

ARVALIS
Institut du végétal



FranceAgriMer

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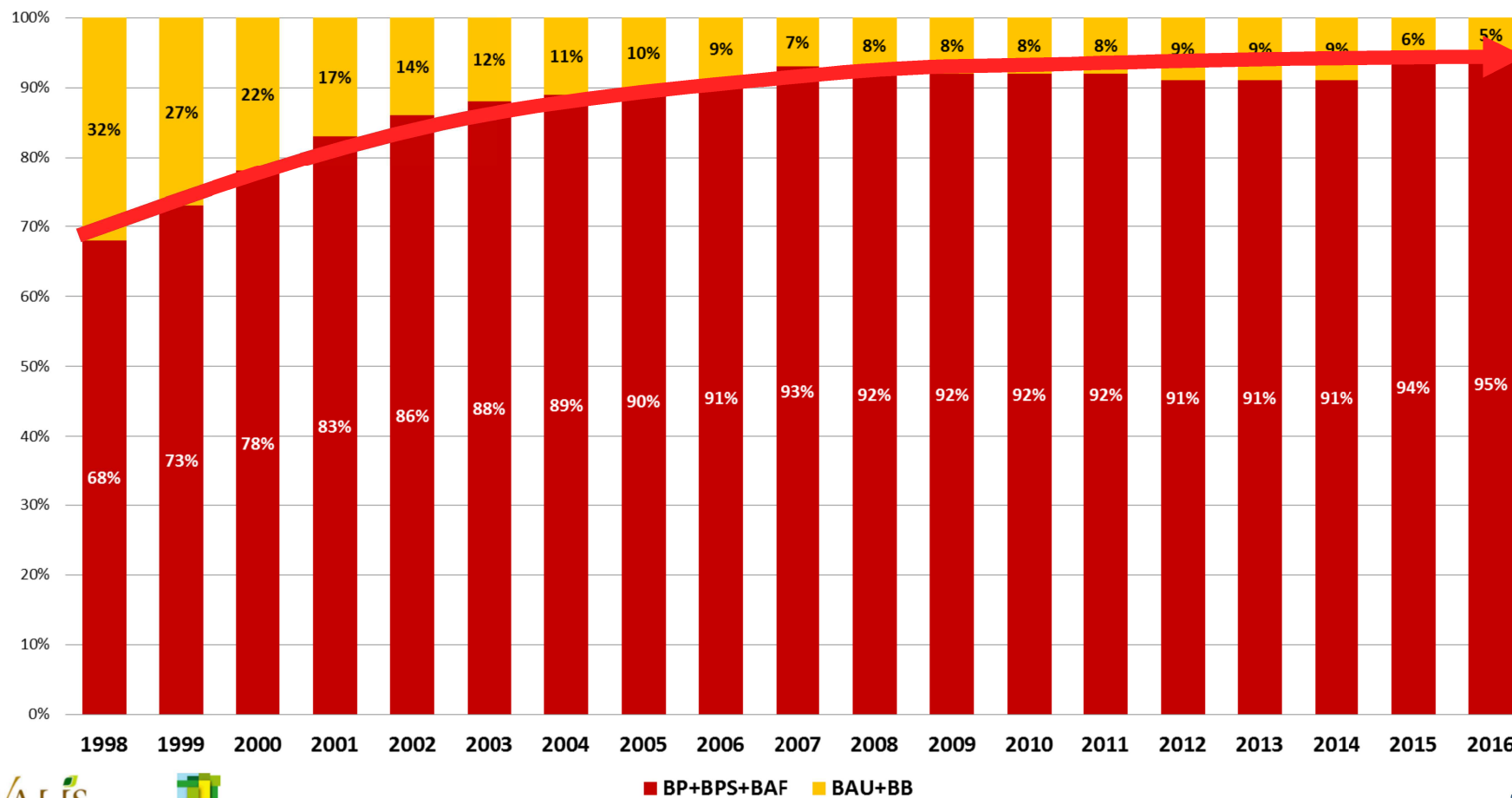
Institut du végétal

French Bread Wheat Harvest

2016



Autumn 2015 : 95 % bread wheat sown



All indicators very favorable until May

Mild temperatures in autumn and early winter :

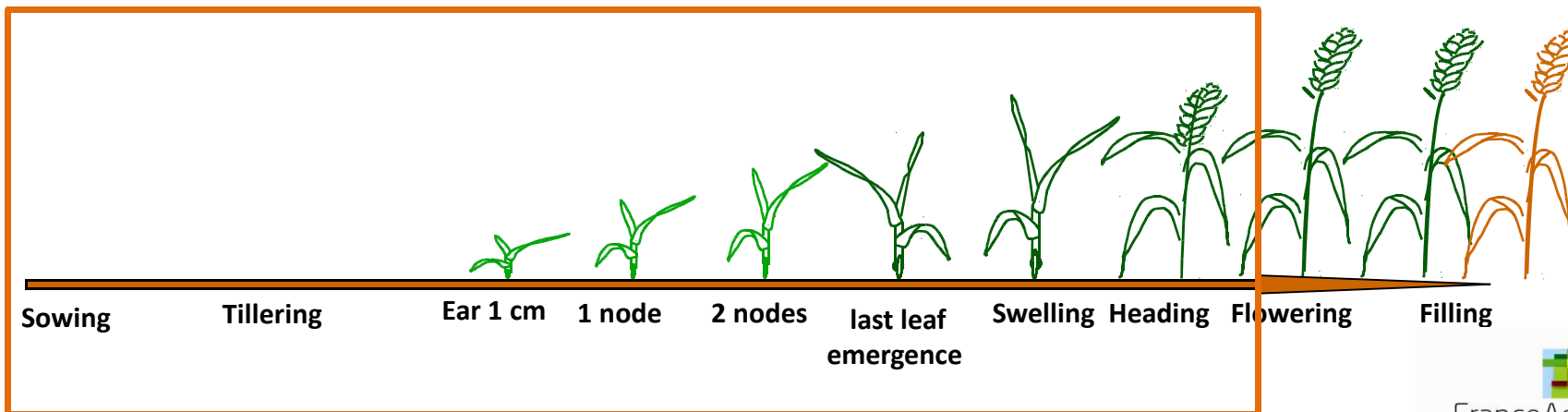
- Rapid growth
- Presence of aphids
- No winter freeze damage
- Weeds developing
- Inoculum of disease (rust)

Cool weather at end of winter and start of spring :

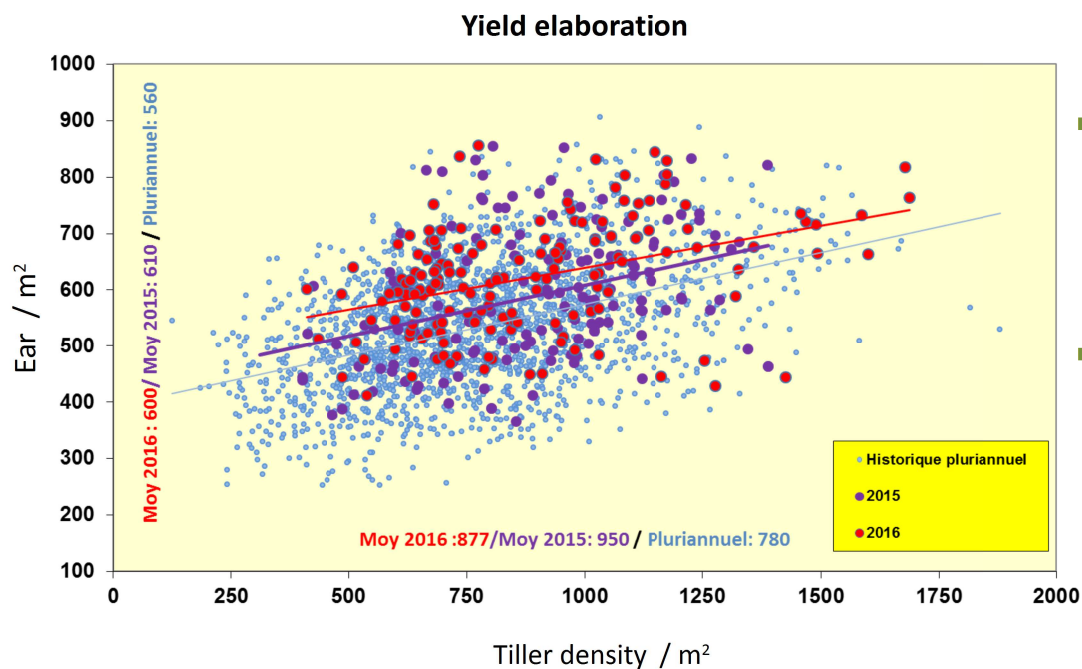
- Slowdown of growth stages
- Difficult weed control
- Biomass and tillering : normal - high
- Some late frosts, very limited consequences

Rainfall episodes in March and April :

- Good nitrogen uptake
- Good ear emergence
- Septoria beginning
- Good water reserves in May
- Exceptions:
 - South East very dry
 - West rather dry

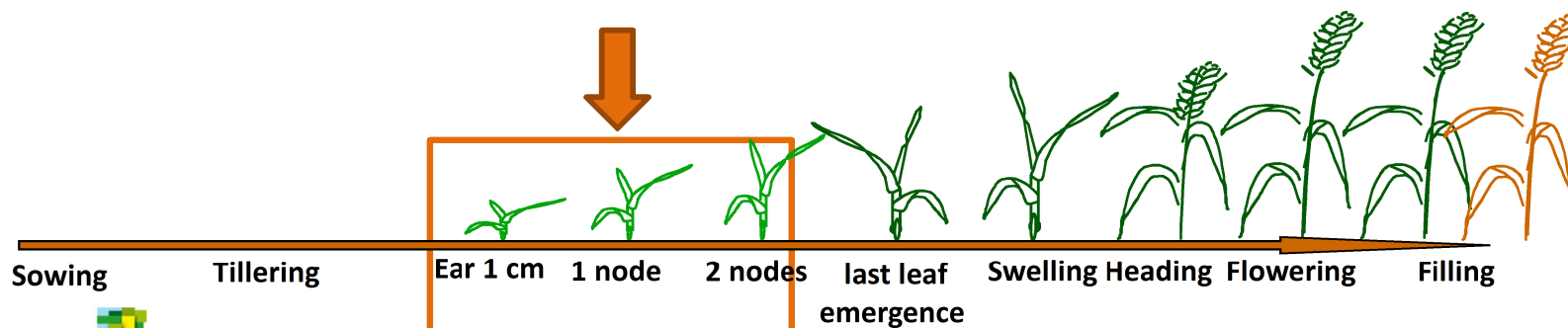


All indicators very favorable until May



➔ Winter ended well, with lots of vegetation

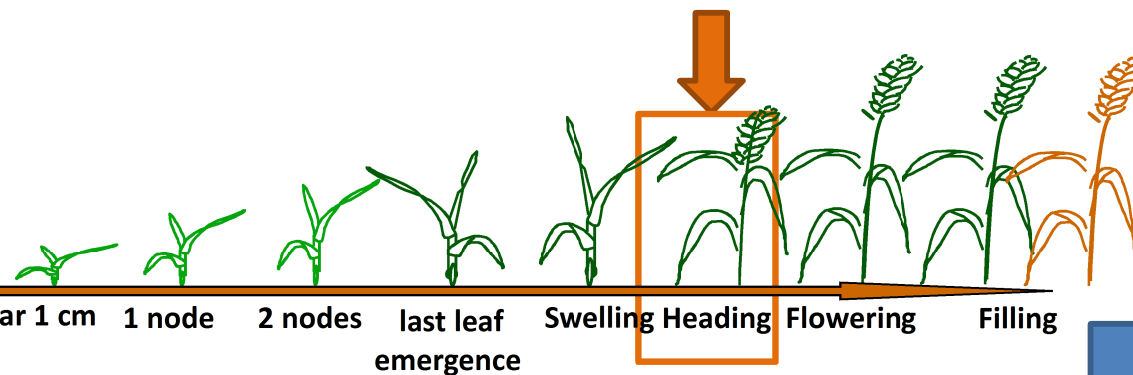
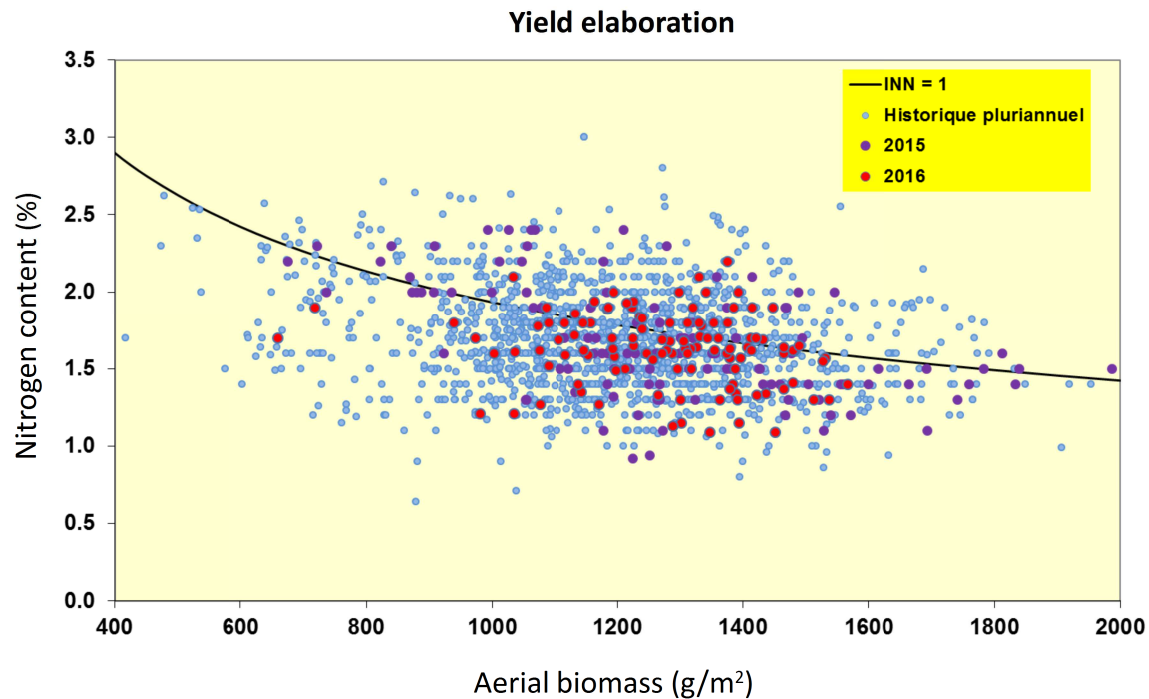
➔ Good tillering, good ear emergence



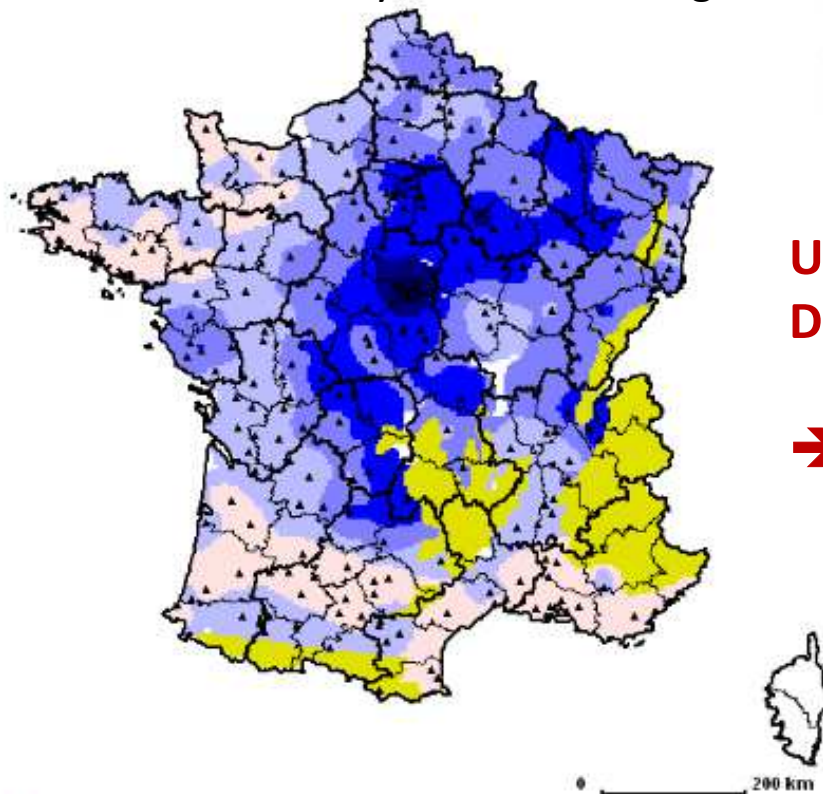
All indicators very favorable until May

At the end of May, the situation was favorable :

- optimum N uptake
- good plant nutrition



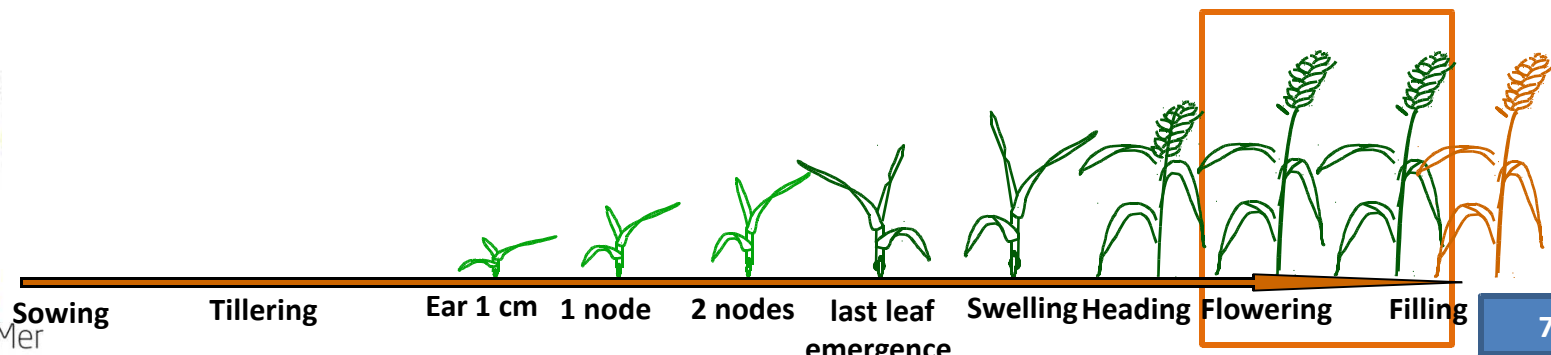
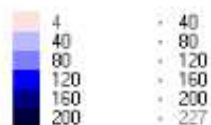
Rainfall +/- 10 days from flowering



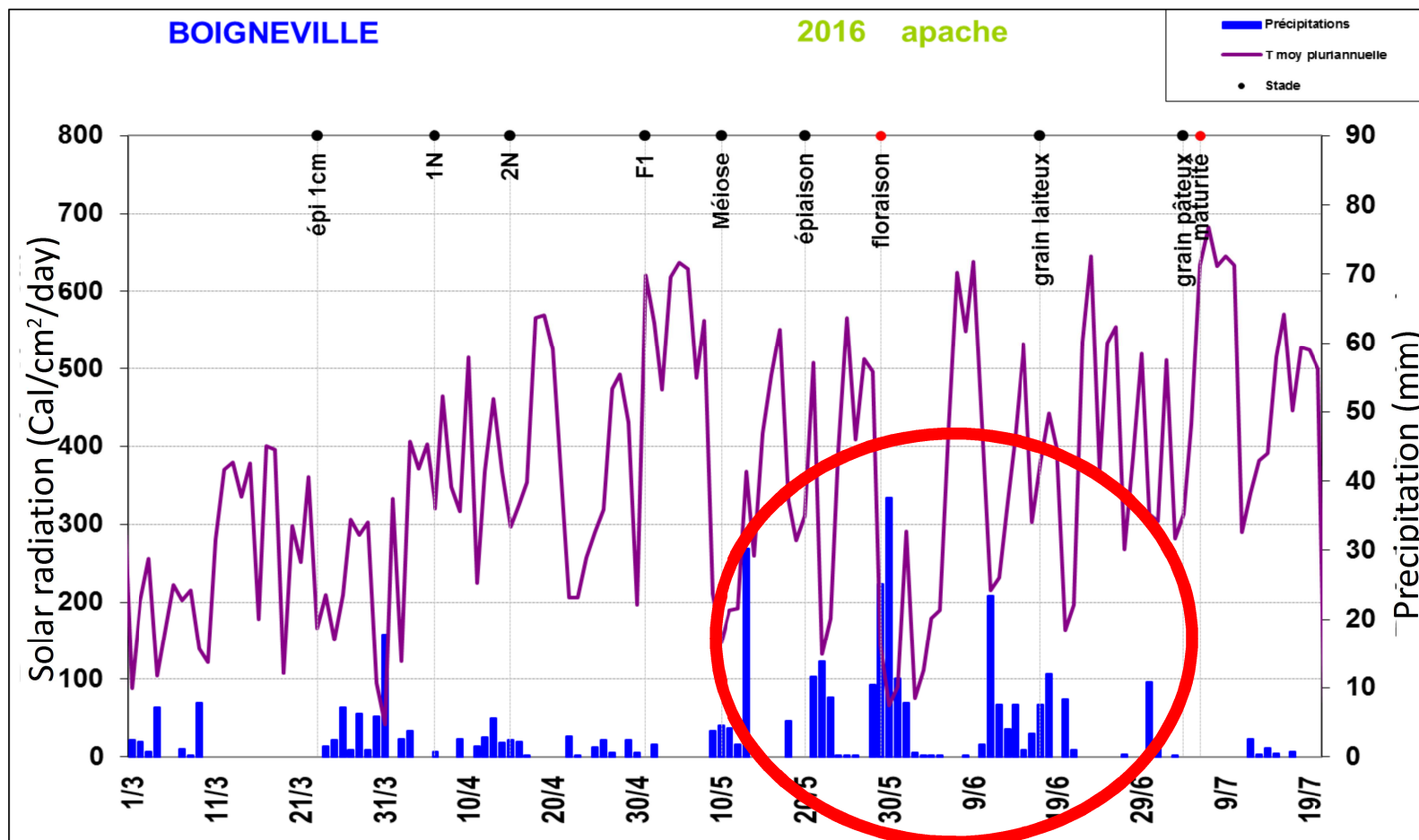
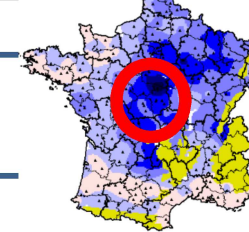
Unusual rain in QUANTITY and DURATION

→ End of the cycle is strongly disrupted

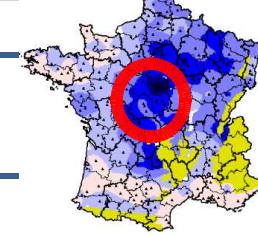
Modèle phénologique Arvalis - cumul en mm



Examples of the center of France and the Parisian Basin



Unusual QUANTITY and DURATION of rain at flowering... then throughout filling !



*The flood water came
up to the ears !*

Cedric Benoist, FDSEA 45

**Flooding : all agricultural sectors
affected in Ile-de-France**

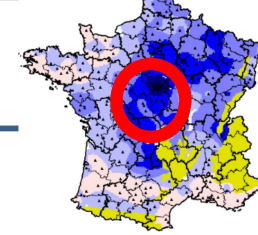
Par Lefigaro.fr avec AFP | Mis à jour le 03/06/2016 à 13:29 / Publié le 03/06/2016 à 11:34



Une parcelle inondée dans le Loiret (FDSEA 45)

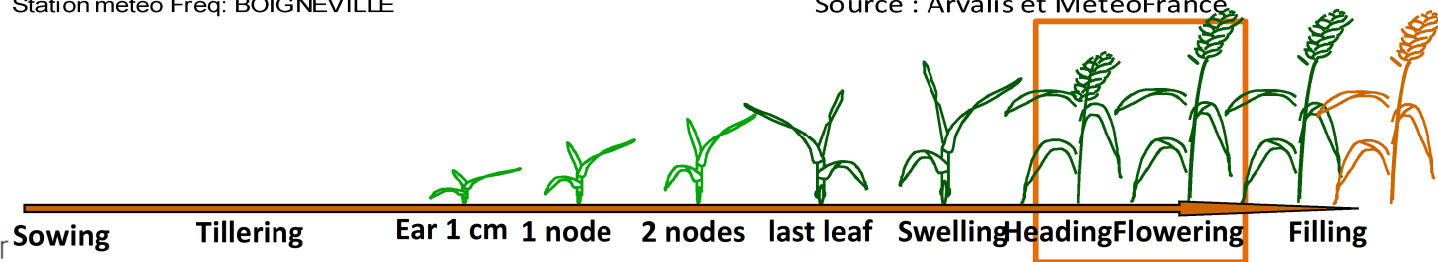
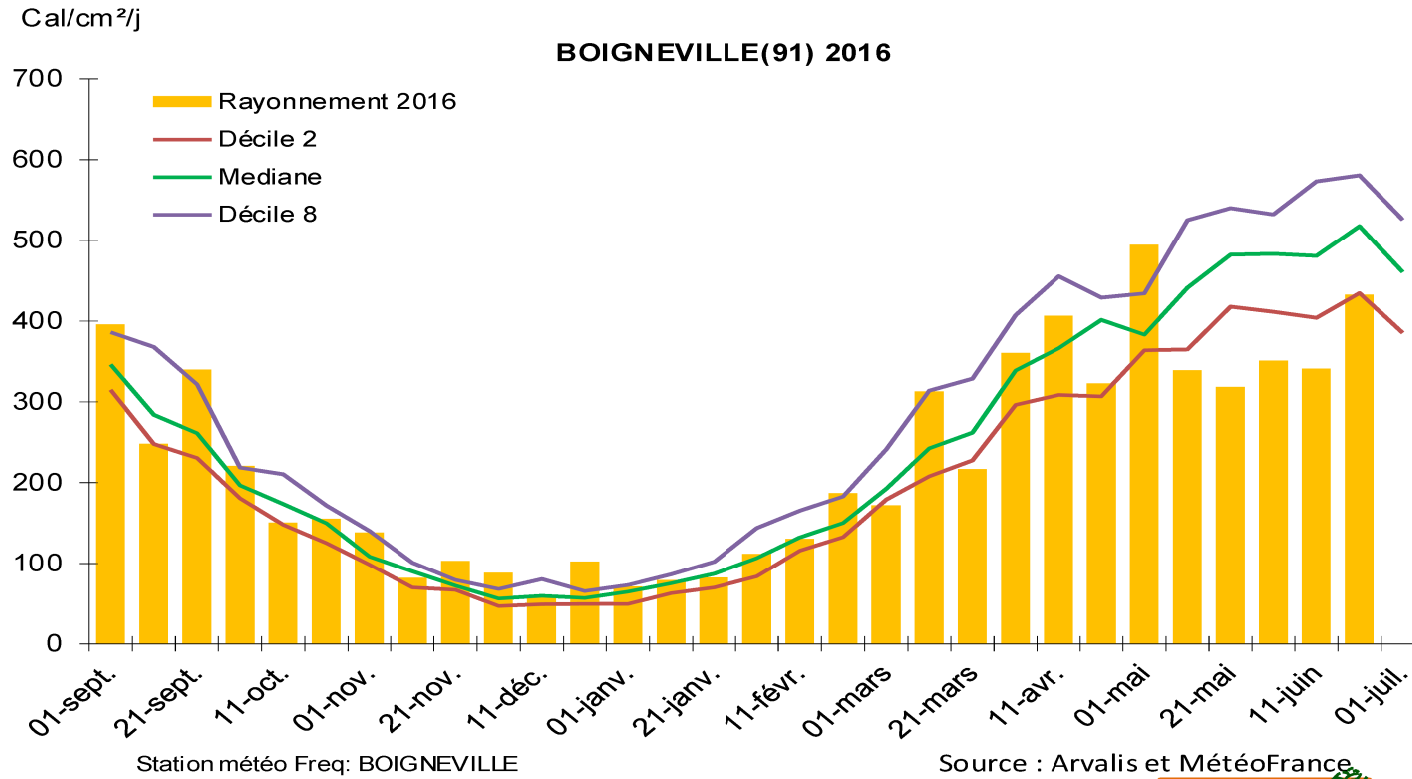


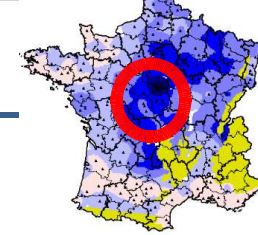
Floods that will stay in our memory.



Example of the center of France and the Parisian Basin

An **exceptional sunshine deficit** compared to historical levels





Example of the center of France and the Parisian Basin

Cumul des précipitations du
25/05/2016 au 25/06/2016

Cumul du rayonnement du
25/05/2016 au 25/06/2016

The exceptional rainfall
accumulation and the
low levels of sunshine
overlapped in the most
affected areas

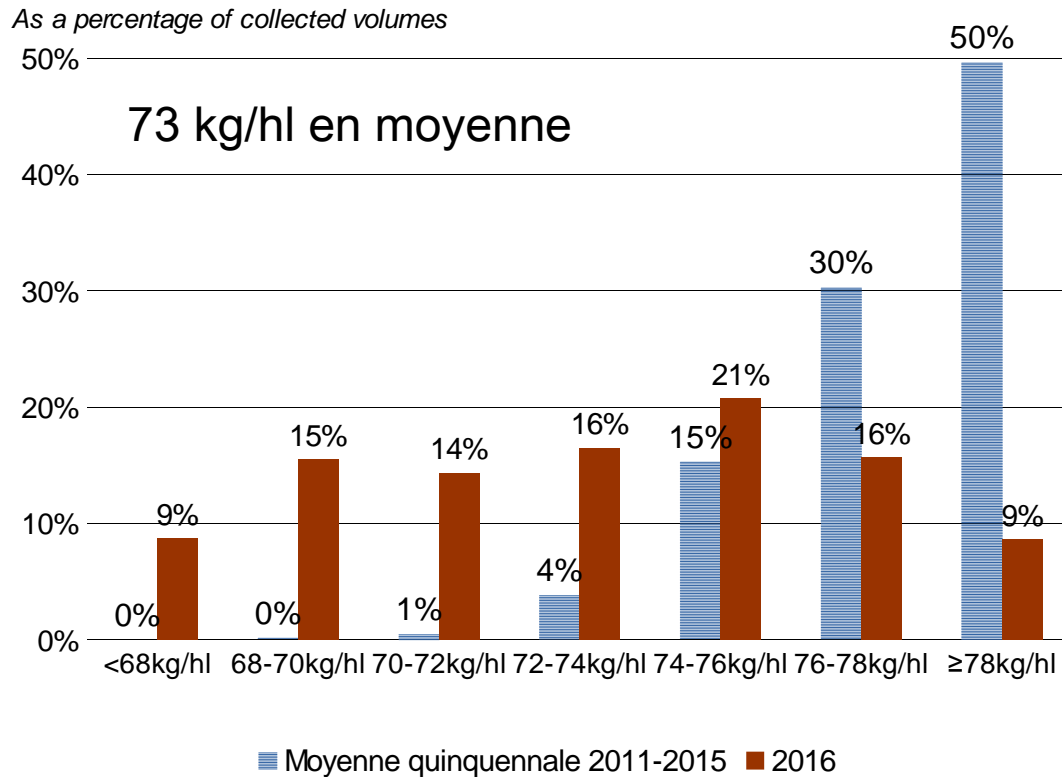
Pluies (mm)



Rayonnement
(Joules/cm²)



Extreme and historically low Specific Weights for French wheat

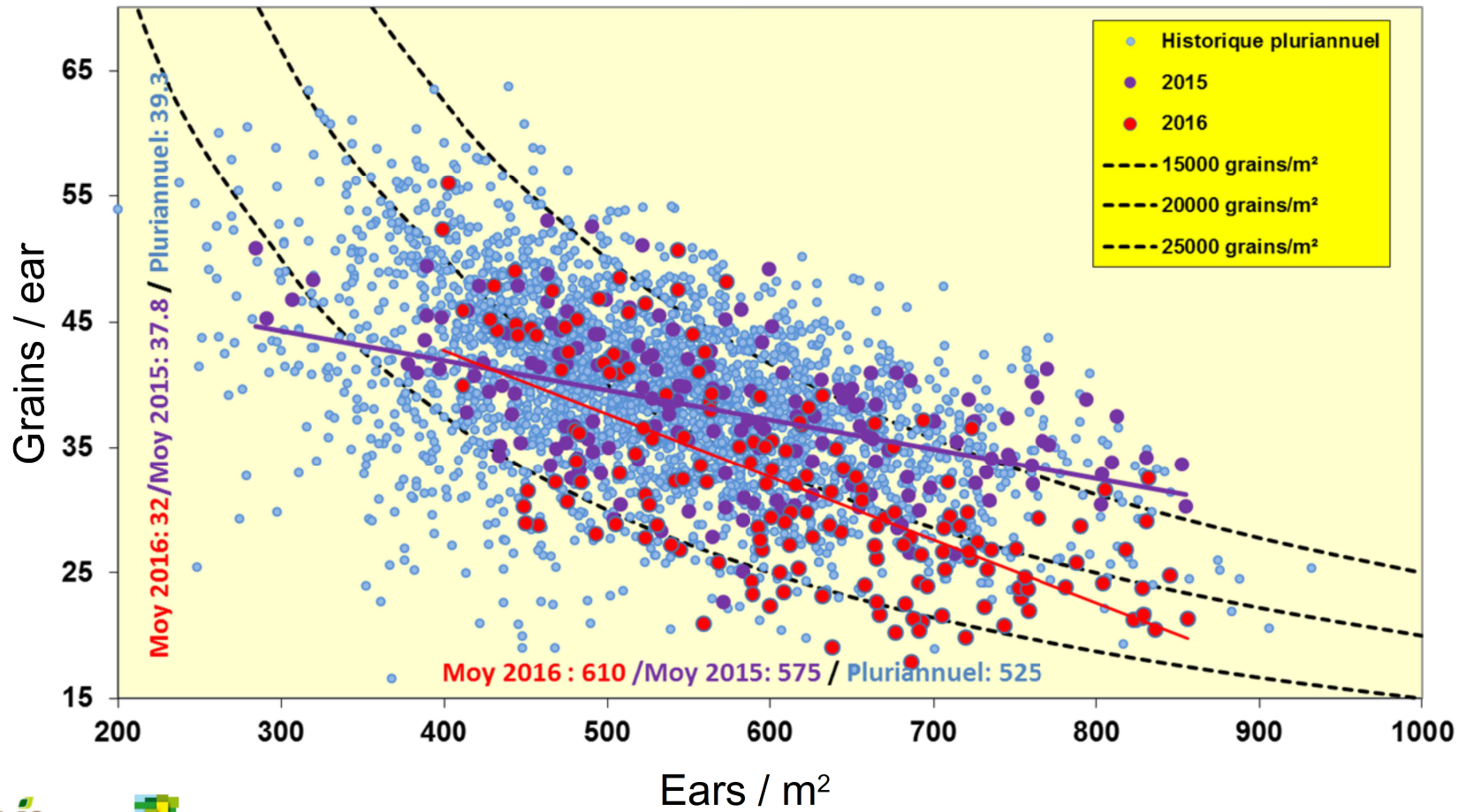


Source : FranceAgriMer / Enquête entrée collecteurs 2016



➔ **A lack of grains in the ear**

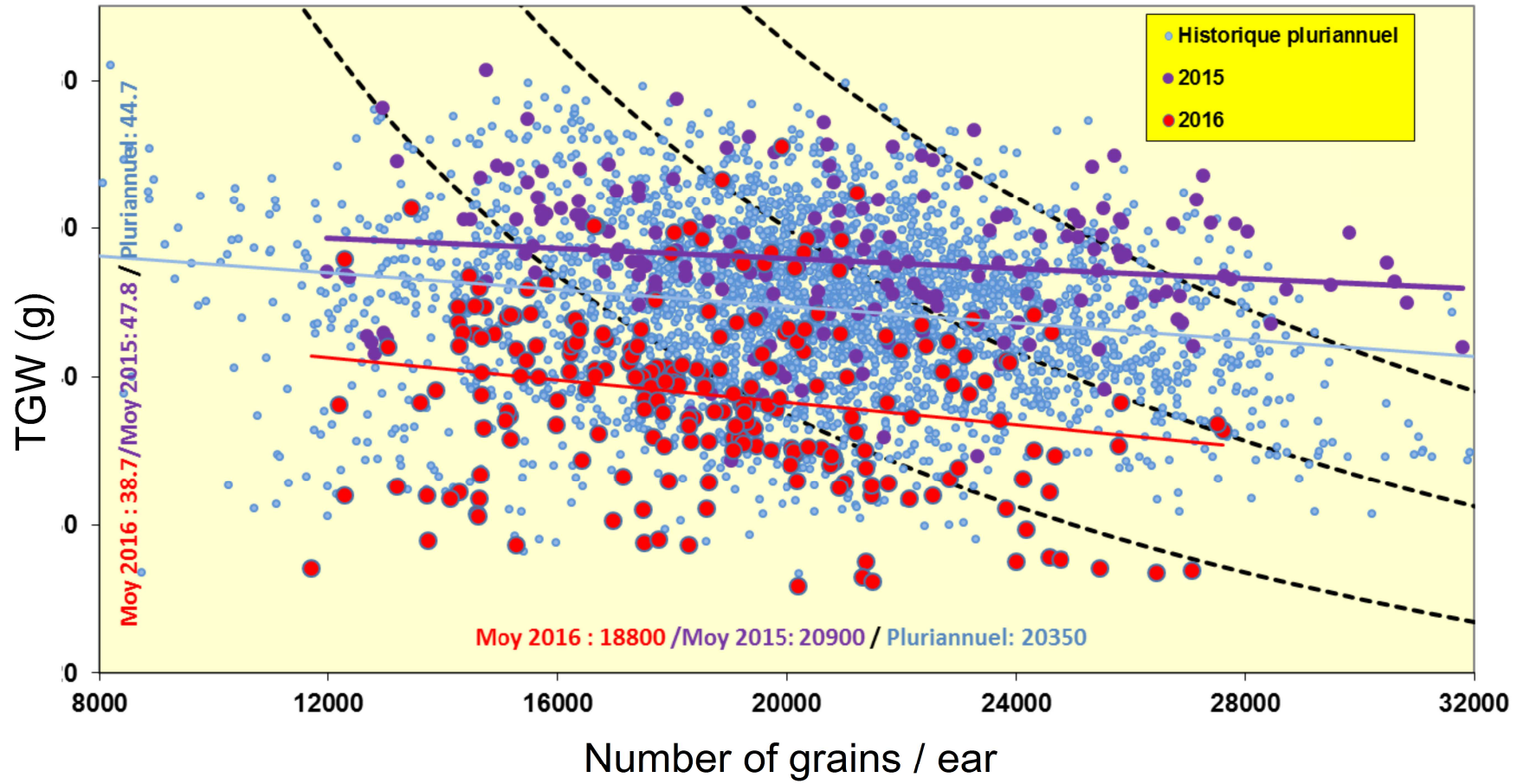
Yield elaboration : Grains per ear





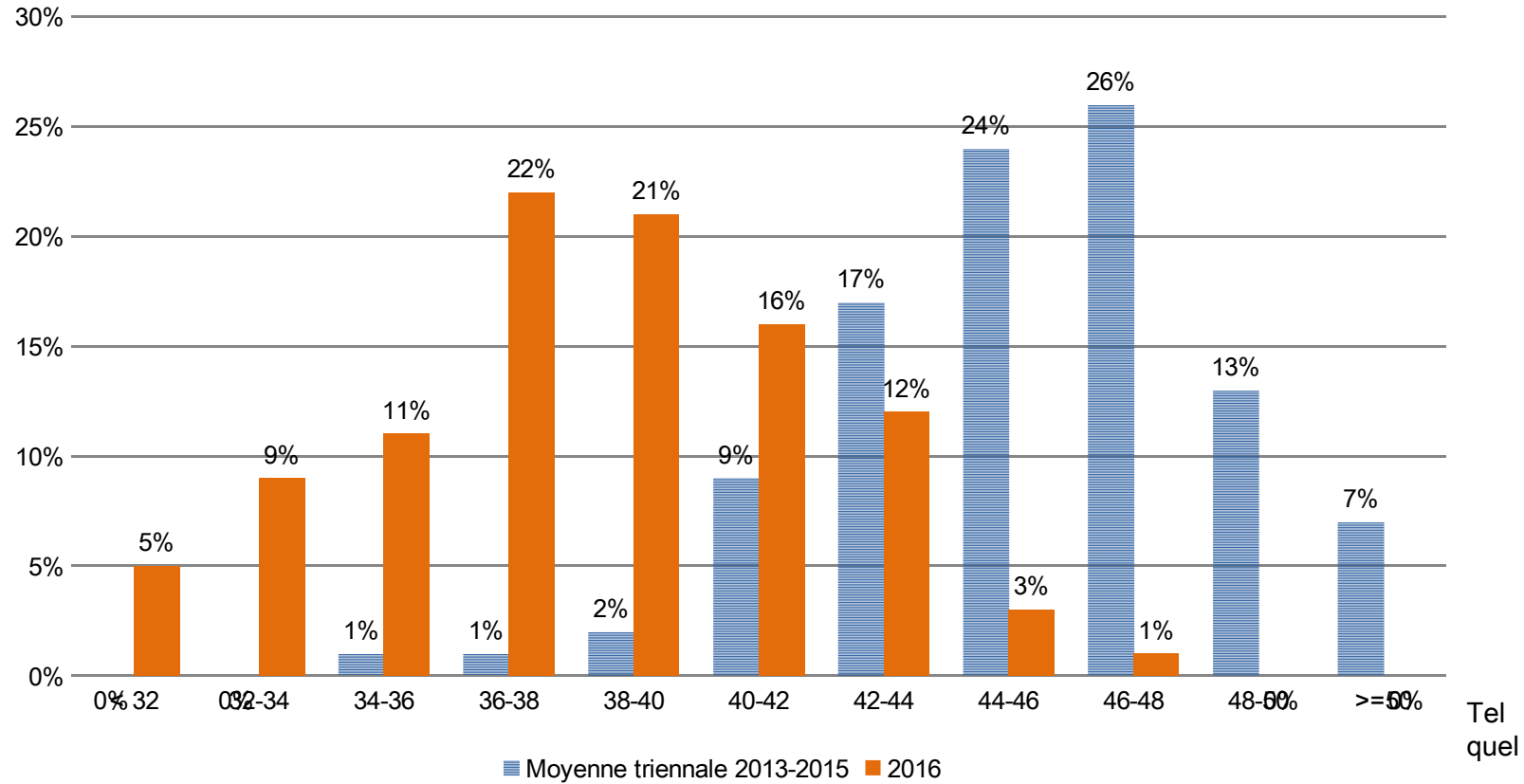
➔ **And the grains are**

Yield elaboration : Ear filling

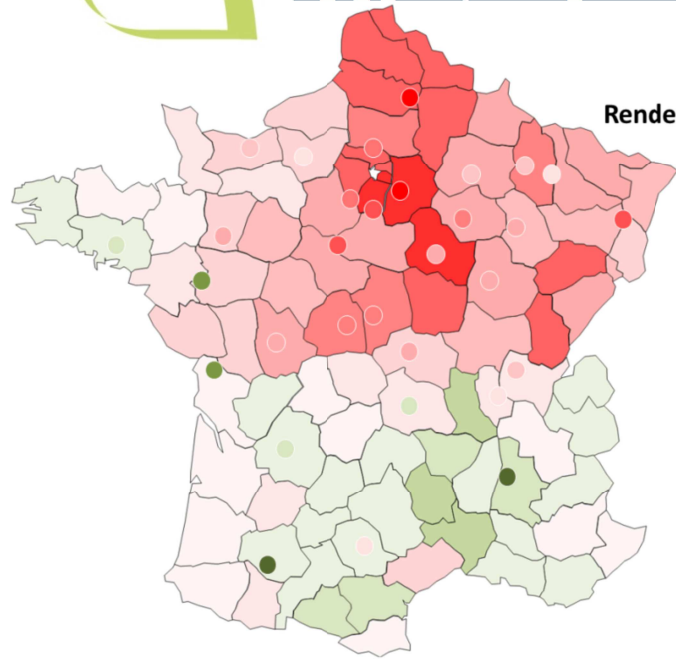




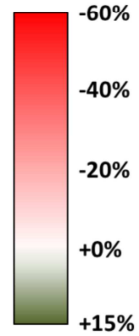
As a percentage of collected volumes



Source : FranceAgriMer / ARVALIS - Institut du végétal / Enquête qualité collecteurs 2016



Blé tendre
Rendement 2016 / pluriannuel

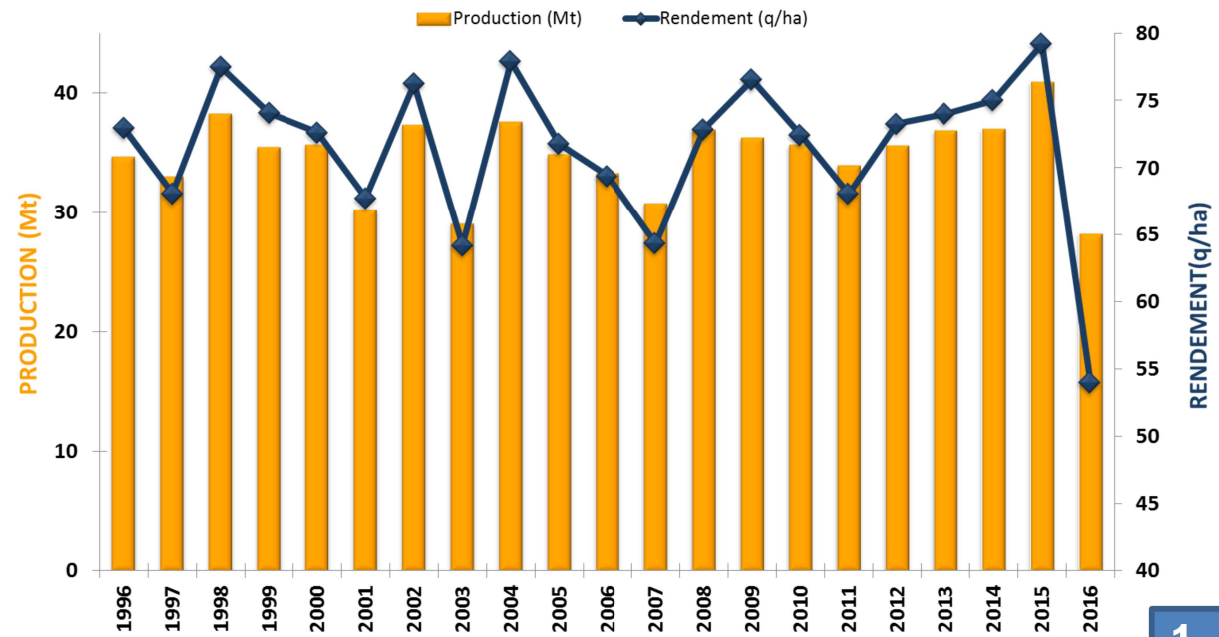


**Yields observed by Agreste and Arvalis
(colored circles),**

**- expressed in % of the multi-year
average (2006-2015)**

Sources : Agreste, estimation août-septembre 2016,
et ARVALIS - Institut du végétal

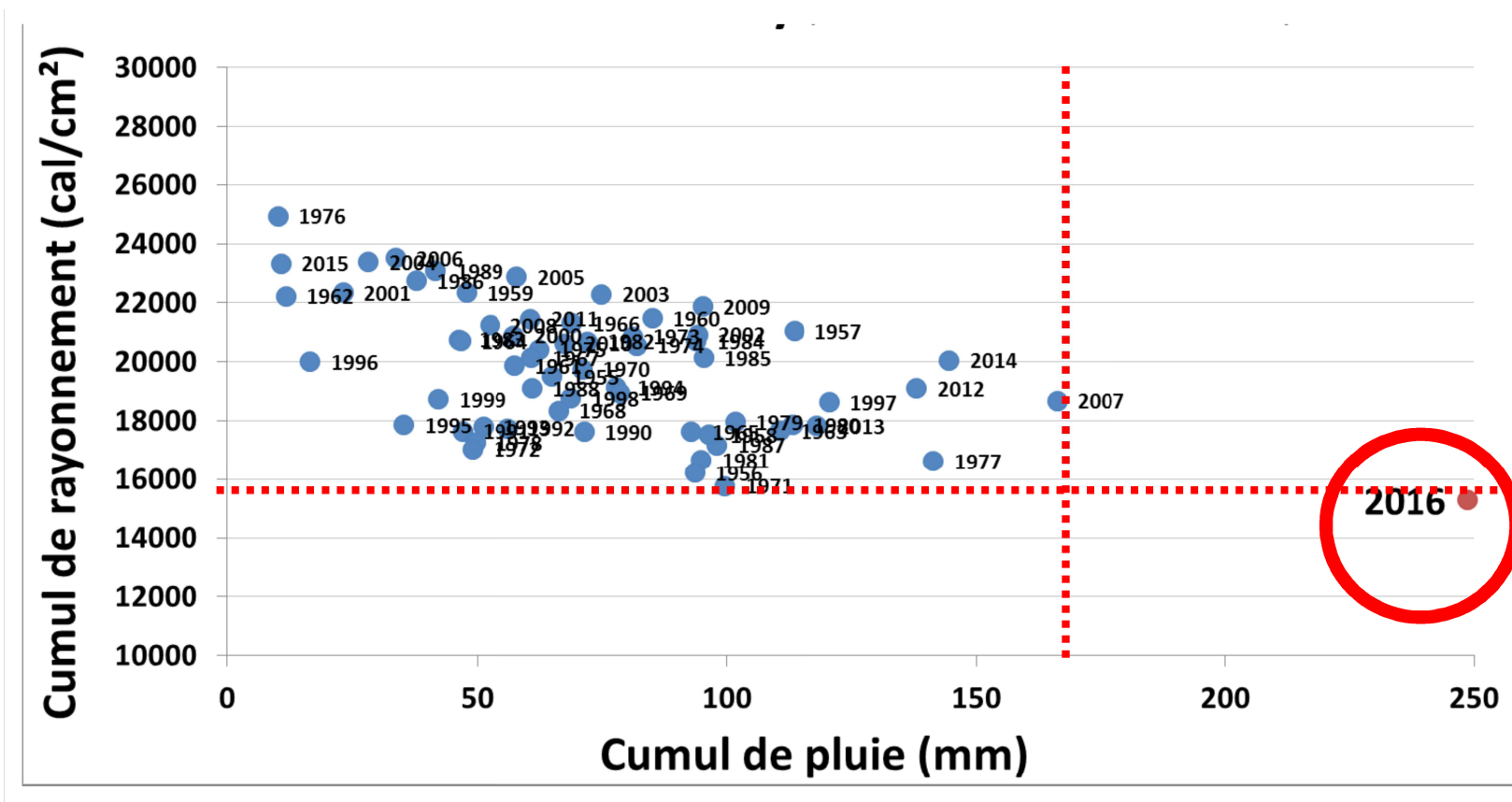
**EVOLUTION DU RENDEMENT ET DE LA PRODUCTION DE BLE TENDRE EN
FRANCE DEPUIS 1996**

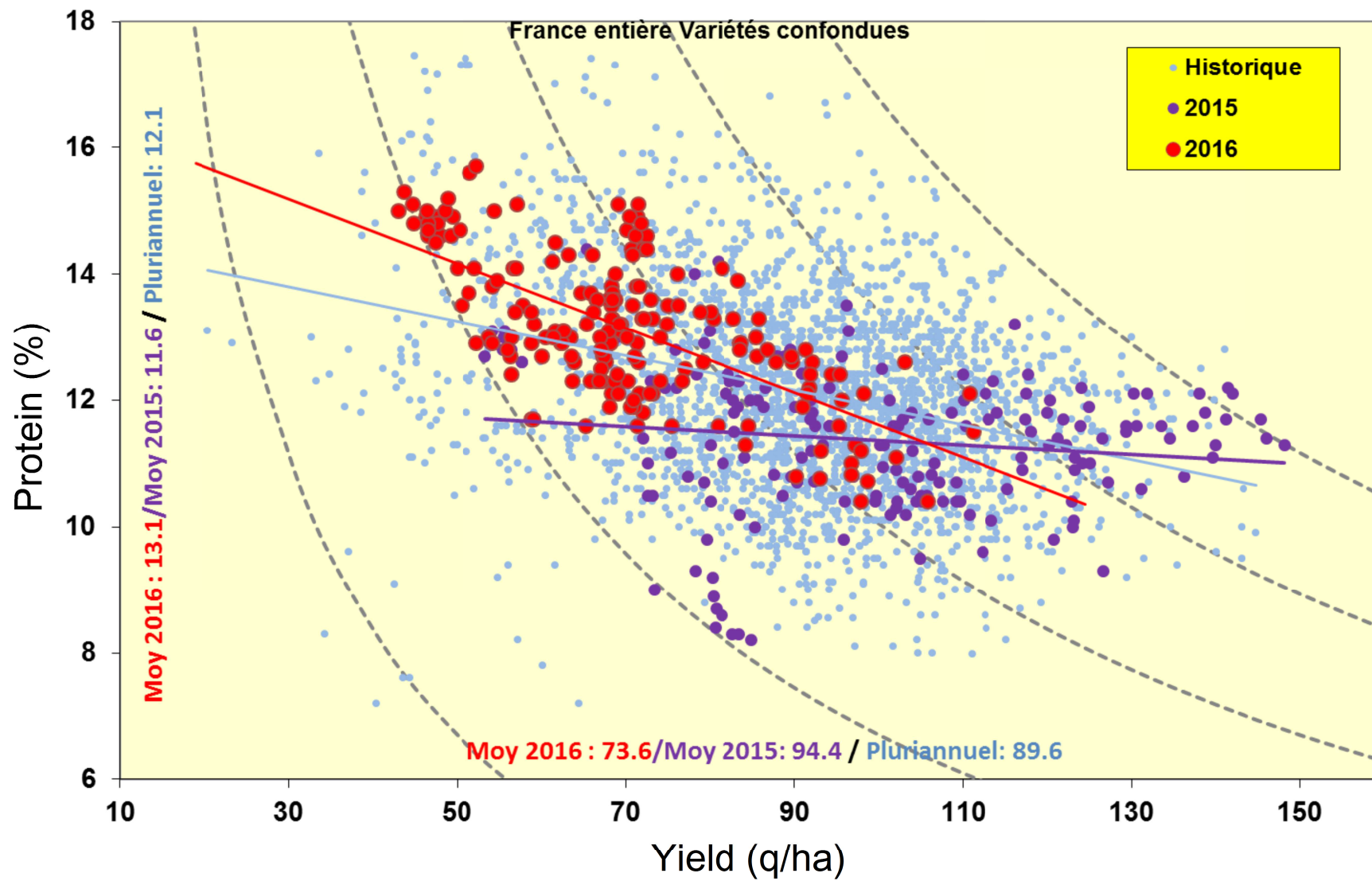


Lowest sunshine levels ever
seen

+ Highest cumulative rainfall

This combination is statistically improbable



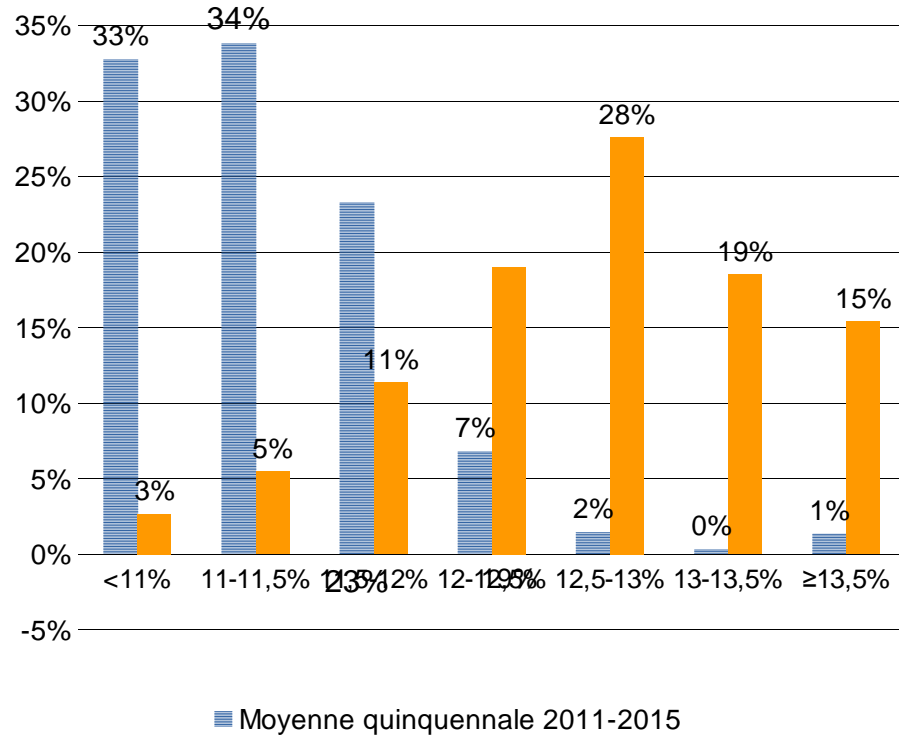




Protein content

12,6 % average

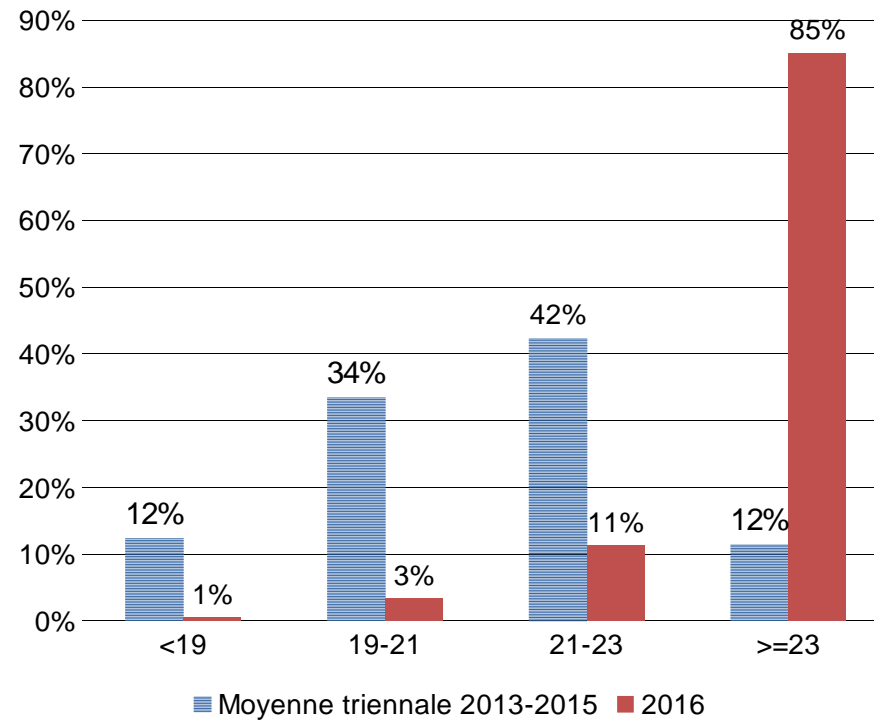
As a percentage of collected volumes



high wet gluten content

25,3 average

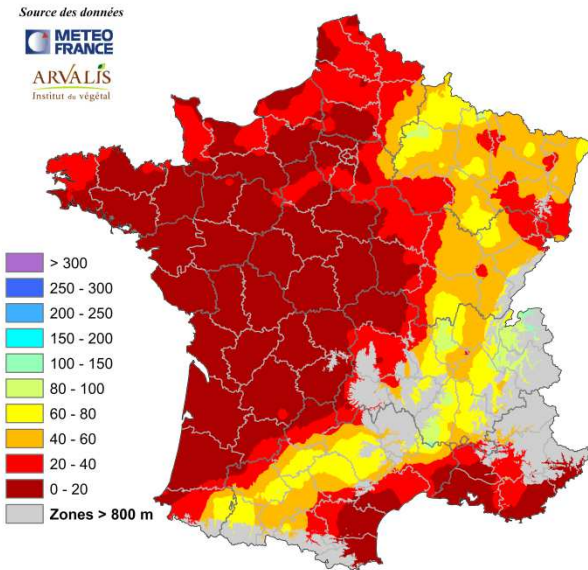
As a percentage of collected volumes



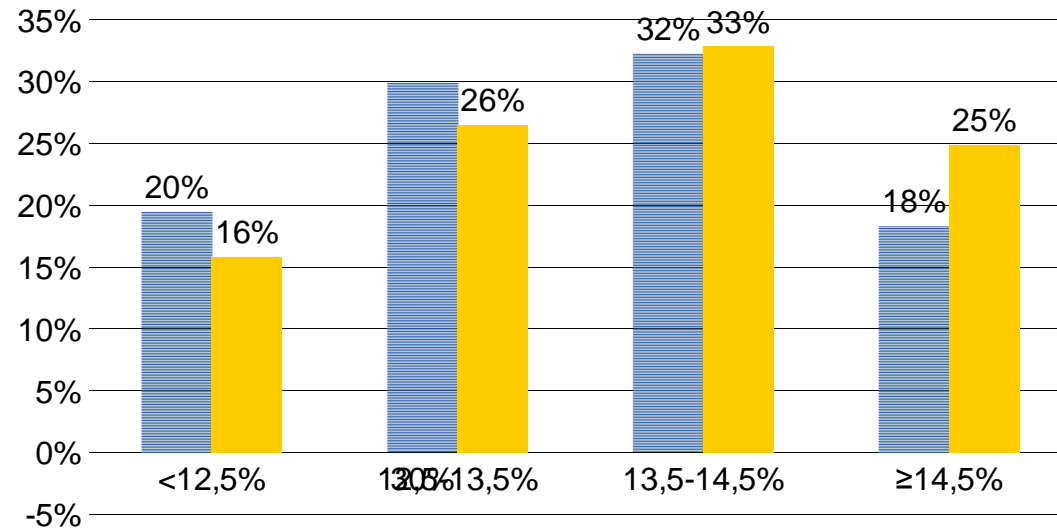


M.C on intake at silos : 13,6 % average

Cumul de précipitations (mm)
du 1er au 31 juillet 2016



As a percentage of collected volumes



■ Moyenne quinquennale 2011-2015 ■ 2016

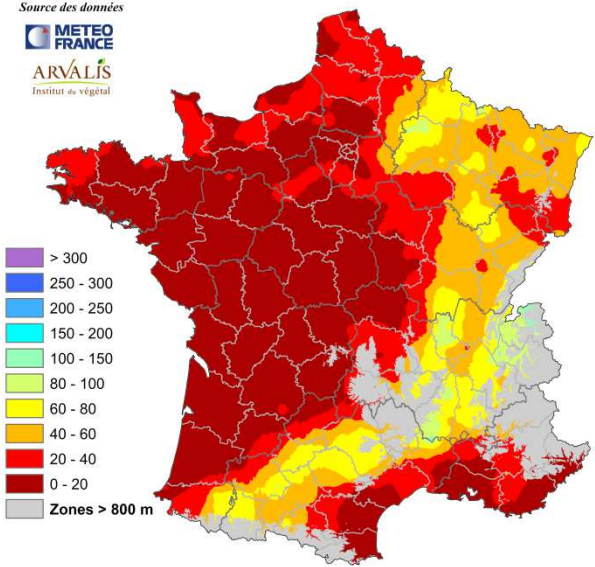
Source : FranceAgriMer / Enquête entrée collecteurs 2016



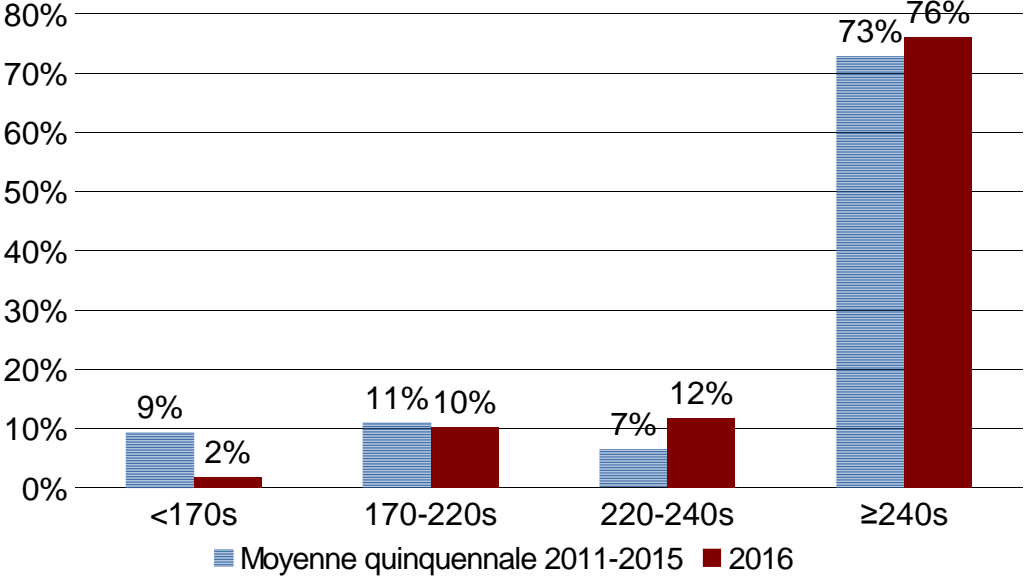
Hagberg Falling Numbers :

88% > 220s

Cumul de précipitations (mm)
du 1er au 31 juillet 2016



As a percentage of collected volumes



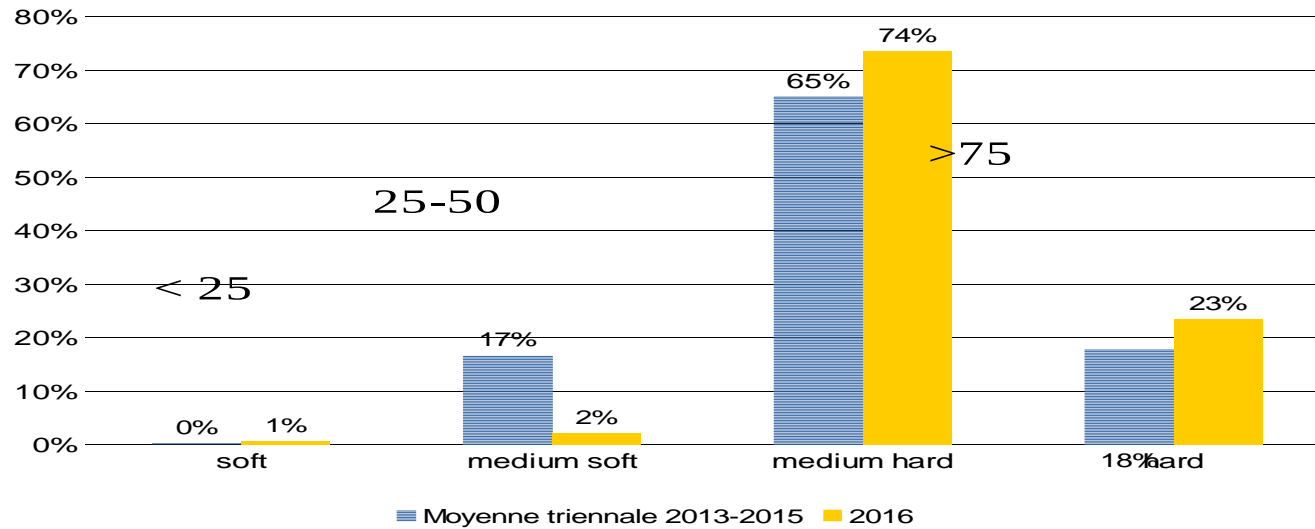
Source : FranceAgriMer / Enquête entrée collecteurs 2016



Hardness : French wheat is generally Medium Hard

50-75

As a percentage of collected volumes



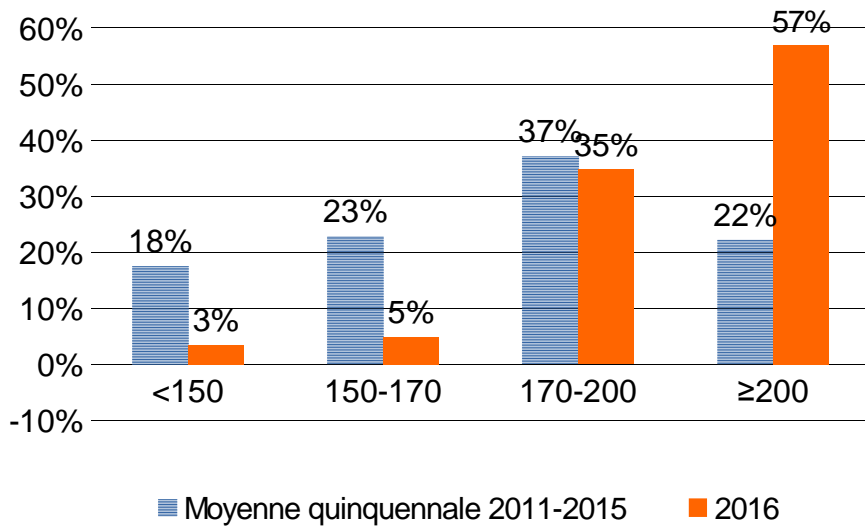
Sources : FranceAgriMer / Enquête qualité collecteurs 2016, US Wheat Associates

Baking strength

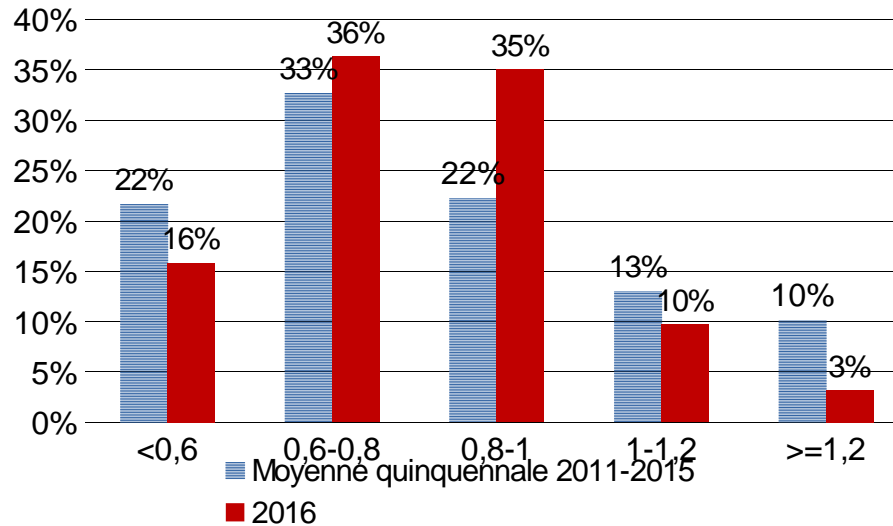
W = **205** on average

P/L = **0.8** on average

As a percentage of collected volumes



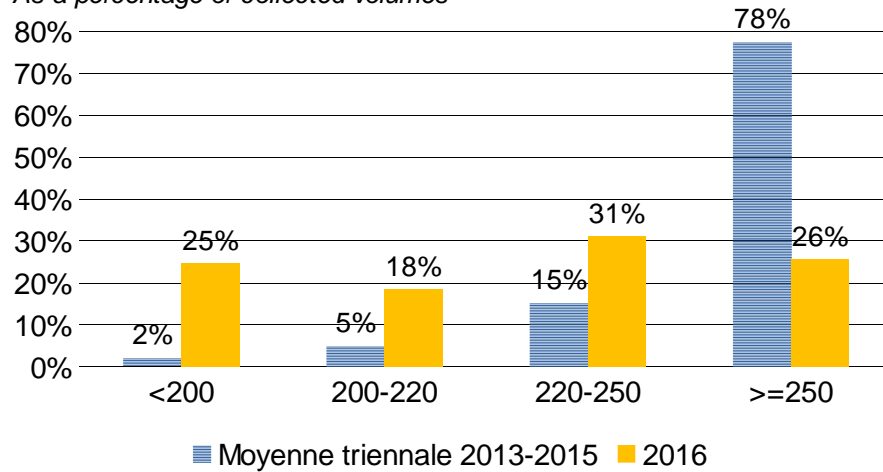
As a percentage of collected volumes



Source : FranceAgriMer / Enquête entrée collecteurs 2016

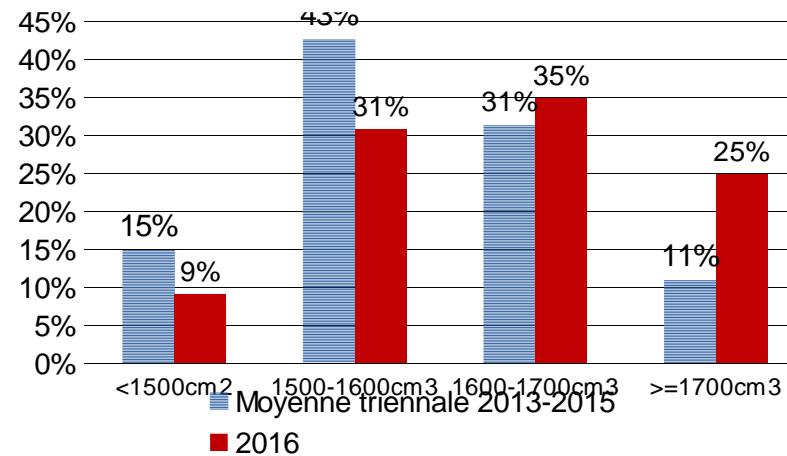
Breadmaking value(/300)

As a percentage of collected volumes



Volume (cm³)

As a percentage of collected volumes



Source : FranceAgriMer / ARVALIS - Institut du végétal / Enquête qualité collecteurs 2016

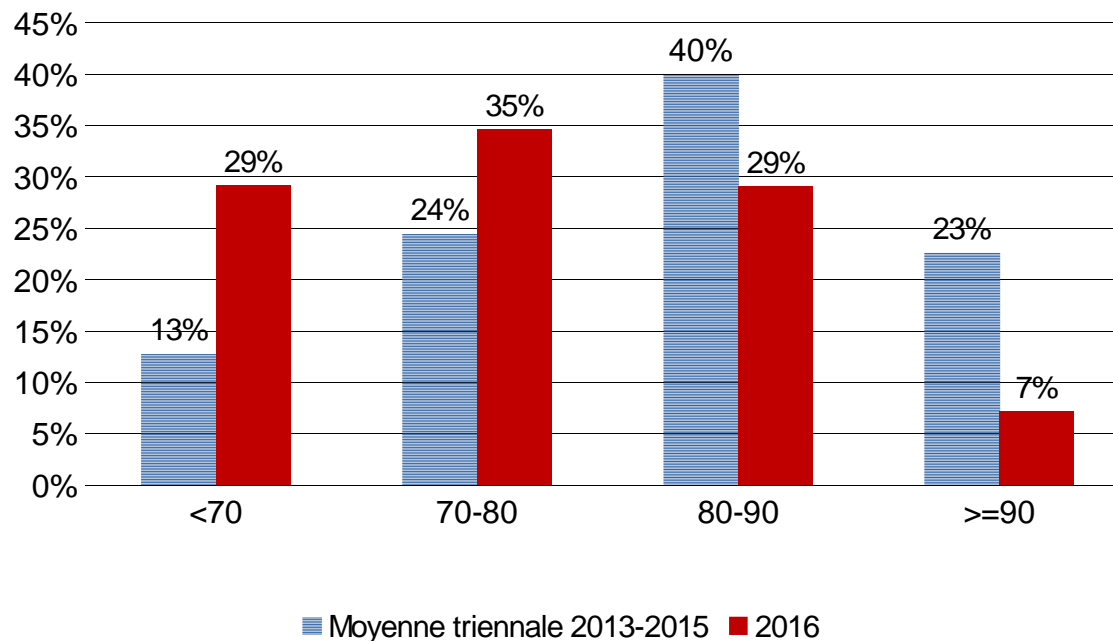


Gluten Index shows more extensibility than usual

Gluten Index levels are lower than those typically known

75.3 on average

As a percentage of collected volumes

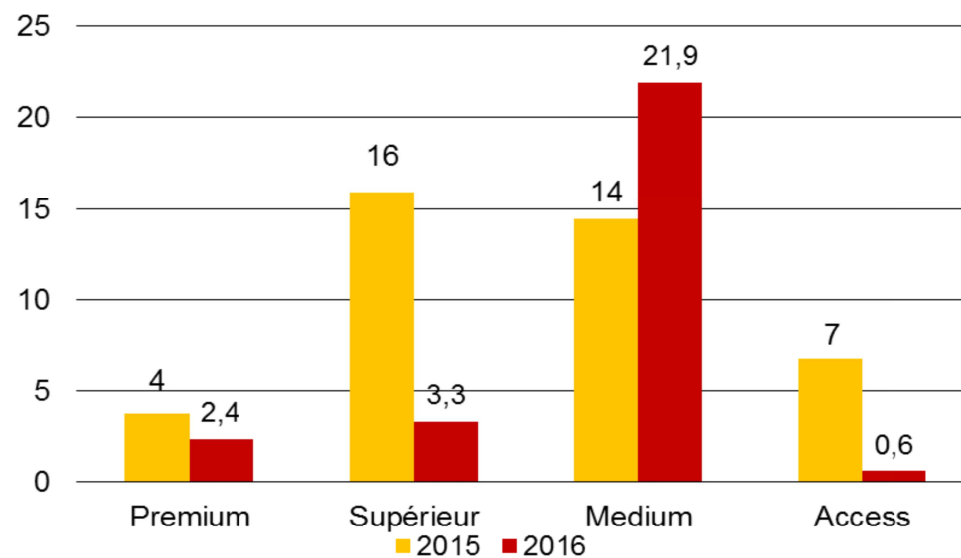


Source : FranceAgriMer / ARVALIS - Institut du végétal / Enquête qualité collecteurs 2016

The French wheat in 2016 is not a reflection of the typical offer

| Classes | Protéines | W | Poids spécifique | Indice de chute de Hagberg | Répartition nationale 2016 | Répartition nationale 2011-2015 |
|-----------|---------------------|--------------|------------------|----------------------------|----------------------------|---------------------------------|
| Premium | ≥ 11,5 % | ≥ 170 | ≥ 77 | ≥ 240 | 8 % | 15 % |
| Supérieur | ≥ 11 % | non spécifié | ≥ 76 | ≥ 220* | 12 % | 30 % |
| Médium | ≥ 10,5 % | non spécifié | non spécifié | ≥ 170* | 78 % | 37 % |
| Access | Spécifié au contrat | non spécifié | non spécifié | non spécifié | 2% | 18% |

en millions de tonnes



Source : FranceAgriMer / Enquête qualité collecteurs 2015 et 2016



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Thank you for your attention

