

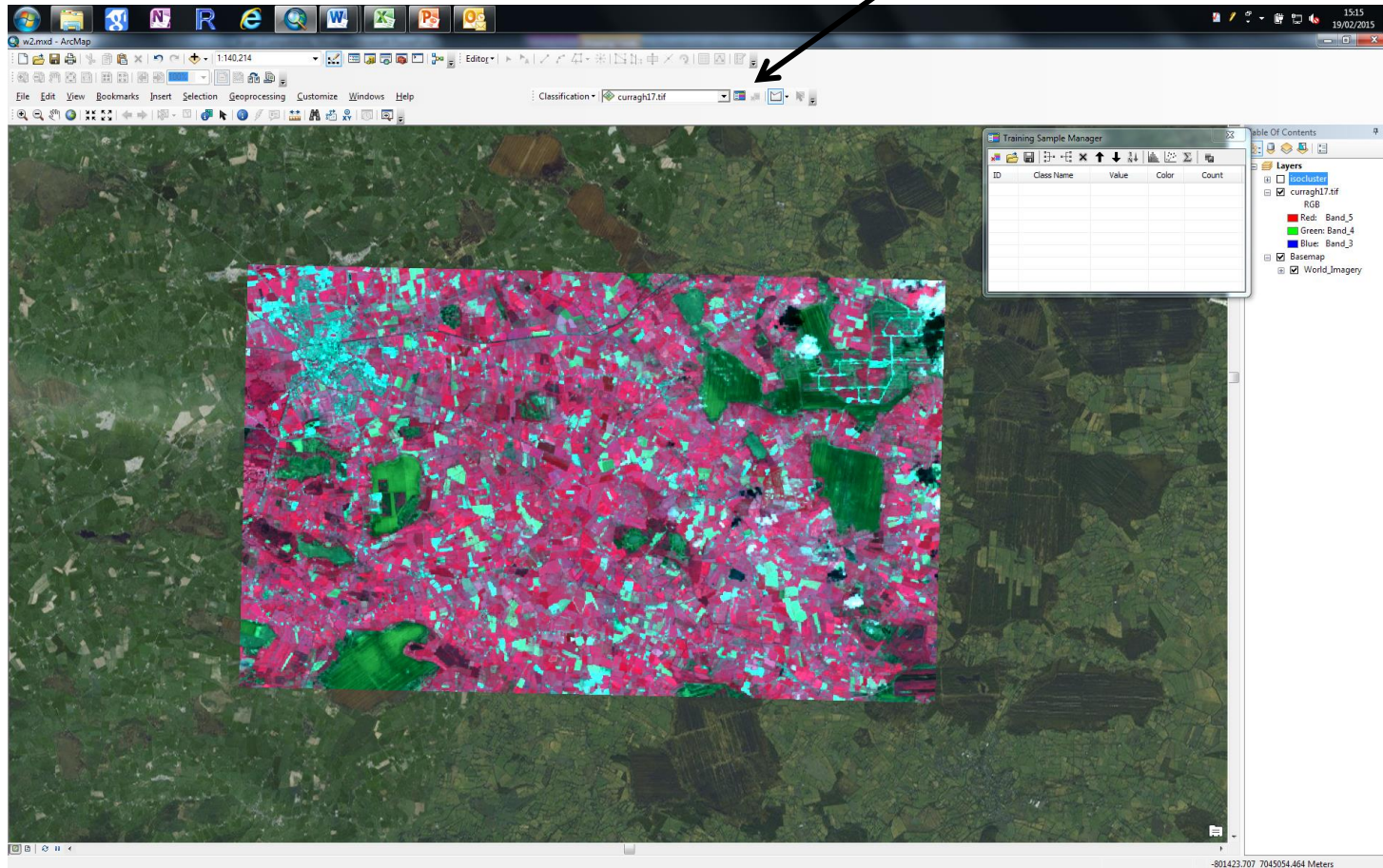
Practical

Simple map of

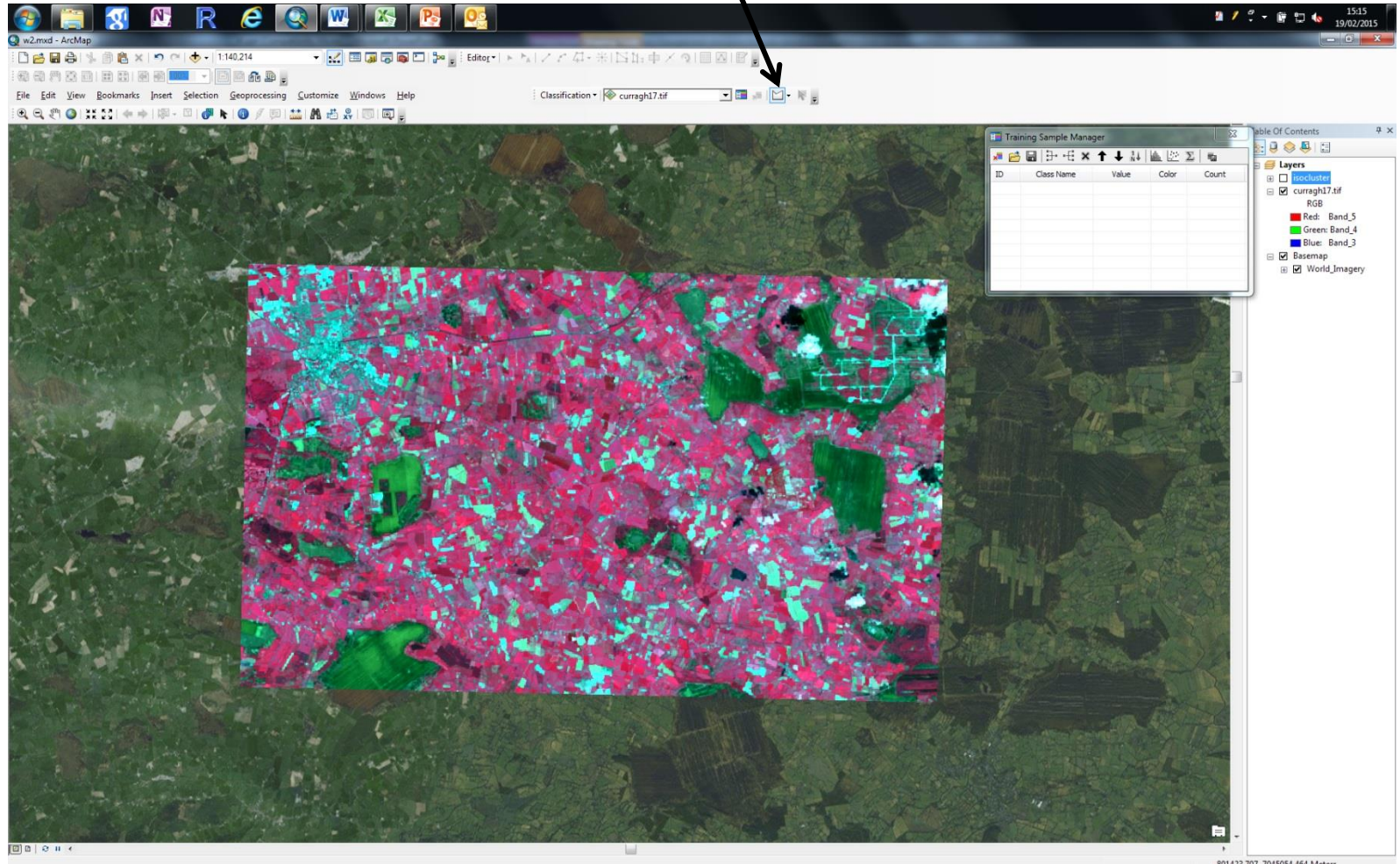
- Grassland
- Builtland
- Peatland
- Crop
- Forest
- Natural Vegetation
- Water

Supervised Classification in ArcMAP

Click the Training Sample Manager Button



Click the Draw Polygon Icon



Digitise at least 5 Training areas for each theme

The screenshot displays the ArcMap interface with a satellite image of a landscape. A central rectangular area is overlaid with a classification legend, showing five distinct colors: cyan, green, red, magenta, and yellow. The Training Sample Manager window is open, showing a table with the following data:

ID	Class Name	Value	Color	Count
1	Pest	1	Cyan	2394
2	Forest	2	Green	239
3	Crop	3	Red	120
4	Grass	4	Magenta	98
5	Built	5	Yellow	58

The Table of Contents window on the right shows the following layers:

- isocluster
- curragh17.tif
 - RGB
 - Red: Band_5
 - Green: Band_4
 - Blue: Band_3
- Basemap
- World_Imagery

The status bar at the bottom right indicates the coordinates: -822977.781 7045499.643 Meters.

- Save Training Samples in your GEODIRECTORY
- Save Signature File in your normal directory

Click on Interactive Supervised Classification

The screenshot shows the ArcMap interface with a satellite image of a landscape. A classification overlay is visible, showing various colored regions. A context menu is open over the 'Classification' dropdown, with 'Interactive Supervised Classification' selected. A 'Training Sample Manager' dialog box is also visible, showing a table of training samples.

ID	Class Name	Value	Color	Count
1	Peat	1	Cyan	2394
2	Forest	2	Red	239
3	Crop	3	Magenta	120
4	Grass	4	Green	98
5	Built	5	Blue	58

The 'Layers' panel on the right shows the following layers:

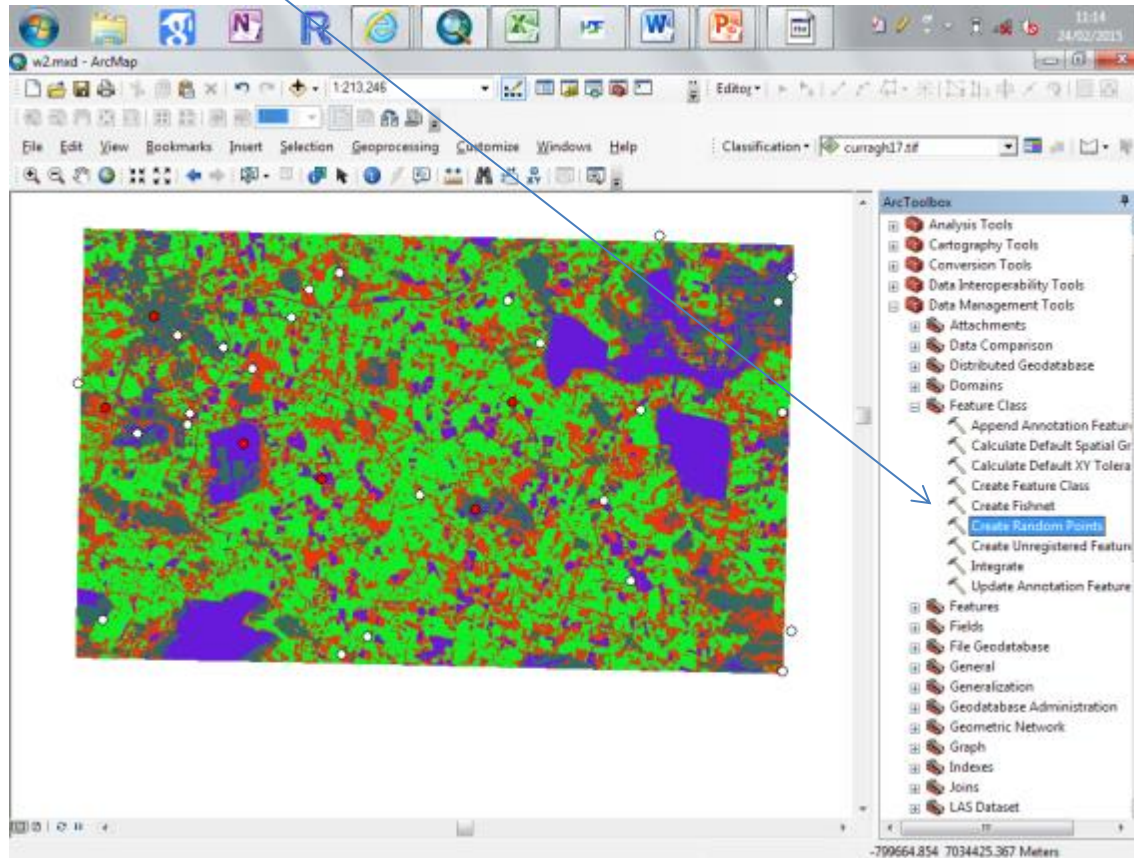
- Classification_curragh17.tif
 - Class_Name
 - Peat
 - Forest
 - Crop
 - Grass
 - Built
 - Unclassified
 - curragh17.tif
 - RGB
 - Red: Band_5
 - Green: Band_4
 - Blue: Band_3
 - Basemap
 - World Imagery

Improve your map

- Check the histograms are 'normal'
- Check the number of pixels are adequate- try combining samples of the same theme
- You want to achieve aprox 85-90% accuracy

Assessing your map

Once you are happy with your supervised map, load into arcMap and use the create random points tool



Create Random Points

Output Location
\\nfax341\homeshares3\$\stuart.green\ArcGIS\Default.gdb

Output Point Feature Class
testpoint

Constraining Feature Class (optional)

Constraining Extent (optional)
Same as layer curragh17.tif

Top
7038636.798009

Left
-838563.204631

Right
-802255.569728

Bottom
7016107.825635

Clear

Number of Points [value or field] (optional)
 Long
25

Field

Minimum Allowed Distance [value or field] (optional)
 Linear unit
0 Meters

Field

Create Multipoint Output (optional)

OK Cancel Environments... << Hide Help

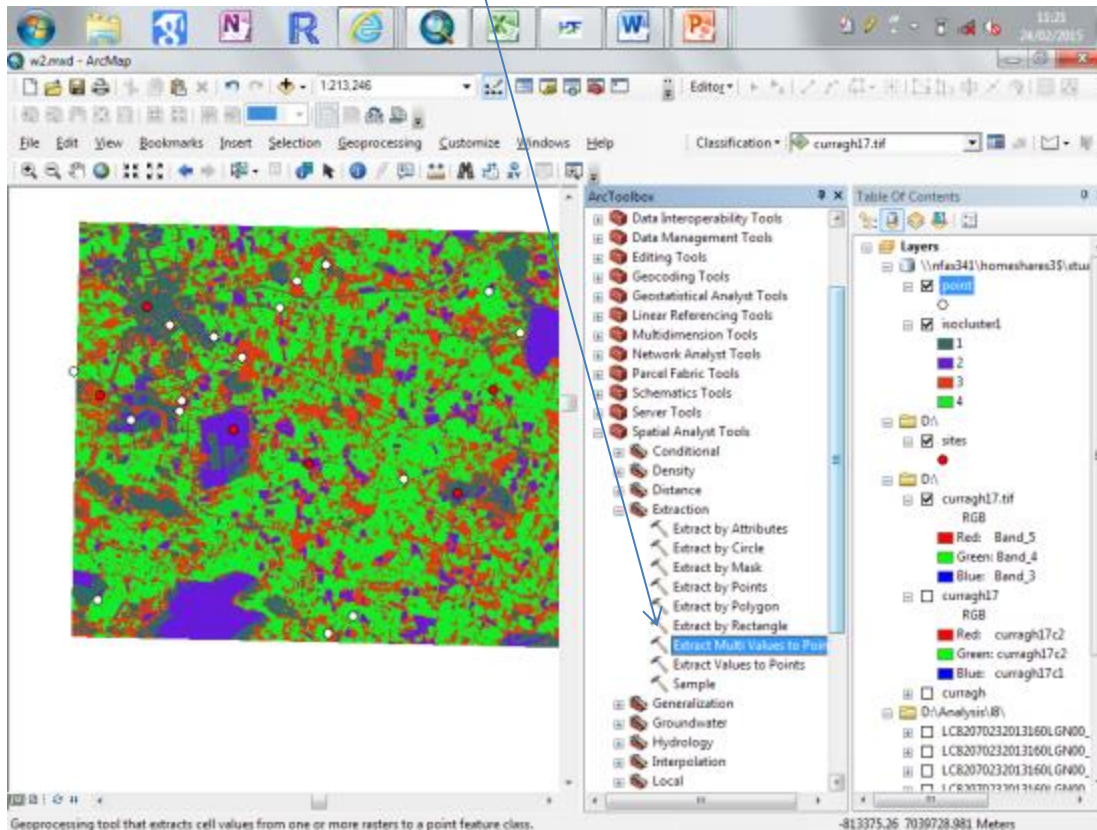
Add output name

Constrain to Curragh17.tif

Create 25 points

Click OK

Use the Extract Multivalues to point tool to assign the value of your map to each point
In your test point coverage



Use the “add field” tool to create an extra text field in your testpoints coverage called “Gro

Input Table
point

Field Name
Ground

Field Type
TEXT

Field Precision (optional)

Field Scale (optional)

Field Length (optional)

Field Alias (optional)

Field IsNullable (optional)

Field IsRequired (optional)

Field Domain (optional)

OK Cancel Environments... Show Help >>

Right Click on the testpoints field in Table of contents and click edit-start edit

Open up the attribute table for the test points coverage and you can now edit the “Ground Field”

Now simply zoom to each point in turn and record in the “ground field” the landcover class visible in the “base image” airphotos.

To create the error matrix, Use Data Management Tools->Tables->Pivot Tables

