

FRIM-FFPRI TRAINING WORKSHOP 2015

KUMPULAN: REMOTE SENSING

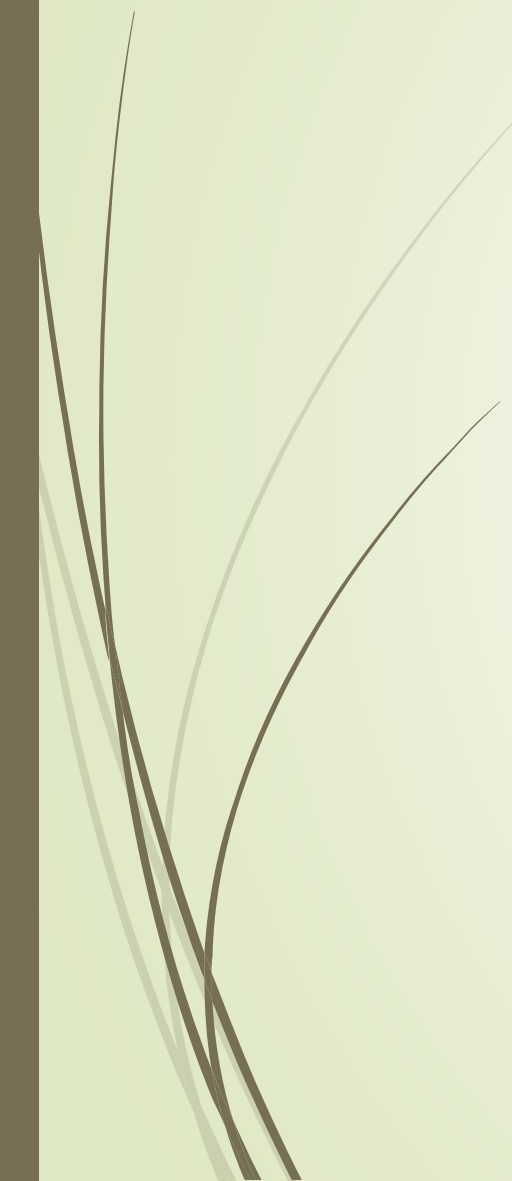
KETUA KUMPULAN : CIK NURFARHANA BINTI AHMAD

AHLI KUMPULAN :
DR. ABD RAHMAN BIN KASSIM
EN HASMI BIN HAMIDAN
EN. WAN ZULKIFLI BIN WAN ALIM
EN. AB. BASIR ALI
EN. MOHD SHUJAEI BIN AZIZ
EN. NAZERI BIN CHE MUSA
EN. MOHD FAIZUL BIN IBRAHIM

FASILITATOR : PN. RODZIAH BINTI HASHIM
EN. MOHD. AZAHARI BIN FAIDI



PENGENALAN REMOTE SENSING

- Sains dan seni perolehan maklumat sesuatu objek, kawasan dan fenomena melalui analisis data menggunakan peralatan tanpa menyentuh secara terus kepada objek, kawasan dan fenomena yang dikaji.
- 

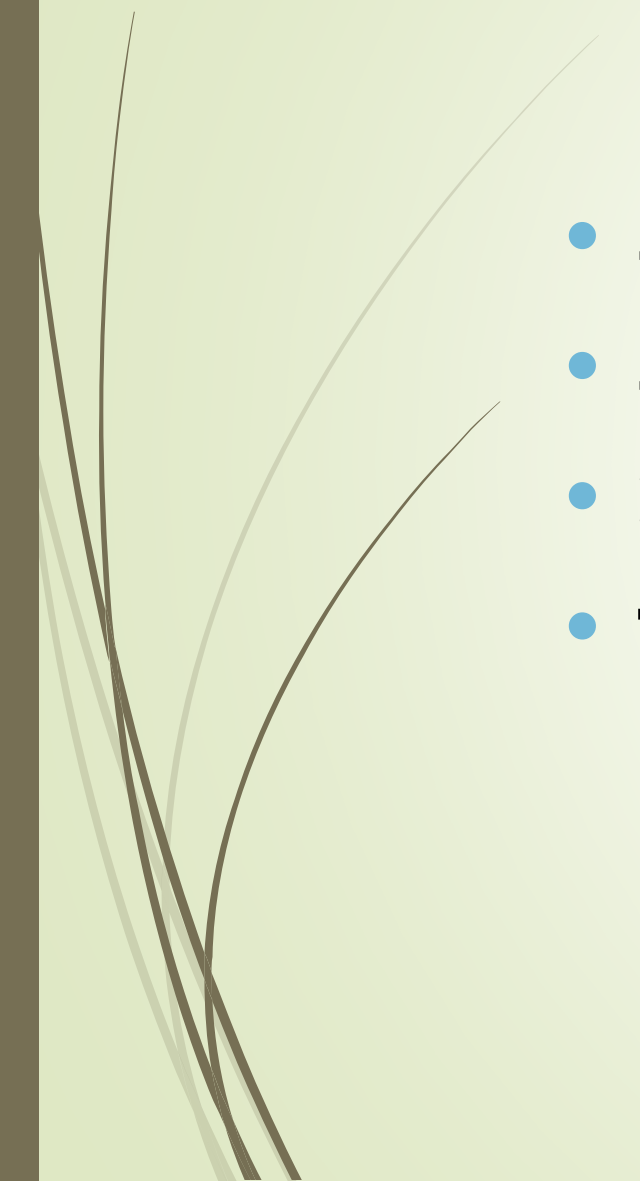
Remote Sensing Platforms

- Ground based
- Aircraft
- Space shuttle
- Satellite





Four Types of Resolution

- Spatial resolution
 - Spectral resolution
 - Radiometric resolution
 - Temporal resolution
- 

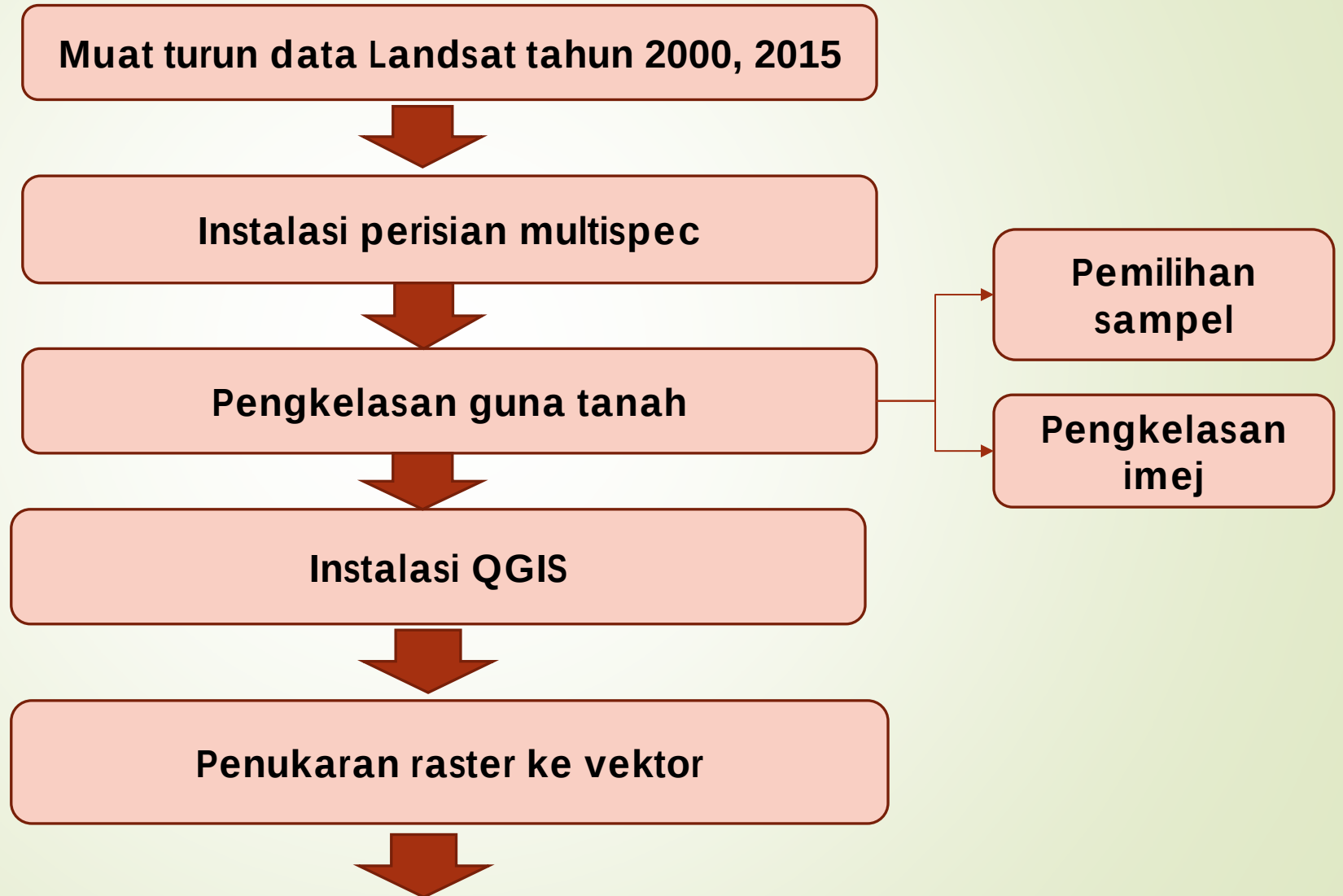


Tajuk: Pemetaan Litupan dan Perubahan Guna Tanah menggunakan Data Remote Sensing

➡ Objektif:

1. Pemetaan guna tanah kawasan kajian menggunakan data Landsat TM tahun 2015 dan 2000
2. Analisis perubahan guna tanah kawasan kajian bagi tahun 2015 dan 2000

CARTA ALIR PEMETAAN LITUPAN GUNA TANAH



CARTA ALIR PEMETAAN LITUPAN GUNA TANAH

Pengeditan maklumat tahun 2000 dan tahun 2015

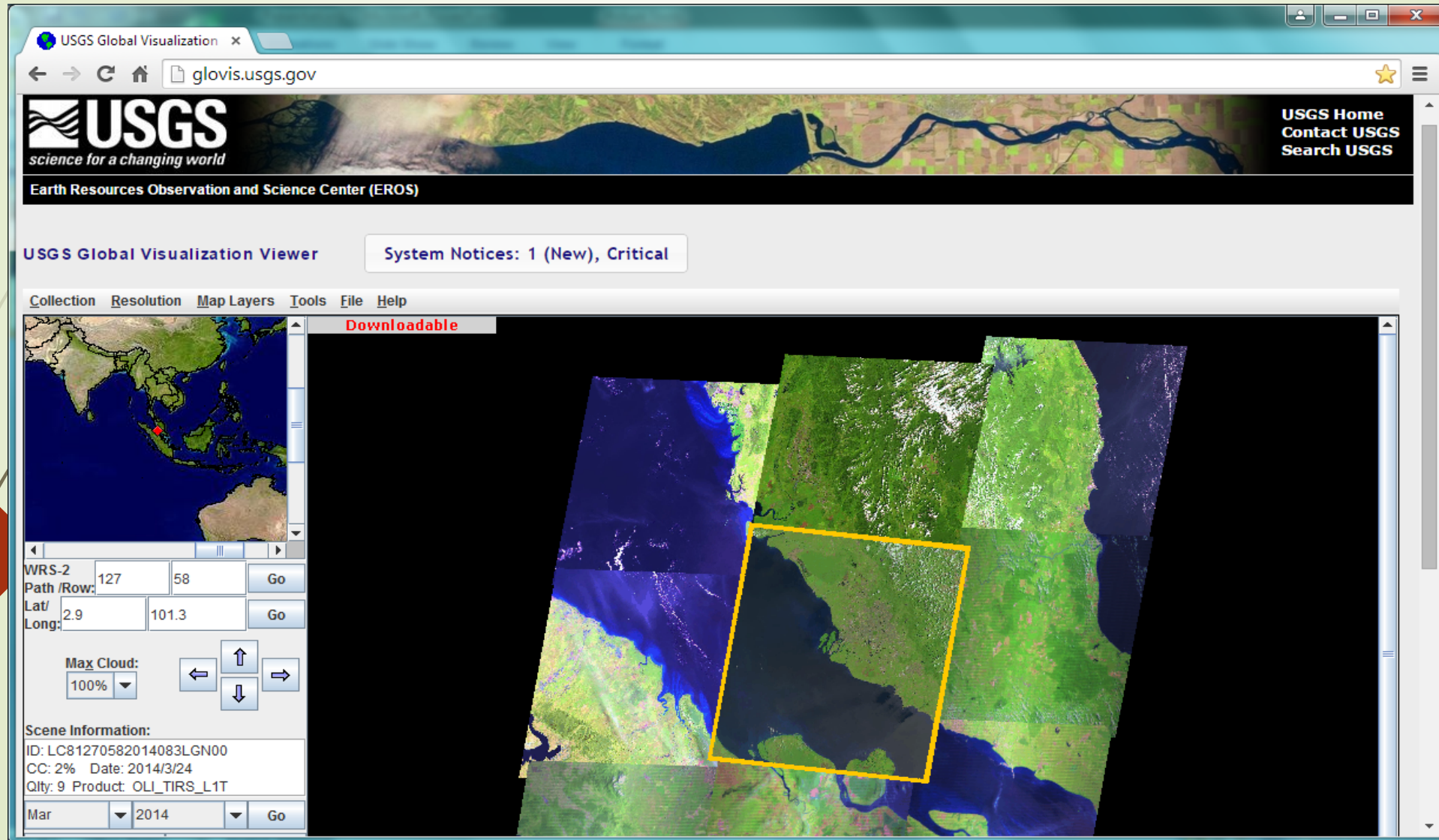


Analisa perubahan guna tanah menggunakan fungsi intersect

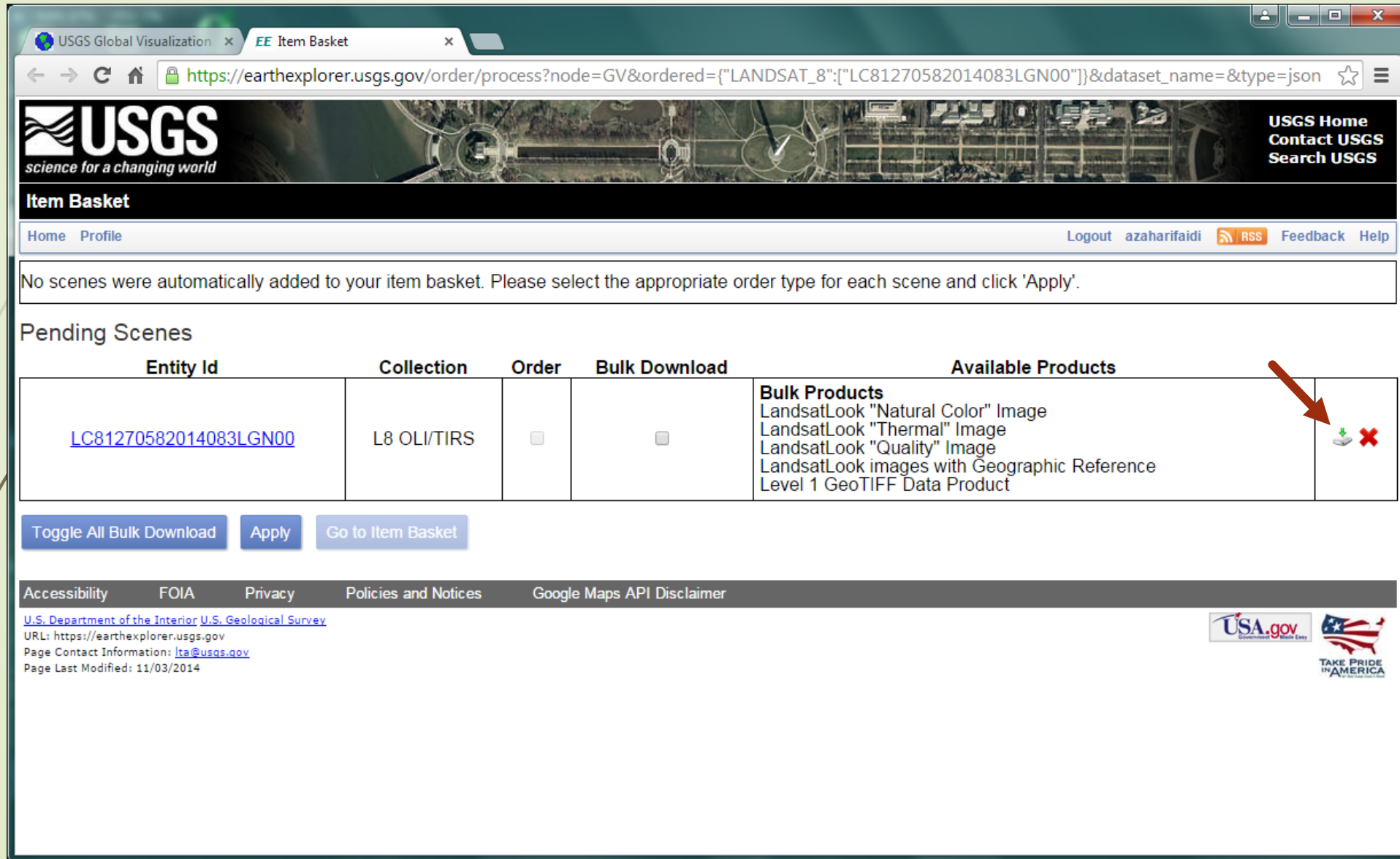


Output perubahan guna tanah 2000 dan 2015 dalam MS Excel

- Pemilihan data menerusi laman web glovis.usgs.gov



- Muat turun data menerusi laman web [glovis.usgs.gov](https://earthexplorer.usgs.gov)



USGS Global Visualization x EE Item Basket x

https://earthexplorer.usgs.gov/order/process?node=GV&ordered={"LANDSAT_8":["LC81270582014083LGN00"]}&dataset_name=&type=json

USGS
science for a changing world

Item Basket

Home Profile Logout azaharifaidi RSS Feedback Help

No scenes were automatically added to your item basket. Please select the appropriate order type for each scene and click 'Apply'.

Pending Scenes

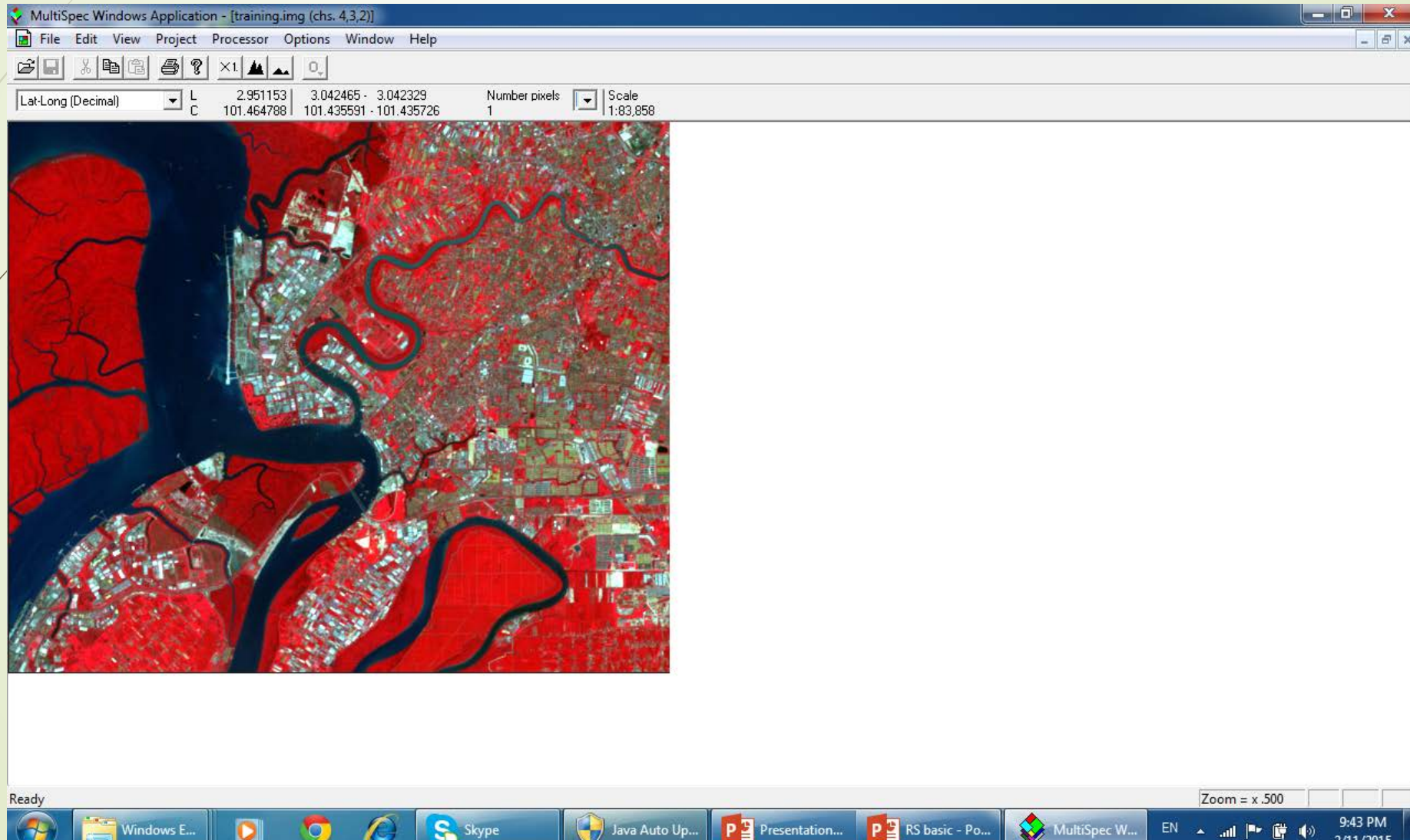
Entity Id	Collection	Order	Bulk Download	Available Products
LC81270582014083LGN00	L8 OLI/TIRS	☐	☐	Bulk Products LandsatLook "Natural Color" Image LandsatLook "Thermal" Image LandsatLook "Quality" Image LandsatLook images with Geographic Reference Level 1 GeoTIFF Data Product

[Accessibility](#)
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[Policies and Notices](#)
[Google Maps API Disclaimer](#)

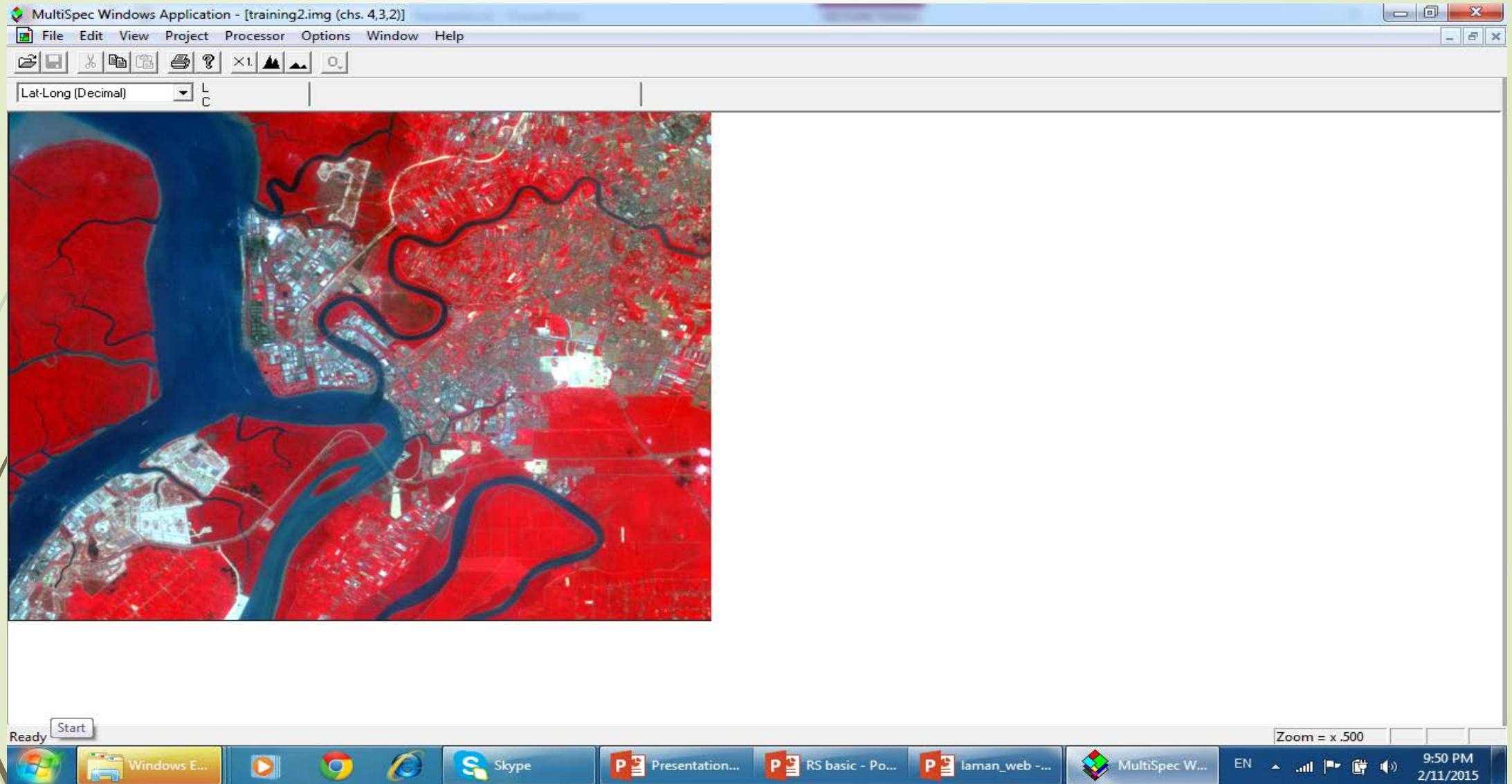
[U.S. Department of the Interior](#)
[U.S. Geological Survey](#)
 URL: <https://earthexplorer.usgs.gov>
 Page Contact Information: lta@usgs.gov
 Page Last Modified: 11/03/2014



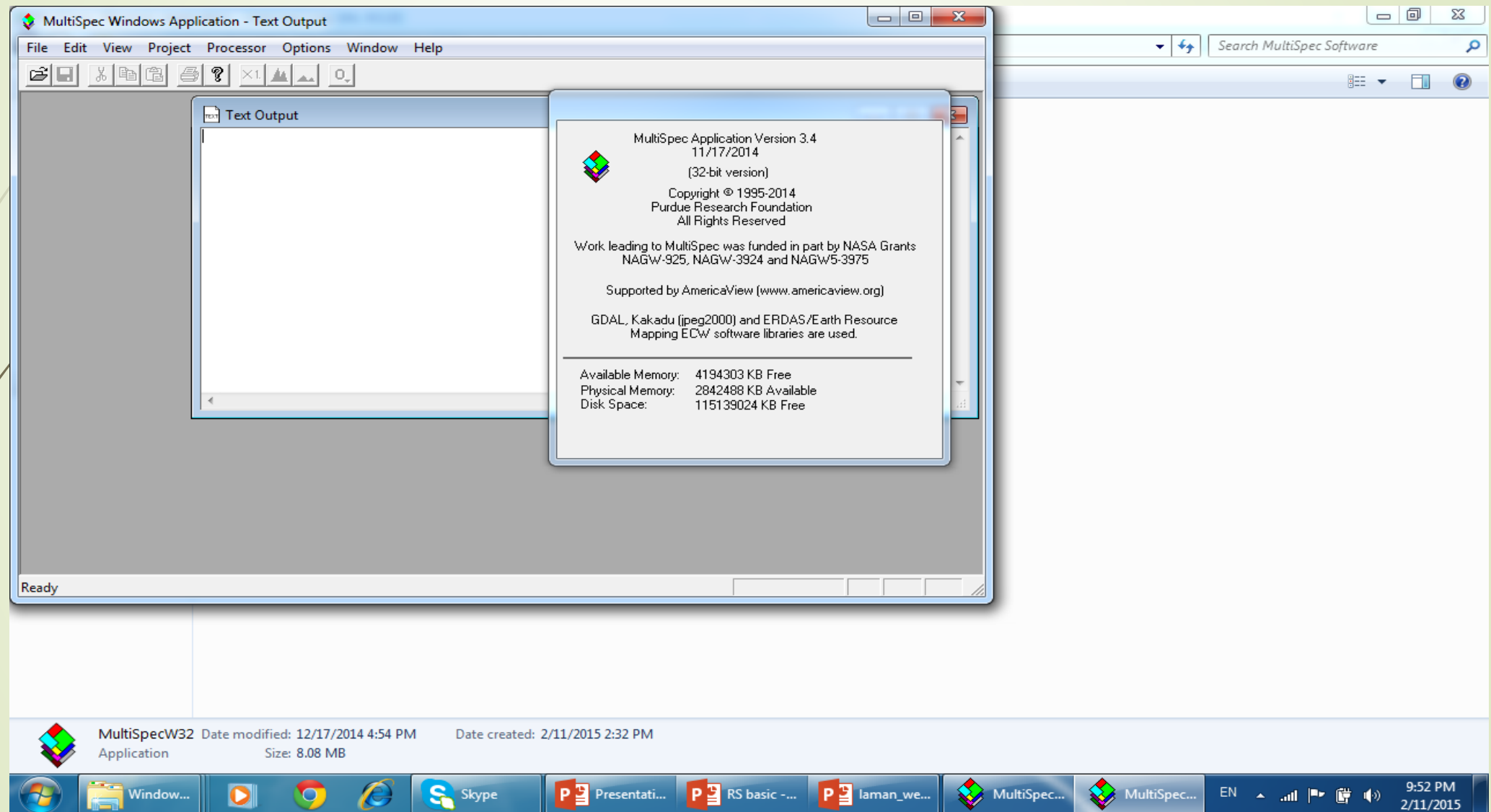

Muat Turun Data Landsat Tahun 2015



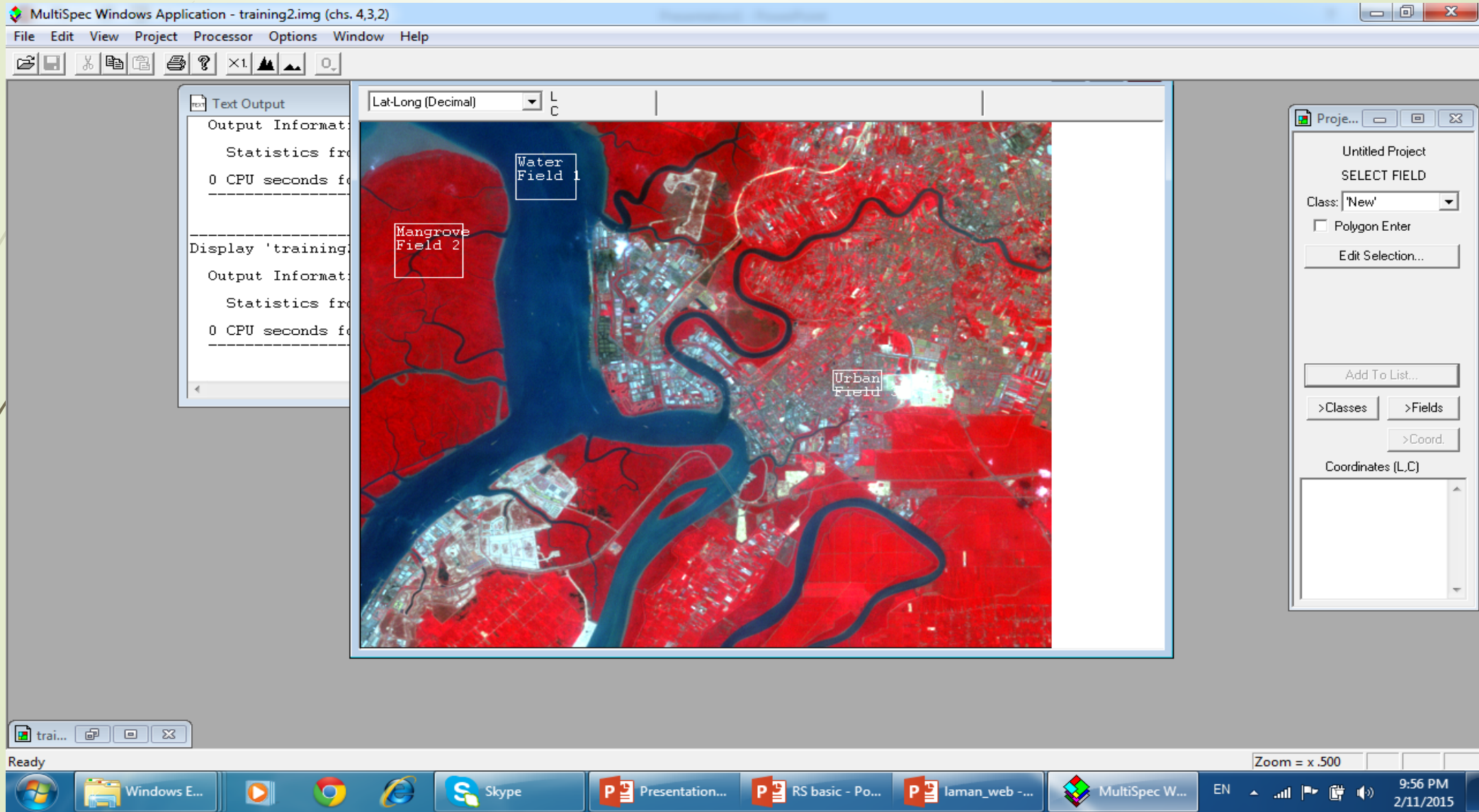
Muat Turun Data Landsat Tahun 2000



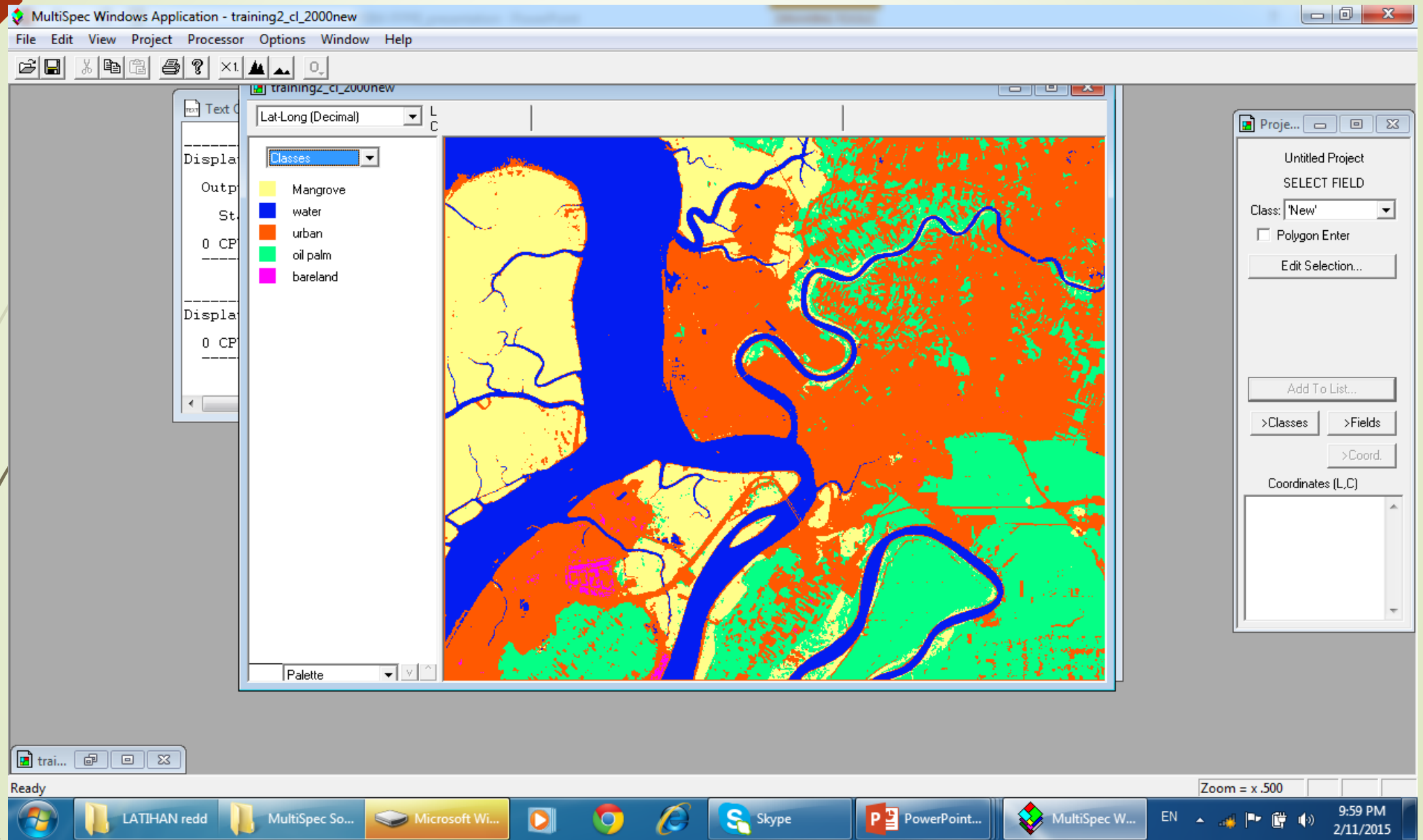
Instalasi Perisian Multispec



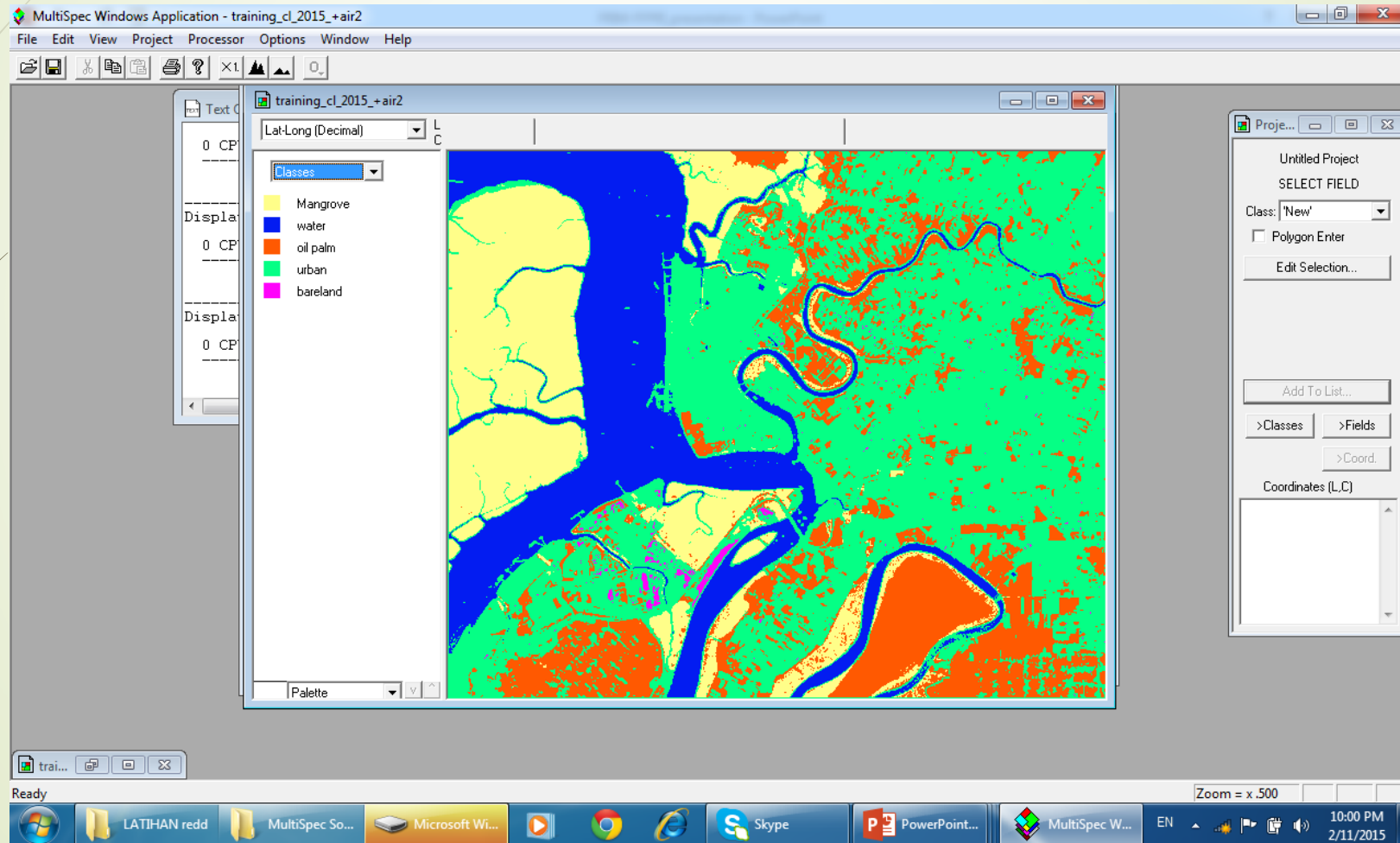
Pemilihan Sampel



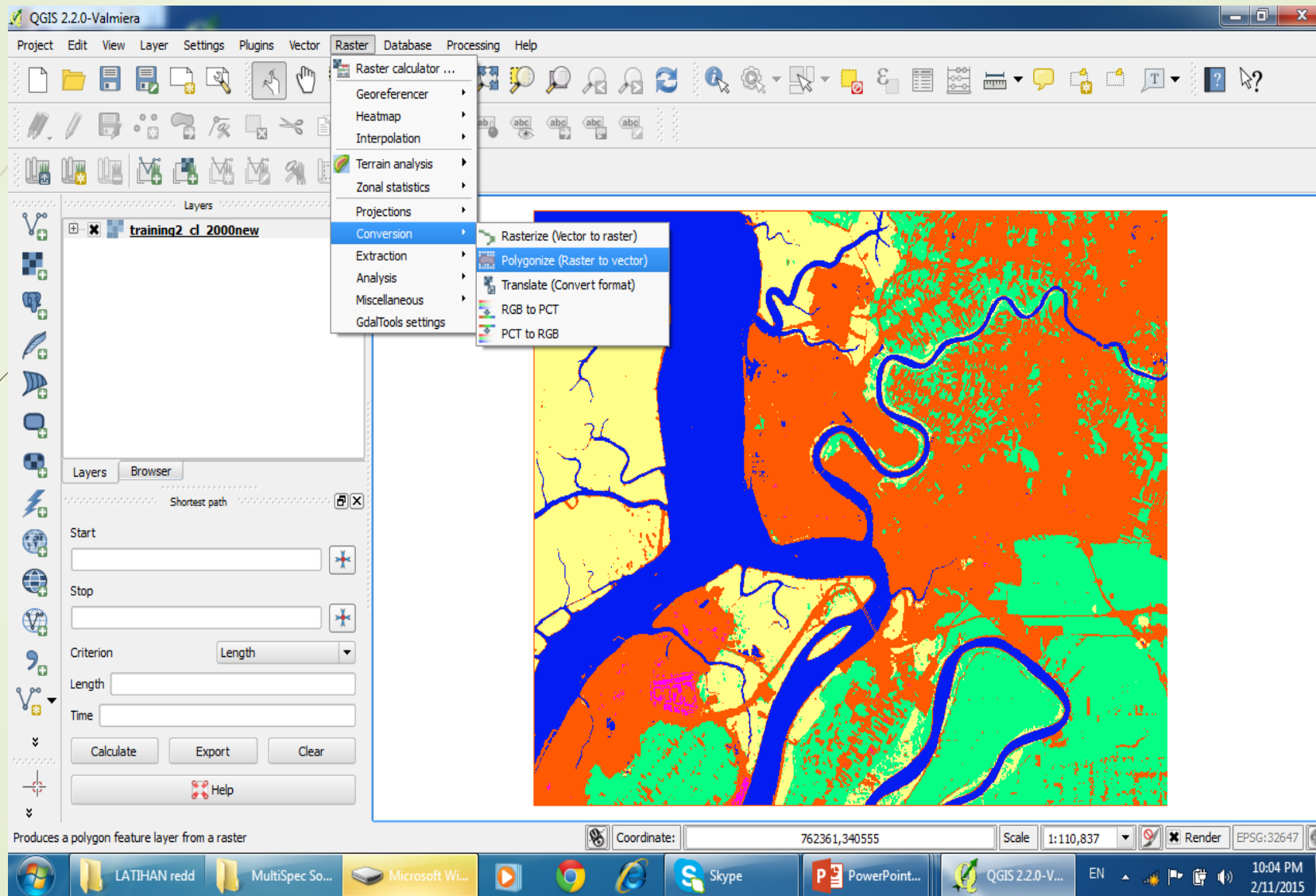
Pengkelasan Imej Tahun 2000



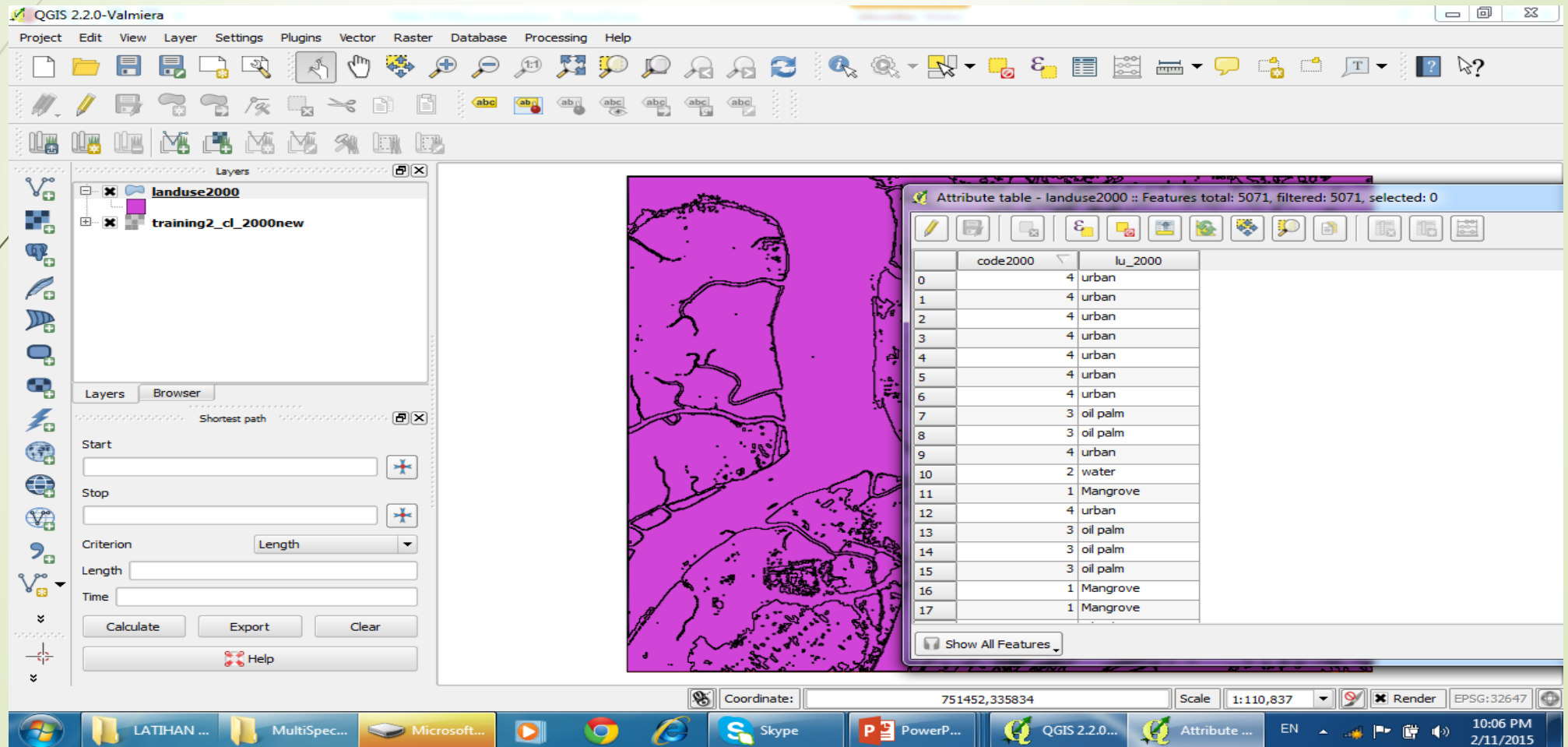
Pengkelasan Imej Tahun 2015



Penukaran Data Raster ke Data Vektor



Pengeditan Maklumat Tahun 2000 dan Tahun 2015

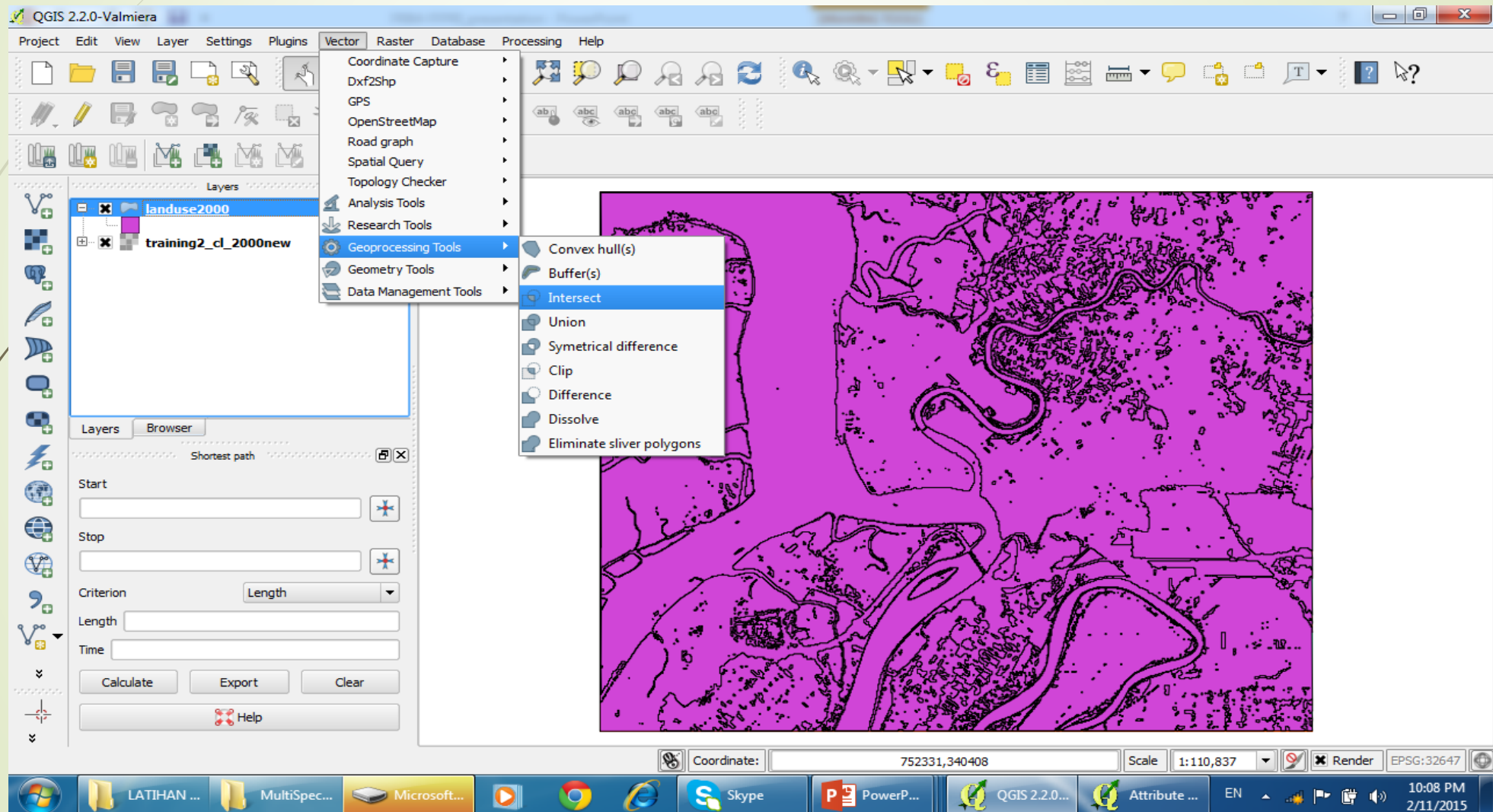


The screenshot displays the QGIS 2.2.0-Valmiera interface. The main map area shows a land use map with a large purple area and a smaller, more detailed area in the bottom right. The Layers panel on the left lists two layers: 'landuse2000' and 'training2_cl_2000new'. The Attribute table window on the right shows the data for the 'landuse2000' layer, with 5071 features total, 5071 filtered, and 0 selected. The table has two columns: 'code2000' and 'lu_2000'. The table data is as follows:

	code2000	lu_2000
0	4	urban
1	4	urban
2	4	urban
3	4	urban
4	4	urban
5	4	urban
6	4	urban
7	3	oil palm
8	3	oil palm
9	4	urban
10	2	water
11	1	Mangrove
12	4	urban
13	3	oil palm
14	3	oil palm
15	3	oil palm
16	1	Mangrove
17	1	Mangrove

The bottom status bar shows the coordinate '751452,335834', scale '1:110,837', and the date '10:06 PM 2/11/2015'.

Analisa Perubahan Guna Tanah Menggunakan Analisis Intersect



Statistik Perubahan Guna Tanah Tahun 2000 dan Tahun 2015

luchange2000_2015_result - Excel

PIVOTABLE TOOLS: ANALYZE, DESIGN

FILE HOME INSERT PAGE LAYOUT FORMULAS DATA REVIEW VIEW

Clipboard Font Alignment Number Styles Cells Editing

G3 Row Labels

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	code2000	lu_2000	code2015	lu_name	luas								
2		4 urban	3 oil palm		0.090		Sum of luas	Column					
3		4 urban	3 oil palm		0.090		Row Labels	bareland	mangrove	oil palm	urban	water	Grand Total
4		4 urban	4 urban		0.090		bareland	1.236		12.557	75.067		88.86
5		4 urban	3 oil palm		0.180		Mangrove	65.921	4180.856	158.175	613.092	21.956	5040
6		4 urban	4 urban		0.180		oil palm	51.196	224.516	1244.854	9053.009	88.715	10662.29
7		4 urban	4 urban		0.338		urban	7.423	191.472	3244.054	2417.449	0.18	5860.578
8		4 urban	3 oil palm		0.090		water	0.18	17.939	6.436	645.884	4601.121	5271.56
9		4 urban	3 oil palm		0.090		Grand Total	125.956	4614.783	4666.076	12804.501	4711.972	26923.288
10		4 urban	4 urban		0.450								
11		3 oil palm	4 urban		0.022								
12		3 oil palm	3 oil palm		0.090								
13		4 urban	4 urban		0.022								
14		2 water	4 urban		0.090								
15		2 water	4 urban		0.090								
16		2 water	1 mangrove		0.180								
17		1 Mangrove	1 mangrove		1.890								
18		4 urban	4 urban		2.092								
19		3 oil palm	1 mangrove		0.113								
20		3 oil palm	4 urban		0.022								
21		3 oil palm	2 water		0.180								
22		3 oil palm	1 mangrove		0.270								
23		1 Mangrove	3 oil palm		0.360								
24													

PivotTable Fields

Choose fields to add to report:

- ☐ code2000
- ☒ lu_2000
- ☐ code2015
- ☒ lu_name
- ☒ luas

MORE TABLES...

Drag fields between areas below:

FILTERS: lu_name

ROWS: lu_2000

COLUMNS: lu_name

VALUES: Sum of luas

Defer Layout Update UPDATE

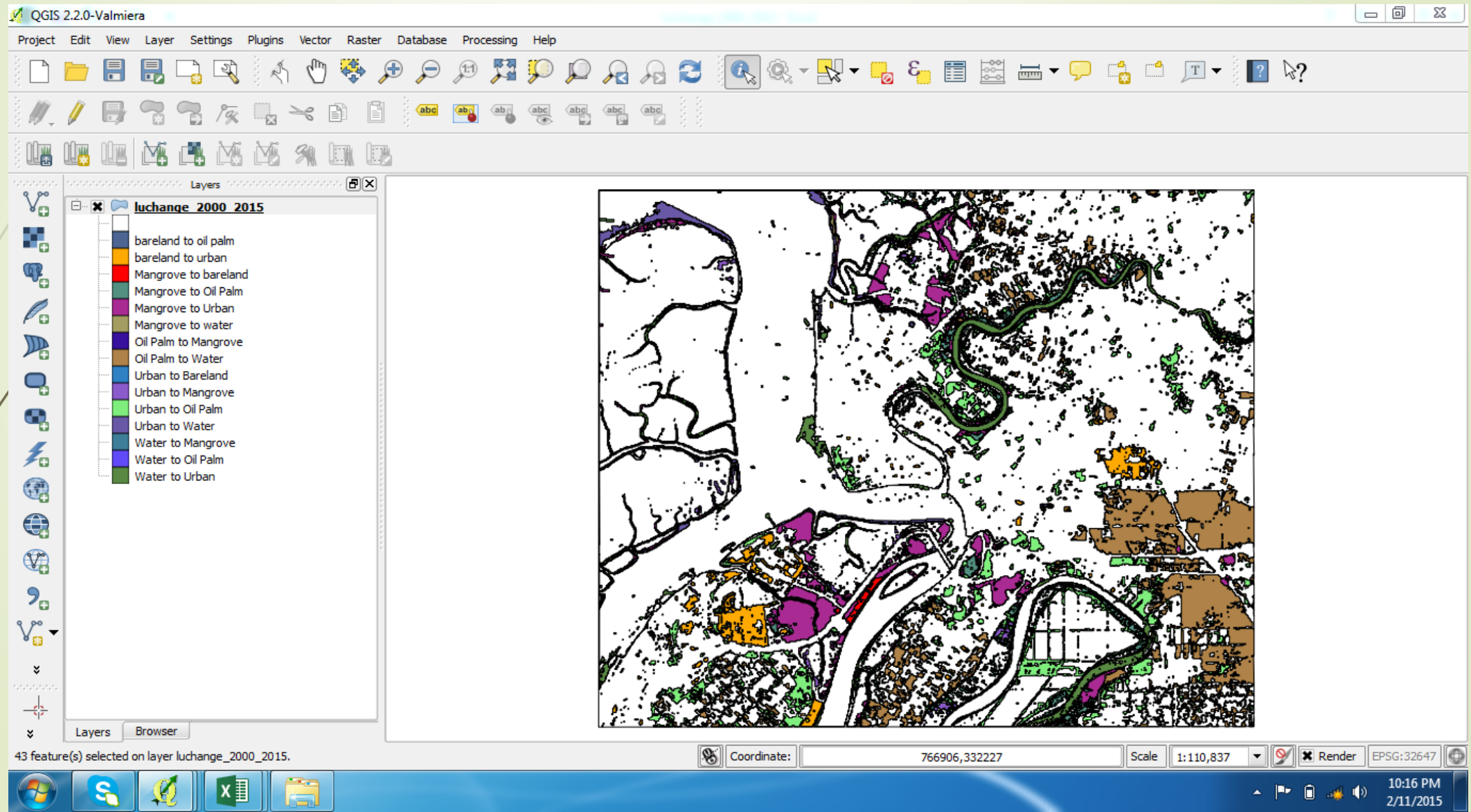
Sheet1 luchange2000_2015

Select destination and press ENTER or choose Paste

Windows E... QGIS 2.2.0-... Attribute ta... luchange20...

10:12 PM 2/11/2015

Perubahan Guna Tanah Tahun 2000 Hingga Tahun 2015



Cadangan dan Ulasan

- Tempoh penerangan berkaitan penggunaan aplikasi perisian perlu dipanjangkan.
- Peserta perlu didedahkan dengan data di lapangan untuk mendapatkan kefahaman yang lebih jelas.
- Kursus ini perlu terus dilaksanakan dengan melibatkan lebih ramai pegawai dan agensi yang berkaitan.

Kesimpulan

- Memberi pendedahan kepada peserta bengkel berkaitan dengan penggunaan aplikasi Remote Sensing & Geographic Information System.
- Membantu dalam menjalankan kajian berkenaan guna tanah.
- Mengaplikasikan ilmu yang dipelajari dalam tugas harian.





ARIGATO GOZAIMAS