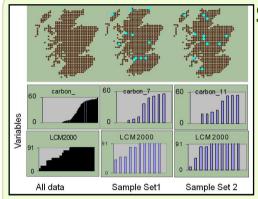


# **OISIN – Optimised Inventorying of Soil Information Networks**



## **Complex Policy Questions**

Soil Carbon Budget
Nitrification
Erosion
Trans-national mapping
Digital Soil Mapping
How do soil parameters relate to each other and to Environmental and human factors needed at a range of scales?



### **Sample Optimisation**

Trends for multiple variables in random samples automatically compared with global trends using R-Stats.

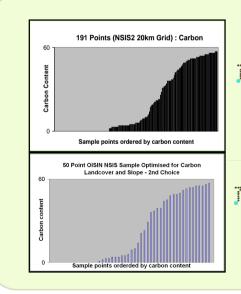
Data may be taken from existing database or spatially joined to 3<sup>rd</sup> party data.

#### **Limited Resources**

The National Soil Inventory of Scotland has data for 778 points in a 10 km grid (see results).

What is the best way to establish change data when resources are only sufficient to revisit c200 points?

What if we monitor only 50 points annually?



#### Results



Carbon d= 0.163031 Landcover d = 0.36297 Slope d = 0.190831

D = % difference from global trend



Carbon d =0.045035 Landcover d=0.067889 Slope d = 0.069963