Total vegetation cover soil protection
Region:LGA Byron_(A) NSW Date: January 2021

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:

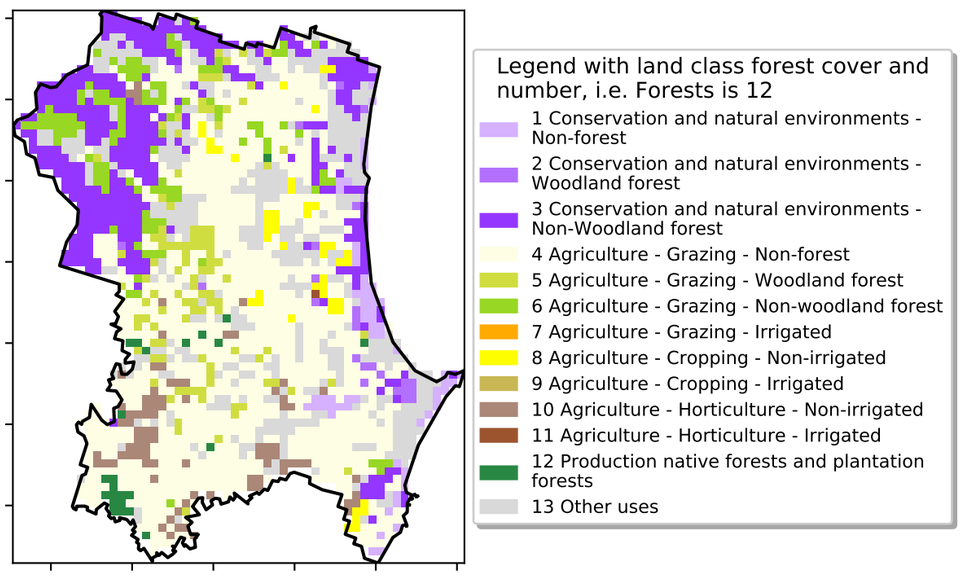
1. http://www.agriculture.gov.au/abares/aclump/land-use/alum-classification
2. http://www.agriculture.gov.au/abares/forestsaustralia/sofr/sofr-2018
3. https://www.dpi.nsw.gov.au/agriculture/pastures-and-rangelands/establishment-mgmt/production-management2/groundcover
4. MODIS Fractional cover algorithm:

   https://doi.org/10.4225/08/5848a3f19a7b3

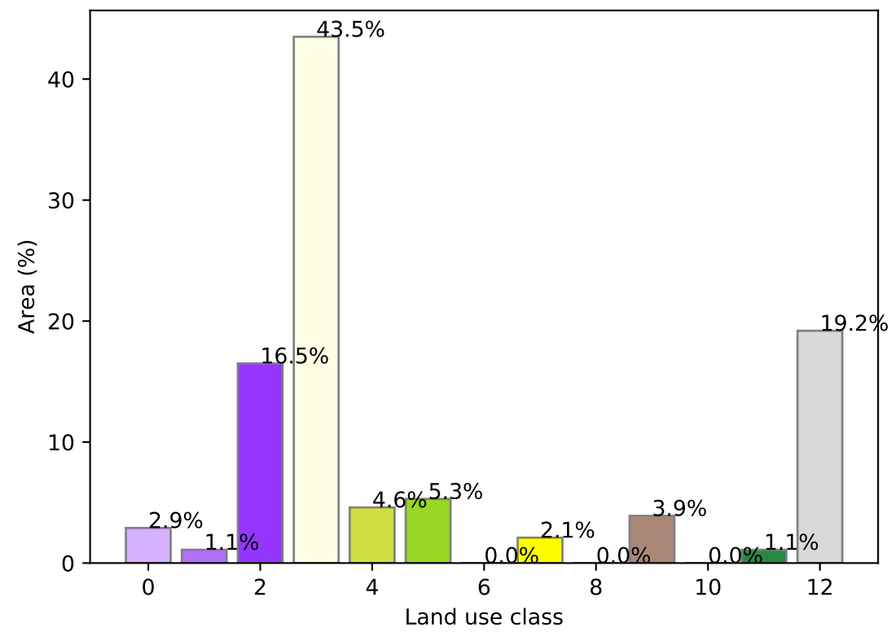
Vegetation Cover Jan 2021

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

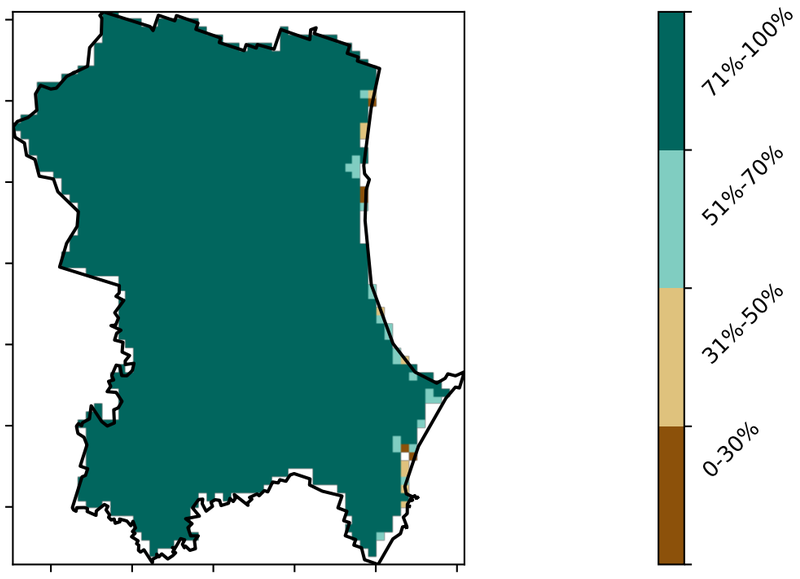
Land use and forest cover



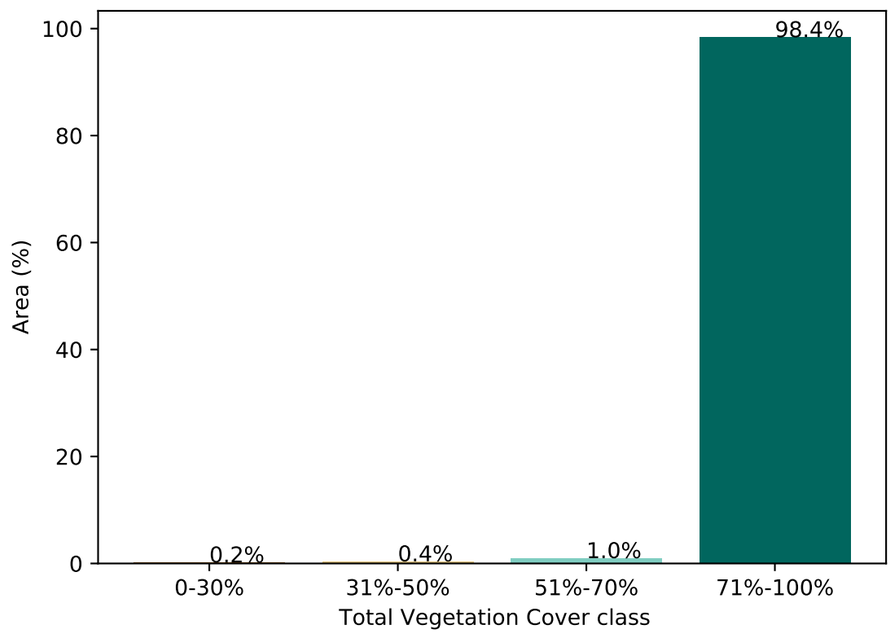
Proportion of each land class in area



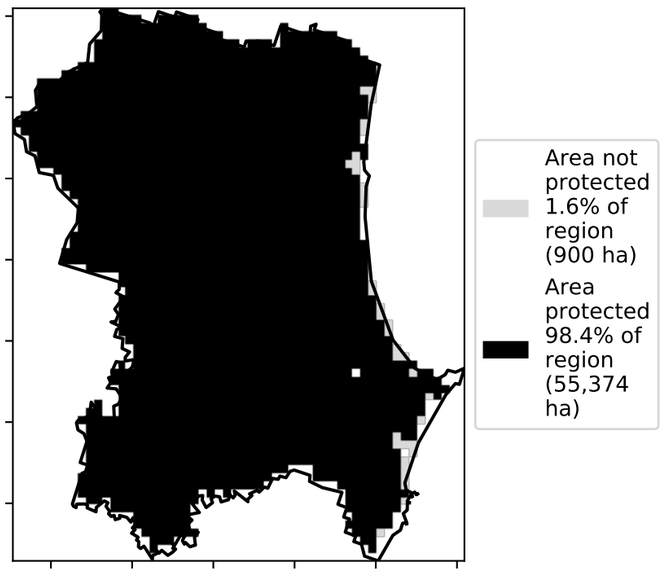
Total Vegetation Cover [%]



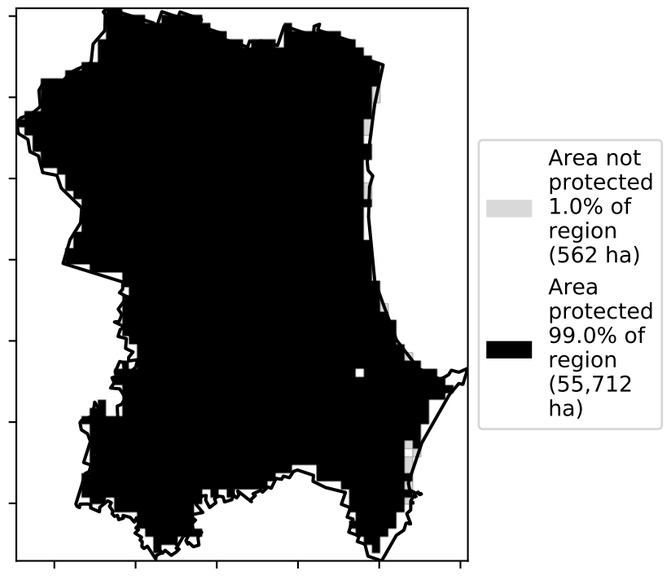
Proportion of vegetation cover class in area



% Area protected from water erosion (>70%)

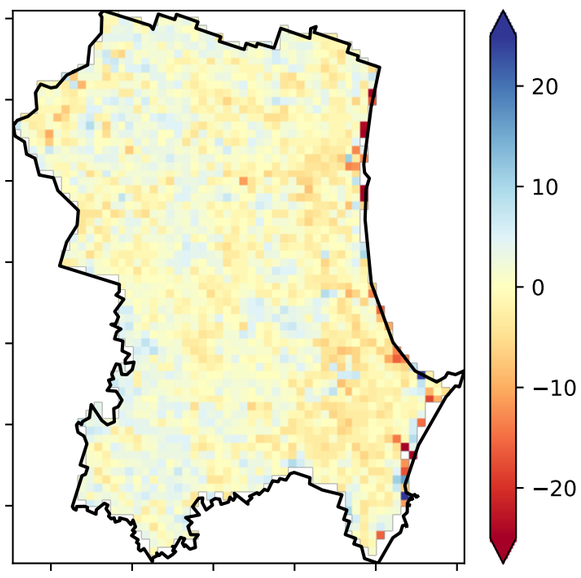


% Area protected from wind erosion (>50%)



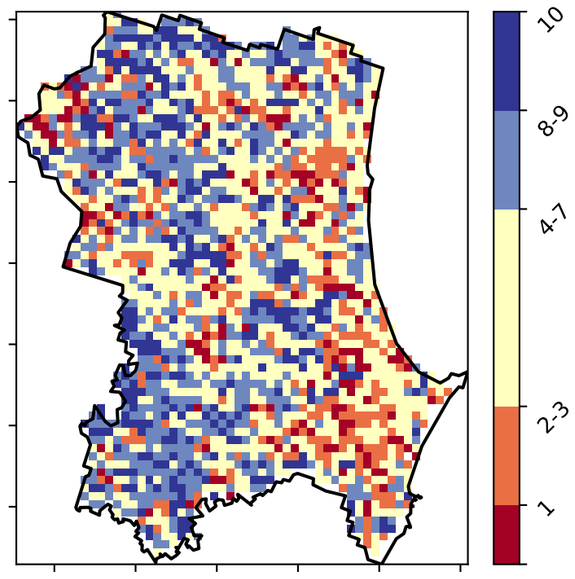
Total Vegetation Cover Anomaly [%]

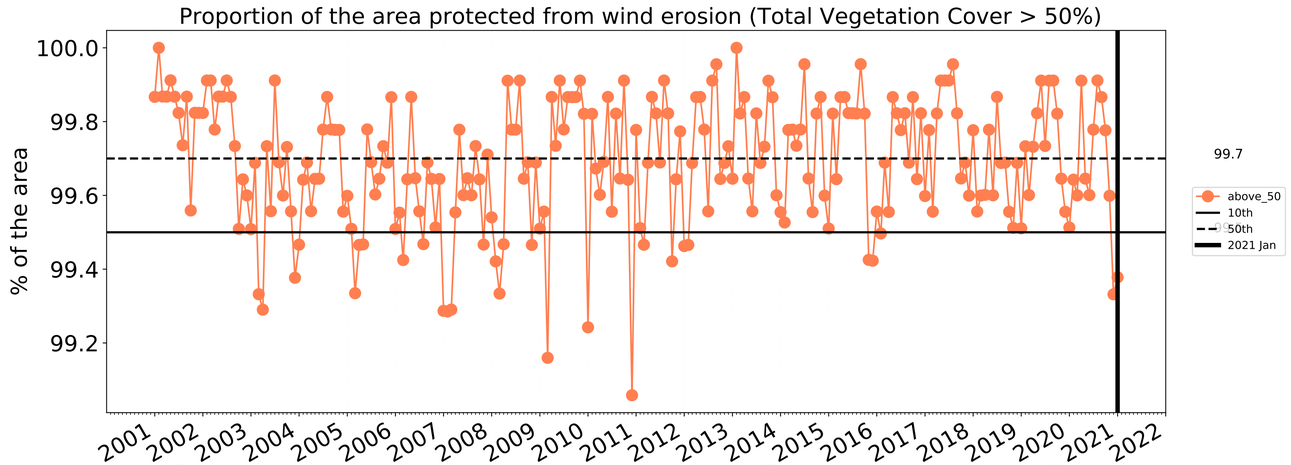
Anomaly show how many percetage points each pixel is from the mean. That is, red pixels are about 20% lower than the mean of that pixel. The mean is only for the month of the map using baseline from 2001 to 2019.

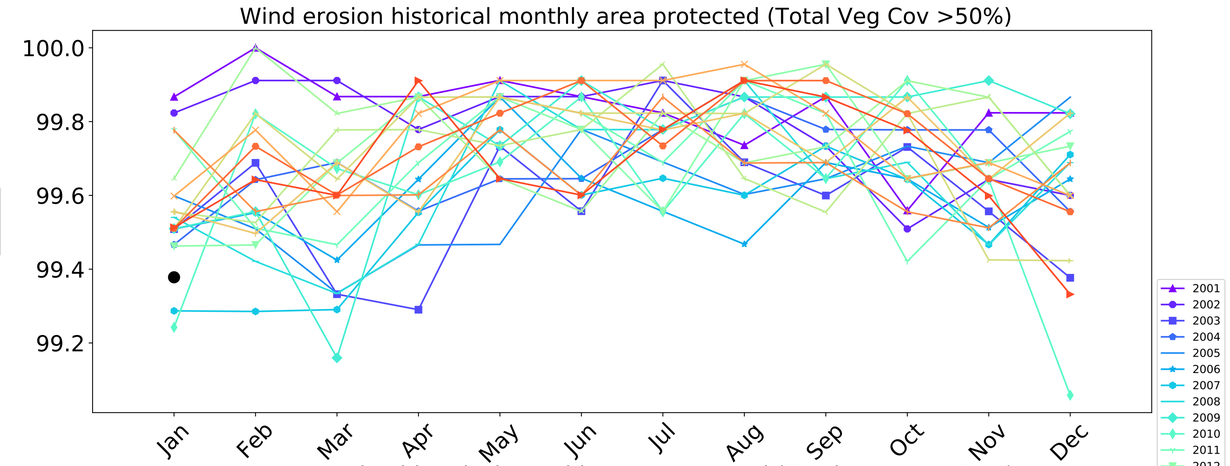


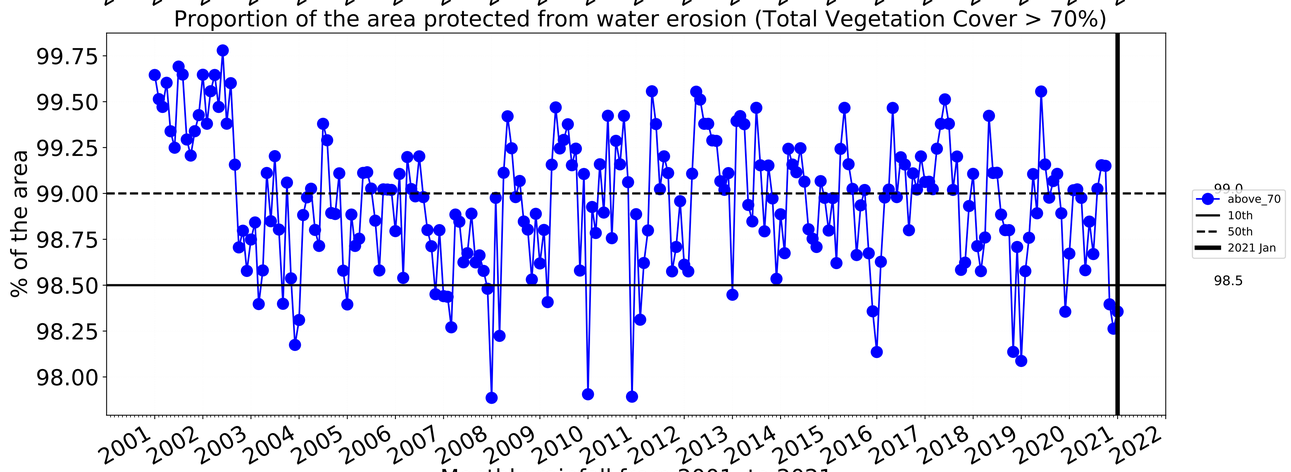
Total Vegetation Cover Decile [%]

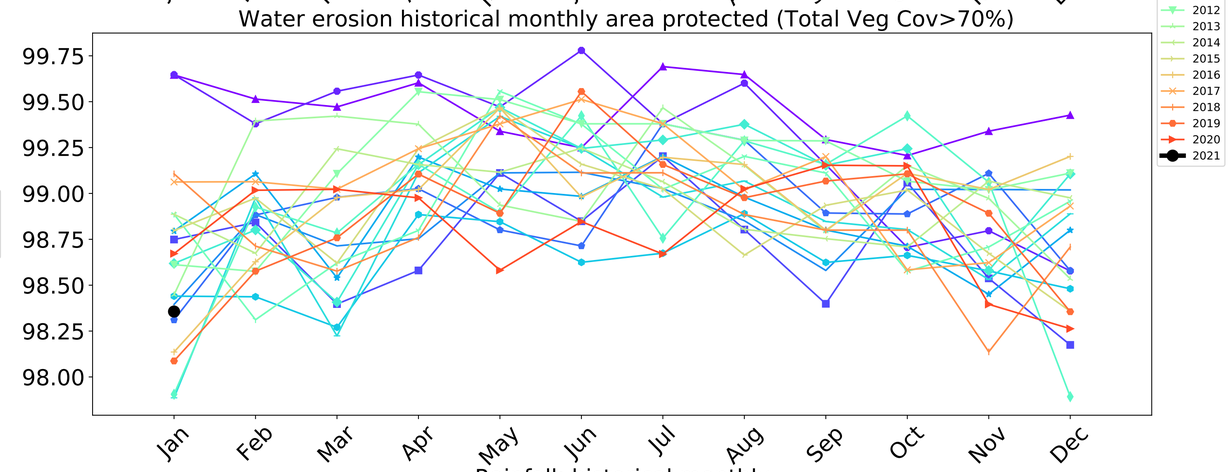
Deciles show where the pixel value lies in the record, from highest to lowest, for that month. That is, red pixels are in the lowest 10% of records for that month of the map using baseline from 2001 to 2019.

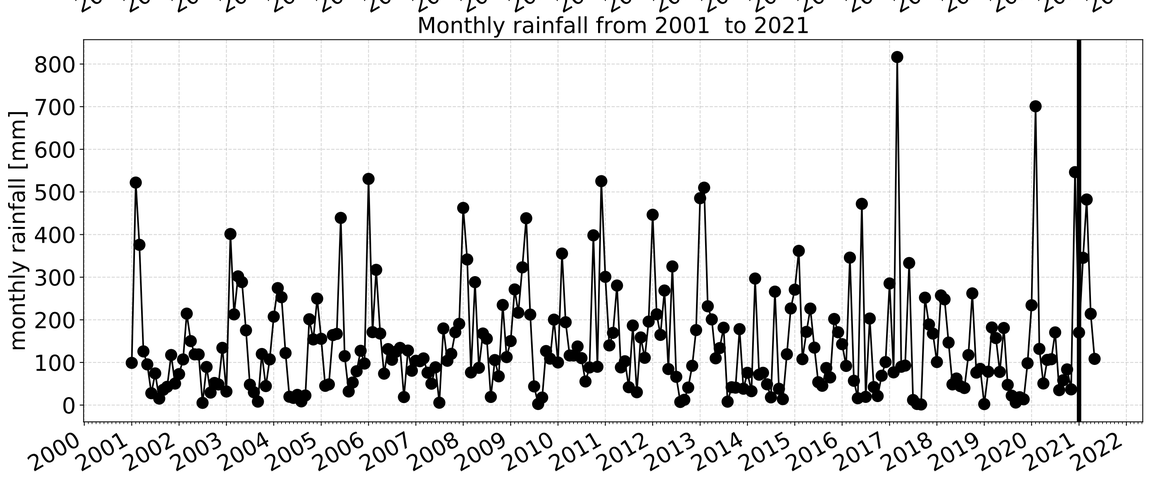


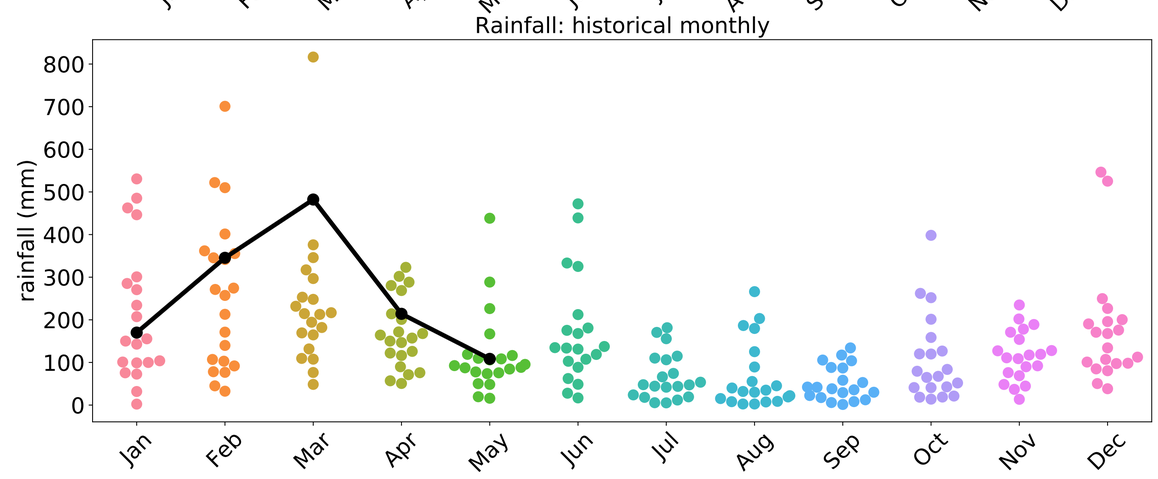

Proportion of the area protected from wind erosion (Total Vegetation Cover > 50%)
% of the area
100.0
99.8
99.6
99.4
99.2
99.7
above_50
10th
50th
2021 Jan
2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022

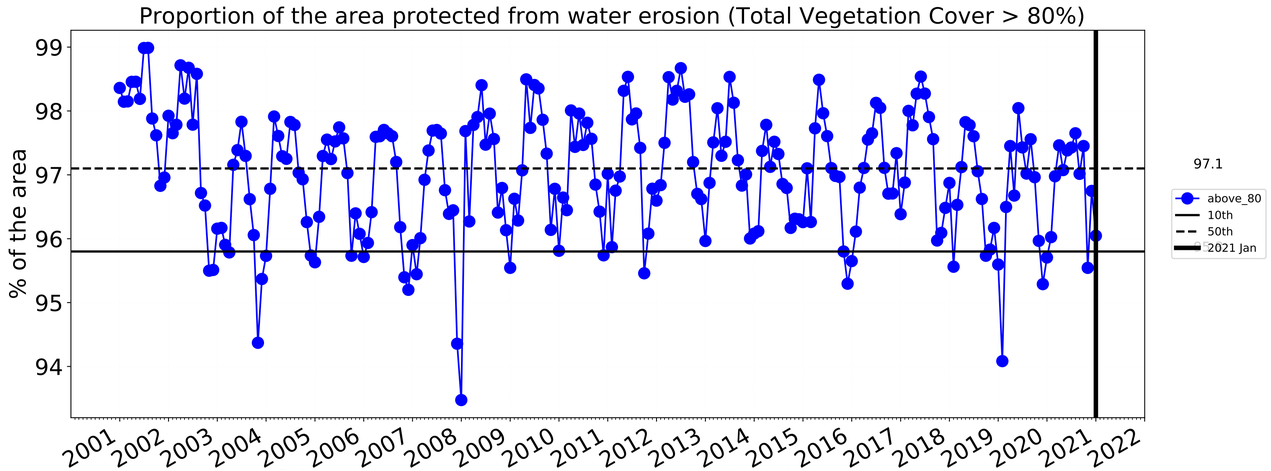

Wind erosion historical monthly area protected (Total Veg Cov >50%)
100.0
99.8
99.6
99.4
99.2
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021

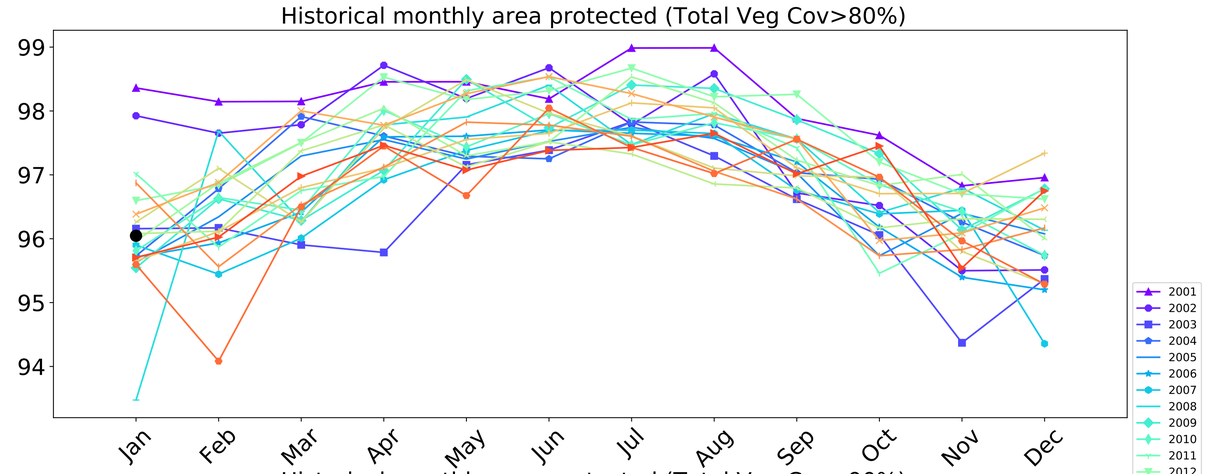

Proportion of the area protected from water erosion (Total Vegetation Cover > 70%)
% of the area
99.75
99.50
99.25
99.00
98.75
98.50
98.25
98.00
99.0
98.5
above_70
10th
50th
2021 Jan
2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022


Water erosion historical monthly area protected (Total Veg Cov>70%)
99.75
99.50
99.25
99.00
98.75
98.50
98.25
98.00
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021


Monthly rainfall from 2001 to 2021
monthly rainfall [mm]
800
700
600
500
400
300
200
100
0
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022


Rainfall: historical monthly
rainfall (mm)
800
700
600
500
400
300
200
100
0
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec


Proportion of the area protected from water erosion (Total Vegetation Cover > 80%)
% of the area
97.1
above_80
10th
50th
2021 Jan


Historical monthly area protected (Total Veg Cov>80%)
Jan
Feb
Mar
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May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
2001
2002
2003
2004
2005
2006
2007
2008
2009
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2015
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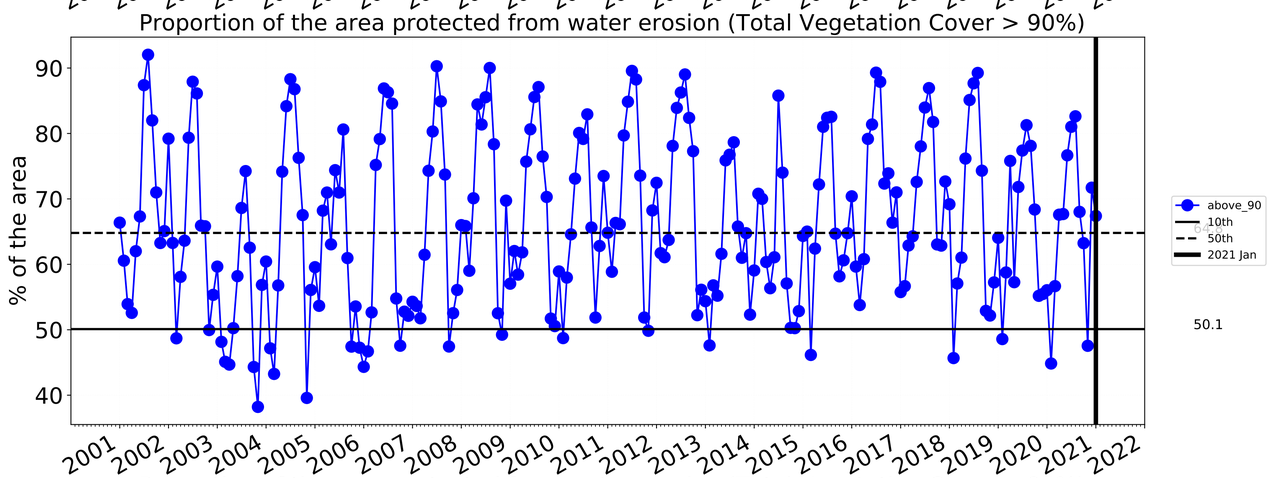
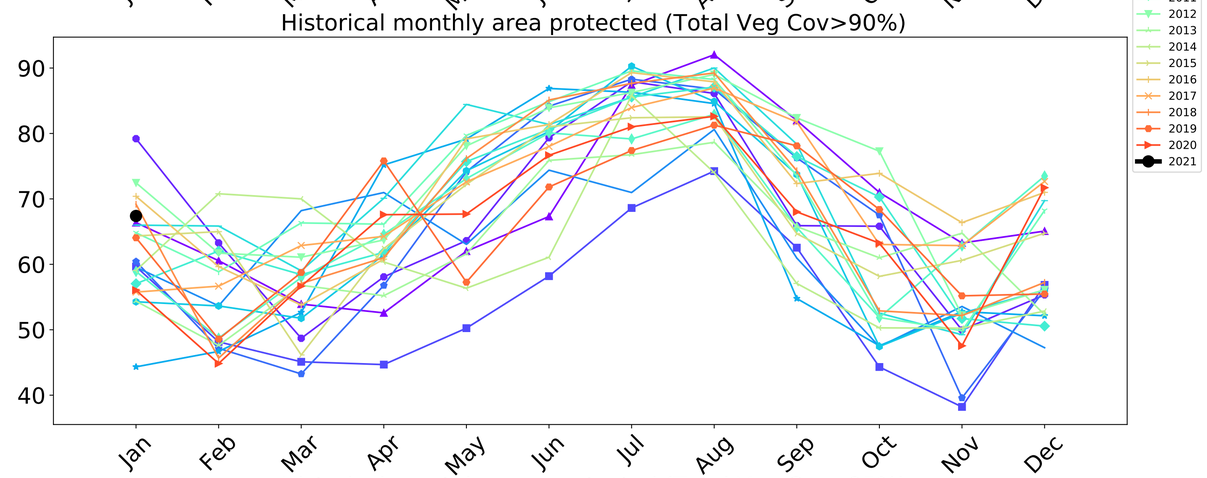
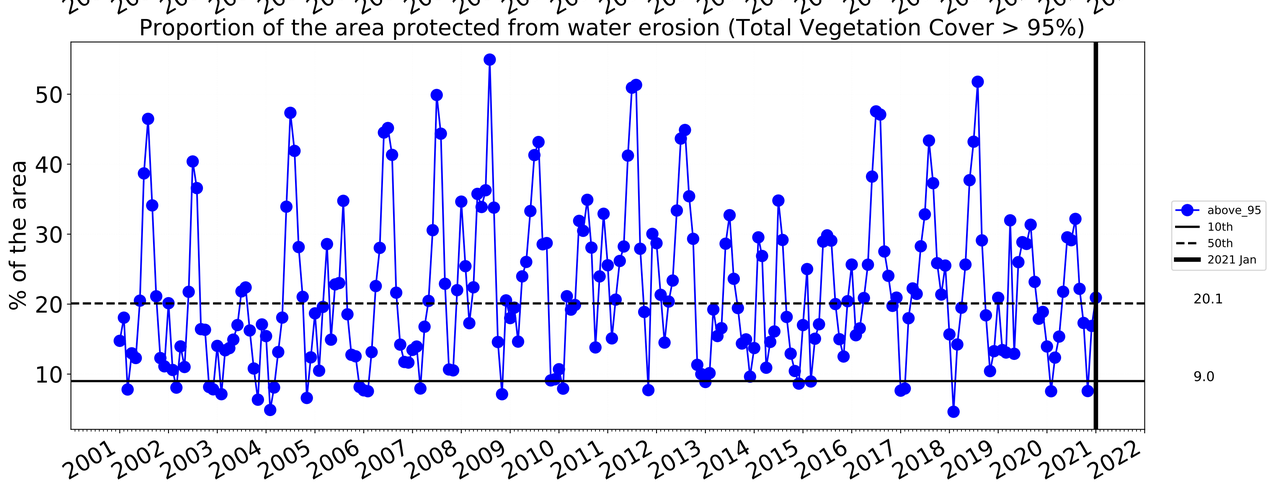
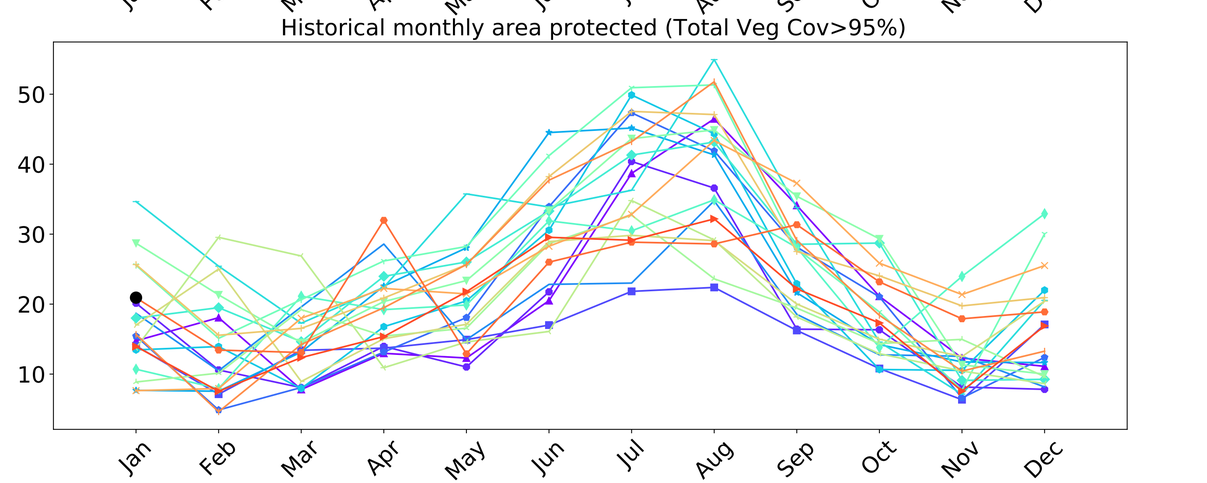
2017
2018
2019
2020
2021


Proportion of the area protected from water erosion (Total Vegetation Cover > 90%)
% of the area
above_90
10th
50th
2021 Jan
50.1


Historical monthly area protected (Total Veg Cov>90%)
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

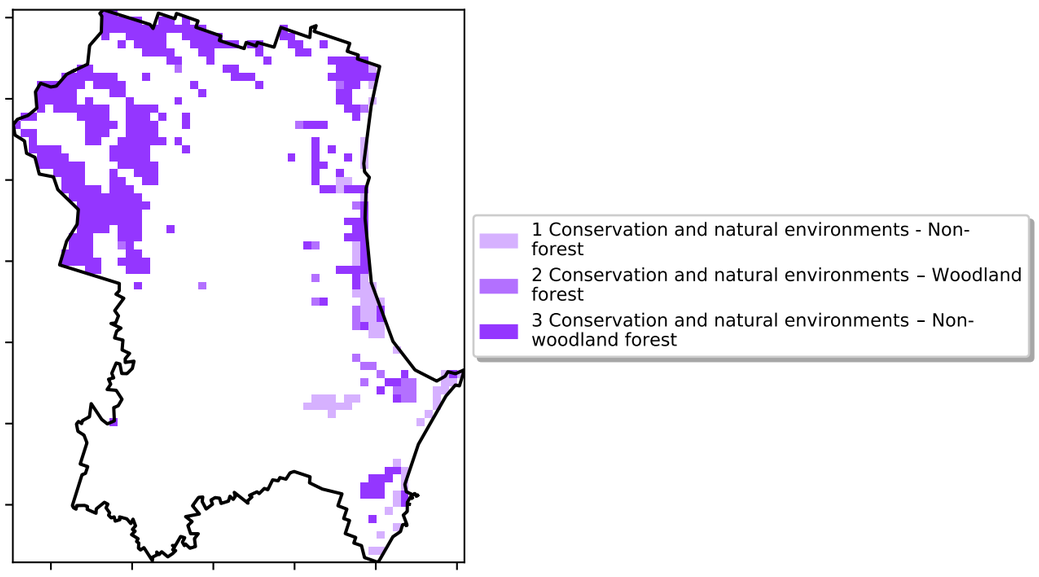

Proportion of the area protected from water erosion (Total Vegetation Cover > 95%)
% of the area
above_95
10th
50th
2021 Jan
20.1
9.0


Historical monthly area protected (Total Veg Cov>95%)
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

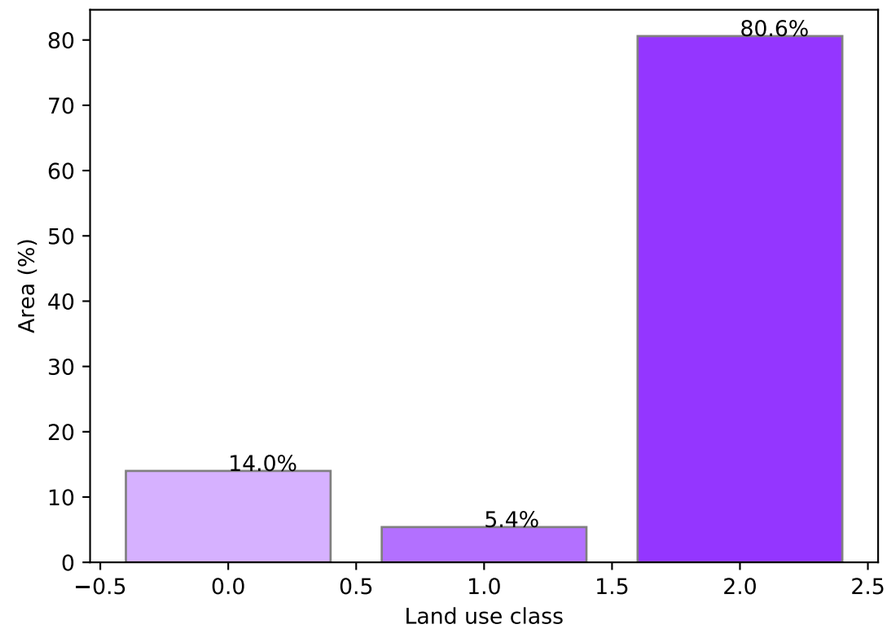
Conservation and natural environments

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

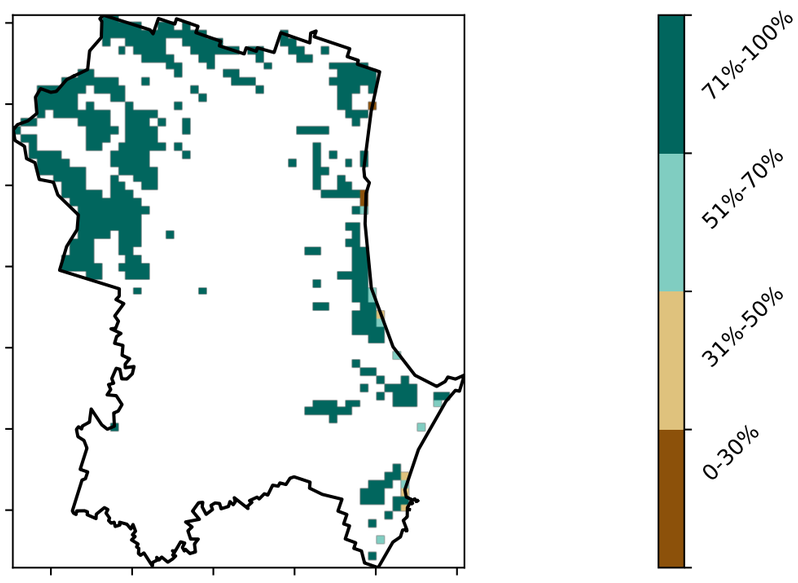
Land use and forest cover



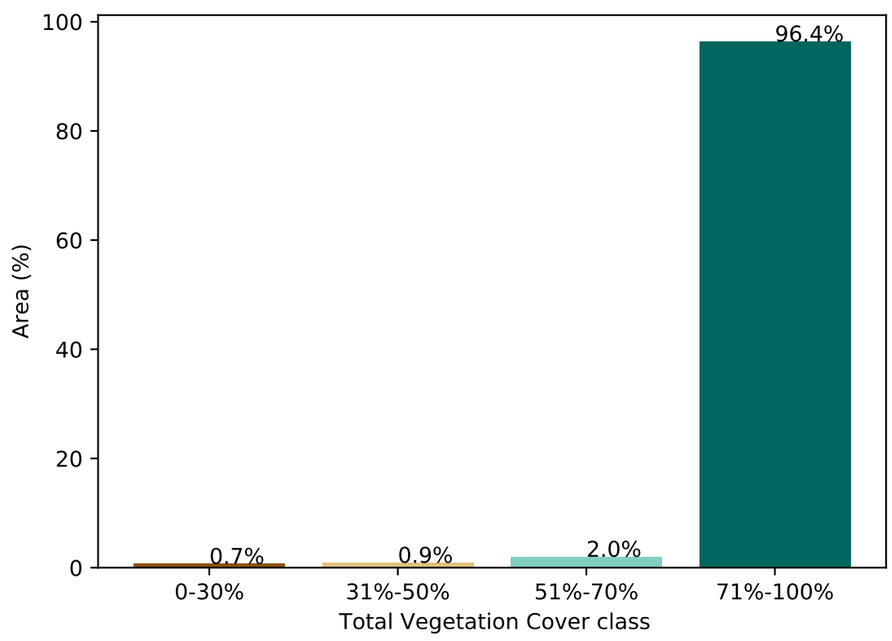
Proportion of each land class in area



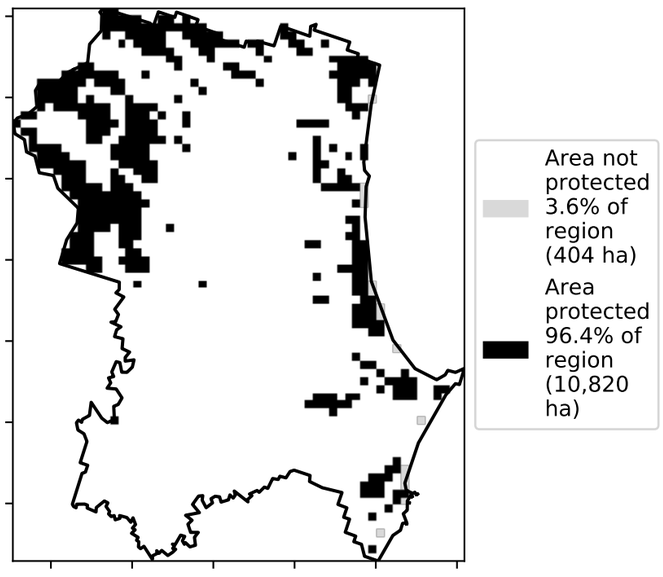
Total Vegetation Cover [%]



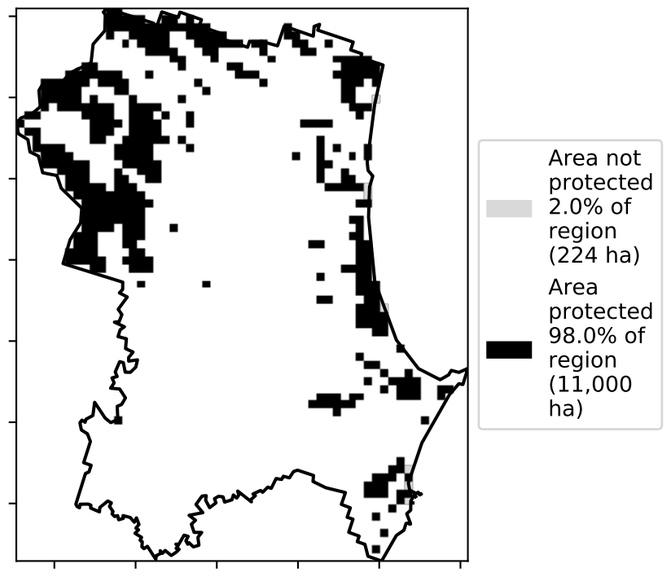
Proportion of vegetation cover class in area



% Area protected from water erosion (>70%)

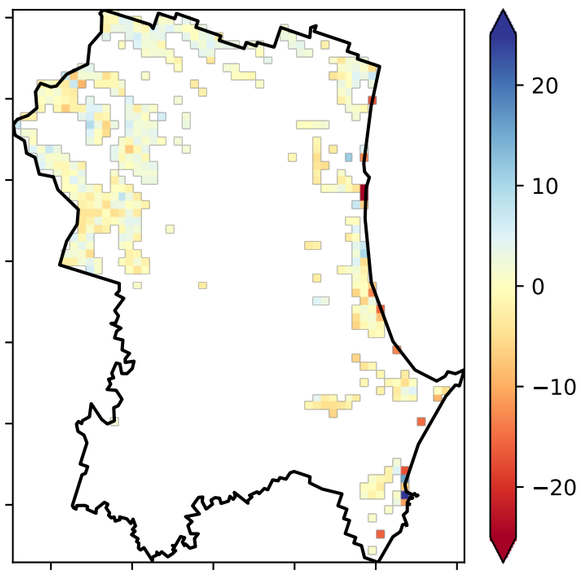


% Area protected from wind erosion (>50%)



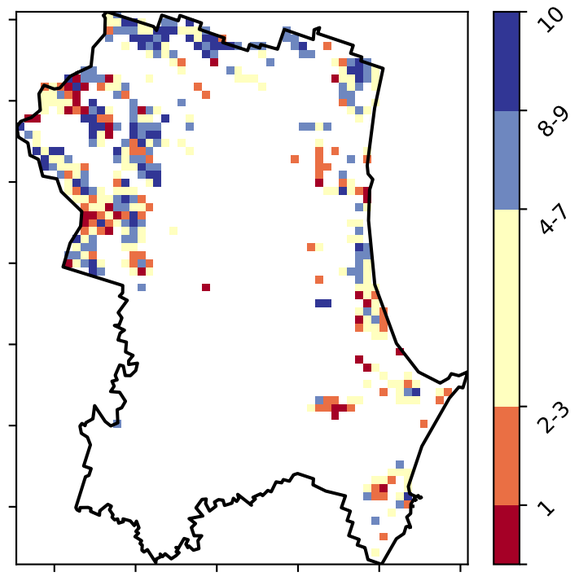
Total Vegetation Cover Anomaly [%]

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.



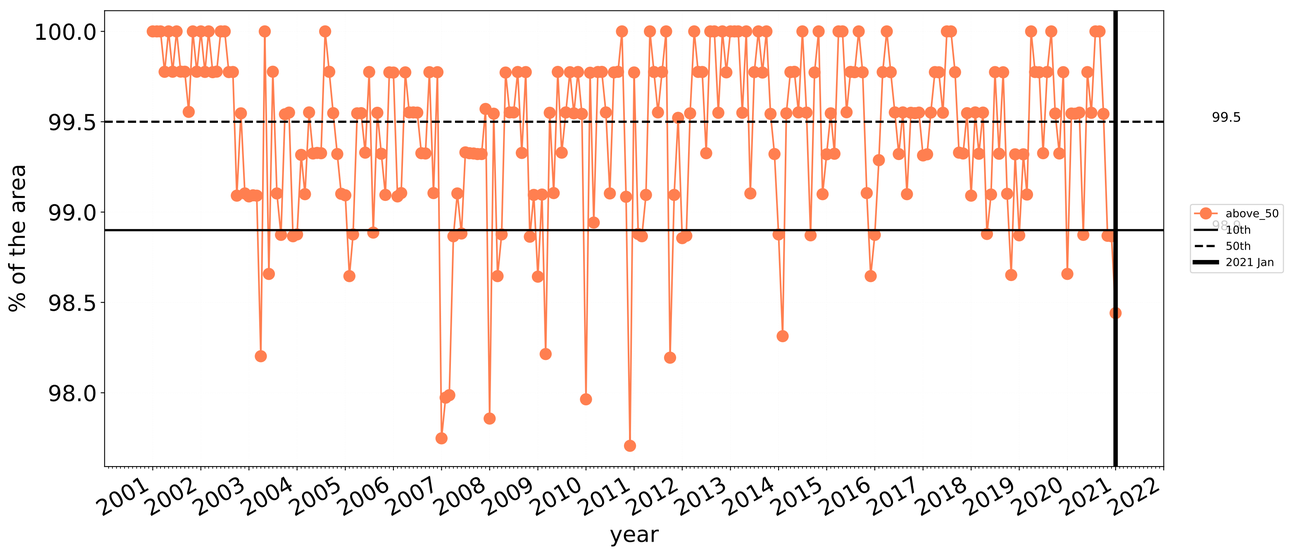
Total Vegetation Cover Decile [%]

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.

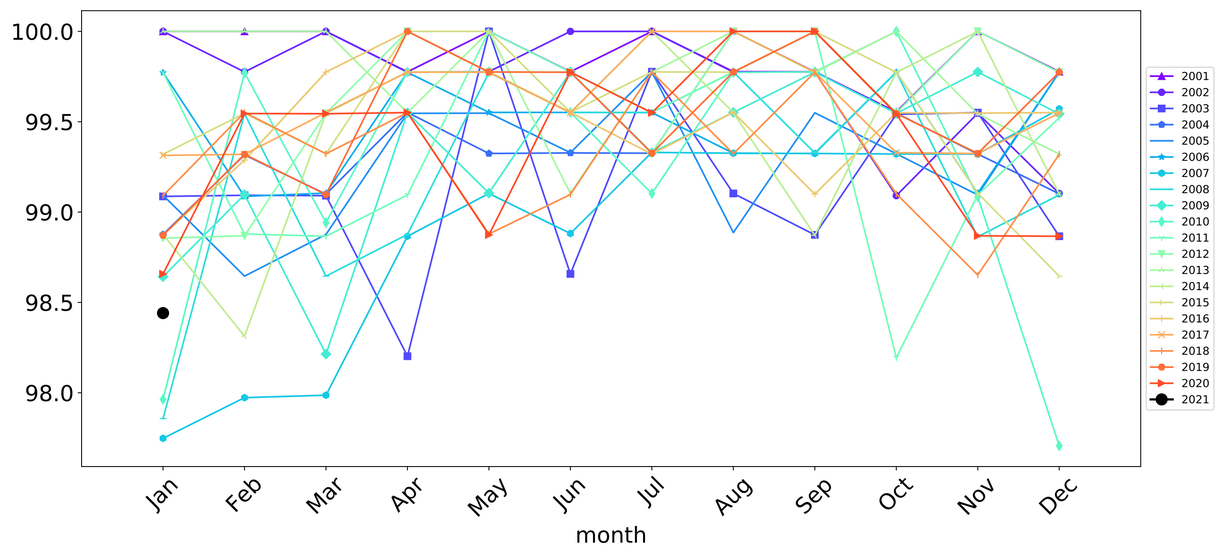


Conservation and natural environments timeseries

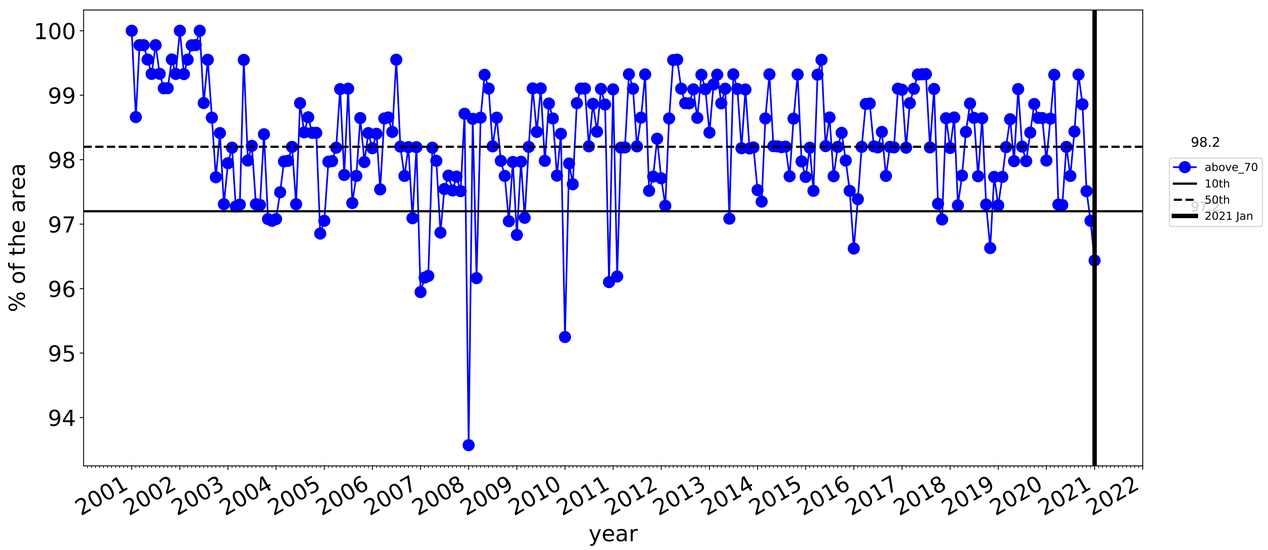
Proportion of the area protected from wind erosion (Total Vegetation Cover > 50%)



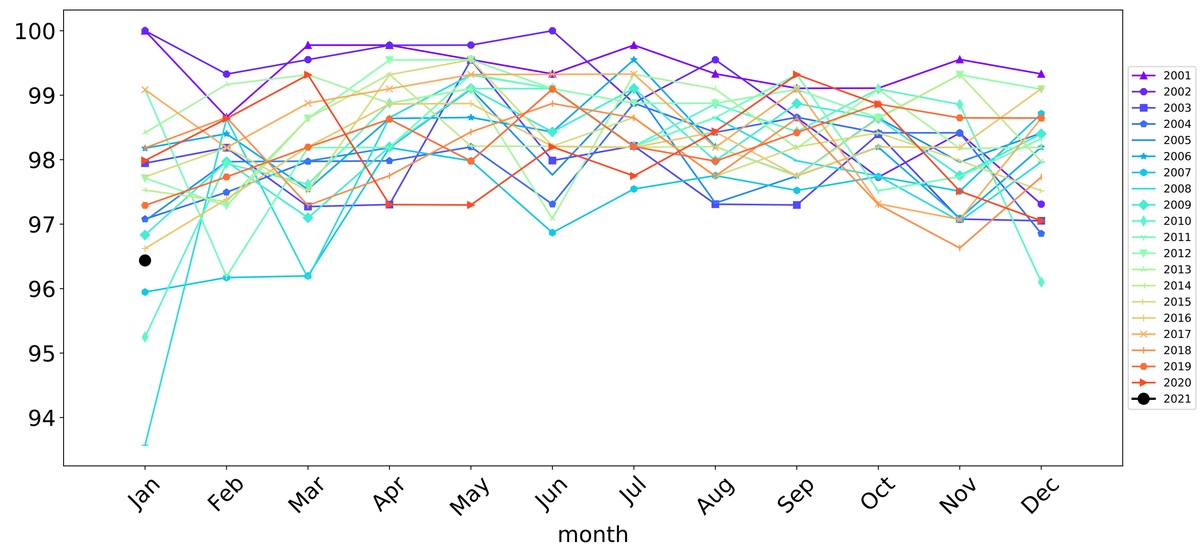
Wind erosion historical monthly area protected (Total Veg Cov >50%)

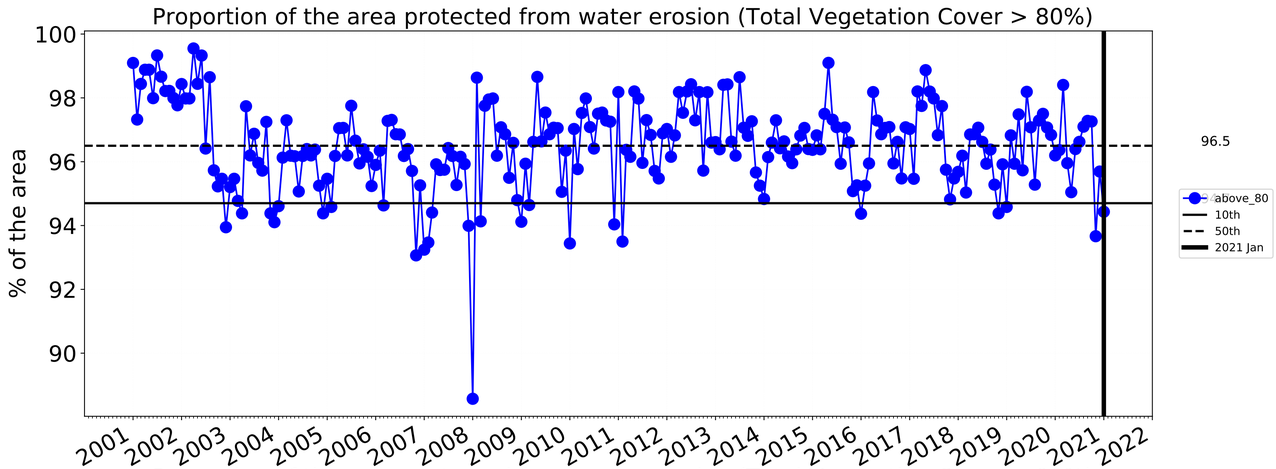


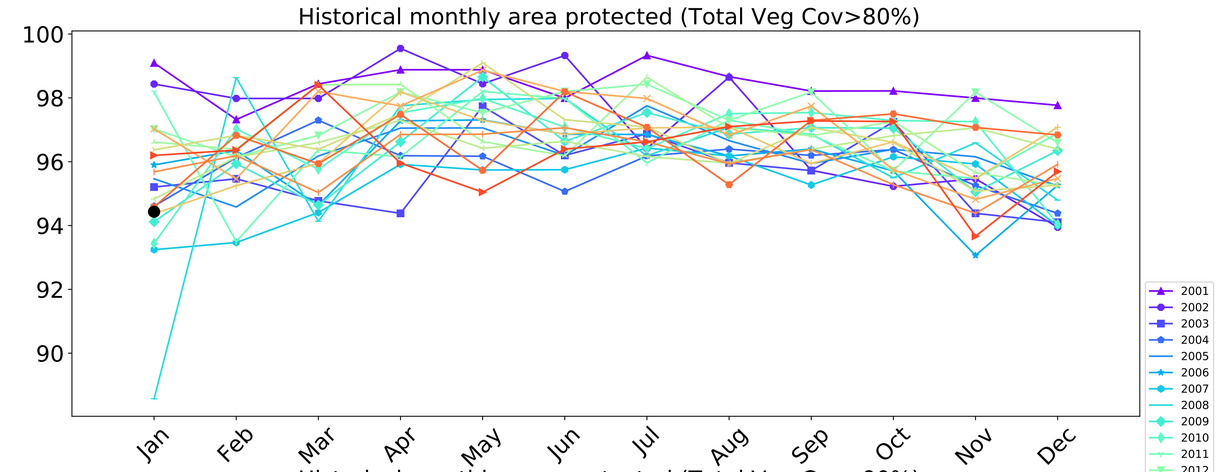
Proportion of the area protected from water erosion (Total Vegetation Cover > 70%)



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




Proportion of the area protected from water erosion (Total Vegetation Cover > 80%)
% of the area
96.5
above_80
10th
50th
2021 Jan


Historical monthly area protected (Total Veg Cov>80%)
Jan
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2001
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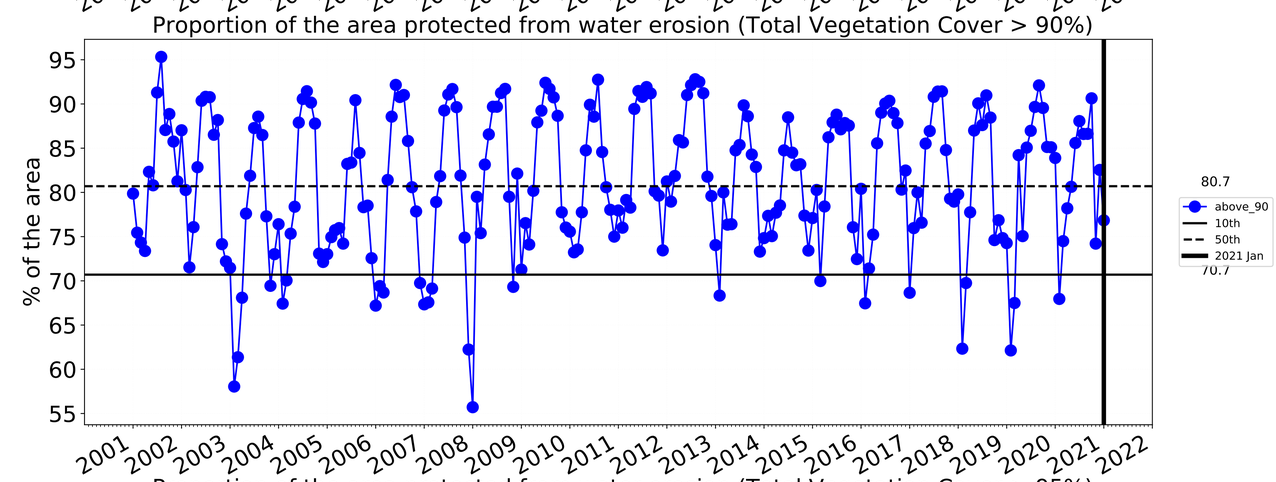
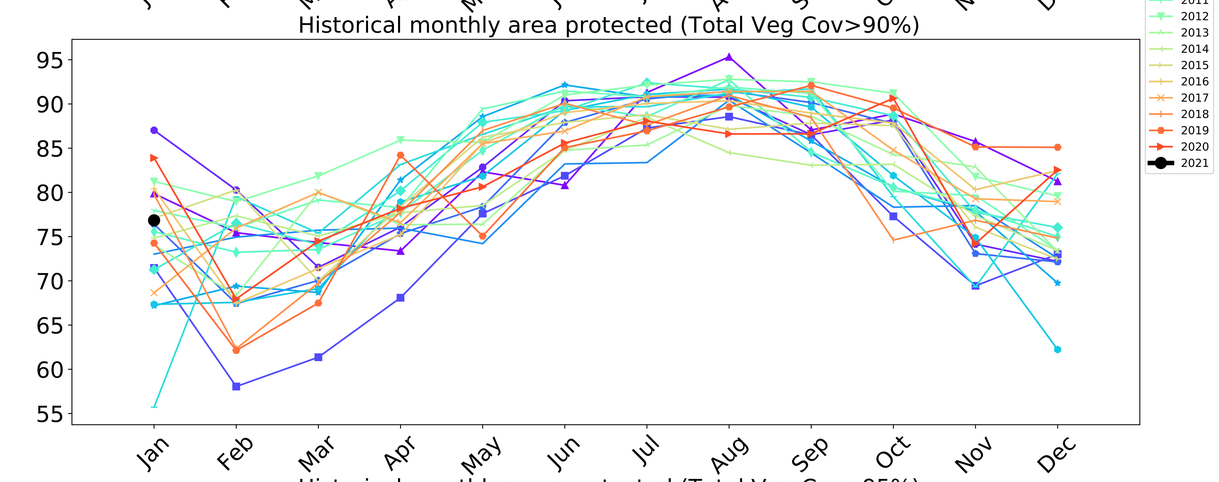
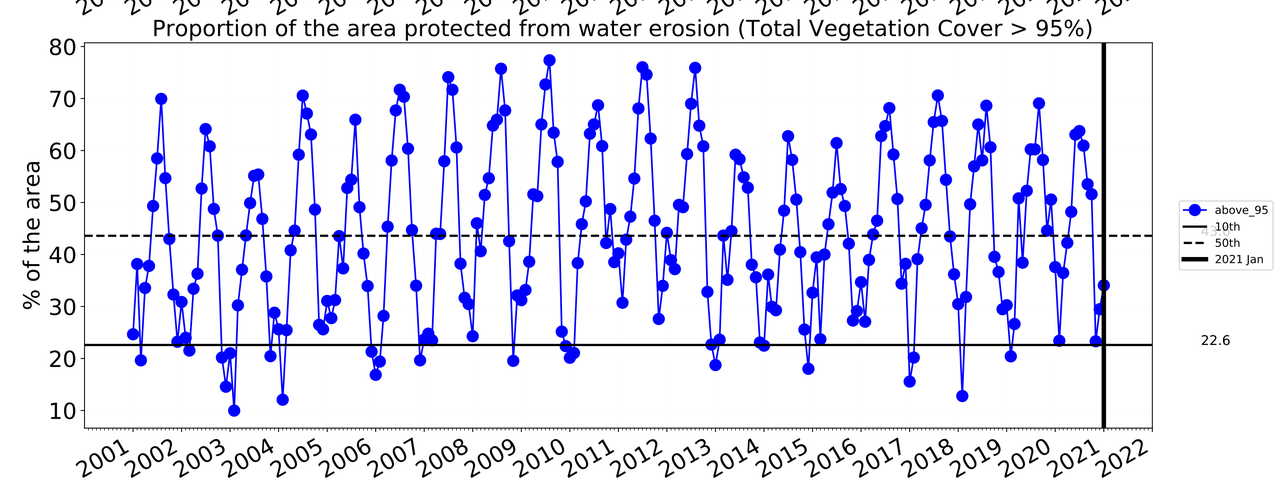
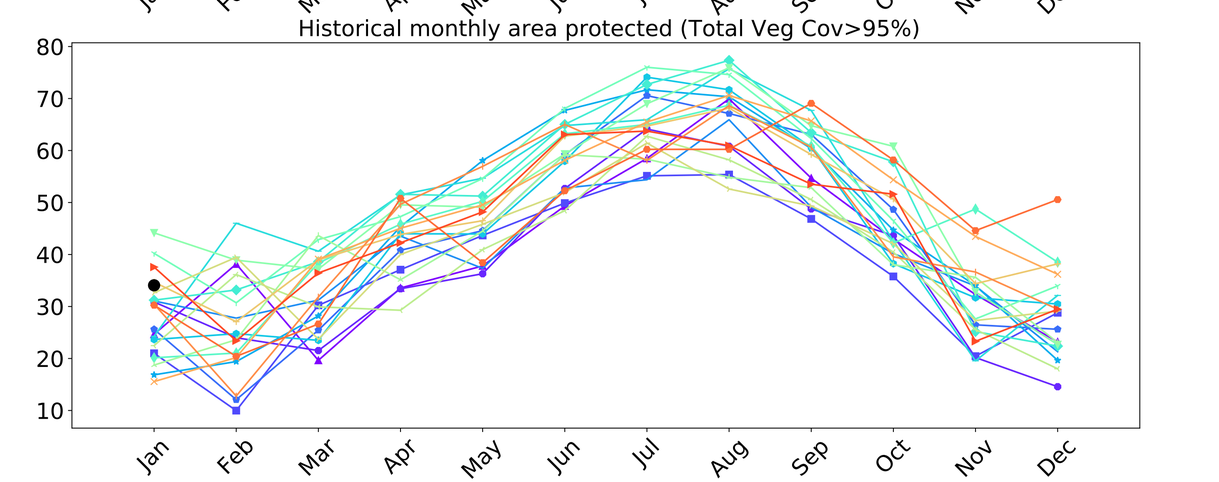
2019
2020
2021


Proportion of the area protected from water erosion (Total Vegetation Cover > 90%)
% of the area
80.7
above_90
10th
50th
2021 Jan
70.7


Historical monthly area protected (Total Veg Cov>90%)
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

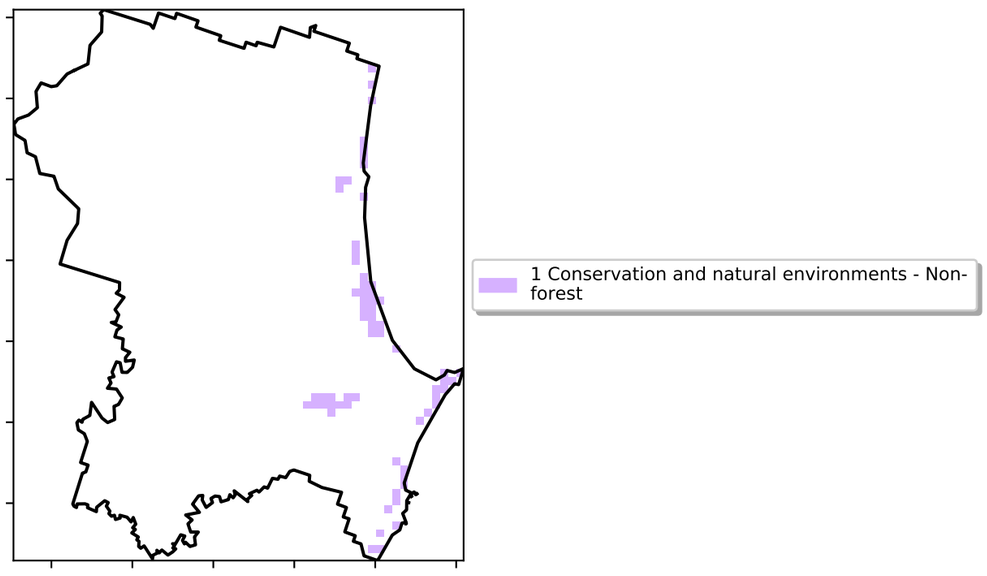

Proportion of the area protected from water erosion (Total Vegetation Cover > 95%)
% of the area
above_95
10th
50th
2021 Jan
22.6


Historical monthly area protected (Total Veg Cov>95%)
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

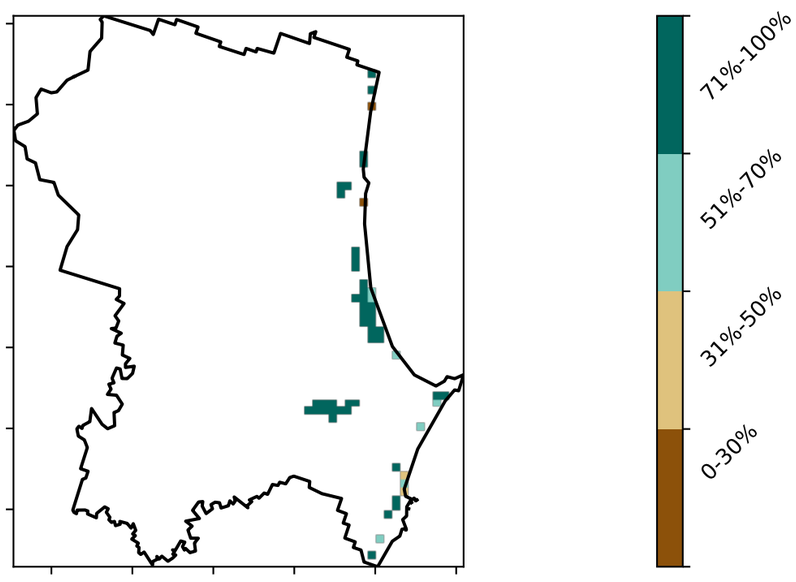
Conservation and natural environments non forest

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

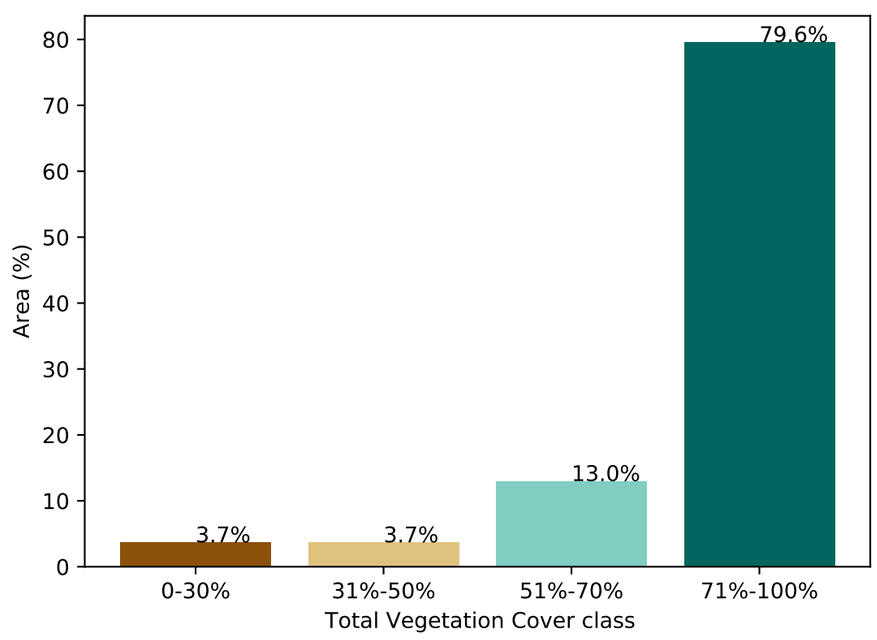
Land use and forest cover



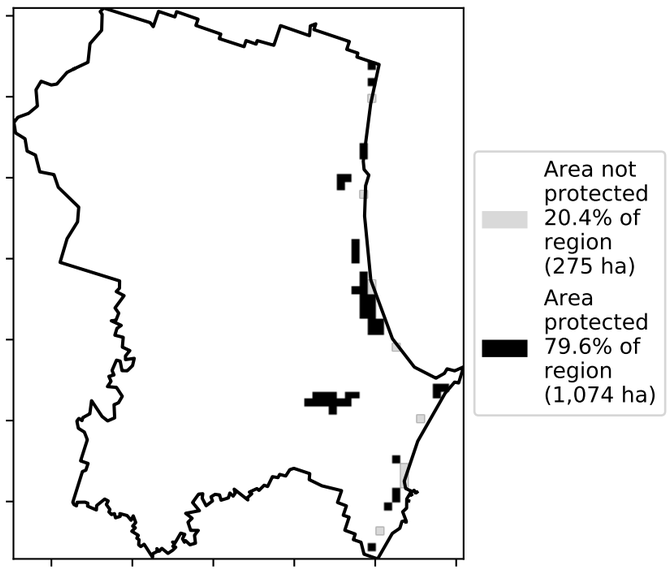
Total Vegetation Cover [%]



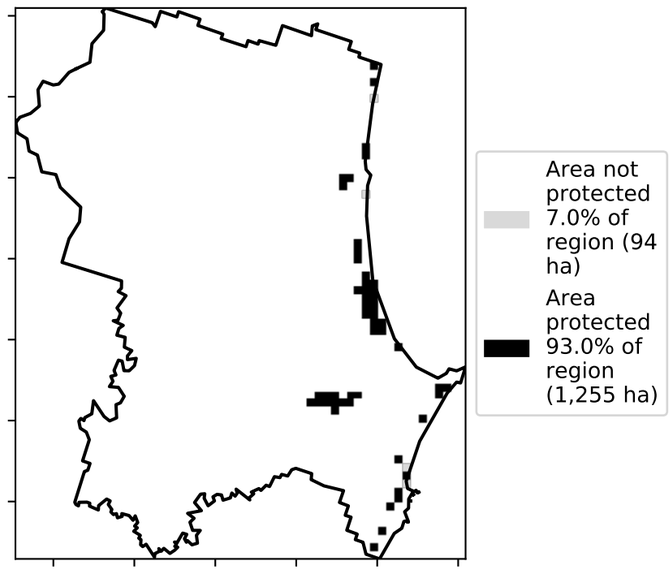
Proportion of vegetation cover class in area



% Area protected from water erosion (>70%)

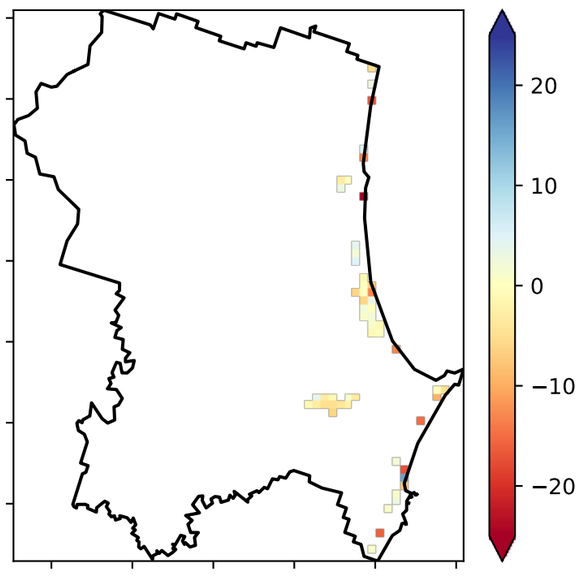


% Area protected from wind erosion (>50%)



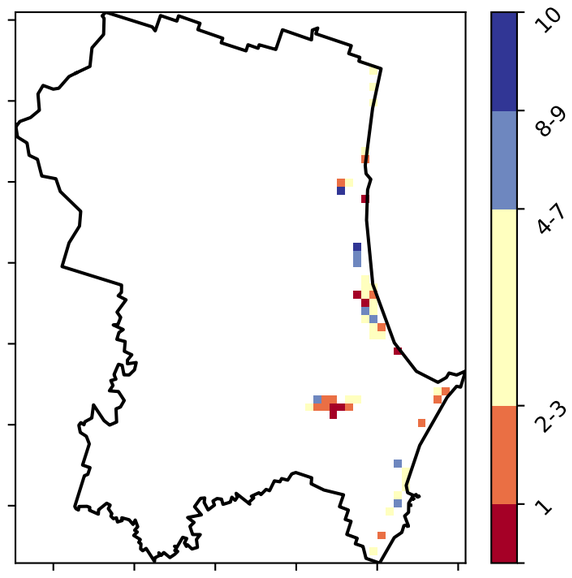
Total Vegetation Cover Anomaly [%]

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.



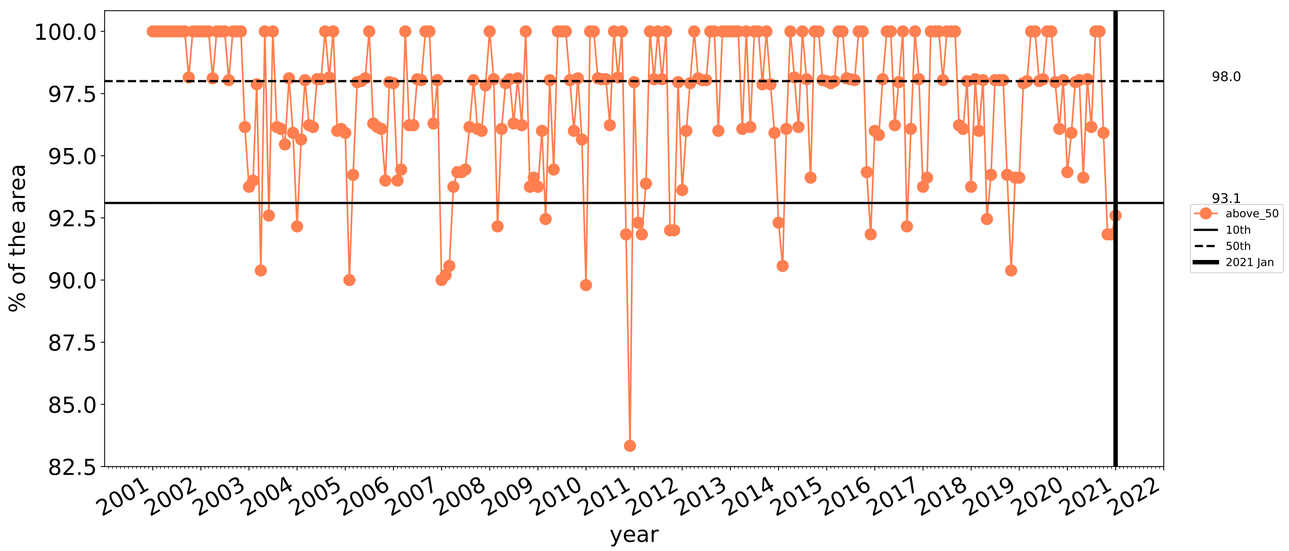
Total Vegetation Cover Decile [%]

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.

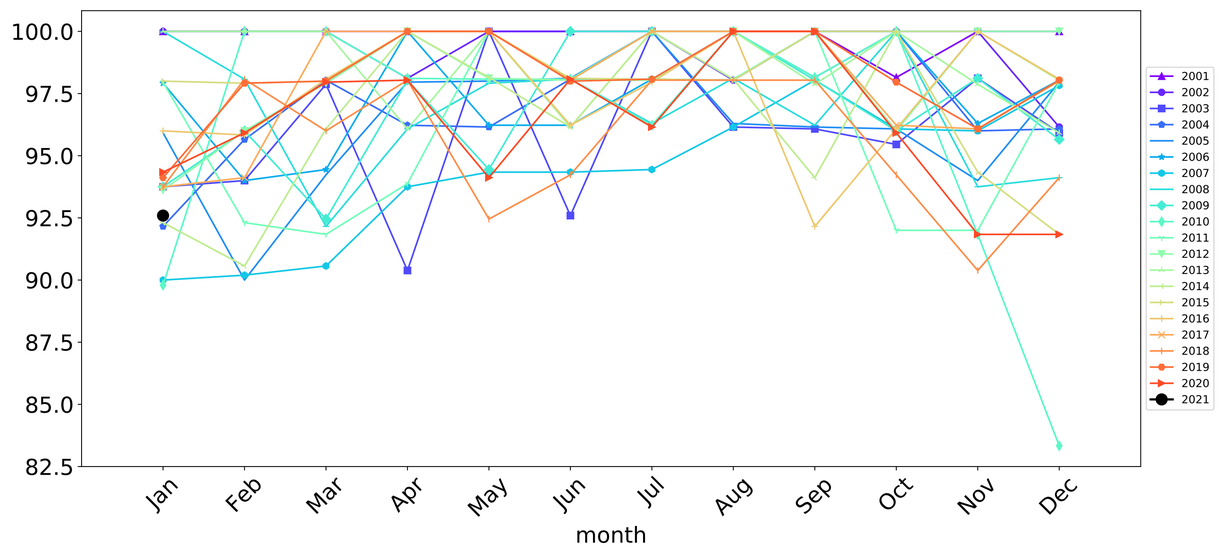


Conservation and natural environments non forest timeseries

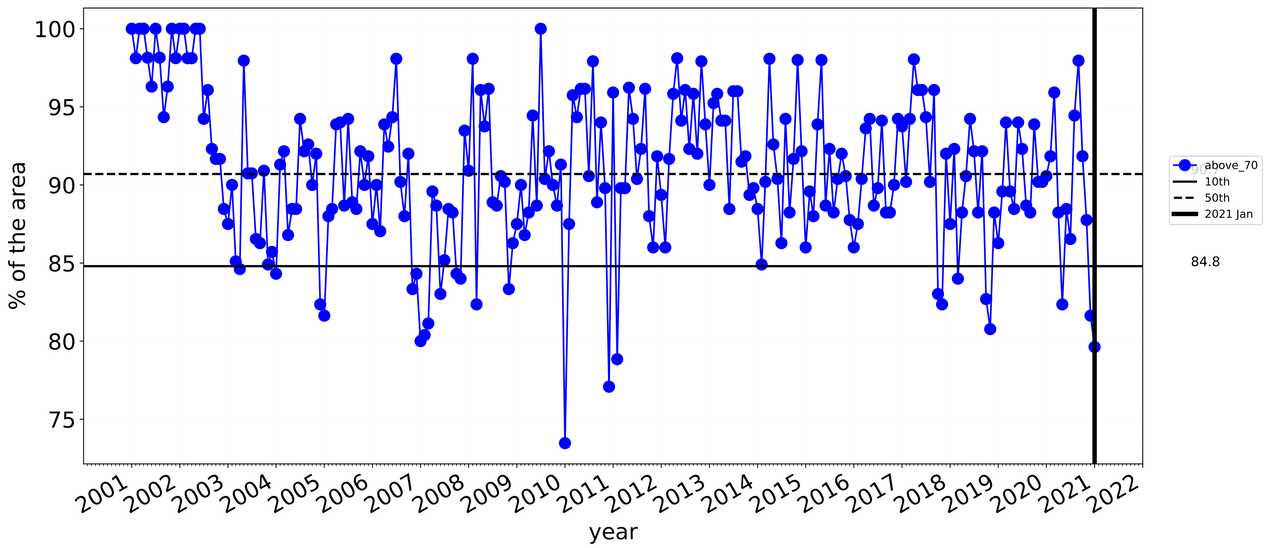
Proportion of the area protected from wind erosion (Total Vegetation Cover > 50%)



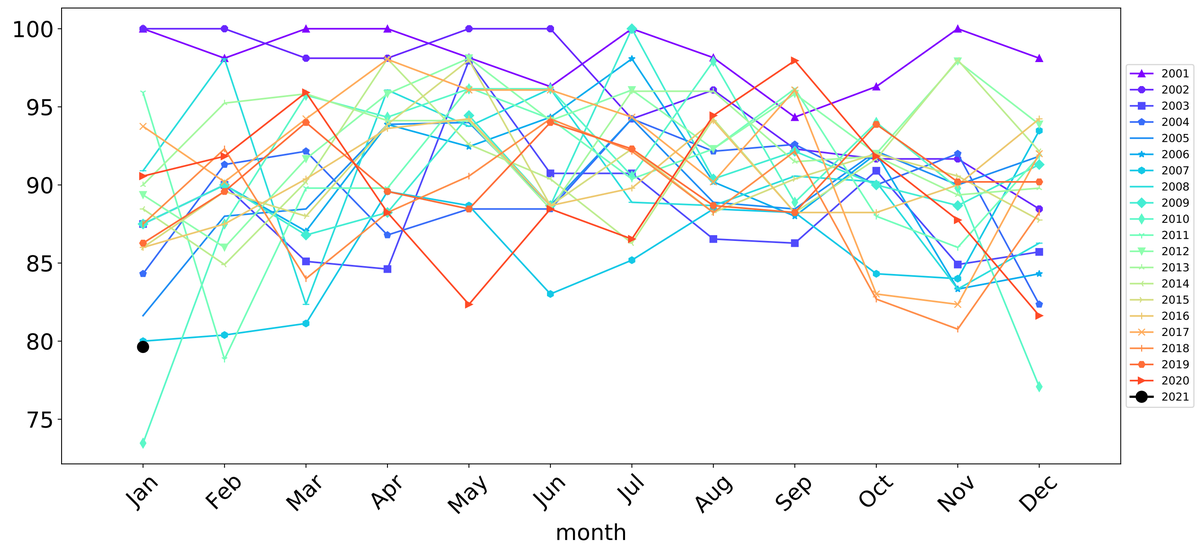
Wind erosion historical monthly area protected (Total Veg Cov >50%)

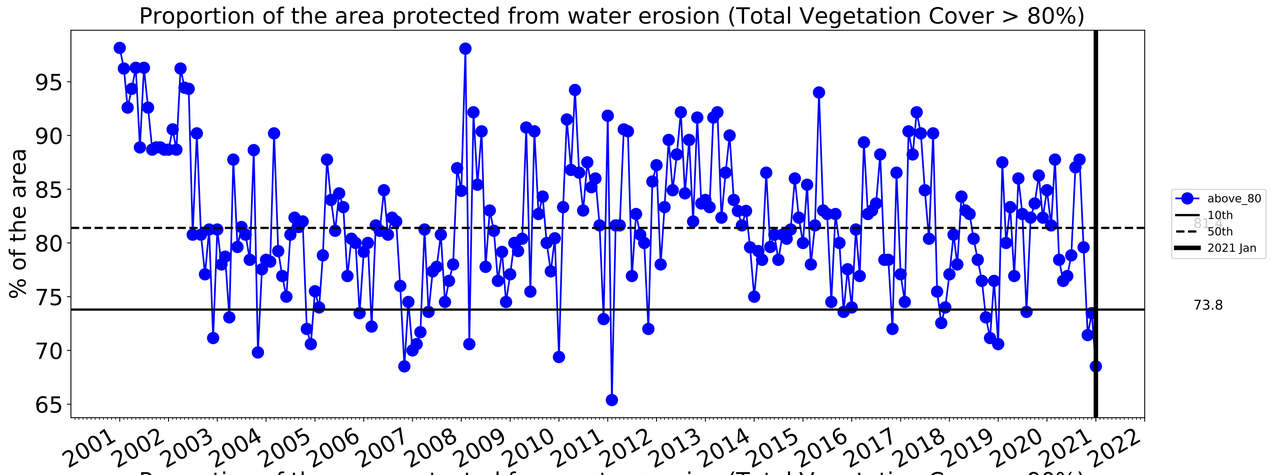


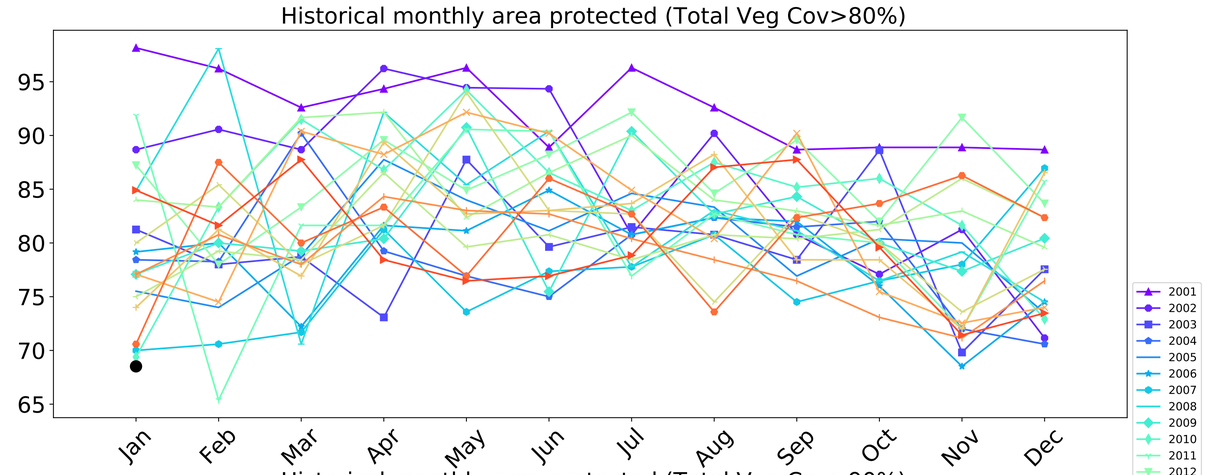
Proportion of the area protected from water erosion (Total Vegetation Cover > 70%)

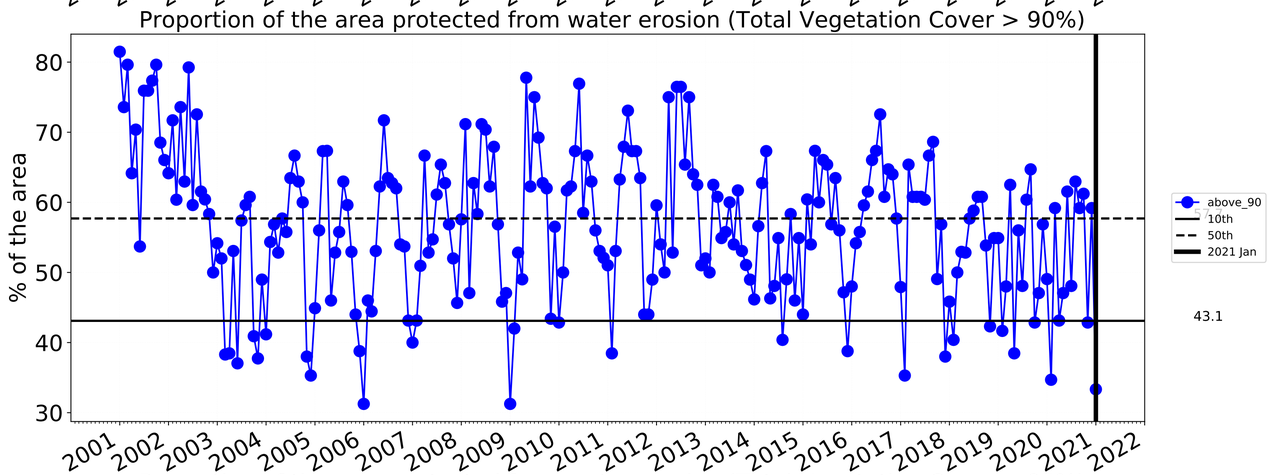


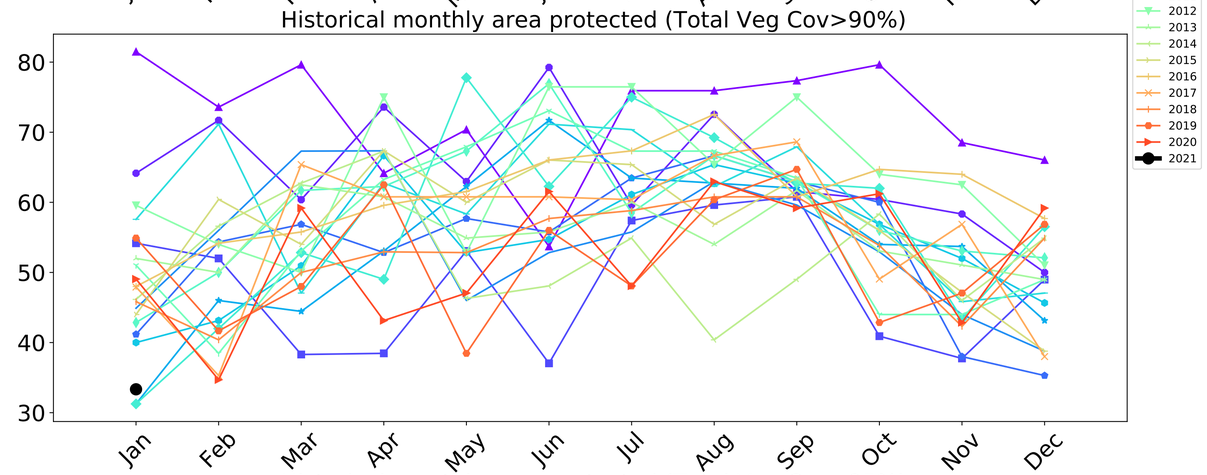
Water erosion historical monthly area protected (Total Veg Cov>70%)

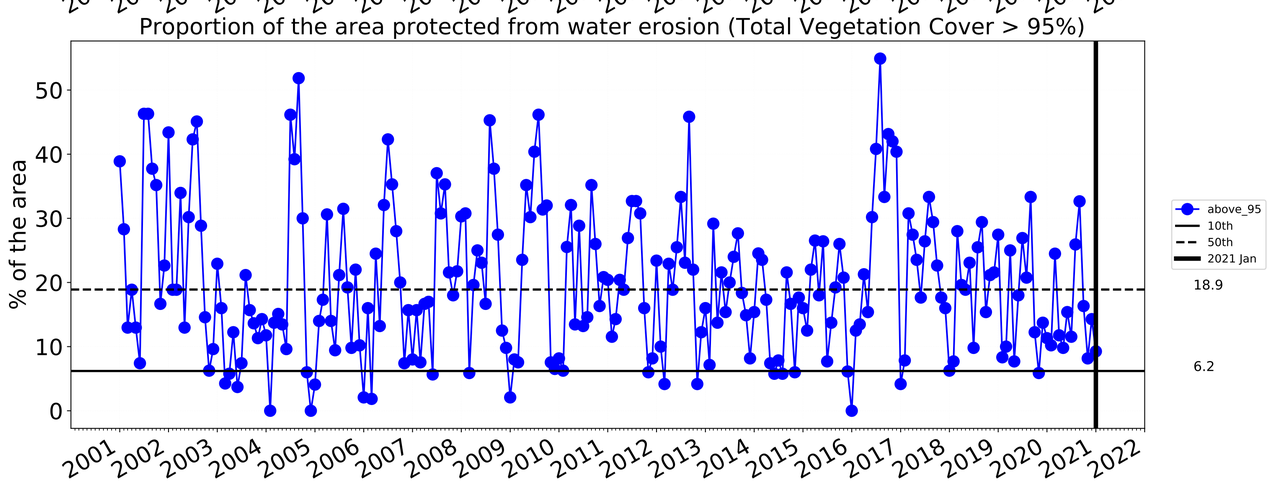


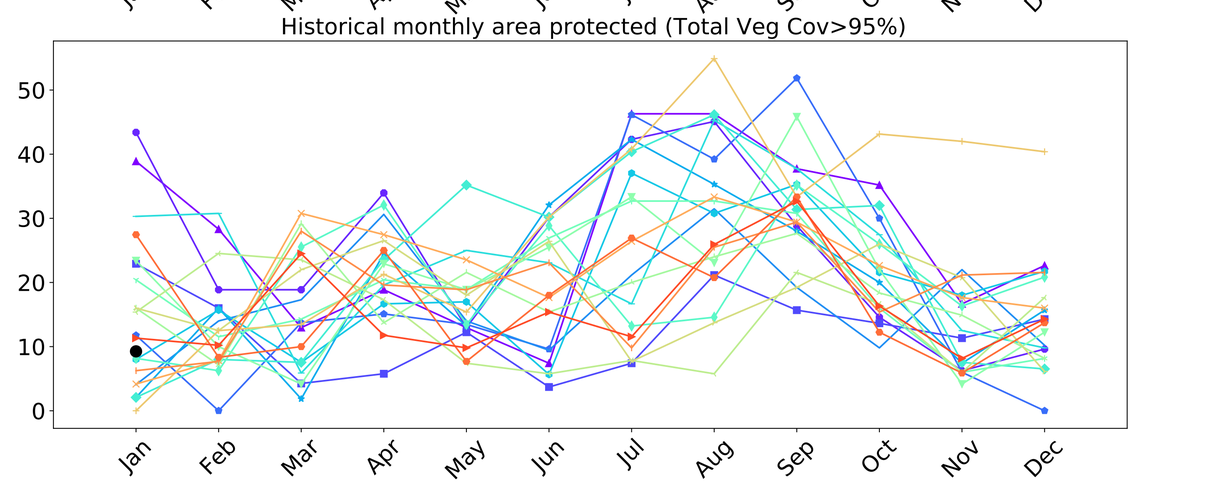

Proportion of the area protected from water erosion (Total Vegetation Cover > 80%)
% of the area
above_80
10th
50th
2021 Jan
73.8


Historical monthly area protected (Total Veg Cov>80%)
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021


Proportion of the area protected from water erosion (Total Vegetation Cover > 90%)
% of the area
above_90
10th
50th
2021 Jan
43.1


Historical monthly area protected (Total Veg Cov>90%)
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

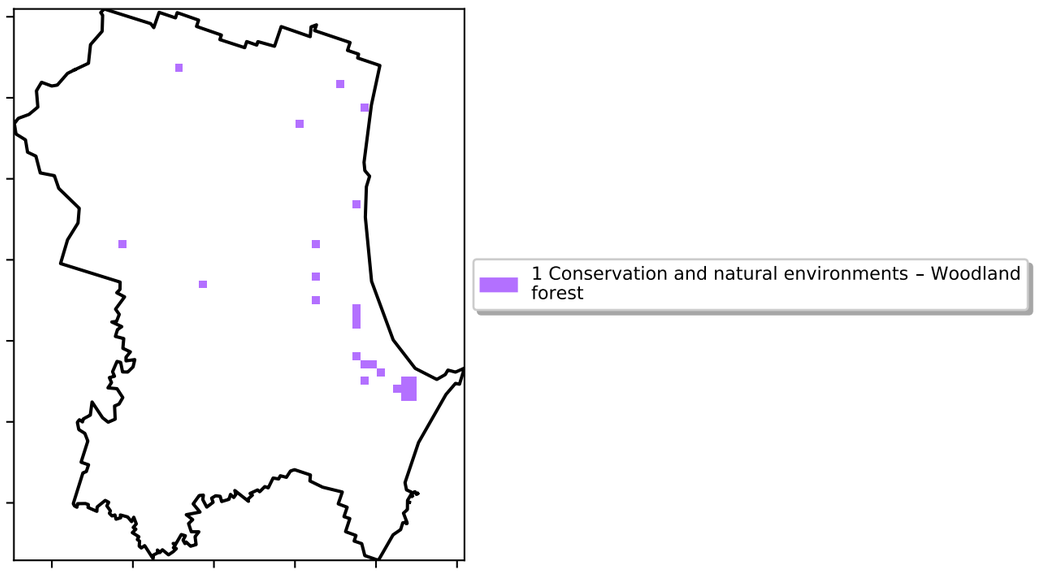

Proportion of the area protected from water erosion (Total Vegetation Cover > 95%)
% of the area
above_95
10th
50th
2021 Jan
18.9
6.2


Historical monthly area protected (Total Veg Cov>95%)
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

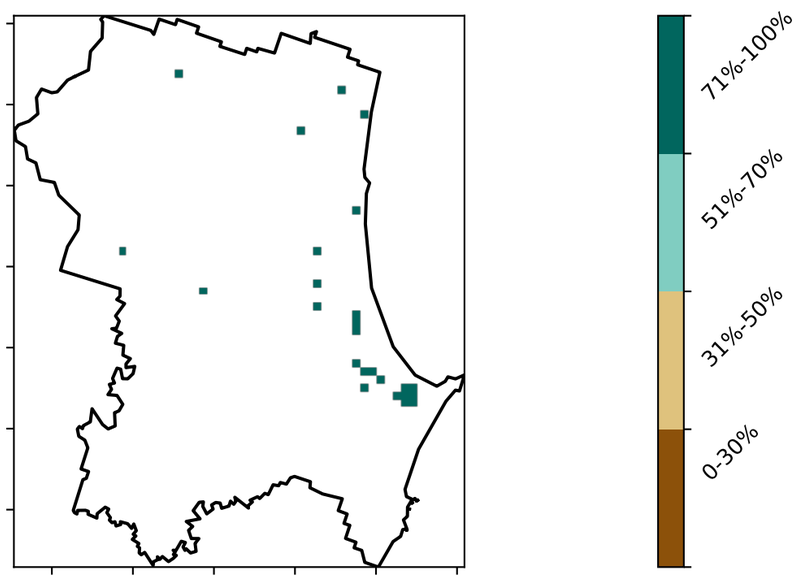
Conservation and natural environments Woodland forest

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

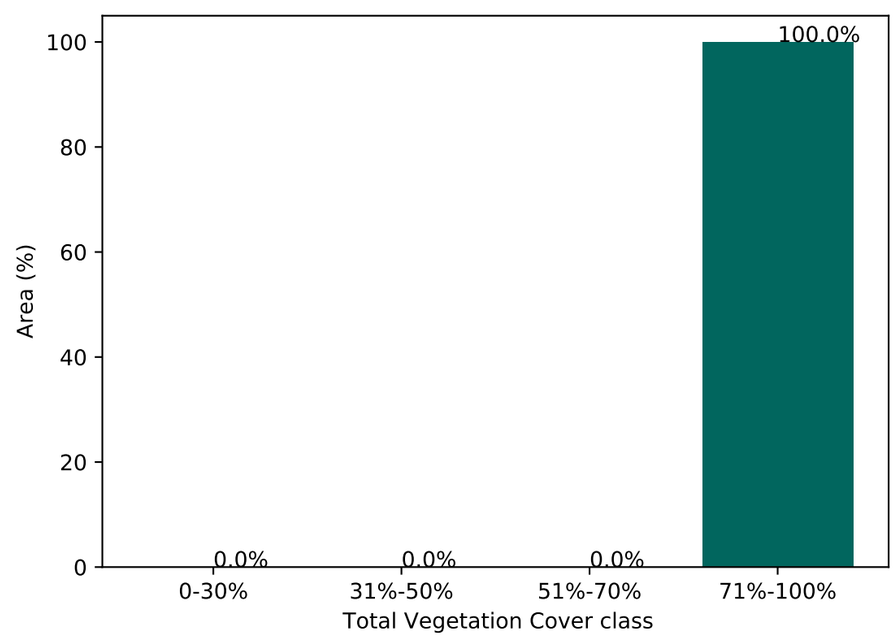
Land use and forest cover



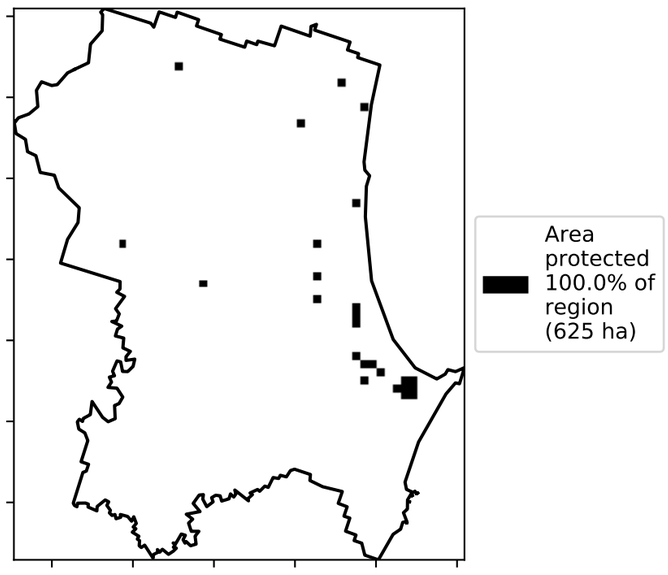
Total Vegetation Cover [%]



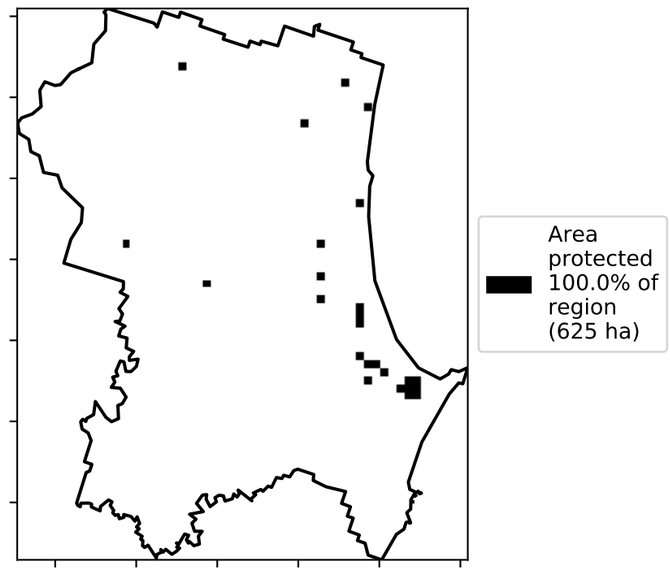
Proportion of vegetation cover class in area



% Area protected from water erosion (>70%)

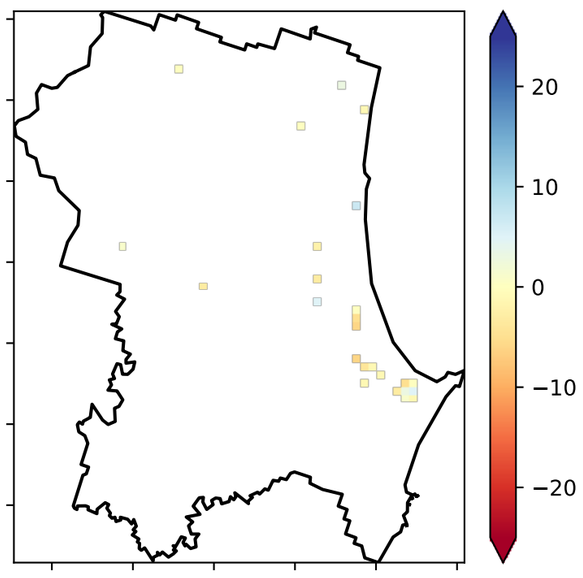


% Area protected from wind erosion (>50%)



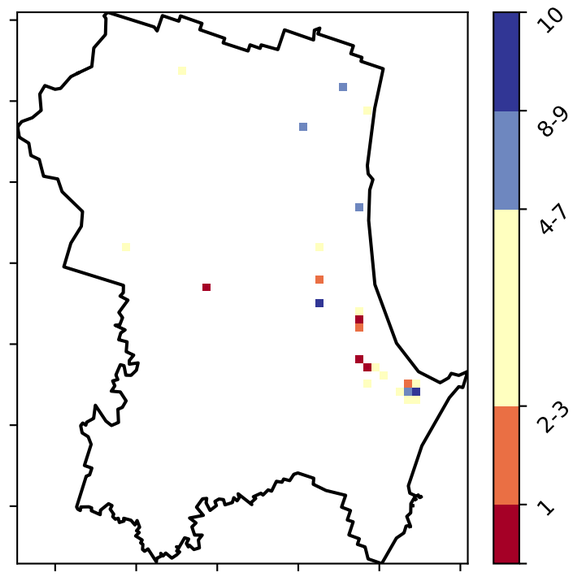
Total Vegetation Cover Anomaly [%]

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.



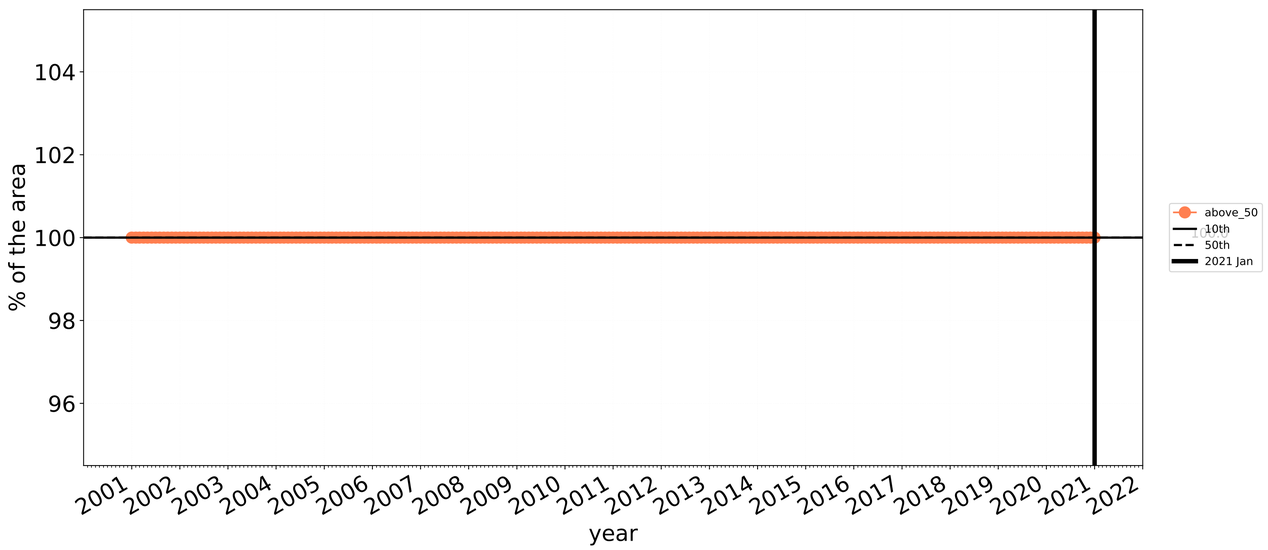
Total Vegetation Cover Decile [%]

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.

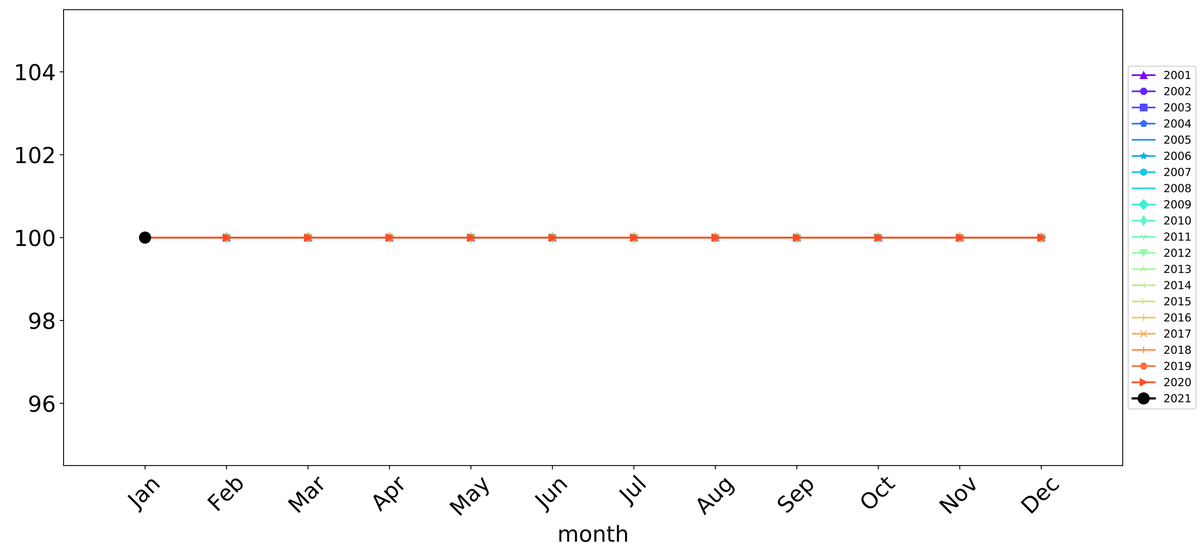


Conservation and natural environments Woodland forest timeseries

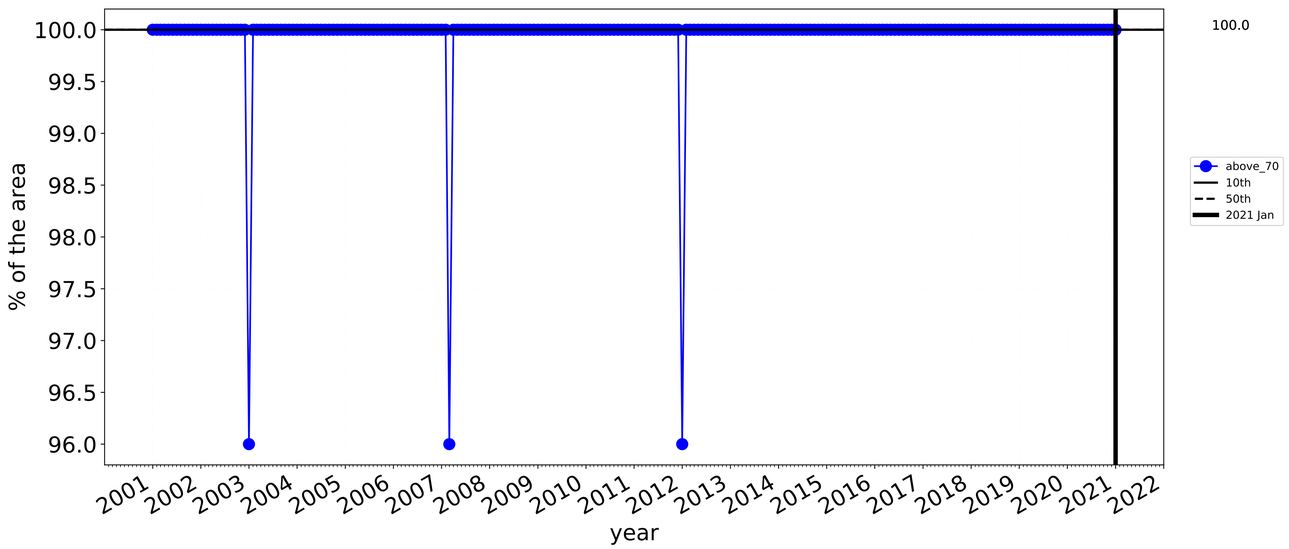
Proportion of the area protected from wind erosion (Total Vegetation Cover > 50%)



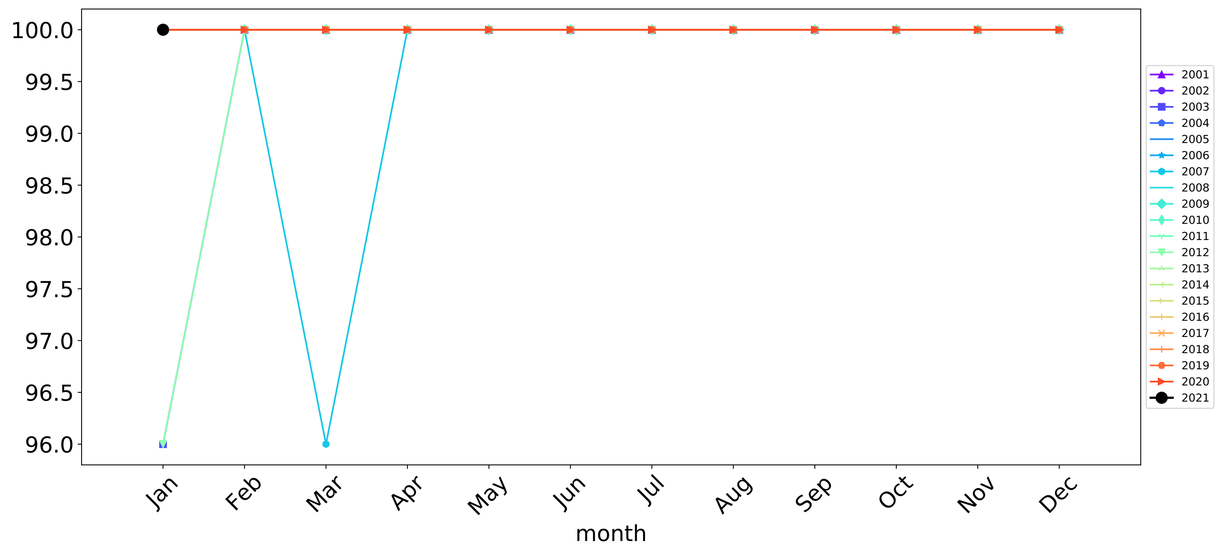
Wind erosion historical monthly area protected (Total Veg Cov >50%)

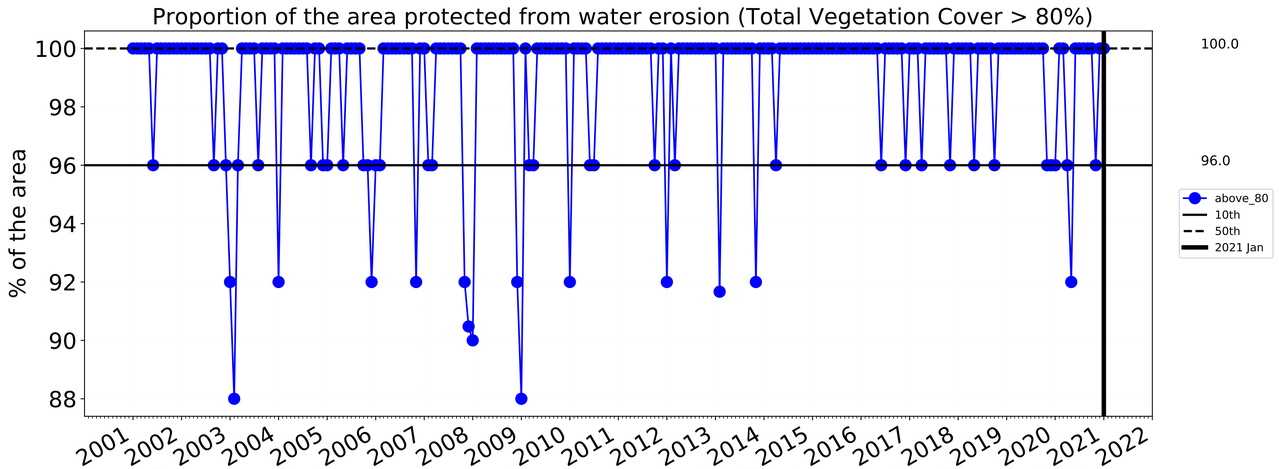


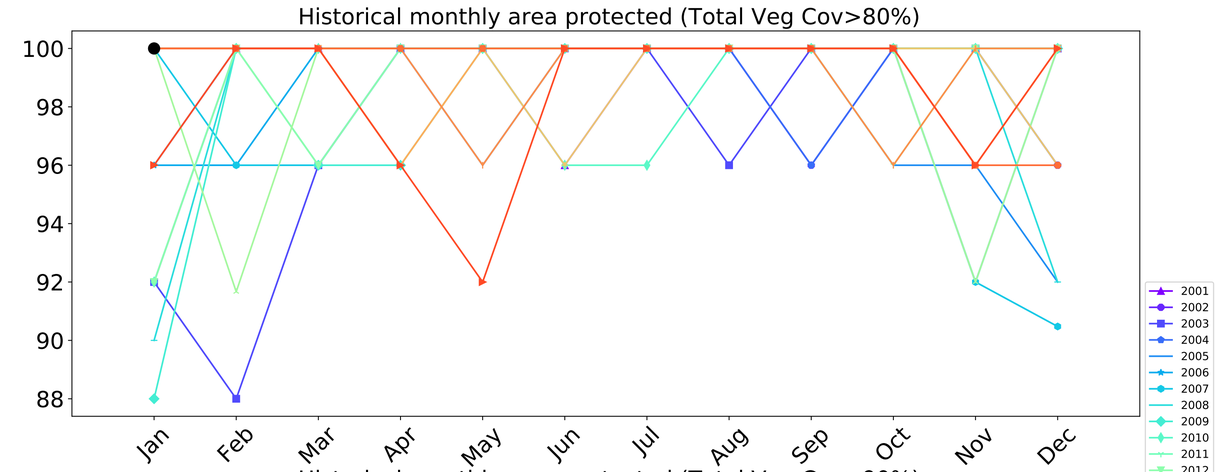
Proportion of the area protected from water erosion (Total Vegetation Cover > 70%)



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




Proportion of the area protected from water erosion (Total Vegetation Cover > 80%)
% of the area
100.0
96.0
above_80
10th
50th
2021 Jan


Historical monthly area protected (Total Veg Cov>80%)
Jan
Feb
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Aug
Sep
Oct
Nov
Dec
2001
2002
2003
2004
2005
2006
2007
2008
2009
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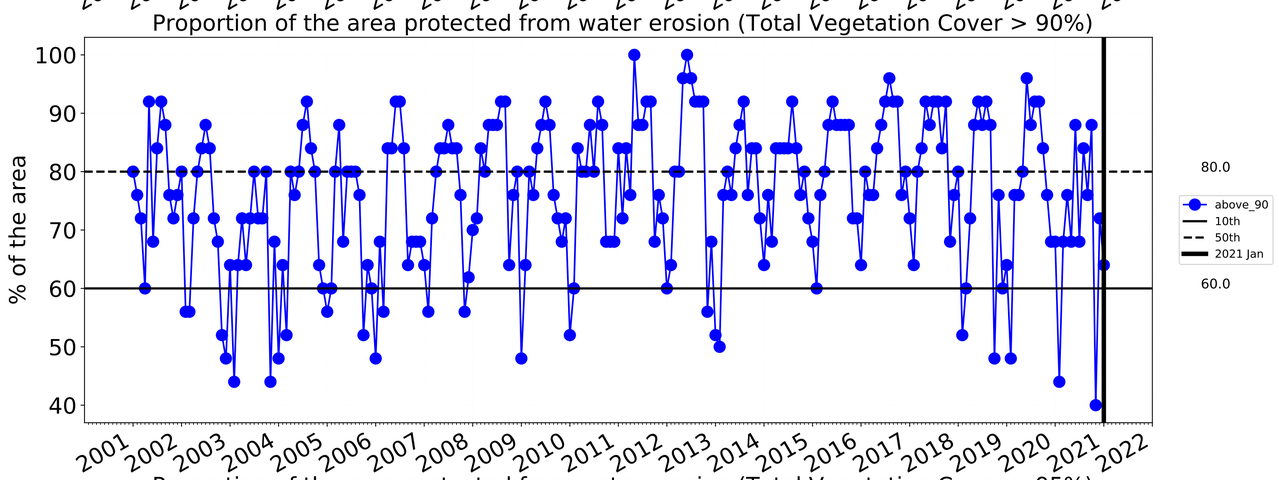
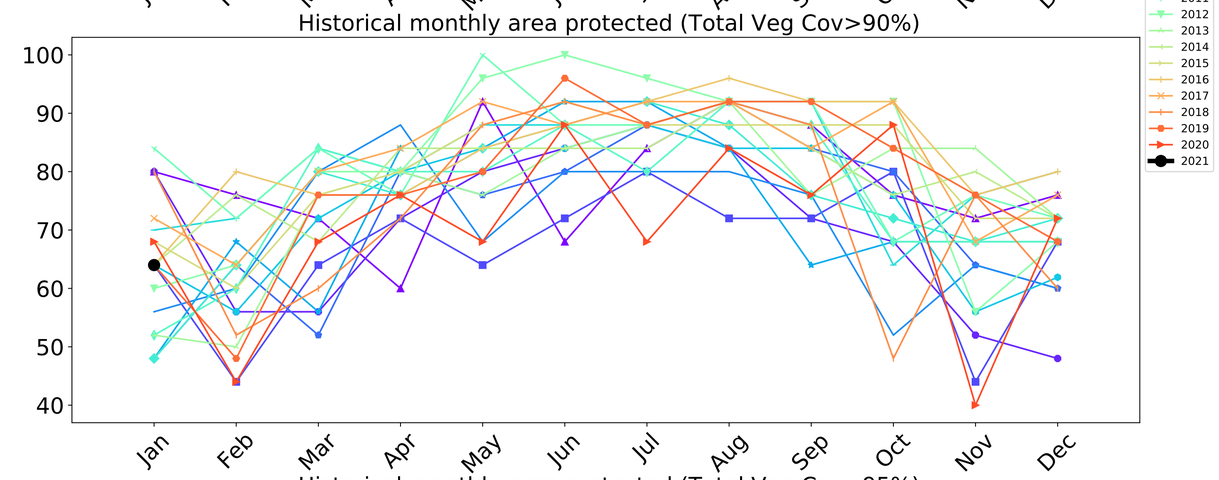
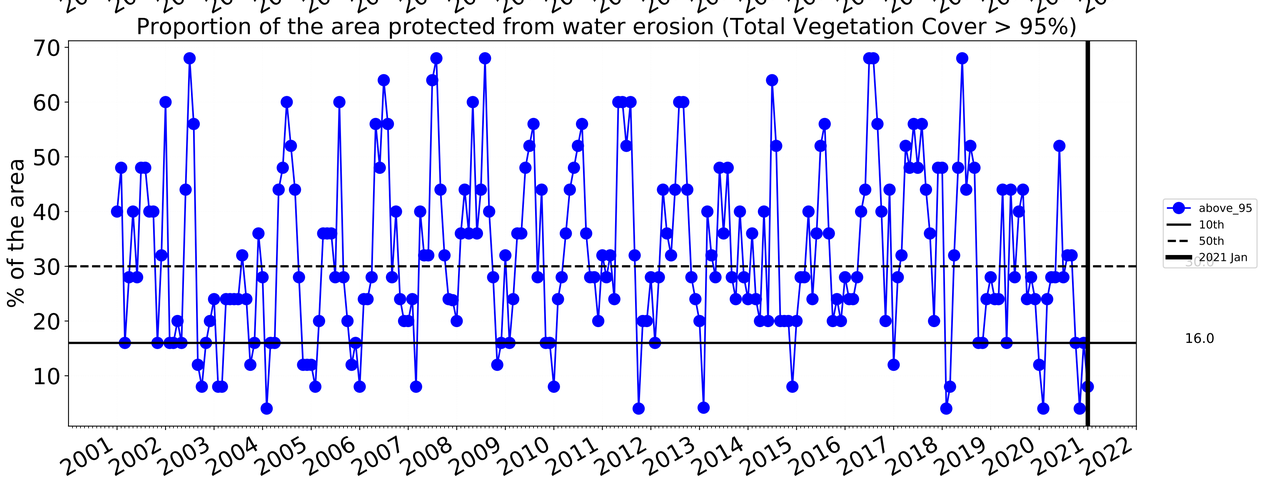
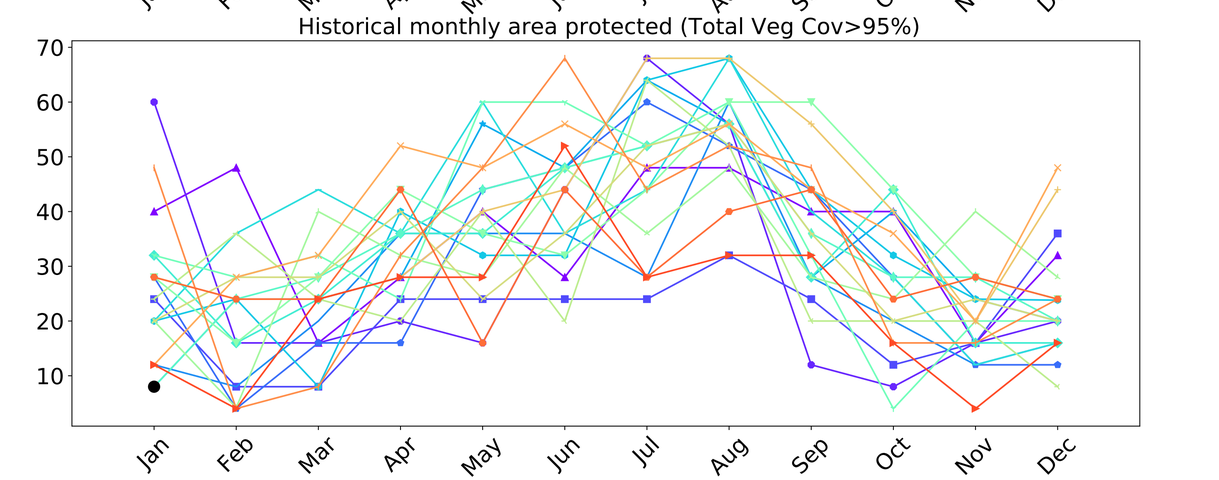
2014
2015
2016
2017
2018
2019
2020
2021


Proportion of the area protected from water erosion (Total Vegetation Cover > 90%)
% of the area
80.0
60.0
above_90
10th
50th
2021 Jan


Historical monthly area protected (Total Veg Cov>90%)
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

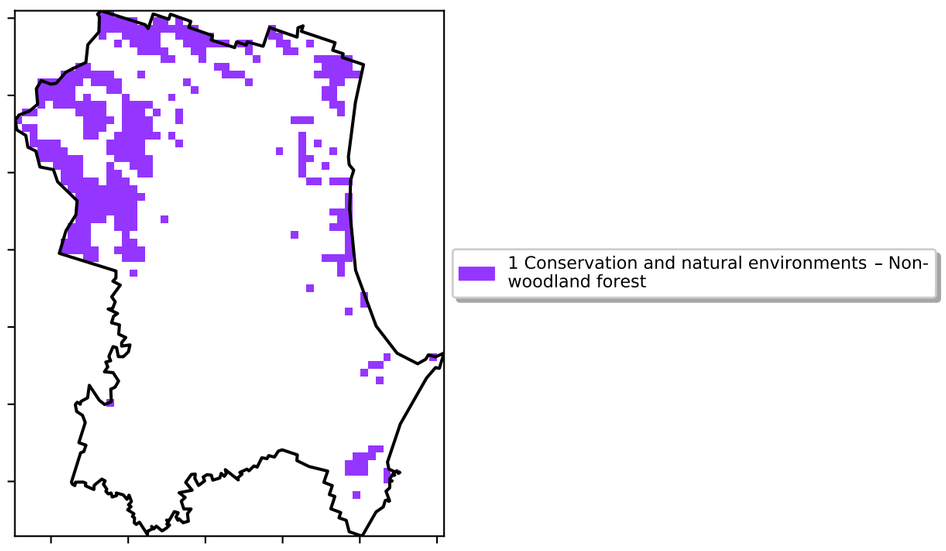

Proportion of the area protected from water erosion (Total Vegetation Cover > 95%)
% of the area
16.0
above_95
10th
50th
2021 Jan


Historical monthly area protected (Total Veg Cov>95%)
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

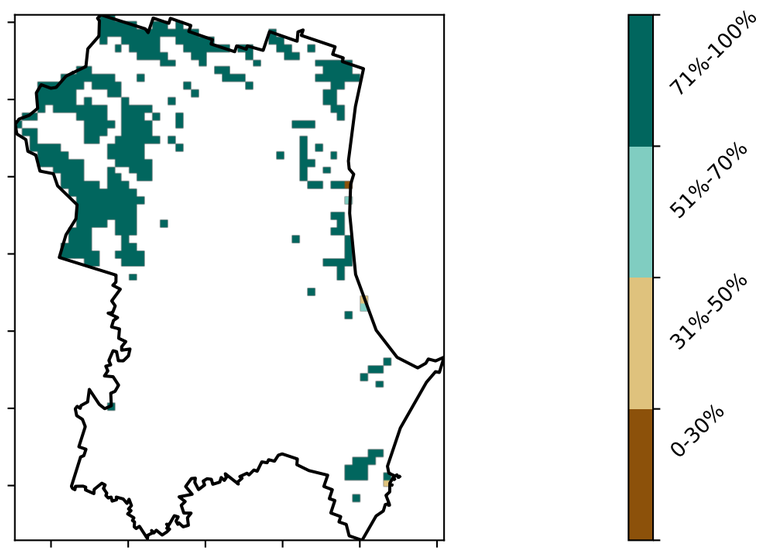
Conservation and natural environments Forest (non woodland)

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

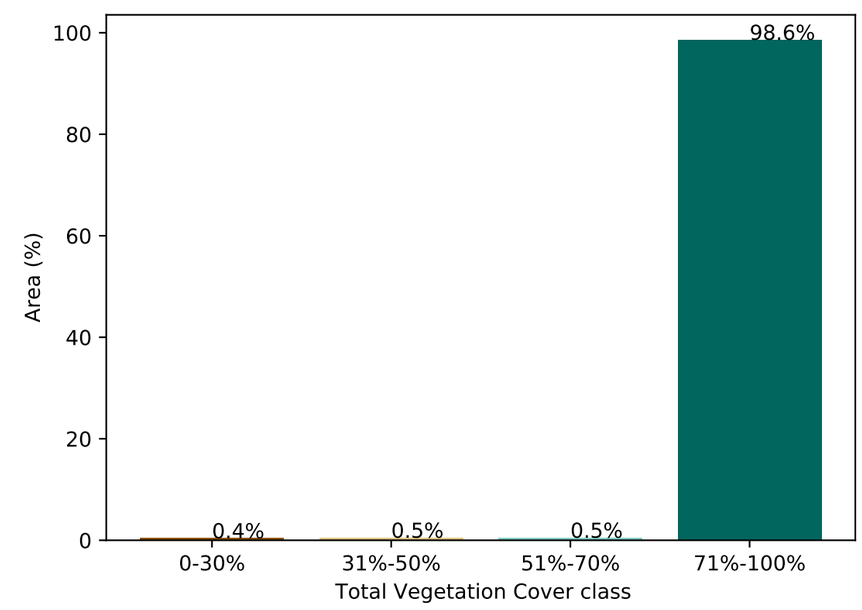
Land use and forest cover



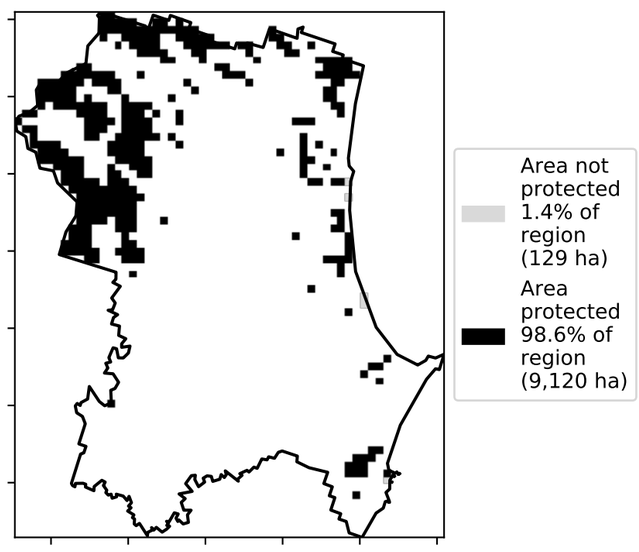
Total Vegetation Cover [%]



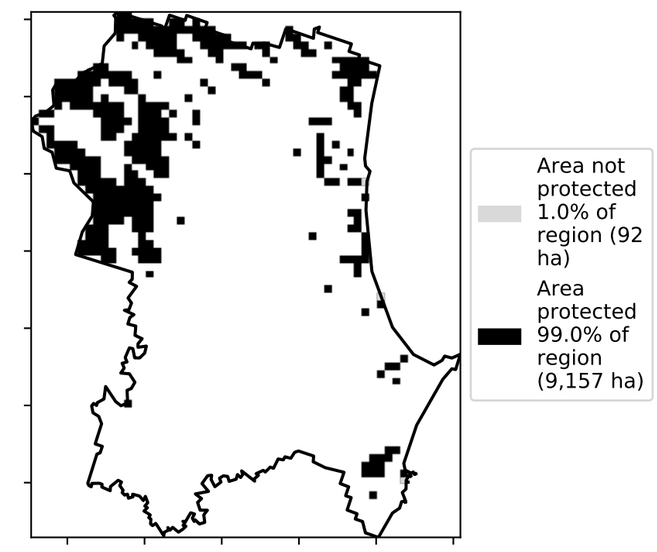
Proportion of vegetation cover class in area



% Area protected from water erosion (>70%)

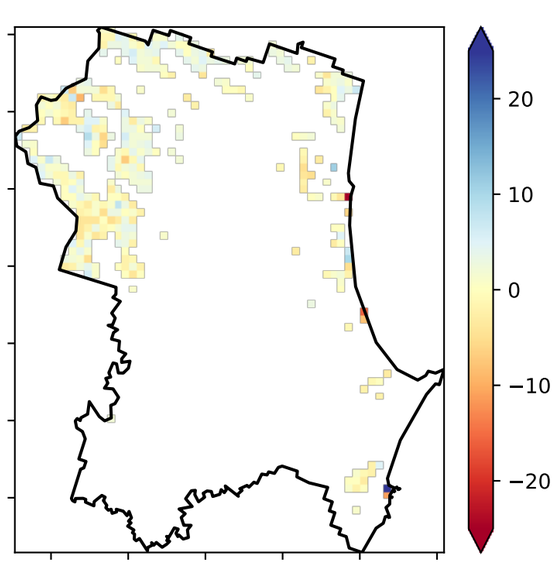


% Area protected from wind erosion (>50%)



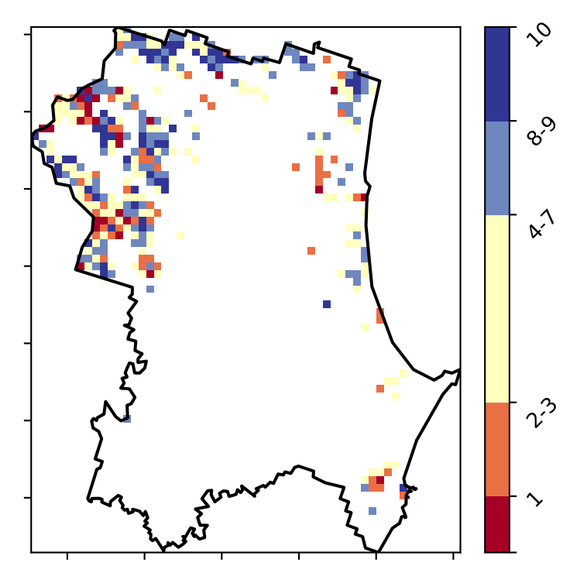
Total Vegetation Cover Anomaly [%]

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.



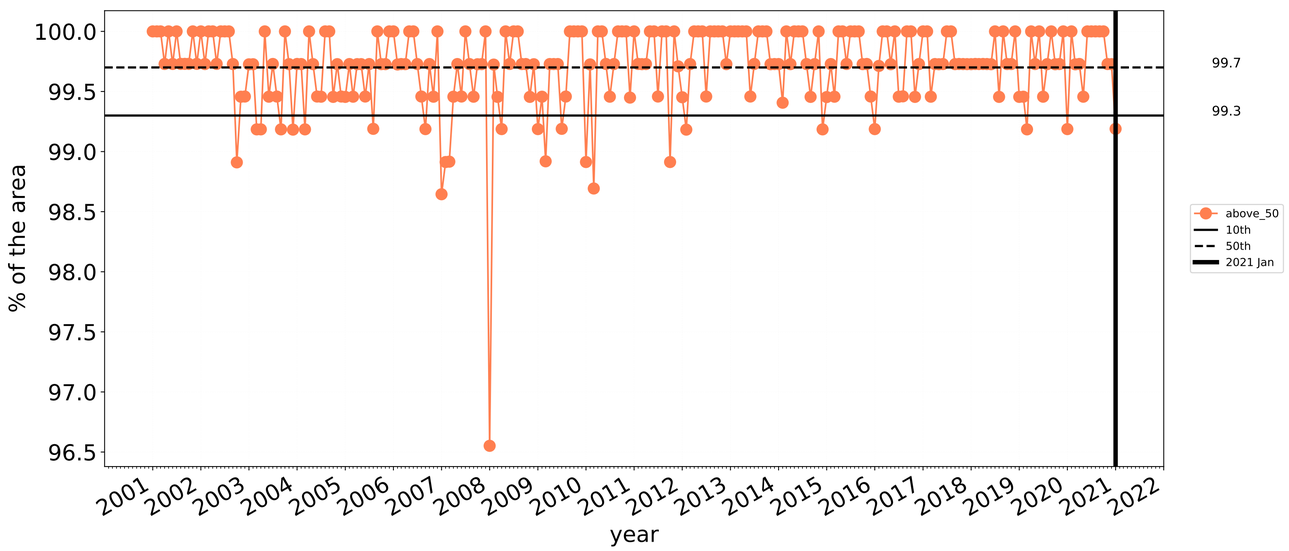
Total Vegetation Cover Decile [%]

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.

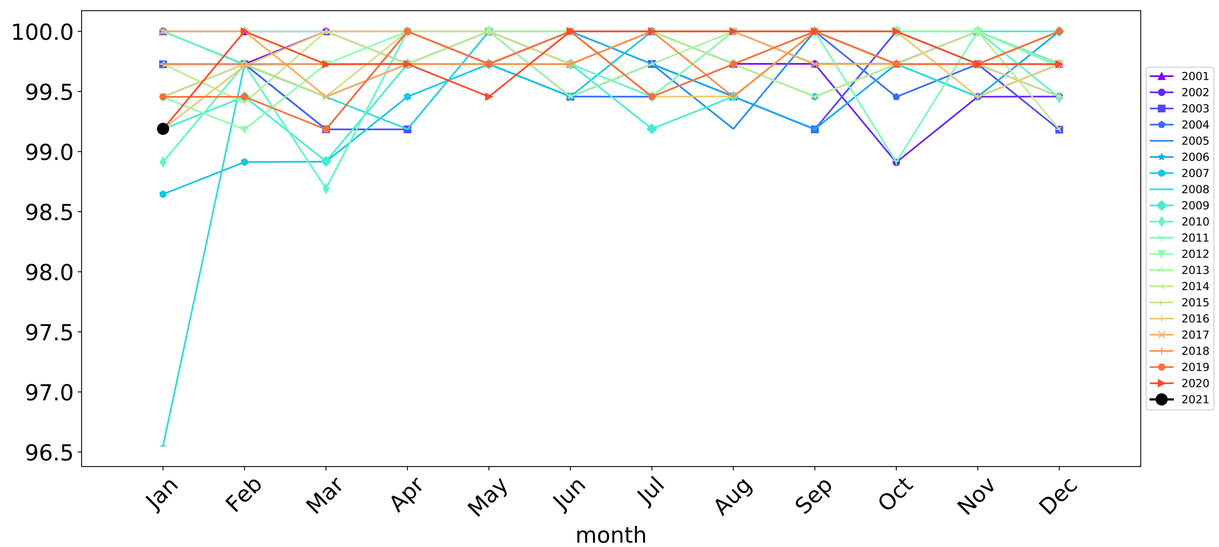


Conservation and natural environments Forest (non woodland) timeseries

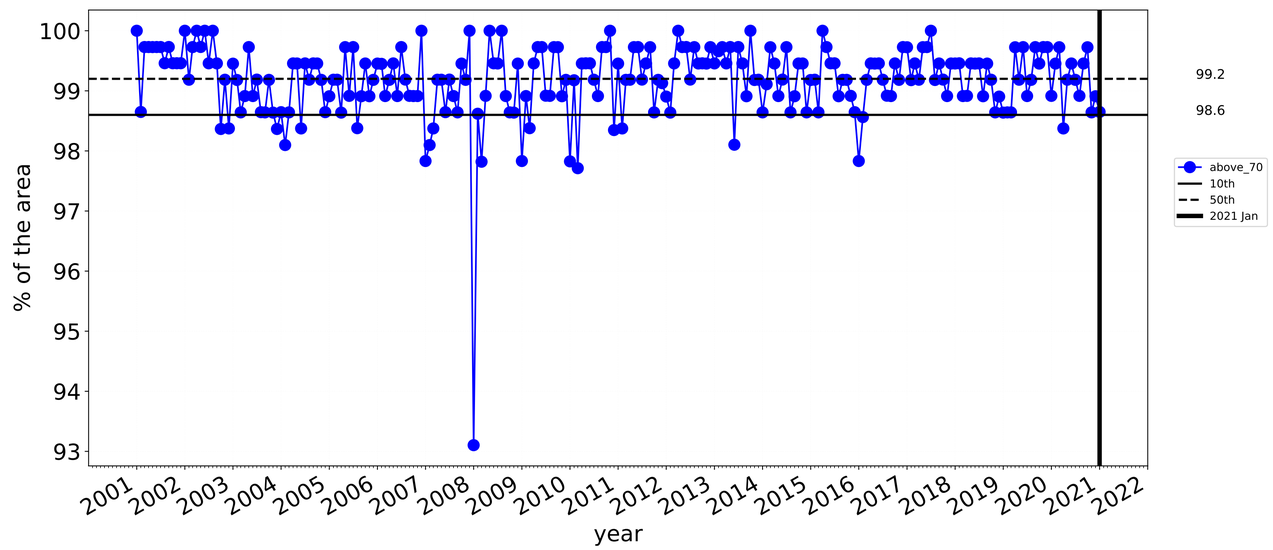
Proportion of the area protected from wind erosion (Total Vegetation Cover > 50%)



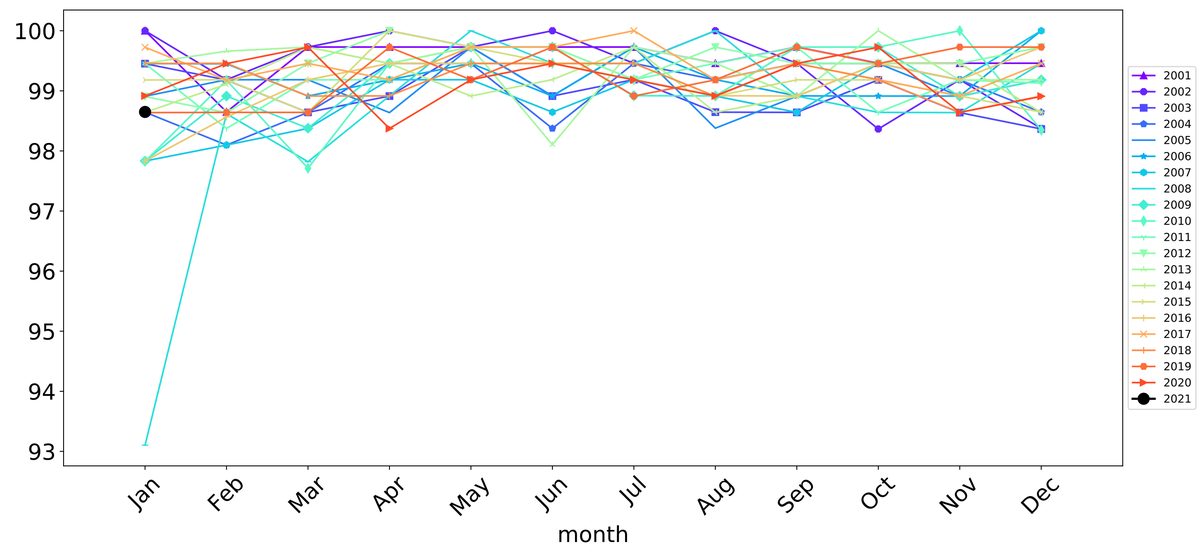
Wind erosion historical monthly area protected (Total Veg Cov >50%)

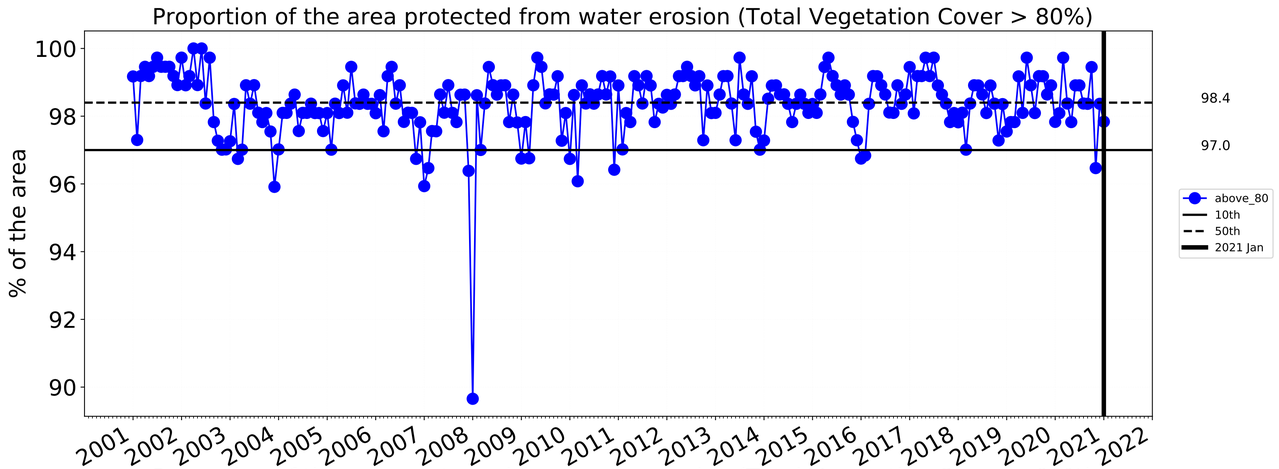


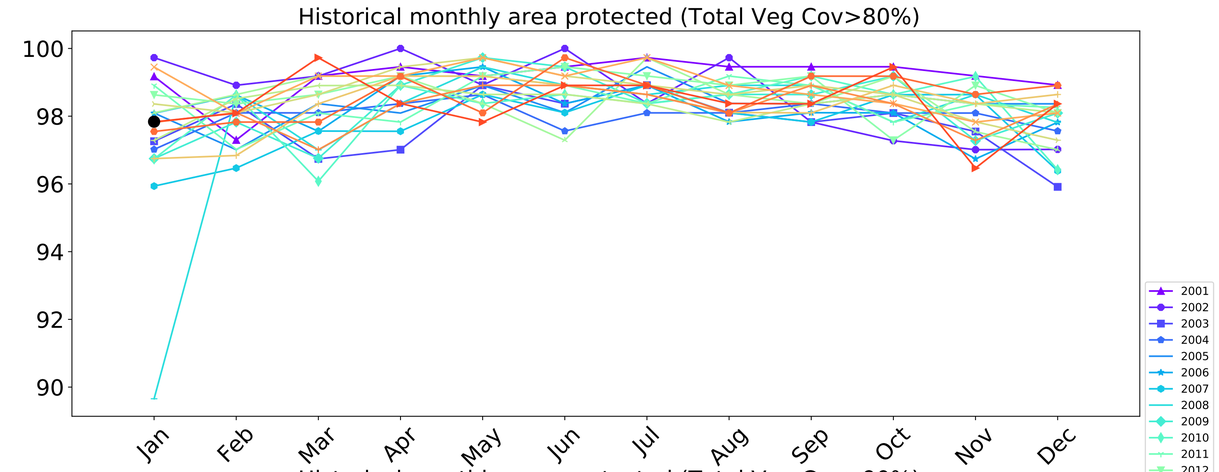
Proportion of the area protected from water erosion (Total Vegetation Cover > 70%)

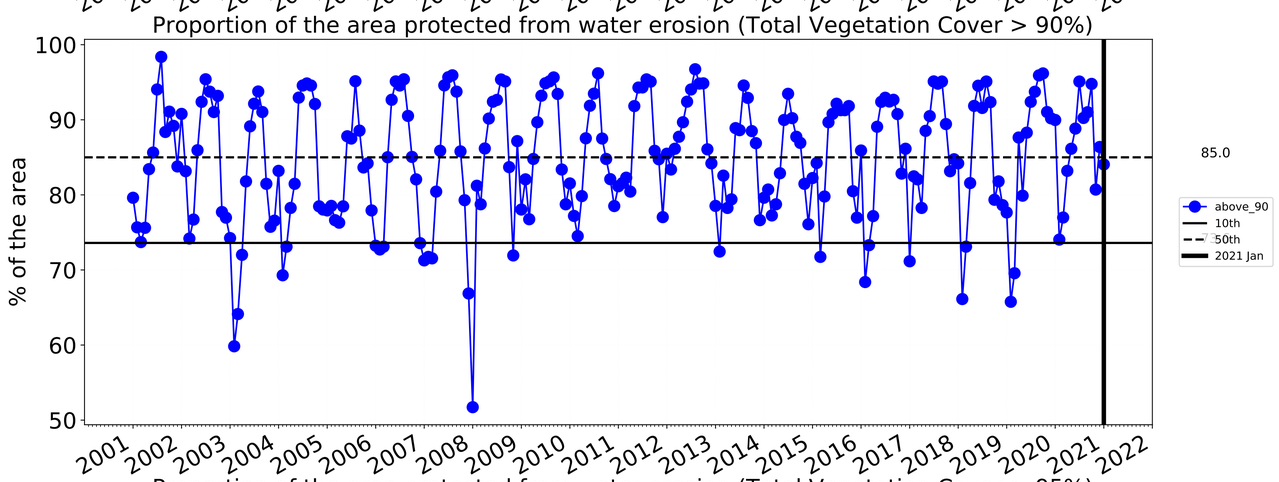


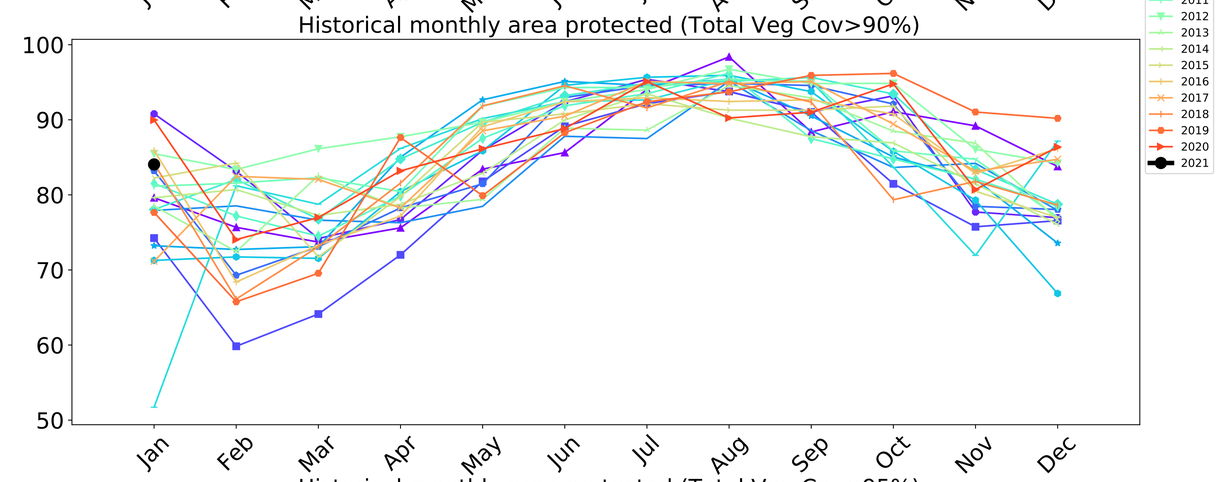
Water erosion historical monthly area protected (Total Veg Cov>70%)

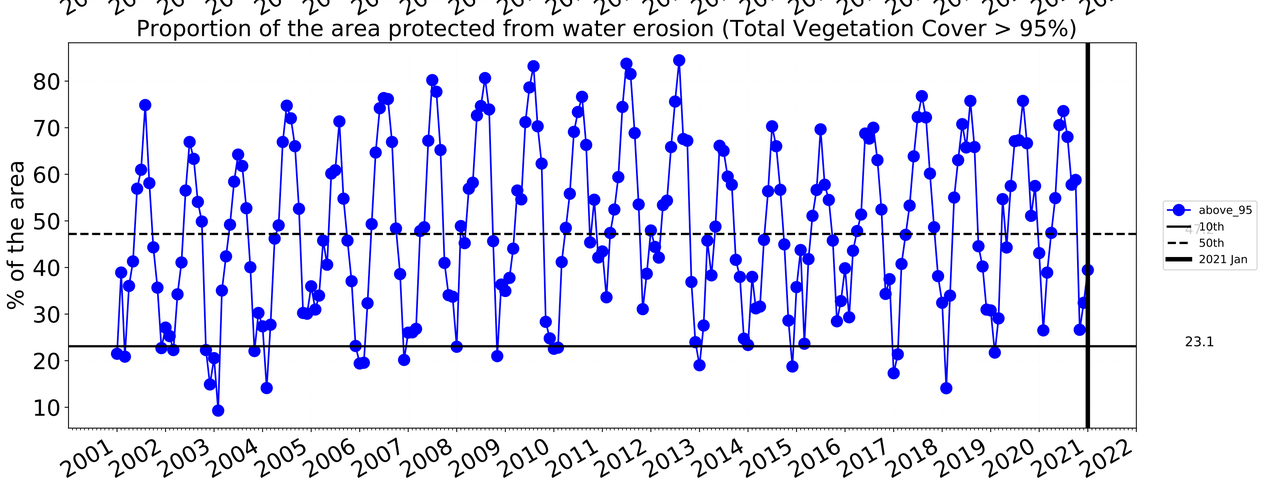


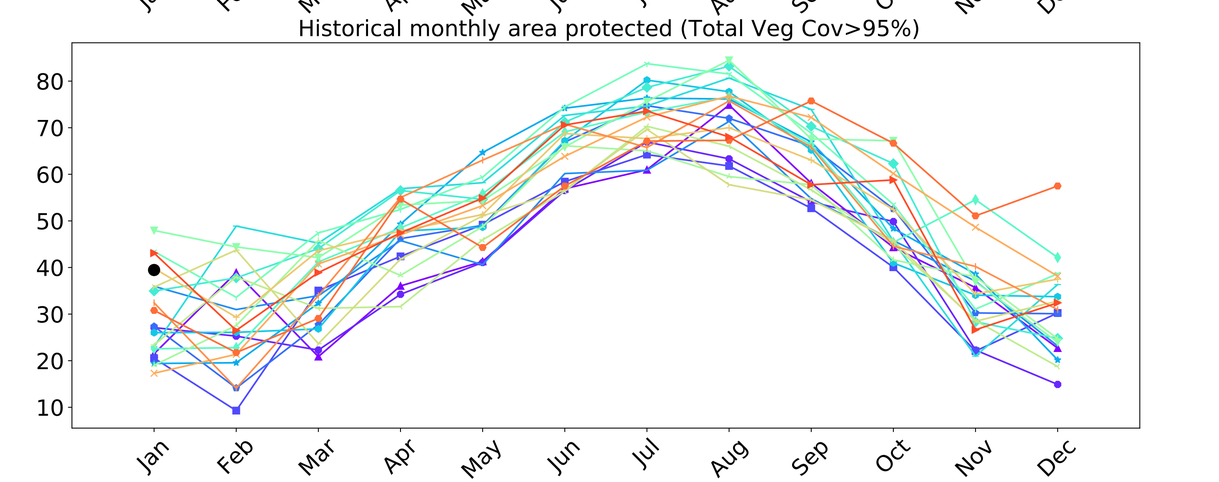

Proportion of the area protected from water erosion (Total Vegetation Cover > 80%)
% of the area
98.4
97.0
above_80
10th
50th
2021 Jan


Historical monthly area protected (Total Veg Cov>80%)
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021


Proportion of the area protected from water erosion (Total Vegetation Cover > 90%)
% of the area
85.0
above_90
10th
50th
2021 Jan


Historical monthly area protected (Total Veg Cov>90%)
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

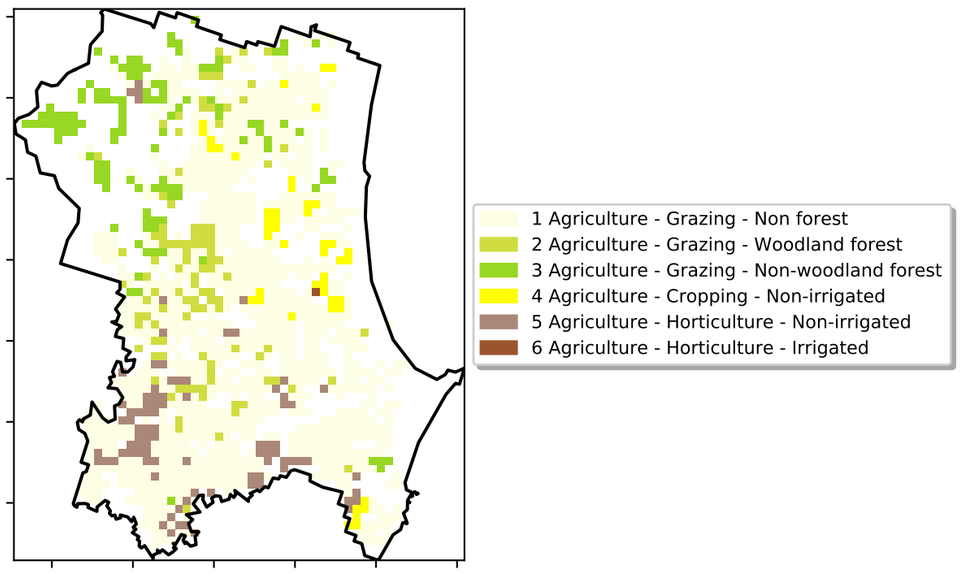

Proportion of the area protected from water erosion (Total Vegetation Cover > 95%)
% of the area
above_95
10th
50th
2021 Jan
23.1


Historical monthly area protected (Total Veg Cov>95%)
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

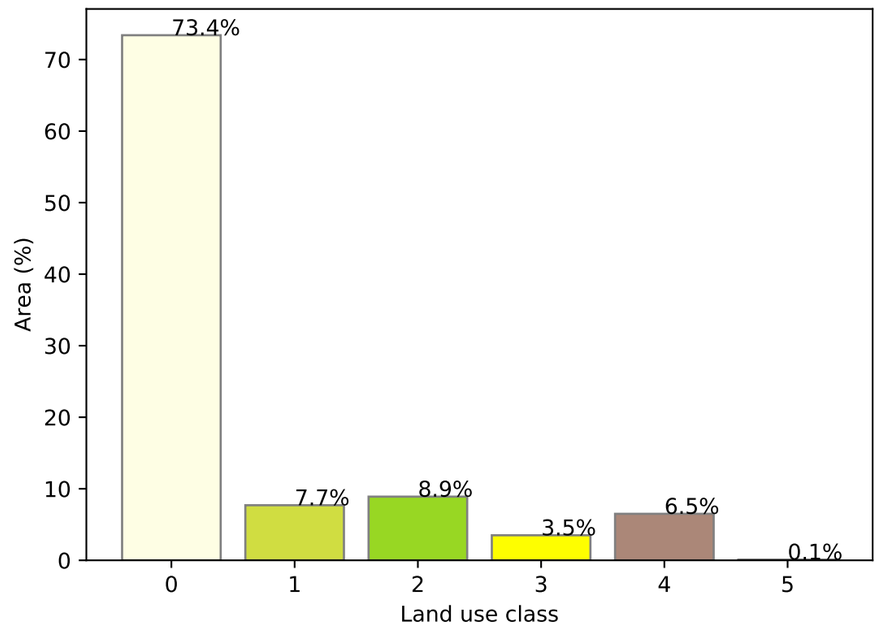
Agriculture

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

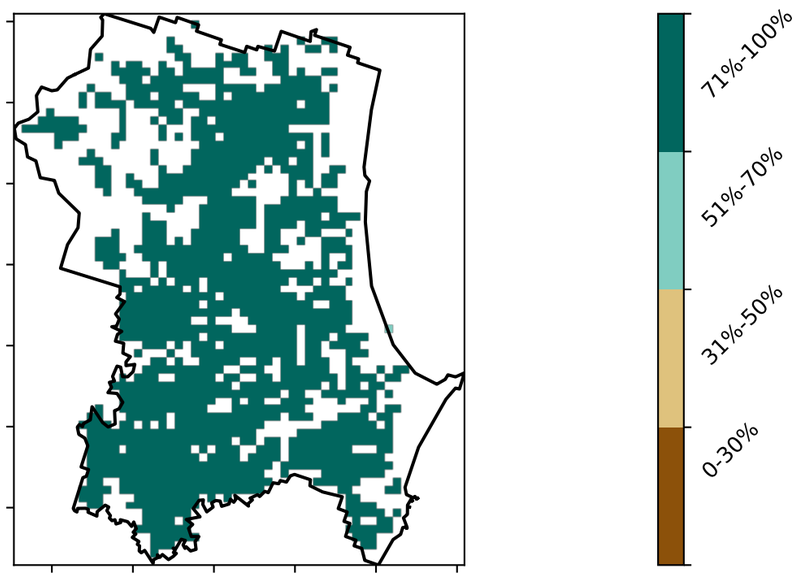
Land use and forest cover



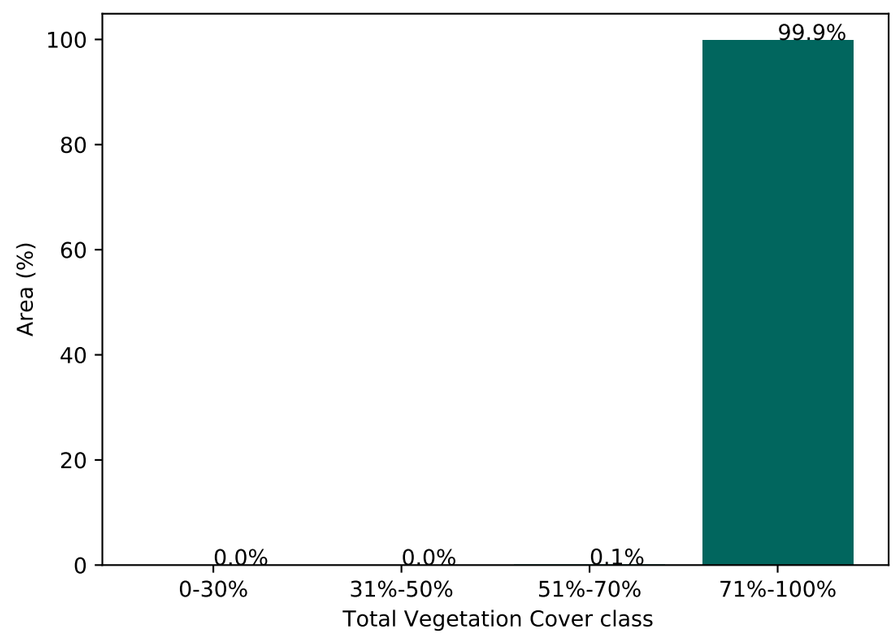
Proportion of each land class in area



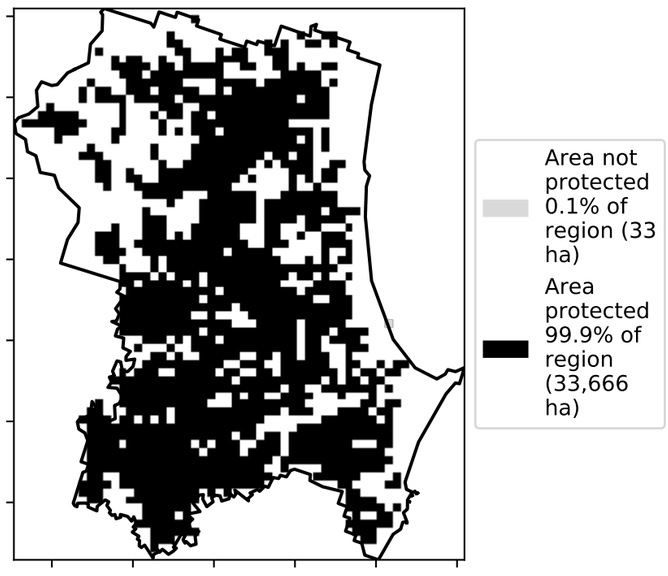
Total Vegetation Cover [%]



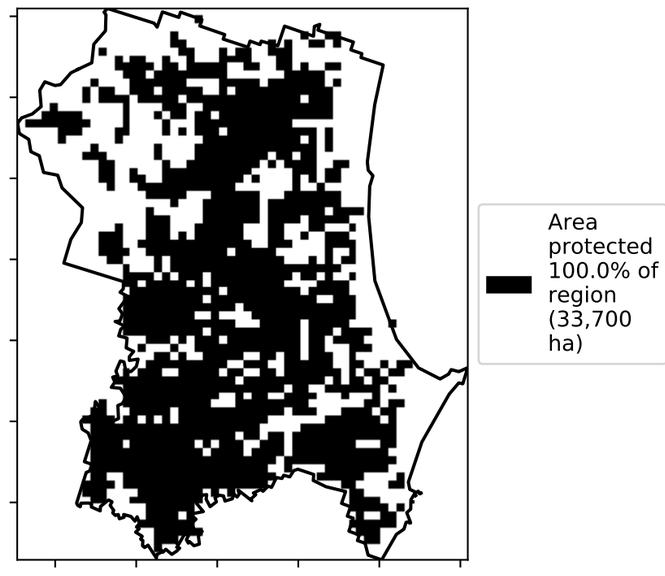
Proportion of vegetation cover class in area



% Area protected from water erosion (>70%)

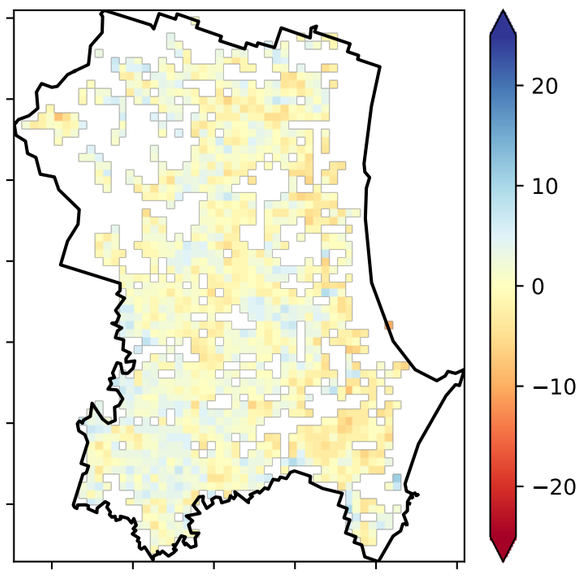


% Area protected from wind erosion (>50%)



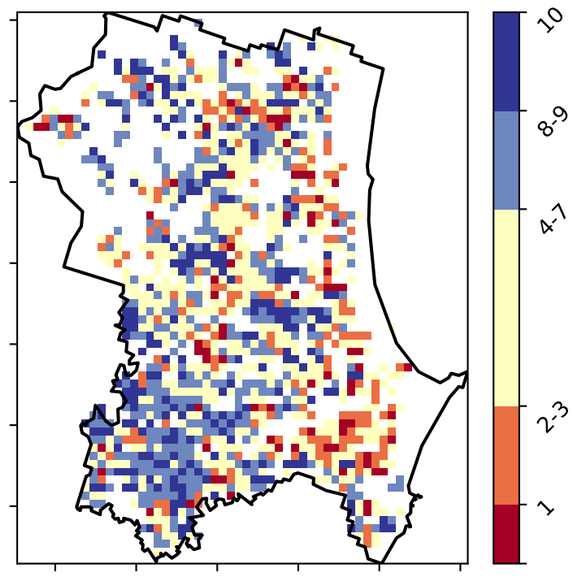
Total Vegetation Cover Anomaly [%]

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.



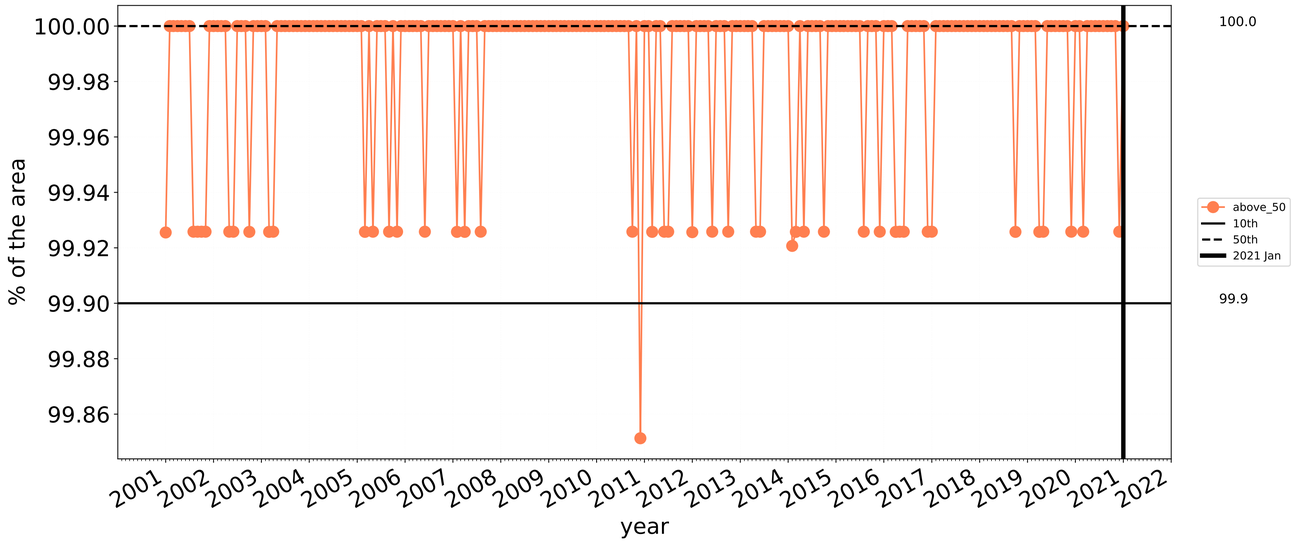
Total Vegetation Cover Decile [%]

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.

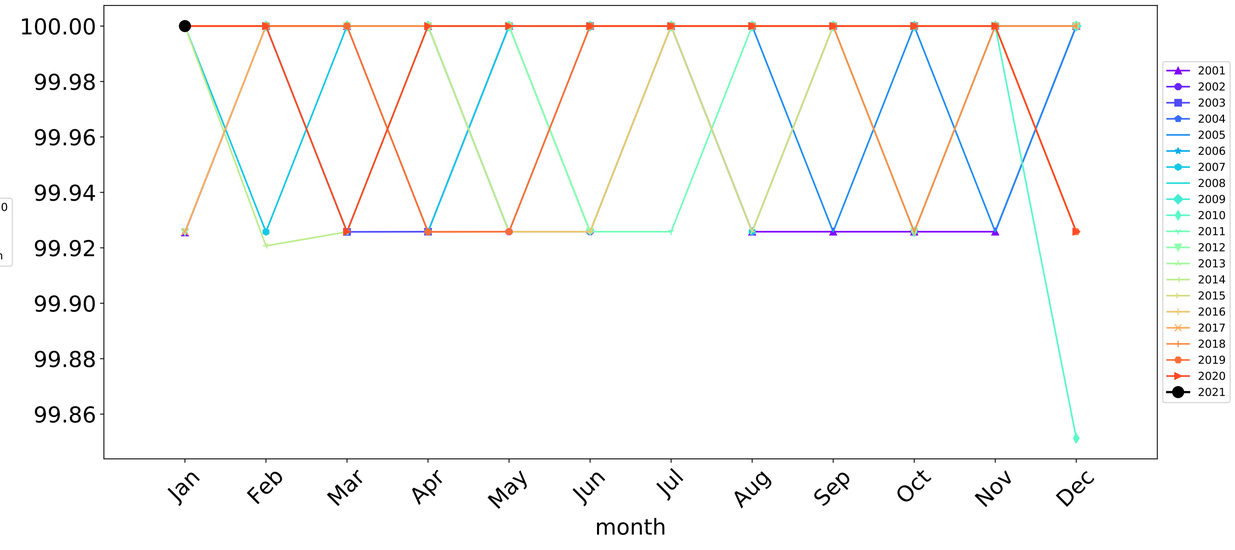


Agriculture timeseries

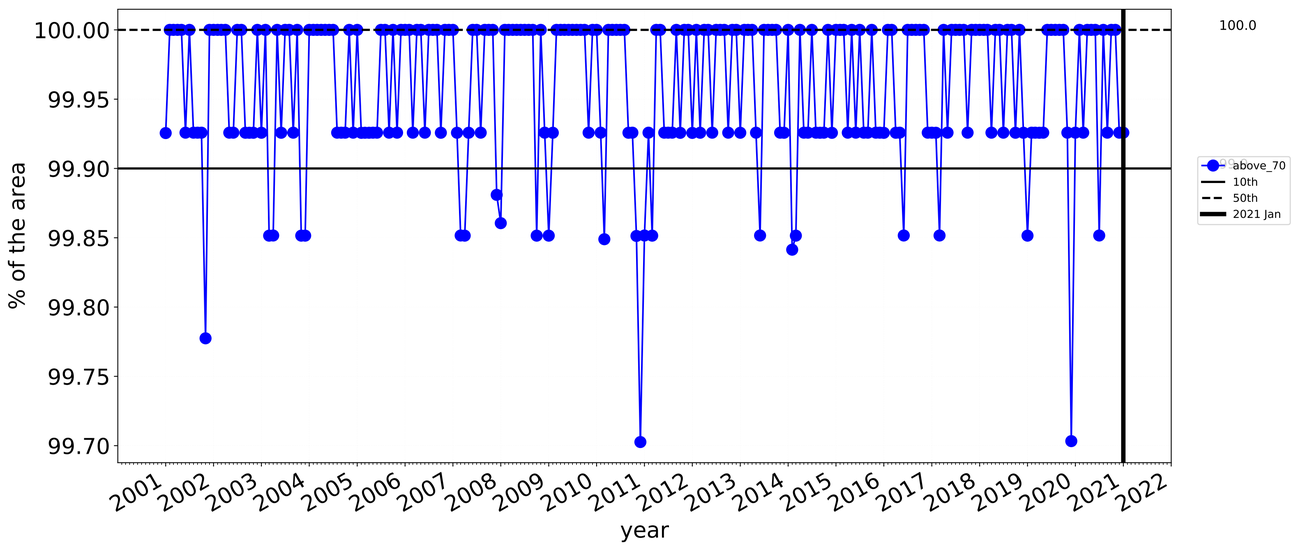
Proportion of the area protected from wind erosion (Total Vegetation Cover > 50%)



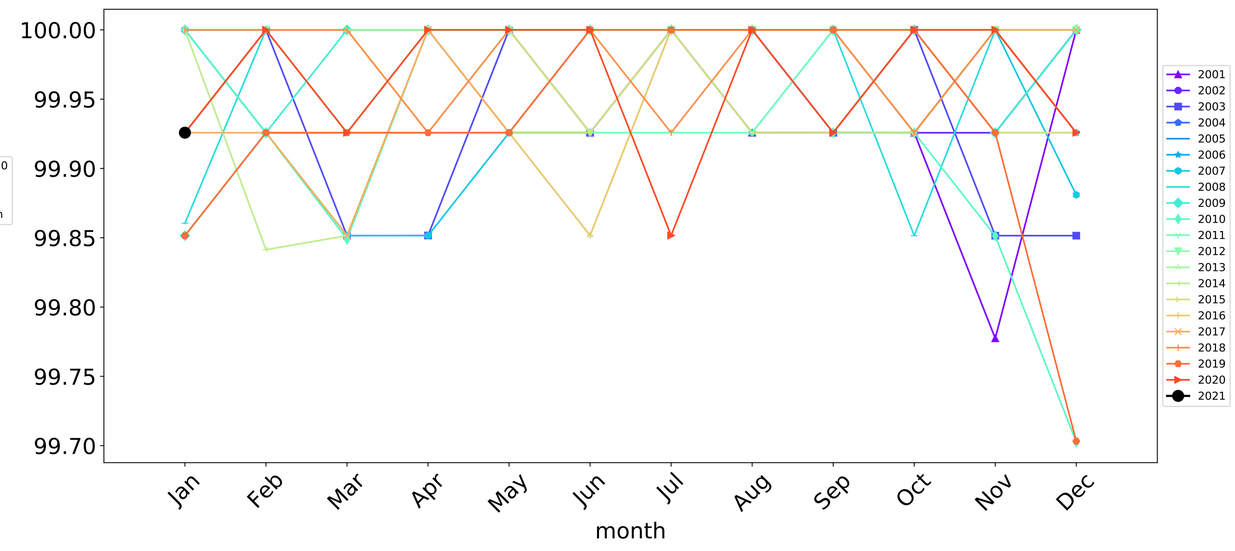
Wind erosion historical monthly area protected (Total Veg Cov >50%)

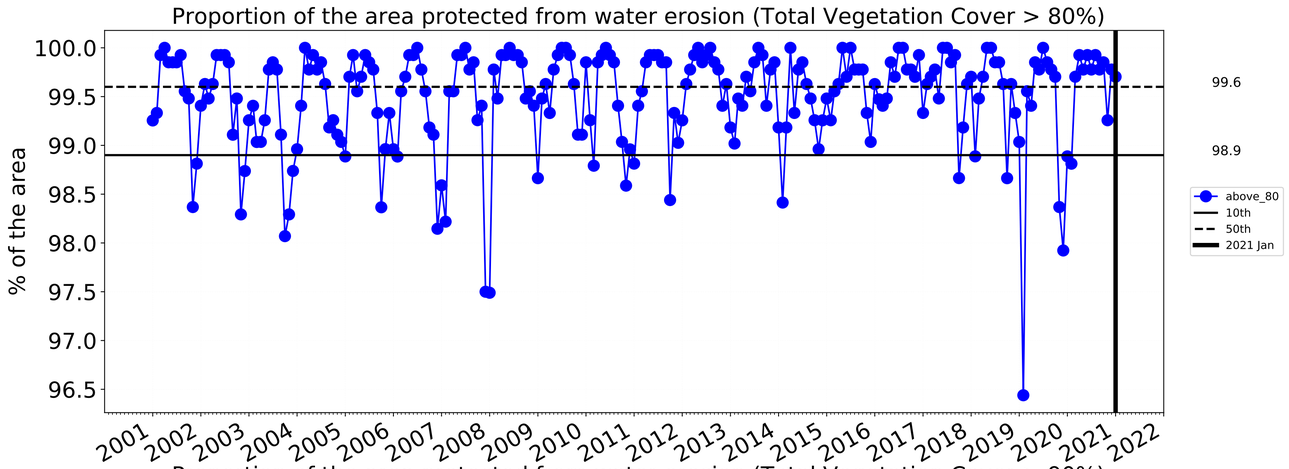


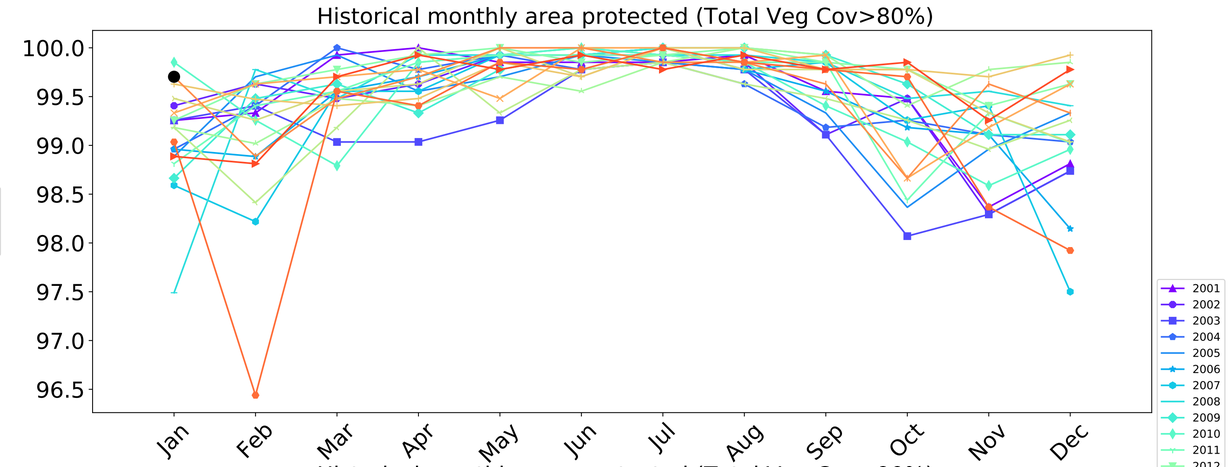
Proportion of the area protected from water erosion (Total Vegetation Cover > 70%)



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




Proportion of the area protected from water erosion (Total Vegetation Cover > 80%)
% of the area
99.6
98.9
above_80
10th
50th
2021 Jan


Historical monthly area protected (Total Veg Cov>80%)
Jan
Feb
Mar
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Nov
Dec
2001
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2003
2004
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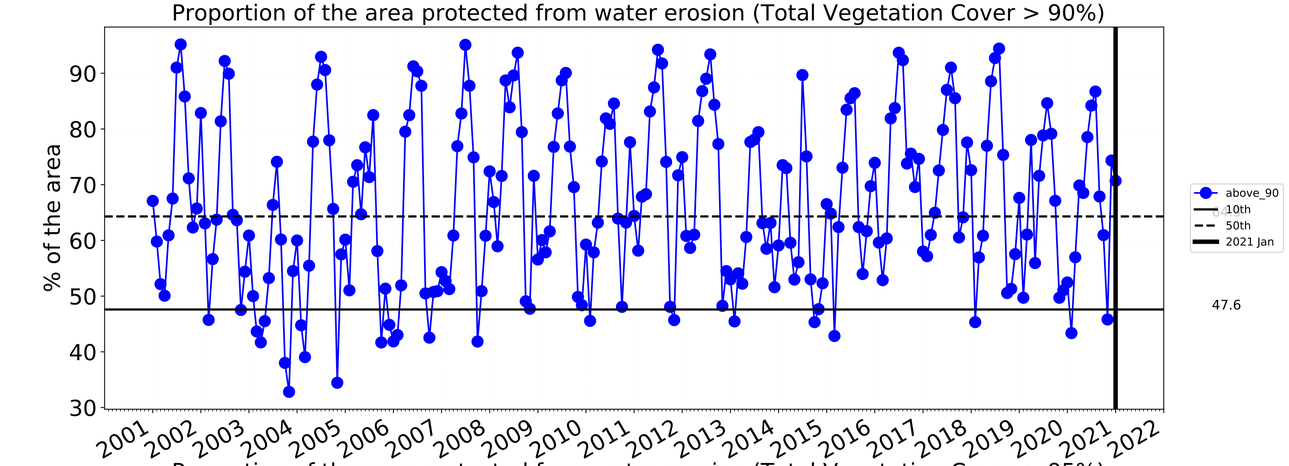
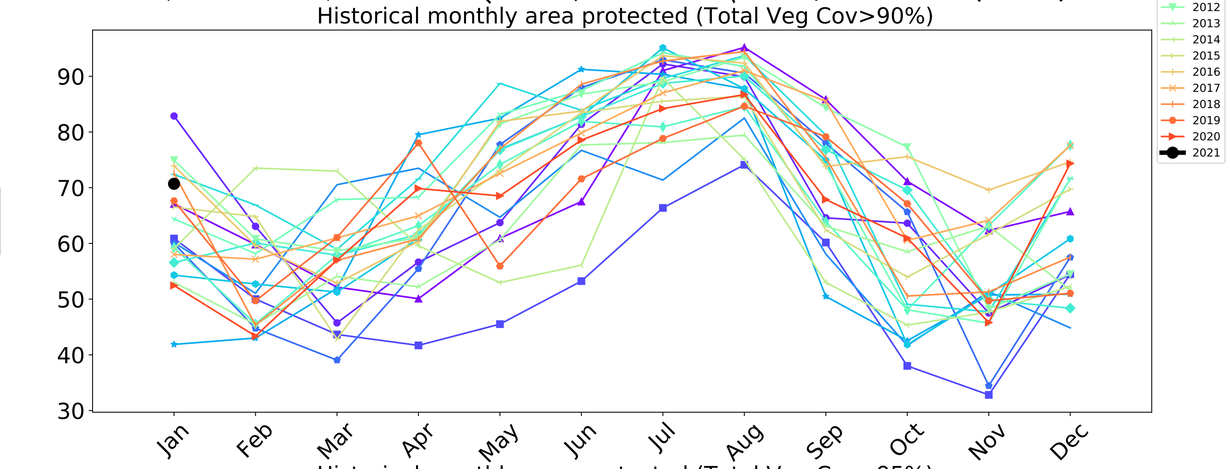
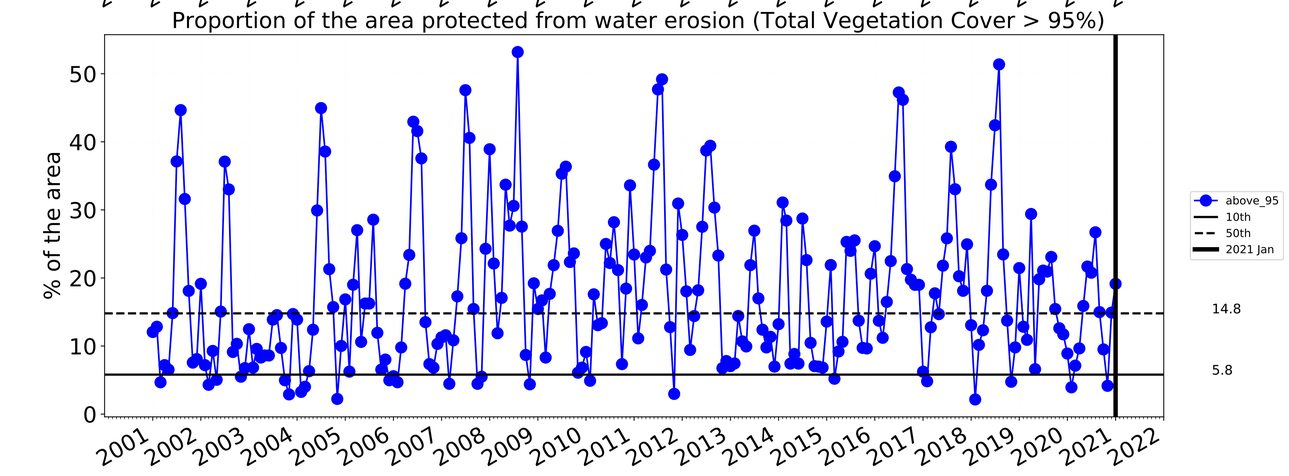
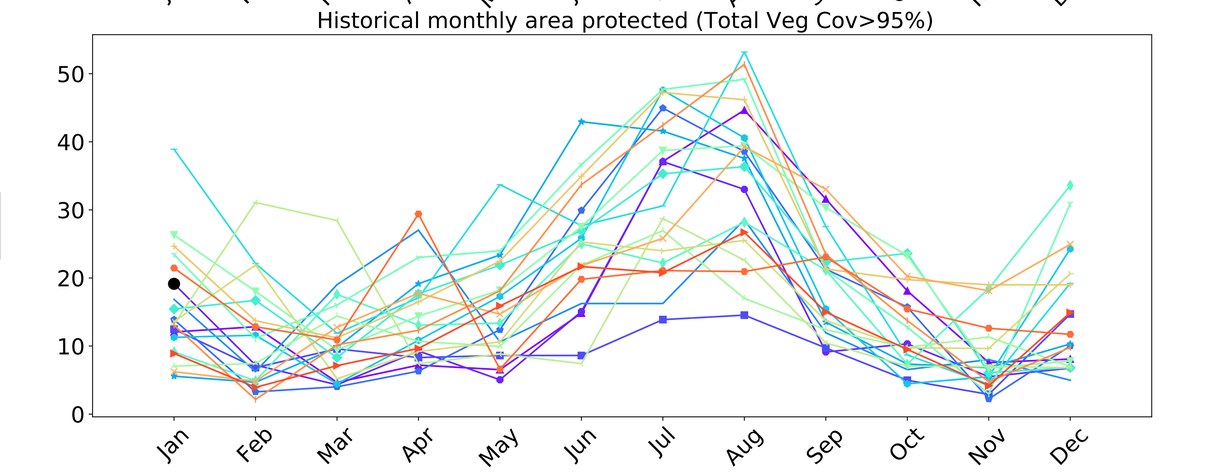
2019
2020
2021


Proportion of the area protected from water erosion (Total Vegetation Cover > 90%)
% of the area
47.6
above_90
10th
50th
2021 Jan


Historical monthly area protected (Total Veg Cov>90%)
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

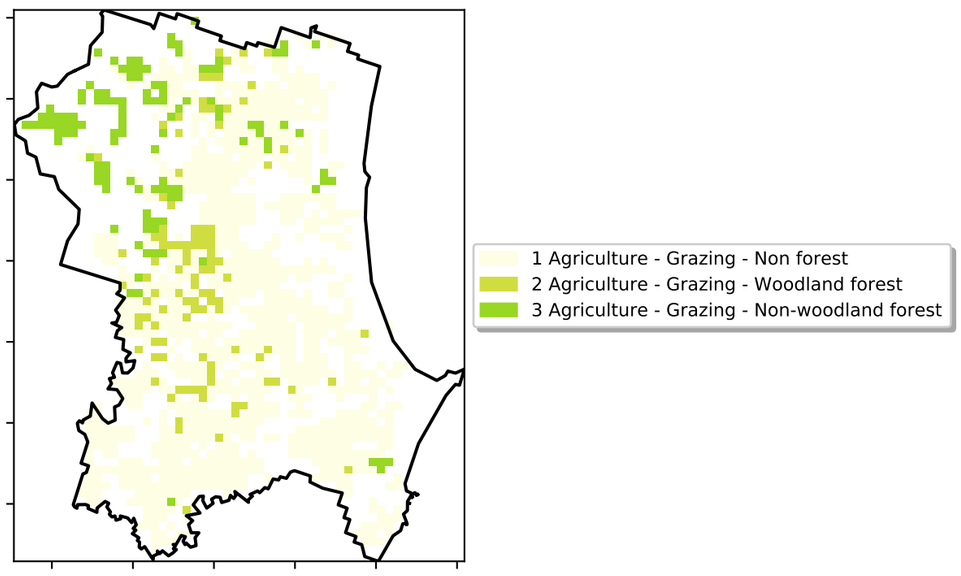

Proportion of the area protected from water erosion (Total Vegetation Cover > 95%)
% of the area
14.8
5.8
above_95
10th
50th
2021 Jan


Historical monthly area protected (Total Veg Cov>95%)
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

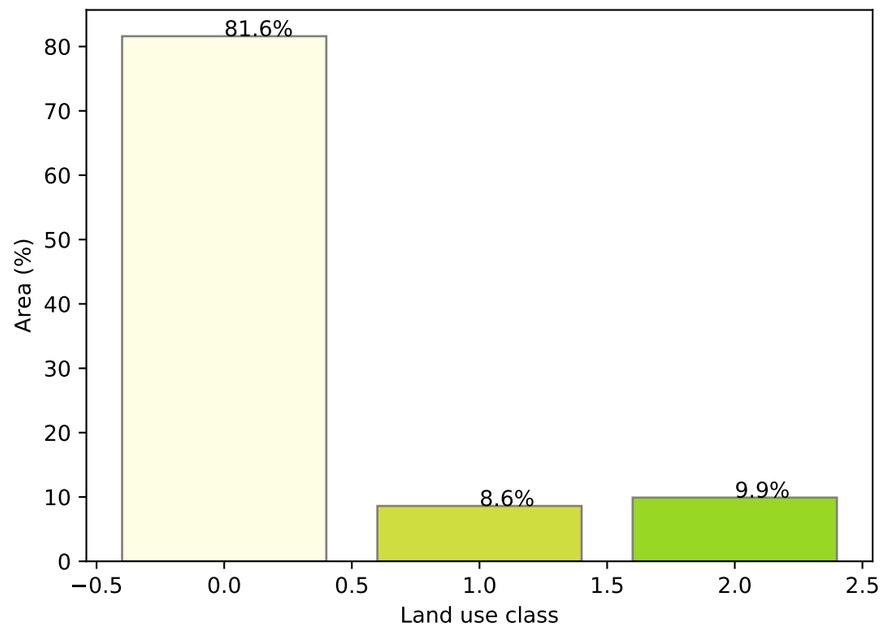
Grazing

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

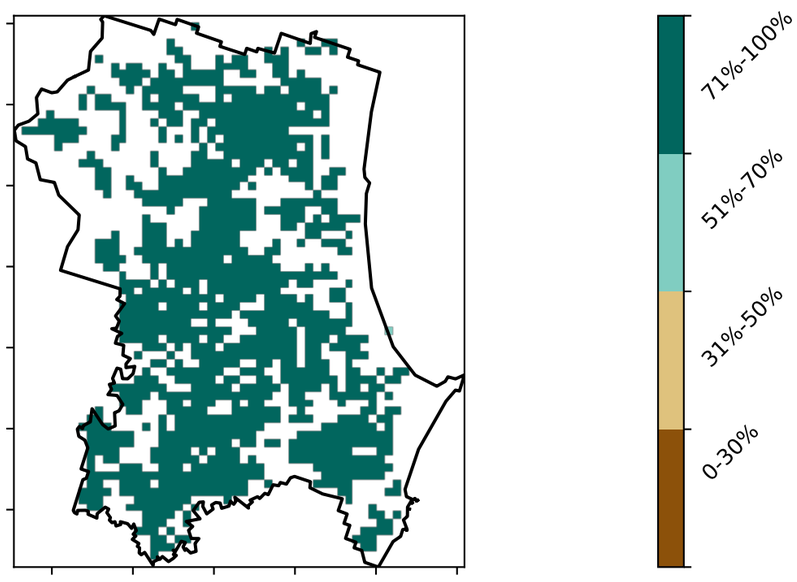
Land use and forest cover



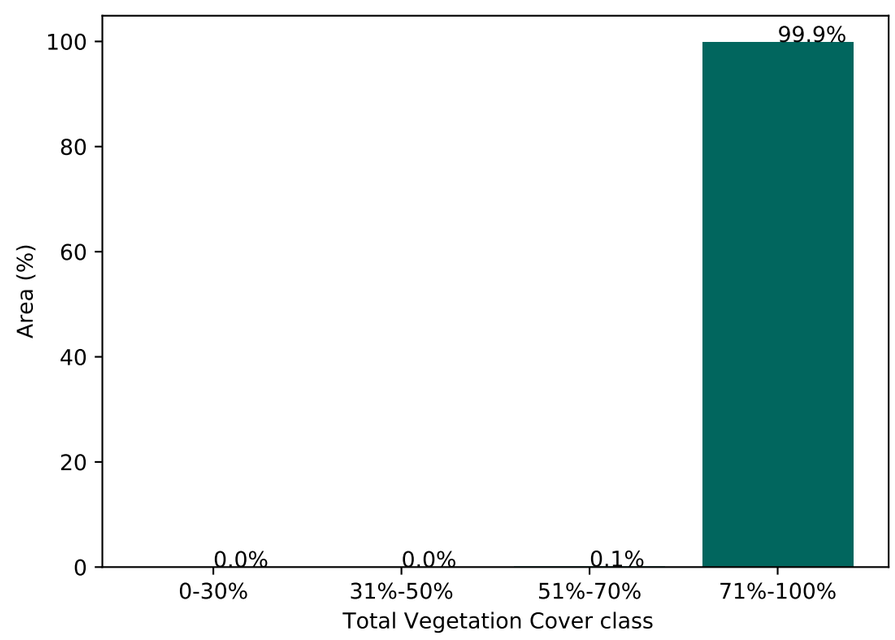
Proportion of each land class in area



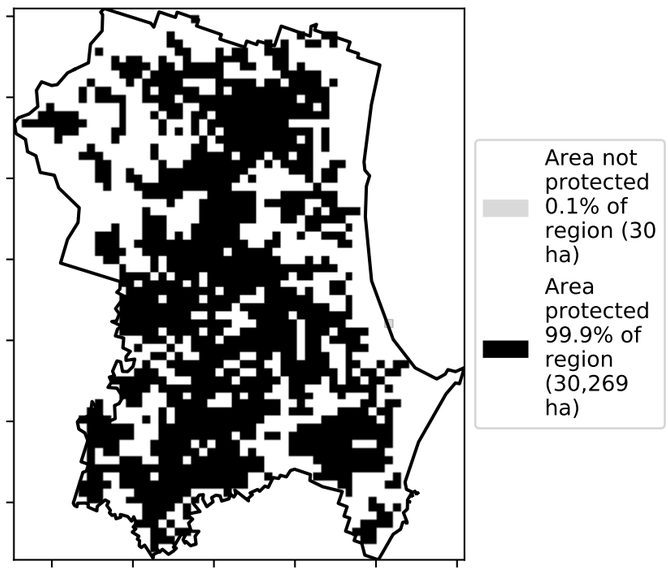
Total Vegetation Cover [%]



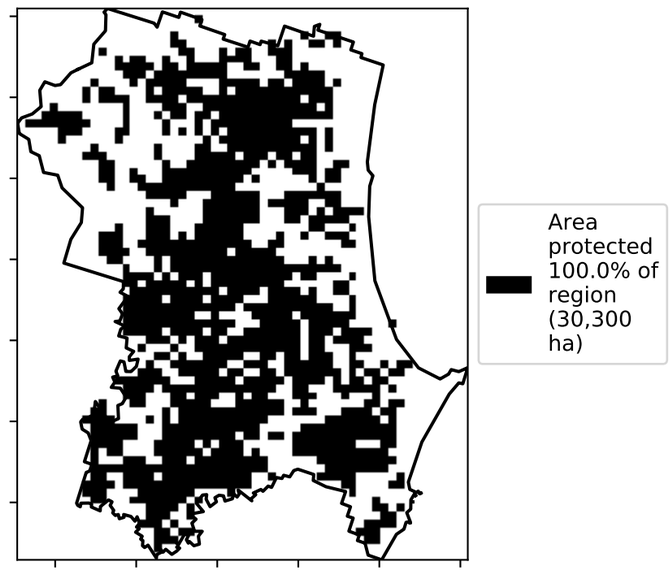
Proportion of vegetation cover class in area



% Area protected from water erosion (>70%)

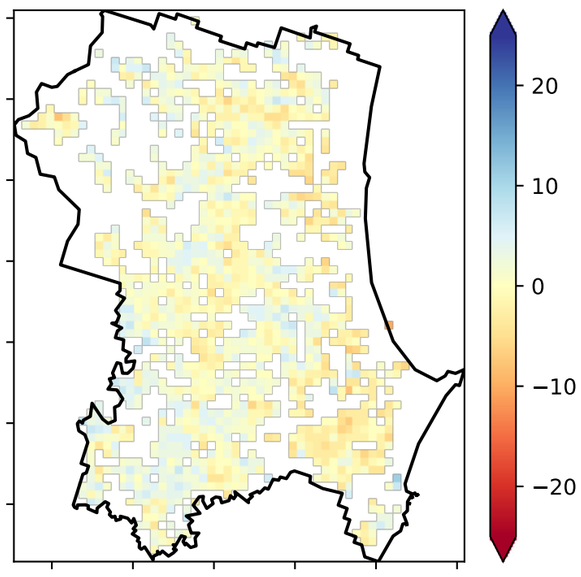


% Area protected from wind erosion (>50%)



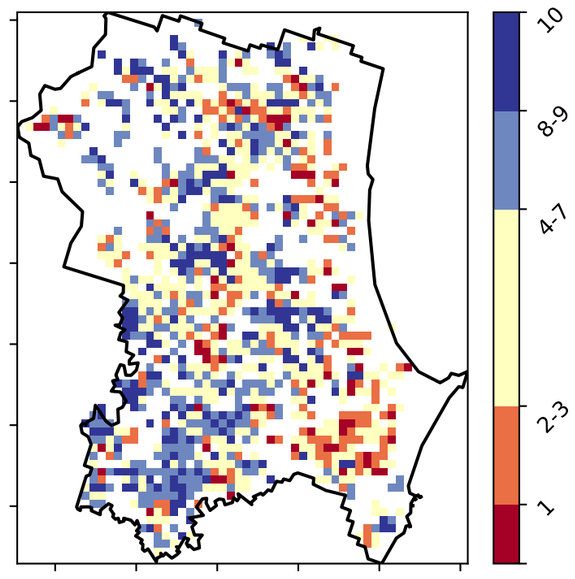
Total Vegetation Cover Anomaly [%]

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.

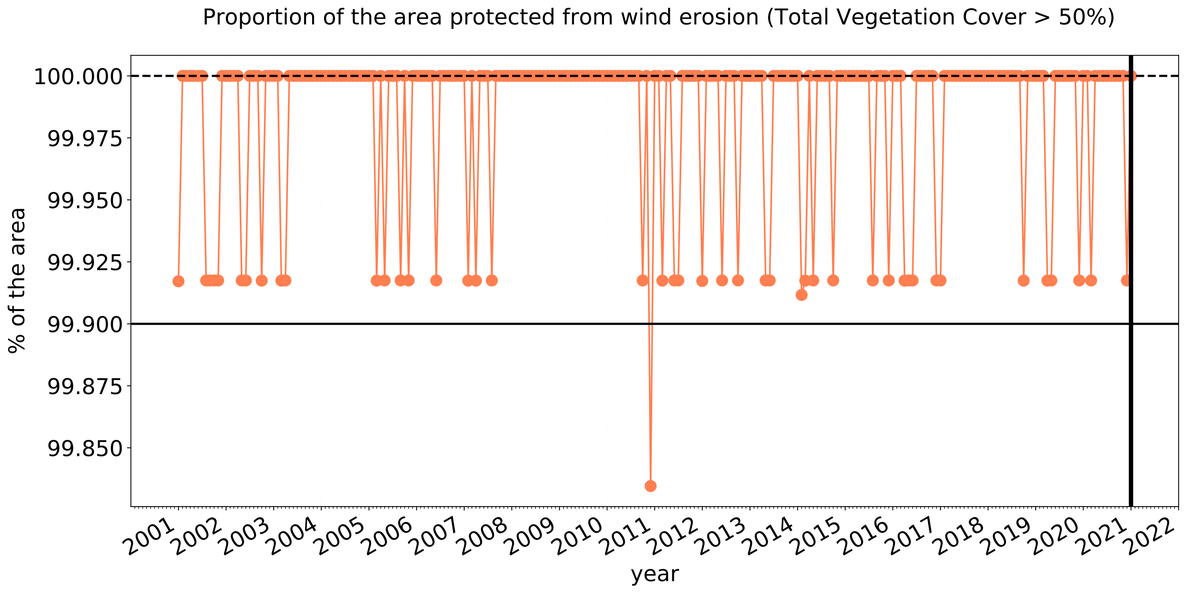


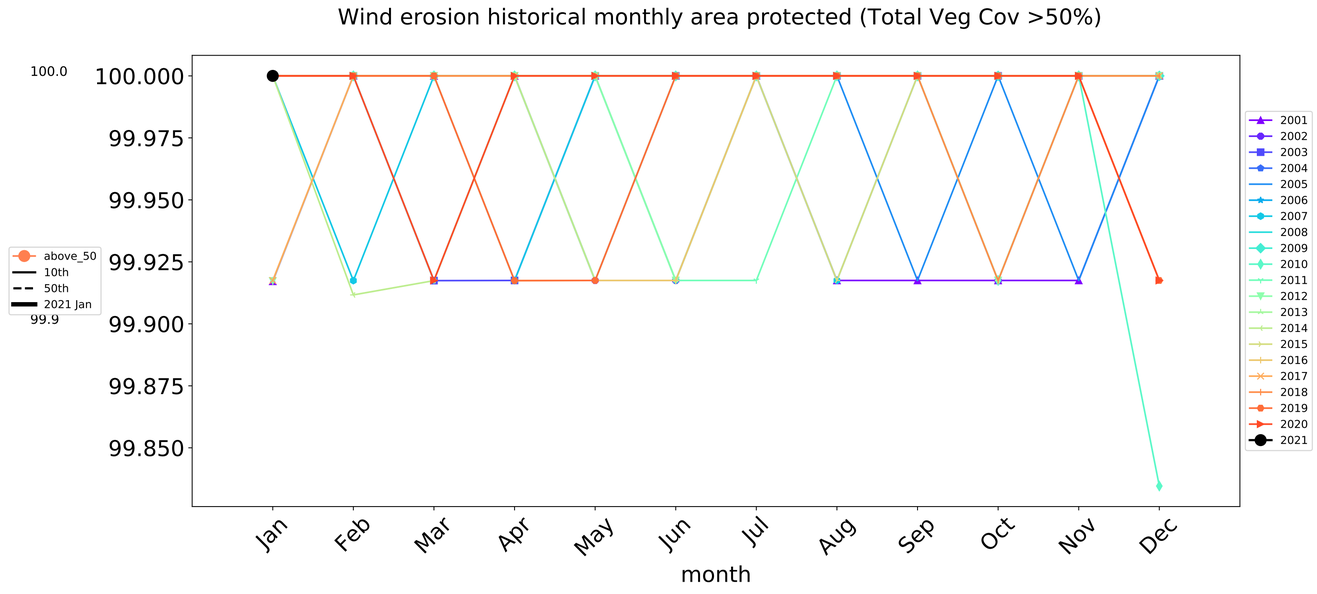
Total Vegetation Cover Decile [%]

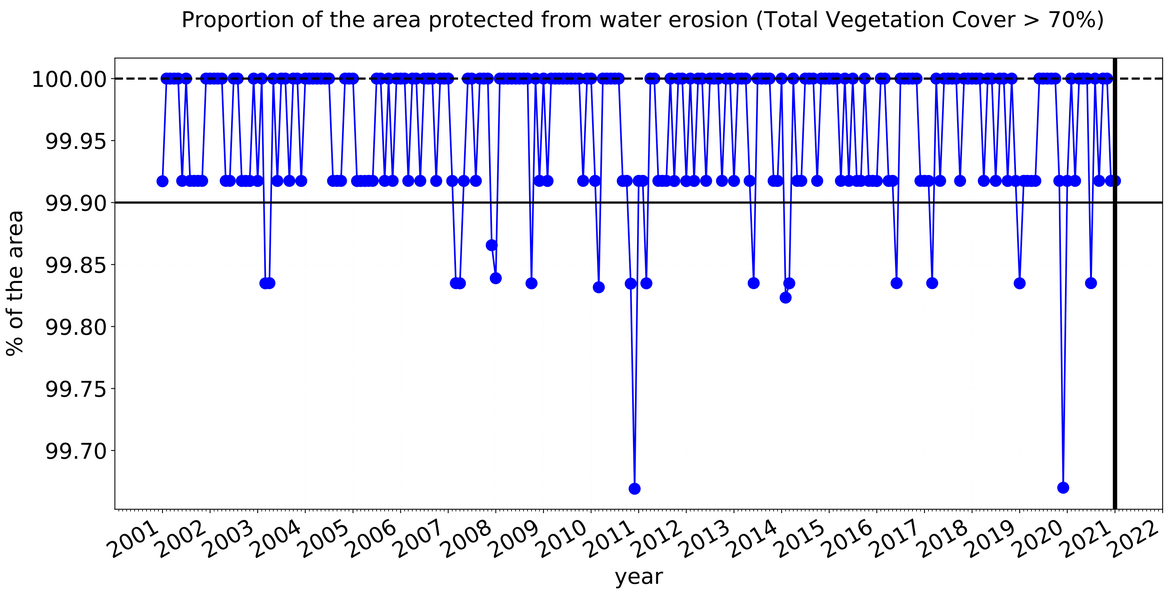
Deciles show where the pixel value lies in the record, from highest to lowest, for that month. That is, red pixels are in the lowest 10% of records for that month of the map using baseline from 2001 to 2019.

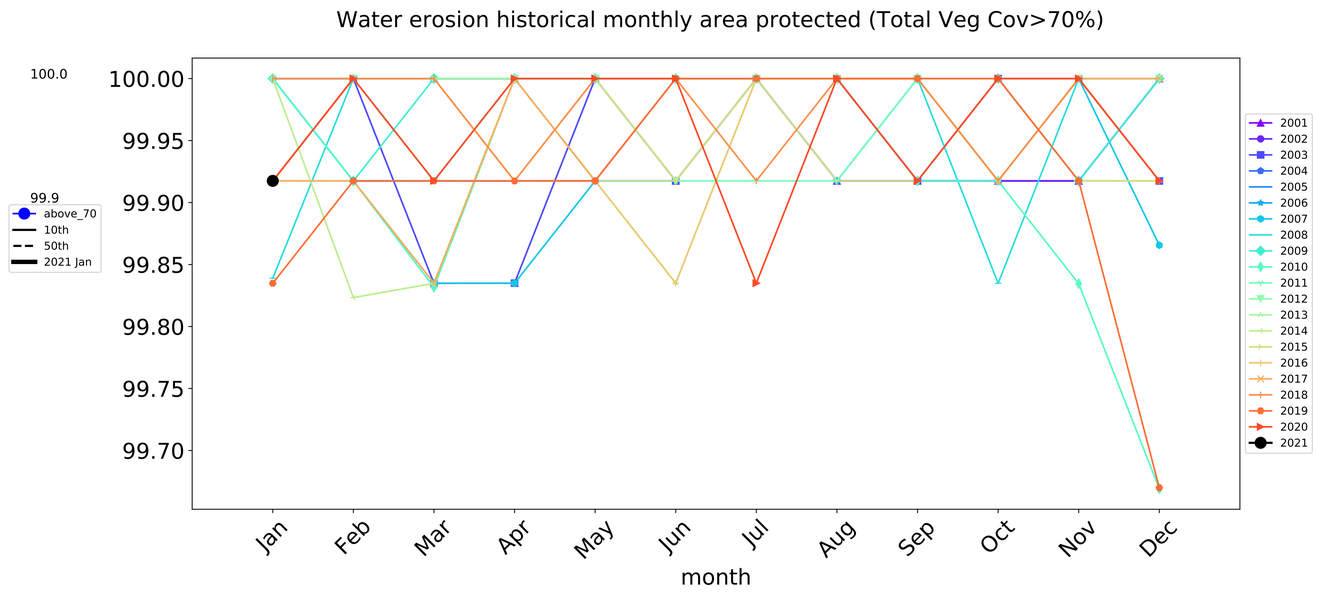


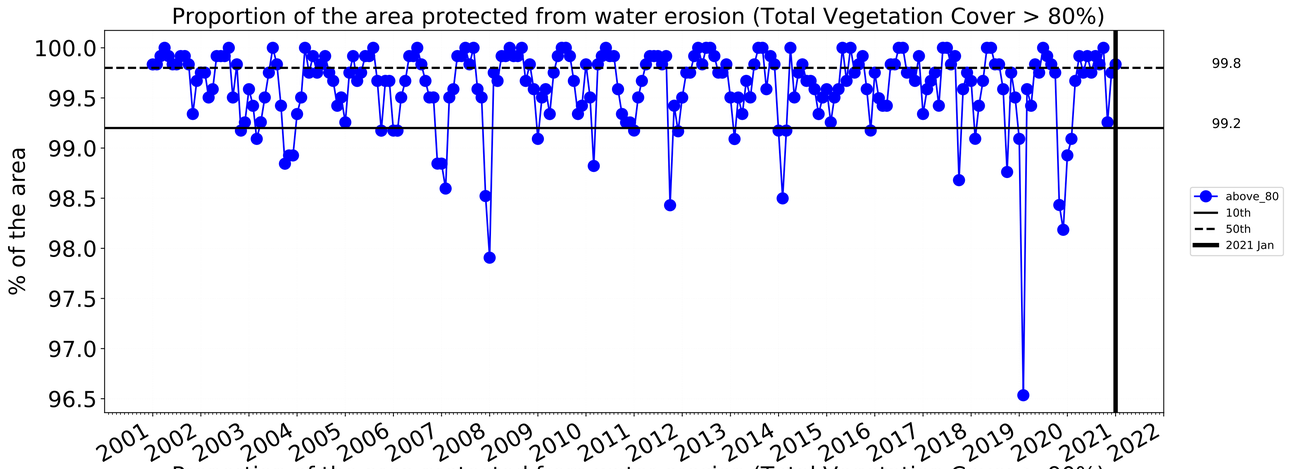
Grazing timeseries

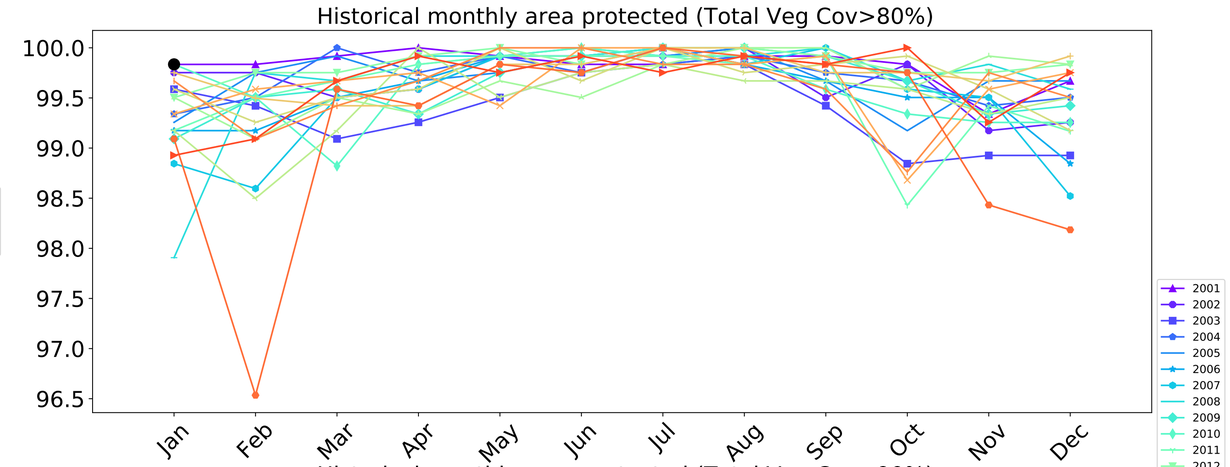









Proportion of the area protected from water erosion (Total Vegetation Cover > 80%)
% of the area
99.8
99.2
above_80
10th
50th
2021 Jan


Historical monthly area protected (Total Veg Cov>80%)
Jan
Feb
Mar
Apr
May
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Sep
Oct
Nov
Dec
2001
2002
2003
2004
2005
2006
2007
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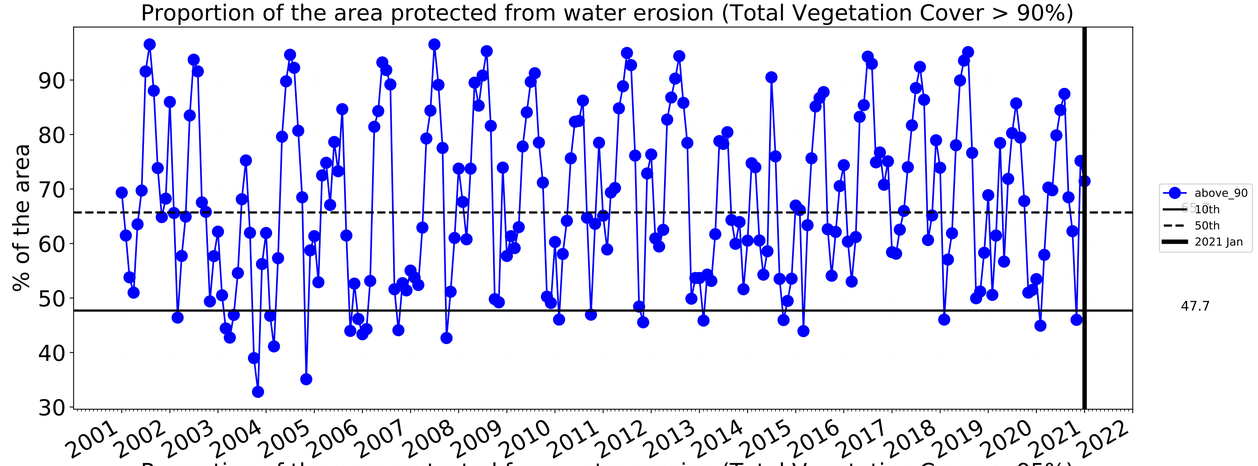
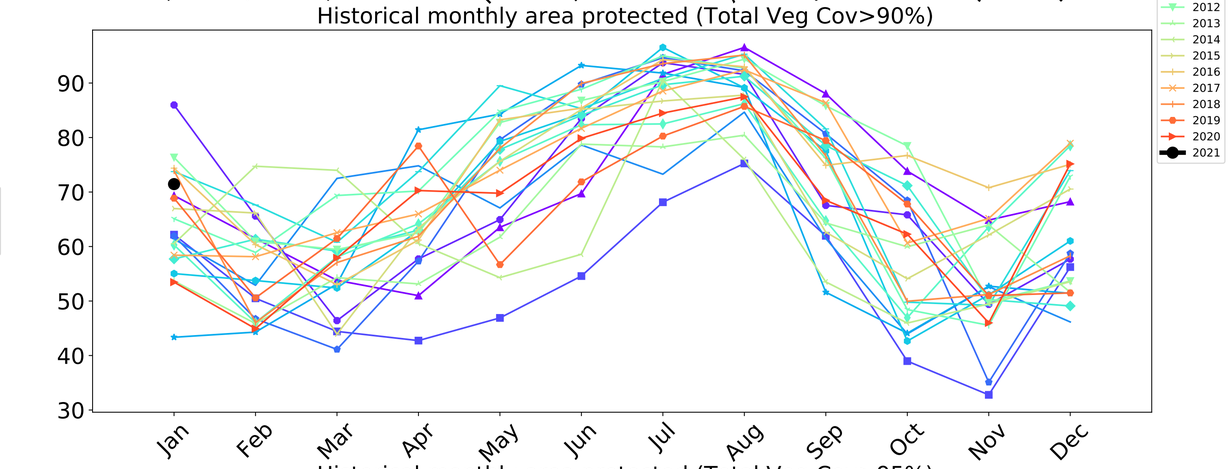
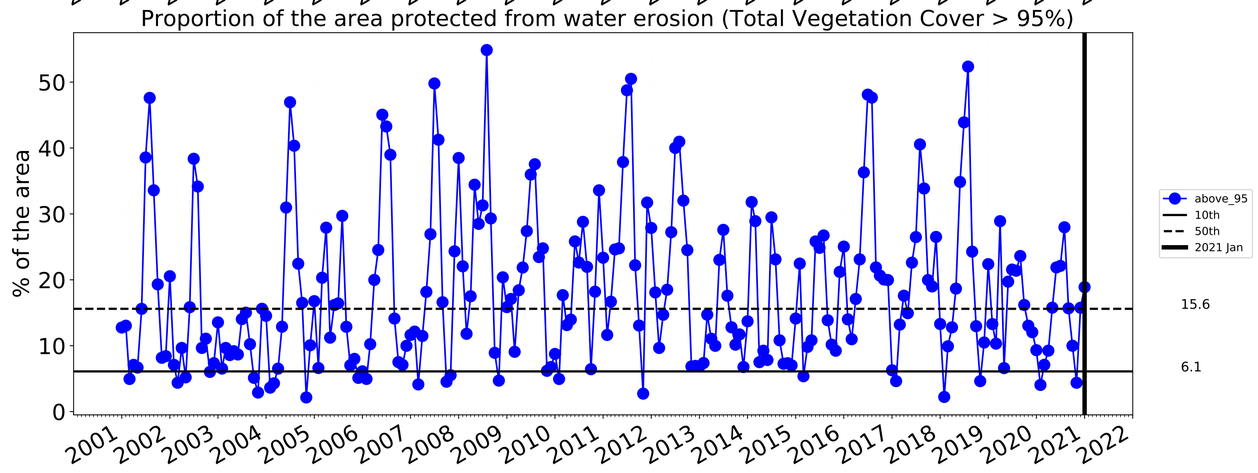
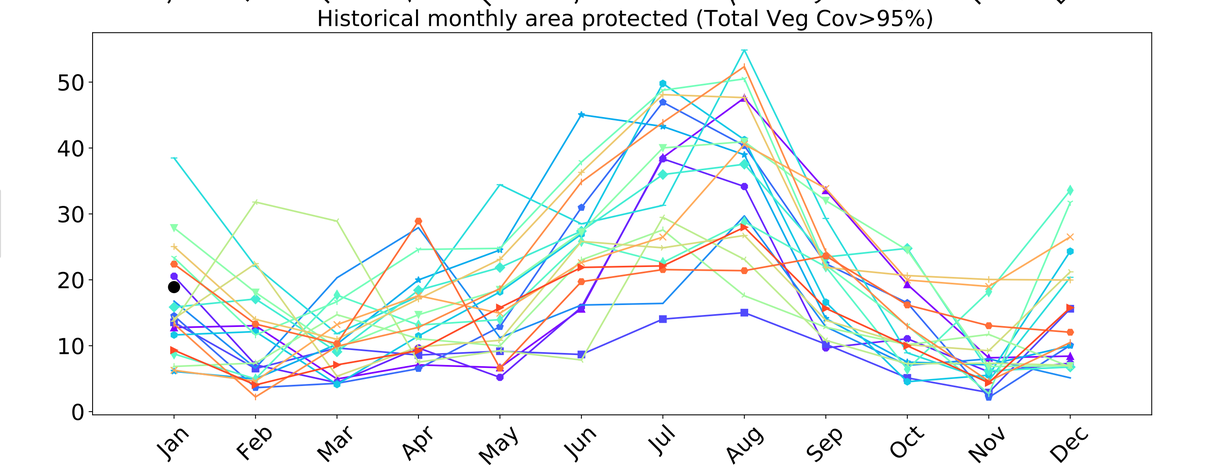
2016
2017
2018
2019
2020
2021


Proportion of the area protected from water erosion (Total Vegetation Cover > 90%)
% of the area
47.7
above_90
10th
50th
2021 Jan


Historical monthly area protected (Total Veg Cov>90%)
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

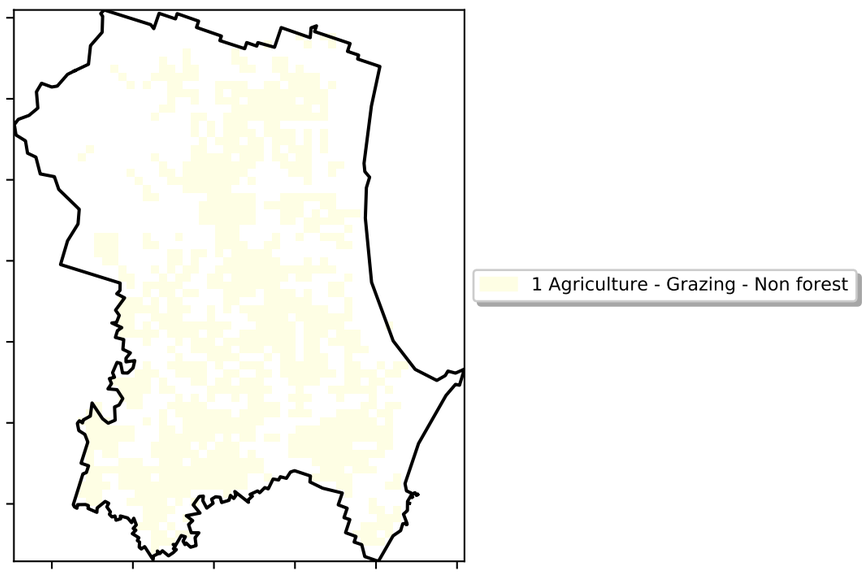

Proportion of the area protected from water erosion (Total Vegetation Cover > 95%)
% of the area
15.6
6.1
above_95
10th
50th
2021 Jan


Historical monthly area protected (Total Veg Cov>95%)
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

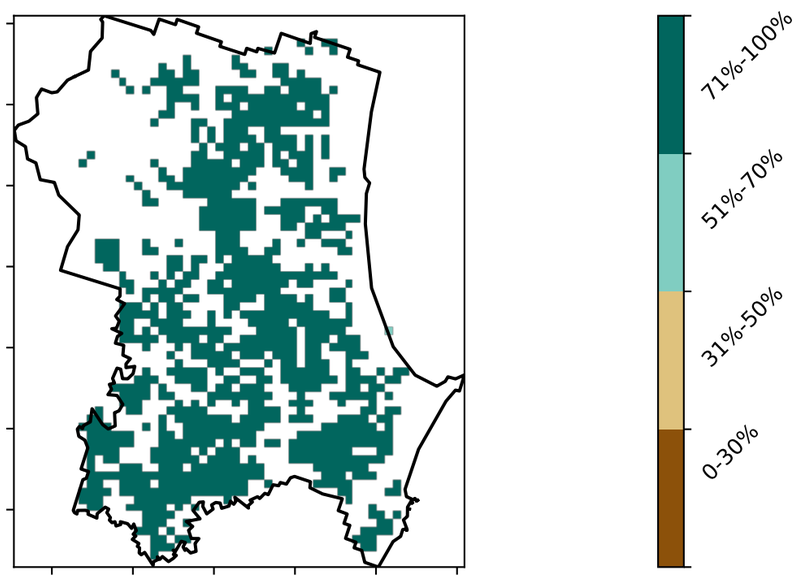
Grazing non forest

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

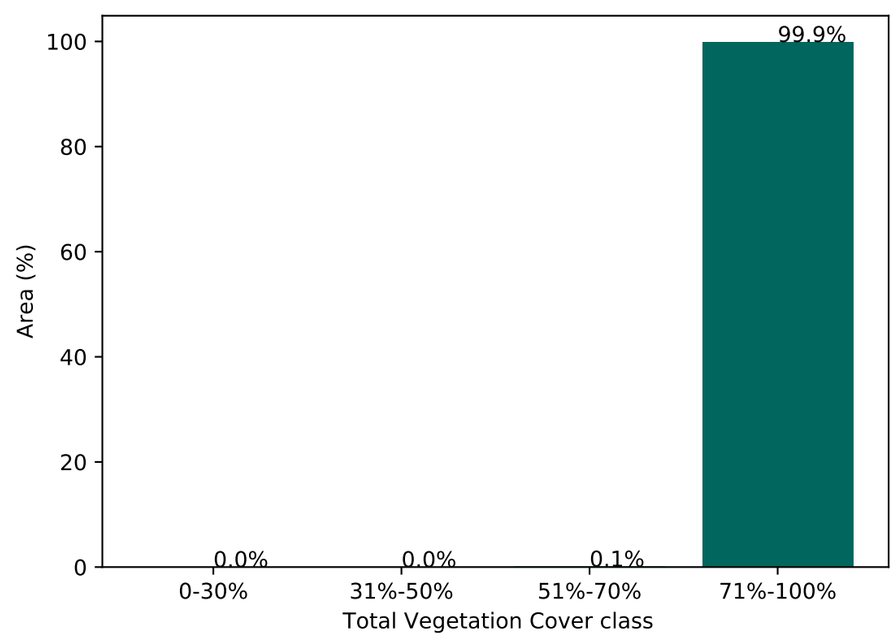
Land use and forest cover



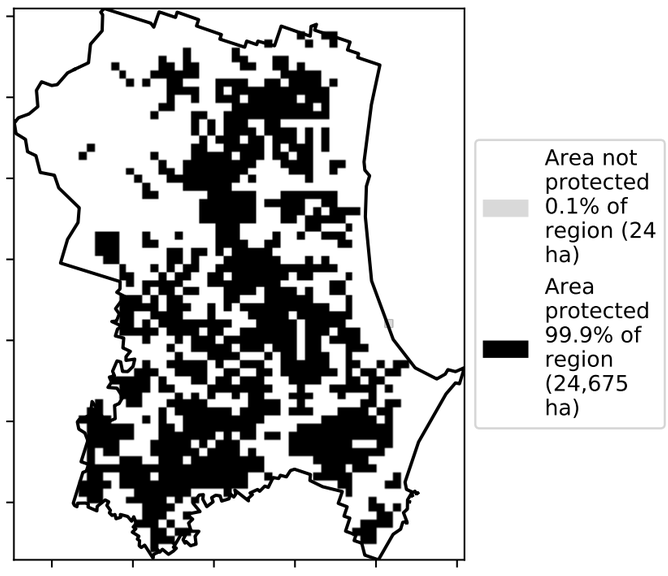
Total Vegetation Cover [%]



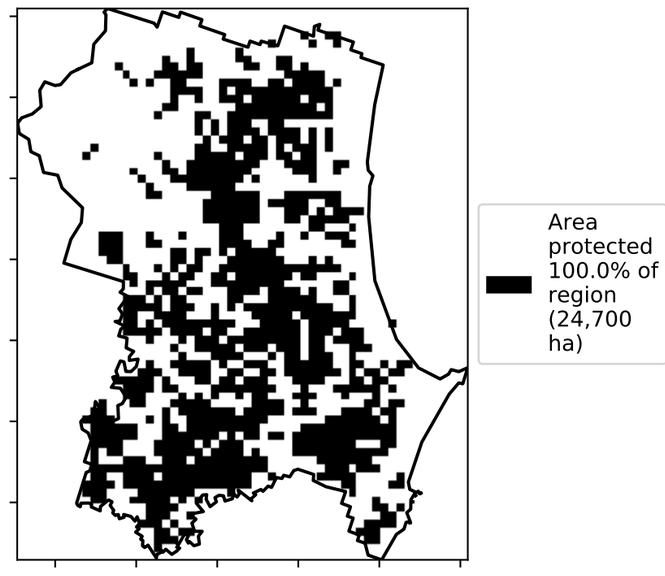
Proportion of vegetation cover class in area



% Area protected from water erosion (>70%)

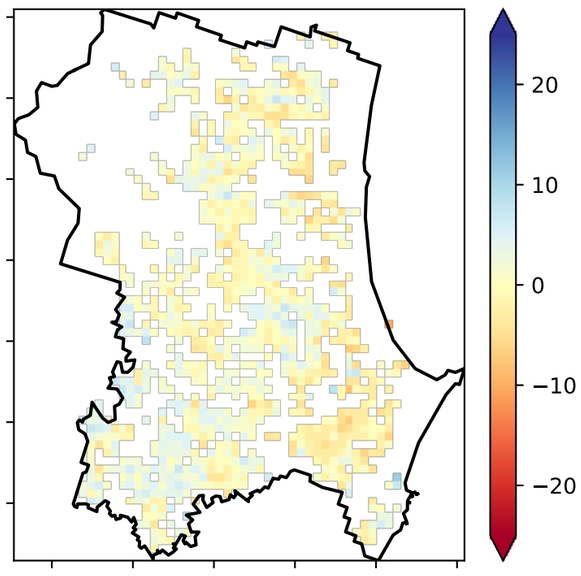


% Area protected from wind erosion (>50%)



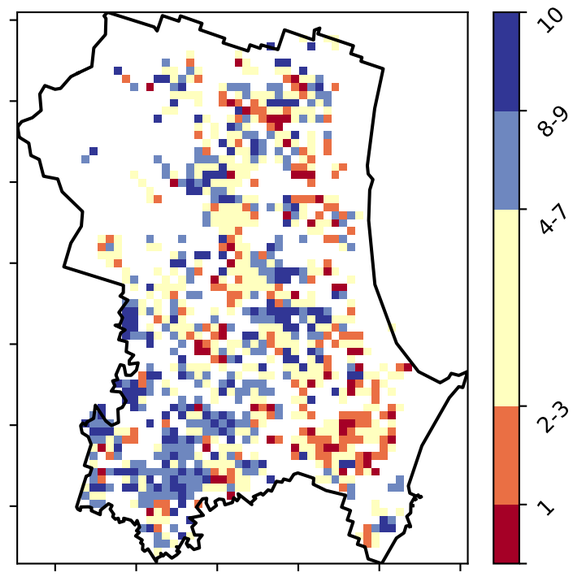
Total Vegetation Cover Anomaly [%]

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.

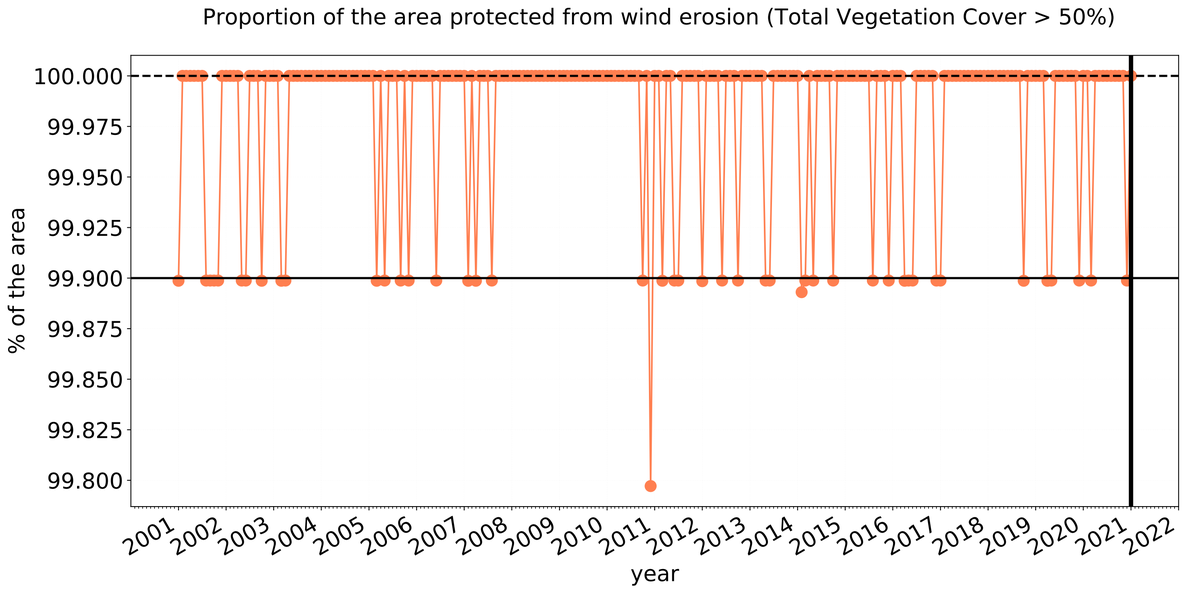


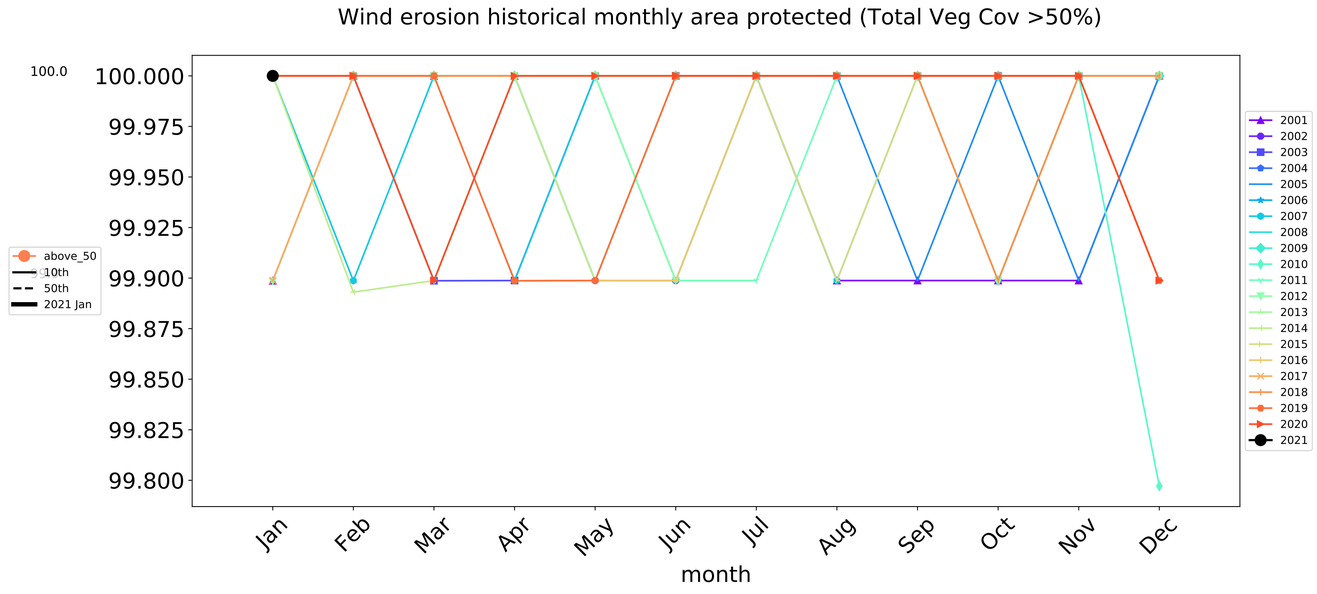
Total Vegetation Cover Decile [%]

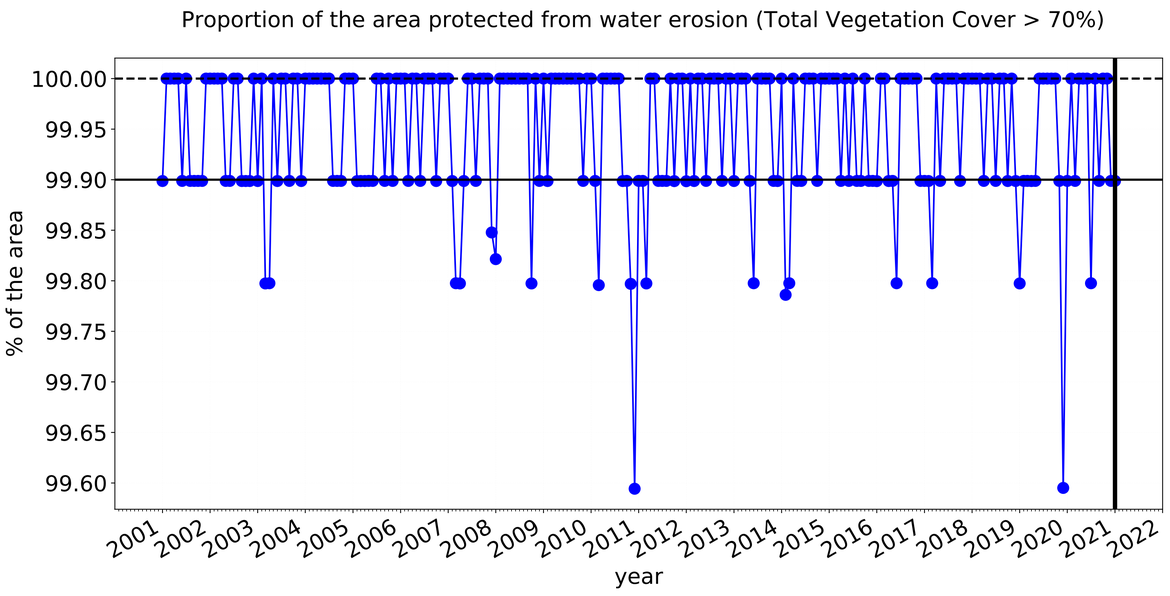
Deciles show where the pixel value lies in the record, from highest to lowest, for that month. That is, red pixels are in the lowest 10% of records for that month of the map using baseline from 2001 to 2019.

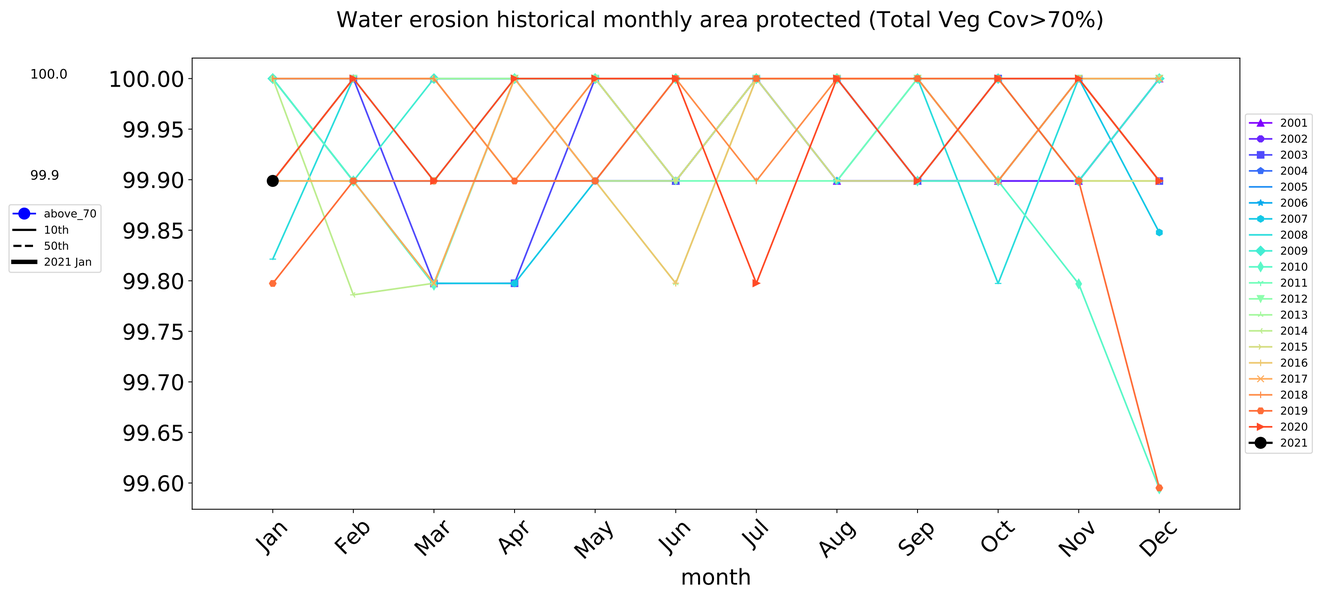


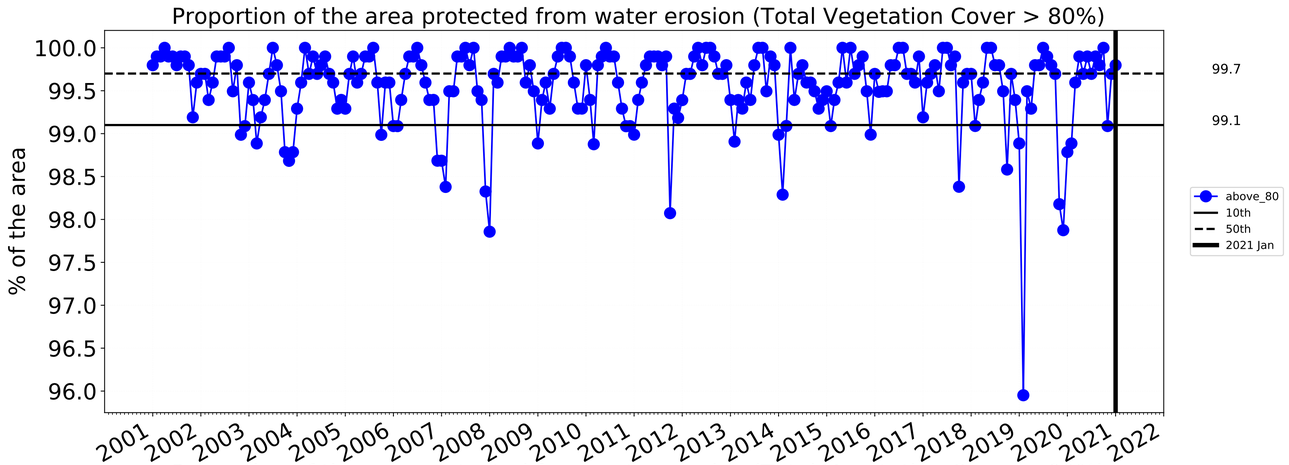
Grazing non forest timeseries

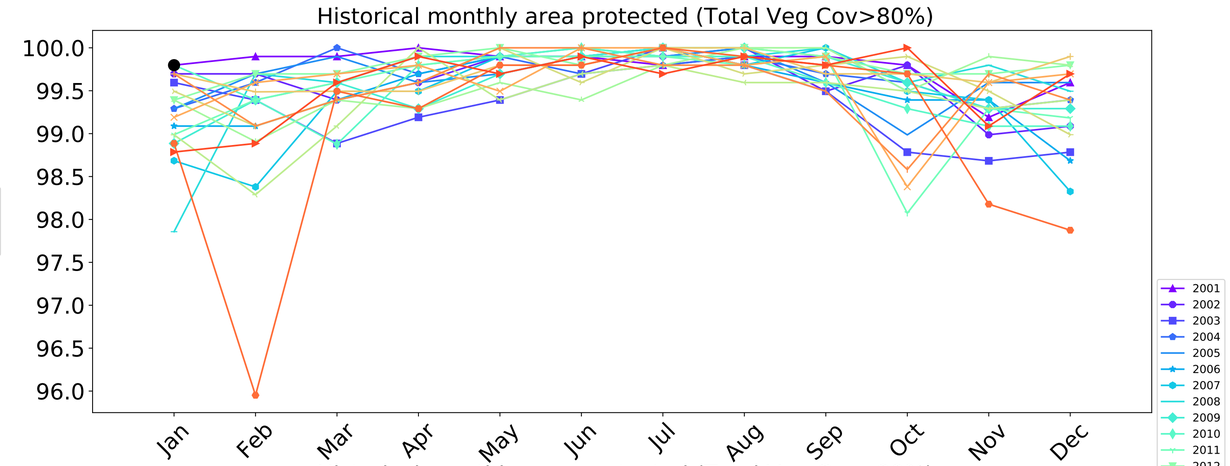


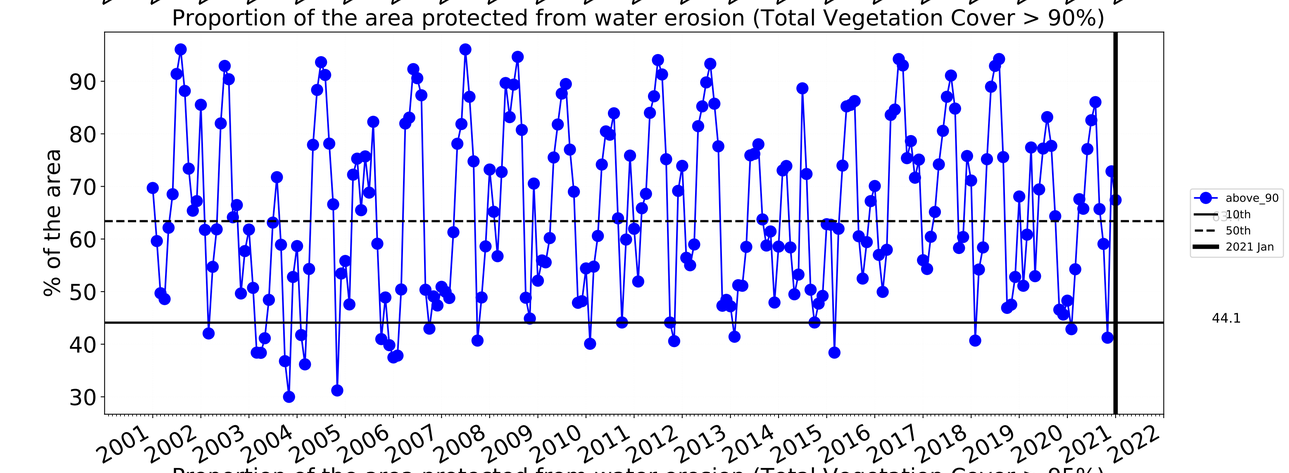


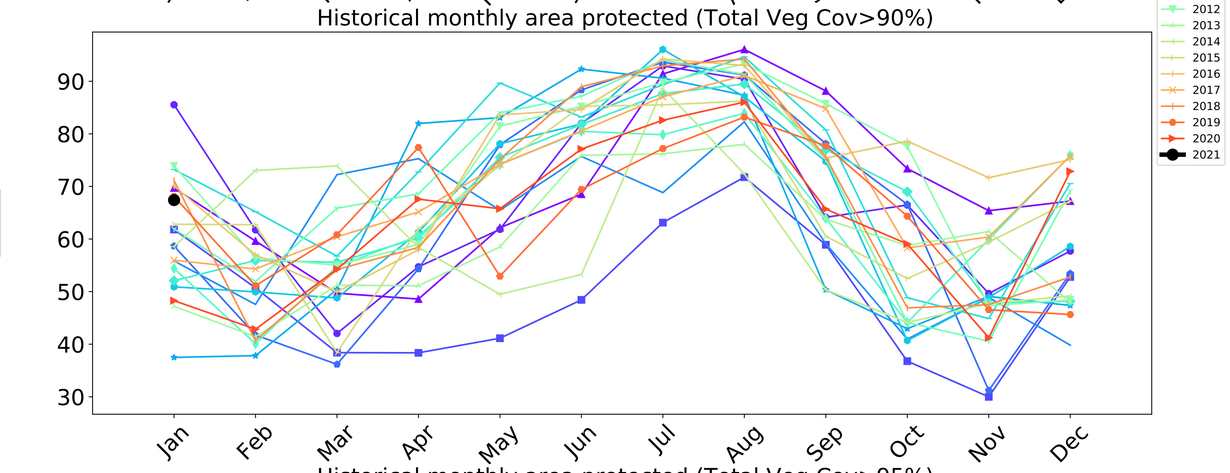


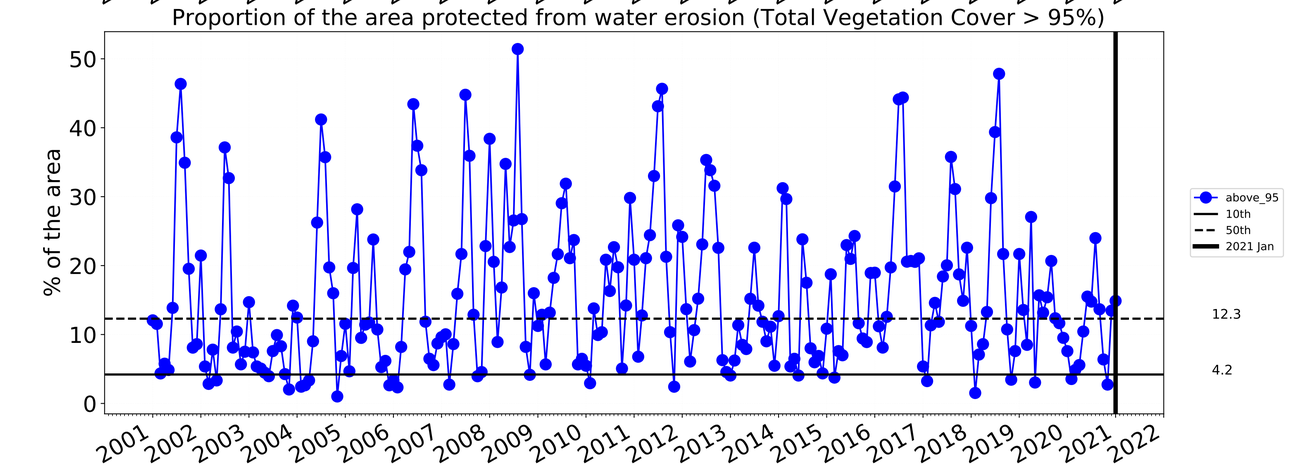


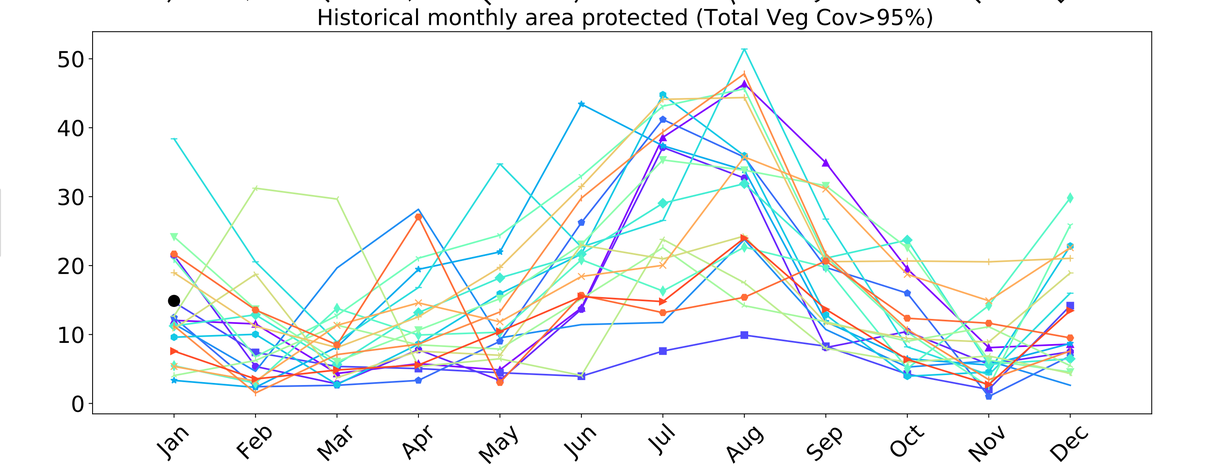

Proportion of the area protected from water erosion (Total Vegetation Cover > 80%)
% of the area
99.7
99.1
above_80
10th
50th
2021 Jan


Historical monthly area protected (Total Veg Cov>80%)
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021


Proportion of the area protected from water erosion (Total Vegetation Cover > 90%)
% of the area
44.1
above_90
10th
50th
2021 Jan


Historical monthly area protected (Total Veg Cov>90%)
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

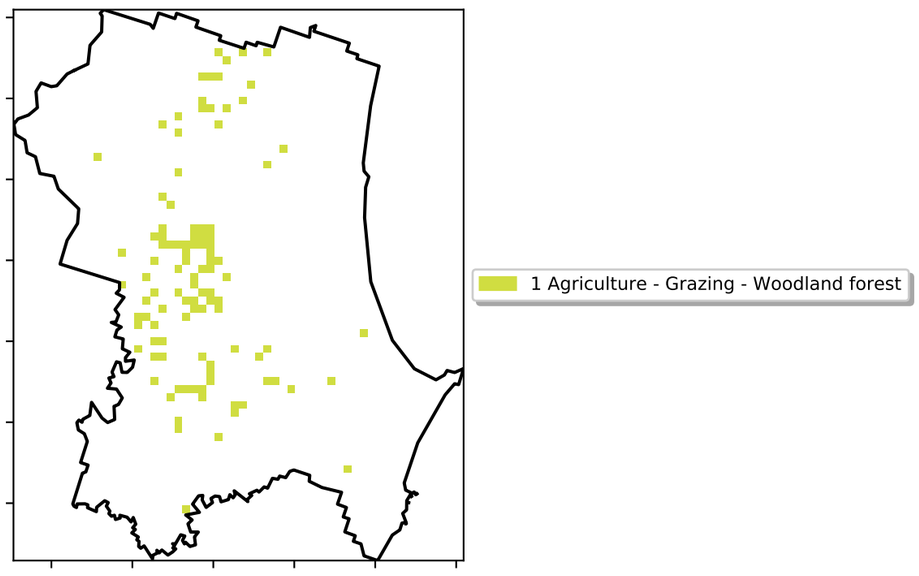

Proportion of the area protected from water erosion (Total Vegetation Cover > 95%)
% of the area
12.3
4.2
above_95
10th
50th
2021 Jan


Historical monthly area protected (Total Veg Cov>95%)
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

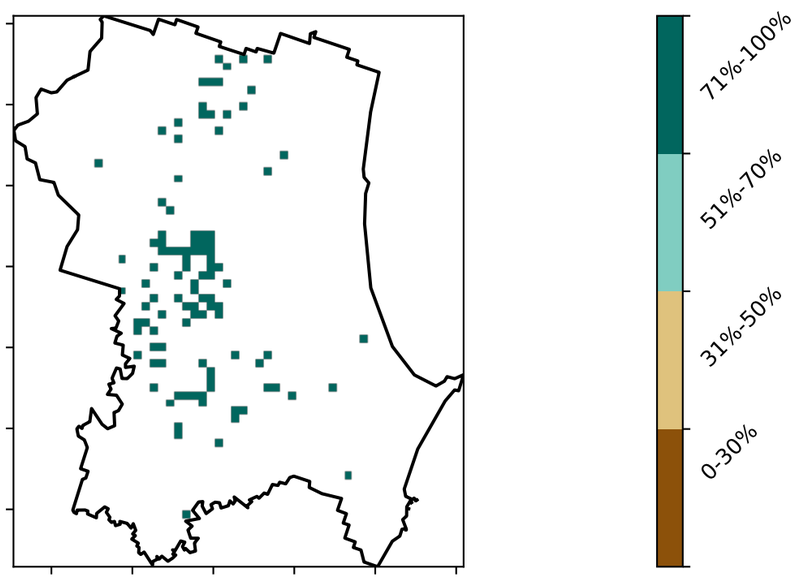
Grazing Woodland forest

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

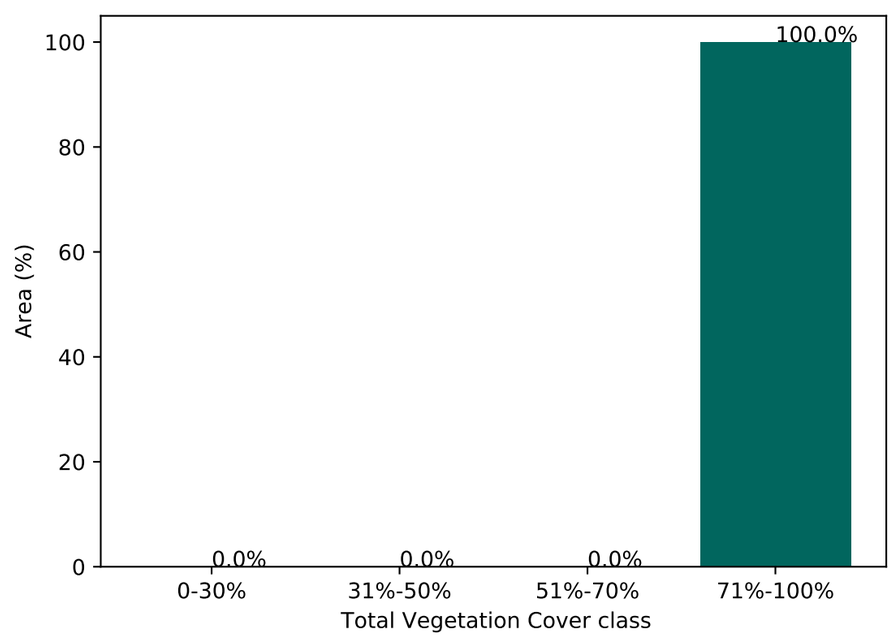
Land use and forest cover



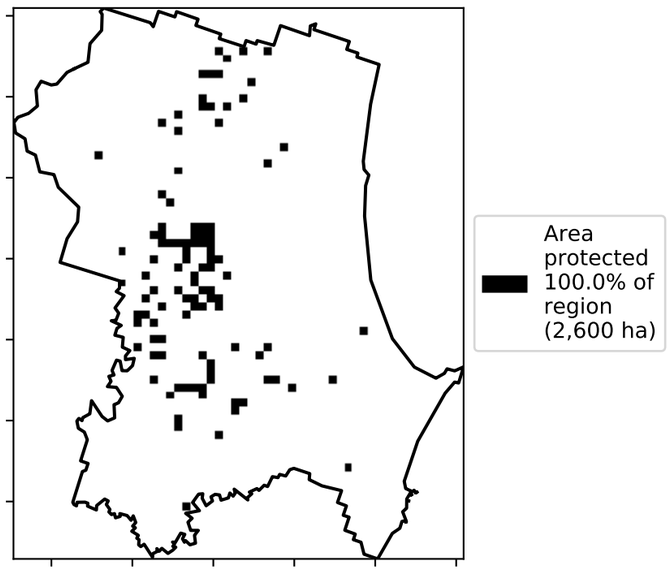
Total Vegetation Cover [%]



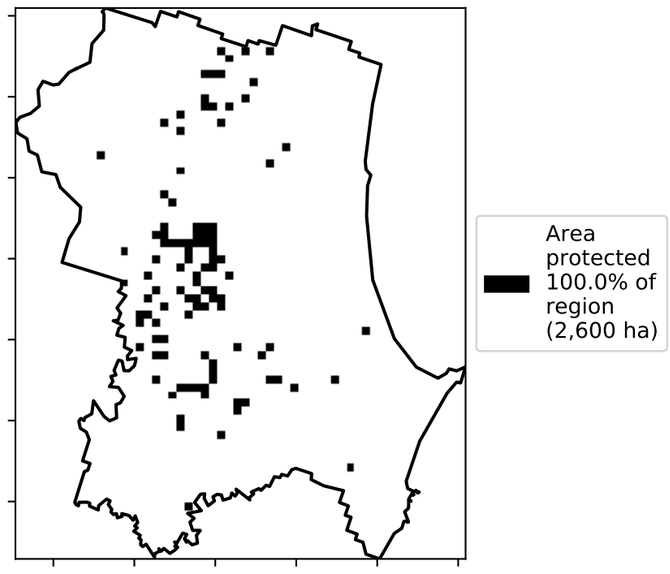
Proportion of vegetation cover class in area



% Area protected from water erosion (>70%)

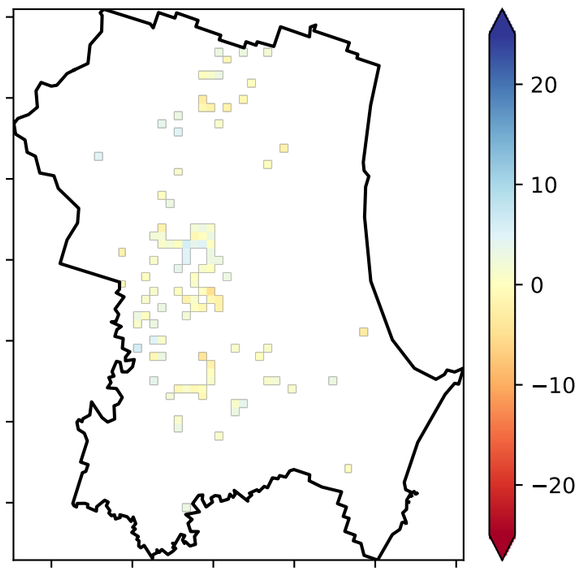


% Area protected from wind erosion (>50%)



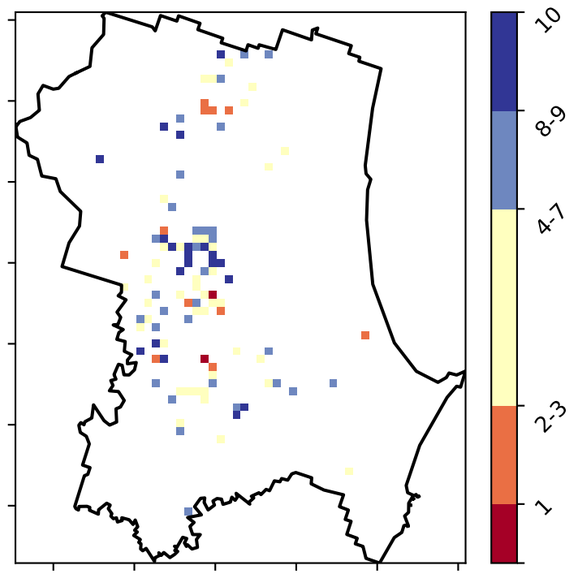
Total Vegetation Cover Anomaly [%]

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.



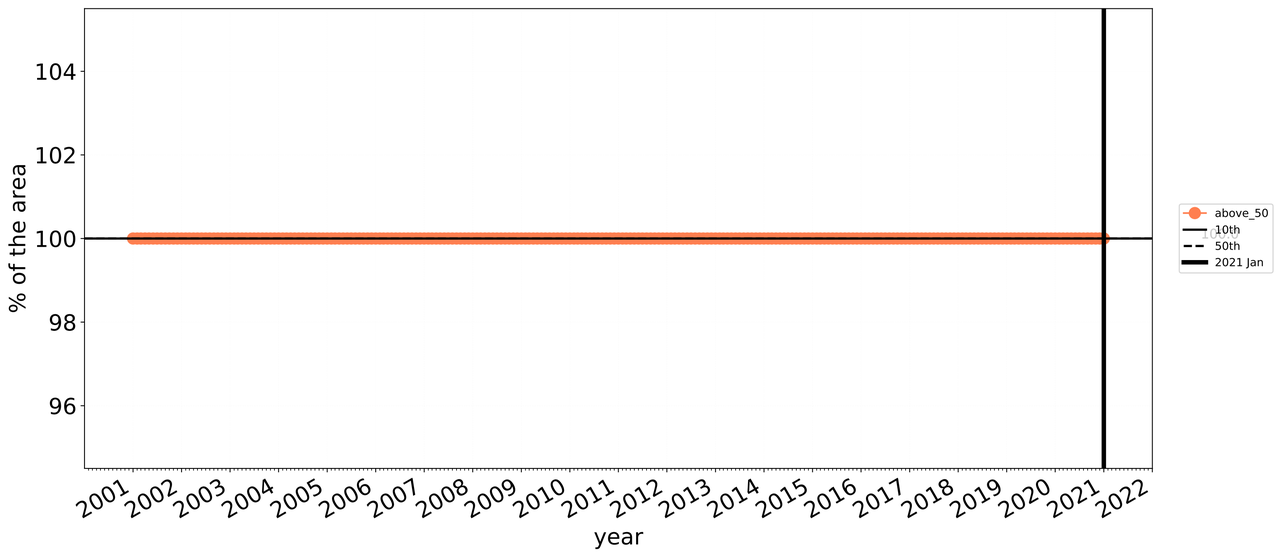
Total Vegetation Cover Decile [%]

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.

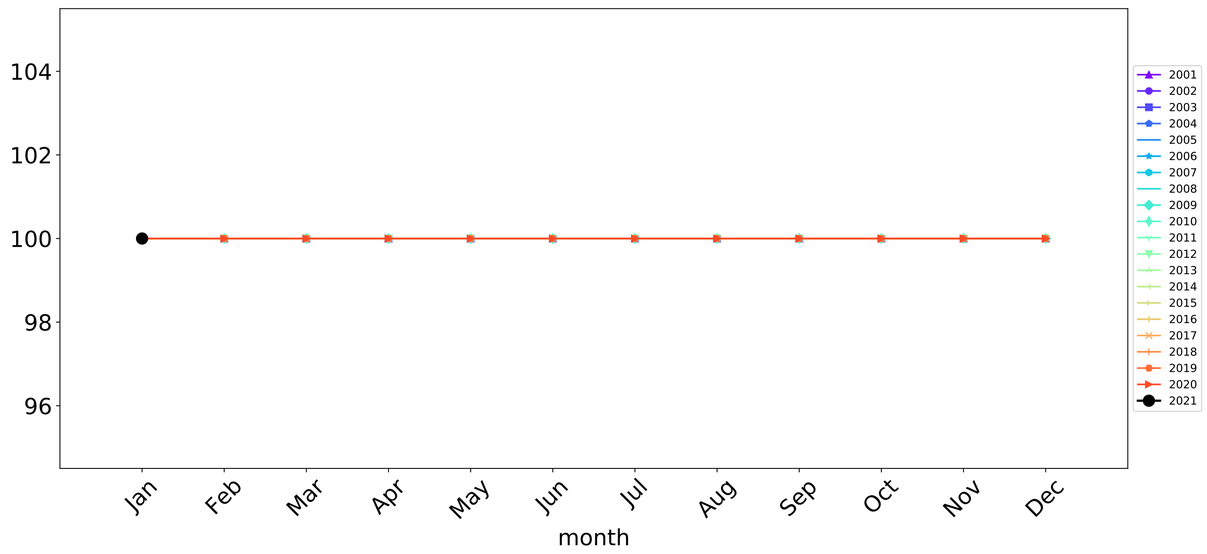


Grazing Woodland forest timeseries

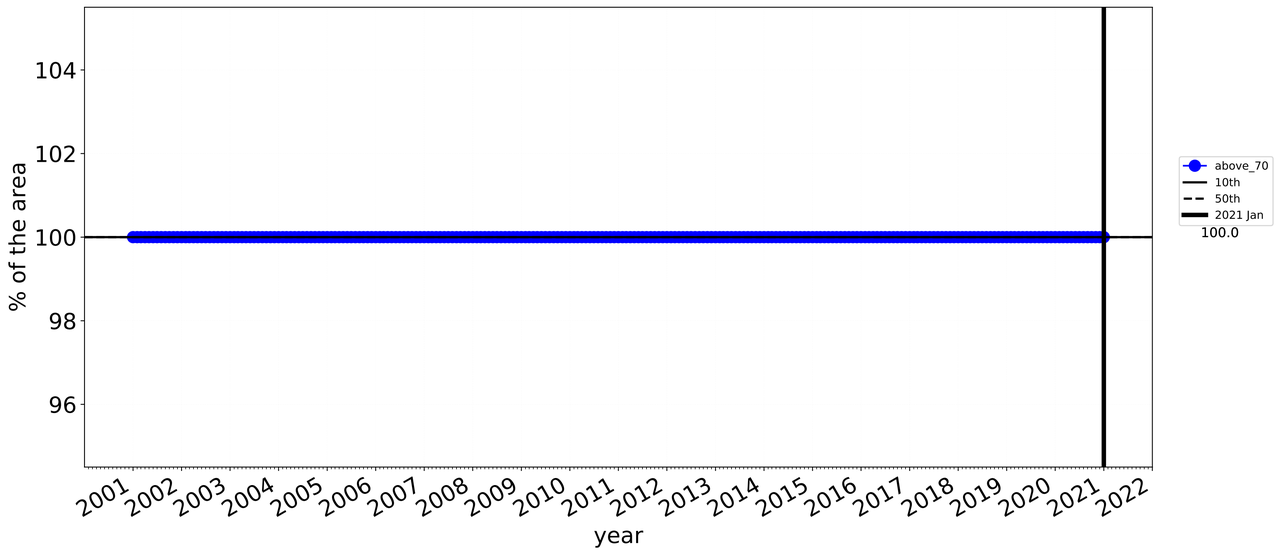
Proportion of the area protected from wind erosion (Total Vegetation Cover > 50%)



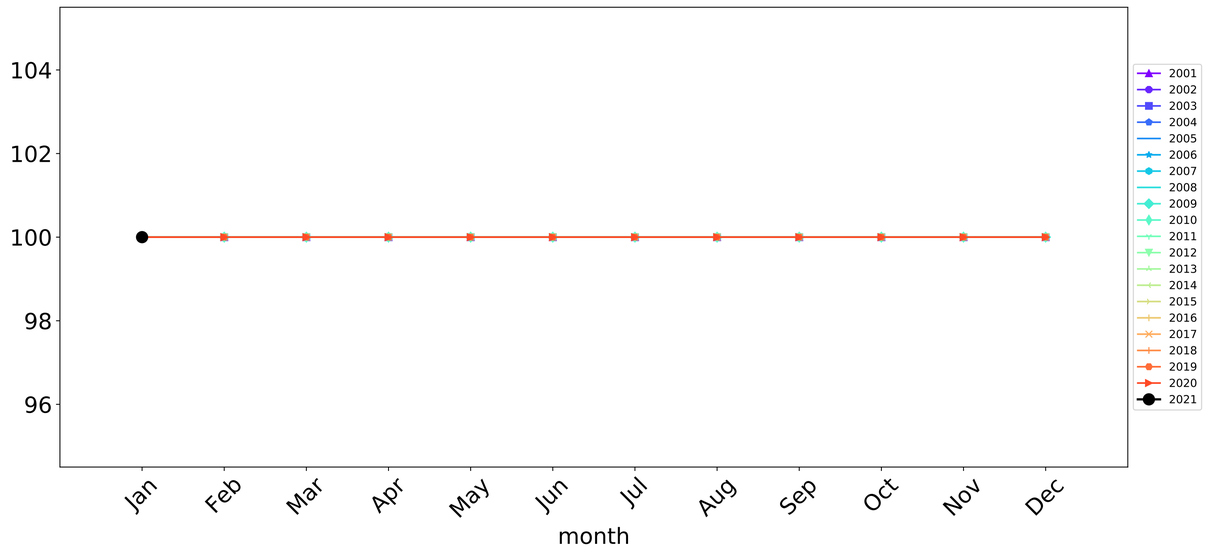
Wind erosion historical monthly area protected (Total Veg Cov >50%)

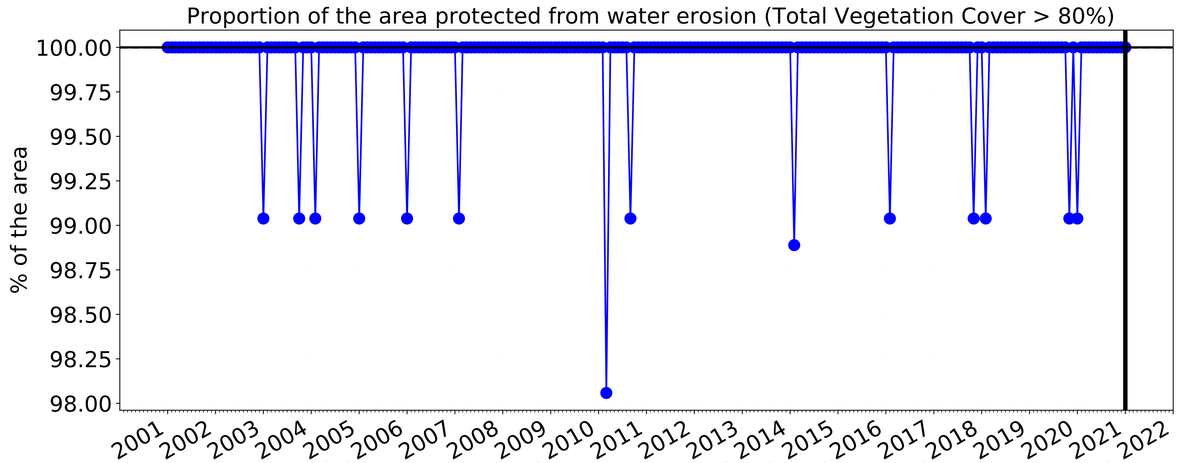


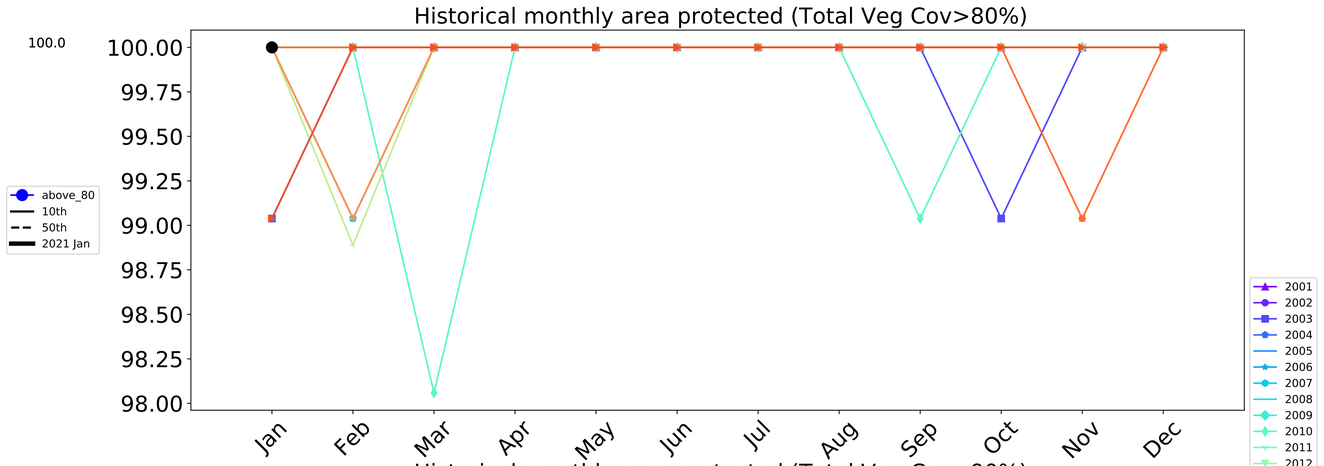
Proportion of the area protected from water erosion (Total Vegetation Cover > 70%)

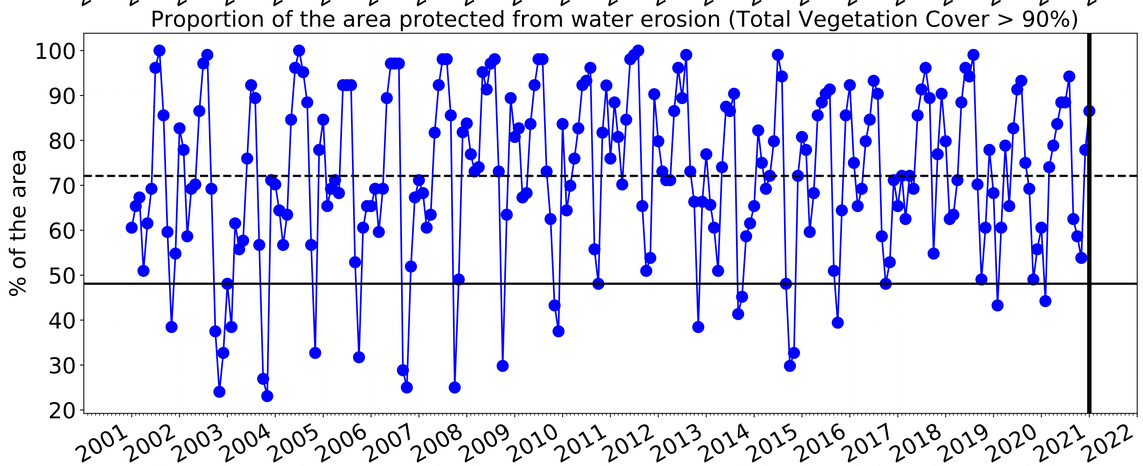


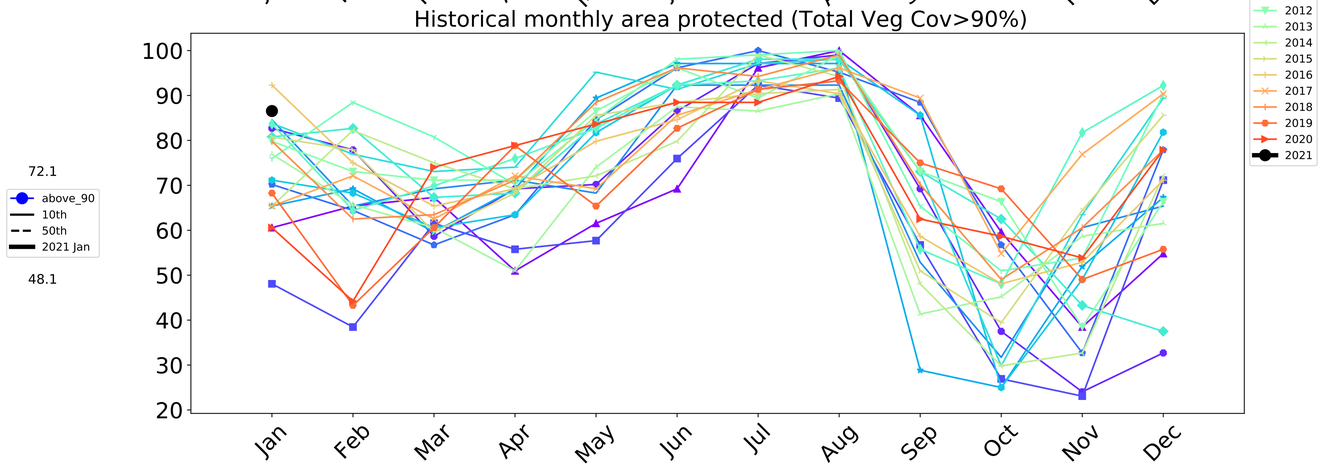
Water erosion historical monthly area protected (Total Veg Cov>70%)

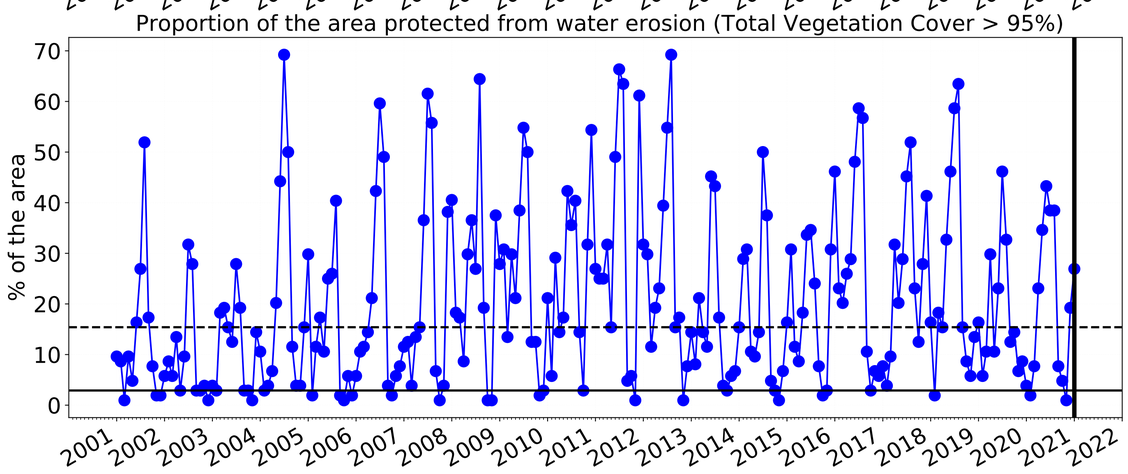


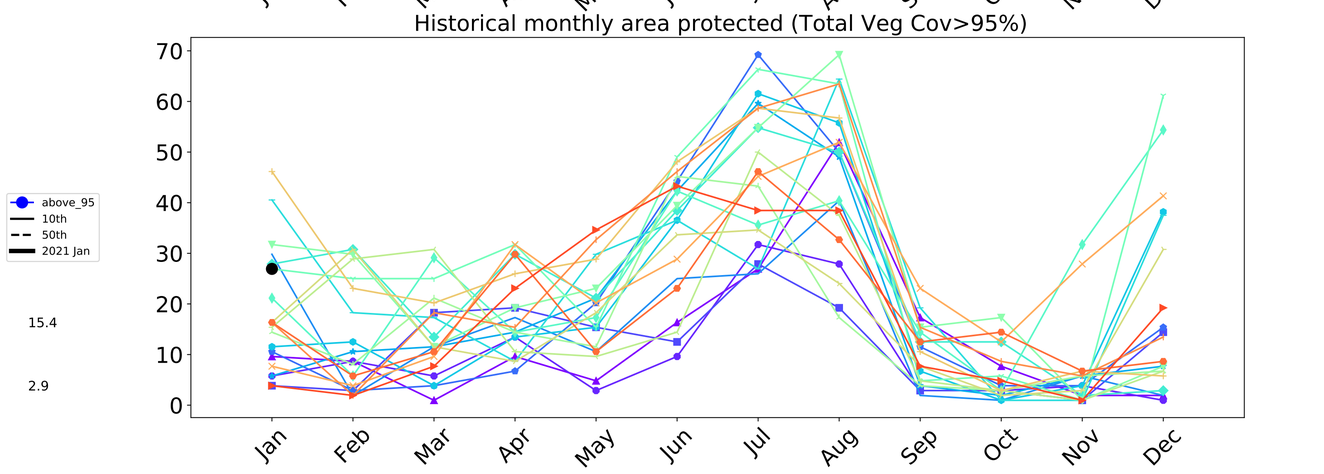

Proportion of the area protected from water erosion (Total Vegetation Cover > 80%)
% of the area
100.00
99.75
99.50
99.25
99.00
98.75
98.50
98.25
98.00
2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022


Historical monthly area protected (Total Veg Cov>80%)
100.0
above_80
10th
50th
2021 Jan
100.00
99.75
99.50
99.25
99.00
98.75
98.50
98.25
98.00
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021


Proportion of the area protected from water erosion (Total Vegetation Cover > 90%)
% of the area
100
90
80
70
60
50
40
30
20
2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022


Historical monthly area protected (Total Veg Cov>90%)
72.1
above_90
10th
50th
2021 Jan
48.1
100
90
80
70
60
50
40
30
20
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021

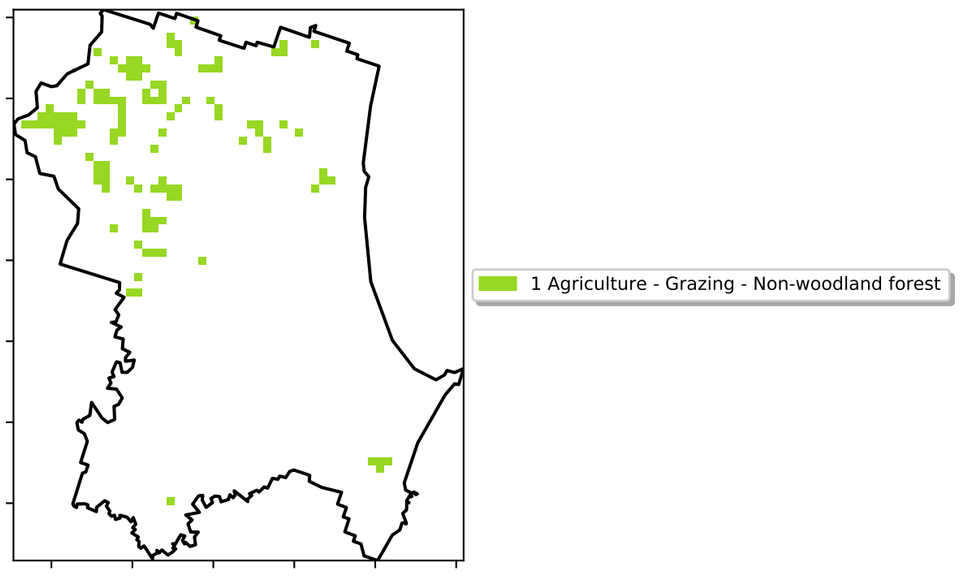

Proportion of the area protected from water erosion (Total Vegetation Cover > 95%)
% of the area
70
60
50
40
30
20
10
0
2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022


Historical monthly area protected (Total Veg Cov>95%)
above_95
10th
50th
2021 Jan
15.4
2.9
70
60
50
40
30
20
10
0
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021

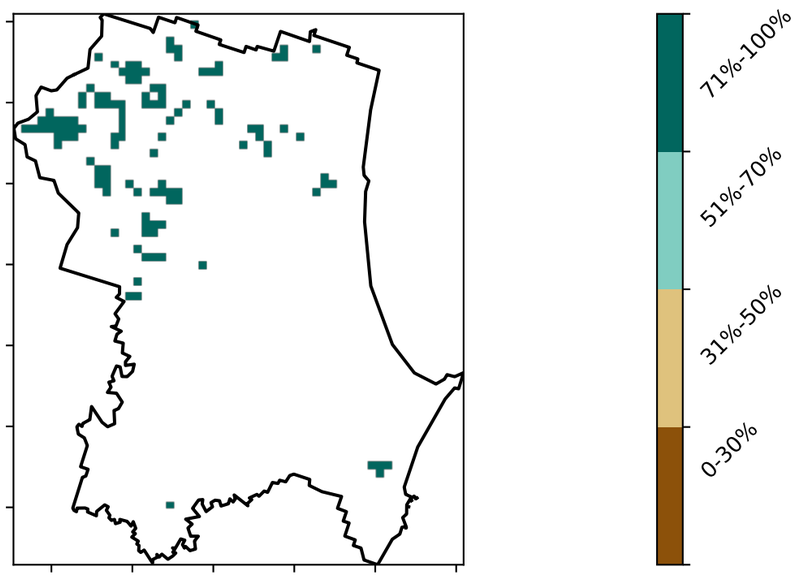
Grazing - Forest (non woodland)

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

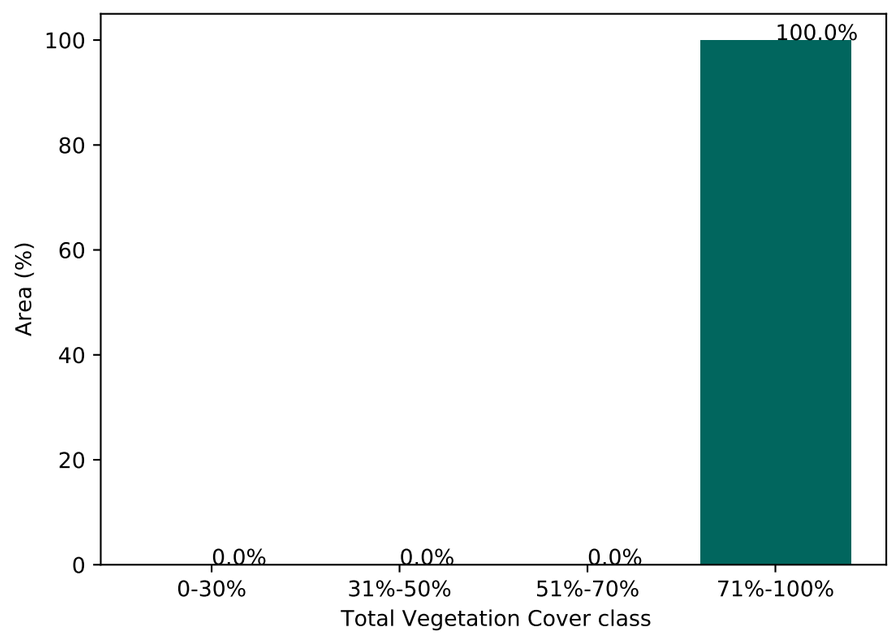
Land use and forest cover



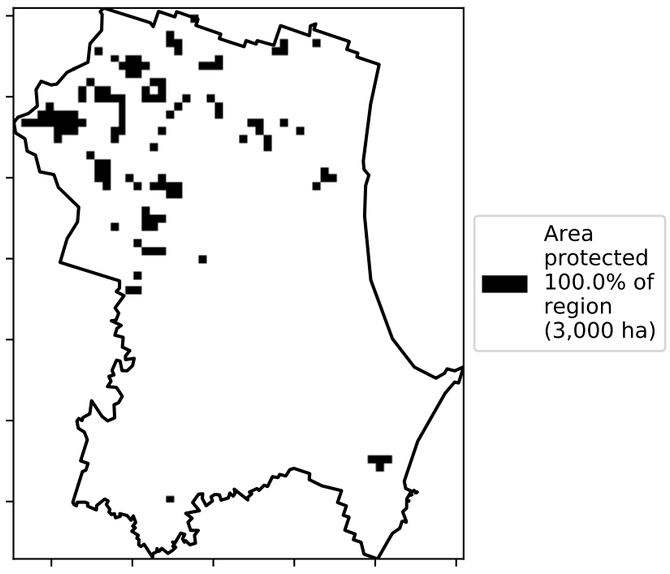
Total Vegetation Cover [%]



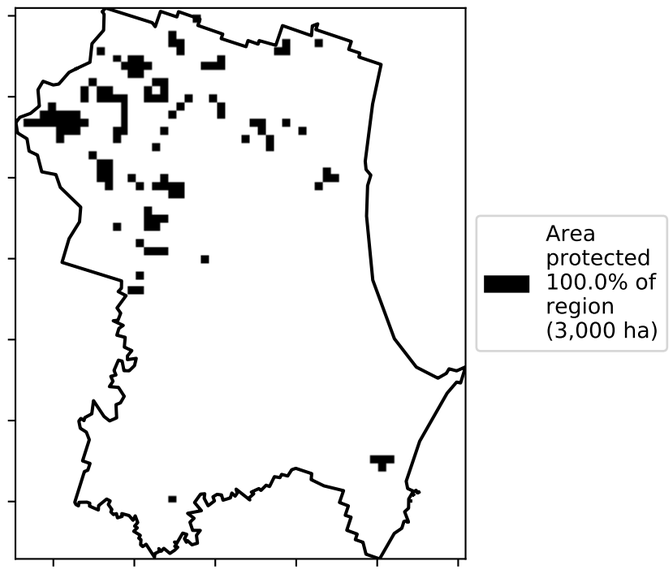
Proportion of vegetation cover class in area



% Area protected from water erosion (>70%)

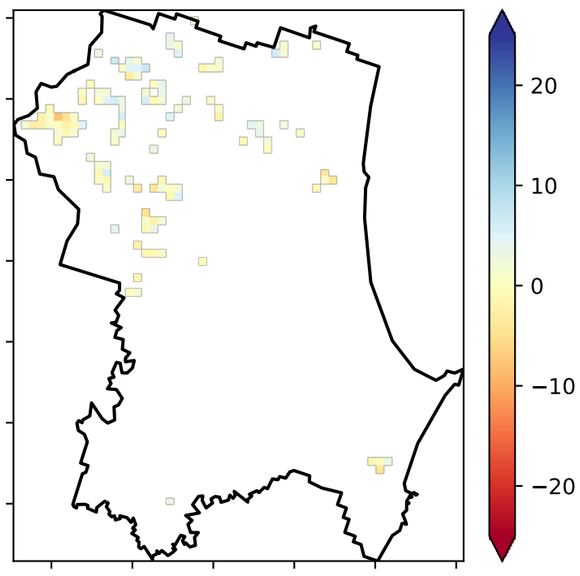


% Area protected from wind erosion (>50%)



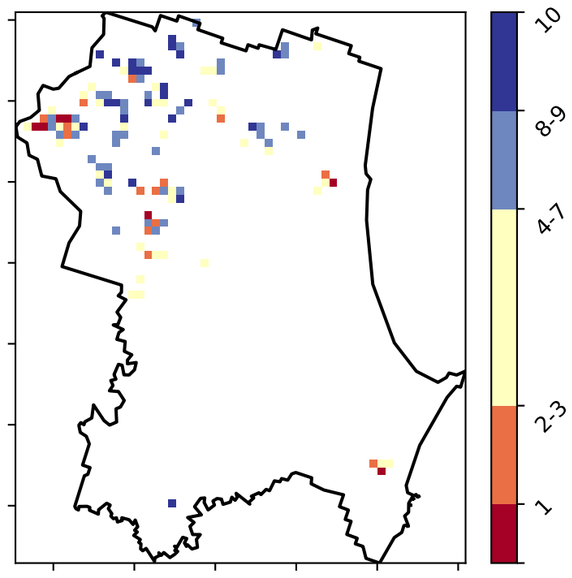
Total Vegetation Cover Anomaly [%]

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.



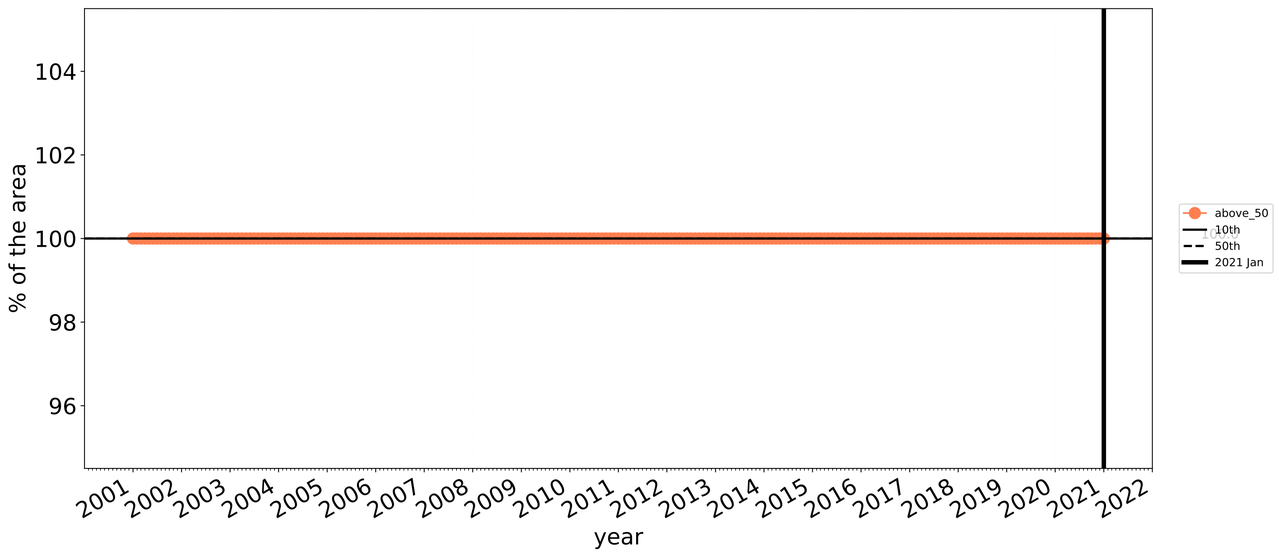
Total Vegetation Cover Decile [%]

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.

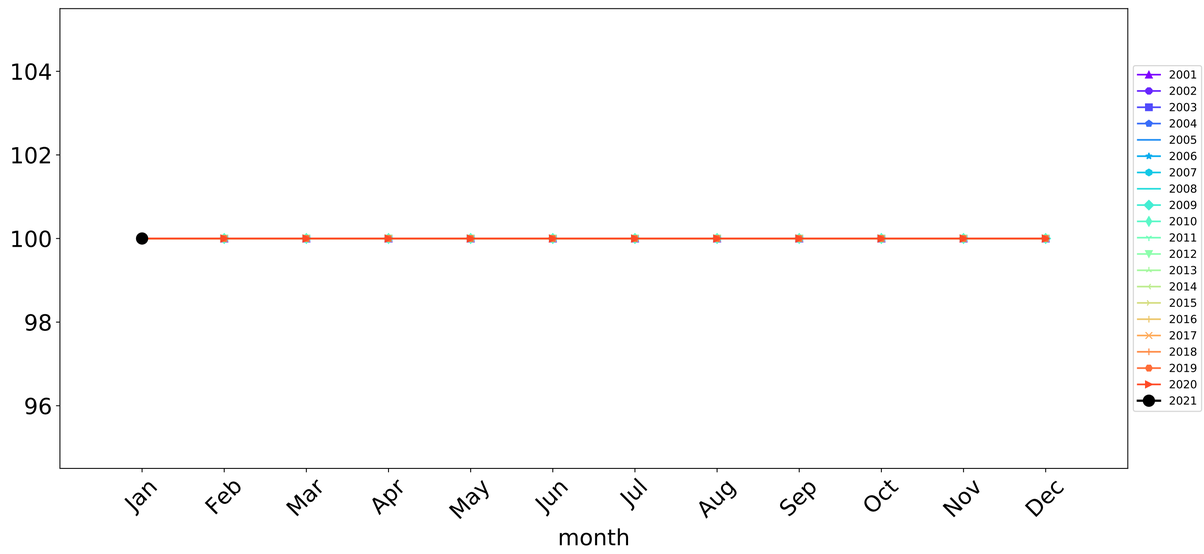


Grazing - Forest (non woodland) timeseries

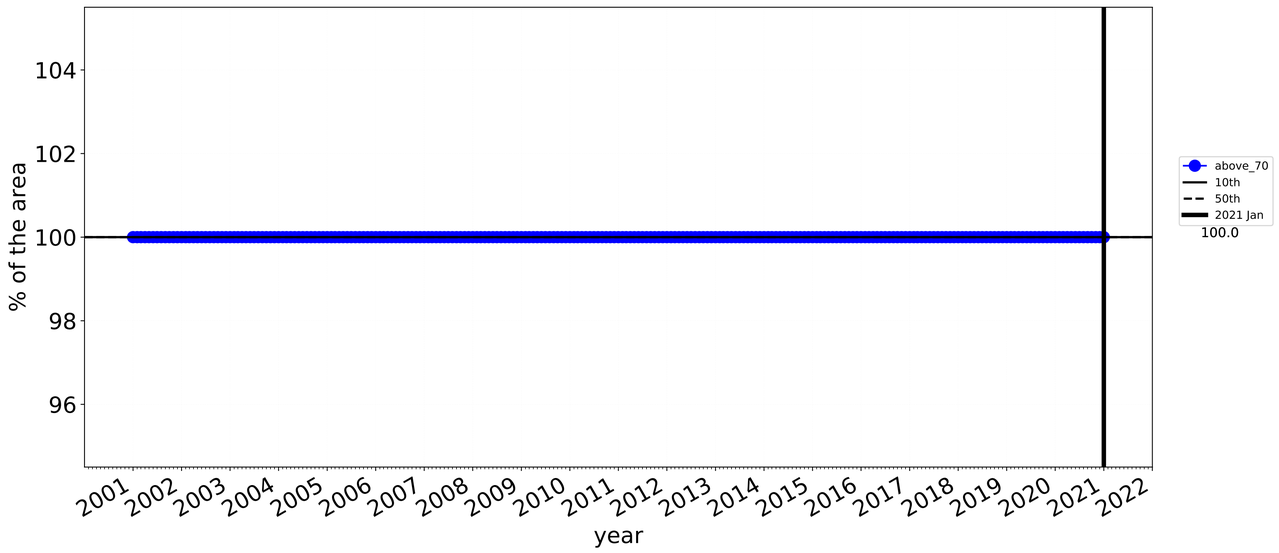
Proportion of the area protected from wind erosion (Total Vegetation Cover > 50%)



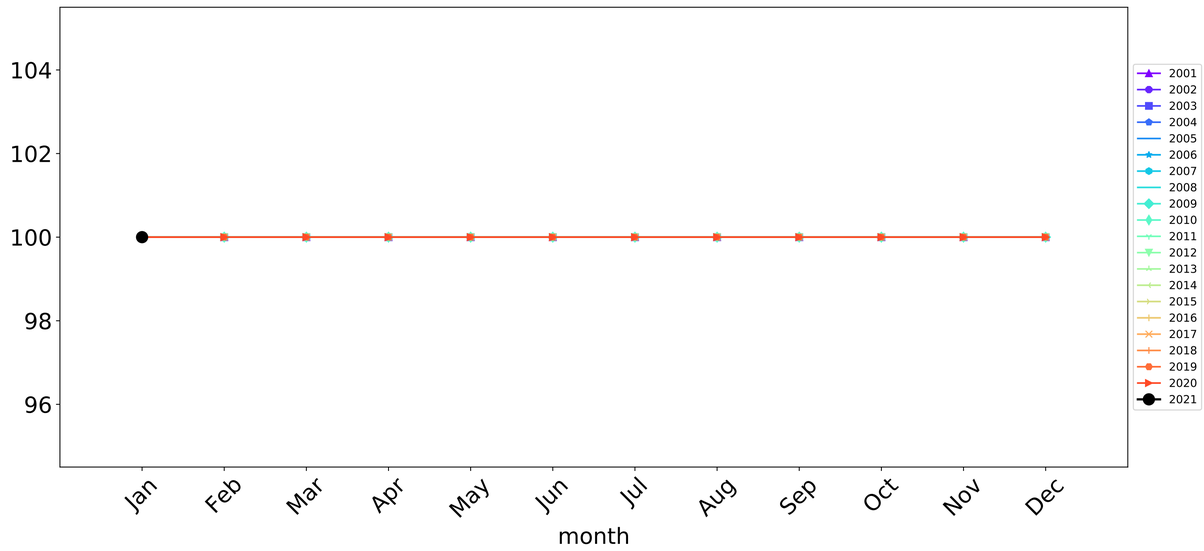
Wind erosion historical monthly area protected (Total Veg Cov >50%)

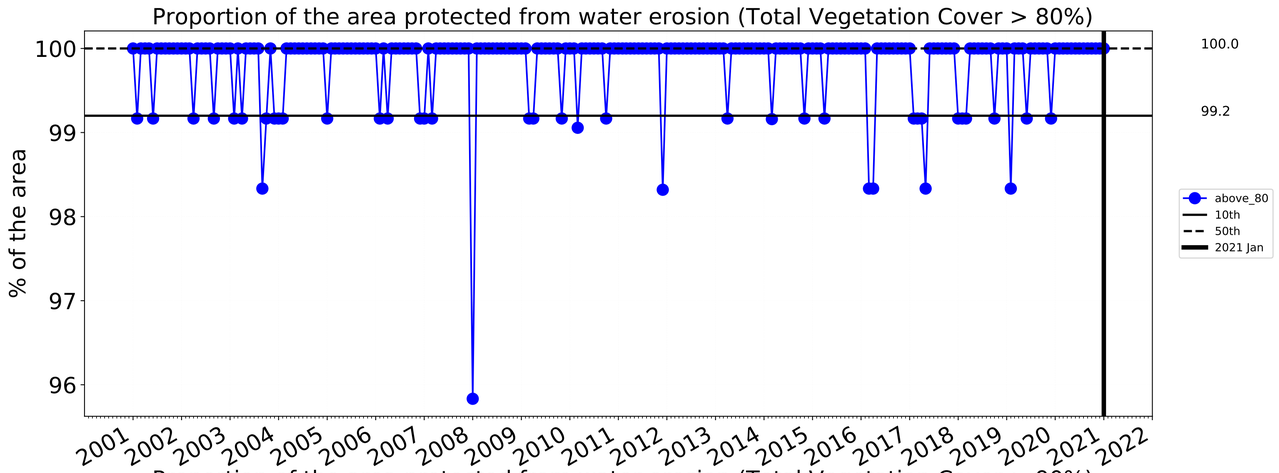


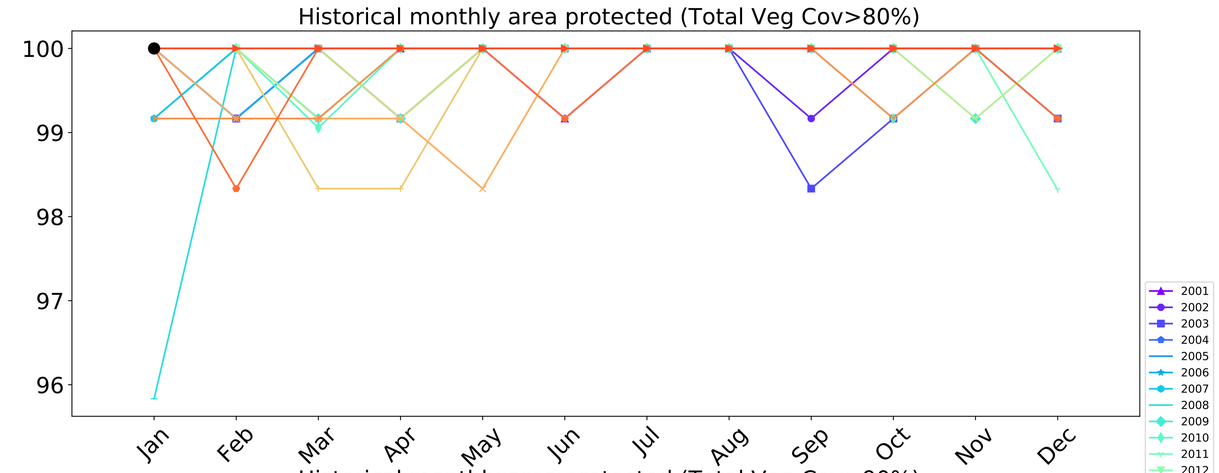
Proportion of the area protected from water erosion (Total Vegetation Cover > 70%)

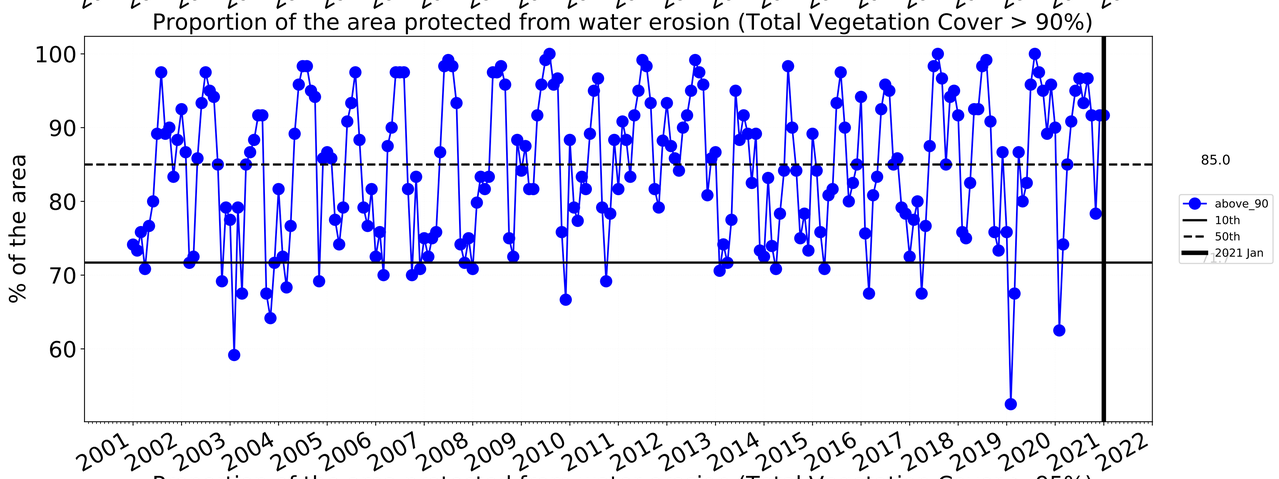


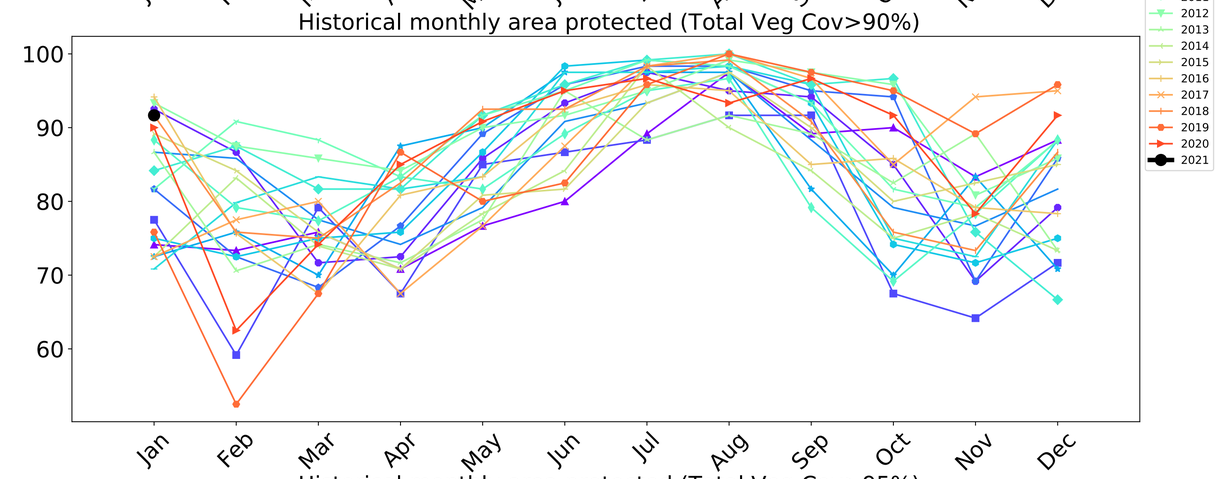
Water erosion historical monthly area protected (Total Veg Cov>70%)

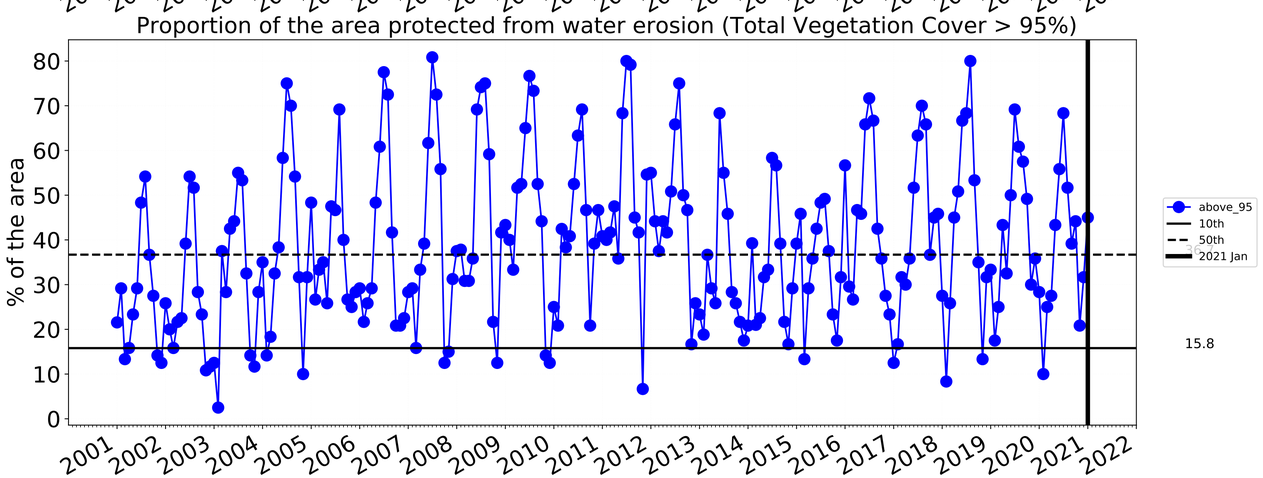


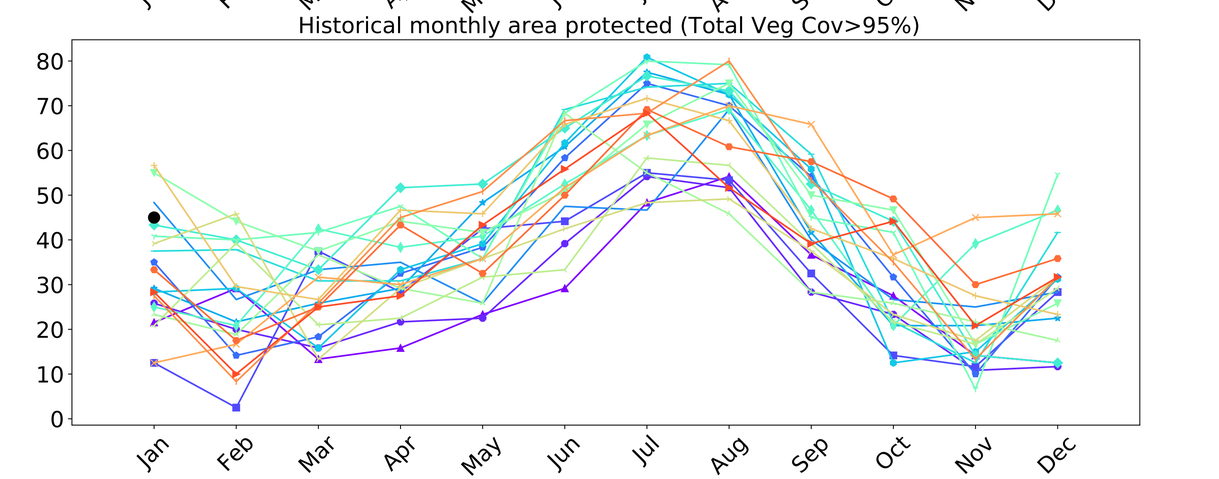

Proportion of the area protected from water erosion (Total Vegetation Cover > 80%)
% of the area
100.0
99.2
above_80
10th
50th
2021 Jan


Historical monthly area protected (Total Veg Cov>80%)
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021


Proportion of the area protected from water erosion (Total Vegetation Cover > 90%)
% of the area
85.0
above_90
10th
50th
2021 Jan


Historical monthly area protected (Total Veg Cov>90%)
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

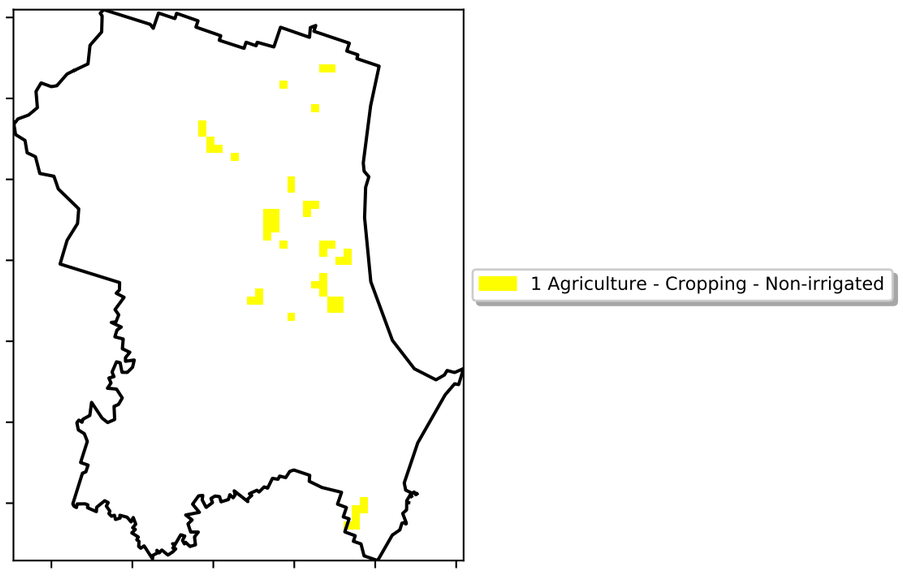

Proportion of the area protected from water erosion (Total Vegetation Cover > 95%)
% of the area
15.8
above_95
10th
50th
2021 Jan


Historical monthly area protected (Total Veg Cov>95%)
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

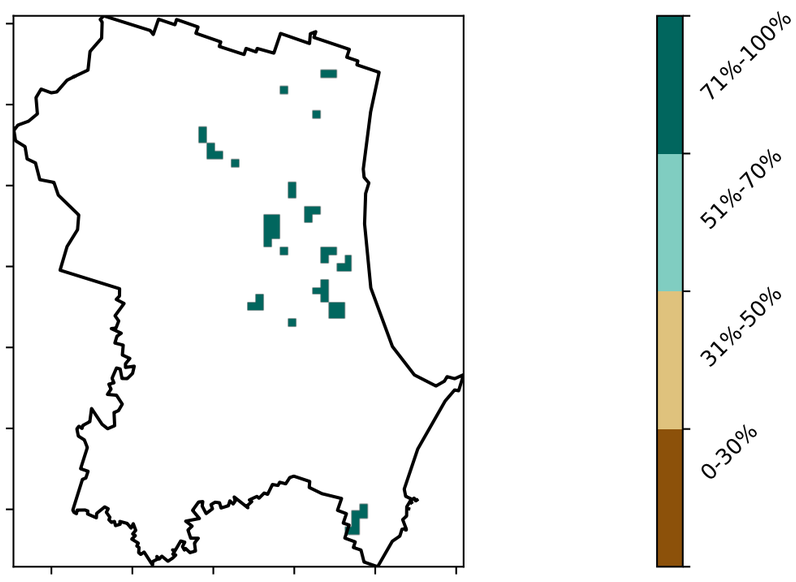
Cropping

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

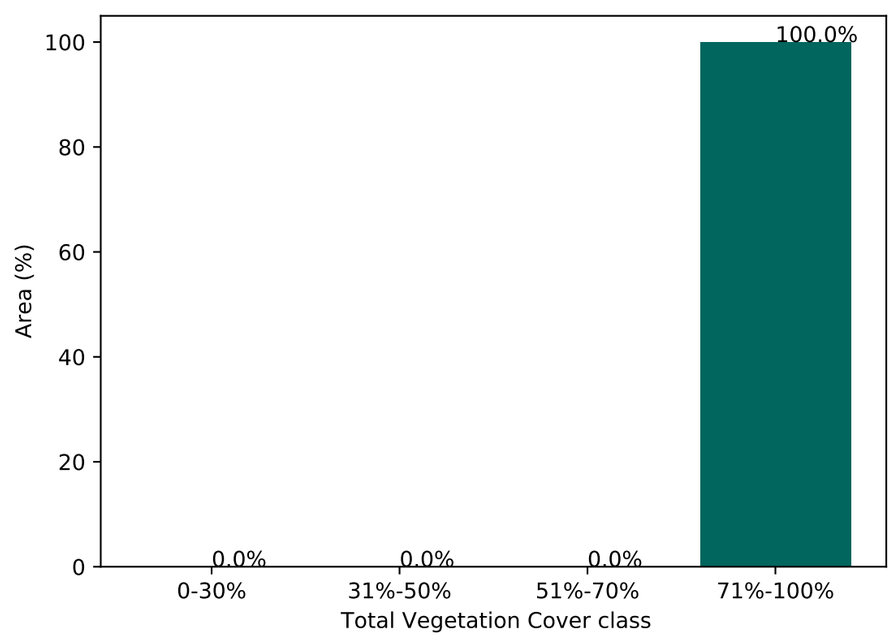
Land use and forest cover



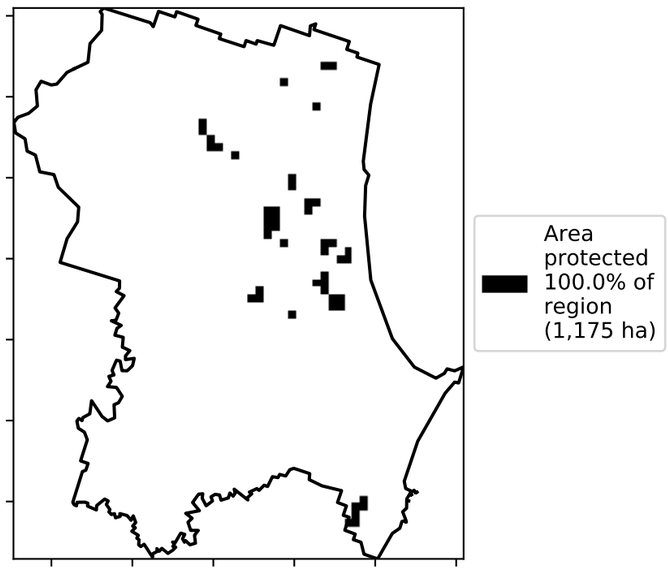
Total Vegetation Cover [%]



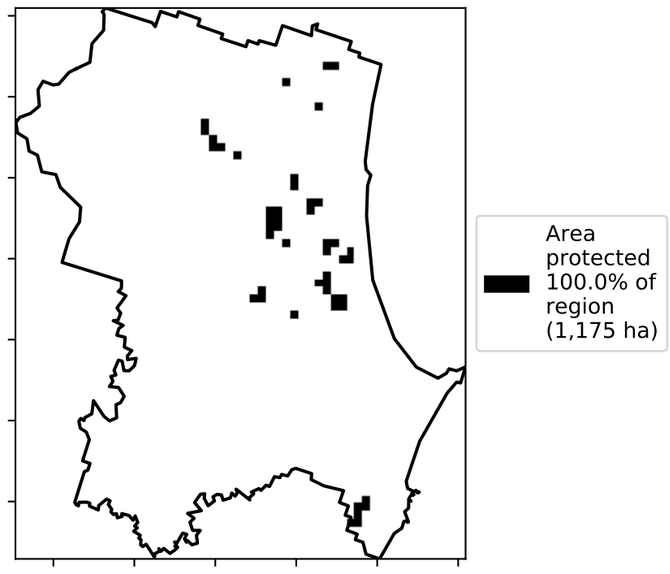
Proportion of vegetation cover class in area



% Area protected from water erosion (>70%)

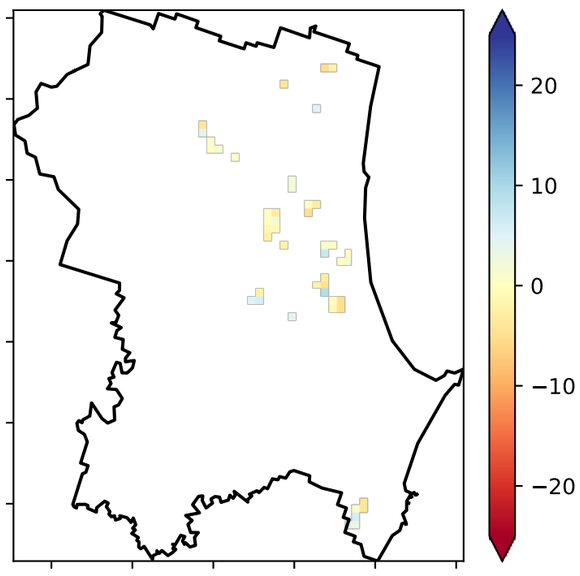


% Area protected from wind erosion (>50%)



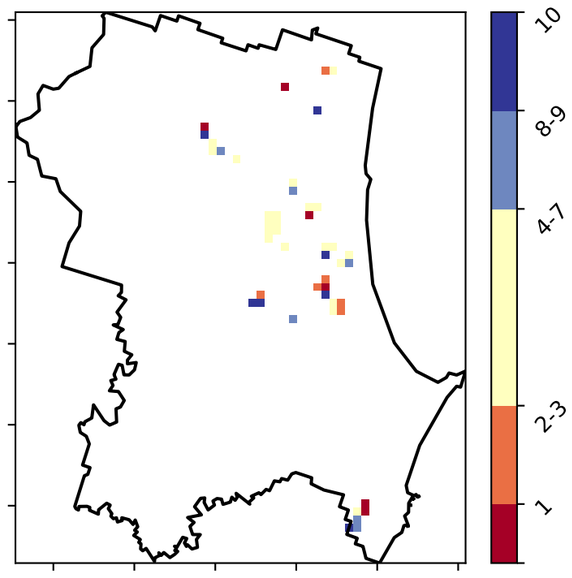
Total Vegetation Cover Anomaly [%]

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.



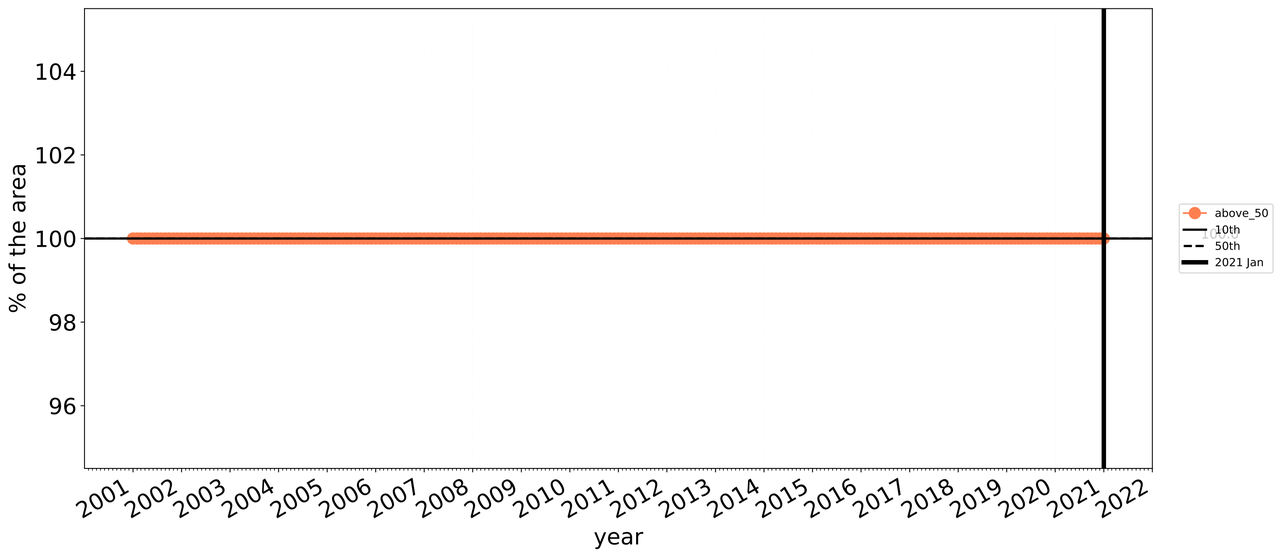
Total Vegetation Cover Decile [%]

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.

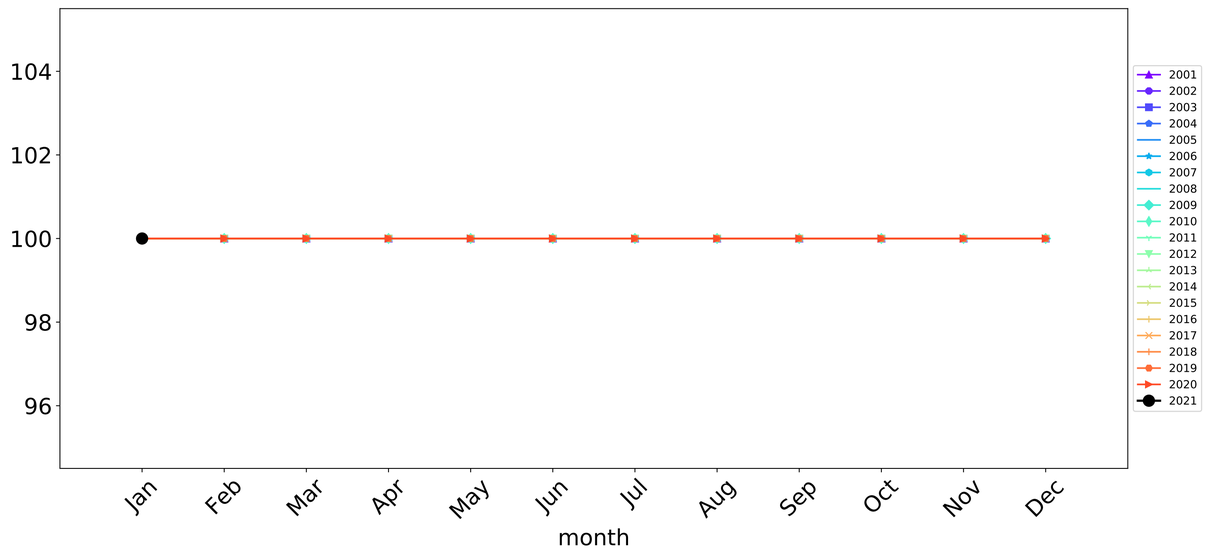


Cropping timeseries

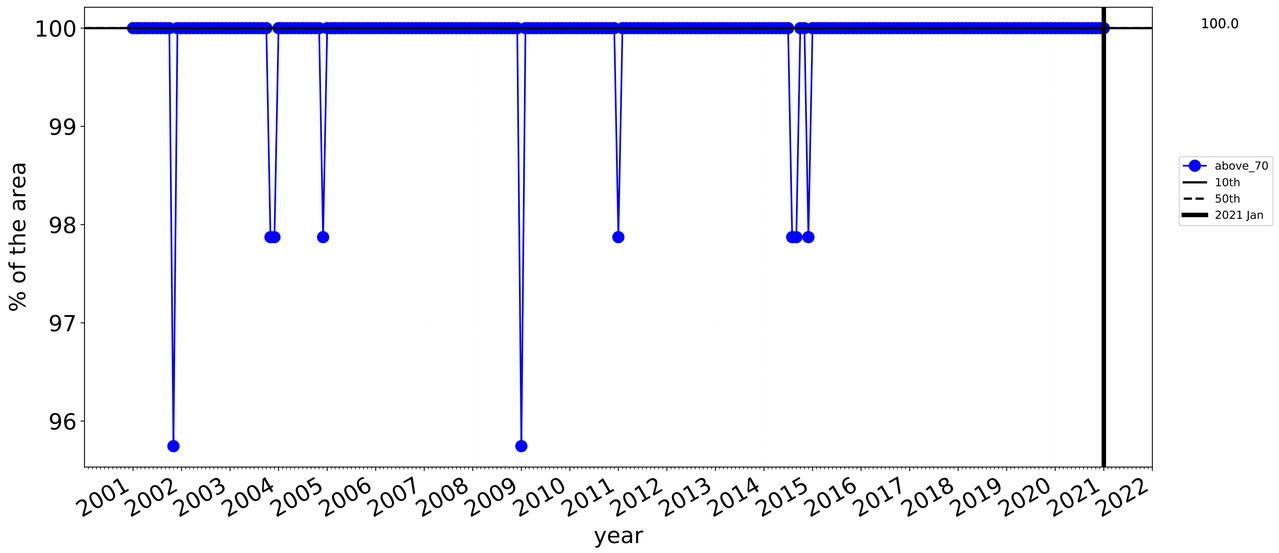
Proportion of the area protected from wind erosion (Total Vegetation Cover > 50%)



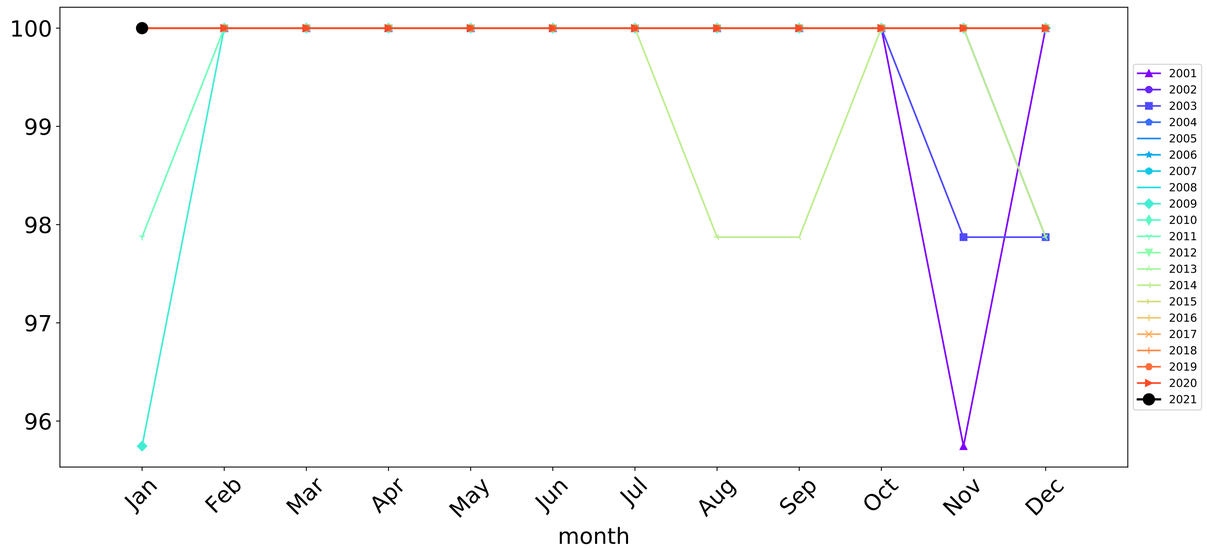
Wind erosion historical monthly area protected (Total Veg Cov >50%)

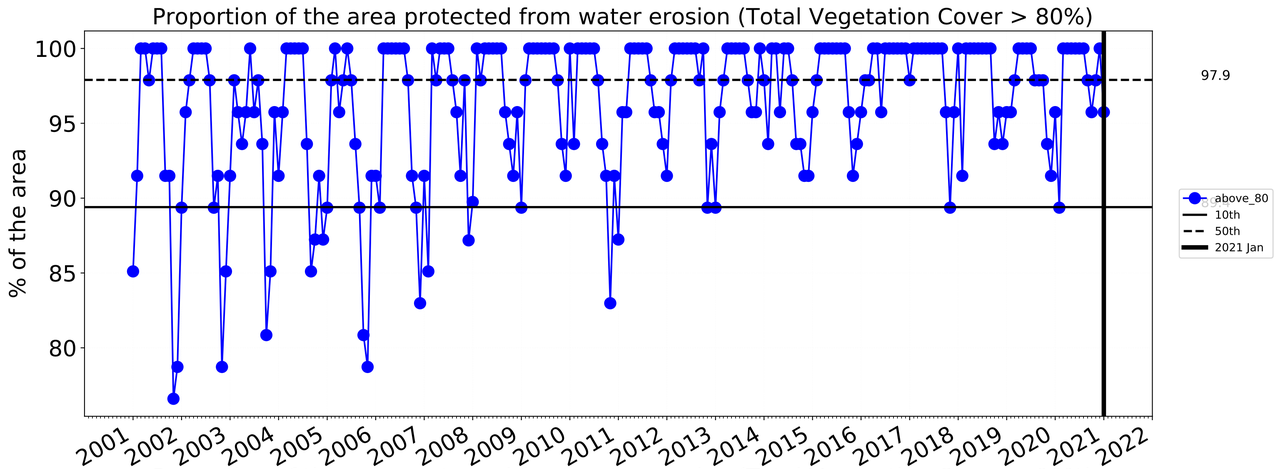


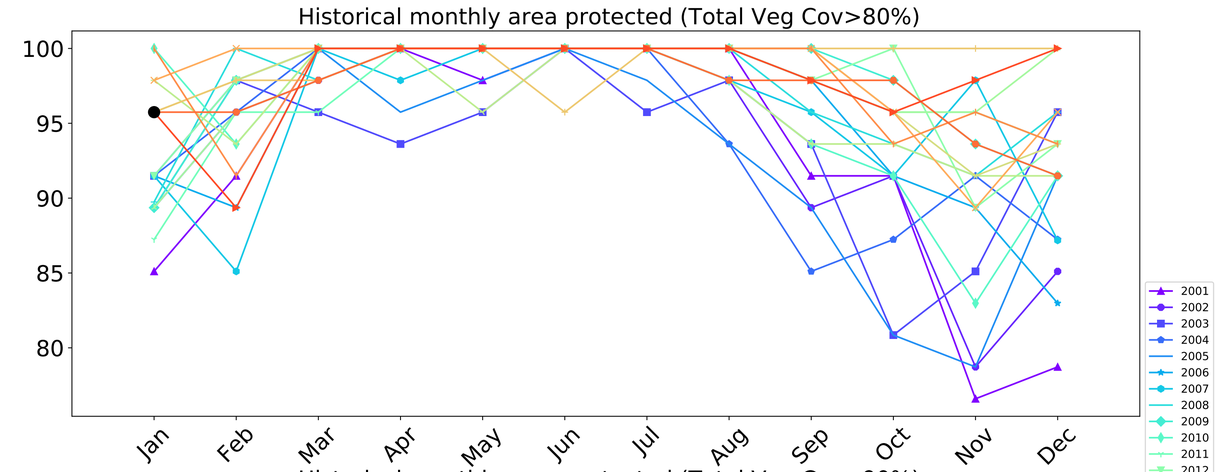
Proportion of the area protected from water erosion (Total Vegetation Cover > 70%)



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




Proportion of the area protected from water erosion (Total Vegetation Cover > 80%)
% of the area
97.9
above_80
10th
50th
2021 Jan


Historical monthly area protected (Total Veg Cov>80%)
Jan
Feb
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Oct
Nov
Dec
2001
2002
2003
2004
2005
2006
2007
2008
2009
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2011
2012
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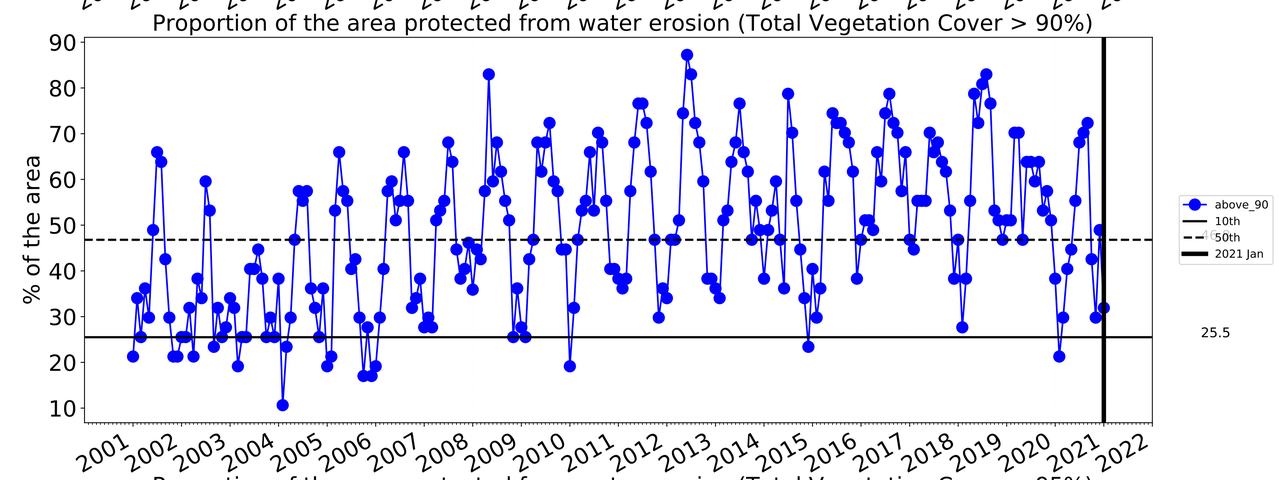
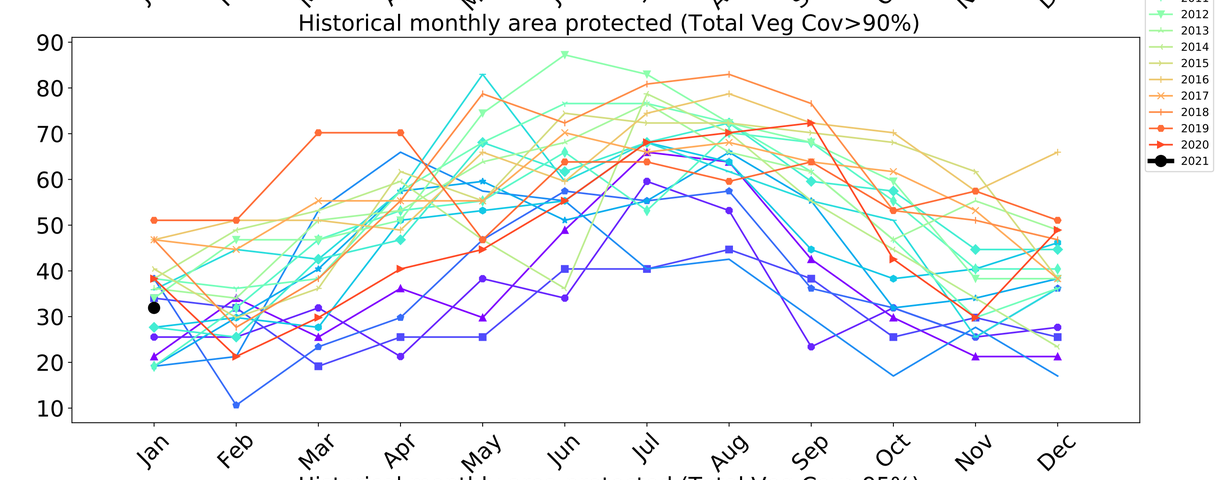
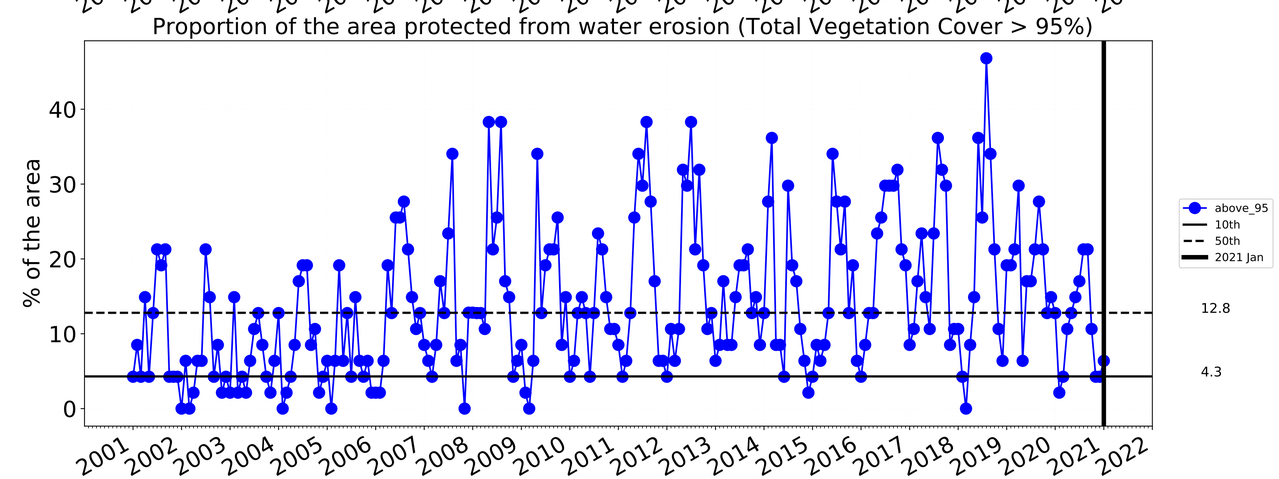
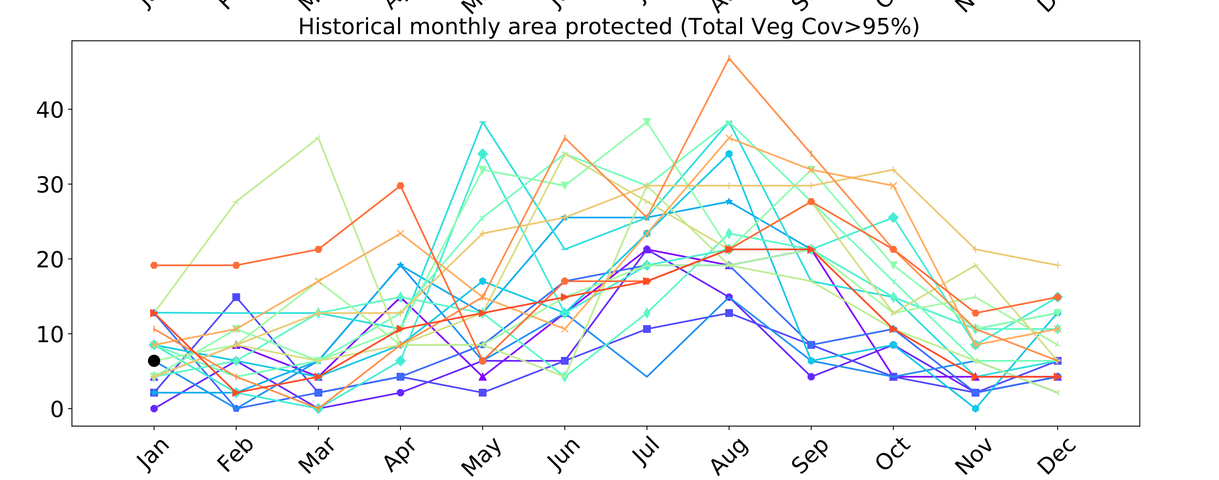
2014
2015
2016
2017
2018
2019
2020
2021


Proportion of the area protected from water erosion (Total Vegetation Cover > 90%)
% of the area
25.5
above_90
10th
50th
2021 Jan


Historical monthly area protected (Total Veg Cov>90%)
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

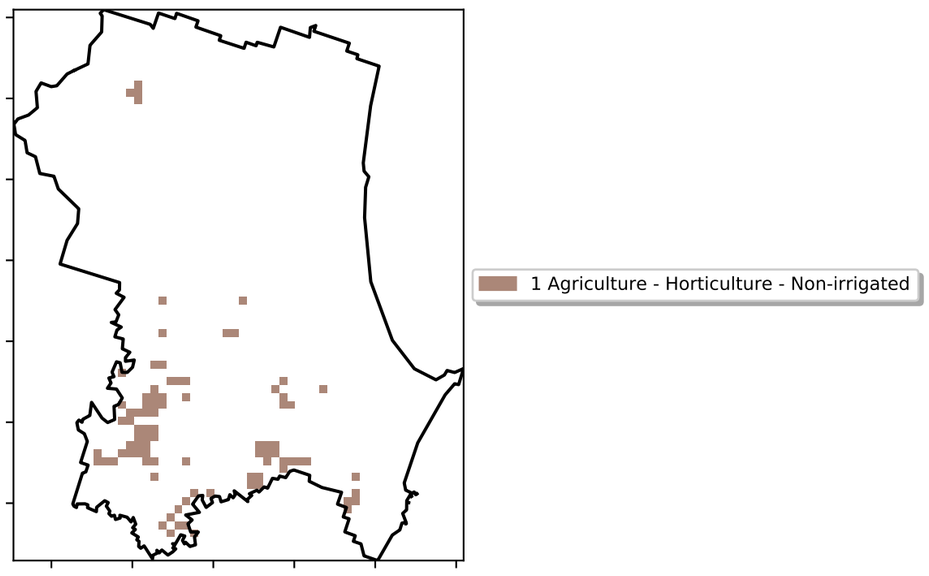

Proportion of the area protected from water erosion (Total Vegetation Cover > 95%)
% of the area
12.8
4.3
above_95
10th
50th
2021 Jan


Historical monthly area protected (Total Veg Cov>95%)
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

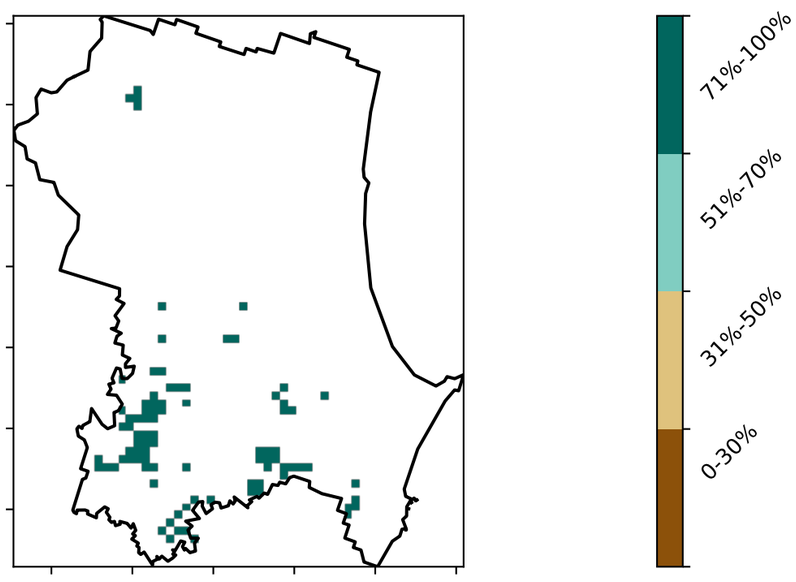
Horticulture

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

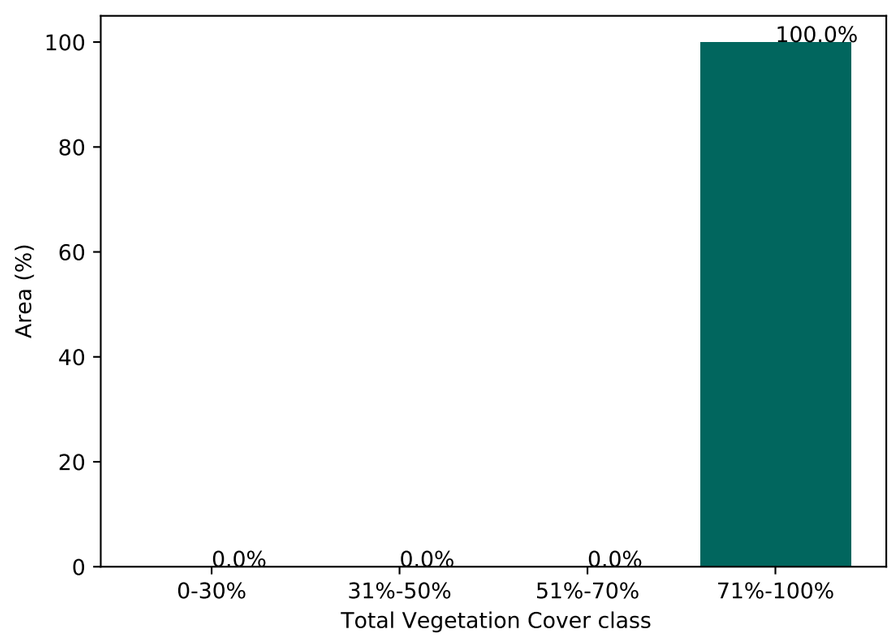
Land use and forest cover



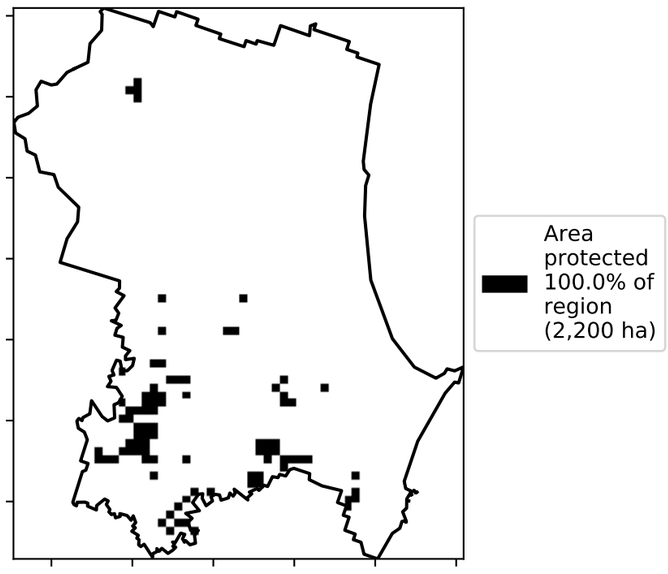
Total Vegetation Cover [%]



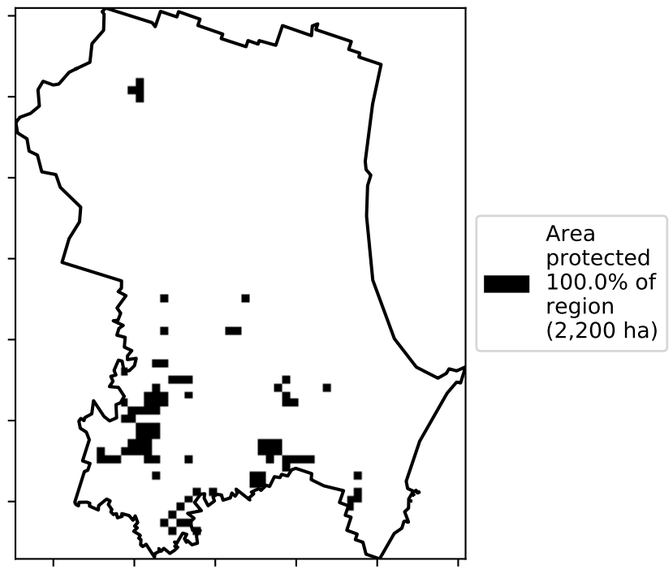
Proportion of vegetation cover class in area



% Area protected from water erosion (>70%)

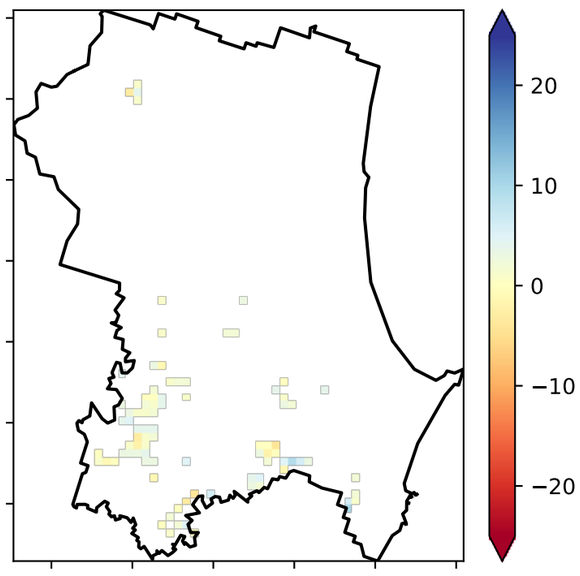


% Area protected from wind erosion (>50%)



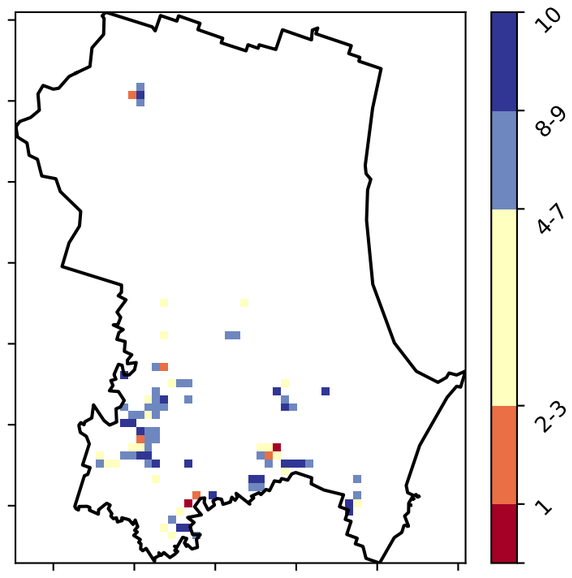
Total Vegetation Cover Anomaly [%]

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.



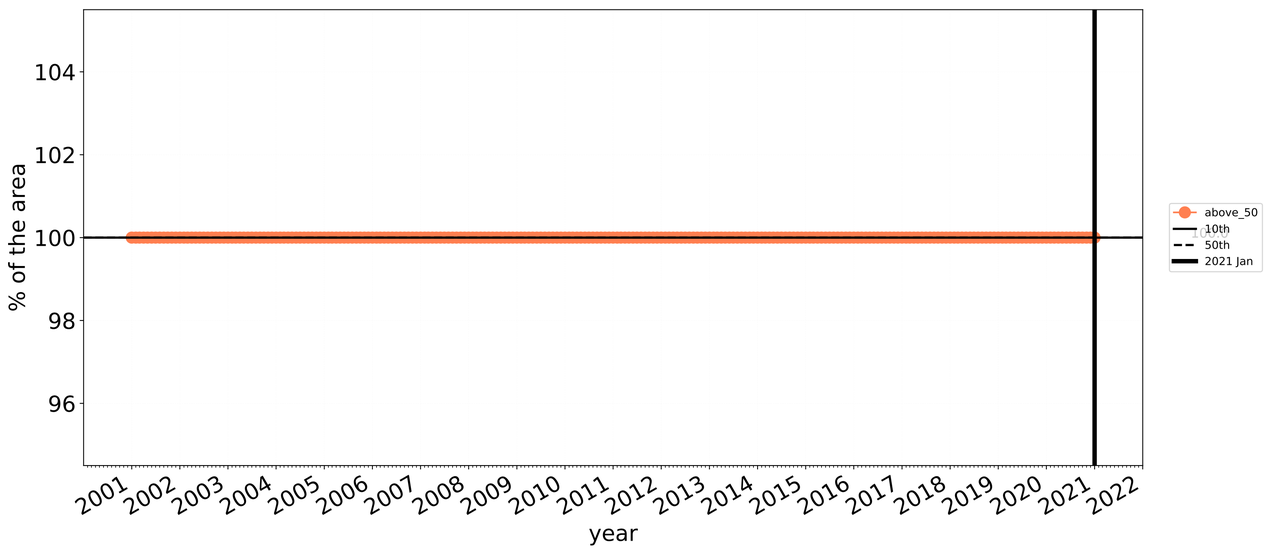
Total Vegetation Cover Decile [%]

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.

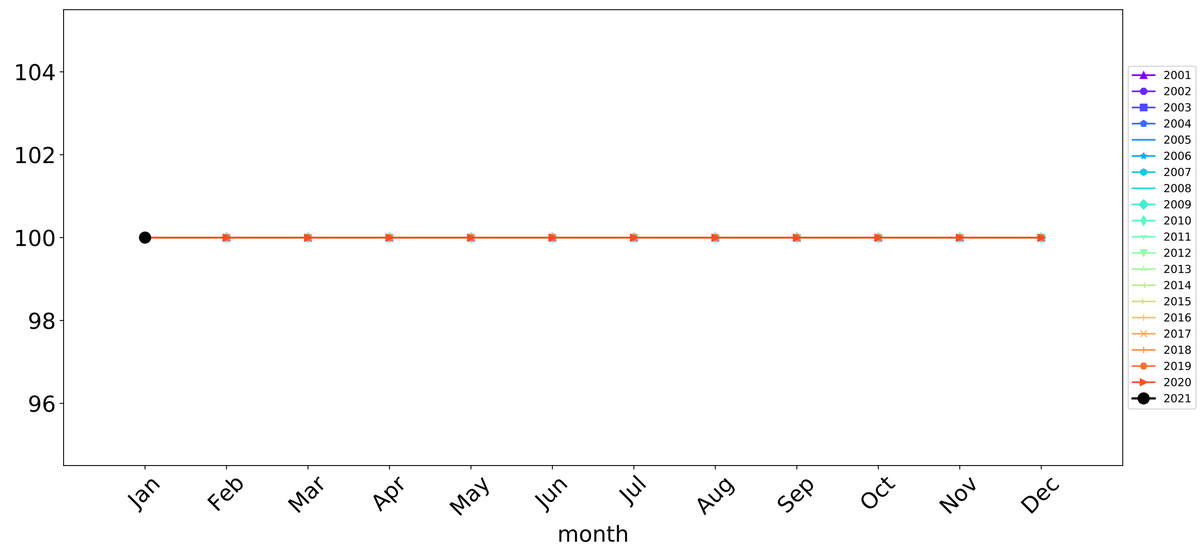


Horticulture timeseries

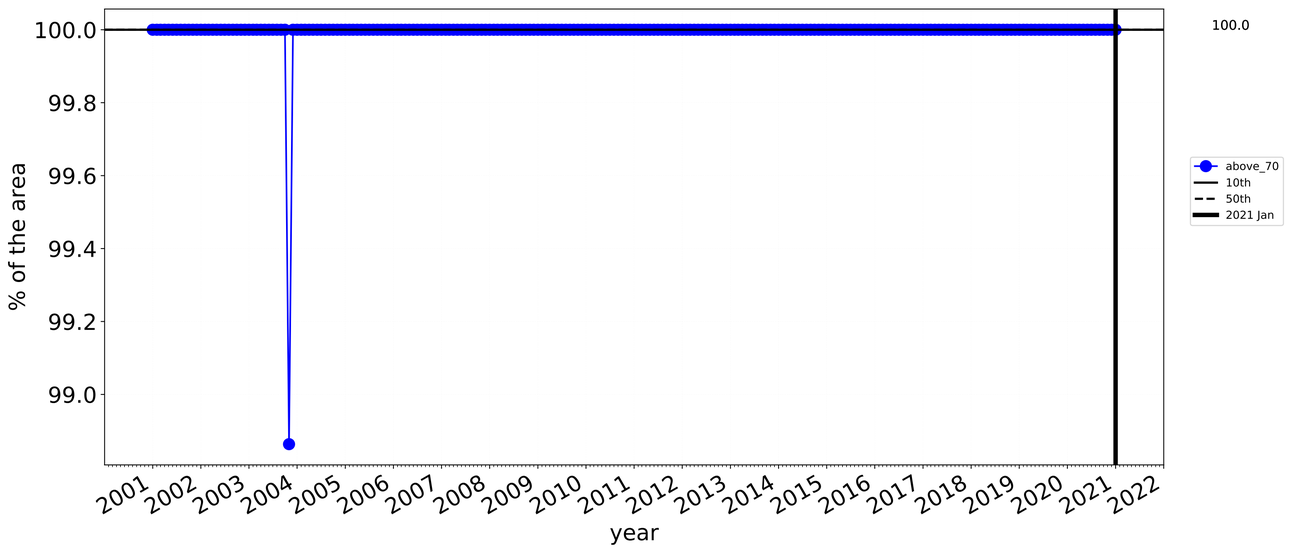
Proportion of the area protected from wind erosion (Total Vegetation Cover > 50%)



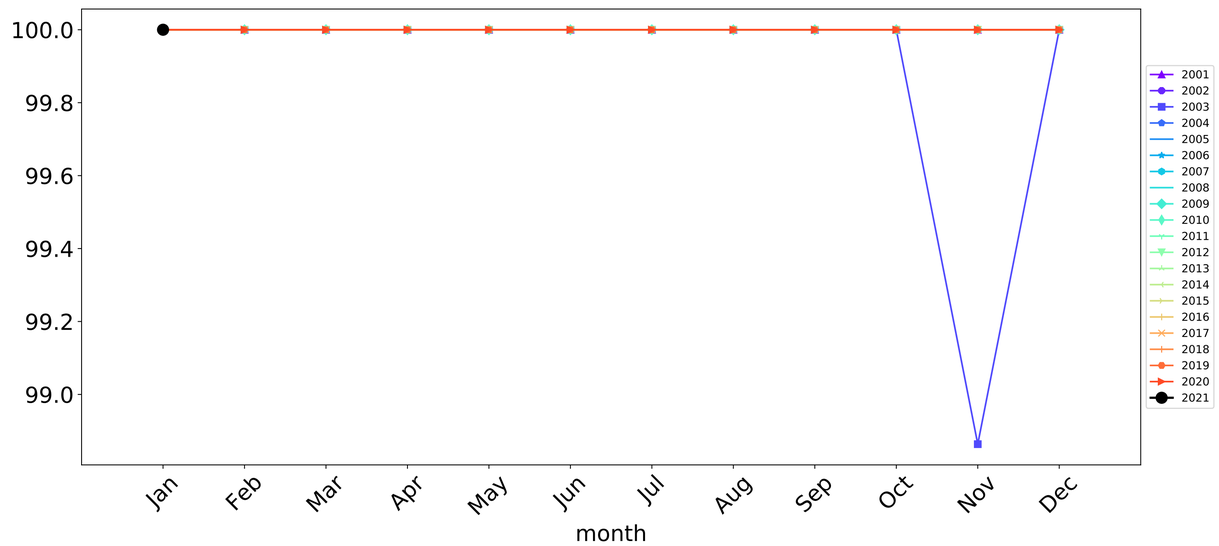
Wind erosion historical monthly area protected (Total Veg Cov >50%)

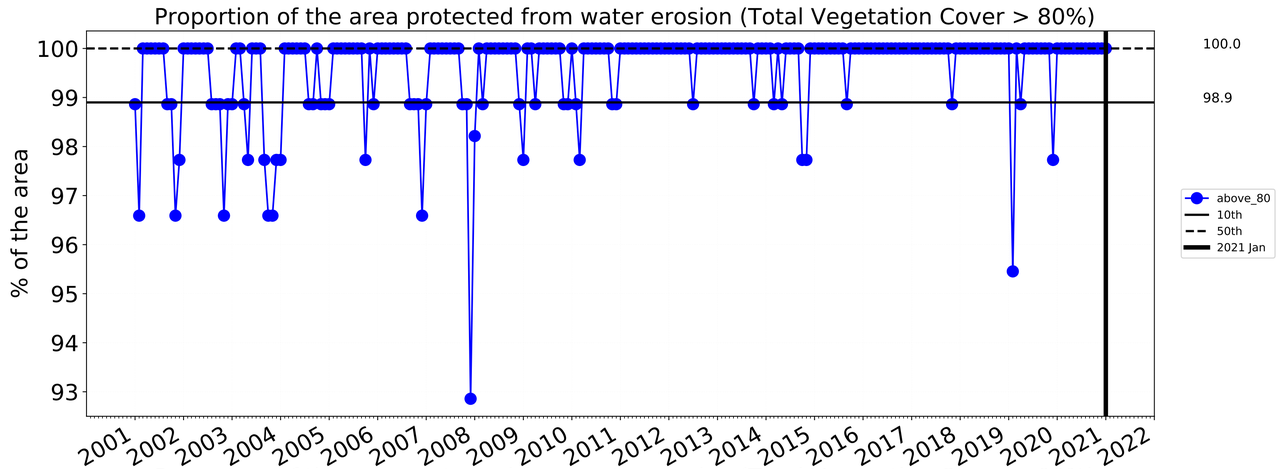


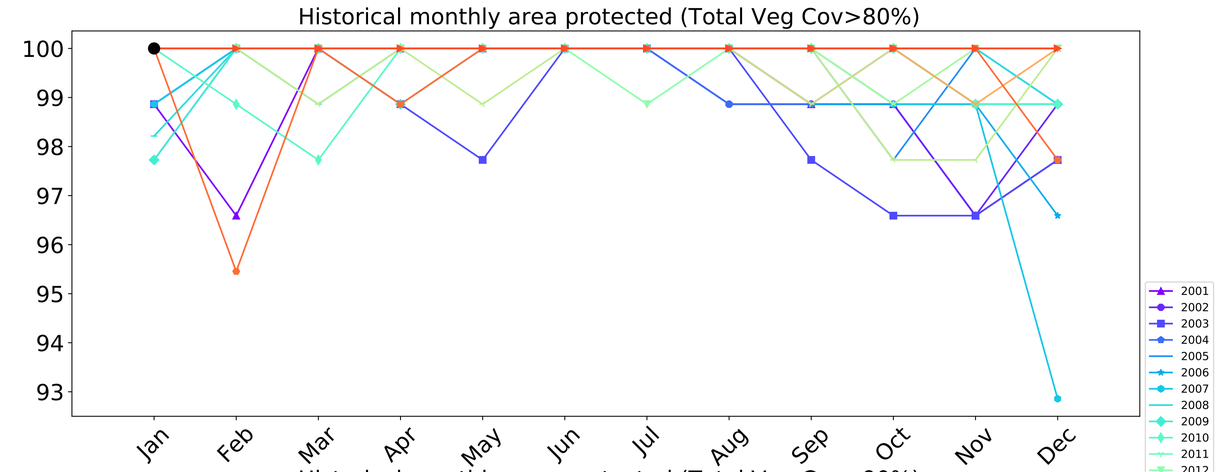
Proportion of the area protected from water erosion (Total Vegetation Cover > 70%)



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




Proportion of the area protected from water erosion (Total Vegetation Cover > 80%)
% of the area
100.0
98.9
above_80
10th
50th
2021 Jan


Historical monthly area protected (Total Veg Cov>80%)
Jan
Feb
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2001
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2011
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2014
2015
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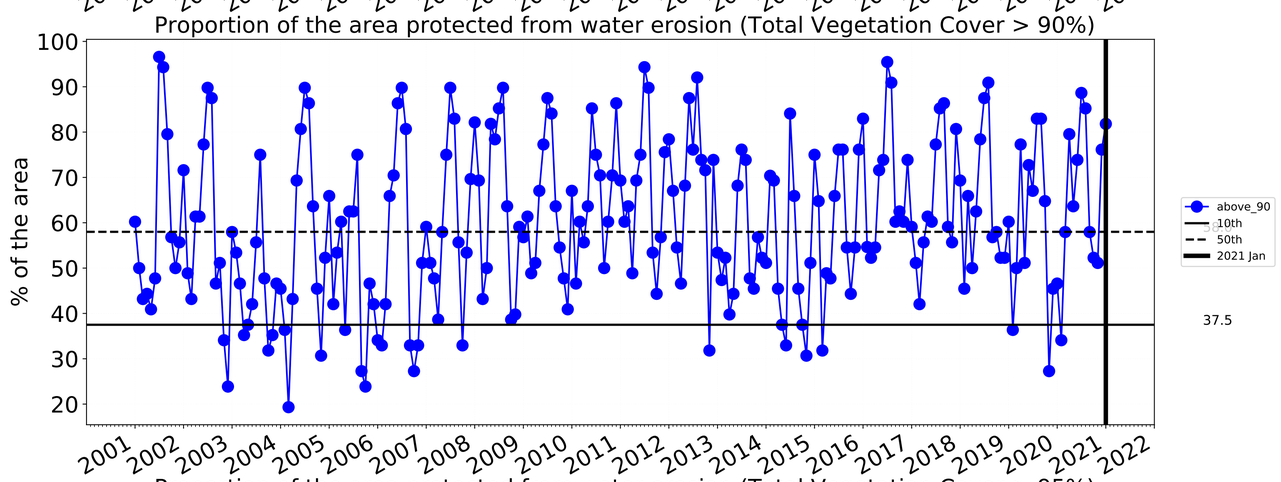
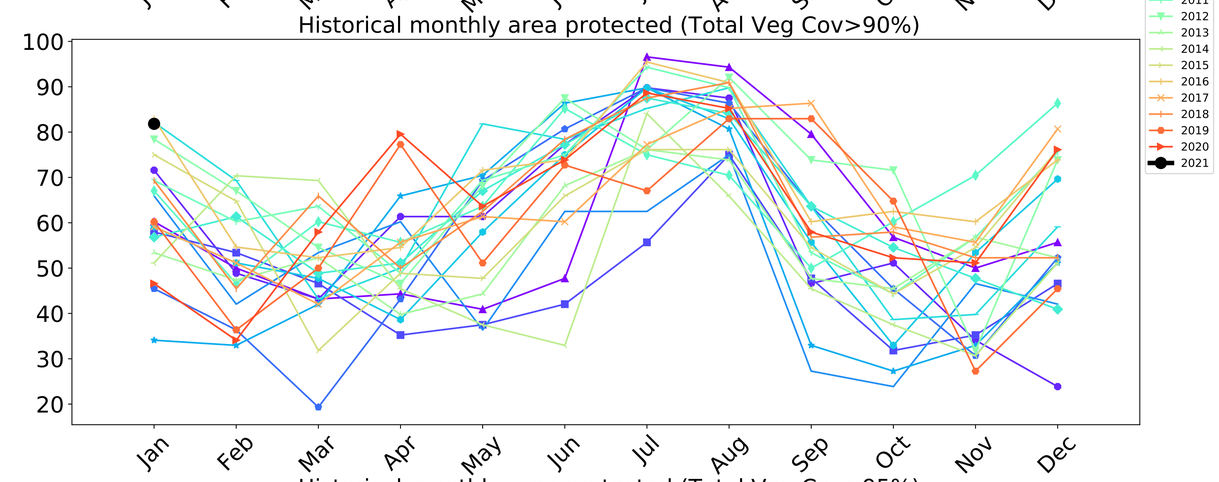
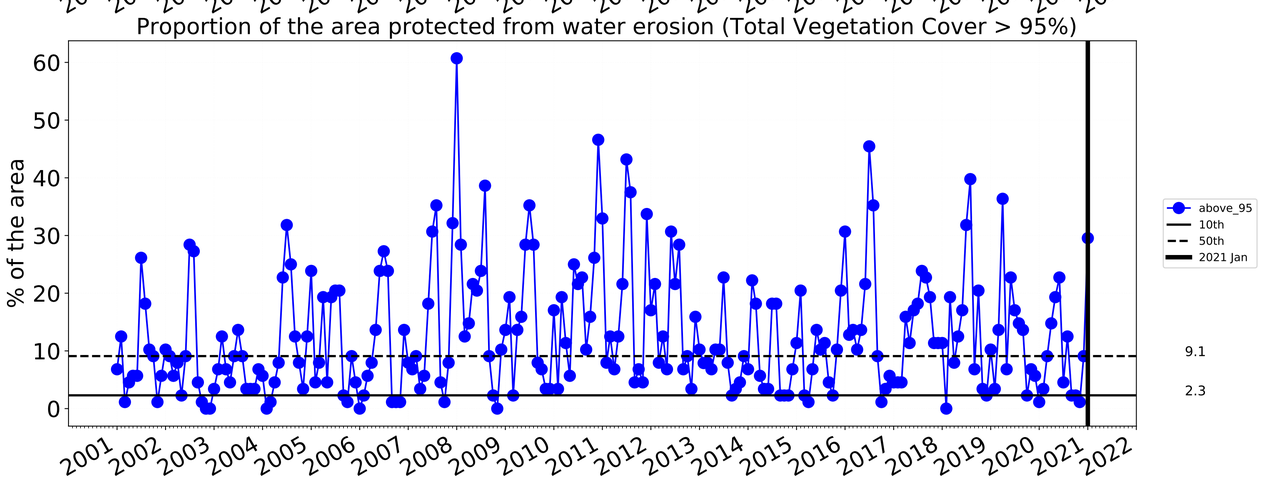
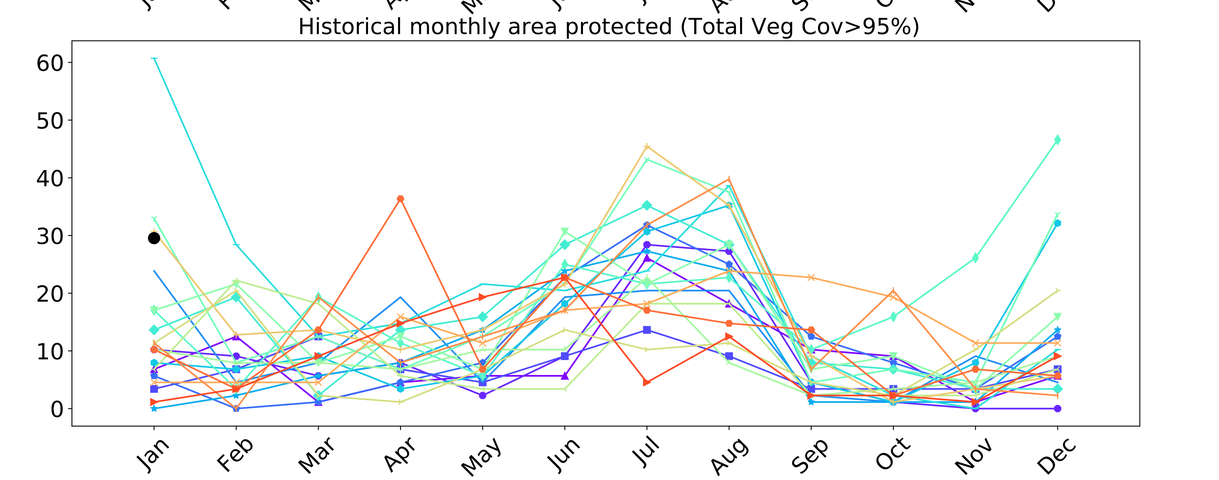
2017
2018
2019
2020
2021


Proportion of the area protected from water erosion (Total Vegetation Cover > 90%)
% of the area
37.5
above_90
10th
50th
2021 Jan


Historical monthly area protected (Total Veg Cov>90%)
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

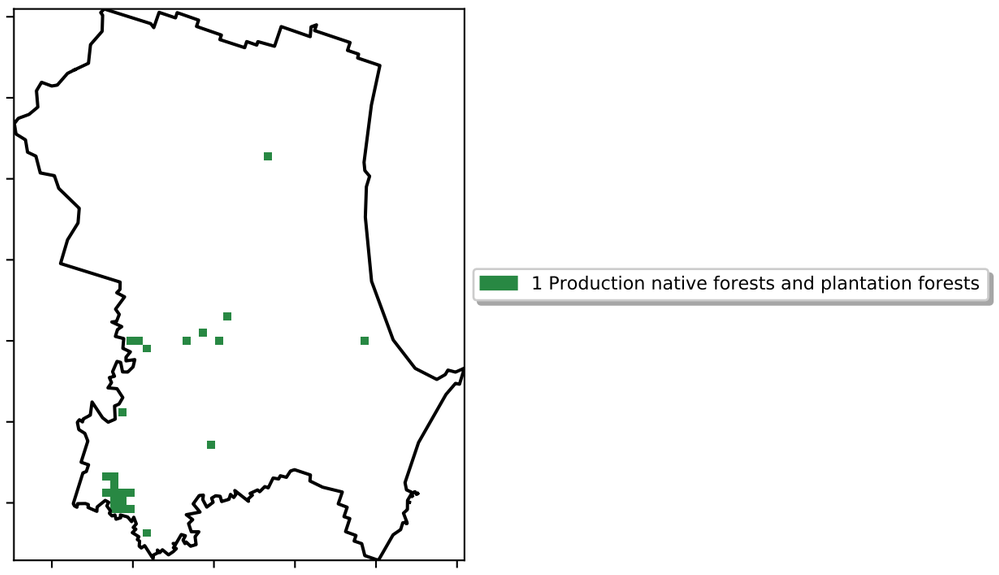

Proportion of the area protected from water erosion (Total Vegetation Cover > 95%)
% of the area
9.1
2.3
above_95
10th
50th
2021 Jan


Historical monthly area protected (Total Veg Cov>95%)
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

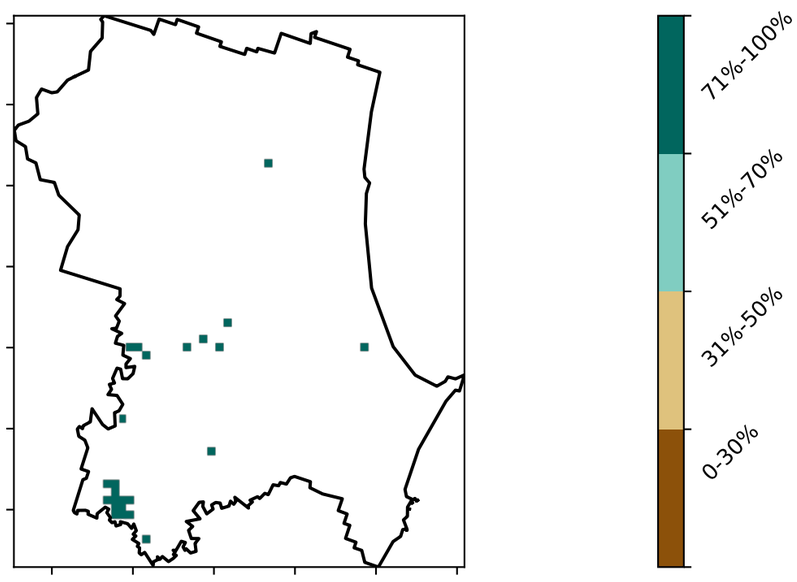
Production native forests and plantation forests

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

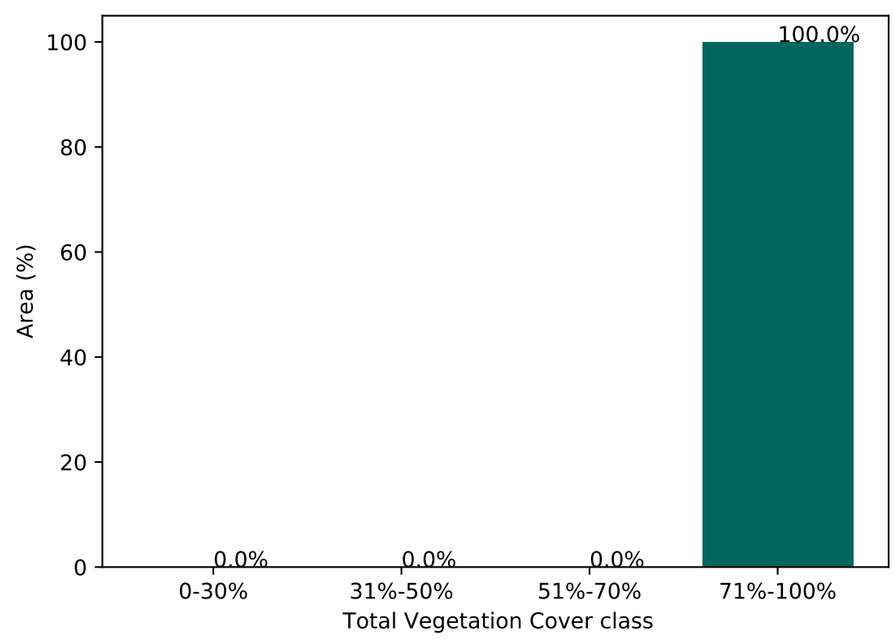
Land use and forest cover



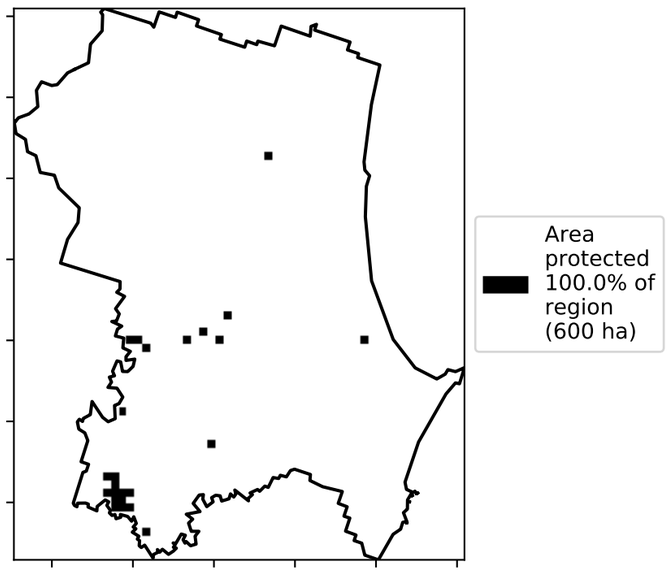
Total Vegetation Cover [%]



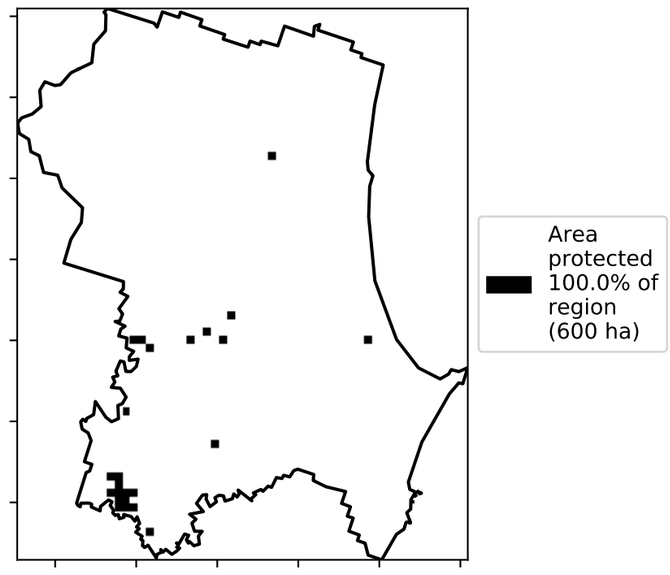
Proportion of vegetation cover class in area



% Area protected from water erosion (>70%)

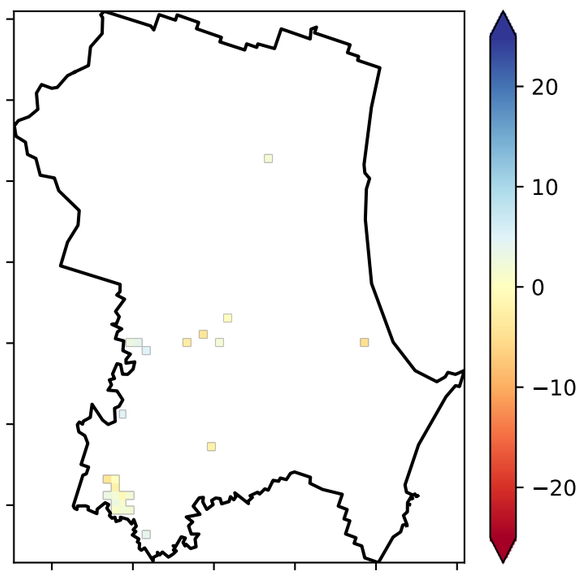


% Area protected from wind erosion (>50%)



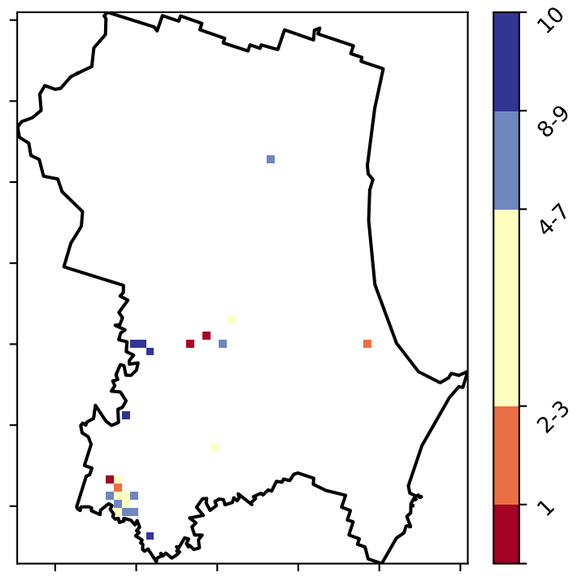
Total Vegetation Cover Anomaly [%]

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.



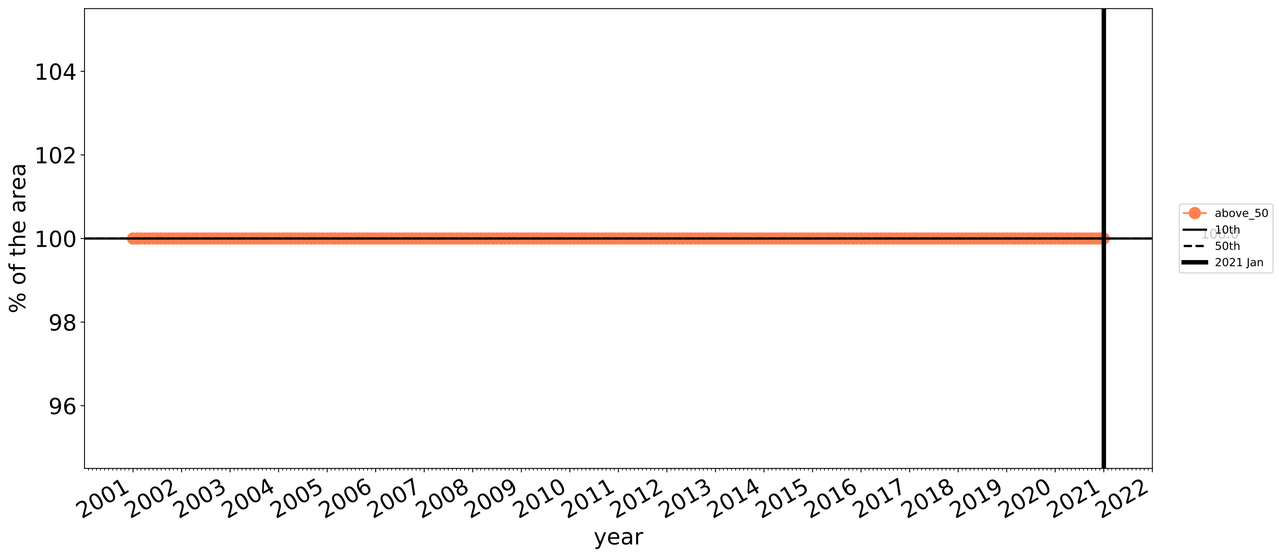
Total Vegetation Cover Decile [%]

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.

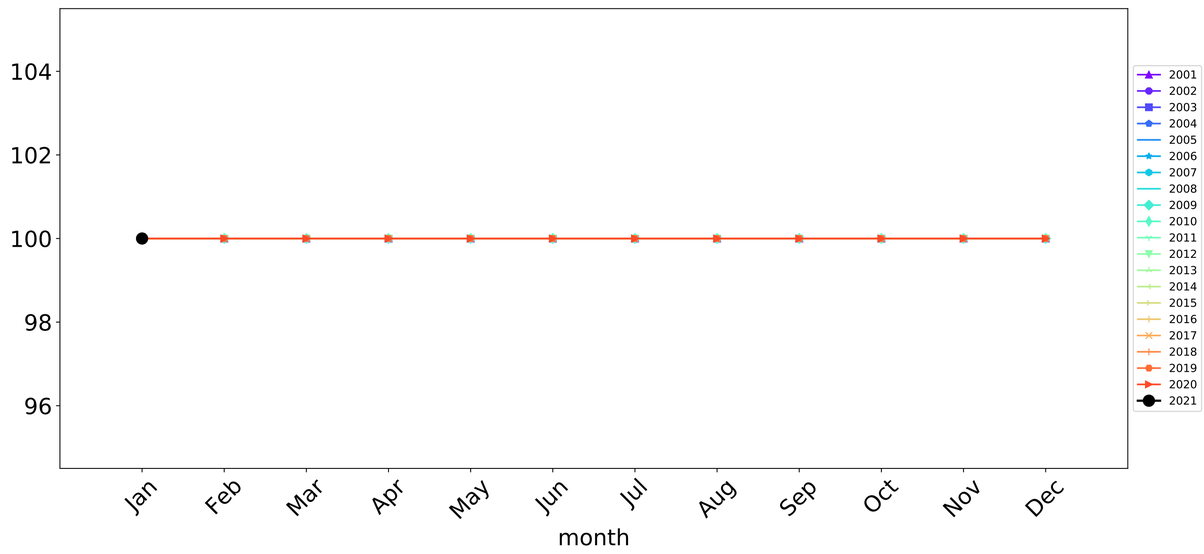


Production native forests and plantation forests timeseries

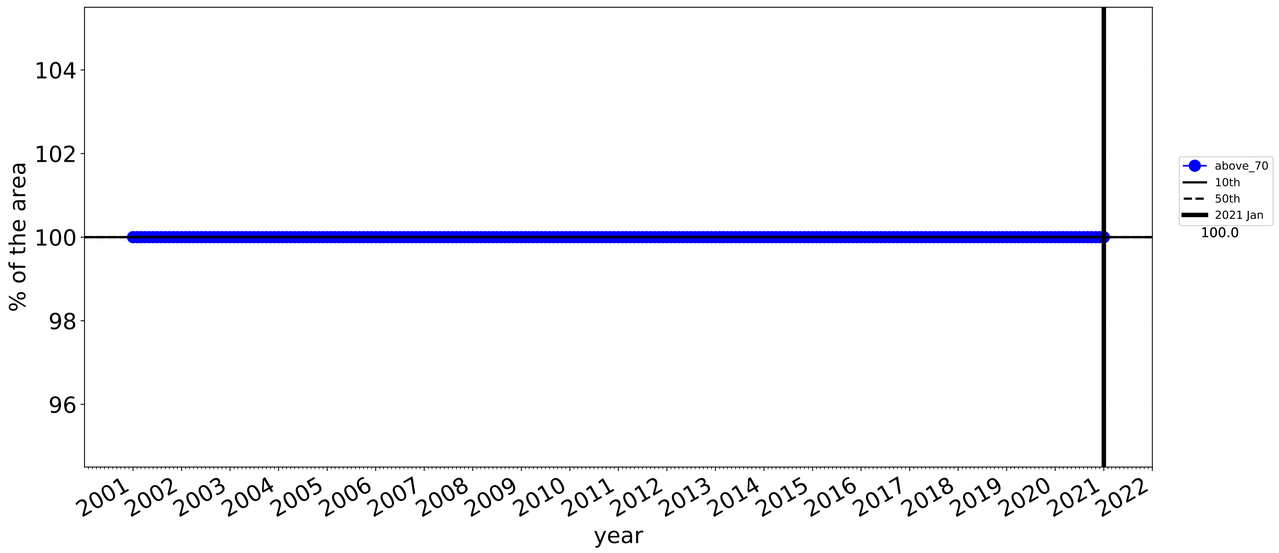
Proportion of the area protected from wind erosion (Total Vegetation Cover > 50%)



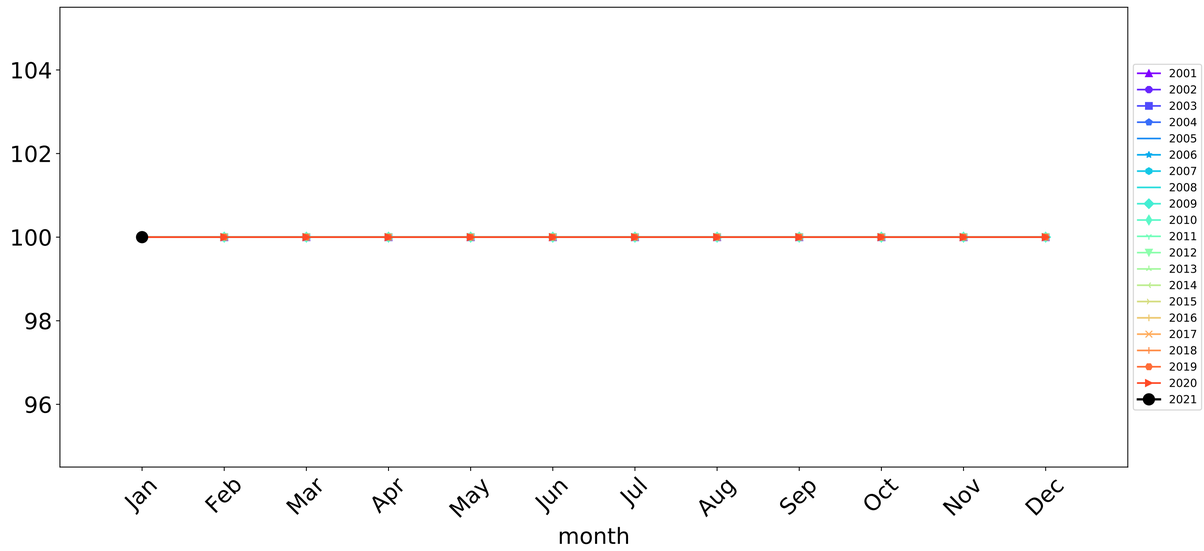
Wind erosion historical monthly area protected (Total Veg Cov >50%)

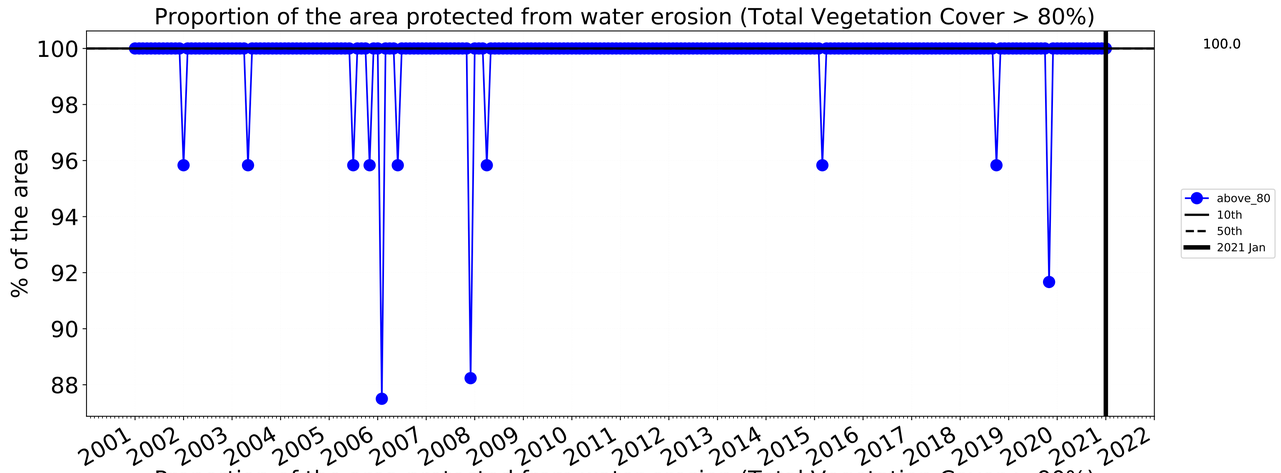


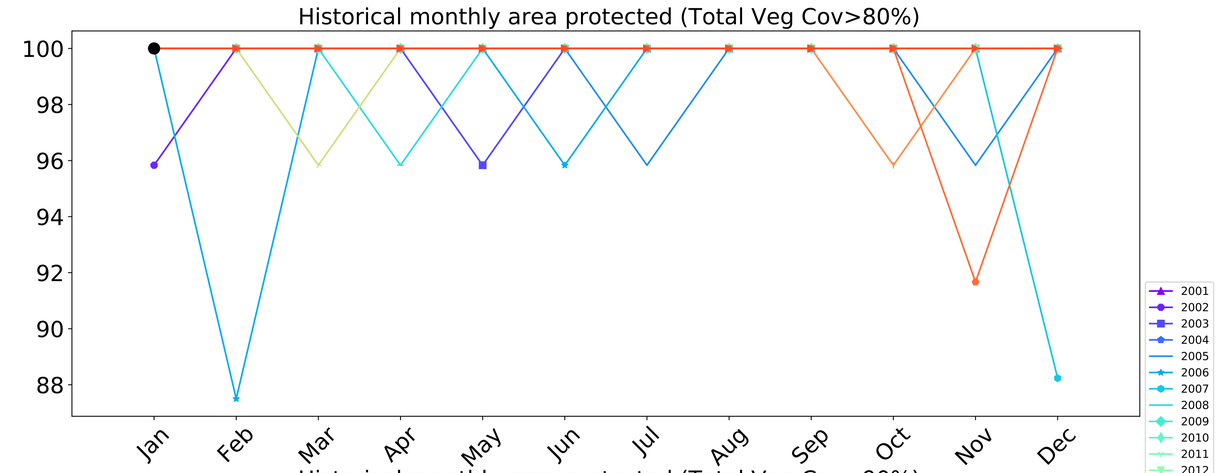
Proportion of the area protected from water erosion (Total Vegetation Cover > 70%)

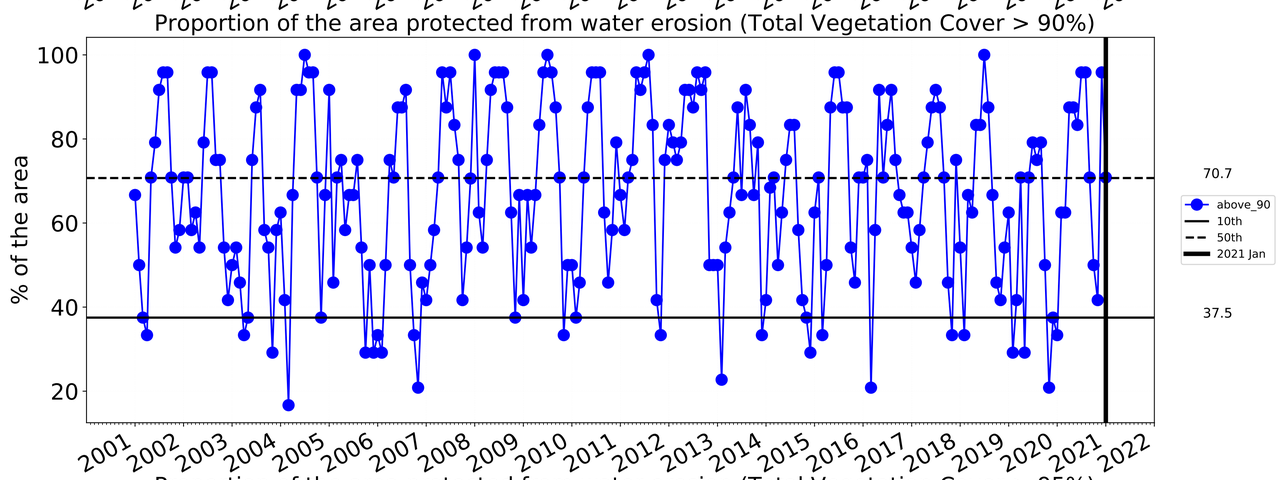


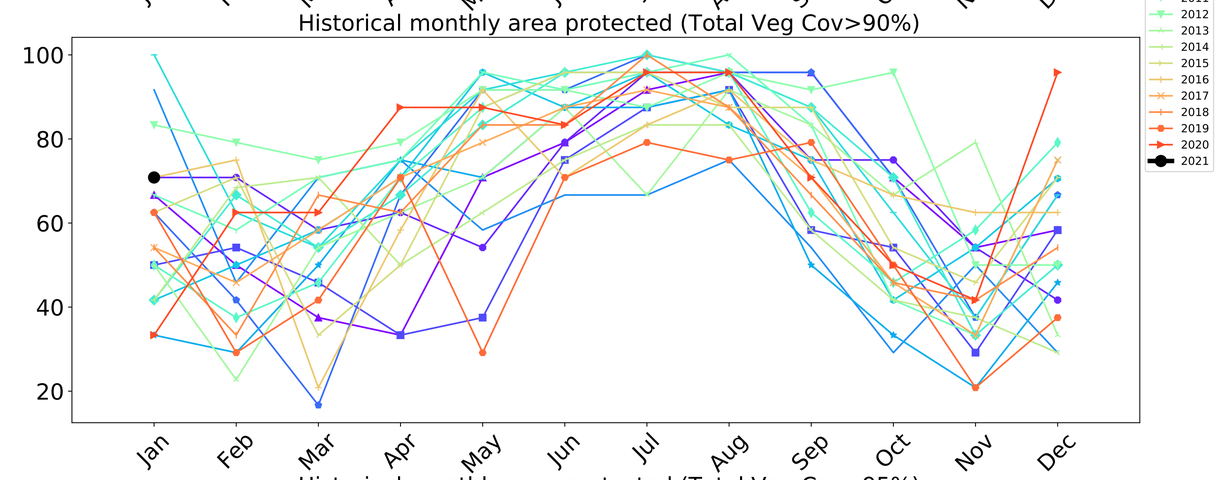
Water erosion historical monthly area protected (Total Veg Cov>70%)

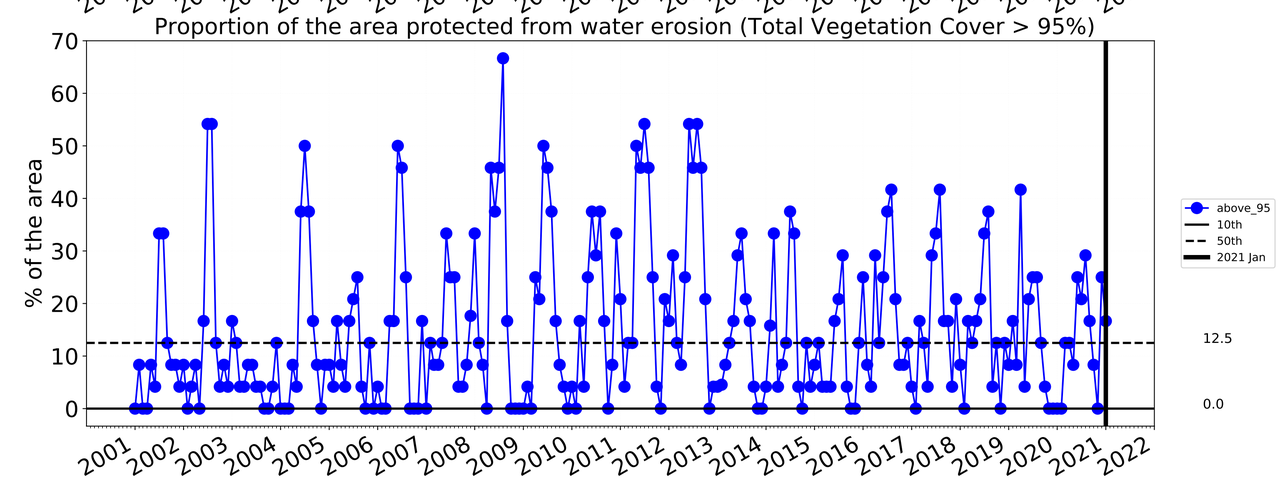


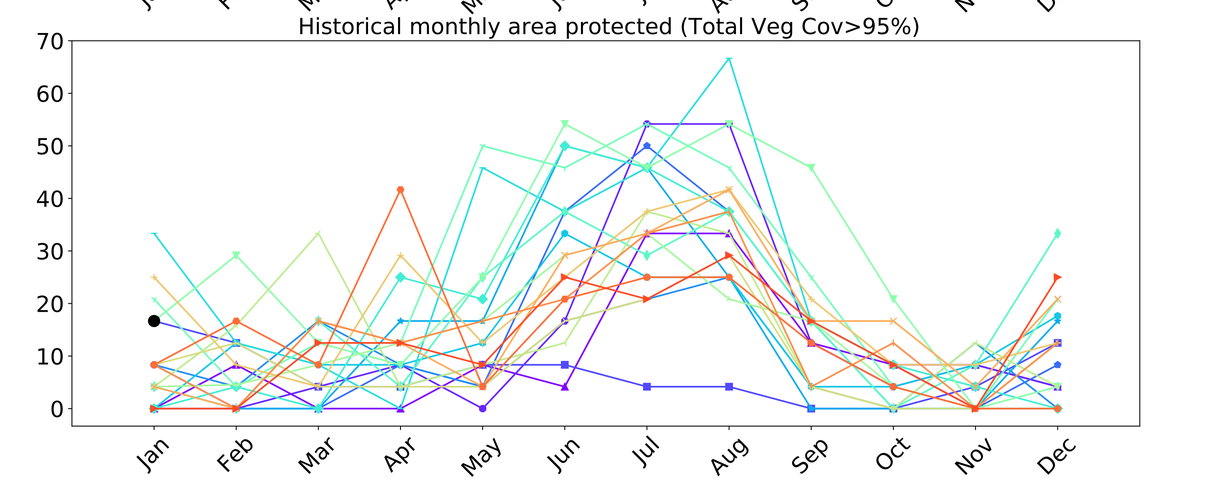

Proportion of the area protected from water erosion (Total Vegetation Cover > 80%)
% of the area
100.0
above_80
10th
50th
2021 Jan


Historical monthly area protected (Total Veg Cov>80%)
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021


Proportion of the area protected from water erosion (Total Vegetation Cover > 90%)
% of the area
70.7
37.5
above_90
10th
50th
2021 Jan


Historical monthly area protected (Total Veg Cov>90%)
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec


Proportion of the area protected from water erosion (Total Vegetation Cover > 95%)
% of the area
12.5
0.0
above_95
10th
50th
2021 Jan


Historical monthly area protected (Total Veg Cov>95%)
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

Byron_(A) (56,275 ha and no data 420 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	56,275	99.8% 56,150	99.4% 55,925	98.4% 55,350	96.0% 54,050	67.4% 37,925	20.9% 11,775
Conservation and natural environments	11,225	99.3% 11,150	98.4% 11,050	96.4% 10,825	94.4% 10,600	76.8% 8,625	34.1% 3,825
Conservation and natural environments non forest	1,350	96.3% 1,300	92.6% 1,250	79.6% 1,075	68.5% 925	33.3% 450	9.3% 125
Conservation and natural environments Woodland forest	625	100.0% 625	100.0% 625	100.0% 625	100.0% 625	64.0% 400	8.0% 50
Conservation and natural environments Forest (non woodland)	9,250	99.7% 9,225	99.2% 9,175	98.6% 9,125	97.8% 9,050	84.1% 7,775	39.5% 3,650
Agriculture	33,700	100.0% 33,700	100.0% 33,700	99.9% 33,675	99.7% 33,600	70.7% 23,825	19.1% 6,450
Grazing	30,300	100.0% 30,300	100.0% 30,300	99.9% 30,275	99.8% 30,250	71.5% 21,650	18.9% 5,725
Grazing non forest	24,700	100.0% 24,700	100.0% 24,700	99.9% 24,675	99.8% 24,650	67.4% 16,650	14.9% 3,675
Grazing Woodland forest	2,600	100.0% 2,600	100.0% 2,600	100.0% 2,600	100.0% 2,600	86.5% 2,250	26.9% 700
Grazing - Forest (non woodland)	3,000	100.0% 3,000	100.0% 3,000	100.0% 3,000	100.0% 3,000	91.7% 2,750	45.0% 1,350
Cropping	1,175	100.0% 1,175	100.0% 1,175	100.0% 1,175	95.7% 1,125	31.9% 375	6.4% 75
Horticulture	2,200	100.0% 2,200	100.0% 2,200	100.0% 2,200	100.0% 2,200	81.8% 1,800	29.5% 650
Production native forests and plantation forests	600	100.0% 600	100.0% 600	100.0% 600	100.0% 600	70.8% 425	16.7% 100