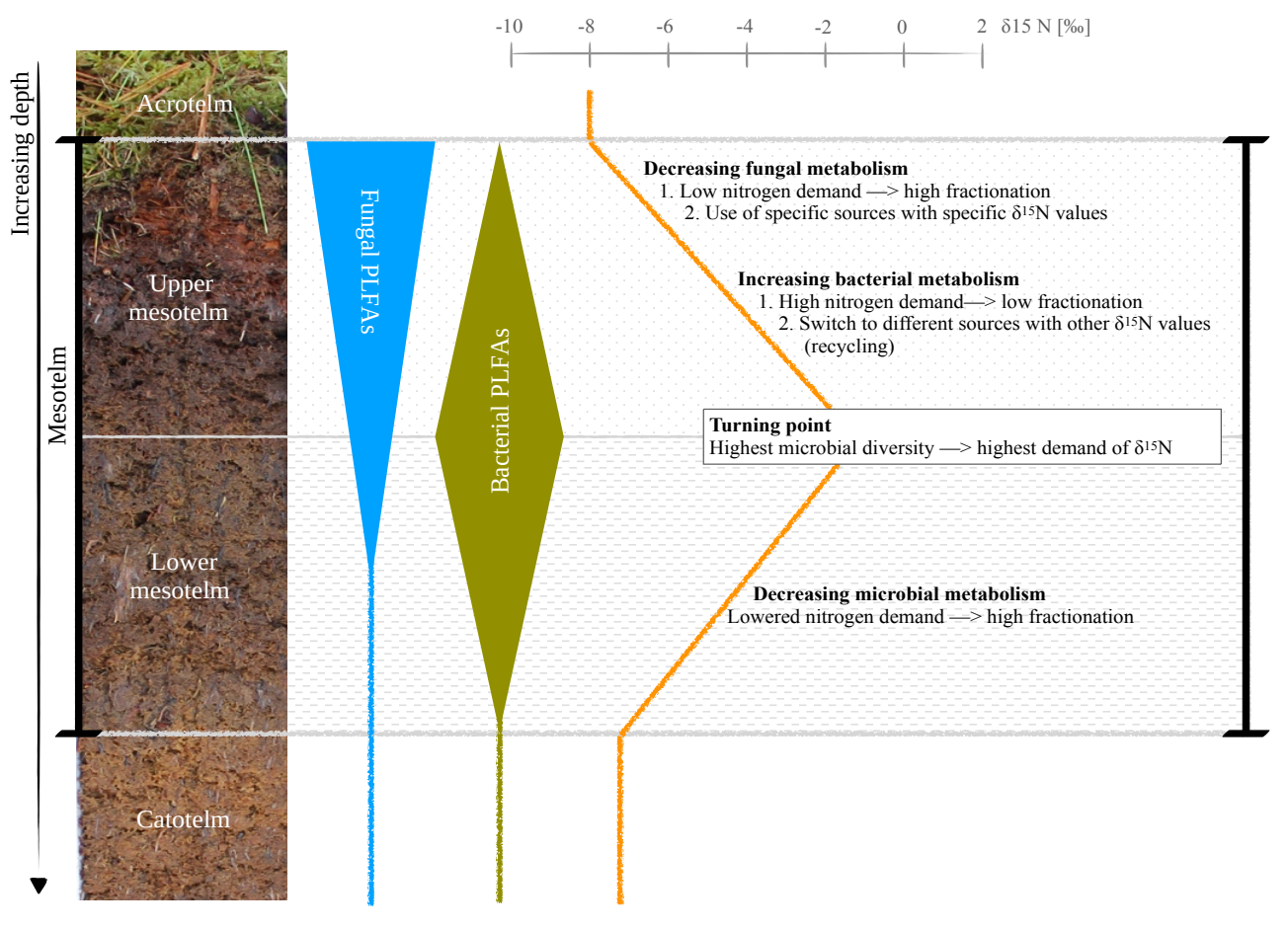
-10
-8
-6
-4
-2
0
2
δ15 N [‰]
Increasing depth
Acrotelm
Upper mesotelm
Mesotelm
Lower mesotelm
Catotelm
Fungal PLFAs
Bacterial PLFAs
Decreasing fungal metabolism
1. Low nitrogen demand —> high fractionation
2. Use of specific sources with specific δ15N values
Increasing bacterial metabolism
1. High nitrogen demand—> low fractionation
2. Switch to different sources with other δ15N values (recycling)
Turning point
Highest microbial diversity —> highest demand of δ15N
Decreasing microbial metabolism
Lowered nitrogen demand —> high fractionation