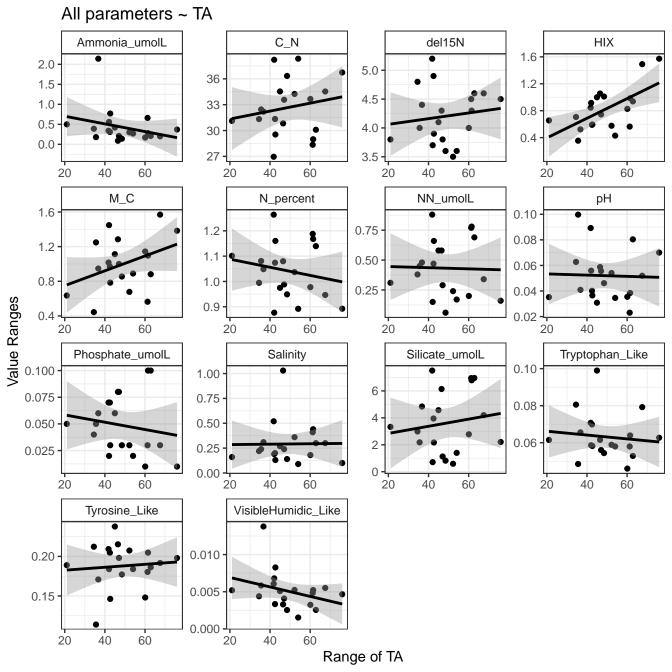
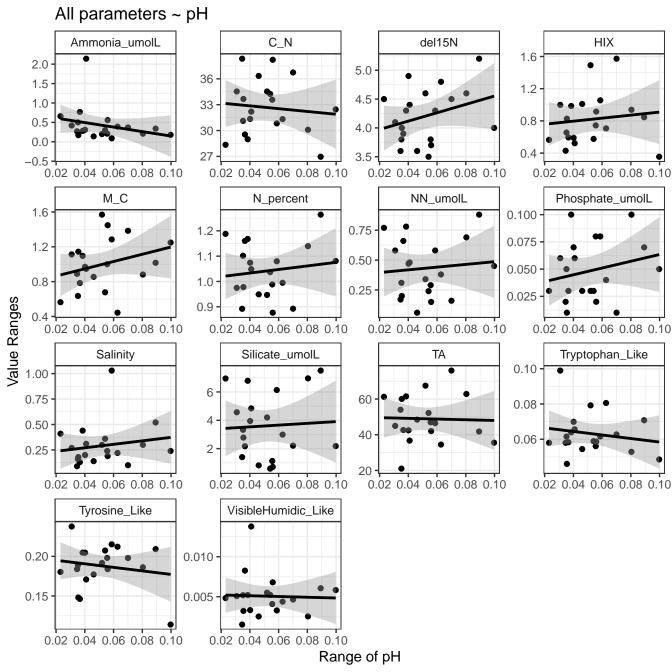
All parameters ~ Salinity Ammonia\_umolL C\_N del15N HIX 1.6 5.5 2 -35 5.0 1.2 4.5 -30 0.8 4.0 0 25 -0.4 3.5 0.25 0.50 0.75 1.00 0.25 0.50 0.75 1.00 0.25 0.50 0.75 1.00 0.25 0.50 0.75 1.00 NN\_umolL M\_C N\_percent рΗ 1.75 1.4 1.25 -0.10 1.50 1.3 1.00 -0.08 1.25 1.2 0.75 0.06 1.00 1.1 0.50 0.75 1.0 0.04 0.25 Value Ranges 0.50 0.9 -0.02 0.25 0.50 0.75 1.00 0.25 0.50 0.75 1.00 0.25 0.50 0.75 1.00 0.25 0.50 0.75 1.00 Phosphate\_umolL Silicate\_umolL TA Tryptophan\_Like 0.10 10.0 60 0.10 80.0 7.5 5.0 -40 0.05 0.06 2.5 20 0.25 0.50 0.75 1.00 0.25 0.50 0.75 1.00 0.25 0.50 0.75 1.00 0.25 0.50 0.75 1.00 Tyrosine\_Like VisibleHumidic\_Like 0.25 0.010 0.20 0.005 0.15 -0.000 0.25 0.50 0.75 1.00 0.25 0.50 0.75 1.00 Range of Salinity





All parameters ~ Phosphate\_umolL Ammonia\_umolL C\_N del15N HIX 1.6 2.0 -5.0 1.5 35 1.2 4.5 1.0 0.8 4.0 -30 0.5 0.0 0.4 3.5 0.0250.0500.0750.100 0.0250.0500.0750.100 0.0250.0500.0750.100 0.0250.0500.0750.100 M\_C N\_percent NN\_umolL рΗ 1.6 0.10 1.2 0.75 0.08 1.2 1.1 0.50 0.06 8.0 1.0 0.25 0.04 Value Ranges 0.9 0.02 0.0250.0500.0750.100 0.0250.0500.0750.100 0.0250.0500.0750.100 0.0250.0500.0750.100 Salinity Silicate\_umolL TA Tryptophan\_Like 0.10 1.00 8 6 0.75 60 -0.08 0.50 40 0.06 0.25 2 0.00 -20 -0.0250.0500.0750.100 0.0250.0500.0750.100 0.0250.0500.0750.100 0.0250.0500.0750.100 Tyrosine\_Like VisibleHumidic\_Like 0.20 0.010 -0.005 0.15 0.0250.0500.0750.100 0.0250.0500.0750.100 Range of Phosphate\_umolL

All parameters ~ Silicate\_umolL Ammonia\_umolL C\_N del15N HIX 1.6 2.0 5.0 -35 1.5 1.2 4.5 -1.0 8.0 4.0 -30 · 0.5 0.4 3.5 0.0 2 6 4 4 6 M\_C NN\_umolL рΗ N\_percent 1.6 0.10 1.2 0.75 0.08 1.2 1.1 0.50 0.06 8.0 1.0 0.25 0.04 Value Ranges 0.9 0.4 0.02 2 6 2 6 2 6 6 4 4 4 4 Phosphate\_umolL Salinity Tryptophan\_Like TΑ 0.10 0.100 1.00 0.075 0.75 60 -0.08 0.50 0.050 40 0.06 0.25 0.025 0.00 20 6 6 2 6 4 2 4 2 4 6 VisibleHumidic\_Like Tyrosine\_Like 0.20 0.010 -0.15 0.005 2 6 4 2

Range of Silicate\_umolL

All parameters ~ NN\_umolL Ammonia\_umolL C\_N del15N HIX 1.6 2.0 -5.0 1.5 -35 1.2 4.5 1.0 0.8 30 4.0 0.5 3.5 0.4 0.0 0.25 0.50 0.75 0.25 0.50 0.75 0.25 0.50 0.75 0.25 0.50 0.75 M\_C Phosphate\_umolL N\_percent рΗ 1.6 0.10 0.100 1.2 0.08 0.075 1.2 -1.1 -0.06 0.050 1.0 8.0 0.025 0.04 0.9 Value Ranges 0.000 0.4 0.02 0.25 0.50 0.75 0.50 0.75 0.25 0.50 0.75 0.25 0.50 0.75 0.25 Salinity Silicate\_umolL TΑ Tryptophan\_Like 0.10 1.00 -7.5 -0.75 -60 -0.08 5.0 0.50 2.5 40 0.25 0.06 0.0 0.00 20 0.25 0.50 0.75 0.25 0.50 0.75 0.25 0.50 0.75 0.25 0.50 0.75 Tyrosine\_Like VisibleHumidic\_Like 0.20 0.010 -0.005 0.15

0.25

0.50 0.75

0.25

0.50 0.75

Range of NN\_umolL

All parameters ~ Ammonia\_umolL C\_N del15N HIX M\_C 1.6 1.5 5.0 36 1.2 1.0 -4.5 32 0.8 0.5 4.0 28 0.4 0.0 3.5 0.0 0.5 1.0 1.5 2.0 0.0 0.5 1.0 1.5 2.0 0.0 0.5 1.0 1.5 2.0 0.0 0.5 1.0 1.5 2.0 NN\_umolL N\_percent рΗ Phosphate\_umolL 1.3 0.100 0.100 -1.00 0.075 1.2 0.075 0.75 1.1 0.050 0.050 0.50 0.025 0.025 1.0 0.25 Value Ranges 0.000 0.9 0.000 -2.0 1.0 1.5 0.0 0.5 1.0 1.5 0.5 2.0 0.0 0.5 1.0 1.5 2.0 0.5 1.0 1.5 2.0 0.0 0.0 Salinity Silicate\_umolL TΑ Tryptophan\_Like 0.10 0.8 -7.5 60 0.08 5.0 0.4 0.06 2.5 0.0 20 -0.0 0.0 0.5 1.0 1.5 2.0 0.0 0.5 1.0 1.5 2.0 0.0 0.5 1.0 1.5 2.0 0.0 0.5 1.0 1.5 VisibleHumidic\_Like Tyrosine\_Like 0.016 0.20 0.012 0.008 0.15 0.004 0.0 0.5 1.0 1.5 2.0 0.5 1.0 1.5 2.0 0.0

Range of Ammonia\_umolL

All parameters ~ M\_C Ammonia\_umolL C\_N del15N HIX 1.6 2.0 -5.0 36 -1.5 1.2 4.5 33 1.0 8.0 0.5 4.0 30 0.4 0.0 27 3.5 1.2 1.2 0.4 0.8 1.2 1.6 0.4 0.8 1.2 1.6 0.4 8.0 1.6 0.4 8.0 1.6 N\_percent NN\_umolL Phosphate\_umolL рΗ 0.10 0.100 1.2 -0.75 0.08 0.075 1.1 0.50 0.06 -0.050 1.0 0.25 0.04 0.025 0.9 Value Ranges 0.02 1.2 0.8 1.2 0.4 0.8 1.2 0.8 1.6 1.2 0.4 1.6 1.6 0.4 0.4 8.0 1.6 Salinity Tryptophan\_Like Silicate\_umolL TΑ 0.10 1.00 -6 0.75 60 -0.08 -0.50 40 0.06 0.25 2 -0.00 20 1.2 1.2 0.8 0.4 0.8 1.6 0.4 0.8 1.2 1.6 1.2 0.4 1.6 0.4 0.8 Tyrosine\_Like VisibleHumidic\_Like 0.20 0.010 -0.15 -0.005 0.4 0.8 1.2 1.6 0.4 0.8 1.2 1.6

Range of M\_C

All parameters ~ HIX Ammonia\_umolL C\_N del15N M\_C 2.0 5.0 1.5 36 -1.5 1.2 -4.5 1.0 33 0.5 0.9 4.0 30 0.0 0.6 27 3.5 -0.51.2 1.2 0.4 8.0 1.6 0.4 0.8 1.2 1.6 0.4 0.8 1.6 0.4 8.0 1.2 1.6 NN\_umolL Phosphate\_umolL N\_percent рΗ 0.10 0.100 1.2 0.75 0.08 0.075 1.1 0.50 0.06 0.050 1.0 0.25 0.04 0.025 0.9 Value Ranges 0.02 1.2 0.8 1.2 1.2 0.8 0.8 0.4 1.6 0.4 0.8 1.6 0.4 1.6 0.4 1.2 1.6 Tryptophan\_Like Salinity Silicate\_umolL TΑ 0.10 -1.00 80 6 0.75 60 0.08 -0.50 40 0.06 0.25 20 1.2 0.4 0.8 1.6 0.8 1.2 1.6 0.8 1.2 1.6 0.8 1.2 0.4 0.4 0.4 Tyrosine\_Like VisibleHumidic\_Like 0.25 0.010 0.20 0.005 0.15

Range of HIX

0.4

0.8

1.2

1.6

0.4

0.8

1.2

1.6

All parameters ~ VisibleHumidic\_Like Ammonia\_umolL C\_N del15N HIX 1.6 2.0 5.0 35 1.2 1.5 4.5 1.0 8.0 30 0.5 4.0 0.4 0.0 3.5 25 0.010 0.010 0.010 0.005 0.010 0.005 0.005 0.005 M\_C NN\_umolL N\_percent рΗ 1.6 1.3 0.100 1.00 1.2 0.75 0.075 1.2 1.1 0.50 0.050 0.8 1.0 0.25 0.025 Value Ranges 0.9 0.4 0.010 0.010 0.010 0.005 0.010 0.005 0.005 0.005 Phosphate\_umolL Salinity Silicate\_umolL TΑ 0.100 1.00 8 0.075 0.75 -60 6 0.50 -0.050 4 40 0.25 0.025 20 · 0.00 0.000 0.010 0.005 0.005 0.010 0.005 0.010 0.005 0.010 Tryptophan\_Like Tyrosine\_Like 0.10 0.20 0.08 0.15 -0.06 0.005 0.010 0.005 0.010 Range of VisibleHumidic\_Like

All parameters ~ Tryptophan\_Like Ammonia\_umolL C\_N del15N HIX5.5 1.6 2.0 36 5.0 -1.5 1.2 33 4.5 1.0 8.0 0.5 30 4.0 -0.0 0.4 27 -3.5 0.08 0.08 0.06 0.10 0.06 0.08 0.10 0.06 0.08 0.10 0.06 0.10 M\_C NN\_umolL N\_percent рΗ 1.6 0.100 1.2 -0.75 0.075 1.2 1.1 0.50 0.050 1.0 8.0 0.25 0.025 0.9 -Value Ranges 0.4 0.10 0.08 0.10 0.06 0.08 0.10 0.06 0.08 0.10 0.06 0.06 0.08 Phosphate\_umolL Salinity Silicate\_umolL TΑ 0.100 1.00 -7.5 0.75 -60 -0.075 5.0 0.50 -0.050 40 2.5 0.25 -0.025 0.00 20 0.10 0.06 0.08 0.10 0.06 0.08 0.06 0.08 0.06 0.08 0.10 0.10 Tyrosine\_Like VisibleHumidic\_Like 0.25 0.010 -0.20 0.005 0.15 0.06 0.08 0.10 0.06 0.08 0.10 Range of Tryptophan\_Like

All parameters ~ Tyrosine\_Like Ammonia\_umolL C\_N del15N HIX 1.6 2.0 5.0 -36 1.2 1.5 4.5 -33 1.0 8.0 4.0 -0.5 30 0.4 -3.5 -0.0 27 0.15 0.20 0.15 0.15 0.20 0.15 0.20 0.20 M\_C N\_percent NN\_umolL рΗ 1.6 0.10 1.2 0.75 -0.08 1.2 -1.1 0.50 0.06 8.0 1.0 0.25 0.04 Value Ranges 0.9 0.00 0.4 0.02 0.15 0.20 0.15 0.20 0.15 0.20 0.15 0.20 Phosphate\_umolL Salinity Silicate\_umolL TΑ 0.100 1.00 6 0.075 0.75 60 0.050 -0.50 0.25 -2 0.025 40 0.00 0 0.000 20 0.15 0.20 0.20 0.15 0.15 0.20 0.15 0.20 Tryptophan\_Like VisibleHumidic\_Like 0.10 0.08 0.010 0.06 0.005 0.04 0.20 0.15 0.15 0.20

Range of Tyrosine\_Like

All parameters ~ del15N Ammonia\_umolL HIXC\_N M\_C 1.6 1.6 •• 2.0 -35 1.5 -1.2 1.2 1.0 -0.8 30 -8.0 0.5 0.4 0.0 0.4 5.0 3.5 4.5 5.0 4.0 4.5 5.0 3.5 4.0 4.5 4.0 3.5 4.0 4.5 5.0 3.5 Phosphate\_umolL N\_percent NN\_umolL рΗ 0.10 0.100 1.2 0.75 -0.08 0.075 1.1 0.50 0.06 0.050 1.0 0.25 0.04 0.025 Value Ranges 0.9 -0.02 5.0 5.0 4.0 4.5 5.0 4.5 3.5 4.5 4.5 3.5 4.0 4.0 3.5 4.0 5.0 3.5 Salinity Silicate\_umolL TΑ Tryptophan\_Like 0.10 1.00 7.5 -0.75 60 0.08 5.0 -0.50 40 2.5 0.06 0.25 0.0 0.00 20 4.5 4.0 4.5 5.0 3.5 4.0 5.0 3.5 4.0 4.5 5.0 4.0 4.5 3.5 3.5 5.0 Tyrosine\_Like VisibleHumidic\_Like 0.20 0.010 -0.15 -0.005 3.5 4.0 4.5 5.0 3.5 4.0 4.5 5.0

Range of del15N

All parameters ~ C\_N Ammonia\_umolL del15N HIX $M_C$ 1.6 1.6 5.2 2.0 -4.8 1.5 1.2 1.2 4.4 1.0 4.0 0.8 8.0 0.5 3.6 0.0 0.4 0.4 36 36 30 33 27 30 33 27 30 33 36 27 30 33 36 27 NN\_umolL Phosphate\_umolL N\_percent рΗ 0.10 0.100 1.2 0.75 0.075 0.08 1.1 0.50 0.050 0.06 1.0 0.25 0.025 0.04 0.9 -Value Ranges 0.00 0.000 0.02 33 36 30 33 36 30 36 30 36 27 30 27 33 33 27 27 Tryptophan\_Like Salinity Silicate\_umolL TΑ 0.10 1.00 8 0.75 6 60 -0.08 0.50 4 40 2 -0.25 0.06 0 -0.00 20 30 33 36 27 30 33 36 30 33 36 27 27 27 30 33 36 VisibleHumidic\_Like Tyrosine\_Like 0.20 0.010 -0.15 0.005 27 30 33 36 27 30 33 36

Range of C\_N

All parameters ~ N\_percent Ammonia\_umolL C\_N del15N HIX 1.6 2.0 -5.0 35 1.5 -1.2 -4.5 -1.0 8.0 30 -4.0 0.5 -0.4 0.0 3.5 25 -1.1 1.2 0.9 1.0 1.1 1.2 0.9 1.0 1.2 0.9 1.0 1.1 0.9 1.0 1.1 1.2 M\_C Phosphate\_umolL NN\_umolL рΗ 1.6 1.00 -0.10 0.09 0.75 0.08 1.2 0.06 -0.50 0.06 -0.8 0.25 0.03 0.04 Value Ranges 0.00 0.4 0.02 0.00 1.2 1.2 1.2 1.2 1.1 1.1 1.0 0.9 1.0 0.9 1.0 0.9 1.1 0.9 1.0 1.1 Tryptophan\_Like Salinity Silicate\_umolL TA 0.10 1.00 -7.5 0.75 -60 -0.08 5.0 0.50 40 2.5 0.06 -0.25 0.0 0.00 20 0.9 1.0 1.1 1.2 1.0 1.1 1.2 1.0 1.1 1.2 0.9 1.0 0.9 1.1 Tyrosine\_Like VisibleHumidic\_Like 0.20 0.010 -0.15 -0.005 1.2 0.9 1.0 1.1 1.2 0.9 1.0 1.1

Range of N\_percent