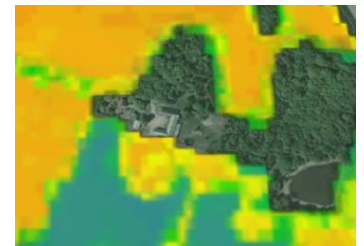


Sky View of Ragnabo Farm

- Slides show yearly sky views seen from SPOT satellites from 2007-2015
- Vegetation index colored from red (desert) to blue (rich vegetation) shows relative 'growth condition'
- One slide per year, mostly in early June, some in late August with farmers comments on spec. things
- During the above years parts of the CDI* system was built in parallel.
- CDI is fully operational from 2014
- Note that vegetation index (growth condition) is dependent on fertilizer, irrigation, sunlight, temperature, soil structure, farmer skill etc. etc.



*CDI = Control Drainage and Irrigation

Date 2007-06-08

Triticale

Winter wheat

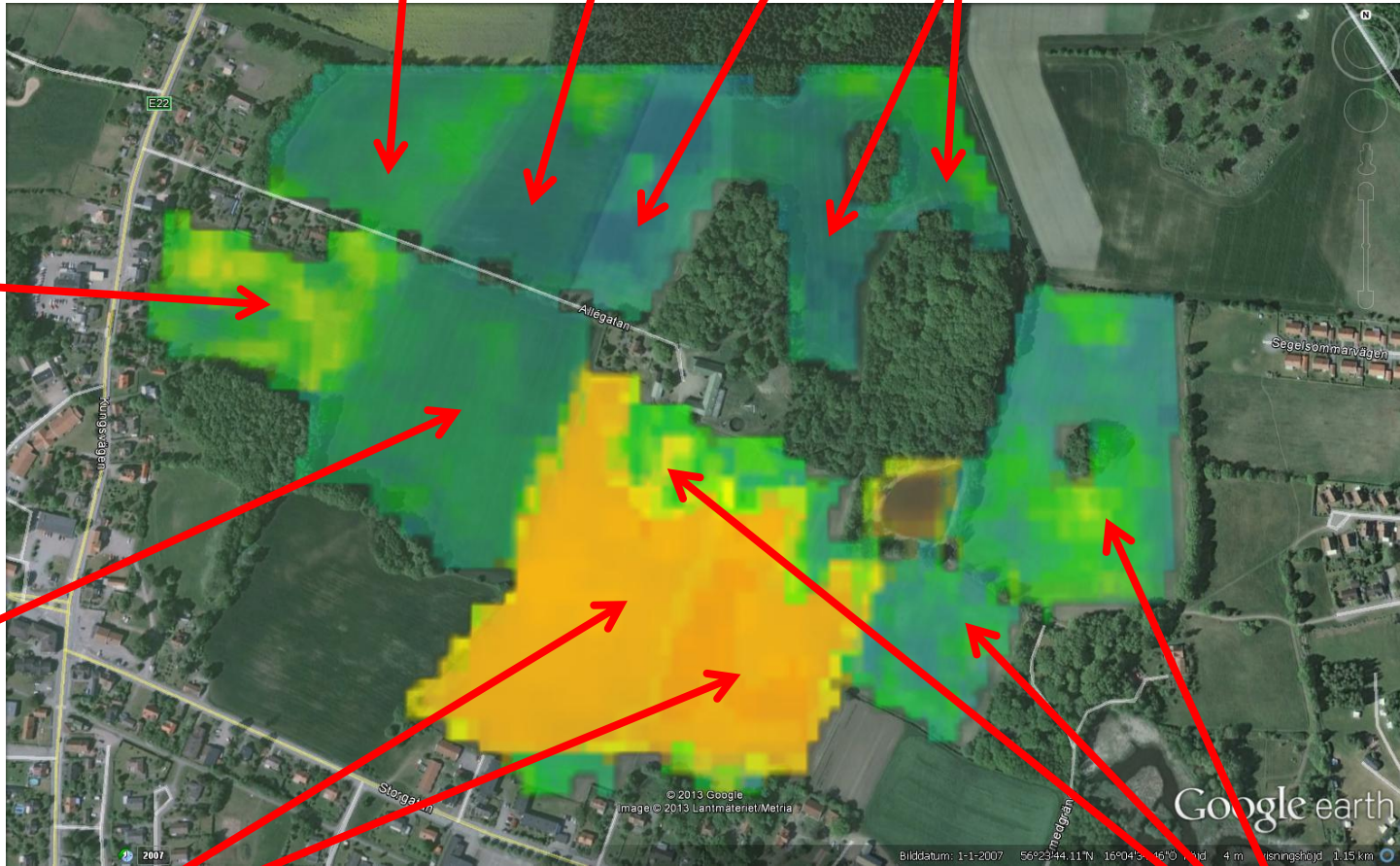
Barley

Winter wheat

Air Photo: 2007

Fallow

Winter wheat



Potatoes

Comments:

Barley, triticale and wheat is light green=>suffer from lack water
 Potatoes is light brown => just broken the soil surface
 Limited irrigation, mostly potatoes, open loop

Barley

Date 2008-06-05

Triticale

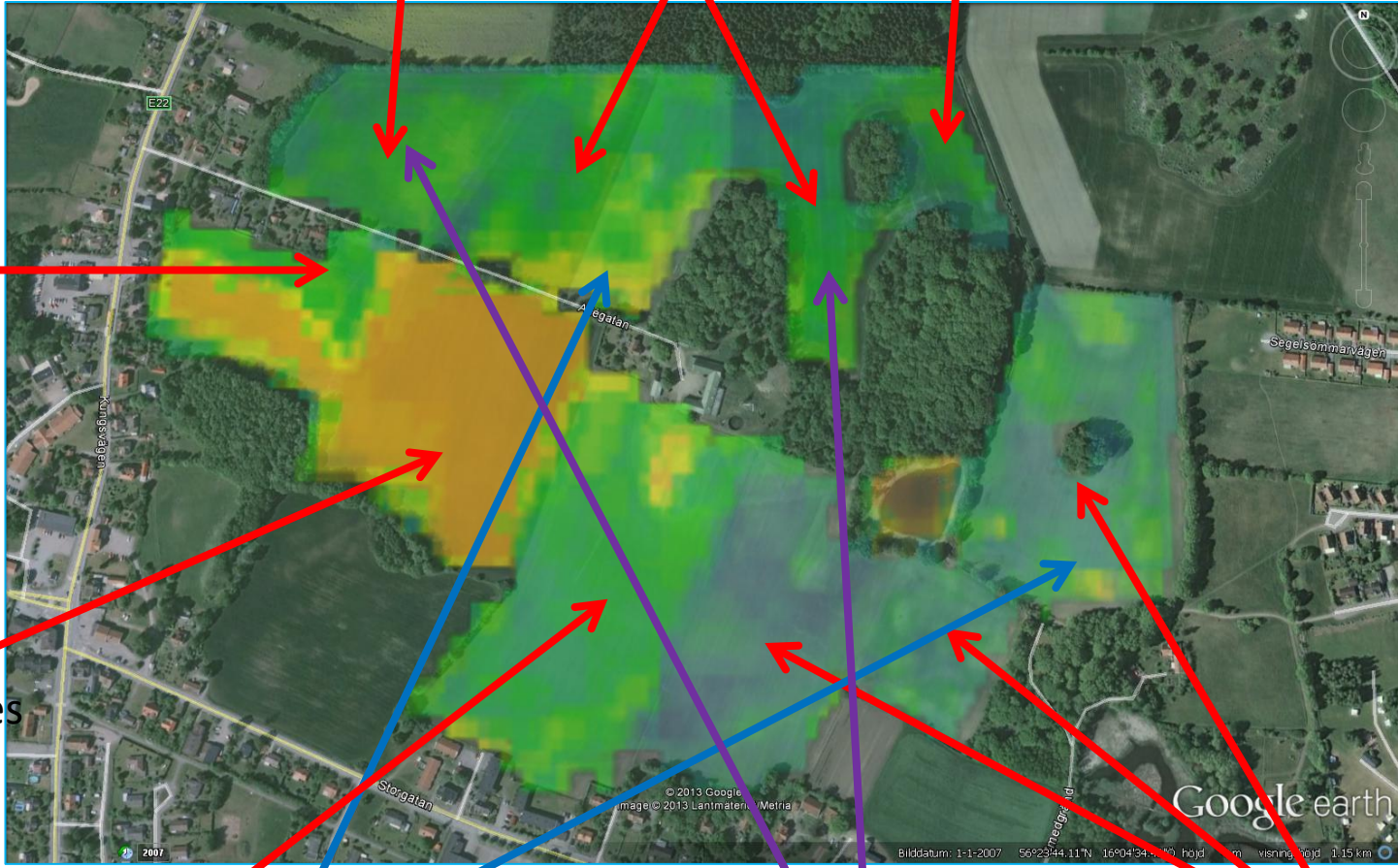
Barley

Winter wheat

Air Photo: 2007

Barley

Potatoes



Barley

Wet Area, need clean pipes, add on drains
Dry area, need irrigation.....

Winter wheat

Date 2009-06-01

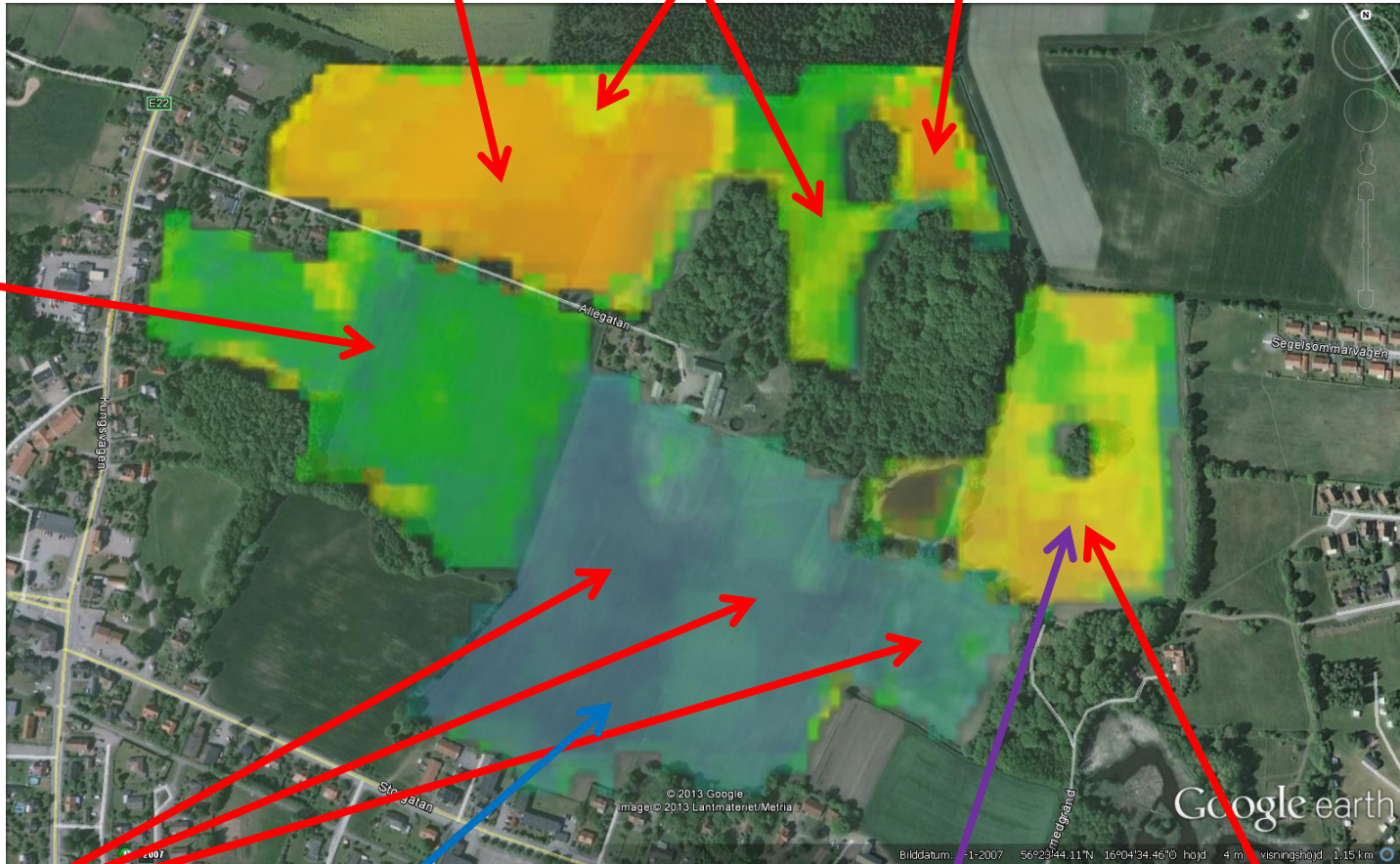
Potatoes

Barley

Potatoes

Air Photo: 2007

Barley



Winter wheat

Winter wheat good irrigated, high yield
Problem area: Plough broke the drain pipes

Barley

Date 2010-05-28

Barley

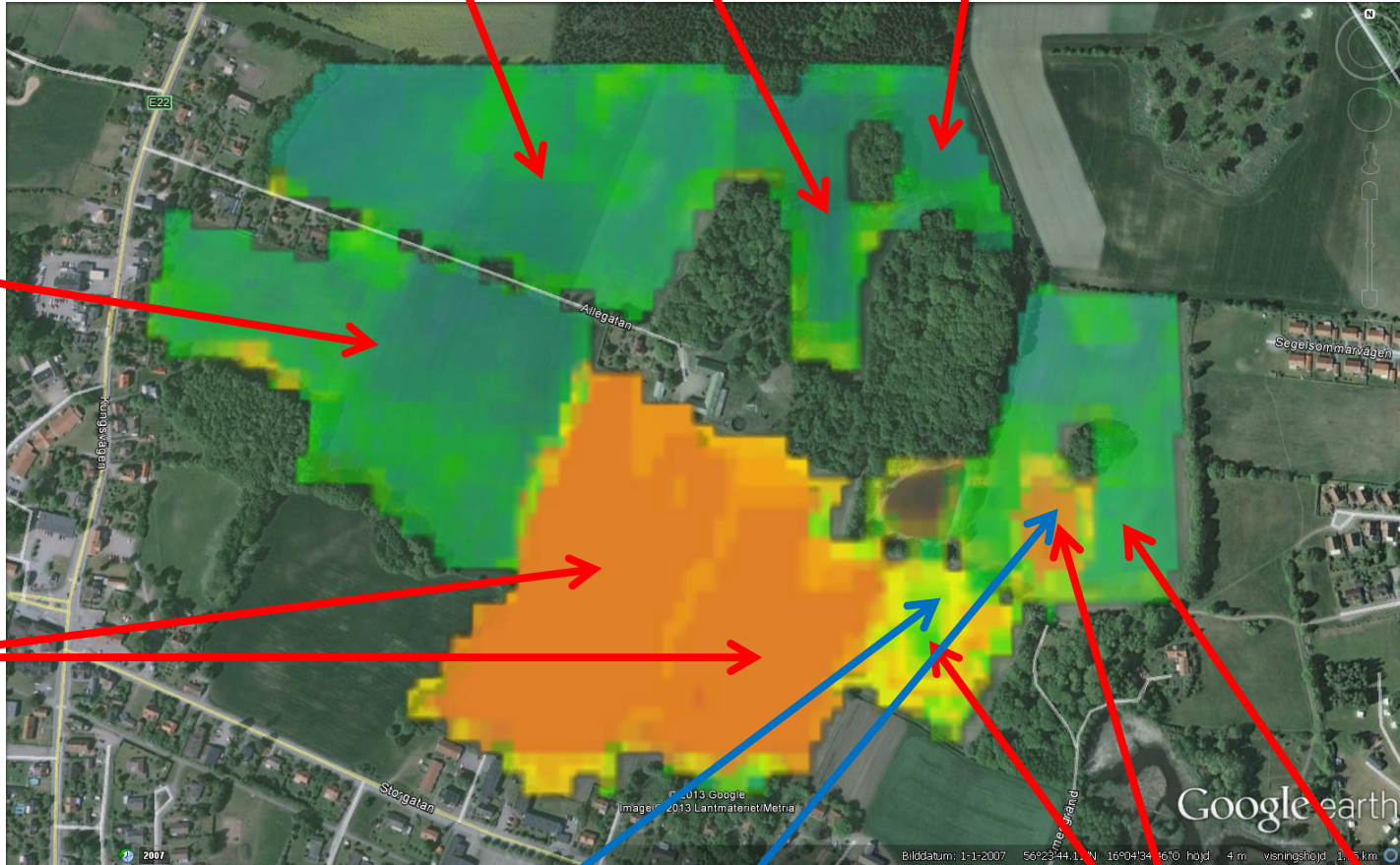
Winter wheat

Barley

Air Photo: 2007

Winter wheat

Potatoes



Problem areas: Late start, too wet

Barley

Winter wheat

Date 2010-06-05

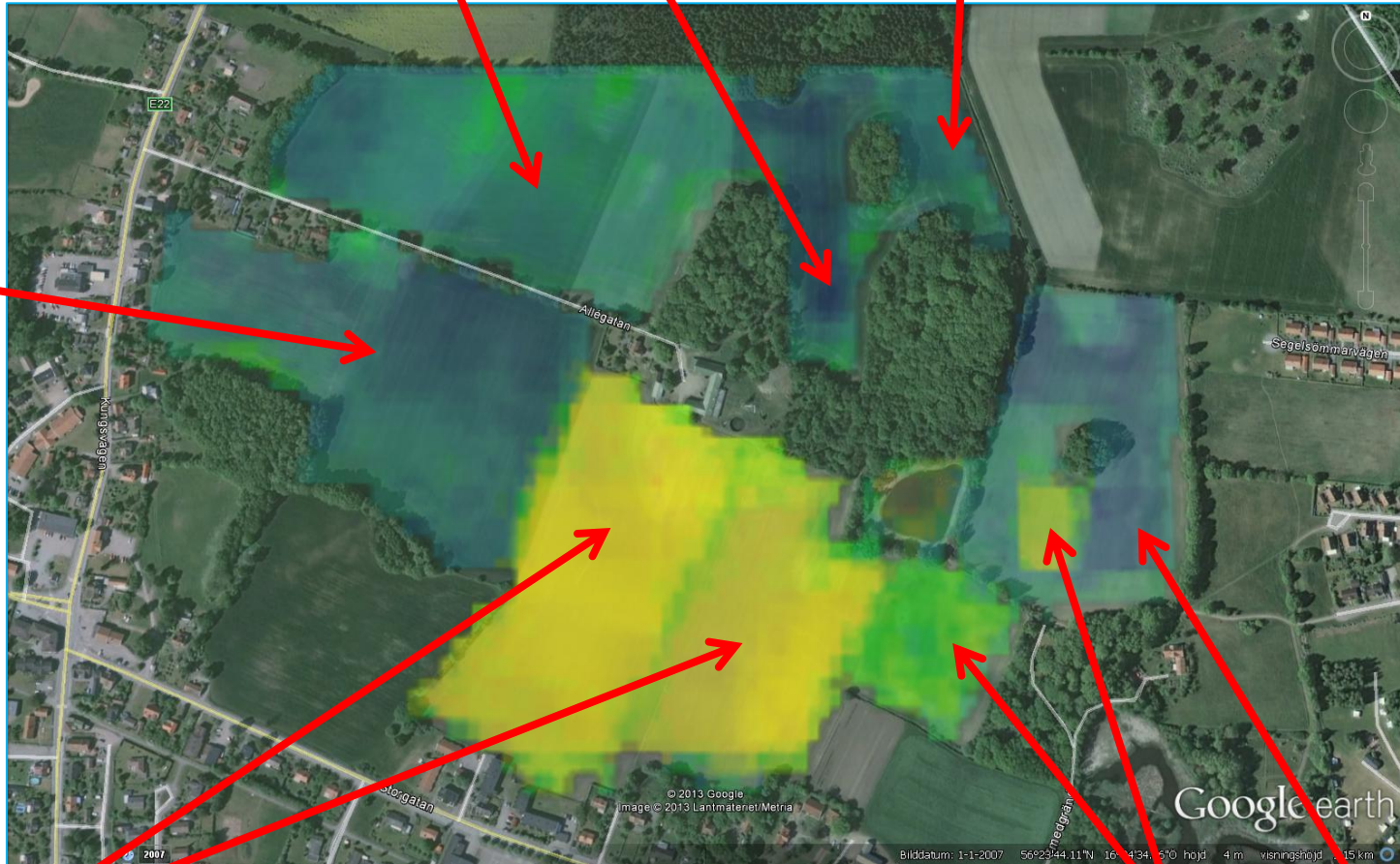
Barley

Winter wheat

Barley

Air Photo: 2007

Winter wheat



Potatoes

Winter wheat is well traditionally irrigated

Barley

Winter wheat

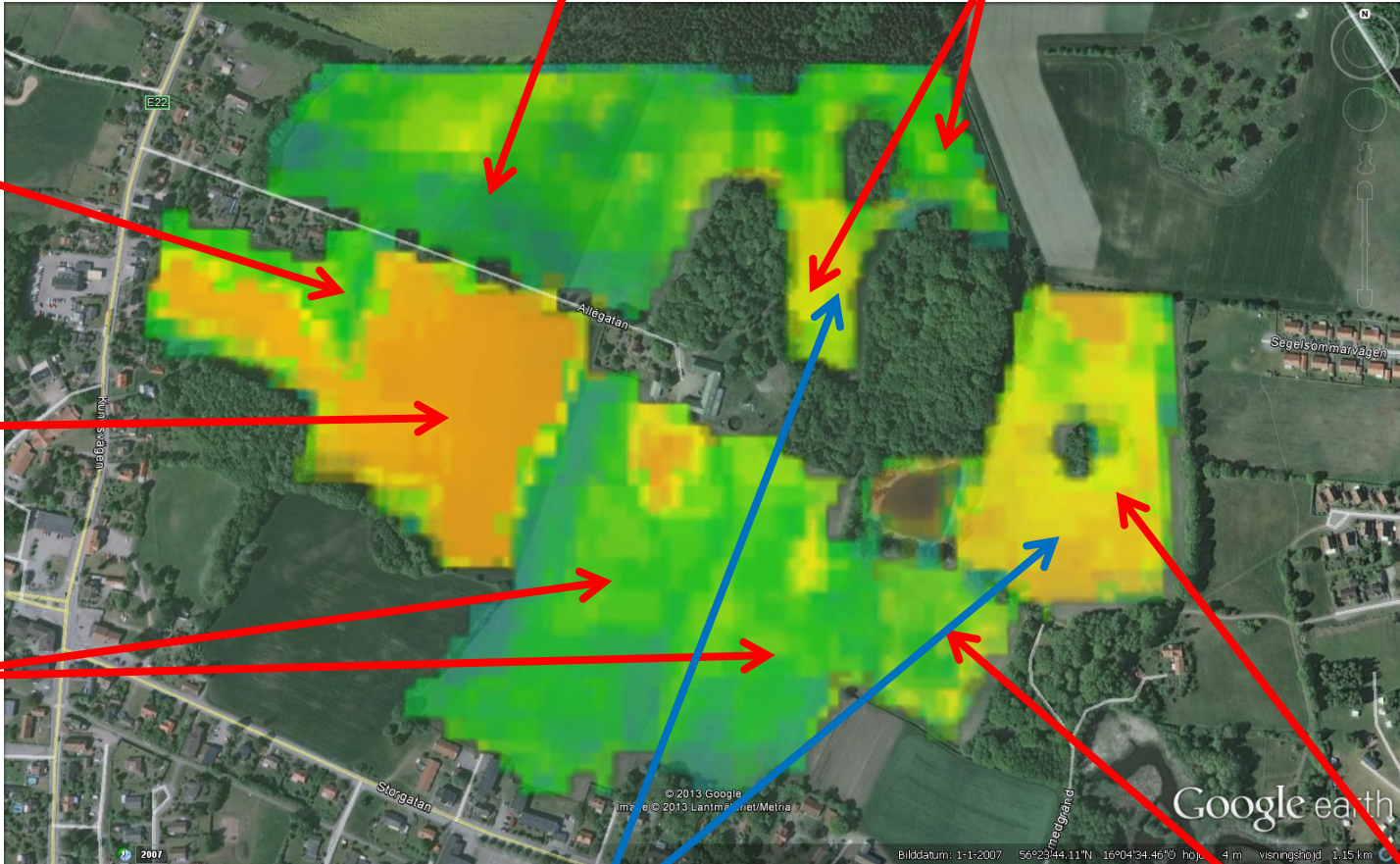
Date 2011-06-02

Winter wheat

Barley

Air Photo: 2007

Barley



Potatoes

Barley

Slow start for barley due too late work with irrigation system upgrade

Winter wheat

Barley

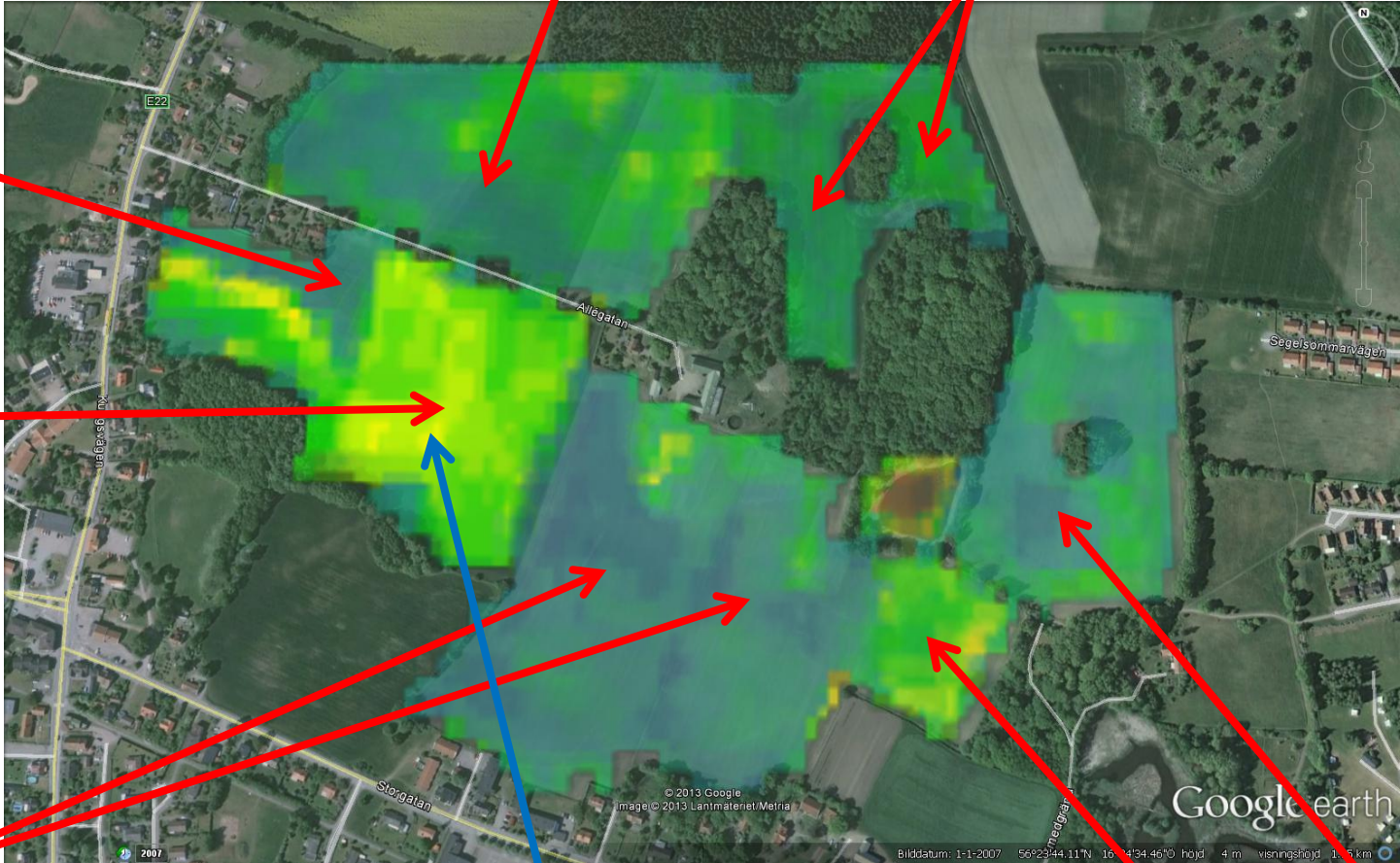
Date 2011-06-29

Winter wheat

Barley

Air Photo: 2007

Barley



Potatoes

Barley

Potatoes need to be planted earlier, 15 may is far too late

Winter wheat Barley

Date 2012-07-24

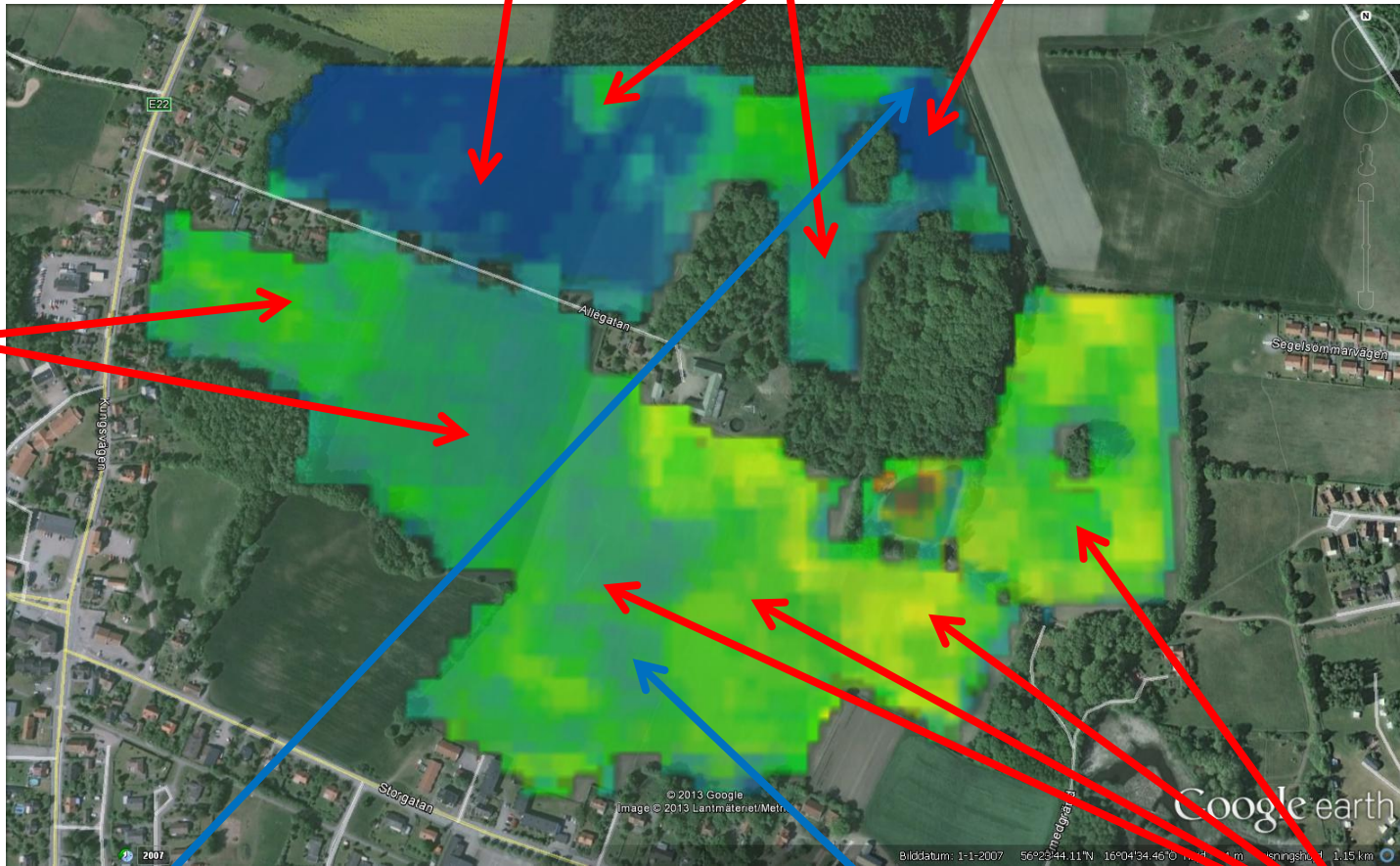
Potatoes

Barley

Potatoes

Air Photo: 2007

Barley



Potatoes well irrigated, feed forward irrigation works fine
Winter wheat: sub-irrigation runs open loop, hard to balance and adjust

Winter wheat

Date 2013-08-28

Barley

Winter wheat

Air Photo: 2007



Winter wheat

CDI system mostly finished. Controllers are well operating and balancing the system.

Picture is taken just after harvesting the winter wheat.

Strip of potatoes seed production, plants are cut off.....

Unfortunately no earlier satellite picture is available this year.

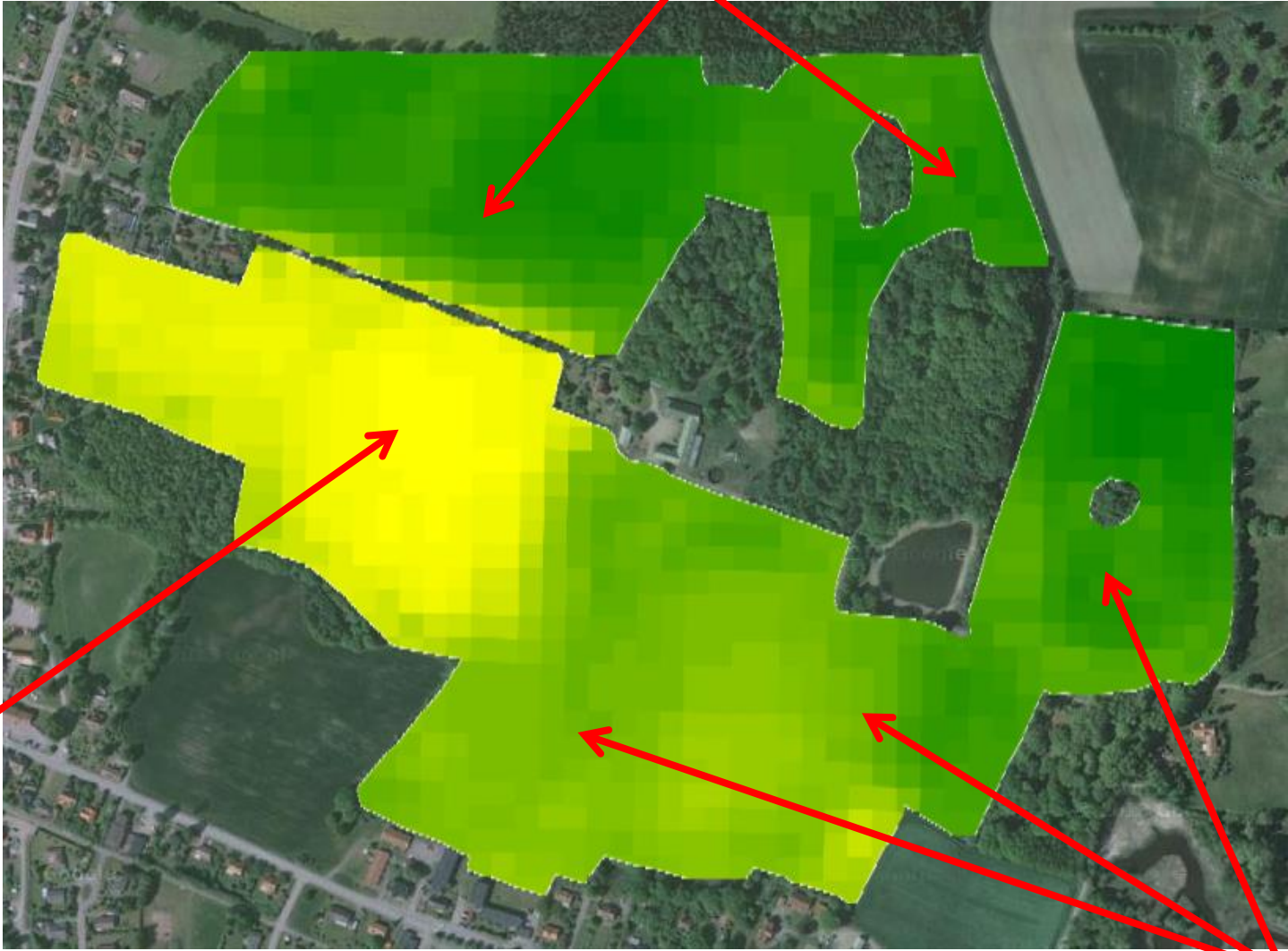
Potatoes

Barley

Date 2014-04-26

Winter wheat

Air Photo: 2007



Potatoes

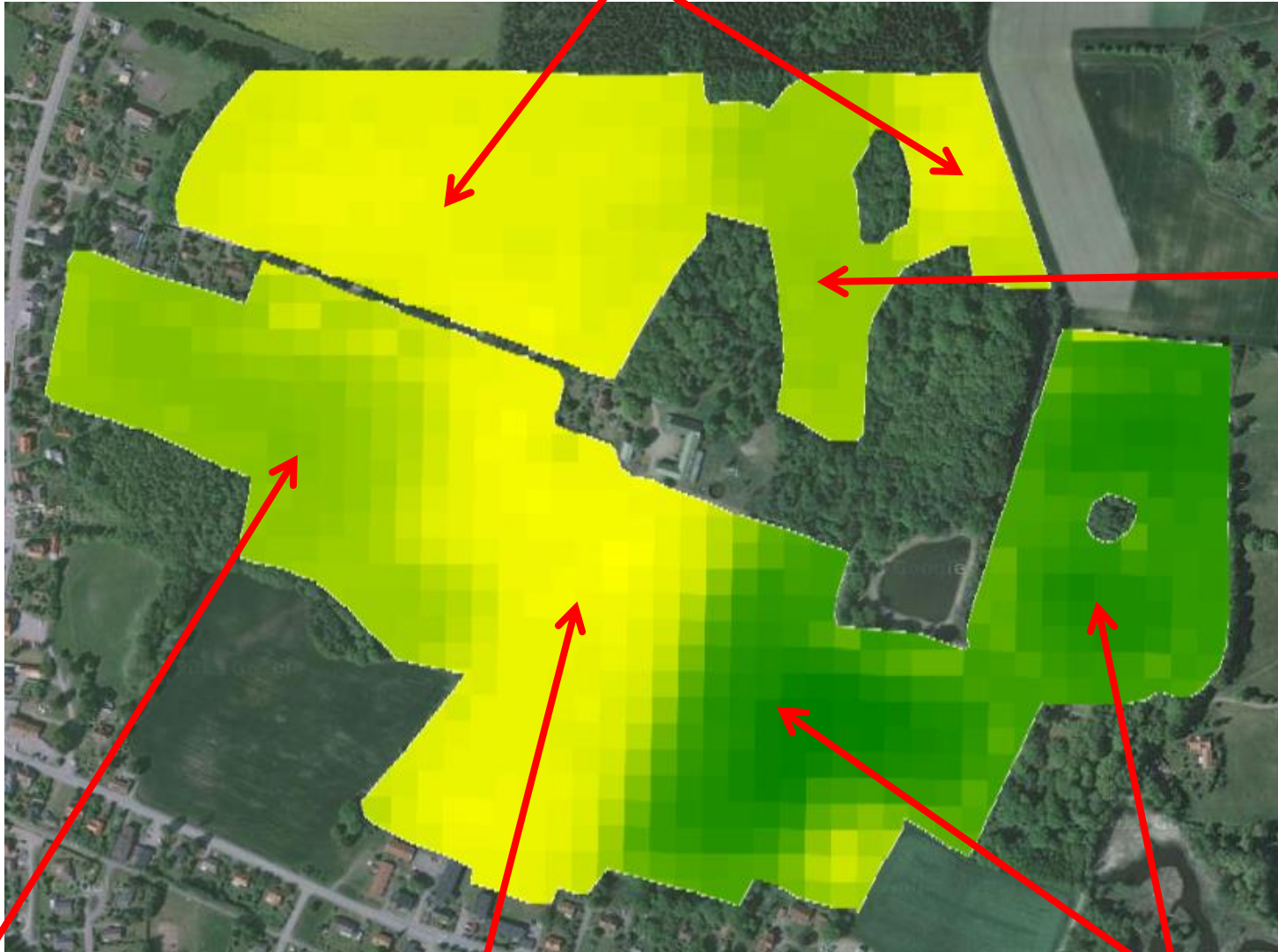
Winter wheat

Date 2015-04-21

Potatoes

Air Photo: 2007

Triticale



Winter wheat

Barley

Winter rape