## Microorganismal distribution in the Iberian Margin deep biosphere

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The deep biosphere of the Iberian Margin was drilled during IODP Expedition 339 and Archaea and Eukarya were examined by high throughput amplicon sequencing of their small subunit ribosomal genes. Eukaryotic signatures reflected distinct populations from other geographically distributed samples analyzed using similar methods. This suggests the presence of unique communities in these Iberian Margin subsurface sediments, also reflected in just the fungal populations seen by rRNA at Expedition 339 Site 1385. Eukaryotes did not show distinct trends with geochemistry, however archaeal 16S rDNA amplicons indicated that DSAG archaea are correlated with downcore carbon and iron profiles, reflecting their habitat preferences that were seen previously in shallower sediments (cite paper). Together these data show that within one deep biosphere hole, different trends for organisms can be seen. Currently eukaryotes such as fungi appear to be generalists, not correlating with any downhole geochemistry, yet archaea show distinct trends with specific metals.