

Title	Soil Carbon Sequestration
Abstract	<p>This project was funded by the Australian Federal Government Carbon Farming Initiative (CFI) Action on The Ground program which aimed to assist landholders in trialing new technologies and practices to improve soil and reduce greenhouse gas emissions. Laboratory and field plot research indicated that ploughing nutrients into the soil with crop residues/stubble increased the amount of soil carbon stored. This project tested if this was possible using farm equipment. Carbon sequestration methods were tested in 14 fields in different bioregions. Soil variability was estimated using two electromagnetic surveying instruments. Randomized block experiments were established in fields after areas of similar soil were identified by geostatistics and finite mixture models.</p> <p>While the field experiments failed to reproduce the high sequestration rates of the earlier more controlled research. We describe one experiment in this paper and propose reasons for this failure to sequester carbon. The hybrid demonstration/research approach is applicable in many other situations where agricultural policy or practice change are to be tested at farm scale.</p> <p>The data are changes in soil carbon over two or three years and at all 14 experimental sites.</p>
Resource locator	
Unique resource identifier	
Code	44dce8cb-8944-48c3-afc0-798ea6832b85
Presentation form	
Edition	1
Dataset language	eng
Metadata standard	
Name	ANZLIC Metadata Profile: An Australian/New Zealand Profile of AS/NZS ISO 19115:2005, Geographic information - Metadata
Version	1.1
Dataset URI	https://data.iar.dpi.nsw.gov.au/dataset/44dce8cb-8944-48c3-afc0-798ea6832b85
Status	completed
Spatial reference system	
Authority code	GDA94 Geographic (Lat\Long)
Code identifying the spatial reference system	4283
Topic category	Environment

Keyword set	
keyword value	AGRICULTURE-Crops
Originating controlled vocabulary	
Title	ANZLIC Search Words
Reference date	2008-05-16
Geographic location	
West bounding longitude	142.968749
East bounding longitude	147.099608
North bounding latitude	-36.82321
South bounding latitude	-31.892327
NSW Place Name	Wagga Wagga
Vertical extent information	
Minimum value	-100
Maximum value	2228
Coordinate reference system	
Authority code	urn:ogc:def:cs:EPSG::
Code identifying the coordinate reference system	5711
Temporal extent	
Begin position	2012-01-01
End position	N/A
Dataset reference date	
Date type	creation
Effective date	2024-03-12
Resource maintenance	
Maintenance and update frequency	notPlanned
Contact info	
Organisation name	DPI
Full postal address	contact@dpi.nsw.gov.au
Telephone number	02 6391 3000

Email address	contact@dpi.nsw.gov.au
Responsible party role	pointOfContact
Constraint set	
Use constraints	This data is provided under licence by the Office of Environment and Heritage (DPI). For further inquiries contact raj.ramachandran@dpi.nsw.gov.au .
Limitations on public access	
Scope	dataset
Responsible party	
Contact position	Data Broker
Organisation name	DPI
Full postal address	contact@dpi.nsw.gov.au
Telephone number	02 6391 3000
Email address	contact@dpi.nsw.gov.au
Web address	https://www.dpi.nsw.gov.au
Responsible party role	pointOfContact
Metadata point of contact	
Contact position	Data Broker
Organisation name	DPI
Full postal address	contact@dpi.nsw.gov.au
Telephone number	02 6391 3000
Email address	contact@dpi.nsw.gov.au
Responsible party role	distributor
Metadata date	2024-03-12
Metadata language	eng