

Suisselab
Zollikofen

L'échange de données avec les fédérations d'élevage et les avantages en découlant pour les détenteurs d'animaux

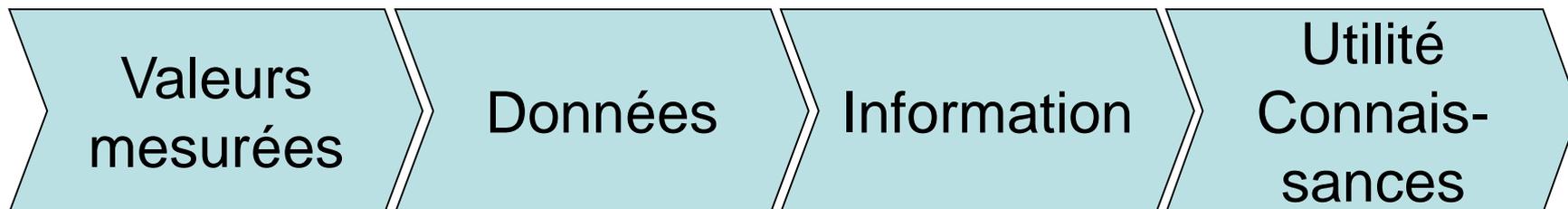
Matthias Houmard, Suisselab
Responsable Gestion TI,

Nicolas Berger, Swissherdbook
Responsable du projet de gestion des données

Zollikofen, 14 septembre 2017

Contenu

Sujets



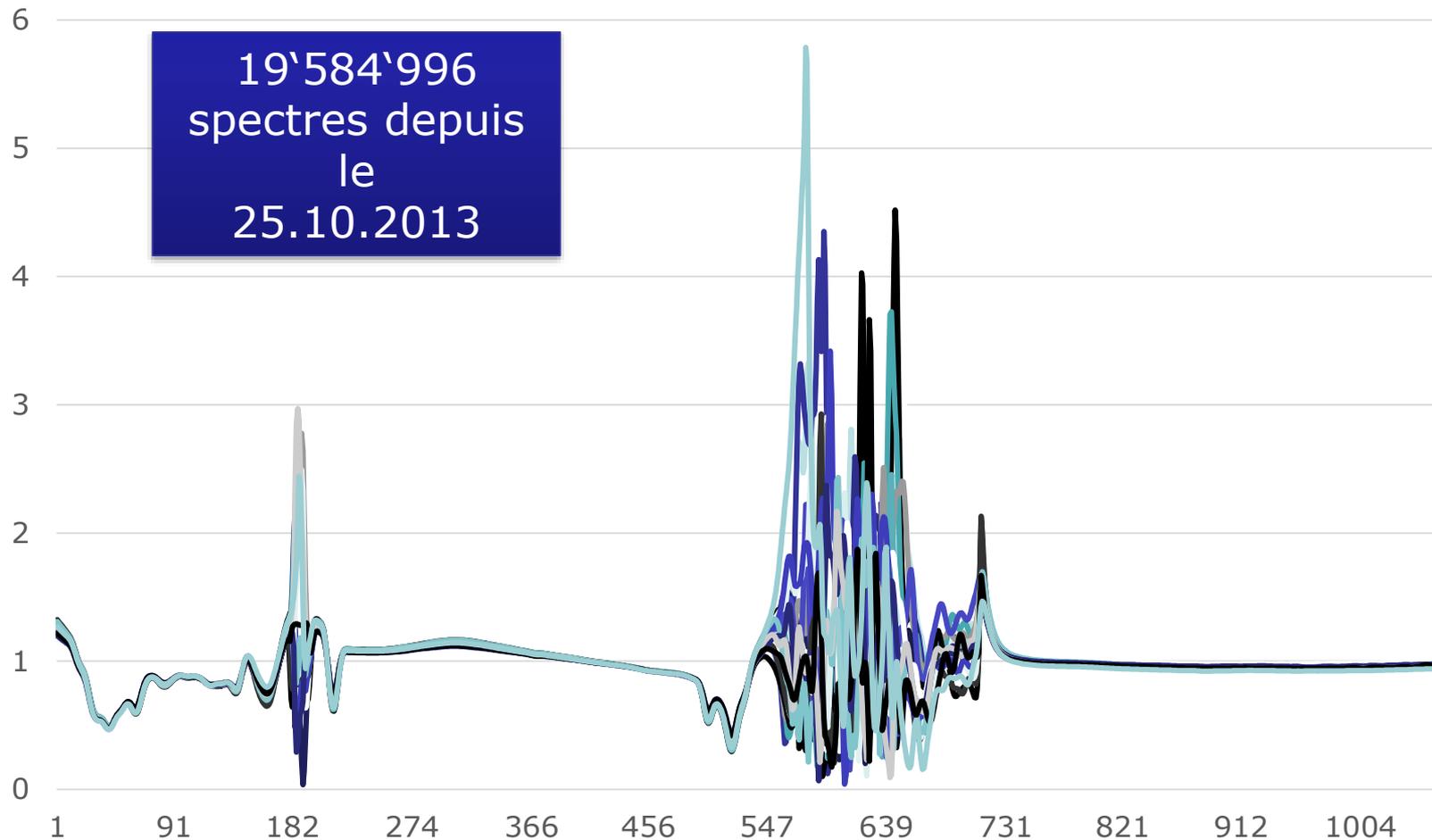
SWISS 
herdbook

BRAUNVIEH 



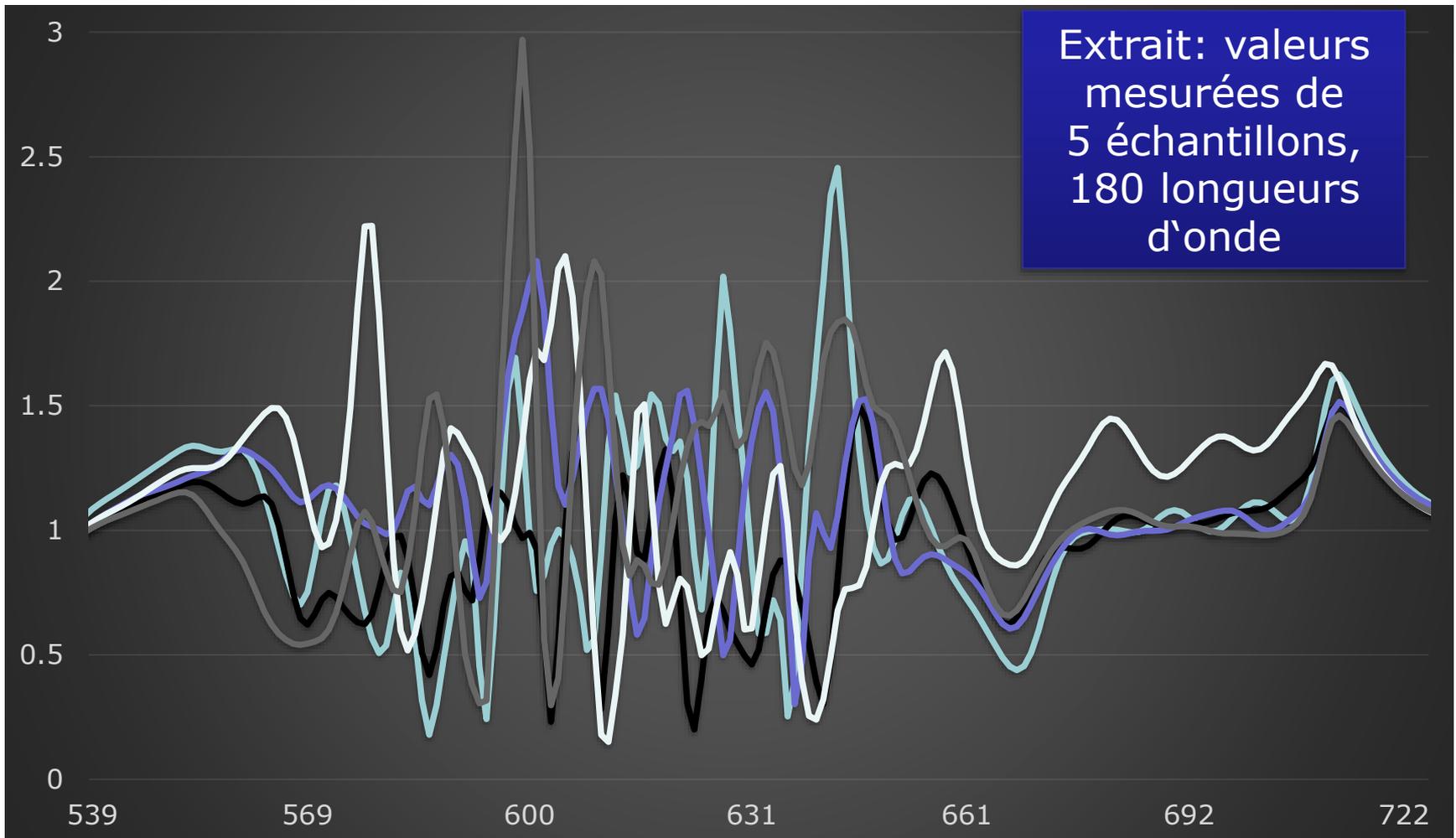
Valeurs mesurées

20'760'095'760 de jeux de données



Valeurs mesurées

Vache «Blüemli», période de 2.5 ans



Données

20'760'095'760 jeux de données

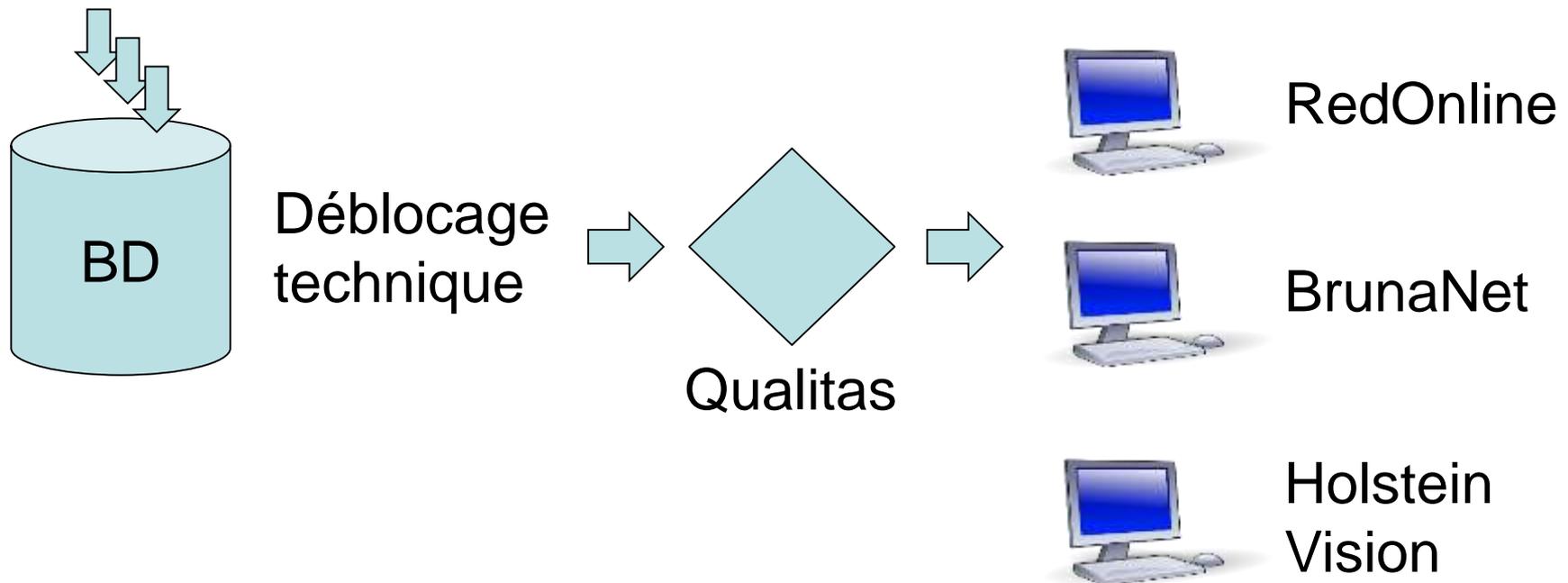
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3.812143	4.354916	4.084578	2.395771	2.708002	2.800137	2.958848	2.802515	2.386486	1.942514	1.484583	1.088758	0.836546	0.848756	0.398777	1.234287	1.443458	1.452031	1.25215	0.350046	0.634082	0.483964	0.544775	0.855125	1.063787	1.285318						
1.502519	2.289017	2.301999	2.861246	2.439863	1.686448	1.417958	1.953771	1.875175	1.075169	0.915448	0.341458	0.381887	0.297021	0.364757	0.451071	0.583181	0.743861	0.940036	1.082047	1.071013	0.90259	0.748801	0.957605	0.832781	0.580489						
1.037308	1.12595	1.072600	0.896003	0.551603	0.377695	0.625082	0.307620	0.60324	0.495909	0.367024	0.351055	0.349404	0.309350	0.371274	0.573961	0.801026	0.804302	0.897735	0.877028	0.950776	1.057520	1.076228	0.997605	0.82404	0.95094	1.20424					
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0.950291	1.10224	1.21051	1.386048	1.479484	1.696243	1.123751	1.918886	1.19374	0.825668	0.851835	0.538104	0.640235	1.967788	1.967788	1.967788	1.967788	1.967788	1.967788	1.967788	1.967788	1.967788	1.967788	1.967788	1.967788	1.967788	1.967788					
1.319594	1.477879	1.602078	1.805295	2.132237	2.307185	2.094233	1.745408	1.581047	1.556359	1.644302	1.762866	1.816887	1.967788	2.016139	1.964232	1.863787	1.588917	1.87124	0.98652	0.806129	0.90223	1.089384	1.275383	1.381695	1.304727	1.189448					
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0.930689	0.867776	0.230352	0.345645	0.503547	0.721077	0.721077	0.962311	0.619543	0.694592	0.736134	0.800652	1.026045	0.724306	0.258796	0.331005	0.817239	0.740042	0.691772	0.659162	0.803003	1.442214	1.689394	1.917339	0.619508	0.56776	1.056956					
0.034233	0.959672	0.069422	0.452196	0.249332	0.607069	1.069531	1.953492	1.630007	1.41033	0.30558	0.797172	0.829594	0.949306	1.025479	0.972241	0.956345	0.472082	0.519679	0.58778	0.903735	1.343363	1.519416	1.423034	1.200452	1.269457	1.467876					
0.839842	0.757447	0.71829	0.882401	1.102588	1.888651	1.88178	1.866073	1.07801	0.388226	0.350949	0.327841	0.675752	0.231491	0.546254	1.074122	1.318561	1.363332	1.074644	0.571796	0.26248	0.682047	1.04953	1.220293	1.123388	0.91804	0.887534					
1.262707	1.125204	0.902096	0.772527	0.790919	0.860586	1.573759	1.623248	1.178459	1.677224	1.399195	2.081666	1.88671	1.495752	1.178687	1.102578	1.200552	1.354943	1.482784	1.587859	1.586488	1.446504	1.22431	1.044866	1.051265	0.550193	0.844634					
1.389651	1.338953	1.286356	1.256022	1.076702	0.932629	0.853323	1.003539	1.162159	1.521619	1.532269	1.604911	1.682294	1.828392	2.034408	2.21048	1.931744	1.569735	1.069586	0.555567	0.179371	0.315045	0.34456	0.582378	1.007781	1.471643	1.506233					
0.006668	0.43935	0.379072	0.305043	0.312189	0.817878	1.527707	0.052259	2.563201	2.970006	2.544311	1.494328	0.973388	0.237821	0.407817	0.739443	1.234007	1.684488	1.927807	2.080191	0.203806	1.694464	1.288237	0.945897	0.817775	0.881044	0.857953					
1.932504	1.806334	0.493866	0.352032	0.520545	0.630770	0.614757	0.497069	0.26933	0.20539	0.456705	0.637776	0.754095	0.791352	0.866594	1.057571	1.177774	1.263314	1.237696	1.10023	0.953814	0.700375	0.519041	0.328937	0.478785	0.957036	1.552941					
1.368986	1.2712	0.500872	0.585017	0.489234	0.698494	0.948084	1.228491	1.408822	1.497385	1.467344	1.347455	1.206677	1.067794	0.31712	0.195145	0.830586	0.588918	0.678664	0.845732	1.032421	1.751622	1.065343	0.838964	0.962741	0.937106	1.162779					
2.2749	2.252223	2.187162	2.207037	2.497256	2.532666	2.096361	1.679376	1.356244	1.228714	1.10415	0.964024	0.846089	0.943709	1.246234	1.33291	1.19161	0.965055	0.736617	0.686118	0.516232	0.446428	0.573833	0.791734	0.87411	0.757028	0.68932					
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1.732001	1.769001	1.635532	1.430666	1.352529	1.549185	1.935684	2.340422	2.560318	2.407847	2.70005	1.962222	1.886847	1.694961	1.300793	0.596402	0.688646	0.867671	0.570949	1.465025	2.098602	2.505232	2.008761	2.536791	1.900721	1.507747	1.226214					
3.612743	4.354916	4.084578	2.395771	2.708002	2.800137	2.958848	2.802515	2.386486	1.942514	1.484583	1.088758	0.836546	0.848756	0.398777	1.234287	1.443458	1.452031	1.25215	0.350046	0.634082	0.483964	0.544775	0.855125	1.063787	1.285318						
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0.551103	0.377685	0.525961	0.643092	0.60924	0.485809	0.369702	0.551103	0.377685	0.919712	0.975386	0.974852	0.699754	0.802805	0.879412	1.028223	1.045623	1.200959	1.309614	1.489714	1.489714	1.489714	1.489714	1.489714	1.489714	1.489714	1.489714					
0.919712	0.919712	0.975386	0.974852	0.699754	0.802805	0.879412	1.028223	1.045623	1.200959	1.309614	1.489714	1.489714	1.489714	1.489714	1.489714	1.489714	1.489714	1.489714	1.489714	1.489714	1.489714	1.489714	1.489714	1.489714	1.489714	1.489714					
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1.956896	1.2712	0.500872	0.585017	0.489234	0.698494	0.948084	1.228491	1.408822	1.497385	1.467344	1.347455	1.206677	1.067794	0.31712	0.195145	0.830586	0.588918	0.678664	0.845732	1.032421	1.751622	1.065343	0.838964	0.962741	0.937106	1.162779					
2.2749	2.252223	2.187162	2.207037	2.497256	2.532666	2.096361	1.679376	1.356244	1.228714	1.10415	0.964024	0.846089	0.943709	1.24623																	

Échange des résultats

Entre 15 et 25 000 par jour

Résultats des analyses:

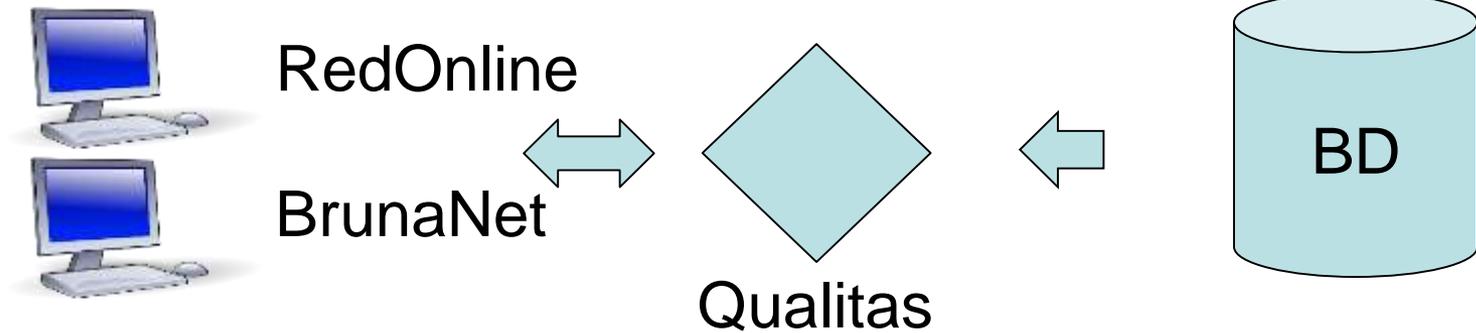
Graisse	Protéines	Lactose	Urée	Cellules	Pt cong	Acétone-IR	BHB-IR
3.26	2.79	4.44	0.040	33	0.527	0.07	0.05
4.43	3.37	4.81	0.029	240	0.547	0.07	0.07
....



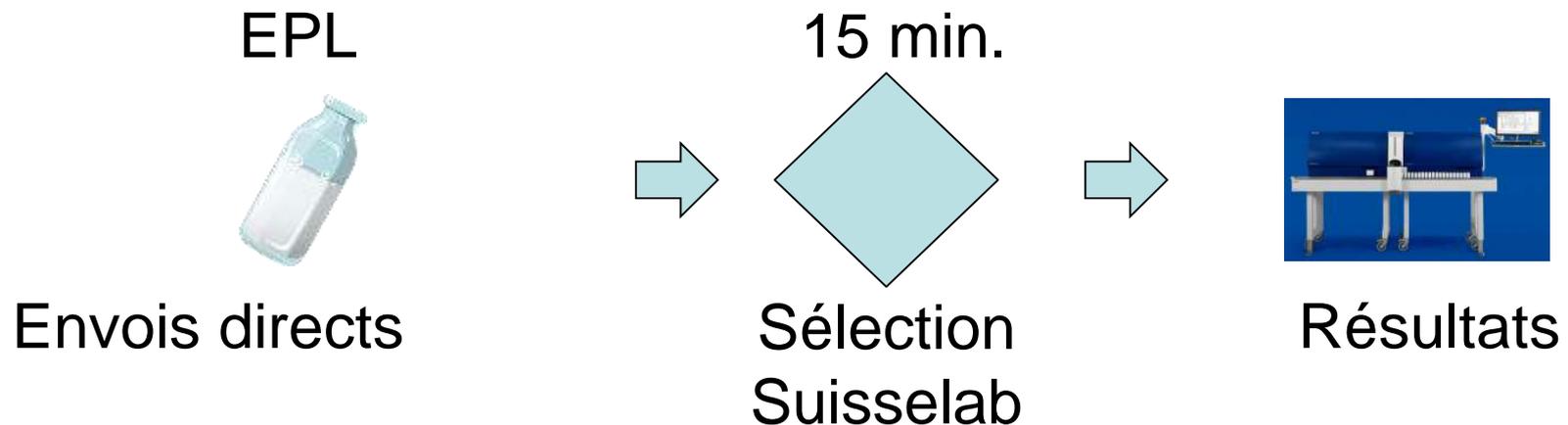
Échange de données

Via web service en temps réel

Commandes:



Échantillons:



Information & informatique

Une différenciation s'impose

«Par **informatique**, j'entends l'art de rendre accessibles des **données de sorte** à ce qu'elles représentent des **informations** ayant une **utilité directe** pour les **gens**.»

Par **information**, on entend la **signification** d'un message. Les **messages peuvent** être des textes parlés ou écrits, des images ou d'autres **données** que nous percevons avec nos organes sensoriels et que nous pouvons enregistrer et transmettre avec des moyens techniques. **L'information** tirée d'un tel message **dépend du destinataire** et est par conséquent **subjective**.

Donnée vs information

Un exemple «pertinent»

21 t de bois



150 m³ d'eau



Chaleur



1 maison

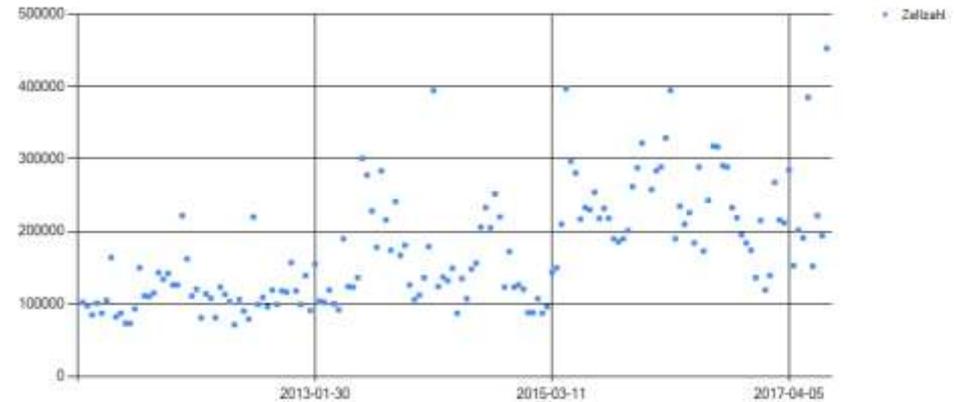
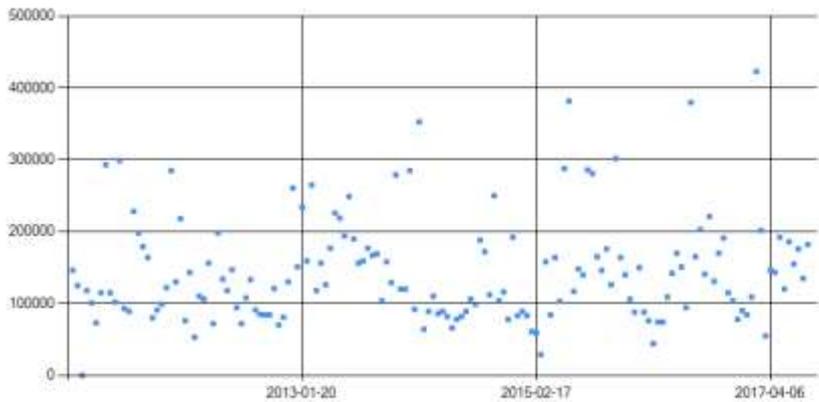
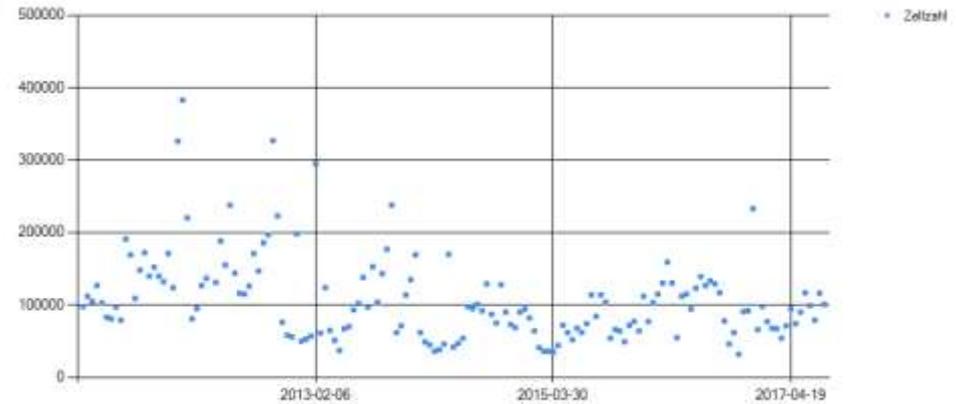
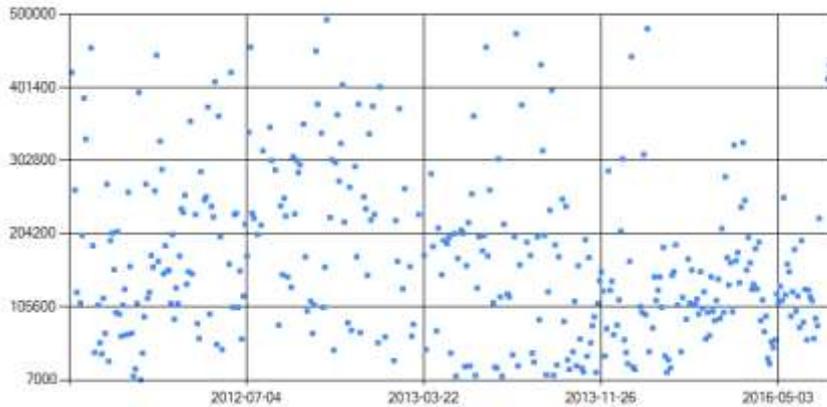


...OU...



Information et temps

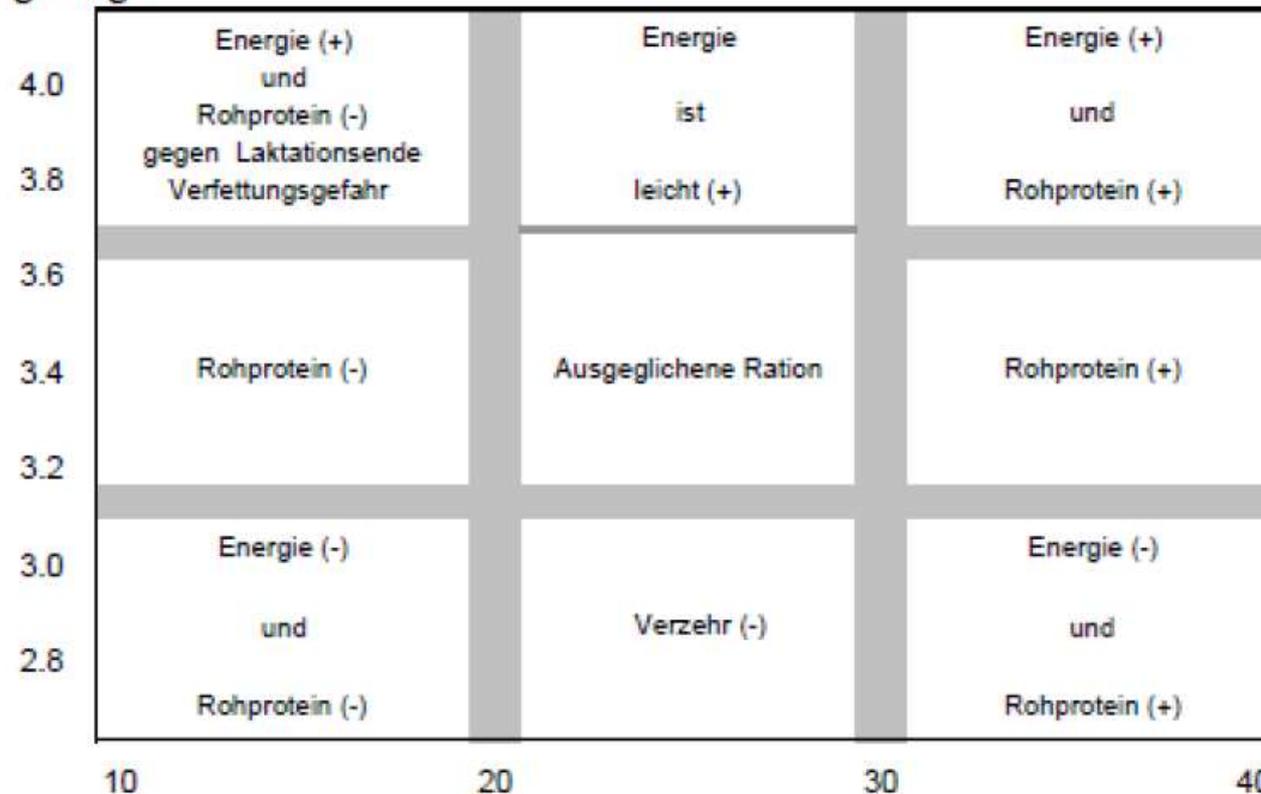
À l'exemple des cellules



Information et signification

À l'exemple protéines vs urée

Eiweiss
g/100g



(-) bedeutet Mangel
(+) bedeutet Überschuss

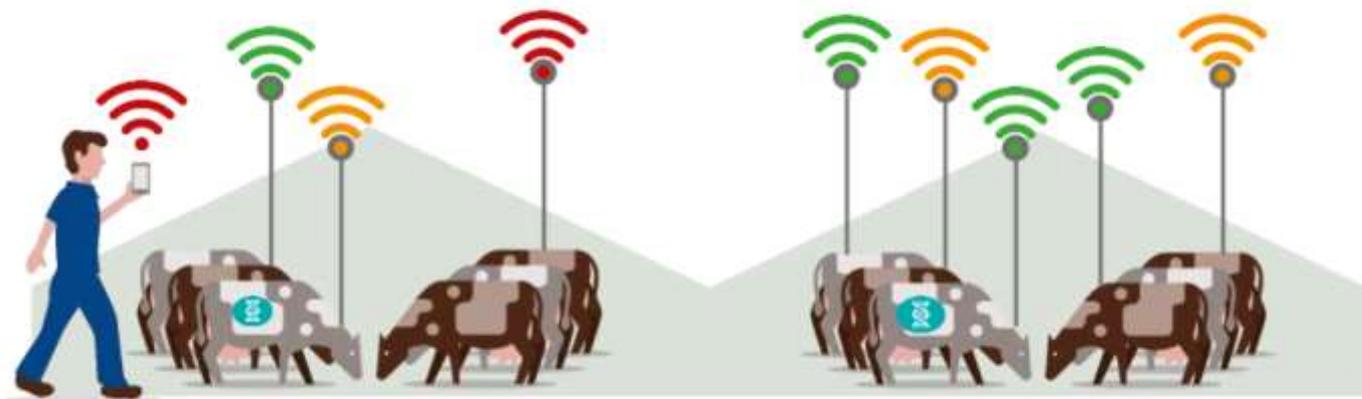
Harnstoff mg/dl

Connaissances, conseils, utilité

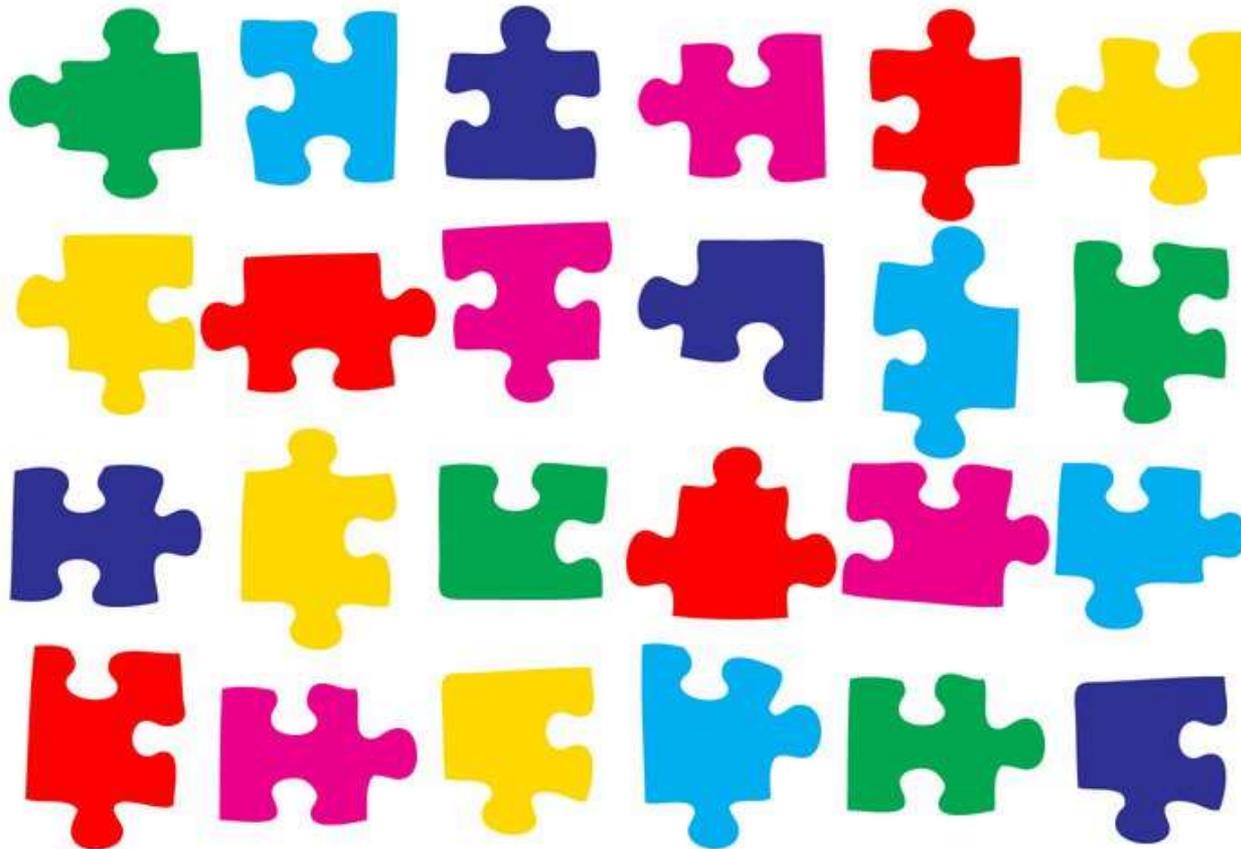


Prédire, prescrire, réaliser: intégration de sources de données traditionnelles et nouvelles pour une gestion intelligente du troupeau

Que voulons-nous?



Intégration de données



Tarissement sélectif / Monitoring des mammites

- Responsable de la majorité des utilisations d'antibiotiques
- Cause les coûts de santé les plus hauts



1. Identifier les vaches malades

- CS > 150'000 (analyse cellules)
- Antécédent des mammites (Données sanitaires)

2. Inscription des candidats

3. Identification des mammites (MID)

- Tarire / soigner les vaches de manière sélective
- Éliminer les mauvaises vaches

Phase de transition

- Période entourant le vêlage
- Beaucoup de maladies
- Coûte cher
 - Frais de traitement
 - Perte de lait

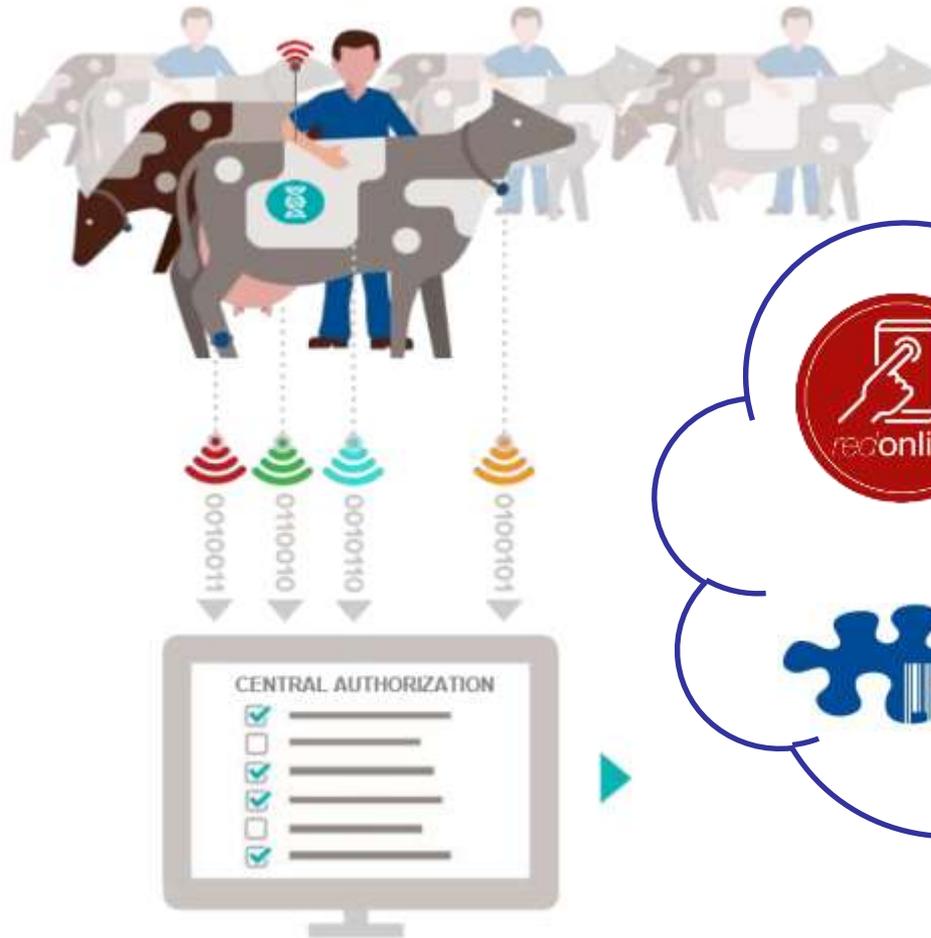


Quelles données

- Données santé saisies
- Données de l'EPL
- Valeurs d'élevage
- Données des robots de traite
- Données de rumination des capteurs



Prédire, prescrire, réaliser!!!



Questions

