Observations and Measurements Reported in the Dataset:
Series 5: pCO2 as one of multiple stressors for Thalassiosira weissflogii - Carbonate system: ambient treatments

Field Names List

Supplied Name	Supplied description	Supplied Units	Standard Name
Lab_Id	Lab Id – Lab identifier where experiments were conducted	text	laboratory
Lat	Approximate Latitude Position of Lab; South is negative	decimal degrees	lat
Lon	Approximate Longitude Position of Lab; West is negative	decimal degrees	lon
temp	Growth temperature	degs celsius	temp_incub
light	light level - LL (Low Light) = 35umol m-2s-1; HL (High Light) = 65umol m-2s-1	umol m-2 s-1	irrad_incub
treatment	pCO2 treatment – ambient: target pH: 8.0 to 8.6; future: target pH: 7.6 to 8.3	text	treatment
date	Measurement date	text	day
dec_day	Decimal days elapsed during experiments	decimal days	days
dilution	Dilution Media	uM	unknown
	Media Preparation: Seawater was filtered through a 0.2 µm cartridge filter followed by a 0.2 µm Stericap (Millipore) filter, and vitamins and trace metals were added as in f/2. Nitrate (NO3: 58.9 µM), phosphate (PO4: 3.6 µM) and silicic acid (Si(OH)4: 53.5 µM) prepared as in f/2 were added using a 0.2 µm syringe filter. Because the seawater contained nutrients, the initial concentrations in the media were slightly higher (72 ± 5 µM NO3, 3.8 ± 0.5 µM PO4, and 54 ± 4 µM Si(OH)4). The carbonate chemistry was adjusted as necessary by adding HCl, NaHCO3, and Na2CO3 (closed system approach) .		
Flask1_Salinity	Flask1 Salinity	%o	sal
Flask1_pHT	Flask1 pHT	pH scale	pH
Flask1_T	Flask1 TA	umol/kg	TALK

Supplied Name	Supplied description	Supplied Units	Standard Name
Flask1_DIC	Flask1 DIC	umol/kg	DIC
Flask2_Salinity	Flask2 Salinity	%o	sal
Flask2_pHT	Flask2 pHT	pH scale	pH
Flask2_TA	Flask2 TA	umol/kg	TALK
Flask2_DIC	Flask2 DIC	umol/kg	DIC
Flask3_Salinity	Flask3 Salinity	%o	sal
Flask3_pHT	Flask3 pHT	pH scale	pH
Flask3_TA	Flask3 TA	umol/kg	TALK
Flask3_DIC	Flask3 DIC	umol/kg	DIC
Flask4_Salinity	Flask4 Salinity	%o	sal
Flask4_pHT	Flask4 pHT	pH scale	pH
Flask4_TA	Flask4 TA	umol/kg	TALK
Flask4_DIC	Flask4 DIC	umol/kg	DIC

Observations and Measurements Reported in the Dataset:
Series 5: pCO2 as one of multiple stressors for Thalassiosira weissflogii - Carbonate system: future treatments

Field Names List

Supplied Name	Supplied description	Supplied Units	Standard Name
Lab_Id	Lab Id – Lab identifier where experiments were conducted	text	laboratory
Lat	Approximate Latitude Position of Lab; South is negative	decimal degrees	lat
Lon	Approximate Longitude Position of Lab; West is negative	decimal degrees	lon
temp	Growth temperature	degs celsius	temp_incub
light	light level - LL (Low Light) = 35umol m-2s-1; HL (High Light) = 65umol m-2s-1	umol m-2 s-1	irrad_incub
treatment	pCO2 treatment – ambient: target pH: 8.0 to 8.6; future: target pH: 7.6 to 8.3	text	treatment
date	Measurement date	text	day
dec_day	Decimal days elapsed during experiments	decimal days	days
dilution	Dilution Media	uM	unknown
	Media Preparation: Seawater was filtered through a 0.2 µm cartridge filter followed by a 0.2 µm Stericap (Millipore) filter, and vitamins and trace metals were added as in f/2. Nitrate (NO3: 58.9 µM), phosphate (PO4: 3.6 µM) and silicic acid (Si(OH)4: 53.5 µM) prepared as in f/2 were added using a 0.2 µm syringe filter. Because the seawater contained nutrients, the initial concentrations in the media were slightly higher (72 ± 5 µM NO3, 3.8 ± 0.5 µM PO4, and 54 ± 4 µM Si(OH)4). The carbonate chemistry was adjusted as necessary by adding HCl, NaHCO3, and Na2CO3 (closed system approach) .		
Flask1_Salinity	Flask1 Salinity	%o	sal
Flask1_pHT	Flask1 pHT	pH scale	pH
Flask1_T	Flask1 TA	umol/kg	TALK

Supplied Name	Supplied description	Supplied Units	Standard Name
Flask1_DIC	Flask1 DIC	umol/kg	DIC
Flask2_Salinity	Flask2 Salinity	%o	sal
Flask2_pHT	Flask2 pHT	pH scale	pH
Flask2_TA	Flask2 TA	umol/kg	TALK
Flask2_DIC	Flask2 DIC	umol/kg	DIC
Flask3_Salinity	Flask3 Salinity	%o	sal
Flask3_pHT	Flask3 pHT	pH scale	pH
Flask3_TA	Flask3 TA	umol/kg	TALK
Flask3_DIC	Flask3 DIC	umol/kg	DIC
Flask4_Salinity	Flask4 Salinity	%o	sal
Flask4_pHT	Flask4 pHT	pH scale	pH
Flask4_TA	Flask4 TA	umol/kg	TALK
Flask4_DIC	Flask4 DIC	umol/kg	DIC

Observations and Measurements Reported in the Dataset:
Series 5: pCO2 as one of multiple stressors for Thalassiosira weissflogii - Cell Characteristics: C:N ratio

Field Names List

Supplied Name	Supplied description	Supplied Units	Standard Name
Lab_Id	Lab Id – Lab identifier where experiments were conducted	text	laboratory
Lat	Approximate Latitude Position of Lab; South is negative	decimal degrees	lat
Lon	Approximate Longitude Position of Lab; West is negative	decimal degrees	lon
Data	Cell characteristics data - C:N ratio (weight)	text	C_to_N
temperature	Growth temperature	degs celsius	temp_incub
pCO2	pCO2 treatment – ambient: target pH: 8.0 to 8.6; future: target pH: 7.6 to 8.3	text	treatment
light	light level - LL (Low Light) = 35umol m-2s-1; HL (High Light) = 65umol m-2s-1	text	irrad_incub
Tp1_Repl1	C:N ration (weight) at Time Point 1; for Replicate 1	ratio	C_to_N
Tp1_Repl2	C:N ration (weight) at Time Point 1; for Replicate 2	ratio	C_to_N
Tp1_Repl3	C:N ration (weight) at Time Point 1; for Replicate 3	ratio	C_to_N
Tp1_Repl4	C:N ration (weight) at Time Point 1; for Replicate 4	ratio	C_to_N
Tp2_Repl1	C:N ration (weight) at Time Point 2; for Replicate 1	ratio	C_to_N
Tp2_Repl2	C:N ration (weight) at Time Point 2; for Replicate 2	ratio	C_to_N
Tp2_Repl3	C:N ration (weight) at Time Point 2; for Replicate 3	ratio	C_to_N
Tp2_Repl4	C:N ration (weight) at Time Point 2; for Replicate 4	ratio	C_to_N
Tp3_Repl1	C:N ration (weight) at Time Point 3; for Replicate 1	ratio	C_to_N
Tp3_Repl2	C:N ration (weight) at Time Point 3; for Replicate 2	ratio	C_to_N

Supplied Name	Supplied description	Supplied Units	Standard Name
Tp3_Repl3	C:N ration (weight) at Time Point 3; for Replicate 3	ratio	C_to_N
Tp3_Repl4	C:N ration (weight) at Time Point 3; for Replicate 4	ratio	C_to_N
Tp4_Repl1	C:N ration (weight) at Time Point 4; for Replicate 1	ratio	C_to_N
Tp4_Repl2	C:N ration (weight) at Time Point 4; for Replicate 2	ratio	C_to_N
Tp4_Repl3	C:N ration (weight) at Time Point 4; for Replicate 3	ratio	C_to_N
Tp4_Repl4	C:N ration (weight) at Time Point 4; for Replicate 4	ratio	C_to_N

Observations and Measurements Reported in the Dataset:
Series 5: pCO2 as one of multiple stressors for Thalassiosira weissflogii - Cell Characteristics: Chl per cell

Field Names List

Supplied Name	Supplied description	Supplied Units	Standard Name
Lab_Id	Lab Id – Lab identifier where experiments were conducted	text	laboratory
Lat	Approximate Latitude Position of Lab; South is negative	decimal degrees	lat
Lon	Approximate Longitude Position of Lab; West is negative	decimal degrees	lon
Data	Cell characteristics data - chl. a cell-1 (pg cell-1)	text	chl_a
temperature	Growth temperature	degs celsius	temp_incub
pCO2	pCO2 treatment – ambient: target pH: 8.0 to 8.6; future: target pH: 7.6 to 8.3	text	treatment
light	light level - LL (Low Light) = 35umol m-2s-1; HL (High Light) = 65umol m-2s-1	text	irrad_incub
Tp1_Repl1	chl. a cell-1 at Time Point 1; for Replicate 1	pg per cell	chl_a
Tp1_Repl2	chl. a cell-1 at Time Point 1; for Replicate 2	pg per cell	chl_a
Tp1_Repl3	chl. a cell-1 at Time Point 1; for Replicate 3	pg per cell	chl_a
Tp1_Repl4	chl. a cell-1 at Time Point 1; for Replicate 4	pg per cell	chl_a
Tp2_Repl1	chl. a cell-1 at Time Point 2; for Replicate 1	pg per cell	chl_a
Tp2_Repl2	chl. a cell-1 at Time Point 2; for Replicate 2	pg per cell	chl_a
Tp2_Repl3	chl. a cell-1 at Time Point 2; for Replicate 3	pg per cell	chl_a
Tp2_Repl4	chl. a cell-1 at Time Point 2; for Replicate 4	pg per cell	chl_a
Tp3_Repl1	chl. a cell-1 at Time Point 3; for Replicate 1	pg per cell	chl_a
Tp3_Repl2	chl. a cell-1 at Time Point 3; for Replicate 2	pg per cell	chl_a

Supplied Name	Supplied description	Supplied Units	Standard Name
Tp3_Repl3	chl. a cell-1 at Time Point 3; for Replicate 3	pg per cell	chl_a
Tp3_Repl4	chl. a cell-1 at Time Point 3; for Replicate 4	pg per cell	chl_a
Tp4_Repl1	chl. a cell-1 at Time Point 4; for Replicate 1	pg per cell	chl_a
Tp4_Repl2	chl. a cell-1 at Time Point 4; for Replicate 2	pg per cell	chl_a
Tp4_Repl3	chl. a cell-1 at Time Point 4; for Replicate 3	pg per cell	chl_a
Tp4_Repl4	chl. a cell-1 at Time Point 4; for Replicate 4	pg per cell	chl_a

Observations and Measurements Reported in the Dataset:
Series 5: pCO2 as one of multiple stressors for Thalassiosira weissflogii - Cell Characteristics:
Chl. a: C ratio

Field Names List

Supplied Name	Supplied description	Supplied Units	Standard Name
Lab_Id	Lab Id – Lab identifier where experiments were conducted	text	laboratory
Lat	Approximate Latitude Position of Lab; South is negative	decimal degrees	lat
Lon	Approximate Longitude Position of Lab; West is negative	decimal degrees	lon
Data	Cell characteristics data - chl. a: C (g g-1)	text	chl_a
temperature	Growth temperature	degs celsius	temp_incub
pCO2	pCO2 treatment – ambient: target pH: 8.0 to 8.6; future: target pH: 7.6 to 8.3	text	treatment
light	light level - LL (Low Light) = 35umol m-2s-1; HL (High Light) = 65umol m-2s-1	text	irrad_incub
Tp1_Repl1	Chl.a: C at Time Point 1; for Replicate 1	g per g	chl_a
Tp1_Repl2	Chl.a: C at Time Point 1; for Replicate 2	g per g	chl_a
Tp1_Repl3	Chl.a: C at Time Point 1; for Replicate 3	g per g	chl_a
Tp1_Repl4	Chl.a: C at Time Point 1; for Replicate 4	g per g	chl_a
Tp2_Repl1	Chl.a: C at Time Point 2; for Replicate 1	g per g	chl_a
Tp2_Repl2	Chl.a: C at Time Point 2; for Replicate 2	g per g	chl_a
Tp2_Repl3	Chl.a: C at Time Point 2; for Replicate 3	g per g	chl_a
Tp2_Repl4	Chl.a: C at Time Point 2; for Replicate 4	g per g	chl_a
Tp3_Repl1	Chl.a: C at Time Point 3; for Replicate 1	g per g	chl_a
Tp3_Repl2	Chl.a: C at Time Point 3; for Replicate 2	g per g	chl_a

Supplied Name	Supplied description	Supplied Units	Standard Name
Tp3_Repl3	Chl.a: C at Time Point 3; for Replicate 3	g per g	chl_a
Tp3_Repl4	Chl.a: C at Time Point 3; for Replicate 4	g per g	chl_a
Tp4_Repl1	Chl.a: C at Time Point 4; for Replicate 1	g per g	chl_a
Tp4_Repl2	Chl.a: C at Time Point 4; for Replicate 2	g per g	chl_a
Tp4_Repl3	Chl.a: C at Time Point 4; for Replicate 3	g per g	chl_a
Tp4_Repl4	Chl.a: C at Time Point 4; for Replicate 4	g per g	chl_a

Field Names List

Supplied Name	Supplied description	Supplied Units	Standard Name
Lab_Id	Lab Id – Lab identifier where experiments were conducted	text	laboratory
Lat	Approximate Latitude Position of Lab; South is negative	decimal degrees	lat
Lon	Approximate Longitude Position of Lab; West is negative	decimal degrees	lon
Data	Cell characteristics data - DW cell-1 (pg cell-1)	text	dry_wgt
temperature	Growth temperature	degs celsius	temp_incub
pCO2	pCO2 treatment – ambient: target pH: 8.0 to 8.6; future: target pH: 7.6 to 8.3	text	treatment
light	light level - LL (Low Light) = 35umol m-2s-1; HL (High Light) = 65umol m-2s-1	text	irrad_incub
Tp1_Repl1	DW cell-1 at Time Point 1; for Replicate 1	pg per cell	dry_wgt
Tp1_Repl2	DW cell-1 at Time Point 1; for Replicate 2	pg per cell	dry_wgt
Tp1_Repl3	DW cell-1 at Time Point 1; for Replicate 3	pg per cell	dry_wgt
Tp1_Repl4	DW cell-1 at Time Point 1; for Replicate 4	pg per cell	dry_wgt
Tp2_Repl1	DW cell-1 at Time Point 2; for Replicate 1	pg per cell	dry_wgt
Tp2_Repl2	DW cell-1 at Time Point 2; for Replicate 2	pg per cell	dry_wgt
Tp2_Repl3	DW cell-1 at Time Point 2; for Replicate 3	pg per cell	dry_wgt
Tp2_Repl4	DW cell-1 at Time Point 2; for Replicate 4	pg per cell	dry_wgt
Tp3_Repl1	DW cell-1 at Time Point 3; for Replicate 1	pg per cell	dry_wgt
Tp3_Repl2	DW cell-1 at Time Point 3; for Replicate 2	pg per cell	dry_wgt

Supplied Name	Supplied description	Supplied Units	Standard Name
Tp3_Repl3	DW cell-1 at Time Point 3; for Replicate 3	pg per cell	dry_wgt
Tp3_Repl4	DW cell-1 at Time Point 3; for Replicate 4	pg per cell	dry_wgt
Tp4_Repl1	DW cell-1 at Time Point 4; for Replicate 1	pg per cell	dry_wgt
Tp4_Repl2	DW cell-1 at Time Point 4; for Replicate 2	pg per cell	dry_wgt
Tp4_Repl3	DW cell-1 at Time Point 4; for Replicate 3	pg per cell	dry_wgt
Tp4_Repl4	DW cell-1 at Time Point 4; for Replicate 4	pg per cell	dry_wgt

Observations and Measurements Reported in the Dataset:
Series 5: pCO2 as one of multiple stressors for Thalassiosira weissflogii - Cell Characteristics: POC per cell

Field Names List

Supplied Name	Supplied description	Supplied Units	Standard Name
Lab_Id	Lab Id – Lab identifier where experiments were conducted	text	laboratory
Lat	Approximate Latitude Position of Lab; South is negative	decimal degrees	lat
Lon	Approximate Longitude Position of Lab; West is negative	decimal degrees	lon
Data	Cell characteristics data - POC cell-1 (pg cell-1)	text	POC
temperature	Growth temperature	degs celsius	temp_incub
pCO2	pCO2 treatment – ambient: target pH: 8.0 to 8.6; future: target pH: 7.6 to 8.3	text	treatment
light	light level - LL (Low Light) = 35umol m-2s-1; HL (High Light) = 65umol m-2s-1	text	irrad_incub
Tp1_Repl1	POC cell-1 at Time Point 1; for Replicate 1	pg per cell	POC
Tp1_Repl2	POC cell-1 at Time Point 1; for Replicate 2	pg per cell	POC
Tp1_Repl3	POC cell-1 at Time Point 1; for Replicate 3	pg per cell	POC
Tp1_Repl4	POC cell-1 at Time Point 1; for Replicate 4	pg per cell	POC
Tp2_Repl1	POC cell-1 at Time Point 2; for Replicate 1	pg per cell	POC
Tp2_Repl2	POC cell-1 at Time Point 2; for Replicate 2	pg per cell	POC
Tp2_Repl3	POC cell-1 at Time Point 2; for Replicate 3	pg per cell	POC
Tp2_Repl4	POC cell-1 at Time Point 2; for Replicate 4	pg per cell	POC
Tp3_Repl1	POC cell-1 at Time Point 3; for Replicate 1	pg per cell	POC
Tp3_Repl2	POC cell-1 at Time Point 3; for Replicate 2	pg per cell	POC

Supplied Name	Supplied description	Supplied Units	Standard Name
Tp3_Repl3	POC cell-1 at Time Point 3; for Replicate 3	pg per cell	POC
Tp3_Repl4	POC cell-1 at Time Point 3; for Replicate 4	pg per cell	POC
Tp4_Repl1	POC cell-1 at Time Point 4; for Replicate 1	pg per cell	POC
Tp4_Repl2	POC cell-1 at Time Point 4; for Replicate 2	pg per cell	POC
Tp4_Repl3	POC cell-1 at Time Point 4; for Replicate 3	pg per cell	POC
Tp4_Repl4	POC cell-1 at Time Point 4; for Replicate 4	pg per cell	POC

Field Names List

Supplied Name	Supplied description	Supplied Units	Standard Name
Lab_Id	Lab Id – Lab identifier where experiments were conducted	text	laboratory
Lat	Approximate Latitude Position of Lab; South is negative	decimal degrees	lat
Lon	Approximate Longitude Position of Lab; West is negative	decimal degrees	lon
Data	Cell characteristics data – PON cell-1 (pg cell-1)	text	PON
temperature	Growth temperature	degs celsius	temp_incub
pCO2	pCO2 treatment – ambient: target pH: 8.0 to 8.6; future: target pH: 7.6 to 8.3	text	treatment
light	light level - LL (Low Light) = 35umol m-2s-1; HL (High Light) = 65umol m-2s-1	text	irrad_incub
Tp1_Repl1	PON cell-1 at Time Point 1; for Replicate 1	pg per cell	PON
Tp1_Repl2	PON cell-1 at Time Point 1; for Replicate 2	pg per cell	PON
Tp1_Repl3	PON cell-1 at Time Point 1; for Replicate 3	pg per cell	PON
Tp1_Repl4	PON cell-1 at Time Point 1; for Replicate 4	pg per cell	PON
Tp2_Repl1	PON cell-1 at Time Point 2; for Replicate 1	pg per cell	PON
Tp2_Repl2	PON cell-1 at Time Point 2; for Replicate 2	pg per cell	PON
Tp2_Repl3	PON cell-1 at Time Point 2; for Replicate 3	pg per cell	PON
Tp2_Repl4	PON cell-1 at Time Point 2; for Replicate 4	pg per cell	PON
Tp3_Repl1	PON cell-1 at Time Point 3; for Replicate 1	pg per cell	PON
Tp3_Repl2	PON cell-1 at Time Point 3; for Replicate 2	pg per cell	PON

Supplied Name	Supplied description	Supplied Units	Standard Name
Tp3_Repl3	PON cell-1 at Time Point 3; for Replicate 3	pg per cell	PON
Tp3_Repl4	PON cell-1 at Time Point 3; for Replicate 4	pg per cell	PON
Tp4_Repl1	PON cell-1 at Time Point 4; for Replicate 1	pg per cell	PON
Tp4_Repl2	PON cell-1 at Time Point 4; for Replicate 2	pg per cell	PON
Tp4_Repl3	PON cell-1 at Time Point 4; for Replicate 3	pg per cell	PON
Tp4_Repl4	PON cell-1 at Time Point 4; for Replicate 4	pg per cell	PON

Observations and Measurements Reported in the Dataset:
Series 5: pCO2 as one of multiple stressors for Thalassiosira weissflogii - Cell Characteristics: TEP per cell

Field Names List

Supplied Name	Supplied description	Supplied Units	Standard Name
Lab_Id	Lab Id – Lab identifier where experiments were conducted	text	laboratory
Lat	Approximate Latitude Position of Lab; South is negative	decimal degrees	lat
Lon	Approximate Longitude Position of Lab; West is negative	decimal degrees	lon
Data	Cell characteristics data – TEP/cell (pg GXeq. Cell-1)	text	TEP
temperature	Growth temperature	degs celsius	temp_incub
pCO2	pCO2 treatment – ambient: target pH: 8.0 to 8.6; future: target pH: 7.6 to 8.3	text	treatment
light	light level - LL (Low Light) = 35umol m-2s-1; HL (High Light) = 65umol m-2s-1	text	irrad_incub
Tp1_Repl1	TEP/cell at Time Point 1; for Replicate 1	pg GXeq. per cell	TEP
Tp1_Repl2	TEP/cell at Time Point 1; for Replicate 2	pg GXeq. per cell	TEP
Tp1_Repl3	TEP/cell at Time Point 1; for Replicate 3	pg GXeq. per cell	TEP
Tp1_Repl4	TEP/cell at Time Point 1; for Replicate 4	pg GXeq. per cell	TEP
Tp2_Repl1	TEP/cell at Time Point 2; for Replicate 1	pg GXeq. per cell	TEP
Tp2_Repl2	TEP/cell at Time Point 2; for Replicate 2	pg GXeq. per cell	TEP
Tp2_Repl3	TEP/cell at Time Point 2; for Replicate 3	pg GXeq. per cell	TEP
Tp2_Repl4	TEP/cell at Time Point 2; for Replicate 4	pg GXeq. per cell	TEP
Tp3_Repl1	TEP/cell at Time Point 3; for Replicate 1	pg GXeq. per cell	TEP
Tp3_Repl2	TEP/cell at Time Point 3; for Replicate 2	pg GXeq. per	TEP

Supplied Name	Supplied description	Supplied Units	Standard Name
		cell	
Tp3_Repl3	TEP/cell at Time Point 3; for Replicate 3	pg GXeq. per TEP cell	
Tp3_Repl4	TEP/cell at Time Point 3; for Replicate 4	pg GXeq. per TEP cell	
Tp4_Repl1	TEP/cell at Time Point 4; for Replicate 1	pg GXeq. per TEP cell	
Tp4_Repl2	TEP/cell at Time Point 4; for Replicate 2	pg GXeq. per TEP cell	
Tp4_Repl3	TEP/cell at Time Point 4; for Replicate 3	pg GXeq. per TEP cell	
Tp4_Repl4	TEP/cell at Time Point 4; for Replicate 4	pg GXeq. per TEP cell	

Series 5: pCO2 as one of multiple stressors for Thalassiosira weissflogii - cell numbers: ambient treatments

Field Names List

Supplied Name	Supplied description	Supplied Units	Standard Name
Lab_Id	Lab Id – Lab identifier where experiments were conducted	text	laboratory
Lat	Approximate Latitude Position of Lab; South is negative	decimal degrees	lat
Lon	Approximate Longitude Position of Lab; West is negative	decimal degrees	lon
temp	Growth temperature	degs celsius	temp_incub
light	light level - LL (Low Light) = 35umol m-2s-1; HL (High Light) = 65umol m-2s-1	umol s-1 m-2	irrad_incub
PCO2_treatment	pCO2 treatment – ambient: target pH: 8.0 to 8.6; future: target pH: 7.6 to 8.3	text	treatment
date	Date	YYYYMMDD	date
time	Time	HHMM	time
decimal_day	Decimal days elapsed during experiments	decimal days	days
dilution	Dilution Media	uM	unknown
	Media Preparation: Seawater was filtered through a 0.2 µm cartridge filter followed by a 0.2 µm Stericap (Millipore) filter, and vitamins and trace metals were added as in f/2. Nitrate (NO3: 58.9 µM), phosphate (PO4: 3.6 µM) and silicic acid (Si(OH)4: 53.5 µM) prepared as in f/2 were added using a 0.2 µm syringe filter. Because the seawater contained nutrients, the initial concentrations in the media were slightly higher (72 ± 5 µM NO3, 3.8 ± 0.5 µM PO4, and 54 ± 4 µM Si(OH)4). The carbonate chemistry was adjusted as necessary by adding HCl, NaHCO3, and Na2CO3 (closed system approach) .		
cell_number_1	Number of cells replicate 1	#/mL	number
cell_number	Number of cells replicate 2	#/mL	number

Supplied Name	Supplied description	Supplied Units	Standard Name
er_2			
cell_number_3	Number of cells replicate 3	#/mL	number
cell_number_4	Number of cells replicate 4	#/mL	number
FT_1	FT: dark adapted Fluorescence replicate 1	(tbd)	unknown
FT_2	FT: dark adapted Fluorescence replicate 2	(tbd)	unknown
FT_3	FT: dark adapted Fluorescence replicate 3	(tbd)	unknown
FT_4	FT: dark adapted Fluorescence replicate 4	(tbd)	unknown
QY_1	QY: Quantum Efficiency replicate 1	(tbd)	unknown
QY_2	QY: Quantum Efficiency replicate 2	(tbd)	unknown
QY_3	QY: Quantum Efficiency replicate 3	(tbd)	unknown
QY_4	QY: Quantum Efficiency replicate 4	(tbd)	unknown

Observations and Measurements Reported in the Dataset:
Series 5: pCO2 as one of multiple stressors for Thalassiosira weissflogii - cell numbers: future treatments

Field Names List

Supplied Name	Supplied description	Supplied Units	Standard Name
Lab_Id	Lab Id – Lab identifier where experiments were conducted	text	laboratory
Lat	Approximate Latitude Position of Lab; South is negative	decimal degrees	lat
Lon	Approximate Longitude Position of Lab; West is negative	decimal degrees	lon
temp	Growth temperature	degs celsius	temp_incub
light	light level - LL (Low Light) = 35umol m-2s-1; HL (High Light) = 65umol m-2s-1	umol s-1 m-2	irrad_incub
PCO2_treatment	pCO2 treatment – ambient: target pH: 8.0 to 8.6; future: target pH: 7.6 to 8.3	text	treatment
date	Date	YYYYMMDD	date
time	Time	HHMM	time
decimal_day	Decimal days elapsed during experiments	decimal days	days
dilution	Dilution Media	uM	unknown
	Media Preparation: Seawater was filtered through a 0.2 µm cartridge filter followed by a 0.2 µm Stericap (Millipore) filter, and vitamins and trace metals were added as in f/2. Nitrate (NO3: 58.9 µM), phosphate (PO4: 3.6 µM) and silicic acid (Si(OH)4: 53.5 µM) prepared as in f/2 were added using a 0.2 µm syringe filter. Because the seawater contained nutrients, the initial concentrations in the media were slightly higher (72 ± 5 µM NO3, 3.8 ± 0.5 µM PO4, and 54 ± 4 µM Si(OH)4). The carbonate chemistry was adjusted as necessary by adding HCl, NaHCO3, and Na2CO3 (closed system approach) .		
cell_number_1	Number of cells replicate 1	#/mL	number
cell_number	Number of cells replicate 2	#/mL	number

Supplied Name	Supplied description	Supplied Units	Standard Name
er_2			
cell_number_3	Number of cells replicate 3	#/mL	number
cell_number_4	Number of cells replicate 4	#/mL	number
FT_1	FT: dark adapted Fluorescence replicate 1	(tbd)	unknown
FT_2	FT: dark adapted Fluorescence replicate 2	(tbd)	unknown
FT_3	FT: dark adapted Fluorescence replicate 3	(tbd)	unknown
FT_4	FT: dark adapted Fluorescence replicate 4	(tbd)	unknown
QY_1	QY: Quantum Efficiency replicate 1	(tbd)	unknown
QY_2	QY: Quantum Efficiency replicate 2	(tbd)	unknown
QY_3	QY: Quantum Efficiency replicate 3	(tbd)	unknown
QY_4	QY: Quantum Efficiency replicate 4	(tbd)	unknown

Observations and Measurements Reported in the Dataset:
Series 5: pCO2 as one of multiple stressors for Thalassiosira weissflogii - growth rates

Field Names List

Supplied Name	Supplied description	Supplied Units	Standard Name
Lab_Id	Lab Id – Lab identifier where experiments were conducted	text	laboratory
Lat	Approximate Latitude Position of Lab; South is negative	decimal degrees	lat
Lon	Approximate Longitude Position of Lab; West is negative	decimal degrees	lon
Temp	Growth temperature	degs celsius	temp_incub
pCO2	pCO2 treatment – ambient: target pH: 8.0 to 8.6; future: target pH: 7.6 to 8.3	text	treatment
light	light level - LL (Low Light) = 35umol m-2s-1; HL (High Light) = 65umol m-2s-1	umol s-1 m-2	irrad_incub
replicate_1	Growth rate replicate 1	(tbd)	growth
replicate_2	Growth rate replicate 1	(tbd)	growth
replicate_3	Growth rate replicate 1	(tbd)	growth
replicate_4	Growth rate replicate 1	(tbd)	growth
avg	Growth rate average	(tbd)	growth
std	Growth rate stdev	(tbd)	growth
comments	Comments	text	comment

Observations and Measurements Reported in the Dataset:
Series 5: pCO2 as one of multiple stressors for Thalassiosira weissflogii – pH extremes

Field Names List

Supplied Name	Supplied description	Supplied Units	Standard Name
Lab_Id	Lab Id – Lab identifier where experiments were conducted	text	laboratory
Lat	Approximate Latitude Position of Lab; South is negative	decimal degrees	lat
Lon	Approximate Longitude Position of Lab; West is negative	decimal degrees	lon
Temp	Growth temperature	degs celsius	temp_incub
Irradiance	light level - LL (Low Light) = 35umol m-2s-1; HL (High Light) = 65umol m-2s-1	umol s-1 m-2	irrad_incub
pH_Ambient_min	pH Ambient min	pH scale	pH
pH_Ambient_max	pH Ambient max	pH scale	pH
pH_Future_min	pH Future min	pH scale	pH
pH_Future_max	pH Future max	pH scale	pH