Classification

SPOT 6 and 7: <http://www.astrium-geo.com/en/147-spot-6-7-satellite-imagery>

GOAL: Couple interview data with remotely sensed adaptation information. I.e. at each survey point in time, run classification and see how cropping patterns appear to change over time.

**SURVEY INFORMATION**

From: Farmer Survey Nielsen Proposal V1-5.doc

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Year 1 (2013)** | **Year 2 (2014)** | **Year 3 (2015)** | **Year 4 (2016)** | **Year 5 (2017)** |
| Pilot Cohort (6 GNs) | November 2013 |  | Follow-up |  |  |
| Cohort 1 (12 GNs) |  | Baseline |  | Follow-up |  |
| Cohort 2 (12 GNs) |  |  | Baseline |  | Follow-up |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Nov-13 | Apr-14 | Nov-14 | Apr-15 | Nov-15 |
| Maha | Yala | Maha | Yala | Maha |
| Pilot Full Survey (6 GNs \* 45 households = 270 households) | Pilot Interim Survey I (45\*6=270) | Pilot Interim Survey II (45\*6=270) | Pilot Interim Survey III (45\*6=270) | Pilot (T2) Full Survey (45\*6=270) |

This would mean five separate classifications using the exact same methods and a change detection across those five time points. Would I need training data at each time point, or could I use spectral information taken at say, an initial time point, and use this to try to deduce classes across time?

For survey data of interest see: Survey\_data.xlsx

Questions to answer:

* LAN2: Given location on canal (LAN\_2\_B) how satisfied are you with the amount of irrigation water you receive in Maha (LAN\_2\_C1) and Yala (LAN\_2\_C2)? Similarly, given location, in the last five years, what percentage of the time does released irrigation water fail to ready your field because it has been used in Maha (LAN\_2\_D1) and Yala (LAN\_2\_D2)?
* ENV\_1 table: Pull some information about perceptions of changing climate from this as contextual information.
* ENV2\_2: When was the last time you experienced a drought?
* Check out qualitative answers from ENV3-7 to see if there’s anything interesting to include. Check AtlasTi coding.

**SUPPLEMENTAL INFORMATION**

* Climate conditions (SPI, NDVI as context)
* Lagged climate conditions (Maha 🡪 Yala issues)
* Standard seasonality/greening up trends in region (justify time period of interest); use TIMESAT and MOD13Q1