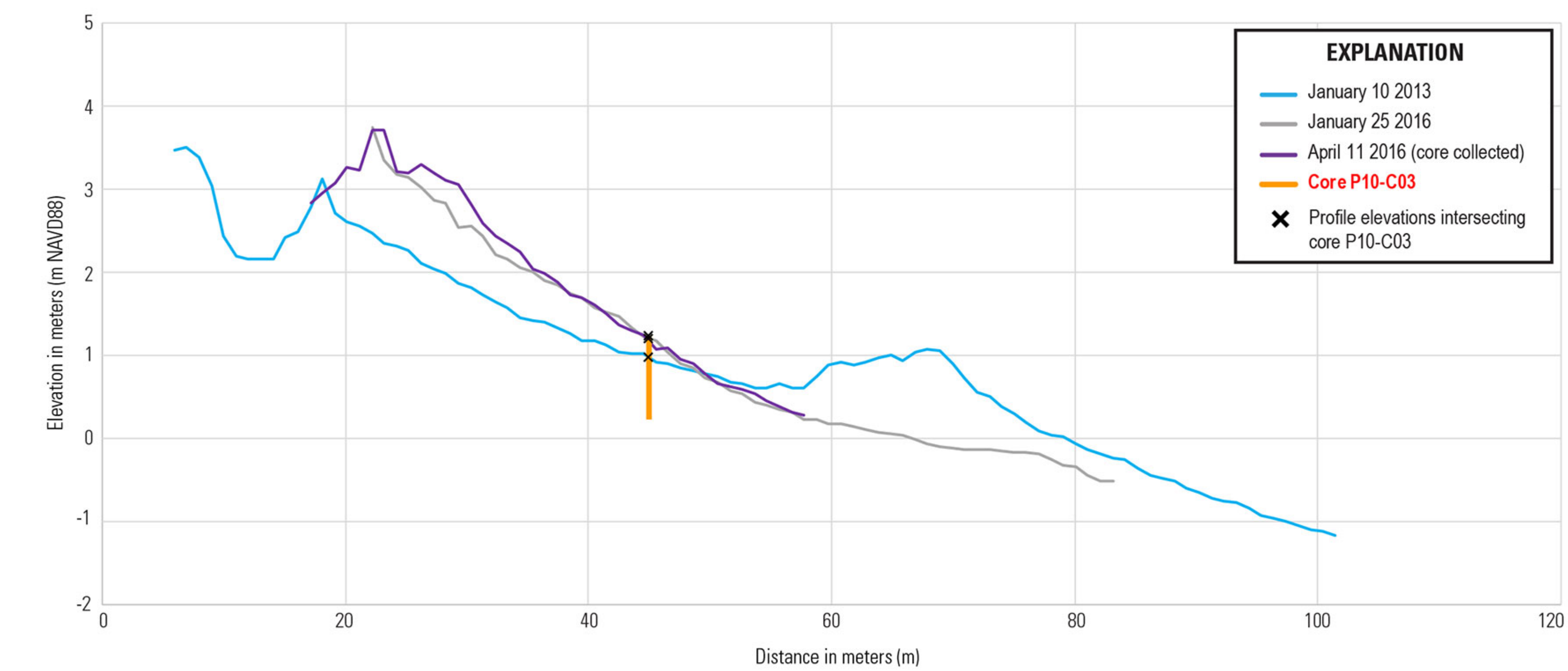
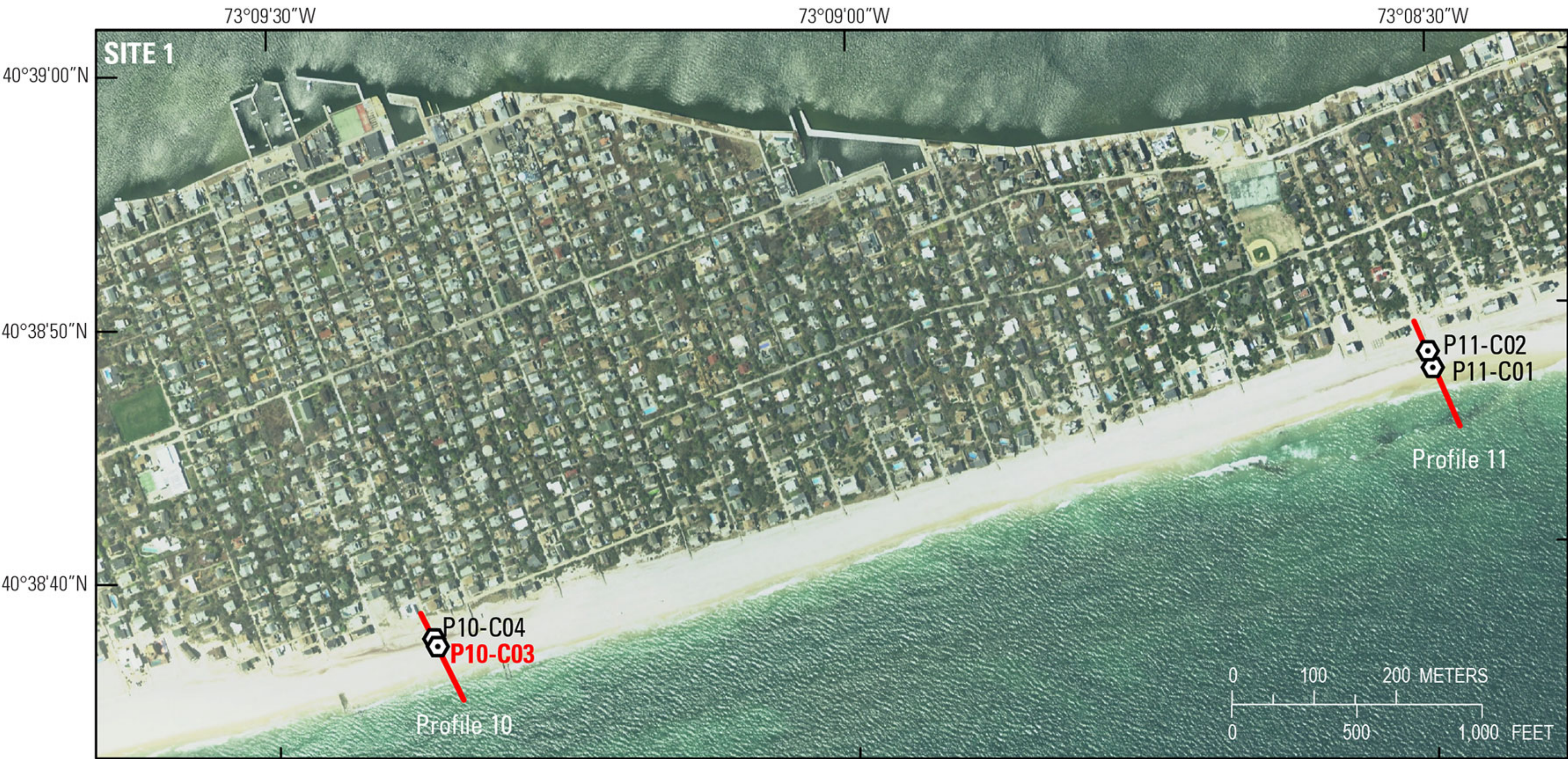
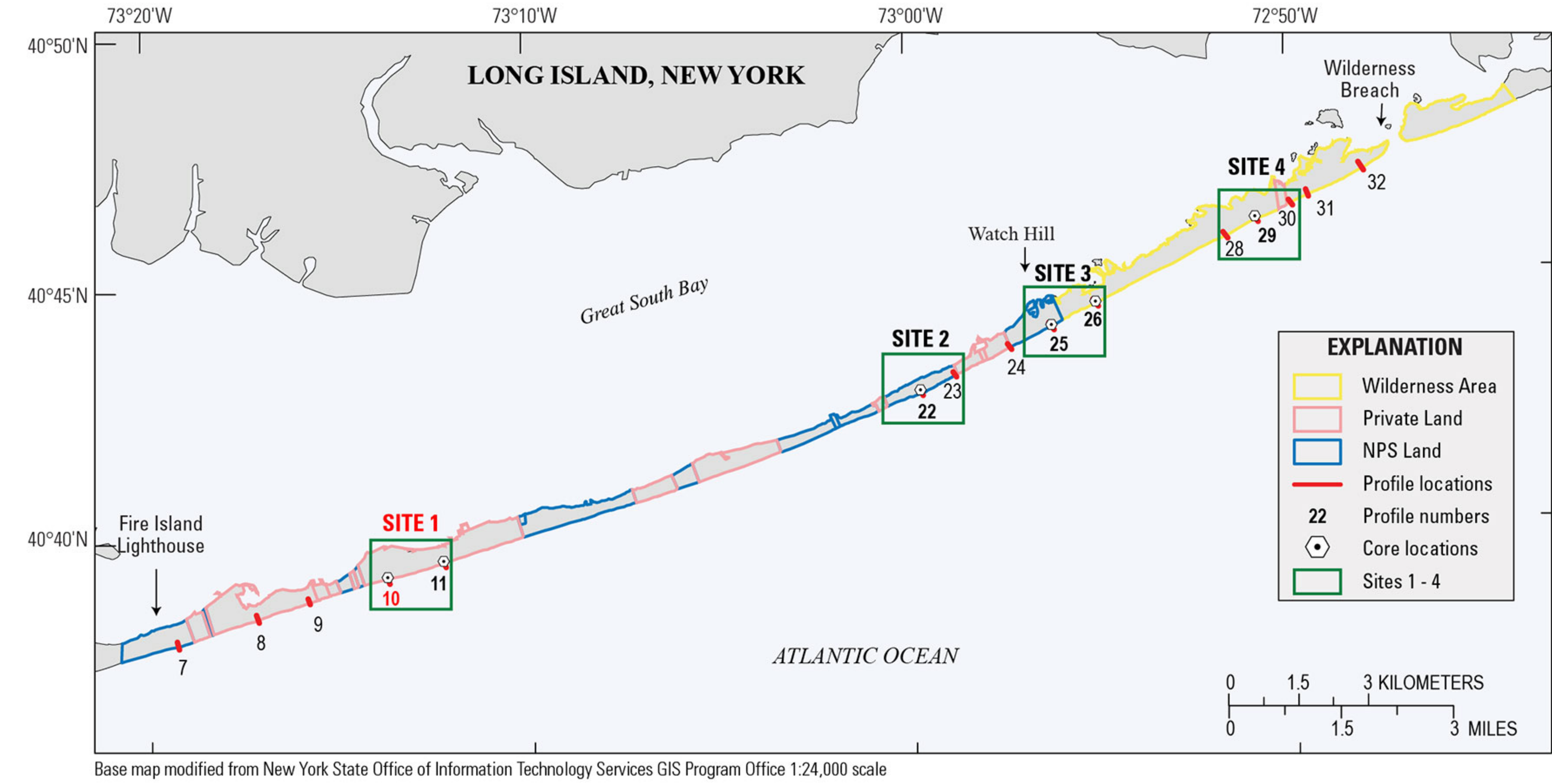




Core ID: P10-C03

Elevation (m)

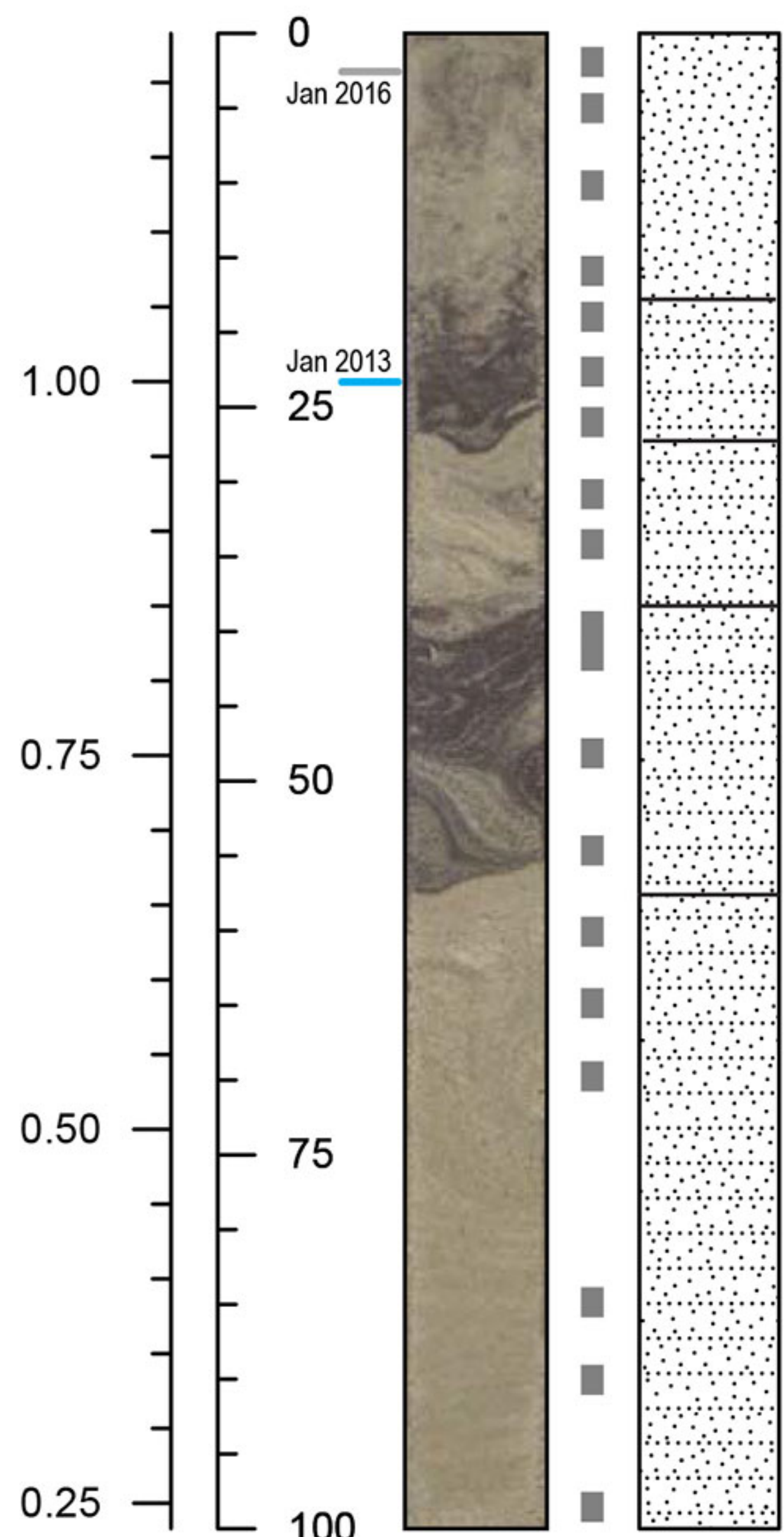
Depth (cm)

Beach Profile elevation

Core Photograph

Sample Interval

Lithology



Lithologic Description

0-17 cm: SAND, mottled light brown (5Y 8/2), moderately sorted, medium-grained sand; with a gradational basal contact

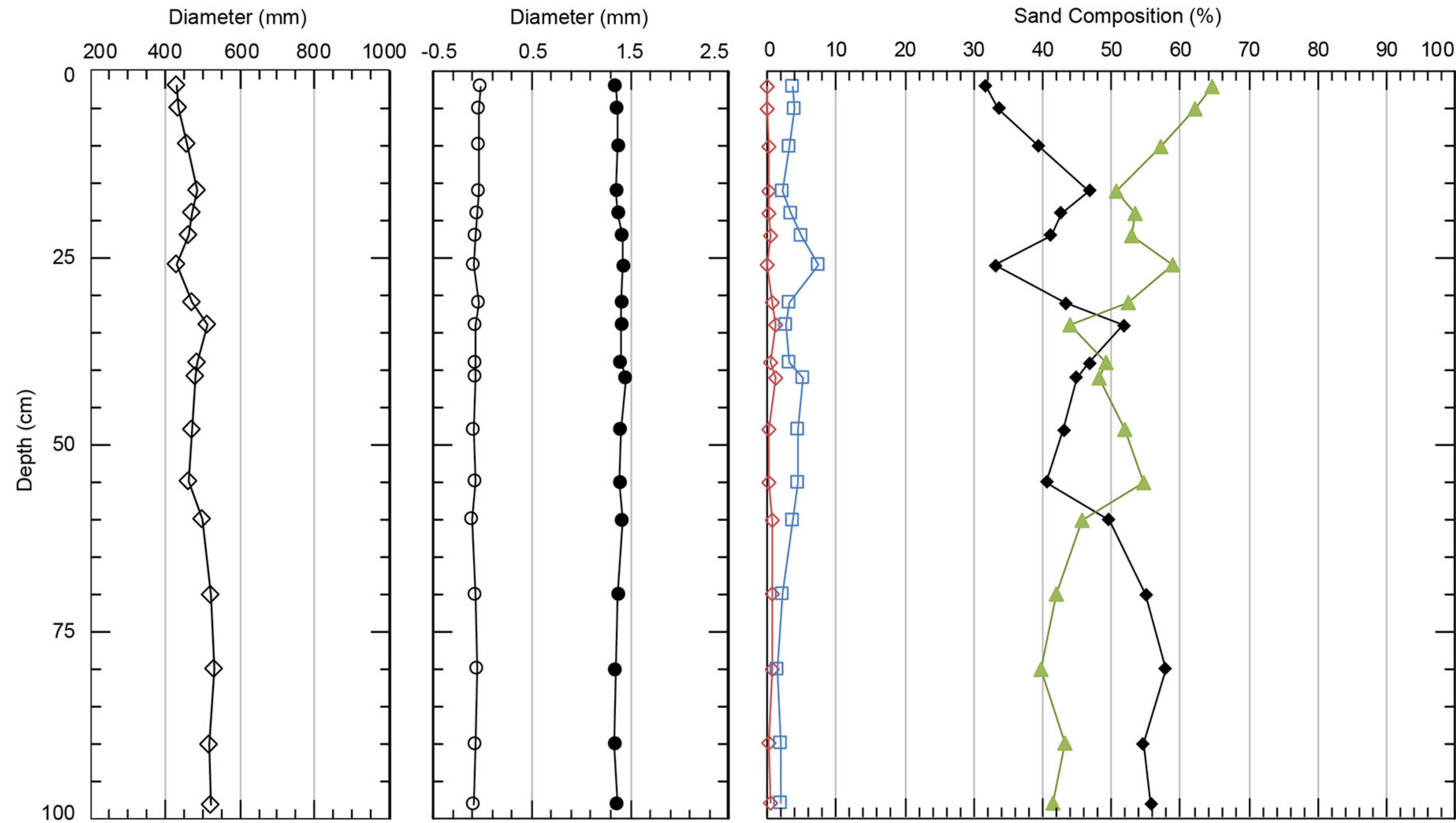
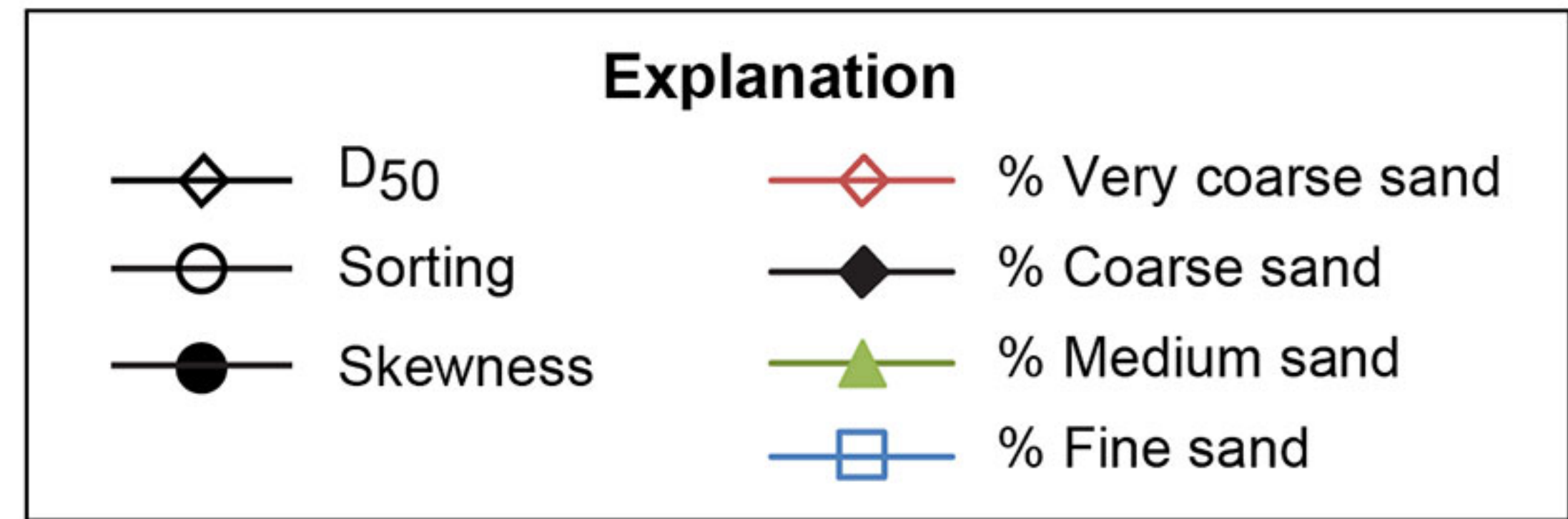
18-28 cm: SAND, mottled light brown (5Y 8/2), moderately sorted, medium-grained sand; with deformed, dark red to black, heavy mineral laminations, scattered shell fragments; with a sharp, deformed basal contact

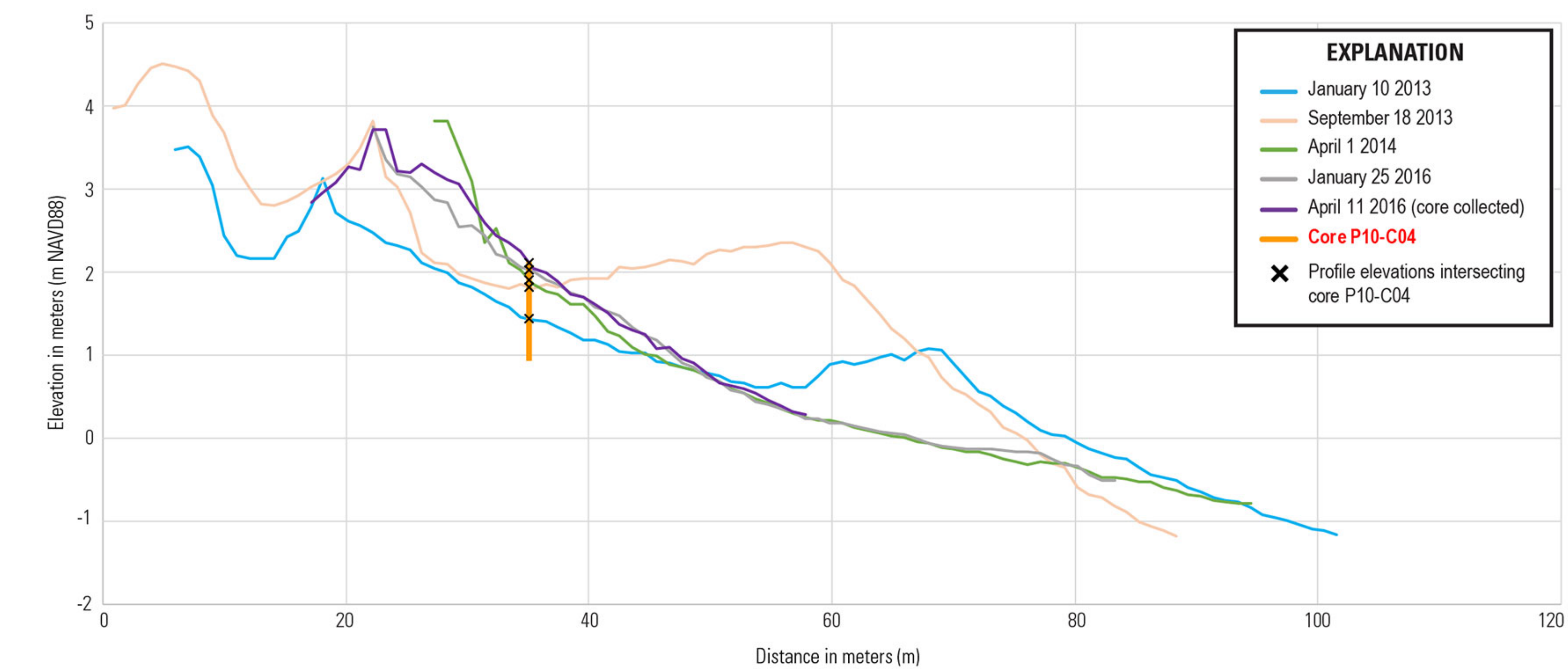
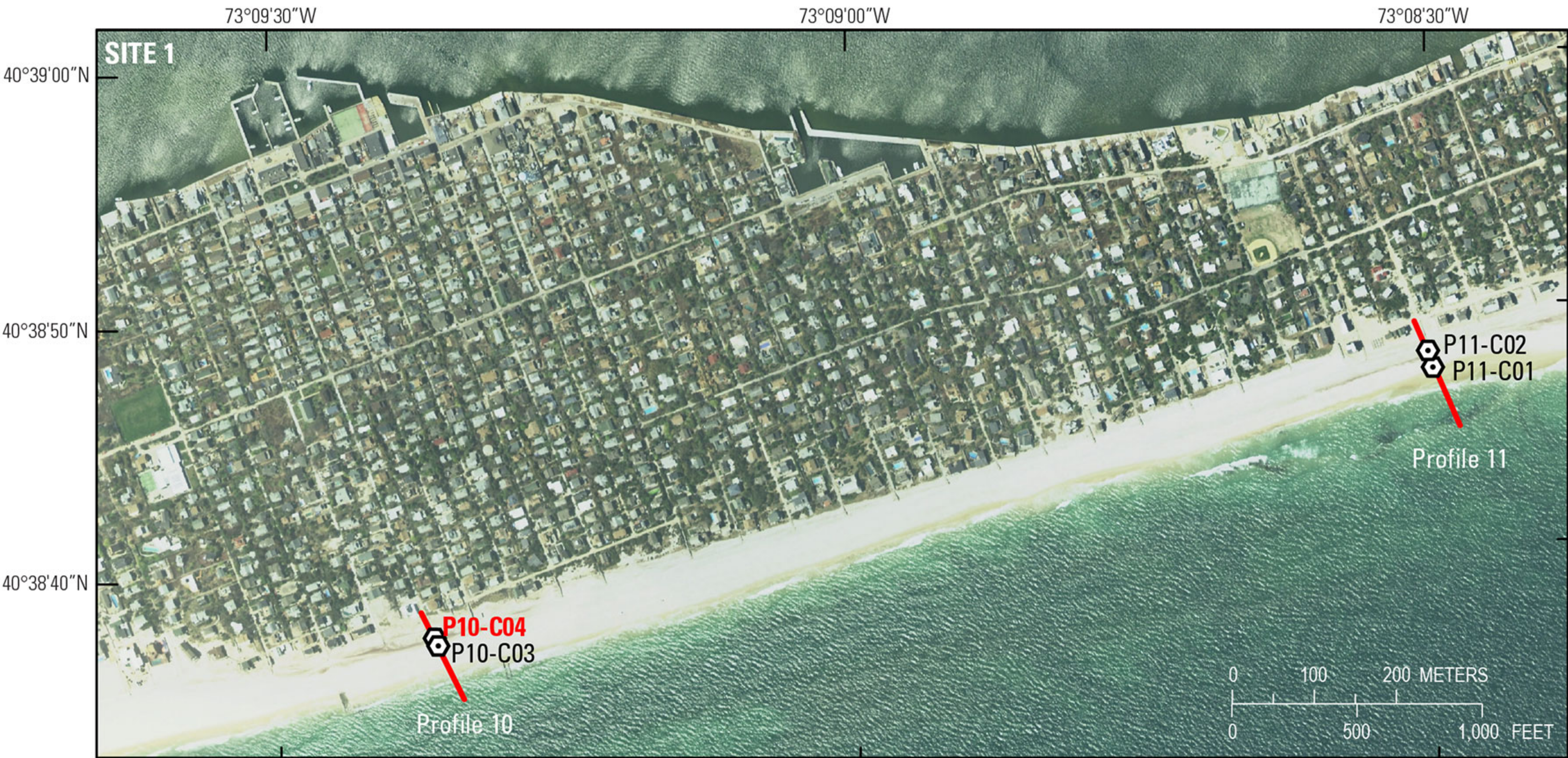
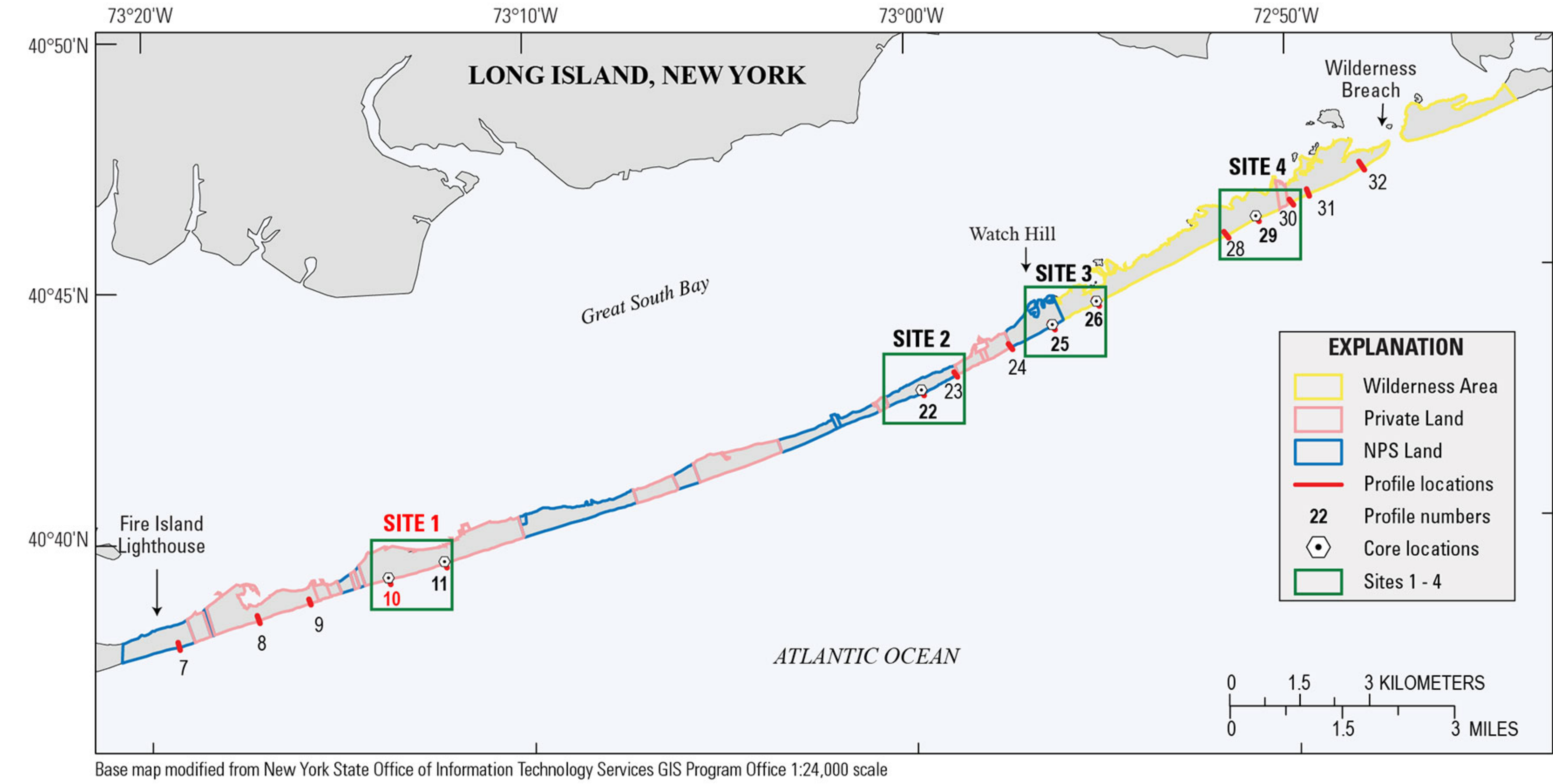
28-39 cm: SAND, light brown (5Y 8/2), moderately sorted, medium-grained sand; with deformed heavy mineral laminations and a sharp; with an angular basal contact

39-58 cm: SAND, light brown (5Y 8/2), moderately sorted, medium-grained sand; with deformed, dark red to black, heavy mineral laminations and a sharp; with an angular basal contact

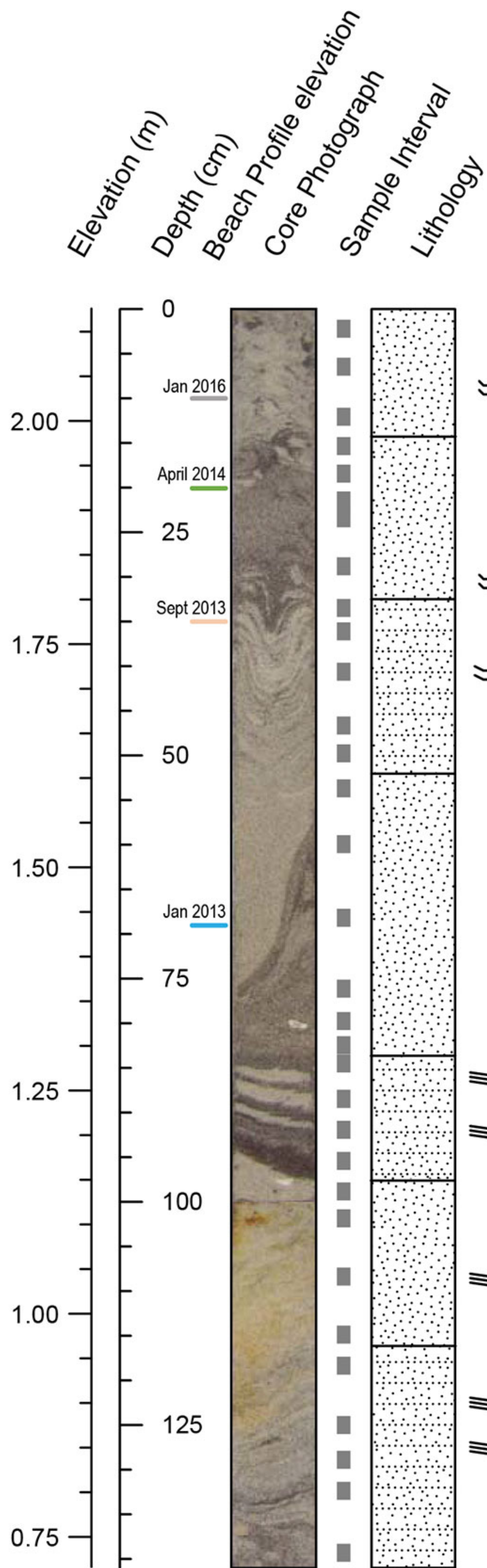
58-100 cm: SAND, light brown (5Y 8/2), moderately sorted, massive to laminated, medium-grained quartz sand with scattered shell fragments

Core ID: P10-C03





Core ID: P10-C04



Latitude: 40.64378 N
Longitude: 73.15614 W
Location: Profile 10, dune toe
Elevation: 2.126 m
Core Length: 141 cm
Compaction: N/A

Lithologic Description

0-14 cm: SAND, mottled light brown (5Y 8/2), moderately sorted, fine- to coarse-grained quartz sand; with deformed, fine- to medium-grained, purple heavy mineral lenses; with a gradational basal contact

14-27 cm: SAND, light brown (5Y 8/2), moderately sorted, mostly massive, fine- to coarse-grained quartz sand; with fine- to medium-grained purple garnet grains, abundant dissiminated heavy mineral flecks; with a deformed, gradational basal contact

27-52 cm: SAND, light brown (5Y 8/2), moderately sorted, fine- to coarse-grained quartz sand; with deformed, fine- to medium-grained purple heavy mineral laminations, abundant dissiminated heavy mineral flecks; with a deformed, gradational basal contact

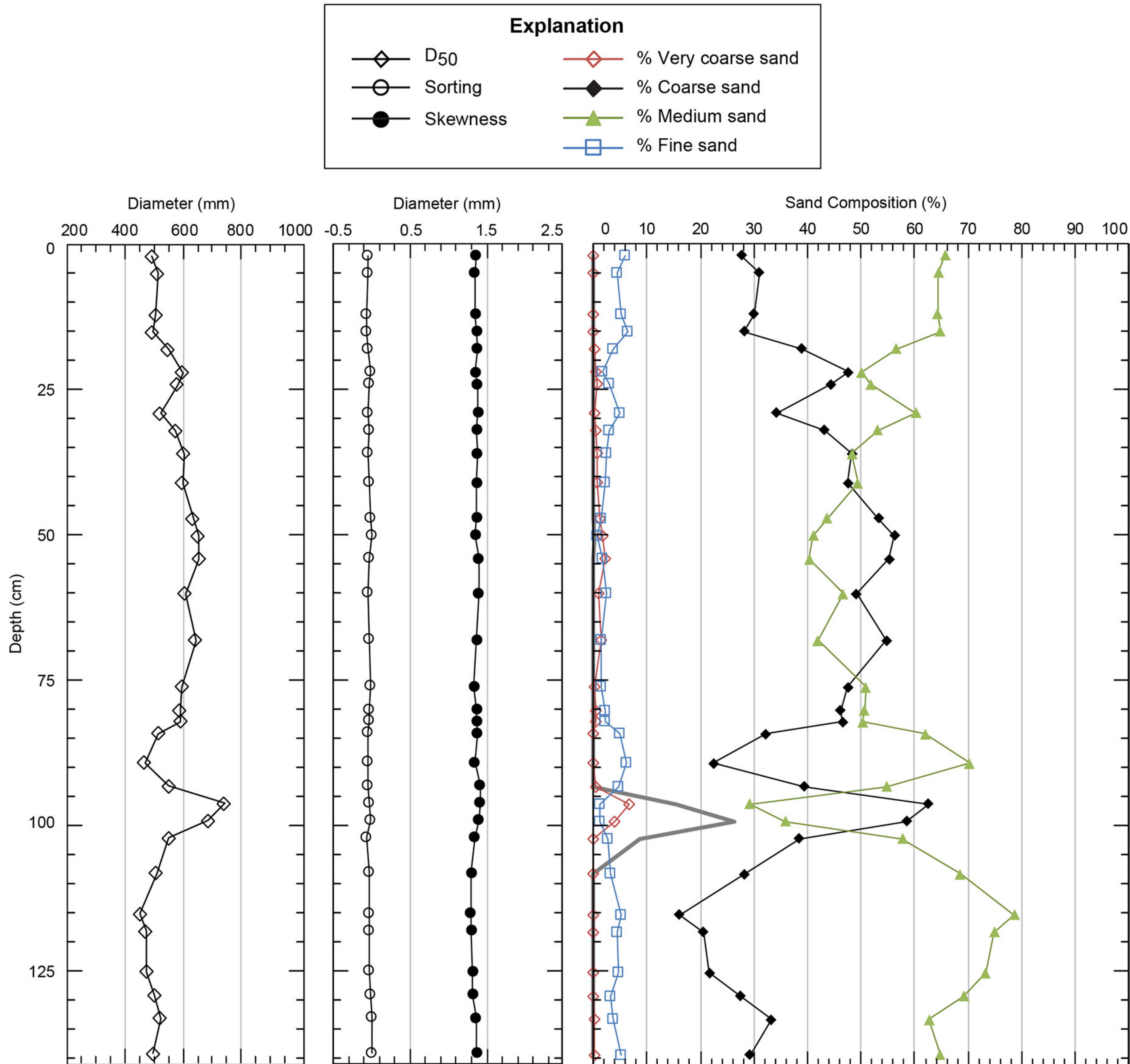
52-83 cm: SAND, light brown (5Y 8/2), moderately sorted, massive, fine- to coarse-grained quartz sand; with a deformed, well sorted, fine- to medium-grained, purple heavy mineral sand lens at the base of the unit, abundant dissiminated heavy mineral flecks, a large (1-2 cm) shell fragment at 80 cm; with a gradational basal contact

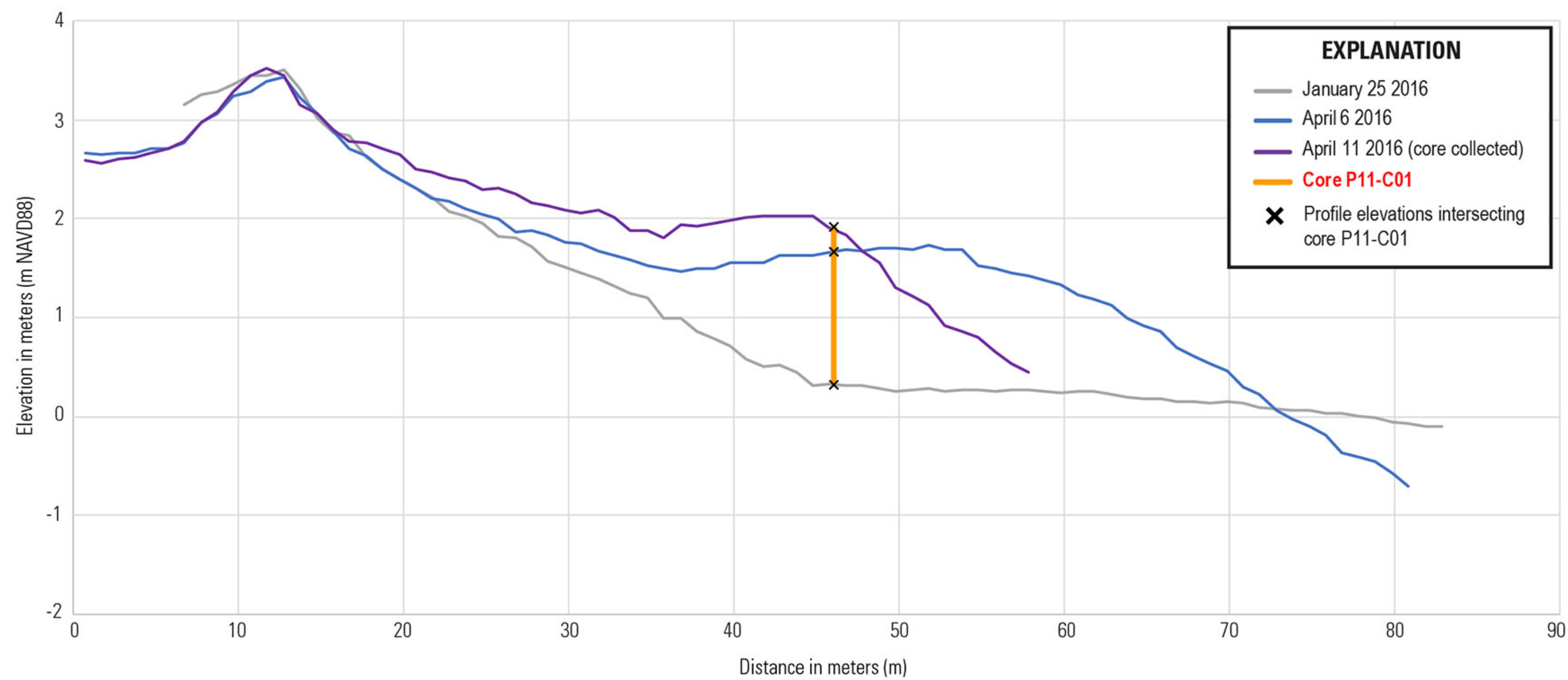
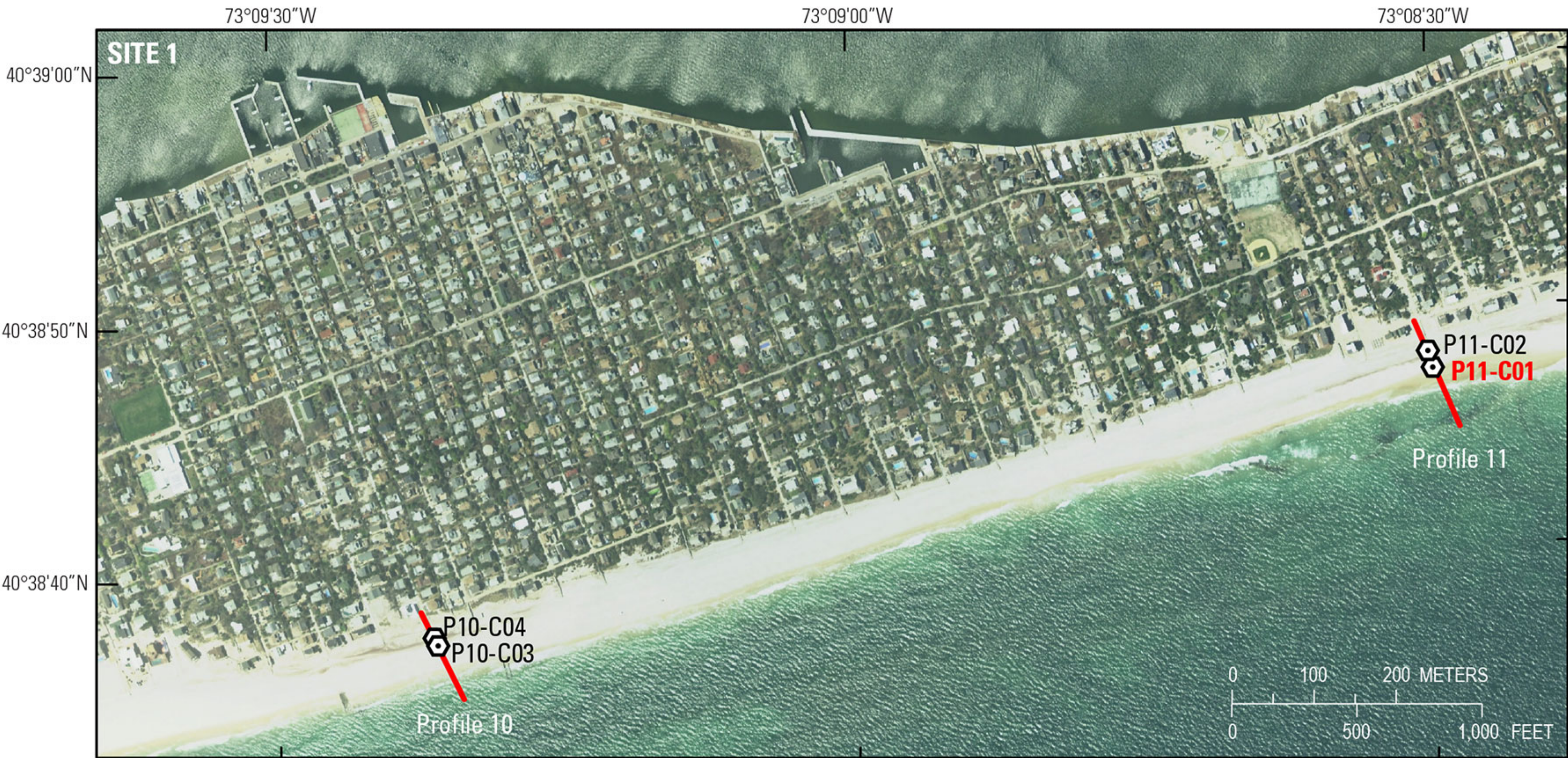
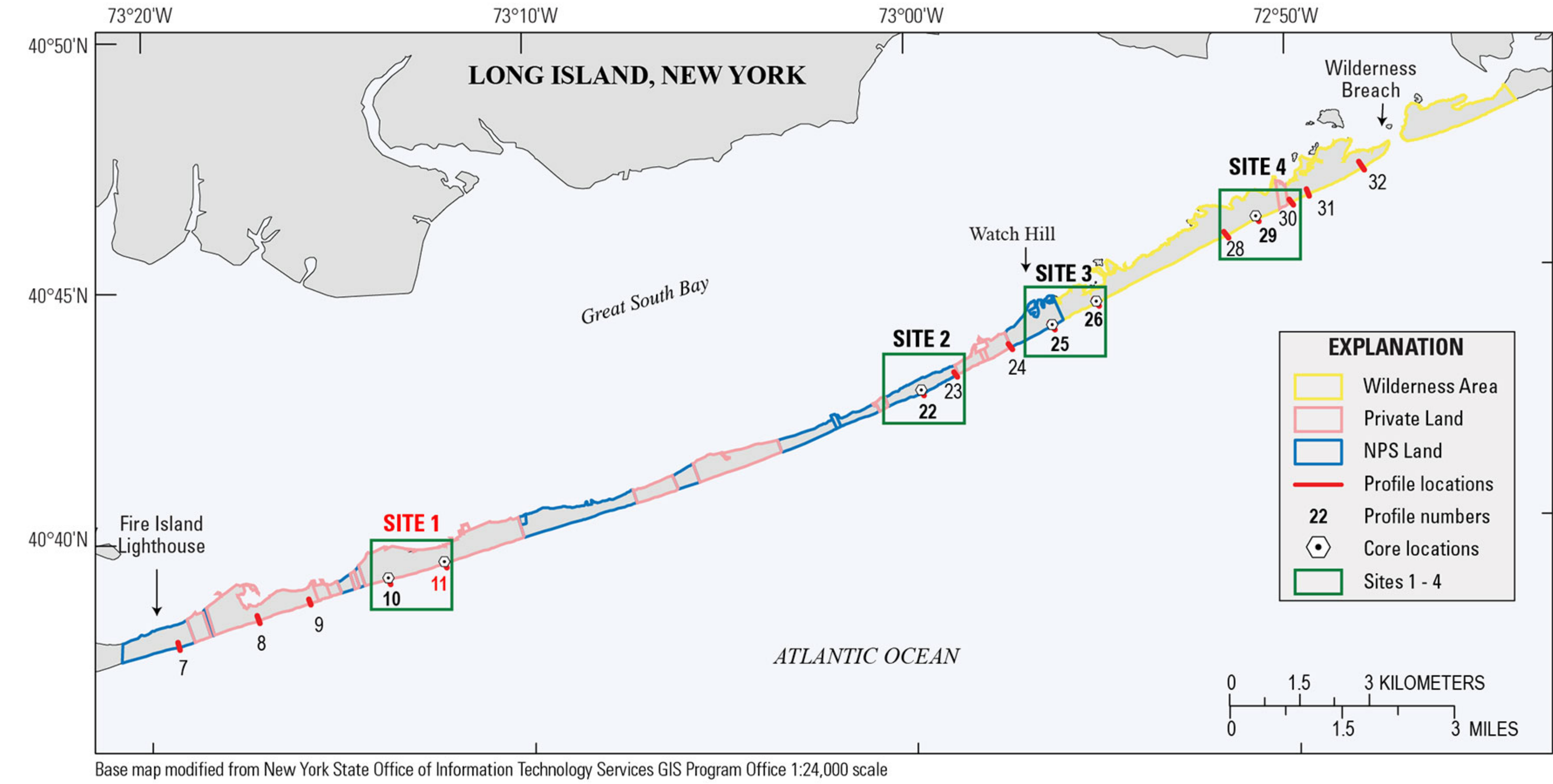
83-97 cm: SAND, light brown (5Y 8/2), moderately sorted, fine- to coarse-grained quartz sand interbedded with well sorted, fine- to medium-grained, purple heavy mineral sand; with abundant dissiminated heavy mineral flecks, a large (1-2 cm) shell fragment at 89 cm; with a sharp basal contact

97-116 cm: SAND, light brown (5Y 8/2), oxidized, moderately sorted, massive to faintly laminated, fine- to coarse-grained quartz sand; with a few faint purple heavy mineral laminations, a large (1-2 cm) shell fragment at 102 cm; with a gradational basal contact

116-141 cm: SAND, light brown (5Y 8/2), moderately sorted, fine- to coarse-grained quartz sand; with fine- to medium-grained, purple garnet laminations and a pebble at 137 cm

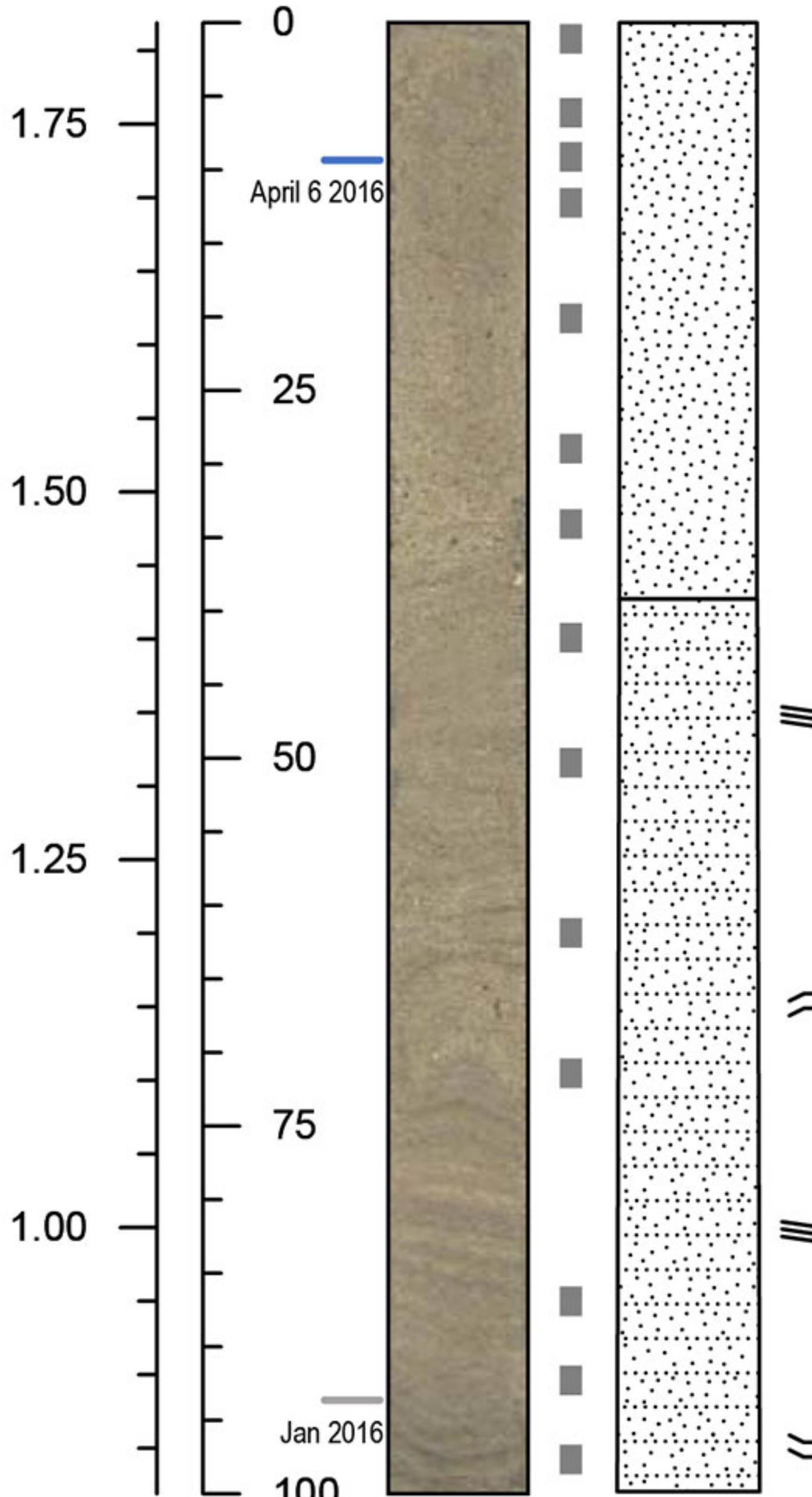
Core ID: P10-C04





Core ID: P11-C01

Elevation (m)
Depth (cm)
Beach Profile elevation
Core Photograph
Sample Interval
Lithology



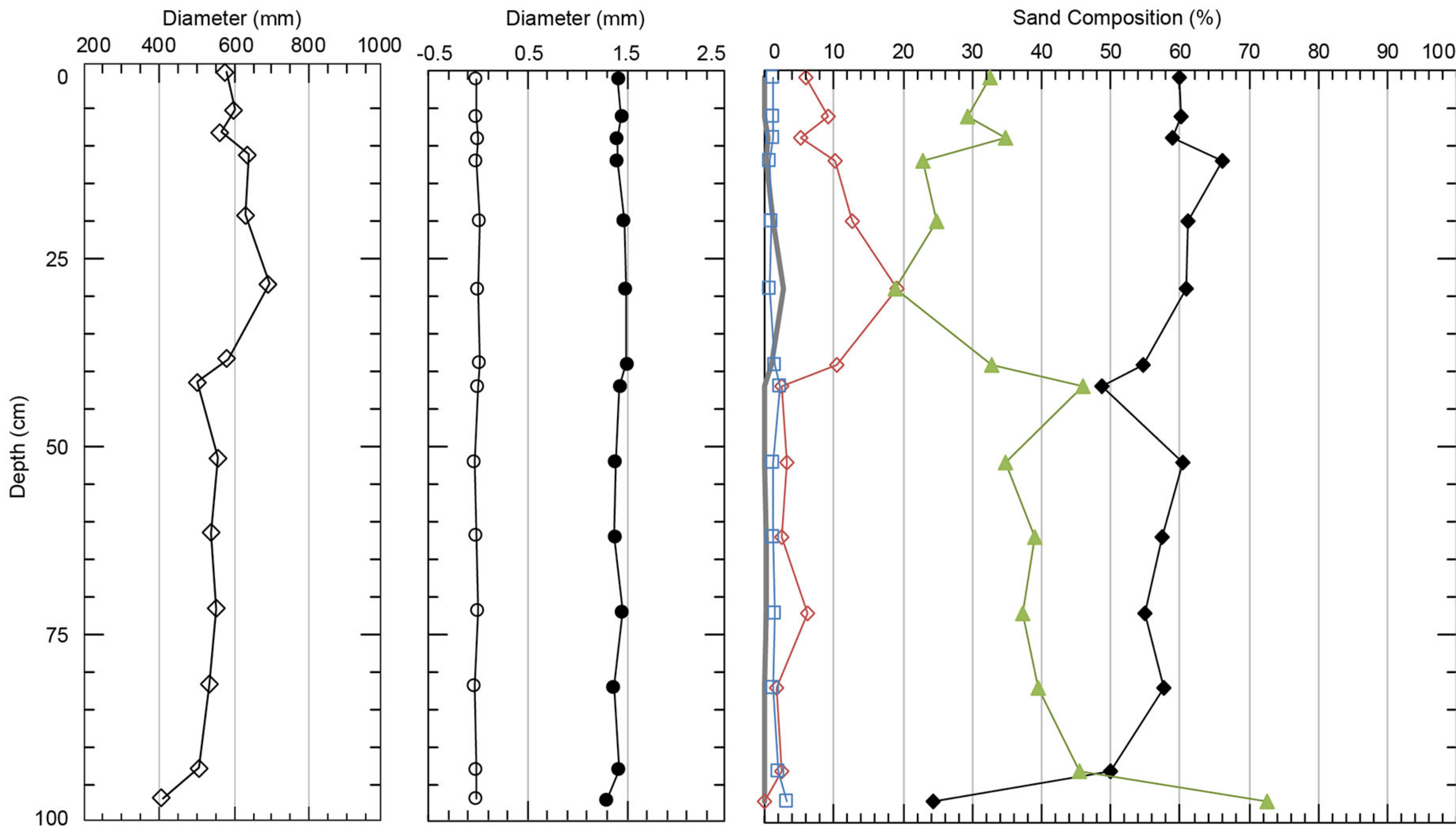
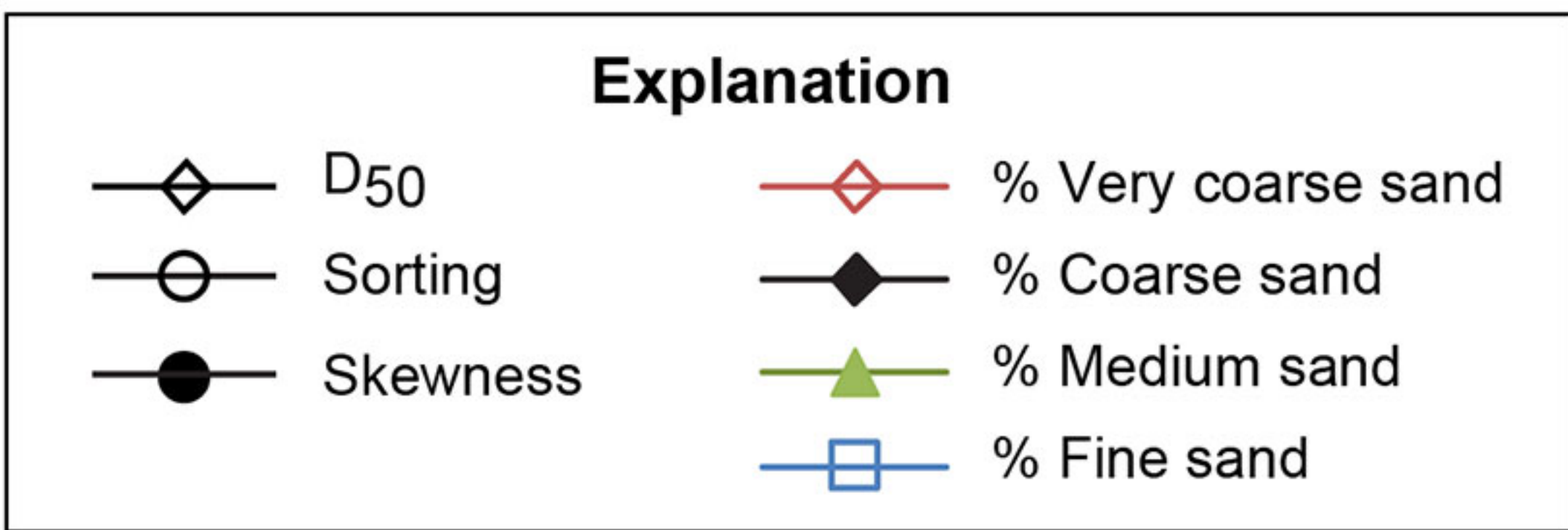
Latitude: 40.64652 N
Longitude: 73.14170 W
Location: Profile 11, lower beach
Elevation: 1.819 m
Core Length: 100 cm
Compaction: 59.5 cm

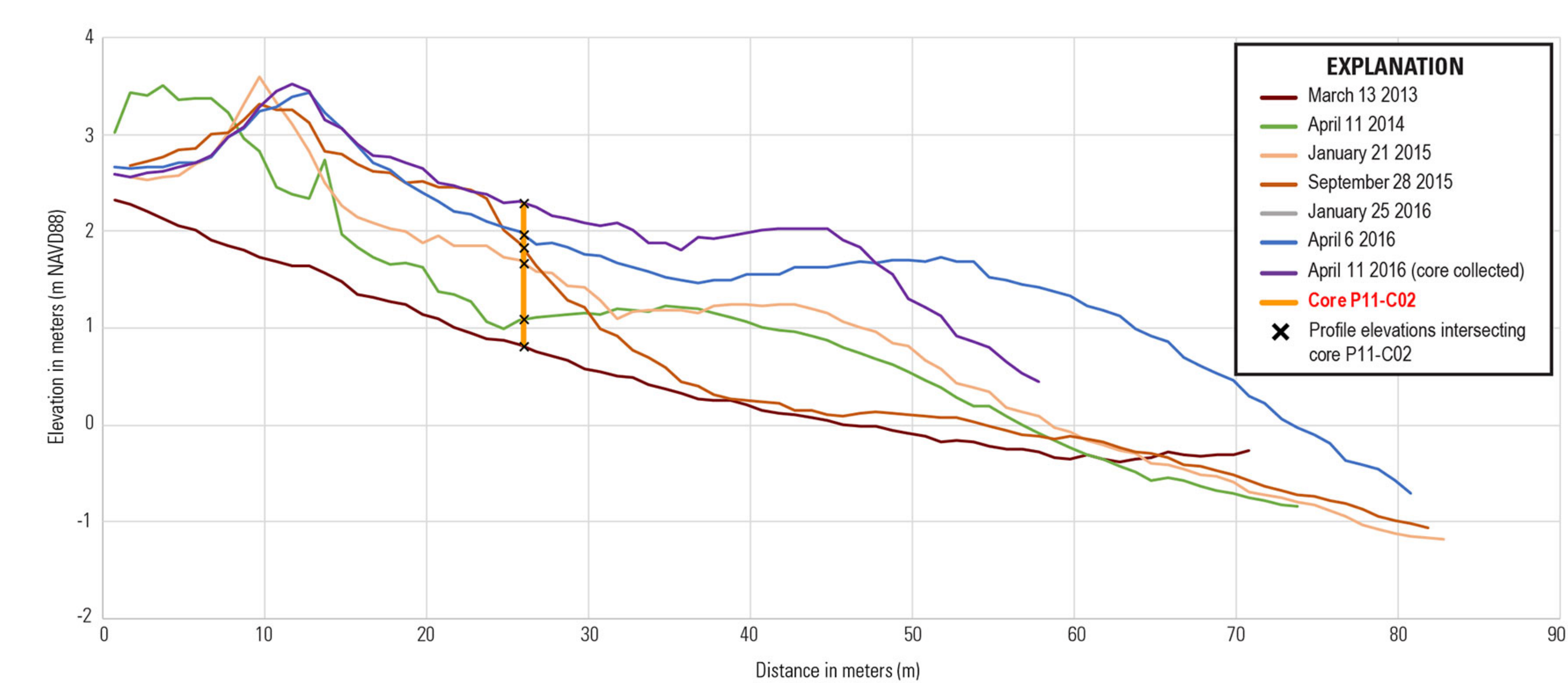
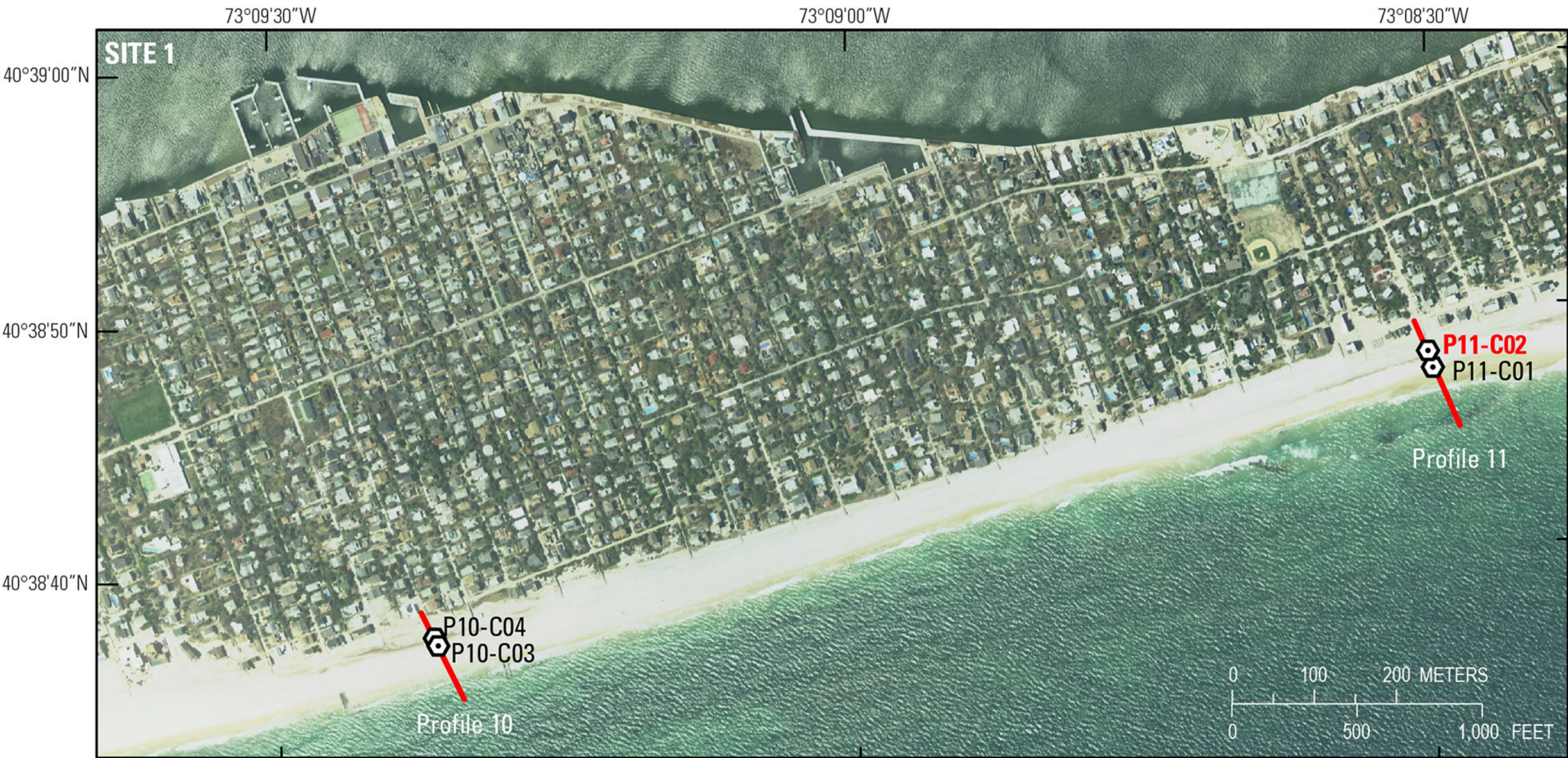
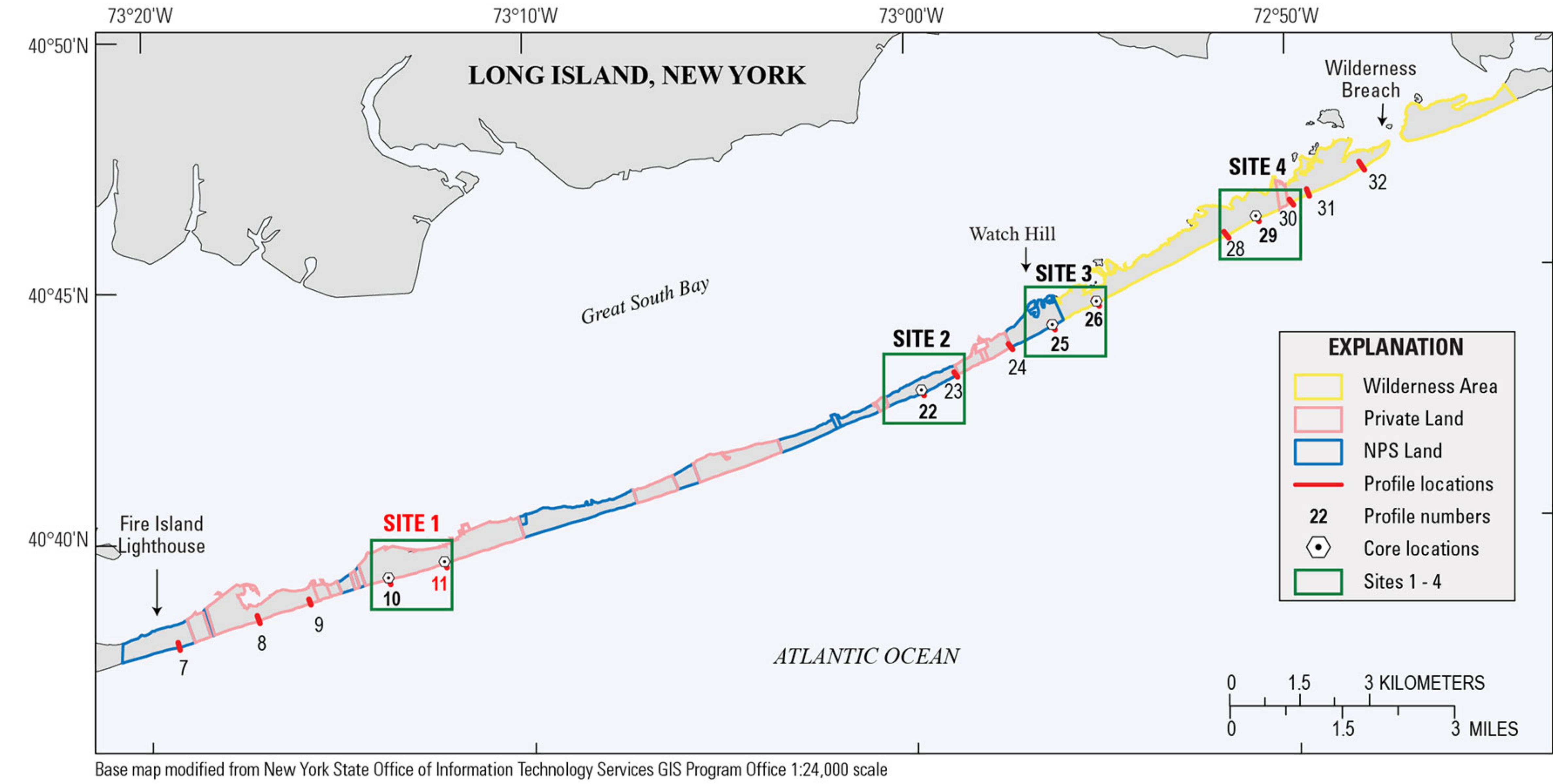
Lithologic Description

0-39 cm: SAND, light brown (5Y 8/2), poorly sorted, massive, fine- to coarse-grained quartz sand; with scattered shell fragments; with a gradational basal contact

39-100 cm: SAND, light brown (5Y 8/2), moderately sorted, laminated, medium- to coarse-grained sand; with occasional small shell fragments and inclined or deformed bedding

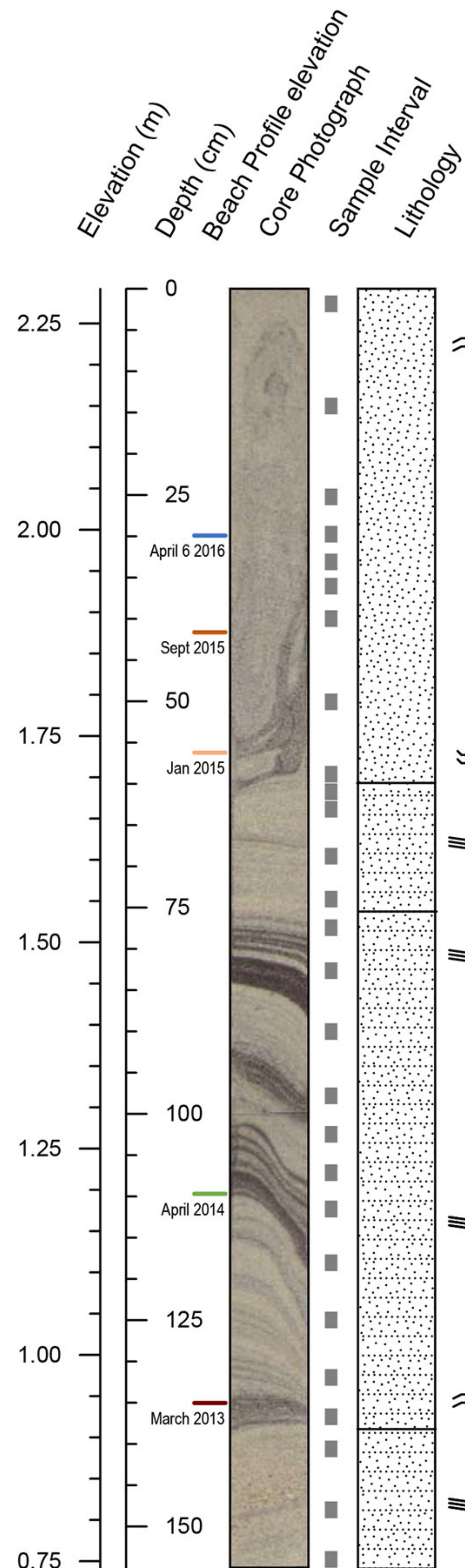
Core ID: P11-C01





Core ID: P11-C02

Latitude: 40.64670 N
Longitude: 73.14178 W
Location: Profile 11, upper beach
Elevation: 2.292 m
Core Length: 155 cm
Compaction: 15.5 cm



Lithologic Description

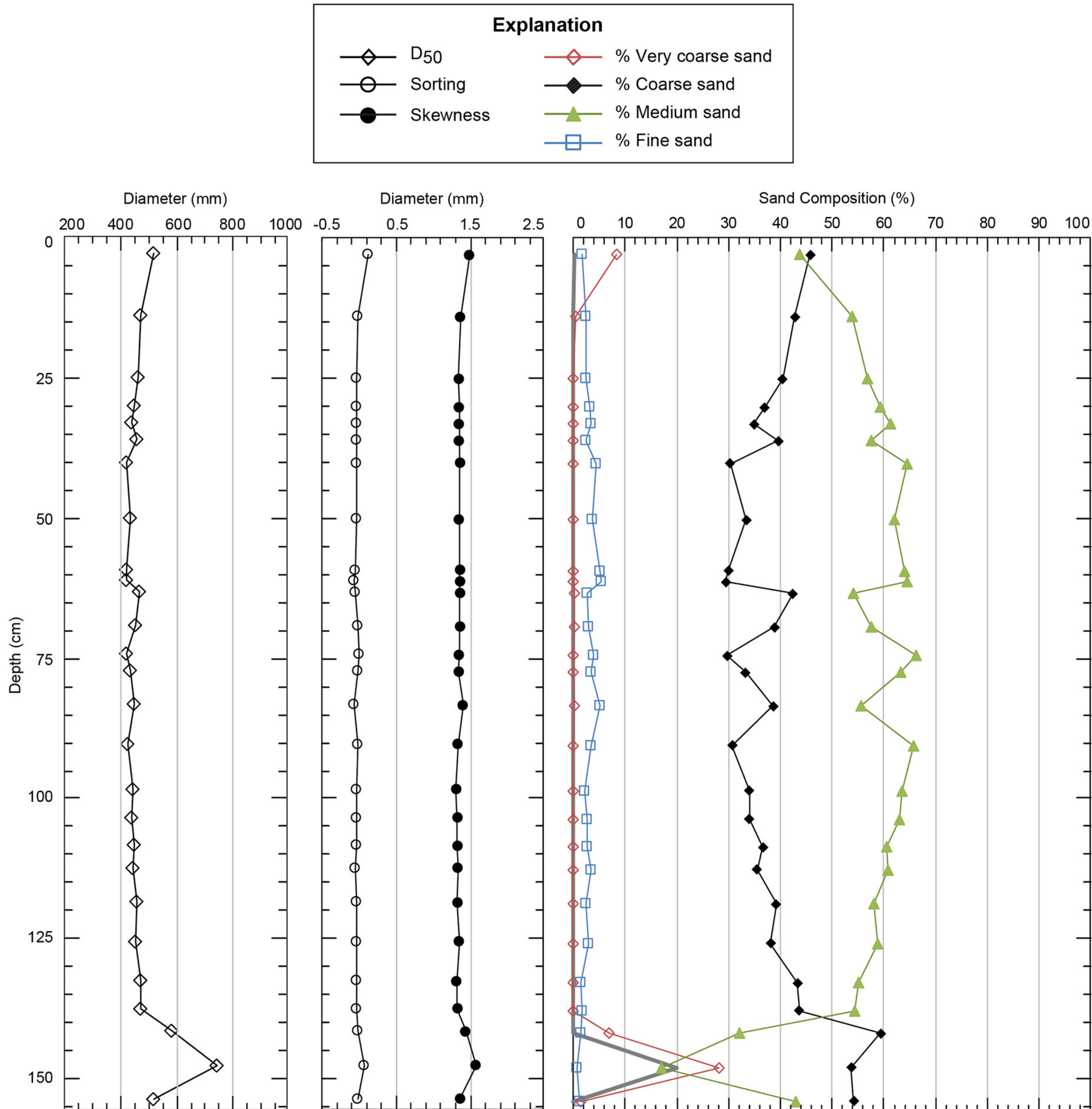
0-60 cm: SAND, mottled light brown (5Y 8/2), moderately well sorted, mostly massive, medium-grained sand; with deformed heavy mineral-rich lenses between 55 and 60 cm; with a gradational basal contact

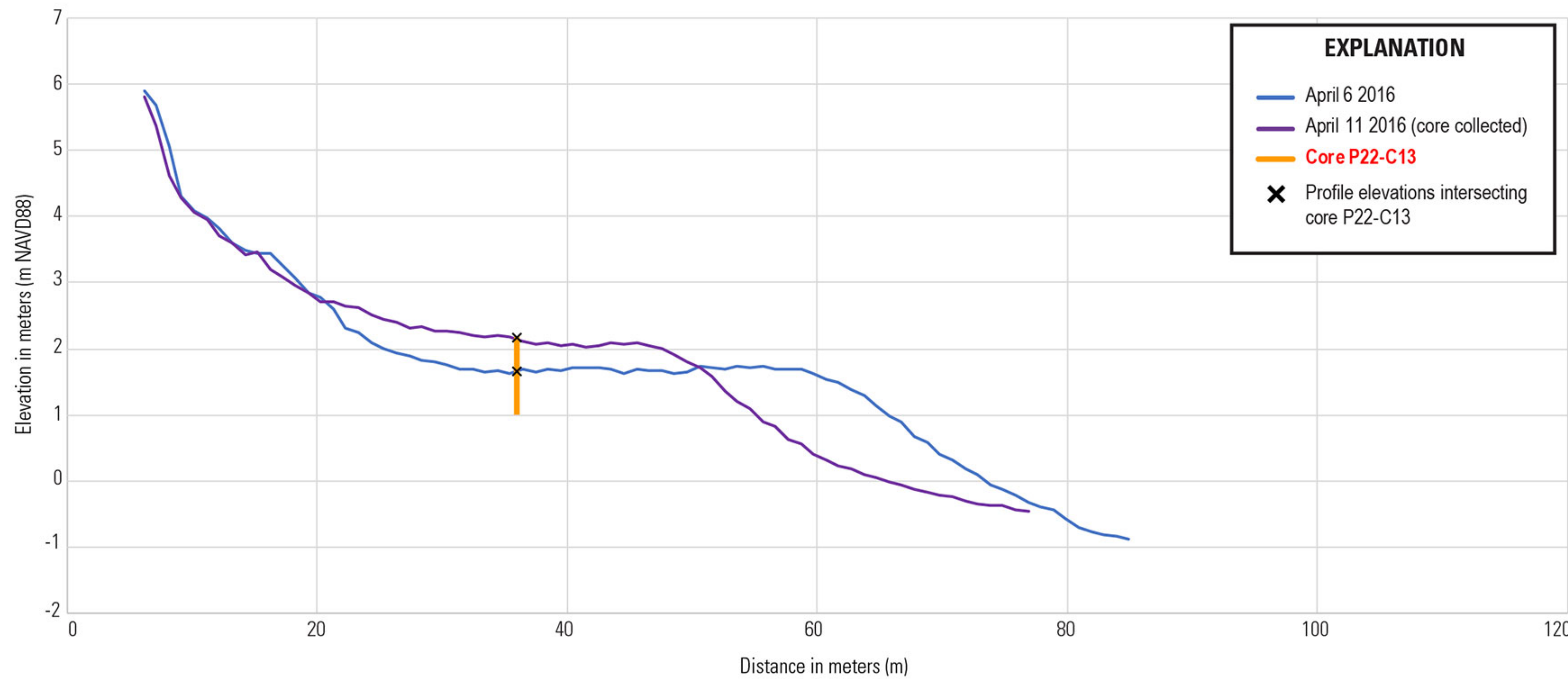
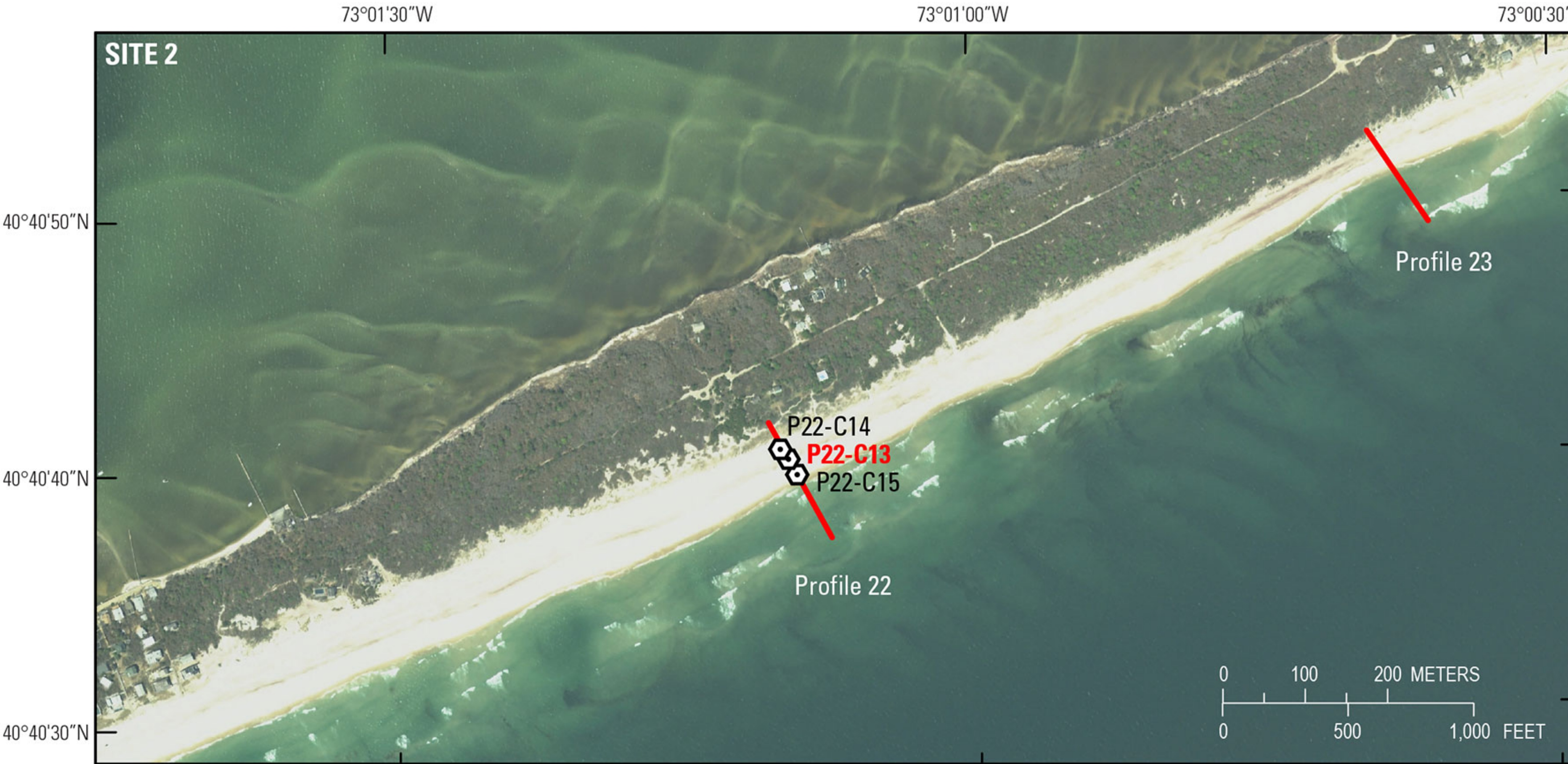
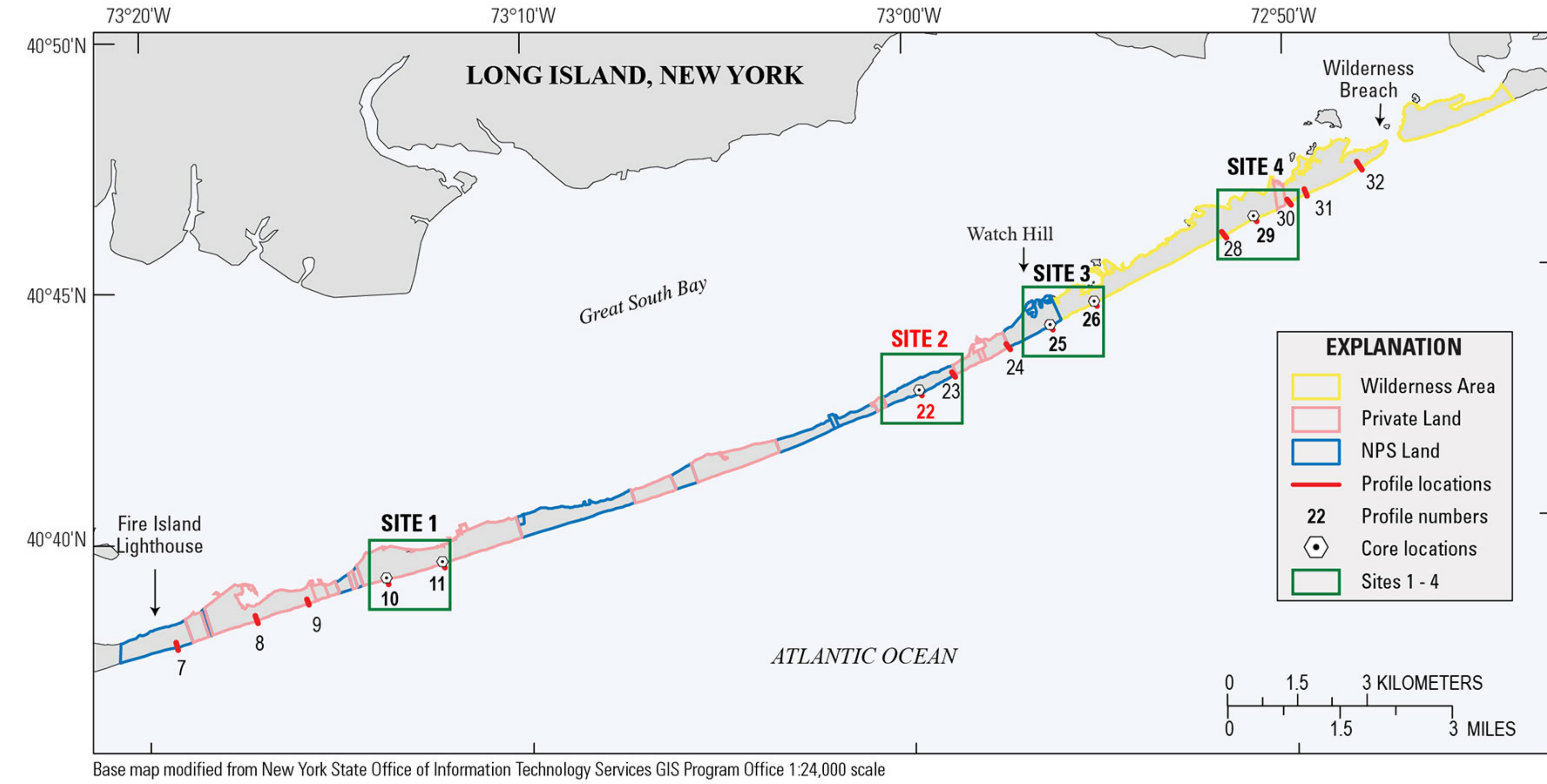
60-75 cm: SAND, light brown (5Y 8/2), moderately well sorted, laminated, medium-grained sand; with a gradational basal contact

75-140 cm: SAND, light brown (5Y 8/2), moderately well sorted, laminated, medium-grained sand; with deformed, dark red to black, heavy mineral laminations; with a sharp basal contact

140-155 cm: SAND, light brown (5Y 8/2), moderately well sorted, laminated, medium-grained sand; with a thin layer of shell fragments and small pebbles from 145 to 147 cm

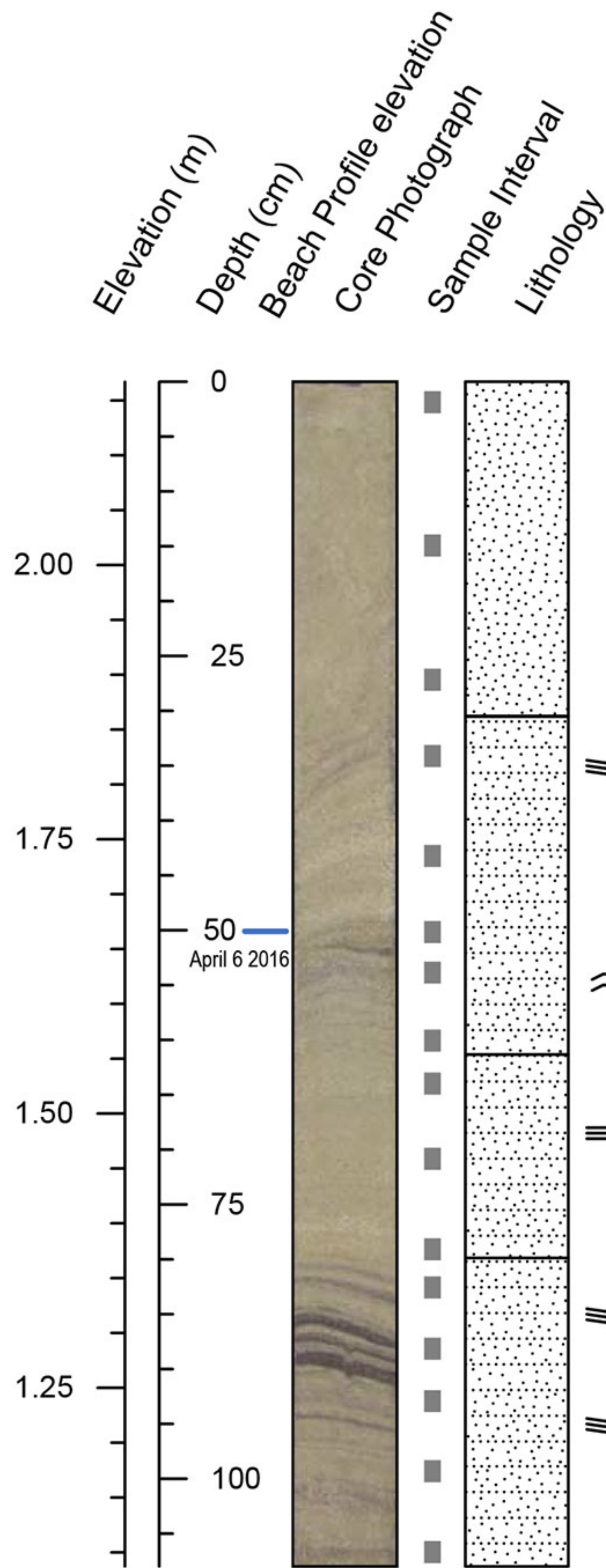
Core ID: P11-C02





Core ID: P22-C13

Latitude: 40.67781 N
Longitude: 73.01941 W
Location: Profile 22, upper beach
Elevation: 2.167 m
Core Length: 108 cm
Compaction: 5 cm



Lithologic Description

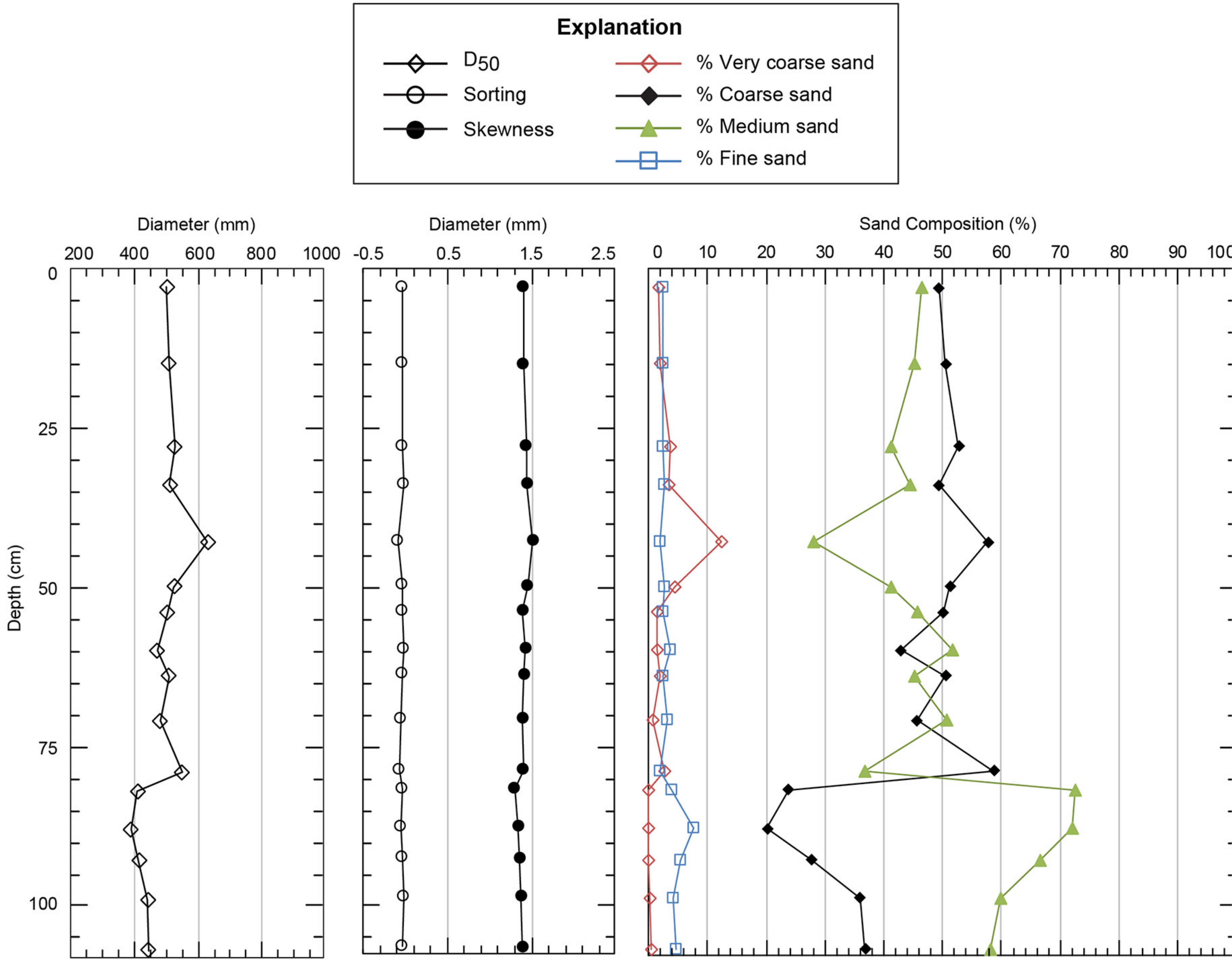
0-31 cm: SAND, light brown (5Y 4/2), moderately sorted, massive, medium- to coarse-grained quartz sand; with occasional heavy mineral flecks; with a gradational basal contact

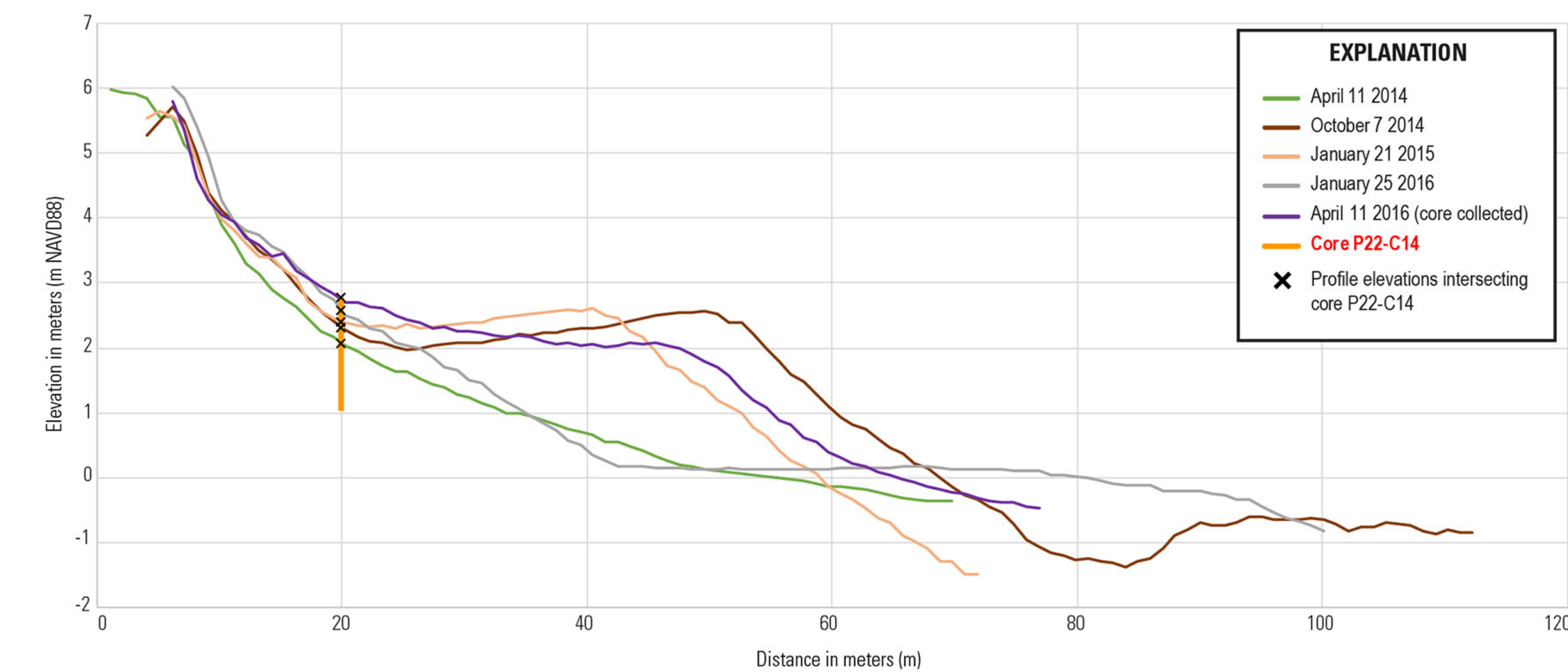
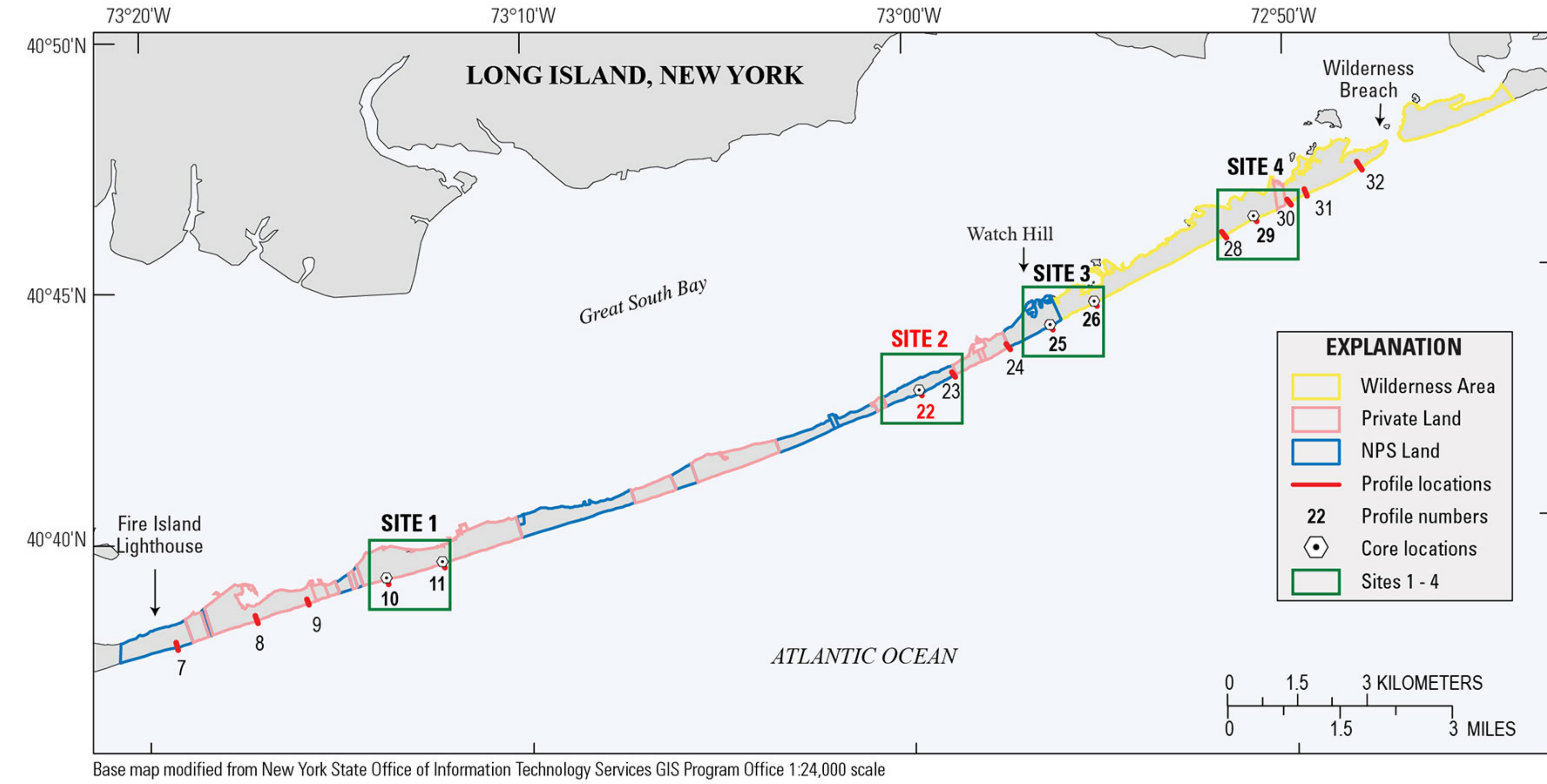
31-62 cm: SAND, light brown (5Y 8/2), moderately sorted, laminated, medium-grained quartz sand; with fine- to medium-grained, dark reddish-gray (5Y R 2/2) heavy mineral and heavy mineral laminations, a thin, poorly sorted, coarse-grained sand horizon at 44 cm; with a gradational basal contact

62-80 cm: SAND, light brown (5Y 8/2), moderately sorted, mostly massive, medium-grained quartz sand; with a few faint laminations, thin, poorly sorted, coarse-grained sand horizons at 65 and 78 cm; with a gradational basal contact

80-108 cm: SAND, light brown (5Y 8/2), moderately sorted, laminated, medium-grained quartz sand; with faint heavy mineral laminations, concentrated heavy mineral horizons between 85 and 90 cm, and a thin, poorly sorted, coarse-grained sand horizon at 102 cm

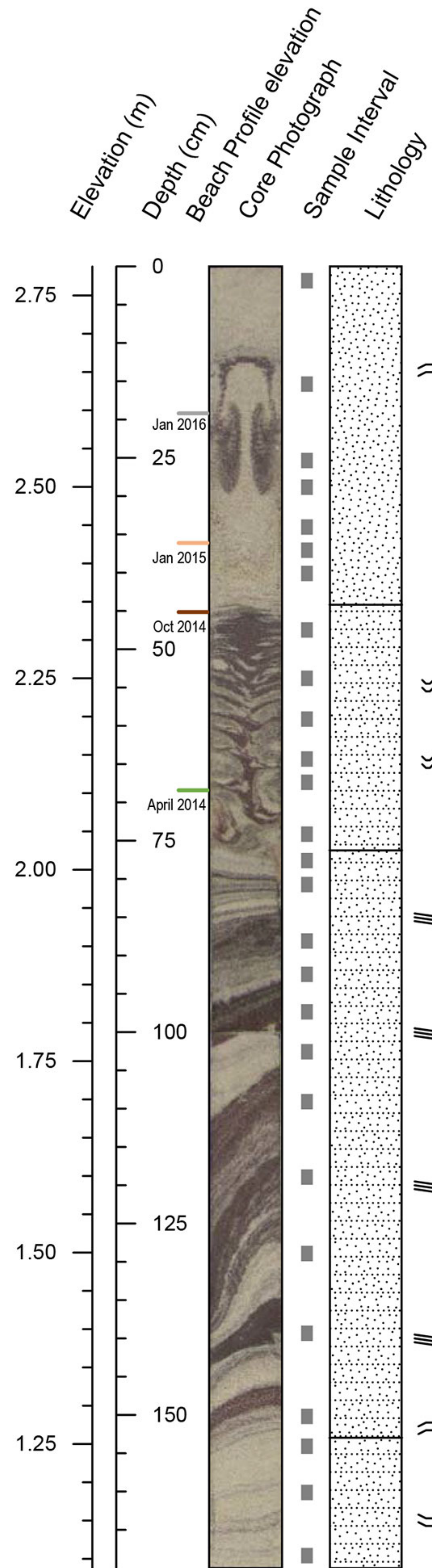
Core ID: P22-C13





Core ID: P22-C14

Latitude: 40.67792 N
Longitude: 73.01953 W
Location: Profile 22, dune toe
Elevation: 2.788 m
Core Length: 170 cm
Compaction: 3.5 cm



Lithologic Description

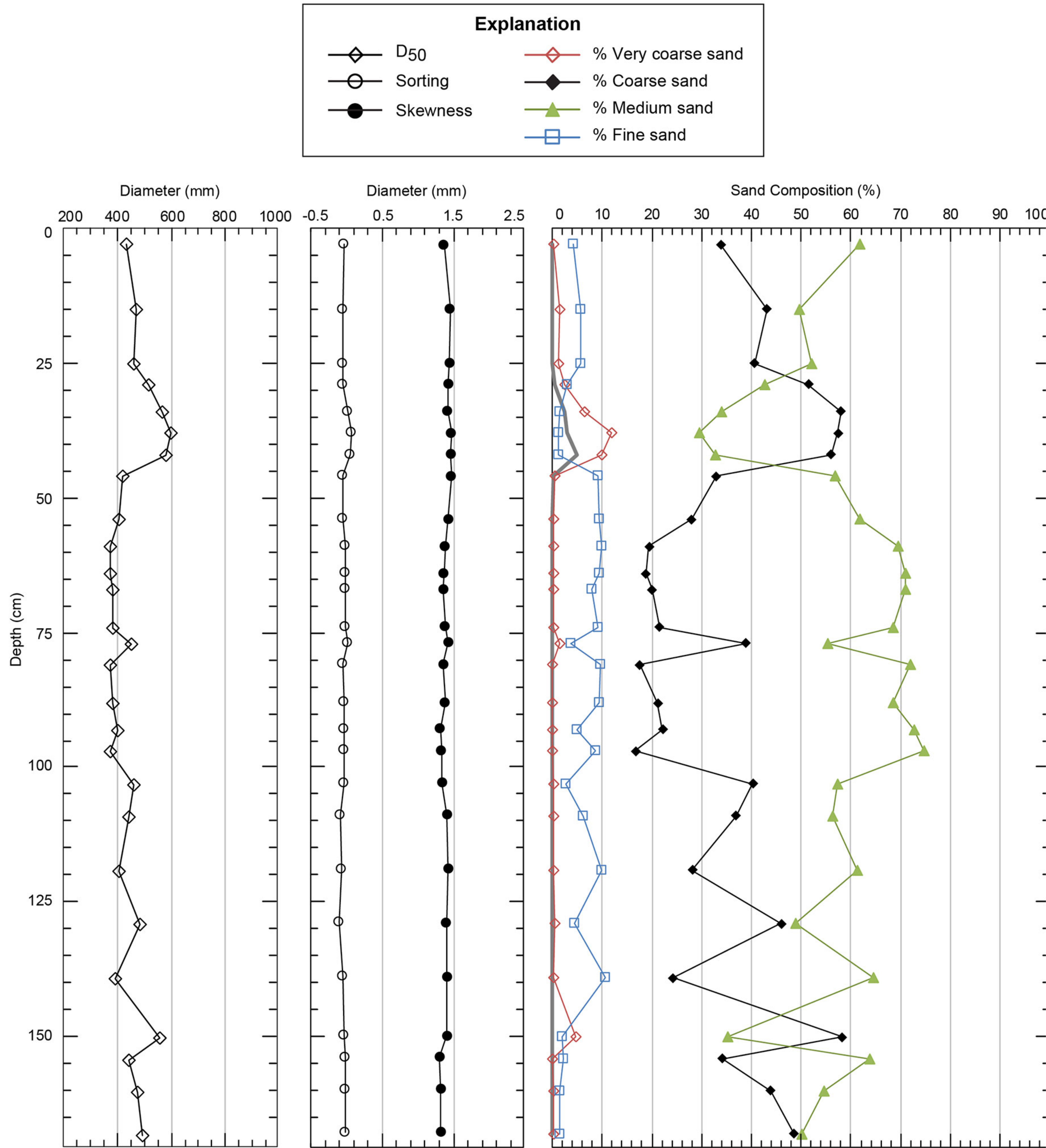
0-44 cm: SAND, light brown (5Y 8/2), moderately sorted, mostly massive, medium-grained quartz sand; with a highly deformed, dark grayish-red heavy mineral sand lens from 12 to 30 cm; with a gradational basal contact

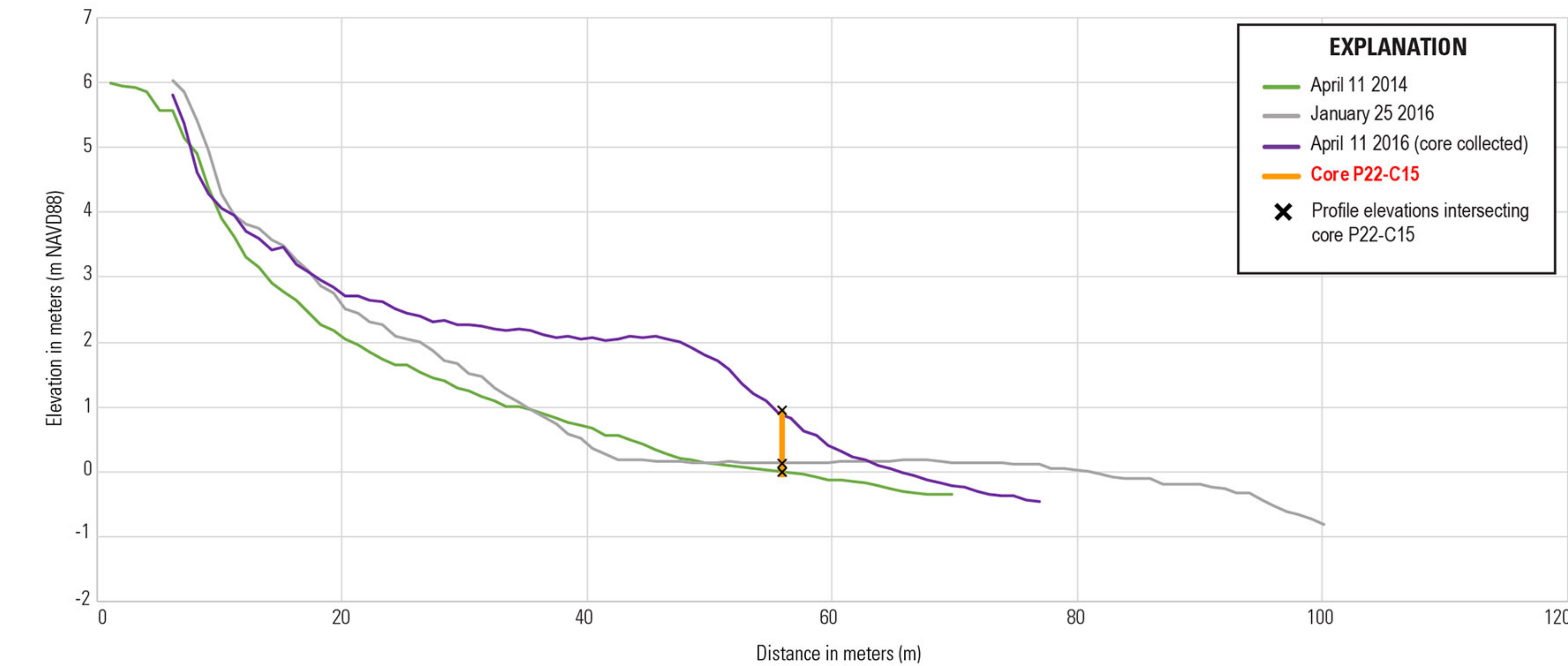
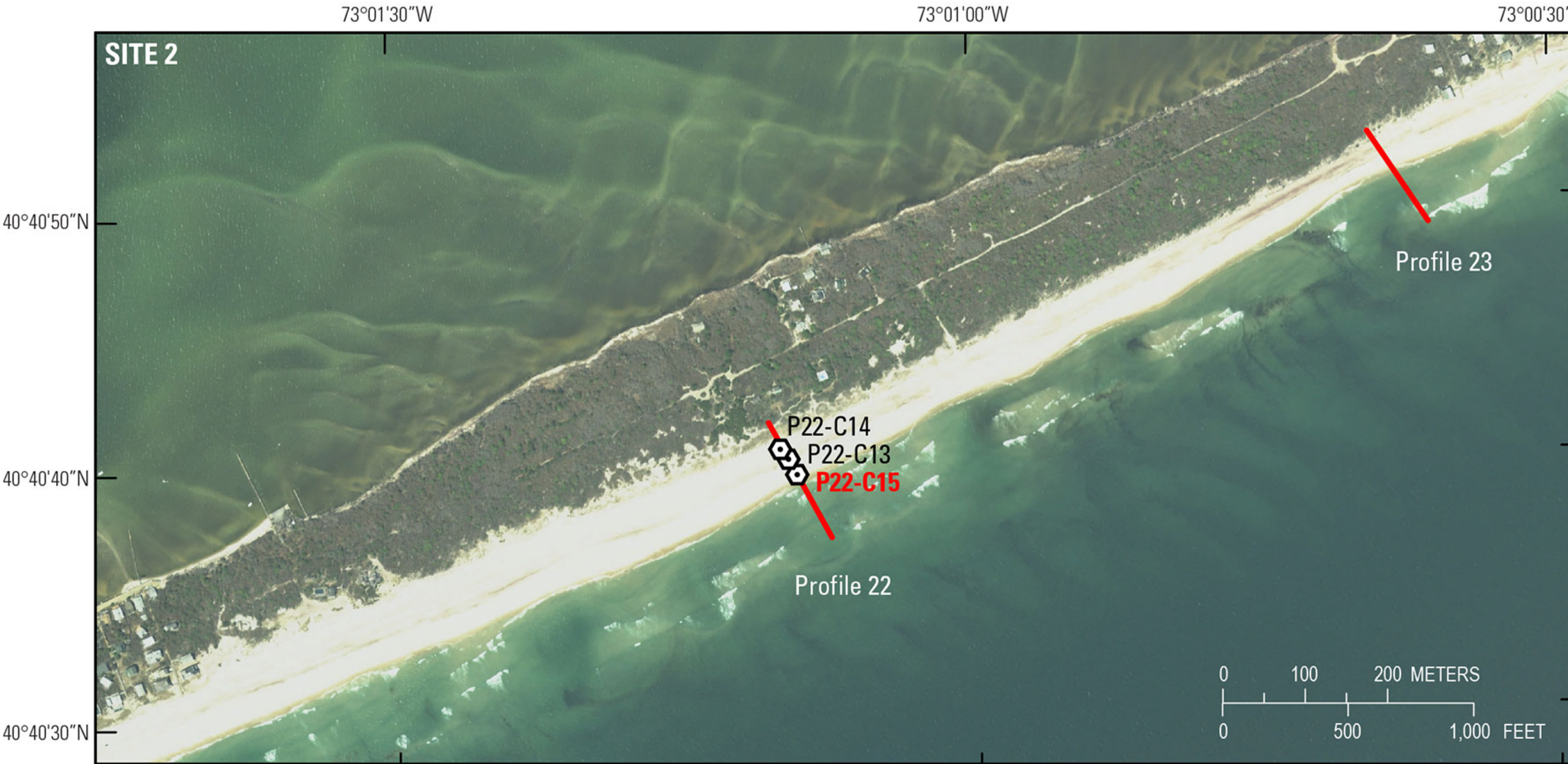
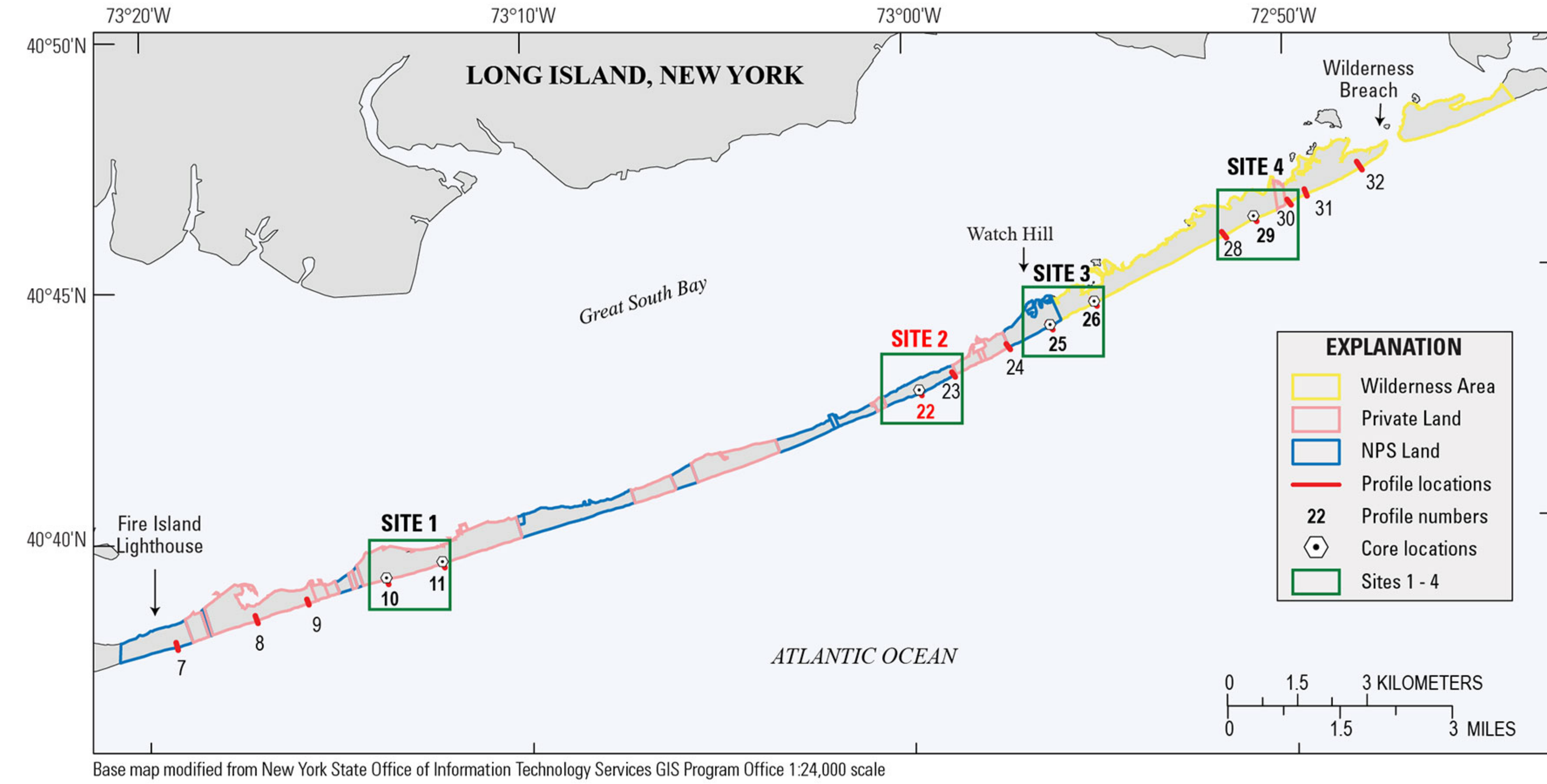
44-76 cm: SAND, light brown (5Y 8/2), moderately sorted, medium-grained quartz sand; with highly deformed, dark grayish-red (5 Y R 2/2) heavy mineral sand lenses; with a gradational basal contact, and abundant dissiminated heavy mineral flecks

76-153 cm: SAND, light brown (5Y 8/2), moderately sorted, laminated, medium-grained quartz sand interbedded with dark grayish-red (5 Y R 2/2) heavy mineral sand; with inclined to deformed bedding from 85 to 153 cm; with a gradational basal contact, and abundant dissiminated heavy mineral flecks

153-170 cm: SAND, light brown (5Y 8/2), moderately sorted, laminated medium-grained quartz sand

Core ID: P22-C14





Core ID: P22-C15

Latitude: 40.67765 N

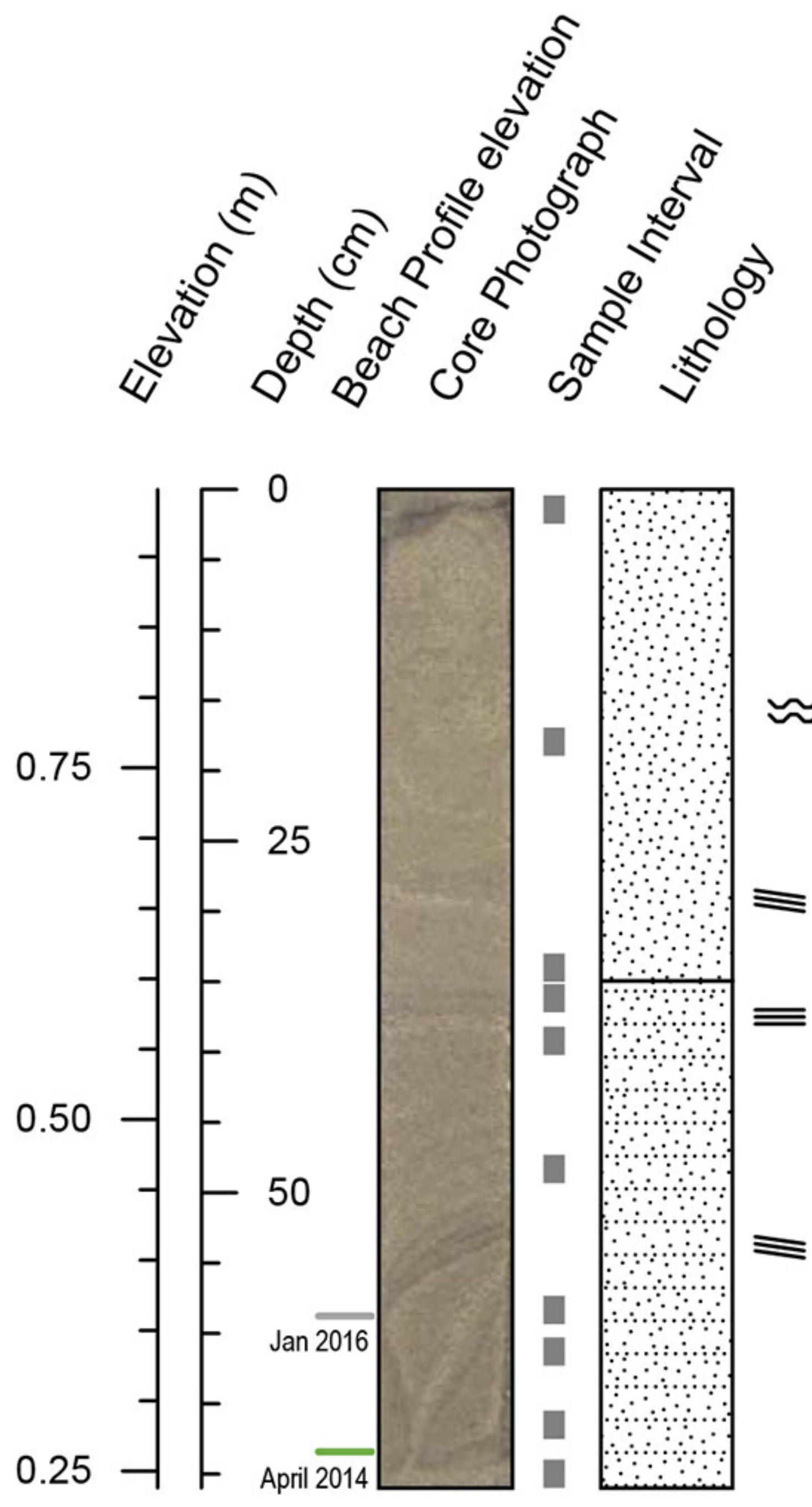
Longitude: 73.01930 W

Location: Profile 22, lower beach

Elevation: 0.948 cm

Core Length: 71 cm

Compaction: 27.5 cm

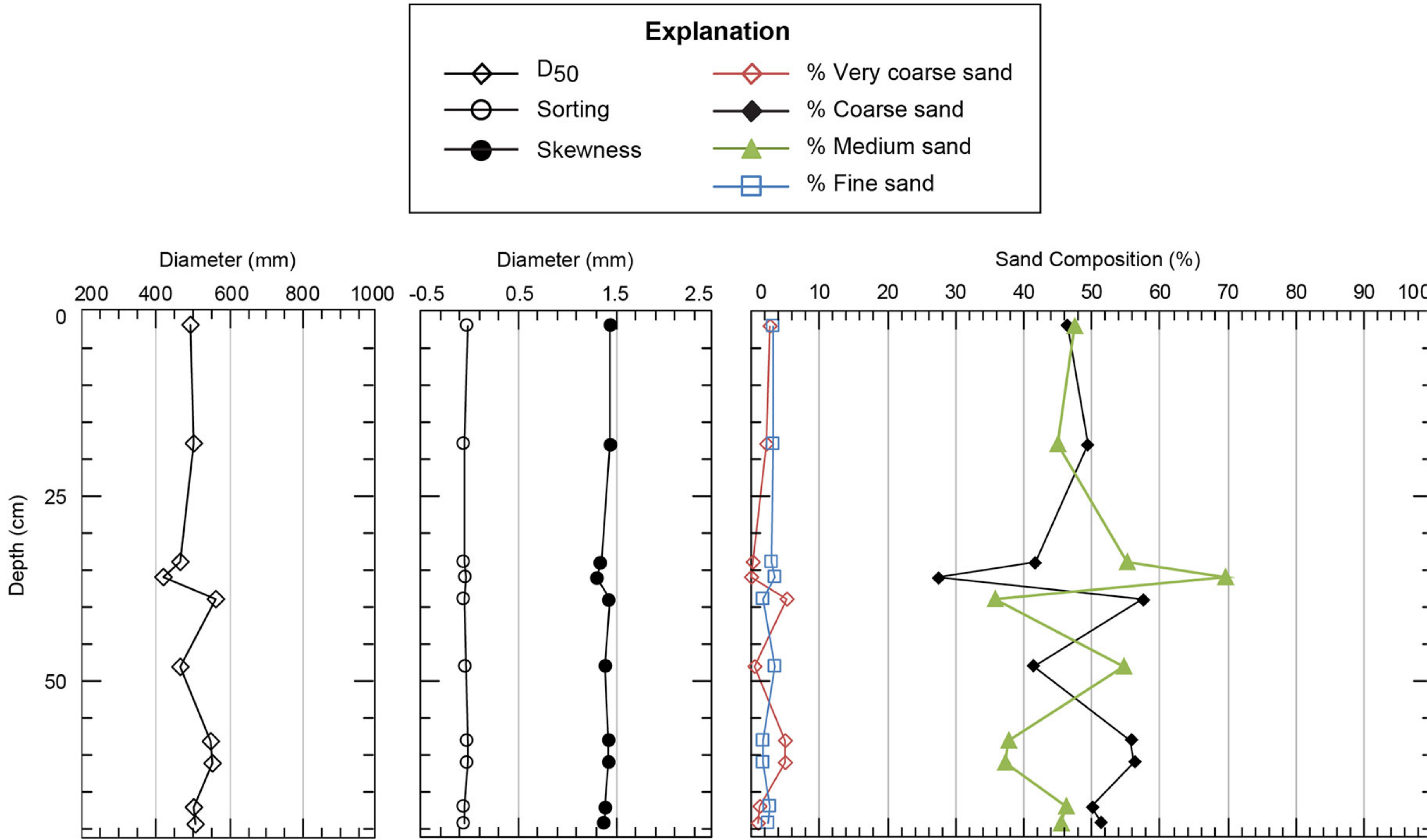


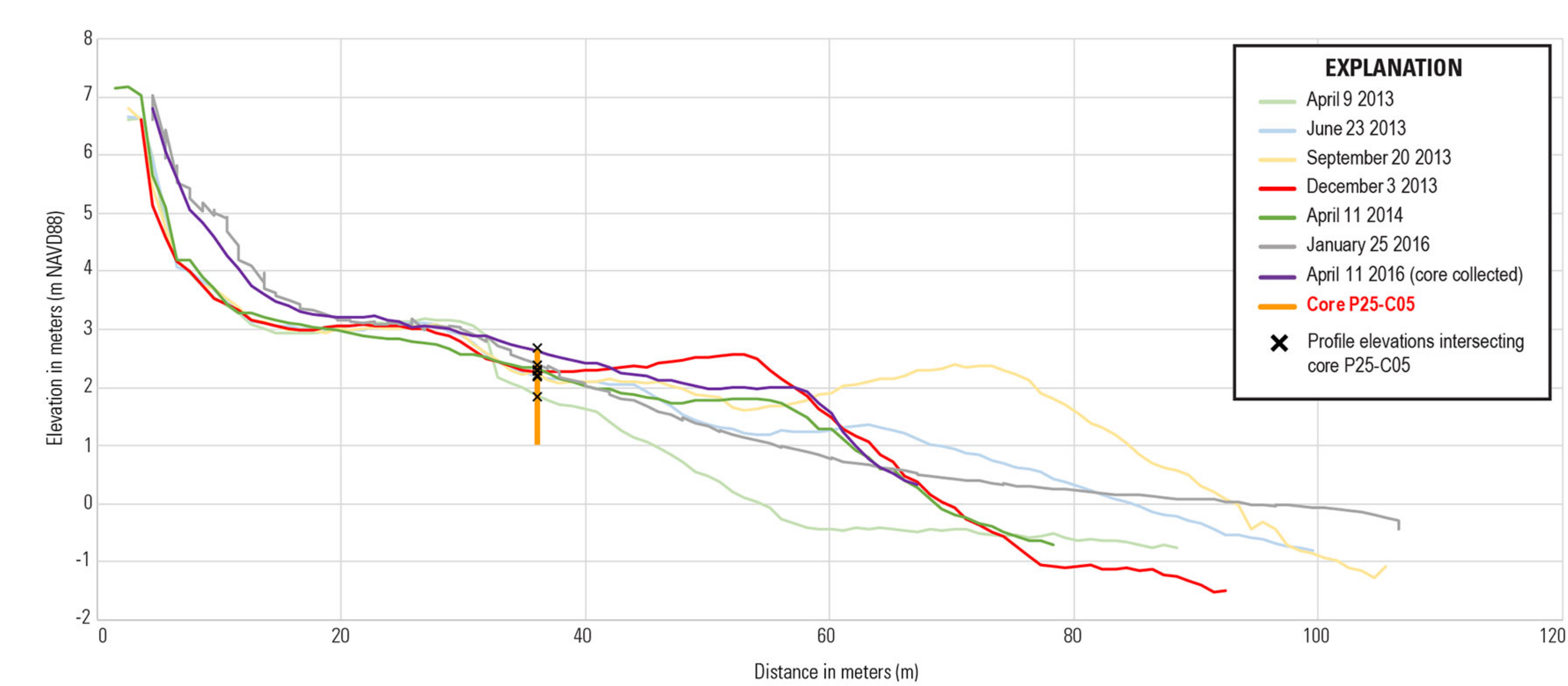
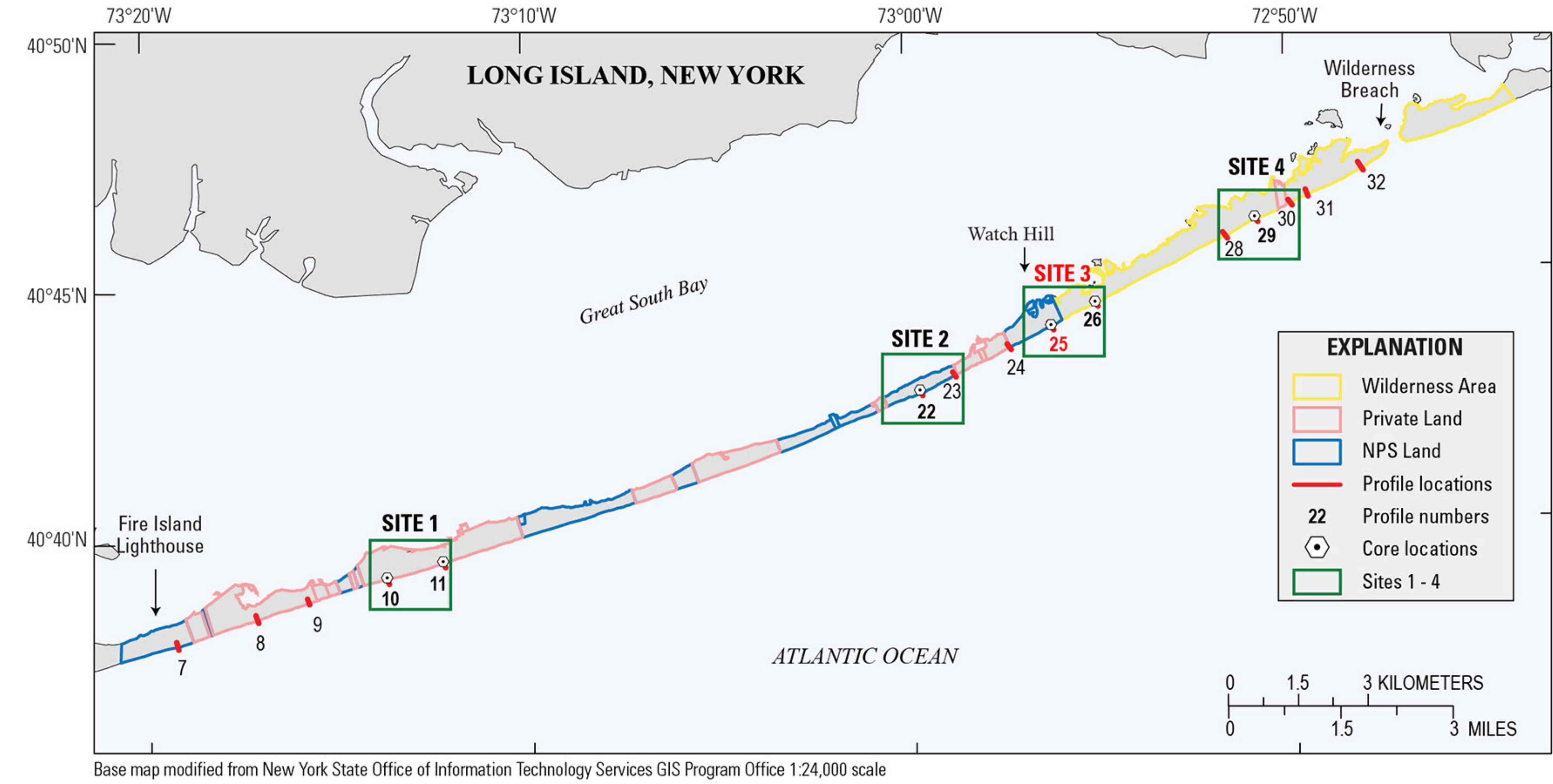
Lithologic Description

0-35 cm: SAND, light brown (5 Y 8/2), moderately sorted, faintly laminated, medium- to coarse-grained quartz sand; with scattered heavy minerals or shell fragments, high shell and heavy mineral content from 3 to 11 cm and at 29 cm; with a gradational basal contact

35-71 cm: SAND, light brown (5 Y 8/2), moderately sorted, laminated, medium- to coarse-grained quartz sand; with occasional heavy minerals or shell fragments and high shell and heavy mineral content at 38 cm and from 53 to 71 cm

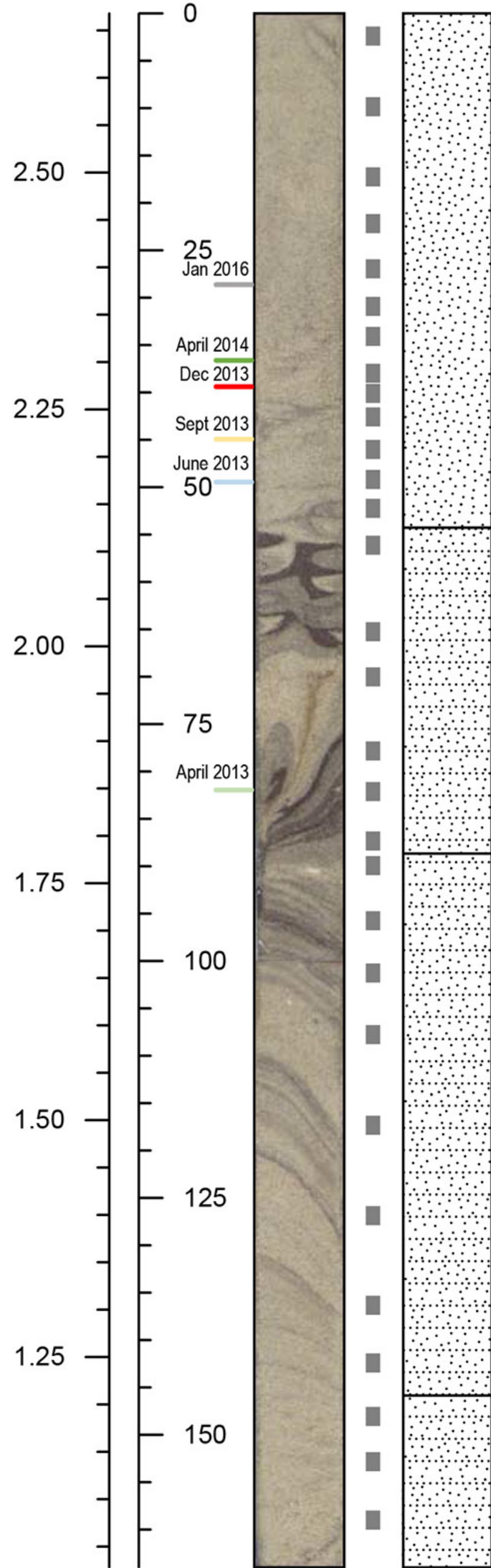
Core ID: P22-C15





Core ID: P25-C05

Elevation (m)
Depth (cm)
Beach Profile elevation
Core Photograph
Sample Interval
Lithology



Latitude: 40.69010 N
Longitude: 72.98597 W
Location: Profile 25, upper beach
Elevation: 2.668 m
Core Length: 162.5 cm
Compaction: 0.5 cm

Lithologic Description

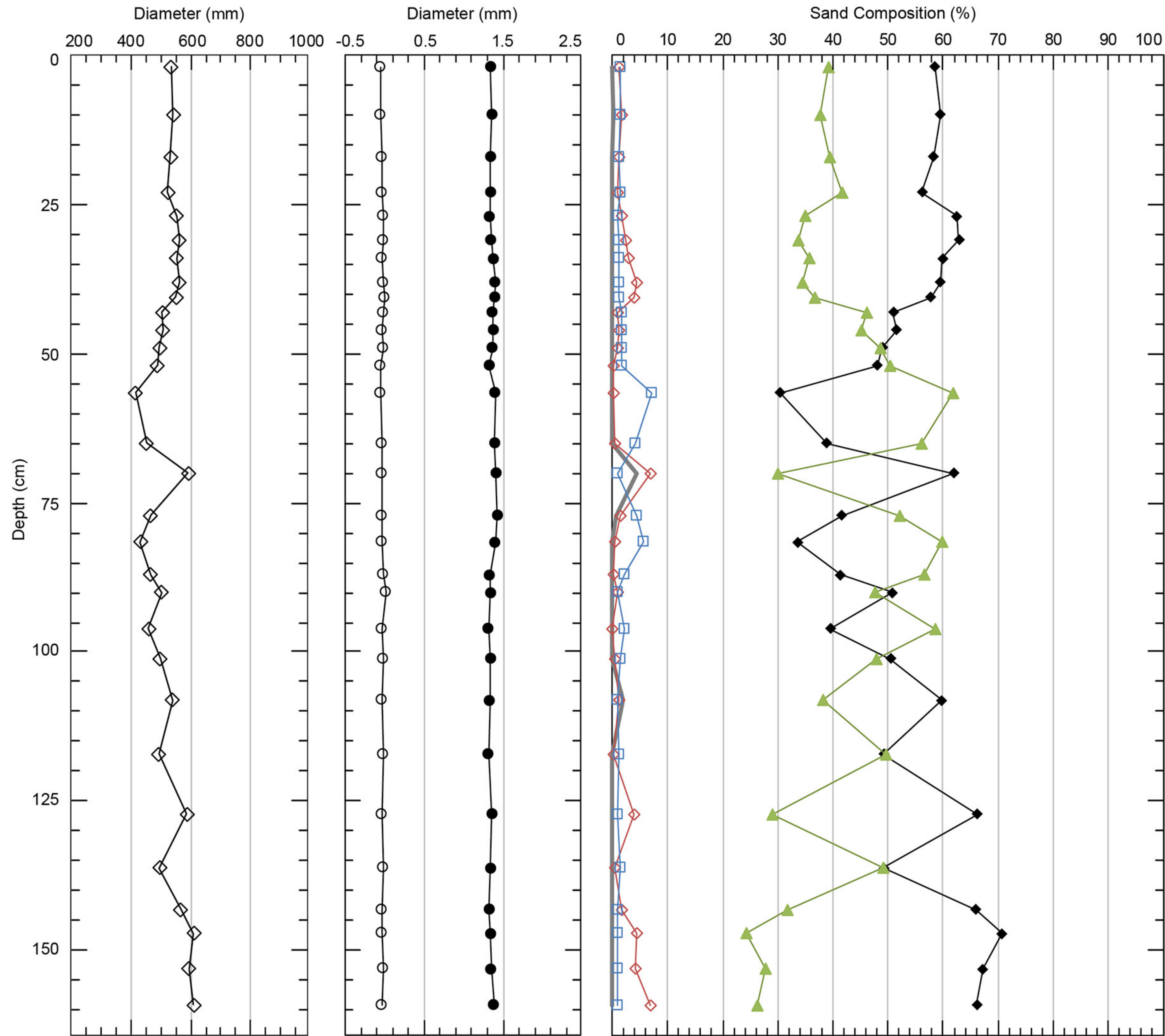
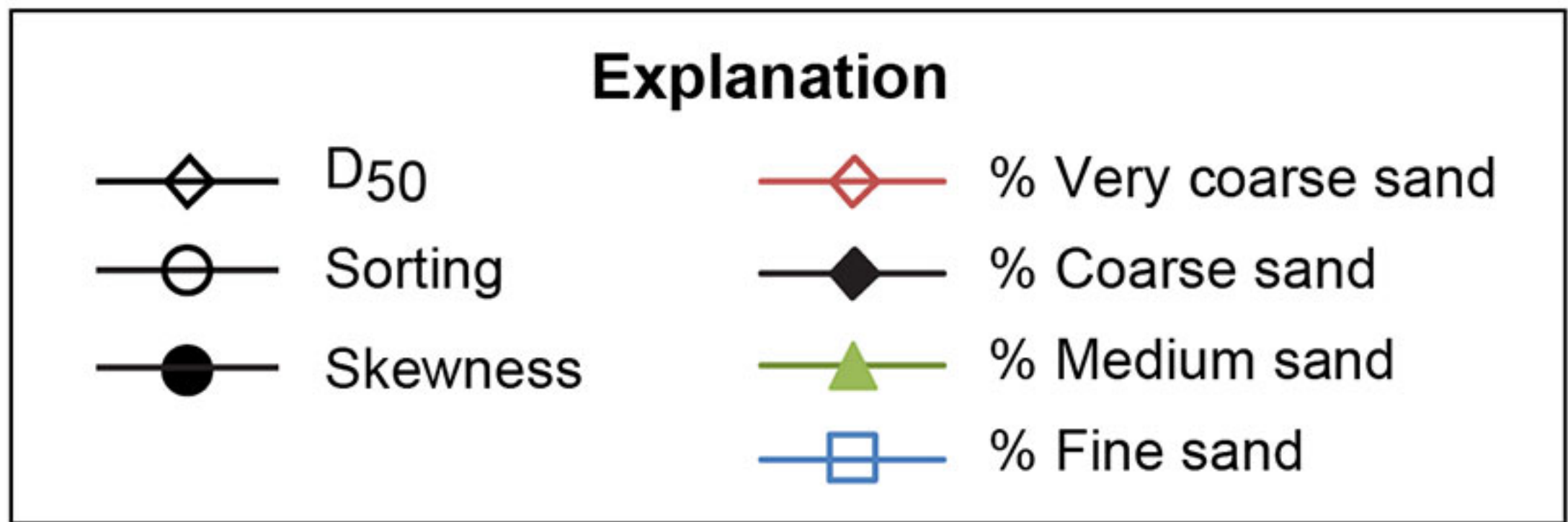
0-54 cm: SAND, mottled light brown (5Y 8/2), moderately sorted, fine- to coarse-grained quartz sand; with scattered heavy mineral flecks and shell fragments; with a gradational basal contact

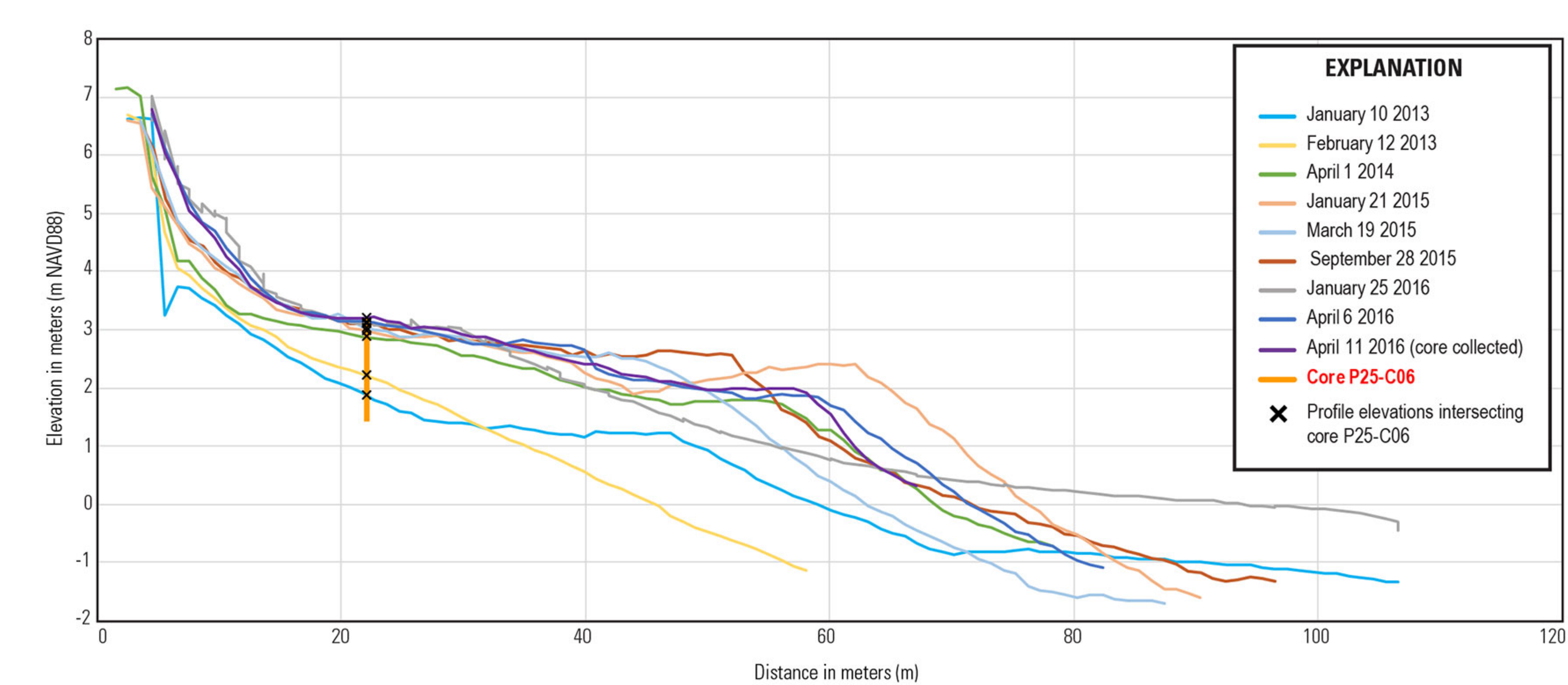
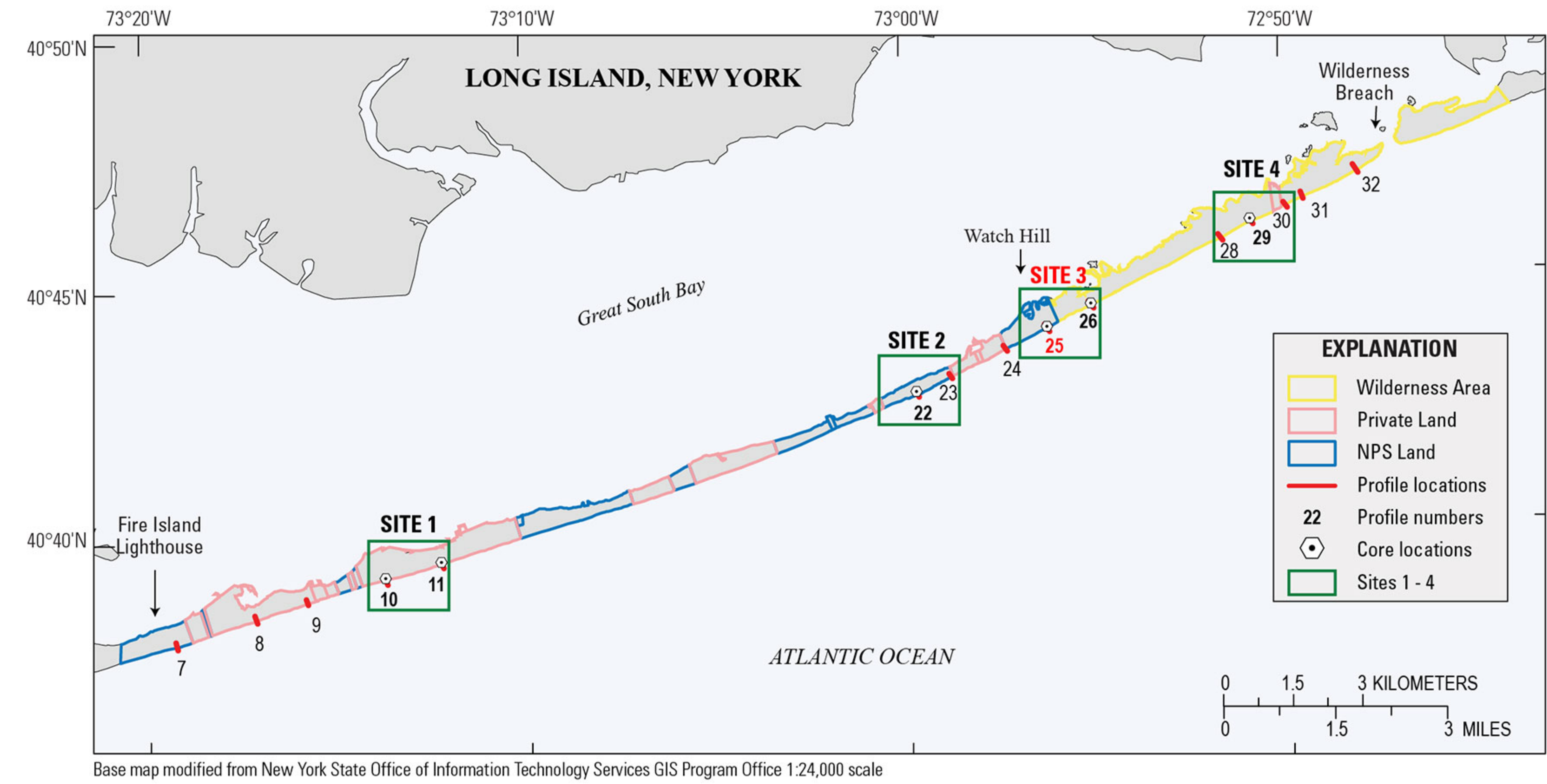
54-89 cm: SAND, light brown (5Y 8/2), moderately sorted, laminated, fine- to coarse-grained quartz sand; with deformed purple, fine- to medium-grained heavy mineral sand, heavy mineral flecks; with a gradational basal contact

89-146 cm: SAND, light brown (5Y 8/2), moderately sorted, laminated, fine- to coarse-grained quartz sand; with inclined purple, fine- to medium-grained heavy mineral sand laminations; scattered shell fragments, pebbles, and heavy mineral flecks; with a gradational basal contact

146-164 cm: SAND, light brown (5Y 8/2), moderately sorted, faintly laminated, fine- to coarse-grained quartz sand

Core ID: P25-C05

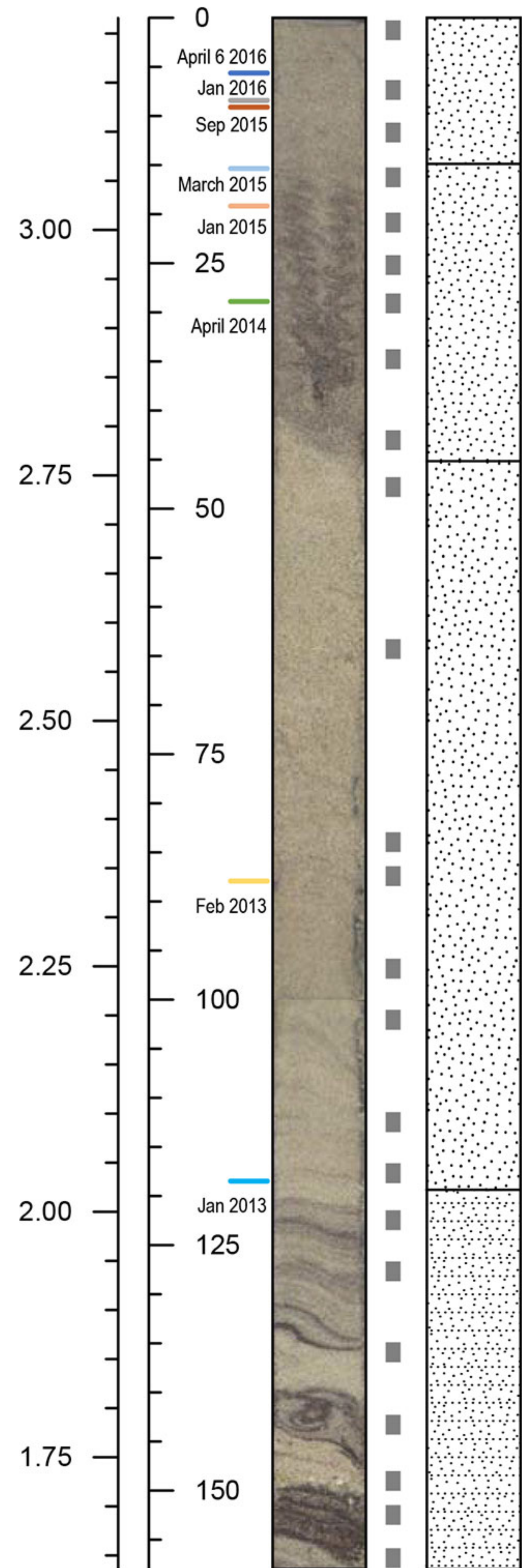




Core ID: P25-C06

Latitude: 40.69021 N
Elevation: 3.216 m
Longitude: 72.98606 W
Core Length: 158 cm
Location: Profile 25, dune toe
Compaction: 21 cm

Elevation (m)
Depth (cm)
Beach Profile elevation
Core Photograph
Sample Interval
Lithology



Lithologic Description

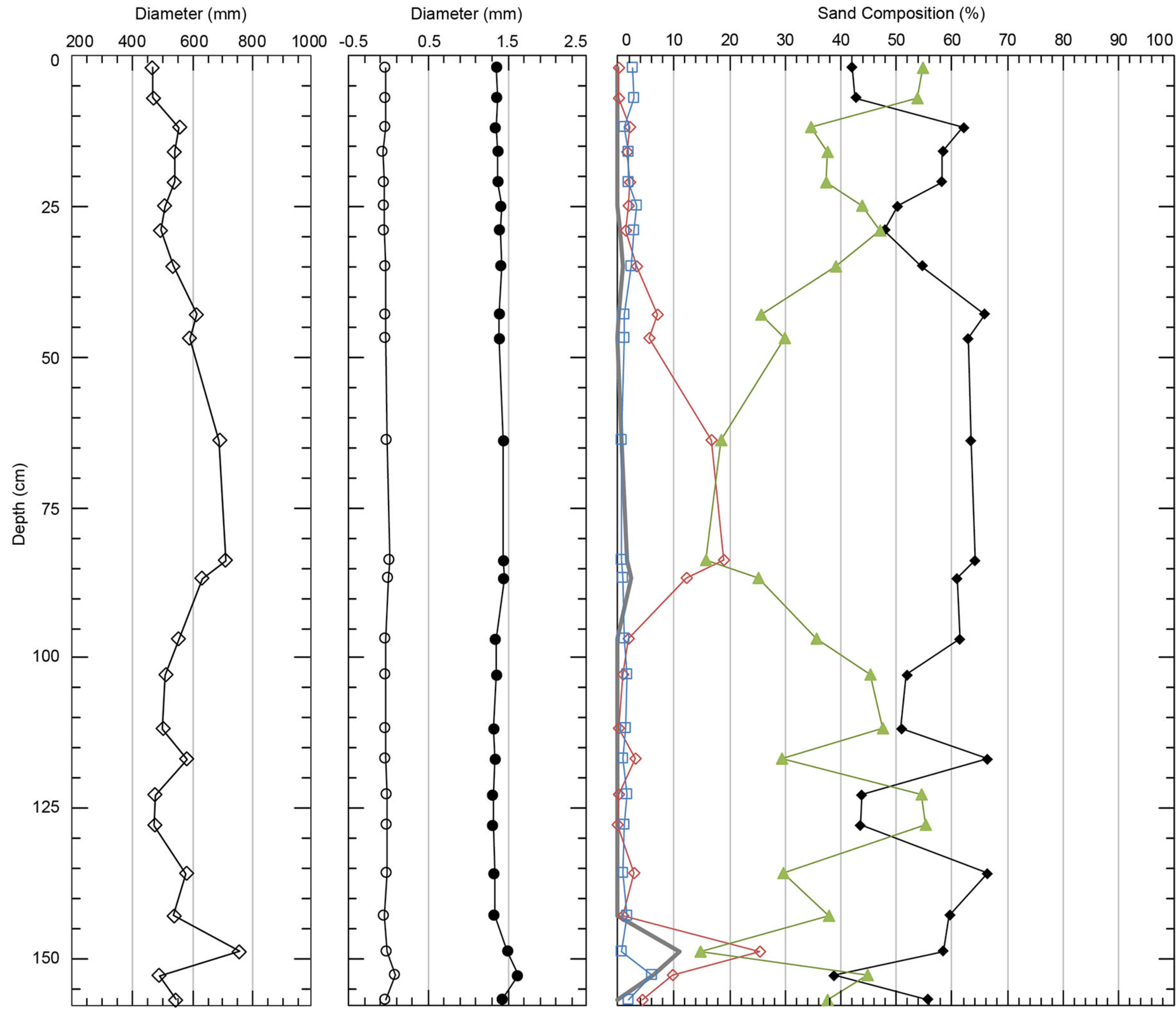
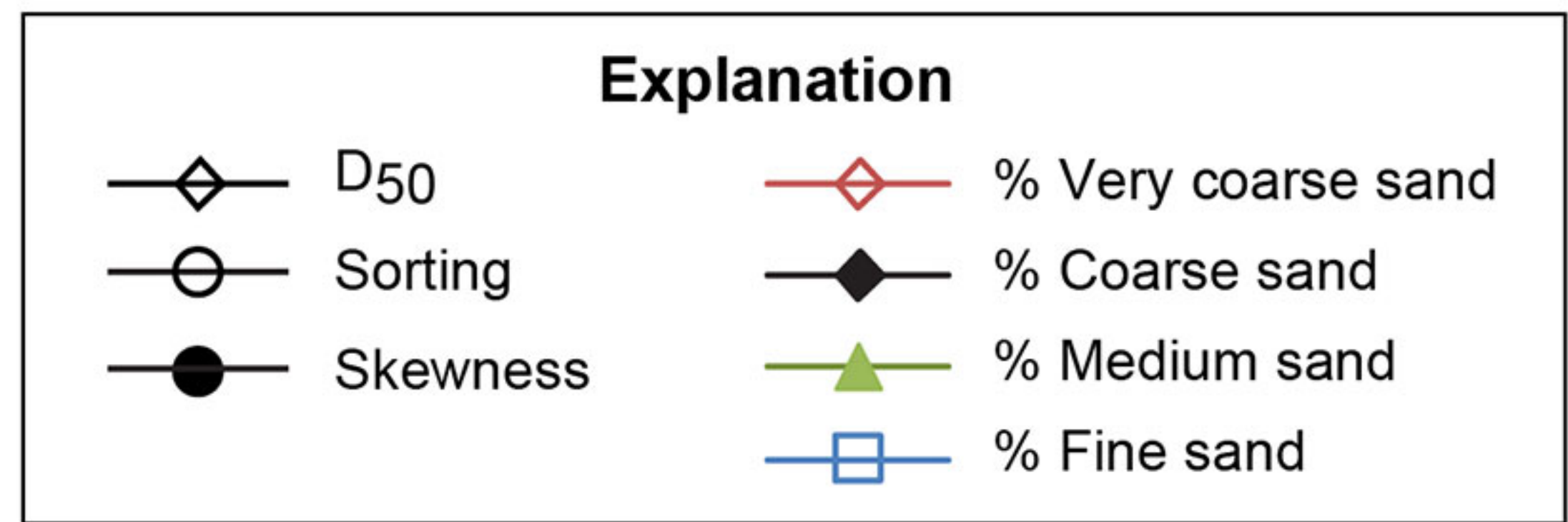
0-14 cm: SAND, mottled light brown (5Y 8/2) to dark brownish-red (7SR 4/4), massive, moderately sorted, medium- to coarse-grained quartz and heavy mineral sand; with a gradational basal contact

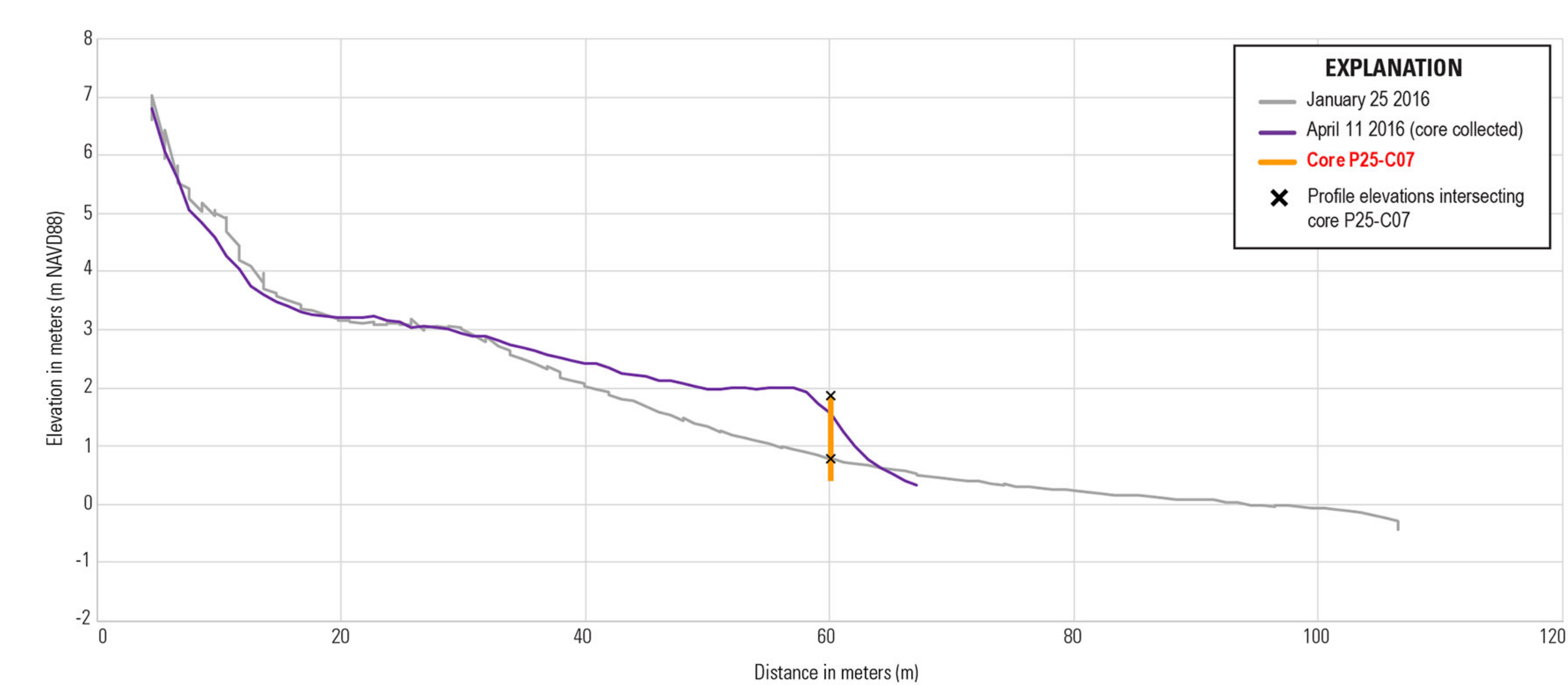
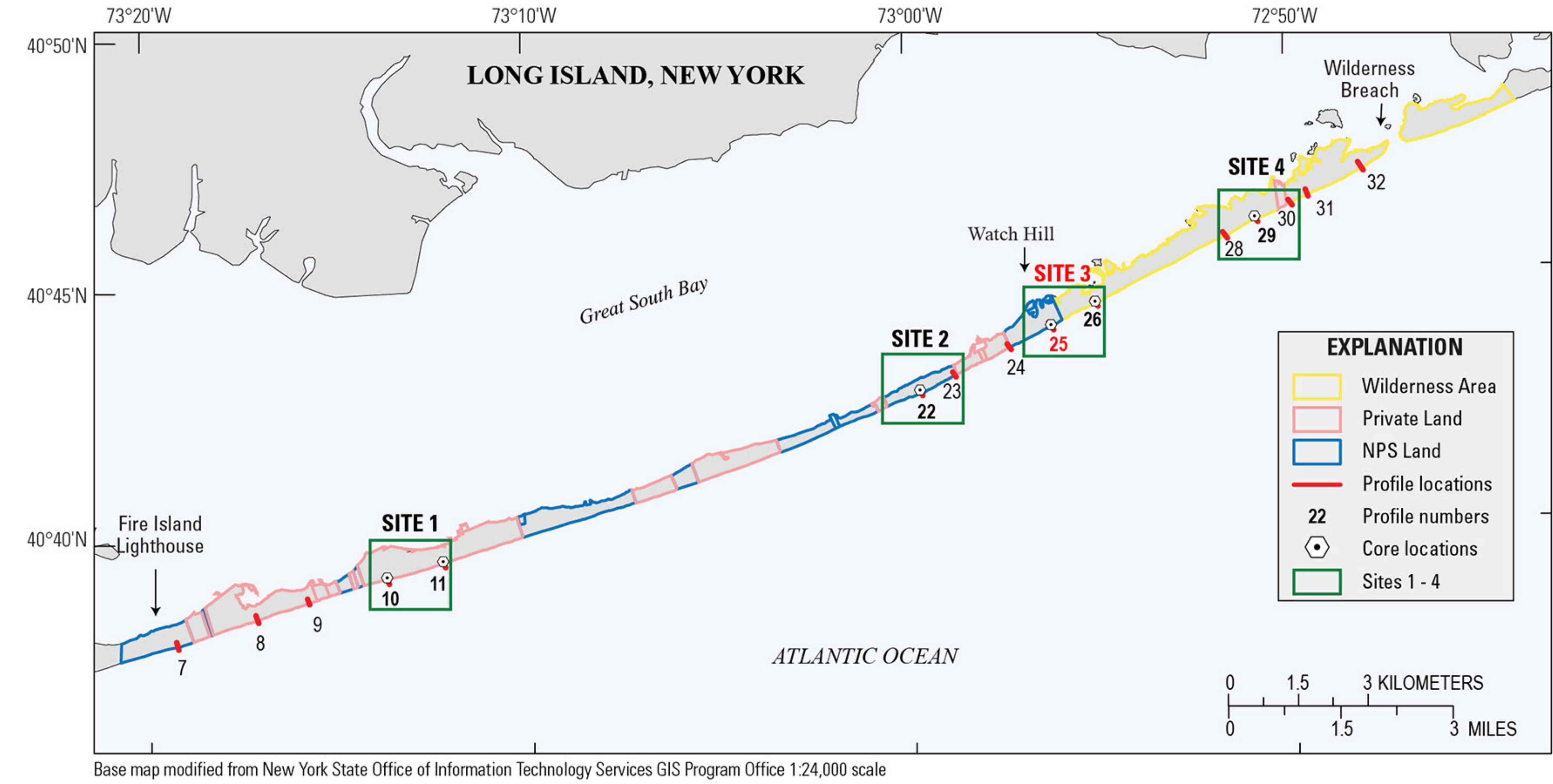
14-45 cm: SAND, mottled light brown (5Y 8/2) to dark brownish-red (7SR 4/4), laminated, moderately sorted, medium- to coarse-grained quartz and heavy mineral sand; with faint angular bedding masked by sediment deformation, an organic root fragment at 36 cm; with an angular basal contact

45-121 cm: SAND, light brown (5Y 8/2), poorly sorted, massive to laminated, fine- to coarse-grained quartz sand; with scattered shell fragments, occasional heavy mineral flecks granules; with a gradational basal contact; bedding is massive from about 45 to 100 cm and faintly laminated between 100 and 121 cm

121-158 cm: SAND, light brown (5Y 8/2), moderately sorted, laminated, fine- to coarse-grained quartz sand interbedded with well sorted, purple (7.5R 4/4), fine- to medium-grained heavy mineral sand; with wavy inclined bedding, abundant heavy mineral flecks within the heavy mineral sand horizons, and a thin (2 cm) lag deposit from 147 to 149 cm with larger shell fragments and small quartz pebbles

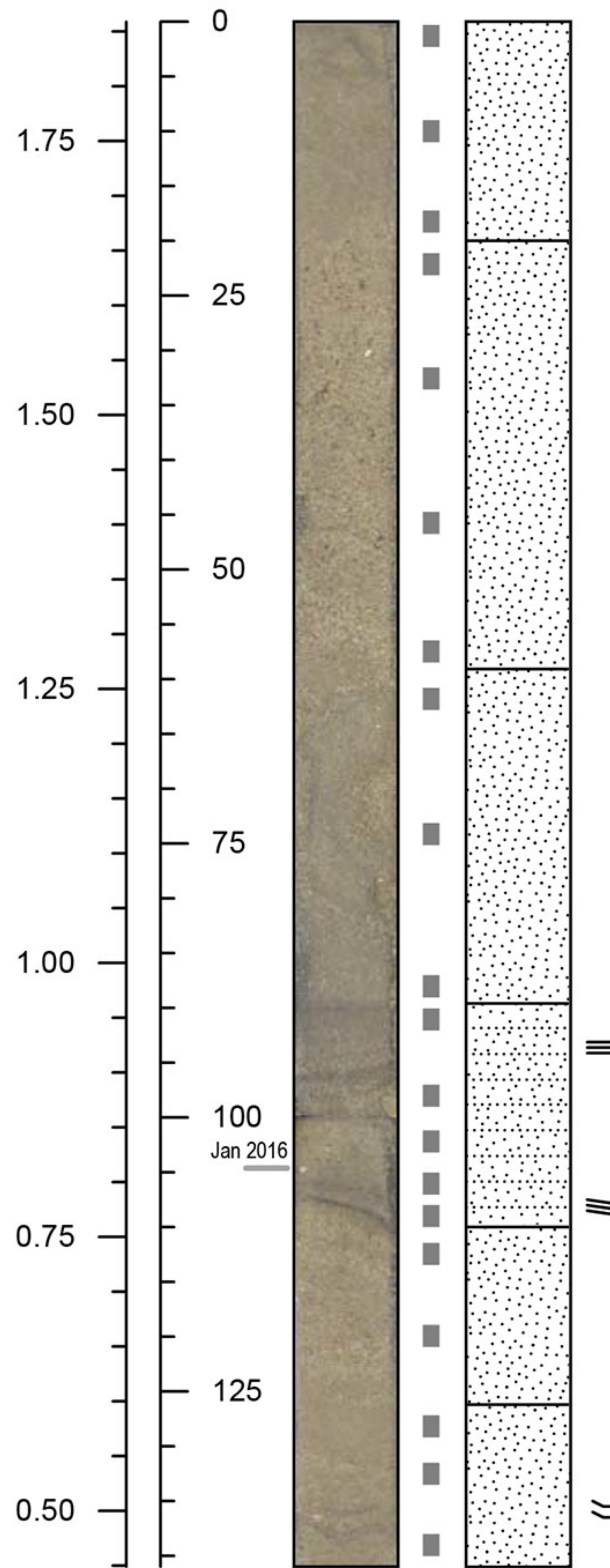
Core ID: P25-C06





Core ID: P25-C07

Elevation (m)
Depth (cm)
Beach Profile elevation
Core Photograph
Sample Interval
Lithology



Latitude: 40.68993 N
Longitude: 72.98579 W
Location: Profile 25, lower beach
Elevation: 1.859 m
Core Length: 141 cm
Compaction: 4.5

Lithologic Description

0-20 cm: SAND, light brown (5Y 8/2), well sorted, massive, fine- to medium-grained quartz sand; with occasional shell fragments and heavy mineral flecks; with a gradational basal contact

20-58 cm: SAND, light brown (5Y 8/2), poorly sorted, massive, fine- to coarse-grained quartz sand; with scattered large shell fragments, heavy mineral flecks, and feldspar granules; with a gradational basal contact

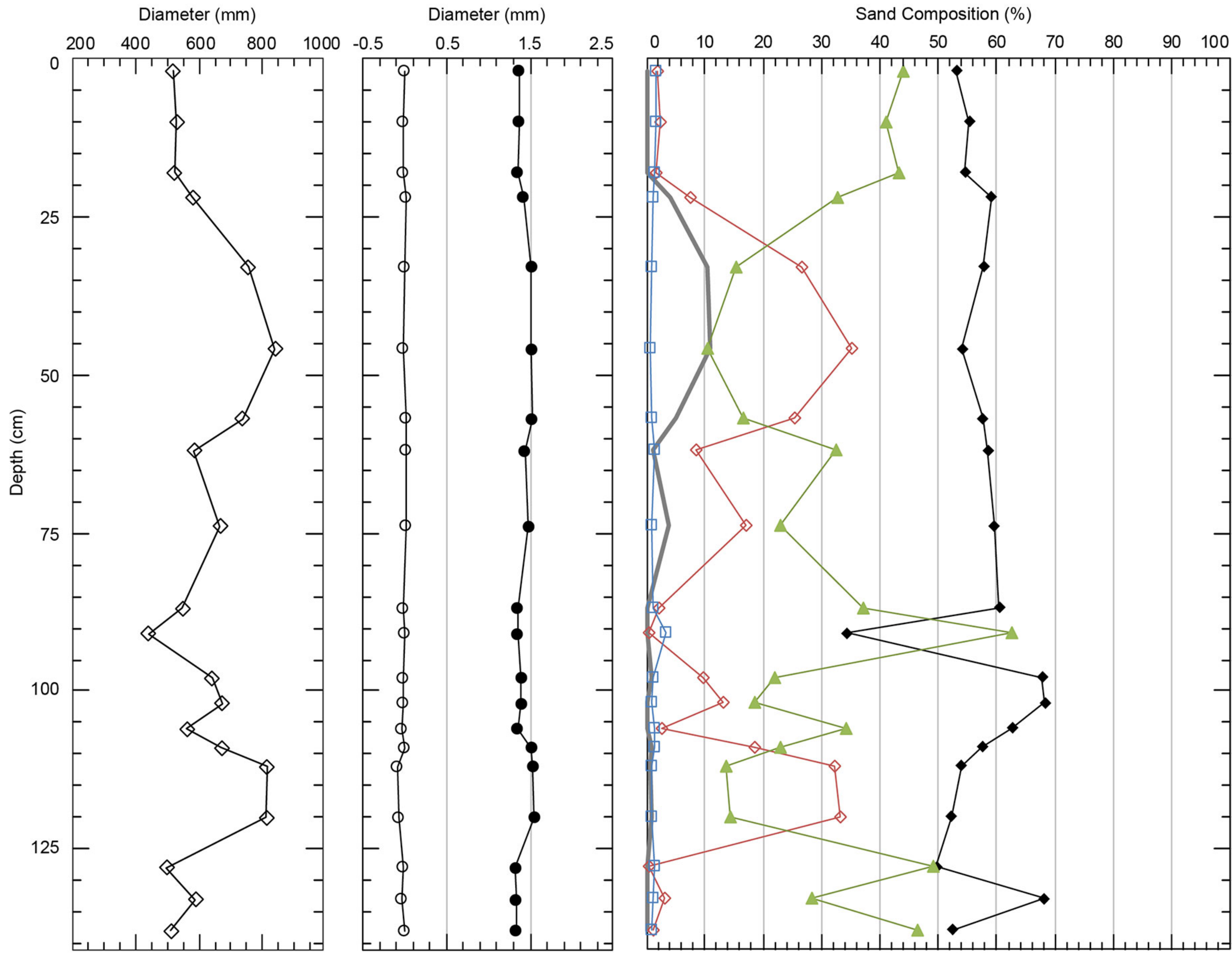
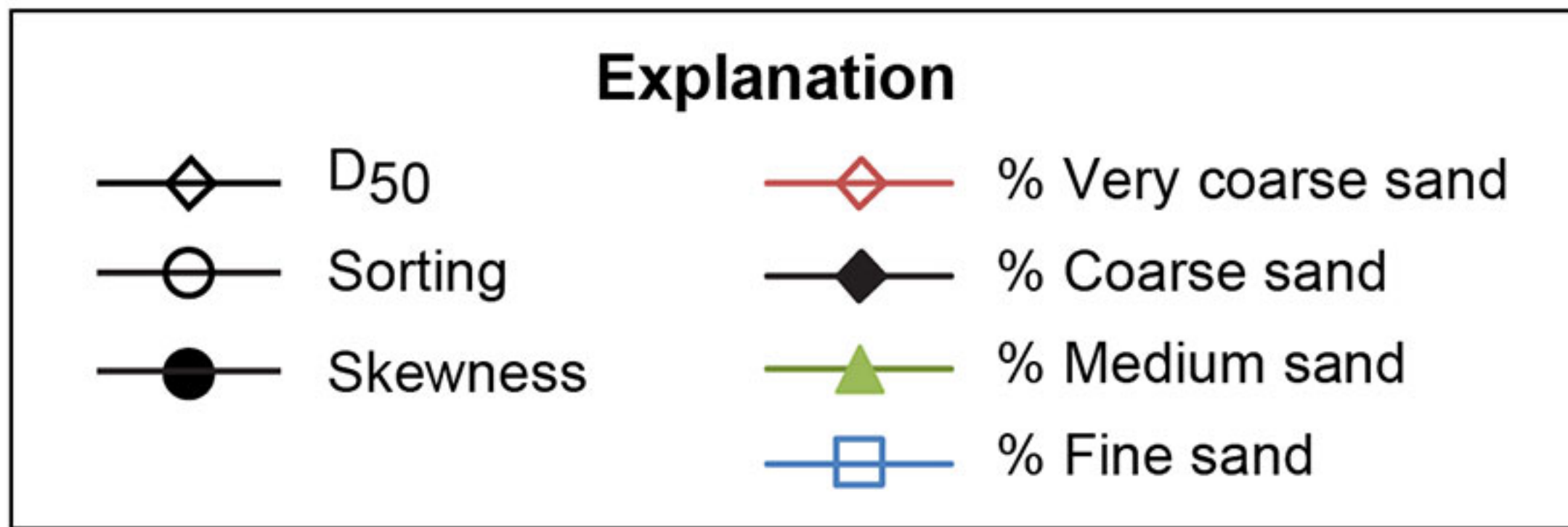
58-89 cm: SAND, light grayish brown (5Y 7/2), well sorted, massive, fine- to medium-grained quartz sand; with a gradational basal contact

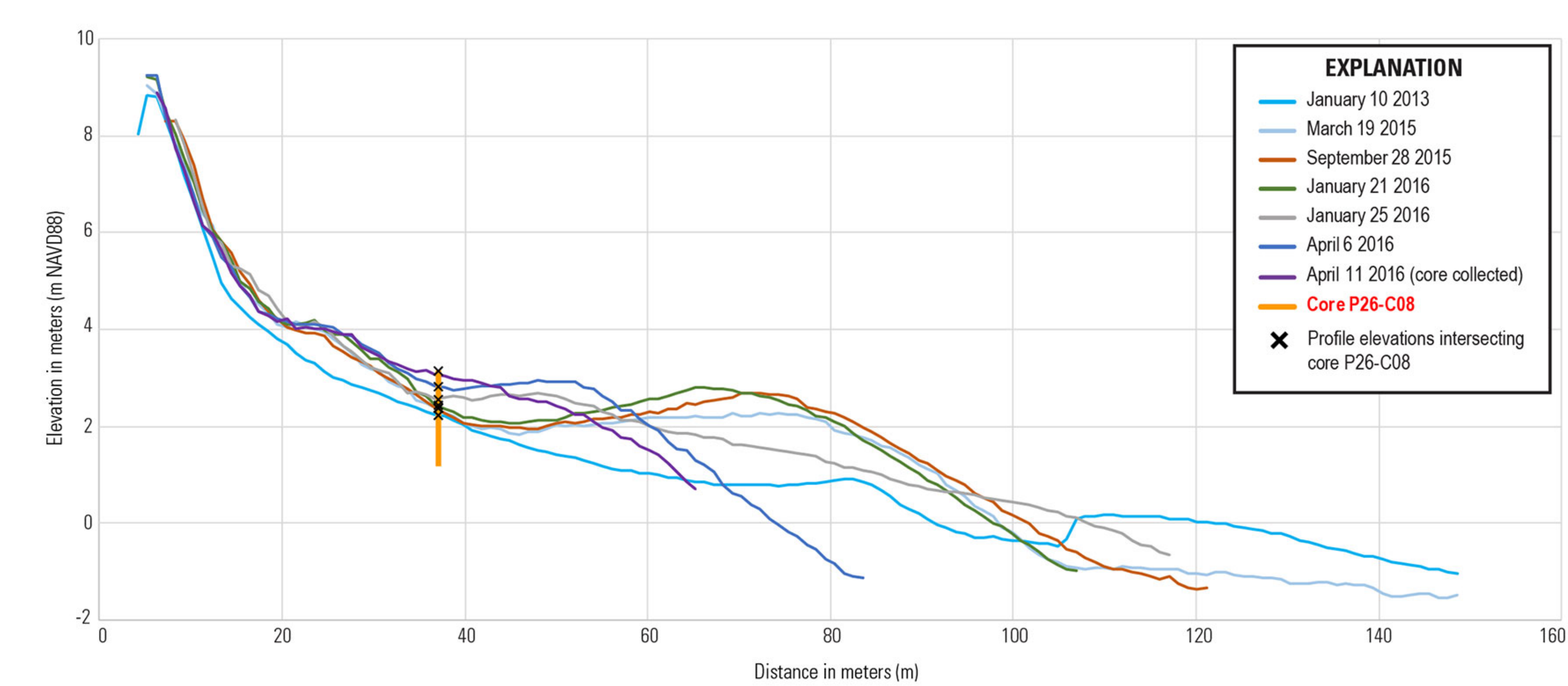
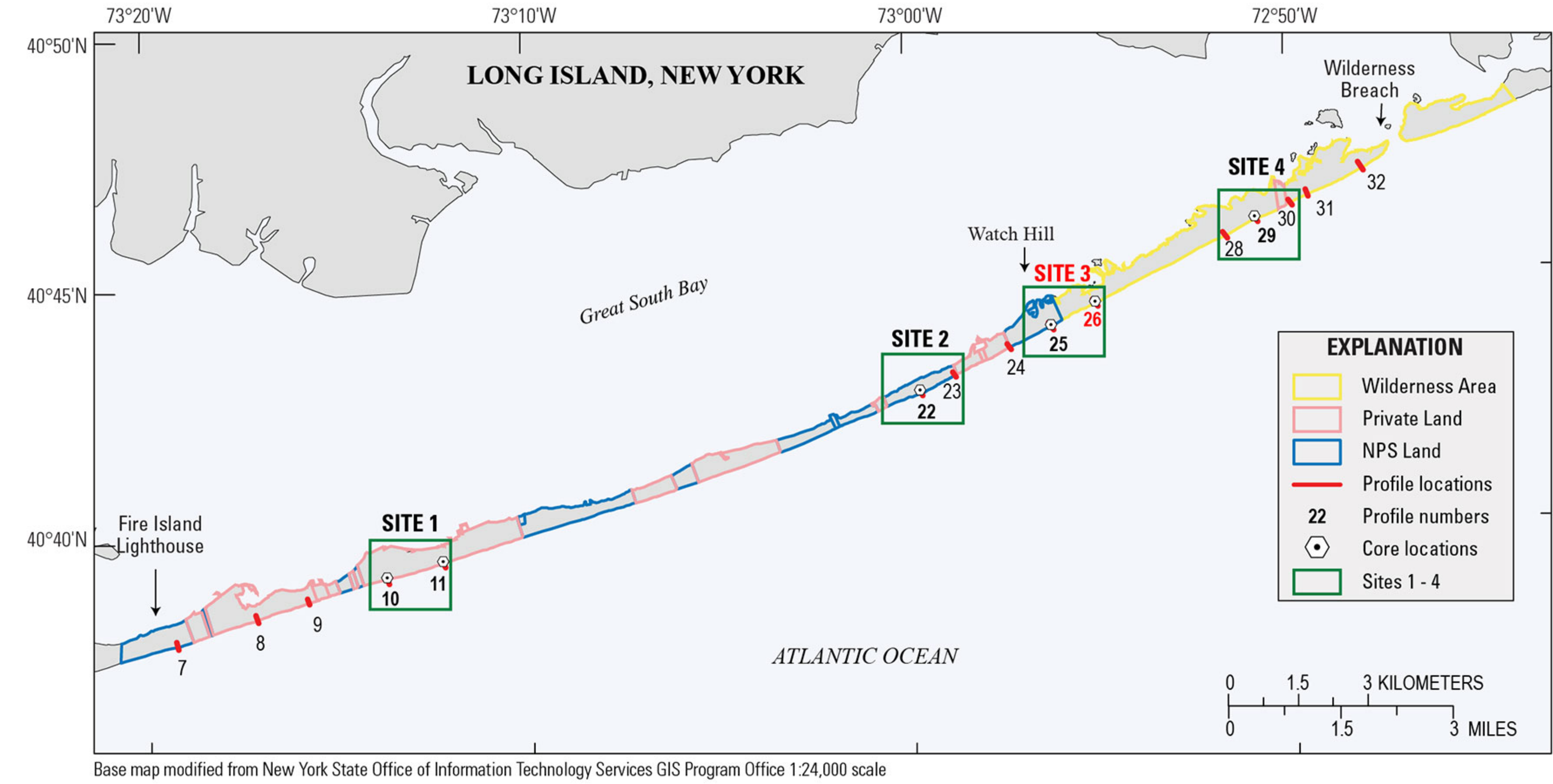
89-110 cm: SAND, light grayish brown (5Y 7/2), well sorted, laminated, fine- to medium-grained quartz sand interbedded with poorly sorted, coarse-grained sand; with faint angular bedding visible in the finer-grained horizons, and scattered shell fragments heavy mineral flecks particularly within the coarser-grained sand layers; with a gradational basal contact

110-126.5 cm: SAND, light brown (5Y 8/2), poorly sorted, massive, fine- to coarse-grained quartz sand; with scattered shell fragments and heavy mineral flecks; with a gradational basal contact

126.5-141 cm: SAND, light brown (5Y 8/2), well sorted, massive, fine- to medium-grained quartz sand

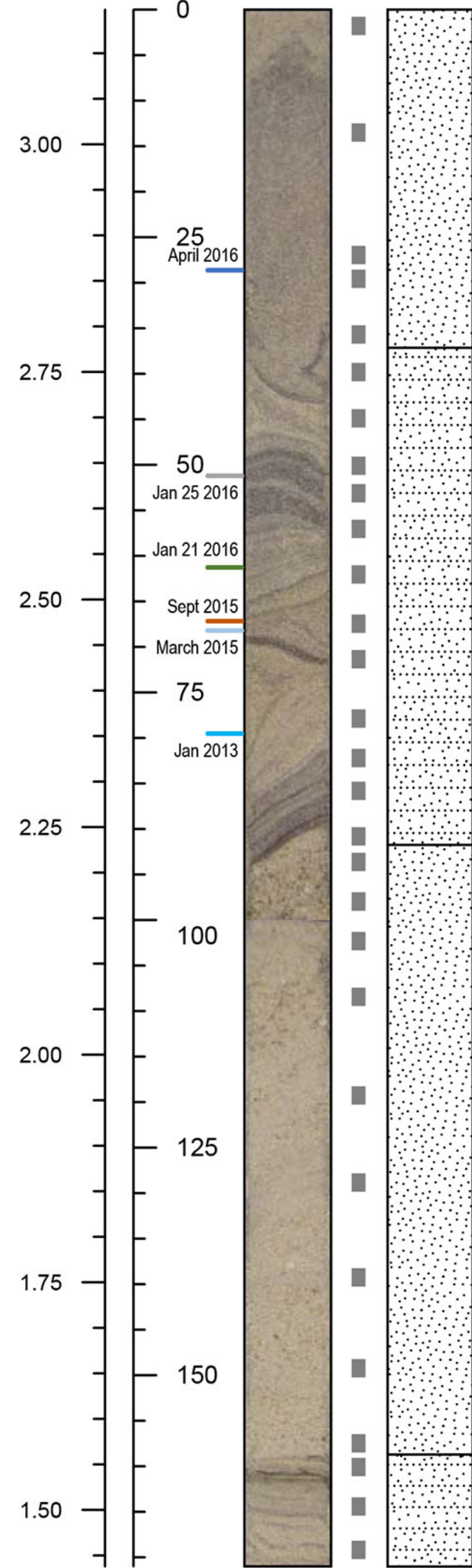
Core ID: P25-C07





Core ID: P26-C08

Elevation (m)
Depth (cm)
Beach Profile elevation
Core Photograph
Sample Interval
Lithology



Latitude: 40.69437 N
Longitude: 72.97461 W
Location: Profile 26, upper beach
Elevation: 3.148 cm
Core Length: 171 cm
Compaction: 27.5 cm

Lithologic Description

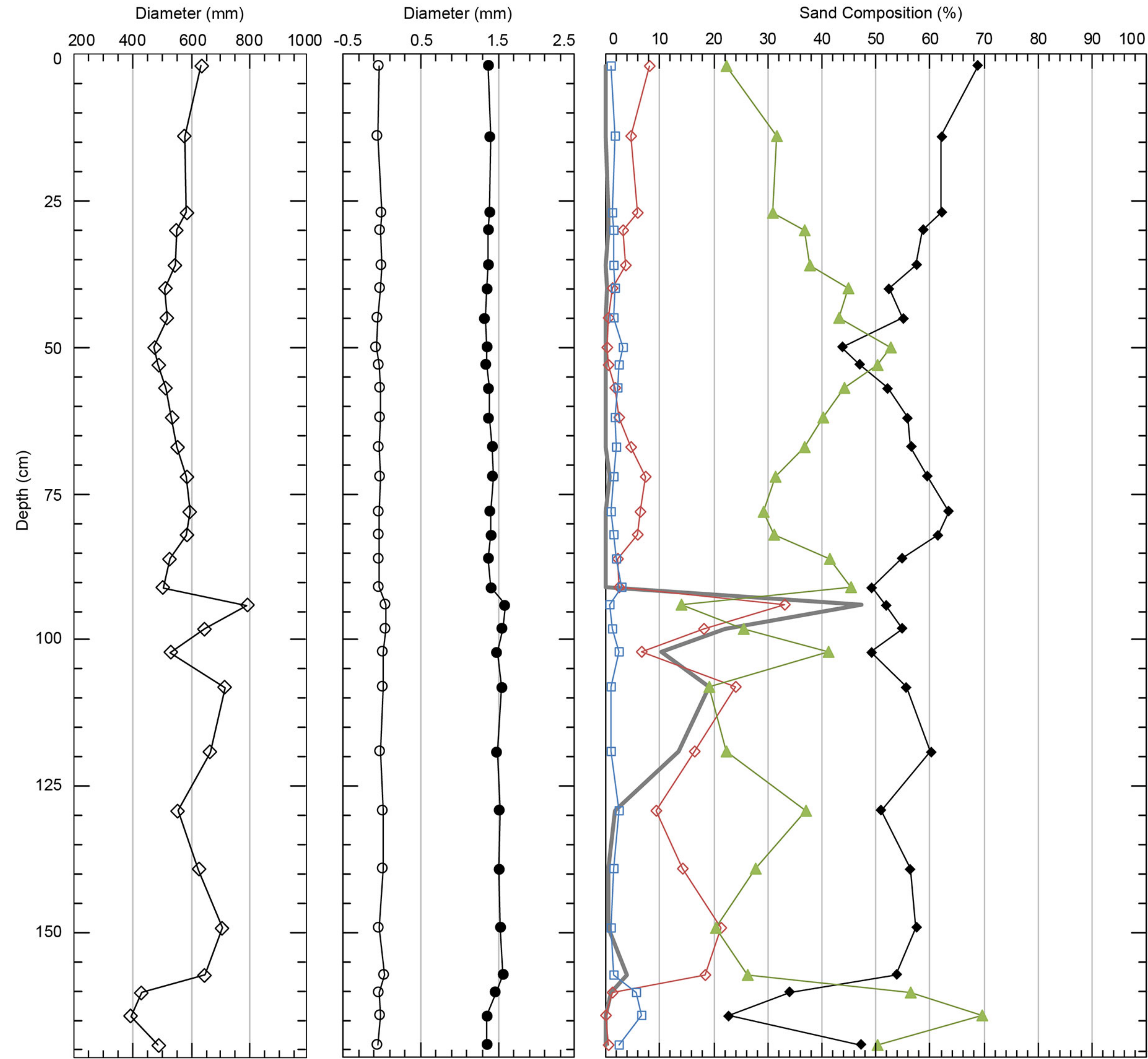
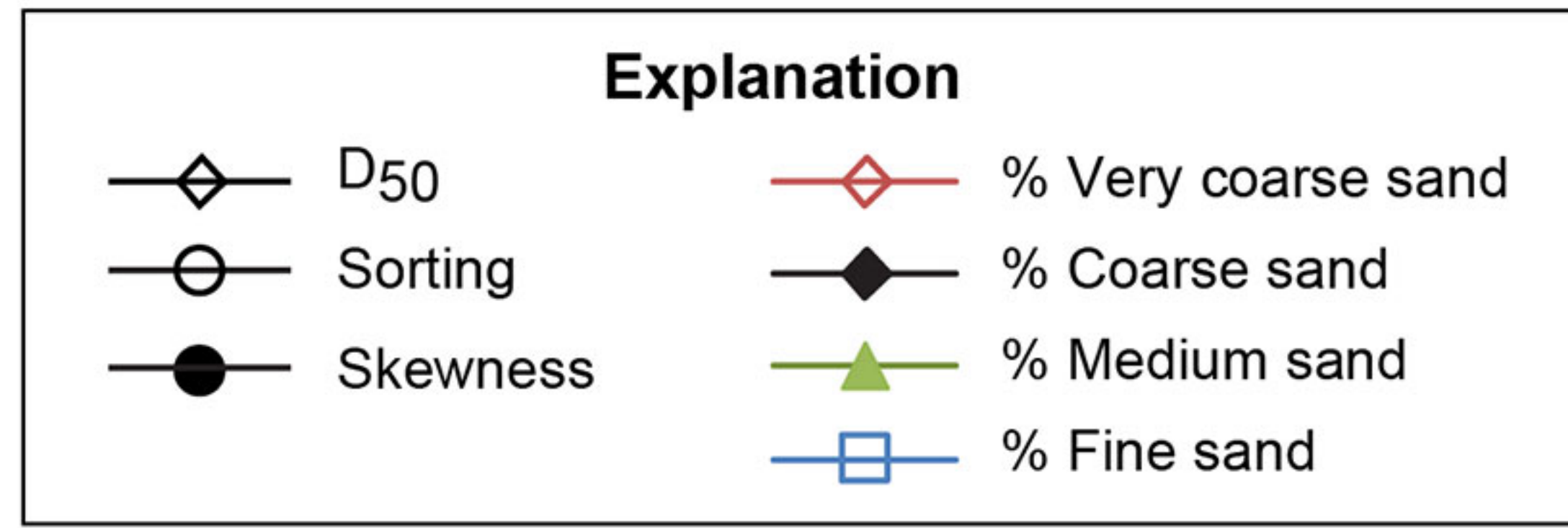
0-38 cm: SAND, mottled light reddish-brown (7SR 4/4), moderately sorted, massive, fine- to coarse-grained quartz sand; with occasional shell fragments and very small heavy mineral flecks; with a gradational basal contact

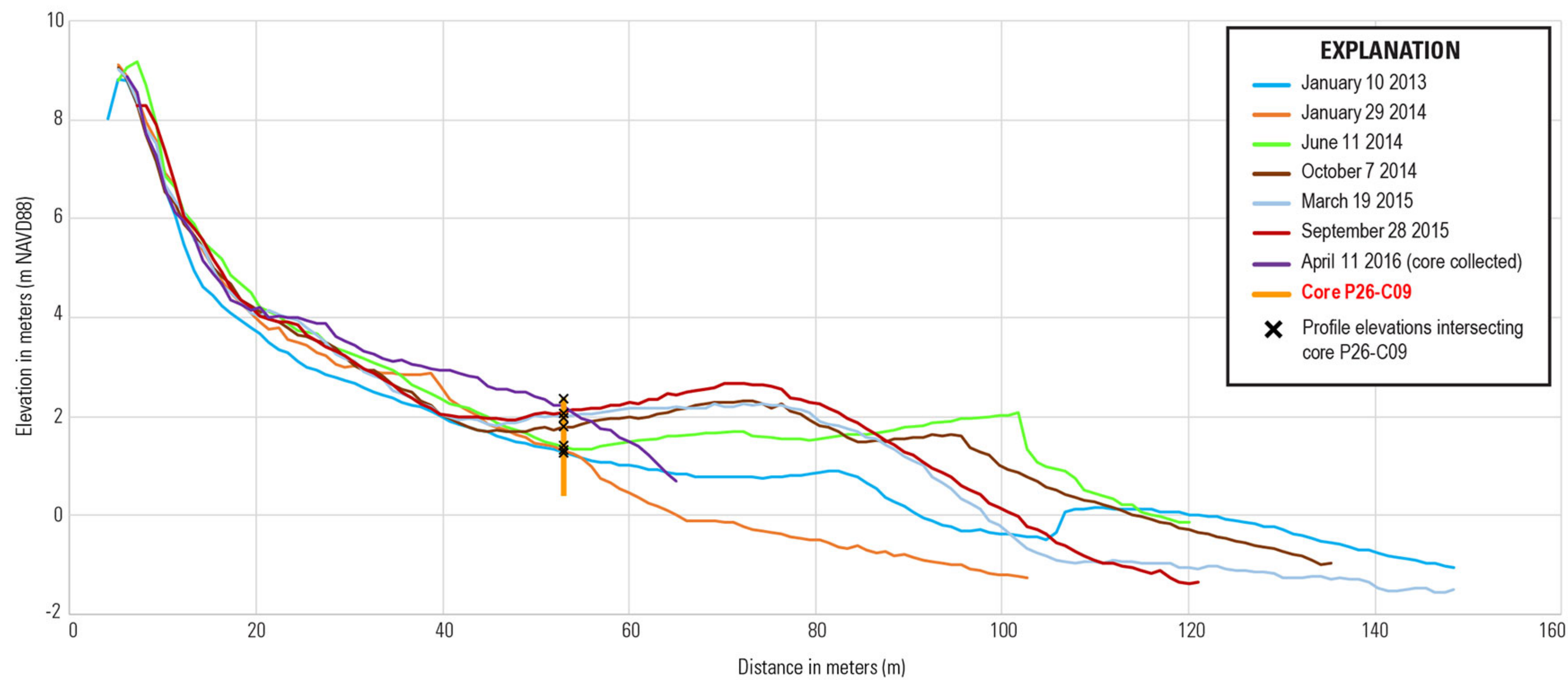
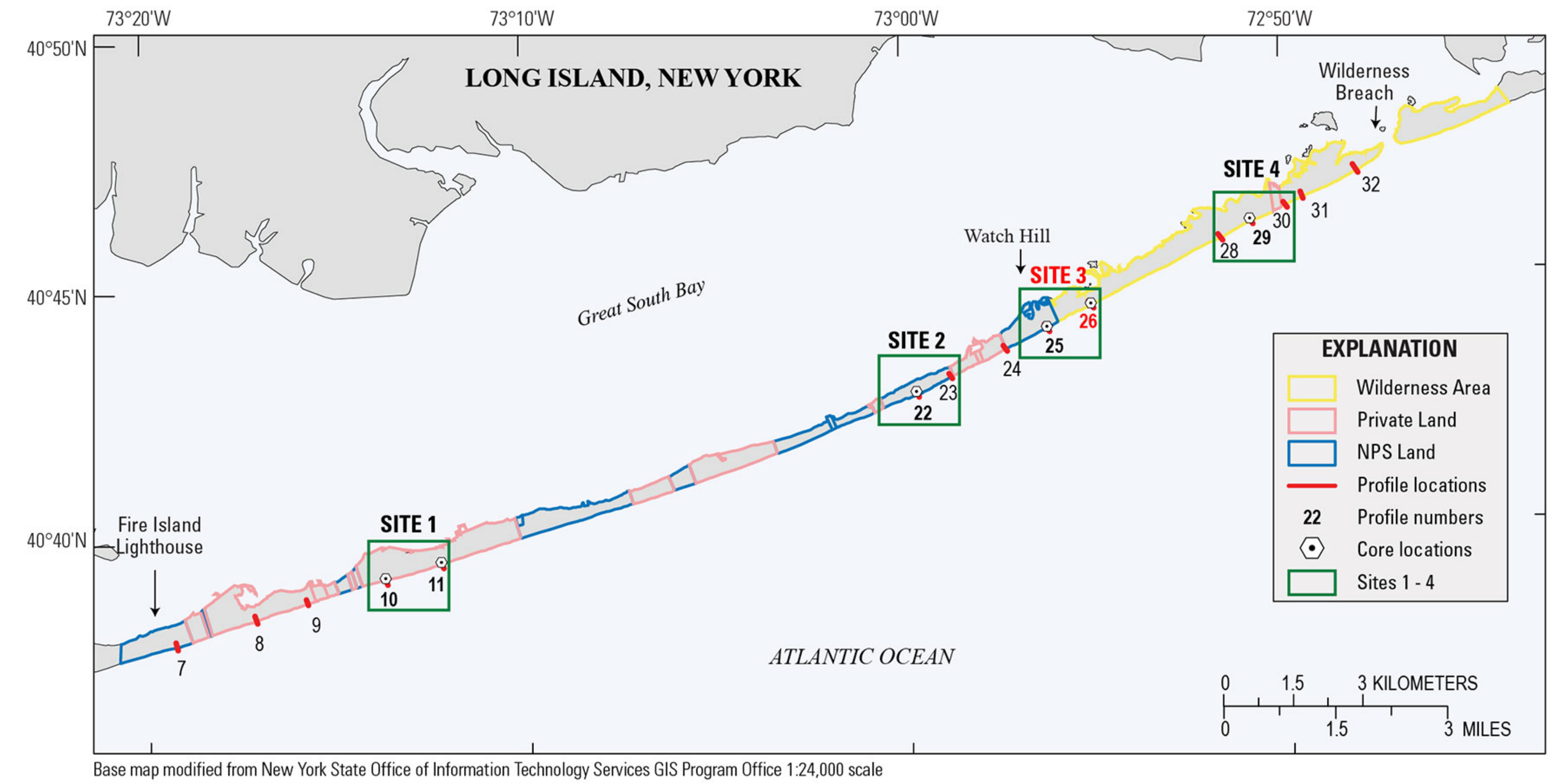
38-92.5 cm: SAND, light brown (5Y 8/2), moderately sorted, laminated, fine- to medium-grained quartz sand; interbedded with purple, well sorted, fine- to medium-grained heavy mineral sand;-with scattered shell fragments, heavy mineral flecks particularly within the heavy mineral horizons, and wavy inclined laminations; with an angular basal contact

92.5-158.5 cm: SAND, light brown (5Y 8/2), poorly sorted, massive, fine- to very coarse-grained quartz sand; with scattered small quartz pebbles, abundant shell fragments, and occasional heavy mineral flecks; with a sharp basal contact

158.5-171 cm: SAND, light brown (5Y 8/2), well sorted, laminated, fine-grained quartz sand; with thin black organic horizons from 160 to 162 cm, and occasional feldspar flecks

Core ID: P26-C08





Core ID: P26-C09

Elevation (m)

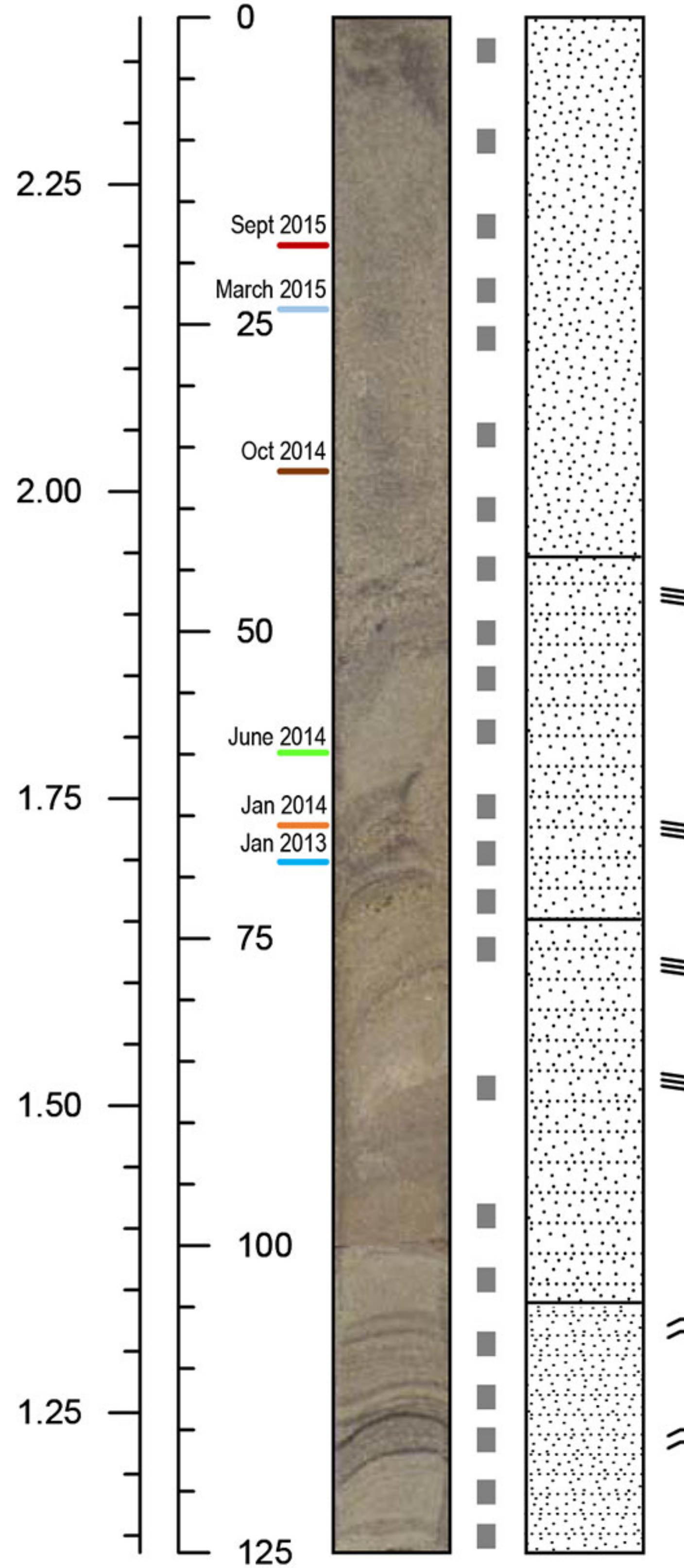
Depth (cm)

Beach Profile elevation

Core Photograph

Sample Interval

Lithology



Lithologic Description

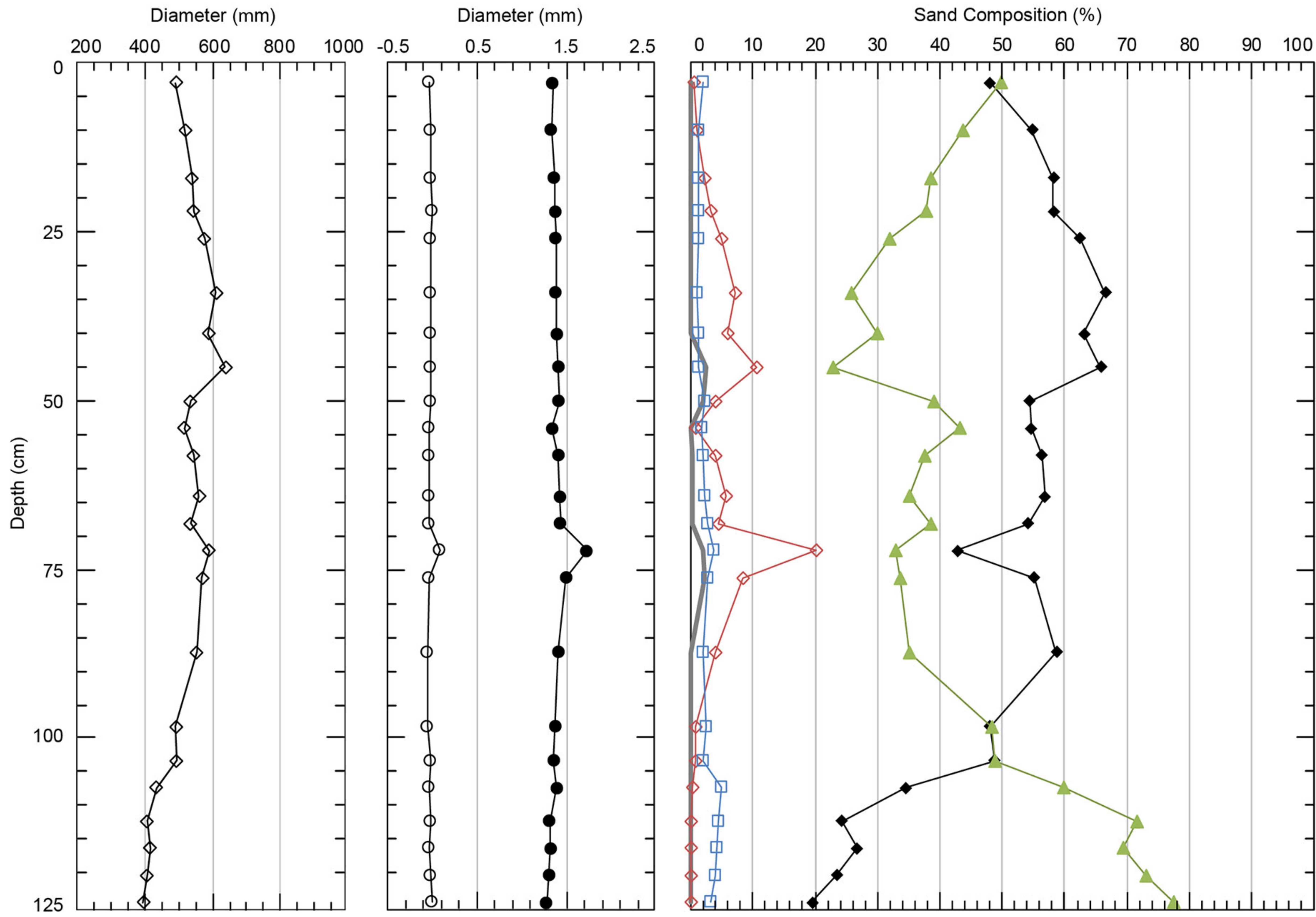
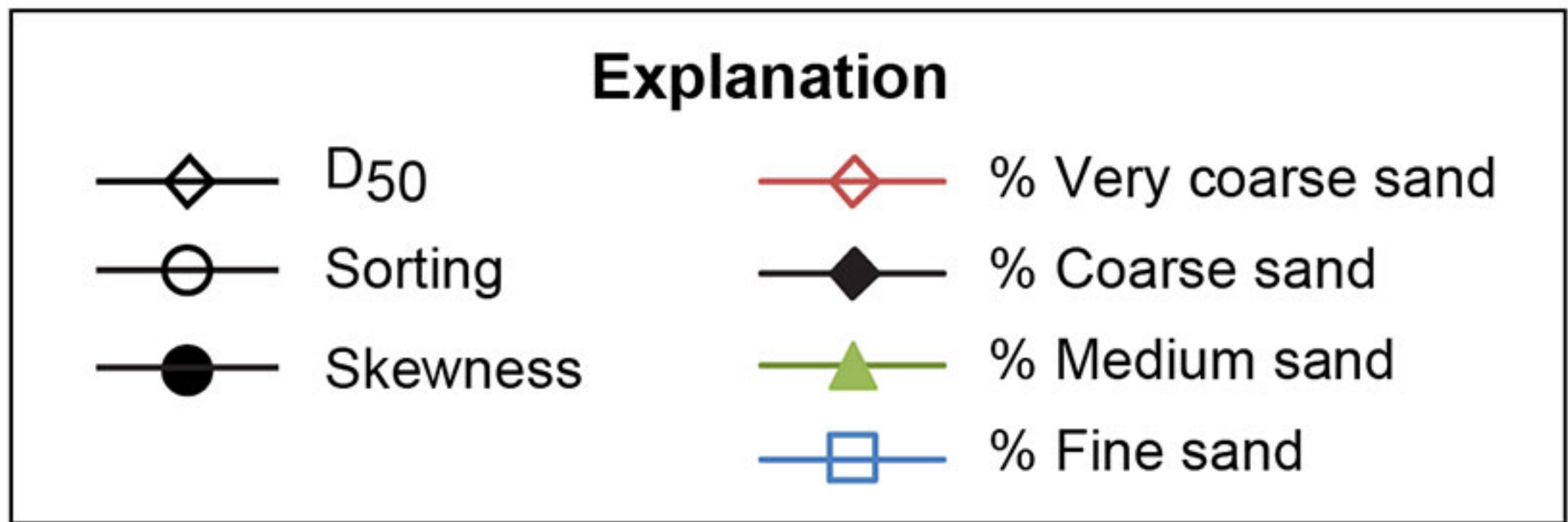
0-44 cm: SAND, light brown (5Y 8/2), moderately sorted, massive, fine- to coarse-grained quartz sand; with abundant heavy mineral sand from 0 to 7 cm, disseminated heavy mineral flecks; with a gradational basal contact

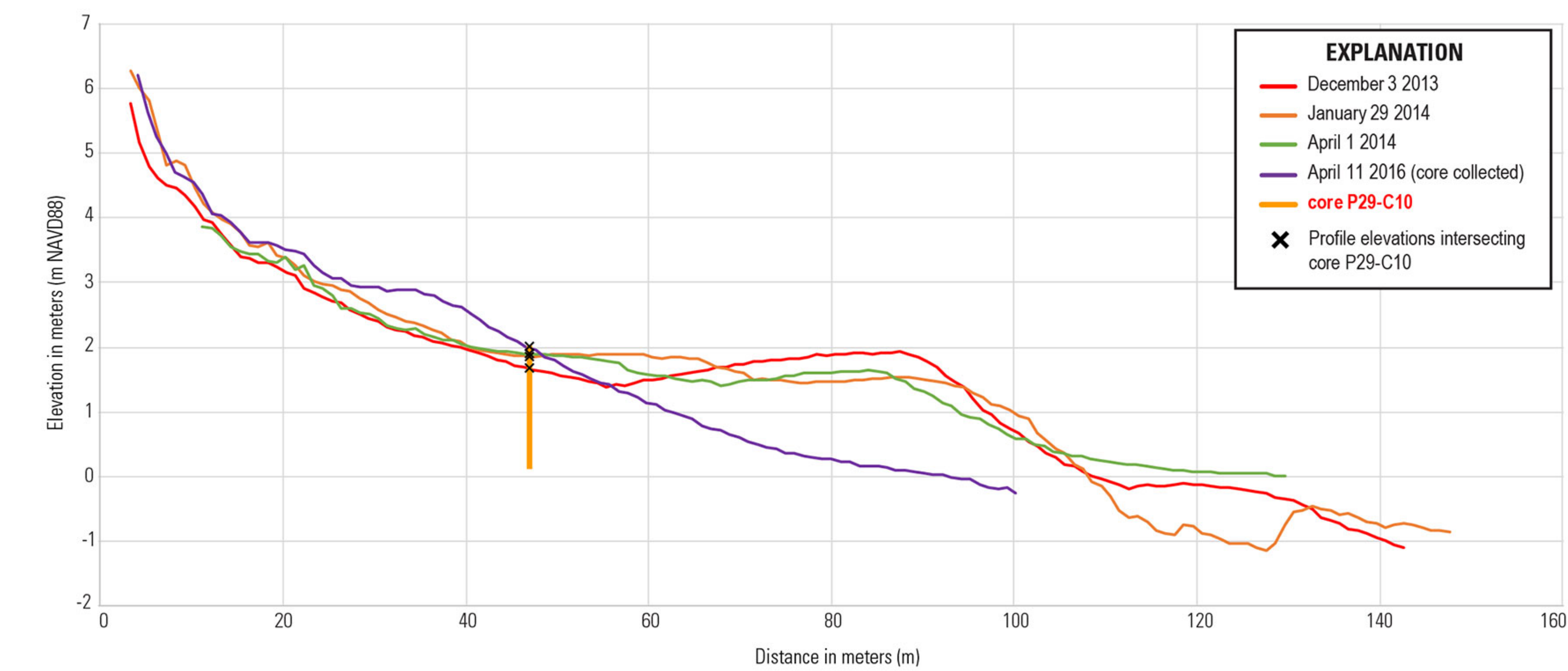
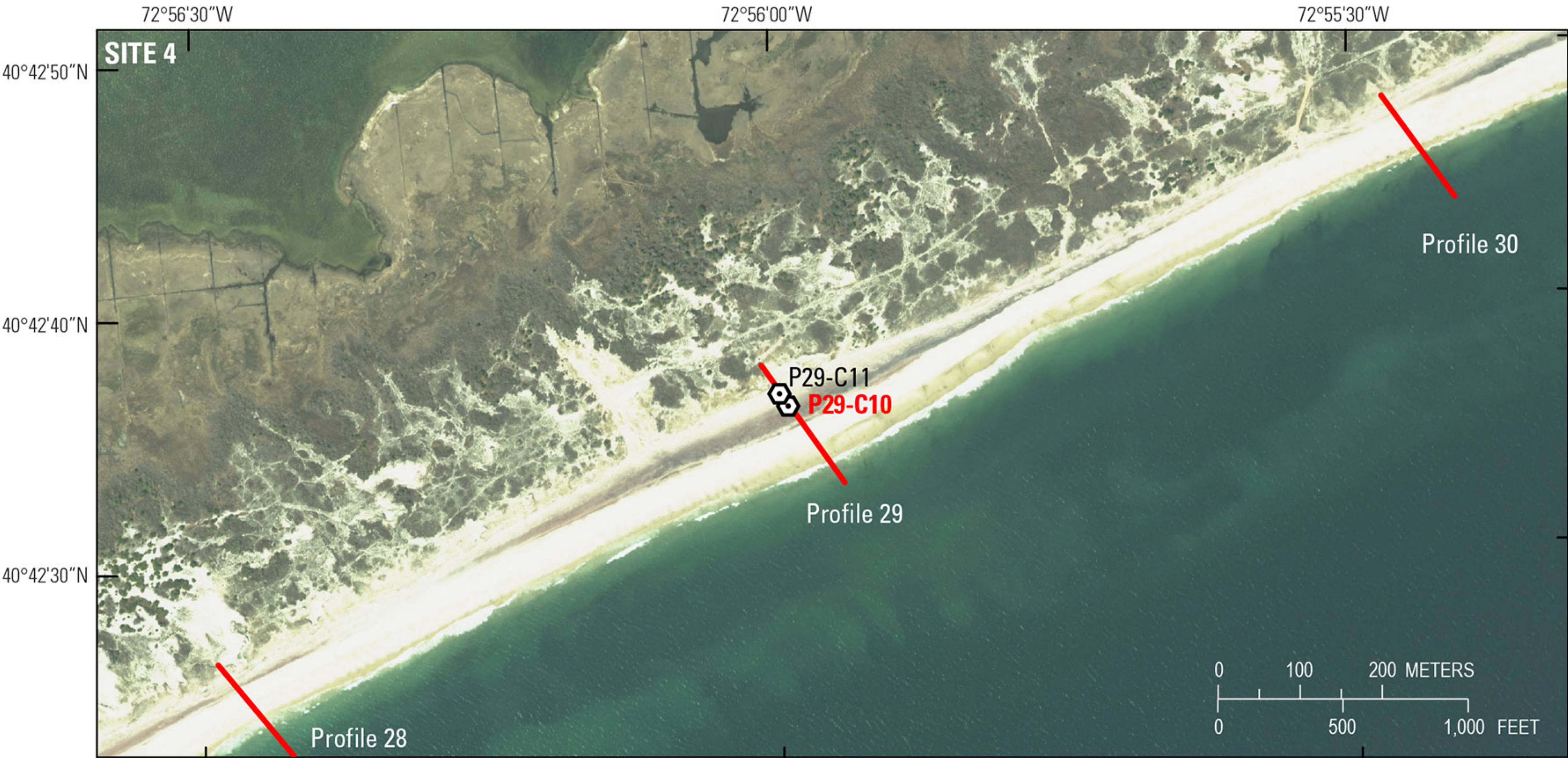
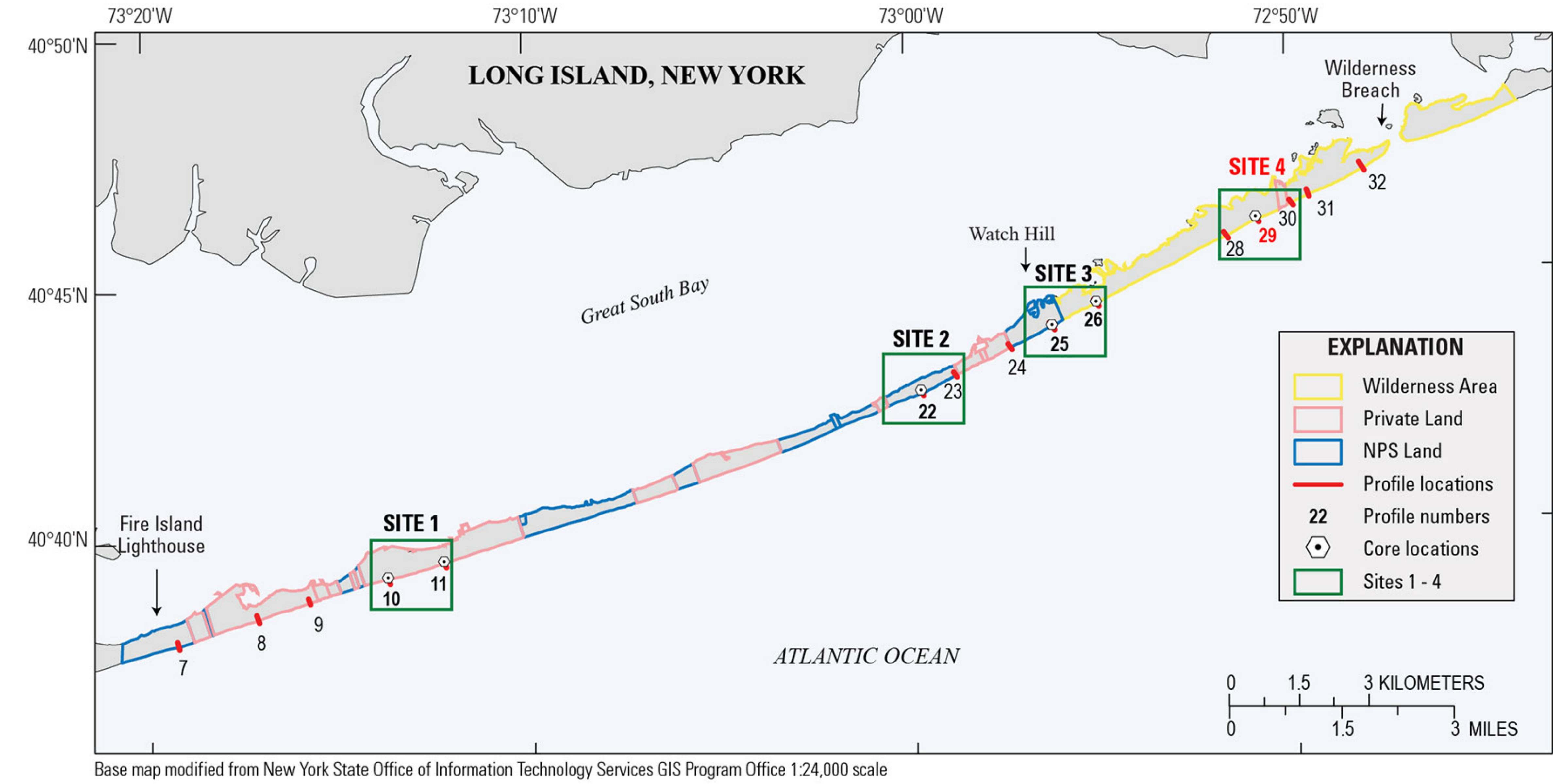
44-74 cm: SAND, light brown (5Y 8/2), poorly sorted, laminated, coarse-grained quartz sand interbedded with light grayish-brown (5Y 7/2), well sorted, fine- to medium-grained sand; with occasional quartz pebbles and heavy mineral fragments, very coarse-grained quartz sand horizons at 66 and 72 cm; with a gradational basal contact

74-105 cm: SAND, light grayish-brown (5Y 7/2), well sorted, laminated, fine- to medium-grained sand interbedded with light brown (5Y 8/2), poorly sorted, coarse-grained quartz sand (86 cm); with occasional quartz pebbles and heavy mineral fragments; with a gradational basal contact

105-125 cm: SAND, light brown (5Y 8/2), moderately sorted, fine- to coarse-grained quartz sand; with thin heavy mineral-rich laminations

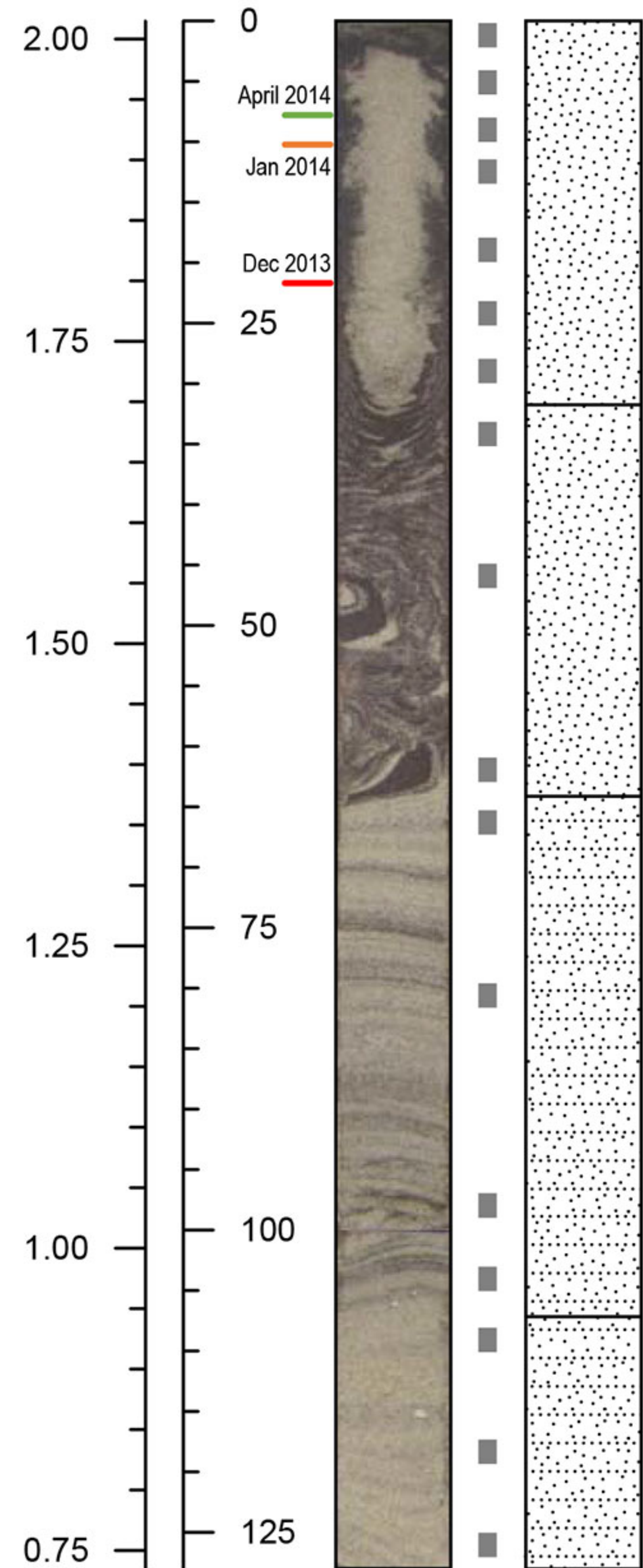
Core ID: P26-C09





Core ID: P29-C10

Elevation (m)
Depth (cm)
Beach Profile elevation
Core Photograph
Sample Interval
Lithology



Latitude: 40.71002 N
Longitude: 72.93323 W
Location: Profile 29, upper beach
Elevation: 2.015
Core Length: 128 cm
Compaction: 63 cm

Lithologic Description

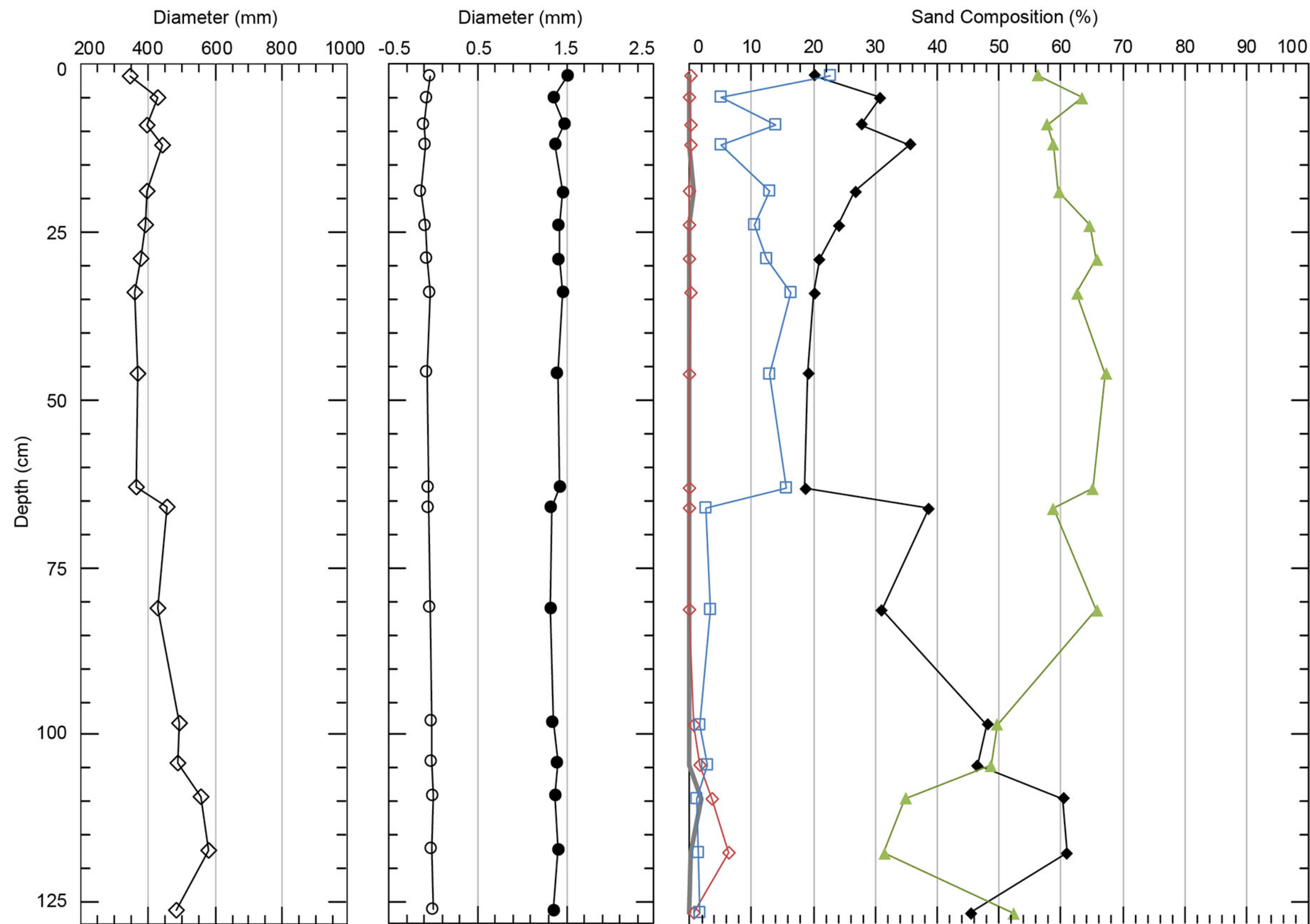
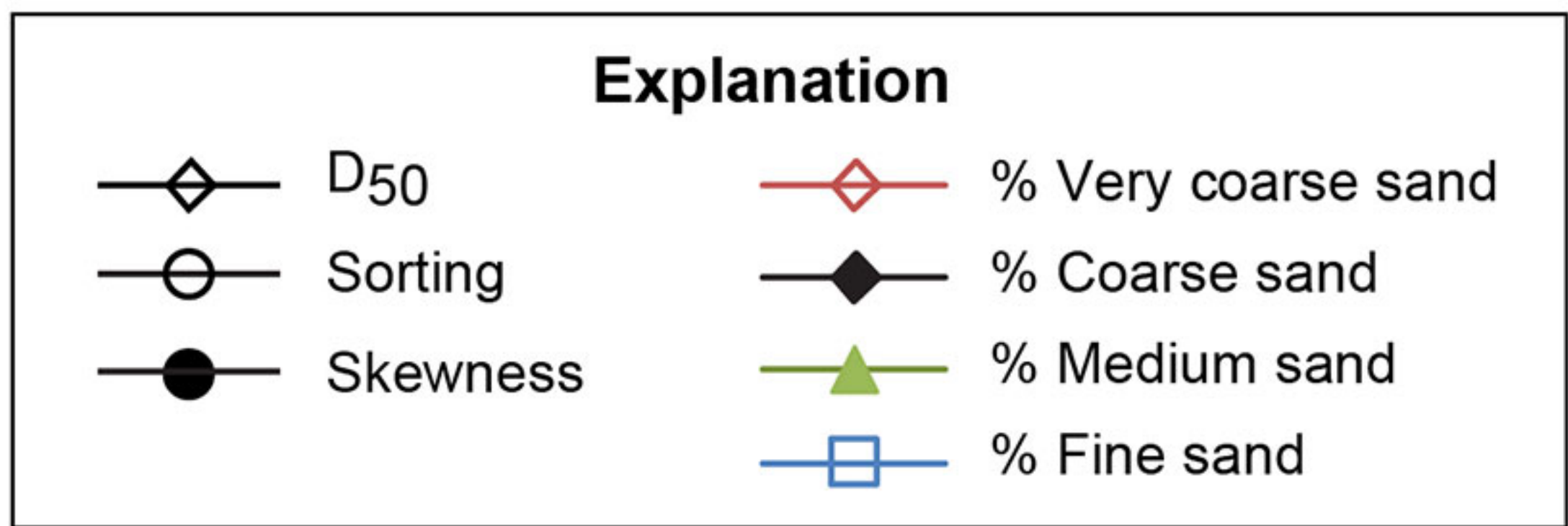
0-32 cm: SAND, light brown (5Y 8/2), moderately sorted, massive, medium-grained quartz sand; with abundant heavy mineral flecks, purple heavy mineral sand along the sides of the core barrel likely dragged during coring, and a deformed basal contact

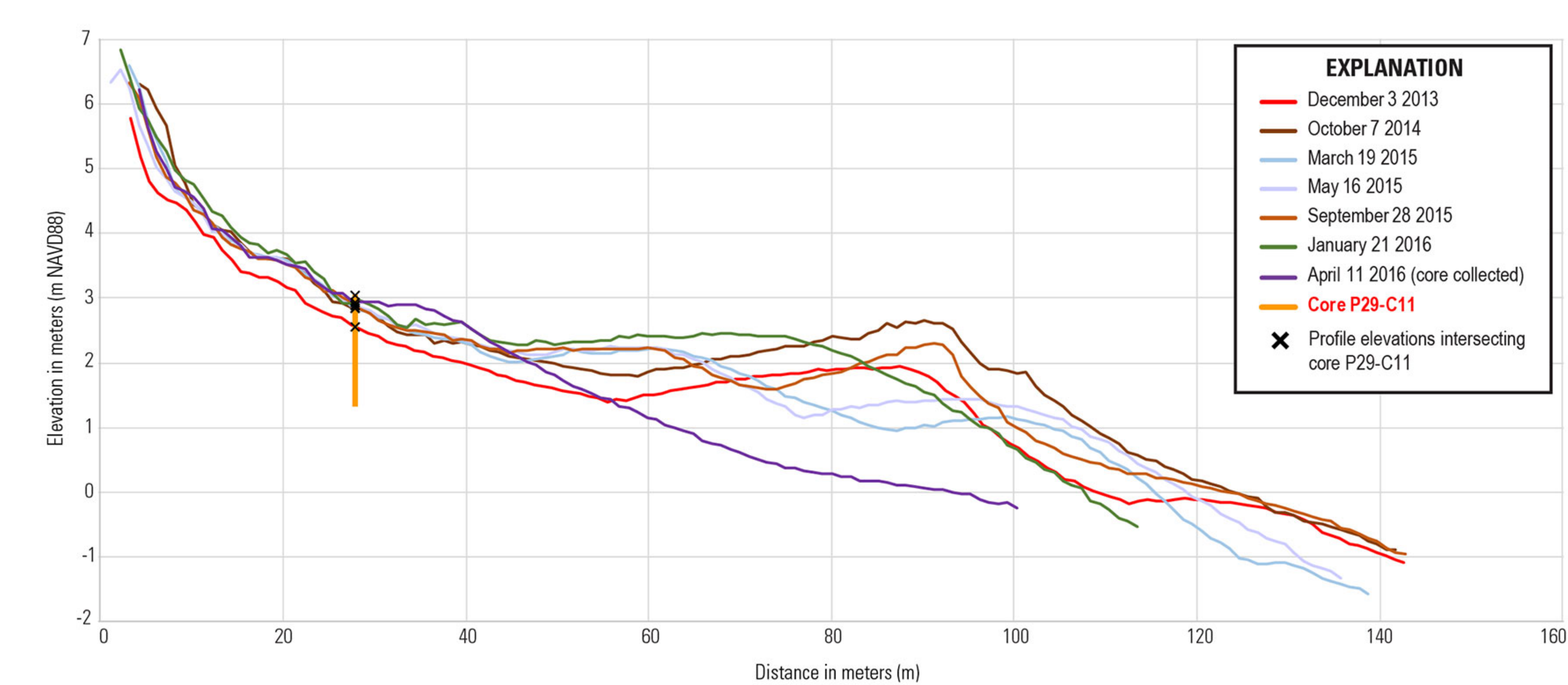
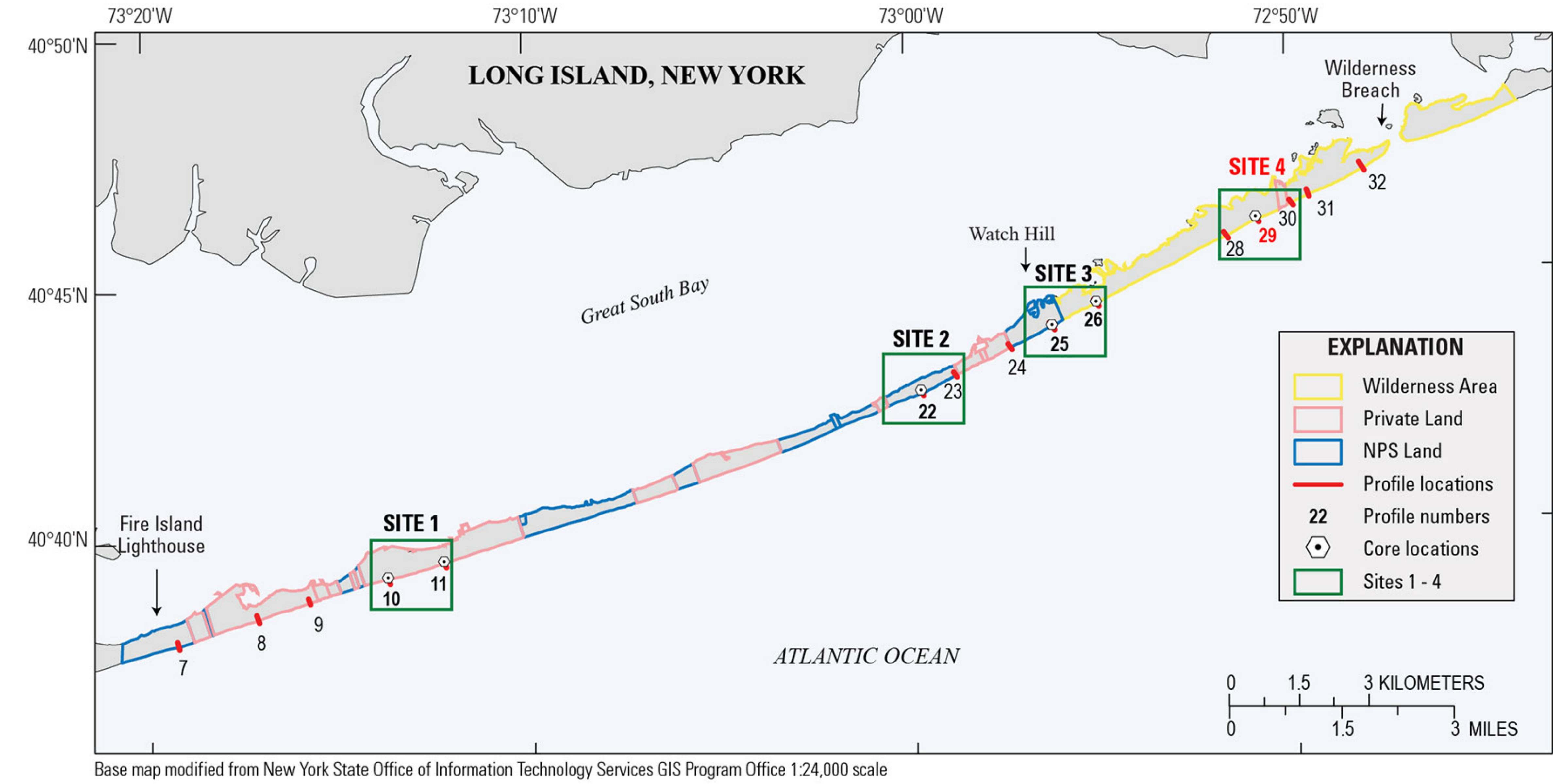
32-64.5 cm: SAND, light brown (5Y 8/2), moderately sorted, laminated, medium-grained quartz sand interbedded with purple (5P 2/2), well sorted, fine- to medium-grained heavy mineral sand; bedding is highly deformed, with abundant heavy mineral flecks and a sharp basal contact

64.5-107 cm: SAND, light brown (5Y 8/2), moderately sorted, laminated, medium-grained quartz sand; with purple heavy mineral laminations, abundant heavy mineral flecks, and a gradational basal contact

107-128 cm: SAND, light brown (5Y 8/2), poorly to moderately sorted, massive to faintly laminated quartz sand; with occasional small shell fragments and larger quartz grains, and scattered heavy mineral flecks

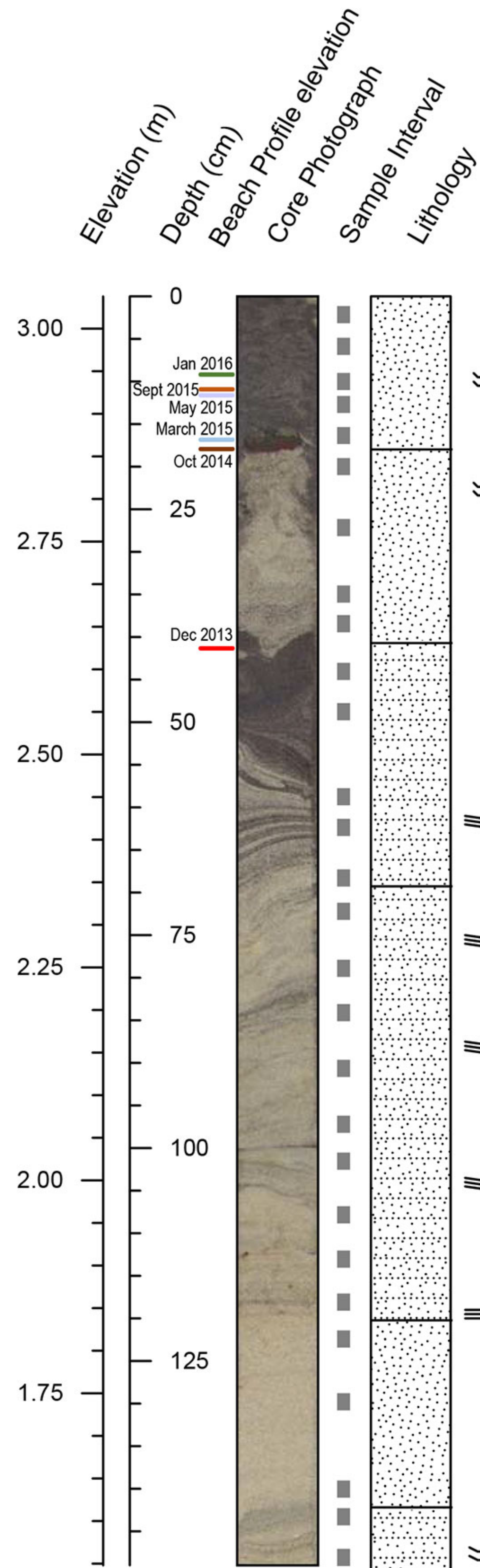
Core ID: P29-C10





Core ID: P29-C11

Latitude: 40.71016 N
Longitude: 72.93335 W
Location: Profile 29, dune toe
Elevation: 3.038 cm
Core Length: 149 cm
Compaction: 24 cm



Lithologic Description

0 -18.5 cm: SAND, mottled dark reddish-gray (5 YR 2/2), well-sorted, fine-grained heavy mineral and quartz sand; bedding is highly deformed, with a large piece of anthropogenic detritus at the base of unit; with a sharp basal contact

18.5-41 cm: SAND, light grayish-brown (5 YR 4/2), well-sorted, massive, coarse-grained quartz sand; with a sharp basal contact

41-69 cm: SAND, light grayish-brown (5 YR 4/2), well-sorted, laminated, coarse-grained quartz sand interbedded with dark red (7.5 R 4/4), well sorted, heavy mineral sand; heavy mineral sand forms a thick, deformed horizon between 41 and 53 cm and becomes laminated down-core, with a gradational basal contact

69-120 cm: SAND, light grayish-brown (5 YR 4/2), well-sorted, finely laminated, coarse-grained quartz sand; with dark red (7.5 R 4/4) heavy mineral sand laminations; scattered heavy mineral flecks, wavy to angular bedding; with a gradational basal contact; heavy mineral content decreases down-core

120-142 cm: SAND, light brown (5Y 8/2), poorly to moderately sorted, massive, fine- to coarse-grained quartz sand; with some oxidized horizons, occasional heavy mineral laminations, occasional heavy mineral granules from 116 to 149 cm; with a sharp basal contact

142-149 cm: SAND, light grayish-brown (5 YR 4/2), well-sorted, finely laminated, coarse-grained quartz sand; with dark red (7.5 R 4/4) heavy mineral sand laminations and a larger shell fragment at 146 cm

Core ID: P29-C11

