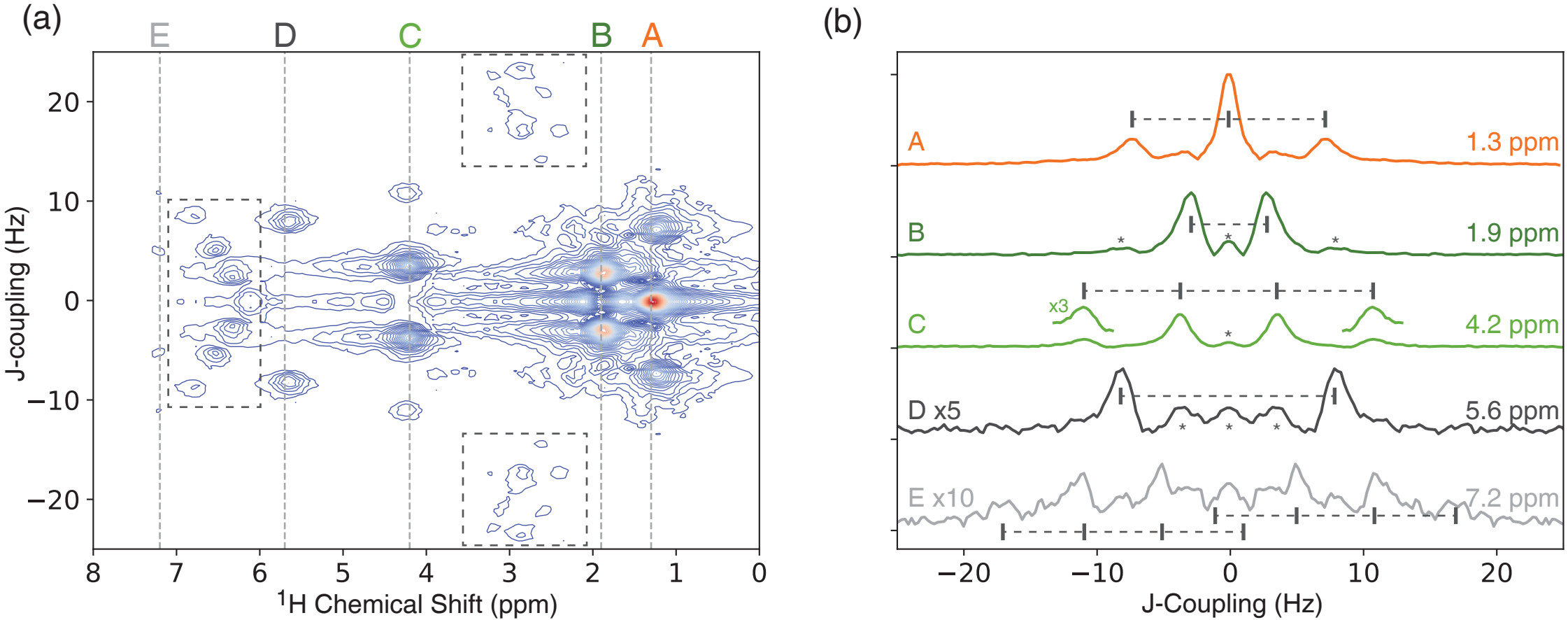
(a)
E
D
C
B
A
20
10
0
−10
−20
J-coupling (Hz)
8
7
6
5
4
3
2
1
0
1H Chemical Shift (ppm)
(b)
A
1.3 ppm
B
1.9 ppm
C
x3
4.2 ppm
D x5
5.6 ppm
E x10
7.2 ppm
−20
−10
0
10
20
J-Coupling (Hz)