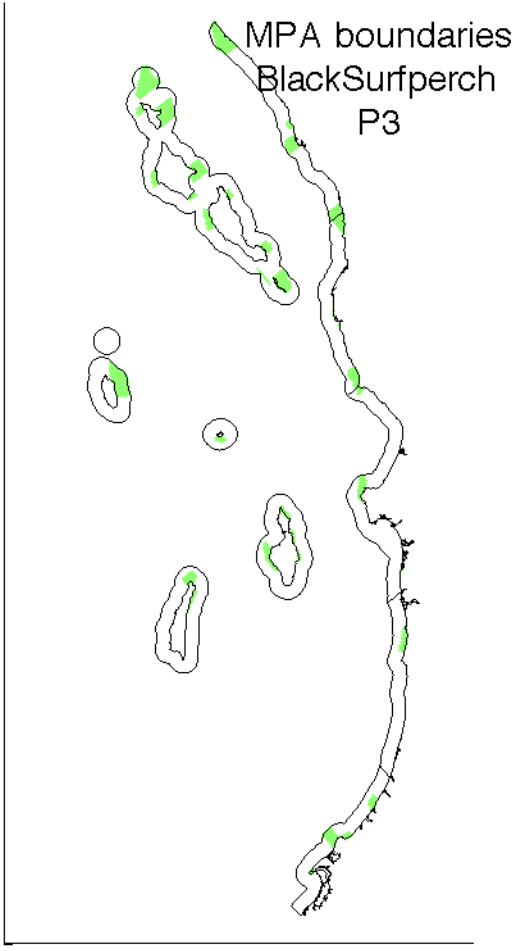
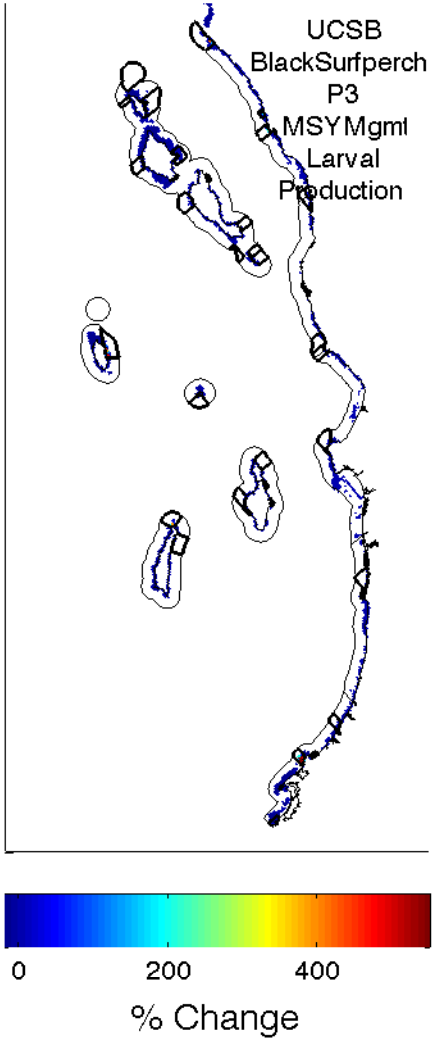
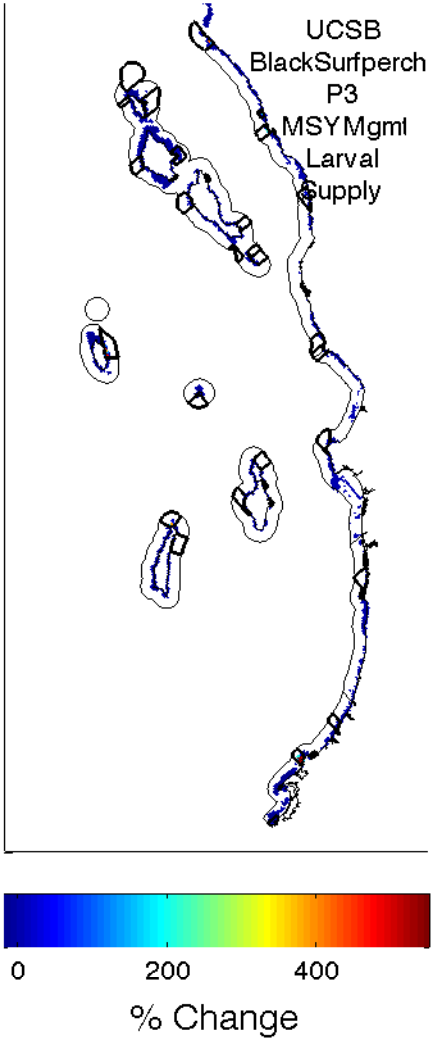
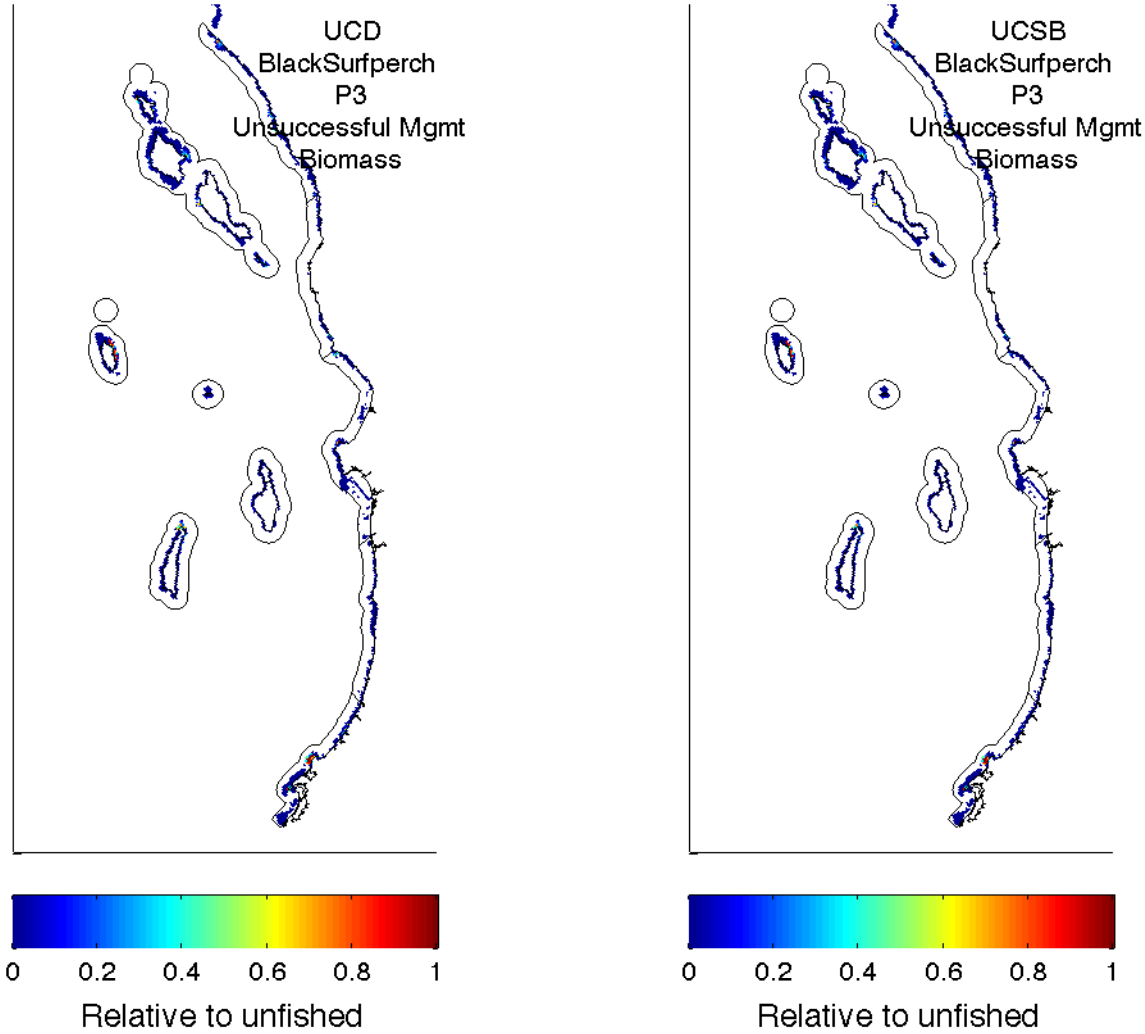
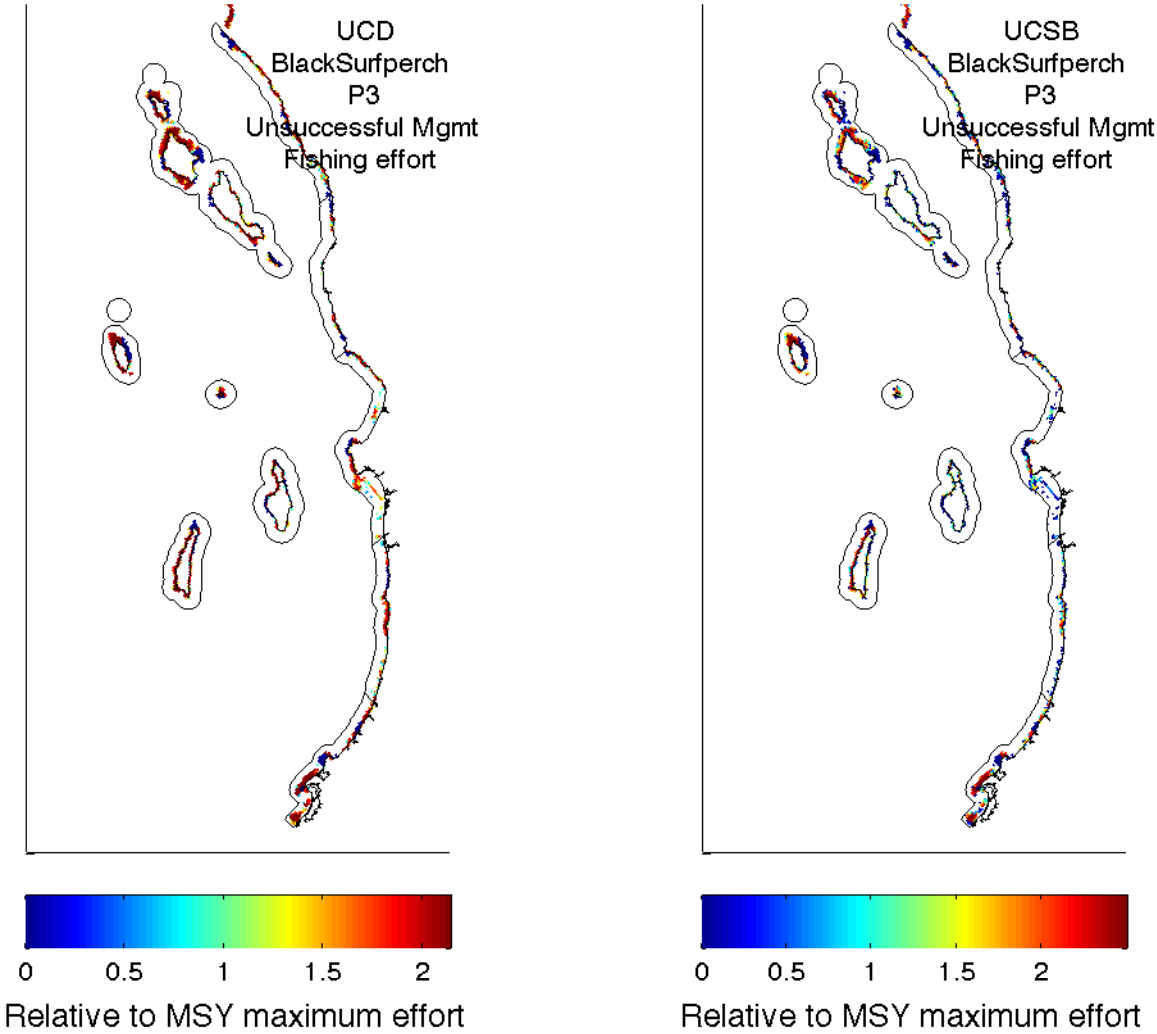
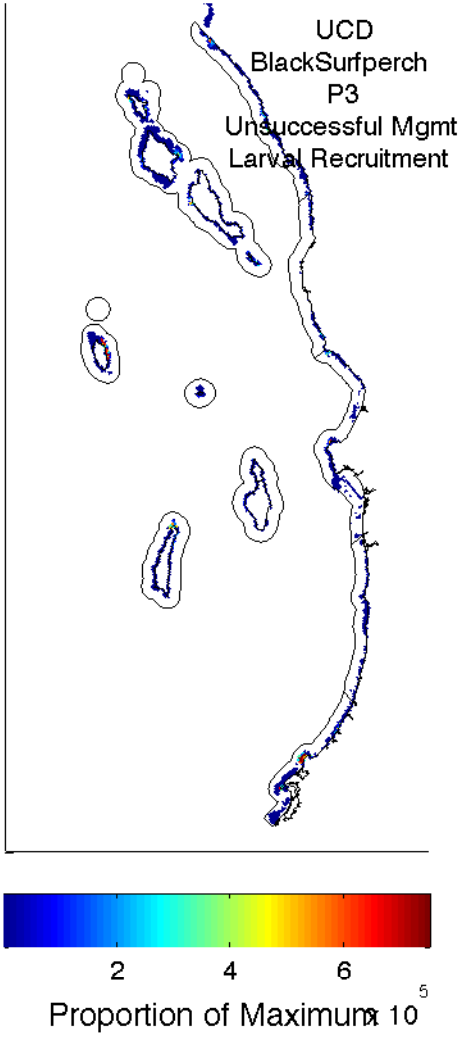

MPA boundaries
BlackSurfperch
P3

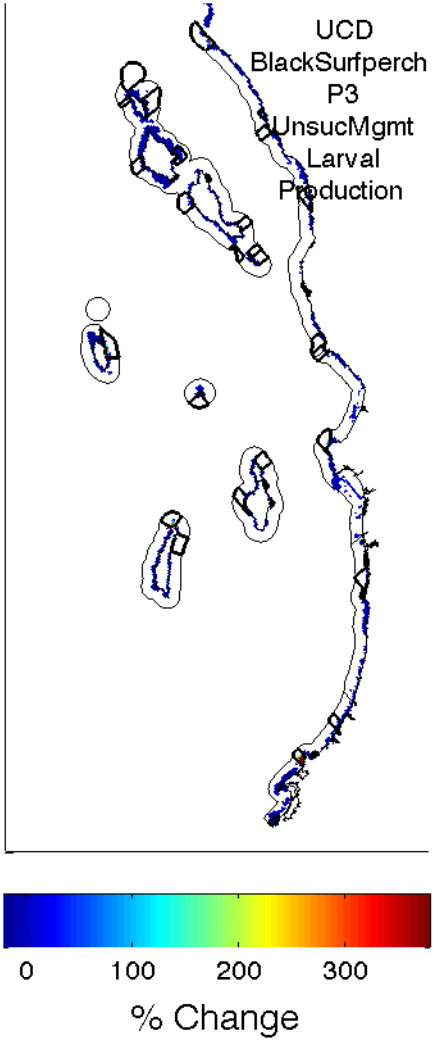

UCSB
BlackSurfperch
P3
MSYMgmt
Larval
Production
0
200
400
% Change

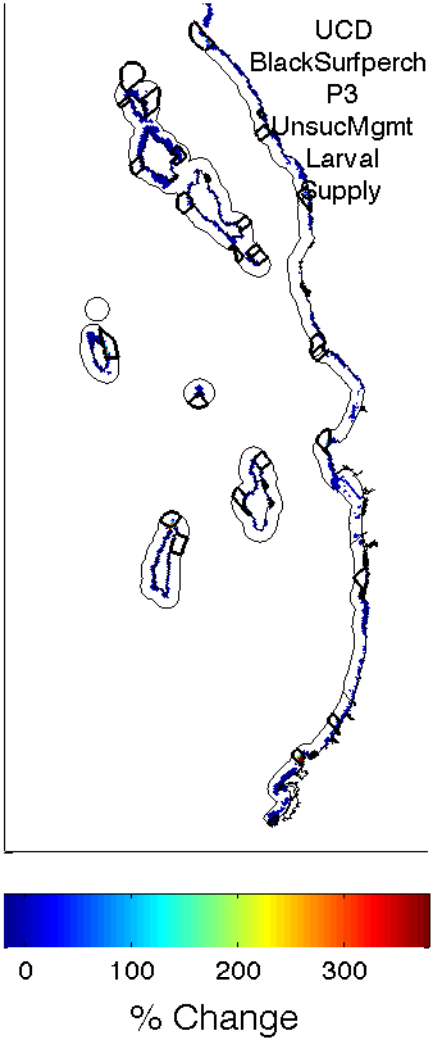

UCSB
BlackSurfperch
P3
MSYMgmt
Larval
Supply
0
200
400
% Change

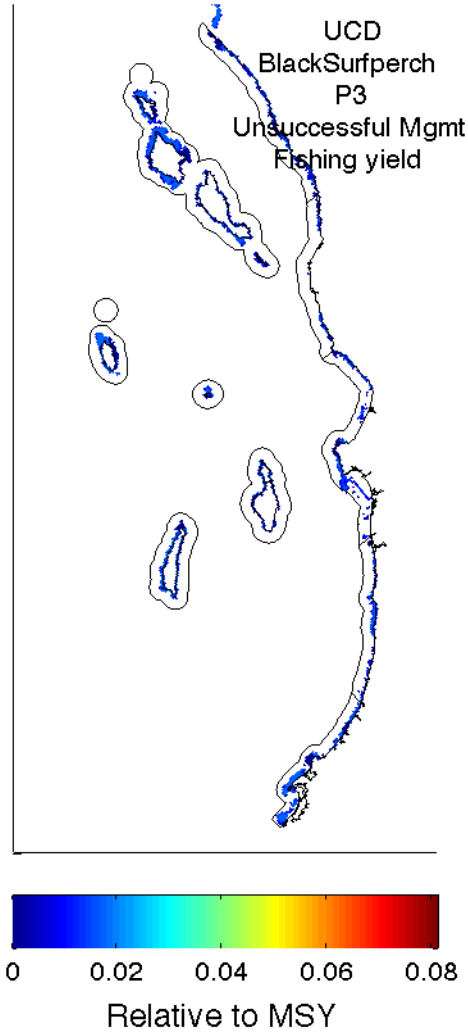

UCD
BlackSurfperch
P3
Unsuccessful Mgmt
Biomass
0
0.2
0.4
0.6
0.8
1
Relative to unfished
UCSB
BlackSurfperch
P3
Unsuccessful Mgmt
Biomass
0
0.2
0.4
0.6
0.8
1
Relative to unfished

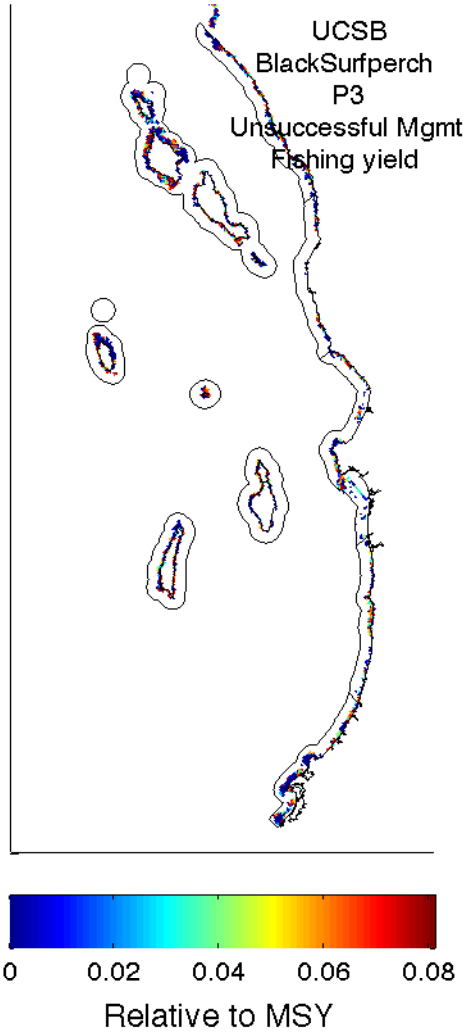

UCD
BlackSurfperch
P3
Unsuccessful Mgmt
Fishing effort
0
0.5
1
1.5
2
Relative to MSY maximum effort
UCSB
BlackSurfperch
P3
Unsuccessful Mgmt
Fishing effort
0
0.5
1
1.5
2
Relative to MSY maximum effort

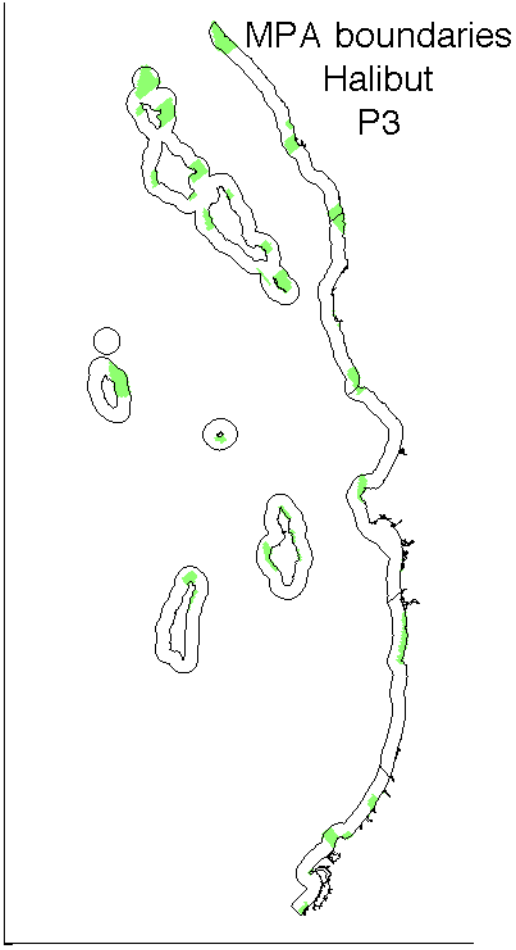

UCD
BlackSurfperch
P3
Unsuccessful Mgmt
Larval Recruitment
2
4
6
Proportion of Maximum
x 10^5

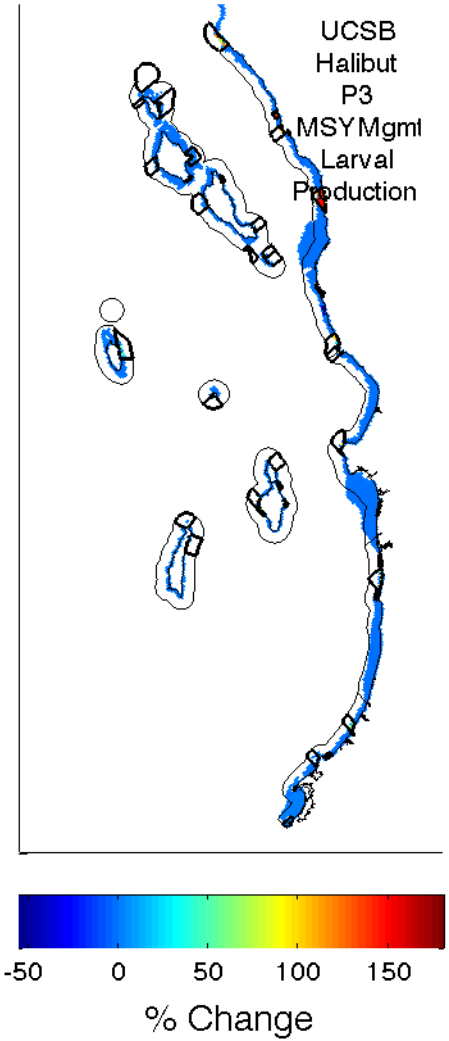

UCD
BlackSurfperch
P3
UnsucMgmt
Larval
Production
0
100
200
300
% Change

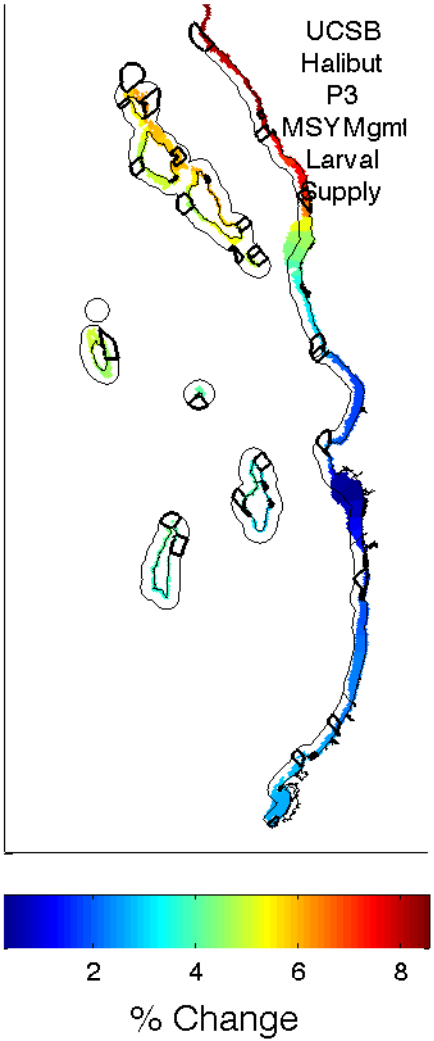

UCD
BlackSurfperch
P3
UnsucMgmt
Larval
Supply
0
100
200
300
% Change

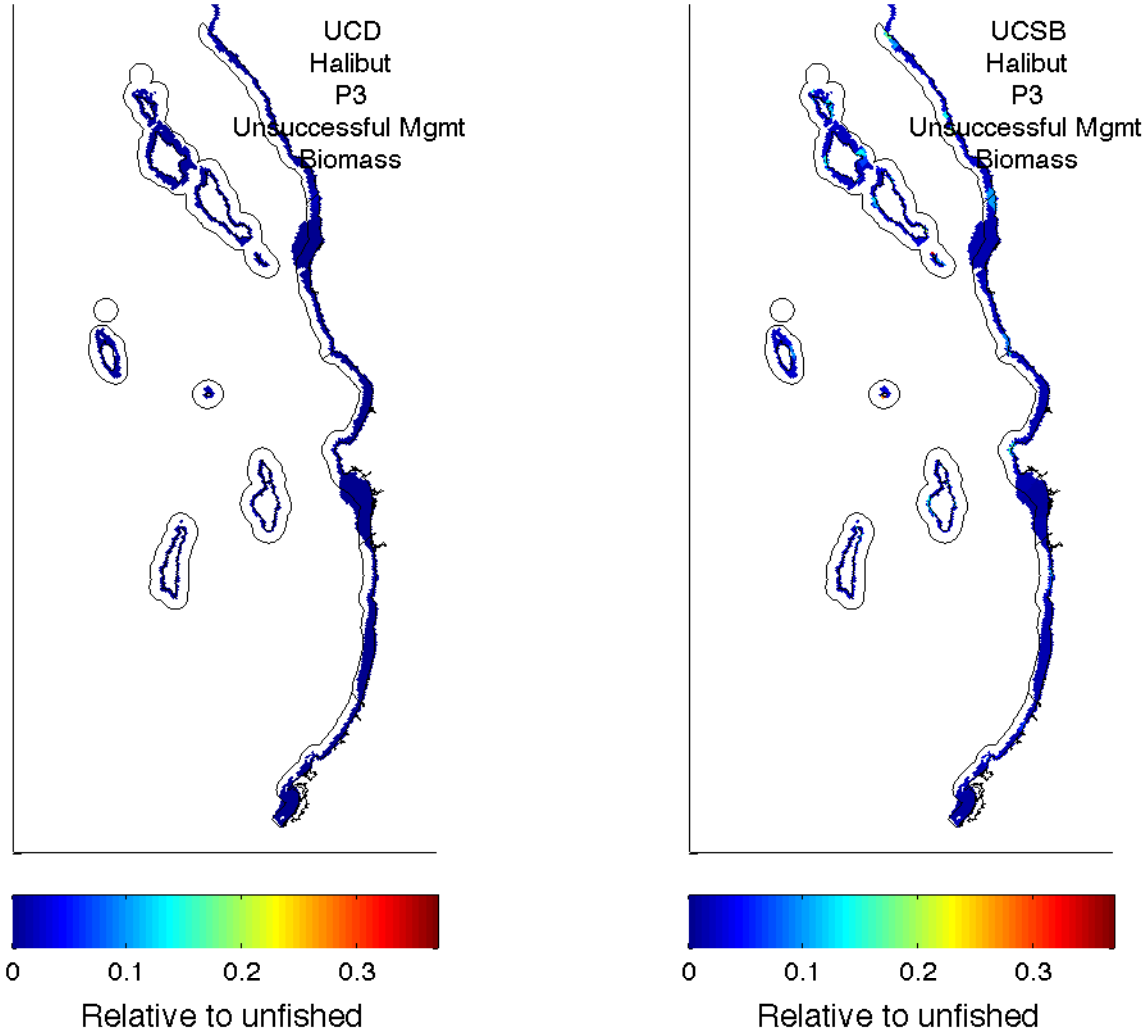

UCD
BlackSurfperch
P3
Unsuccessful Mgmt
Fishing yield
0
0.02
0.04
0.06
0.08
Relative to MSY

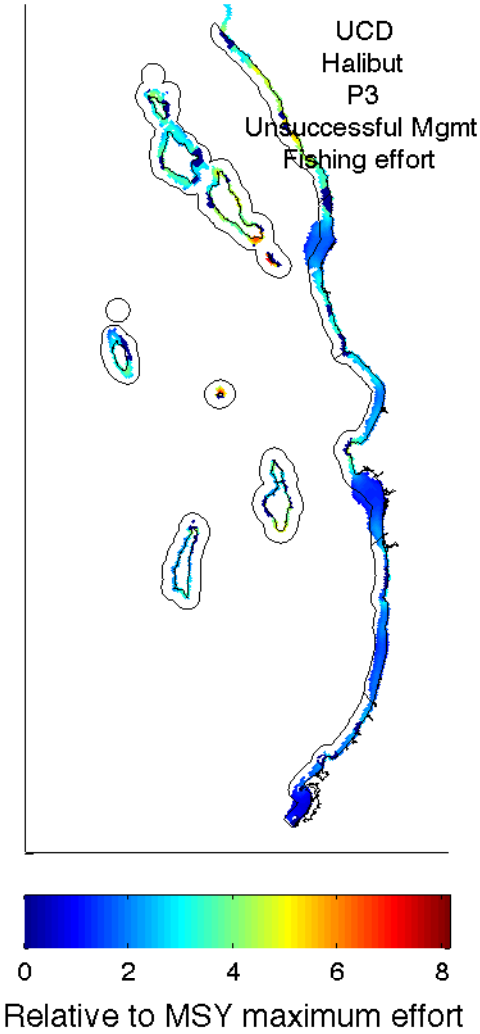

UCSB
BlackSurfperch
P3
Unsuccessful Mgmt
Fishing yield
0
0.02
0.04
0.06
0.08
Relative to MSY

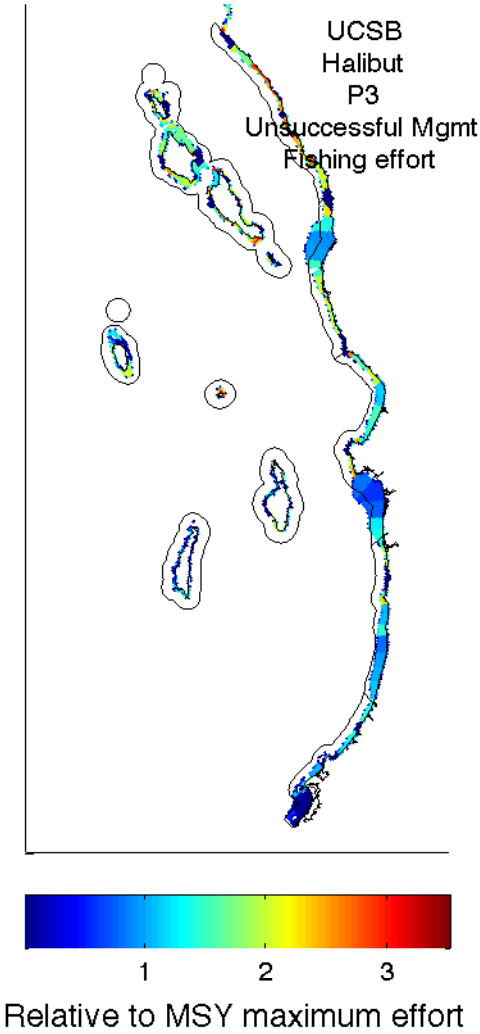

MPA boundaries
Halibut
P3

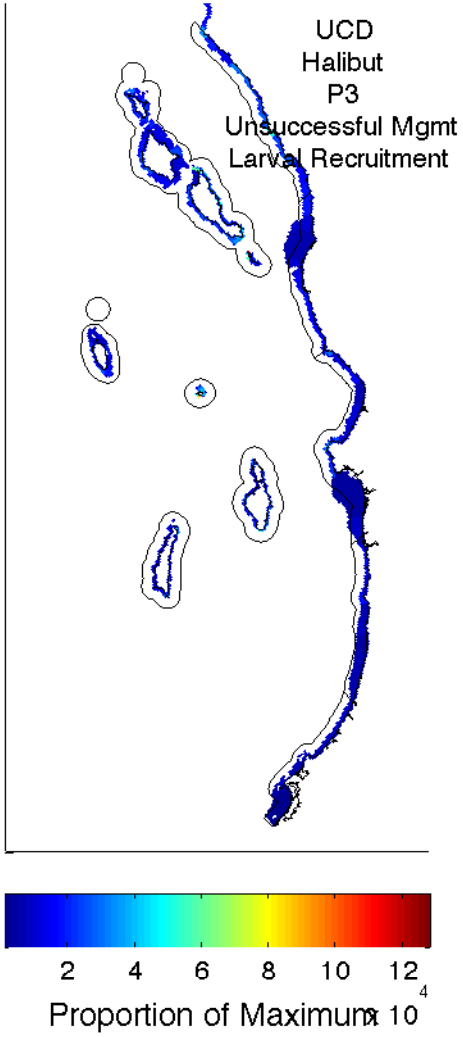

UCSB
Halibut
P3
MSYMgmt
Larval
Production
-50
0
50
100
150
% Change

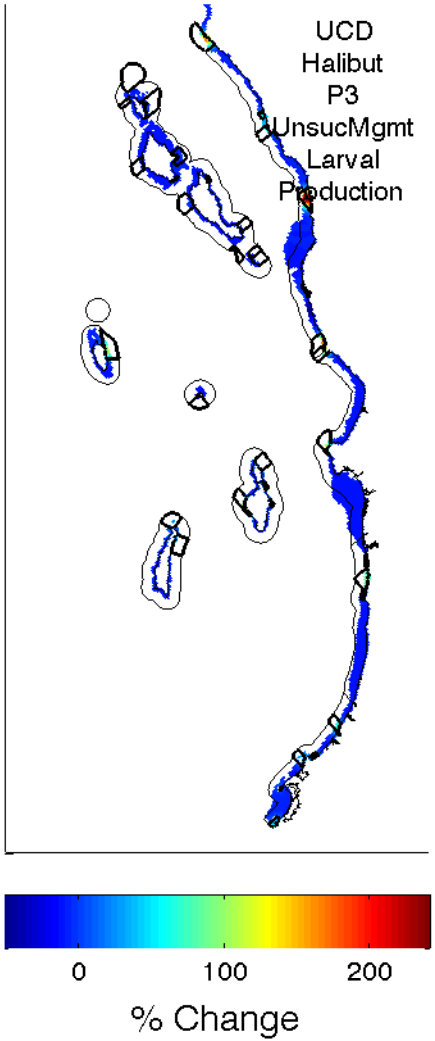

UCSB
Halibut
P3
MSYMgmt
Larval
Supply
2
4
6
8
% Change

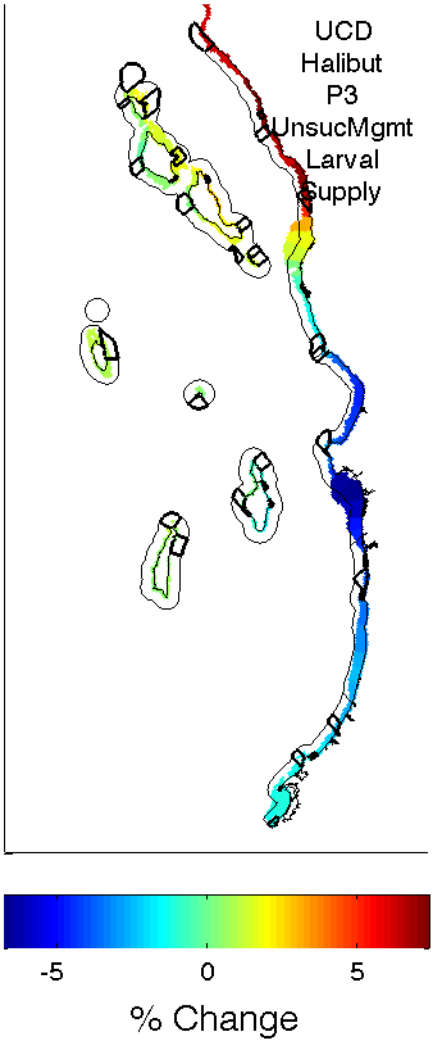

UCD
Halibut
P3
Unsuccessful Mgmt
Biomass
0
0.1
0.2
0.3
Relative to unfished
UCSB
Halibut
P3
Unsuccessful Mgmt
Biomass
0
0.1
0.2
0.3
Relative to unfished

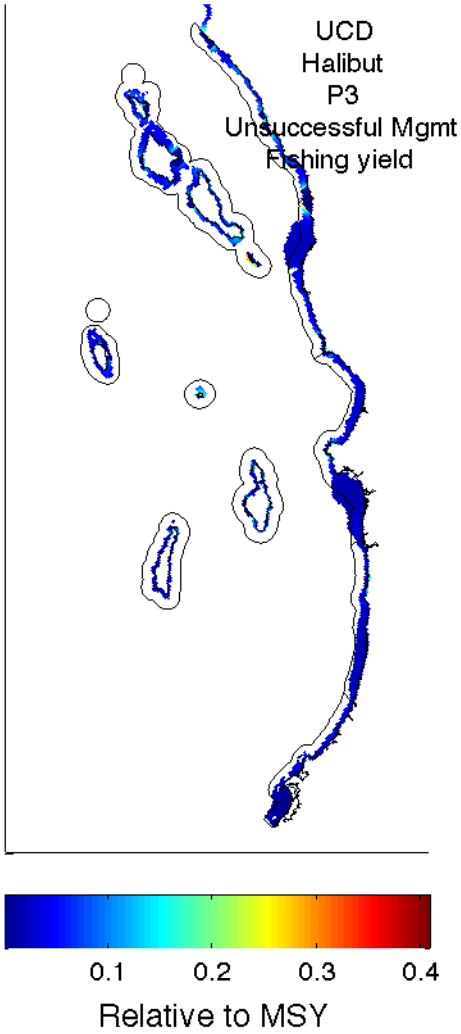

UCD
Halibut
P3
Unsuccessful Mgmt
Fishing effort
0
2
4
6
8
Relative to MSY maximum effort

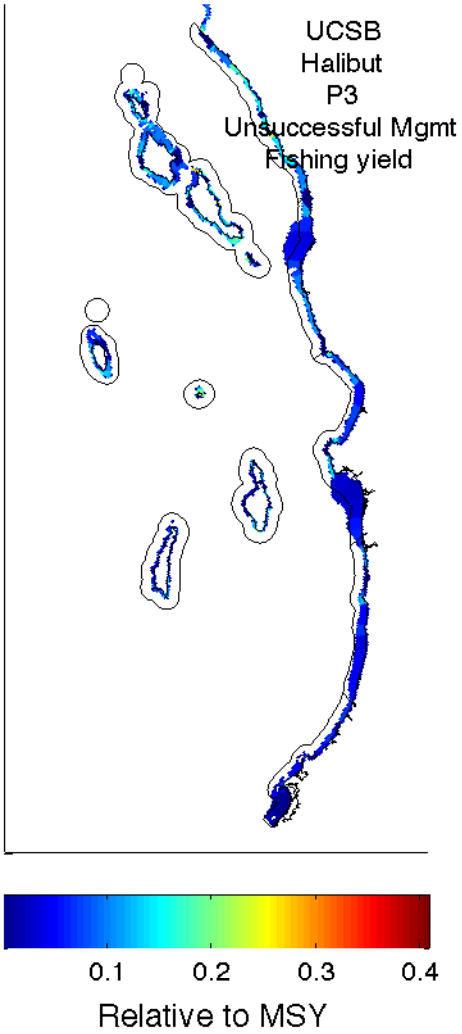

UCSB
Halibut
P3
Unsuccessful Mgmt
Fishing effort
1
2
3
Relative to MSY maximum effort

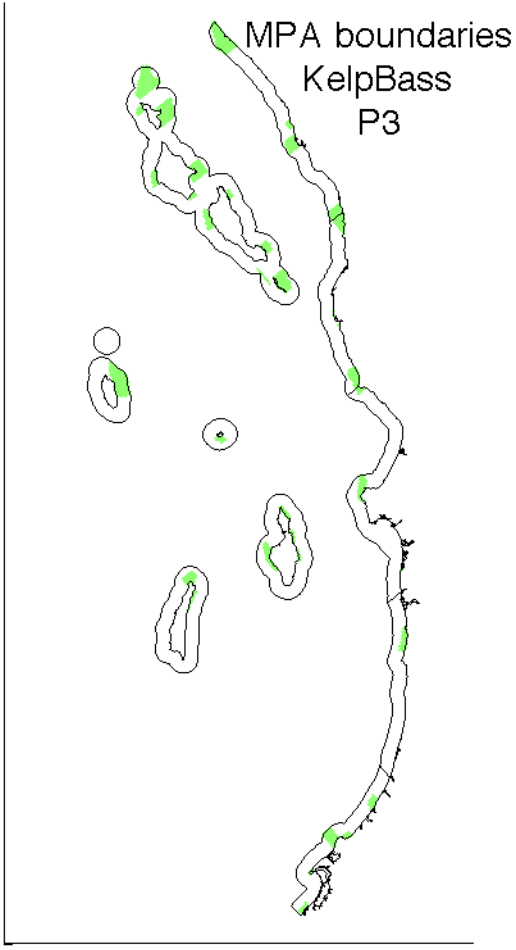

UCD
Halibut
P3
Unsuccessful Mgmt
Larval Recruitment
2
4
6
8
10
12
Proportion of Maximum
x 10^4

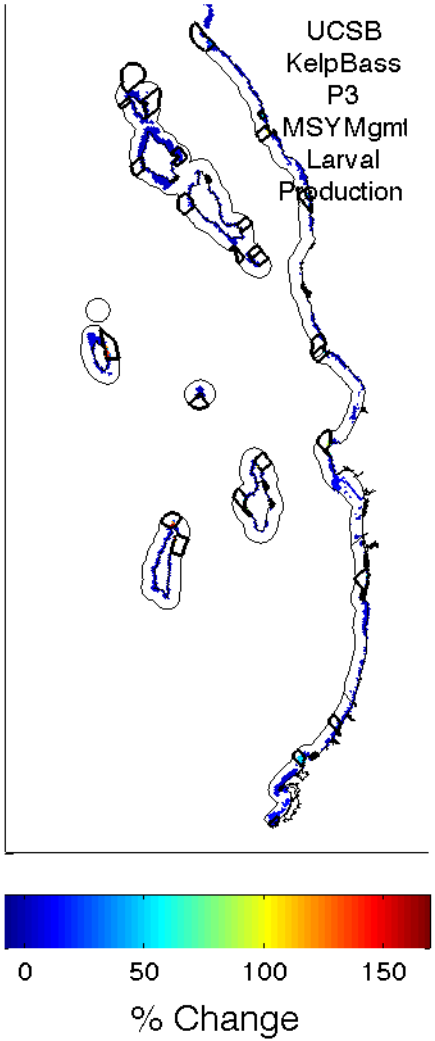

UCD
Halibut
P3
UnsucMgmt
Larval
Production
0
100
200
% Change

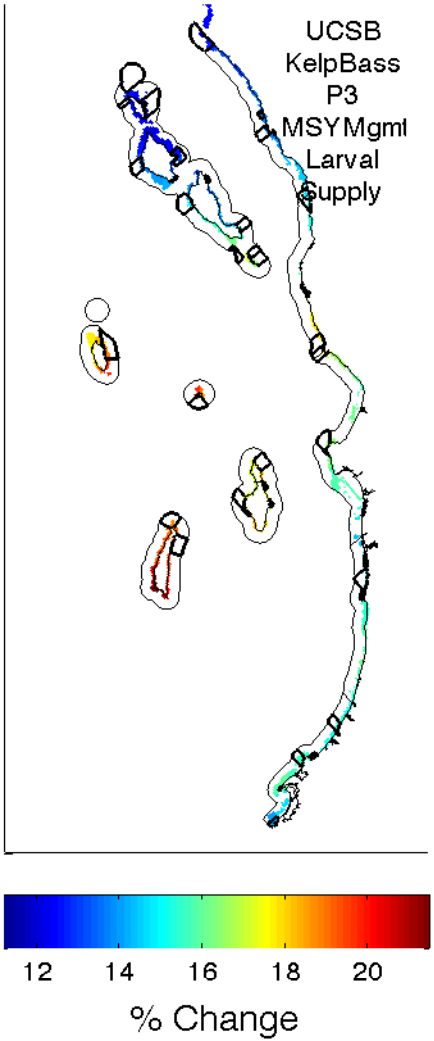

UCD
Halibut
P3
UnsucMgmt
Larval
Supply
-5
0
5
% Change

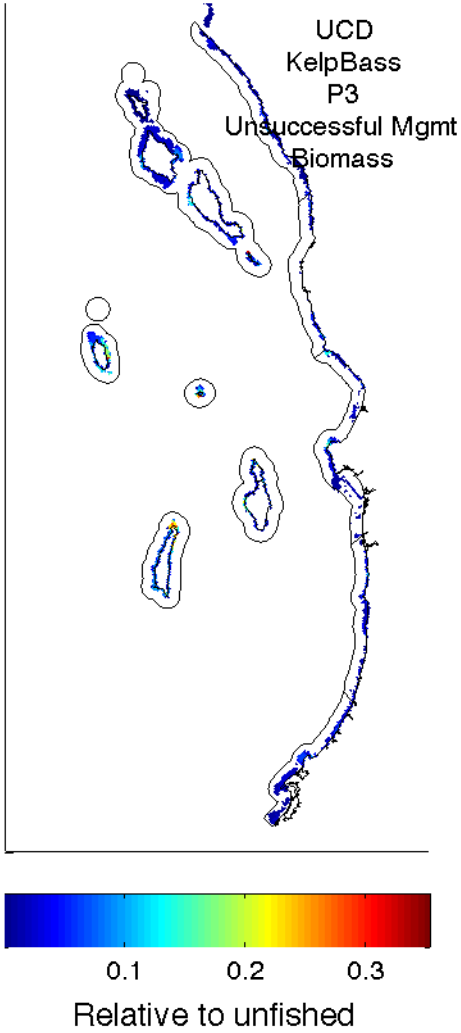

UCD
Halibut
P3
Unsuccessful Mgmt
Fishing yield
0.1
0.2
0.3
0.4
Relative to MSY

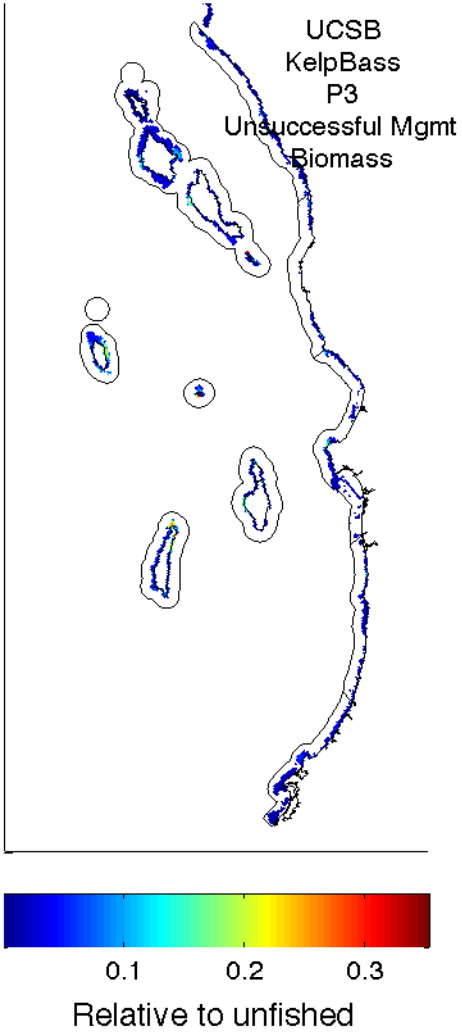

UCSB
Halibut
P3
Unsuccessful Mgmt
Fishing yield
0.1
0.2
0.3
0.4
Relative to MSY

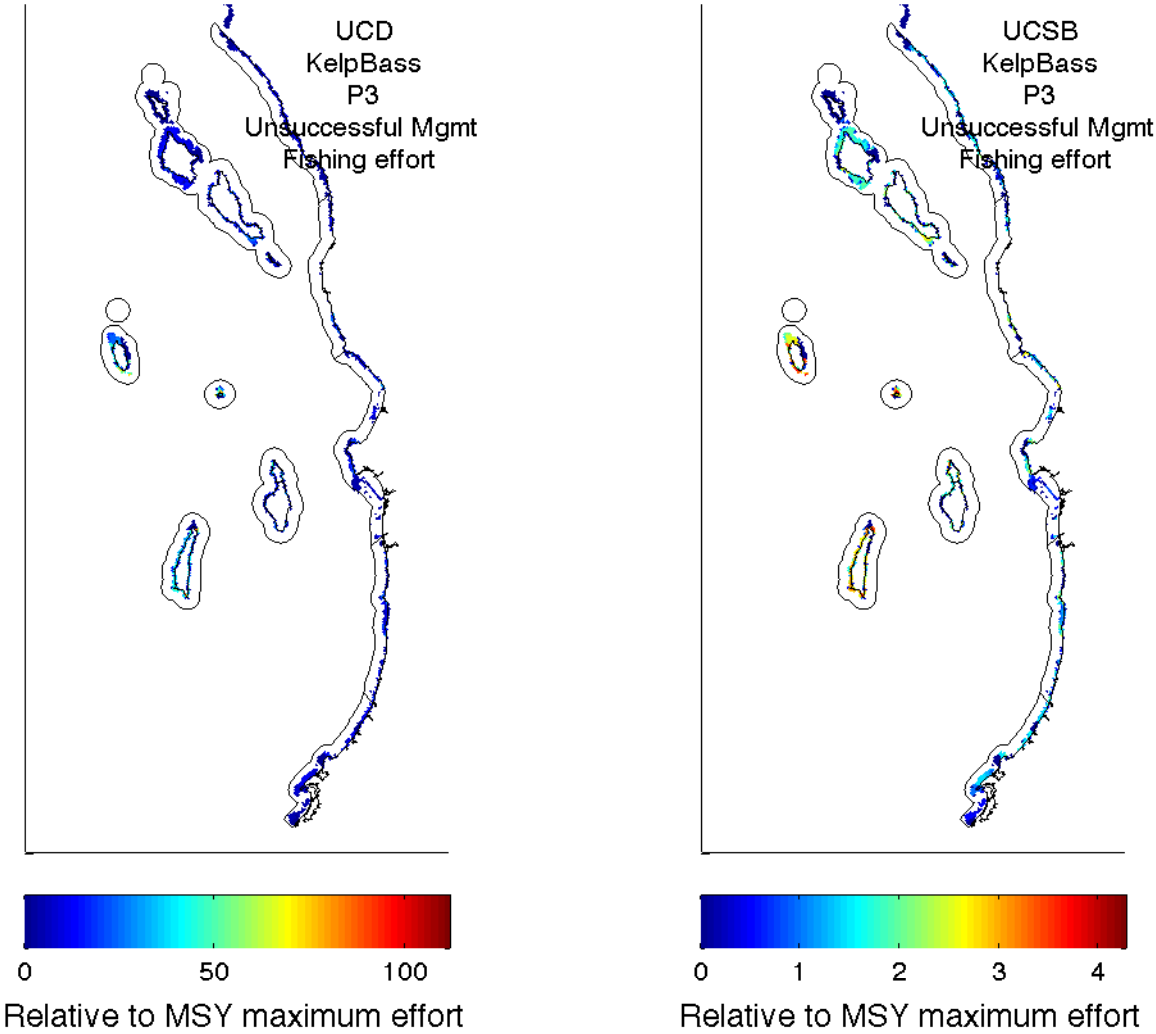

MPA boundaries
KelpBass
P3

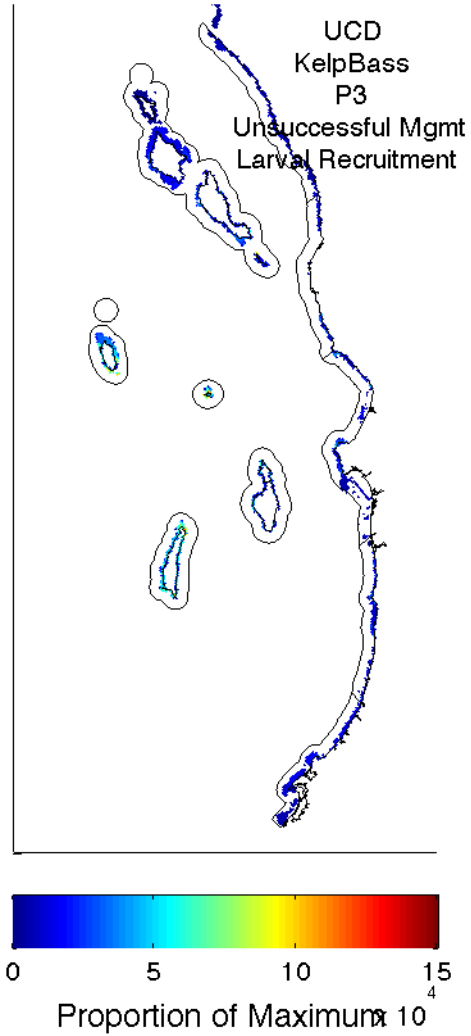

UCSB
KelpBass
P3
MSYMgmt
Larval
Production
0
50
100
150
% Change

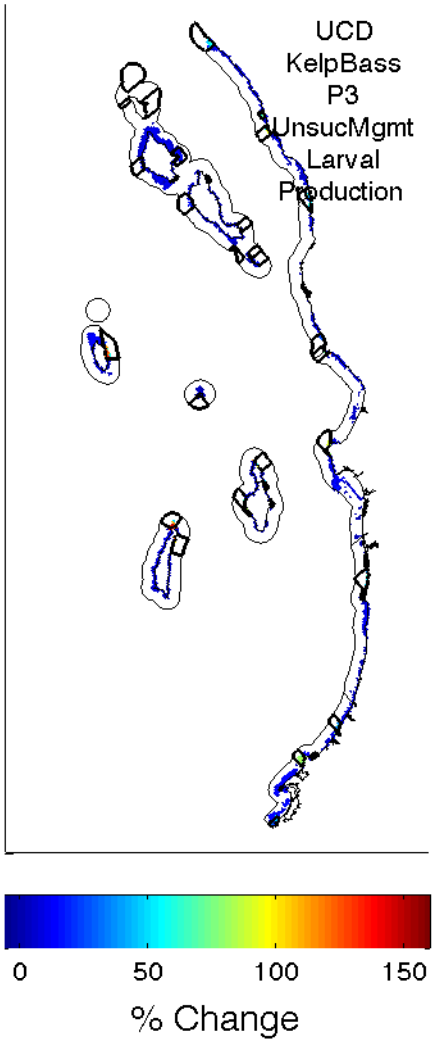

UCSB
KelpBass
P3
MSYMgmt
Larval
Supply
12
14
16
18
20
% Change

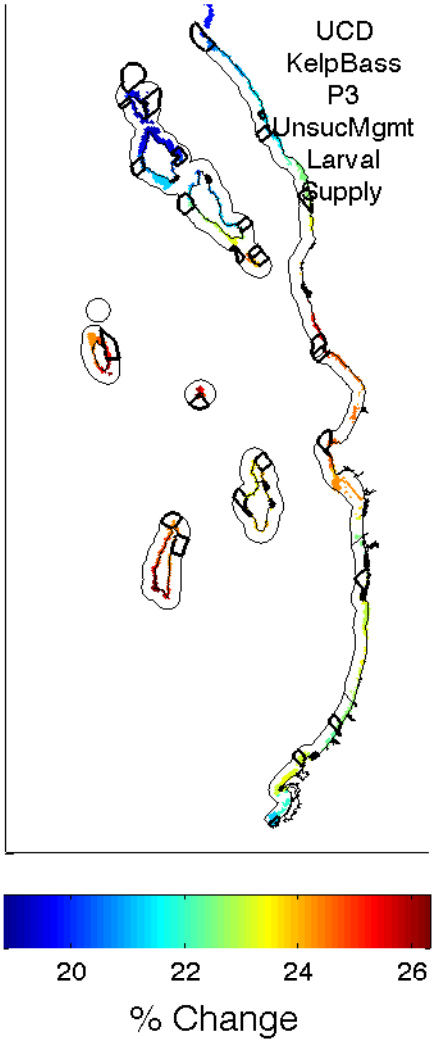

UCD
KelpBass
P3
Unsuccessful Mgmt
Biomass
0.1
0.2
0.3
Relative to unfished

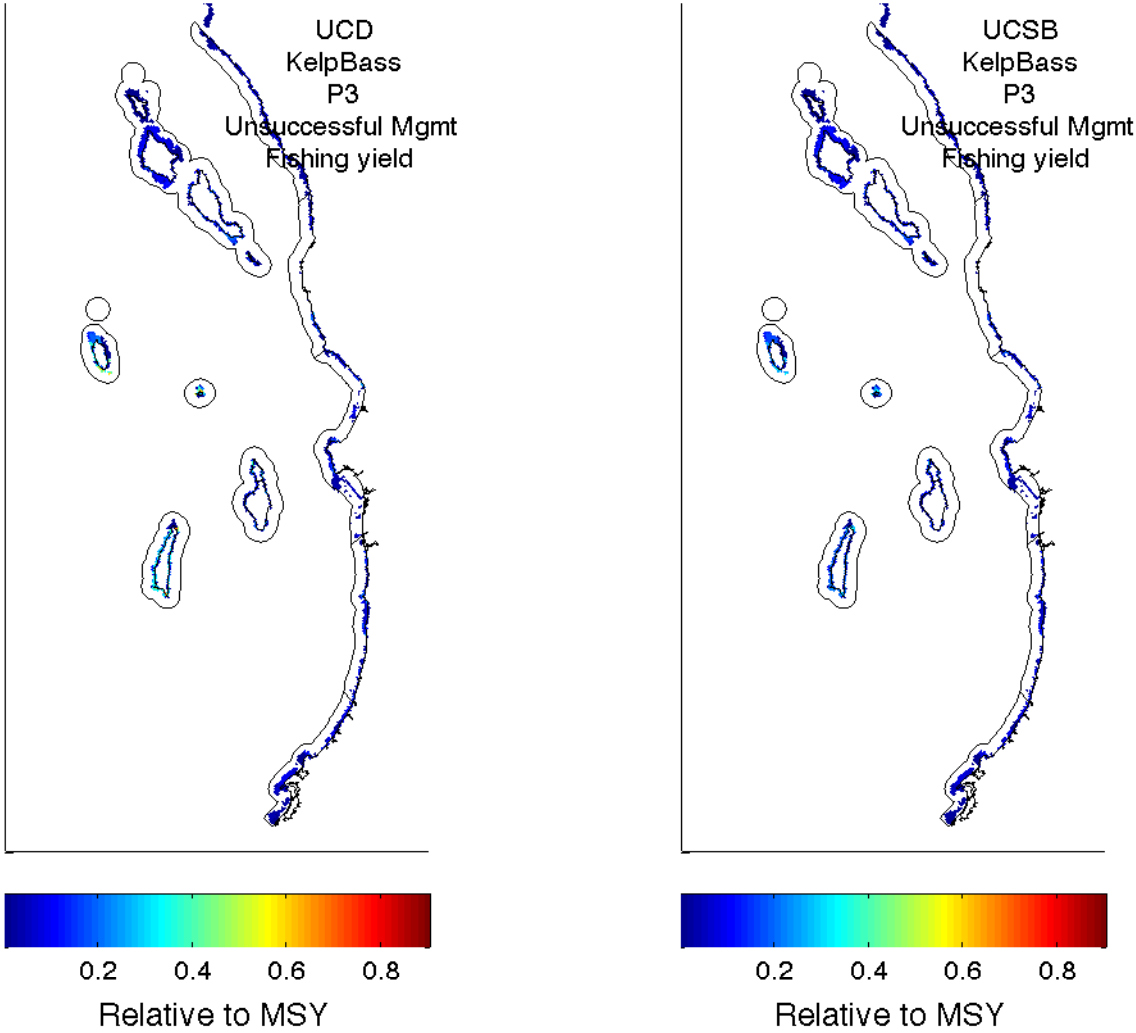

UCSB
KelpBass
P3
Unsuccessful Mgmt
Biomass
0.1
0.2
0.3
Relative to unfished

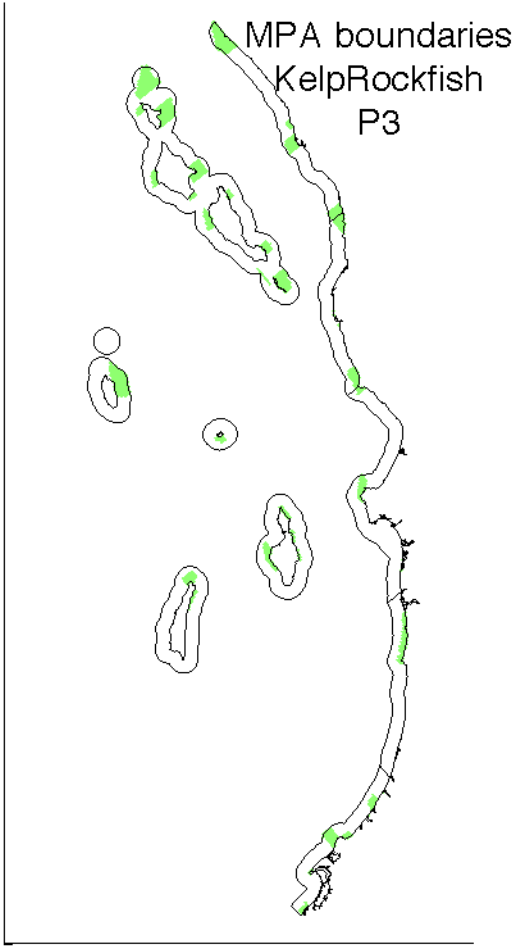

UCD
KelpBass
P3
Unsuccessful Mgmt
Fishing effort
0
50
100
Relative to MSY maximum effort
UCSB
KelpBass
P3
Unsuccessful Mgmt
Fishing effort
0
1
2
3
4
Relative to MSY maximum effort

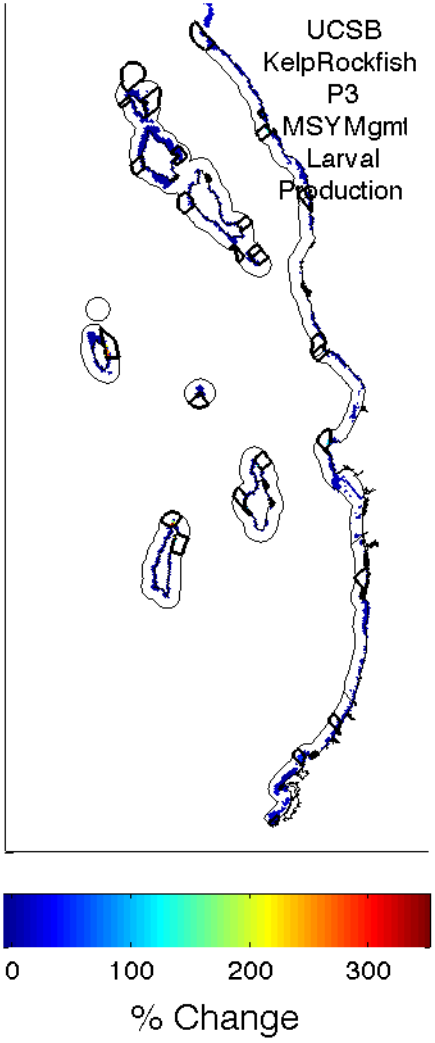

UCD
KelpBass
P3
Unsuccessful Mgmt
Larval Recruitment
0
5
10
15
Proportion of Maximum
x 10^4

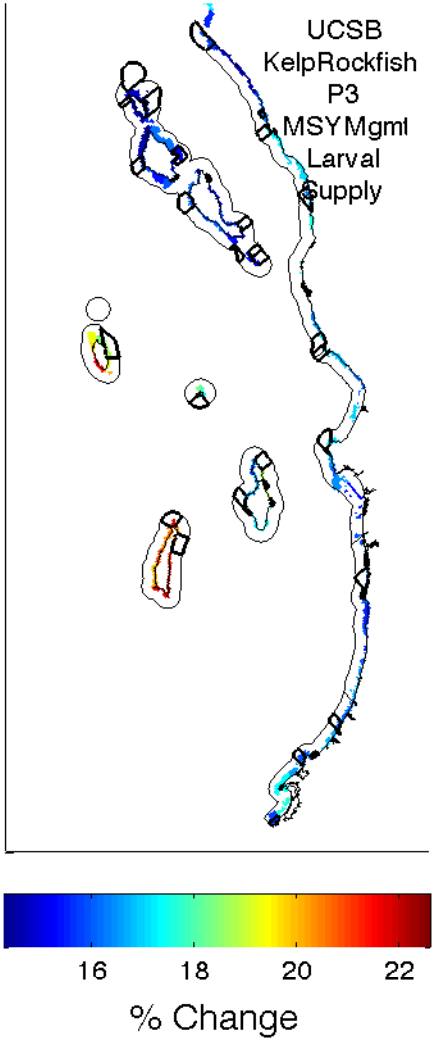

UCD
KelpBass
P3
UnsucMgmt
Larval
Production
0
50
100
150
% Change

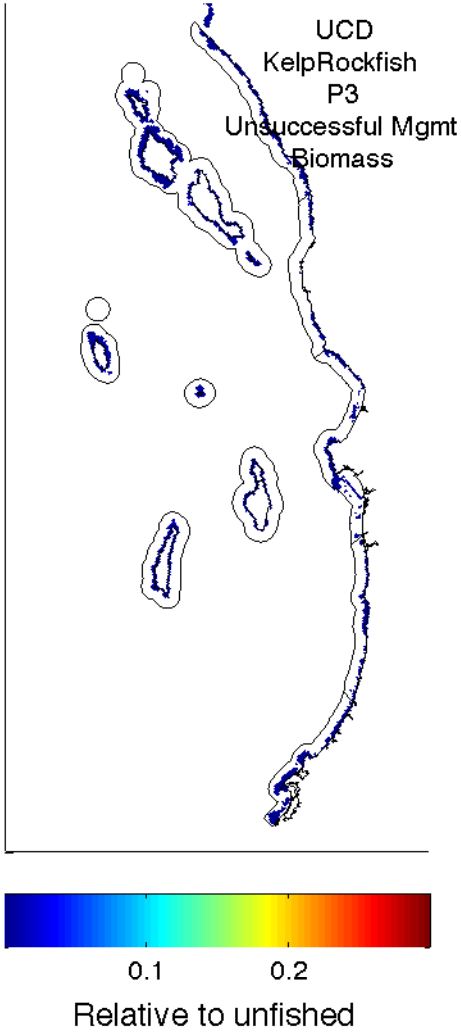

UCD
KelpBass
P3
UnsucMgmt
Larval
Supply
20
22
24
26
% Change

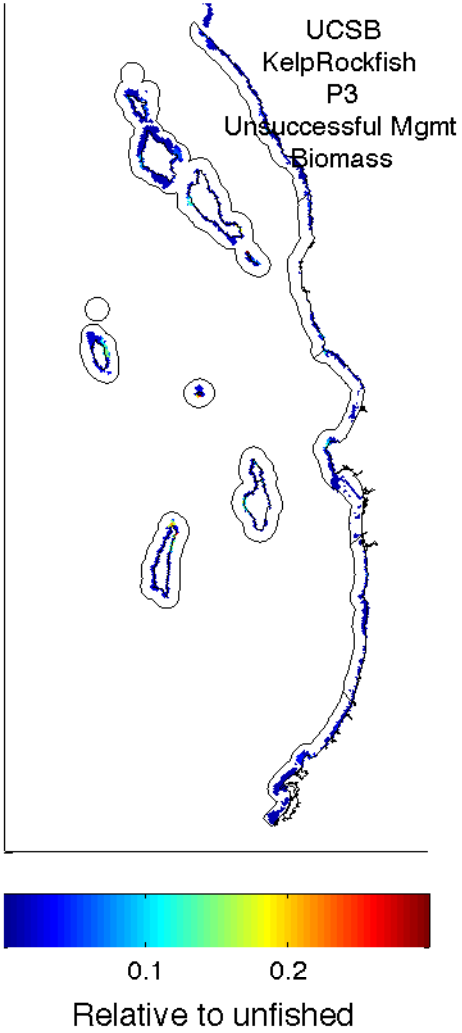

UCD
KelpBass
P3
Unsuccessful Mgmt
Fishing yield
0.2
0.4
0.6
0.8
Relative to MSY
UCSB
KelpBass
P3
Unsuccessful Mgmt
Fishing yield
0.2
0.4
0.6
0.8
Relative to MSY

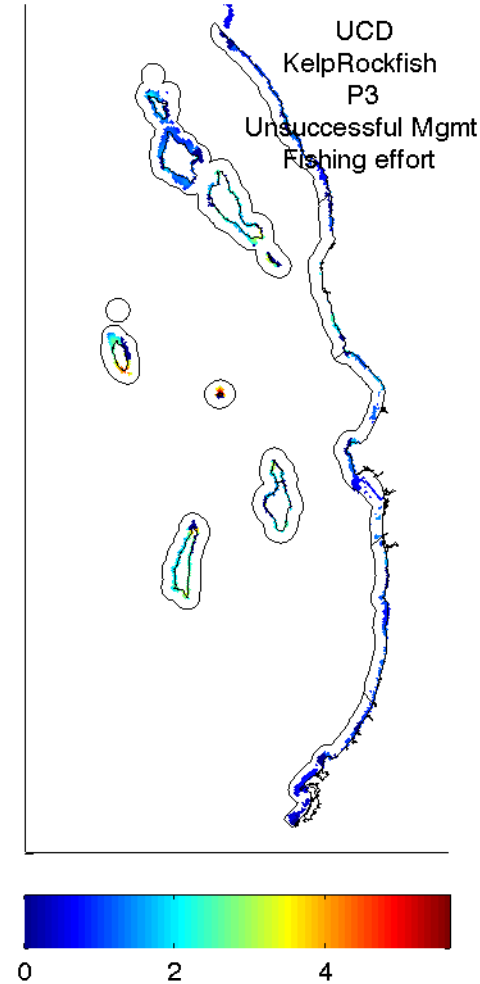

MPA boundaries
KelpRockfish
P3

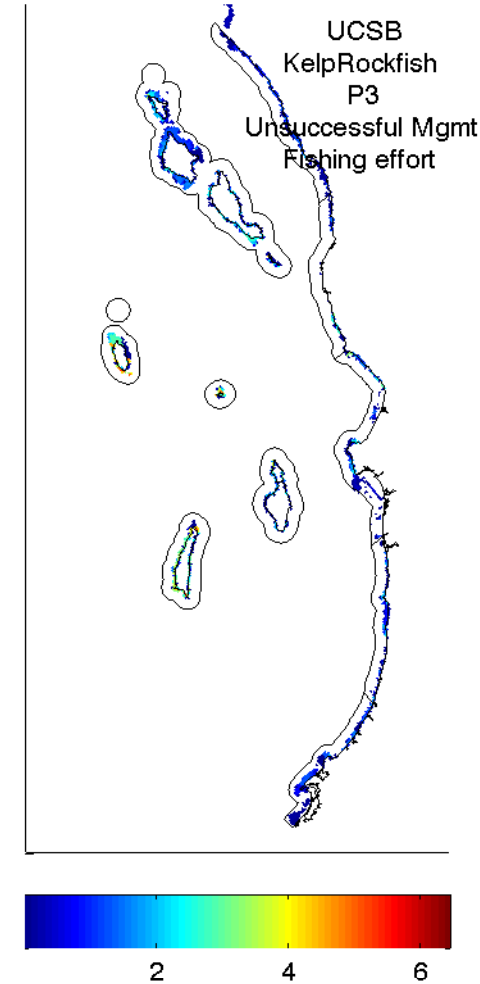

UCSB
KelpRockfish
P3
MSYMgmt
Larval
Production
0
100
200
300
% Change

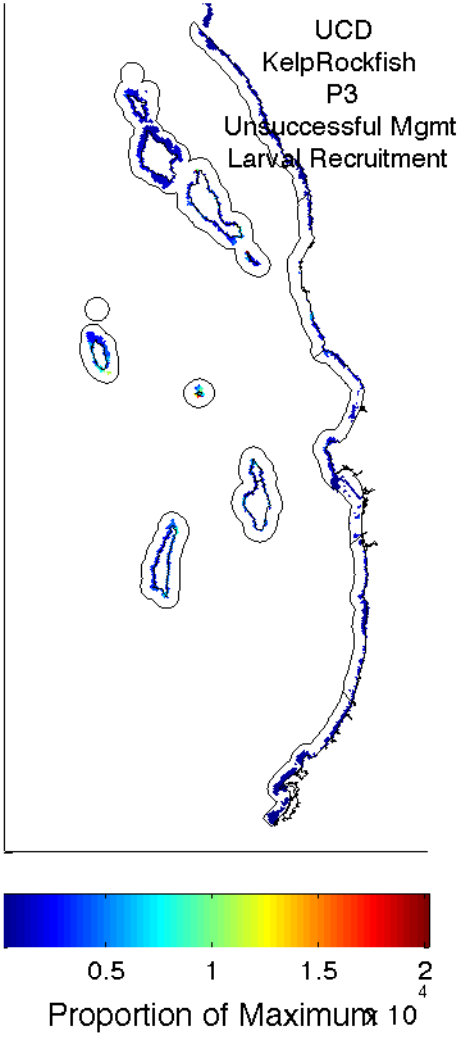

UCSB
KelpRockfish
P3
MSYMgmt
Larval
Supply
16
18
20
22
% Change

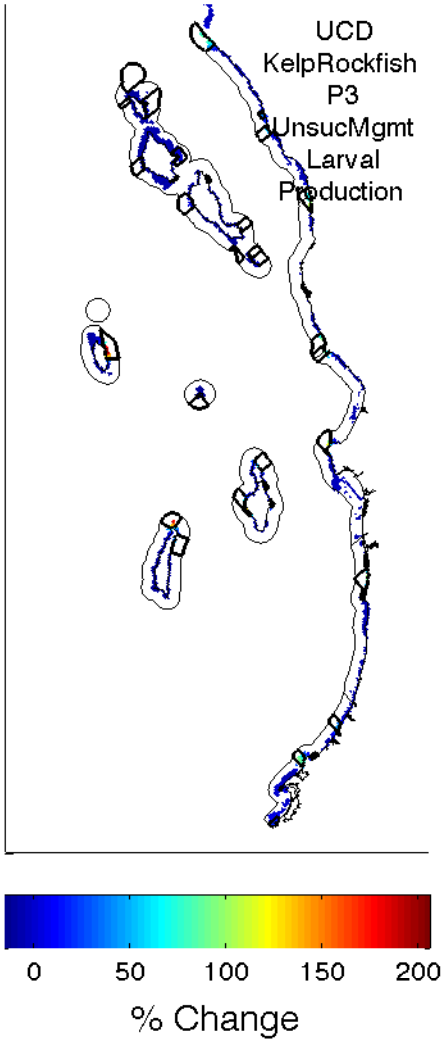

UCD
KelpRockfish
P3
Unsuccessful Mgmt
Biomass
0.1
0.2
Relative to unfished

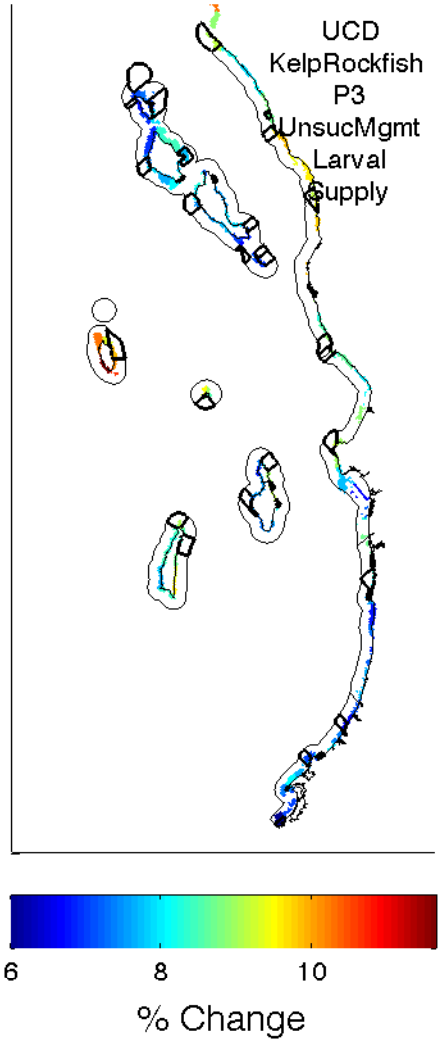

UCSB
KelpRockfish
P3
Unsuccessful Mgmt
Biomass
0.1
0.2
Relative to unfished

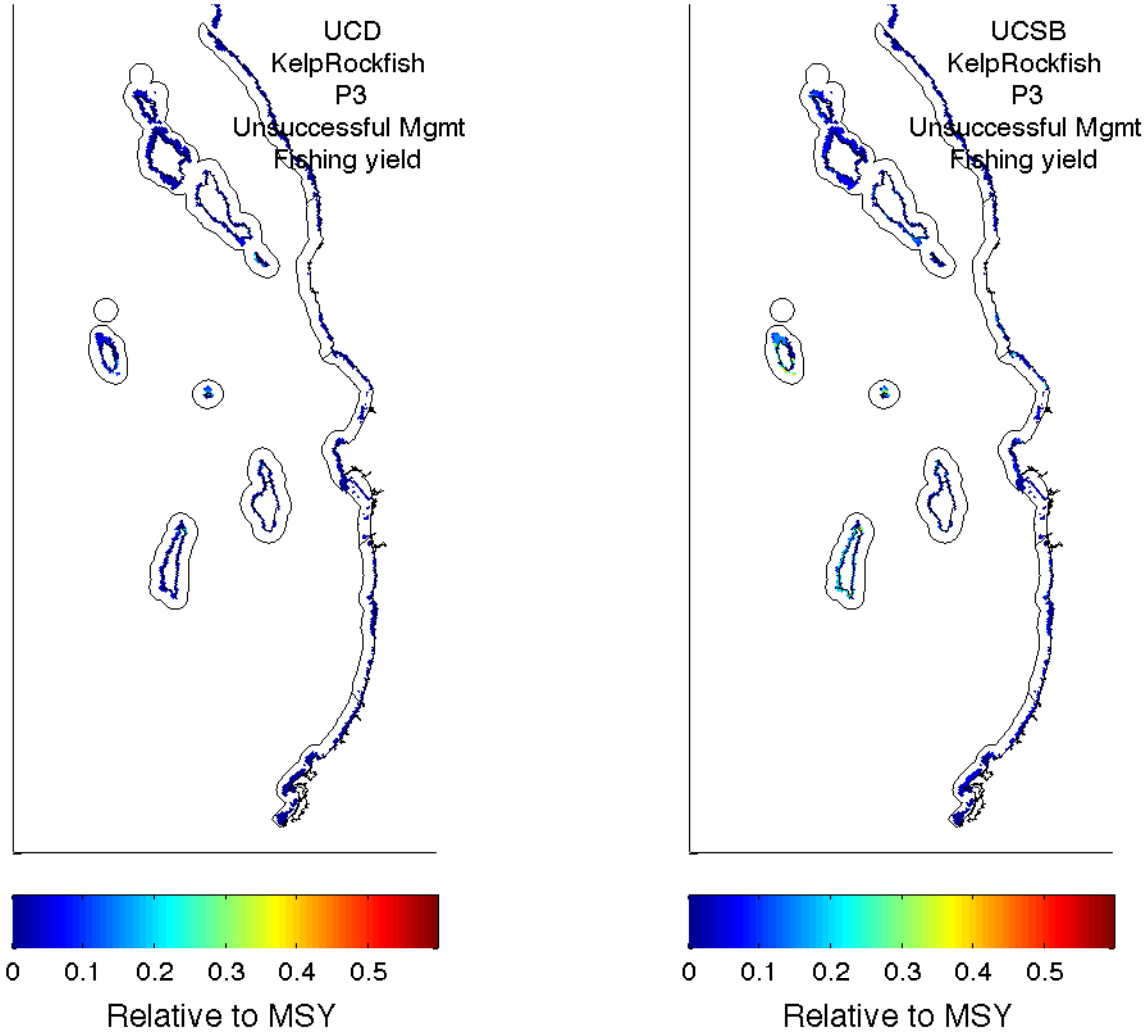

UCD
KelpRockfish
P3
Unsuccessful Mgmt
Fishing effort
0
2
4
Relative to MSY maximum effort

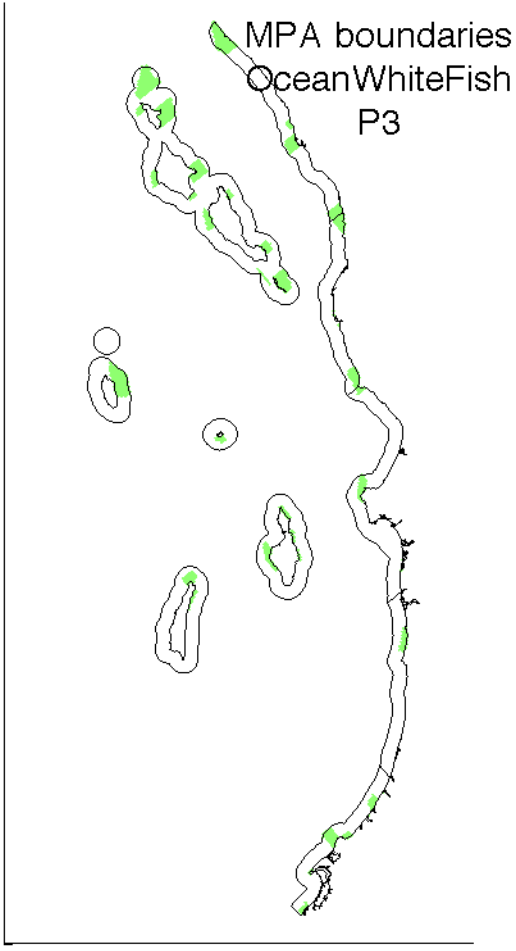

UCSB
KelpRockfish
P3
Unsuccessful Mgmt
Fishing effort
2
4
6
Relative to MSY maximum effort

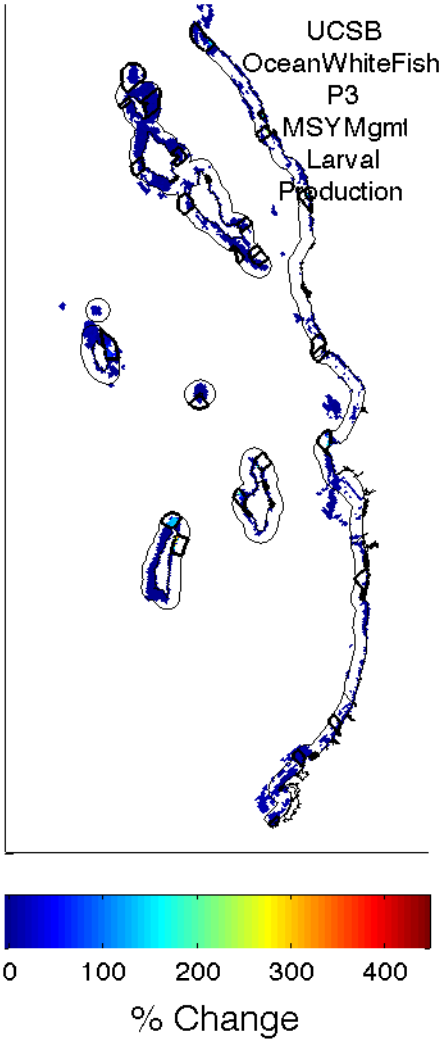

UCD
KelpRockfish
P3
Unsuccessful Mgmt
Larval Recruitment
0.5
1
1.5
2
Proportion of Maximum
x 10^4

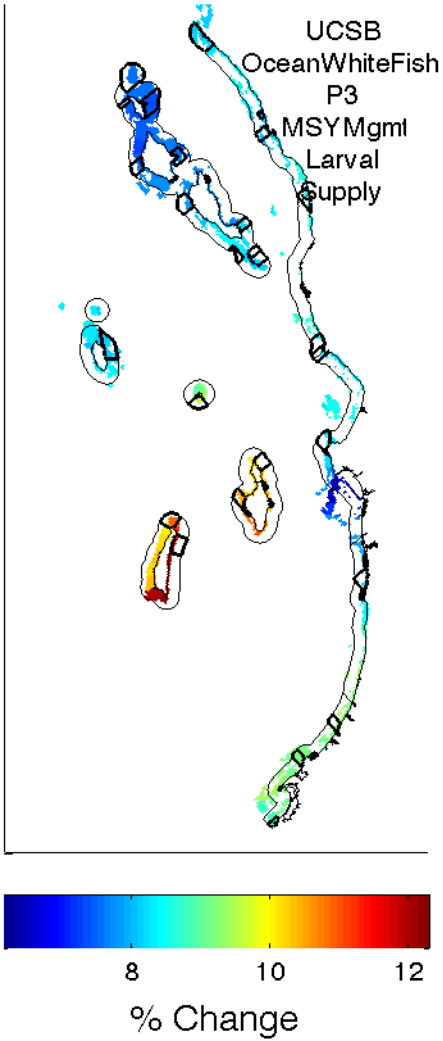

UCD
KelpRockfish
P3
UnsucMgmt
Larval
Production
0
50
100
150
200
% Change

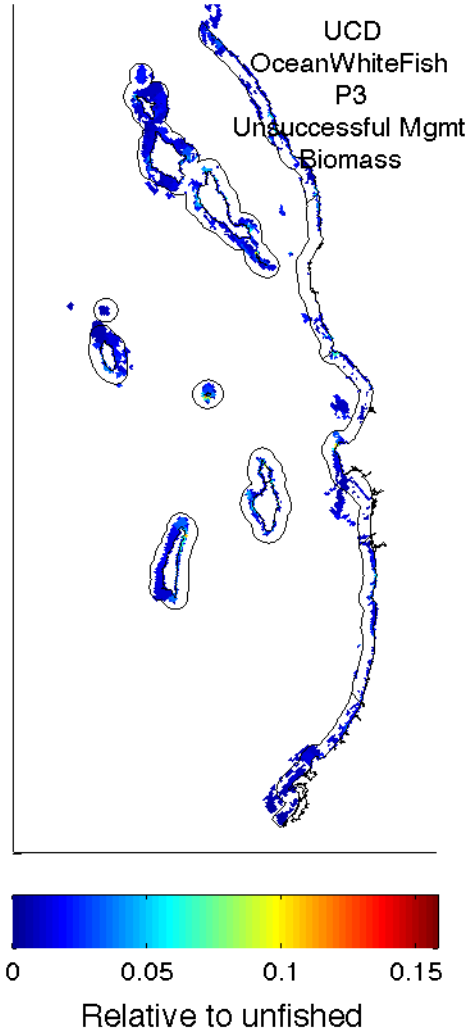

UCD
KelpRockfish
P3
UnsucMgmt
Larval
Supply
6
8
10
% Change

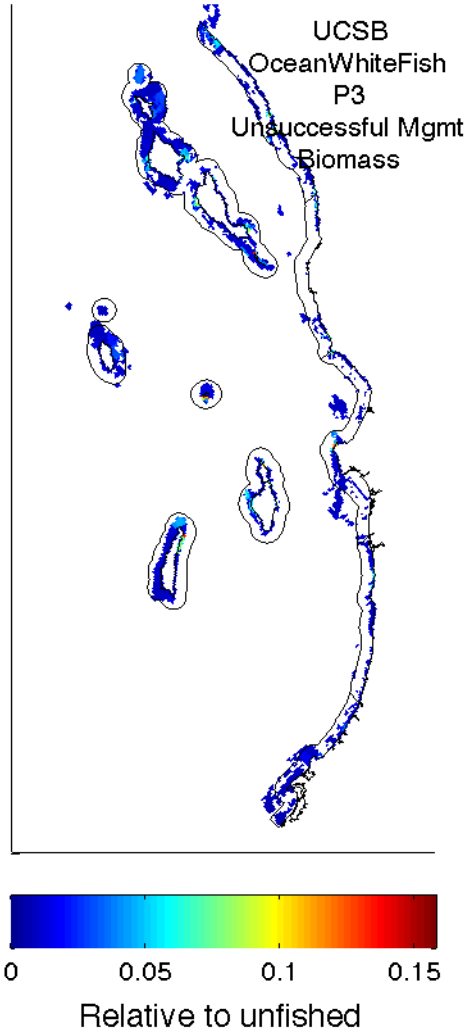

UCD
KelpRockfish
P3
Unsuccessful Mgmt
Fishing yield
0
0.1
0.2
0.3
0.4
0.5
Relative to MSY
UCSB
KelpRockfish
P3
Unsuccessful Mgmt
Fishing yield
0
0.1
0.2
0.3
0.4
0.5
Relative to MSY

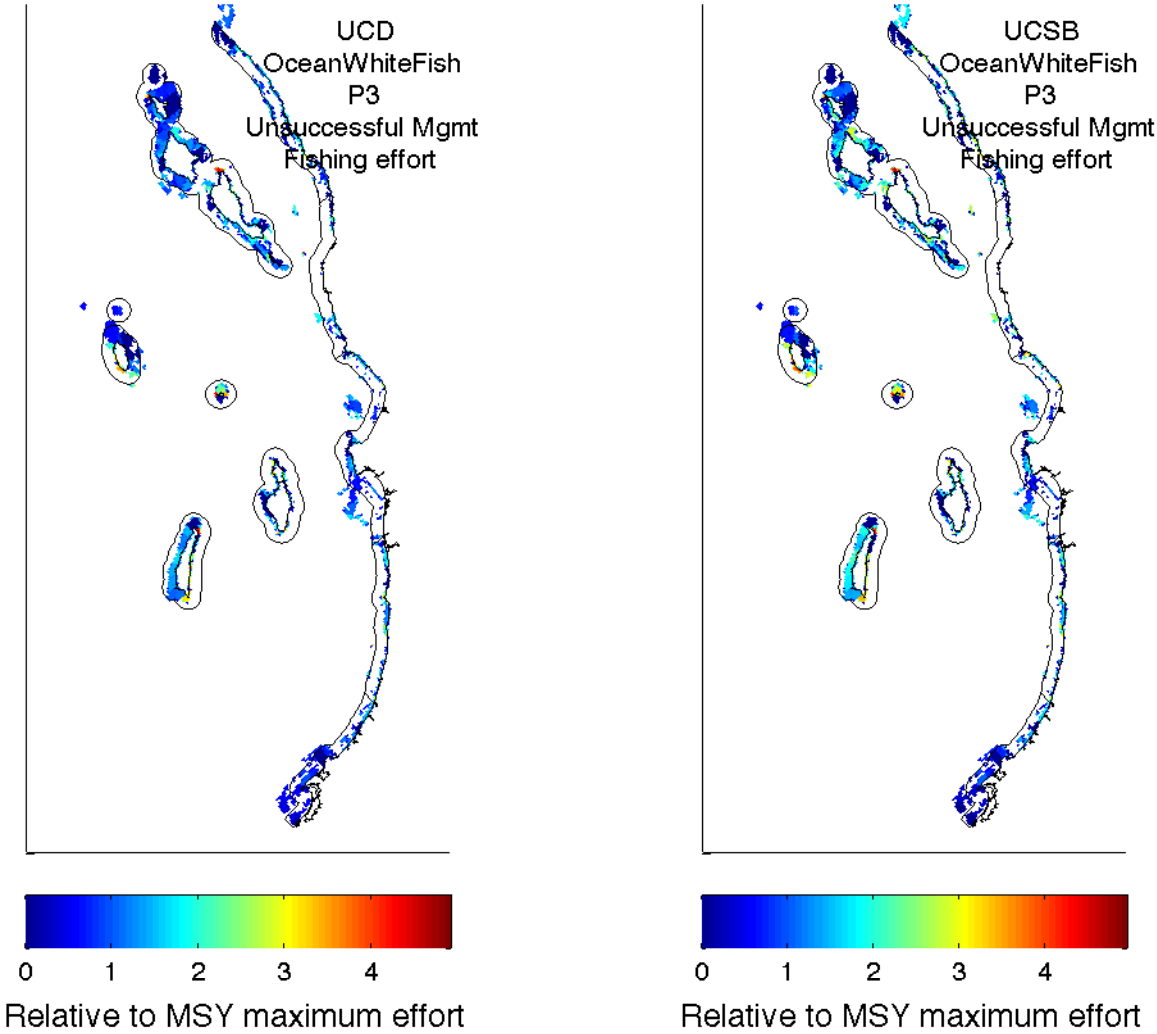

MPA boundaries
OceanWhiteFish
P3

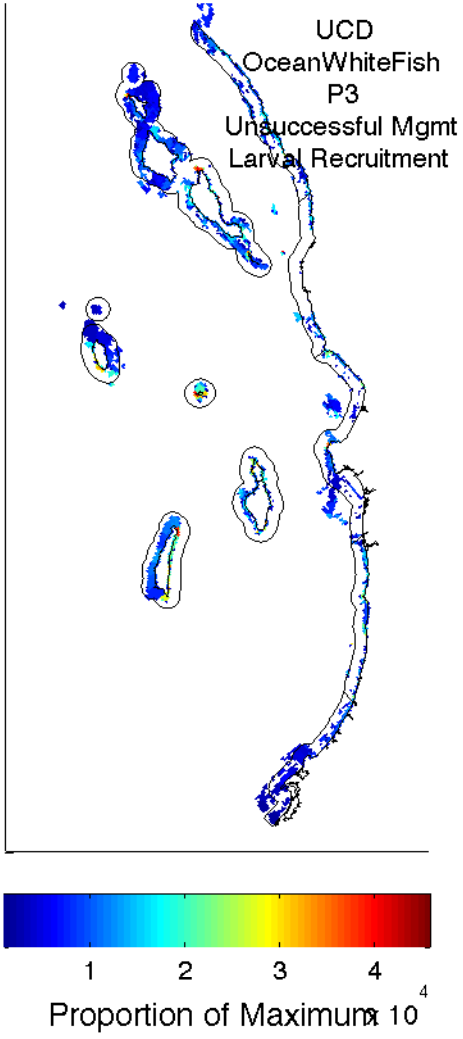

UCSB
OceanWhiteFish
P3
MSYMgmt
Larval
Production
0
100
200
300
400
% Change

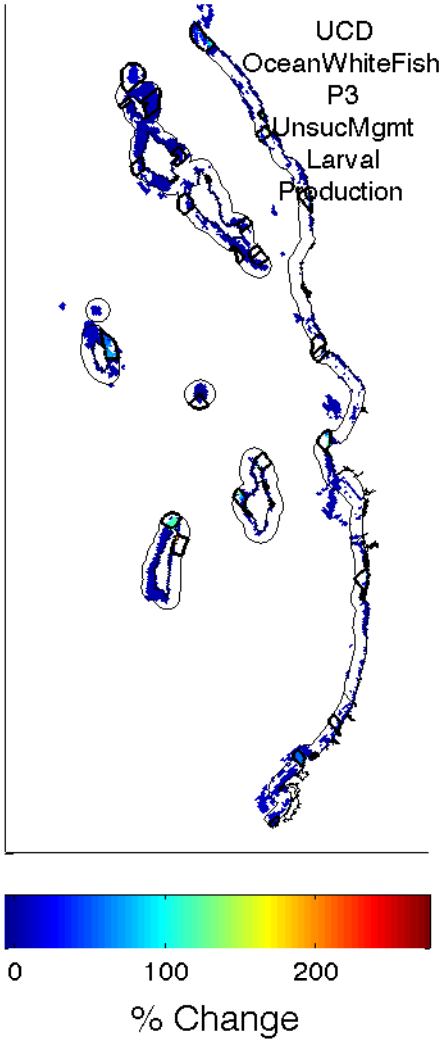

UCSB
OceanWhiteFish
P3
MSYMgmt
Larval
Supply
8
10
12
% Change

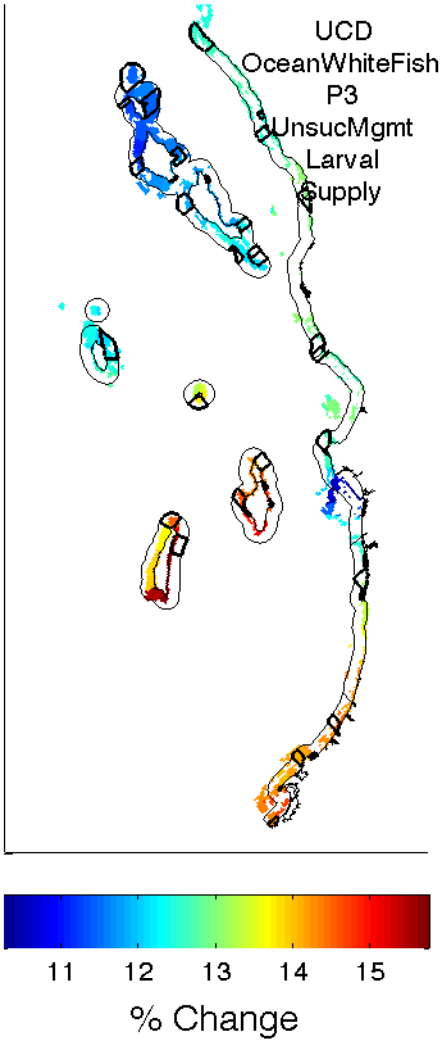

UCD
OceanWhiteFish
P3
Unsuccessful Mgmt
Biomass
0
0.05
0.1
0.15
Relative to unfished

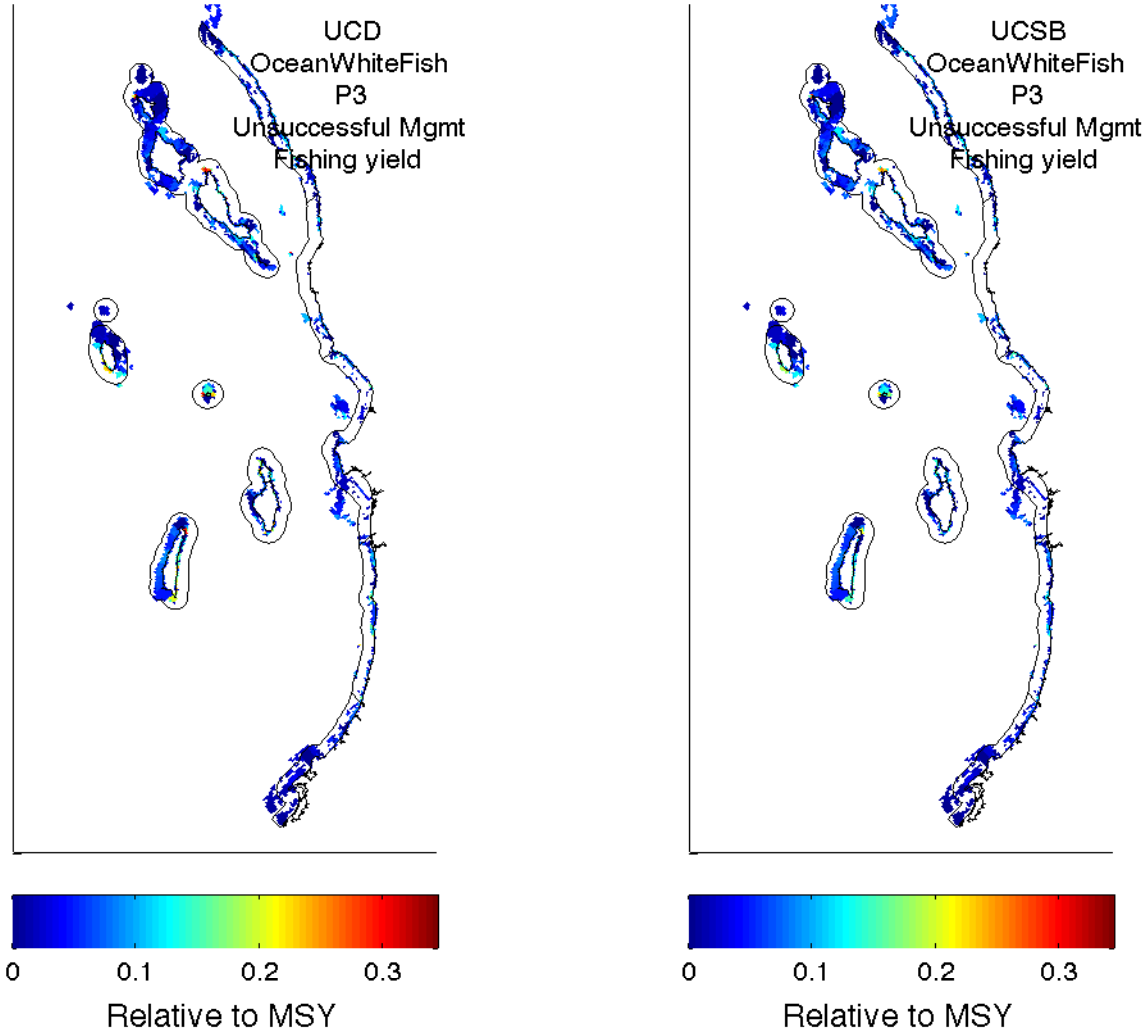

UCSB
OceanWhiteFish
P3
Unsuccessful Mgmt
Biomass
0
0.05
0.1
0.15
Relative to unfished

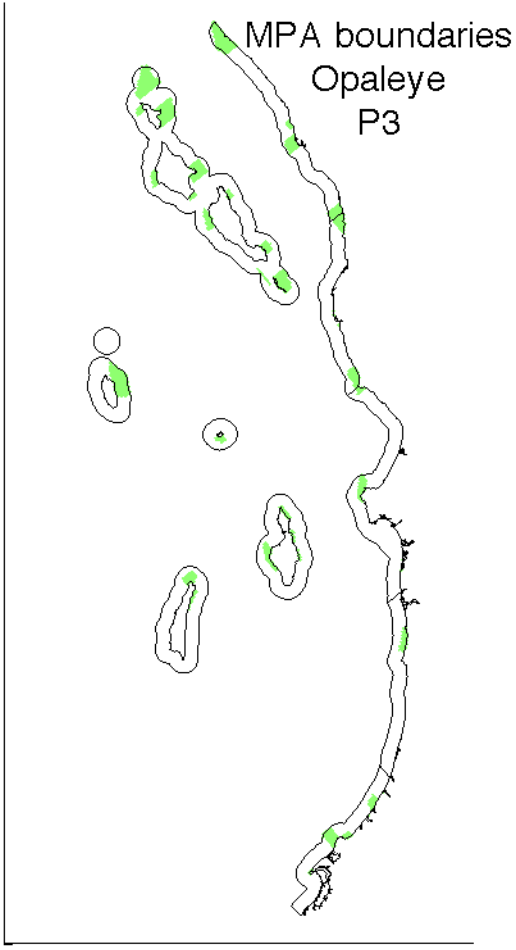

UCD
OceanWhiteFish
P3
Unsuccessful Mgmt
Fishing effort
0
1
2
3
4
Relative to MSY maximum effort
UCSB
OceanWhiteFish
P3
Unsuccessful Mgmt
Fishing effort
0
1
2
3
4
Relative to MSY maximum effort

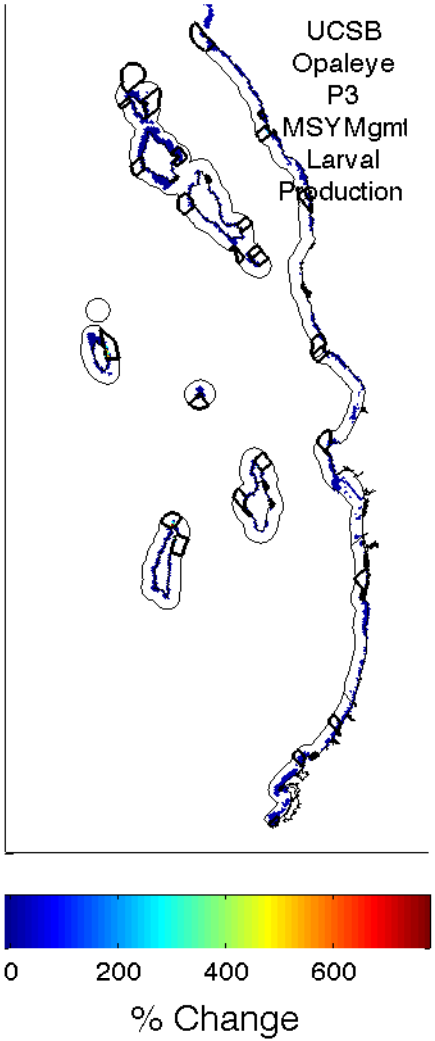

UCD
OceanWhiteFish
P3
Unsuccessful Mgmt
Larval Recruitment
1
2
3
4
Proportion of Maximum
x 10^4

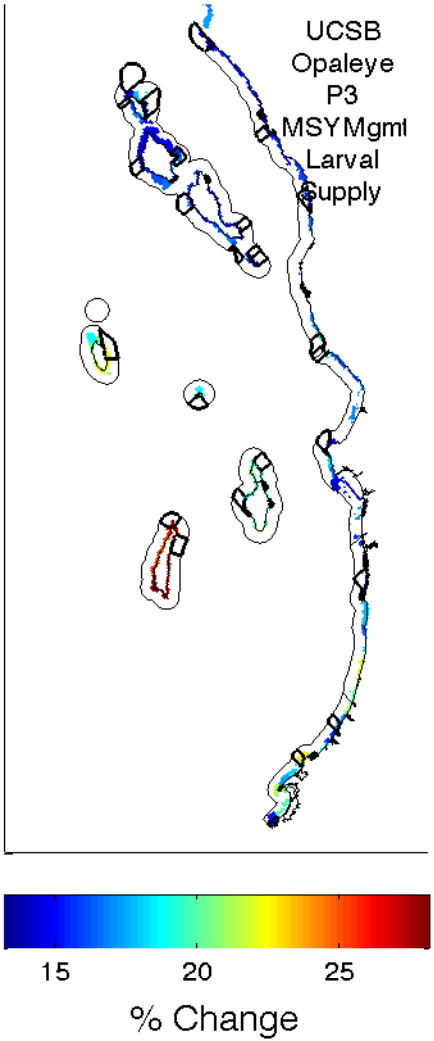

UCD
OceanWhiteFish
P3
UnsucMgmt
Larval
Production
0
100
200
% Change

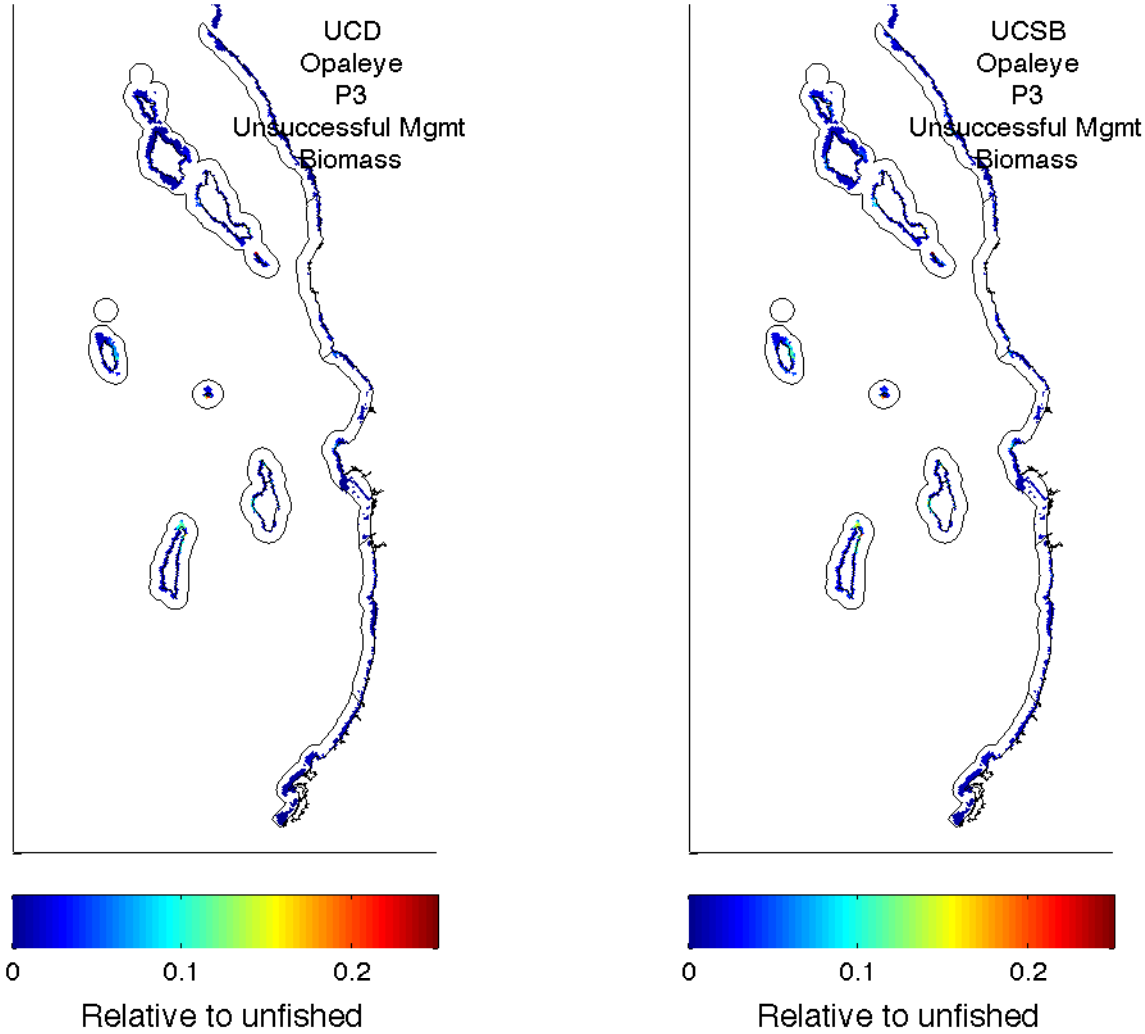

UCD
OceanWhiteFish
P3
UnsucMgmt
Larval
Supply
11
12
13
14
15
% Change

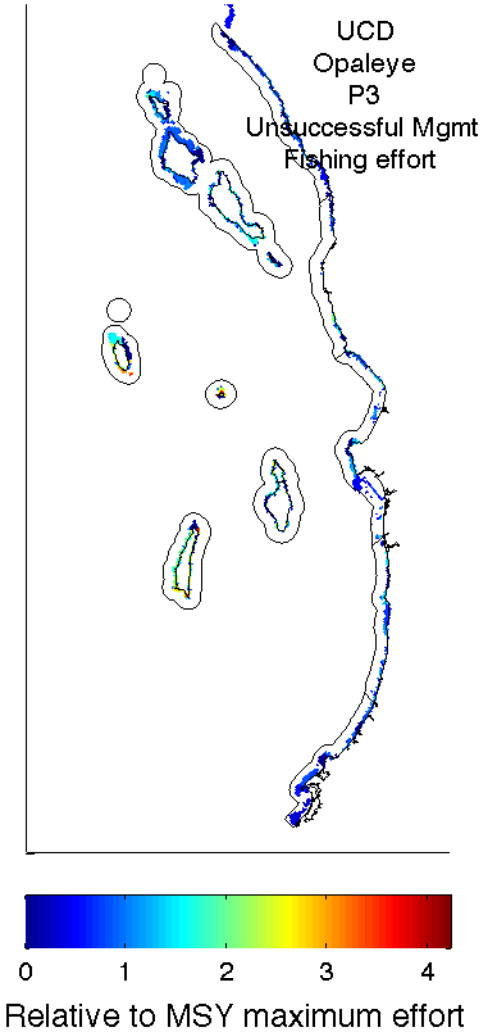

UCD
OceanWhiteFish
P3
Unsuccessful Mgmt
Fishing yield
0
0.1
0.2
0.3
Relative to MSY
UCSB
OceanWhiteFish
P3
Unsuccessful Mgmt
Fishing yield
0
0.1
0.2
0.3
Relative to MSY

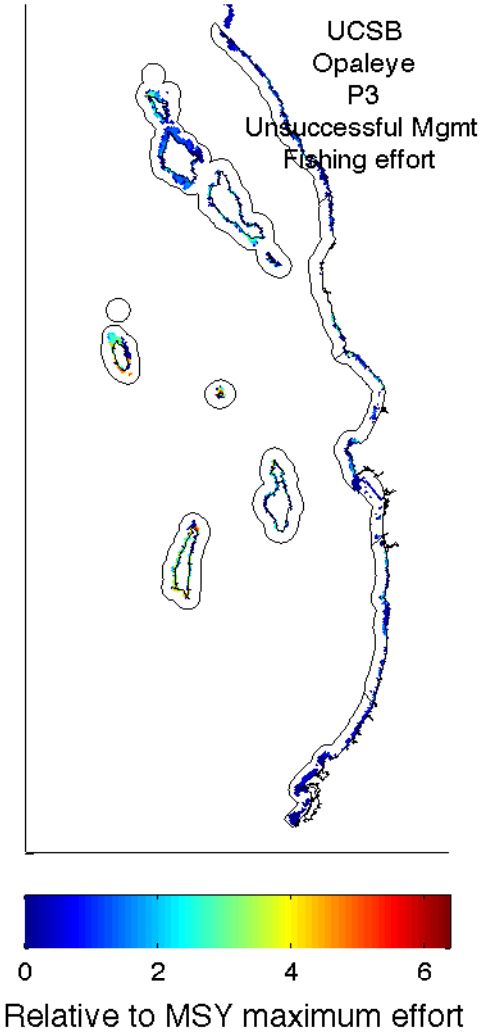

MPA boundaries
Opaleye
P3

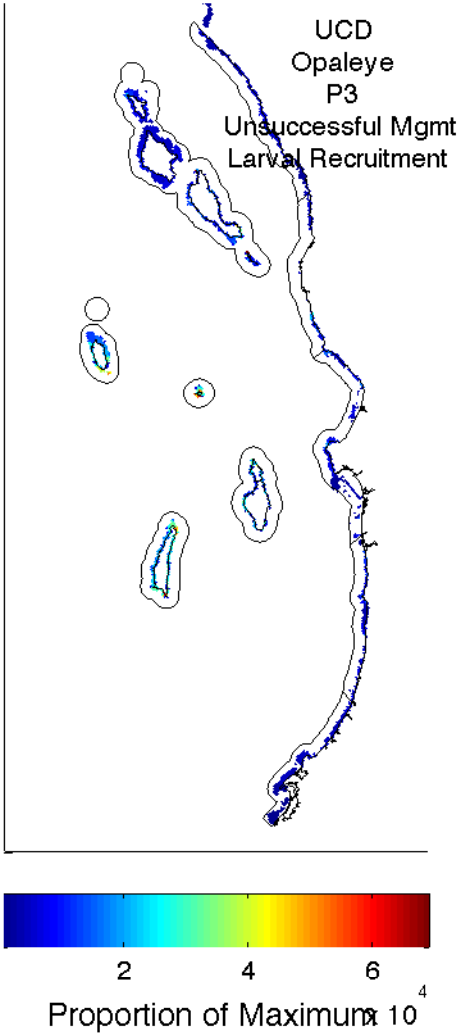

UCSB
Opaleye
P3
MSYMgmt
Larval
Production
0
200
400
600
% Change

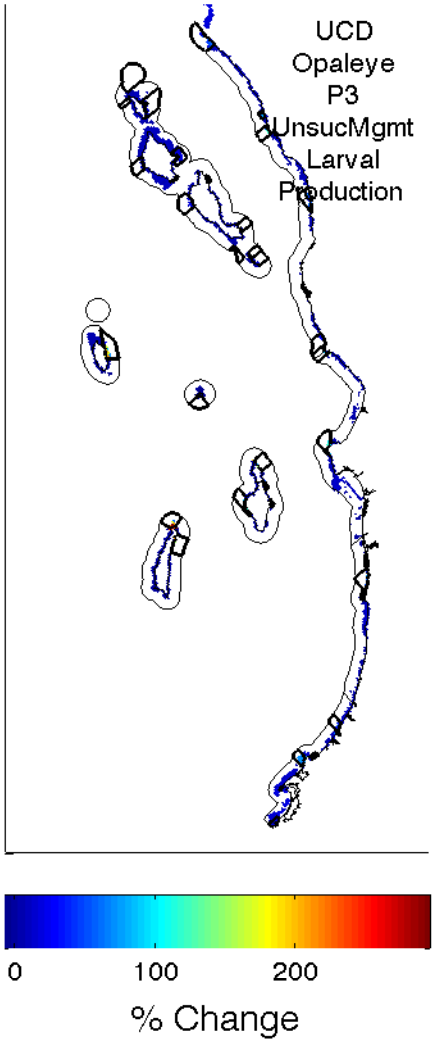

UCSB
Opaleye
P3
MSYMgmt
Larval
Supply
15
20
25
% Change

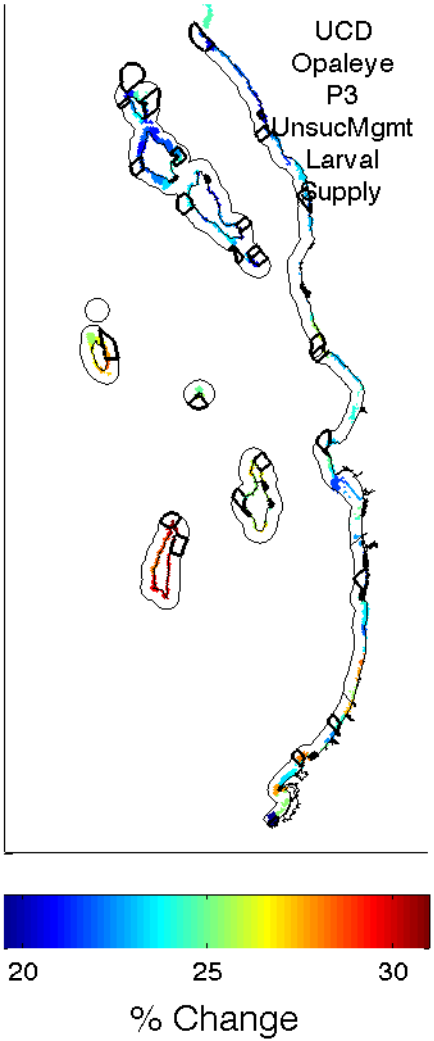

UCD
Opaleye
P3
Unsuccessful Mgmt
Biomass
0
0.1
0.2
Relative to unfished
UCSB
Opaleye
P3
Unsuccessful Mgmt
Biomass
0
0.1
0.2
Relative to unfished

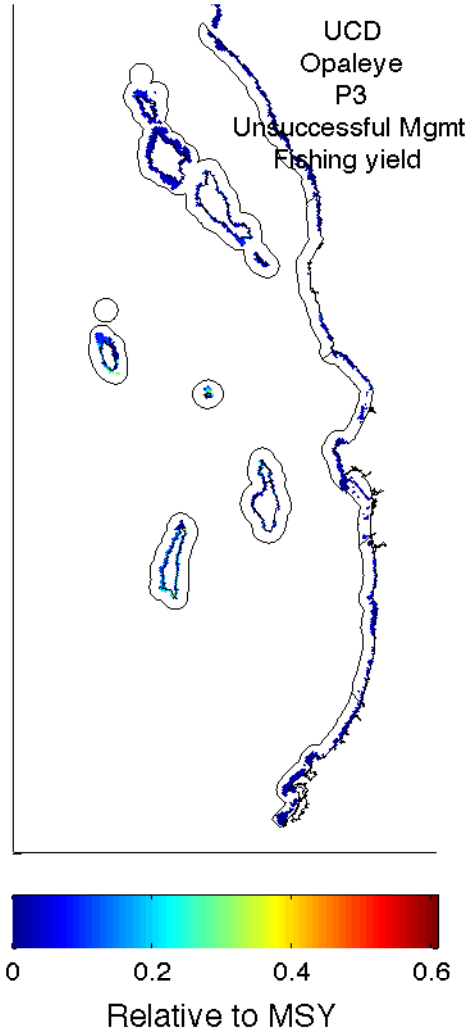

UCD
Opaleye
P3
Unsuccessful Mgmt
Fishing effort
0
1
2
3
4
Relative to MSY maximum effort

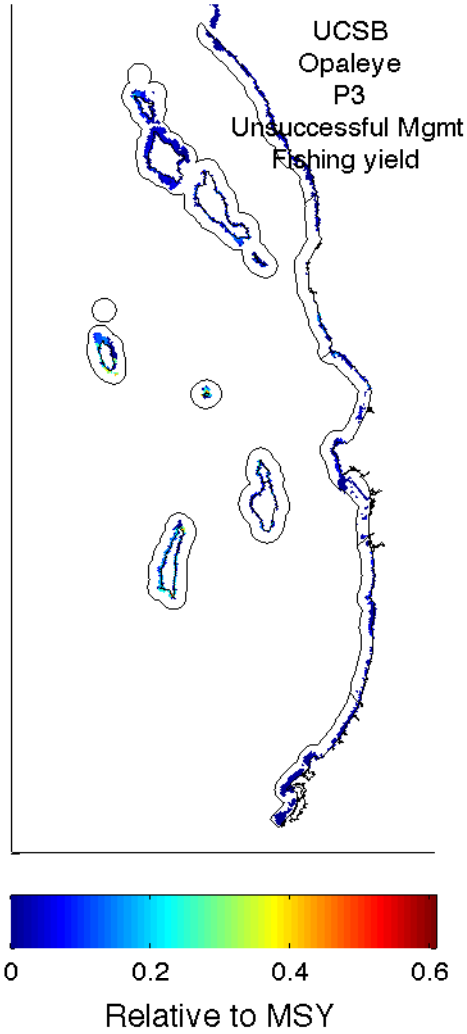

UCSB
Opaleye
P3
Unsuccessful Mgmt
Fishing effort
0
2
4
6
Relative to MSY maximum effort


UCD
Opaleye
P3
Unsuccessful Mgmt
Larval Recruitment
2
4
6
Proportion of Maximum
x 10^4

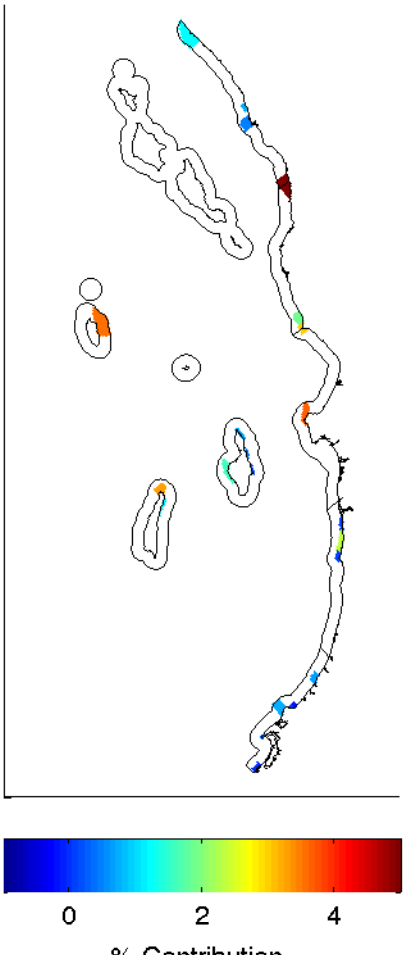

UCD
Opaleye
P3
UnsucMgmt
Larval
Production
0
100
200
% Change


UCD
Opaleye
P3
UnsucMgmt
Larval
Supply
20
25
30
% Change

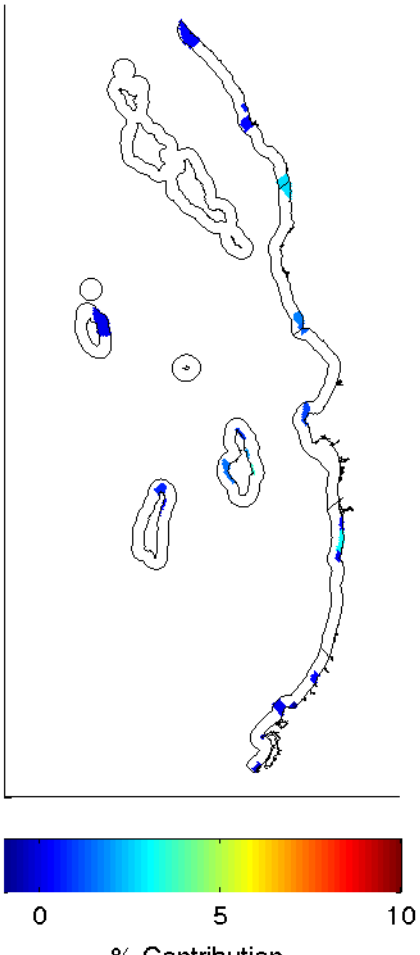

UCD
Opaleye
P3
Unsuccessful Mgmt
Fishing yield
0
0.2
0.4
0.6
Relative to MSY


UCSB
Opaleye
P3
Unsuccessful Mgmt
Fishing yield
0
0.2
0.4
0.6
Relative to MSY

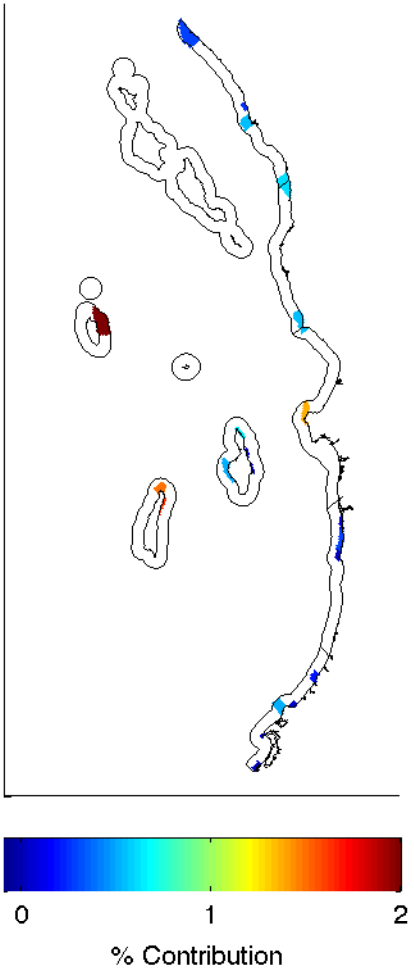
UCD Model
P3
Unsuc Mgmt
Knockout Index



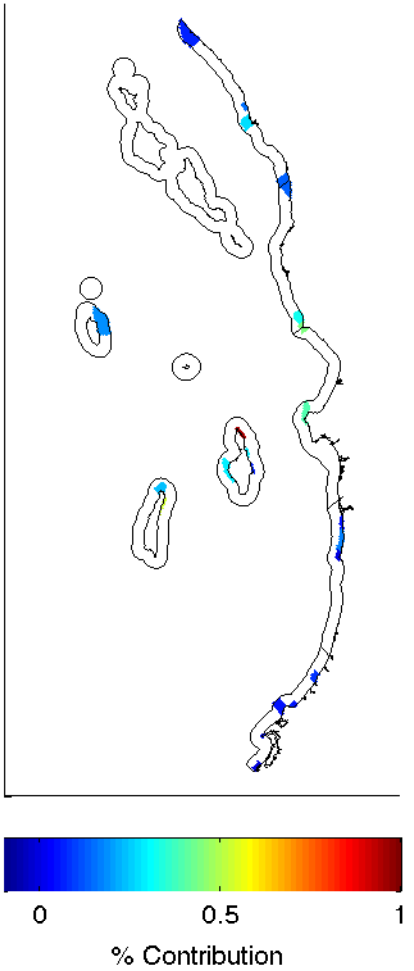
UCD Model
P3
Unsuc Mgmt
Knockout Index, Scaled by Habitat

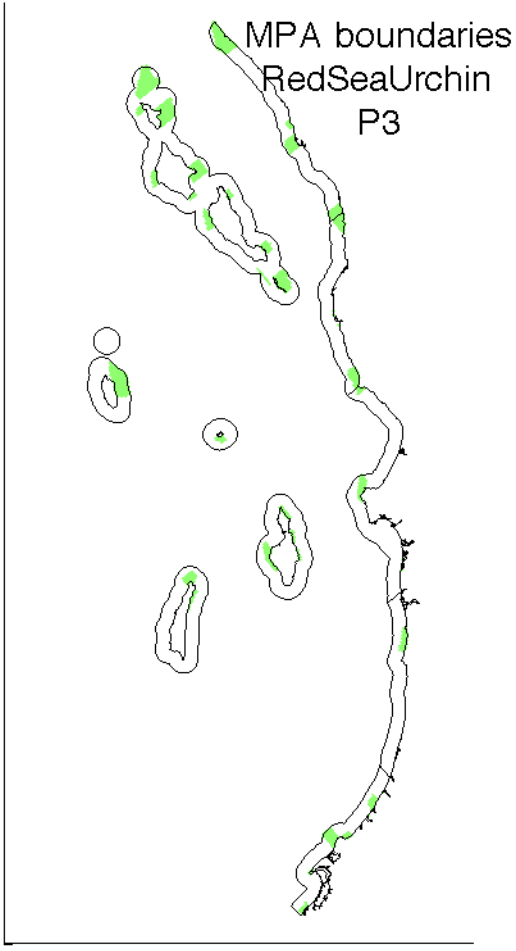


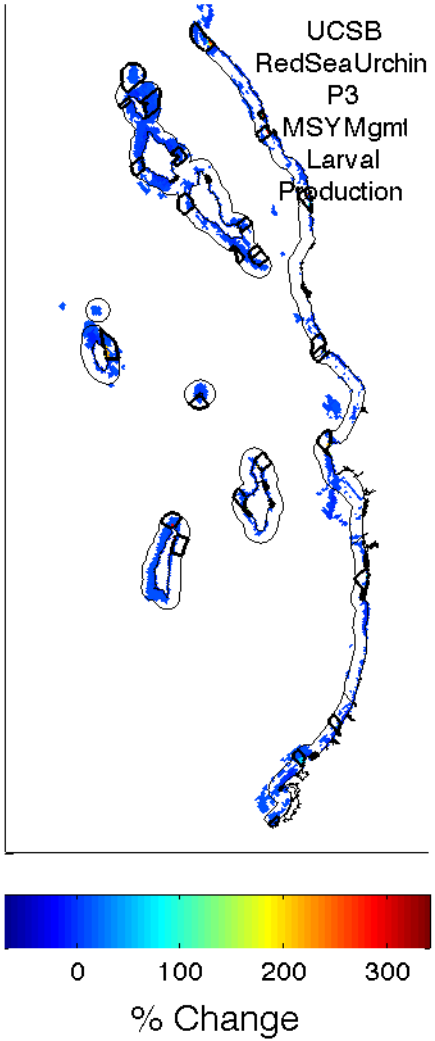
UCSB Model
P3
MSY Mgmt
Knockout Index

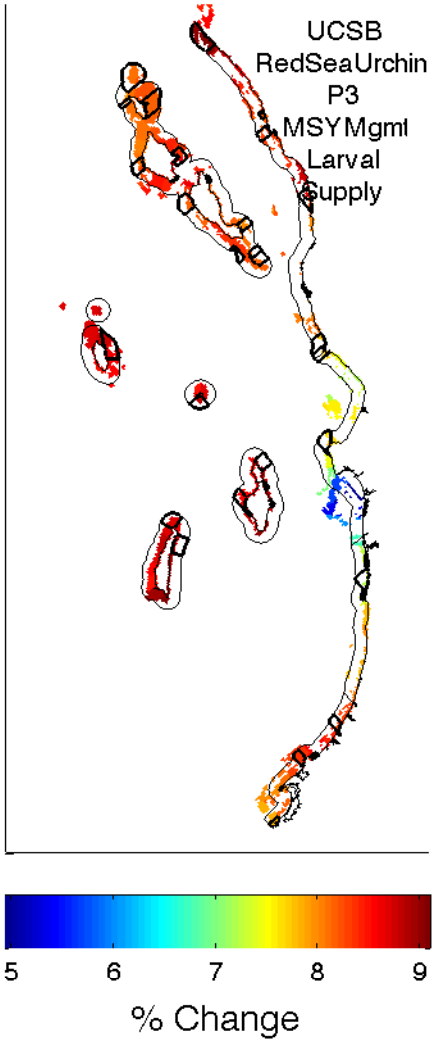


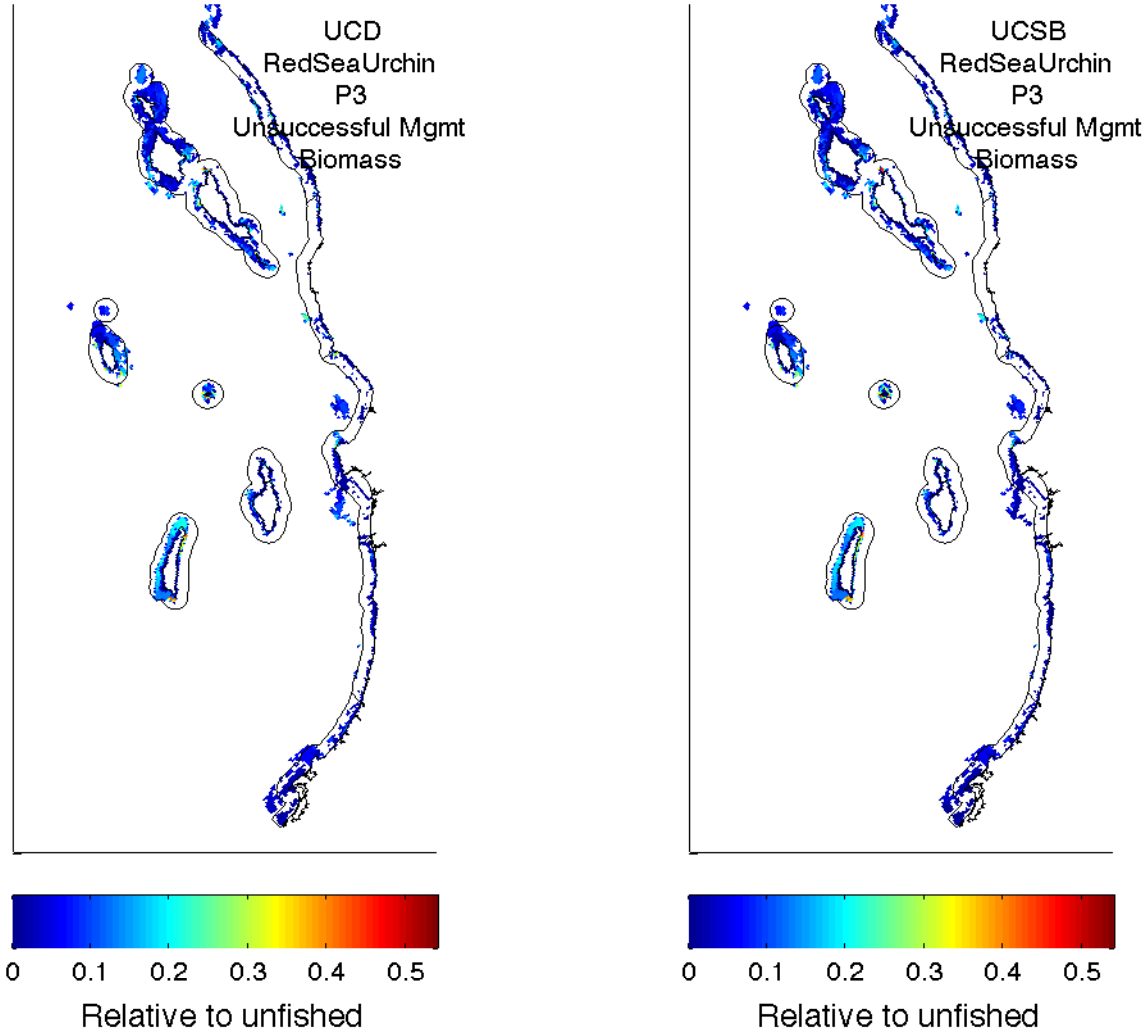
UCSB Model
P3
MSY Mgmt
Knockout Index, Scaled by Habitat

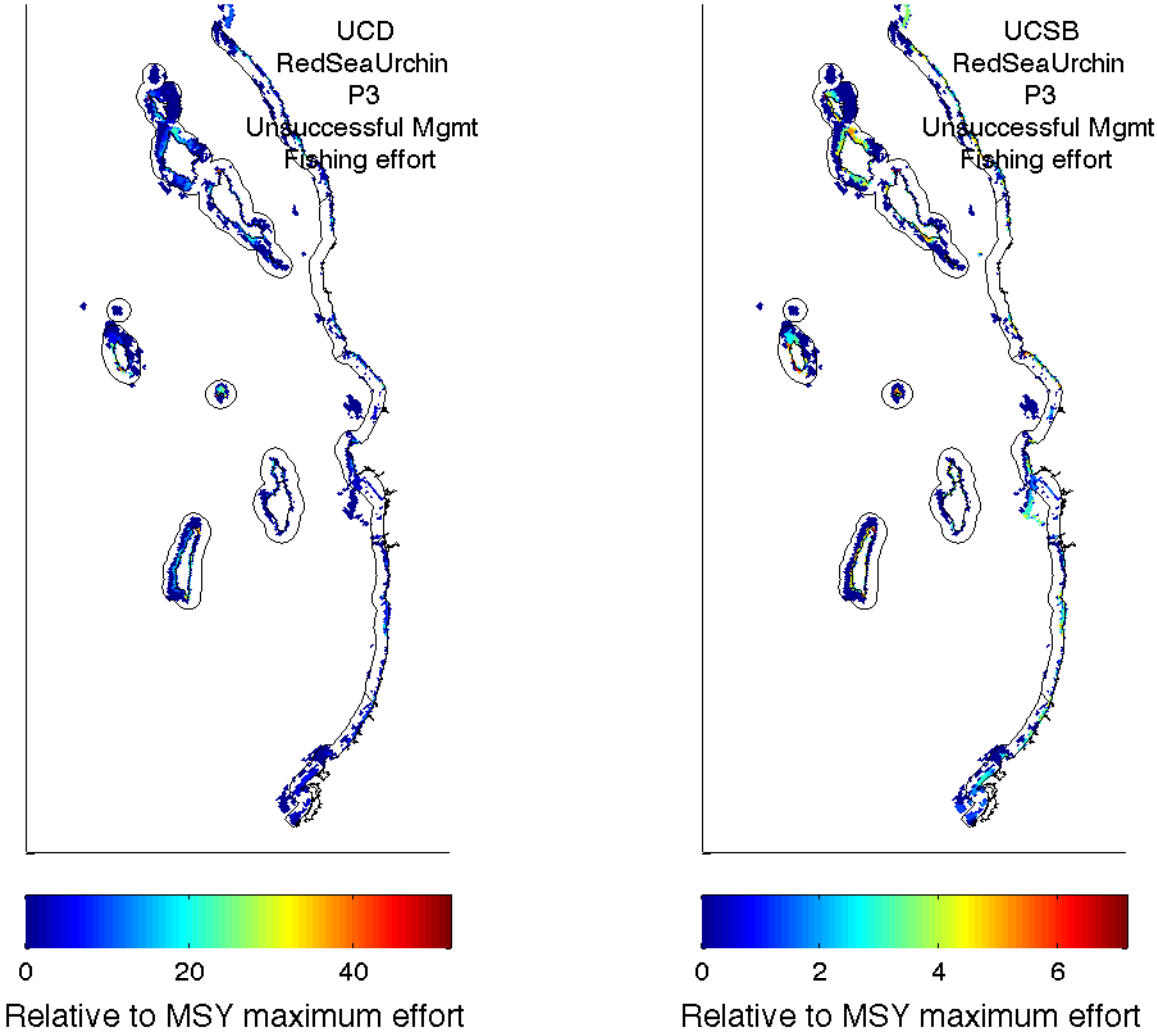


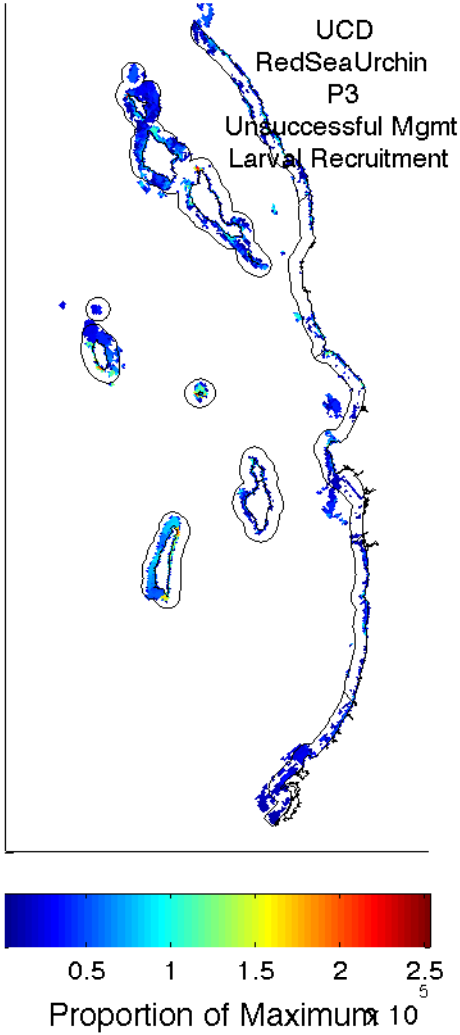

MPA boundaries
RedSeaUrchin
P3

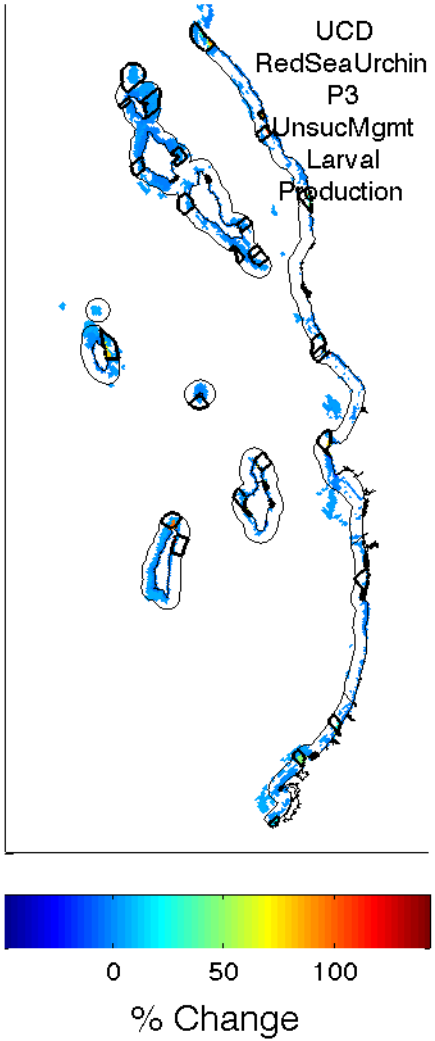

UCSB
RedSeaUrchin
P3
MSYMgmt
Larval
Production
0
100
200
300
% Change

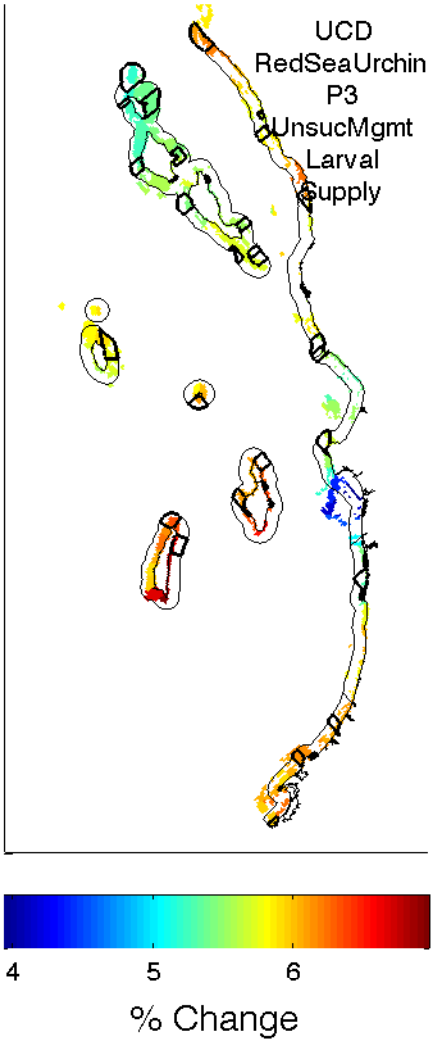

UCSB
RedSeaUrchin
P3
MSYMgmt
Larval
Supply
5
6
7
8
9
% Change

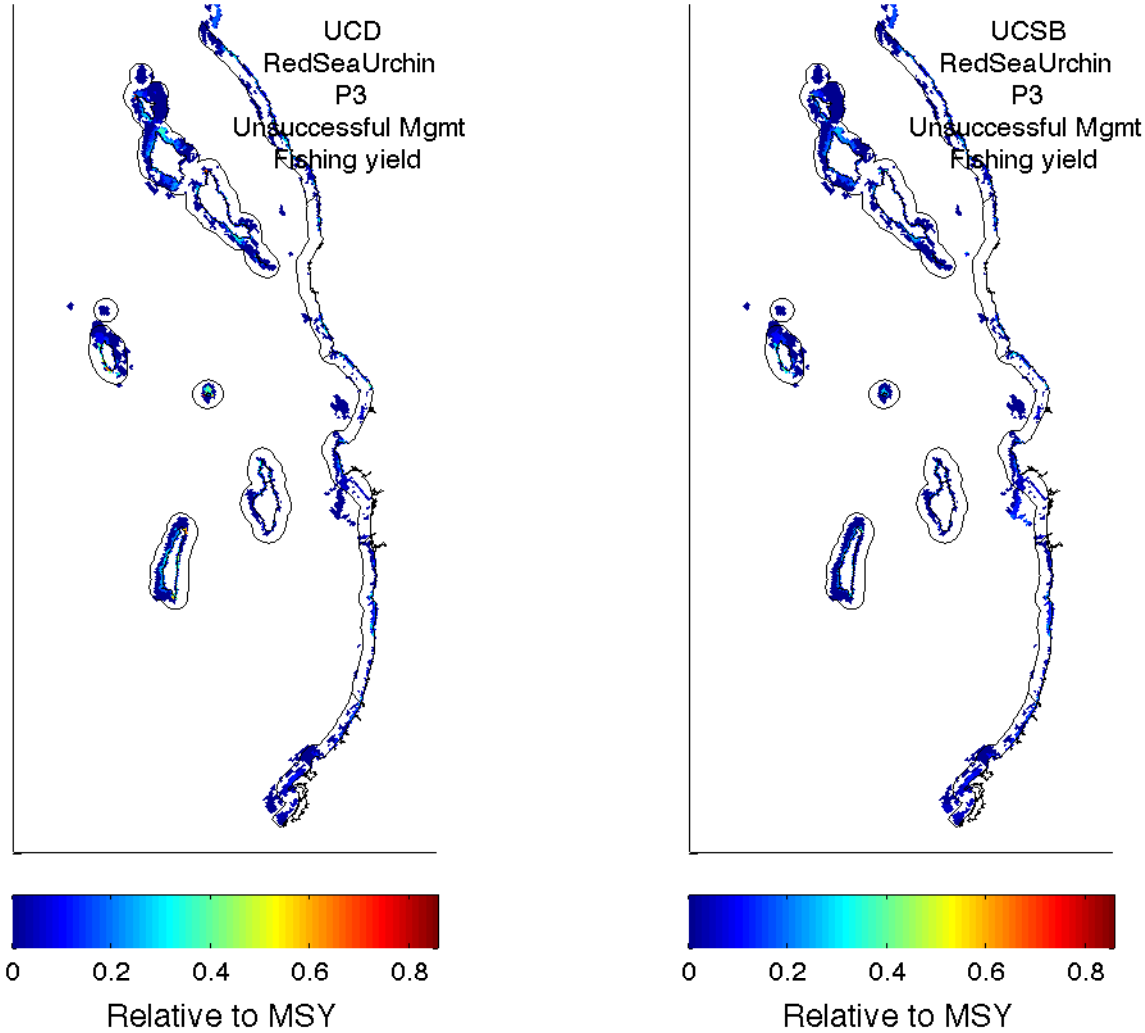

UCD
RedSeaUrchin
P3
Unsuccessful Mgmt
Biomass
0
0.1
0.2
0.3
0.4
0.5
Relative to unfished
UCSB
RedSeaUrchin
P3
Unsuccessful Mgmt
Biomass
0
0.1
0.2
0.3
0.4
0.5
Relative to unfished

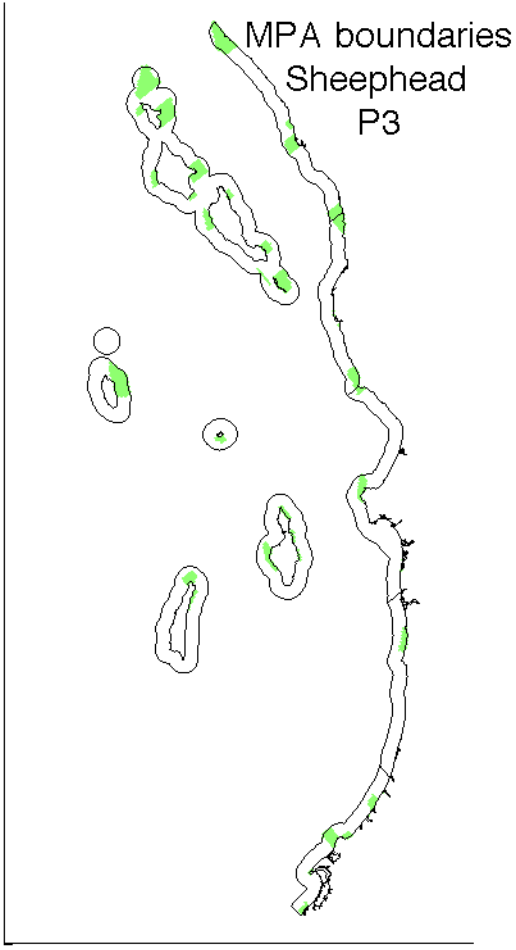

UCD
RedSeaUrchin
P3
Unsuccessful Mgmt
Fishing effort
0
20
40
Relative to MSY maximum effort
UCSB
RedSeaUrchin
P3
Unsuccessful Mgmt
Fishing effort
0
2
4
6
Relative to MSY maximum effort

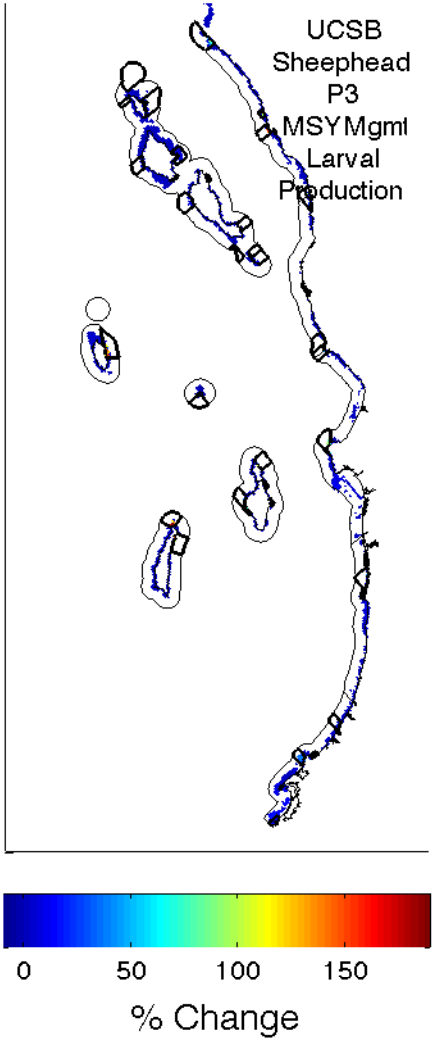

UCD
RedSeaUrchin
P3
Unsuccessful Mgmt
Larval Recruitment
0.5
1
1.5
2
2.5
Proportion of Maximum
x 10^5

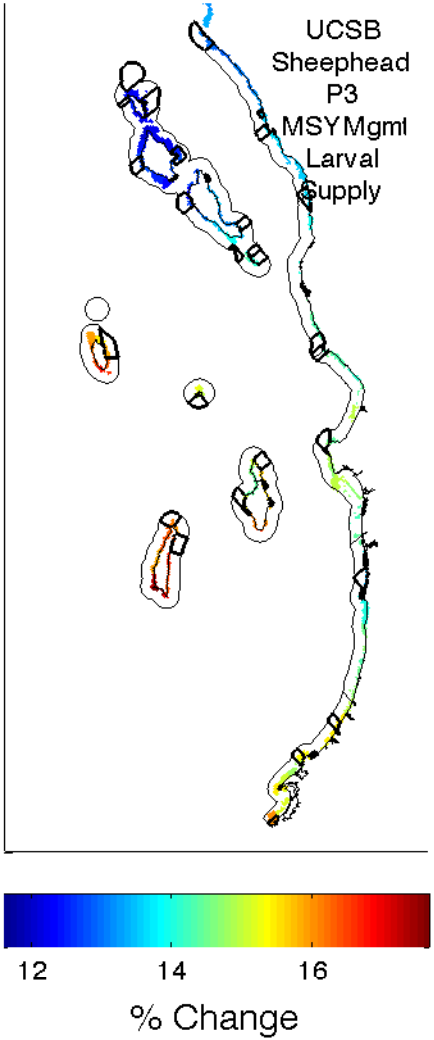

UCD
RedSeaUrchin
P3
UnsucMgmt
Larval
Production
0
50
100
% Change

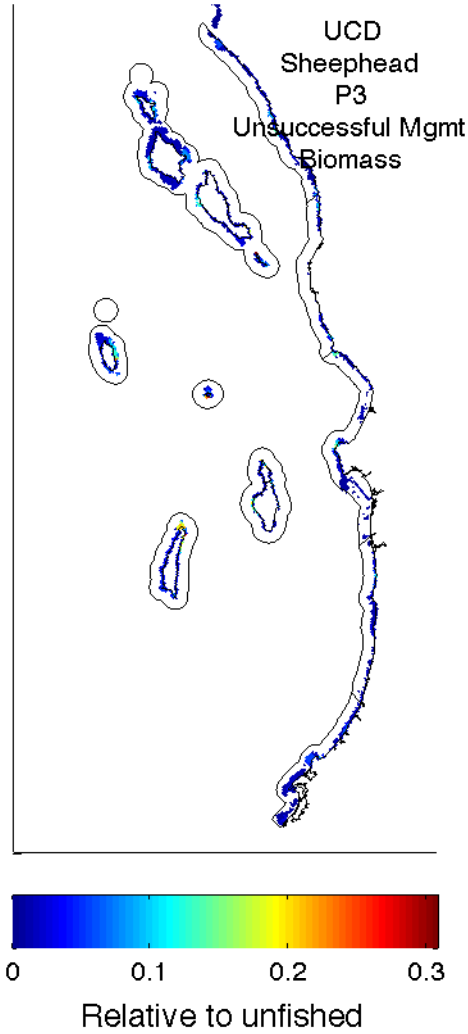

UCD
RedSeaUrchin
P3
UnsucMgmt
Larval
Supply
4
5
6
% Change

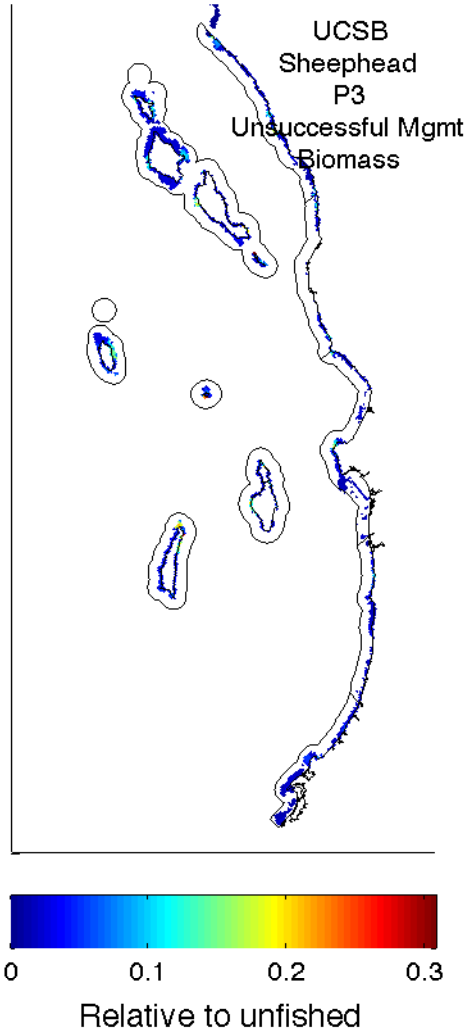

UCD
RedSeaUrchin
P3
Unsuccessful Mgmt
Fishing yield
0
0.2
0.4
0.6
0.8
Relative to MSY
UCSB
RedSeaUrchin
P3
Unsuccessful Mgmt
Fishing yield
0
0.2
0.4
0.6
0.8
Relative to MSY

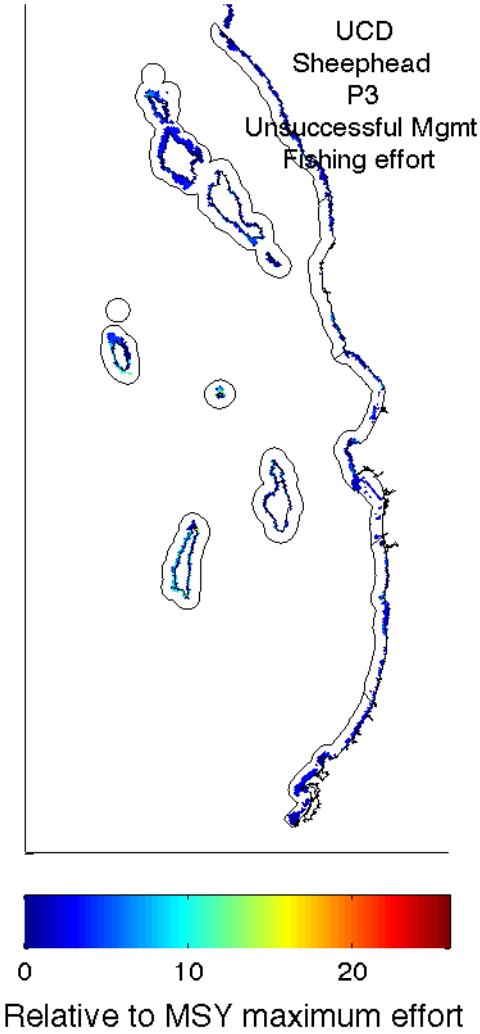

MPA boundaries
Sheephead
P3

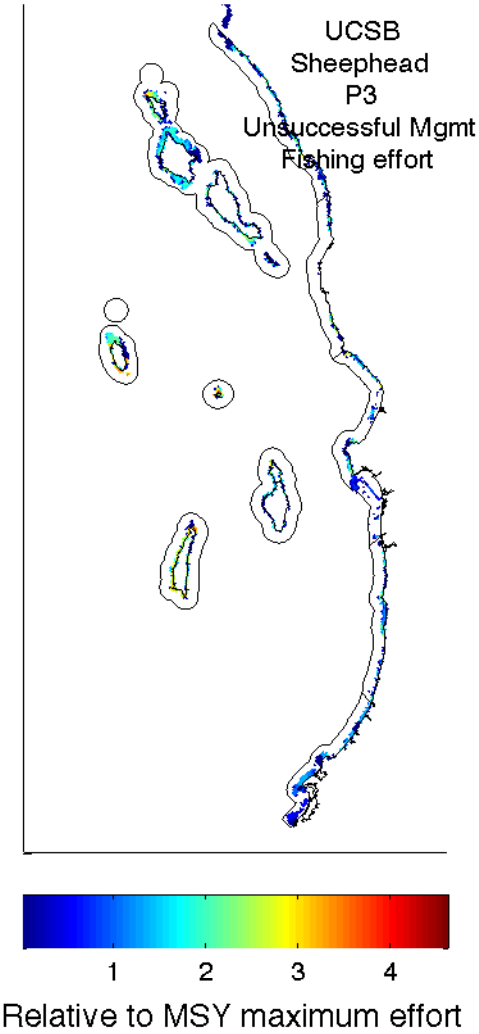

UCSB
Sheephead
P3
MSY Mgmt
Larval
Production
0
50
100
150
% Change

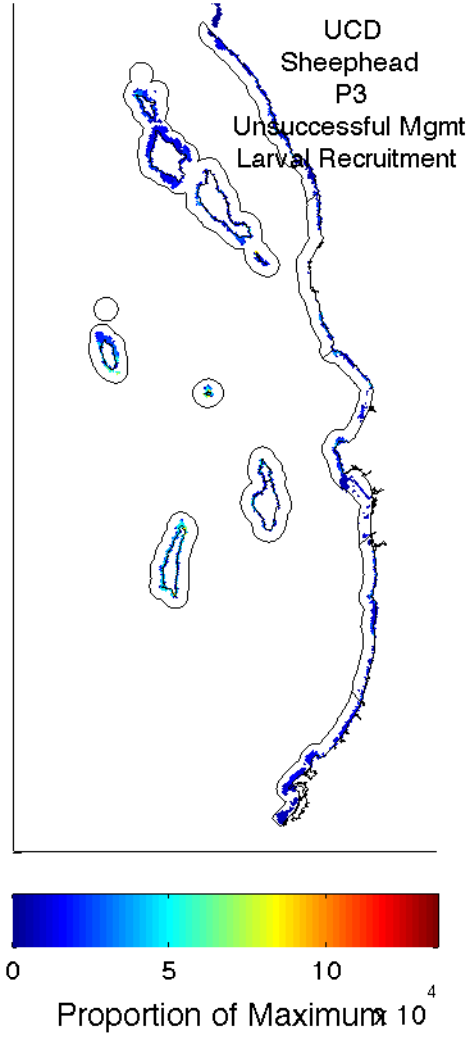

UCSB
Sheephead
P3
MSY Mgmt
Larval
Supply
12
14
16
% Change

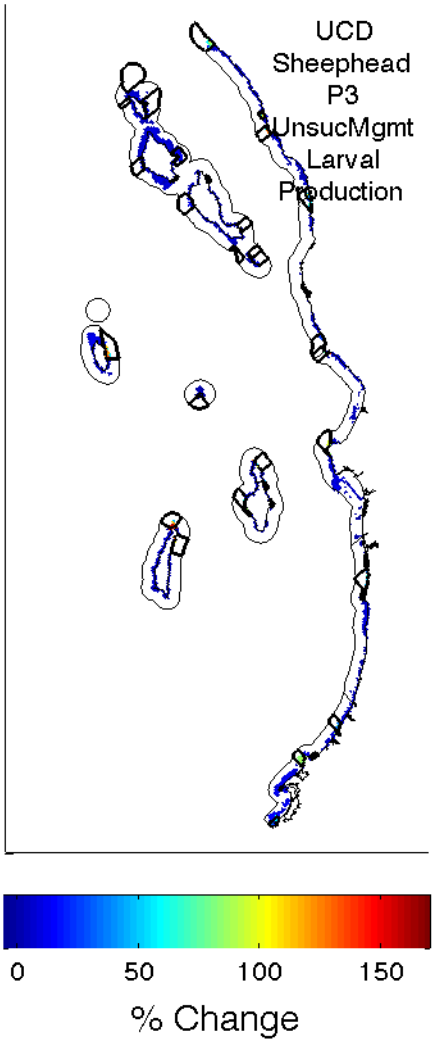

UCD
Sheephead
P3
Unsuccessful Mgmt
Biomass
0
0.1
0.2
0.3
Relative to unfished

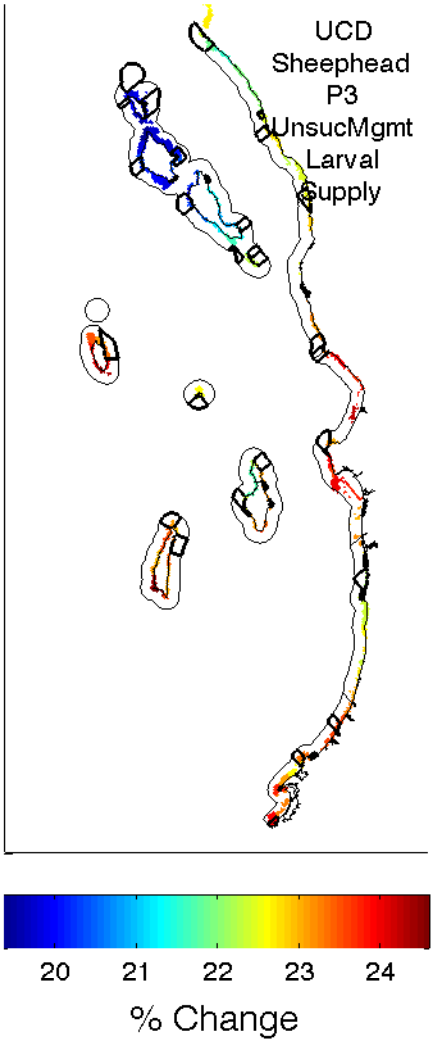

UCSB
Sheephead
P3
Unsuccessful Mgmt
Biomass
0
0.1
0.2
0.3
Relative to unfished

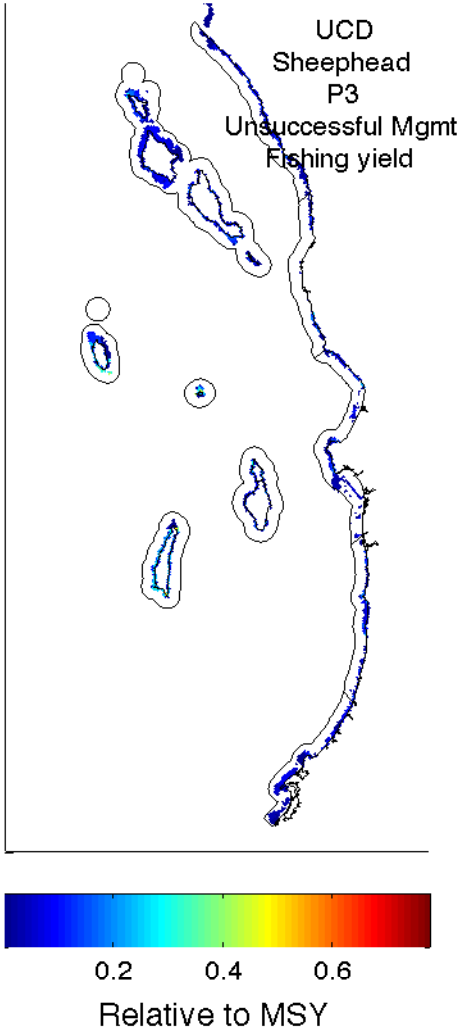

UCD
Sheephead
P3
Unsuccessful Mgmt
Fishing effort
0
10
20
Relative to MSY maximum effort

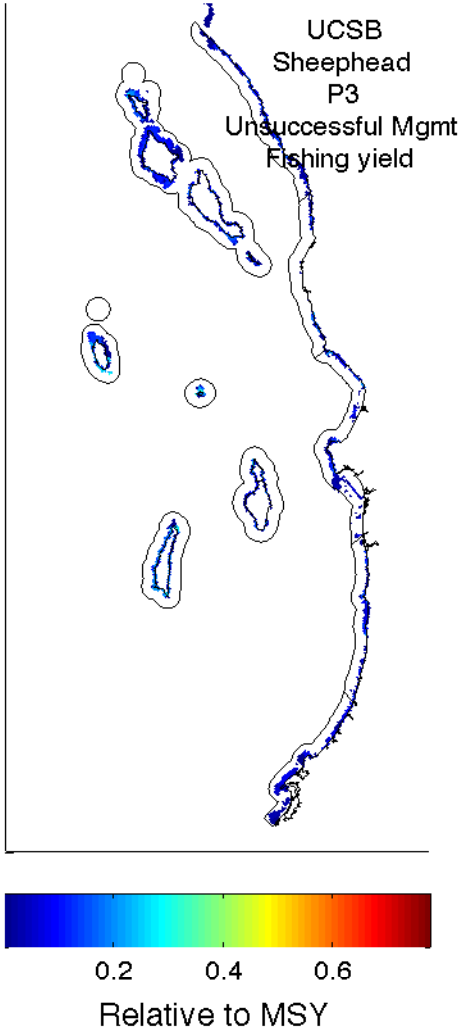

UCSB
Sheephead
P3
Unsuccessful Mgmt
Fishing effort
1
2
3
4
Relative to MSY maximum effort


UCD
Sheephead
P3
Unsuccessful Mgmt
Larval Recruitment
0
5
10
Proportion of Maximum
x 10^4


UCD
Sheephead
P3
UnsucMgmt
Larval
Production
0
50
100
150
% Change


UCD
Sheephead
P3
UnsucMgmt
Larval
Supply
20
21
22
23
24
% Change


UCD
Sheephead
P3
Unsuccessful Mgmt
Fishing yield
0.2
0.4
0.6
Relative to MSY


UCSB
Sheephead
P3
Unsuccessful Mgmt
Fishing yield
0.2
0.4
0.6
Relative to MSY