



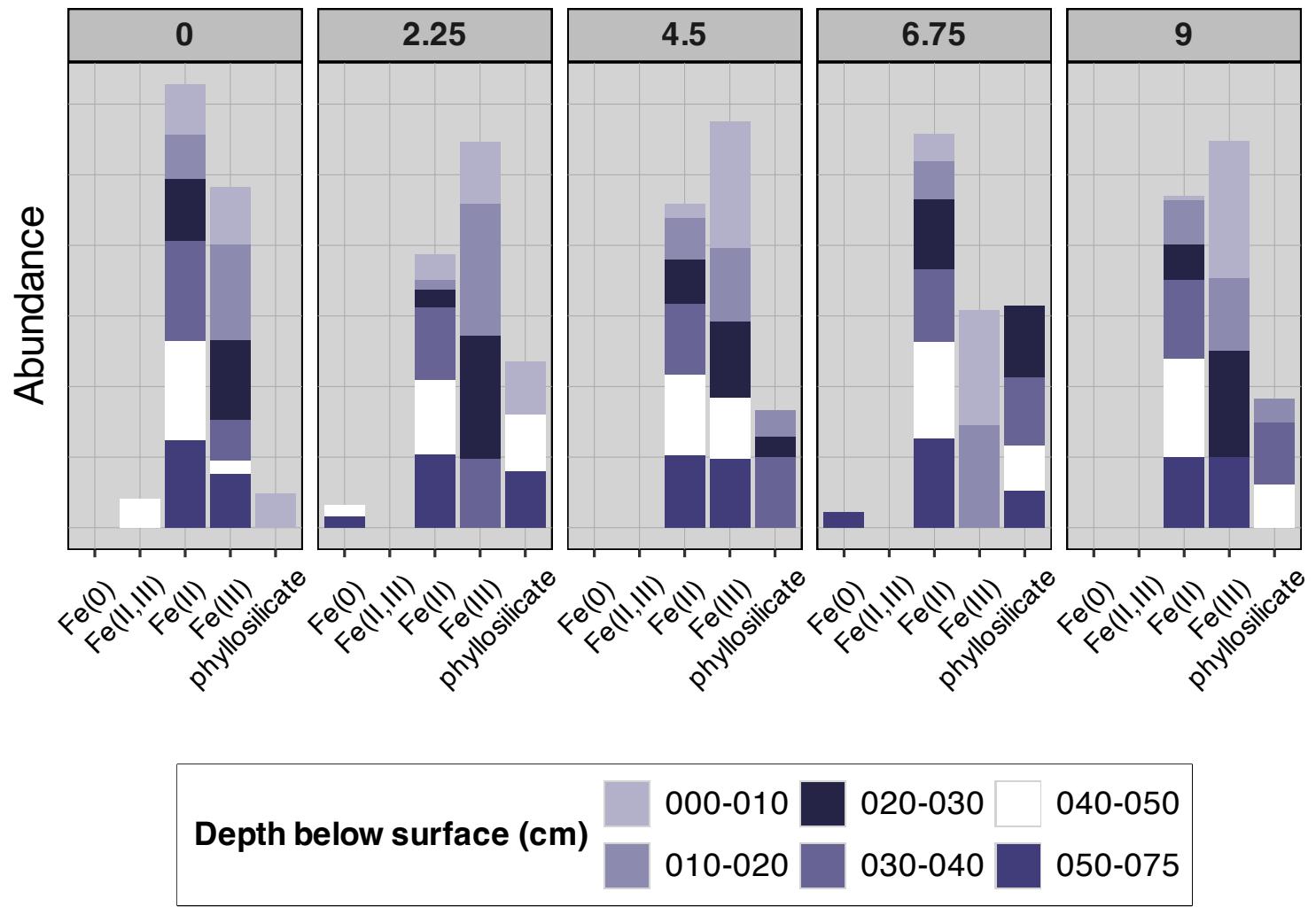
Atmospheric Greenhouse Gas Emissions from Wetlands: Dark Fenton-Hydroxyl Radical Production in a Peatland Bog and Prairie Potholes

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Methods:

- X-ray Absorption Near Edge Structure Spectroscopy (XANES)
- High Performance Liquid Chromatography (HPLC)

Figure: Fe XANES: SPRUCE 2021 field season, 0-75 cm depth



Depth below surface (cm)

Summary

- $\text{Fe}(\text{II})$ abundance decreases at near surface depths (0-10 cm) with \uparrow temp
- **Little variation in $\text{Fe}(\text{II})$ abundance** from 30 – 75 cm depths across temp treatments
 - Fe pools vary from **$\text{Fe}(\text{III})$** and **Fe-phyllosilicates** pools with \uparrow temp