

EGM310: GIS and Remote Sensing

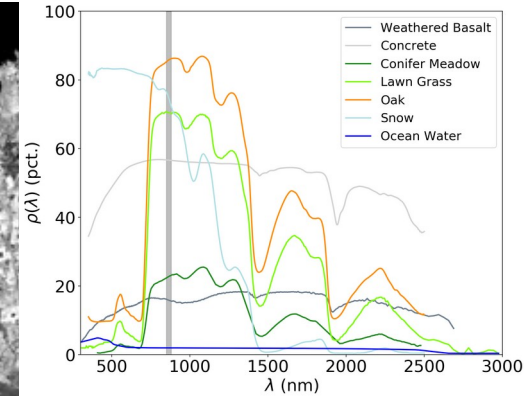
Week 11, Part 1: Band Combinations

1. Band combinations
2. Image enhancements
3. Visual interpretation
4. Image decomposition and transformation
5. Classification methods
6. Accuracy Assessment

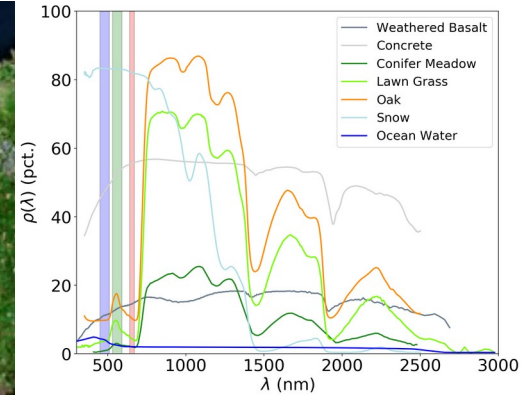
Using multispectral imagery

- Can work with images as single-band or multi-band composites
- Composite images can help highlight different features, aid in visual analysis
- Here, we're looking at Landsat 8 OLI images
- Use this presentation as a guide, but feel free to try your own combinations

Grayscale (OLI Band 5)

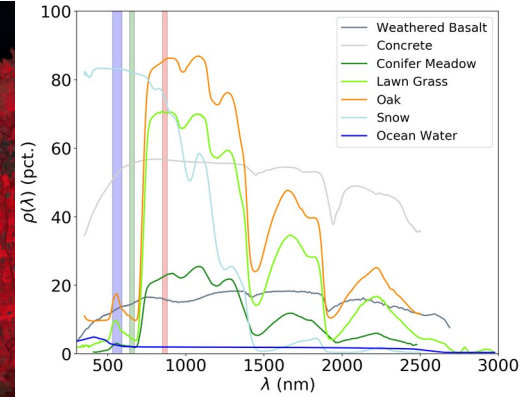


	Name	Bandwidth (nm)
1	Coastal	430 – 450
2	Blue	450 – 510
3	Green	530 – 590
4	Red	640 – 670
5	Near Infrared	850 – 880
6	Shortwave Infrared 1	1570 – 1650
7	Shortwave Infrared 2	2110 – 2290
8	Panchromatic	500 – 680
9	Cirrus	1360 – 1380
10	Thermal Infrared 1	10600 – 11900
11	Thermal Infrared 2	11500 – 12510

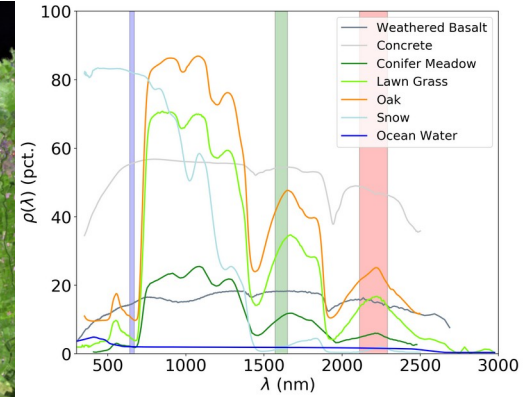


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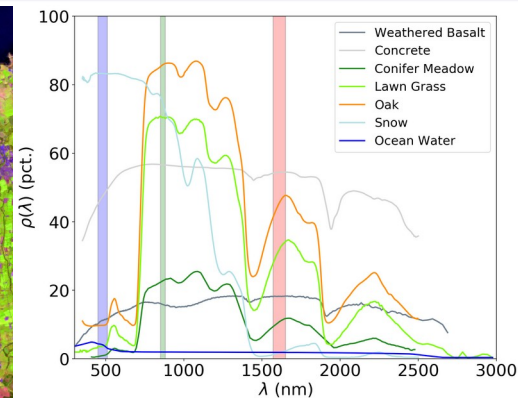
False-colour Infrared - vegetation



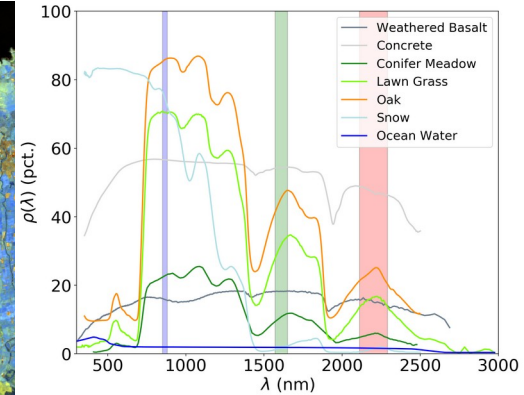
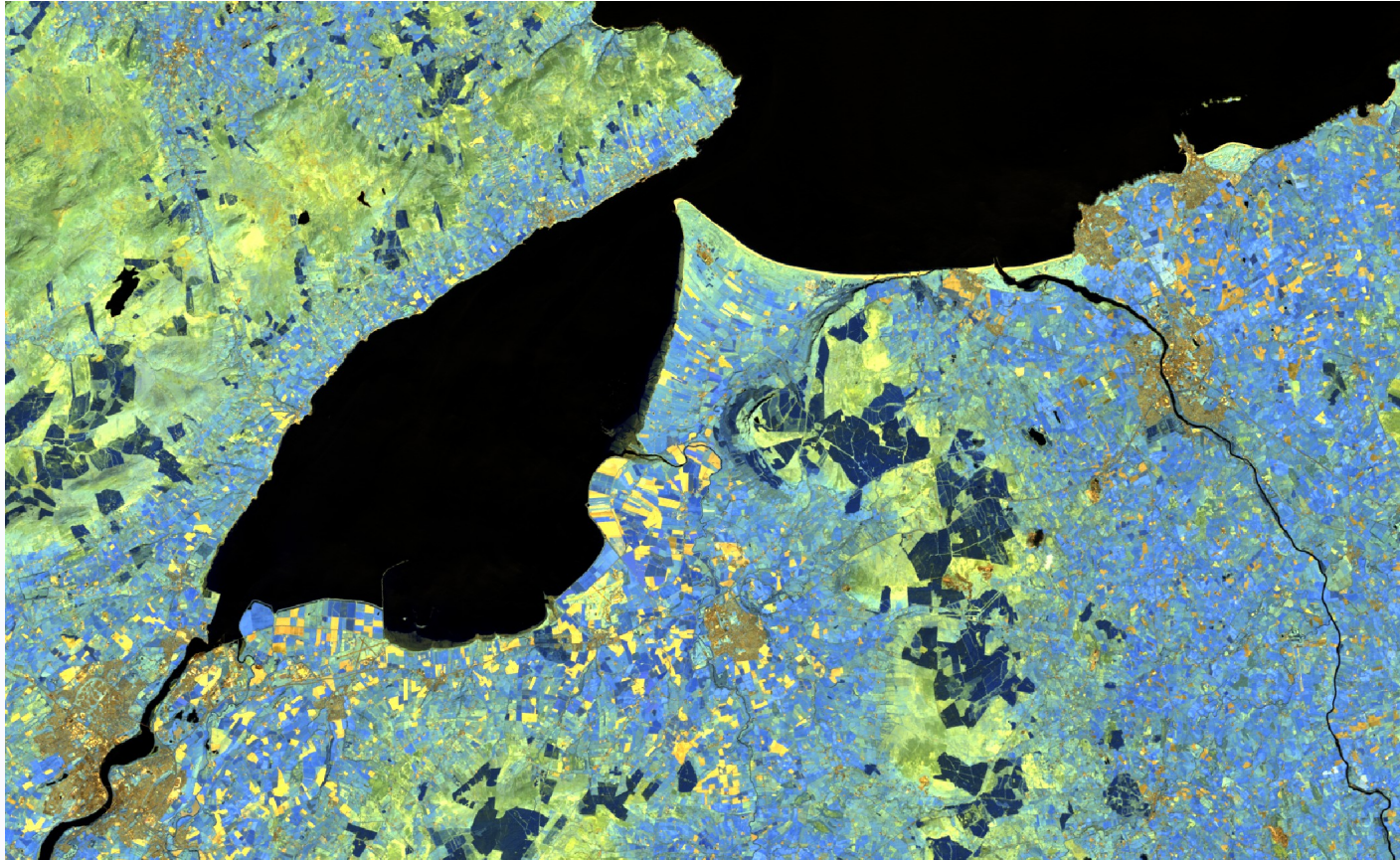
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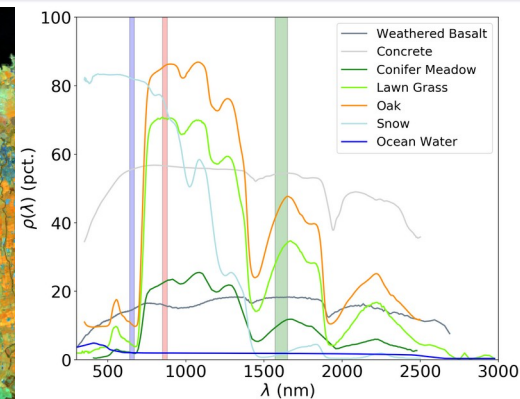
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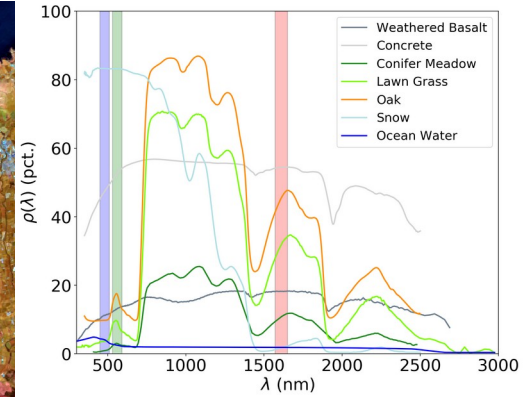
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- Campbell & Wynne – Chapter 4.6
- How to Interpret a False-Color Image [[NASA](#)]
- Interactive L-8 Band Combinations Tool [[geocarto](#)]
- Landsat Spectral Characteristics Viewer [[USGS](#)]
- The Many Band Combinations of Landsat 8 [[L3Harris](#)]
- Landsat 8: Band by Band [[NASA](#)]