

### Le GABION MONITORING ESBG 2015

### Two monitoring experiences:

- 1) drying and rain influence of 4 different coatings on straw bales
  - λgypsum plaster,
  - <sub>λ</sub>2 earth + 1 gypsum plaster,
  - $_{\lambda}CL$
  - $\lambda NHL$



2) Monitoring of an experimental building

Study of drying and rain influence of 4 different renders

The inside and outside coatings were done in two days, this brought a lot of water in the straw.





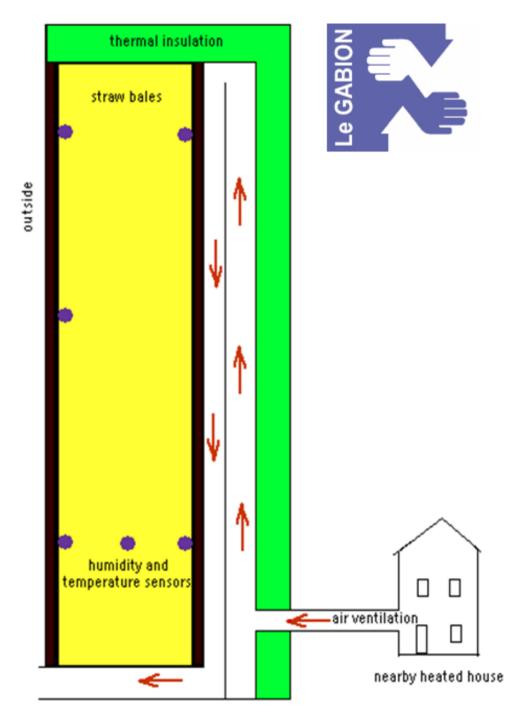


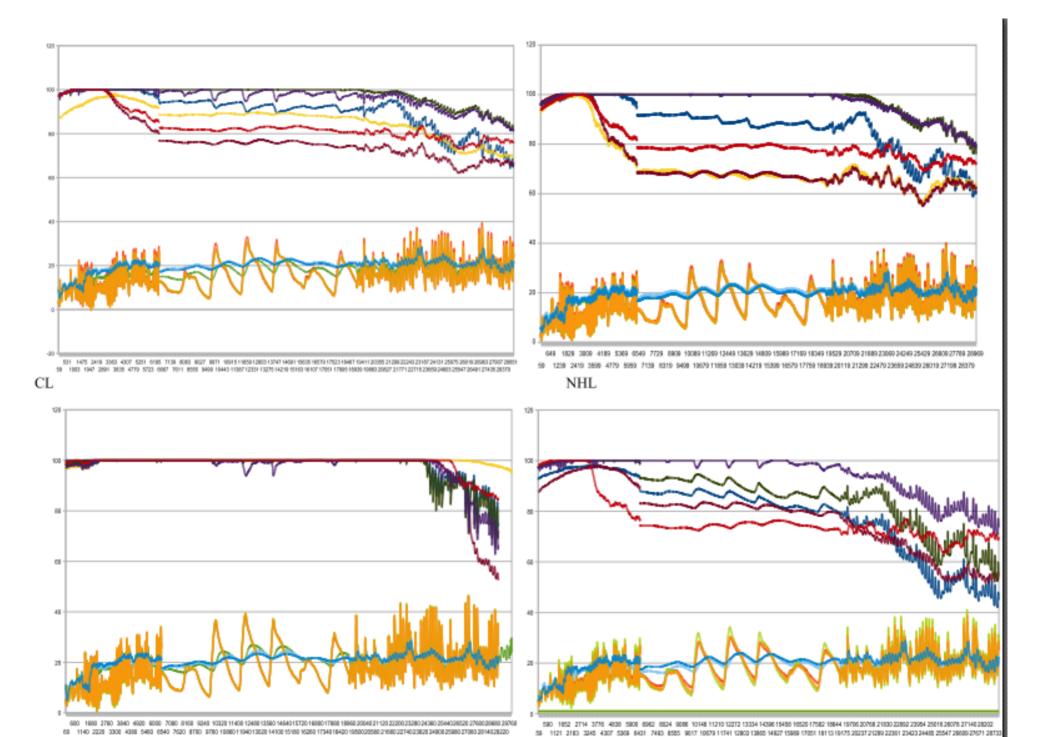
# Study of drying and rain influence of 4 different coatings



### $_{\lambda}$ Findings

- λThe most interesting findings λwere not expected
- <sup>λ</sup>Too many measures made it <sup>λ</sup>very difficult to analyze
- <sub>λ</sub>Straw will not start drying until <sub>λ</sub> the renders are dry!
- alt is very interesting to compare athe behavior of different elements awhen it can be done at the same at time and under the same conditions





68 1140 2228 2308 4388 5460 6540 7620 8780 9780 1886011540135281410815180 162601754818420 1958022580276802274023828 24608259802718028728220 PLATRE

TERRE PLATRE



## Monitoring of an experimental building













## Monitoring of an experimental building





Centre de formation - depuis 1993

qui? où? contacts liens partenaires inscriptions

Région PACA

stages

construction paille

docs

réalisations

actions

Consultez le programme de tous les Stages de l'année

Formations diplômantes

Ouvrier Professionnel en Eco Construction

Ouvrier Professionnel en Restauration du Patrimoine

approche de la rénovation thermique du bâti ancien et des matériaux sains

#### Les prochains stages courts

| Construction paille ossature bois                  | Embrun | 1 au 15 juin  | T PUBLIC |
|--|--------|---------------|----------|
| Maçonnerie : calade, murs pierre sèche et maçonnée | Embrun | 15 au 19 juin | T PUBLIC |
| Enduits terre                                      | Embrun | 22 au 26 juin | T PUBLIC |

#### Découvrez le site de la construction Paille PACA



Le bâtiment expérimental du Gabion

#### L'Actu du Gahion

Nouveaux Films du Gabion

**Construction Paille** La Paille et la Poutre

#### RECRUTEMENT

Mr Pierre Sallé a été recruté au poste de directeu du Gabion

Notre installation chauffage solaire en directe

Vie de L'association

Découvrez les interventions aux assises PACA le la construction Paille



Partenaire sur le 04

LA TECHNIQUE TERRE-PAILLE



gabionorg.free.fr/Meteo

## Monitoring of an experimental building

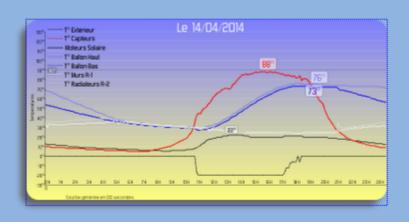




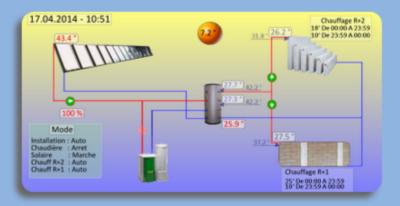


LE CHAUFFAGE SOLAIRE THERMIQUE DU GABION (05200)

#### Etude des données USB

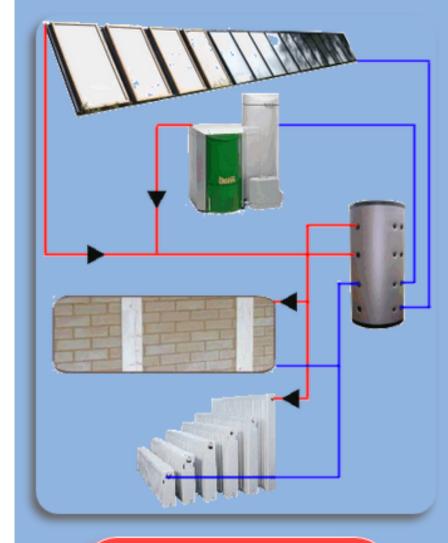


#### Supervision









Créer le graphique Effacer

- Température Extérieure
- Température Capteurs
- Moteurs solaire
- Économie Solaire basée sur la consommation chaudière
- Bruleur Chaudière
- Consommation Chaudière comptée à partir d'une T° flamme > 100°

Températures du Ballon Tampon

- Haut
- Milieu
- Bas
- Température de Consigne R+1
- Température Mesurée R+1
- Température de Consigne R+2
- Température Mesurée R+2

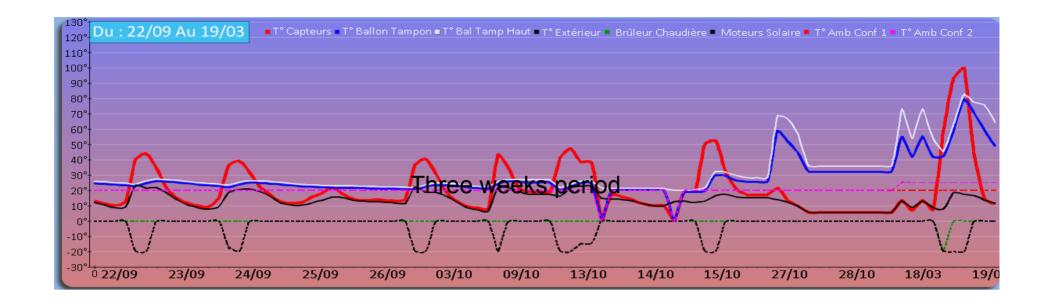
Champ Expert

Fréquence des données, chaque 07 min

Choisir une date entre le 13/12/2013 et le 31/08/2014

Fourchette

31/08/2014





We would like to test the efficiency of our solar heating and it should help adjusting our heating system.

We are most interested in CO2 recording in the 2 classrooms since we hope to avoid mechanical ventilation.

But the main reason is that we would like use this monitoring as a teaching support.

We are going to record

20 Temperature and humidity sensors all around the building Probes inside the walls

The information given by the OKOfen pellet boiler

And the information given by the solar heating system.

All this data will be on real time access on our site

Monitoring of an experimental building



