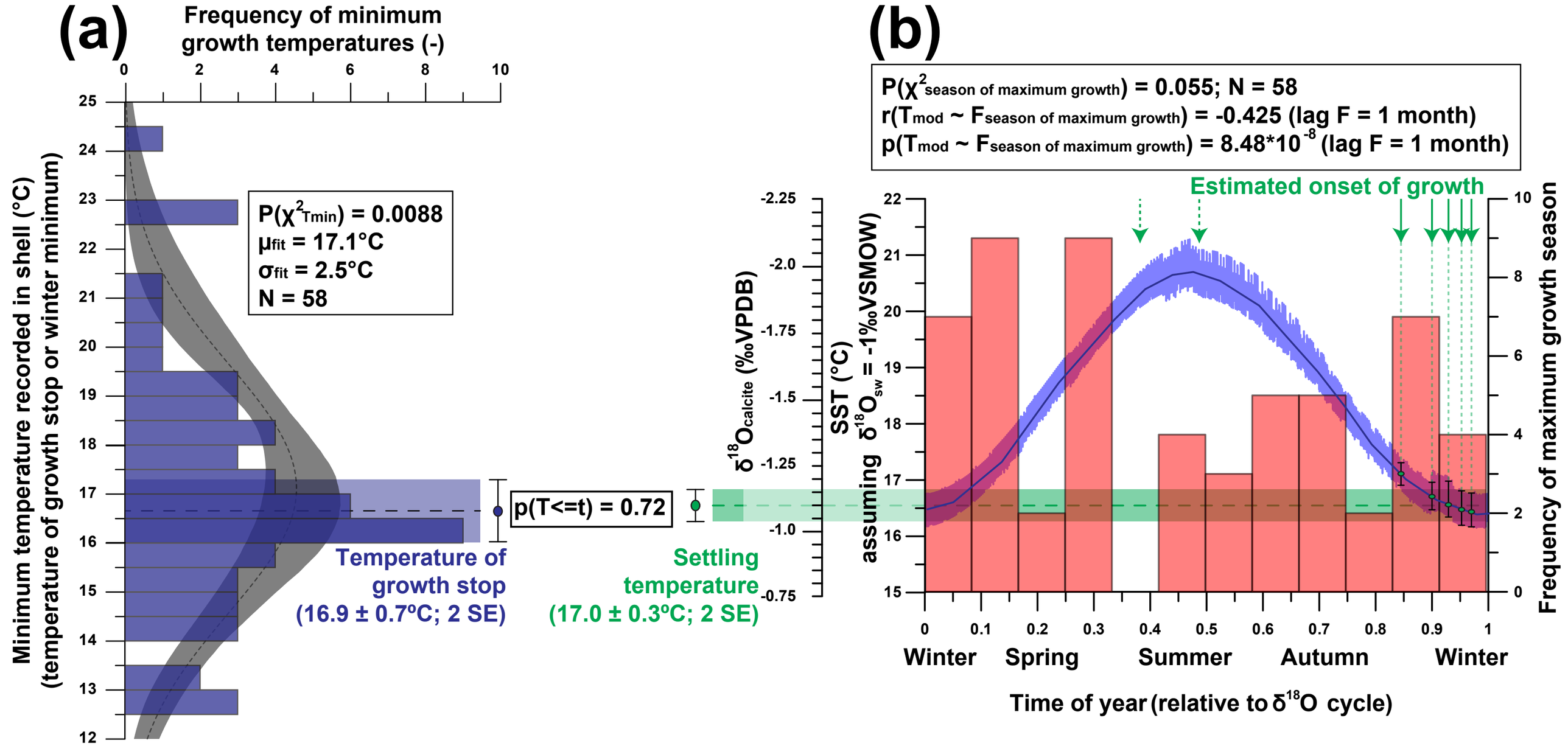
(a)
Frequency of minimum growth temperatures (-)
0
2
4
6
8
10
Minimum temperature recorded in shell (°C)
(temperature of growth stop or winter minimum)
25
24
23
22
21
20
19
18
17
16
15
14
13
12
P(χ²Tmin) = 0.0088
μfit = 17.1°C
σfit = 2.5°C
N = 58
p(T<=t) = 0.72
Temperature of growth stop
(16.9 ± 0.7ºC; 2 SE)
Settling temperature
(17.0 ± 0.3ºC; 2 SE)
δ18Ocalcite (‰VPDB)
-2.25
-2.0
-1.75
-1.5
-1.25
-1.0
-0.75
(b)
P(χ²season of maximum growth) = 0.055; N = 58
r(Tmod ~ Fseason of maximum growth) = -0.425 (lag F = 1 month)
p(Tmod ~ Fseason of maximum growth) = 8.48*10-8 (lag F = 1 month)
Estimated onset of growth
SST (°C)
assuming δ18Osw = -1‰VSMOW
22
21
20
19
18
17
16
15
Frequency of maximum growth season
10
8
6
4
2
0
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
Winter
Spring
Summer
Autumn
Winter
Time of year (relative to δ18O cycle)