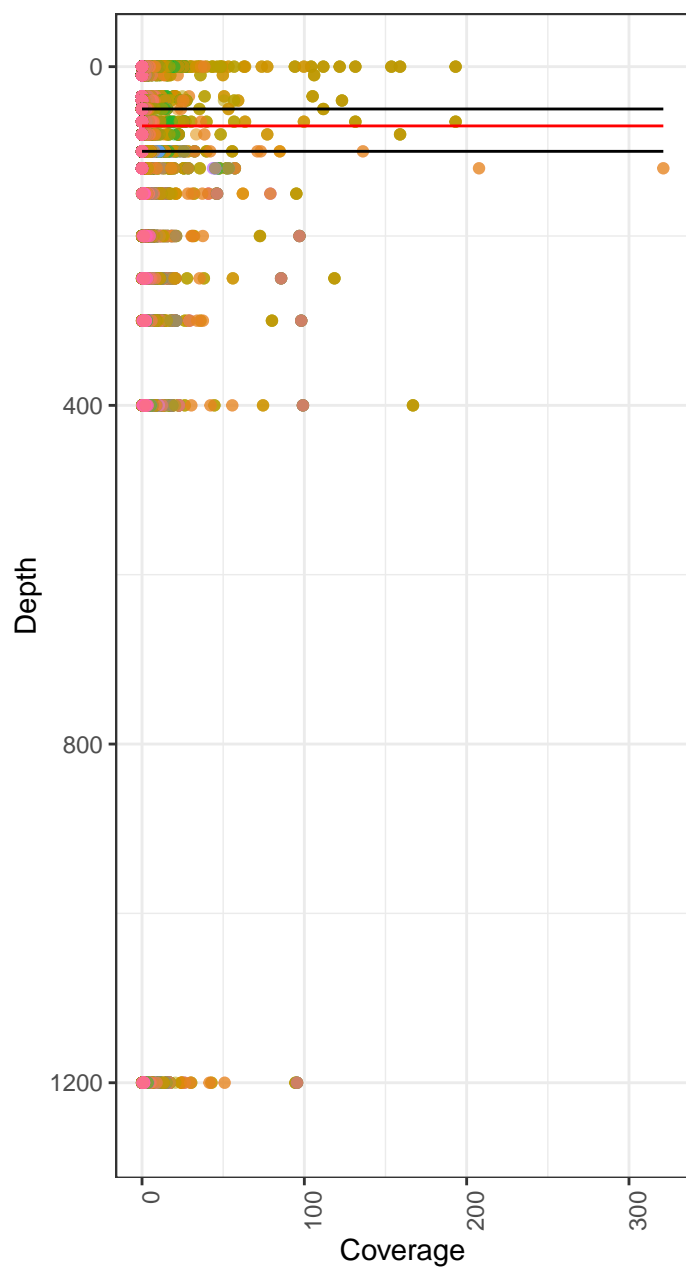


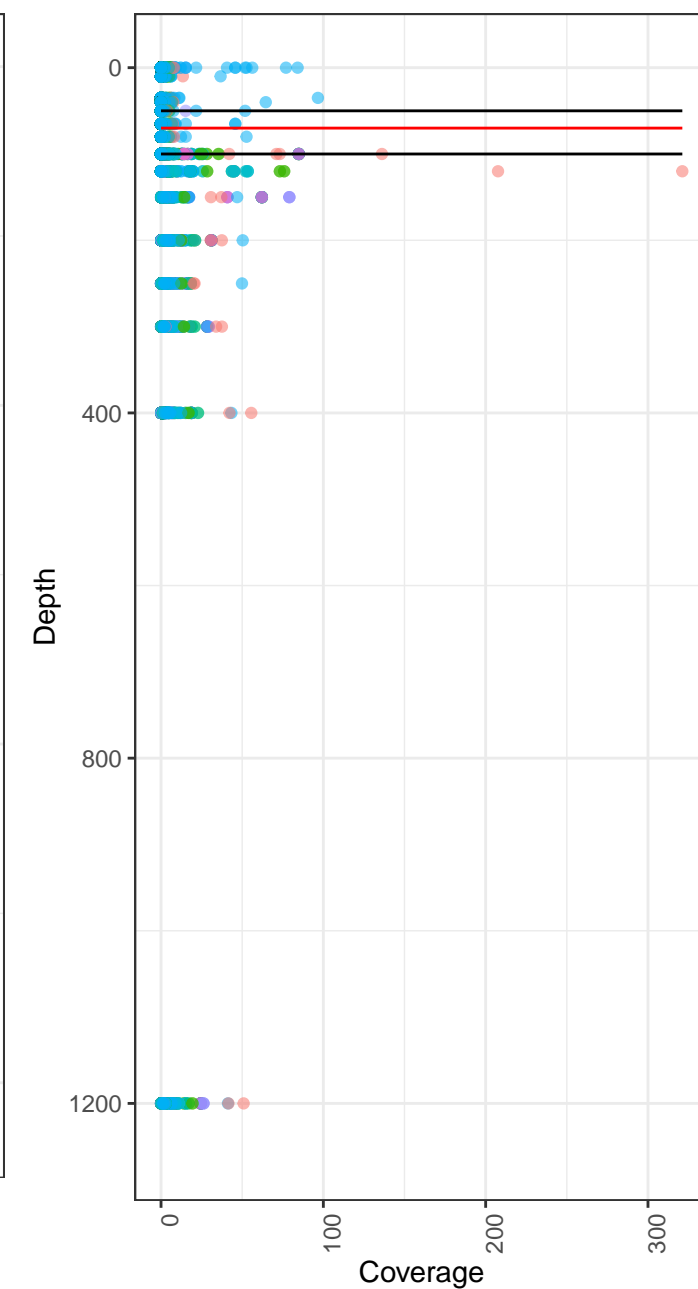
A Distribution of MAGs involved in carbon

3HP/4HB
CBB cycle
- Rubisco
CO Oxidation

Formaldehyde oxidation
Formate oxidation
methane production

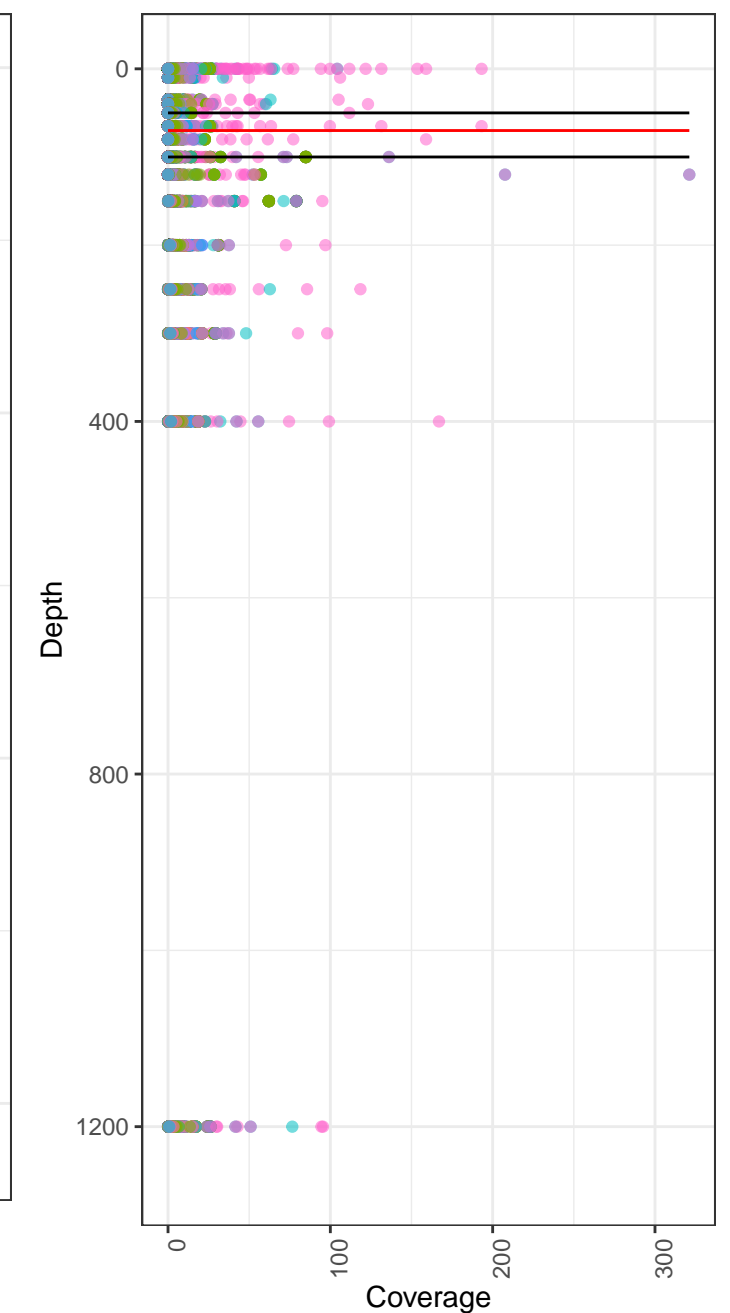
me ox
Me
Fo
pa
me
ox

Reaction

B Distribution of MAGs involved in nitrogen

Ammonia oxidation
anammox
comammox
nitrate reduction
nitric oxide reduction
nitrite oxidation
nitrite reduction
nitrofixation

Reaction

C Distribution of MAGs involved in sulfur

ancillary genes associated with the electron transport chain
core genes strongly associated with sulfur oxidation

sulfate reduction
sulfide oxidation
sulfite reduction
sulfur oxidation

Reaction