Collaborative Agreement

JRC (MARS Unit-AGRI4CAST): M. El Aydam

&

INRA (Morocco): R. Balaghi

Use of CGMS to forecast production / cooperation INRA and AGRI4CAST

- Soft and durum wheat, barley
- Use of water limited models
- Yield (t/ha) is forecast
- Production (Mt) is estimated: yield * area

Use of CGMS to forecast production / How works the cooperation INRA and AGRI4CAST

INRA: field info >> JRC

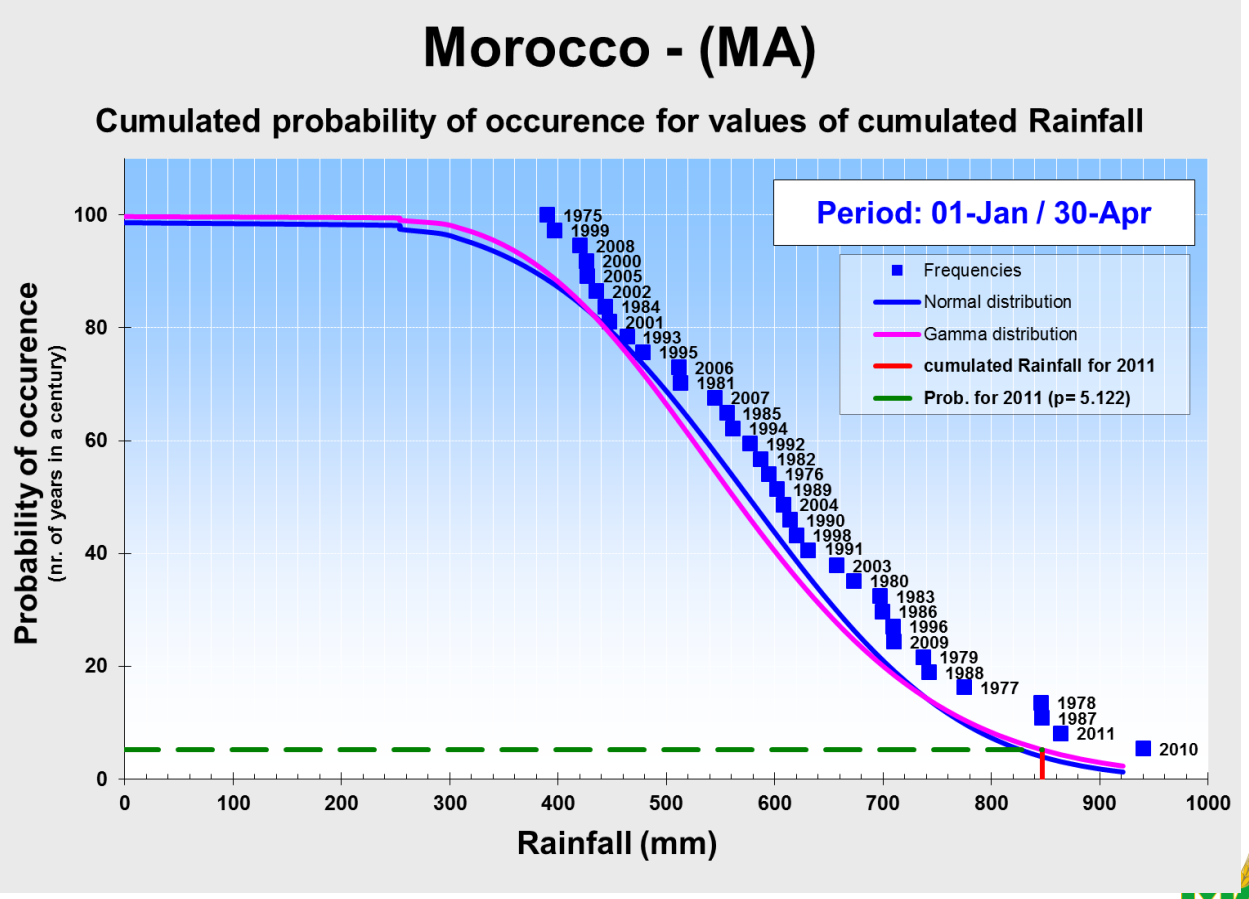
JRC: output of CGMS level 1 and 2 >> INRA

INRA: feedback + statistics (province level) >> JRC level 3

Final analysis and conclusions: INRA + JRC
Bulletin production
>> DG AGRI (EU) + Min. of Agriculture (Morocco)

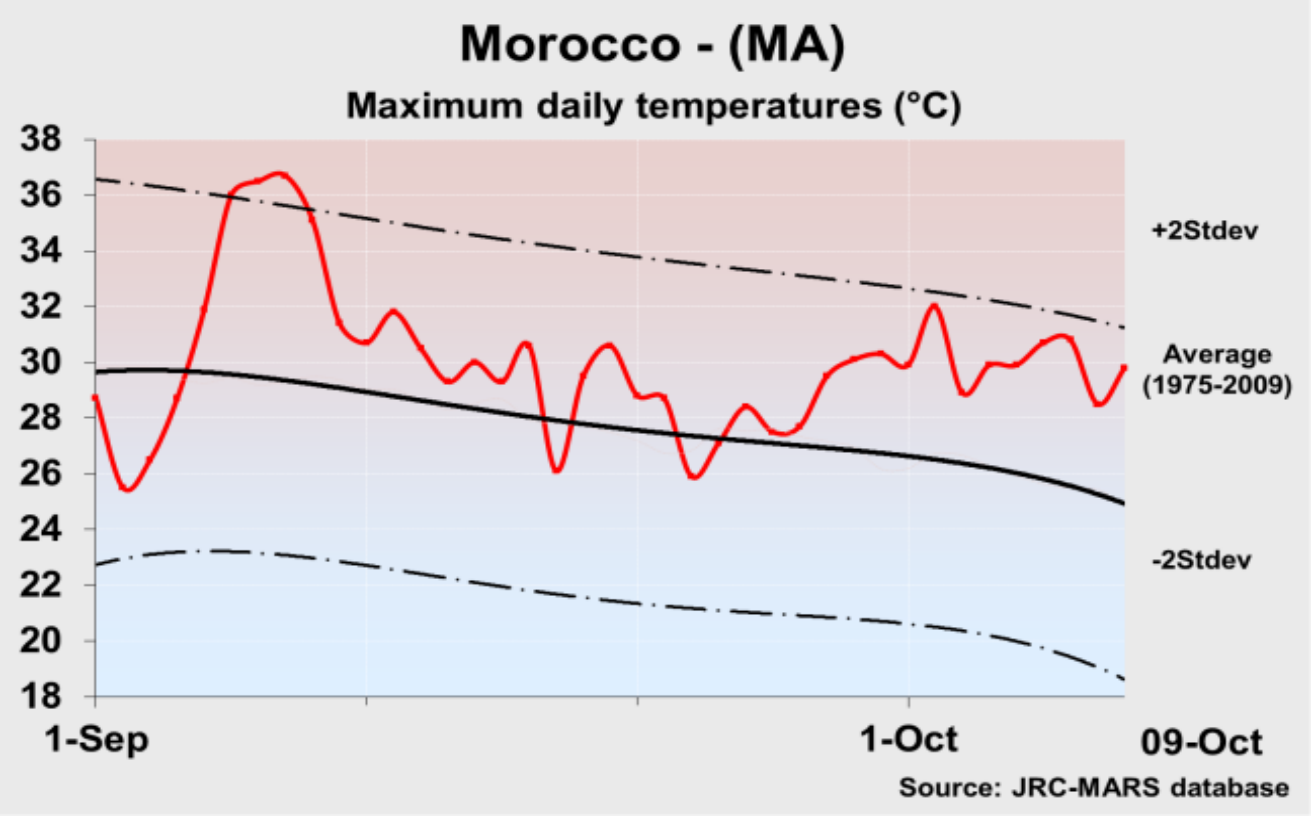
Use of CGMS / Illustrations for Morocco

Level 1



Use of CGMS / Illustrations for Morocco

Level 1



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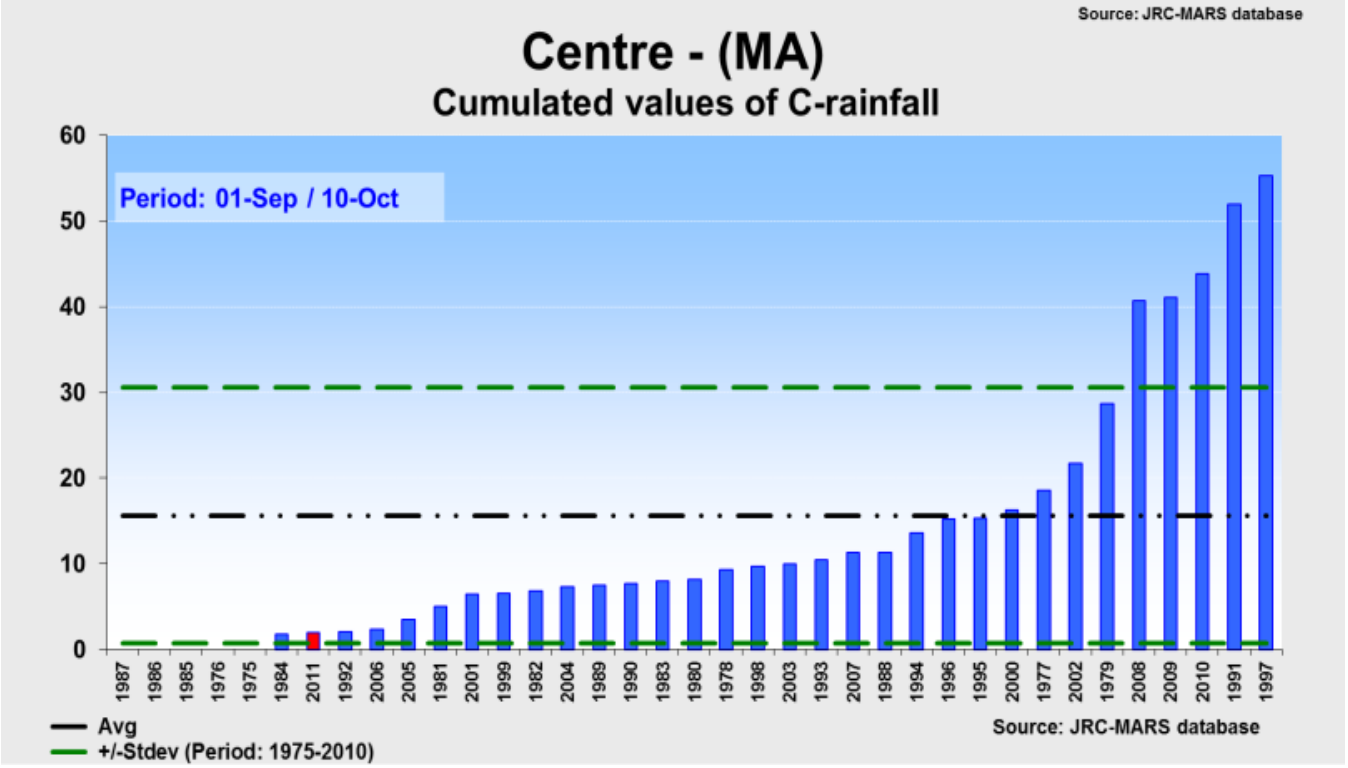
Level 1



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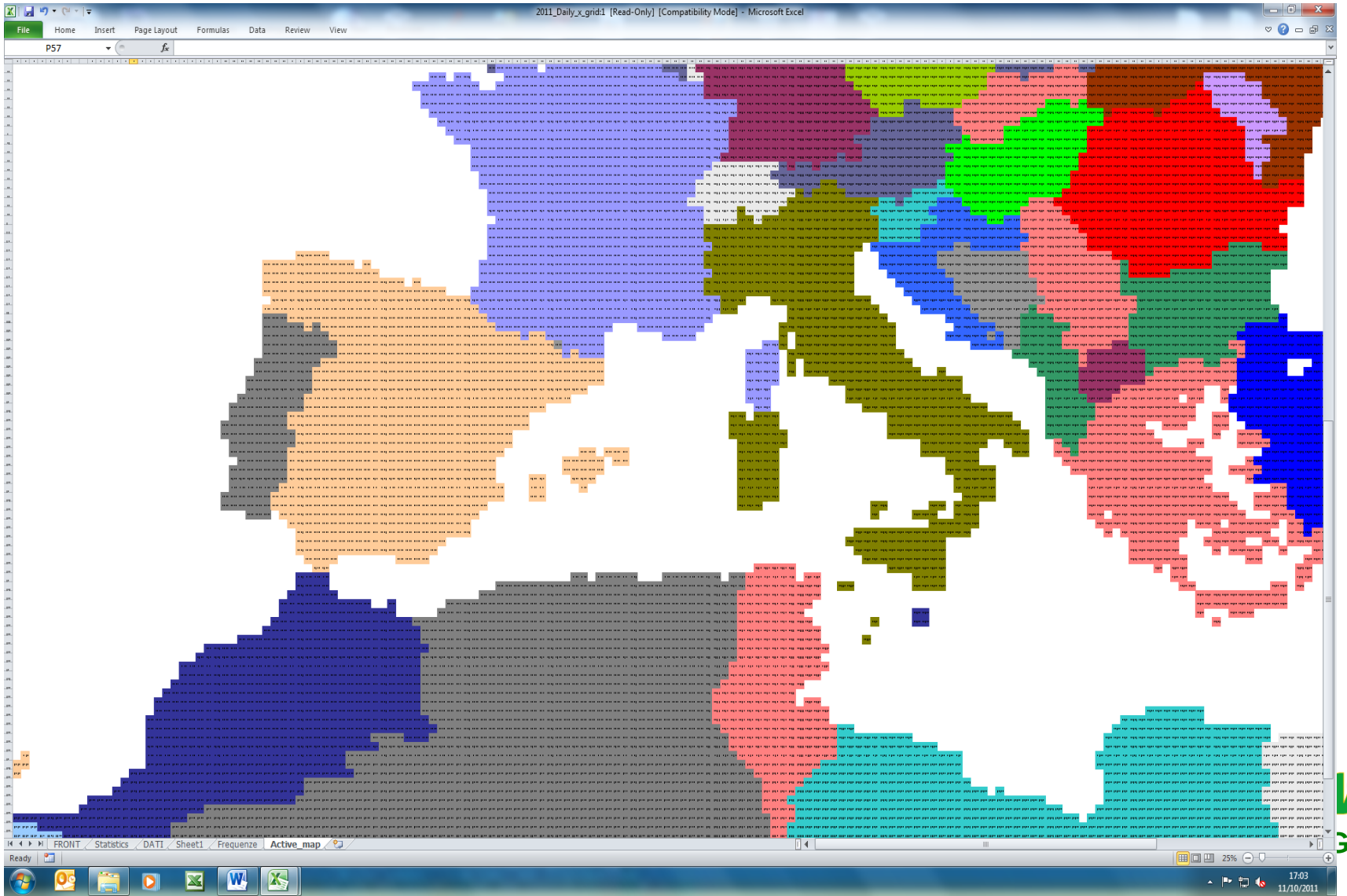
Level 1



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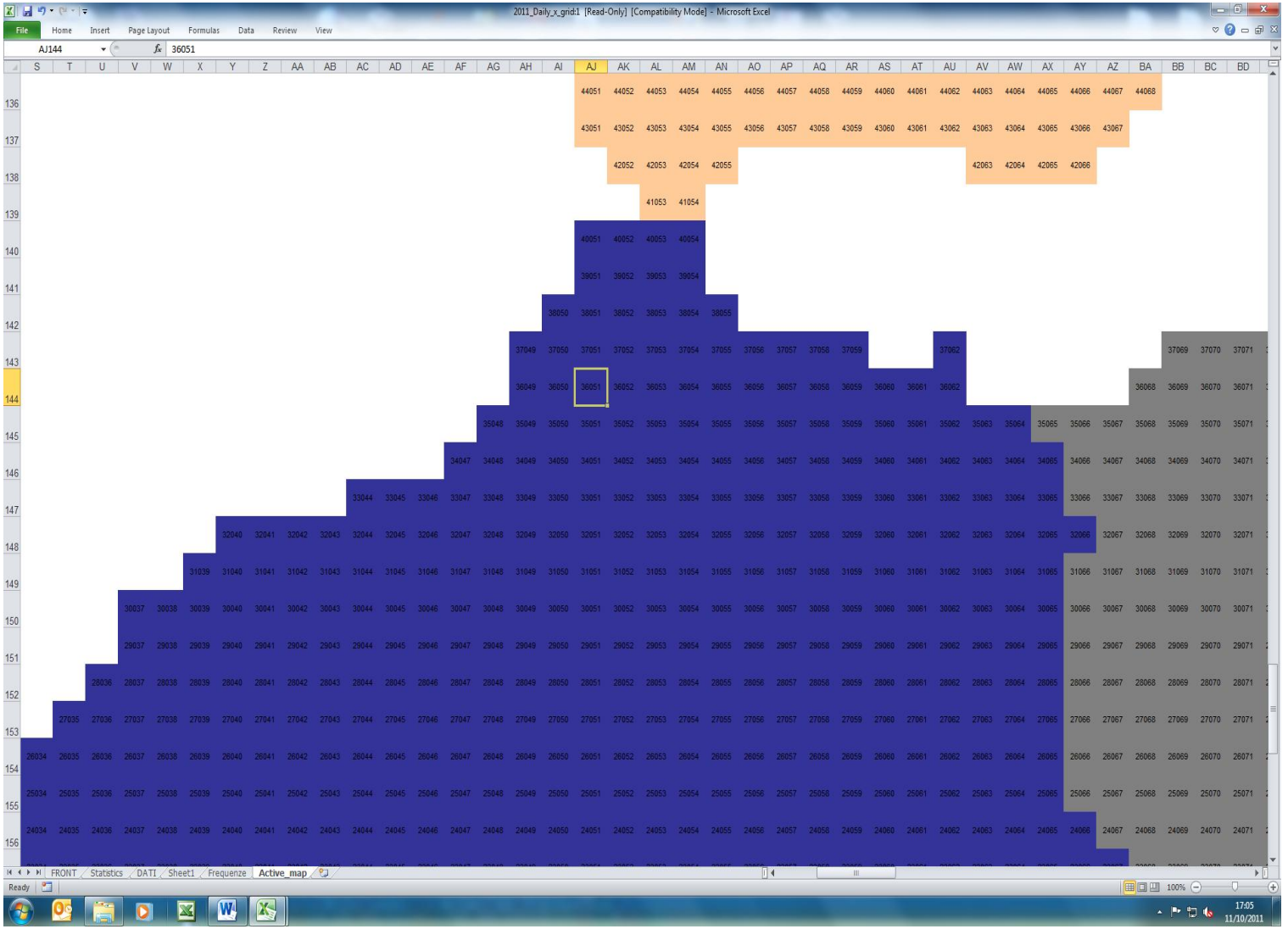

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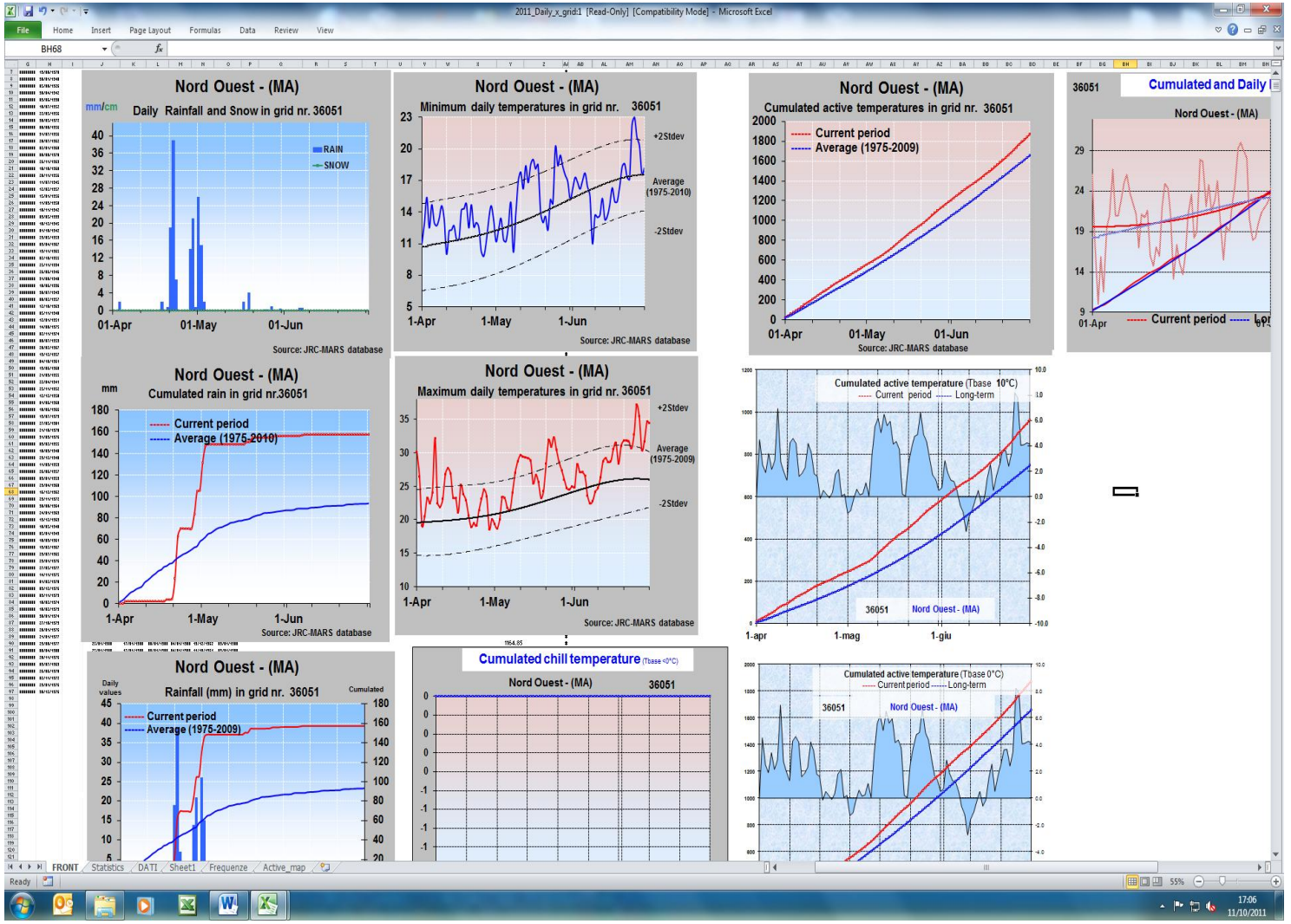

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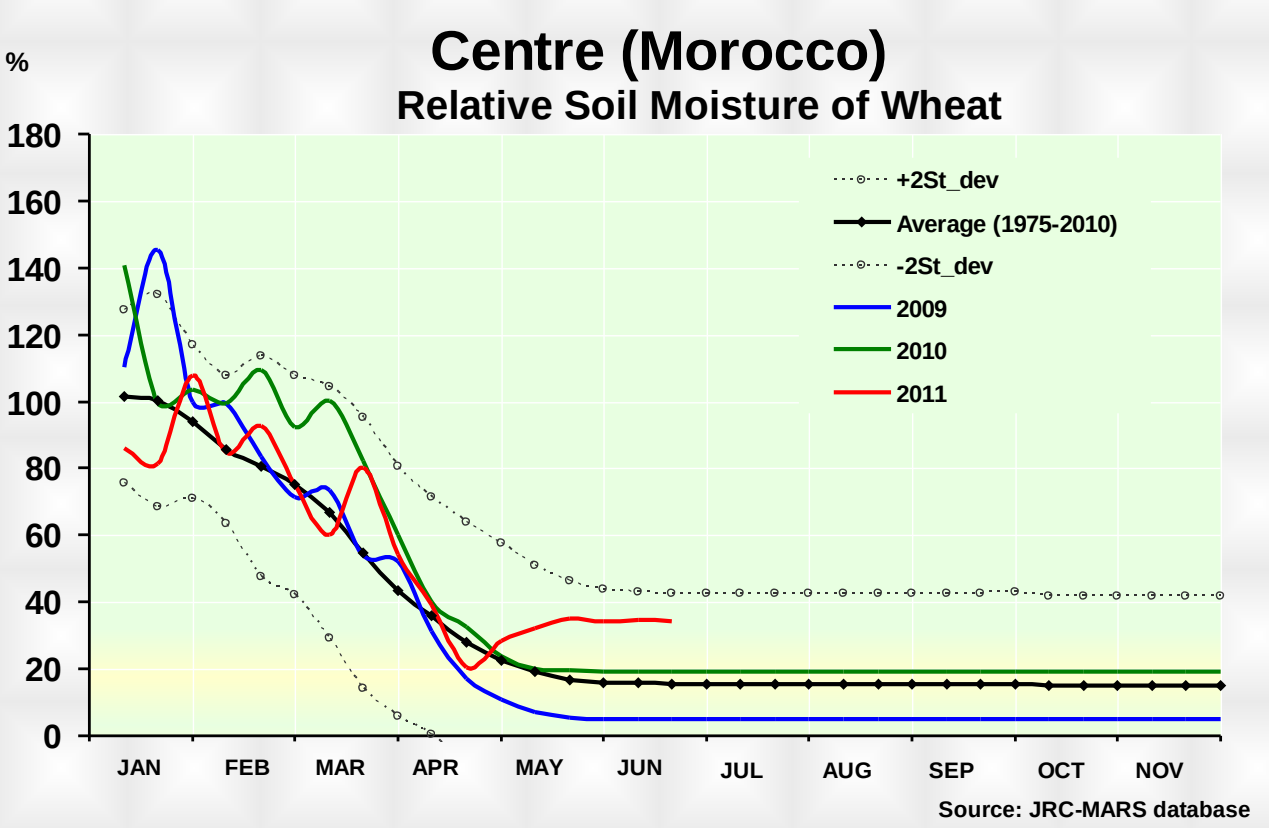
Level 1 > Level 2



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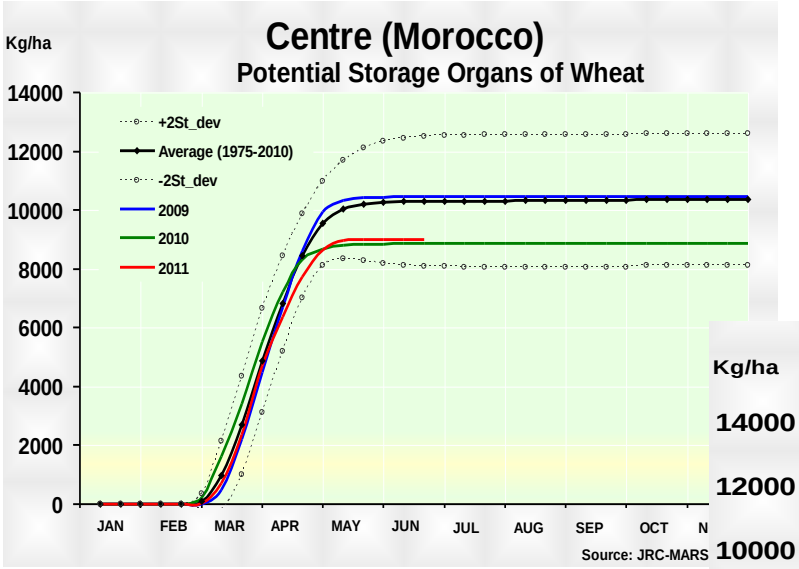
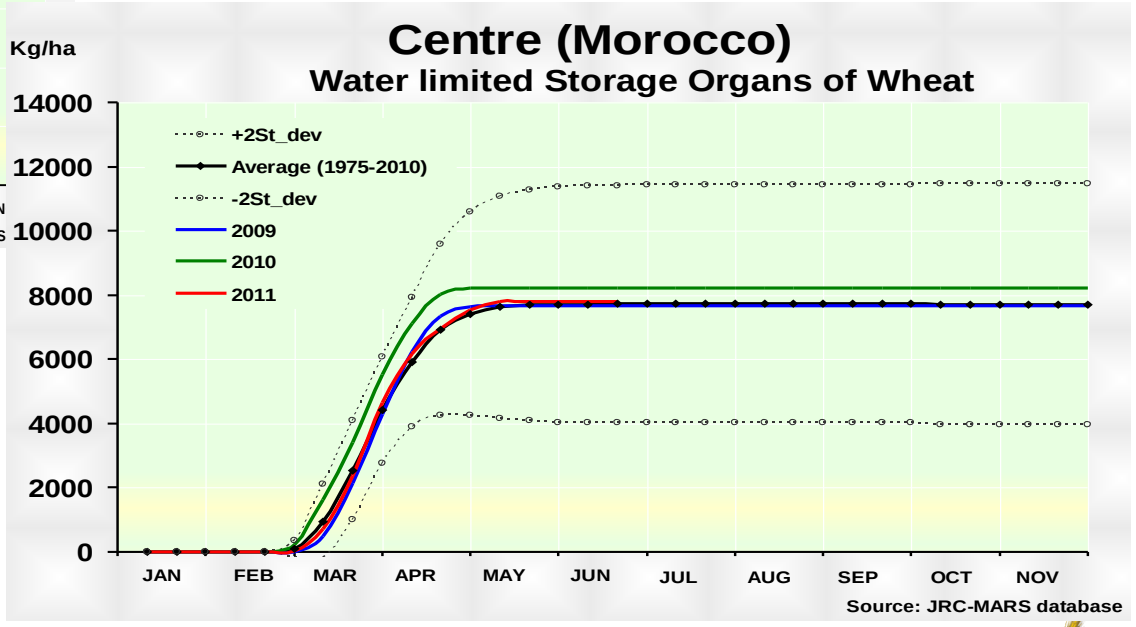
Level 1 > Level 2





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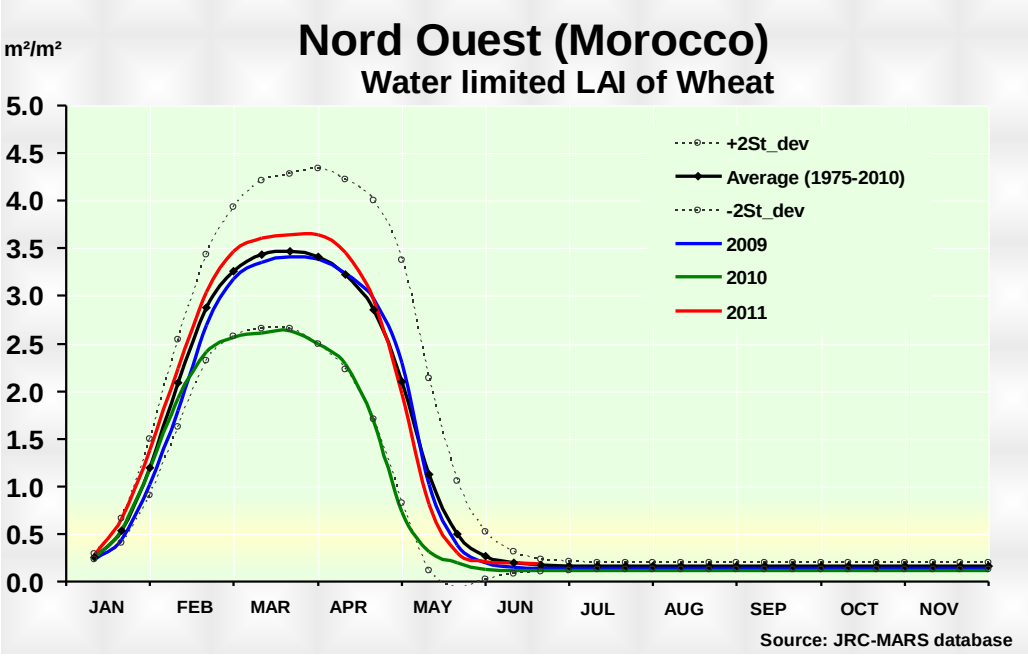
Level 1 > Level 2



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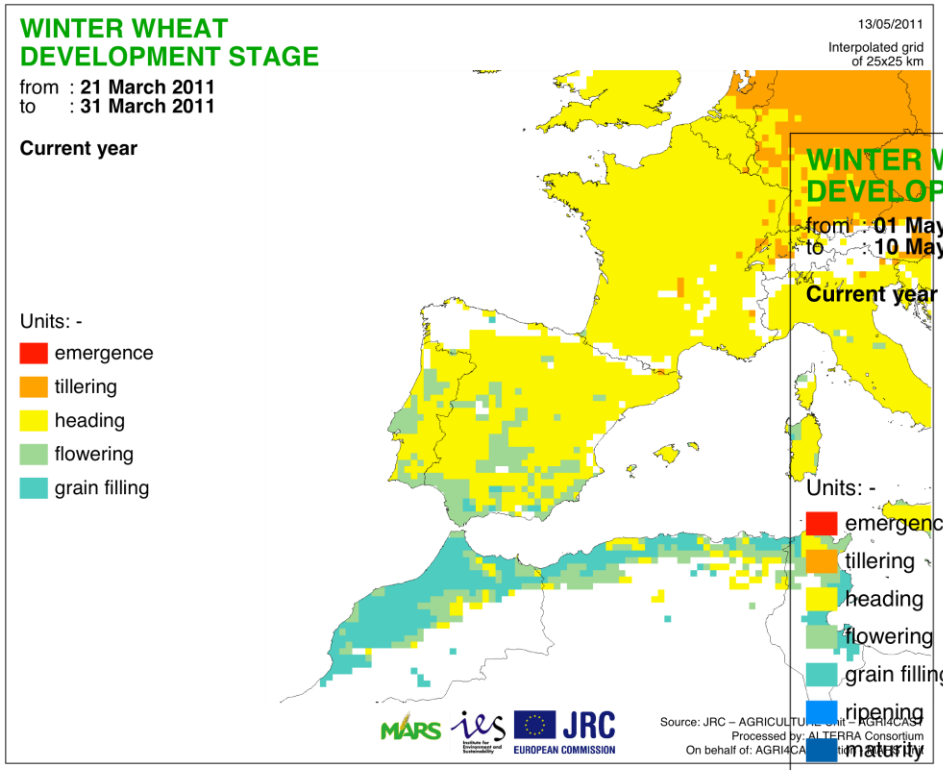
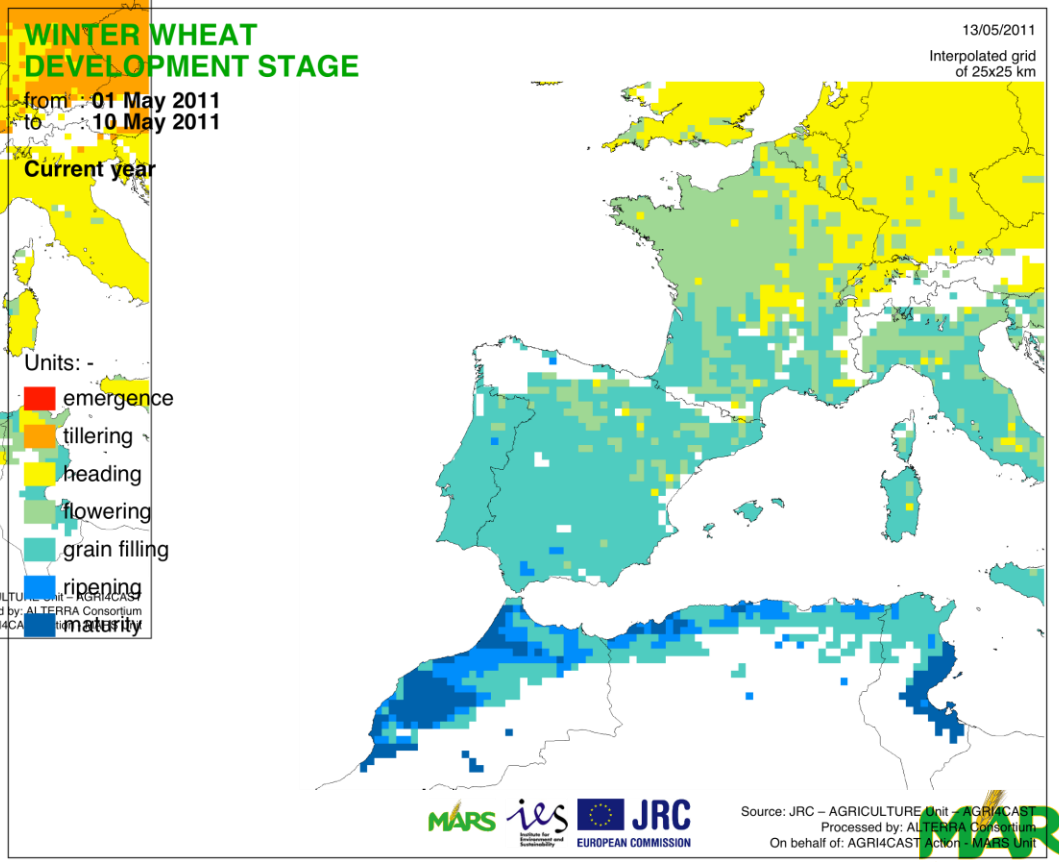
Level 1 > Level 2





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Level 2 > Level 3 – analysis based on similarity of crop parameters on dekadal basis

This step can be costumised in regard to the statistical tools available and the local expertise

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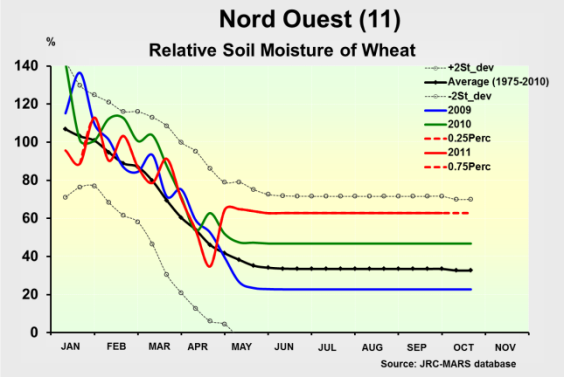
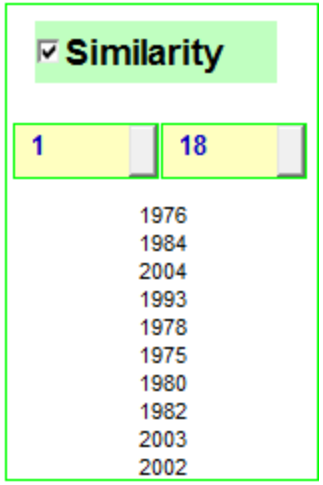
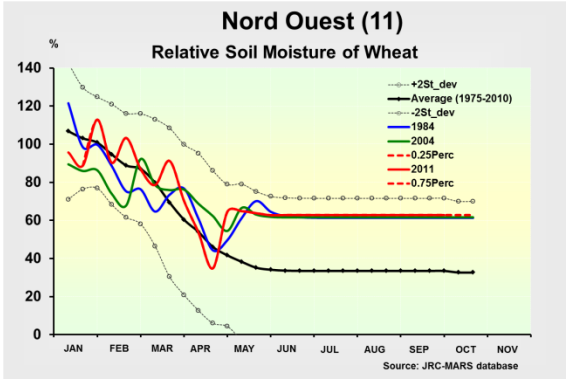
Level 2 > Level 3 – statistical analysis







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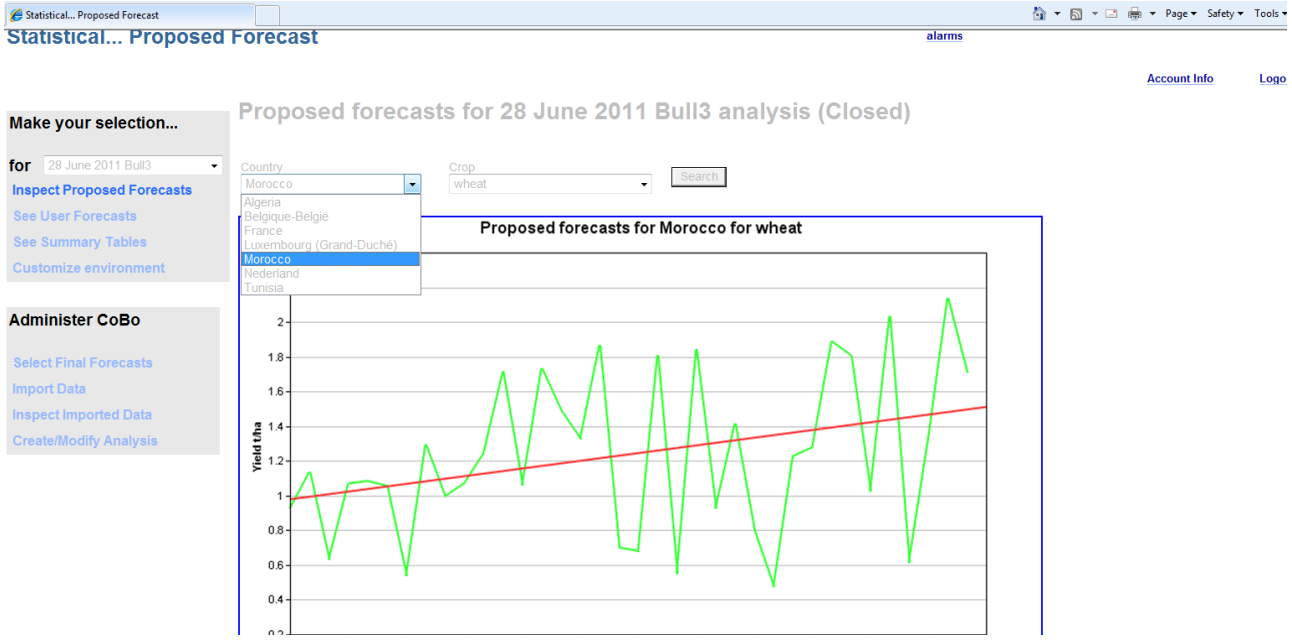
Level 2 > Level 3 – statistical analysis/CoBo



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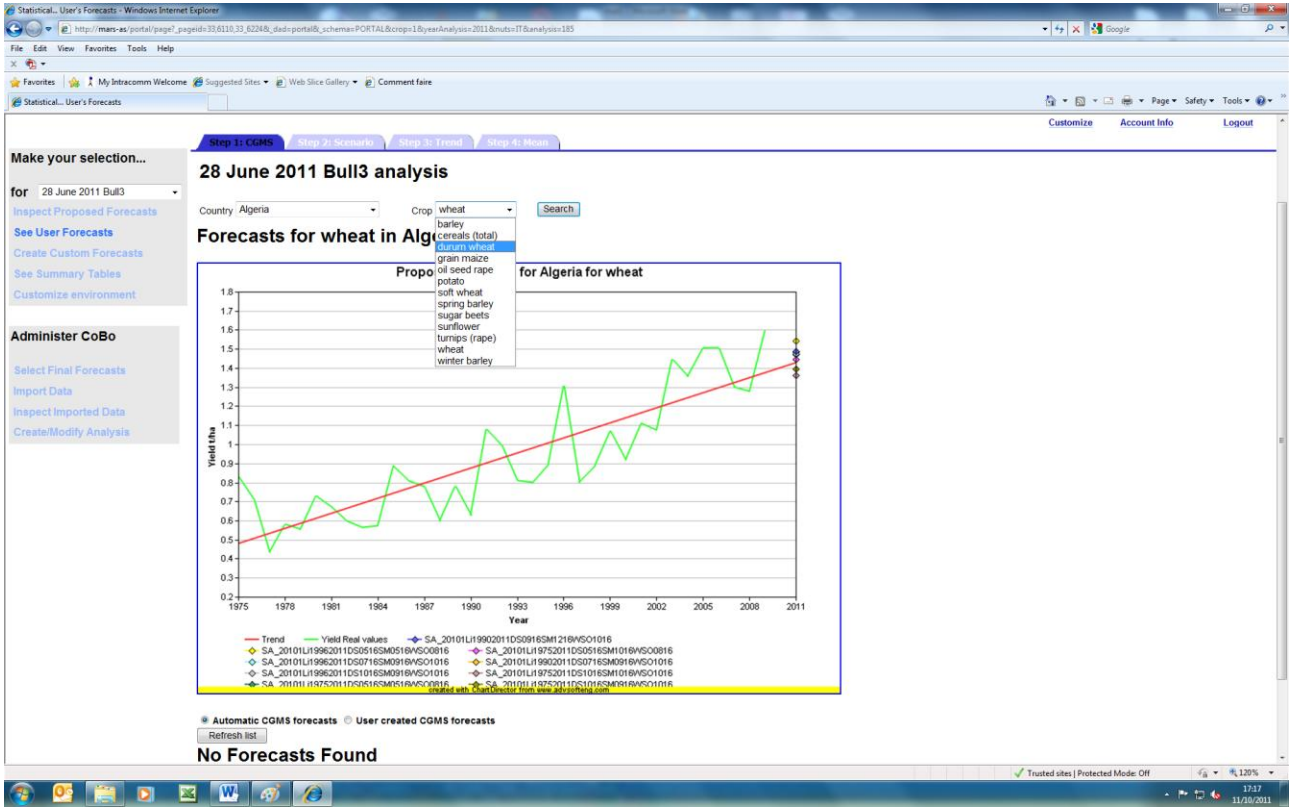

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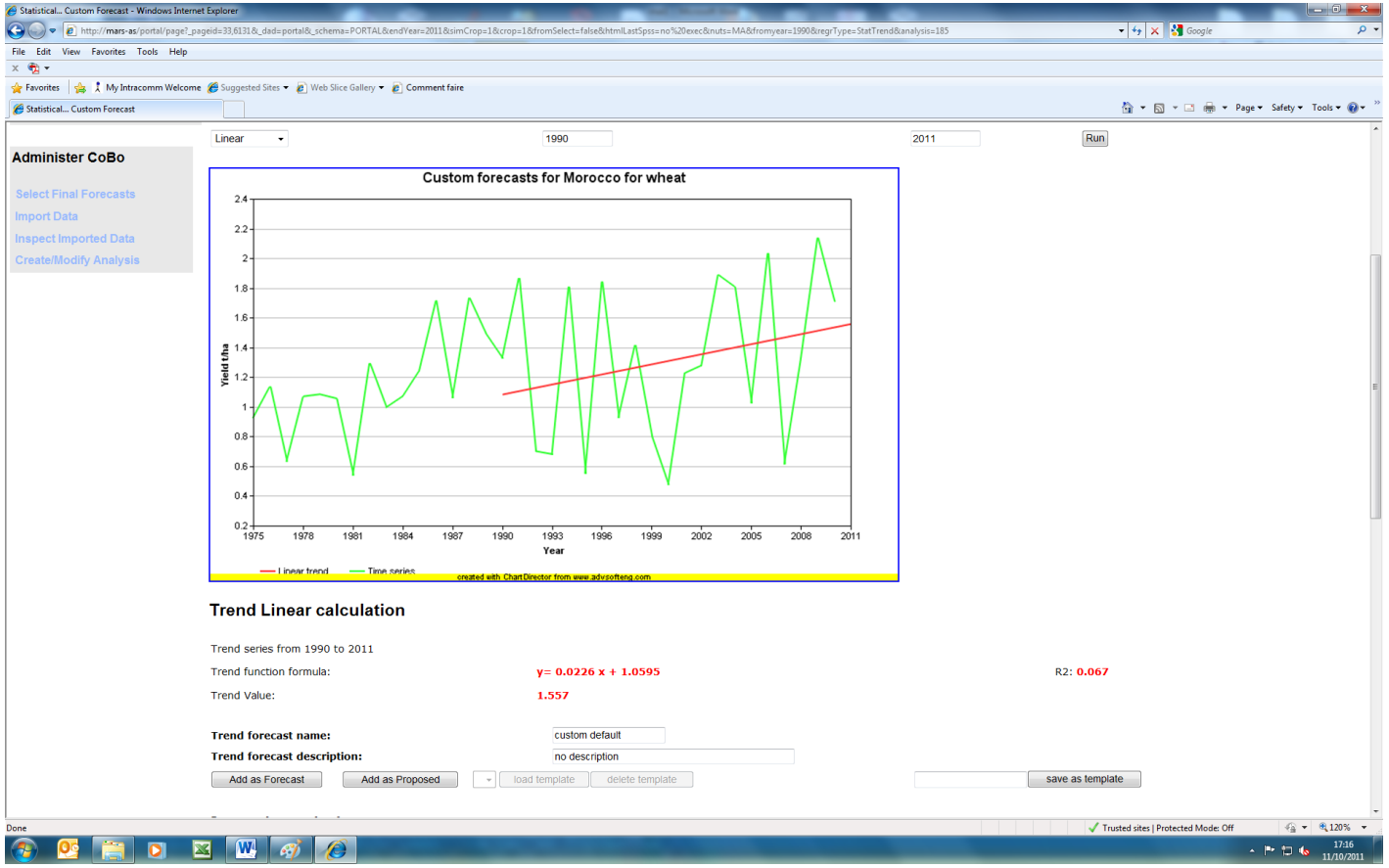

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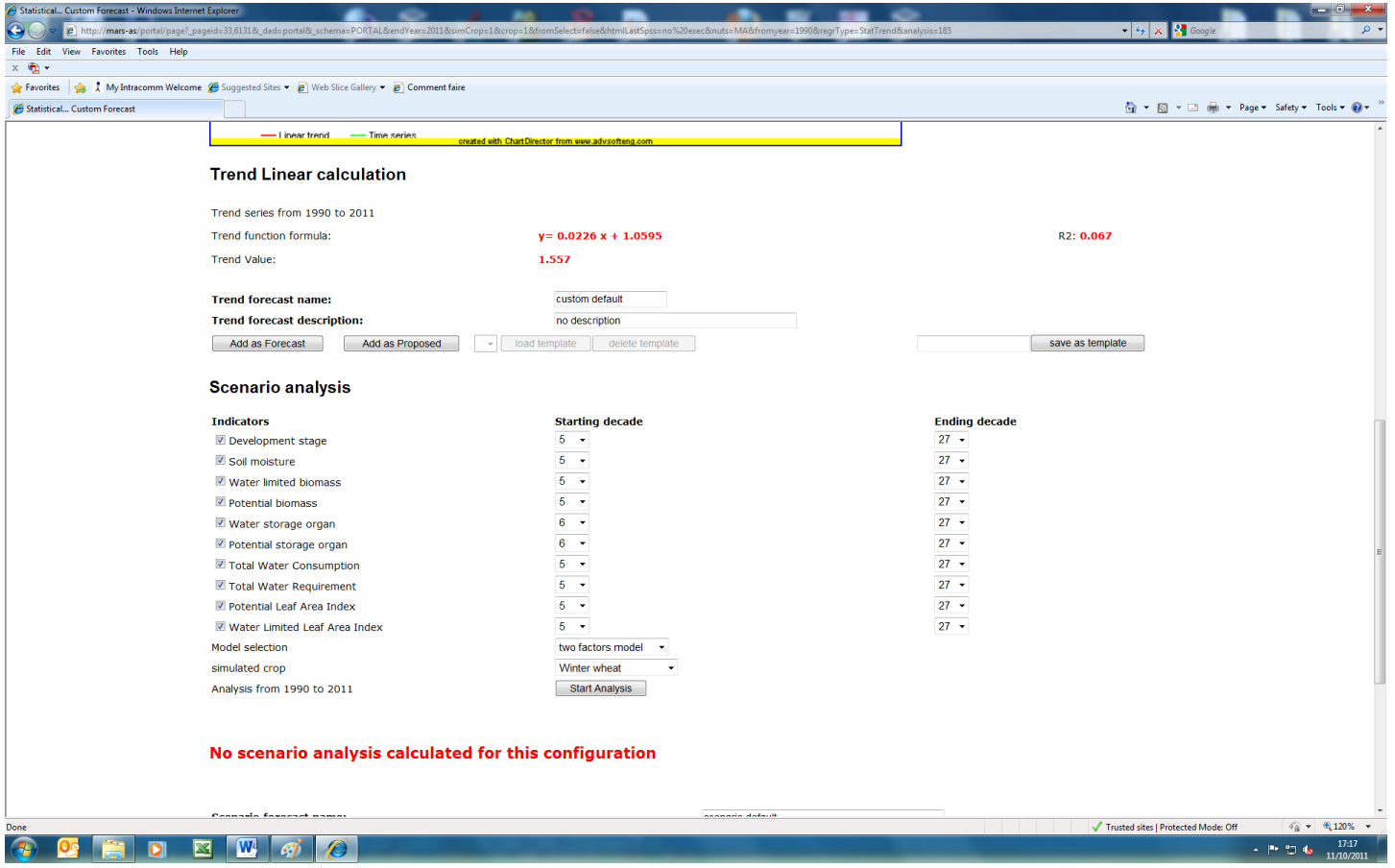

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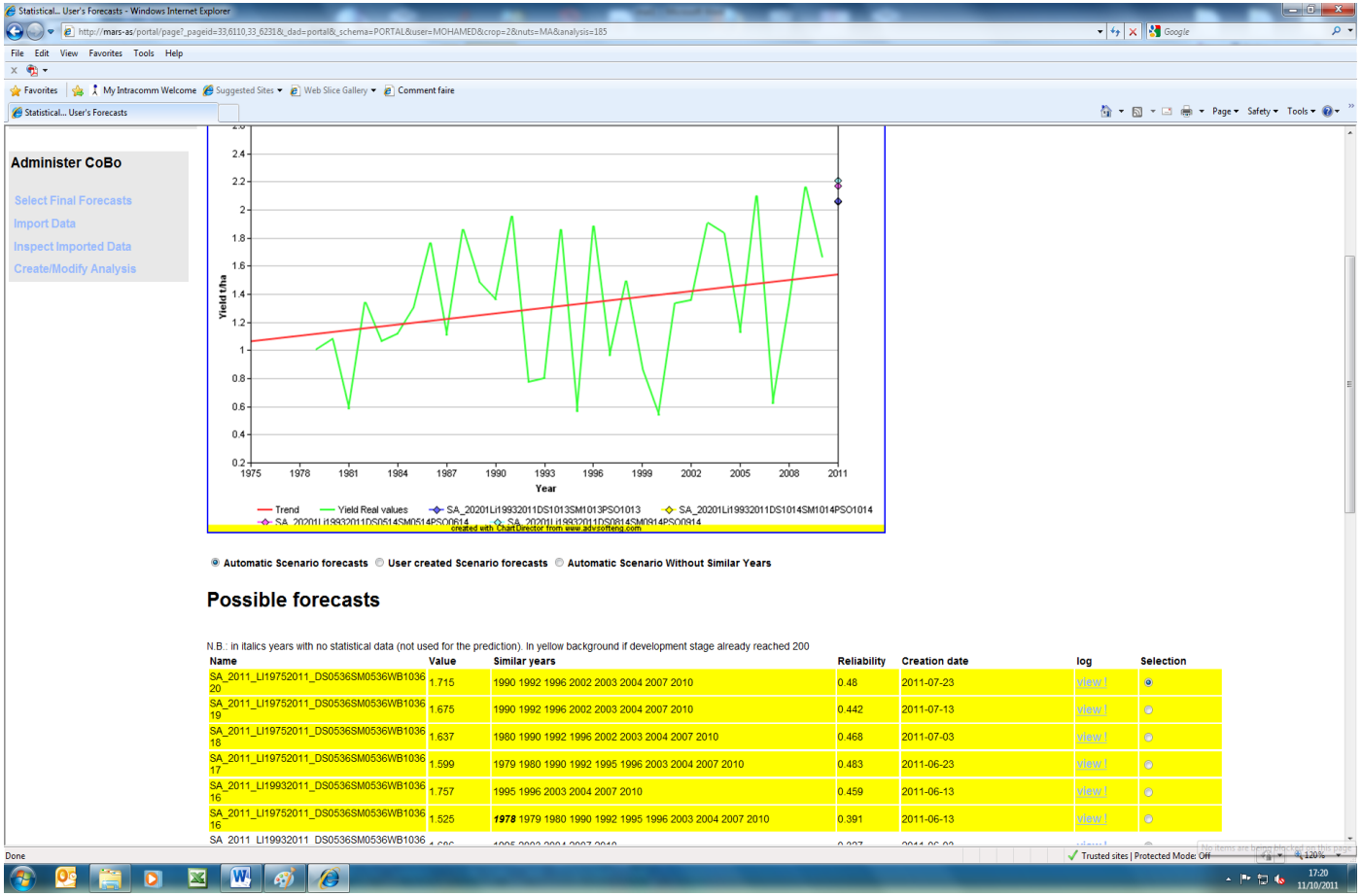

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Level 2 > Level 3 – statistical analysis/CoBo

Total Variance Explained

	Total	% of Variance	Cumulative %
Component 1	20.403563	47.450146	47.450146
Component 2	10.194158	23.707344	71.157486
Component 3	4.8505826	11.280424	82.43791
Component 4	2.5837991	6.0088353	88.44675
Component 5	1.3821129	3.214216	91.660965
Component 6	1.0586497	2.461976	94.12294
Component 7	0.71045256	1.6522152	95.775154
Component 8	0.5049438	1.1742879	96.94944
Component 9	0.33587906	0.7811141	97.73055
Component 10	0.21434352	0.4984733	98.22903
Component 11	0.16587839	0.38576367	98.61479
Component 12	0.14294986	0.33244157	98.947235
Component 13	0.11843781	0.27543676	99.22267
Component 14	0.06918098	0.160886	99.38356
Component 15	0.055899095	0.1299979	99.51356
Component 16	0.047755565	0.11105946	99.62462

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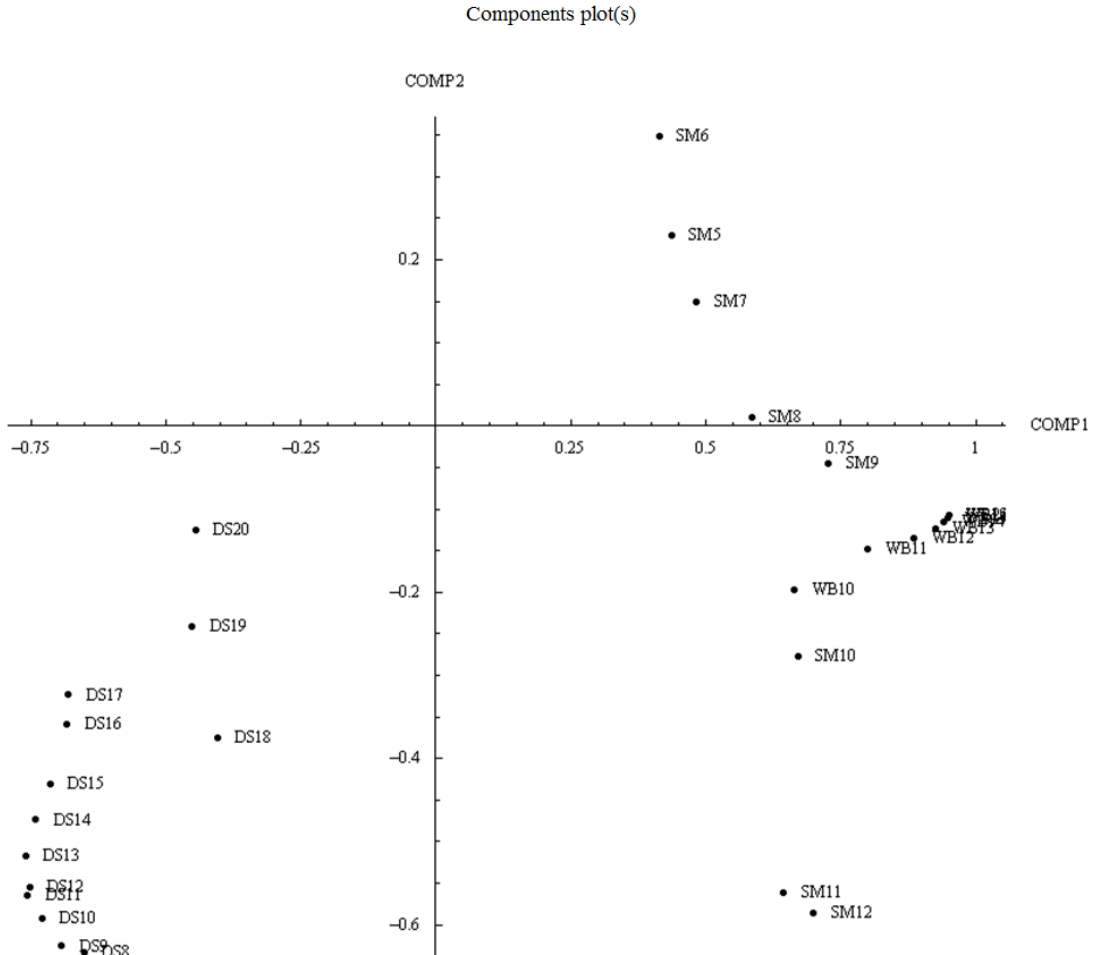

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Thank you for your attention