Total vegetation cover soil protection
Region:NRM Riverina NSW   Date: March 2008

This report describes vegetation protecting the soil surface from erosion during a chosen month compared to previous years. This report has been generated using MODIS fractional vegetation cover information available in Rangelands and Pasture Productivity (RAPP) map tool https://map.geo-rapp.org/#australia. The report is based on 500 metre pixel data on monthly time steps.
Land use forest cover:

Results can be shown for the whole region (polygon), and separated by land use and forest cover classes which are likely to show different cover patterns and targets. Land use is divided into four broad classes: Conservation and natural environments, Agriculture, production native forests and plantation forests (no report), and other (no report). Agriculture is divided into grazing, crops and horticulture which are sub-divided into non-irrigated and irrigated. If forest is present land use is further divided into: non-forest, woodland forest and non-woodland forest. The area of each land use and forest class are shown as a map and chart. The report content is repeated for each land use and forest cover class that covers at least 1% of the area of the chosen region.
Total vegetation Cover:

The total vegetation cover indicates where soil is likely to be protected from wind and or water hillslope erosion. Total vegetation cover for this month is shown on a map and chart classified into 4 classes.
    • 71-100% High cover – protected from wind and usually water erosion (high rainfall, steep
slopes, and erodible soils may need greater than 80, 90, 95 and up to 100% cover)
    • 51-70% Moderate cover – protected from wind erosion
    • 31-50% Low cover – not protected
    • 0-30% Very Low cover – not protected
Erosion protection: Wind erosion 50% total vegetation cover

The vegetation cover threshold required to prevent soil erosion is usually 50% to reduce wind erosion, 70% or 80% to reduce water (hillslope) erosion depending on the steepness and rainfall. Areas protected from erosion for the month:
    • Map: water erosion protection (>70% cover) percentage area and hectares.
    • Map: wind erosion protection (>50% cover) percentage area and hectares.
Comparison with previous years:

    • Map: anomaly comparing this month to the average cover from the same month in previous years.
    • Map: deciles rank of month against the same month in previous years.
Anomalies and deciles until September 2019 are calculated comparing to the same months 2001 to 2019. Extra monthly data will be used to calculate anomalies and deciles post September 2019 as they become available.
Time series monthly from January 2001 to current:

Erosion protection
    • Wind erosion protection time series: percentage of the area of the region with greater than 50% cover for
      each month (orange lines). Horizontal lines are 10th (cover target) and 50th percentiles.
    • Water erosion protection time series: percentage of the area of the region with greater than 70% cover for
      each month (blue line). Horizontal lines are 10th (cover target) and 50th percentiles.
Rainfall
    • Millimetres rainfall each month (black line).
Each time series is also stacked by year. The black line shows the current year of data.
Water erosion protection for higher rainfall and steeper slopes:

Water erosion protection on higher slopes. As slope increases, more cover is required to control water erosion. The thresholds reported are:
    • the percentage area with pixels greater than 80% total cover.
    • the percentage area with pixels greater than 90% total cover.
    • the percentage area with pixels greater than 95% total cover.
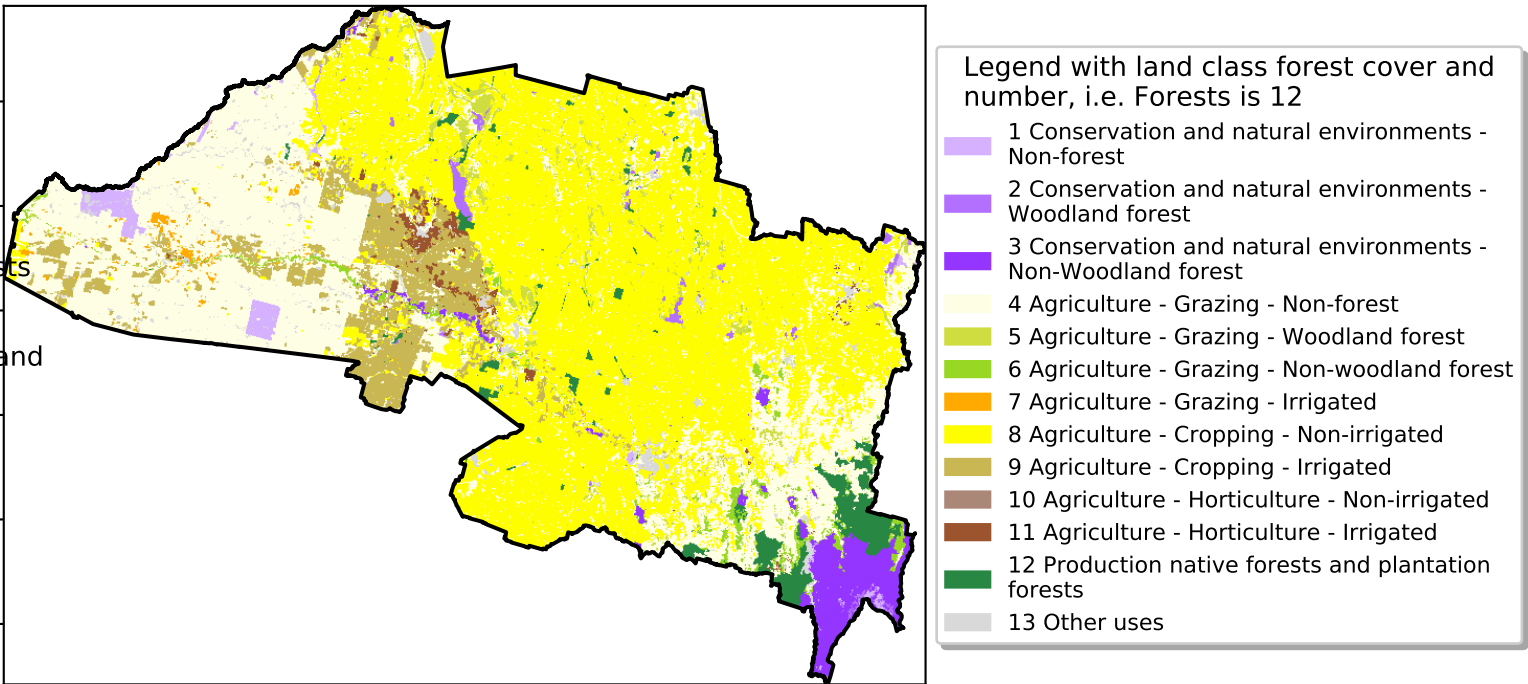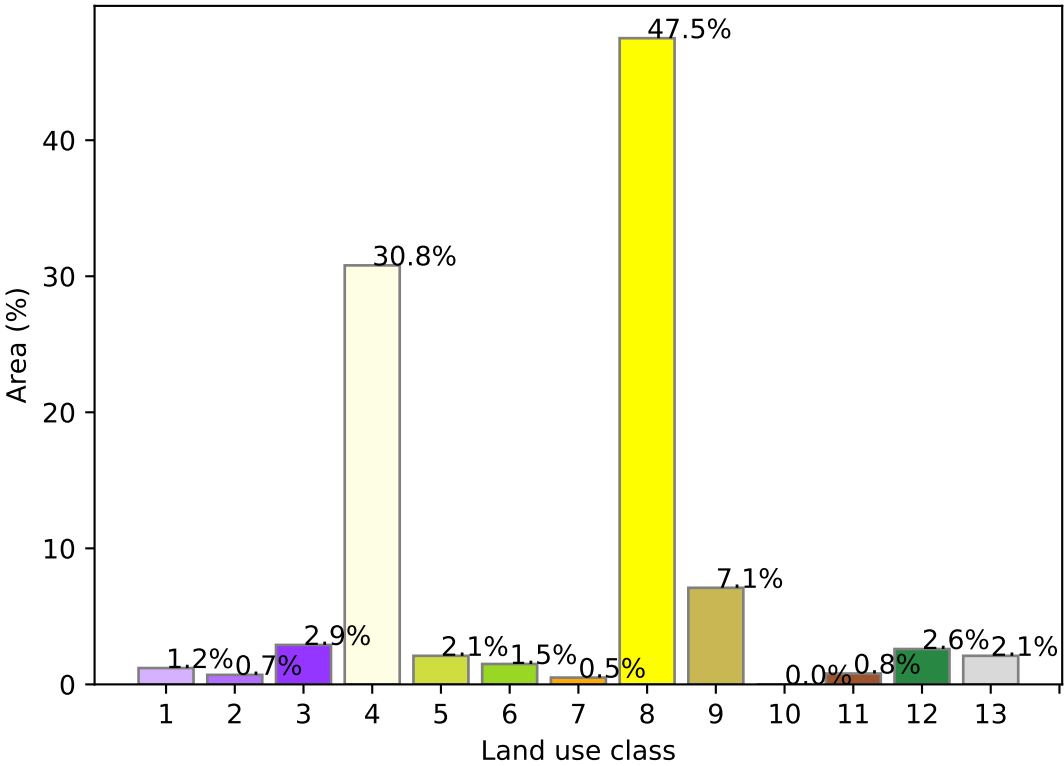
Acknowledgment of data:

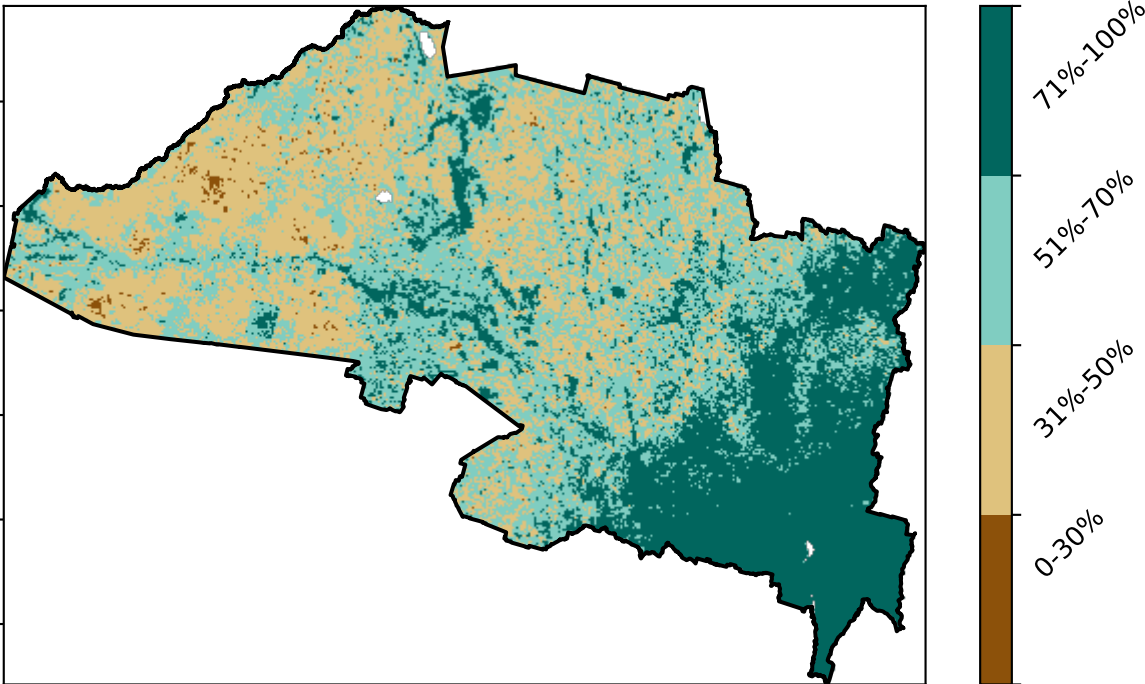# Vegetation Cover Mar 2008

Land use and forest cover

Catchment Scale Land Use and Forests of Australia (2018). Derived from Catchment Scale Land Use of Australia (2018) and Forests of Australia (2018)
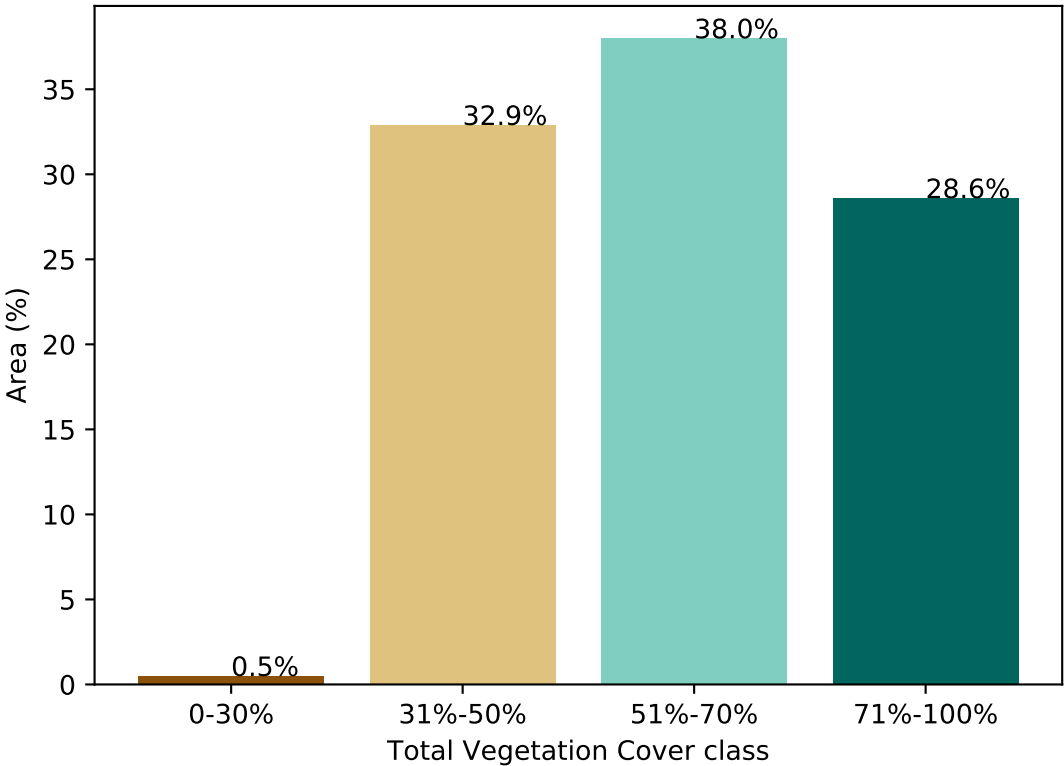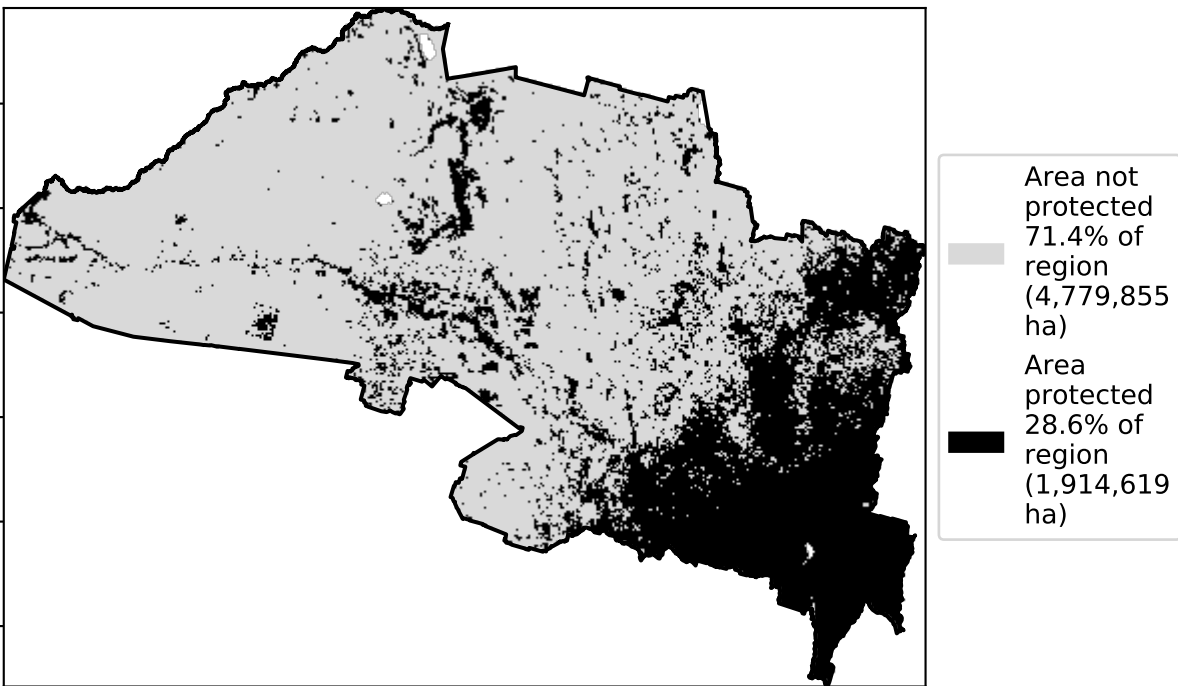
Legend with land class forest cover and number, i.e. Forests is 12
1 Conservation and natural environments - Non-forest
2 Conservation and natural environments - Woodland forest
3 Conservation and natural environments - Non-Woodland forest
4 Agriculture - Grazing - Non-forest
5 Agriculture - Grazing - Woodland forest
6 Agriculture - Grazing - Non-woodland forest
7 Agriculture - Grazing - Irrigated
8 Agriculture - Cropping - Non-irrigated
9 Agriculture - Cropping - Irrigated
10 Agriculture - Horticulture - Non-irrigated
11 Agriculture - Horticulture - Irrigated
12 Production native forests and plantation forests
13 Other uses

Proportion of each land class in area

Total Vegetation Cover [%]

71%-100%
51%-70%
31%-50%
0-30%

Proportion of vegetation cover class in area

% Area protected from water erosion (>70%)

Area not protected 71.4% of region (4,779,855 ha)

Area protected 28.6% of region (1,914,619 ha)

% Area protected from wind erosion (>50%)

Area not protected 33.0% of region (2,209,176 ha)

Area protected 67.0% of region (4,485,298 ha)

Total Vegetation Cover Anomaly [%]

Anomaly show how many percetage points each pixel is from the mean. That is, red pixels are about 20% lower than the mean of that pixel. The mean is only for the month of the map using baseline from 2001 to 2019.

Total Vegetation Cover Decile [%]

Deciles show where the pixel value lies in the record, from highest to lowest, for that month. That is, red pixels are in the lowest 10% of records for that month of the map using baseline from 2001 to 2019.
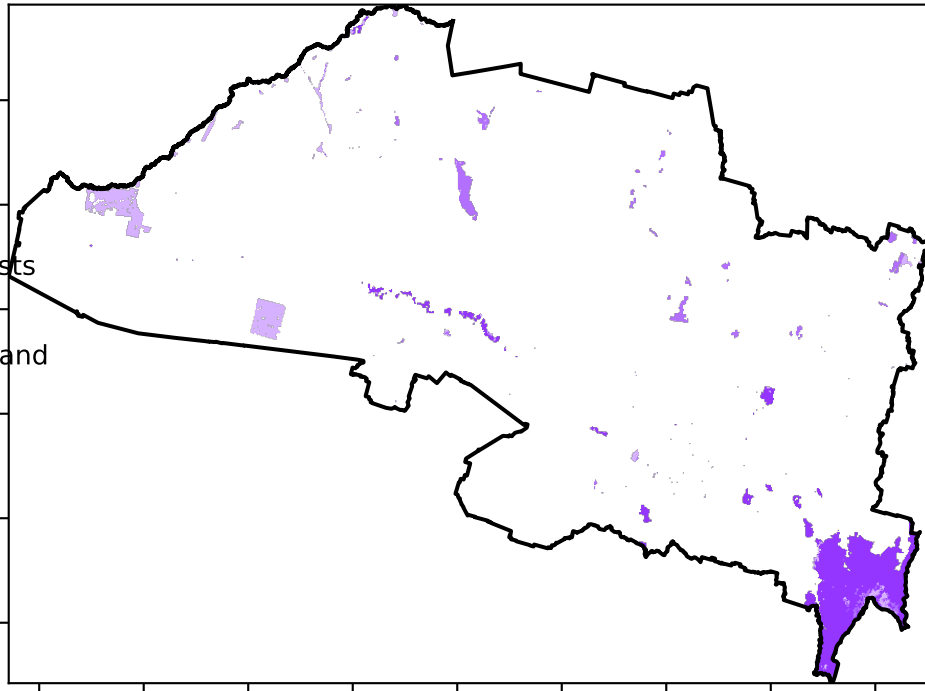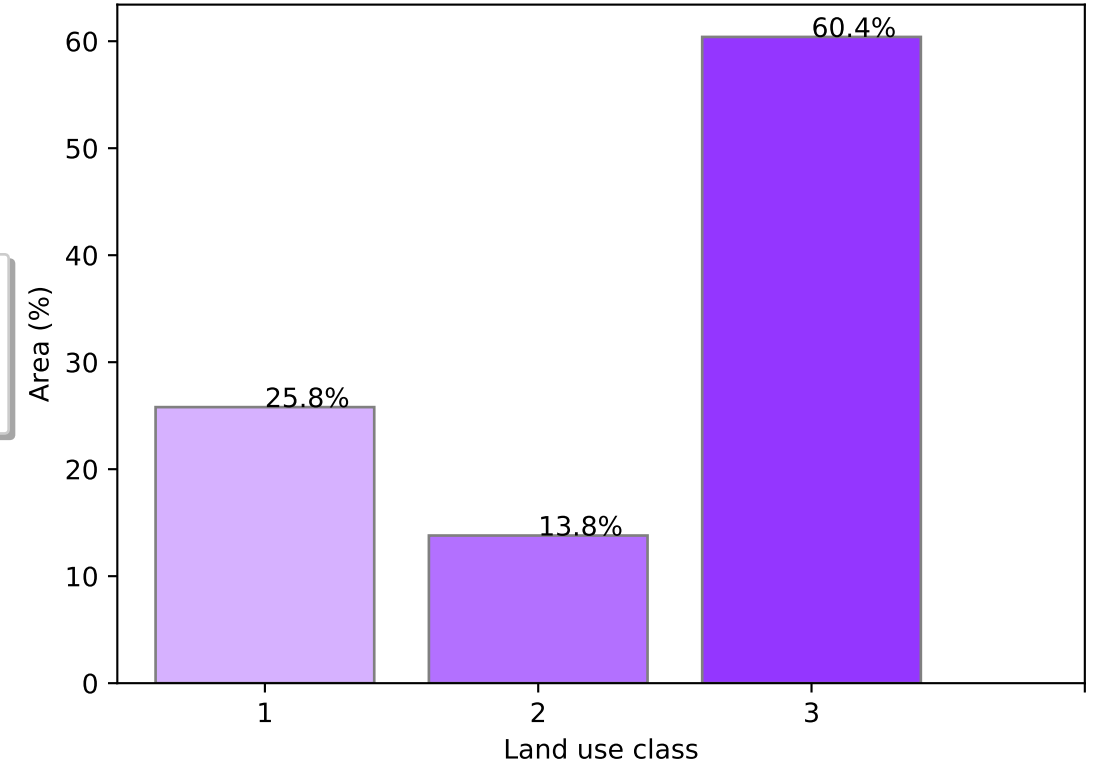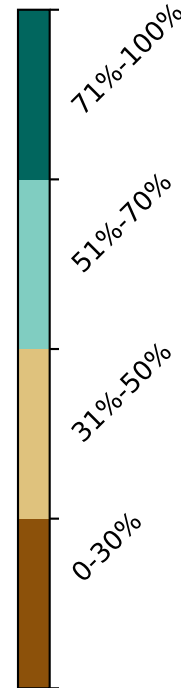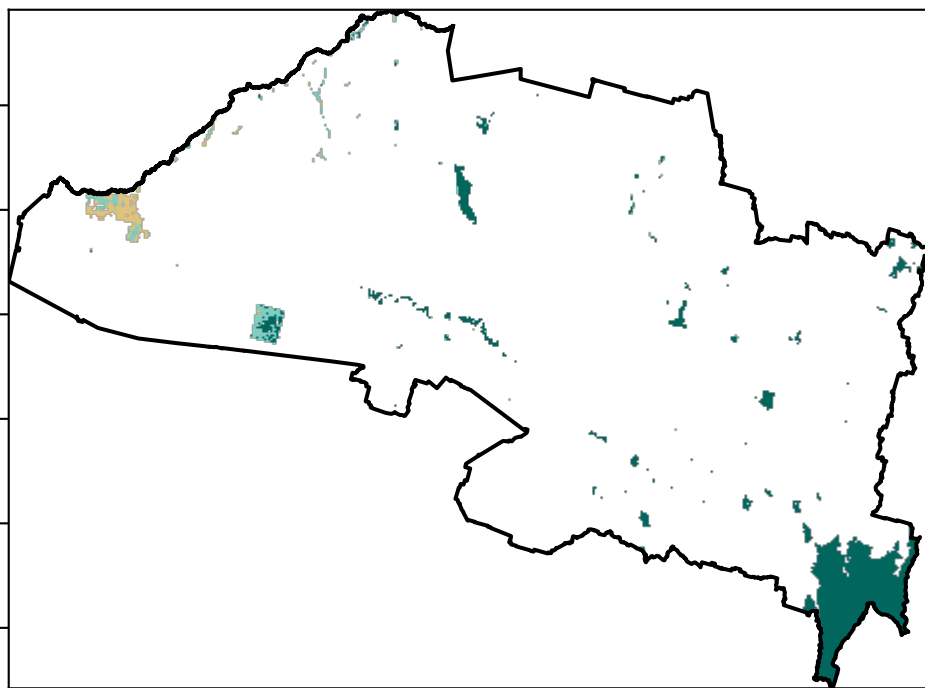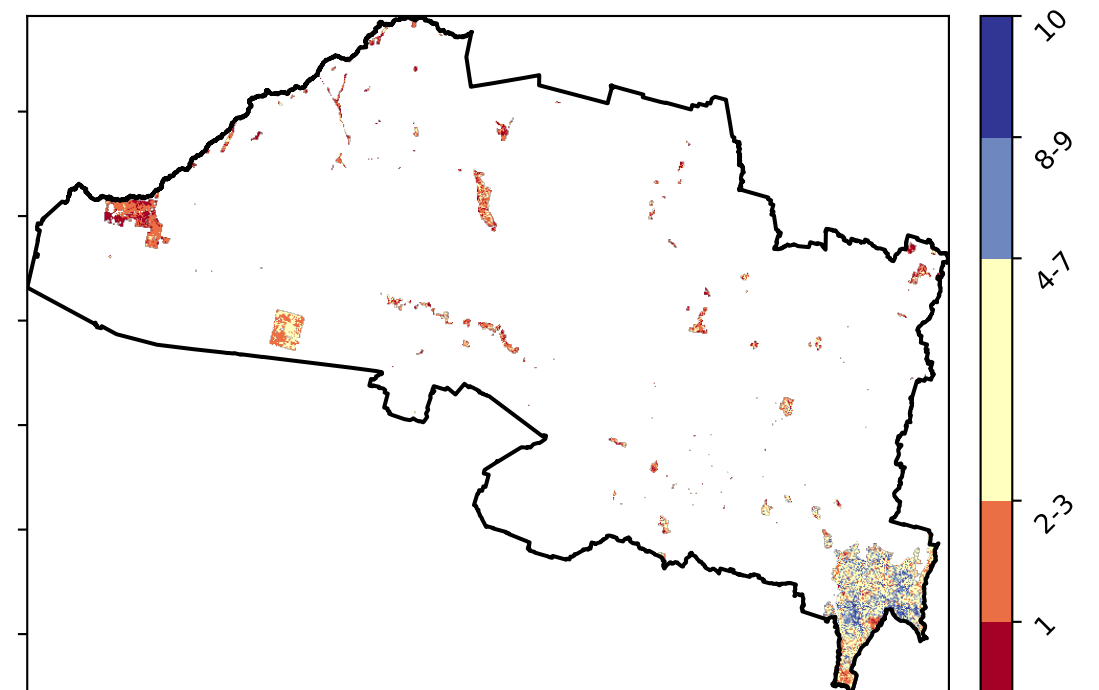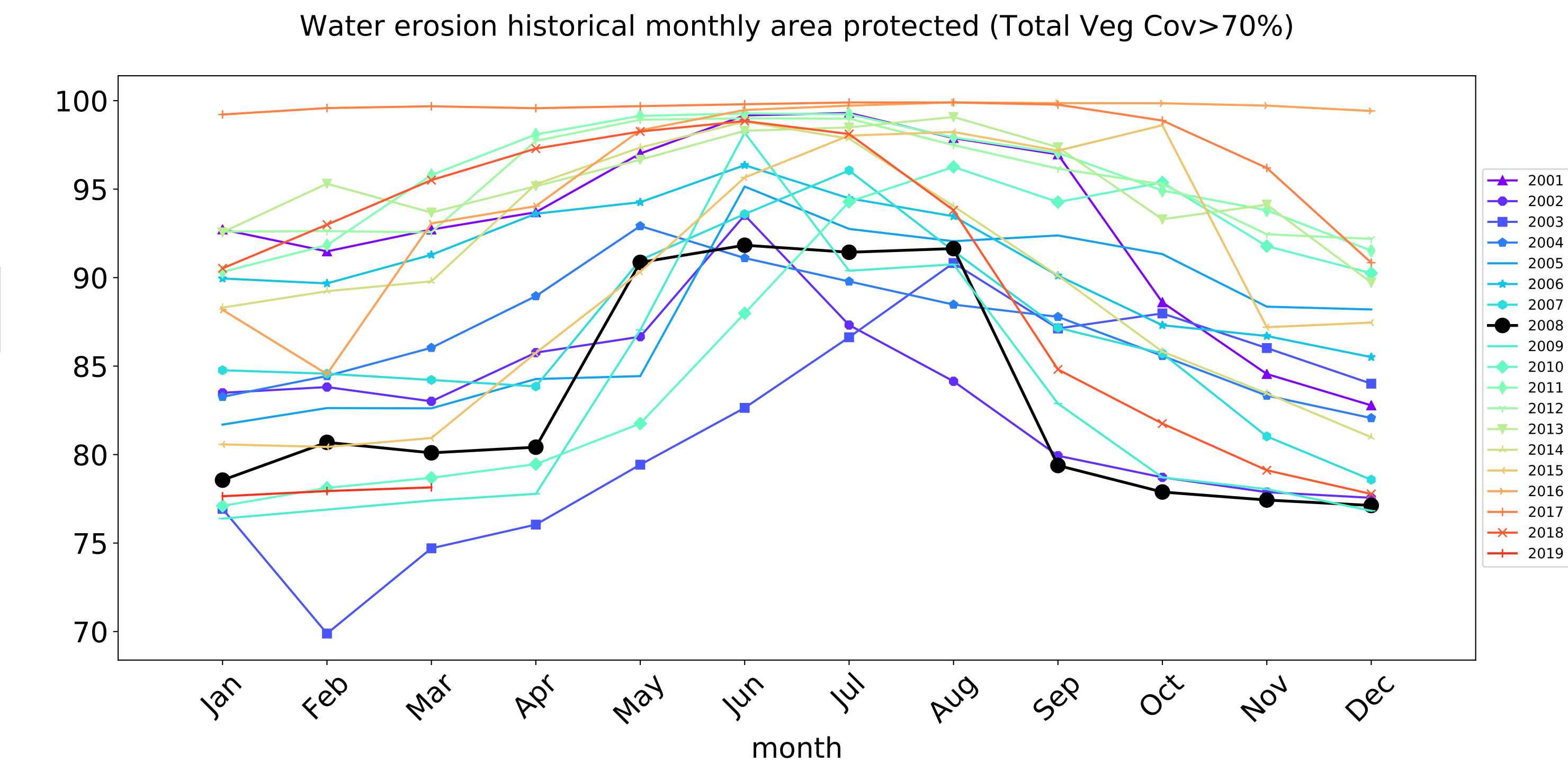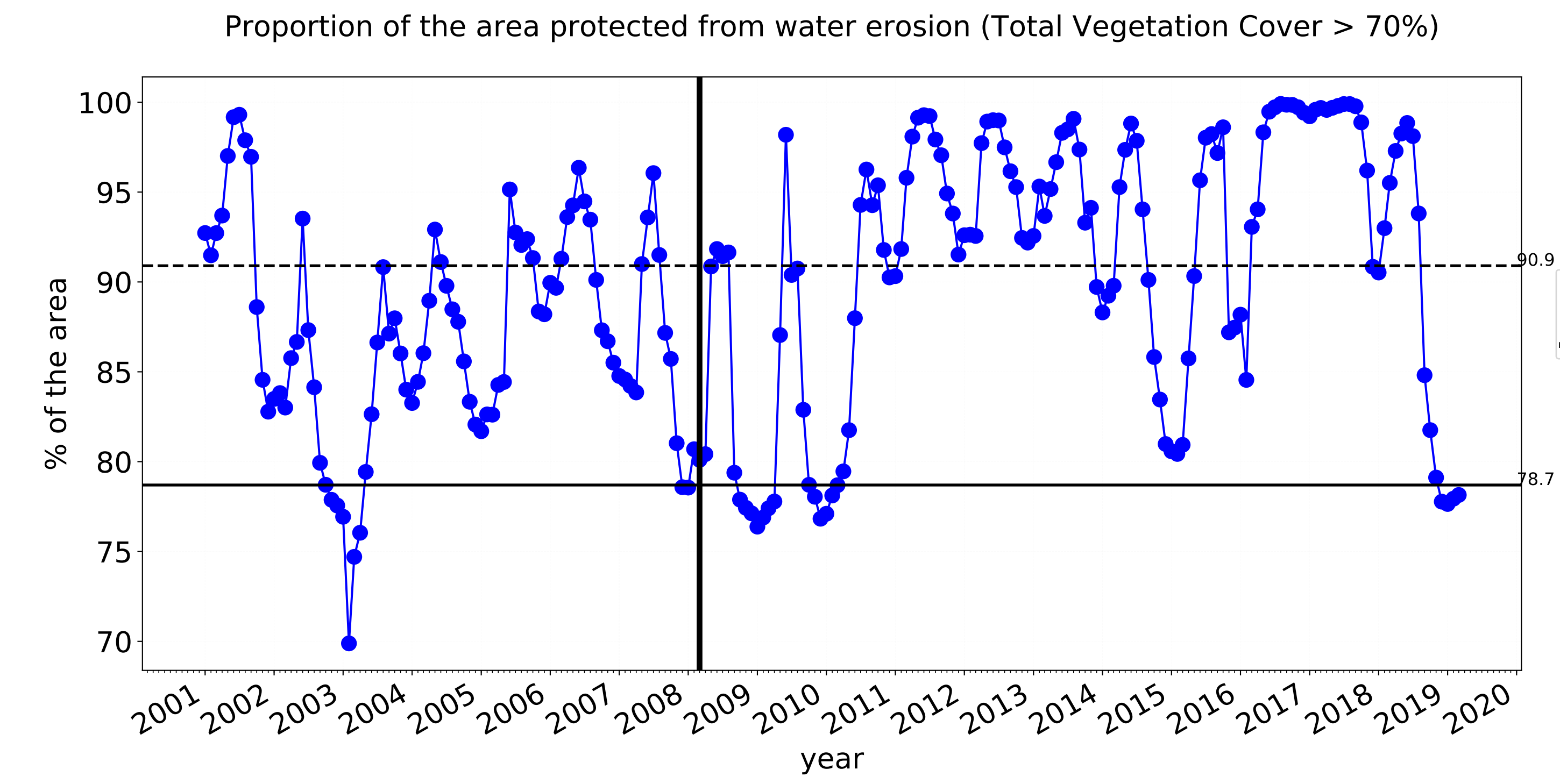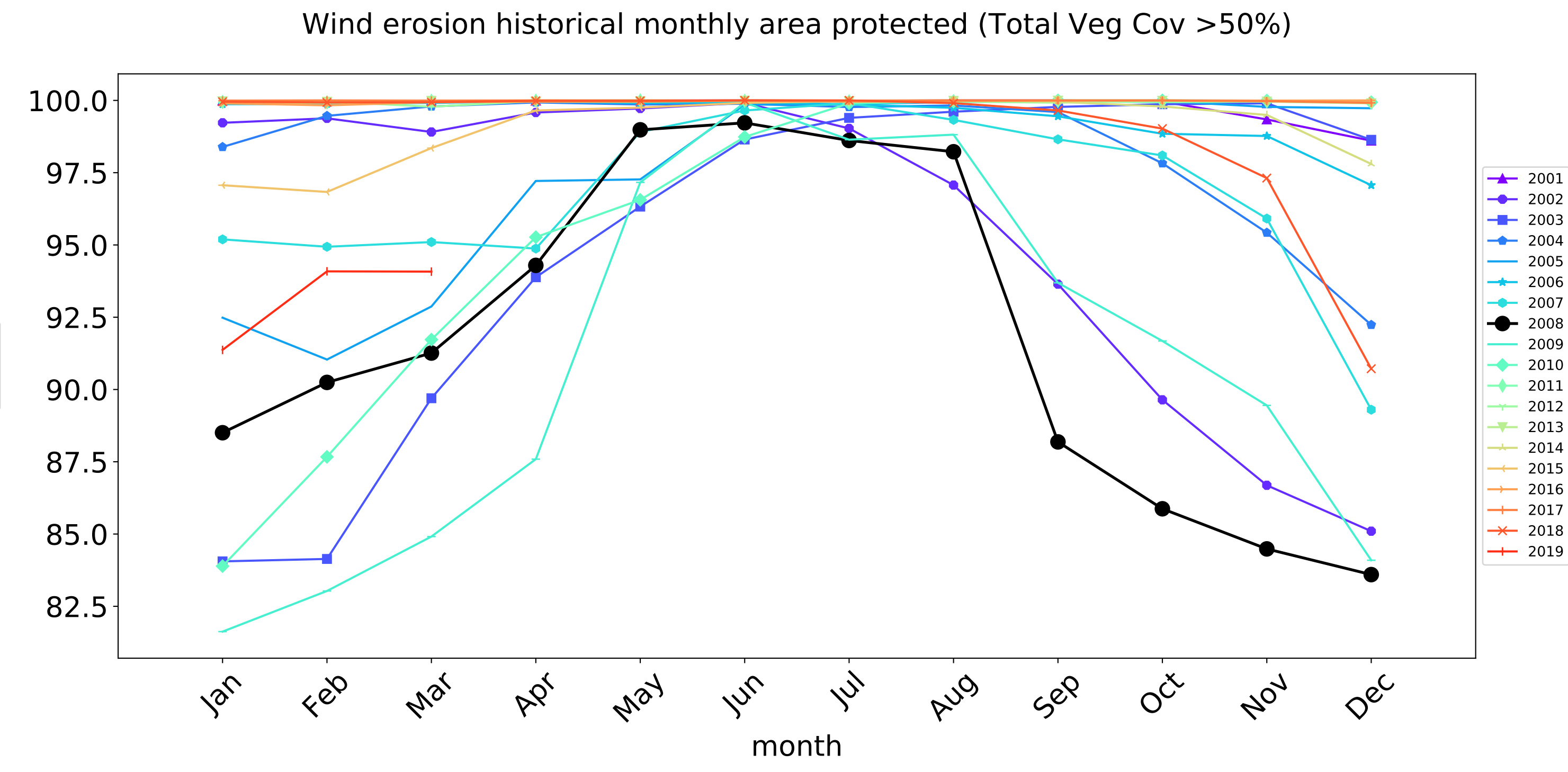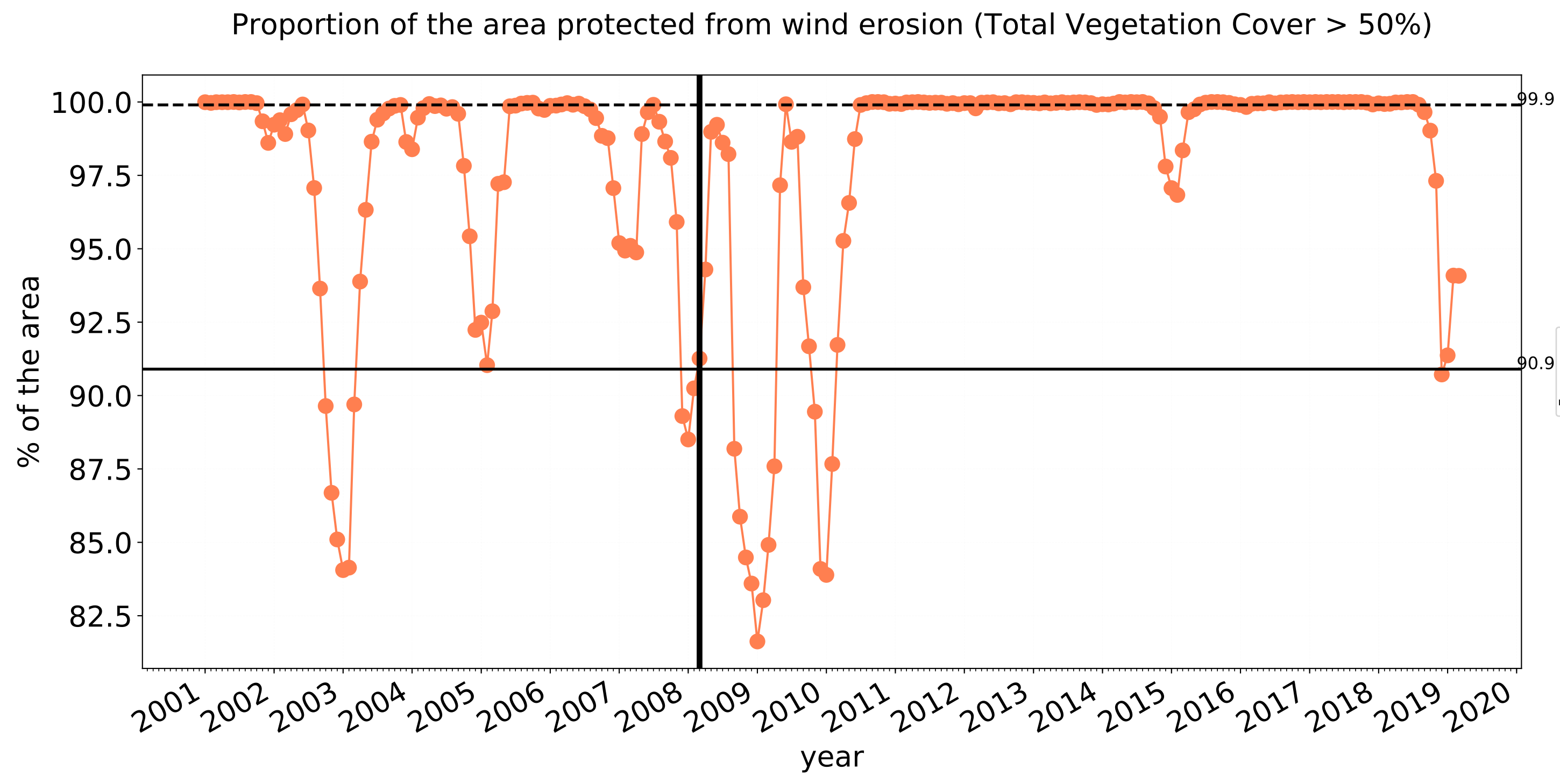

10
8-9
4-7
2-3
1

Proportion of the area protected from wind erosion (Total Vegetation Cover > 50%)

Wind erosion historical monthly area protected (Total Veg Cov >50%)

Proportion of the area protected from water erosion (Total Vegetation Cover > 70%)

Water erosion historical monthly area protected (Total Veg Cov>70%)

Monthly rainfall from 2001 to 2019

Rainfall: historical monthly

Conservation and natural environments

Land use and forest cover

Catchment Scale Land Use and Forests of Australia (2018) Derived from Catchment Scale Land Use of Australia (2018) and Forests of Australia (2018)

1 Conservation and natural environments - Non-forest

2 Conservation and natural environments - Woodland forest

3 Conservation and natural environments - Non-woodland forest

Proportion of each land class in area

Area (%)

60.4%

25.8%

13.8%

Land use class

Total Vegetation Cover [%]

71%-100%

51%-70%

31%-50%

0-30%

Proportion of vegetation cover class in area

Area (%)

80.1%

0.0%

8.7%

11.2%

Total Vegetation Cover class
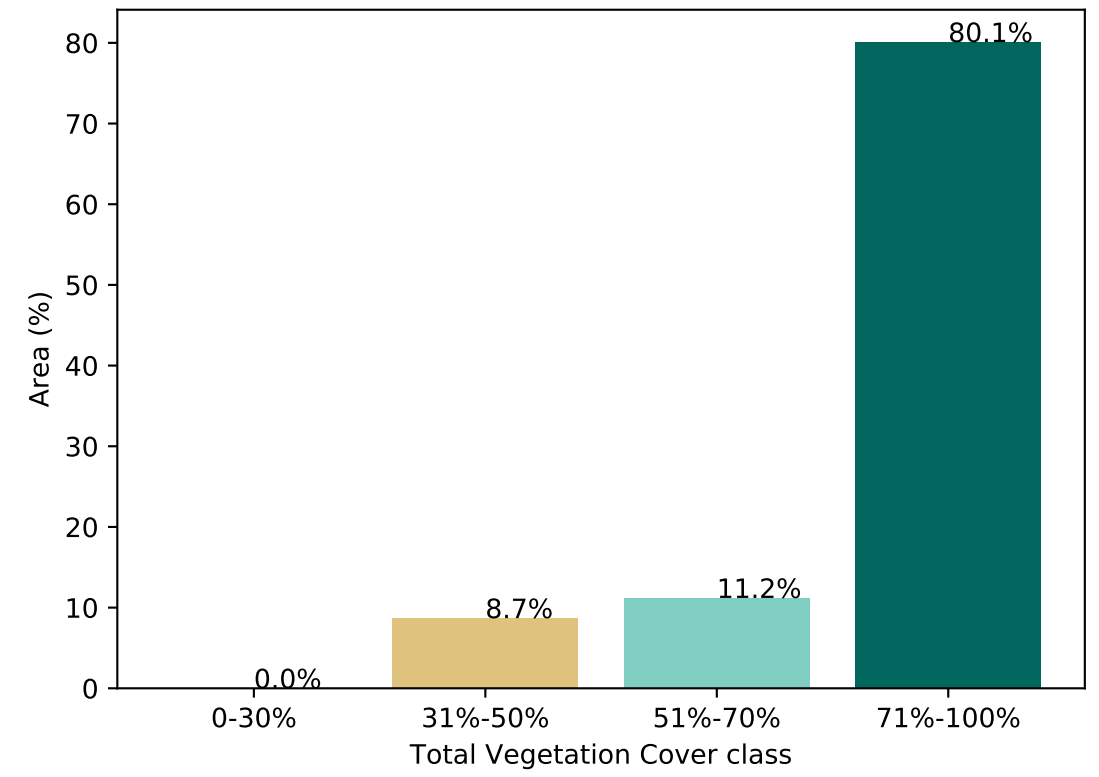
% Area protected from water erosion (>70%)
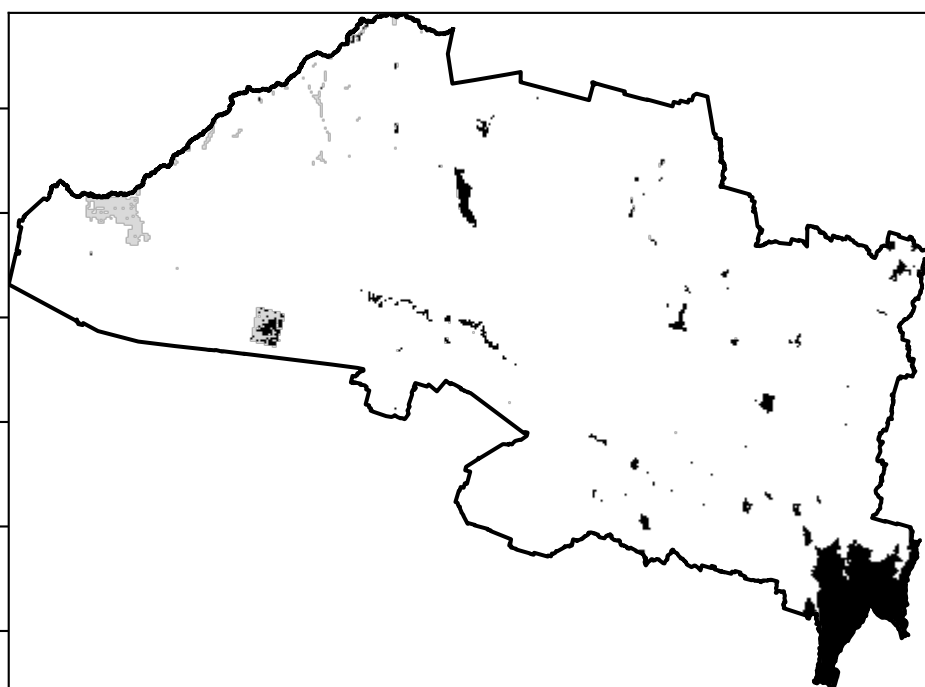
Area not protected 19.9% of region (64,272 ha)

Area protected 80.1% of region (258,702 ha)

% Area protected from wind erosion (>50%)
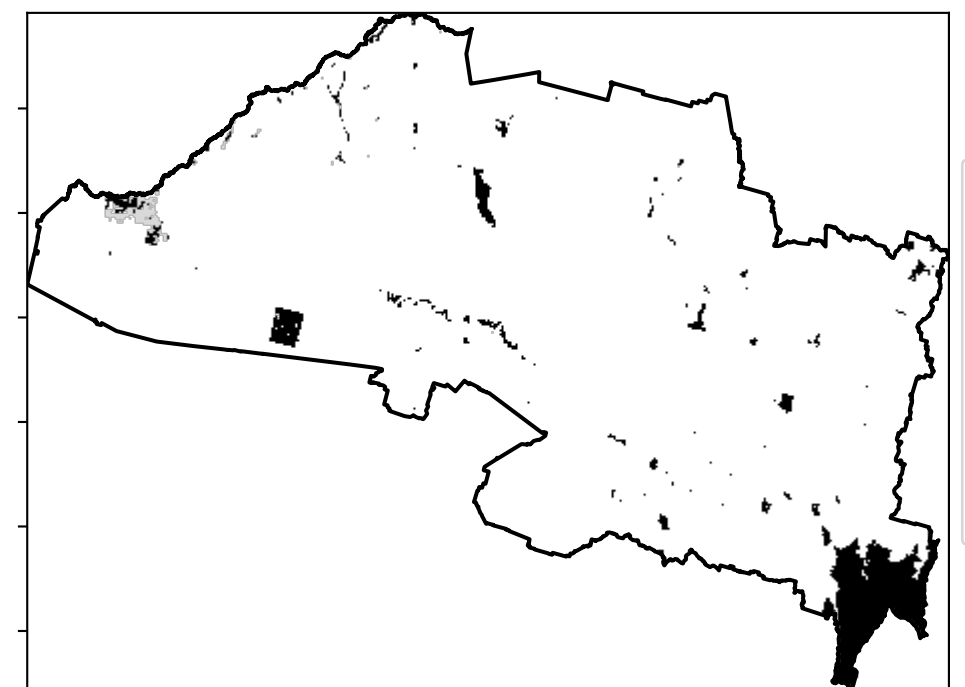
Area not protected 9.0% of region (29,067 ha)

Area protected 91.0% of region (293,907 ha)

Total Vegetation Cover Anomaly [%]
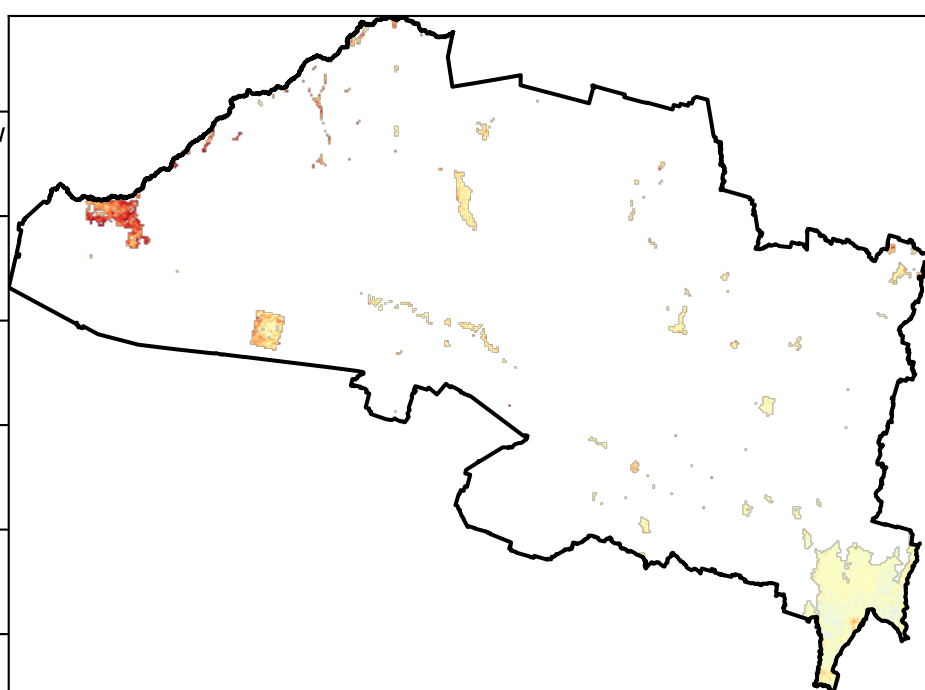
Anomaly show how many percetage points each pixel is from the mean. That is, red pixels are about 20% lower than the mean of that pixel. The mean is only for the month of the map using baseline from 2001 to 2019.

Total Vegetation Cover Decile [%]

Deciles show where the pixel value lies in the record, from highest to lowest, for that month. That is, red pixels are in the lowest 10% of records for that month of the map using baseline from 2001 to 2019.

10

8-9

4-7

2-3

1

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Australian Government

National Landcare Programme

NSW GOVERNMENT | Planning, Industry & Environment
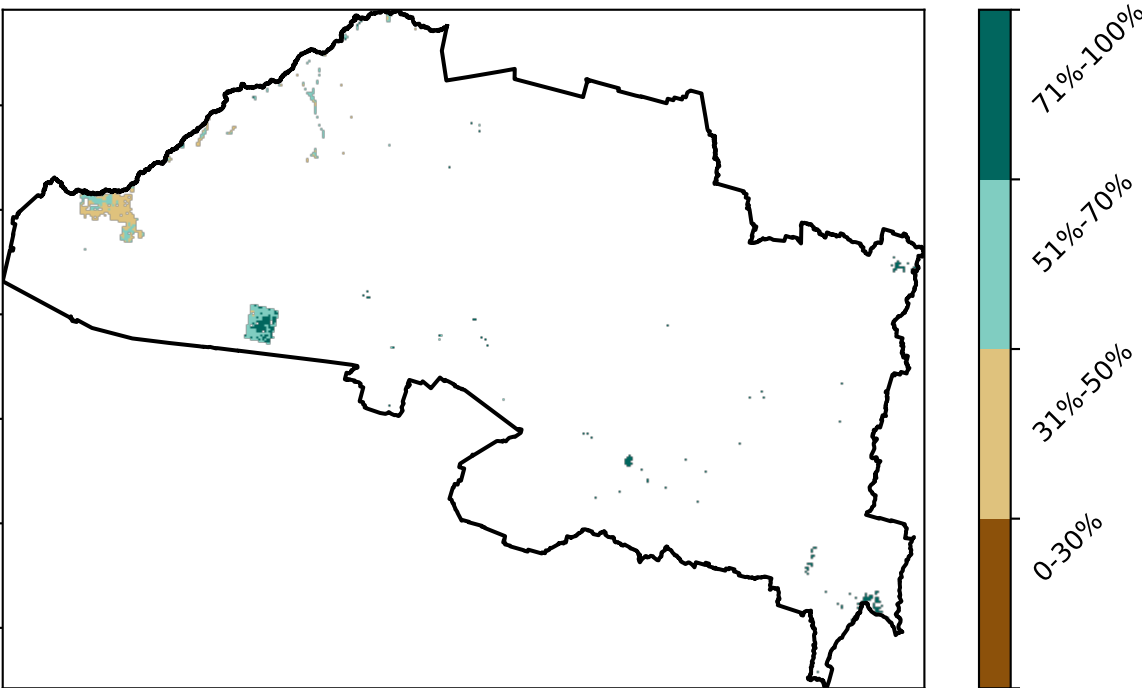
Conservation and natural environments timeseries

Proportion of the area protected from wind erosion (Total Vegetation Cover > 50%)

Wind erosion historical monthly area protected (Total Veg Cov >50%)

Proportion of the area protected from water erosion (Total Vegetation Cover > 70%)

Water erosion historical monthly area protected (Total Veg Cov>70%)

Conservation and natural environments non forest
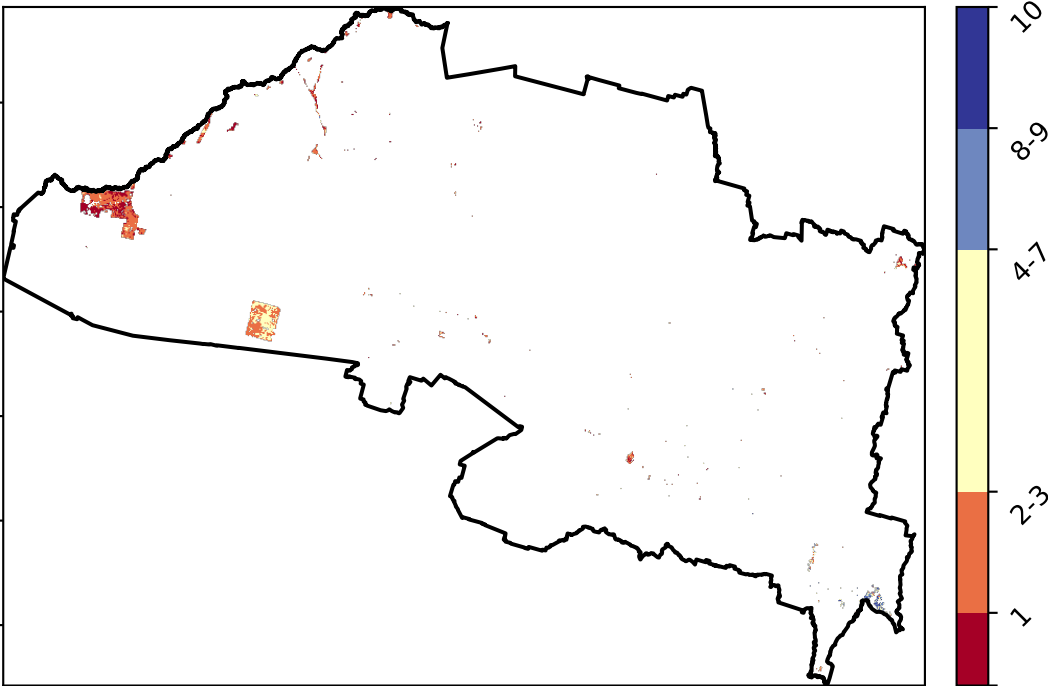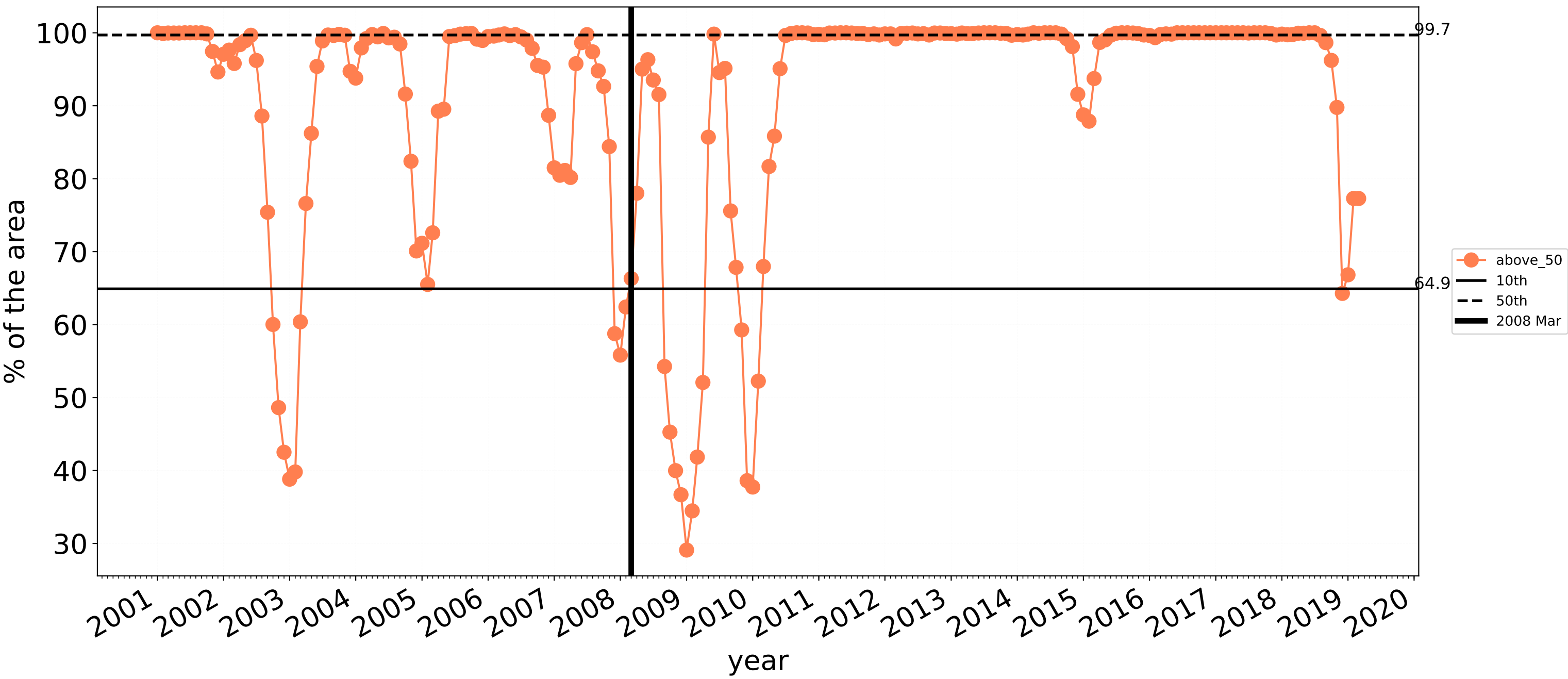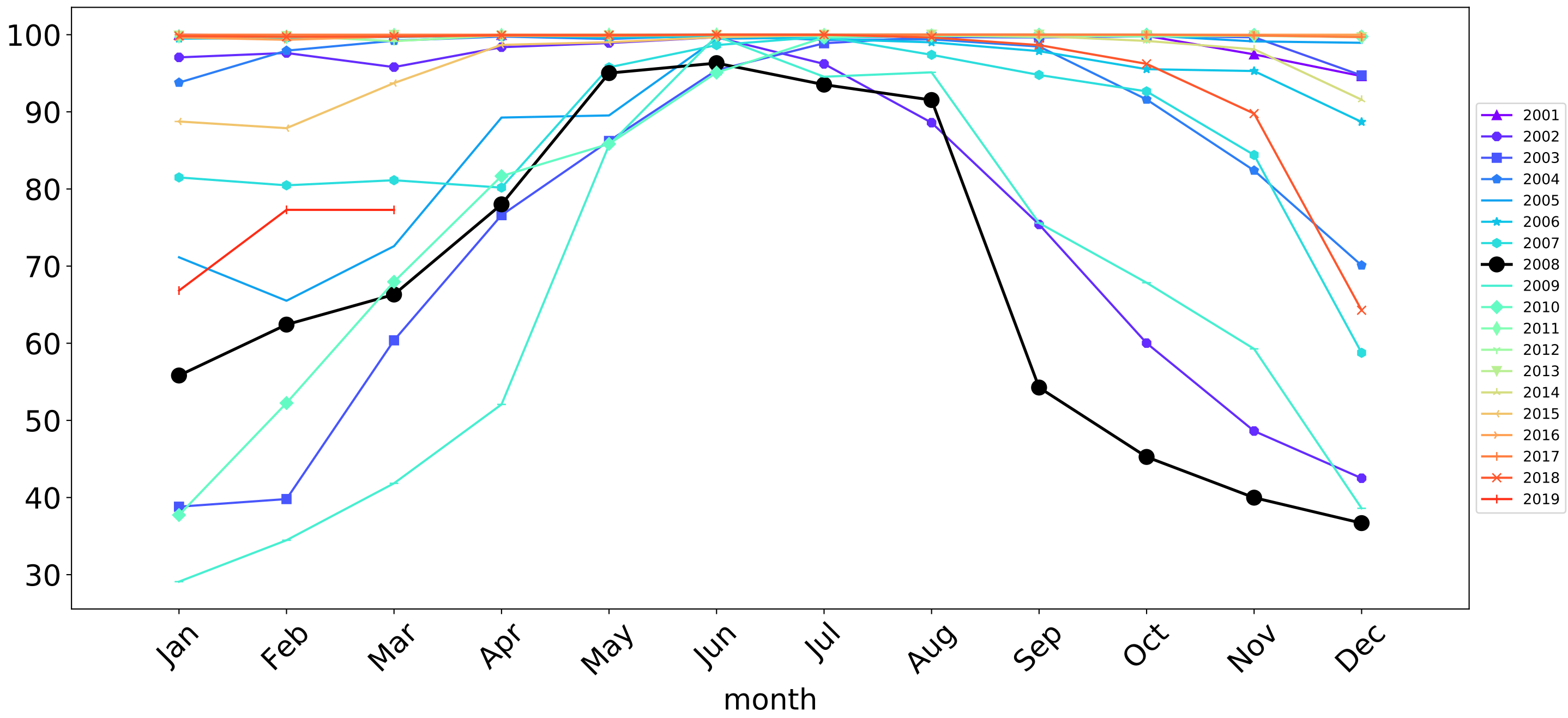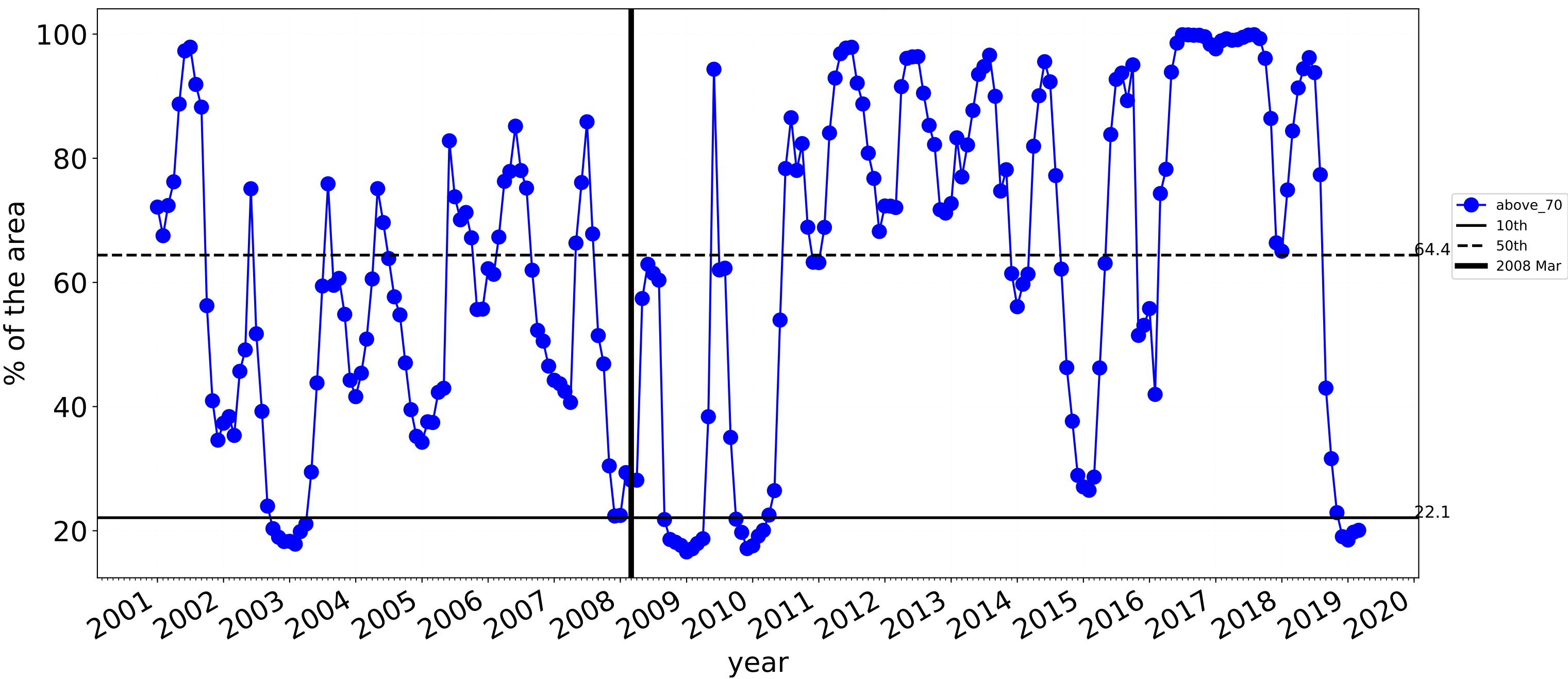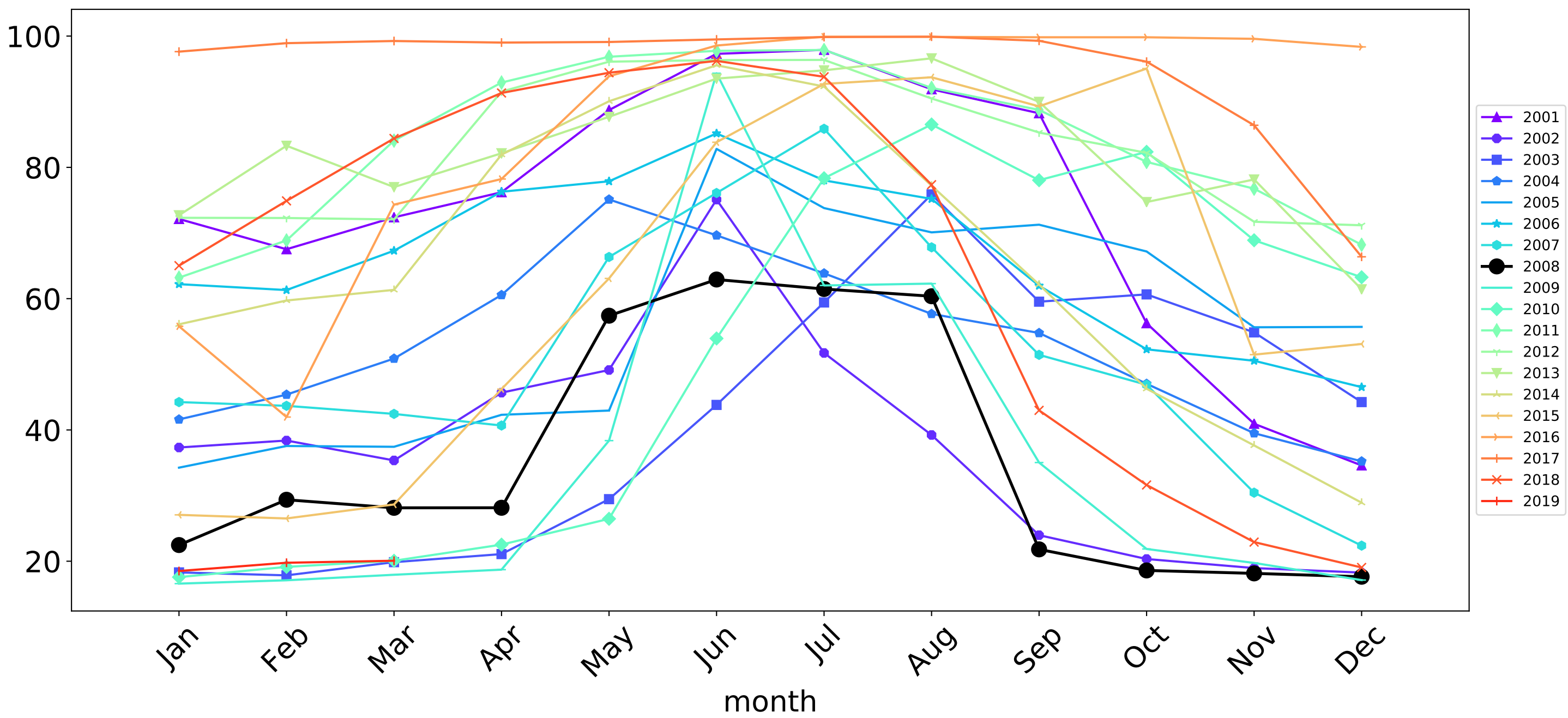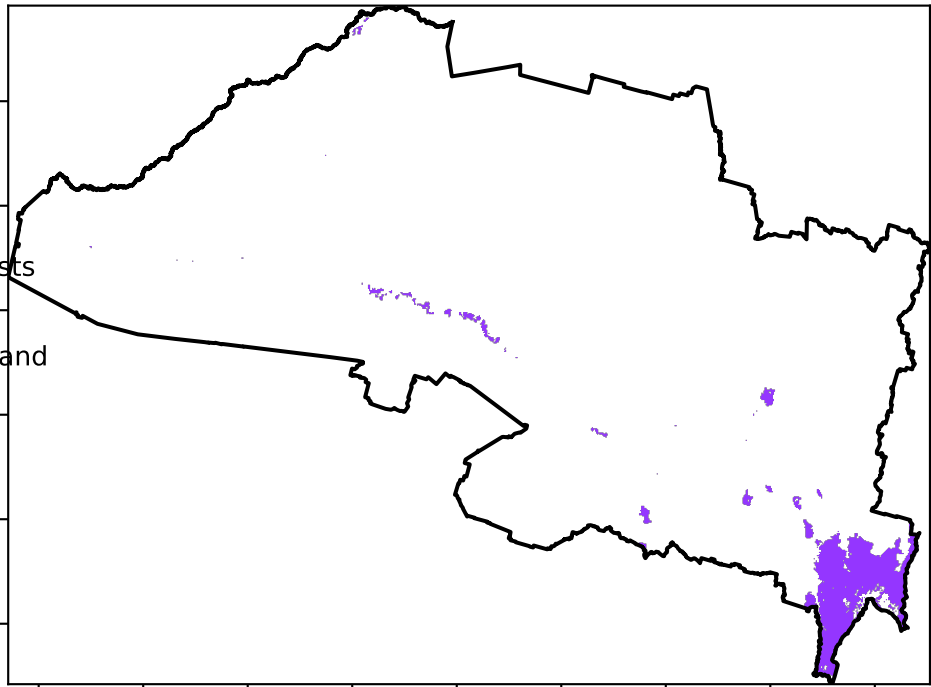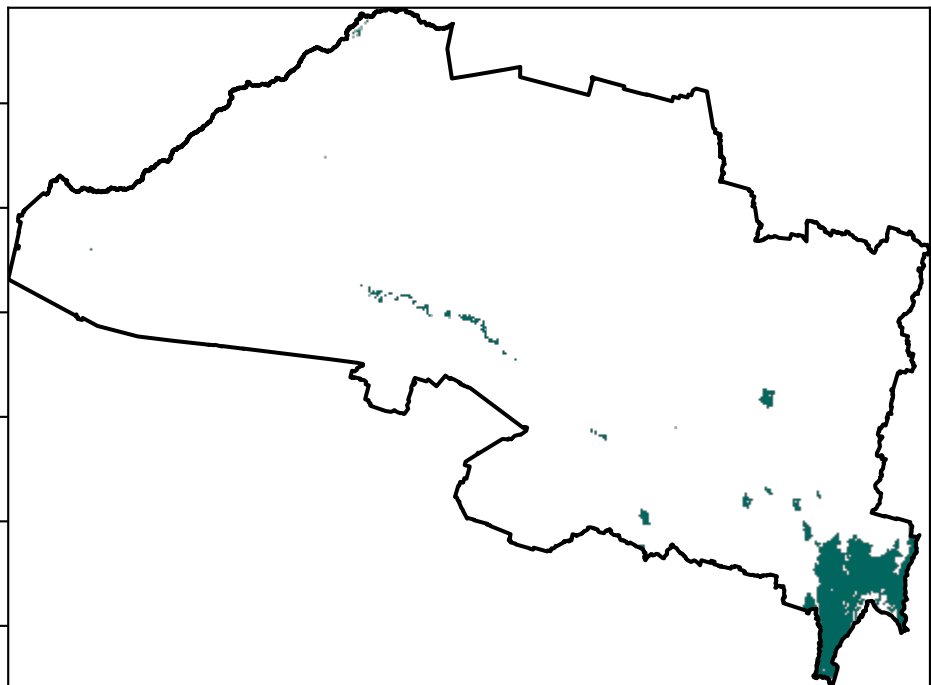
Land use and forest cover

Catchment Scale Land Use and Forests of Australia (2018) Derived from Catchment Scale Land Use of Australia (2018) and Forests of Australia (2018)
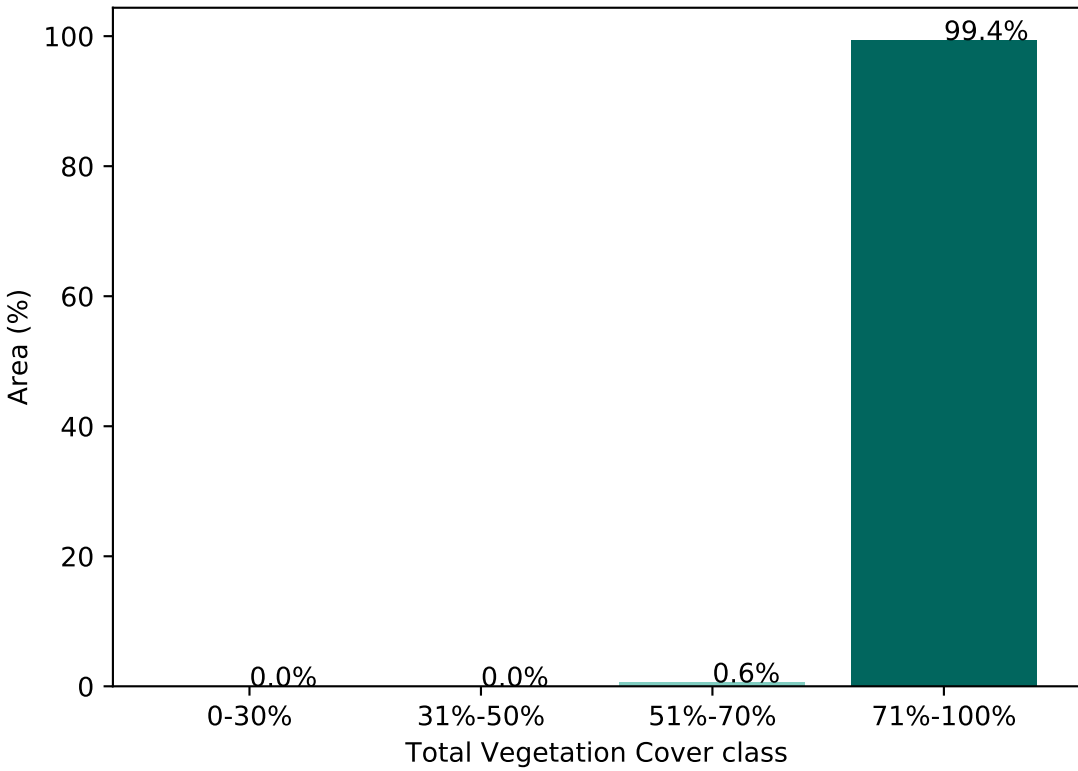
1 Conservation and natural environments - Non-forest

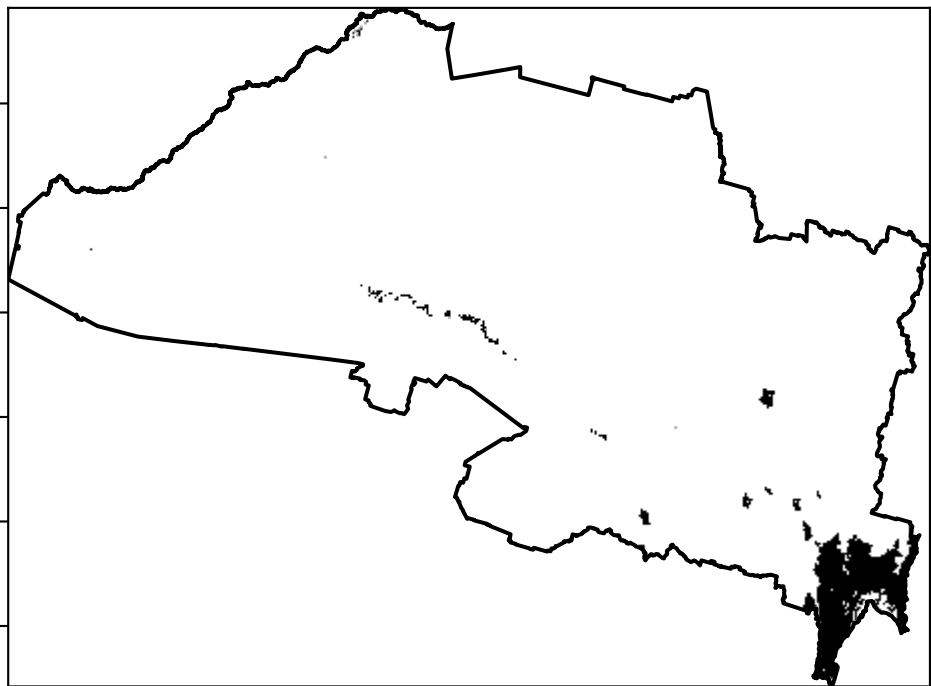## Total Vegetation Cover [%]

71%-100%

51%-70%

31%-50%

0-30%

Proportion of vegetation cover class in area

0.0% 33.7% 38.2% 28.1%

Area (%)

Total Vegetation Cover class
0-30% 31%-50% 51%-70% 71%-100%

% Area protected from water erosion (>70%)

Area not protected 71.9% of region (59,928 ha)
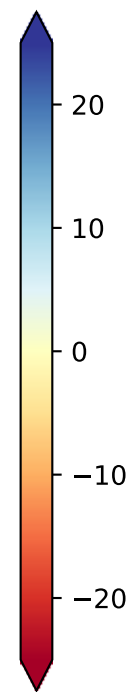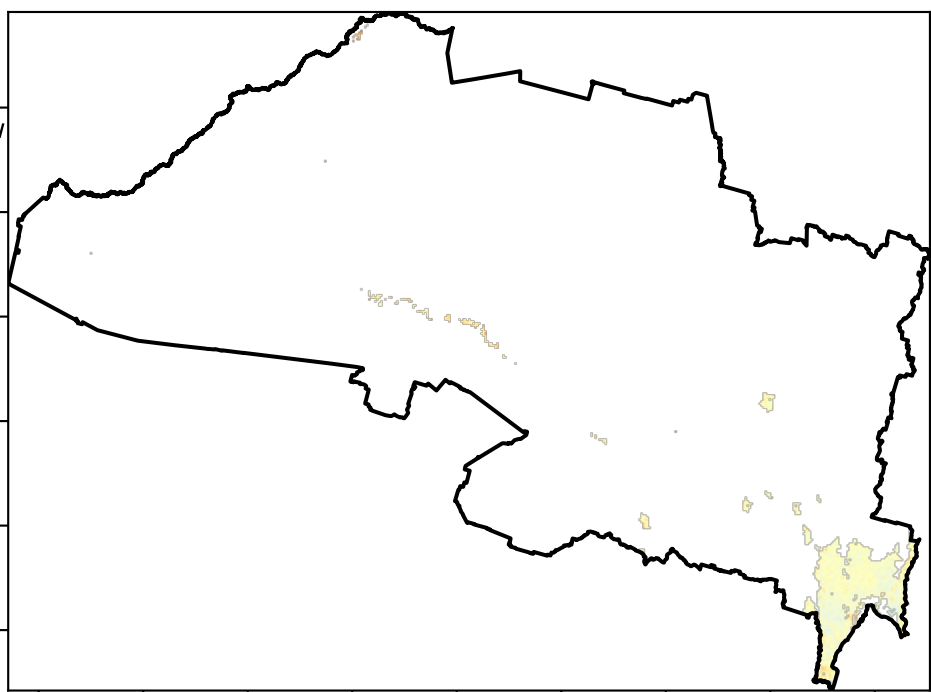
Area protected 28.1% of region (23,421 ha)

% Area protected from wind erosion (>50%)

Area not protected 34.0% of region (28,339 ha)
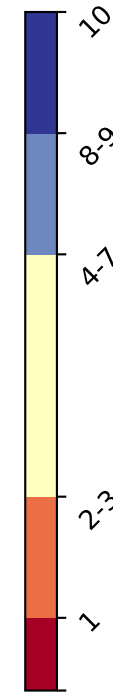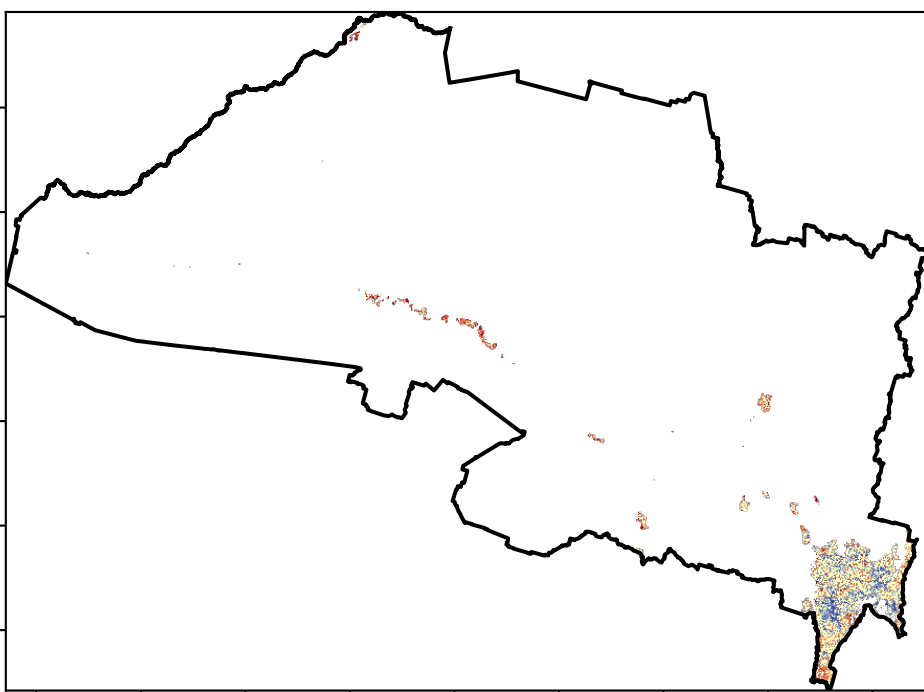
Area protected 66.0% of region (55,011 ha)

Total Vegetation Cover Anomaly [%]

Anomaly show how many percetage points each pixel is from the mean. That is, red pixels are about 20% lower than the mean of that pixel. The mean is only for the month of the map using baseline from 2001 to 2019.

Total Vegetation Cover Decile [%]

Deciles show where the pixel value lies in the record, from highest to lowest, for that month. That is, red pixels are in the lowest 10% of records for that month of the map using baseline from 2001 to 2019.

10

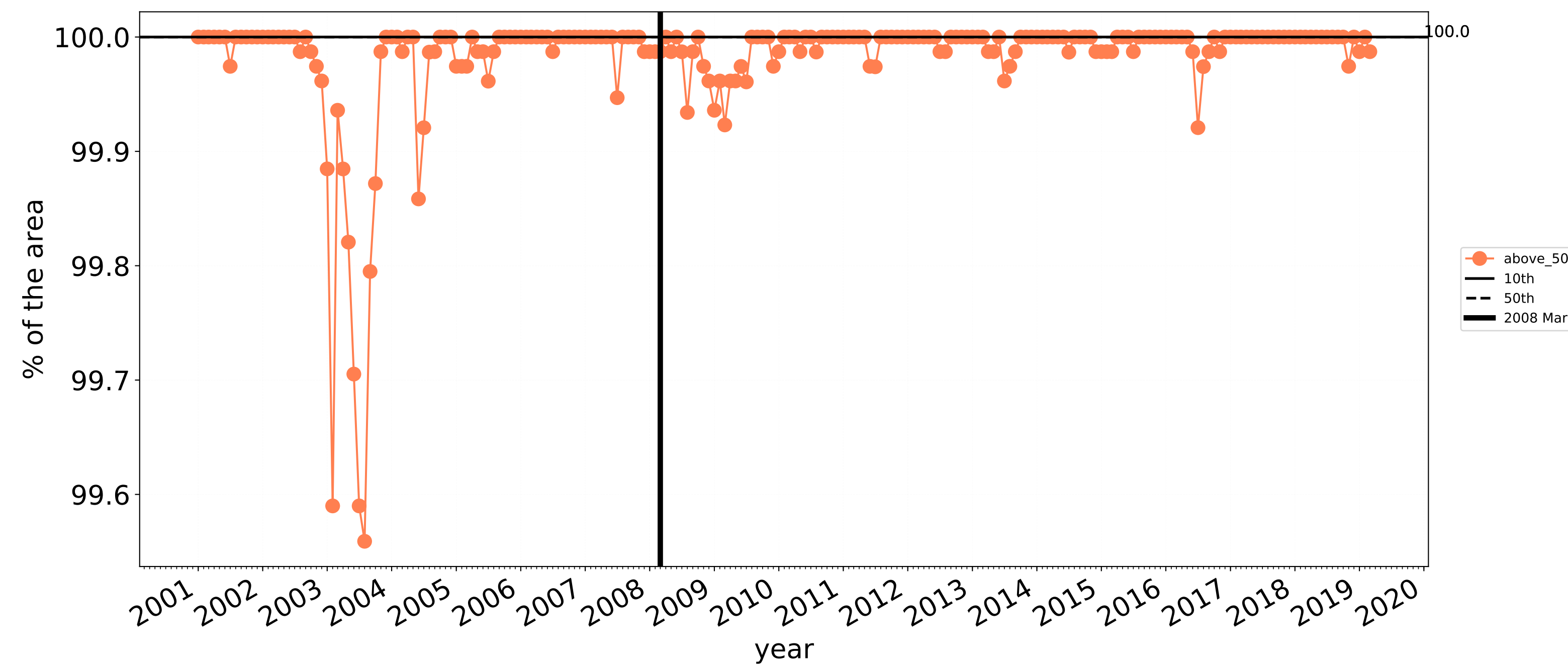8-9

4-7

2-3

1

CSIRO

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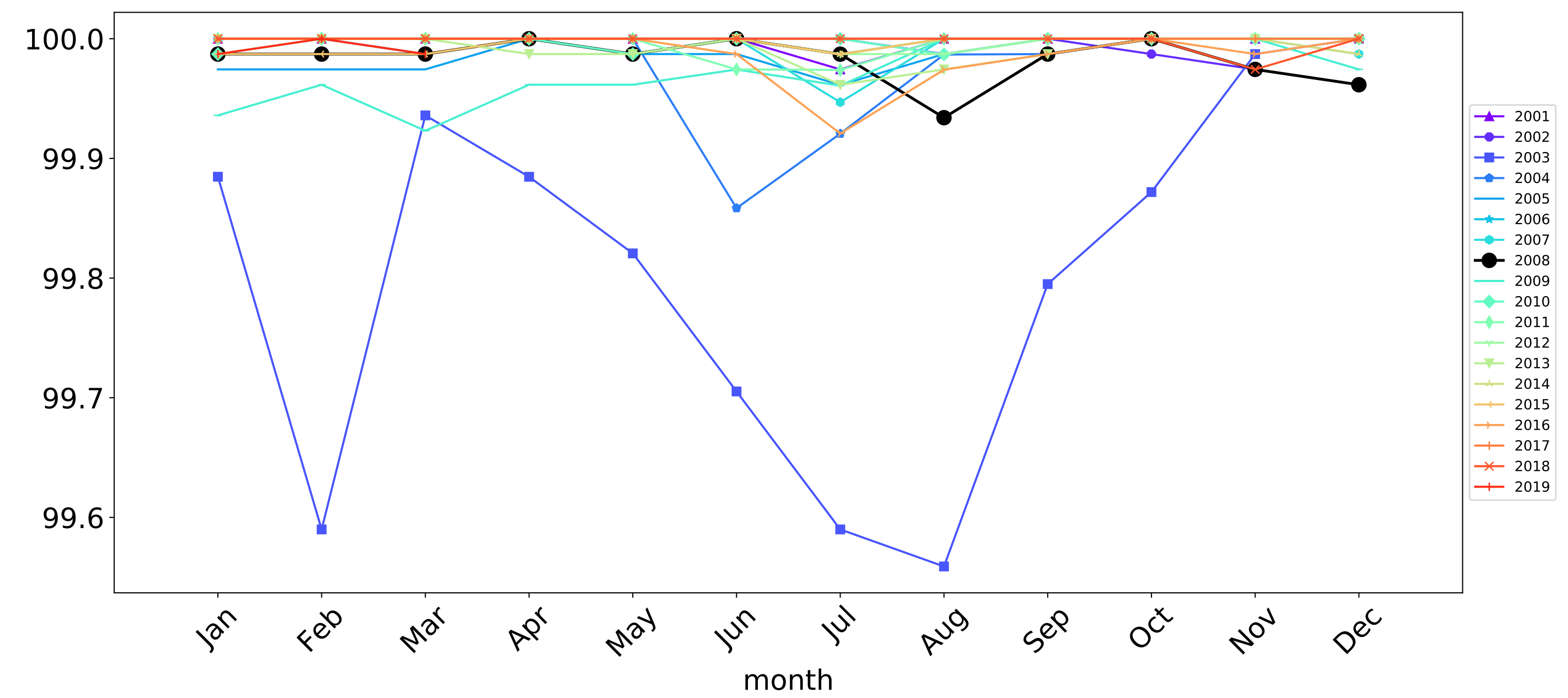Australian Government

National Landcare Programme

NSW GOVERNMENT | Planning, Industry & Environment

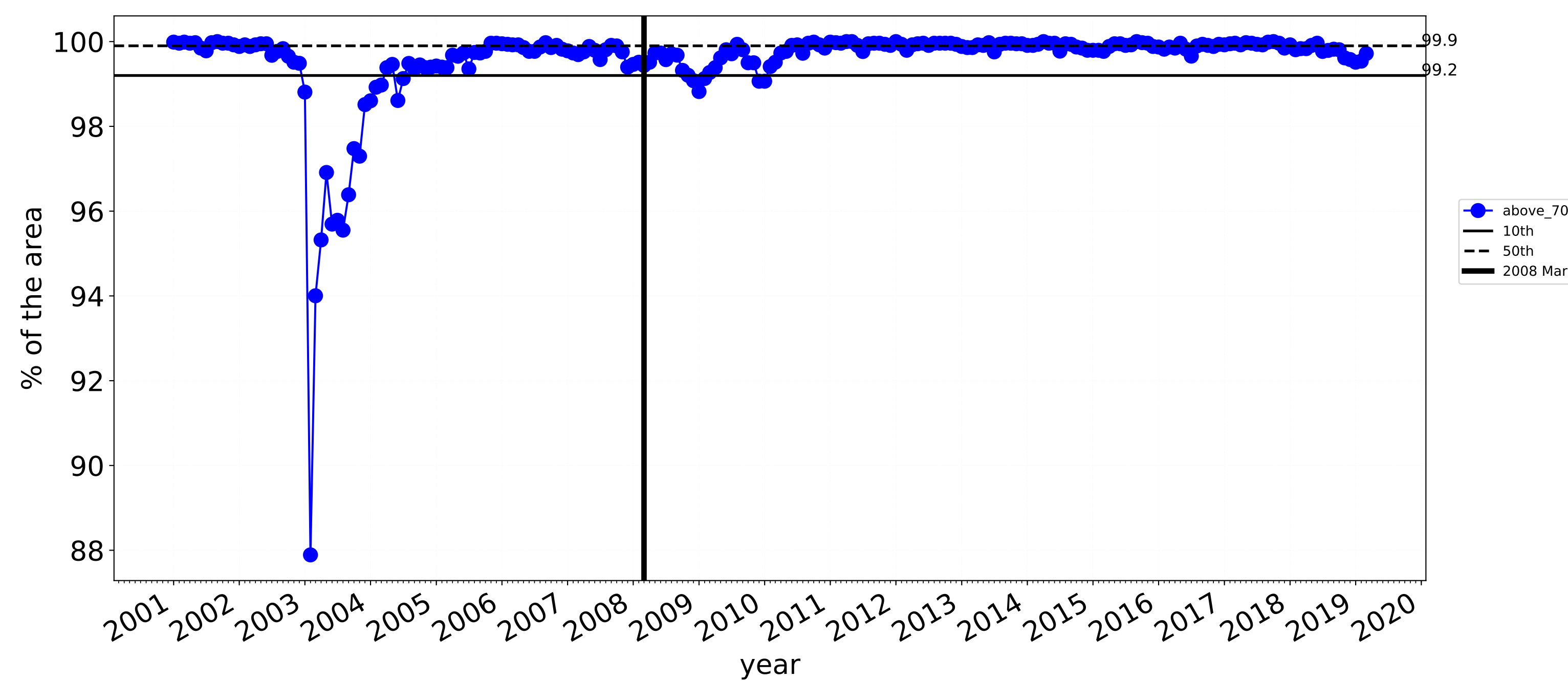Conservation and natural environments non forest timeseries

Proportion of the area protected from wind erosion (Total Vegetation Cover > 50%)
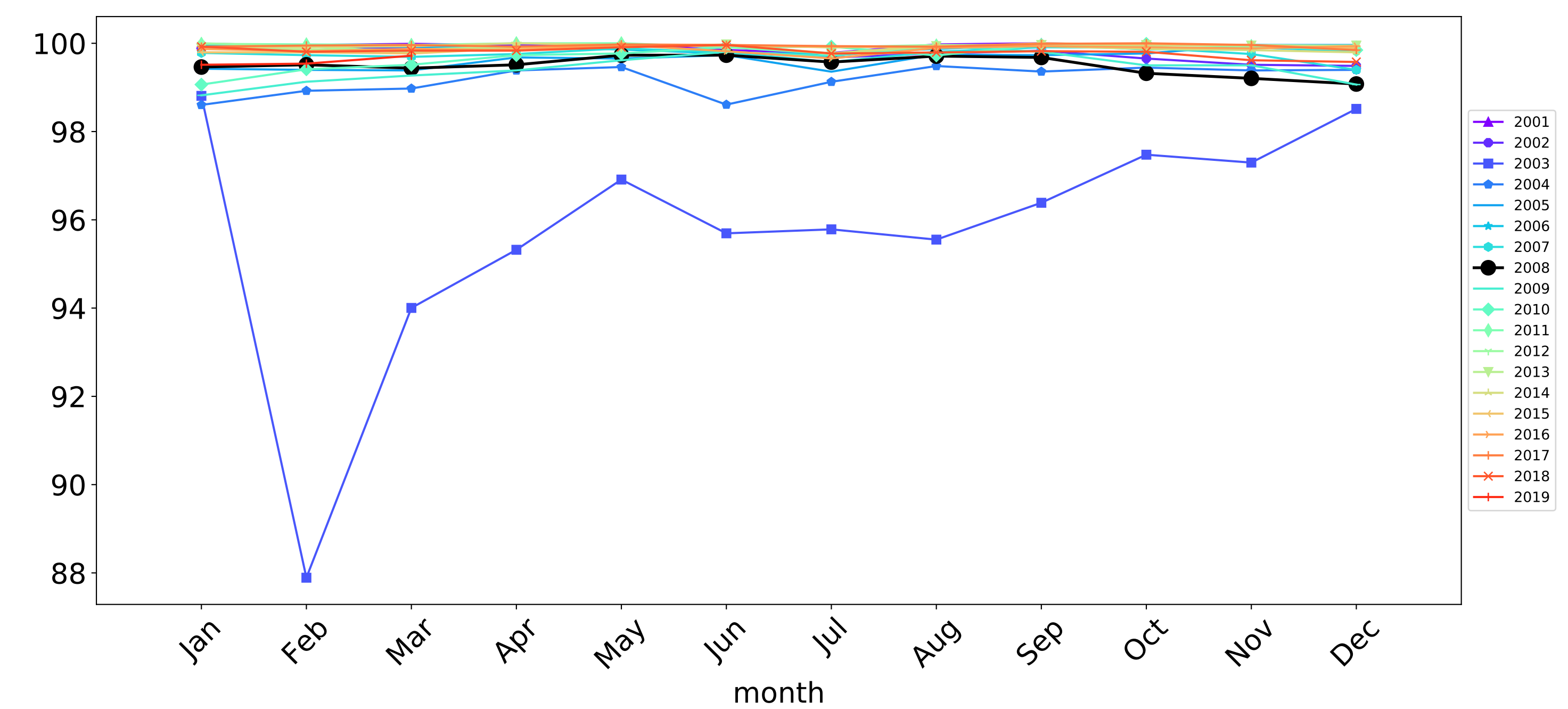
Wind erosion historical monthly area protected (Total Veg Cov >50%)

Proportion of the area protected from water erosion (Total Vegetation Cover > 70%)
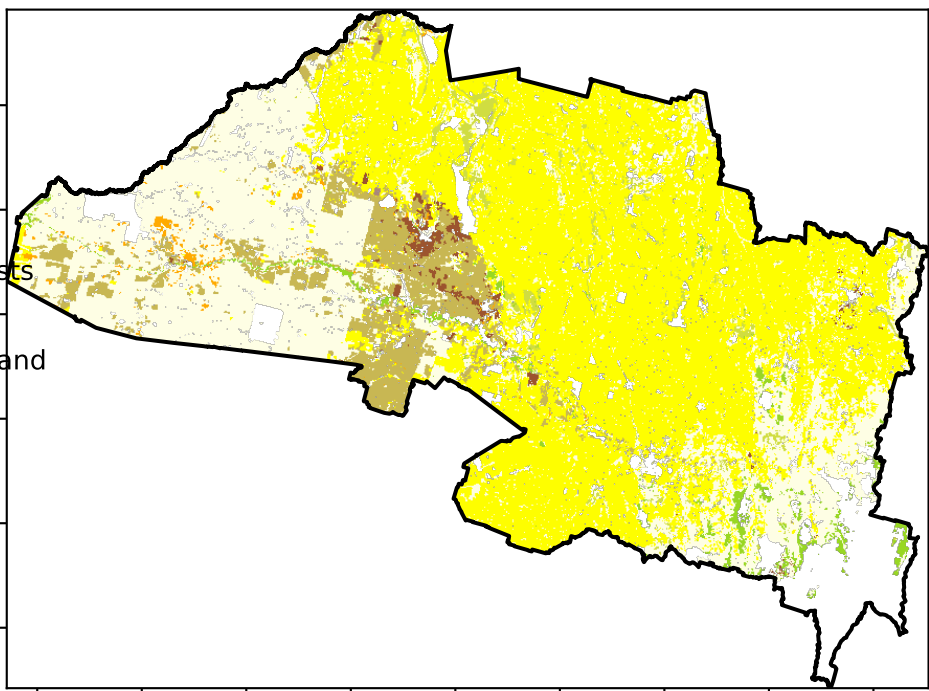
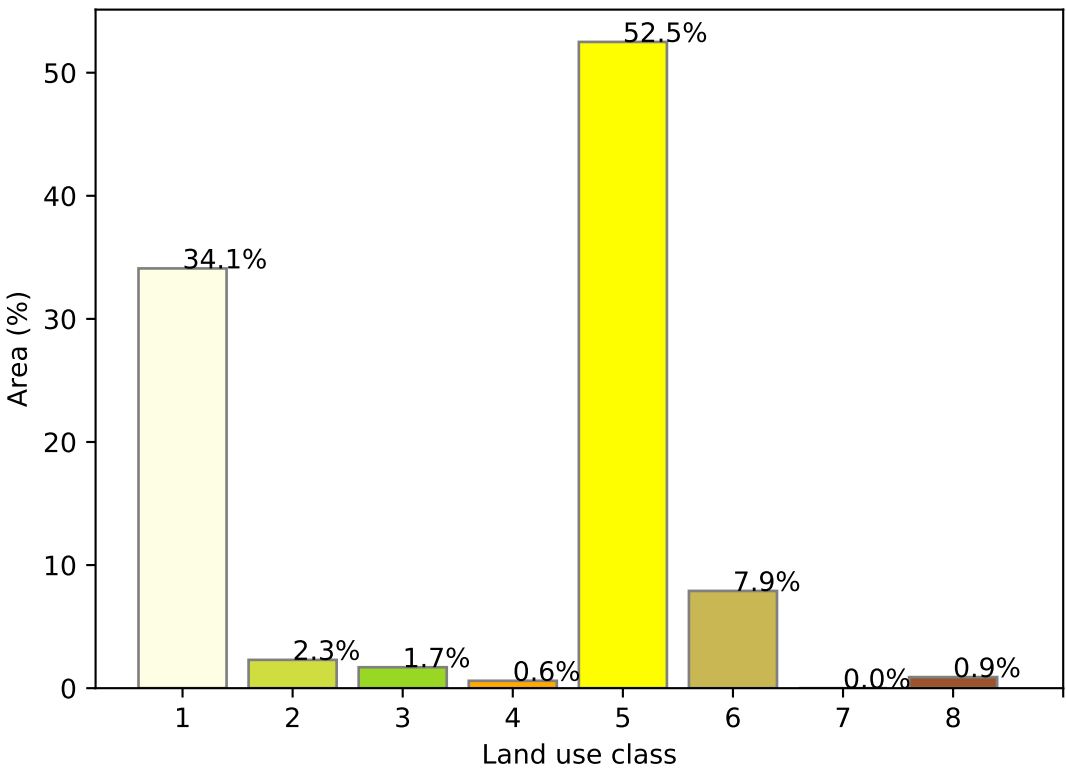Water erosion historical monthly area protected (Total Veg Cov>70%)

Conservation and natural environments Forest (non woodland)
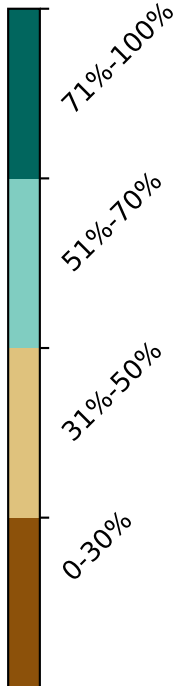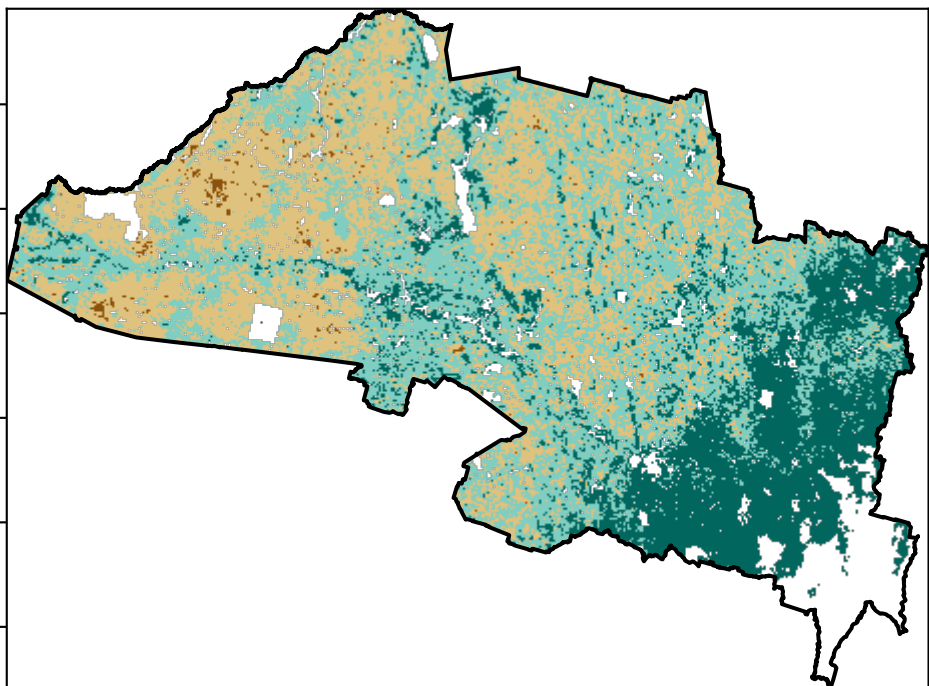
Land use and forest cover

Catchment Scale
Land Use and Forests
of Australia (2018)
Derived from
Catchment Scale Land
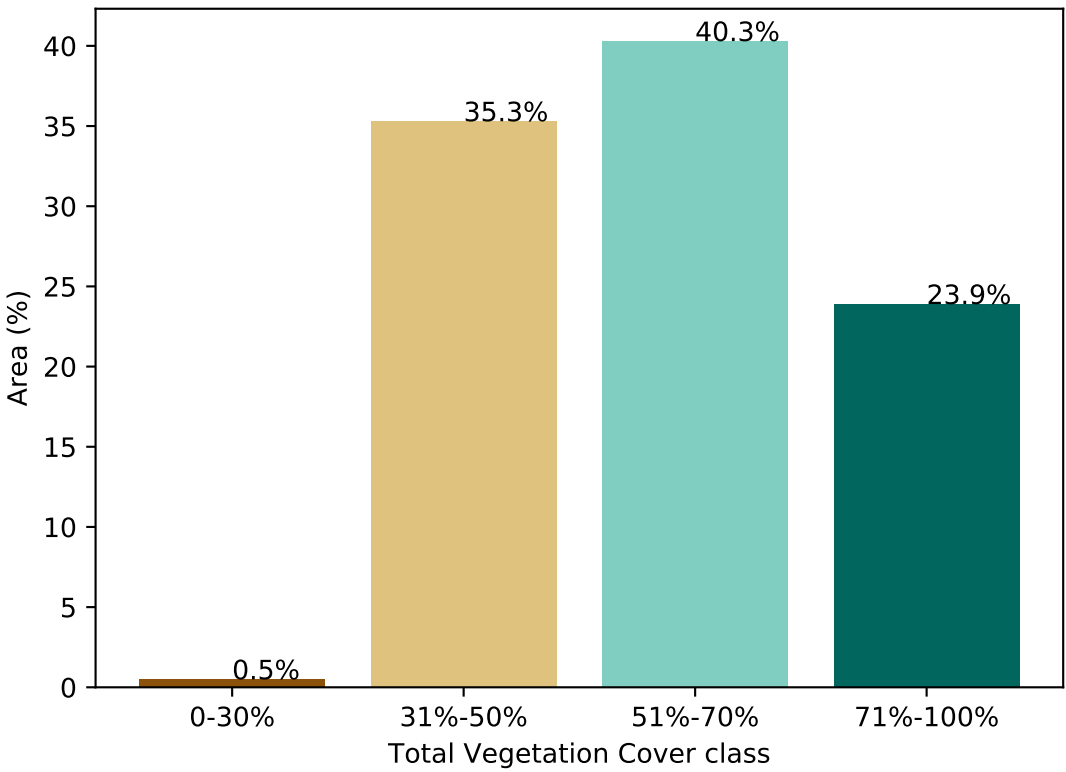Use of Australia
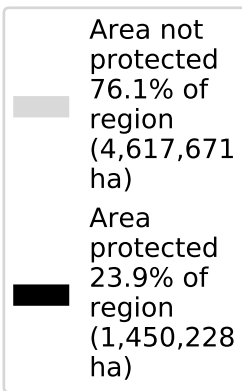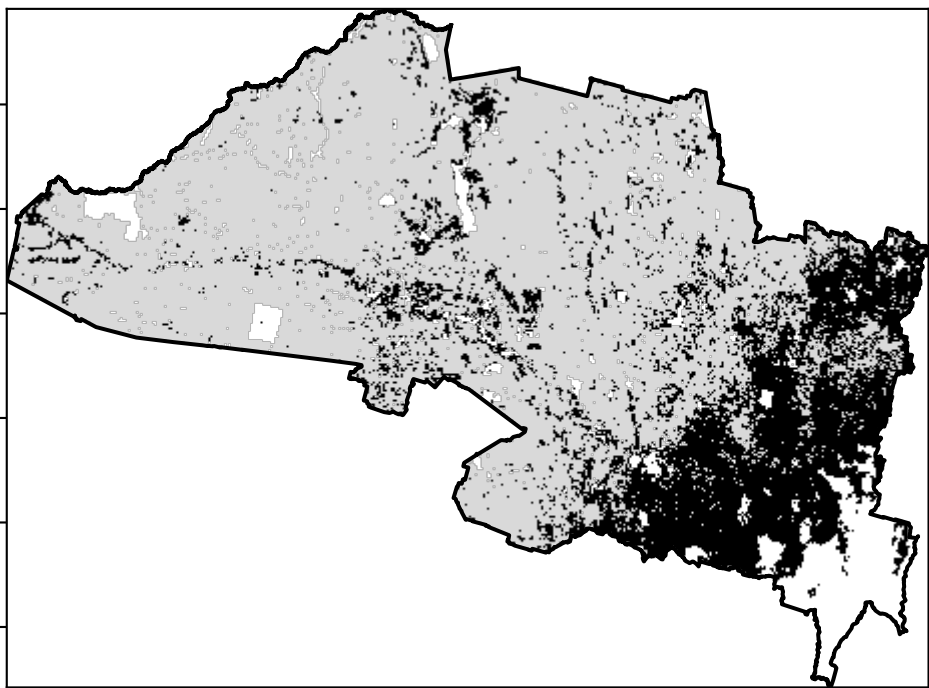(2018) and Forests
of Australia (2018)

1 Conservation and natural environments - Non-
woodland forest

Total Vegetation Cover [%]

71%-100%

51%-70%

31%-50%

0-30%

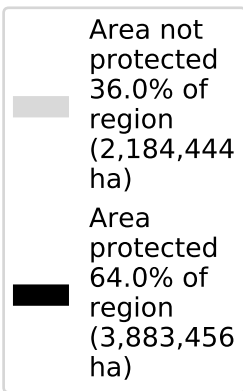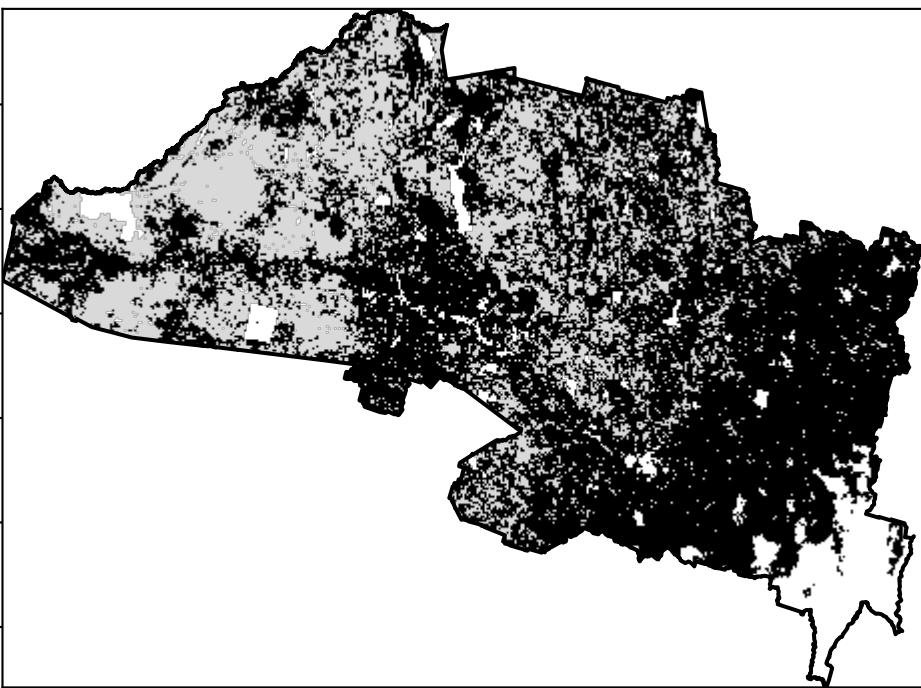### Proportion of vegetation cover class in area

% Area protected from water erosion (>70%)

Area not
protected
0.6% of
region
(1,170 ha)

Area
protected
99.4% of
region
(193,954
ha)

% Area protected from wind erosion (>50%)
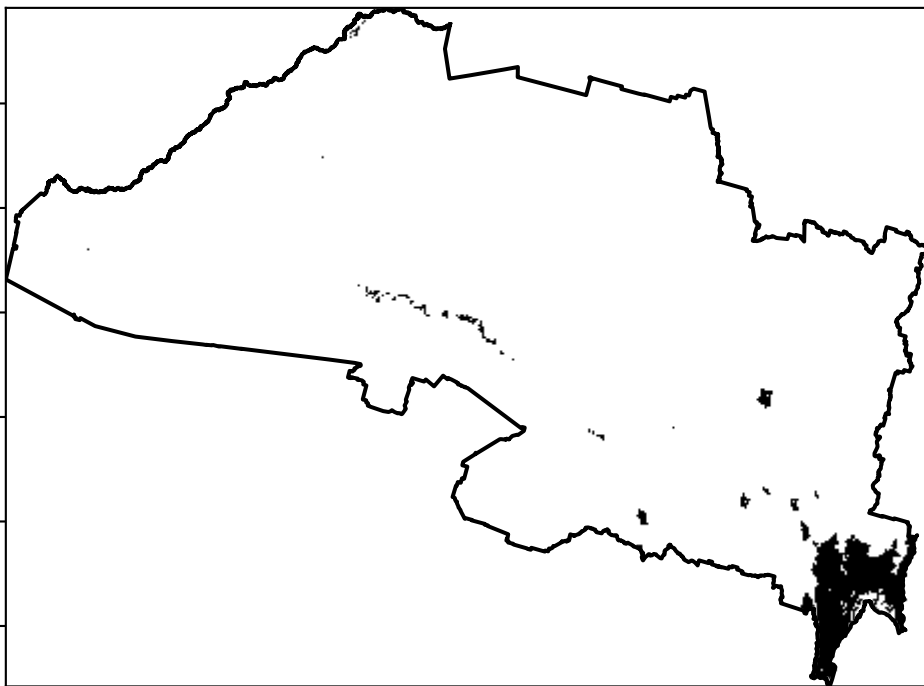
Area not
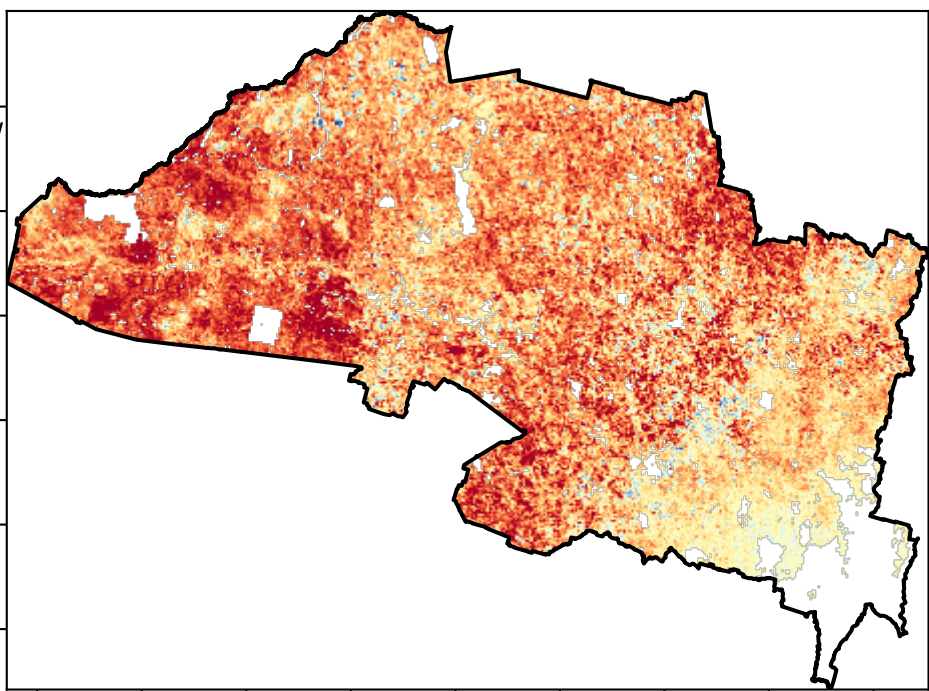protected
0.0% of
region (0
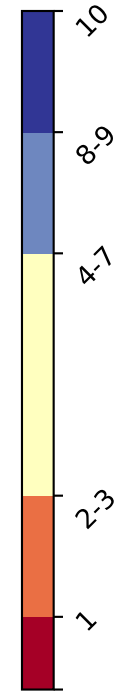ha)

Area
protected
100.0% of
region
(195,125
ha)

Total Vegetation Cover Anomaly [%]

Anomaly show how
many percetage
points each
pixel is from
the mean. That
is, red pixels
are about 20%
lower than the
mean of that
pixel. The mean
is only for the
month of the map
using baseline
from 2001 to
2019.

Total Vegetation Cover Decile [%]

Deciles show where the
pixel value lies in the
record, from highest to
lowest, for that month.
That is, red pixels are
in the lowest 10% of
records for that month of
the map using baseline
from 2001 to 2019.

Conservation and natural environments Forest (non woodland) timeseries

Proportion of the area protected from wind erosion (Total Vegetation Cover > 50%)

Wind erosion historical monthly area protected (Total Veg Cov >50%)

Proportion of the area protected from water erosion (Total Vegetation Cover > 70%)

Water erosion historical monthly area protected (Total Veg Cov>70%)

Agriculture

Land use and forest cover

Catchment Scale
Land Use and Forests
of Australia (2018)
Derived from
Catchment Scale Land
Use of Australia
(2018) and Forests
of Australia (2018)

Legend:
1 Agriculture - Grazing - Non forest
2 Agriculture - Grazing - Woodland forest
3 Agriculture - Grazing - Non-woodland forest
4 Agriculture - Grazing - Irrigated
5 Agriculture - Cropping - Non-irrigated
6 Agriculture - Cropping - Irrigated
7 Agriculture - Horticulture - Non-irrigated
8 Agriculture - Horticulture - Irrigated

Proportion of each land class in area

34.1% (class 1), 2.3% (class 2), 1.7% (class 3), 0.6% (class 4), 52.5% (class 5), 7.9% (class 6), 0.0% (class 7), 0.9% (class 8)

Total Vegetation Cover [%]

Legend: 71%-100%, 51%-70%, 31%-50%, 0-30%

Proportion of vegetation cover class in area

0-30%: 0.5%, 31%-50%: 35.3%, 51%-70%: 40.3%, 71%-100%: 23.9%

% Area protected from water erosion (>70%)

Area not
protected
76.1% of
region
(4,617,671
ha)

Area
protected
23.9% of
region
(1,450,228
ha)

% Area protected from wind erosion (>50%)

Area not
protected
36.0% of
region
(2,184,444
ha)

Area
protected
64.0% of
region
(3,883,456
ha)

Total Vegetation Cover Anomaly [%]

Anomaly show how
many percetage
points each
pixel is from
the mean. That
is, red pixels
are about 20%
lower than the
mean of that
pixel. The mean
is only for the
month of the map
using baseline
from 2001 to
2019.

Total Vegetation Cover Decile [%]

Deciles show where the
pixel value lies in the
record, from highest to
lowest, for that month.
That is, red pixels are
in the lowest 10% of
records for that month of
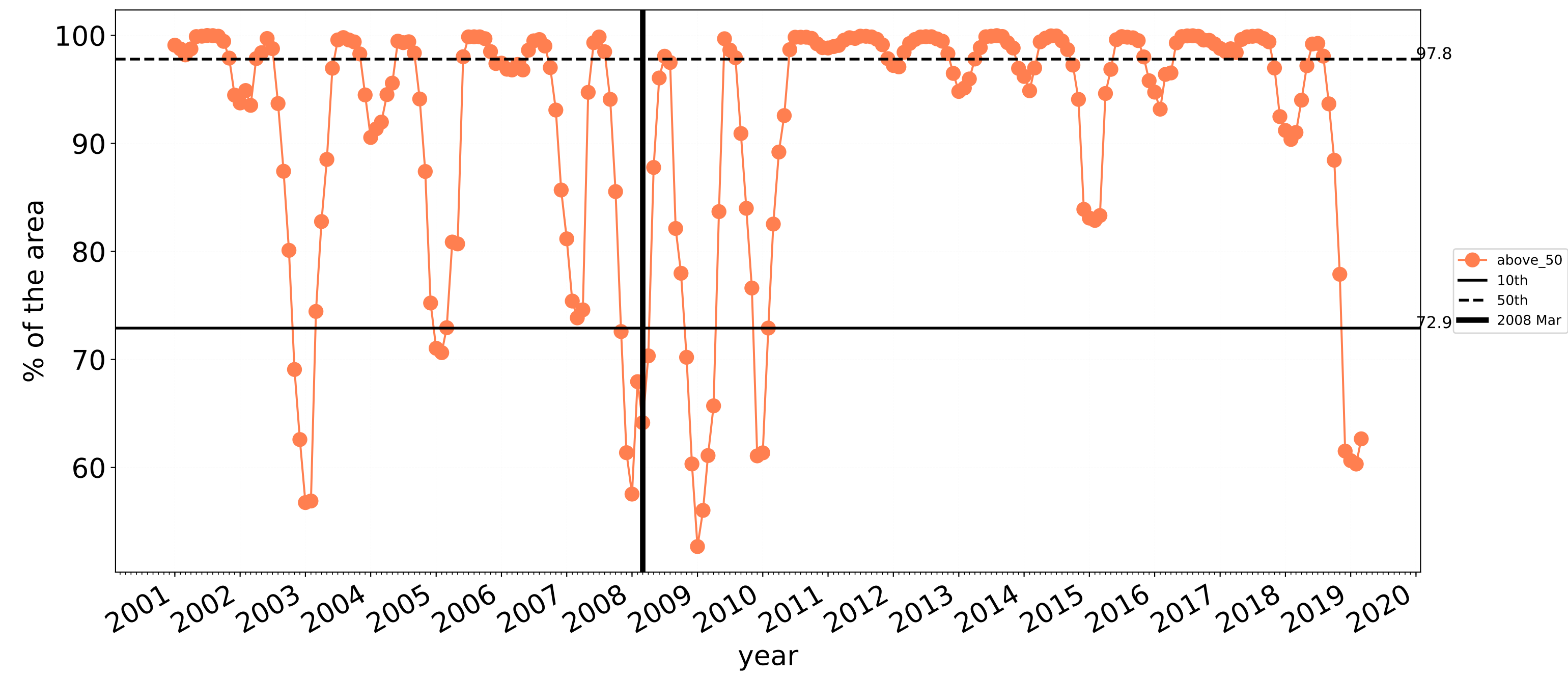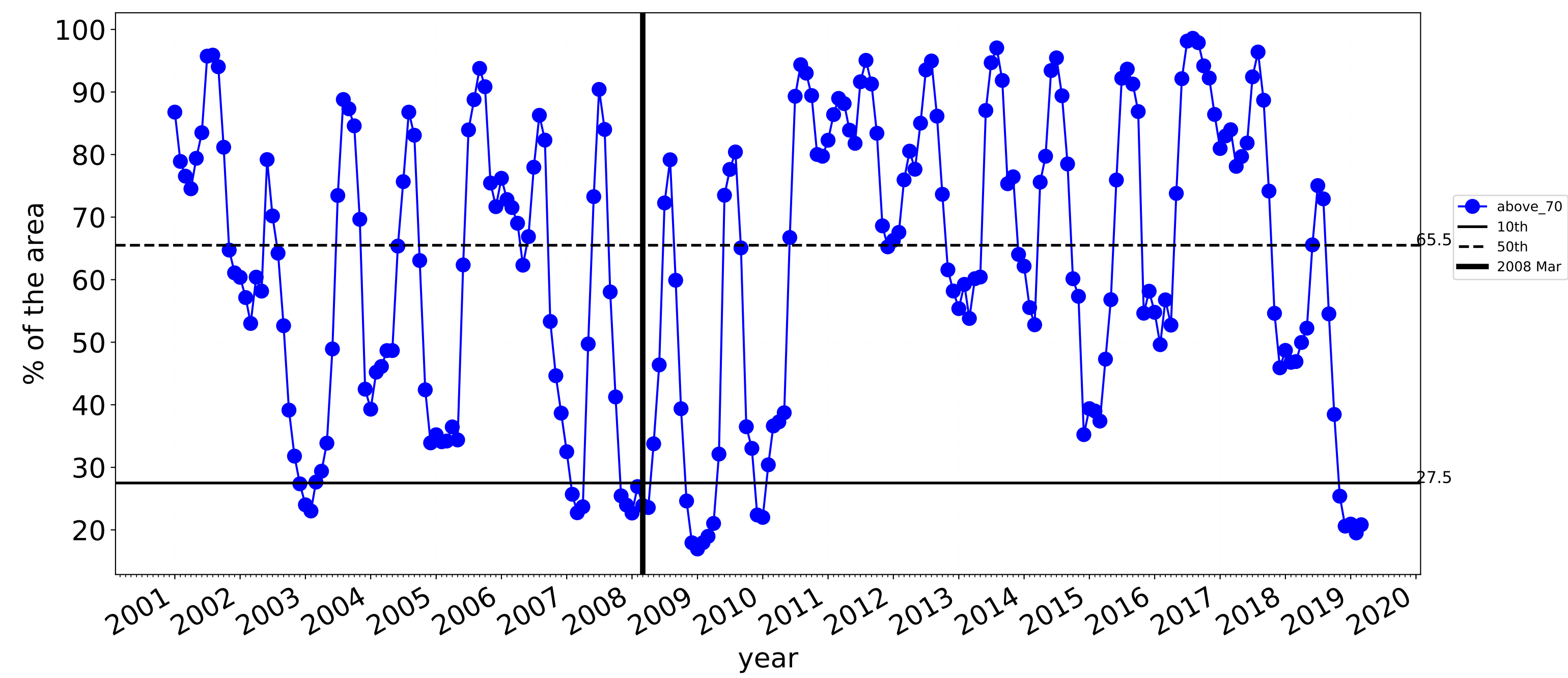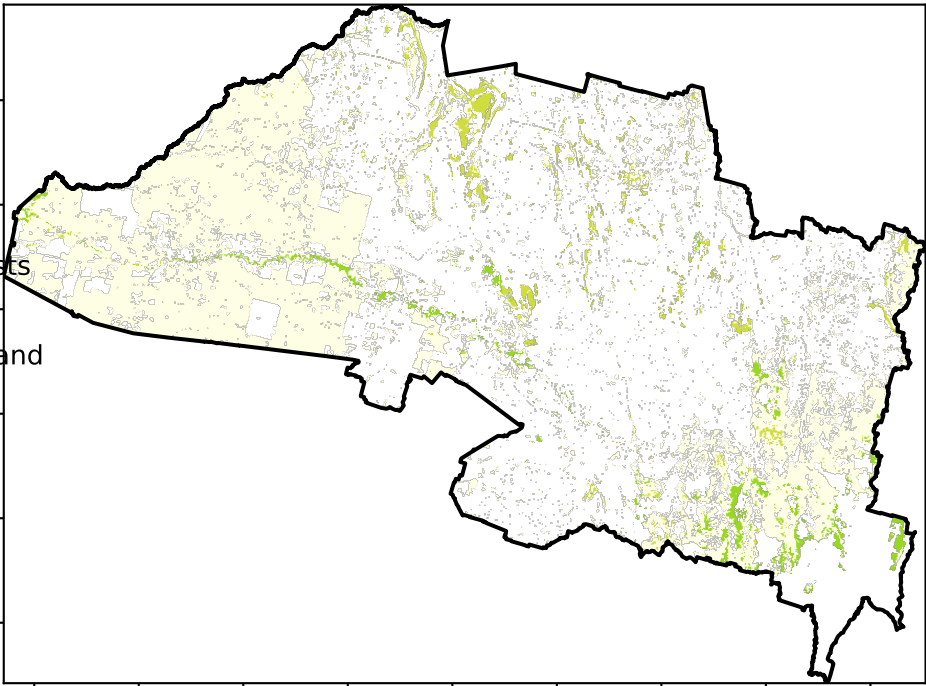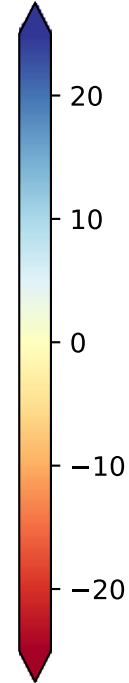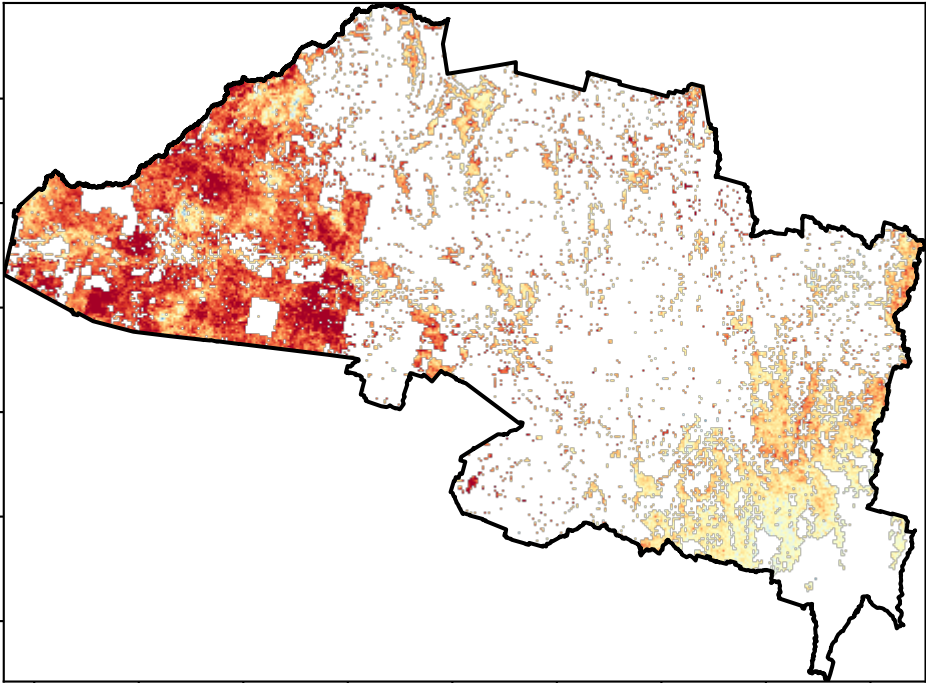the map using baseline
from 2001 to 2019.

Legend: 10, 8-9, 4-7, 2-3, 1

Agriculture timeseries

Proportion of the area protected from wind erosion (Total Vegetation Cover > 50%)

Wind erosion historical monthly area protected (Total Veg Cov >50%)
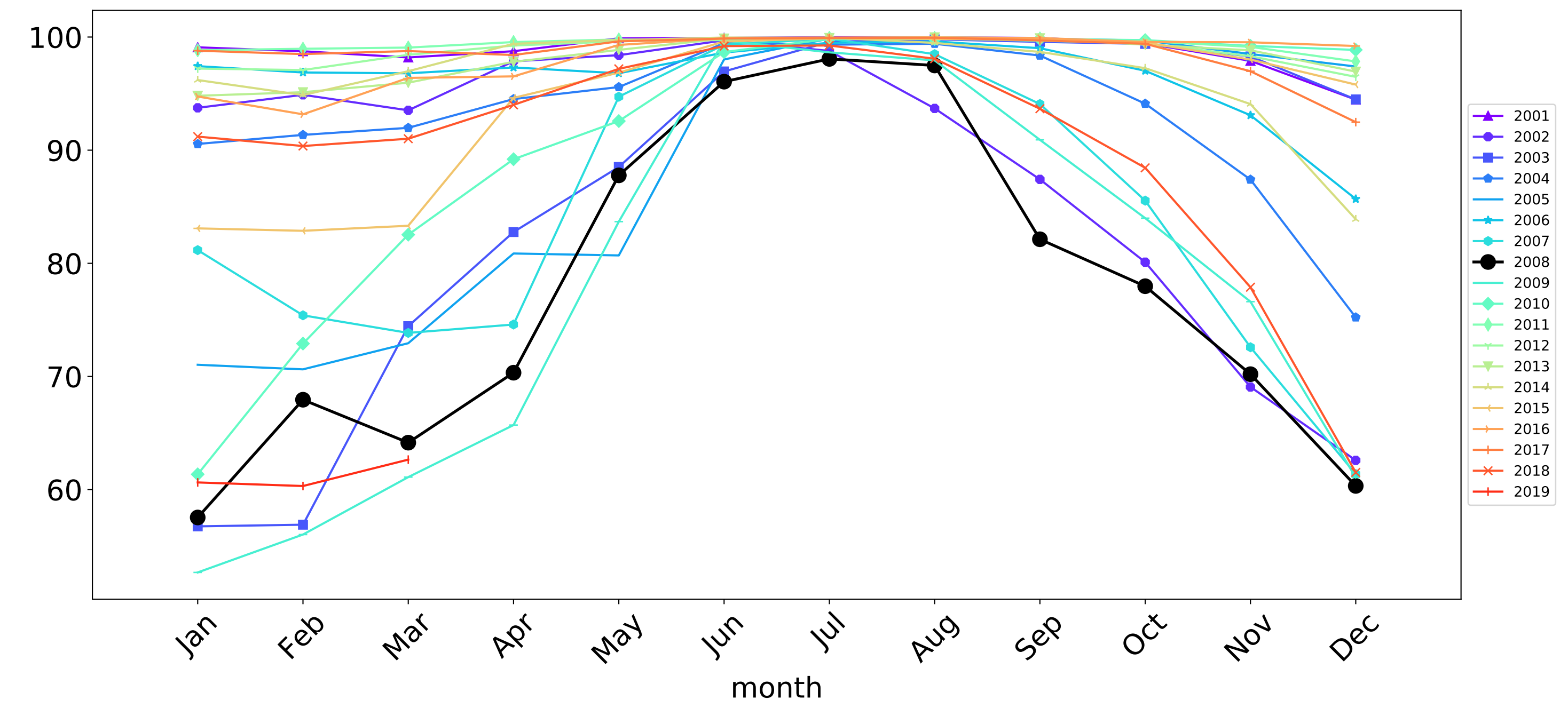
Proportion of the area protected from water erosion (Total Vegetation Cover > 70%)

Water erosion historical monthly area protected (Total Veg Cov>70%)
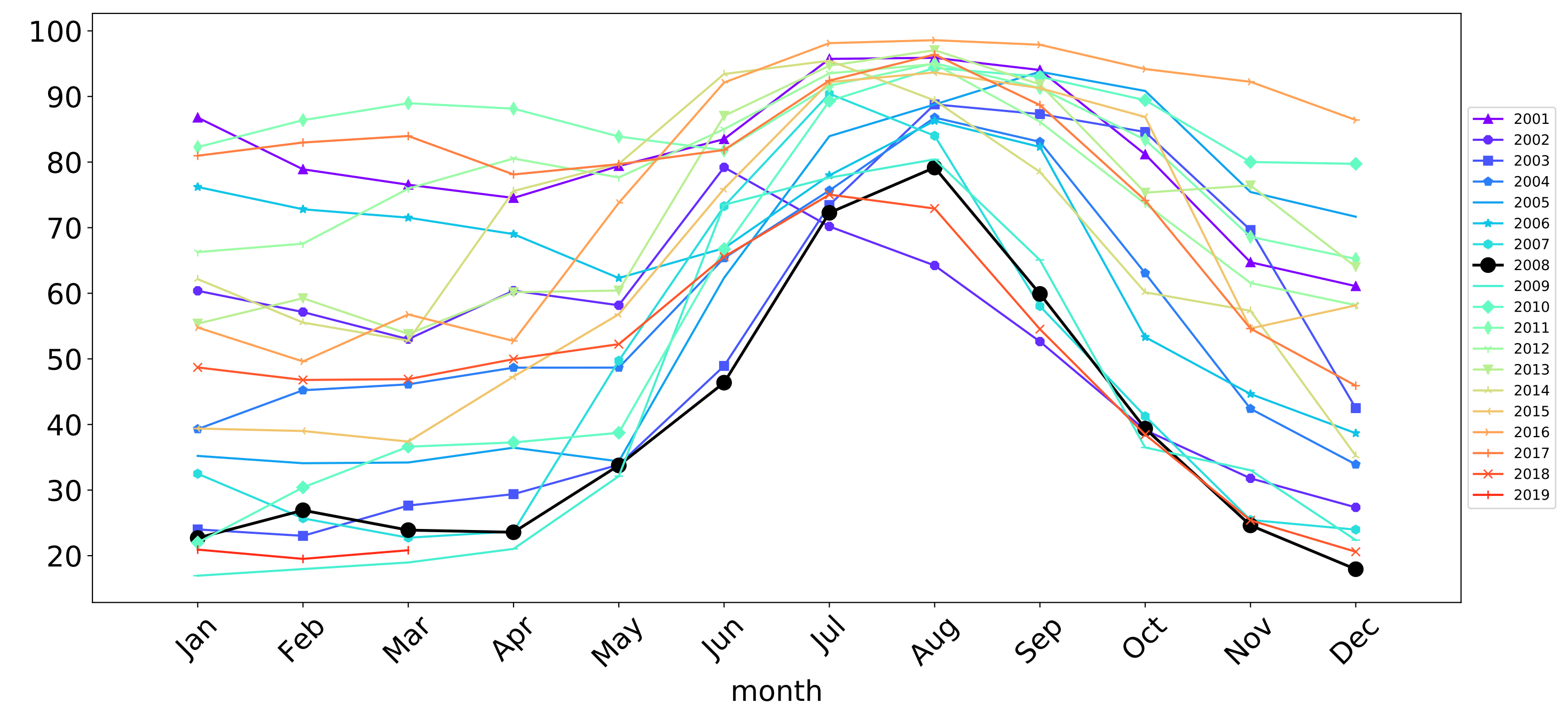
Grazing

Land use and forest cover

Catchment Scale Land Use and Forests of Australia (2018) Derived from Catchment Scale Land Use of Australia (2018) and Forests of Australia (2018)

- 1 Agriculture - Grazing - Non forest
- 2 Agriculture - Grazing - Woodland forest
- 3 Agriculture - Grazing - Non-woodland forest

Proportion of each land class in area

Total Vegetation Cover [%]

- 71%-100%
- 51%-70%
- 31%-50%
- 0-30%
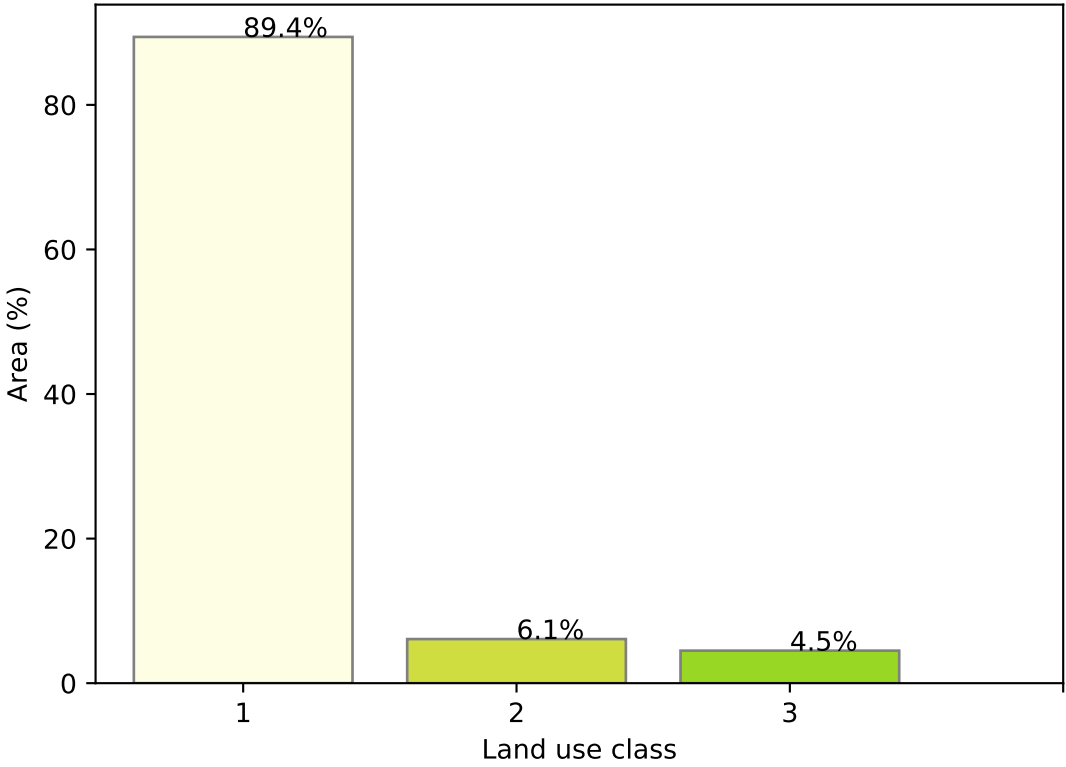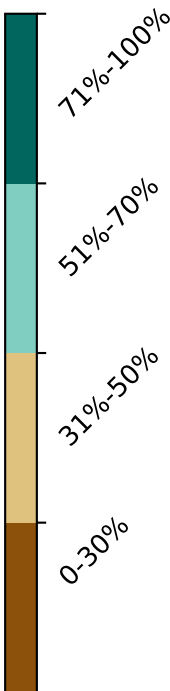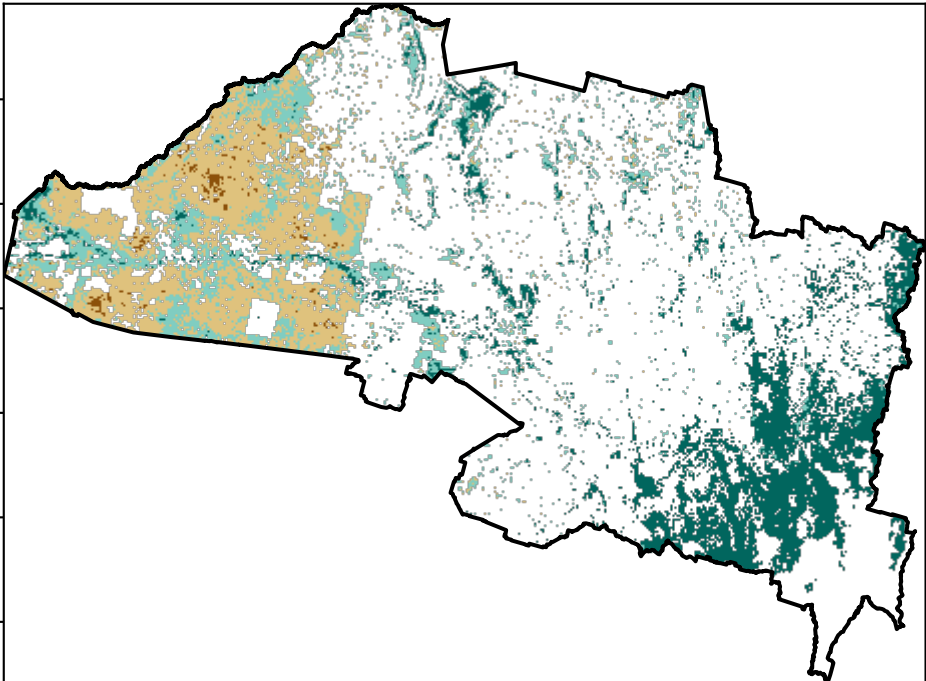
Proportion of vegetation cover class in area
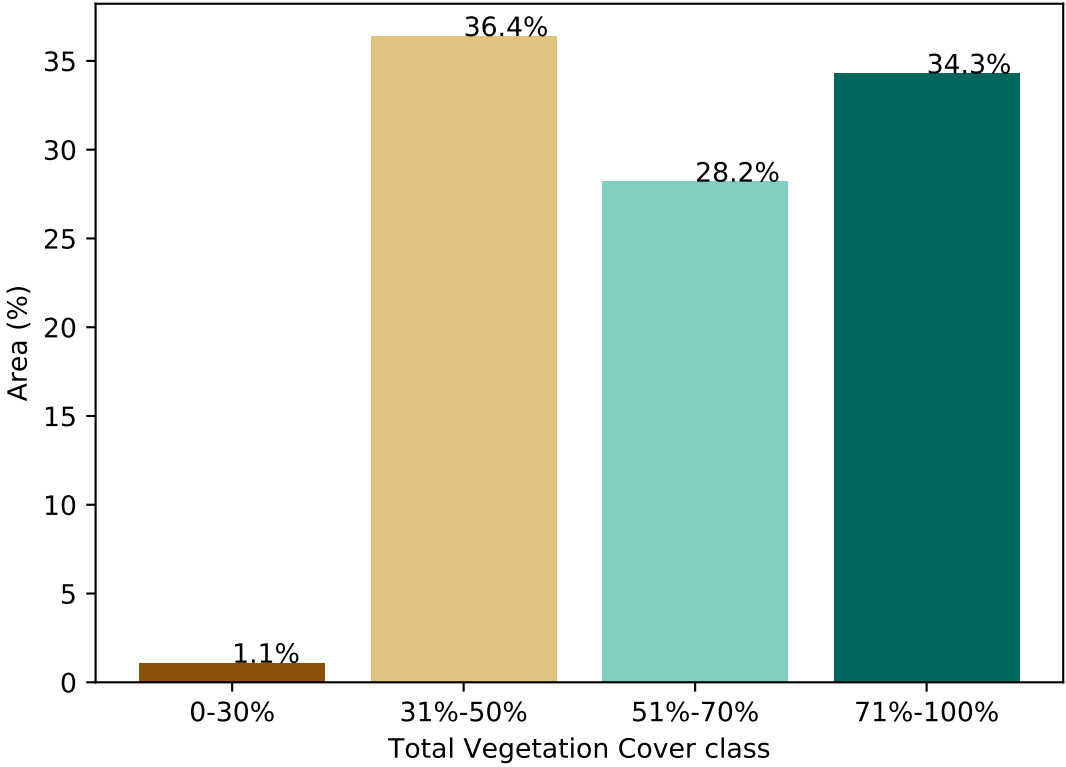
% Area protected from water erosion (>70%)
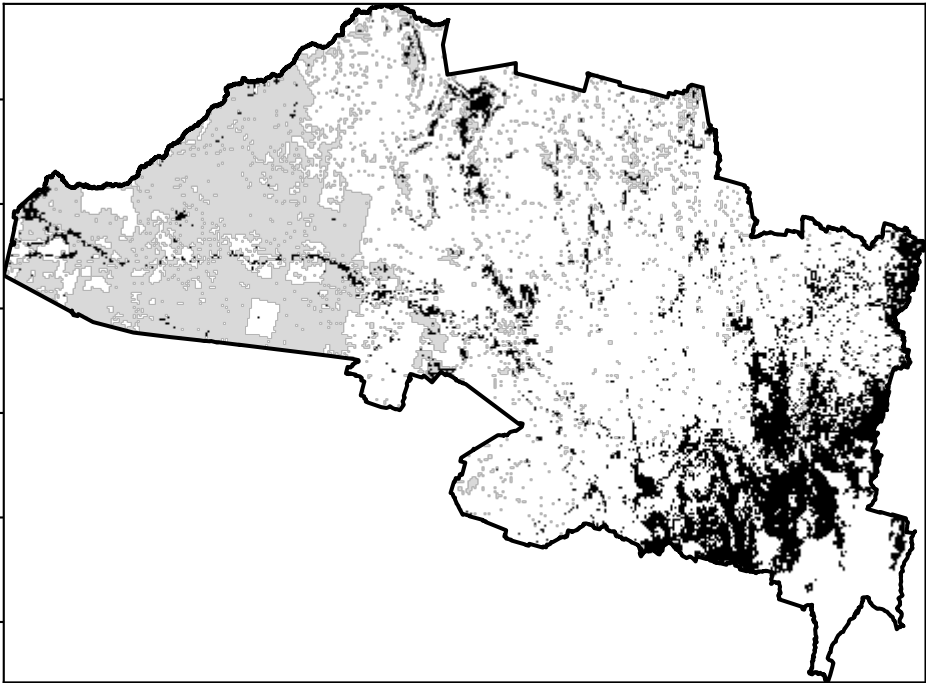
Area not protected 65.7% of region (1,518,704 ha)

Area protected 34.3% of region (792,870 ha)

% Area protected from wind erosion (>50%)
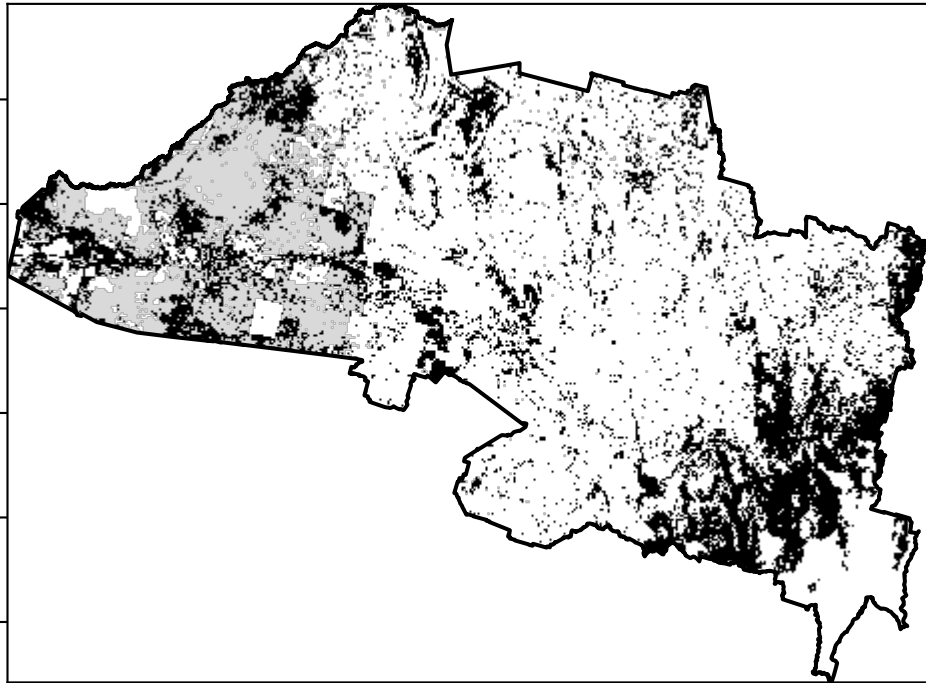
Area not protected 38.0% of region (878,398 ha)

Area protected 62.0% of region (1,433,176 ha)

Total Vegetation Cover Anomaly [%]

Anomaly show how many percetage points each pixel is from the mean. That is, red pixels are about 20% lower than the mean of that pixel. The mean is only for the month of the map using baseline from 2001 to 2019.

Total Vegetation Cover Decile [%]

Deciles show where the pixel value lies in the record, from highest to lowest, for that month. That is, red pixels are in the lowest 10% of records for that month of the map using baseline from 2001 to 2019.
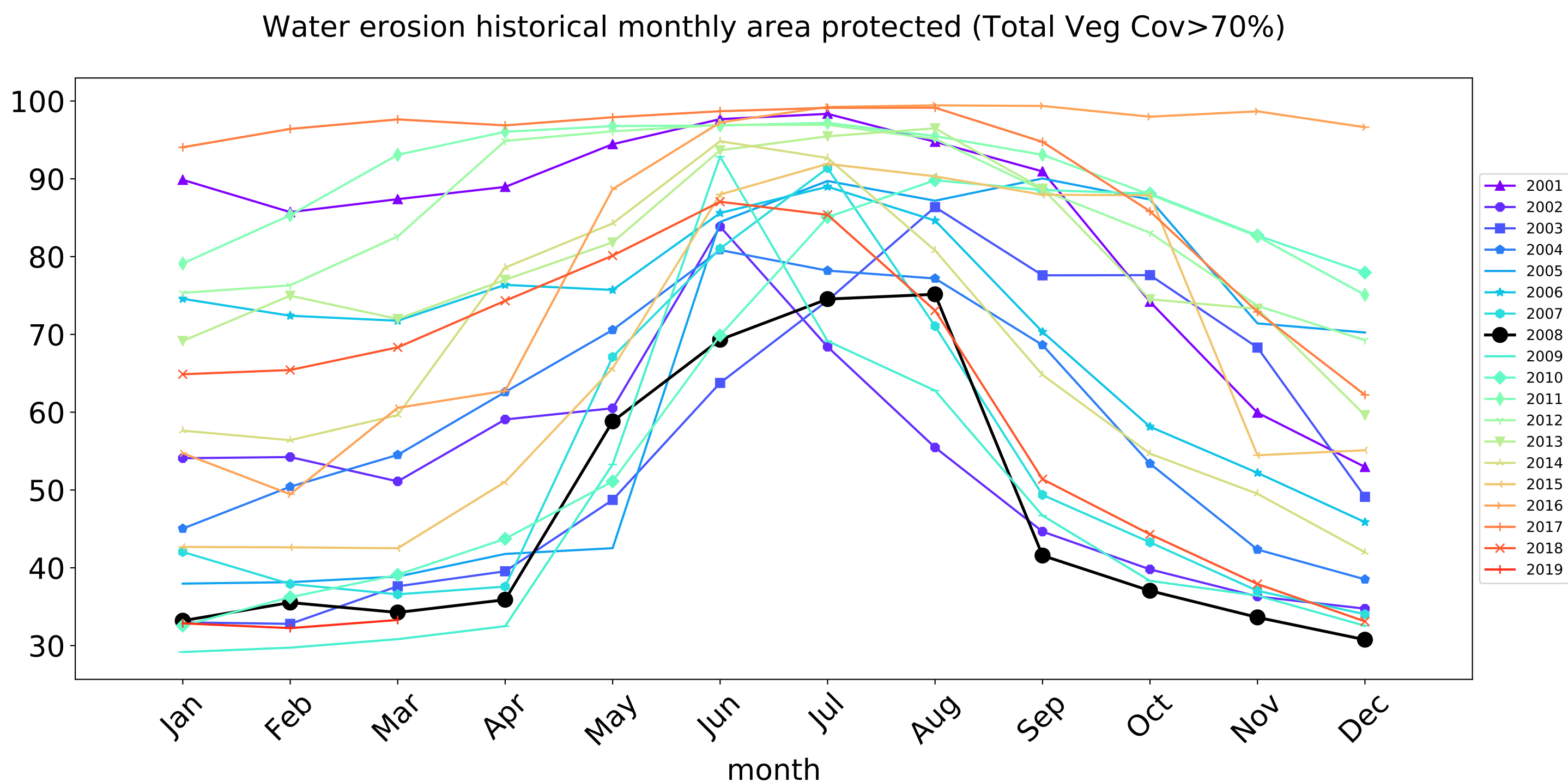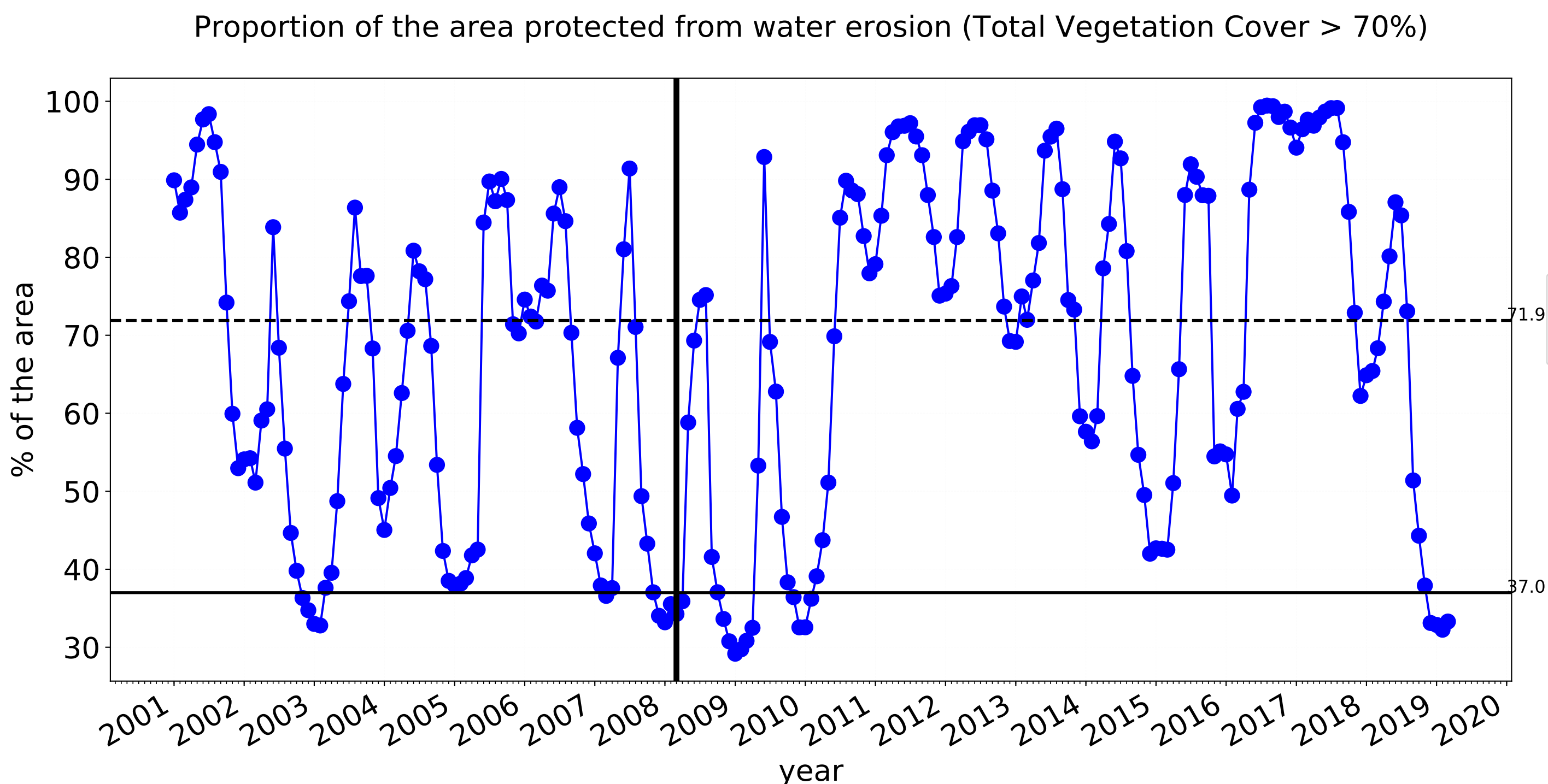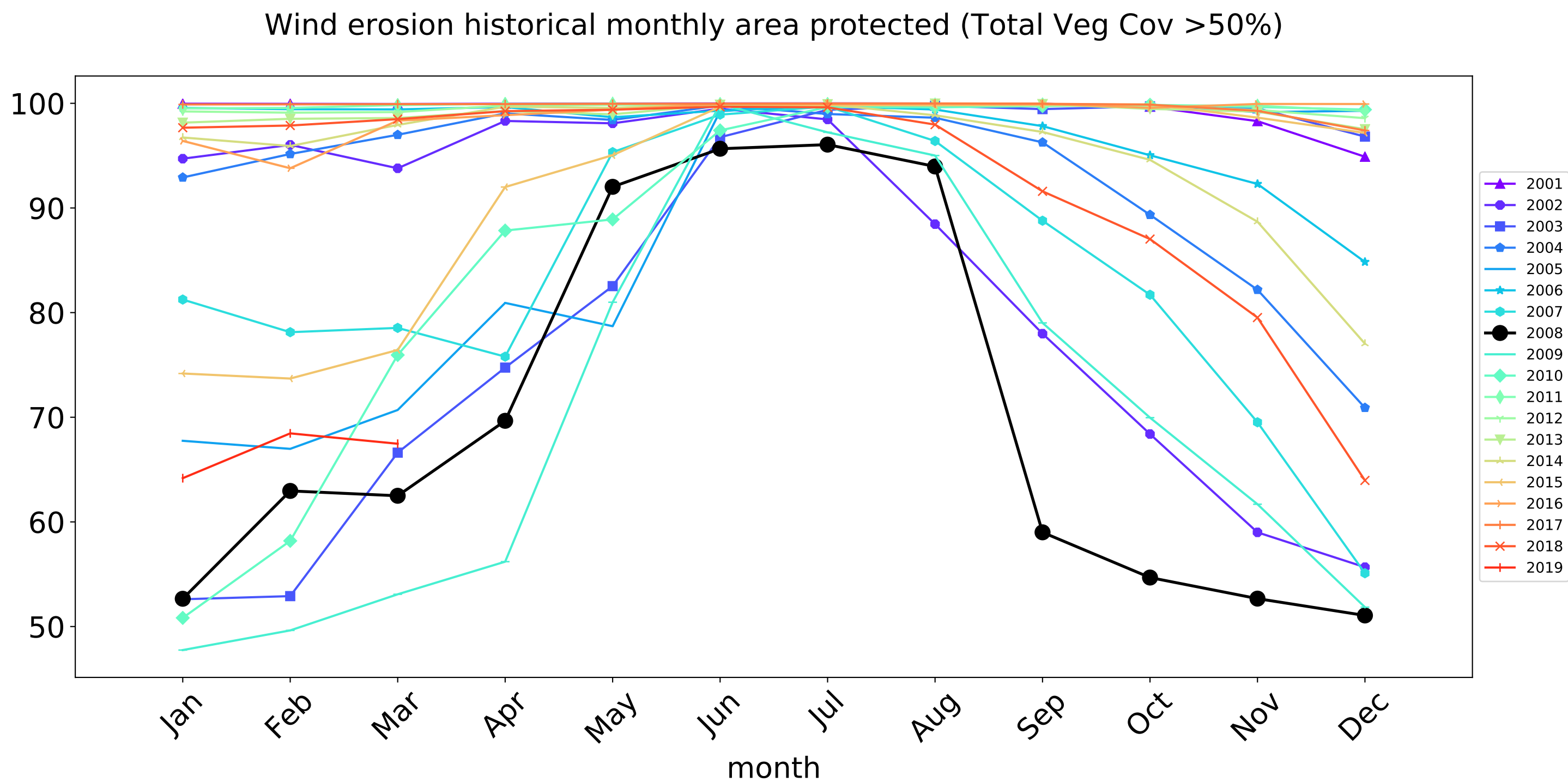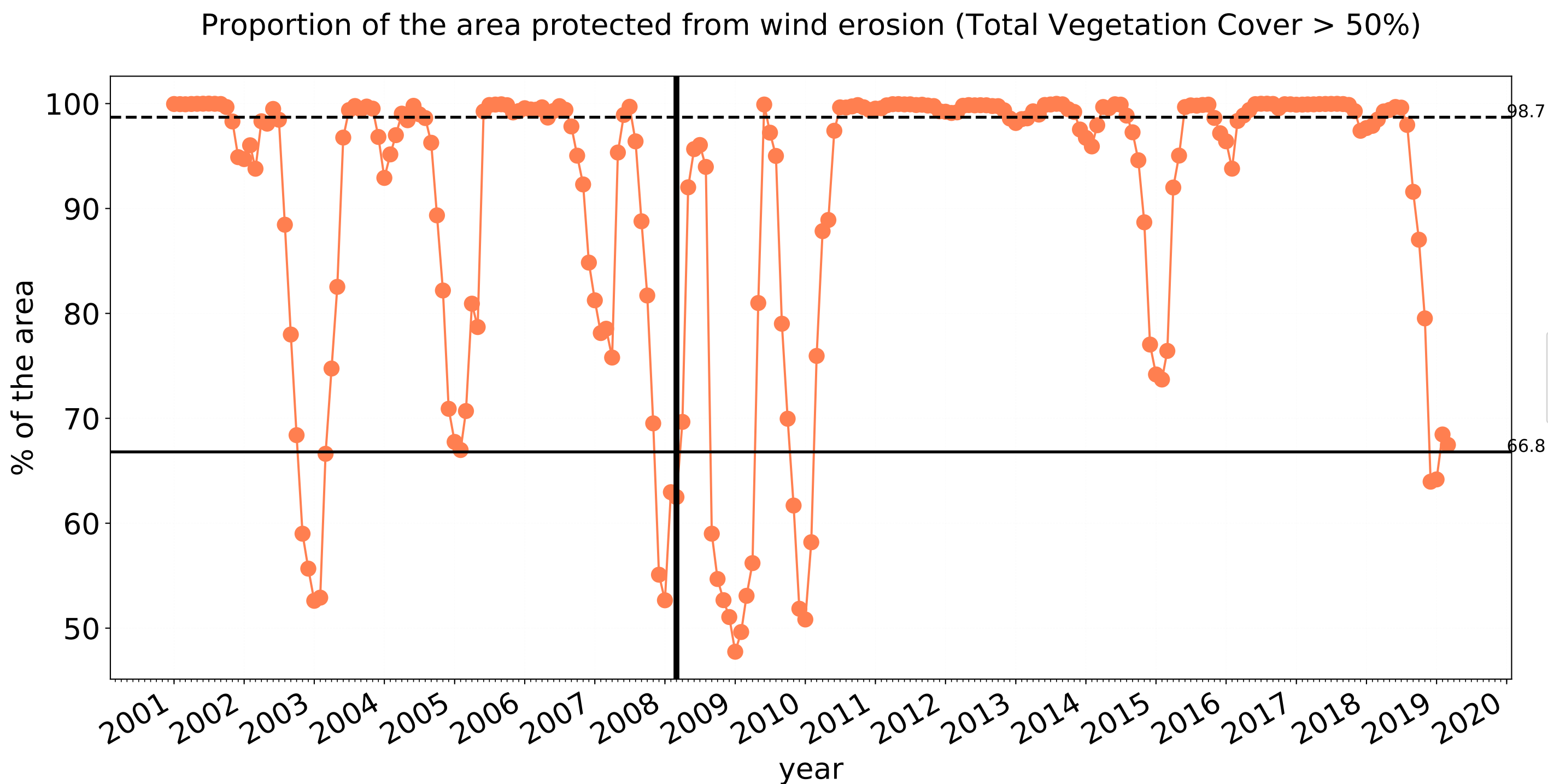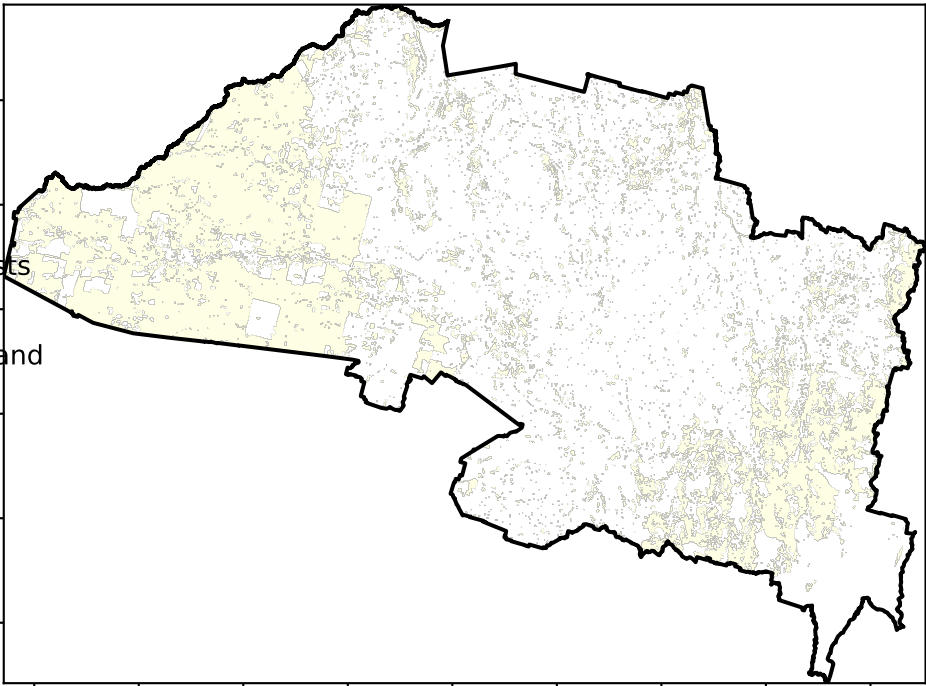
Grazing timeseries

Proportion of the area protected from wind erosion (Total Vegetation Cover > 50%)

Wind erosion historical monthly area protected (Total Veg Cov >50%)

Proportion of the area protected from water erosion (Total Vegetation Cover > 70%)

Water erosion historical monthly area protected (Total Veg Cov>70%)

Grazing non forest

Land use and forest cover

Catchment Scale Land Use and Forests of Australia (2018) Derived from Catchment Scale Land Use of Australia (2018) and Forests of Australia (2018)

1 Agriculture - Grazing - Non forest

Total Vegetation Cover [%]
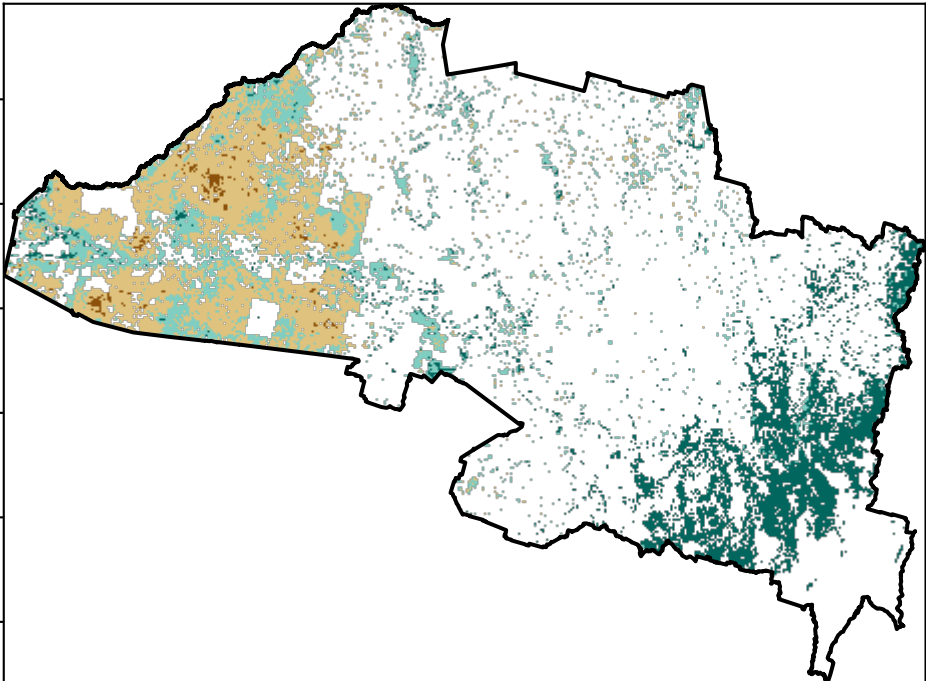
71%-100%
51%-70%
31%-50%
0-30%

Proportion of vegetation cover class in area

40.7%
29.1%
29.0%
1.2%

Area (%)

Total Vegetation Cover class
0-30% 31%-50% 51%-70% 71%-100%
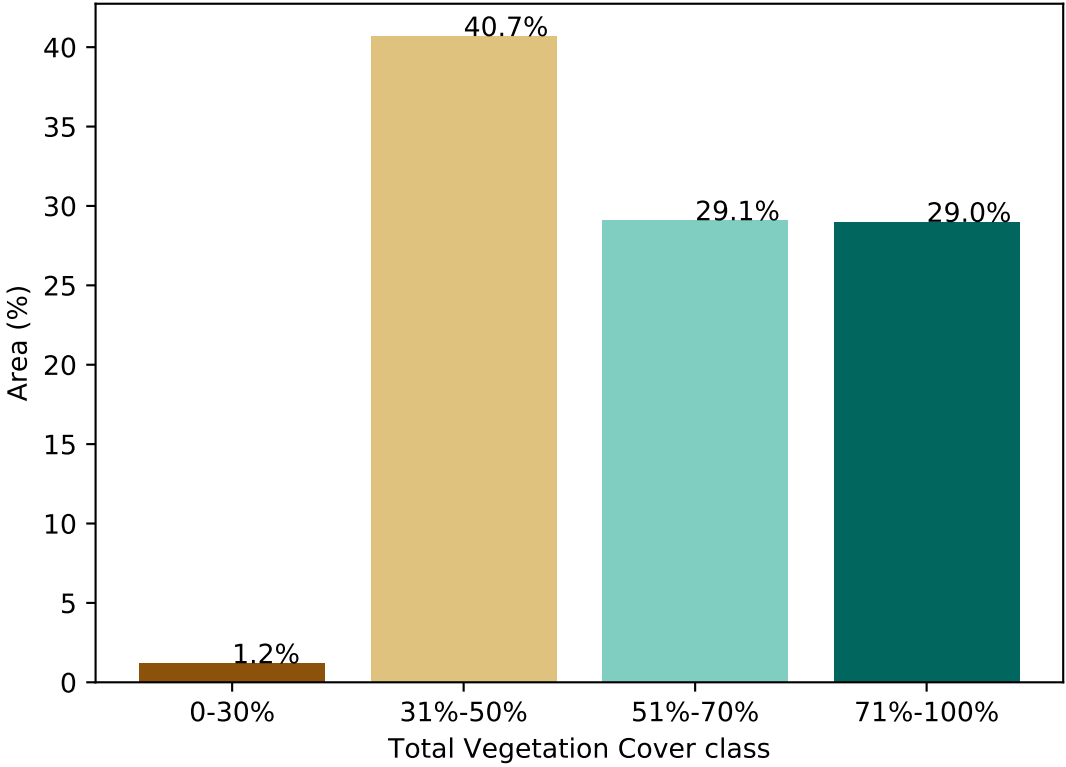
% Area protected from water erosion (>70%)
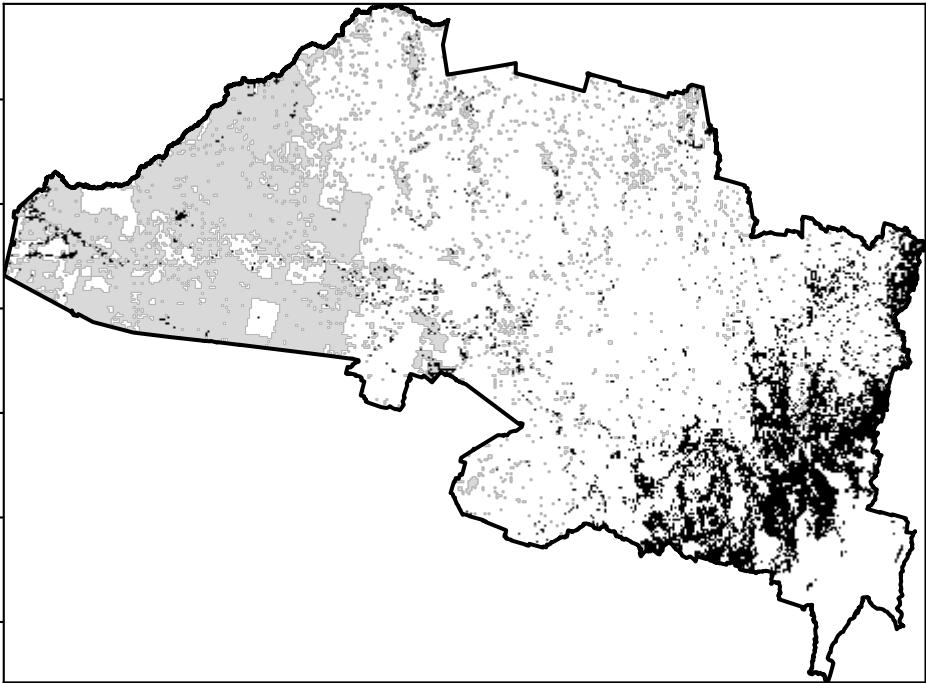
Area not protected 71.0% of region (1,467,268 ha)

Area protected 29.0% of region (599,306 ha)

% Area protected from wind erosion (>50%)
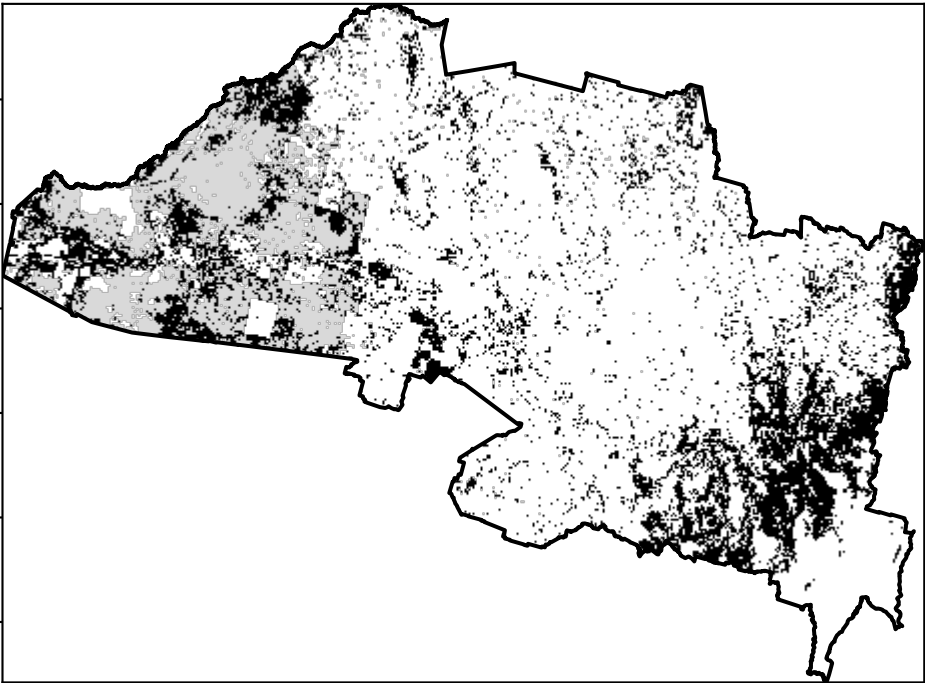
Area not protected 42.0% of region (867,961 ha)

Area protected 58.0% of region (1,198,613 ha)

Total Vegetation Cover Anomaly [%]

Anomaly show how many percetage points each pixel is from the mean. That is, red pixels are about 20% lower than the mean of that pixel. The mean is only for the month of the map using baseline from 2001 to 2019.

20
10
0
-10
-20

Total Vegetation Cover Decile [%]

Deciles show where the pixel value lies in the record, from highest to lowest, for that month. That is, red pixels are in the lowest 10% of records for that month of the map using baseline from 2001 to 2019.
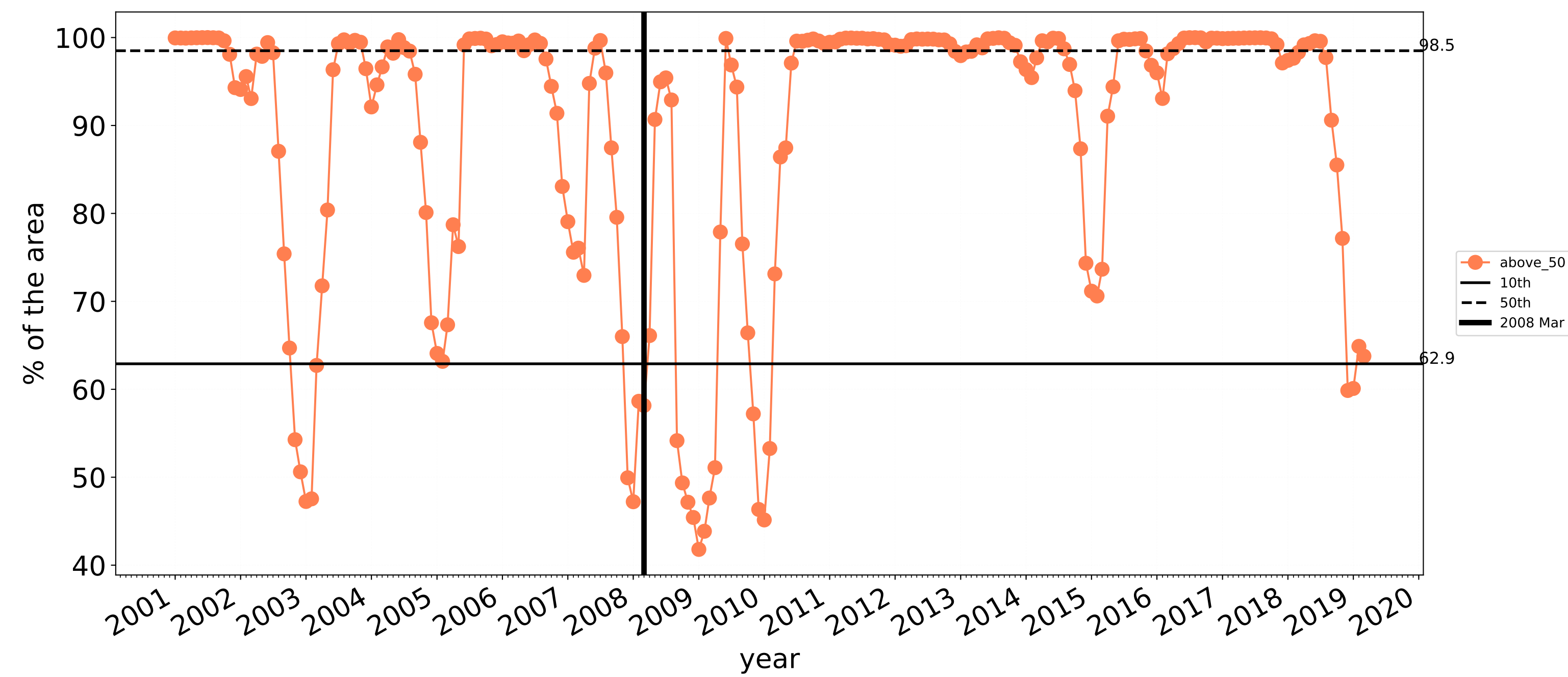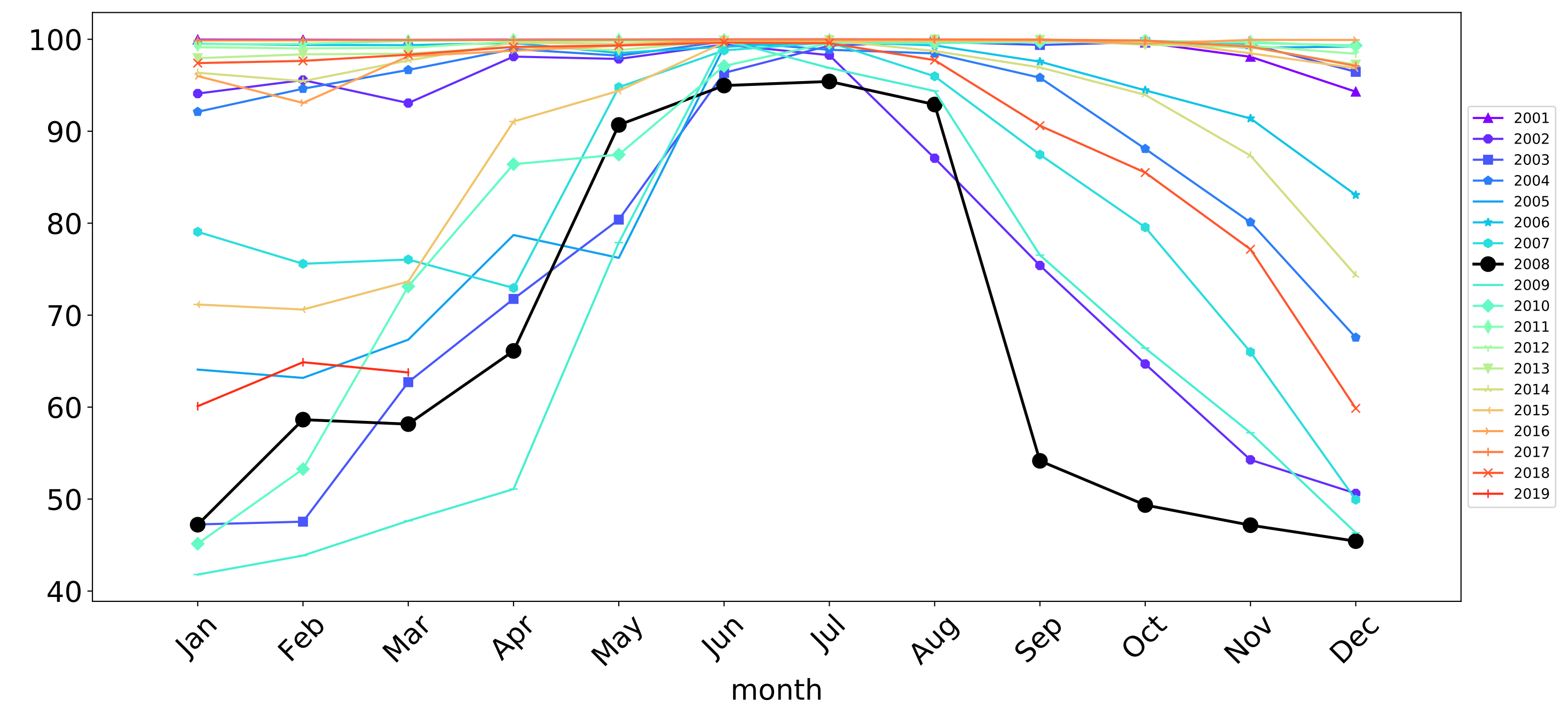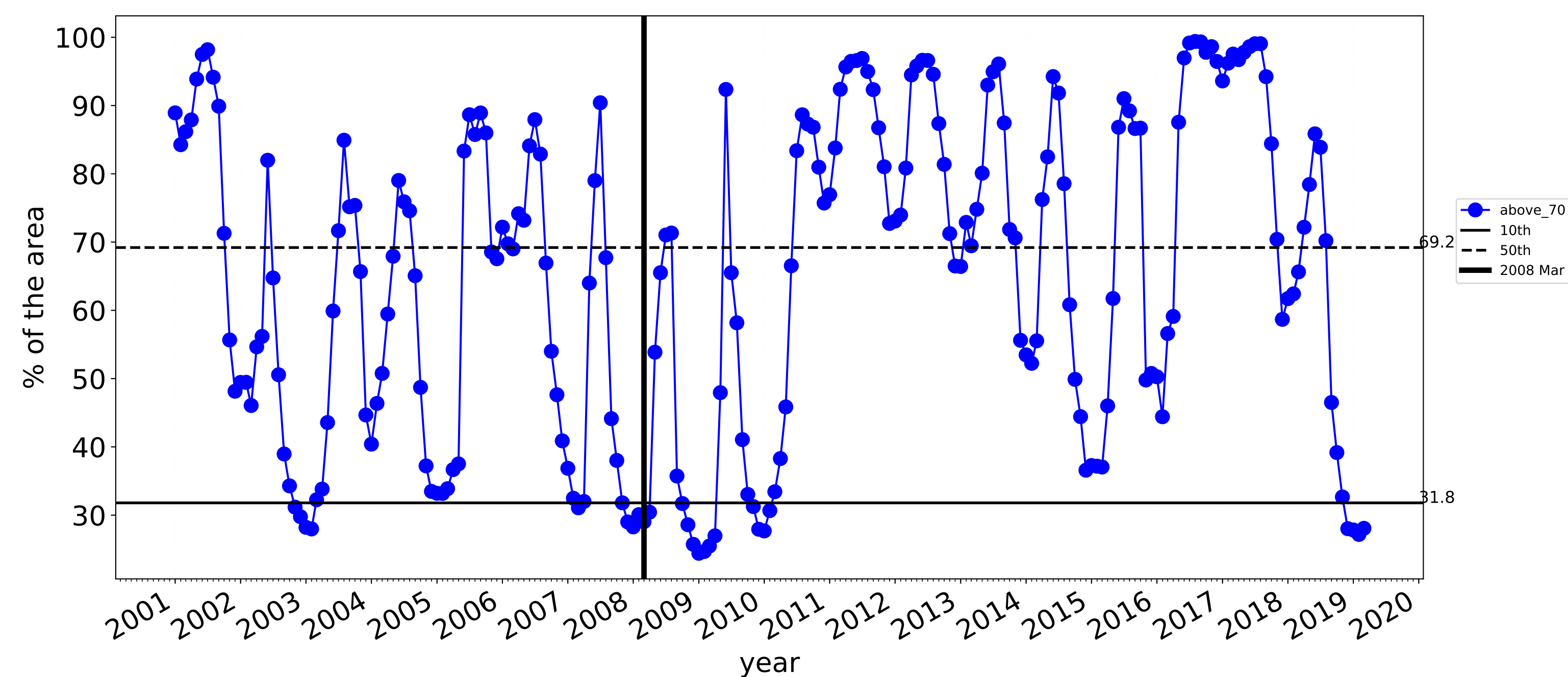
10
8-9
4-7
2-3
1
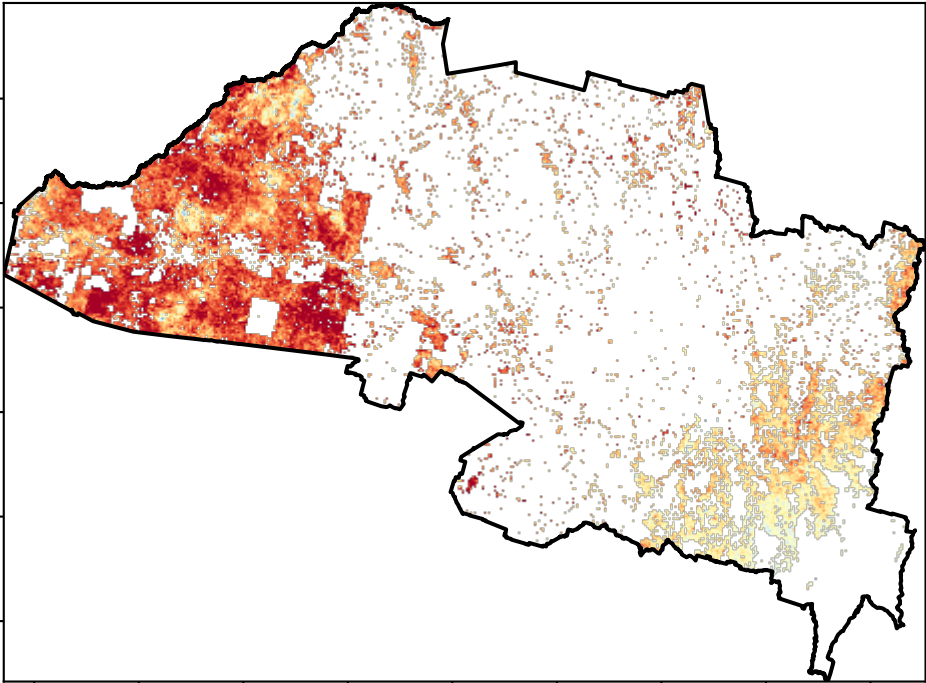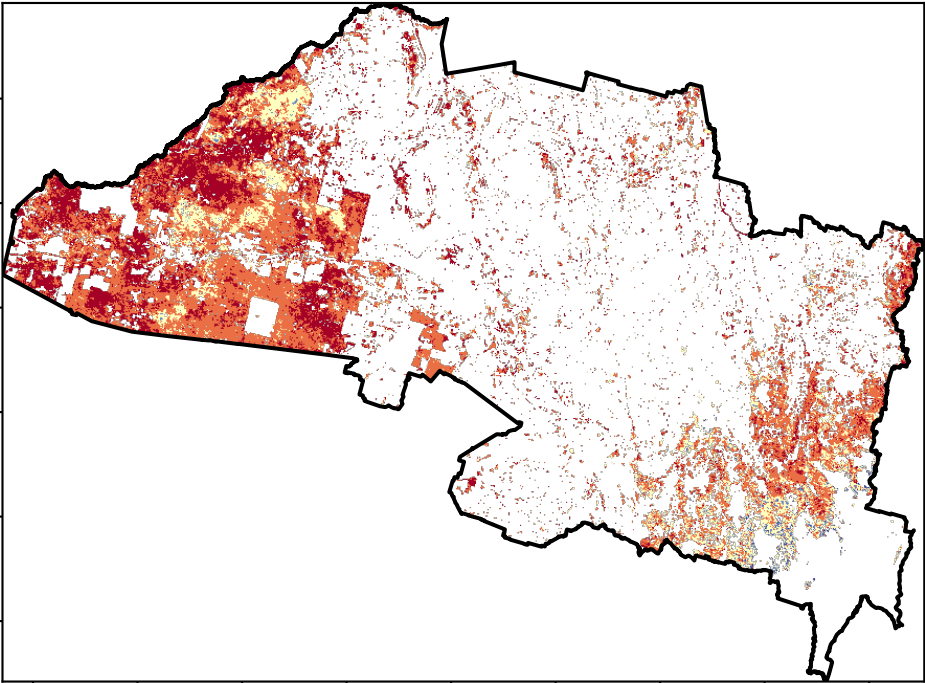
Grazing non forest timeseries

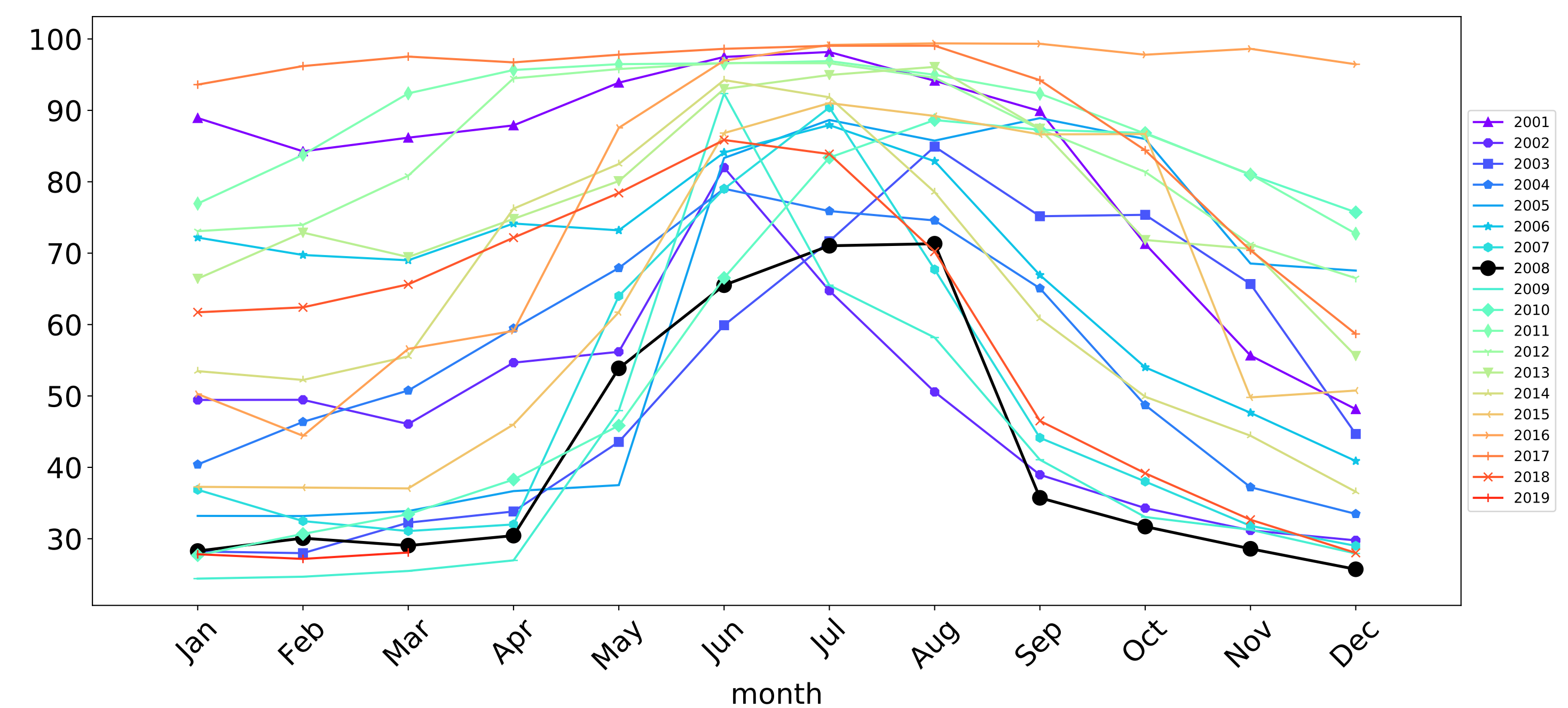Proportion of the area protected from wind erosion (Total Vegetation Cover > 50%)

Wind erosion historical monthly area protected (Total Veg Cov >50%)

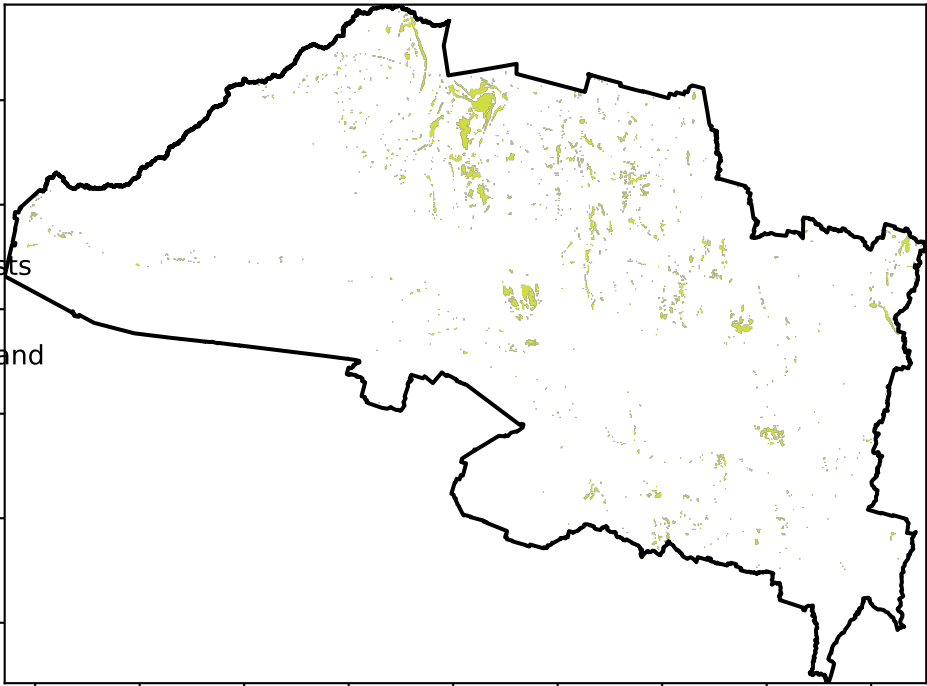Proportion of the area protected from water erosion (Total Vegetation Cover > 70%)

Water erosion historical monthly area protected (Total Veg Cov>70%)
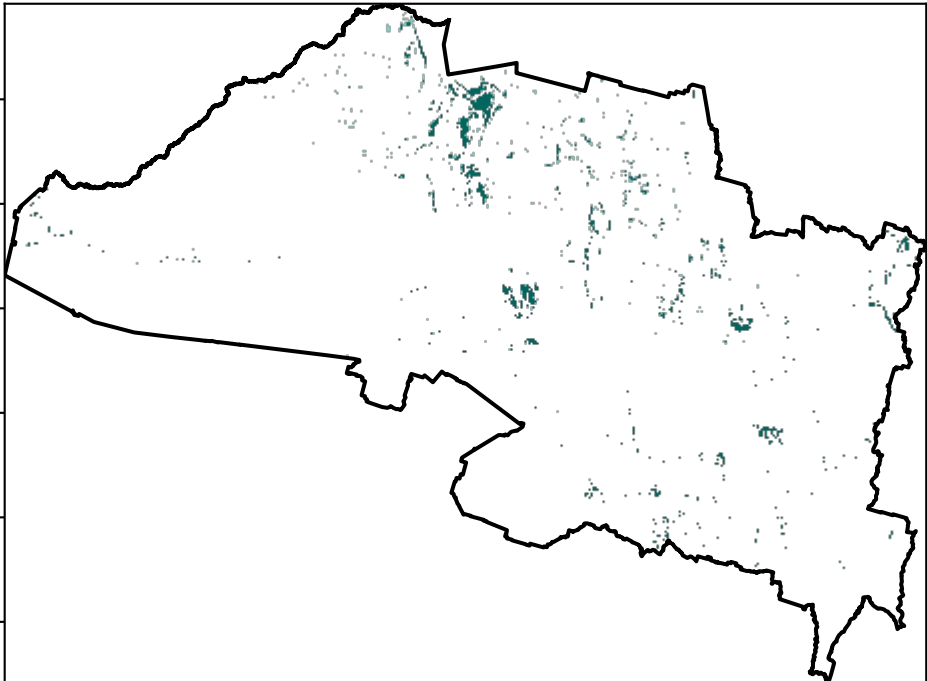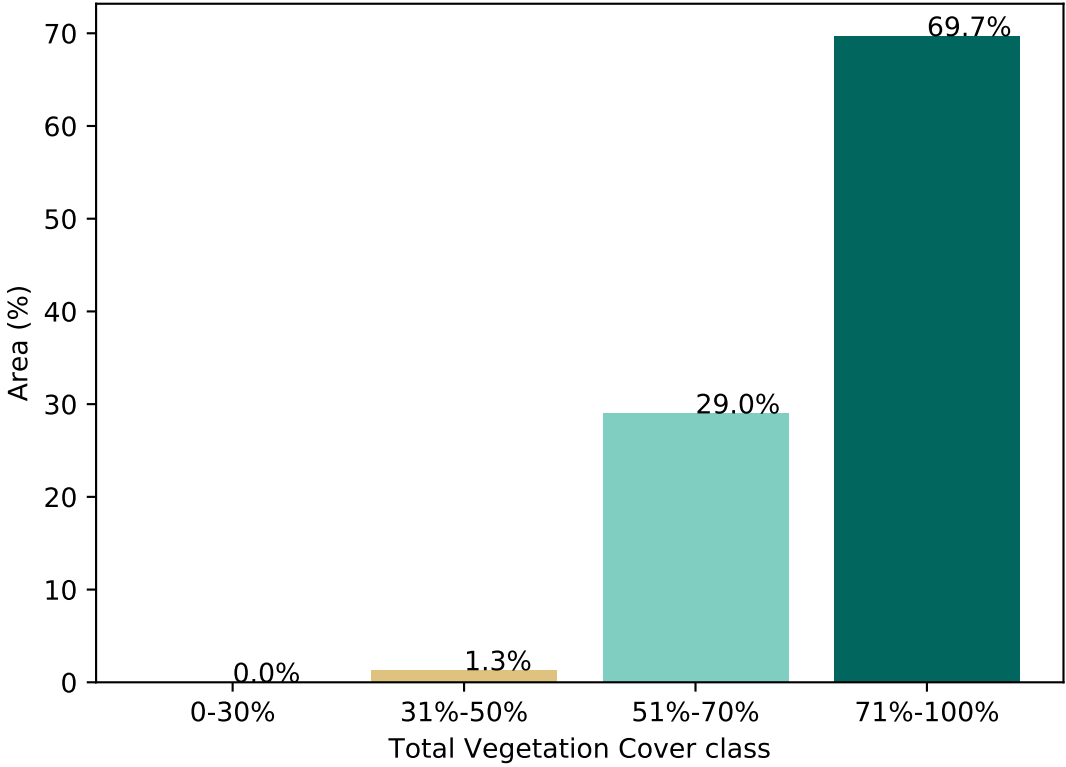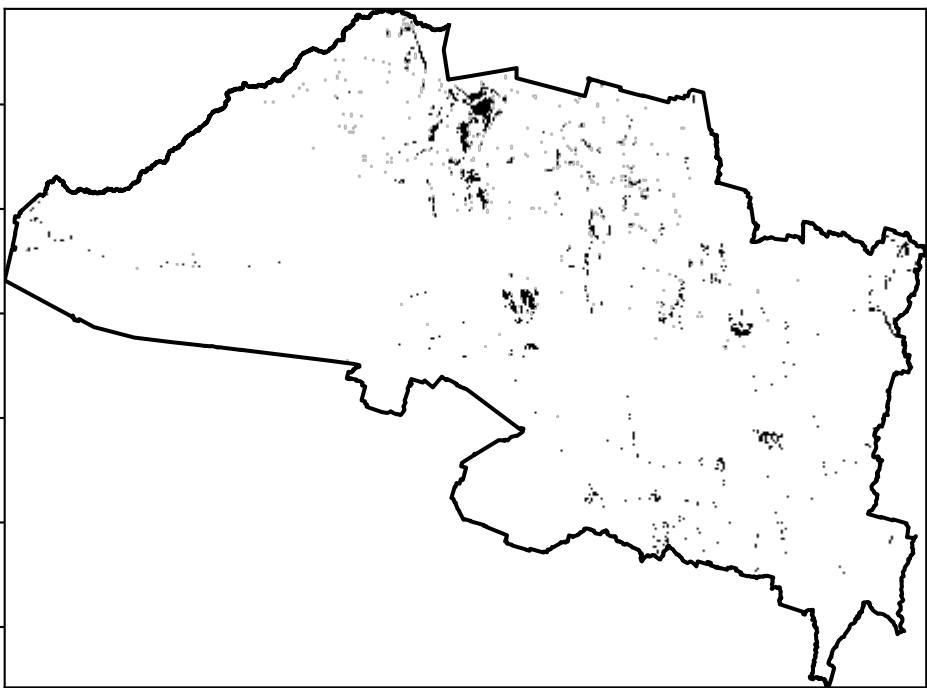
Grazing Woodland forest

Land use and forest cover

Catchment Scale Land Use and Forests of Australia (2018) Derived from Catchment Scale Land Use of Australia (2018) and Forests of Australia (2018)
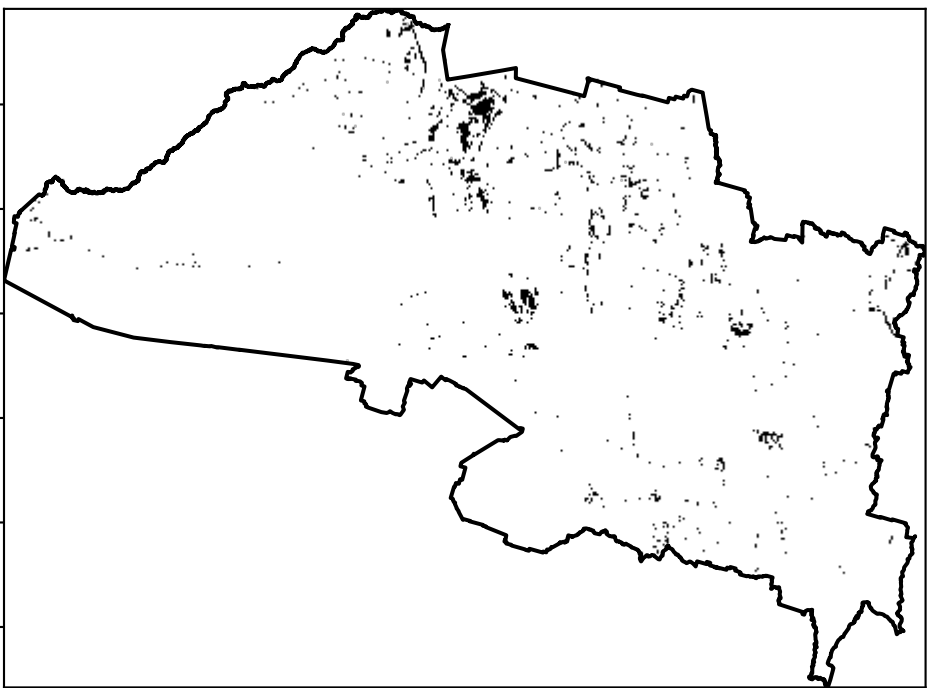
1 Agriculture - Grazing - Woodland forest

Total Vegetation Cover [%]

71%-100%

51%-70%

31%-50%

0-30%

Proportion of vegetation cover class in area

0.0%   1.3%   29.0%   69.7%

Area (%)

Total Vegetation Cover class

0-30%   31%-50%   51%-70%   71%-100%

% Area protected from water erosion (>70%)

Area not protected 30.3% of region (42,919 ha)

Area protected 69.7% of region (98,730 ha)

% Area protected from wind erosion (>50%)

Area not protected 1.0% of region (1,416 ha)

Area protected 99.0% of region (140,233 ha)

Total Vegetation Cover Anomaly [%]

Anomaly show how many percetage points each pixel is from the mean. That is, red pixels are about 20% lower than the mean of that pixel. The mean is only for the month of the map using baseline from 2001 to 2019.

Total Vegetation Cover Decile [%]

Deciles show where the pixel value lies in the record, from highest to lowest, for that month. That is, red pixels are in the lowest 10% of records for that month of the map using baseline from 2001 to 2019.
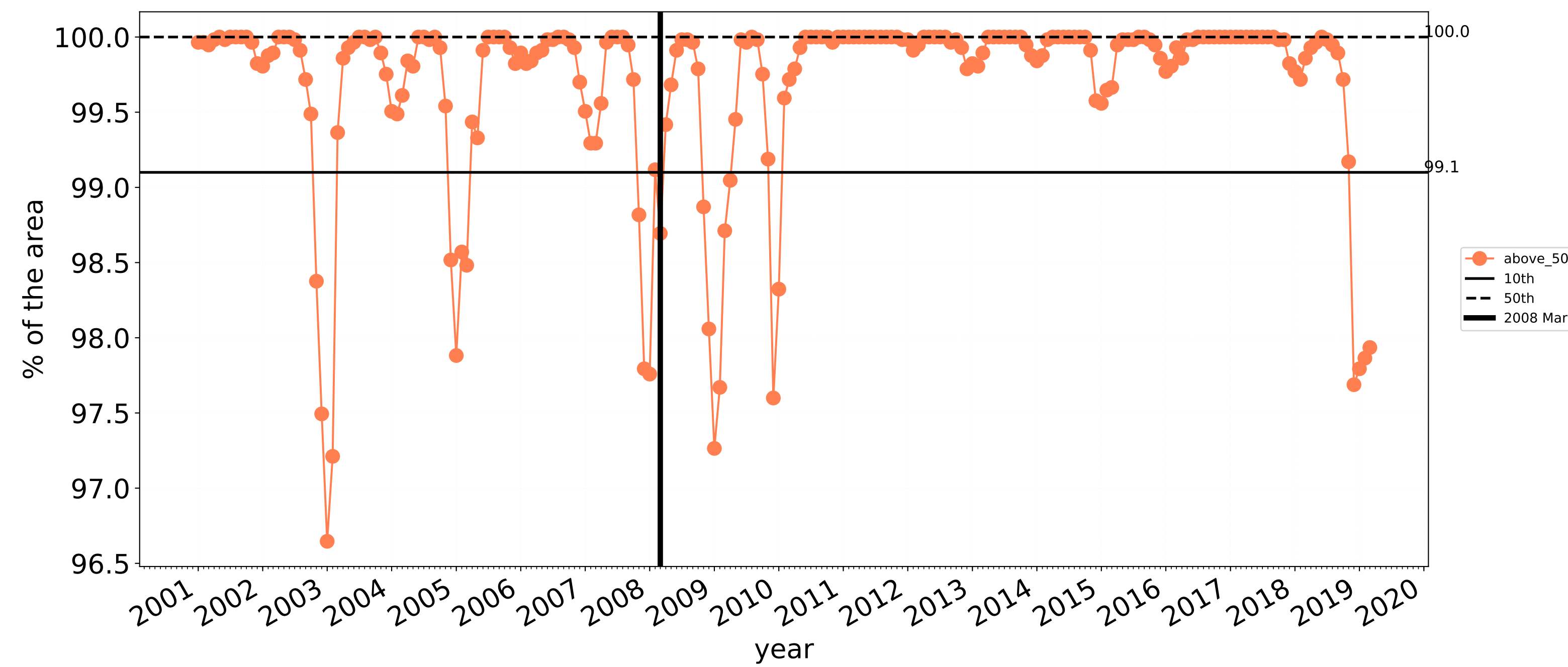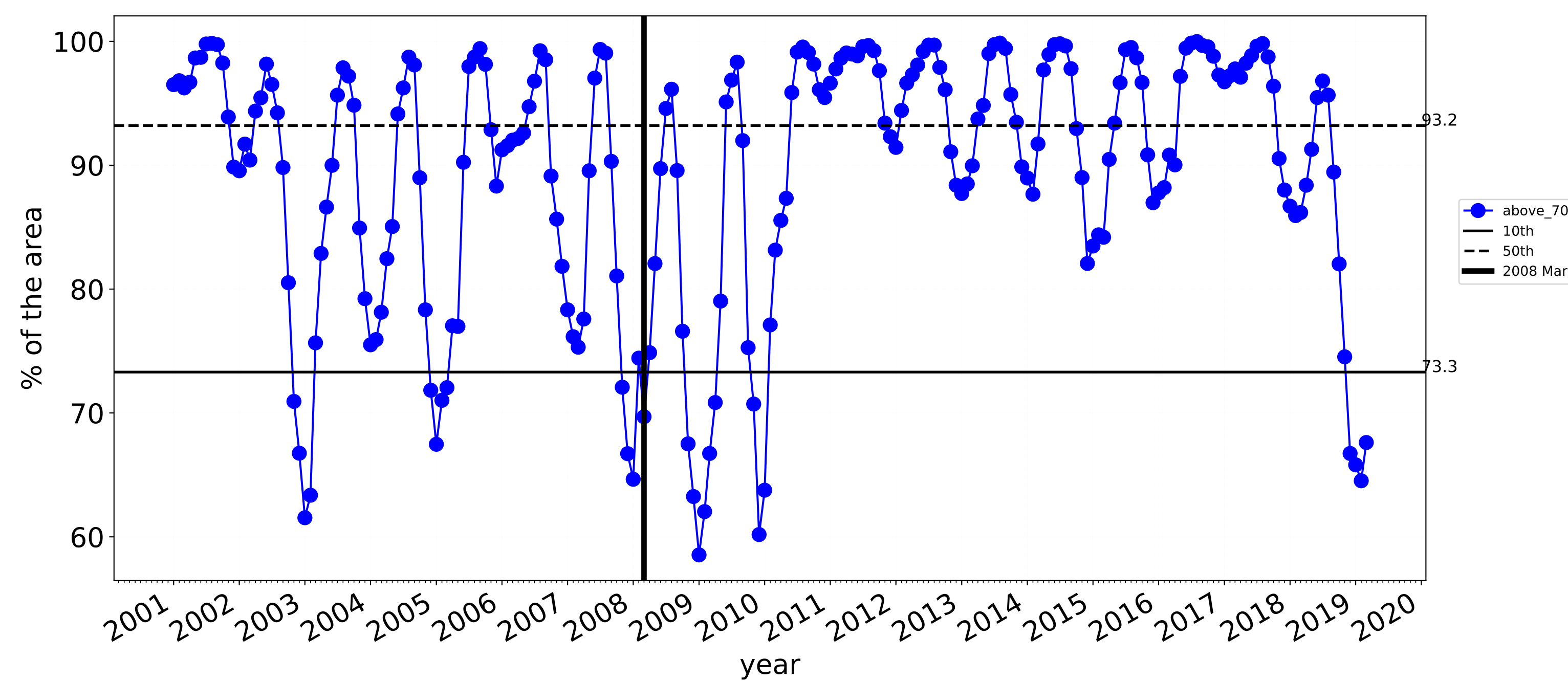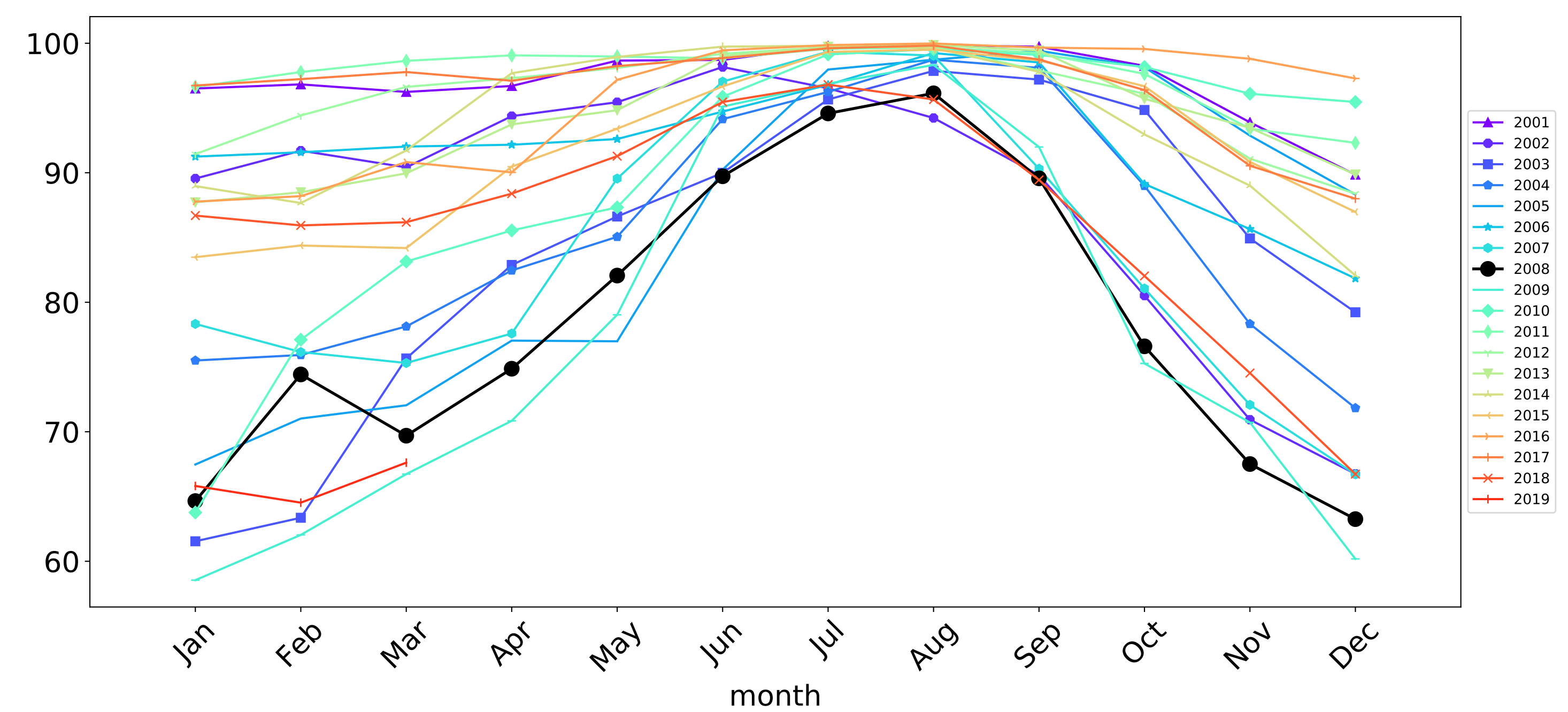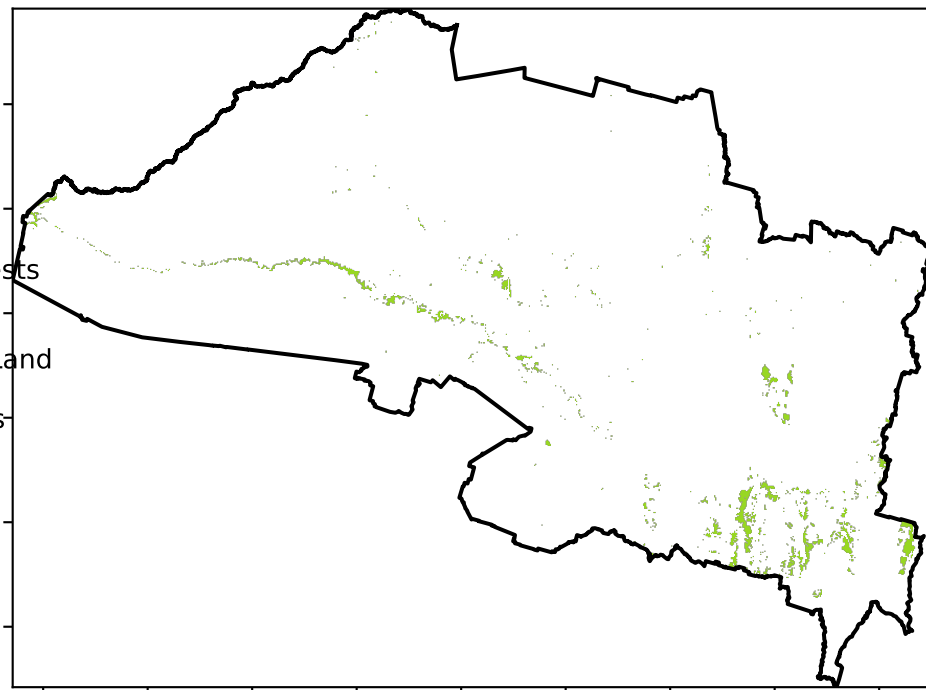
10

8-9

4-7

2-3

1

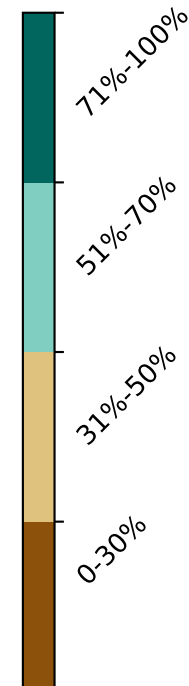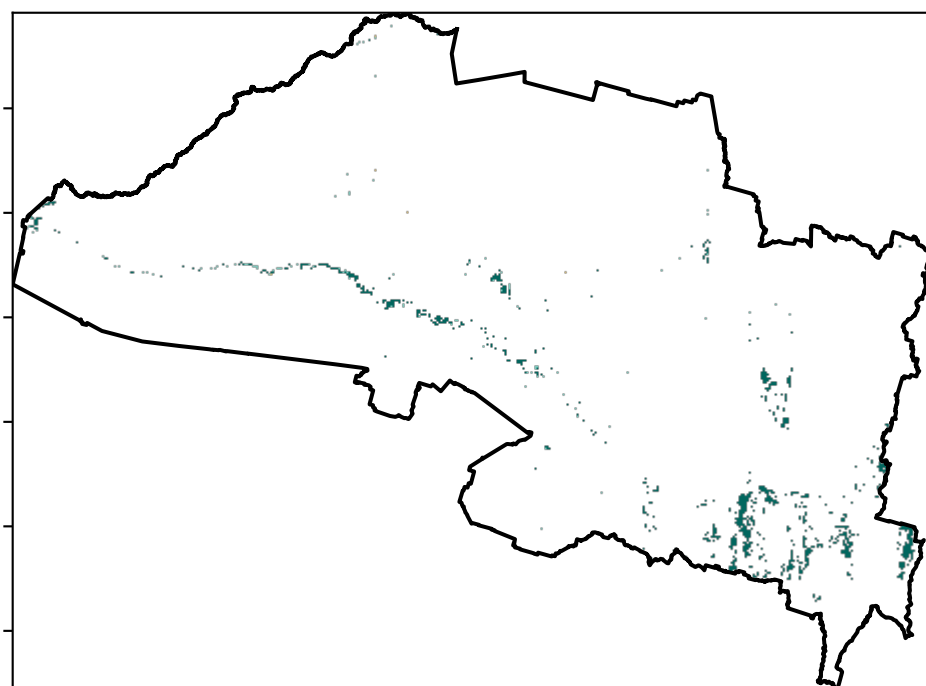Grazing Woodland forest timeseries

Grazing - Forest (non woodland)

Land use and forest cover

Catchment Scale Land Use and Forests of Australia (2018) Derived from Catchment Scale Land Use of Australia (2018) and Forests of Australia (2018)
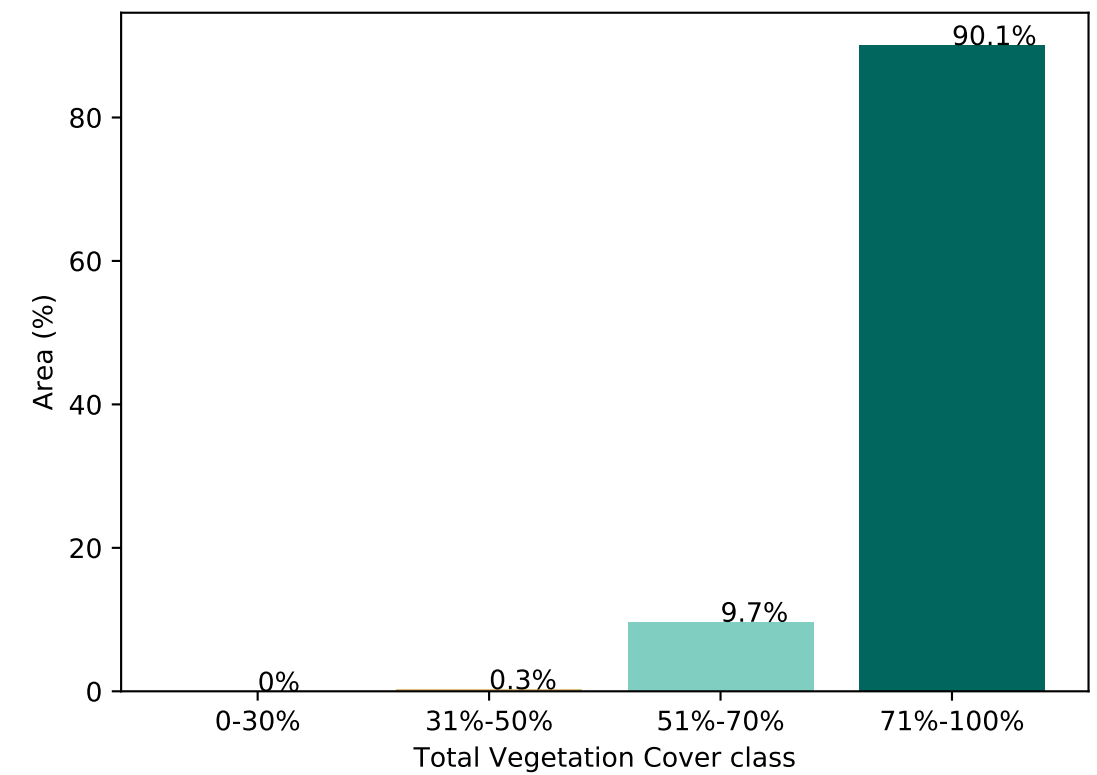
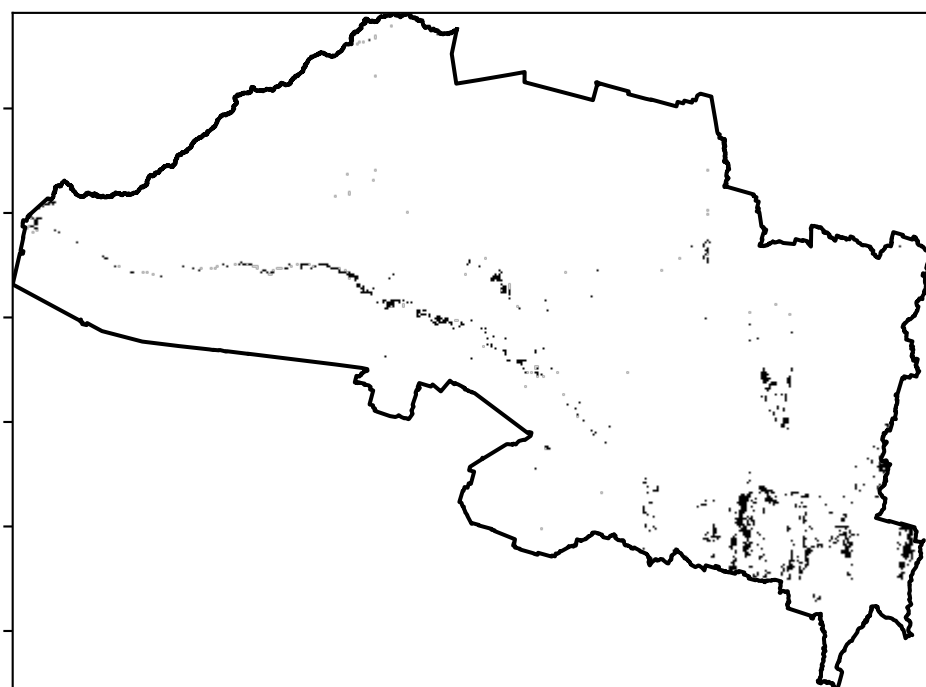legend: 1 Agriculture - Grazing - Non-woodland forest

Total Vegetation Cover [%]

71%-100%
51%-70%
31%-50%
0-30%

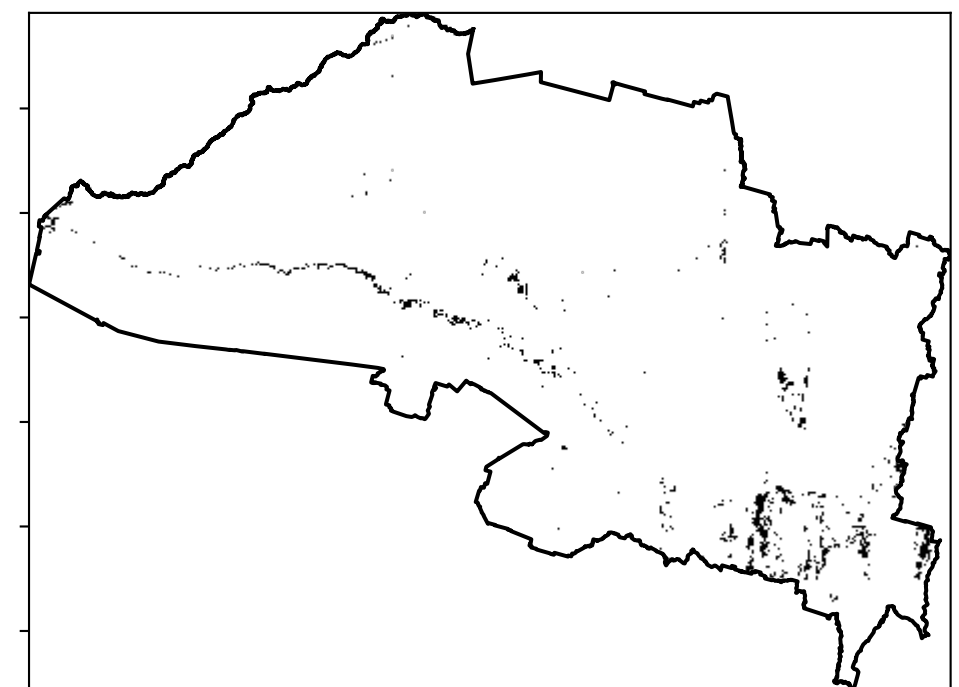## Proportion of vegetation cover class in area
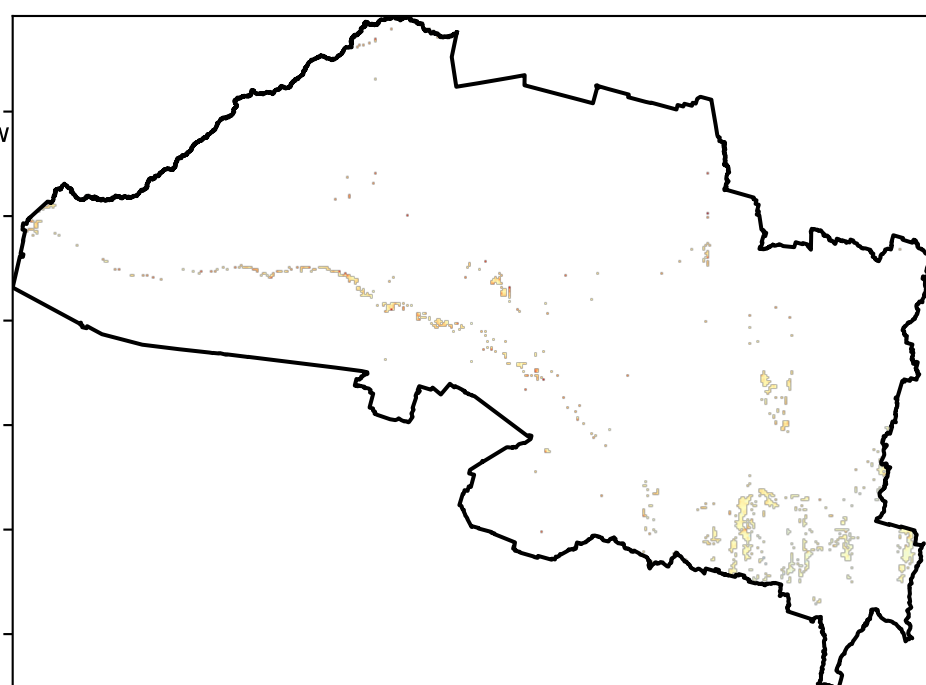

% Area protected from water erosion (>70%)

Area not protected 9.9% of region (10,231 ha)

Area protected 90.1% of region (93,118 ha)

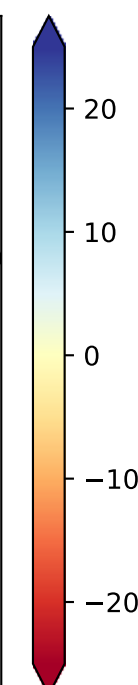## % Area protected from wind erosion (>50%)

Area not protected 0.0% of region (0 ha)

Area protected 100.0% of region (103,350 ha)
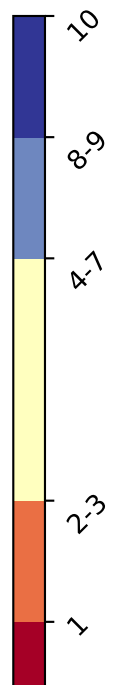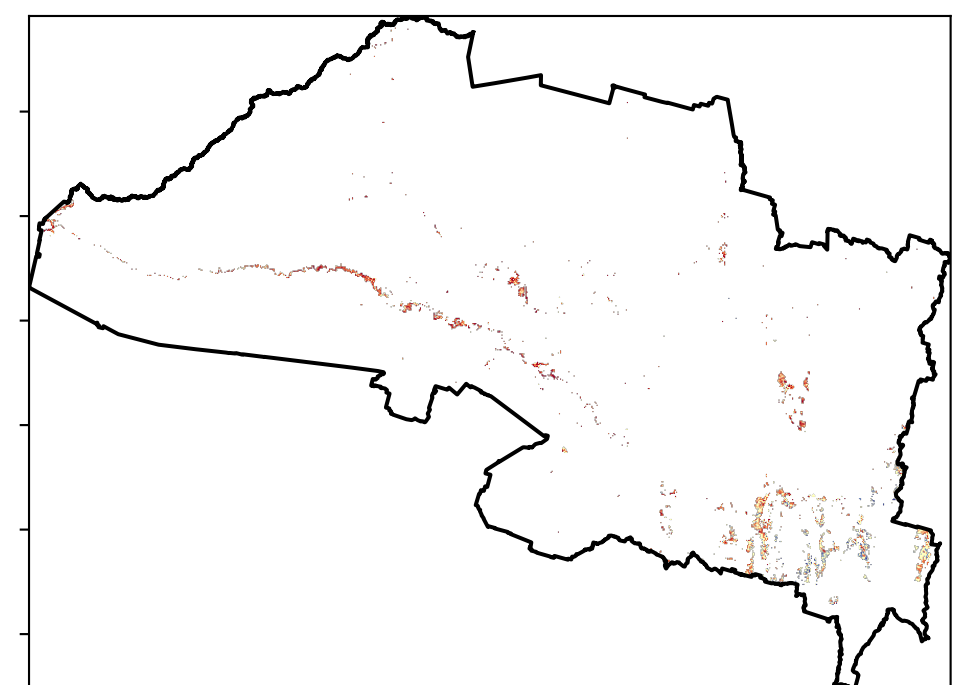
Total Vegetation Cover Anomaly [%]

Anomaly show how many percetage points each pixel is from the mean. That is, red pixels are about 20% lower than the mean of that pixel. The mean is only for the month of the map using baseline from 2001 to 2019.

Total Vegetation Cover Decile [%]

Deciles show where the pixel value lies in the record, from highest to lowest, for that month. That is, red pixels are in the lowest 10% of records for that month of the map using baseline from 2001 to 2019.
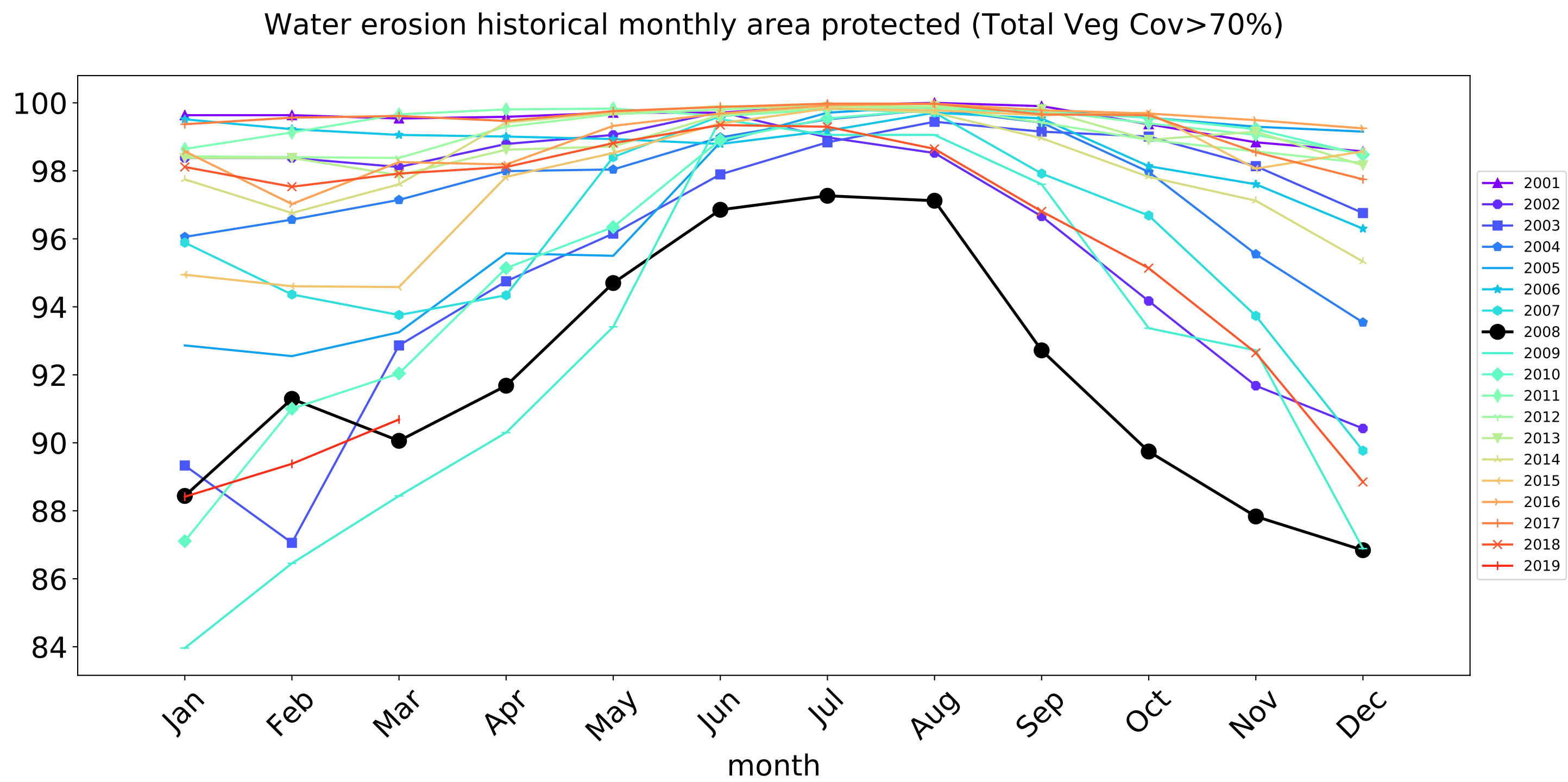
10
8-9
4-7
2-3
1

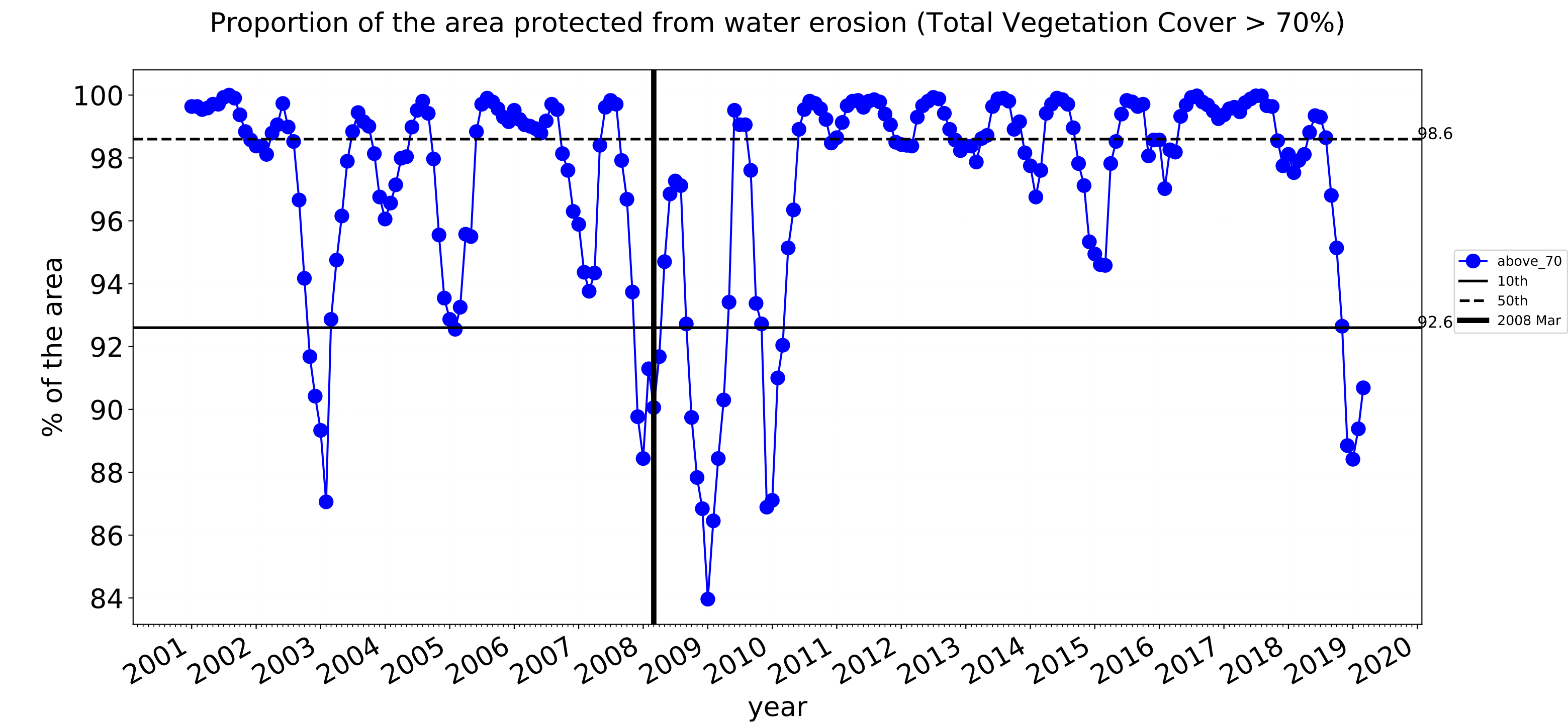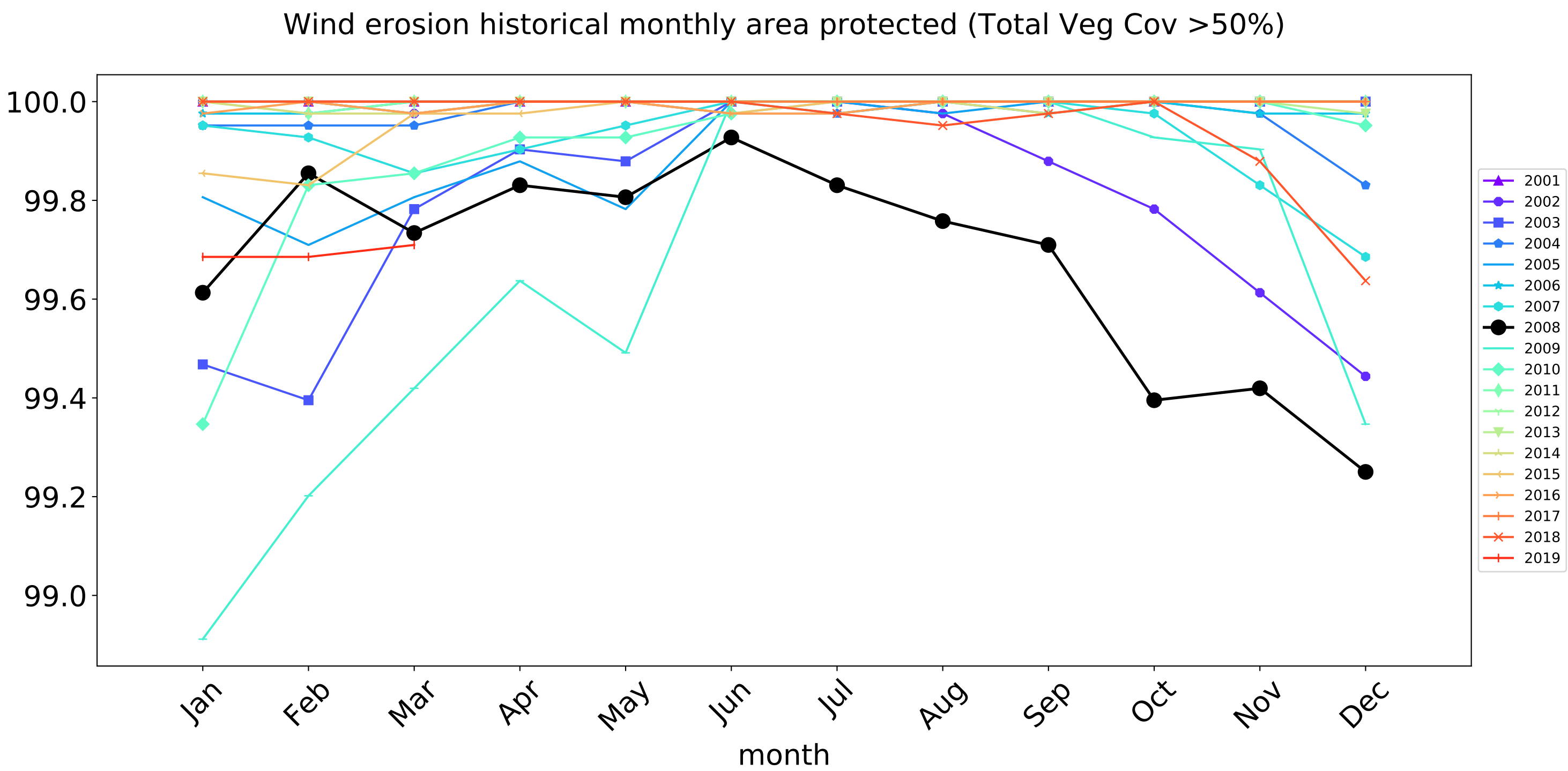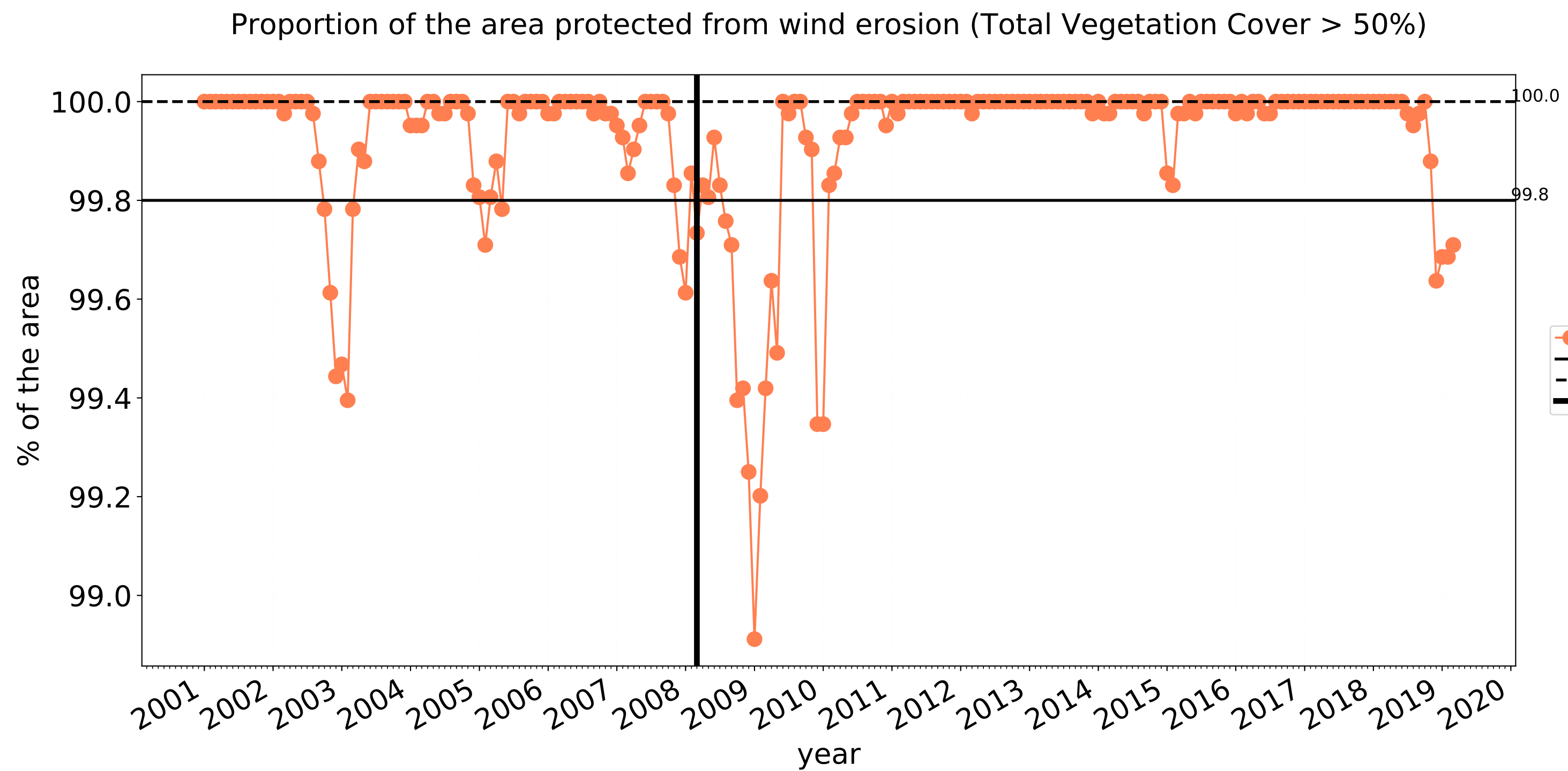# Grazing - Forest (non woodland) timeseries

Proportion of the area protected from wind erosion (Total Vegetation Cover > 50%)

Wind erosion historical monthly area protected (Total Veg Cov >50%)

Proportion of the area protected from water erosion (Total Vegetation Cover > 70%)

Water erosion historical monthly area protected (Total Veg Cov>70%)
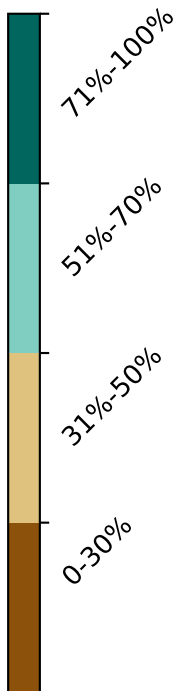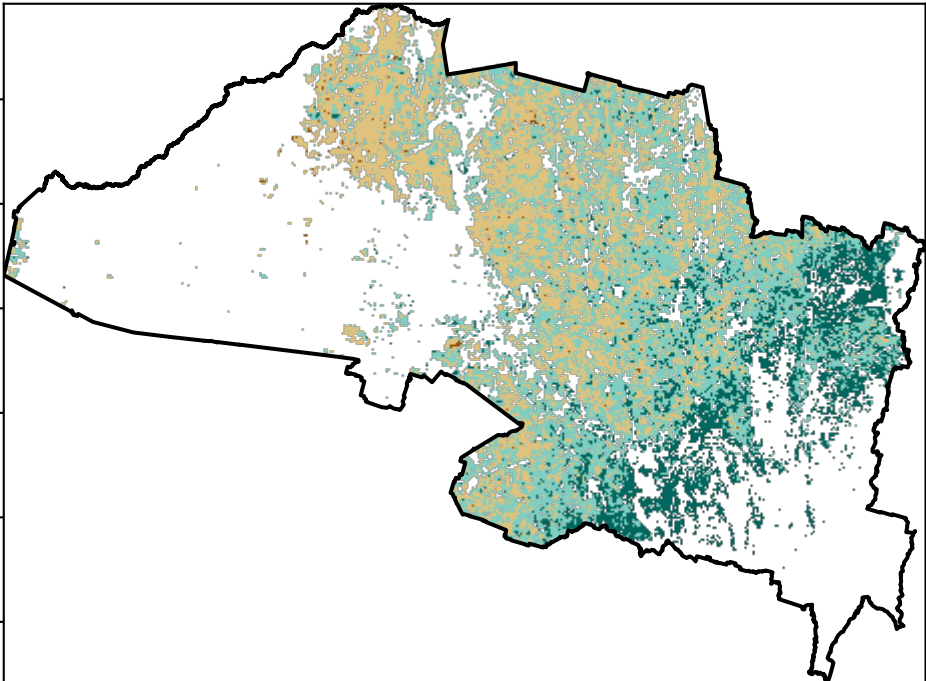
Cropping

Land use and forest cover

Catchment Scale Land Use and Forests of Australia (2018) Derived from Catchment Scale Land Use of Australia (2018) and Forests of Australia (2018)
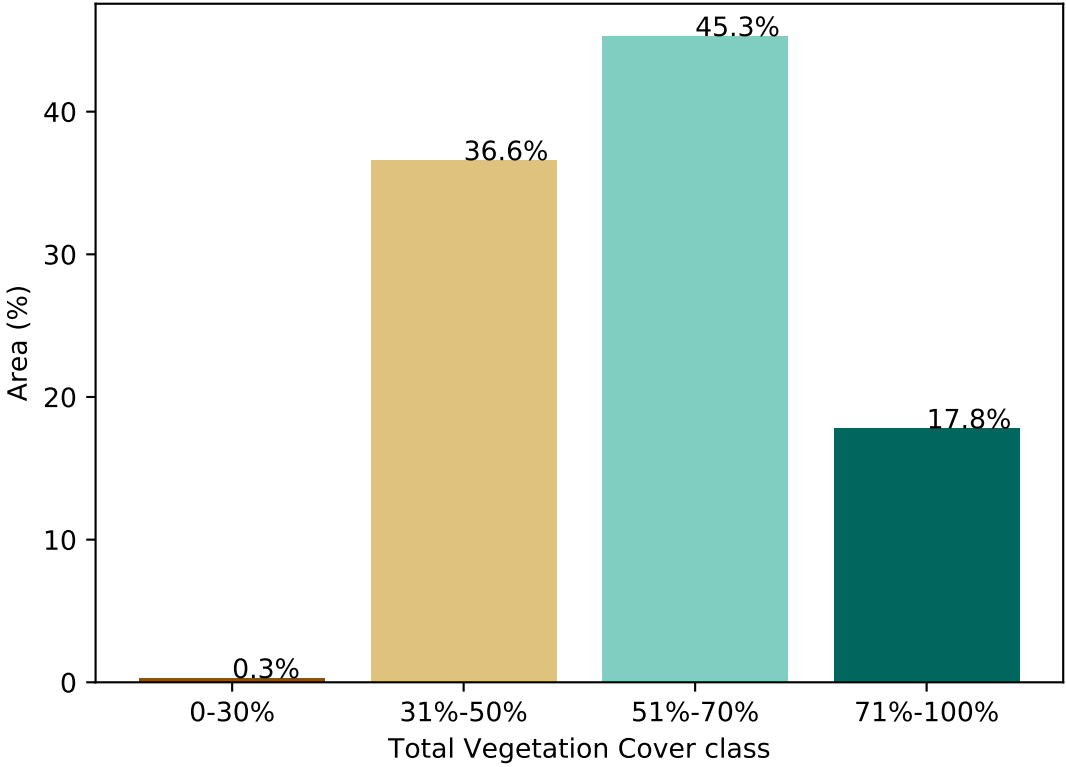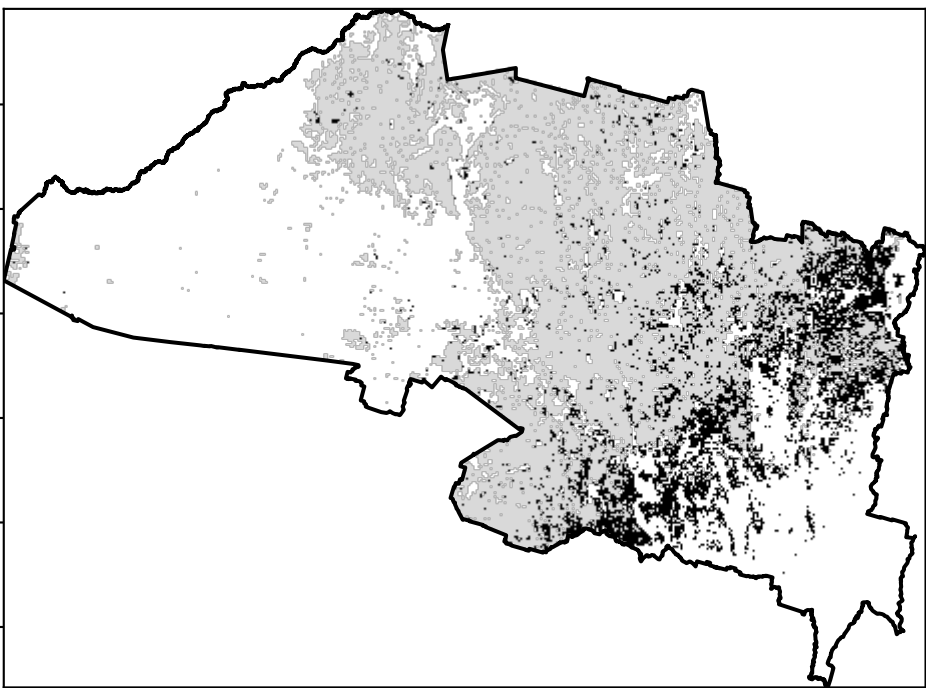
1 Agriculture - Cropping - Non-irrigated

Total Vegetation Cover [%]

71%-100%
51%-70%
31%-50%
0-30%

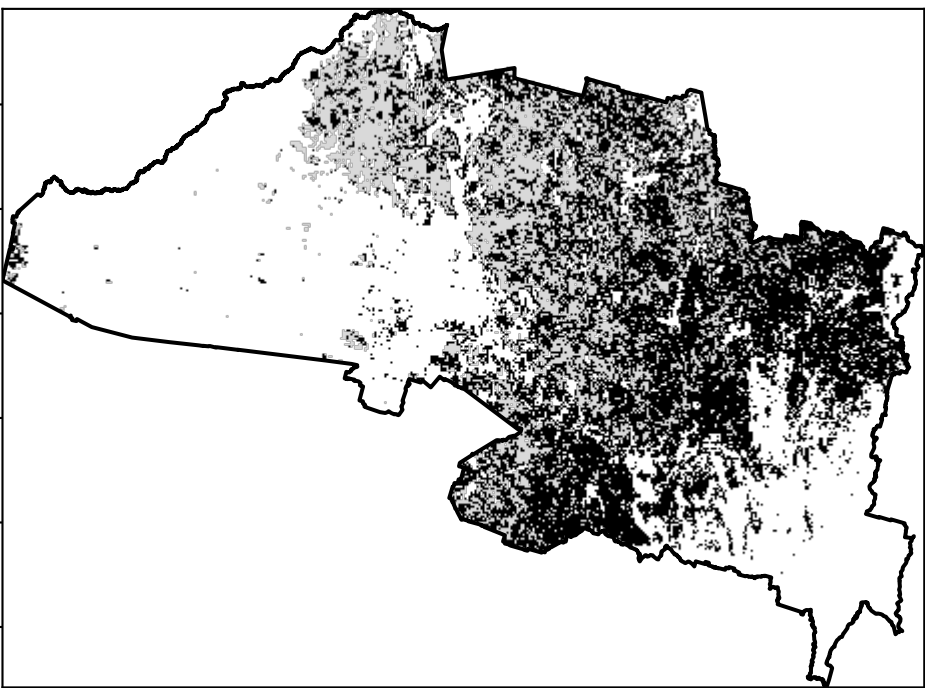## Proportion of vegetation cover class in area

% Area protected from water erosion (>70%)

Area not protected 82.2% of region (2,619,672 ha)

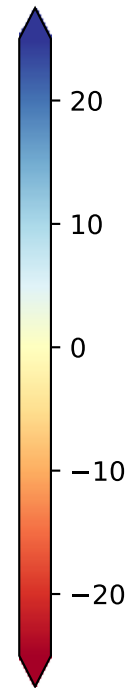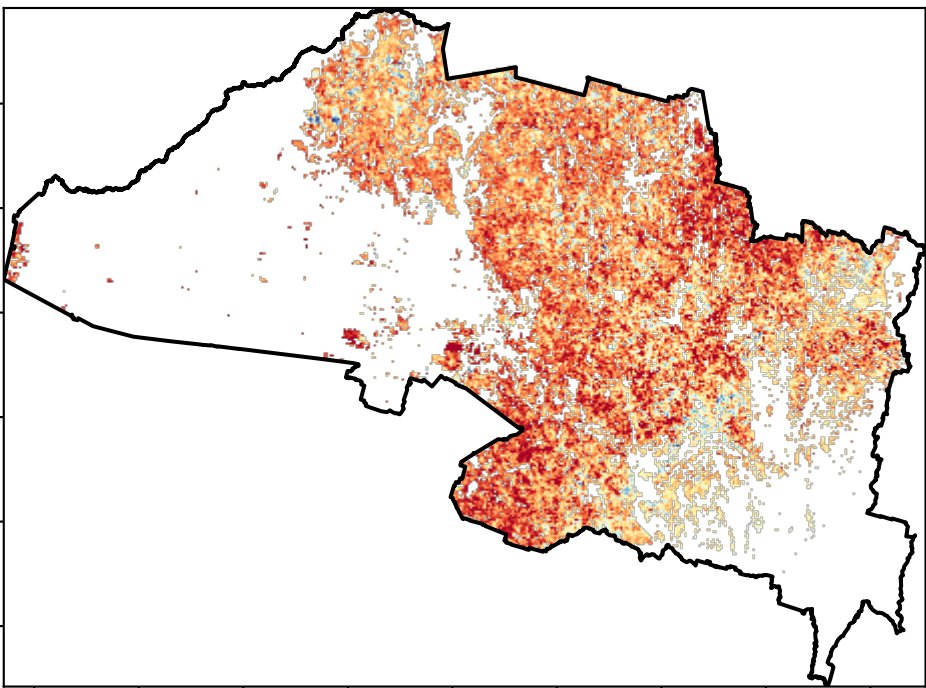Area protected 17.8% of region (567,277 ha)

% Area protected from wind erosion (>50%)

Area not protected 37.0% of region (1,179,171 ha)
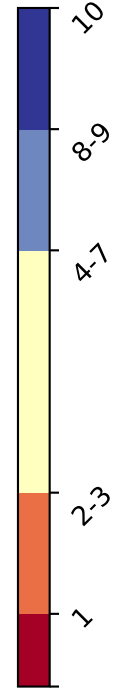
Area protected 63.0% of region (2,007,778 ha)

Total Vegetation Cover Anomaly [%]

Anomaly show how many percetage points each pixel is from the mean. That is, red pixels are about 20% lower than the mean of that pixel. The mean is only for the month of the map using baseline from 2001 to 2019.

Total Vegetation Cover Decile [%]

Deciles show where the pixel value lies in the record, from highest to lowest, for that month. That is, red pixels are in the lowest 10% of records for that month of the map using baseline from 2001 to 2019.

10
8-9
4-7
2-3
1

Cropping timeseries

Proportion of the area protected from wind erosion (Total Vegetation Cover > 50%)

Wind erosion historical monthly area protected (Total Veg Cov >50%)

Proportion of the area protected from water erosion (Total Vegetation Cover > 70%)

Water erosion historical monthly area protected (Total Veg Cov>70%)

Irrigation

Land use and forest cover

Catchment Scale Land Use and Forests of Australia (2018) Derived from Catchment Scale Land Use of Australia (2018) and Forests of Australia (2018)

1 Agriculture - Grazing - Irrigated
2 Agriculture - Cropping - Irrigated
3 Agriculture - Horticulture - Irrigated

Proportion of each land class in area

Total Vegetation Cover [%]

71%-100%
51%-70%
31%-50%
0-30%

Proportion of vegetation cover class in area
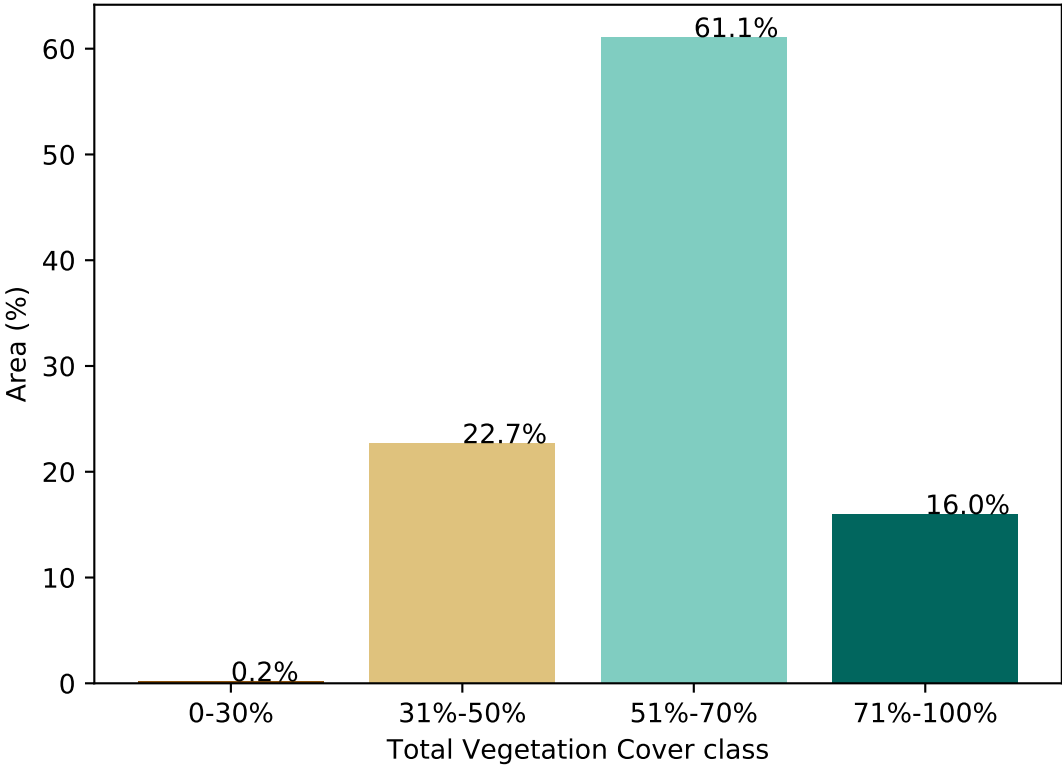
% Area protected from water erosion (>70%)

Area not protected 84.0% of region (476,742 ha)

Area protected 16.0% of region (90,808 ha)

% Area protected from wind erosion (>50%)
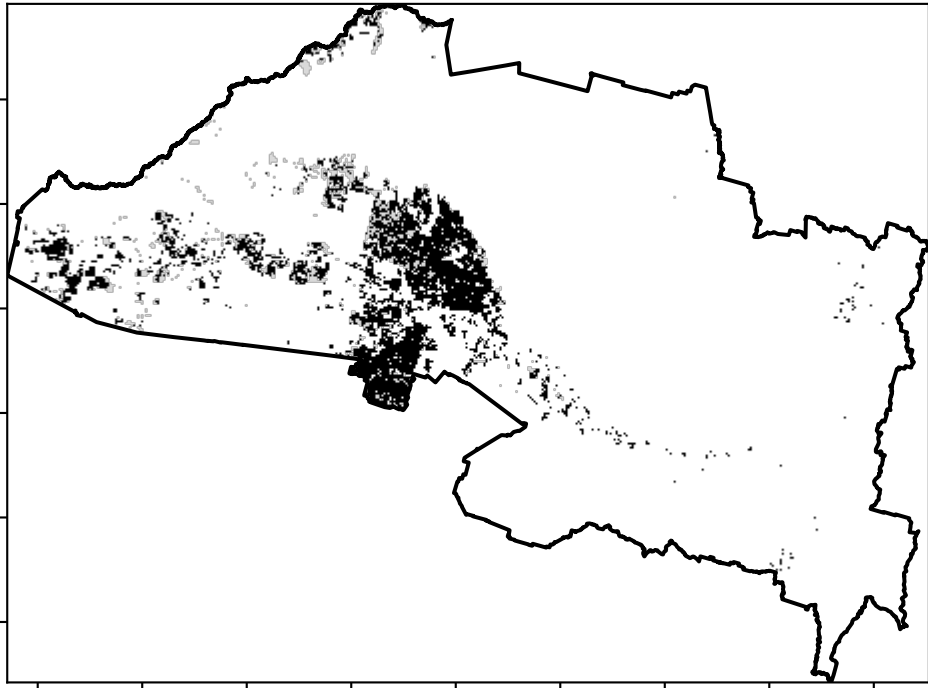
Area not protected 23.0% of region (130,536 ha)

Area protected 77.0% of region (437,013 ha)

Total Vegetation Cover Anomaly [%]

Anomaly show how many percetage points each pixel is from the mean. That is, red pixels are about 20% lower than the mean of that pixel. The mean is only for the month of the map using baseline from 2001 to 2019.
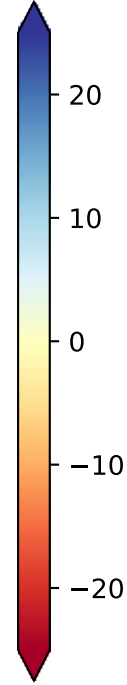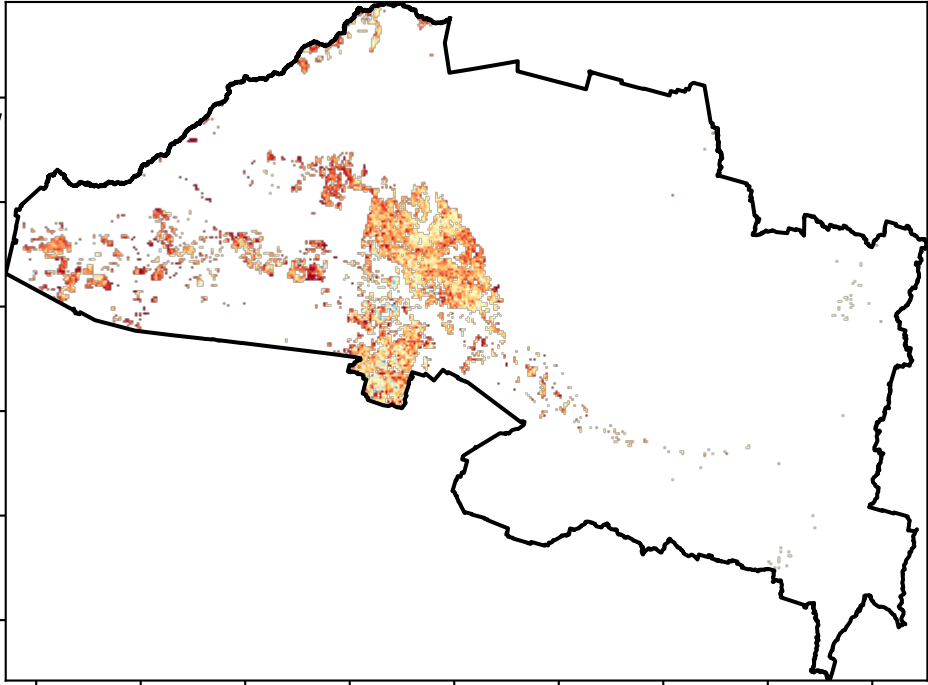
Total Vegetation Cover Decile [%]

Deciles show where the pixel value lies in the record, from highest to lowest, for that month. That is, red pixels are in the lowest 10% of records for that month of the map using baseline from 2001 to 2019.
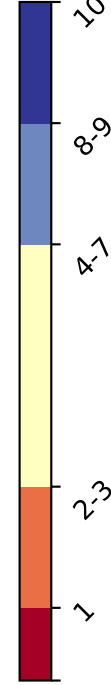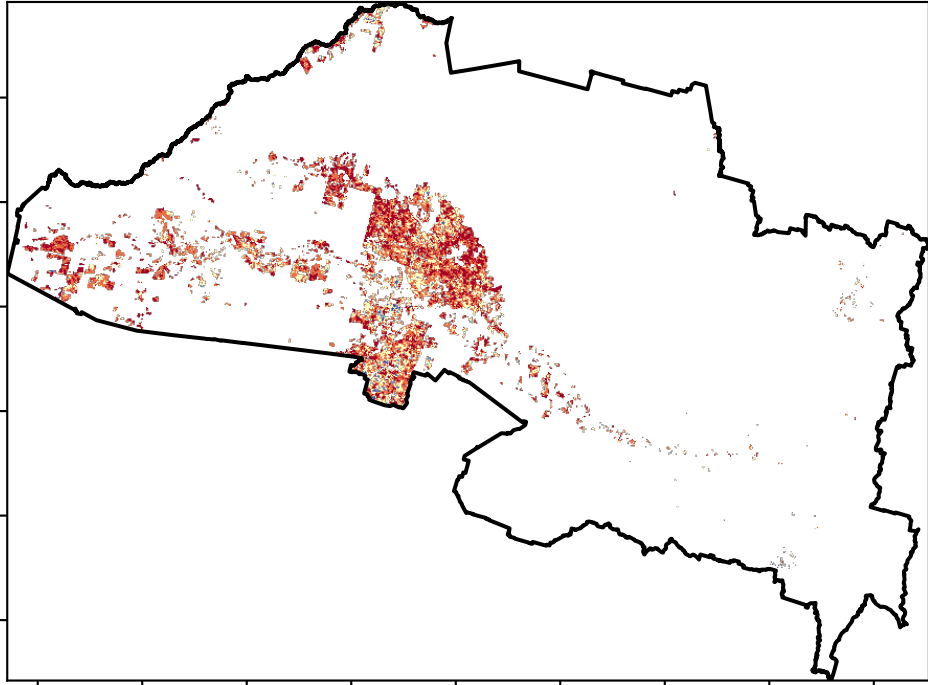
Irrigation timeseries

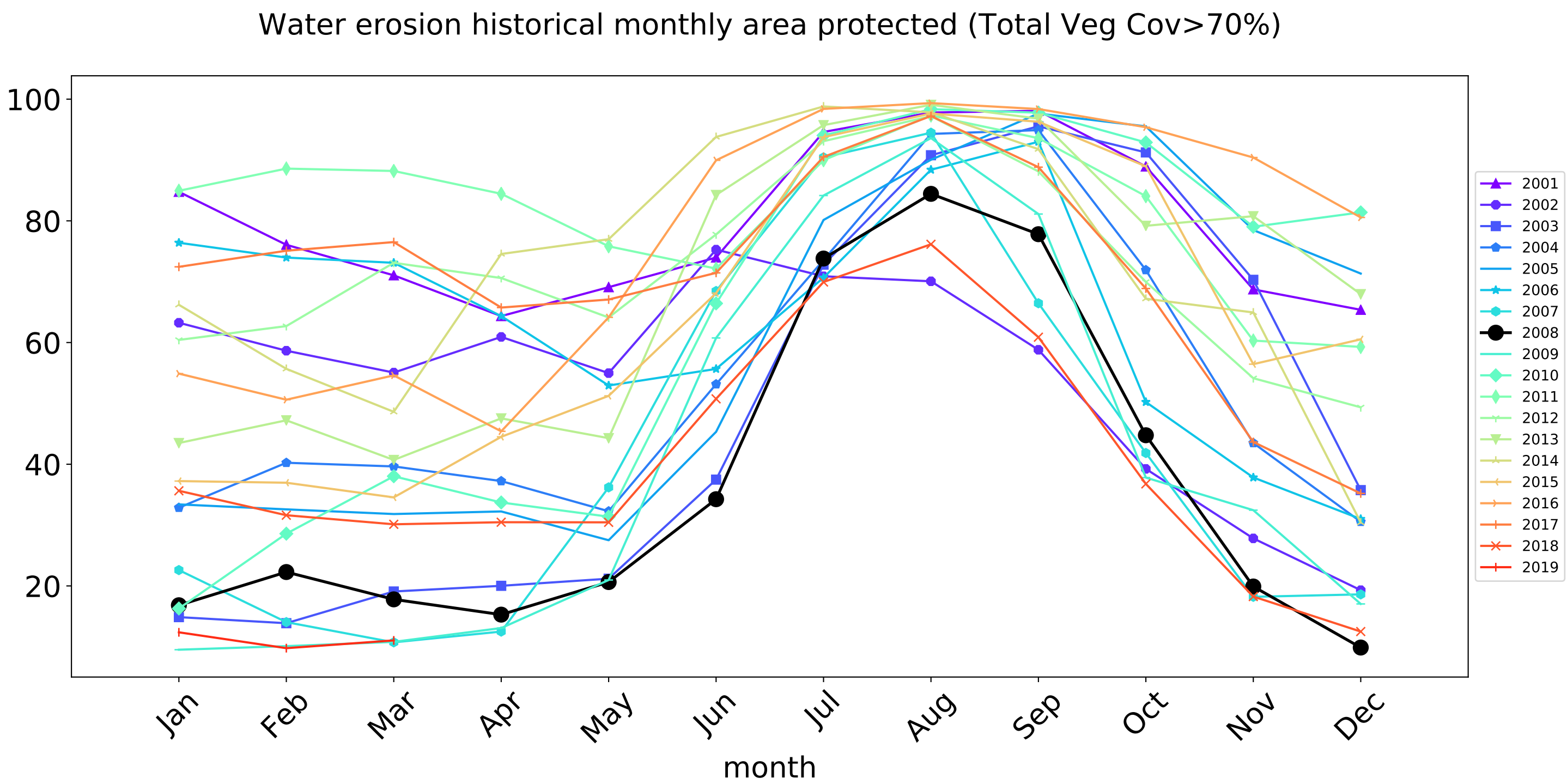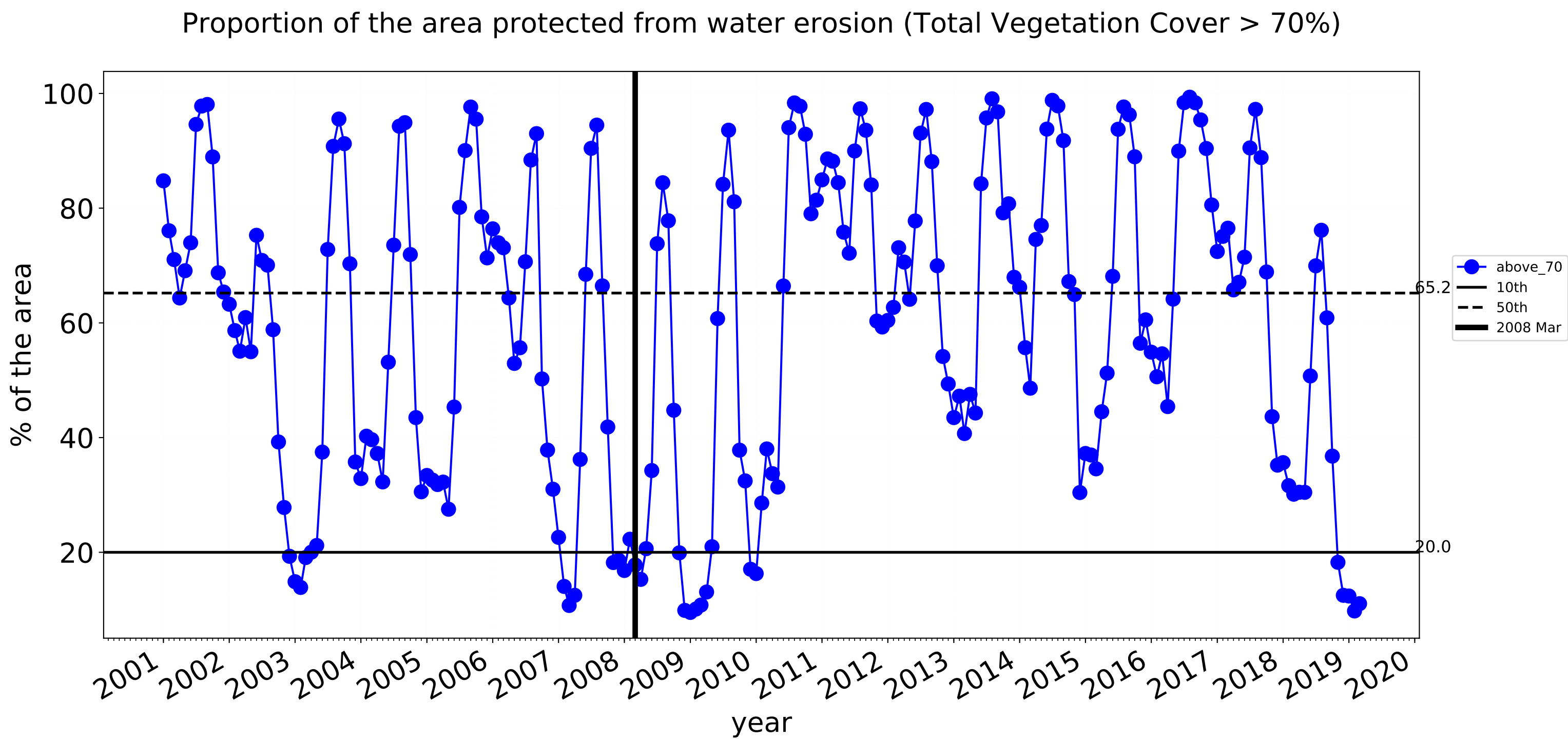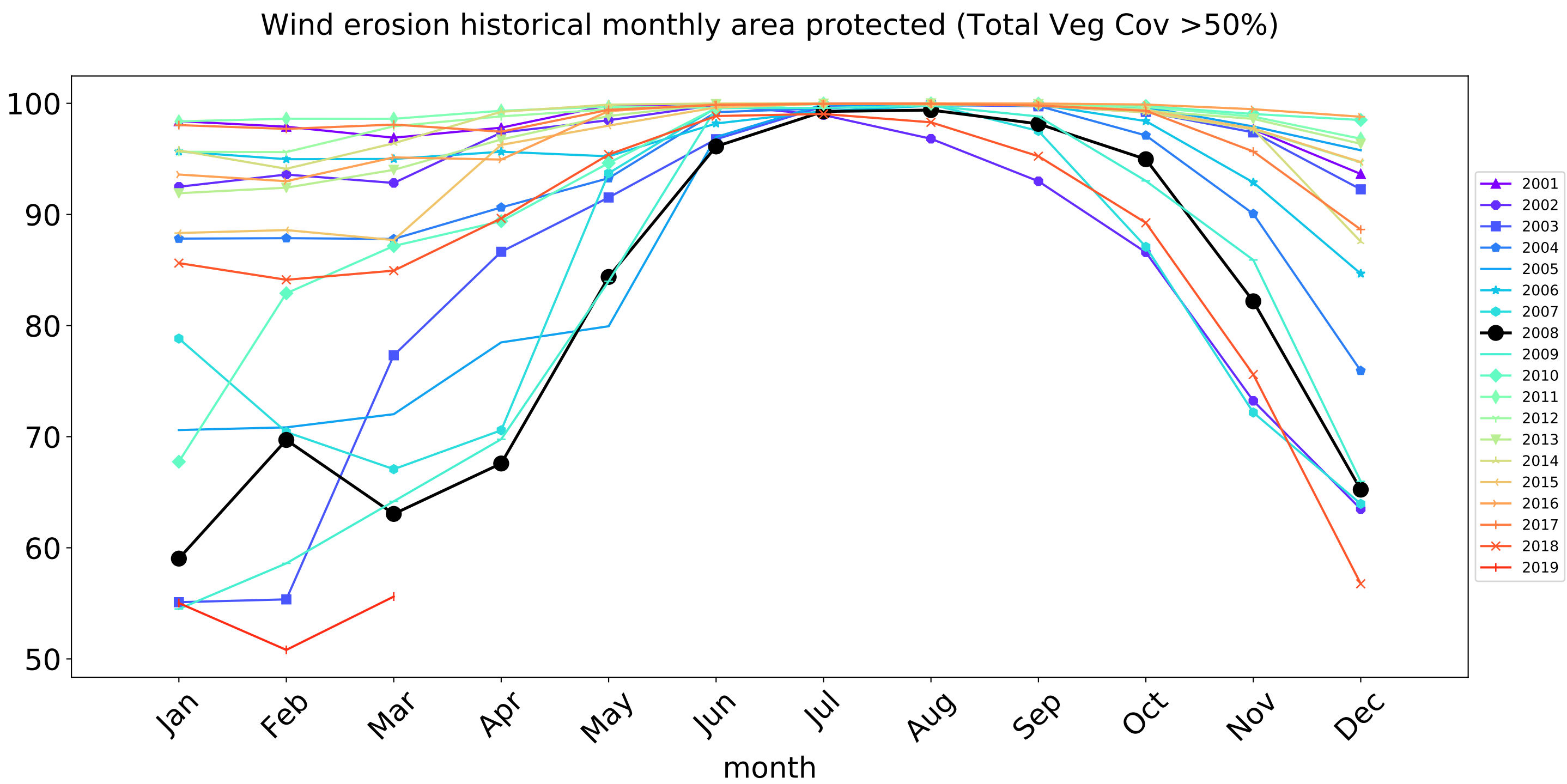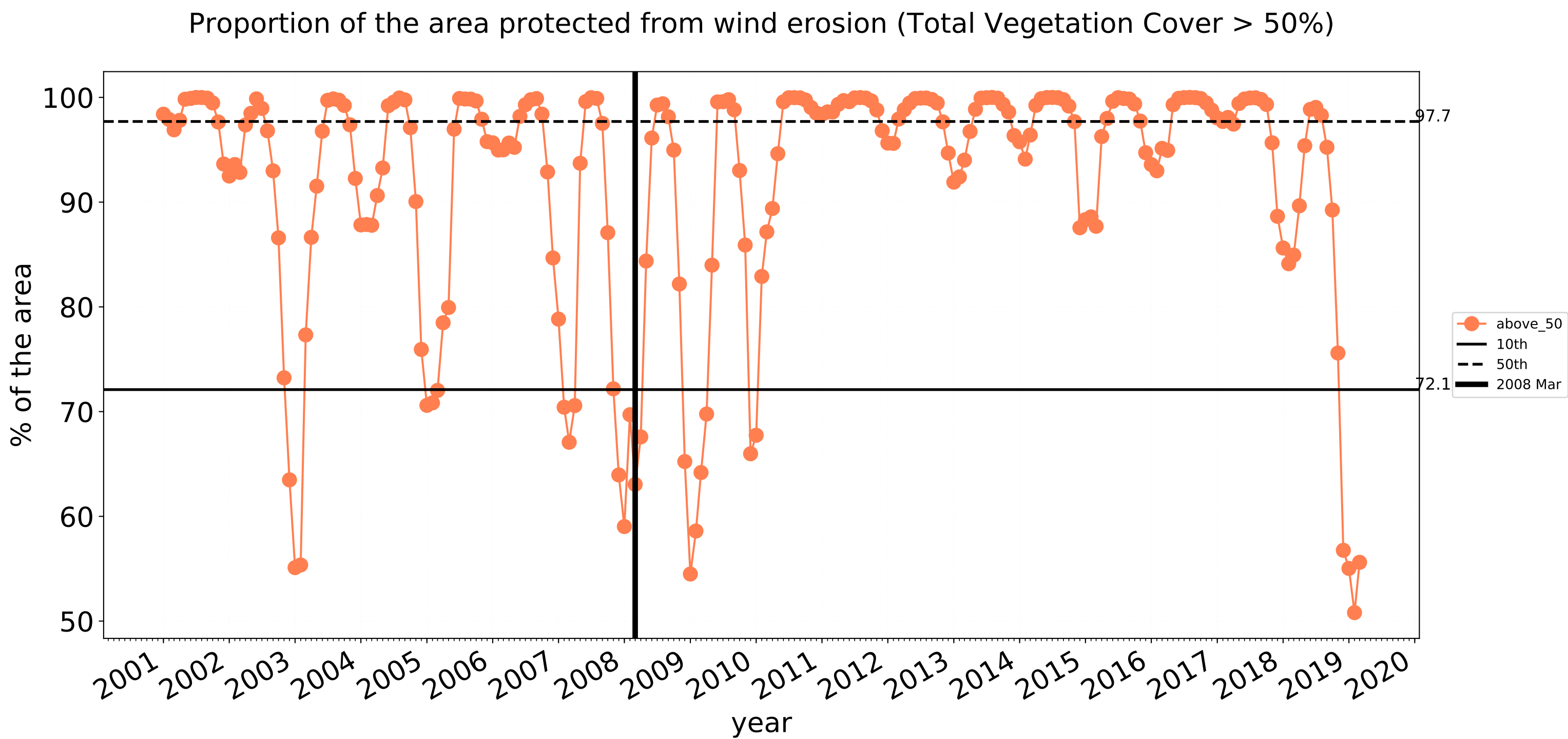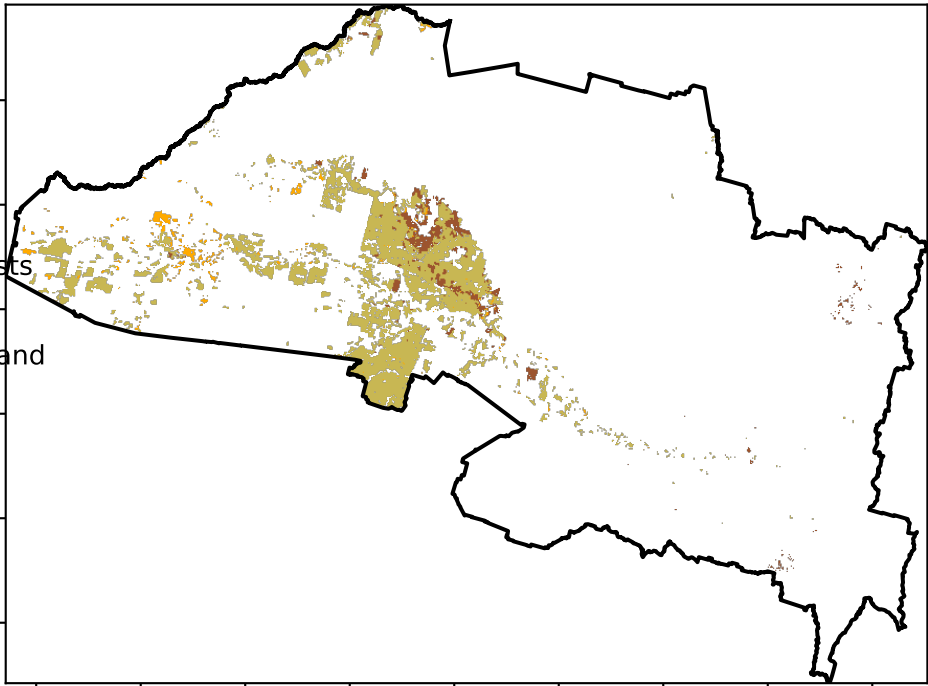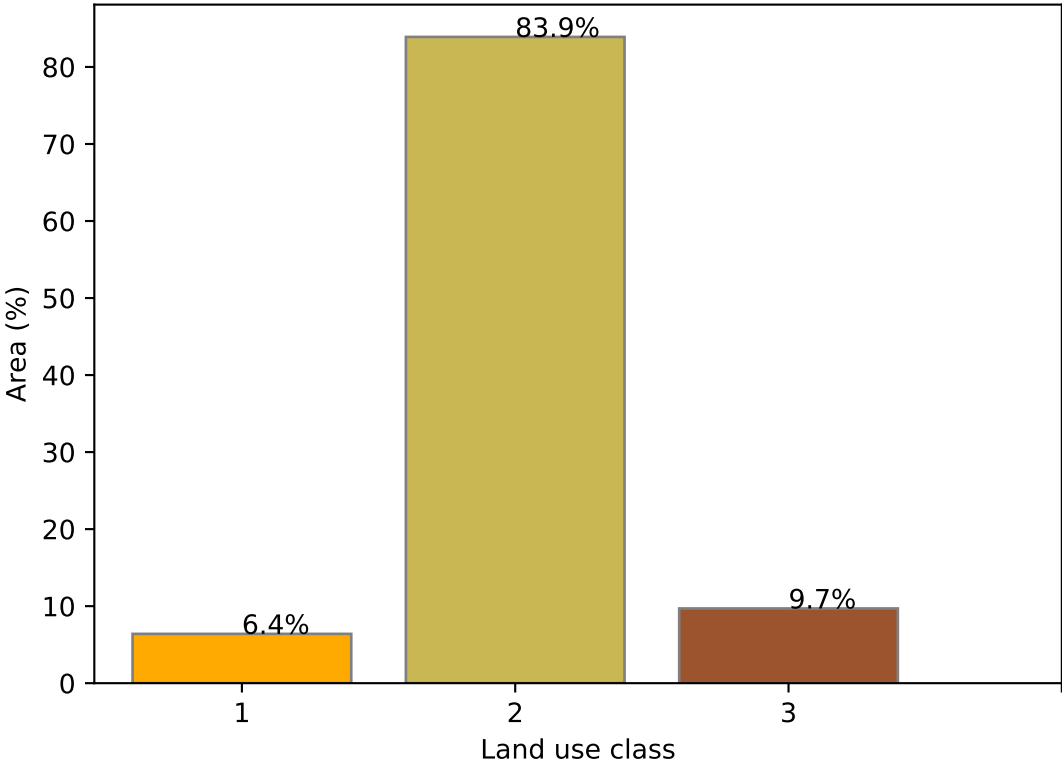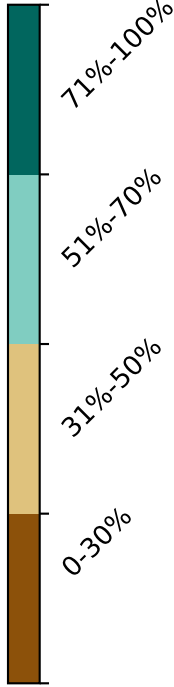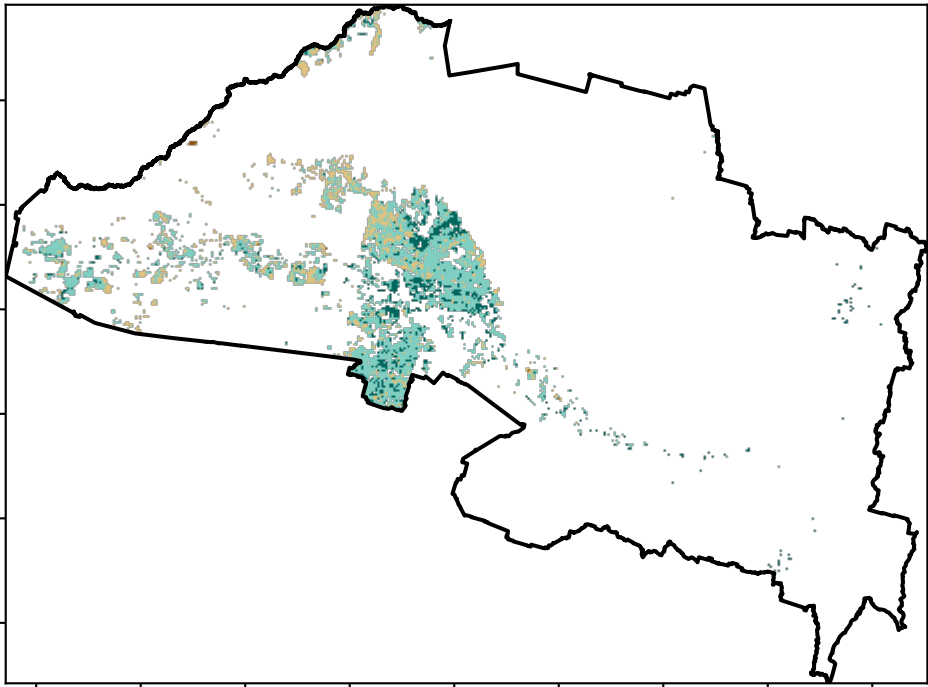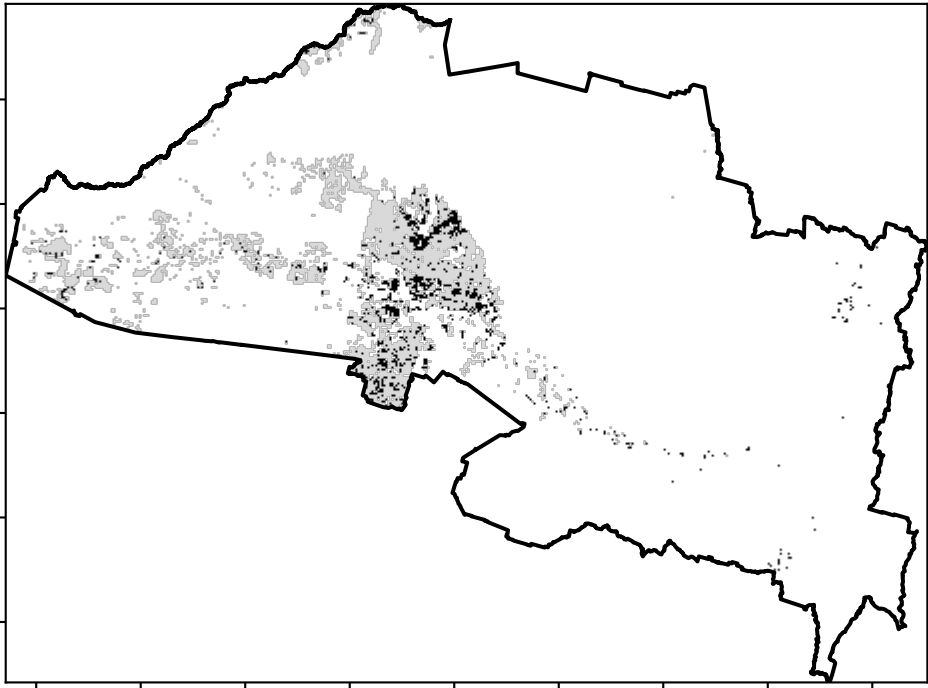Proportion of the area protected from wind erosion (Total Vegetation Cover > 50%)

Wind erosion historical monthly area protected (Total Veg Cov >50%)

Proportion of the area protected from water erosion (Total Vegetation Cover > 70%)

Water erosion historical monthly area protected (Total Veg Cov>70%)
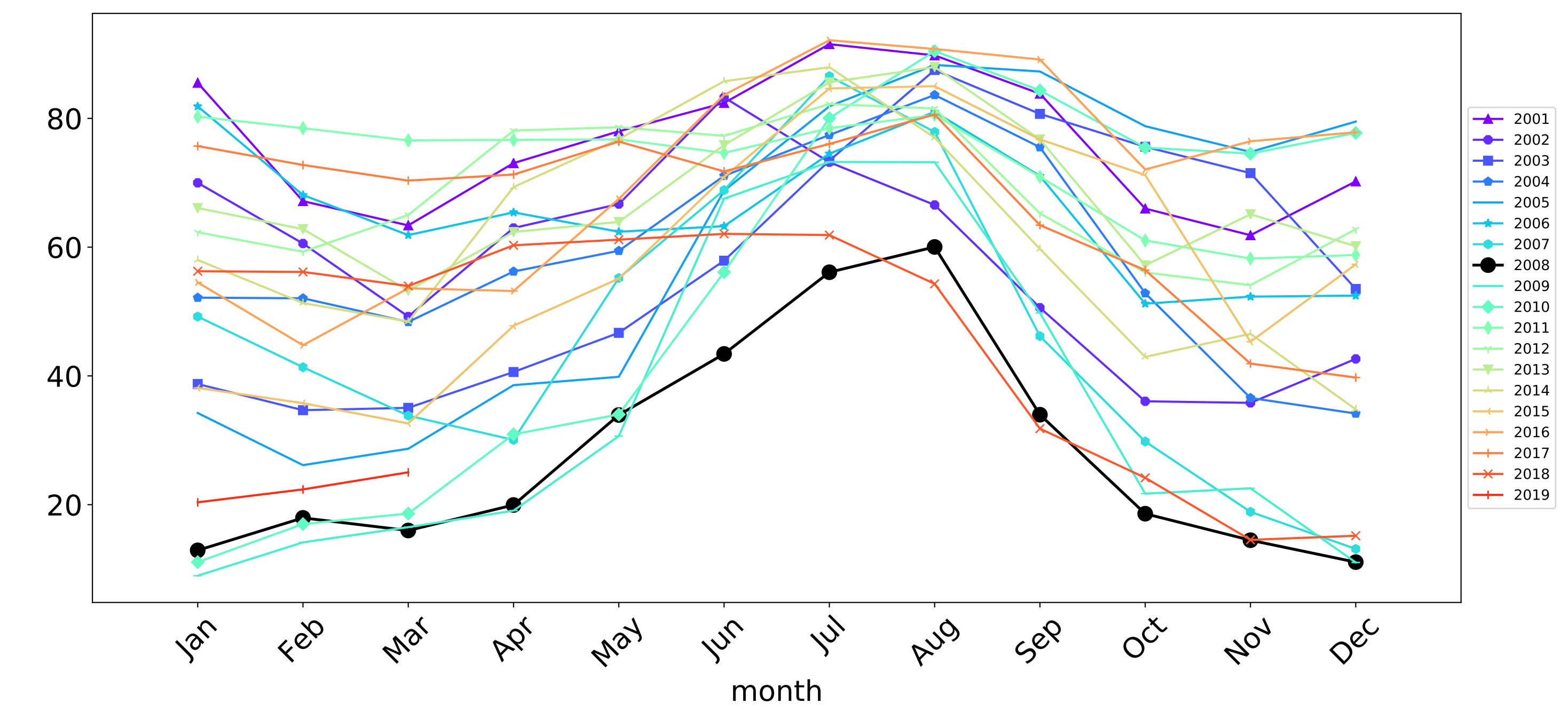
Production native forests and plantation forests

Land use and forest cover

Catchment Scale Land Use and Forests of Australia (2018) Derived from Catchment Scale Land Use of Australia (2018) and Forests of Australia (2018)

■ 1 Production native forests and plantation forests

Total Vegetation Cover [%]

- 71%-100%
- 51%-70%
- 31%-50%
- 0-30%

Proportion of vegetation cover class in area

Bar chart showing Area (%) vs Total Vegetation Cover class:
- 0-30%: 0.0%
- 31%-50%: 0.8%
- 51%-70%: 7.8%
- 71%-100%: 91.4%

% Area protected from water erosion (>70%)

Area not protected 8.6% of region (14,862 ha)

Area protected 91.4% of region (157,962 ha)

% Area protected from wind erosion (>50%)

Area not protected 1.0% of region (1,728 ha)

Area protected 99.0% of region (171,096 ha)

Total Vegetation Cover Anomaly [%]

Anomaly show how many percetage points each pixel is from the mean. That is, red pixels are about 20% lower than the mean of that pixel. The mean is only for the month of the map using baseline from 2001 to 2019.

Total Vegetation Cover Decile [%]

Deciles show where the pixel value lies in the record, from highest to lowest, for that month. That is, red pixels are in the lowest 10% of records for that month of the map using baseline from 2001 to 2019.
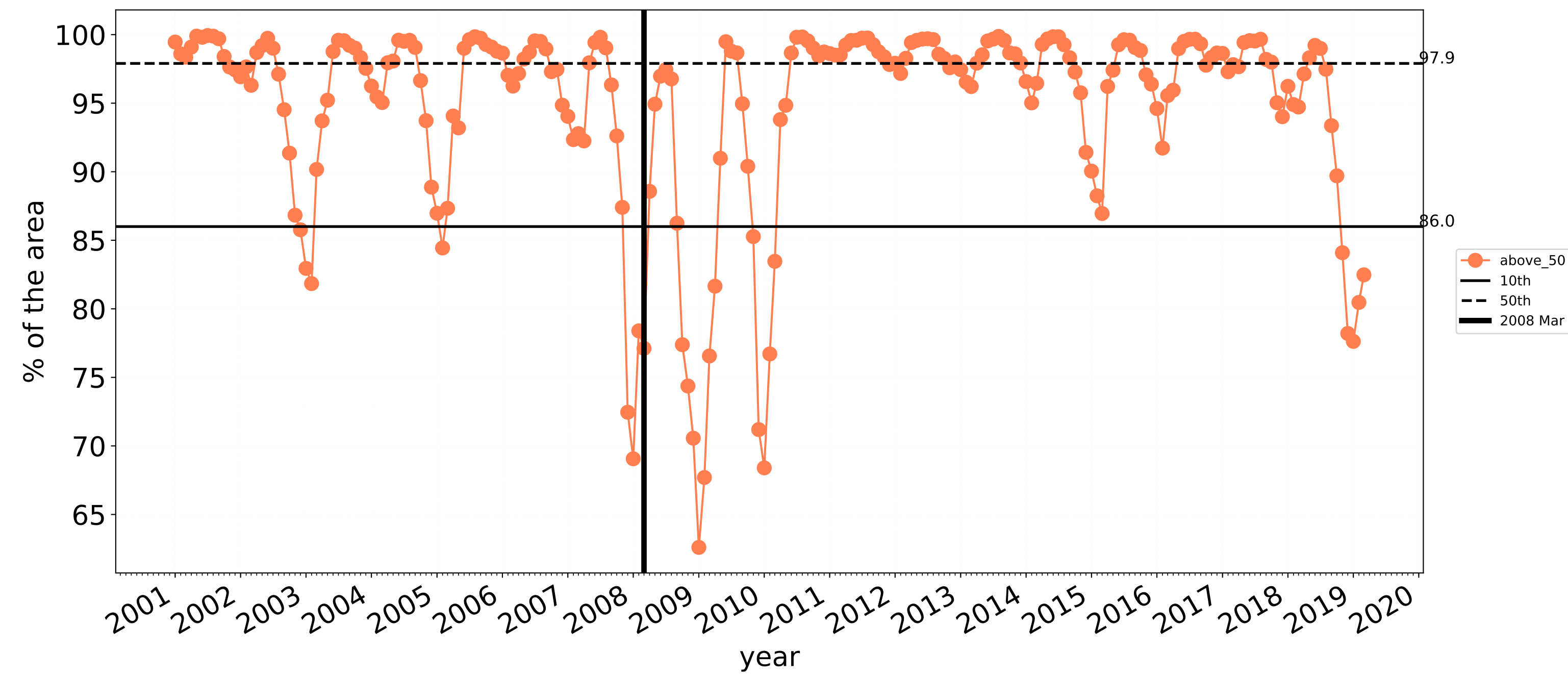
- 10
- 8-9
- 4-7
- 2-3
- 1

Production native forests and plantation forests timeseries
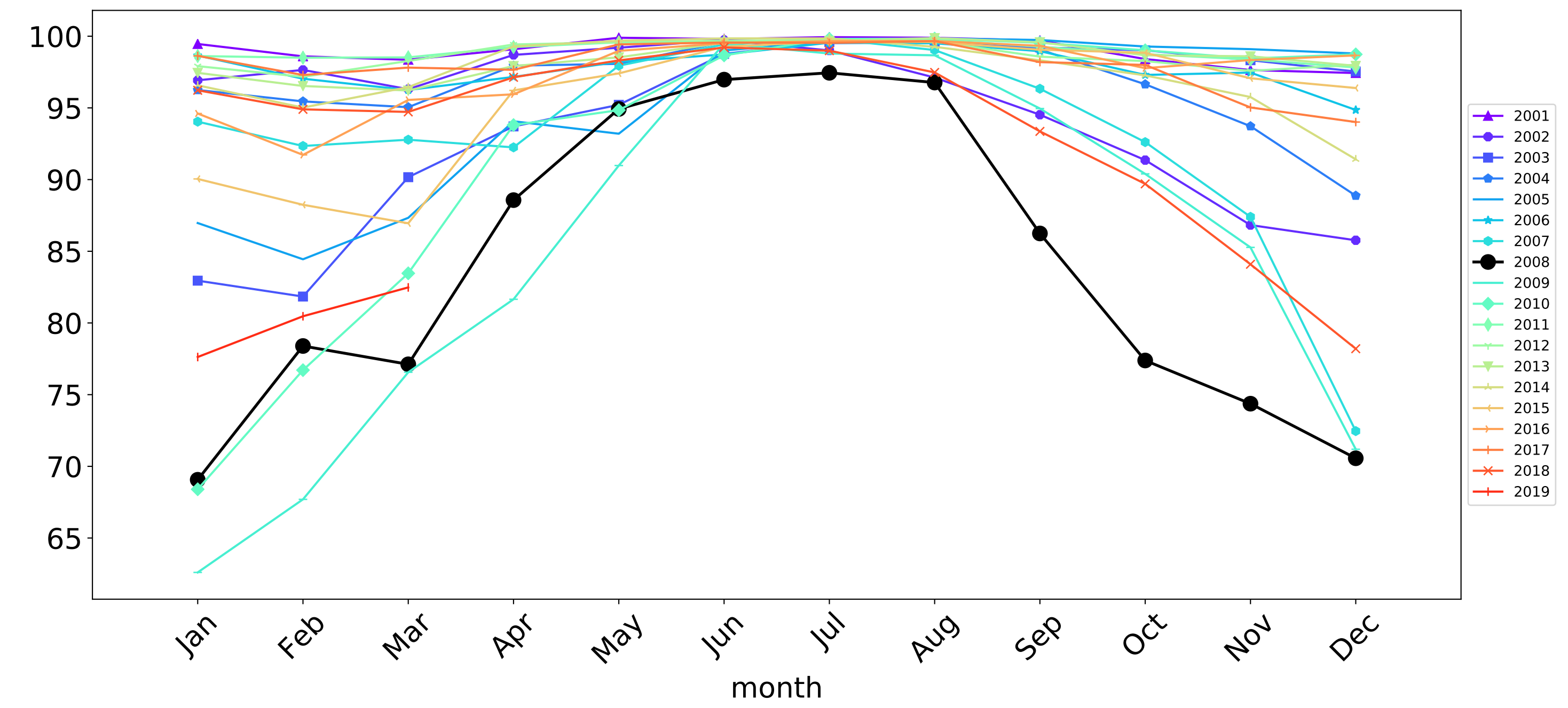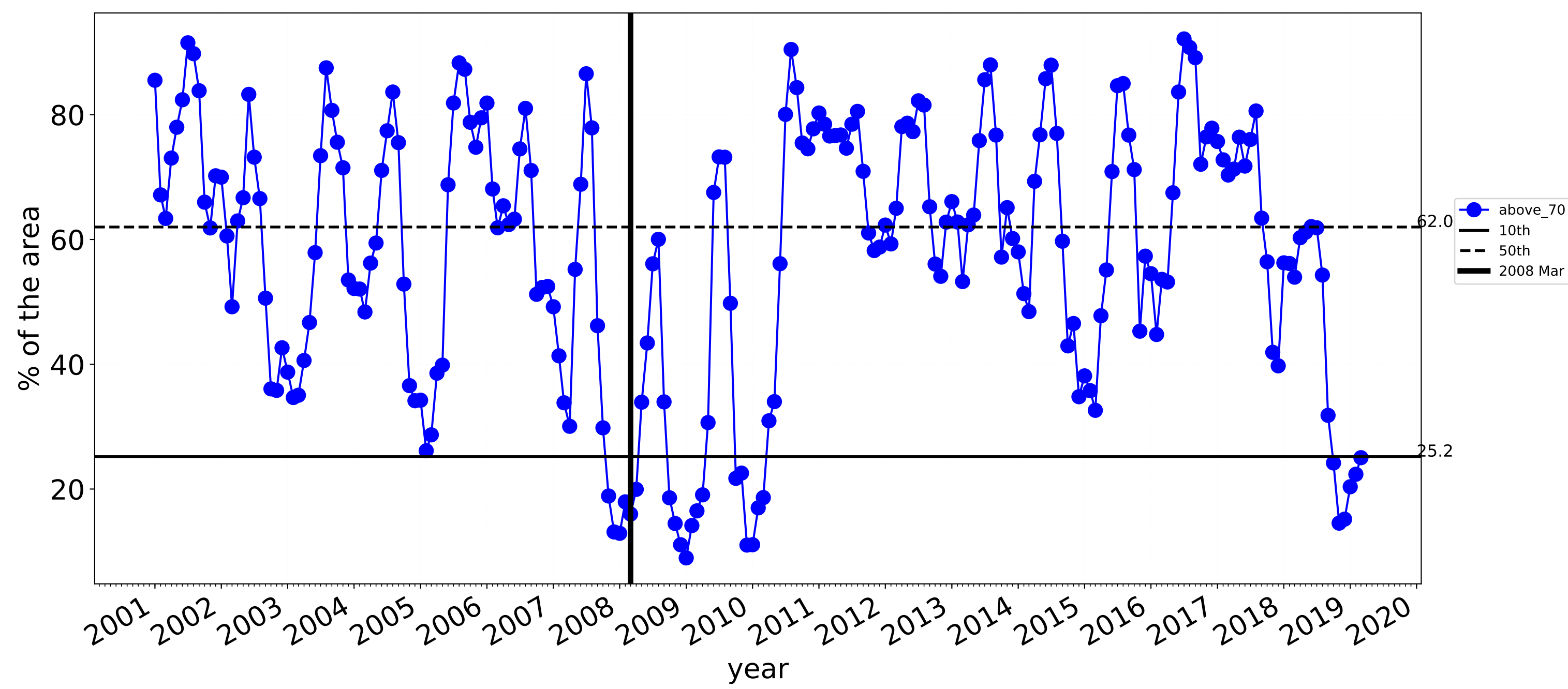

Proportion of the area protected from wind erosion (Total Vegetation Cover > 50%)
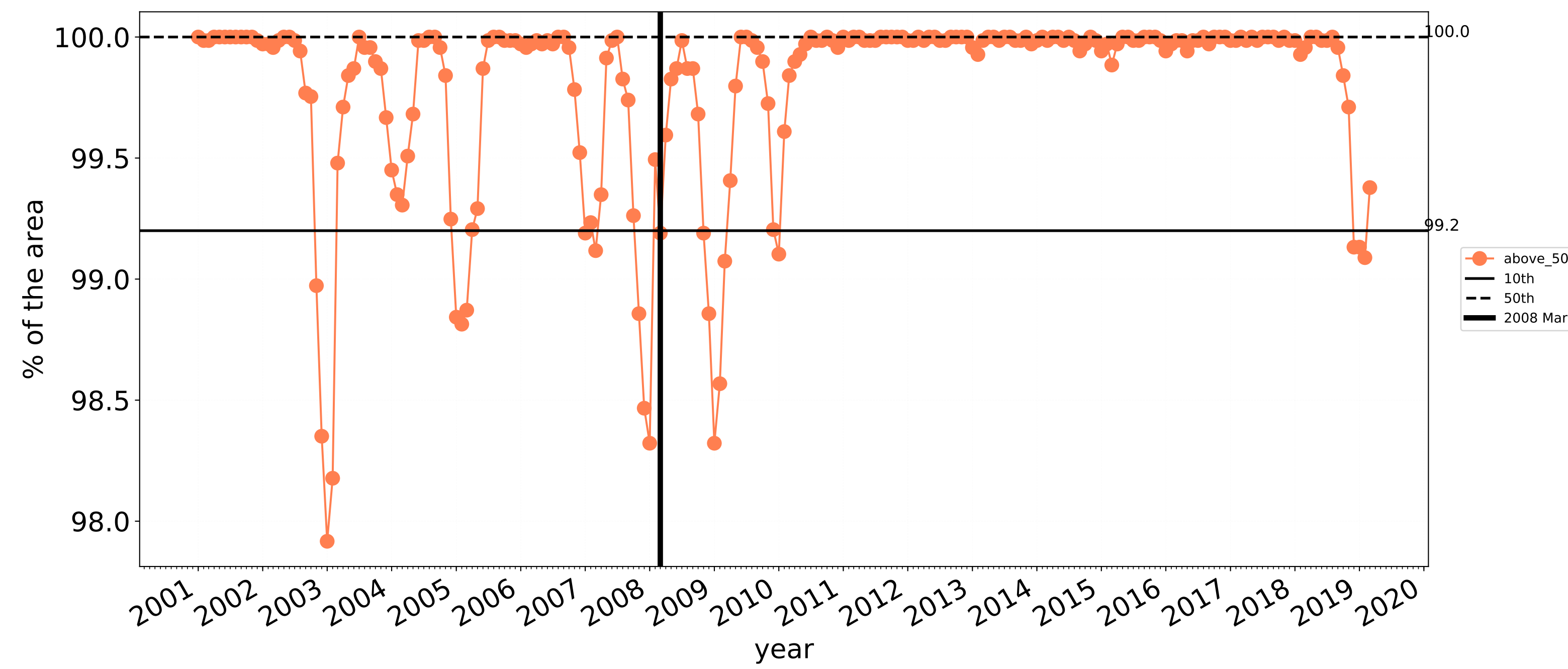
Wind erosion historical monthly area protected (Total Veg Cov >50%)

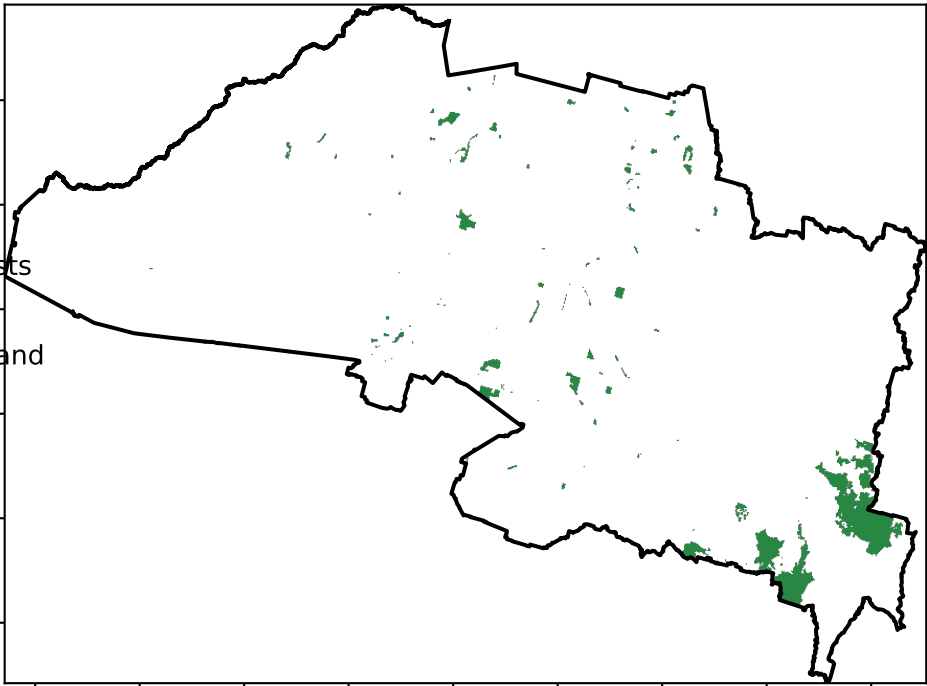Proportion of the area protected from water erosion (Total Vegetation Cover > 70%)

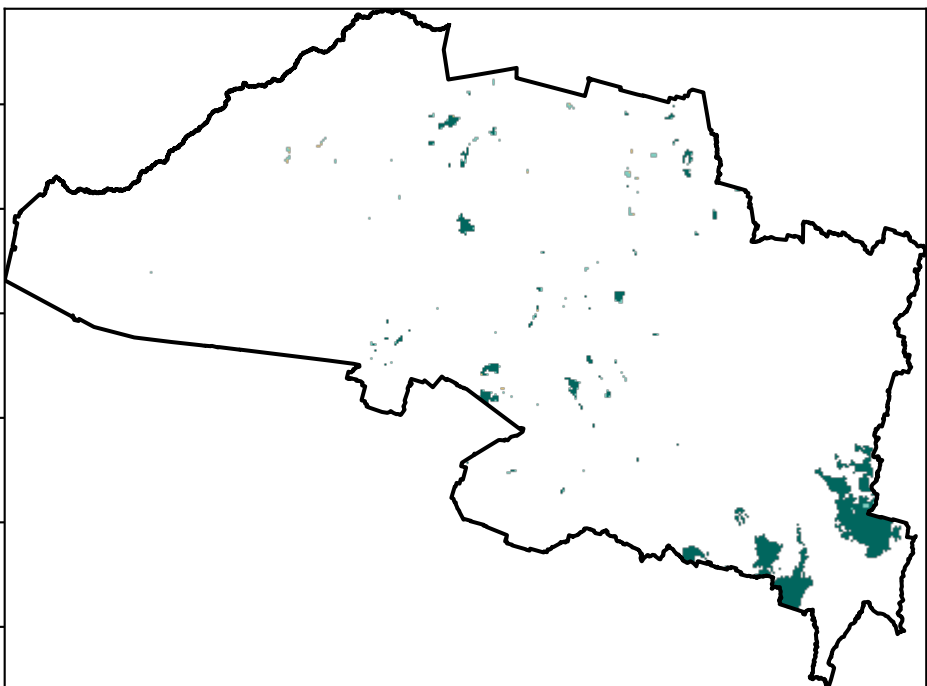Water erosion historical monthly area protected (Total Veg Cov>70%)

Riverina (6,694,475 ha and no data 13,860 ha) Percentage area and hectares protected with TVC threshold 30,50,70,80,90 and 95%

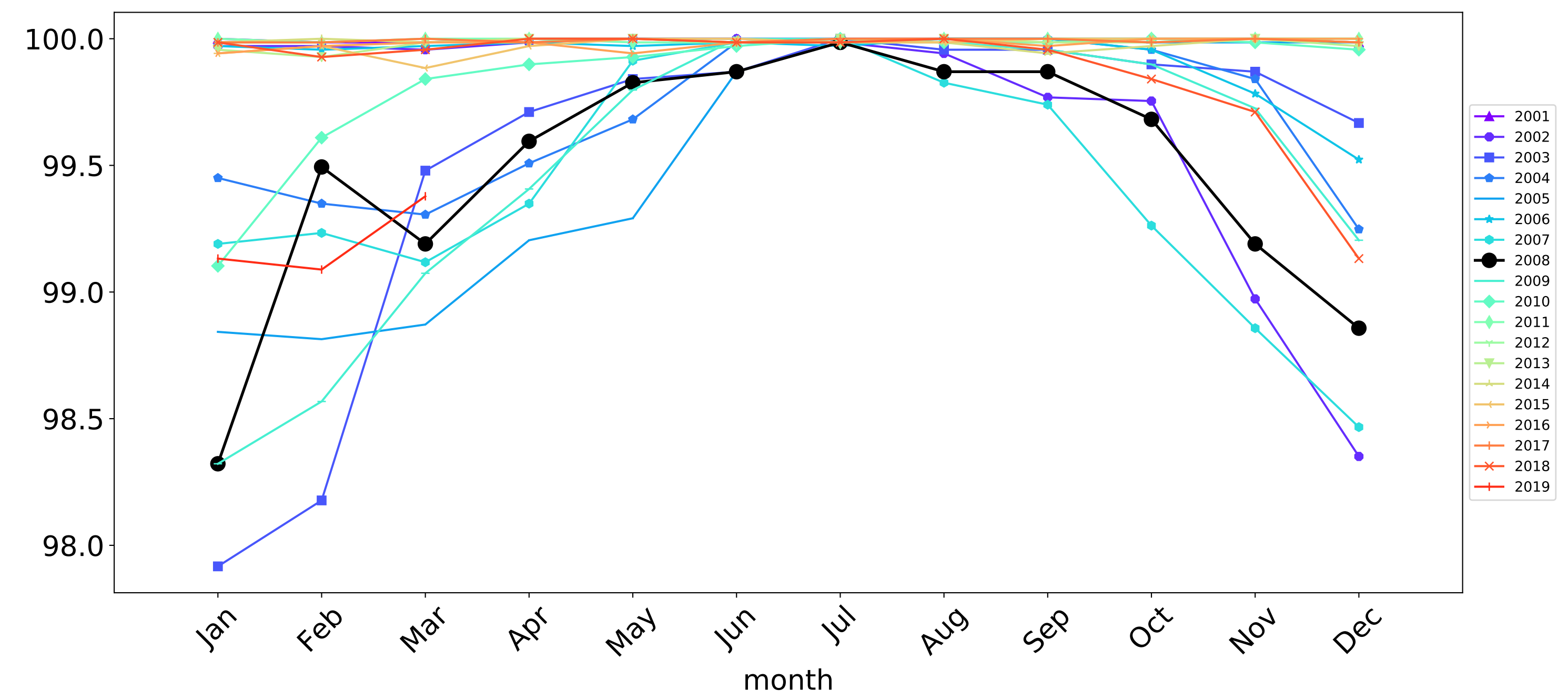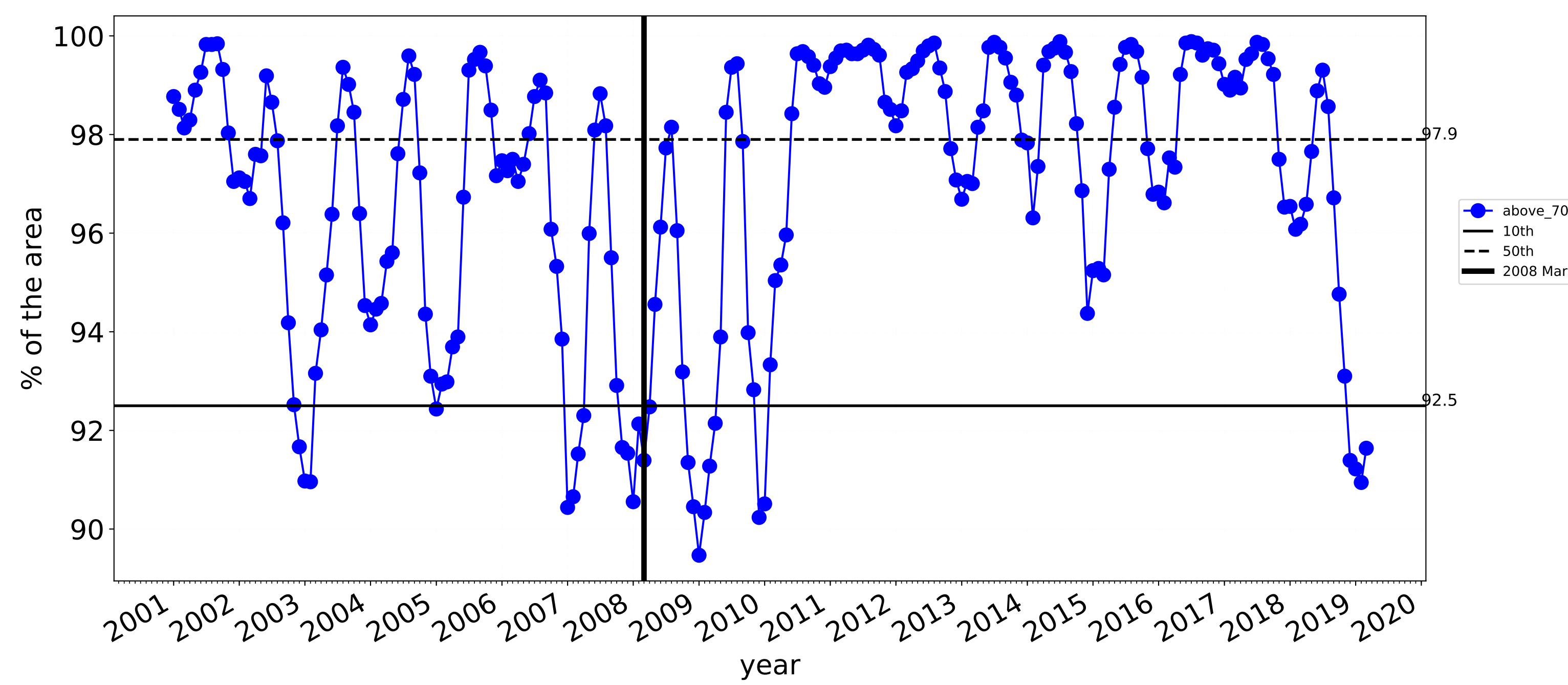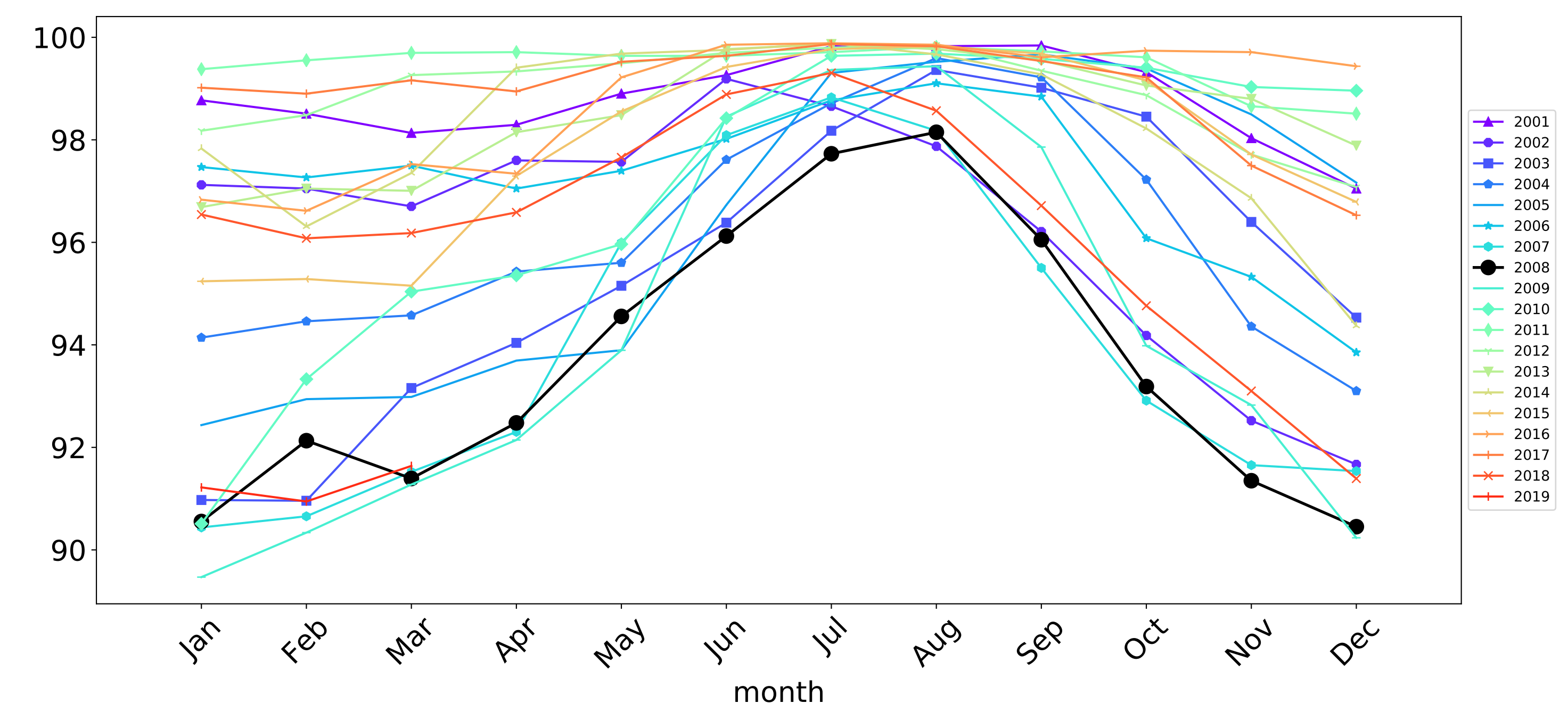| Land use and forest cover Class	area(ha)	above_30	above_50	above_70	above_80	above_90	above_95
Entire region	6,694,475	99.5% 6,657,946	66.6% 4,458,291	28.6% 1,911,878	16.4% 1,095,752	6.2% 411,813	3.3% 219,820
Conservation and natural environments	322,975	100.0% 322,975	91.3% 294,750	80.1% 258,700	72.7% 234,800	54.1% 174,800	37.5% 121,225
Conservation and natural environments non forest	83,350	100.0% 83,350	66.3% 55,275	28.1% 23,450	14.4% 12,000	9.0% 7,500	5.8% 4,875
Conservation and natural environments Forest (non woodland)	195,125	100.0% 195,125	100.0% 195,100	99.4% 194,025	97.5% 190,300	81.6% 159,225	57.7% 112,575
Agriculture	6,067,900	99.4% 6,032,025	64.1% 3,892,400	23.9% 1,450,050	11.6% 704,475	2.1% 127,475	0.4% 23,100
Grazing	2,311,575	98.9% 2,286,925	62.5% 1,444,650	34.3% 791,925	21.8% 502,775	4.7% 108,225	0.9% 20,000
Grazing non forest	2,066,575	98.8% 2,041,925	58.2% 1,201,775	29.0% 600,125	18.4% 379,500	3.5% 72,225	0.5% 10,575
Grazing Woodland forest	141,650	100.0% 141,650	98.7% 139,800	69.7% 98,725	34.8% 49,275	2.2% 3,175	0.5% 725
Grazing - Forest (non woodland)	103,350	100.0% 103,350	99.7% 103,075	90.1% 93,075	71.6% 74,000	31.8% 32,825	8.4% 8,700
Cropping	3,186,950	99.7% 3,176,975	63.0% 2,009,300	17.8% 567,025	5.8% 184,650	0.5% 17,375	0.1% 2,625
Irrigation	567,550	99.8% 566,375	77.1% 437,675	16.0% 90,725	3.0% 16,950	0.3% 1,875	0.1% 475
Production native forests and plantation forests	172,825	100.0% 172,825	99.2% 171,425	91.4% 157,950	81.3% 140,550	62.1% 107,250	43.4% 75,025