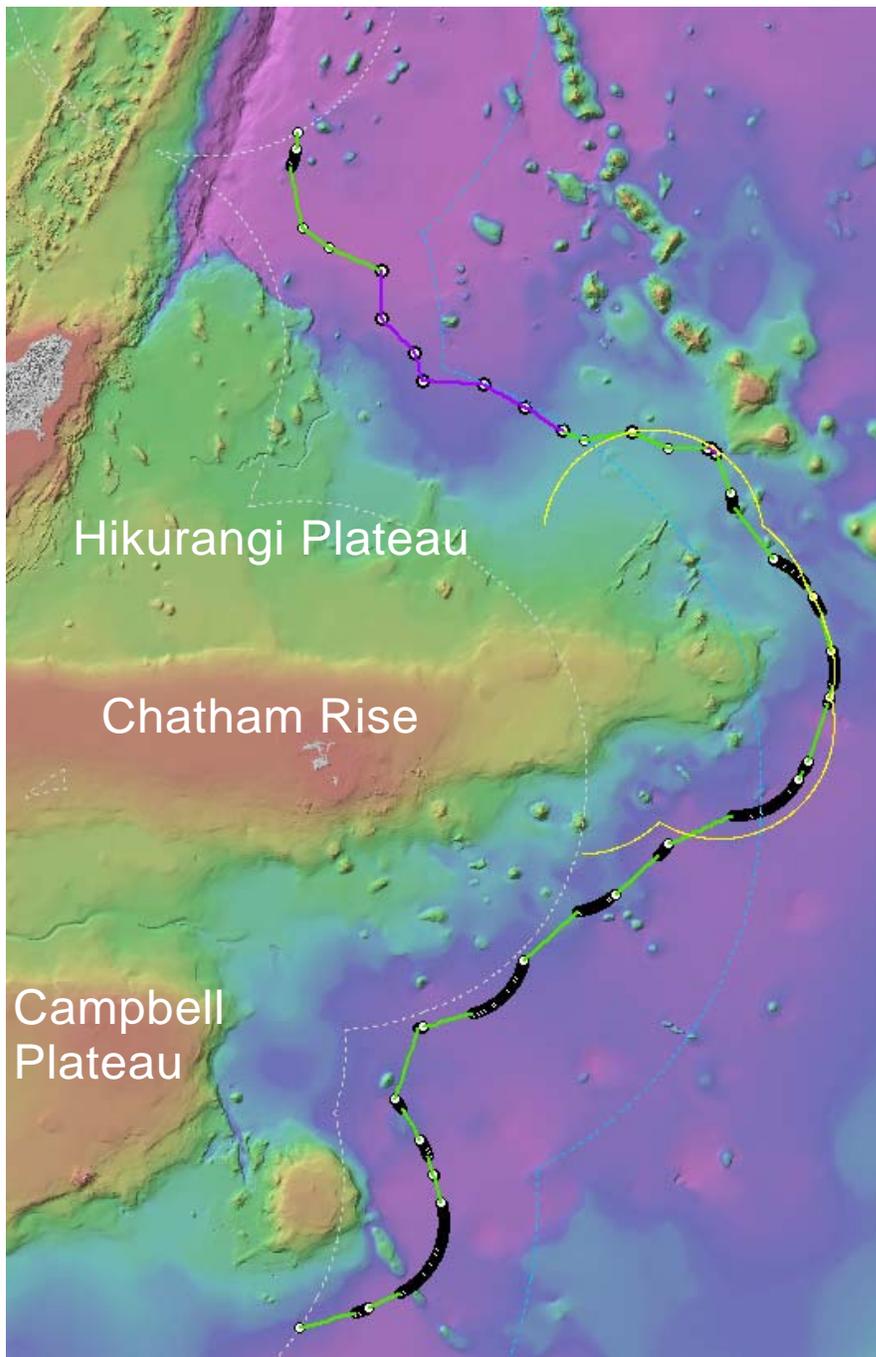
165 In the Eastern Region New Zealand has applied a constraint line based on the combination of lines constructed by the application of both the distance and depth criteria contained in article 76, paragraph 5 (see sections 5.1.1 and 5.1.2 above). The Commission agrees with the way this combined constraint line has been applied (Fig. B.2).

## **5.2 The outer limits of the continental shelf**

166 The outer limits of the continental shelf in the Eastern Region as submitted by New Zealand in its Submission of 19 April 2006 and revised in NZ-CLCS-DOC-09 of 13 March 2008 consist of fixed points connected by straight lines not exceeding 60 M in length (Fig. B.2). The fixed points are listed in Table 2, Annex III, as submitted on 27 March 2008. The fixed points are formula points established by the provisions contained in article 76, paragraph 4(a), or points on the constraint line where the outer edge of the continental margin extends beyond the constraints. Two points E001 and E886 are located on the 200 M limit line (Fig. B.2).

## **5.3 Recommendations**

167 The Commission agrees with the principles applied in establishing the outer limits of the continental shelf in the Eastern Region, including the determination of the fixed formula points listed in Table 2, Annex III, and the construction of the straight lines connecting those points. The Commission recommends that New Zealand proceeds to establish the outer limits of the continental shelf in the Eastern Region accordingly. Further, the Commission also recommends that New Zealand includes in its continental shelf the seabed and subsoil of the polygon located beyond 200 M on the Chatham Rise as the natural prolongation of its land territory.

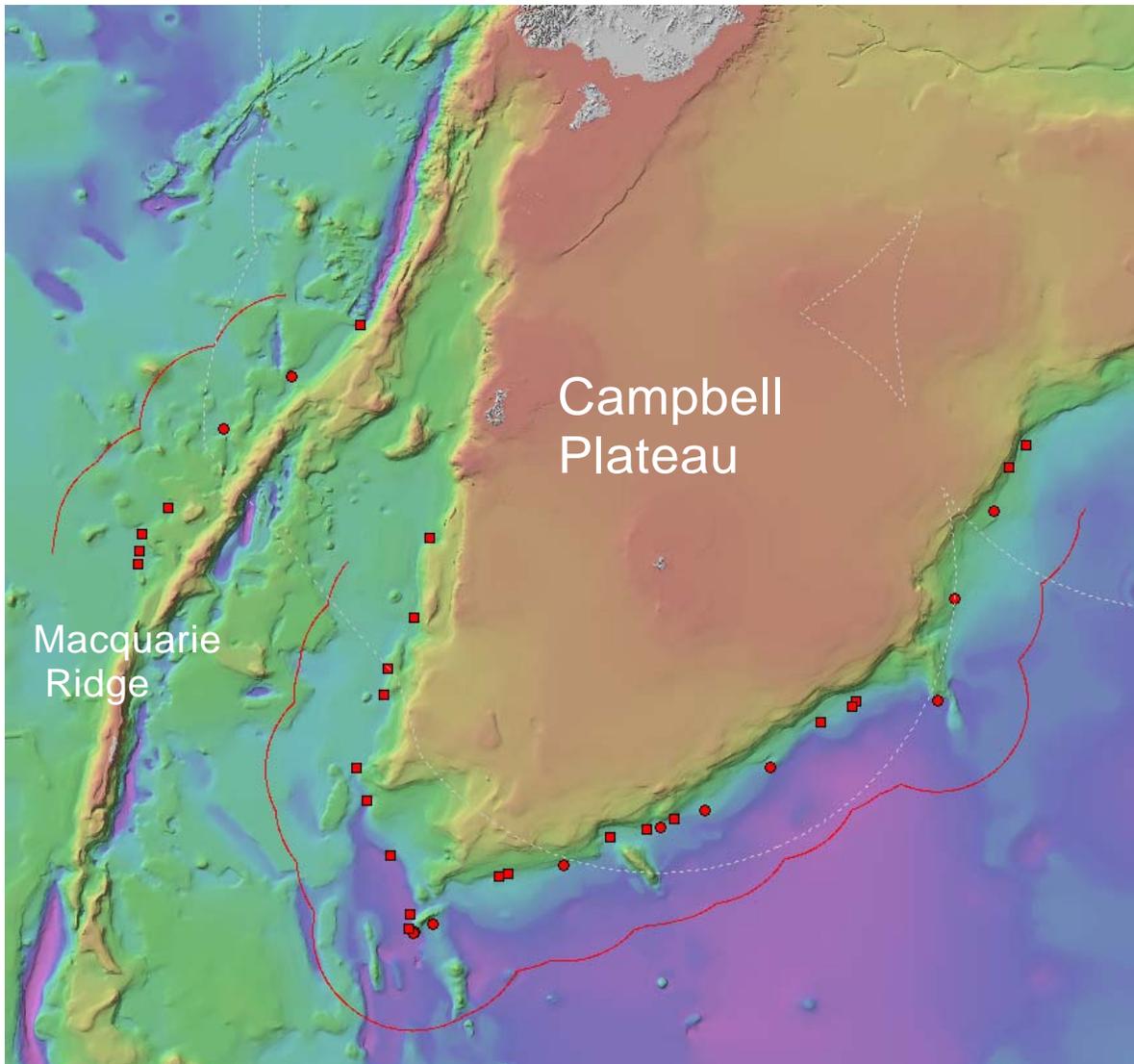


**Figure B.2. Final outer limit of the continental shelf in the Eastern Region as submitted by New Zealand as at 27 March 2008. The outer limit fixed points are shown as white circles with black rims, the continental shelf outer limit line where based on Hedberg points is shown in green, the continental shelf outer limit line where based on Gardiner points is shown in purple, the 350 M constraint line in blue (stippled), the 2500 m isobath + 100 M constraint in yellow, and the 200 M lines of New Zealand in white.**

## C. Southern Region

### 1. Geographical region description

168 The Southern Region covers the southern margin of the Campbell Plateau (Fig. C.1), from its intersection with the negotiated maritime boundary with Australia in the west to the intersection with the line 200 M from New Zealand's territorial sea baseline at about 177°E longitude (Fig. 1).



**Figure C.1. Overview of the FOS points and the associated formula points that are the basis for demonstrating the submerged prolongation of the landmass of New Zealand and establishing the outer edge of its continental margin in the Southern Region. White line (stippled) is the 200 M line from the territorial sea baseline of New Zealand, Red circles and squares are critical and relevant FOS points, red line is arc of Hedberg points, purple circles are Gardiner points.**

## **2. Submarine prolongation of landmass and entitlement to the continental shelf beyond 200 M**

169 The outer edge of the continental margin, as generated from the foot of the continental slope of the Southern Region by applying the provisions of article 76, paragraph 4, extends beyond the 200 M limits of New Zealand. On this basis, the Commission recognises the legal entitlement of New Zealand to establish continental shelf beyond its 200 M limits in this region (Fig. C.1).

## **3. Recommendations regarding the determination of foot of the continental slope**

### **3.1 Considerations**

170 The location of the base of the continental slope of the southern Campbell Plateau is distinct and easily identified on a morphological basis. Accordingly, the plateau may be readily delineated by its foot of the continental slope envelope and the Commission agrees in general with the way this foot of the continental slope is established by New Zealand.

### **3.2 Recommendations**

171 Based on its consideration of the technical and scientific documentation contained in the Submission of 19 April 2006 and the information provided the Commission concludes that, in the Southern Region, the FOS points listed in Table 1.C, Annex III, fulfil the criteria in accordance with article 76 and Chapter 5 of the Guidelines. The Commission recommends that these FOS points should form the basis for the establishment of the outer edge of the continental margin of New Zealand for the purposes of the Convention in the Southern Region.

## **4. Recommendations regarding the establishment of the outer edge of the continental margin - The application of the 60 M distance criterion**

172 In the Southern Region, the outer edge of the continental margin is based on points on arcs constructed at 60 M distance from the FOS points (Table 1.C, Annex III) in accordance with the provision contained in article 76, paragraph 4(a)(ii) (see Fig. C.1). The Commission agrees with the way these points have been established by New Zealand, and recommends that they are used as the basis for establishing the outer limit of the continental shelf in this region.

## **5. Recommendations regarding the establishment of the outer limits of the continental shelf**

173 The outer limits of the continental shelf should be based on the established outer edge of the continental margin and taking into consideration the constraints contained in article 76, paragraphs 2, 5 and 6.

### **5.1 The application of constraint criteria**

174 For the outer limits of the continental shelf in the Southern Region, New Zealand has invoked the distance criterion constraint only.

#### **5.1.1 The construction of the distance criterion line**

175 The distance criterion constraint line submitted by New Zealand is constructed by arcs at 350 M distance from the territorial sea baselines included in the submission. The Commission agrees with the procedure and methods applied by New Zealand in the construction of this constraint line.

#### **5.1.2 The application of the of the constraint criteria**

176 In the Southern Region New Zealand has applied a constraint line based on the distance criterion contained in article 76, paragraph 5 (see section 5.1.1 above).

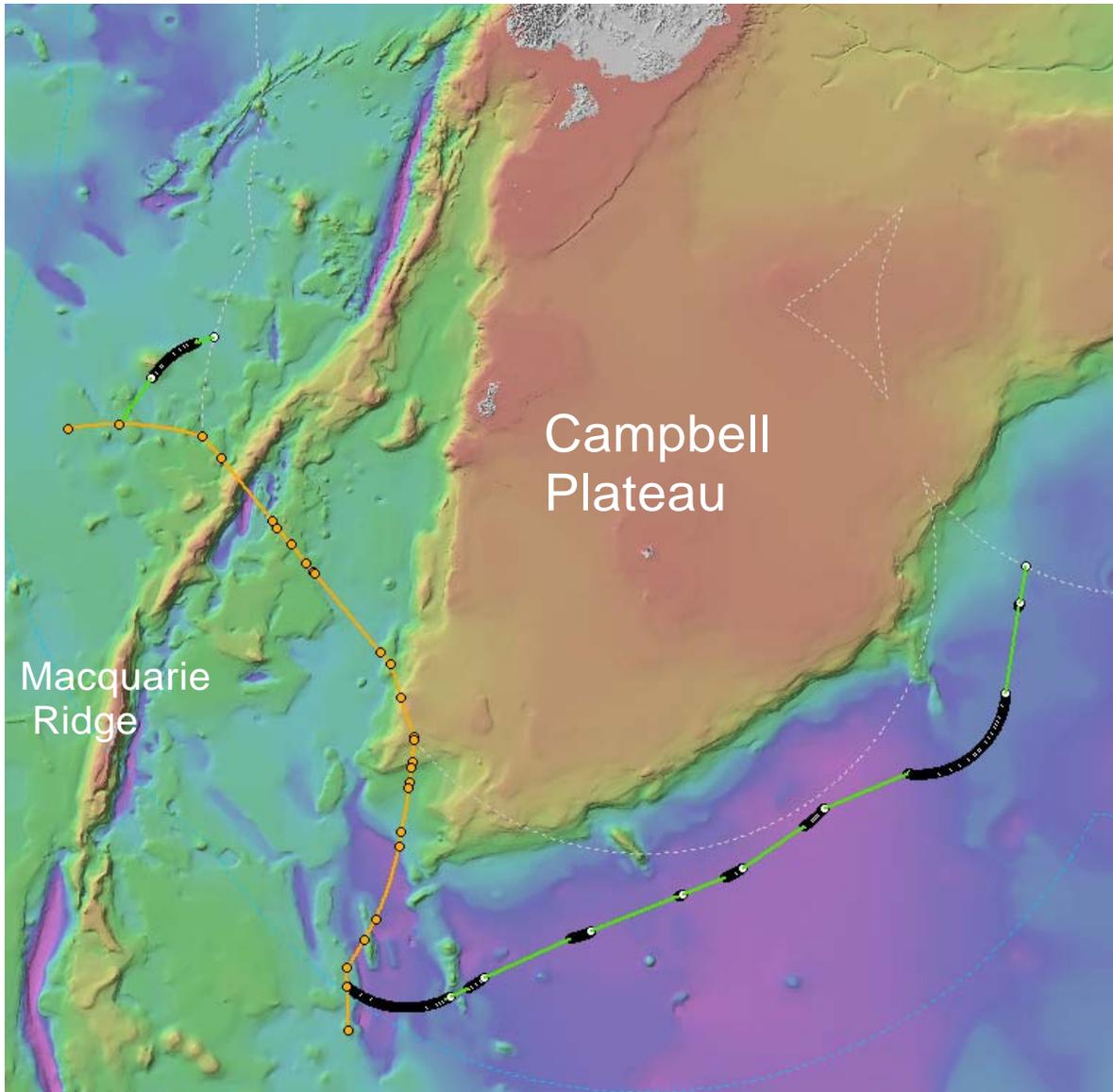
The Commission agrees with the way this constraint line has been applied (Fig. C.2).

## **5.2 The outer limits of the continental shelf**

177 The outer limits of the continental shelf in the Southern Region as submitted by New Zealand in its Submission of 19 April 2006 consist of fixed points connected by straight lines not exceeding 60 M in length (Fig. C.2). The fixed points are listed in Table 2, Annex III, as submitted on 27 March 2008. The fixed points are formula points established by the provisions contained in article 76, paragraph 4(a), or points on the constraint line where the outer edge of the continental margin extends beyond the constraints. One point, S455, is located on the 200 M limit line, and one point, S001, is located on the treaty line with Australia (Fig. C.2).

## **5.3 Recommendations**

178 The Commission agrees with the principles applied in establishing the outer limits of the continental shelf in the Southern Region, including the determination of the fixed formula points listed in Table 2, Annex III, and the construction of the straight lines connecting those points. The Commission recommends that New Zealand proceeds to establish the outer limits of the continental shelf in the Southern Region accordingly. Further, the Commission also recommends that New Zealand includes in its continental shelf the seabed and subsoil of the polygon located beyond 200 M on the Campbell Plateau as the natural prolongation of its land territory.



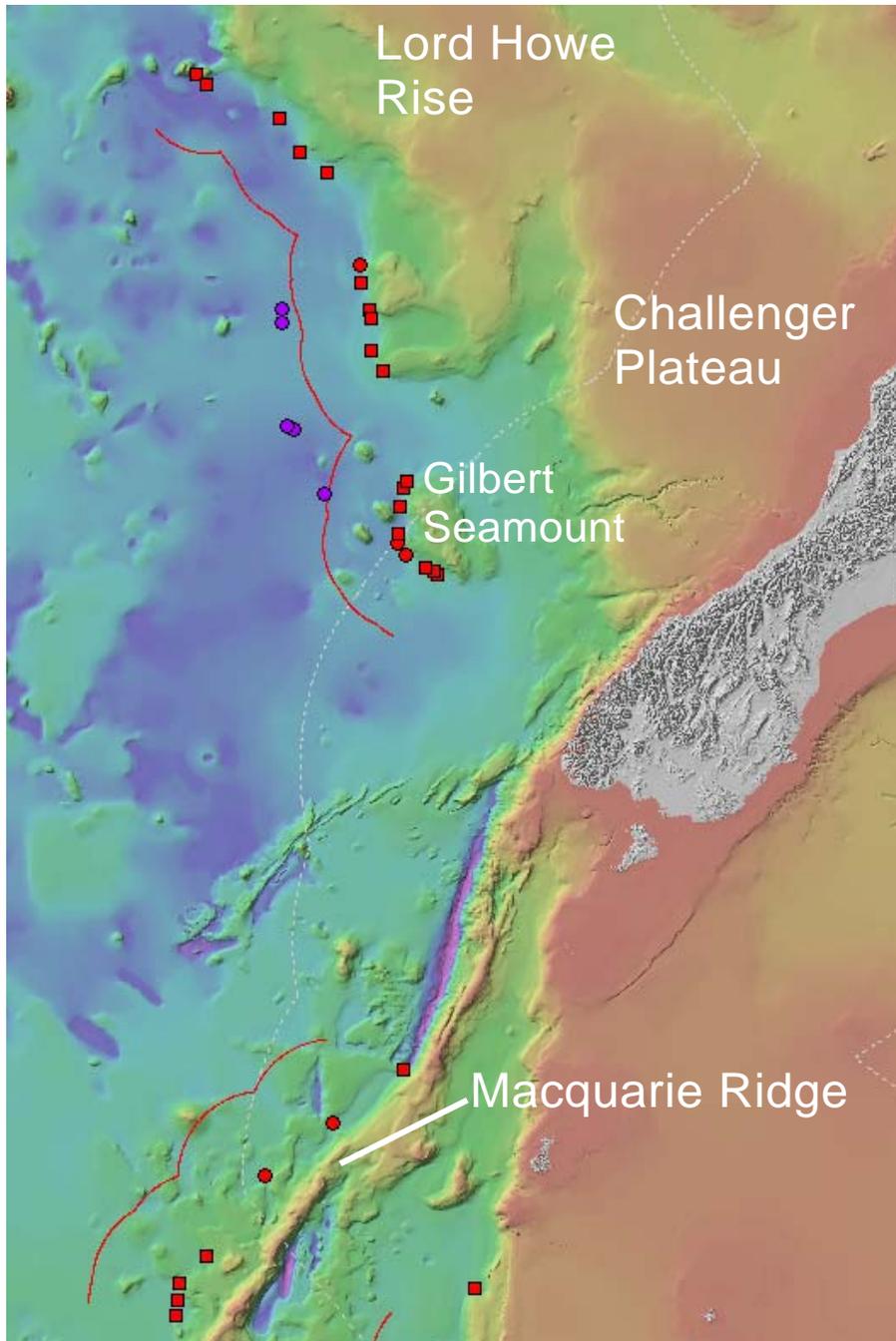
**Figure C.2. Final outer limit of the continental shelf in the Southern Region as submitted by New Zealand as at 27 March 2008. The outer limit fixed points are shown as white circles with black rims, the continental shelf outer limit line is shown in green, the 350 M constraint line in blue (stippled), the 2500 m isobath + 100 M constraint in yellow, the New Zealand-Australian Delimitation Treaty line in orange, and the 200 M lines of New Zealand and neighbouring states in white.**

#### **D. Western Region**

##### **1. Geographical region description**

179 The Western Region covers the southern Norfolk Ridge System, New Caledonia Basin, Challenger Plateau, Lord Howe Rise, and the Macquarie Ridge Complex and may be subdivided into the two main areas (Fig. 1):

**a.** The area along the southwest margin of the Challenger Plateau, Lord Howe Rise, New Caledonia Basin and the Norfolk Ridge System, from New Zealand's 200 M line at about 172°E longitude to the New Zealand–Australia 2004 Delimitation Treaty line, and then along this treaty line to the intersection of



**Figure D.1. Overview of the FOS points and the associated formula points that are the basis for demonstrating the submerged prolongation of the landmass of New Zealand and establishing the outer edge of its continental margin in the Western Region. White line (stippled) is the 200 M line from the territorial sea baseline of New Zealand, Red circles and squares are critical and relevant FOS points, red line is arc of Hedberg points, purple circles are Gardiner points.**

the New Zealand and Australian 200 M lines near 166°E longitude.  
**b.** The area along the western margin of the Macquarie Ridge Complex, beyond the 200 M lines of New Zealand and Australia.

## **2. Submarine prolongation of landmass and entitlement to the continental shelf beyond 200 M**

180 The outer edge of the continental margin, as generated from the foot of the continental slope of the Western Region by applying the provisions of article 76, paragraph 4, extends beyond the 200 M limits of New Zealand. On this basis, the Commission recognises the legal entitlement of New Zealand to establish continental shelf beyond its 200 M limits in this region (Fig. D.1).

## **3. Recommendations regarding the determination of foot of the continental slope**

181 The foot of the continental slope should be established in accordance with article 76, paragraph 4(b).

### **3.1 Considerations**

182 FOS points that generate formula points beyond 200 M in the Western Region are found along the western flanks of the Lord Howe Rise and the Challenger Plateau, including the Gilbert Seamount, and along the north-western flank of the Macquarie Ridge.

183 The Lord Howe Rise and the Challenger Plateau form a continuous continental slope adjacent to the Tasman Basin. The base of this continental slope is in general distinct and easily identified on a morphological basis, except in the area of the Gilbert Seamount. Accordingly, the Lord Howe Rise and the Challenger Plateau may be readily delineated by their foot of the continental slope envelope outside of the Gilbert Seamount area. In the view of the Subcommission, the establishment of the base of the continental slope along the flank of the Gilbert Seamount needed further supportive geological and geophysical data and information, especially with respect to the Gilbert saddle area. Such data and information was provided. After considering this supplementary data and information, the Subcommission accepted the establishment of the base of the continental slope along the flank of the Gilbert Seamount as submitted. Accordingly, the Commission agrees with the way this foot of the continental slope is established by New Zealand in the whole of this area of the Western Region.

184 The Macquarie Ridge Complex is a transform ridge system that extends southwards from the South Island. The base of the continental slope along the western flank of the Macquarie Ridge Complex is in general distinct and easily identified on a morphological basis. Accordingly, the western flank may readily be delineated by its foot of the continental slope envelope and the Commission agrees with the way the foot of the continental slope is established by New Zealand.

### **3.2 Recommendations**

185 Based on its consideration of the technical and scientific documentation contained in the Submission of 19 April 2006 and the information provided the Commission concludes that, in the Western Region, the FOS points listed in Table 1.D, Annex III, fulfil the criteria provided for by article 76 and Chapter 5 of the Guidelines. The Commission recommends that these FOS points should form the basis for the establishment of the outer edge of the continental margin of New Zealand for the purposes of the Convention in the Western Region.

#### **4. Recommendations regarding the establishment of the outer edge of the continental margin**

##### **4.1 The application of the 60 M distance criterion**

186 In the Western Region, the continental margin is partly based on points on arcs constructed at 60 M distance from the FOS points (Table 1.D, Annex III) in accordance with the provision contained in article 76, paragraph 4(a)(ii) (Fig.D.1). The Commission agrees with the way these points and lines have been established by New Zealand.

##### **4.2 The application of the sediment thickness criterion**

187 In the Western Region adjacent to the Lord Howe Rise and the Challenger Plateau, New Zealand has submitted 9 fixed points based on the sediment thickness provision of article 76, paragraph 4 (a)(i) (Fig. D.1). The Commission agrees with the procedure applied by New Zealand to establish the sediment thickness points based on the FOS points contained in Table 1.D, Annex III, including the data provided, the seismic interpretation, the methods of depth conversion, and the distance calculations.

##### **4.3 Recommendations**

188 In the Western Region, the outer edge of the continental margin beyond 200 M is based on the arcs and points described in sections 4.1 and 4.2 above in accordance with article 76, paragraphs 4(a) and 7 (see Fig. B.1). The Commission recommends that these arcs and points are used as the basis for establishing the outer limit of the continental shelf in this region.

#### **5. Recommendations regarding the establishment of the outer limits of the continental shelf**

189 The outer limits of the continental shelf should be based on the established outer edge of the continental margin and taking into consideration the constraints contained in article 76, paragraphs 2, 5 and 6.

##### **5.1 The application of constraint criteria**

###### **5.1.1 The construction of the distance criterion line**

190 The distance criterion constraint line submitted by New Zealand is constructed by arcs at 350 M distance from the territorial sea baselines included in the Submission. The Commission agrees with the procedure and methods applied by New Zealand in the construction of this constraint line.

###### **5.1.2 The construction of the depth criterion line**

191 The 2500 meters isobath on which the depth criterion constraint line is based are located along the Challenger Plateau and the Lord Howe Rise, including the Gilbert Seamount. Since all these isobaths are landward of the foot of the continental slope, they conform to the general outline of the continental margin as defined for the purposes of the Convention. Therefore, the application of these isobaths as basis for the depth criterion constraint is in accordance with the Convention and with paragraphs 4.4.1 and 4.4.2 of the Guidelines, and the Commission recommends that the depth criterion constraint line is constructed as submitted by New Zealand.

###### **5.1.3 Consideration and classification of submarine highs**

192 Based on the literature and the evidence in the Submission, the Commission agrees that the Challenger Plateau and the Lord Howe Rise, including the Gilbert

Seamount, are natural components of the continental margin of New Zealand and be classified as submarine elevations in the sense article 76, paragraph 6. Hence, the depth constraint line originating from these elevations may be applied as submitted by New Zealand.

#### **5.1.4 The application of the combination of the distance and the depth constraint criteria**

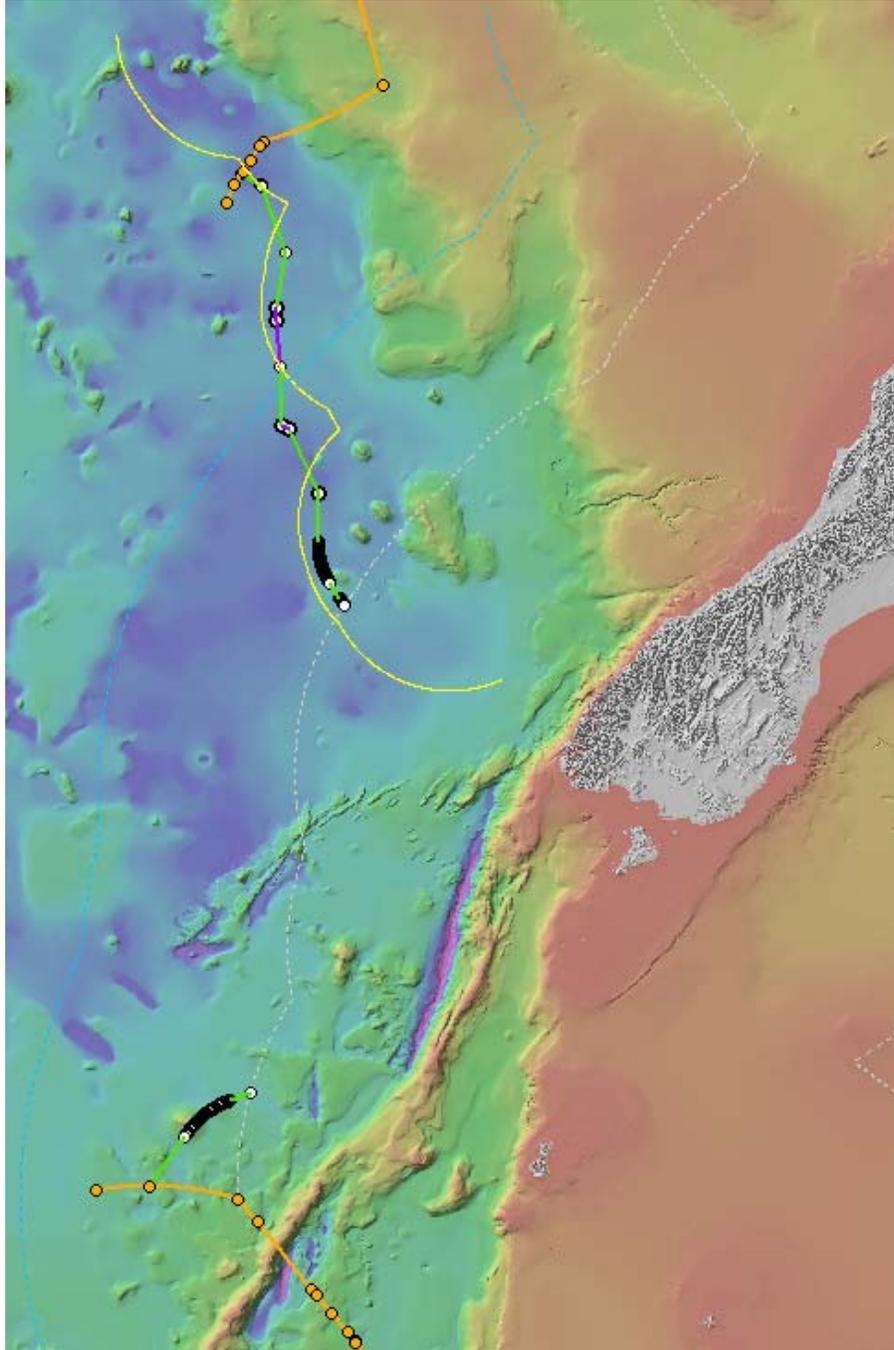
193 In the Western Region New Zealand has applied a constraint line based on the combination of lines constructed by the application of both the distance and depth criteria contained in article 76, paragraph 5 (see sections 5.1.1 and 5.1.2 above). The Commission agrees with the way this combined constraint line has been applied (Fig. D.2).

#### **5.2 The outer limits of the continental shelf**

194 The outer limits of the continental shelf in the Western Region as submitted by New Zealand in its Submission of 19 April 2006 and revised in NZ-CLCS-DOC-09 consist of fixed points connected by straight lines not exceeding 60 M in length (Fig. D.2). The fixed points are listed in Table 2, Annex III as submitted on 27 March 2008. The fixed points are formula points established by the provisions contained in article 76, paragraph 4(a), or points on the constraint line where the outer edge of the continental margin extends beyond the constraints. Two points, W101 and W102 are located on the 200 M line of New Zealand and two points, W001 and W190, are located on the treaty line with Australia.(Fig. D.2).

#### **5.3 Recommendations**

195 The Commission agrees with the principles applied in establishing the outer limits of the continental shelf in the Western Region, including the determination of the fixed formula points listed in Table 2, Annex III, and the construction of the straight lines connecting those points. The Commission recommends that New Zealand proceeds to establish the outer limits of the continental shelf in the Western Region accordingly.



**Figure D.2. Final outer limit of the continental shelf in the Western Region as submitted by New Zealand as at 27 March 2008. The outer limit fixed points are shown as white circles with black rims, the continental shelf outer limit line where based on Hedberg points is shown in green, the continental shelf outer limit line where based on Gardiner points is shown in purple, the 350 M constraint line in blue (stippled), the 2500 m isobath + 100 M constraint in yellow, the New Zealand-Australian Delimitation Treaty line in orange, and the 200 M line of New Zealand in white.**

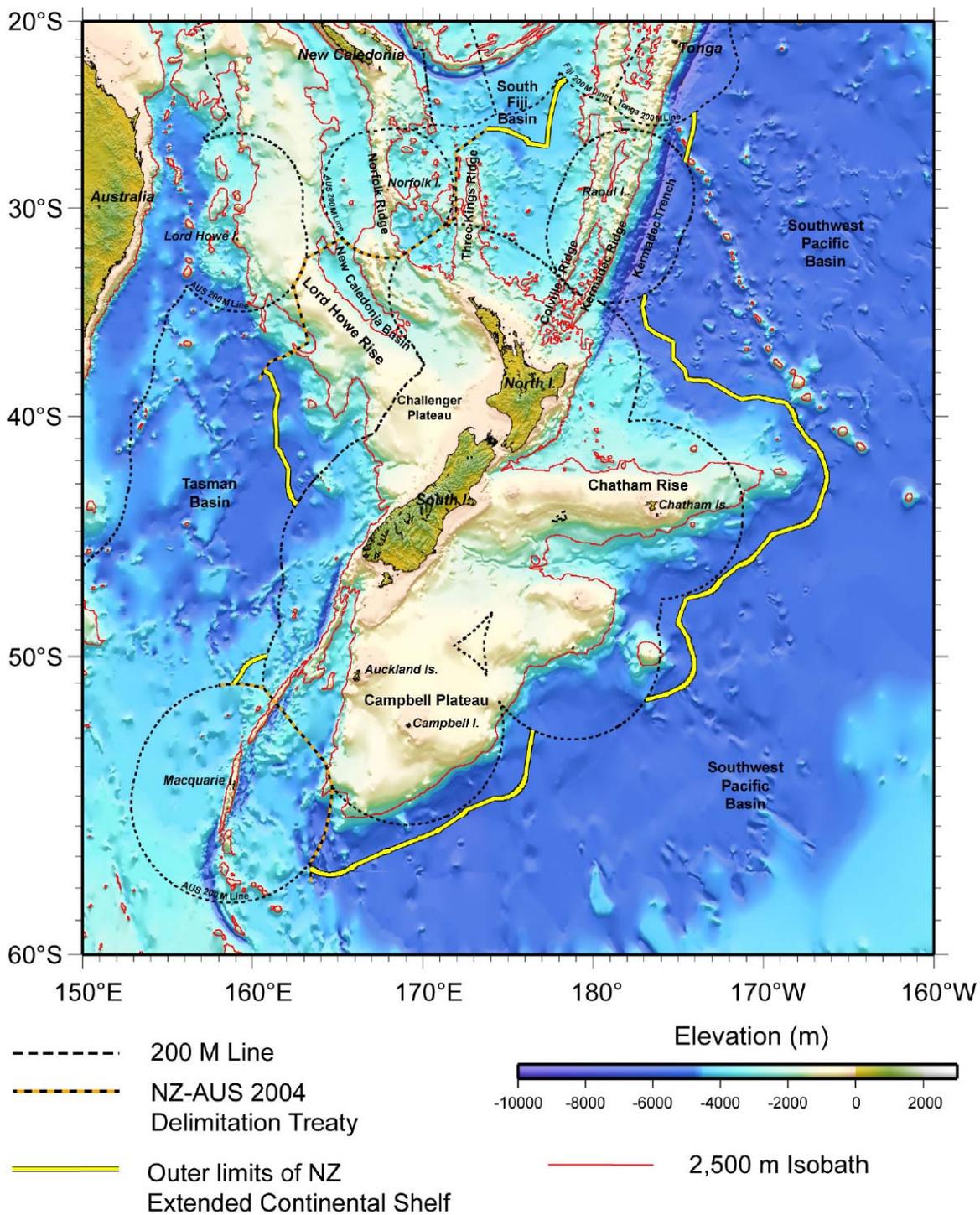
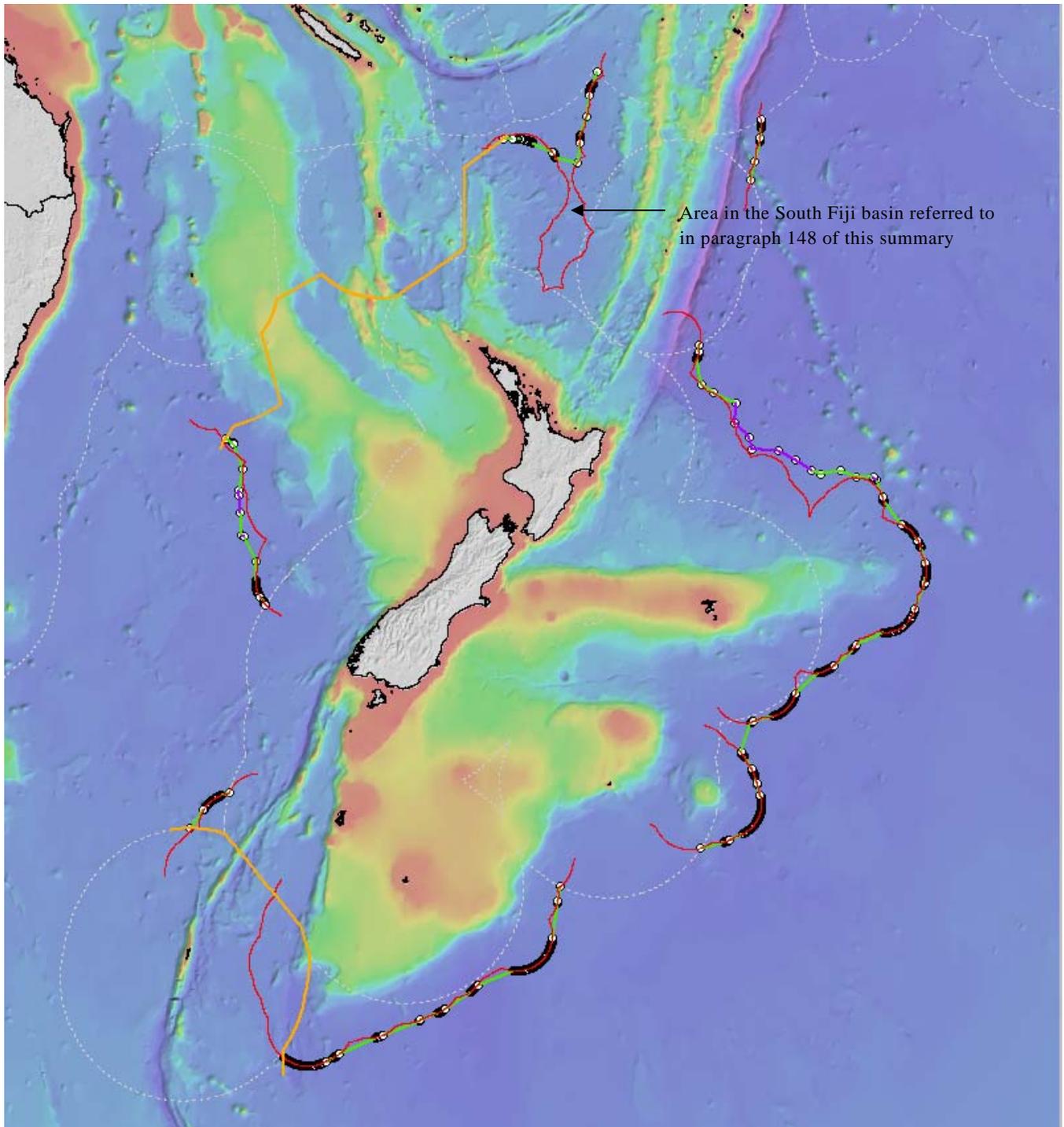


Figure 2. Outer limits of the continental shelf of New Zealand as submitted 19 April 2006



**Figure 3. Outer limits of the continental shelf of New Zealand reflecting the recommendations of the Commission adopted 22 August 2008. The outer limit fixed points are shown as white circles with black rims, the continental shelf outer limit line where based on Hedberg points is shown in green, the continental shelf outer limit line where based on Gardiner points is shown in purple, at 60 M distance from the foot of the continental slope in red, the 200 M lines of New Zealand and neighbouring states in white, and treaty lines with Australia in orange.**