Algorithm

Duration

Mean extent

or distance

Trend (km

2

or

deg/yr)

Trend (SE)

%

change

/yr

R

2

pValue

Area metrics (km

2

)

OCX: low level chl *a*

1998-2007

2.19E+007

2.37E+05

5.30E+04

1.08

0.19

<0.001

OCX: low level chl *a*

1998-2013

2.20E+007

5.46E+03

2.39E+04

0.250

0.04

<0.001

OCX: low level chl *a*

1998-2016

2.22E+007

9.34E+04

1.94E+04

0.420

0.14

<0.001

OCI: low level chl *a*

1998-2007

1.90E+007

1.31E+05

5.27E+04

0.690

0.07

<0.001

OCI: low level chl *a*

1998-2013

1.92E+007

6.89E+04

2.22E+04

0.360

0.07

<0.001

OCI: low level chl *a*

1998-2016

1.95E+007

1.31E+04

1.85E+04

0.560

0.20

<0.001

ADT\_adj

1993-2016

1.76E+007

1.19E+05

1.11E+04

0.68

0.29

<0.001

ADT\_adj

1998-2016

1.81E+007

3.78E+04

1.45E+04

0.21

0.02

<0.01

*Subtropical Seascape*

1998-2016

2.32E+07

5.28E+04

1.59E+04

0.230

0.05

<0.01

*Subtropical Seascape*

*1985-2016*

*2.32E+07*

*1.13E+04*

*6.79E+03*

*0.050*

*0.00*

*0.100*

Distance metrics (degrees)

*Station ALOHA to SS edge*

*1998-2016*

*3.26+00*

*2.37E -02*

*1.90E-02*

*0.727*

*0*

*0.220*

Station ALOHA to SS edge

1985-2016

2.98E+00

3.695E-02

8.12E-03

1.250

0.05

<0.001

Supplementary Table 1. Trends of subtropical expansion across geographic metrics, chl *a* algorithms, and time-series duration.

Italicized values denote no significant trend over the duration measured. The effect of climate oscillations has not been removed.