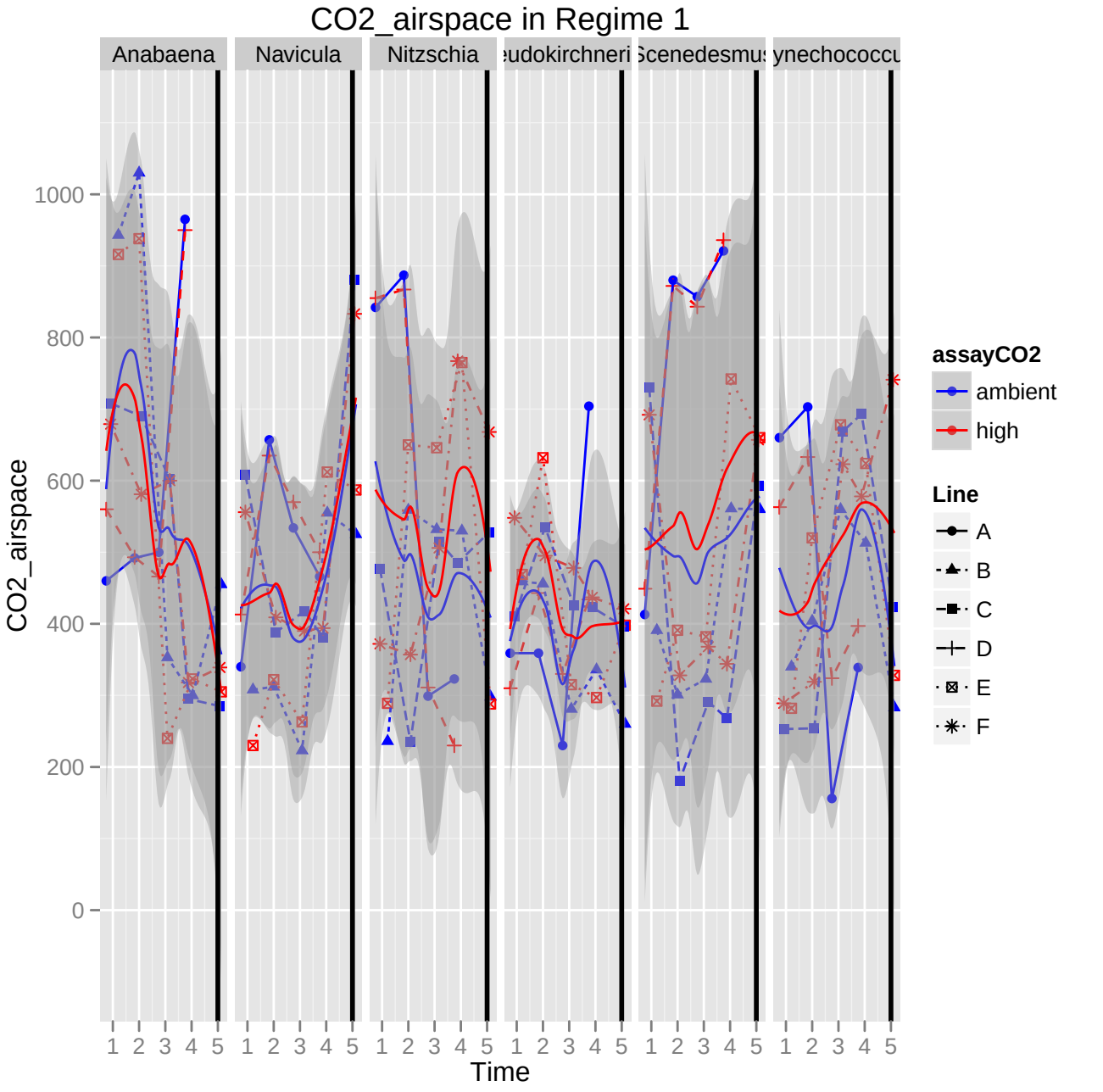
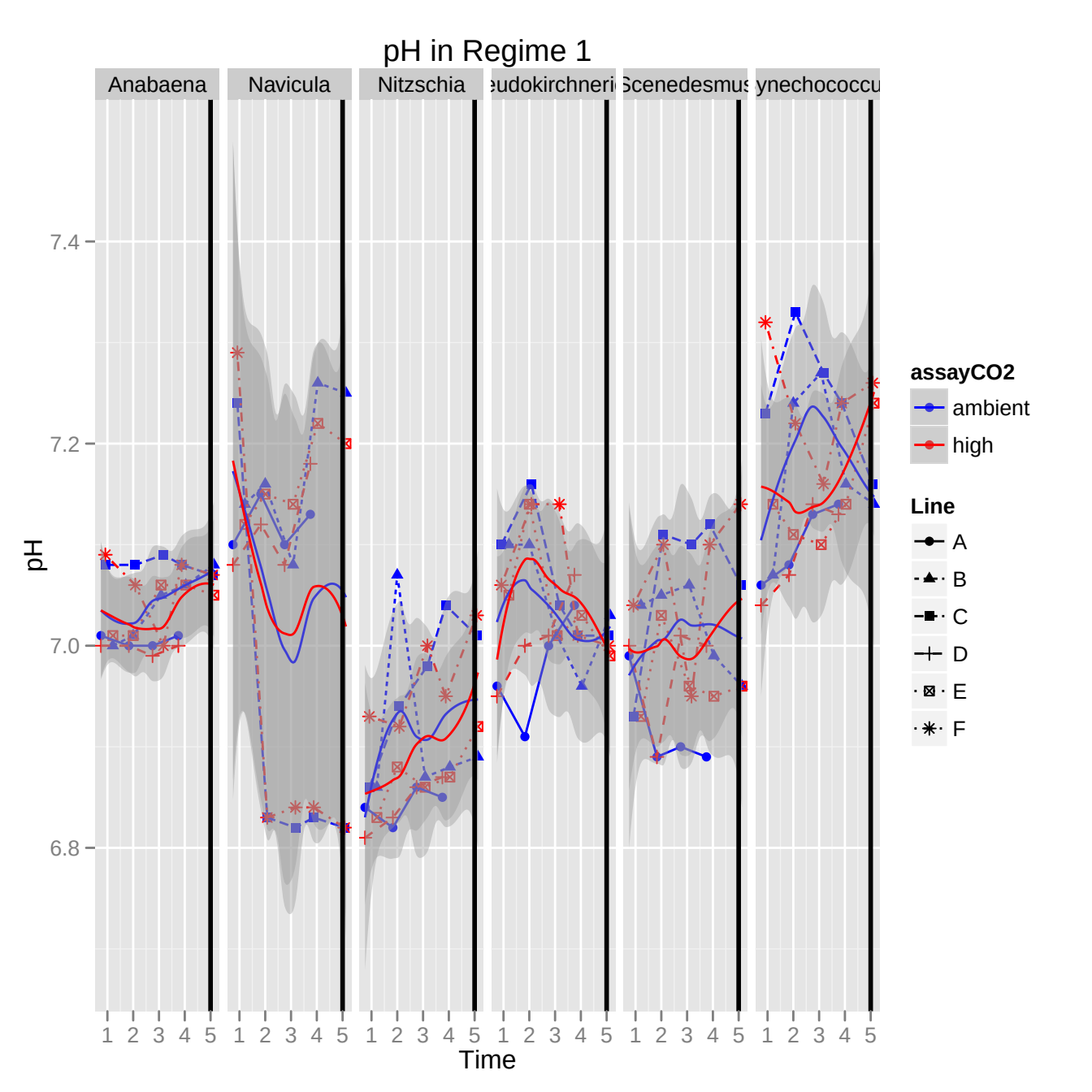
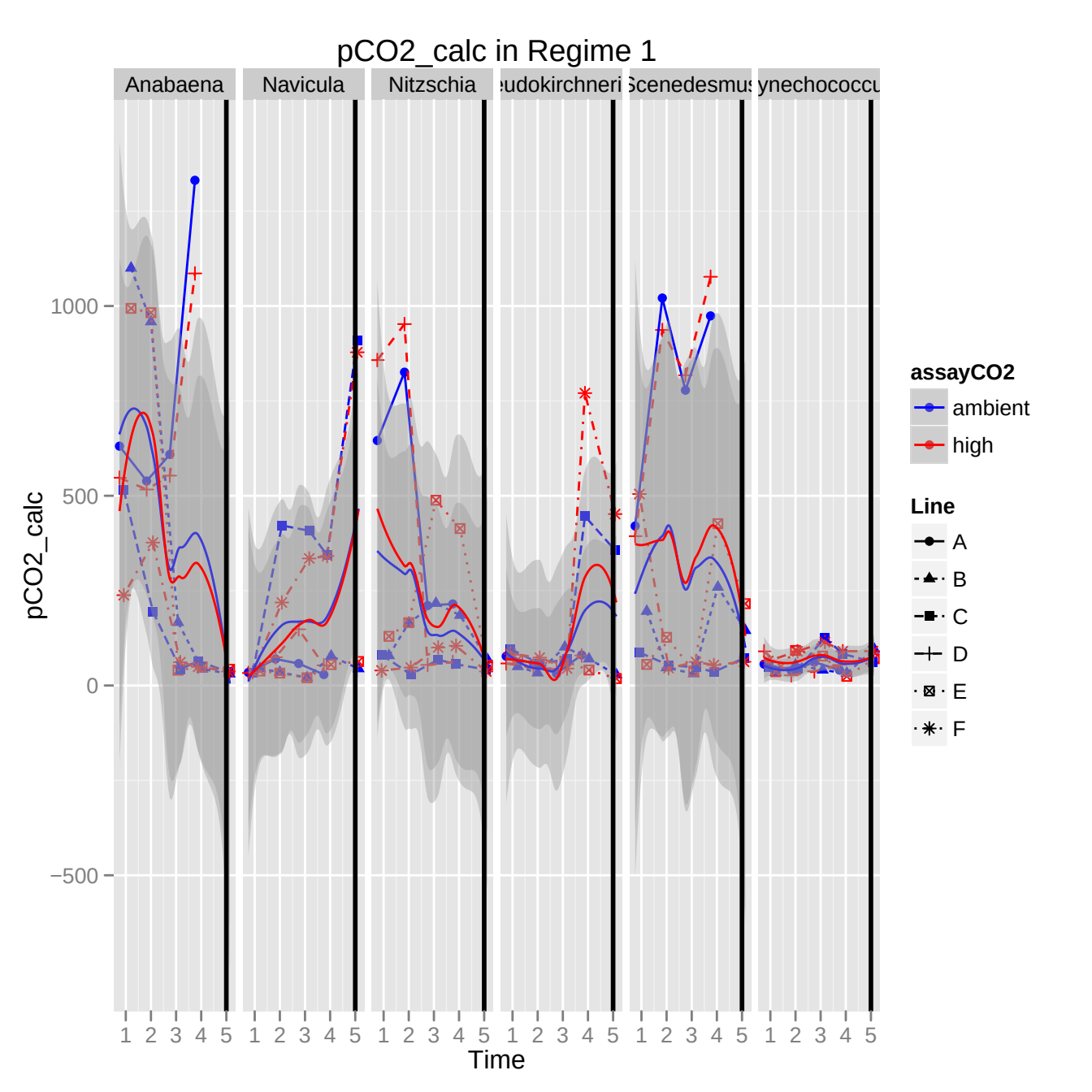
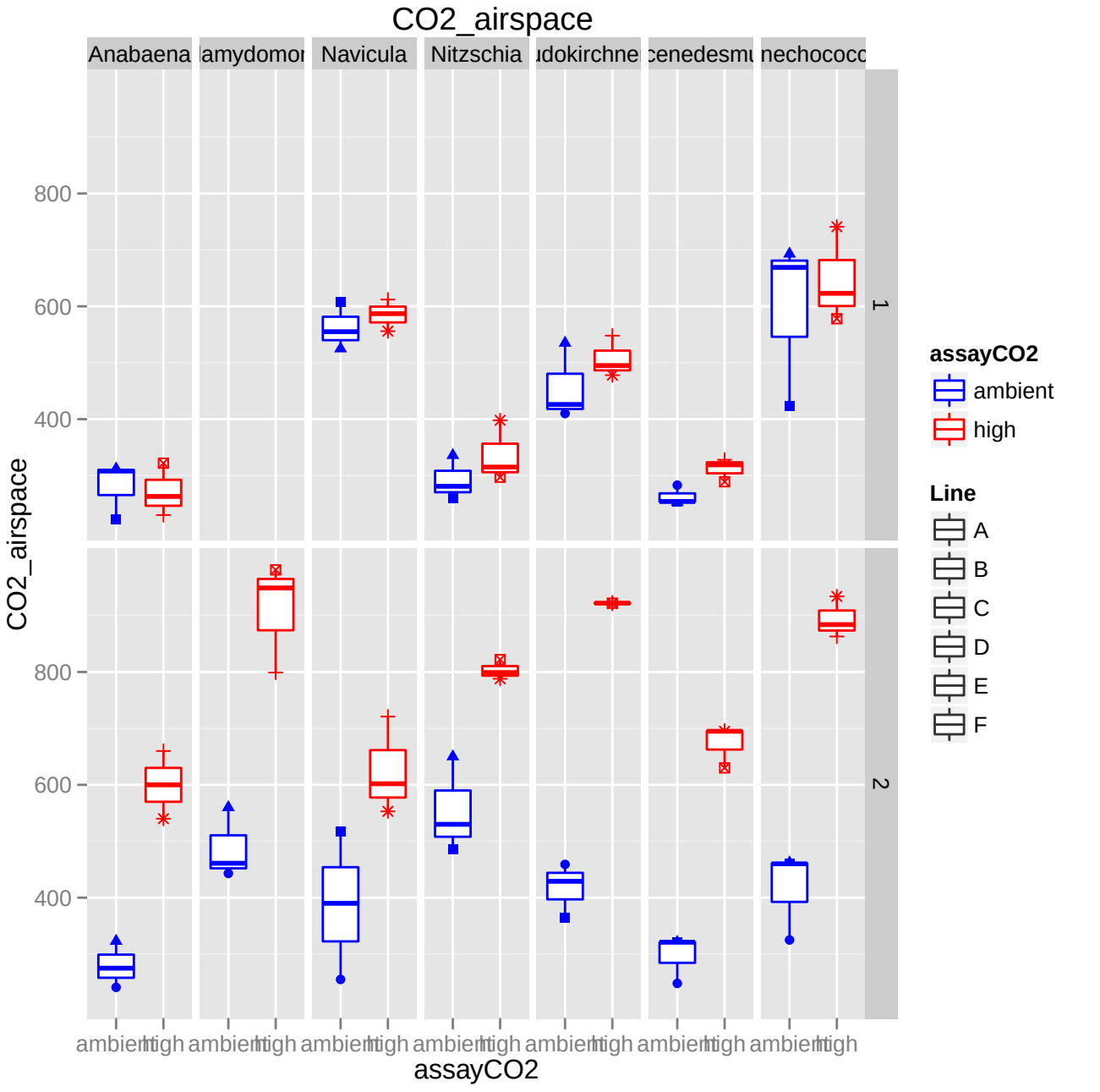

CO2_airspace in Regime 1
Anabaena
Navicula
Nitzschia
udokirchneri
Scenedesmus
ynechococcu
CO2_airspace
1000
800
600
400
200
0
1 2 3 4 5
Time
assayCO2
ambient
high
Line
A
B
C
D
E
F


pH in Regime 1
Anabaena
Navicula
Nitzschia
eudokirchneri
Scenedesmus
ynechococcu
pH
7.4
7.2
7.0
6.8
1 2 3 4 5
Time
assayCO2
ambient
high
Line
A
B
C
D
E
F


pCO2_calc in Regime 1
Anabaena
Navicula
Nitzschia
udokirchneri
cenedesmus
ynechococcu
1000
500
0
−500
pCO2_calc
1 2 3 4 5
Time
assayCO2
ambient
high
Line
A
B
C
D
E
F


CO2_airspace
Anabaena
amydomor
Navicula
Nitzschia
dokirchne
cenedesmu
nechococc
1
2
800
600
400
CO2_airspace
ambient
high
assayCO2
assayCO2
ambient
high
Line
A
B
C
D
E
F

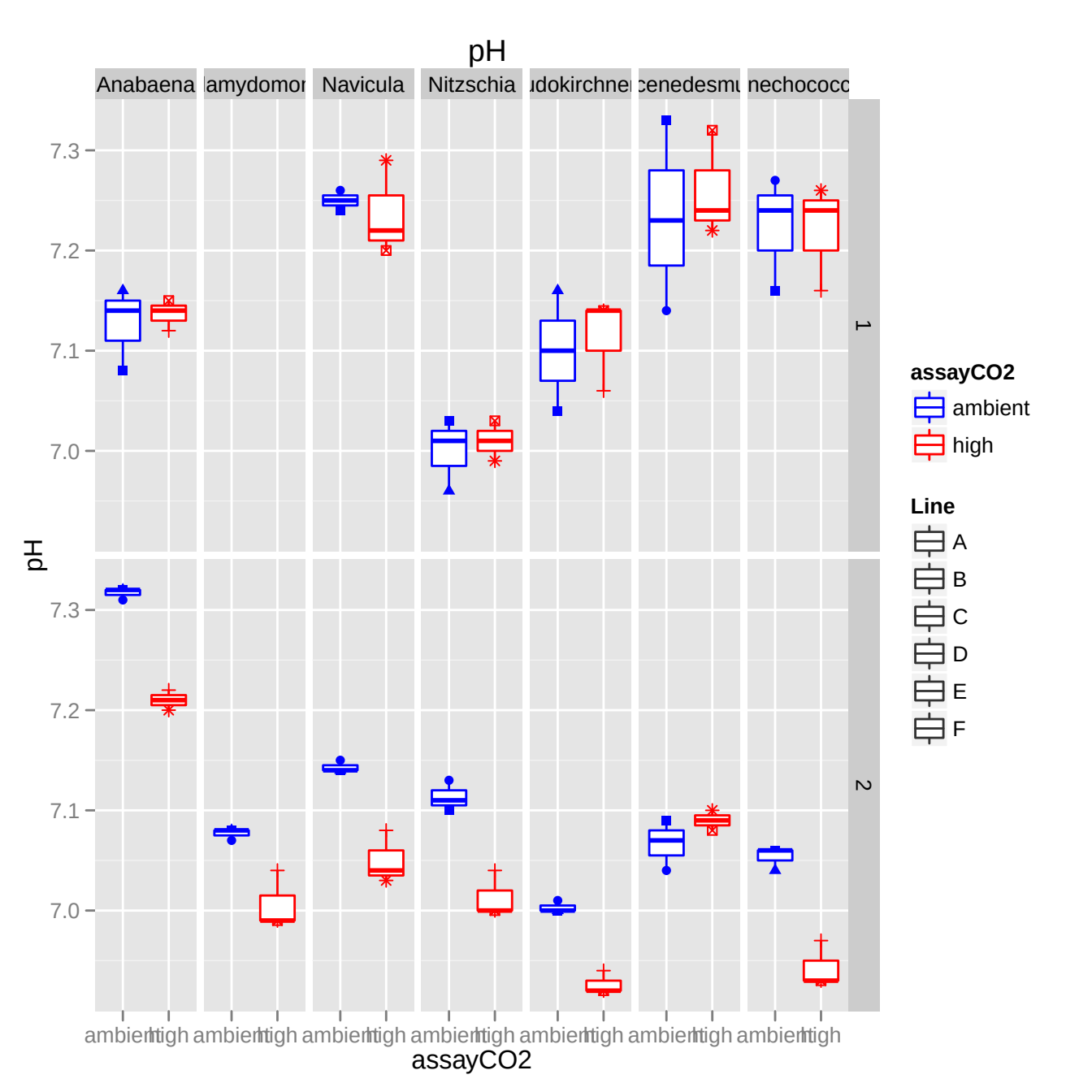
	Species	assayCO2	CO2_airspace_1	CO2_airspace_2
1	Anabaena	ambient	326.7	296.7
2	Anabaena	high	591.7	673.7
3	Chlamydomonas	ambient	NaN	415.7
4	Chlamydomonas	high	NaN	893.7
5	Navicula	ambient	290.7	279.7
6	Navicula	high	544.7	600.0
7	Nitzschia	ambient	291.0	488.0
8	Nitzschia	high	594.3	909.7
9	Pseudokirchneriella	ambient	302.7	555.3
10	Pseudokirchneriella	high	553.3	803.0
11	Scenedesmus	ambient	300.3	387.7
12	Scenedesmus	high	584.3	625.3
13	Synechococcus	ambient	245.7	417.7
14	Synechococcus	high	485.7	922.0

	assayCO2	CO2_airspace_1	CO2_airspace_2
1	ambient	292.8	405.8
2	high	559.0	775.3

CO2_airspace

	Df	Sum Sq	Mean Sq	F value	Pr(>F)	regime
temp[, "assayCO2"]	1	637602	637602.2	109.9446	1.932e−10	1
temp[, "Species"]	5	32149	6429.7	1.1087	3.819e−01	1
temp[, "assayCO2"]:temp[, "Species"]	5	4161	832.1	0.1435	9.801e−01	1
Residuals	24	139183	5799.3	NA	NA	1

	Df	Sum Sq	Mean Sq	F value	Pr(>F)	regime
temp[, "assayCO2"]	1	1433752	1433752	313.710	9.567e−17	2
temp[, "Species"]	6	425163	70861	15.505	9.287e−08	2
temp[, "assayCO2"]:temp[, "Species"]	6	101056	16843	3.685	7.986e−03	2
Residuals	28	127969	4570	NA	NA	2


pH
Anabaena
amydomor
Navicula
Nitzschia
udokirchne
cenedesmu
nechococc
1
2
7.3
7.2
7.1
7.0
pH
ambient
high
assayCO2
assayCO2
ambient
high
Line
A
B
C
D
E
F

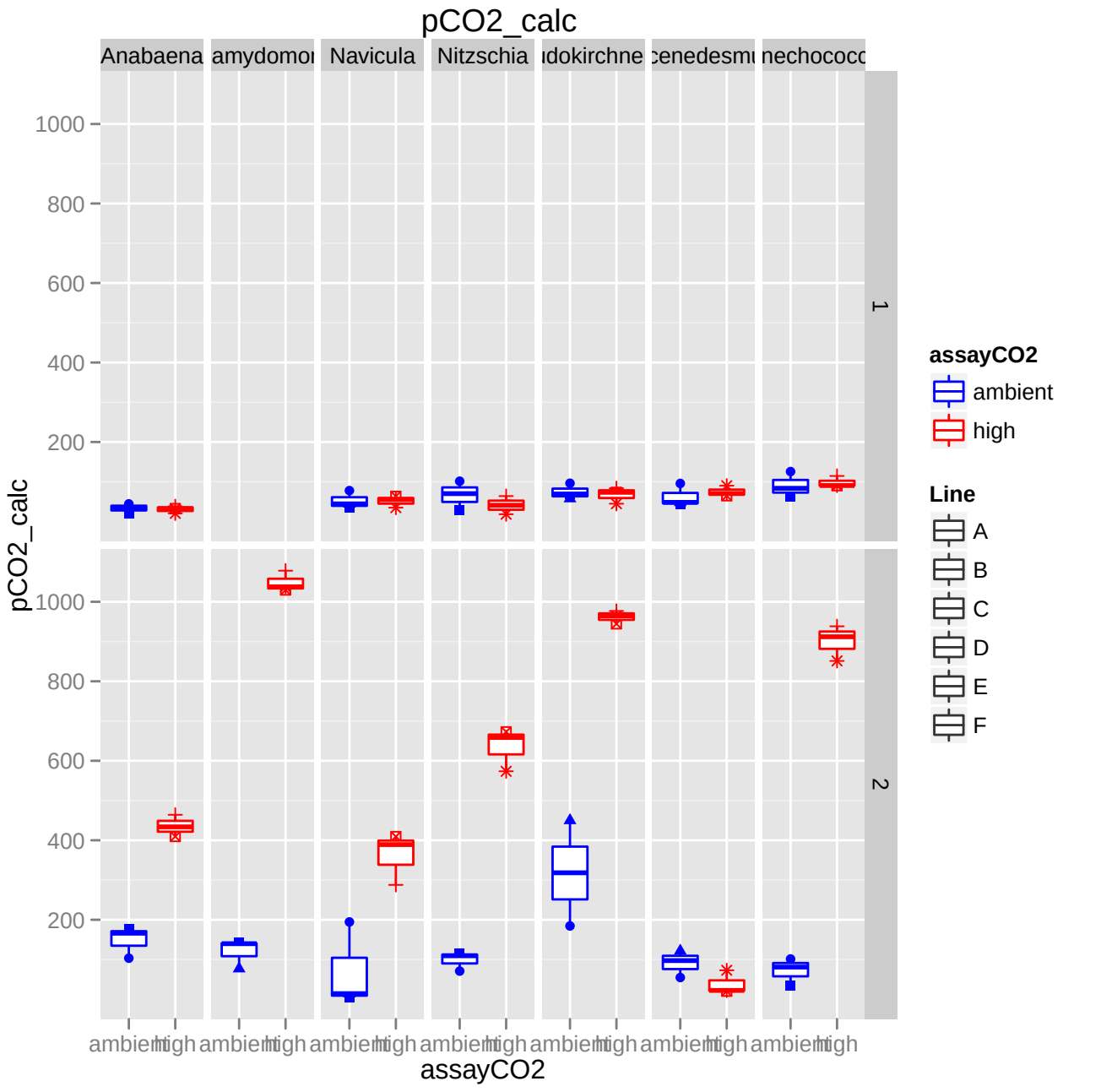
	Species	assayCO2	pH_1	pH_2
1	Anabaena	ambient	7.117	7.067
2	Anabaena	high	7.230	7.090
3	Chlamydomonas	ambient	NaN	7.053
4	Chlamydomonas	high	NaN	6.943
5	Navicula	ambient	7.097	7.317
6	Navicula	high	7.210	7.210
7	Nitzschia	ambient	7.123	7.077
8	Nitzschia	high	7.147	7.007
9	Pseudokirchneriella	ambient	7.167	7.113
10	Pseudokirchneriella	high	7.193	7.013
11	Scenedesmus	ambient	7.117	7.143
12	Scenedesmus	high	7.217	7.050
13	Synechococcus	ambient	7.147	7.003
14	Synechococcus	high	7.147	6.927

	assayCO2	pH_1	pH_2
1	ambient	7.128	7.110
2	high	7.191	7.034

pH

	Df	Sum Sq	Mean Sq	F value	Pr(>F)	regime
temp[, "assayCO2"]	1	0.035469	0.035469	3.1243	0.08985	1
temp[, "Species"]	5	0.008792	0.001758	0.1549	0.97648	1
temp[, "assayCO2"]:temp[, "Species"]	5	0.019947	0.003989	0.3514	0.87625	1
Residuals	24	0.272467	0.011353	NA	NA	1

	Df	Sum Sq	Mean Sq	F value	Pr(>F)	regime
temp[, "assayCO2"]	1	0.060952	0.0609524	209.84	1.556e−14	2
temp[, "Species"]	6	0.330762	0.0551270	189.78	2.412e−21	2
temp[, "assayCO2"]:temp[, "Species"]	6	0.019314	0.0032190	11.08	2.529e−06	2
Residuals	28	0.008133	0.0002905	NA	NA	2


pCO2_calc
Anabaena
amydomor
Navicula
Nitzschia
idokirchne
cenedesmu
nechococc
1
2
1000
800
600
400
200
pCO2_calc
ambient
high
assayCO2
assayCO2
ambient
high
Line
A
B
C
D
E
F

	Species	assayCO2	pCO2_calc_1	pCO2_calc_2
1	Anabaena	ambient	42.93	91.20
2	Anabaena	high	56.71	38.51
3	Chlamydomonas	ambient	NaN	72.29
4	Chlamydomonas	high	NaN	900.52
5	Navicula	ambient	80.49	148.62
6	Navicula	high	99.86	435.74
7	Nitzschia	ambient	57.57	119.57
8	Nitzschia	high	84.44	1048.47
9	Pseudokirchneriella	ambient	46.06	98.63
10	Pseudokirchneriella	high	75.60	635.03
11	Scenedesmus	ambient	51.14	70.93
12	Scenedesmus	high	61.85	362.10
13	Synechococcus	ambient	30.91	317.51
14	Synechococcus	high	55.19	962.00

	assayCO2	pCO2_calc_1	pCO2_calc_2
1	ambient	51.52	131.3
2	high	72.27	626.1

pCO2_calc

	Df	Sum Sq	Mean Sq	F value	Pr(>F)	regime
temp[, "assayCO2"]	1	3877.5	3877.51	6.7019	0.01611	1
temp[, "Species"]	5	8484.1	1696.82	2.9328	0.03325	1
temp[, "assayCO2"]:temp[, "Species"]	5	417.9	83.58	0.1445	0.97982	1
Residuals	24	13885.7	578.57	NA	NA	1

	Df	Sum Sq	Mean Sq	F value	Pr(>F)	regime
temp[, "assayCO2"]	1	2570697	2570697	771.37	6.359e−22	2
temp[, "Species"]	6	1526029	254338	76.32	4.782e−16	2
temp[, "assayCO2"]:temp[, "Species"]	6	1062164	177027	53.12	5.148e−14	2
Residuals	28	93313	3333	NA	NA	2