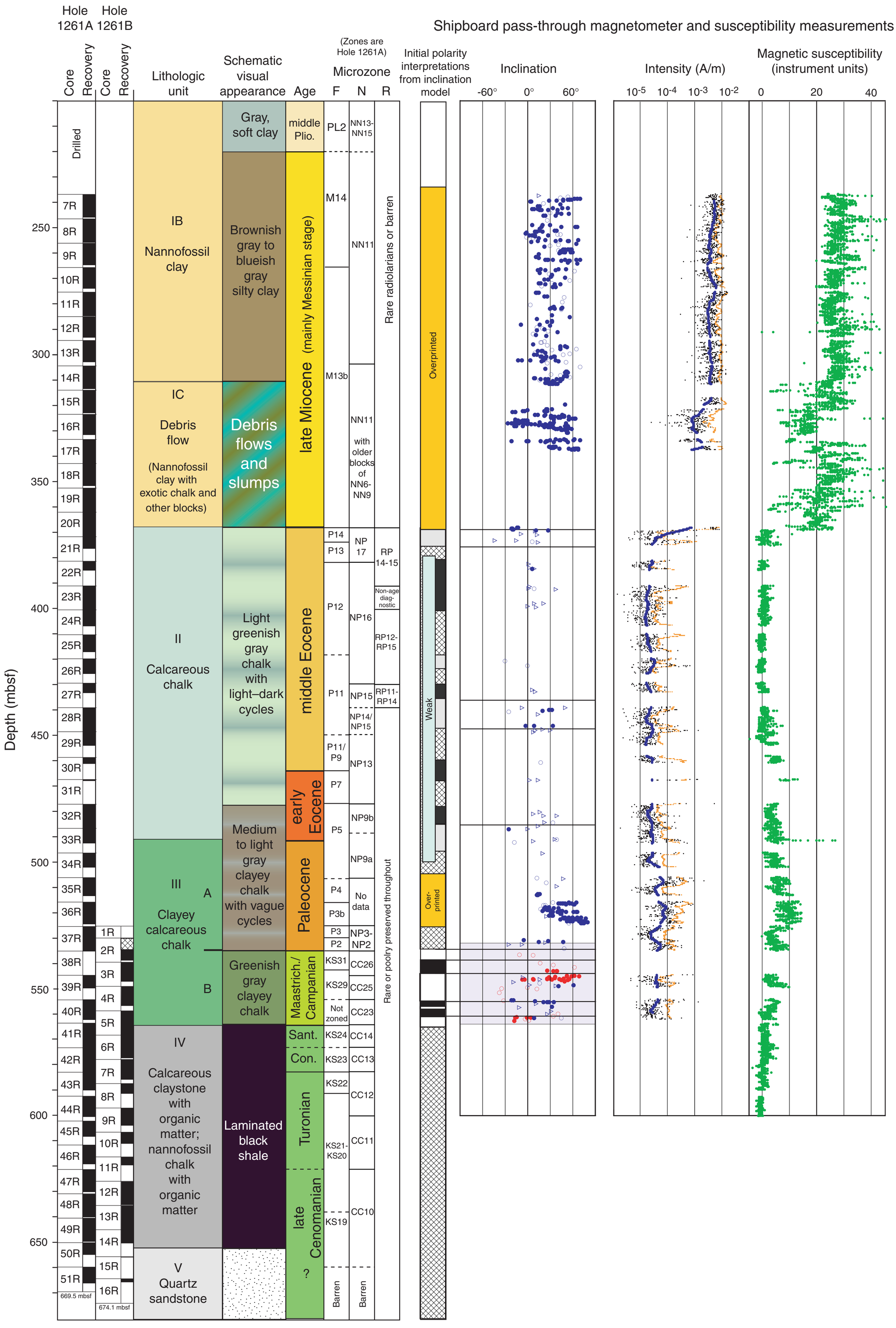
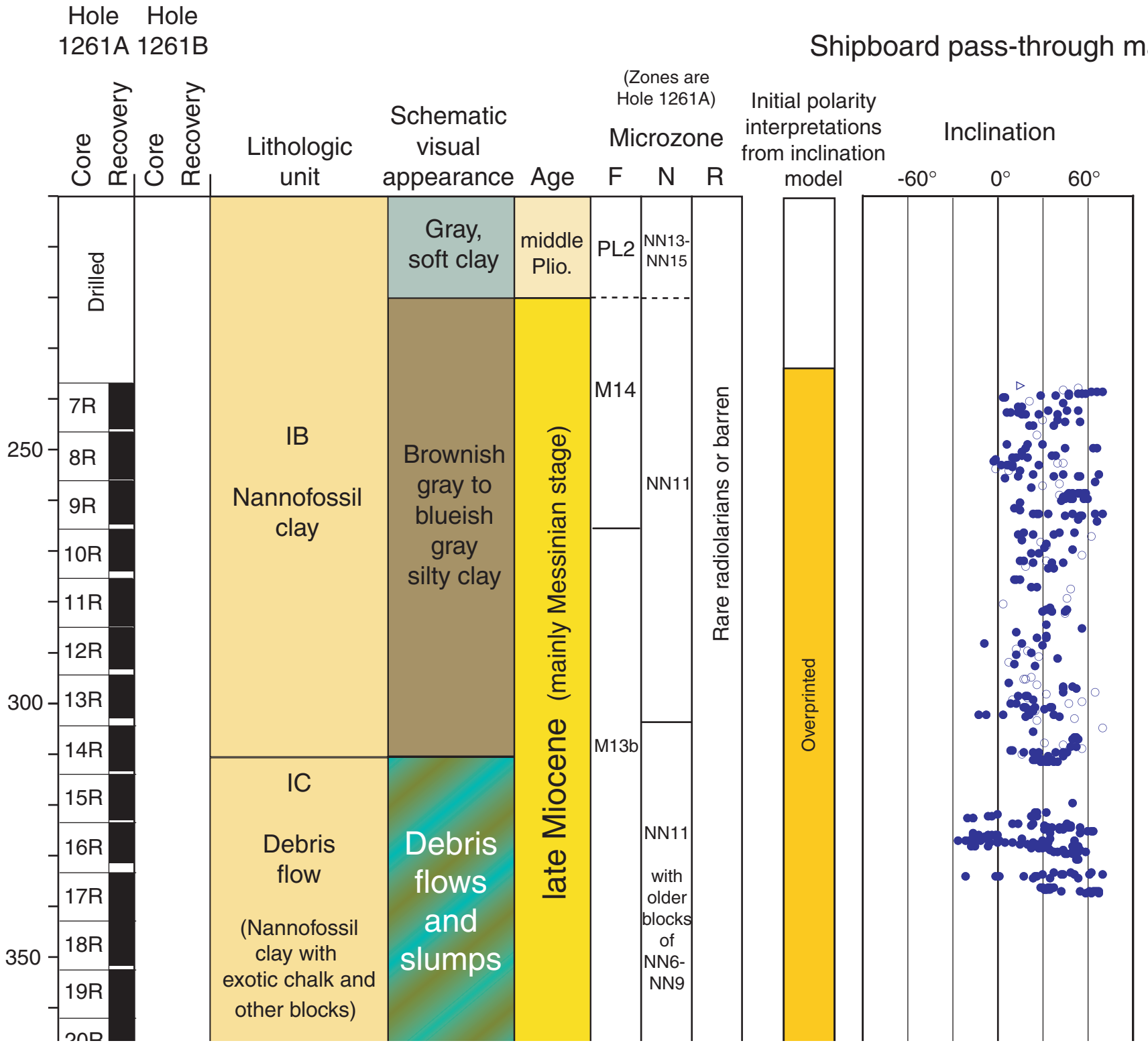
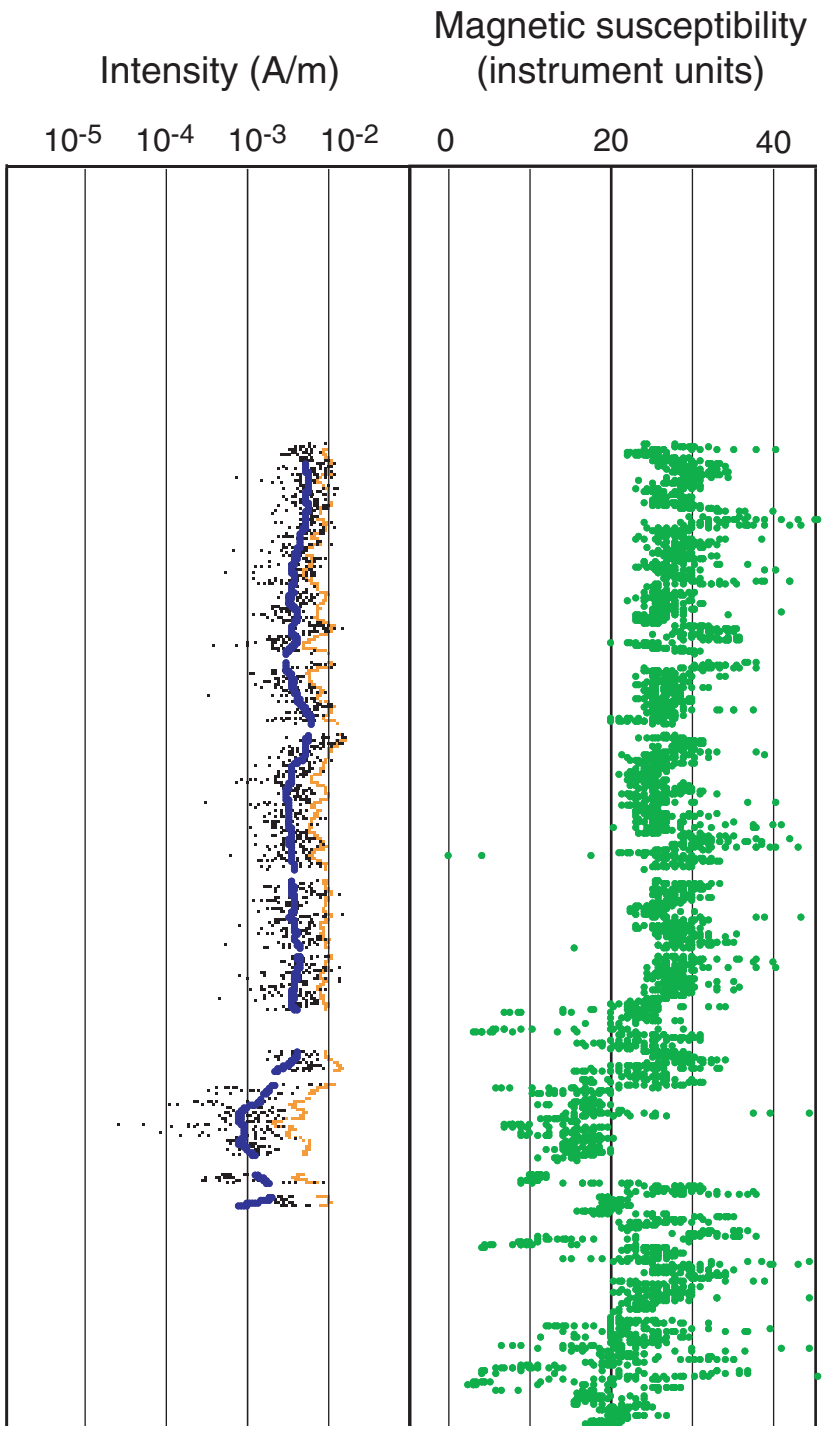
Chapter 8, Figure F9. Shipboard paleomagnetic data and initial interpretations of inclination clusters in the Cretaceous–Miocene from Holes 1261A and 1261B. Visual color variations in the sediment succession generally correspond to changes in magnetic properties and are displayed as an exaggerated schematic column to the right of the shipboard lithostratigraphic units. The paleomagnetic data from the holes have been compared using the composite depth offsets, which rarely exceeded a relative displacement of 4 m at this site. Magnetic inclinations (blue points = Hole 1261A and Upper Cretaceous red = Hole 1261B) are from intact blocks (excluding measurements within 5 cm of the end of each blocks) after 15-mT demagnetization. The inclination data exclude measurements near the background noise limit of the cryogenic magnetometer (~3×10^{-5} A/m); therefore, measurements with intensities <5×10^{-5} A/m are not considered reliable. In addition, the upper 20 cm of each core, which commonly displays spurious high-intensity magnetization or downhole contamination, and the upper 5 cm of each section, which is influenced by magnetization carried by the blue end cap, are excluded. The displayed inclinations are either 3-point running means (solid circles), 2-point means (open circles), or single-level data (open triangles) (from the central portion of blocks between 10 and 15 cm long, or from isolated levels within a larger block in which the adjacent measurements were <5×10^{-5} A/m). The magnetic intensity column includes NRM (small orange dots = 21-point running mean) and after the 15-mT demagnetization (small black dots, where large blue dots are 101-point log-mean average) for Hole 1261A. Magnetic susceptibility data for Hole 1261A obtained using a magnetic susceptibility core logger (MSCL) are shown by green dots in the rightmost column. Shipboard assignment of polarity zones was based on clusters of magnetic inclinations from intact blocks (to right of polarity zone column), as delimited by the thin lines. Zones of positive inclinations (originally considered to be normal polarity zones) = black or medium gray, if reliability is less certain; negative or mixed inclinations (originally considered to be reversed polarity zones) = white or light gray, if reliability is less certain. Uncertain inclination characteristics or gaps in data coverage = cross hatched. The shipboard interpretations of polarity zones were not always supported by analyses of magnetic characteristics during progressive thermal demagnetization of minicores (Fig. **F10,** p.52). F = foraminifers, N = nannofossils, R = radiolarians.

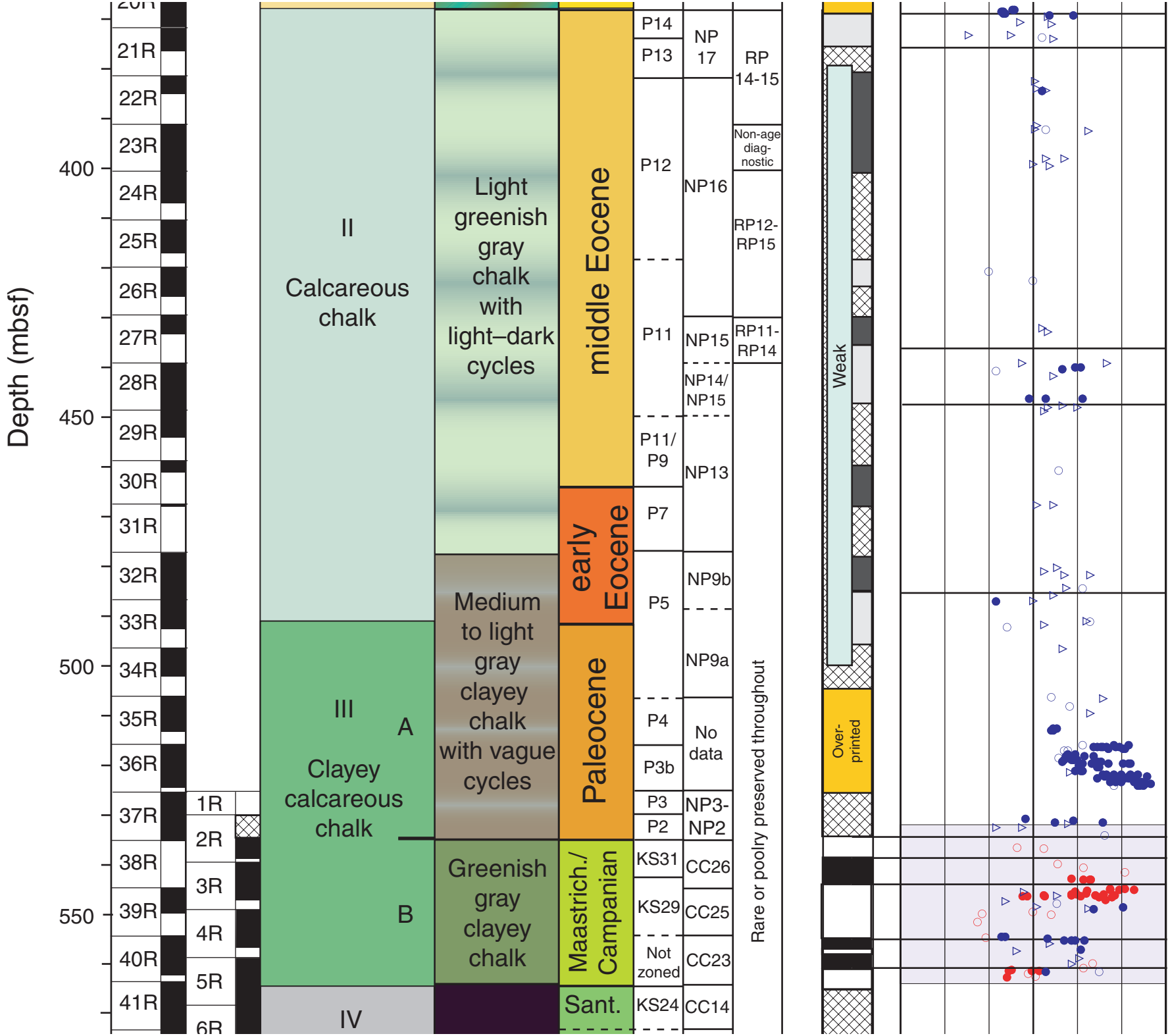


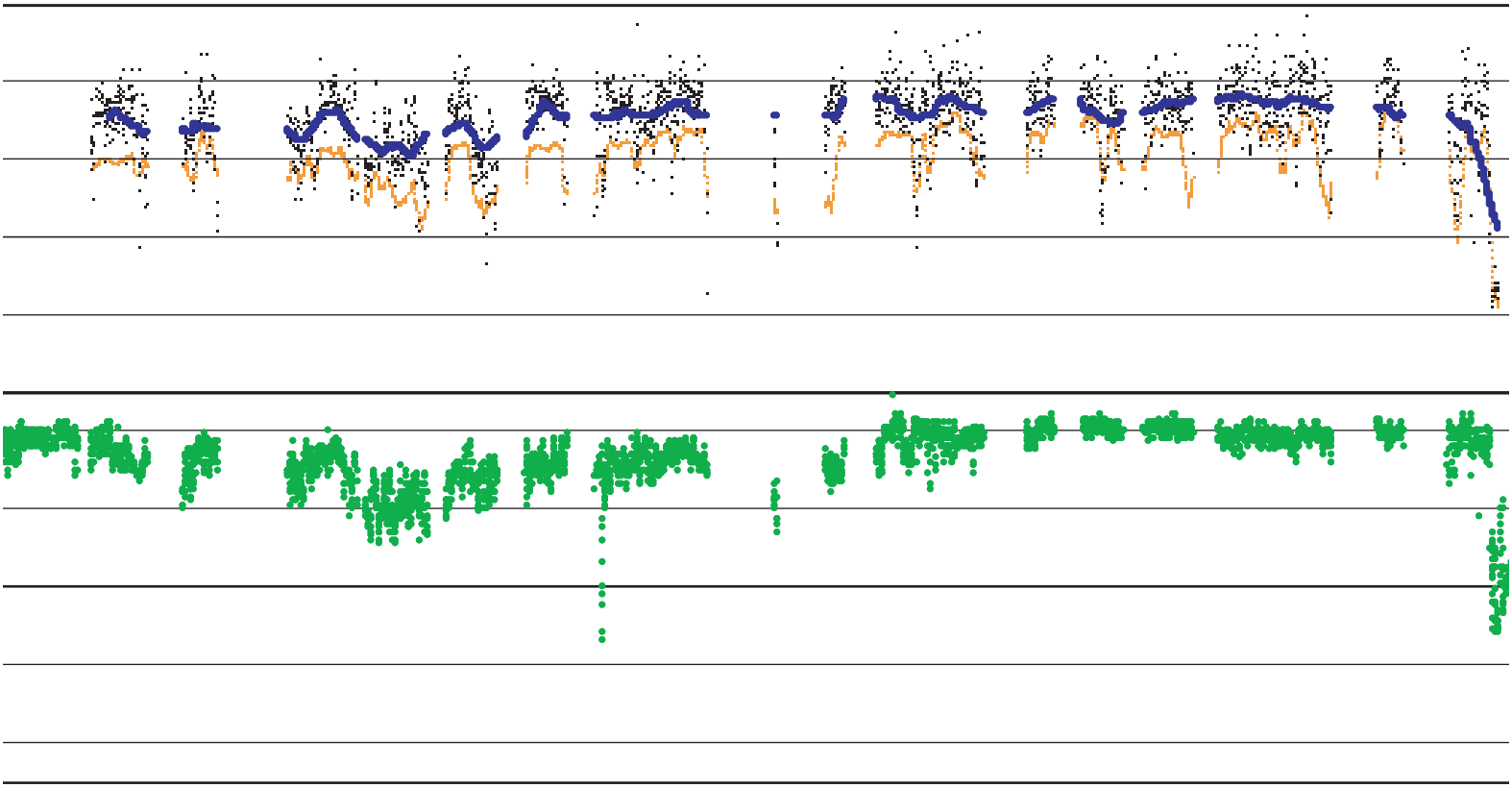
Chapter 8, Figure F9. Shipboard paleomagnetic data and initial interpretations of inclination clusters in the Cretaceous–Miocene from Holes 1261A and 1261B. Visual color variations in the sediment succession generally correspond to changes in magnetic properties and are displayed as an exaggerated schematic column to the right of the shipboard lithostratigraphic units. The paleomagnetic data from the holes have been compared using the composite depth offsets, which rarely exceeded a relative displacement of 4 m at this site. Magnetic inclinations (blue points = Hole 1261A and Upper Cretaceous red = Hole 1261B) are from intact blocks (excluding measurements within 5 cm of the end of each blocks) after 15-mT demagnetization. The inclination data exclude measurements near the background noise limit of the cryogenic magnetometer (~3×10^{-5} A/m); therefore, measurements with intensities <5×10^{-5} A/m are not considered reliable. In addition, the upper 20 cm of each core, which commonly displays spurious high-intensity magnetization or downhole contamination, and the upper 5 cm of each section, which is influenced by magnetization carried by the blue end cap, are excluded. The displayed inclinations are either 3-point running means (solid circles), 2-point means (open circles), or single-level data (open triangles) (from the central portion of blocks between 10 and 15 cm long, or from isolated levels within a larger block in which the adjacent measurements were <5×10^{-5} A/m). The magnetic intensity column includes NRM (small orange dots = 21-point running mean) and after the 15-mT demagnetization (small black dots, where large blue dots are 101-point log-mean average) for Hole 1261A. Magnetic susceptibility data for Hole 1261A obtained using a magnetic susceptibility core logger (MSCL) are shown by green dots in the rightmost column. Shipboard assignment of polarity zones was based on clusters of magnetic inclinations from intact blocks (to right of polarity zone column), as delimited by the thin lines. Zones of positive inclinations (originally considered to be normal polarity zones) = black or medium gray, if reliability is less certain; negative or mixed inclinations (originally considered to be reversed polarity zones) = white or light gray, if reliability is less certain. Uncertain inclination characteristics or gaps in data coverage = cross hatched. The shipboard interpretations of polarity zones were not always supported by analyses of magnetic characteristics during progressive thermal demagnetization of minicores (Fig. **F10,** p.52). F = foraminifers, N = nannofossils, R = radiolarians.

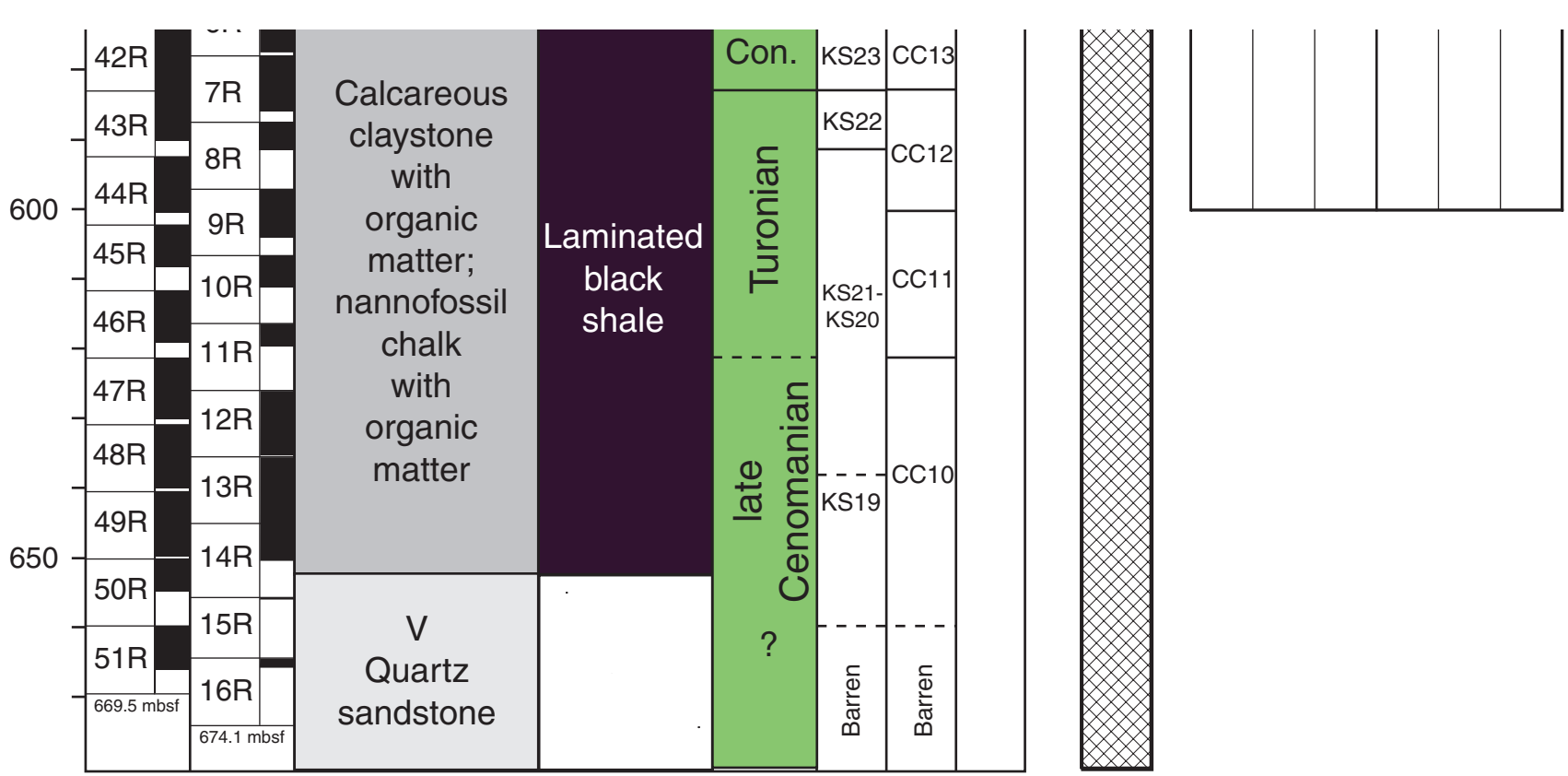

Hole 1261A
Hole 1261B
Shipboard pass-through ma
Core
Recovery
Core
Recovery
Lithologic unit
Schematic visual appearance
Age
(Zones are Hole 1261A)
Microzone
F
N
R
Initial polarity interpretations from inclination model
Inclination
-60°
0°
60°
Drilled
7R
8R
9R
10R
11R
12R
13R
14R
15R
16R
17R
18R
19R
250
300
350
IB
Nannofossil clay
IC
Debris flow
(Nannofossil clay with exotic chalk and other blocks)
Gray, soft clay
Brownish gray to blueish gray silty clay
Debris flows and slumps
middle Plio.
late Miocene (mainly Messinian stage)
PL2
M14
M13b
NN13-NN15
NN11
NN11
with older blocks of NN6-NN9
Rare radiolarians or barren
Overprinted

gnetometer and susceptibility measurements




Depth (mbsf)
400
450
500
550
20R
21R
22R
23R
24R
25R
26R
27R
28R
29R
30R
31R
32R
33R
34R
35R
36R
37R
38R
39R
40R
41R
1R
2R
3R
4R
5R
6R
II
Calcareous chalk
III
A
Clayey calcareous chalk
B
IV
Light greenish gray chalk with light–dark cycles
Medium to light gray clayey chalk with vague cycles
Greenish gray clayey chalk
middle Eocene
early Eocene
Paleocene
Maastrich./ Campanian
Sant.
P14
P13
P12
P11
P11/ P9
P7
P5
P4
P3b
P3
P2
KS31
KS29
Not zoned
KS24
NP 17
NP16
NP15
NP14/ NP15
NP13
NP9b
NP9a
No data
NP3- NP2
CC26
CC25
CC23
CC14
RP 14-15
Non-age diag- nostic
RP12- RP15
RP11- RP14
Rare or poolry preserved throughout
Weak
Over- printed




600
650
42R
43R
44R
45R
46R
47R
48R
49R
50R
51R
669.5 mbsf
7R
8R
9R
10R
11R
12R
13R
14R
15R
16R
674.1 mbsf
Calcareous claystone with organic matter; nannofossil chalk with organic matter
V Quartz sandstone
Laminated black shale
Con.
Turonian
late Cenomanian
?
KS23
KS22
KS21-KS20
KS19
Barren
CC13
CC12
CC11
CC10
Barren