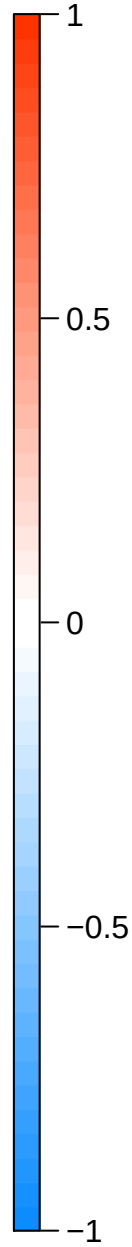
Module−trait relationships

	Latitude	Longitude	Salinity	NO2	PO4	NO2NO3	Chlorophyll	Temperature	Oxygen	CarbonExport	NPP
MEdarkgreen	0.0021 (1)	−0.18 (0.1)	−0.047 (0.7)	−0.0094 (0.9)	−0.046 (0.7)	−0.054 (0.7)	−0.077 (0.5)	0.21 (0.07)	−0.12 (0.3)	−0.0047 (1)	−0.26 (0.03)
MEdarkred	0.24 (0.04)	−0.1 (0.4)	−0.25 (0.04)	0.14 (0.2)	0.0041 (1)	−0.038 (0.7)	0.07 (0.6)	−0.27 (0.02)	0.079 (0.5)	0.3 (0.01)	−0.036 (0.8)
MEsalmon	0.017 (0.9)	−0.023 (0.8)	−0.57 (2e−07)	−0.061 (0.6)	−0.1 (0.4)	−0.065 (0.6)	−0.084 (0.5)	0.18 (0.1)	−0.033 (0.8)	0.27 (0.02)	−0.066 (0.6)
MEcyan	0.16 (0.2)	0.035 (0.8)	0.11 (0.3)	−0.067 (0.6)	−0.14 (0.2)	−0.067 (0.6)	−0.058 (0.6)	0.083 (0.5)	−0.029 (0.8)	0.027 (0.8)	−0.17 (0.1)
MEblack	−0.039 (0.7)	−0.14 (0.2)	0.092 (0.4)	0.23 (0.05)	0.022 (0.9)	0.063 (0.6)	−0.05 (0.7)	0.28 (0.02)	−0.29 (0.01)	0.28 (0.02)	−0.082 (0.5)
MEdarkorange	−0.066 (0.6)	−0.15 (0.2)	0.0014 (1)	0.23 (0.05)	0.12 (0.3)	0.11 (0.3)	−0.083 (0.5)	0.26 (0.02)	−0.29 (0.01)	−0.071 (0.6)	−0.14 (0.2)
MElightcyan	0.13 (0.3)	−0.21 (0.07)	−0.00067 (1)	−0.06 (0.6)	−0.15 (0.2)	−0.094 (0.4)	−0.064 (0.6)	−0.027 (0.8)	0.0063 (1)	−0.062 (0.6)	−0.17 (0.1)
MEmagenta	0.089 (0.5)	0.18 (0.1)	0.34 (0.004)	0.12 (0.3)	−0.12 (0.3)	−0.065 (0.6)	−0.065 (0.6)	0.15 (0.2)	−0.14 (0.2)	−0.065 (0.6)	−0.043 (0.7)
MEwhite	−0.13 (0.3)	0.068 (0.6)	0.076 (0.5)	0.0044 (1)	−0.049 (0.7)	−0.025 (0.8)	0.035 (0.8)	−0.27 (0.02)	0.12 (0.3)	0.12 (0.3)	0.33 (0.005)
MEgreen	0.16 (0.2)	0.19 (0.1)	−0.054 (0.7)	−0.085 (0.5)	−0.071 (0.5)	−0.11 (0.3)	0.44 (1e−04)	−0.16 (0.2)	0.31 (0.008)	−0.072 (0.5)	0.38 (8e−04)
MEpink	−0.18 (0.1)	0.031 (0.8)	−0.098 (0.4)	−0.045 (0.7)	0.14 (0.2)	−0.059 (0.6)	0.87 (2e−23)	−0.2 (0.1)	0.35 (0.003)	0.13 (0.3)	0.5 (6e−06)
MEgreenyellow	−0.18 (0.1)	0.19 (0.1)	−0.019 (0.9)	0.049 (0.7)	0.18 (0.1)	0.078 (0.5)	0.4 (5e−04)	−0.35 (0.003)	0.25 (0.03)	−0.061 (0.6)	0.97 (3e−44)
MEorange	−0.15 (0.2)	0.22 (0.07)	0.012 (0.9)	−0.08 (0.5)	−0.12 (0.3)	−0.079 (0.5)	−0.055 (0.6)	−0.013 (0.9)	0.05 (0.7)	−0.061 (0.6)	−0.017 (0.9)
MEtan	0.26 (0.03)	0.26 (0.02)	0.3 (0.009)	−0.095 (0.4)	−0.16 (0.2)	−0.095 (0.4)	−0.029 (0.8)	−0.2 (0.09)	0.14 (0.2)	0.042 (0.7)	0.027 (0.8)
MEblue	0.28 (0.01)	0.26 (0.03)	0.32 (0.006)	−0.018 (0.9)	−0.17 (0.1)	−0.088 (0.5)	−0.034 (0.8)	−0.19 (0.1)	0.09 (0.4)	0.11 (0.4)	0.044 (0.7)
MEpurple	0.26 (0.02)	0.24 (0.04)	0.25 (0.03)	−0.054 (0.7)	−0.14 (0.2)	−0.082 (0.5)	−0.023 (0.8)	−0.18 (0.1)	0.11 (0.3)	0.032 (0.8)	0.022 (0.9)
MEdarkturquoise	0.21 (0.07)	0.19 (0.1)	0.52 (2e−06)	−0.097 (0.4)	−0.38 (0.001)	−0.23 (0.05)	−0.24 (0.04)	−0.1 (0.4)	0.02 (0.9)	−0.098 (0.4)	−0.16 (0.2)
MEred	0.23 (0.05)	0.2 (0.08)	0.45 (6e−05)	−0.033 (0.8)	−0.34 (0.003)	−0.2 (0.08)	−0.16 (0.2)	−0.22 (0.06)	−0.057 (0.6)	−0.057 (0.6)	−0.12 (0.3)
MEturquoise	0.029 (0.8)	0.29 (0.01)	−0.07 (0.6)	−0.095 (0.4)	−0.091 (0.4)	−0.042 (0.7)	−0.037 (0.8)	0.26 (0.03)	−0.061 (0.6)	−0.055 (0.6)	−0.13 (0.3)
MEdarkgrey	−0.11 (0.4)	0.27 (0.02)	−0.048 (0.7)	−0.09 (0.4)	0.27 (0.02)	0.36 (0.002)	−0.11 (0.3)	0.22 (0.06)	−0.063 (0.6)	−0.11 (0.4)	−0.13 (0.3)
MElightgreen	−0.03 (0.8)	0.24 (0.04)	0.038 (0.7)	0.0039 (1)	−0.099 (0.4)	−0.045 (0.7)	−0.068 (0.6)	0.25 (0.04)	−0.19 (0.1)	0.078 (0.5)	−0.13 (0.3)
MElightyellow	−0.21 (0.07)	−0.0098 (0.9)	−0.027 (0.8)	−0.12 (0.3)	−0.076 (0.5)	−0.097 (0.4)	−0.12 (0.3)	−0.031 (0.8)	0.078 (0.5)	0.015 (0.9)	−0.056 (0.6)
MEroyalblue	−0.16 (0.2)	0.076 (0.5)	0.092 (0.4)	−0.11 (0.3)	−0.15 (0.2)	−0.094 (0.4)	−0.094 (0.4)	−0.091 (0.4)	0.11 (0.3)	−0.11 (0.3)	−0.022 (0.9)
MEmidnightblue	−0.13 (0.3)	−0.068 (0.6)	0.11 (0.4)	−0.1 (0.4)	−0.095 (0.4)	−0.08 (0.5)	−0.089 (0.5)	0.095 (0.4)	−0.013 (0.9)	−0.19 (0.1)	−0.084 (0.5)
MEgrey60	−0.055 (0.6)	−0.037 (0.8)	0.015 (0.9)	0.015 (0.9)	0.041 (0.7)	0.042 (0.7)	0.055 (0.6)	0.088 (0.5)	0.0025 (1)	−0.032 (0.8)	0.051 (0.7)
MEbrown	−0.028 (0.8)	−0.012 (0.9)	−0.1 (0.4)	−0.017 (0.9)	−0.02 (0.9)	−0.035 (0.8)	−0.0059 (1)	0.18 (0.1)	−0.011 (0.9)	−0.031 (0.8)	−0.031 (0.8)
MEyellow	−0.12 (0.3)	−0.17 (0.2)	0.075 (0.5)	−0.047 (0.7)	−0.025 (0.8)	−0.035 (0.8)	−0.1 (0.4)	0.18 (0.1)	−0.097 (0.4)	−0.14 (0.2)	−0.36 (0.002)