

Figure 14. Track line for Leg 194 seismic data



Two-way traveltime (s)

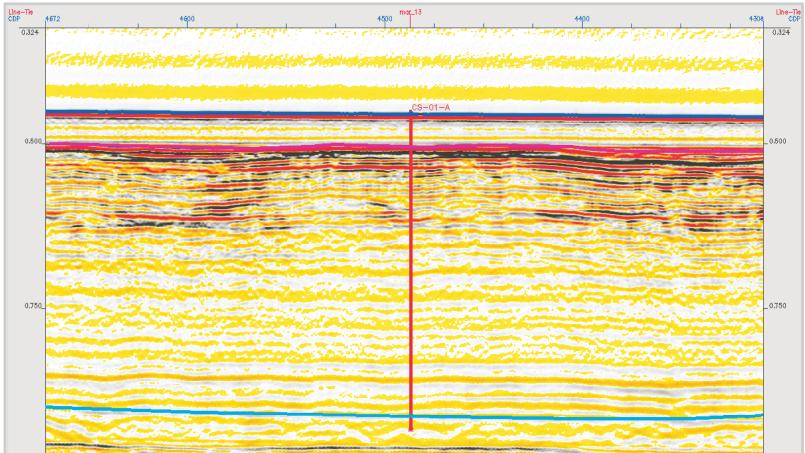
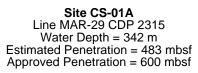


Figure 15. Detailed high-resolution north-south seismic section (two-way traveltime) used to locate Site CS-01A.

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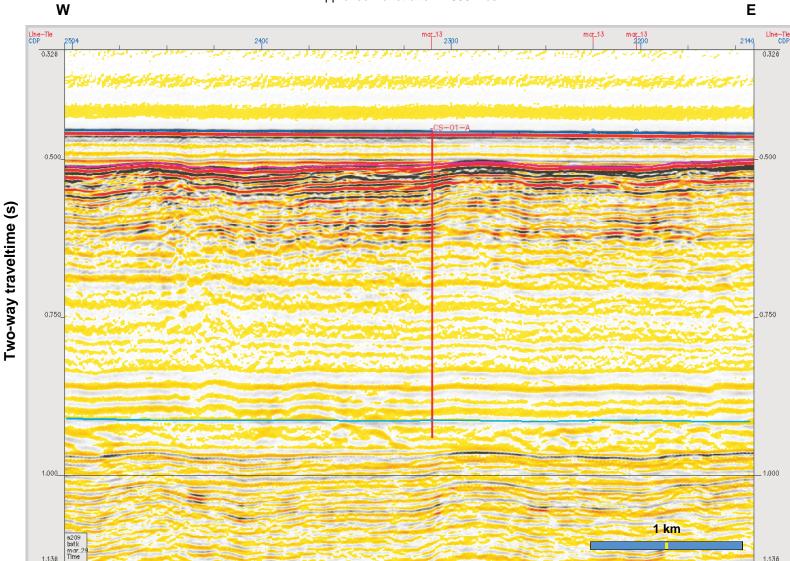


Figure 16. Detailed high-resolution east-west seismic section (two-way traveltime) used to locate Site CS-01A.

SITE SUMMARIES

Site: CS-01A

Priority: 1

Position: 20°14.53′S, 151°47.54′E

Water Depth: 342 m

Sediment Thickness: 474 m **Target Depth:** 483 mbsf

Approved Maximum Penetration: 600 mbsf

Seismic Coverage: Regional Line MAR-13, shotpoint 4751; crossing Line MAR-29, CDPs 2315

and 4486

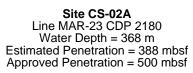
Objectives: The objectives of Site CS-01A are the following.

- 1. Determine the age of the MP2 platform drowning phase.
- 2. Determine the age and duration of regional unconformities.
- 3. Determine the total thickness of MP2.
- 4. Determine the age of the initial marine transgression over basement.
- 5. Determine the age and nature of the basement.
- 6. Measure and describe fluid flow within the MP2 platform.
- 7. Describe the MP2 platform carbonates.
- 8. Calibrate the seismic sequence stratigraphy.

Drilling Program: Double APC/XCB to refusal (3-4 cores), RCB (~1 core into basement); ADCB in selected intervals

Logging and Downhole Operations: Triple-combo, sonic-FMS, WST, GHMT (if available)

Nature of Rock Anticipated: 33 m of hemipelagic ooze overlying dolomitized reefal carbonates; underlying basement composed of Paleozoic quartz-feldspar mafic metasediment



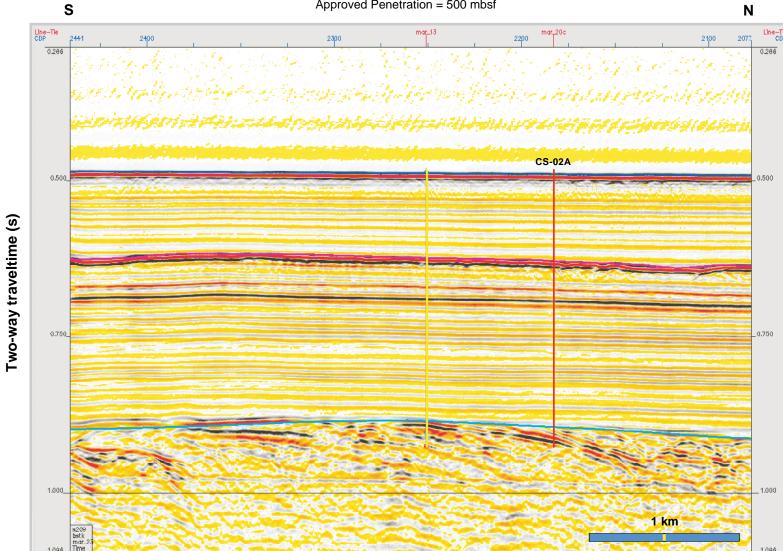


Figure 17. Detailed high-resolution north-south seismic section (two-way traveltime) used to locate Site CS-02A.

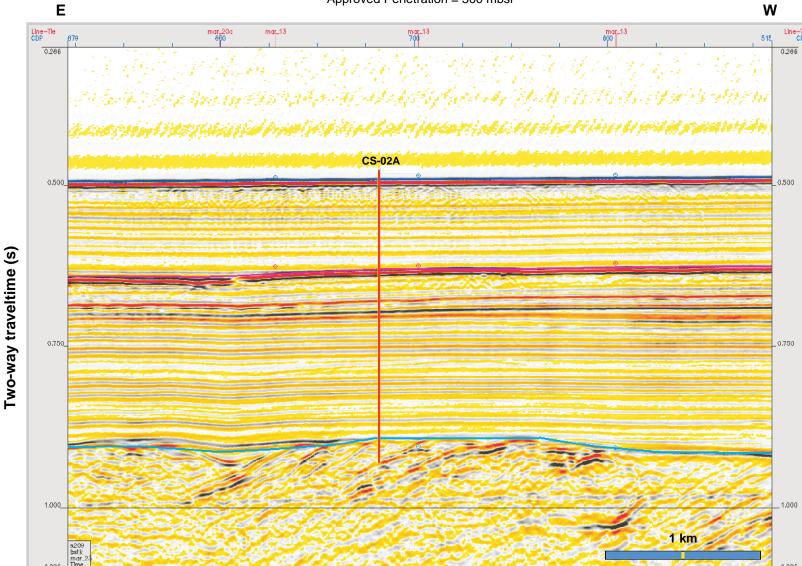


Figure 18. Detailed high-resolution east-west seismic section (two-way traveltime) used to locate Site CS-02A.

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Site: CS-02A

Priority: 1

Position: 20°14.10′S, 151°59.03′E

Water Depth: 368 m

Sediment Thickness: 379 m **Target Depth:** 388 mbsf

Approved Maximum Penetration: 500 mbsf

Seismic Coverage: Regional Line MAR-13; crossing Line MAR-23, CDPs 720 and 2180

Objectives: The objectives of Site CS-02A are the following.

- 1. Determine the age and describe the facies of Megasequences B-D, particularly the prograding, proximal slope sediments from MP2.
- 2. Determine the age and duration of unconformities that can be carried into the platform.
- 3. Determine the age of initial marine transgression over basement.
- 5. Determine the age and nature of the basement.
- 6. Measure and describe fluid flow and diagenetic processes within the MP platform and adjacent sediments.
- 7. Calibrate the seismic sequence stratigraphy.

Drilling Program: Double APC/XCB to refusal, XCB or RCB (~1 core into basement)

Logging and Downhole Operations: Triple-combo, sonic-FMS, WST, GHMT (if available)

Nature of Rock Anticipated: Approximately 119 m of hemipelagic ooze overlying ~260 m of periplatform ooze, wackestones with some mudstones, siltstones, and turbidites; underlying basement composed of Paleozoic quartz-feldspar mafic metasediment



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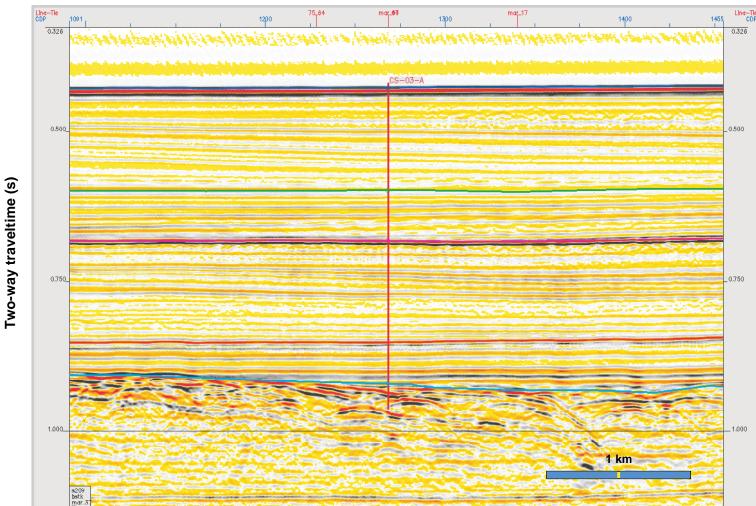


Figure 19. Detailed high-resolution northwest-southeast seismic section (two-way traveltime) used to locate Site CS-03A.

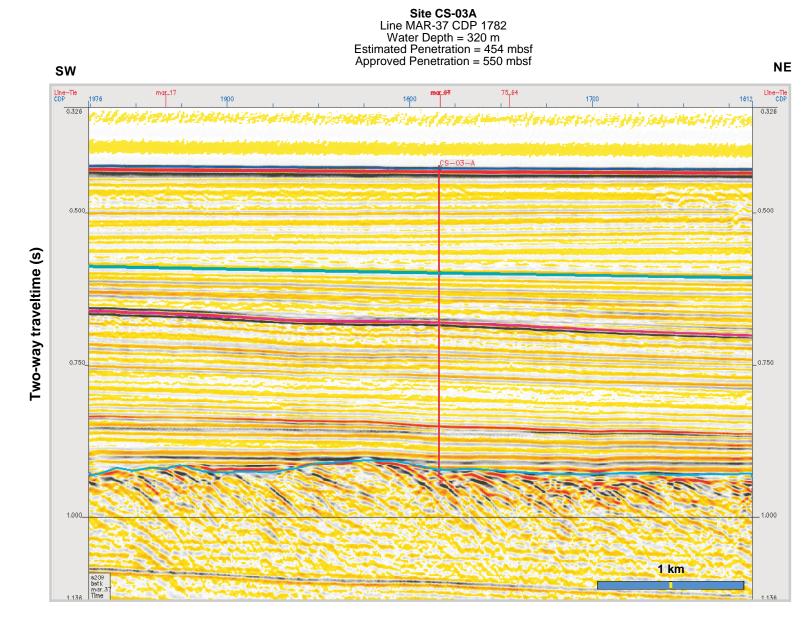


Figure 20. Detailed high-resolution northeast-southwest seismic section (two-way traveltime) used to locate Site CS-03A.

Site: CS-03A

Priority: 2

Position: 20°47.57′S, 152°16.51′E

Water Depth: 320 m

Sediment Thickness: 445 m **Target Depth:** 454 mbsf

Approved Maximum Penetration: 550 mbsf

Seismic Coverage: Intersection of regional Line MAR-07 (shotpoint 223) with Line MAR-44 (shotpoint 3584); crossing Line: MAR-37 at shotpoints 887 and 630, CDPs 1782 and 1268

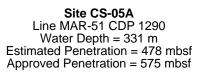
Objectives: The objectives of Site CS-03A are the following.

- 1. Determine the age and and describe the facies of Megasequences B-D.
- 2. Determine the age of the initial marine transgression over basement.
- 3. Determine the age and describe the facies of lowstand deposits.
- 4. Determine the age and nature of the basement.
- 5. Measure fluid-flow processes within the MP2 platform and adjacent sediments.
- 6. Determine the lithologic signature of basinward unconformities.
- 7. Calibrate the seismic sequence stratigraphies.

Drilling Program: Double APC/XCB to refusal, XCB or RCB (~1 core) into basement

Logging and Downhole Operations: Triple-combo, sonic-FMS, WST, GHMT (if available)

Nature of Rock Anticipated: Approximately 180 m of hemipelagic ooze overlying ~265 m of periplatform ooze, wackestones with some siltstones and mudstones; underlying basement composed of Paleozoic quartz-feldspar mafic metasediment



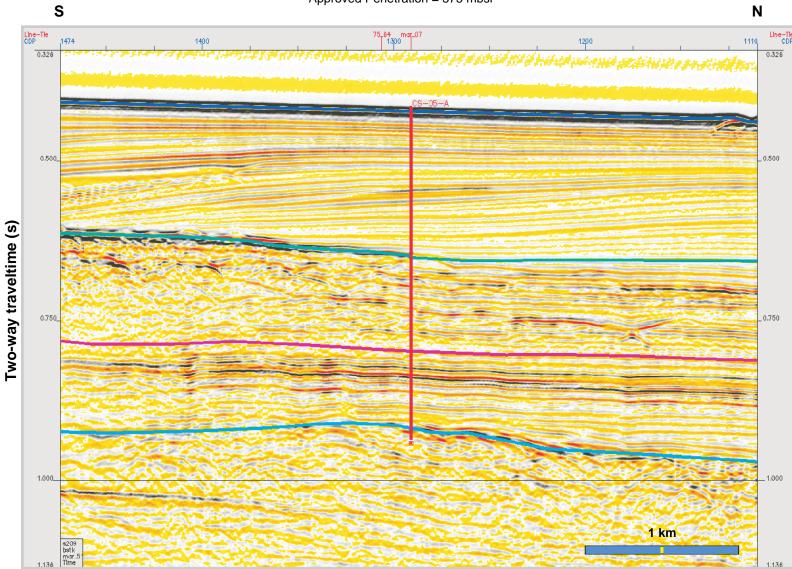


Figure 21. Detailed high-resolution north-south seismic section (two-way traveltime) used to locate Site CS-05A.

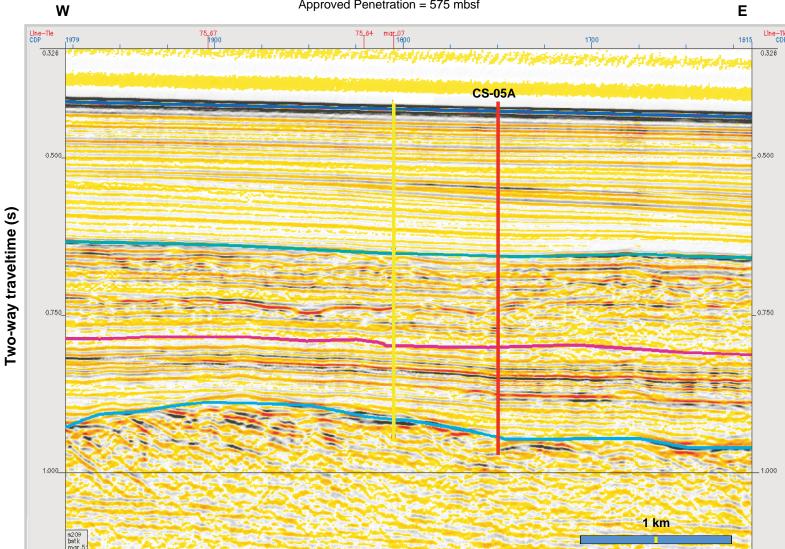


Figure 22. Detailed high-resolution east-west seismic section (two-way traveltime) used to locate Site CS-05A

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Site: CS-05A

Priority: 1

Position: 20°57.75′S, 152°44.31′E

Water Depth: 331 m

Sediment Thickness: 469 m **Target Depth:** 478 mbsf

Approved Maximum Penetration: 575 mbsf

Seismic Coverage: Regional Line MAR-07, shotpoint 2261; crossing Line Mar-51, shotpoint

871, CDPs 1290 and 1750

Objectives: The objectives of Site CS-05A are the following.

- 1. Determine the age and facies description of Megasequences B-D, particularly the initiation of the MP3 platform.
- 2. Determine the age and duration of the unconformities that can be carried into the MP3 platform and those separating each sequence in the proximal slope adjacent to MP3.
- 3. Determine the paleowater depth of the initial growth phase of MP2.
- 4. Determine the age and nature of the condensed section equivalent to MP2.
- 5. Determine the age and nature of the basement.
- 6. Measure fluid flow processes within the MP3 platform and adjacent sediments.
- 7. Determine Pliocene-Holocene paleoceanography from the Megasequence D drift deposit.
- 8. Calibrate the seismic sequence stratigraphy.

Drilling Program: Double APC/XCB to refusal, XCB or RCB (~1 core into basement)

Logging and Downhole Operations: Triple-combo, sonic-FMS, WST, GHMT (if available)

Nature of Rock Anticipated: Approximately 196 m of hemipelagic ooze overlying ~273 m of periplatform ooze, wackestones with some siltstones, mudstones, and turbidites; underlying basement composed of Paleozoic quartz-feldspar mafic metasediment

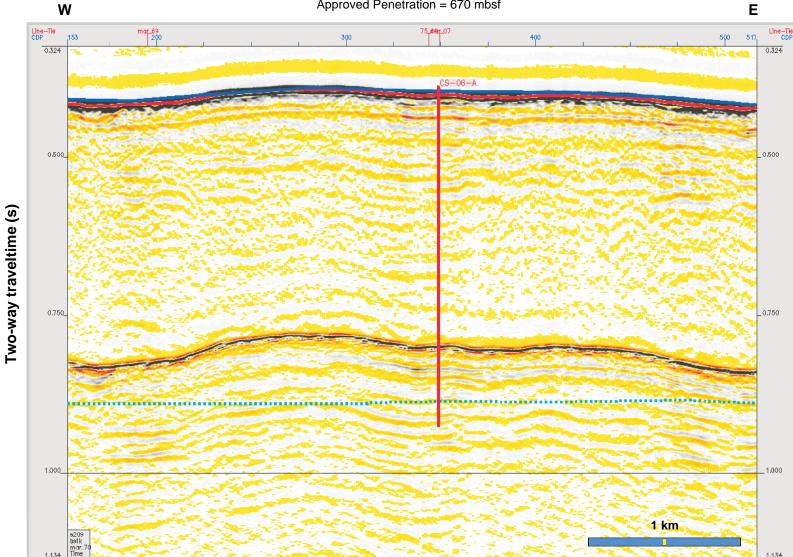
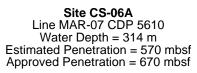


Figure 23. Detailed high-resolution east-west seismic section (two-way traveltime) used to locate Site CS-06A.



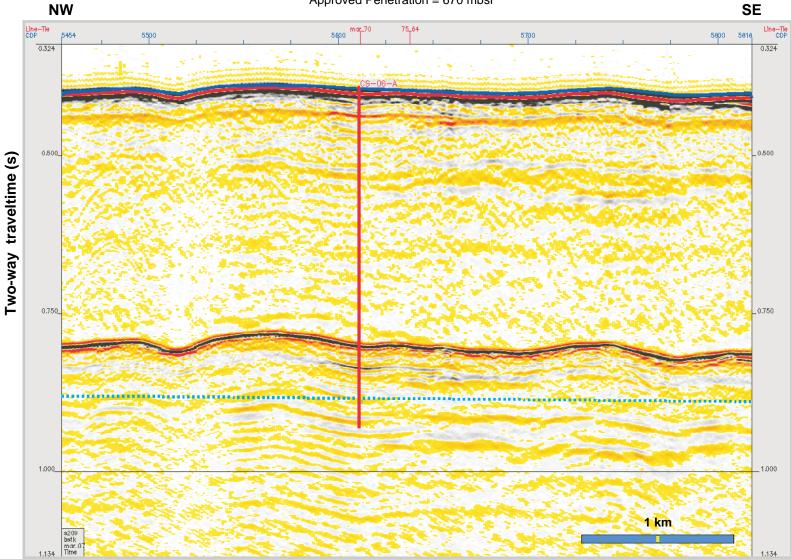


Figure 24. Detailed high-resolution northwest-southeast seismic section (two-way traveltime) used to locate Site CS-06A.

Site: CS-06A

Priority: 1

Position: 21°00.38'S, 152°51.40'E

Water Depth: 314 m

Sediment Thickness: ~561 m **Target Depth:** ~570 mbsf

Approved Maximum Penetration: 670 mbsf

Seismic Coverage: Intersection of Lines MAR-07, shotpoint 2801, CDP 5610, and MAR-70,

shotpoint 170, CDP 348

Objectives: The objectives of Site CS-06A are the following.

- 1. Determine the Initiation and facies development of the MP3 platform.
- 2. Determine the age and paleowater depth of the initial growth phase of MP3.
- 3. Describe the MP3 platform carbonates
- 4. Determine the age and duration of unconformities separating each platform phase.
- 5. Determine the age and nature of the condensed section equivalent to MP2.
- 6. Measure the fluid flow processes within the MP3 platform.
- 7. Calibrate the seismic stratigraphy.

Drilling Program: RCB (~1 core into basement), ADCB an interval of ~300 m.

Logging and Downhole Operations: Triple-combo, sonic-FMS, WST, GHMT (if available)

Nature of Rock Anticipated: Approximately 501 m of dolomitized framestone, packstone, and wackestone with a thin cover of periplatform ooze; underlying basement composed of Paleozoic quartz-feldspar mafic metasediment