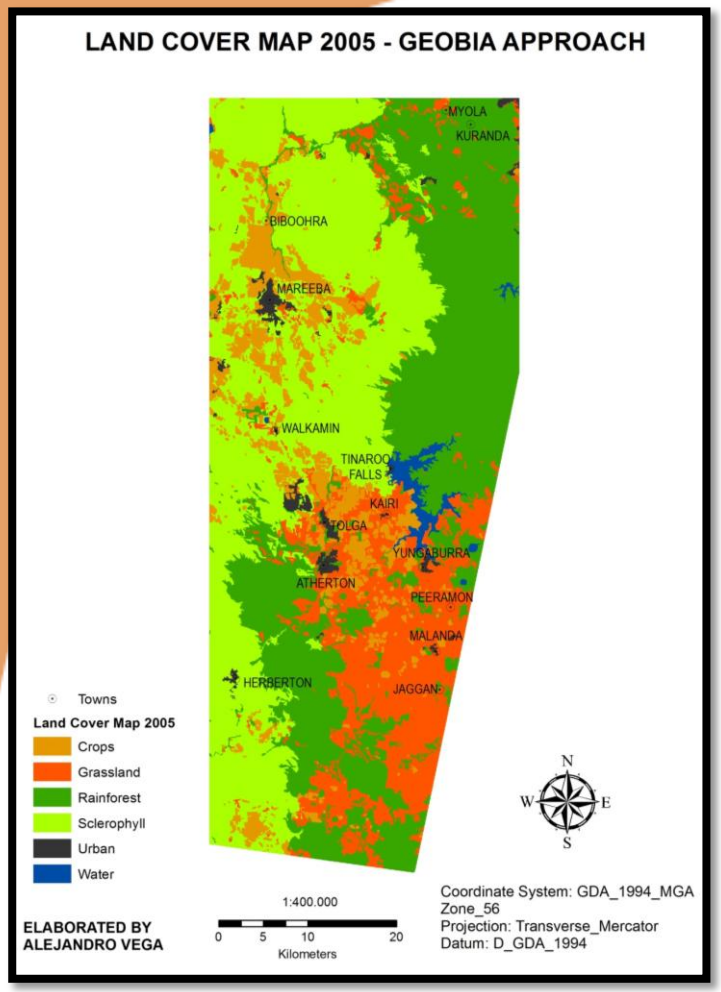
SENDERO RESOURCES

ENVIRONMENTAL AND GEOSPATIAL SOLUTIONS

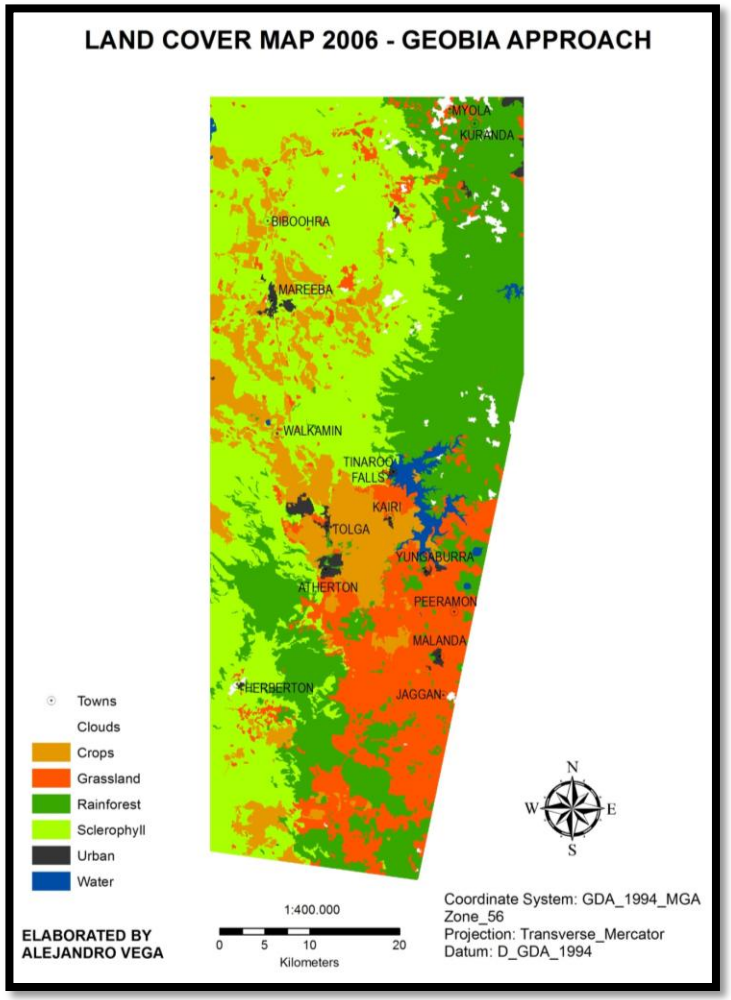
WORK SAMPLES CHANGE DETECTION ANALYSIS

𝒯 +61 08 6113 2180
ℳ +61 432 547 241
ℰ alejandro.vega@senderoresources.com.au
𝒲 www.senderoresources.com.au

LANDSCAPE CHANGE IN THE ATHERTON TABLELAND REGION (NORTHEASTERN AUSTRALIA) IN RESPONSE TO NATURAL AND HUMAN INFLUENCES



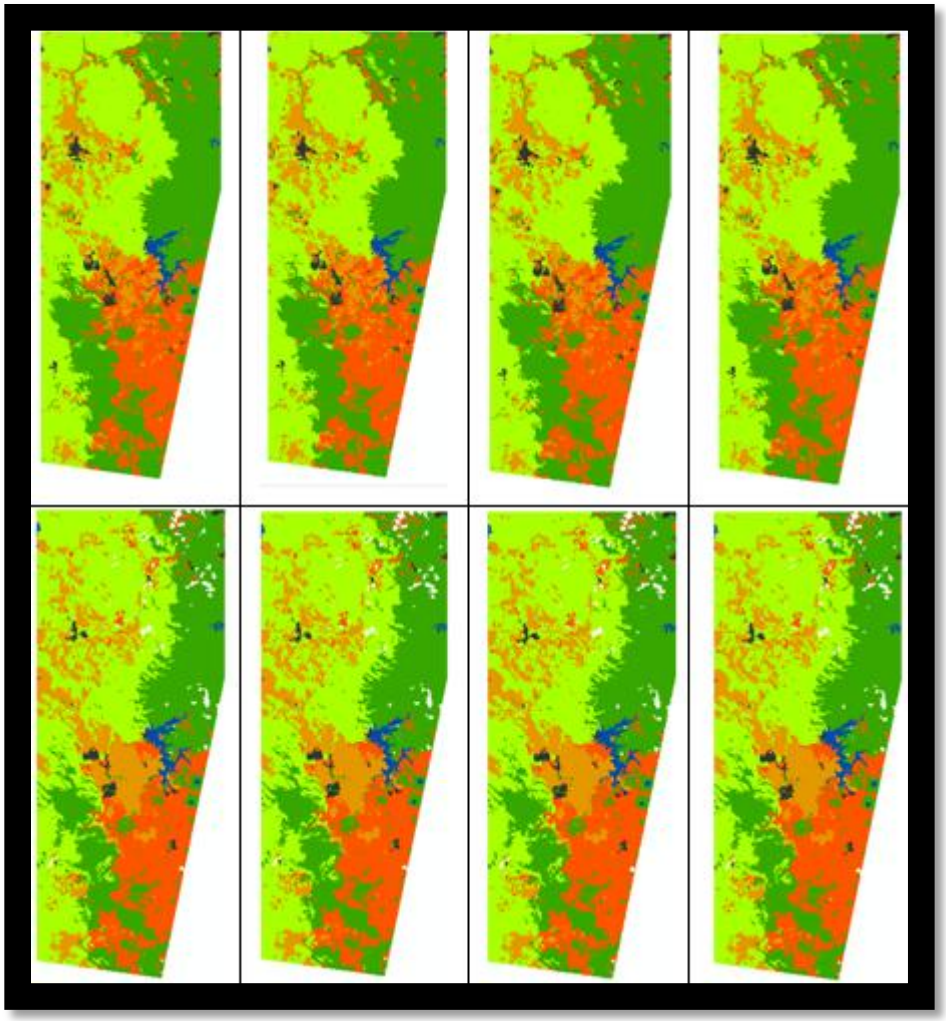
MAP PRODUCTION



LANDSCAPE CHANGE IN THE ATHERTON TABLELAND REGION (NORTHEASTERN AUSTRALIA) IN RESPONSE TO NATURAL AND HUMAN INFLUENCES

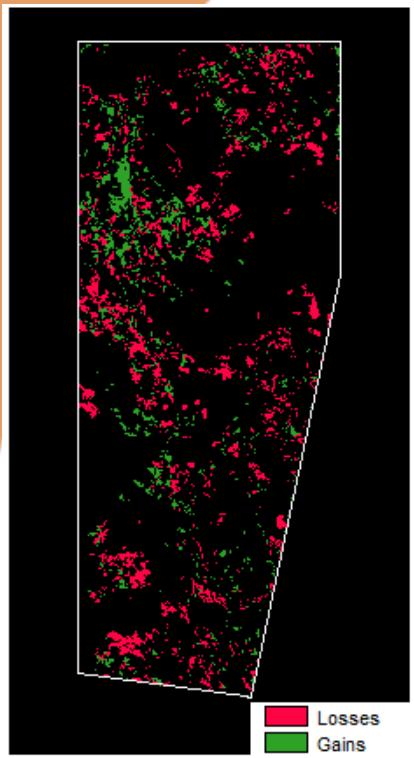
MAP PRODUCTION

Post-classification process land cover maps 2005 (top) and 2006 (bottom)



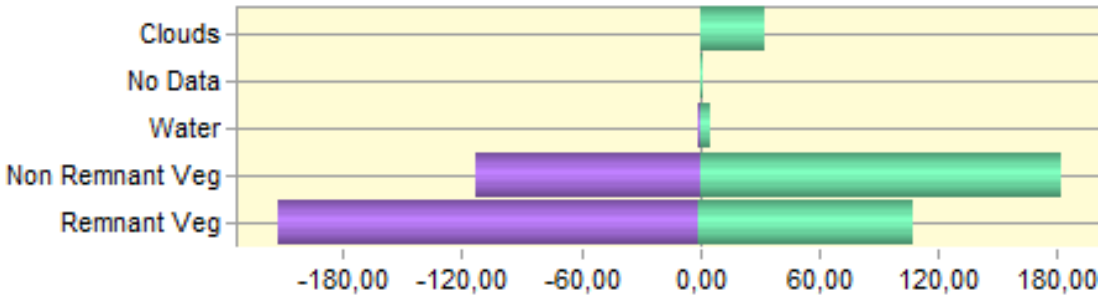
LANDSCAPE CHANGE IN THE ATHERTON TABLELAND REGION (NORTHEASTERN AUSTRALIA) IN RESPONSE TO NATURAL AND HUMAN INFLUENCES

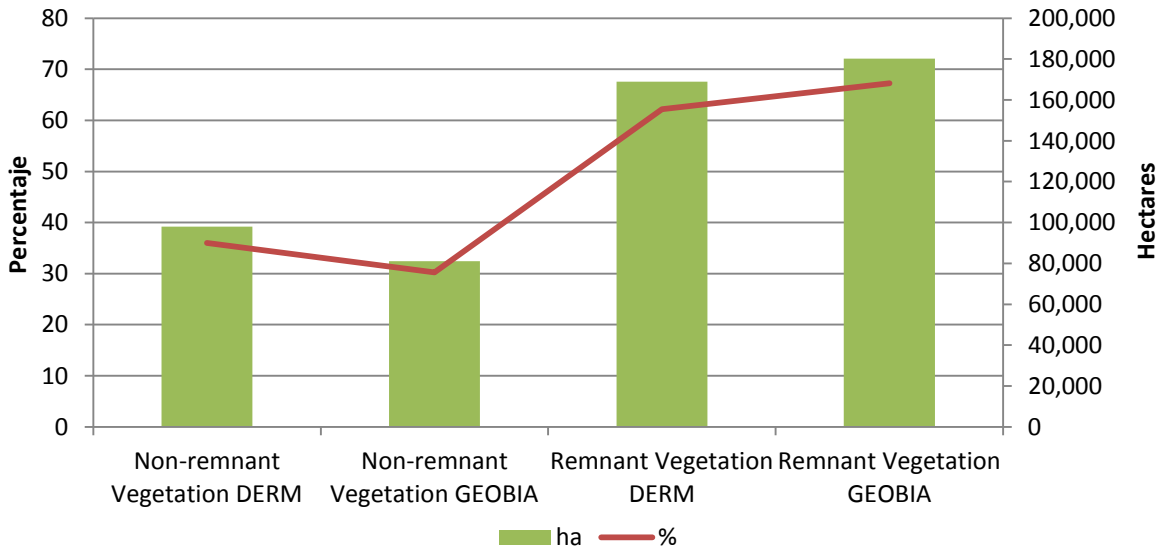
RESULTS



Gains and losses in remnant vegetation

Gains and losses for the land cover types expressed in sq km.





Comparison between the area occupied and percentage of each category

LANDSCAPE CHANGE IN THE ATHERTON TABLELAND REGION (NORTHEASTERN AUSTRALIA) IN RESPONSE TO NATURAL AND HUMAN INFLUENCES

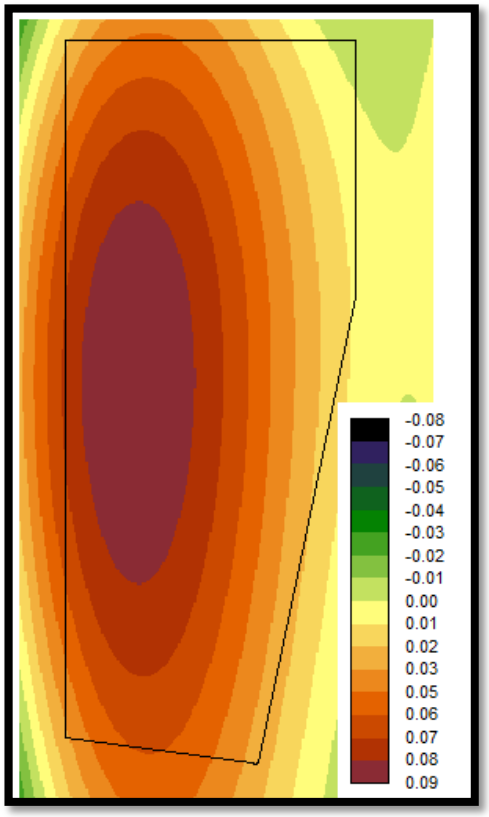
RESULTS

%	Clouds	Crops	Grassland	No Data	Rainforest	Sclerophyll	Urban	Water	Grand Total
Crops	0,05	64,79	13,03		0,82	20,56	0,60	0,15	100,00
Grassland	0,89	15,62	72,12		4,65	5,33	1,18	0,21	100,00
No Data			0,00	100,00		0,00			100,00
Rainforest	2,15	1,46	6,05	0,00	77,11	12,75	0,07	0,40	100,00
Sclerophyll	0,67	8,24	2,59		3,79	84,50	0,17	0,04	100,00
Urban	1,39	19,42	11,15		2,39	15,16	50,36	0,12	100,00
Water	0,12	0,64	0,26		1,04	0,20	0,10	97,63	100,00
Grand Total	5,28	110,18	105,20	100,00	89,81	138,51	52,49	98,54	700,00

Probability matrices for each land cover map

Image Classes (Rows)/Reference data (Columns)	CROPS	GRASSLAND	RAINFOREST	SCLEROPHYLL	WATER	ROW TOTAL	Commission Accuracy (in %)
CROPS	7	3		2		12	58,3
GRASSLAND		12				12	100,0
RAINFOREST		2	27	8		37	73,0
SCLEROPHYLL	2	1	3	32		38	84,2
WATER					1	1	100,0
COL TOTAL	7	14	30	38	1	100	
Omission Accuracy (in %)	100,0	85,7	90,0	84,2	100,0		

Error assessment matrixes for each land cover map



Spatial Trend of change from all category to Non-Remnant Vegetation