

JOURNÉE
TECHNIQUE

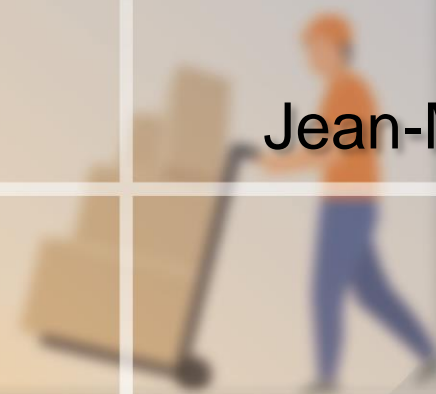
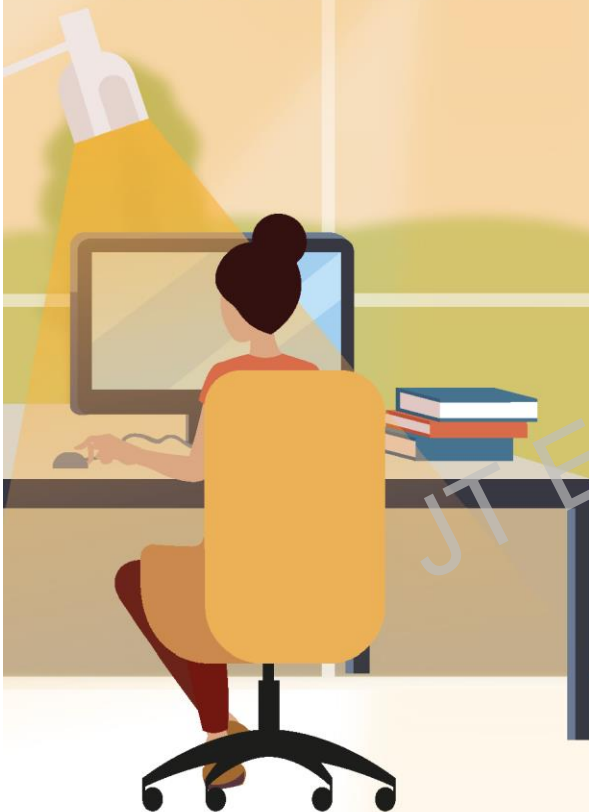
inrs
Institut National de Recherche et de Sécurité

**ÉCLAIRAGE DES LIEUX
DE TRAVAIL**
SANTÉ ET SÉCURITÉ DES SALARIÉS

MARDI 31 MARS 2026

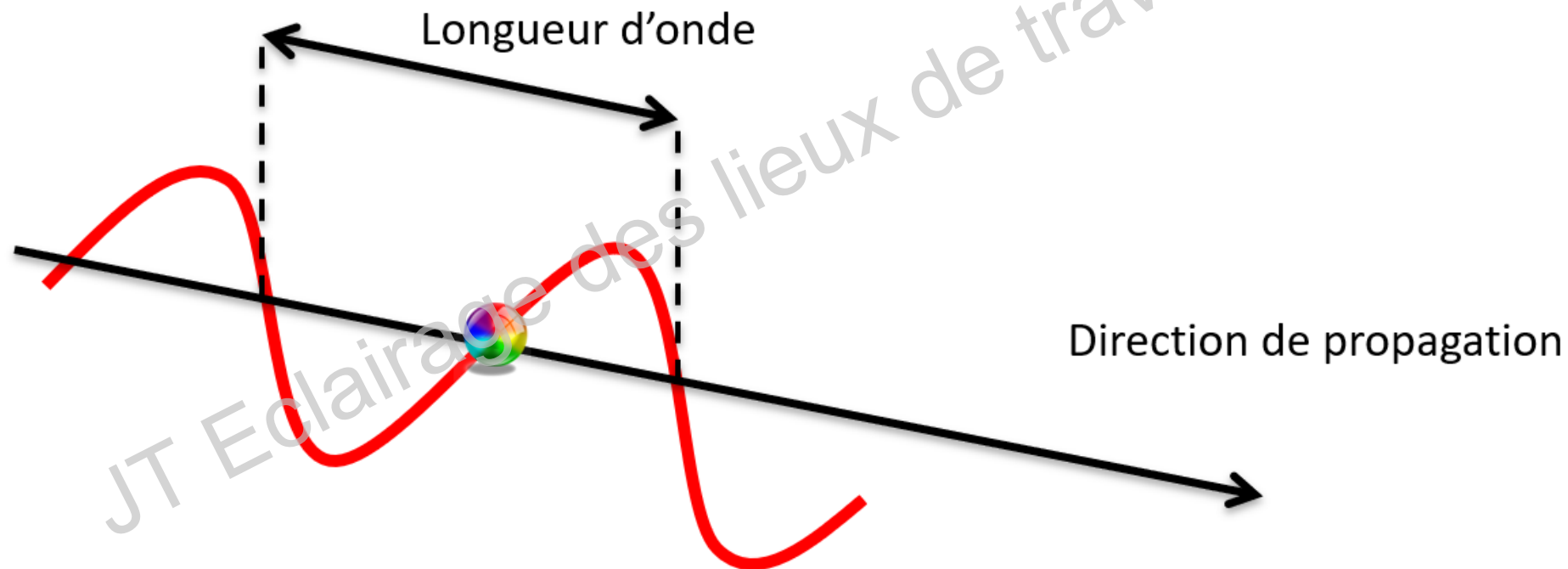
Caractéristiques de la lumière naturelle

Jean-Marc DENIEL, INRS

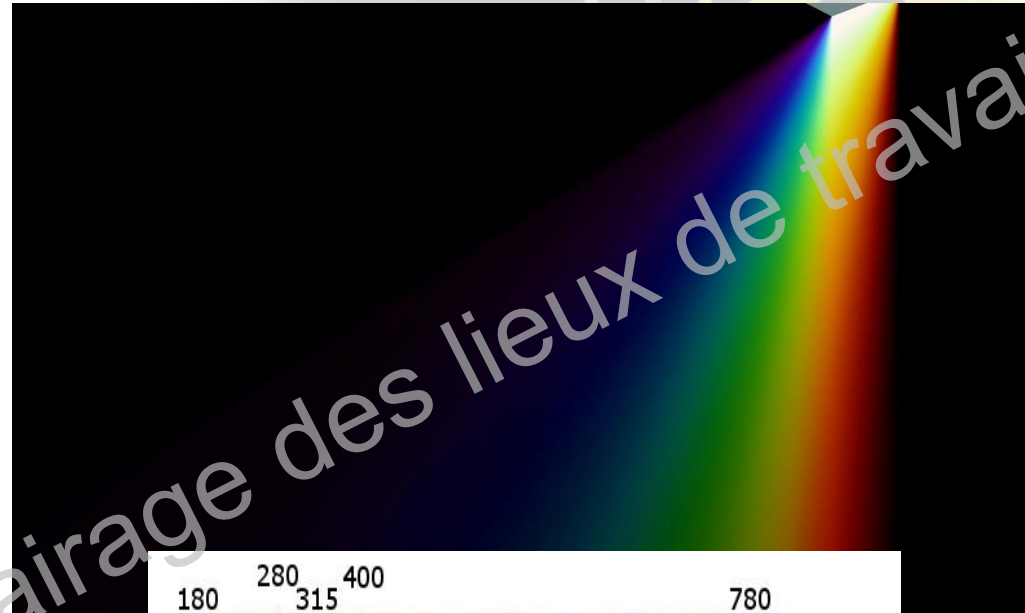


Lumière : de quoi parle-t-on ?

Une onde lumineuse, ça vibre et ça va vite



Lumière : de quoi parle-t-on ?



Provenance

Soleil

Filtrage et diffusion par l'atmosphère

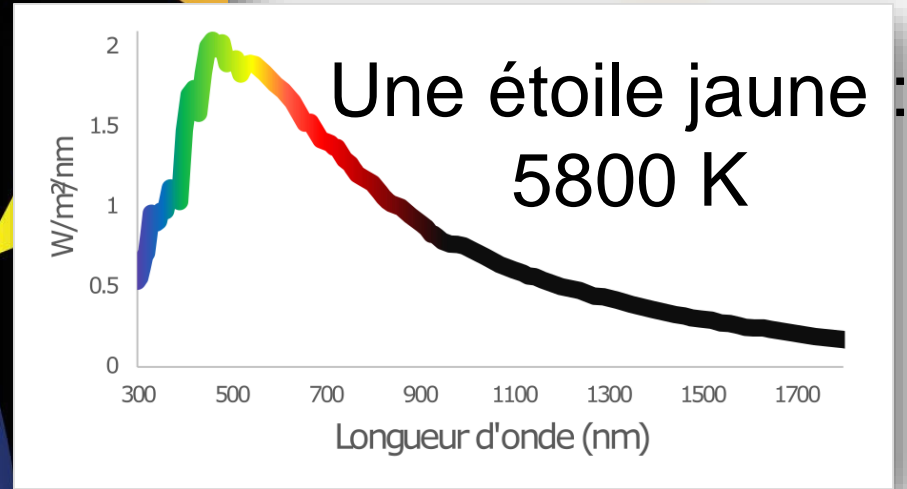
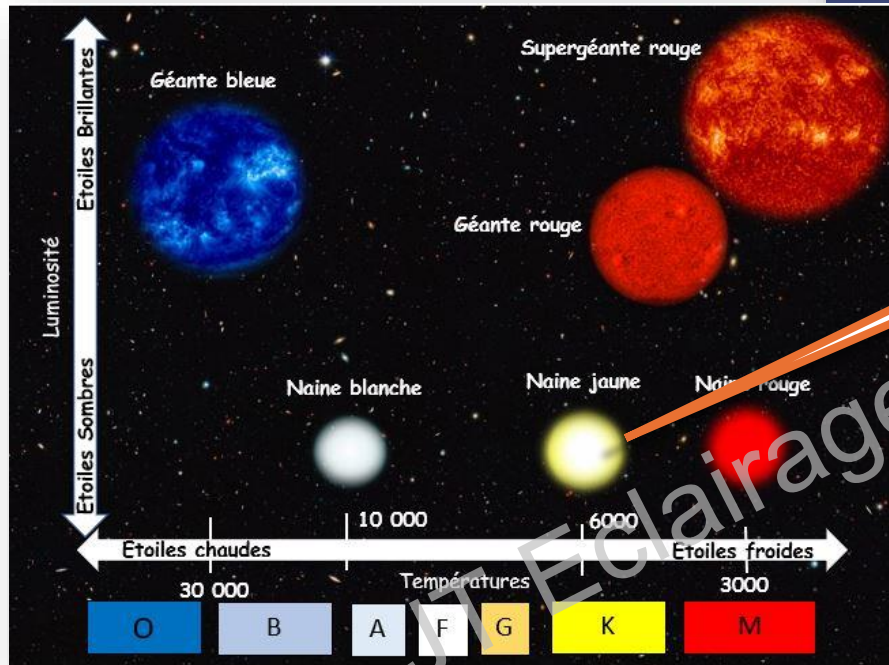
Occultation et diffusion par les nuages

Réverbérée par l'environnement

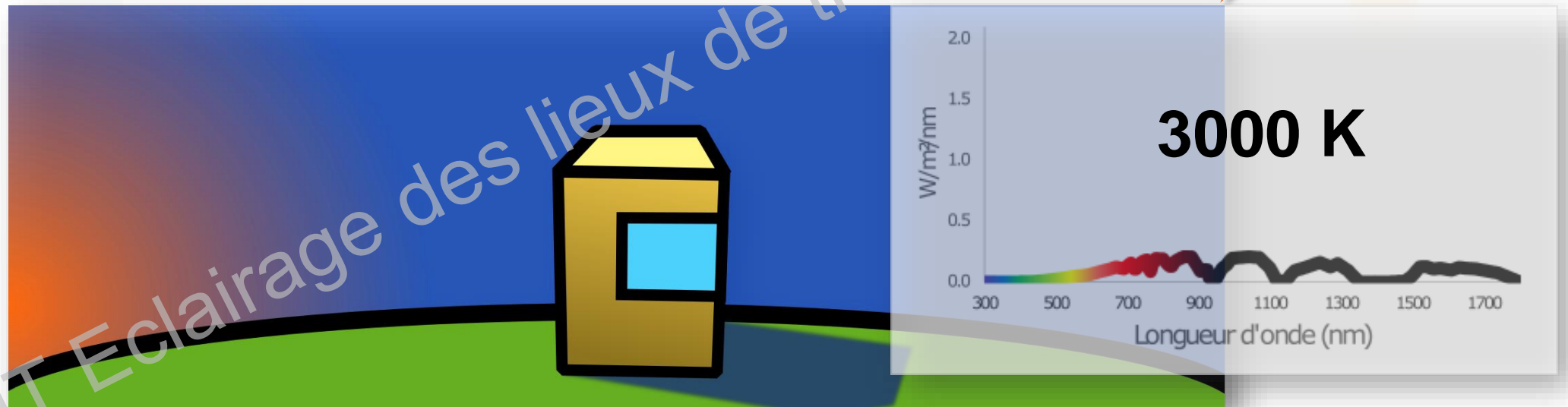


Provenance

Soleil

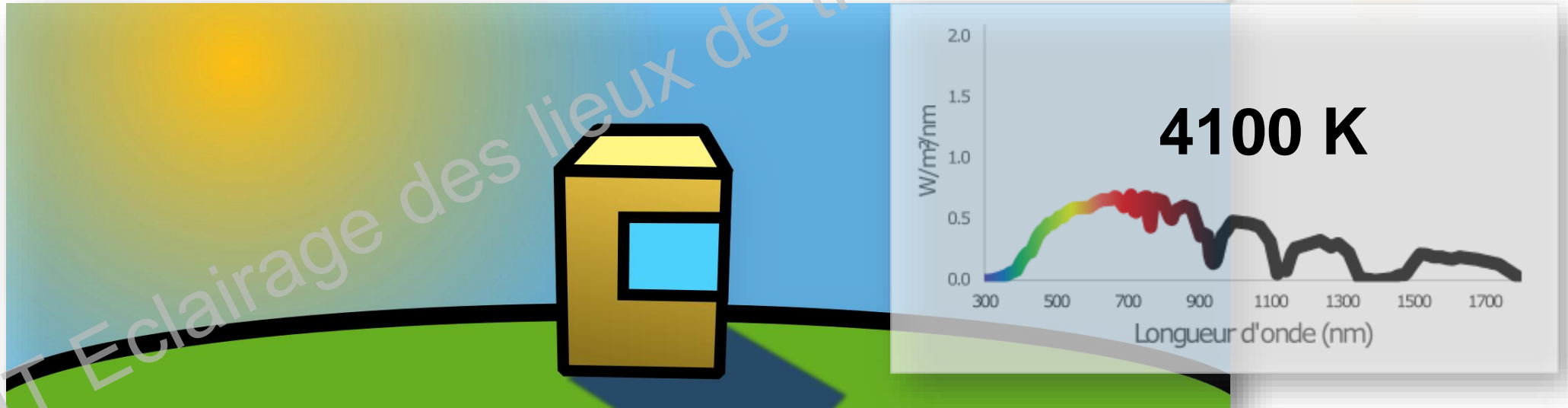


Provenance



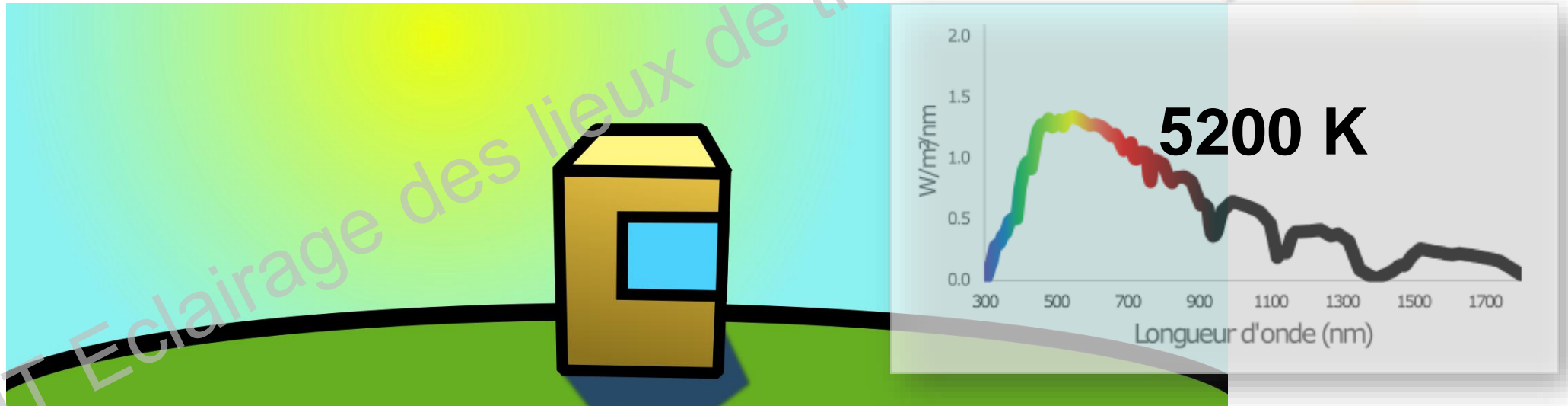
Provenance

Filtrage par l'atmosphère



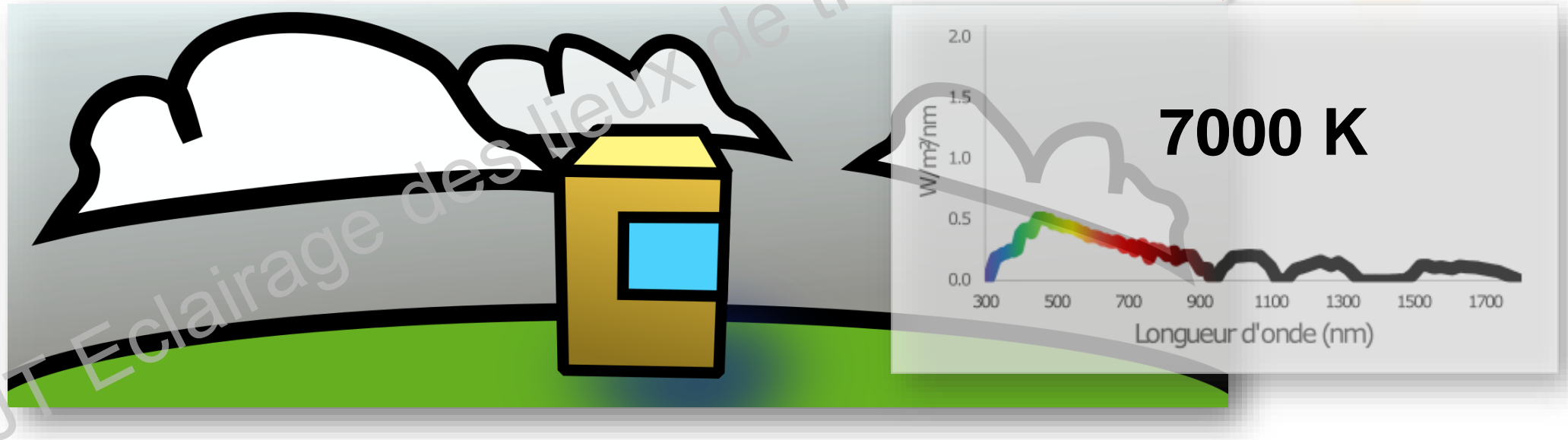
Provenance

Filtrage par l'atmosphère



Provenance

Occultation
+ diffusion
par les
nuages

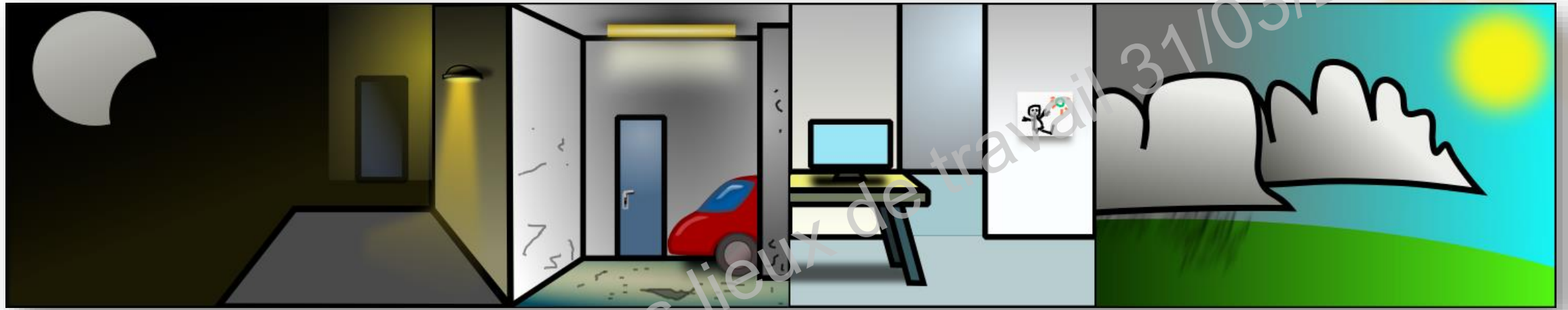


Provenance



Réverbérée par
l'environnement

Variation en éclairage



0,1 lx

1 - 15 lx

5 - 20 lx

150 - 1000 lx

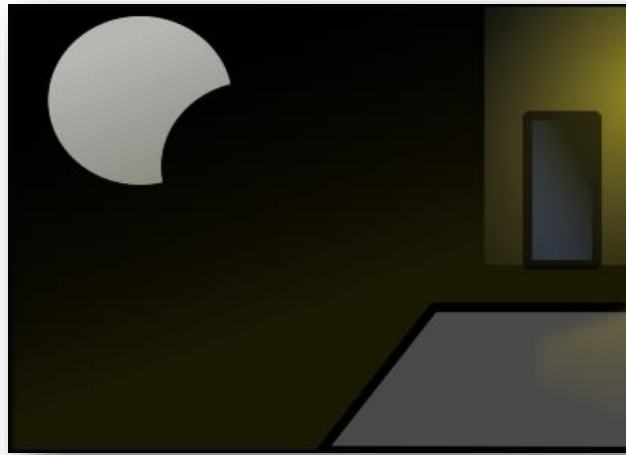
5k - 30k lx

100 000 lx

JT Eclairage des lieux de travail 31/03/26

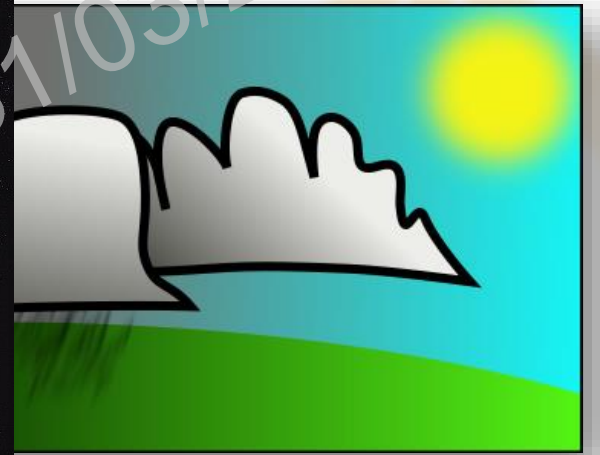


Variation en éclairage



0,1 lx

1 - 15 lx



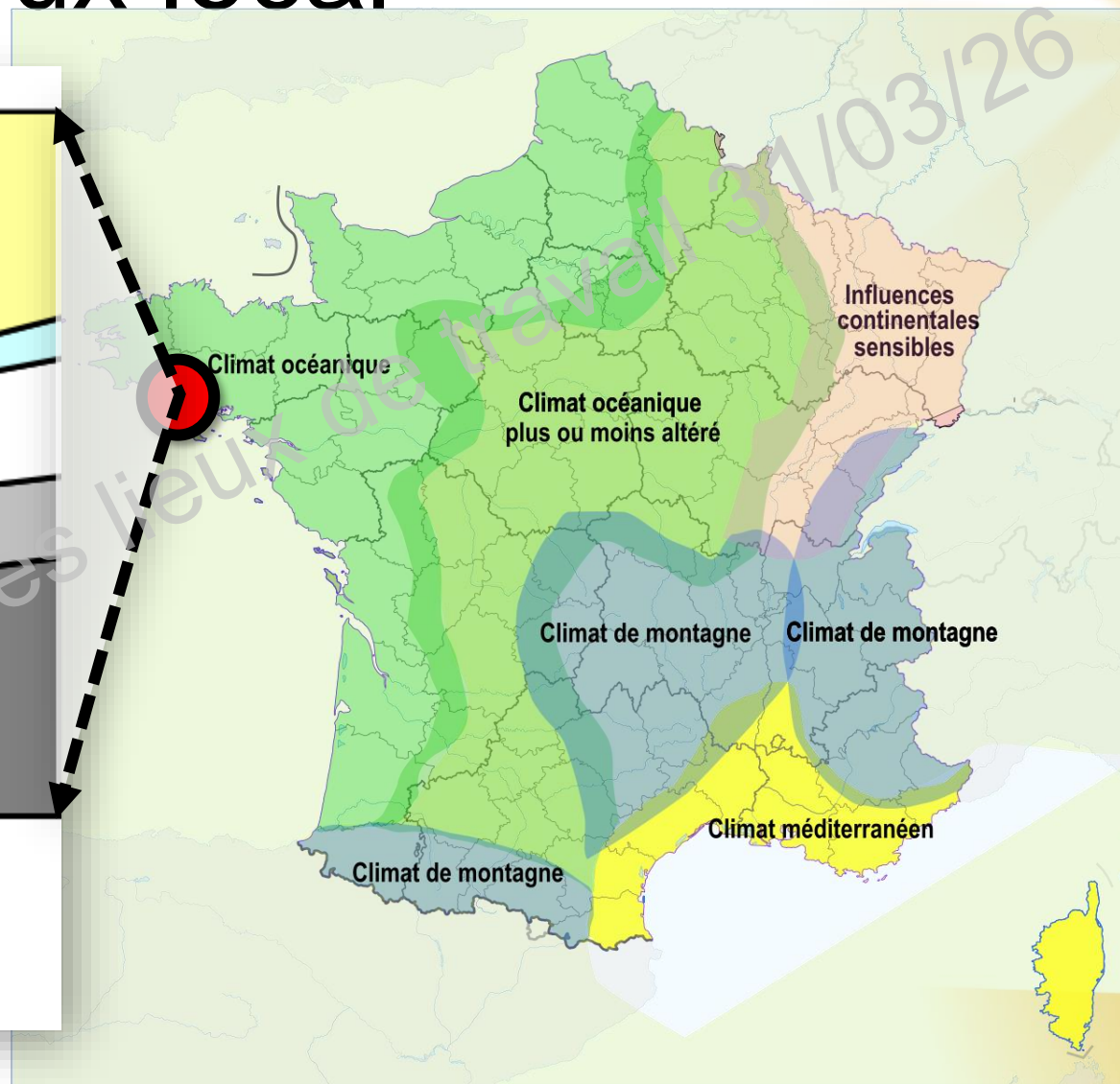
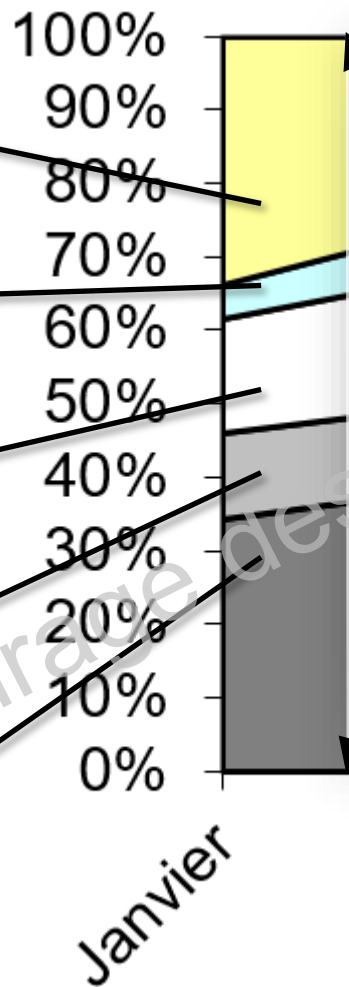
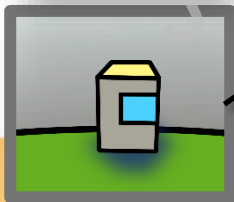
30 000 lx

100 000 lx

1 lux = 1 bougie à 1m

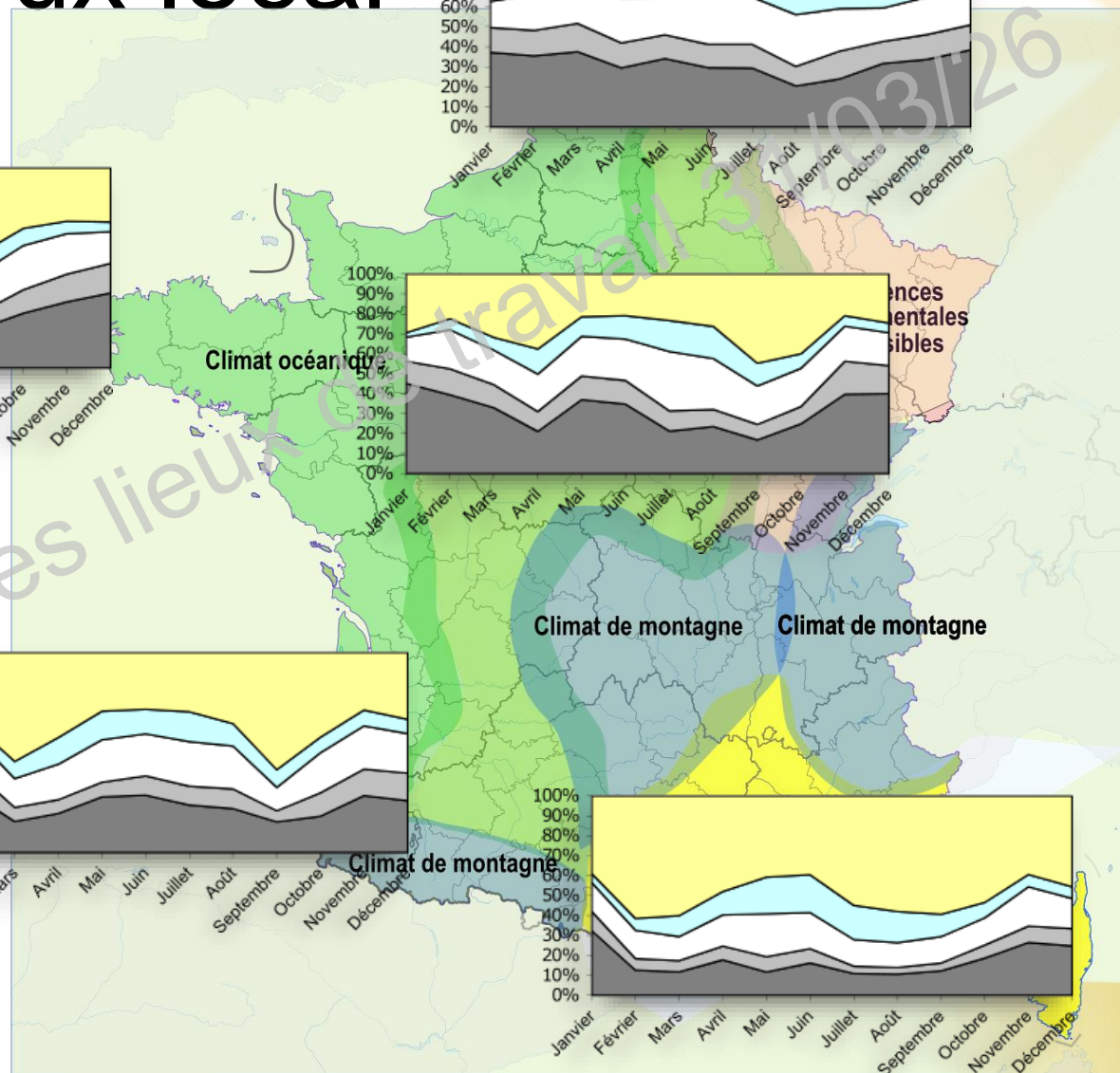
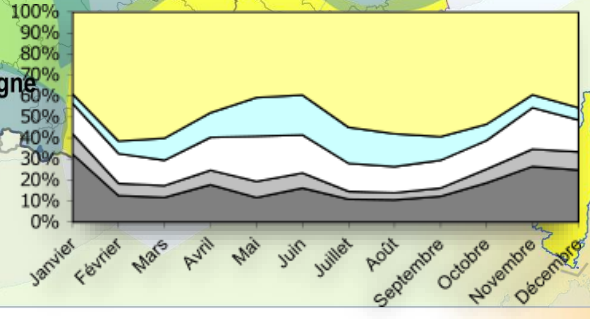
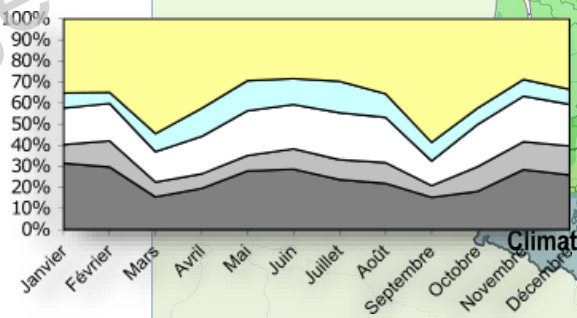
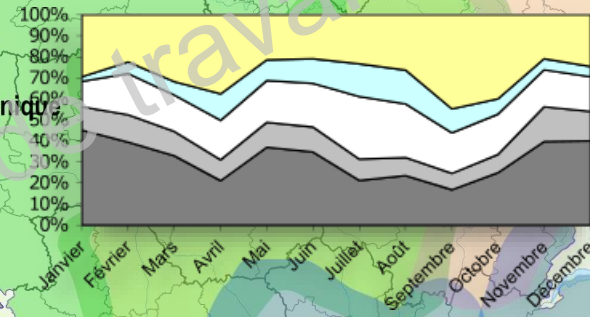
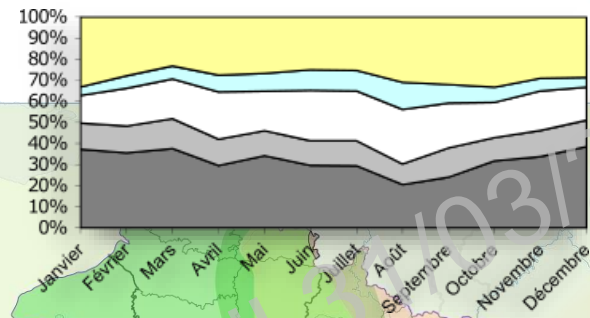
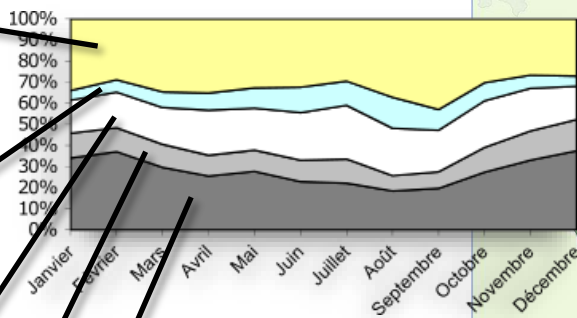
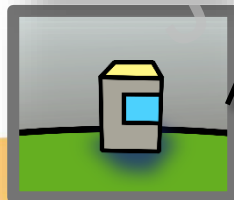


Le climat lumineux local



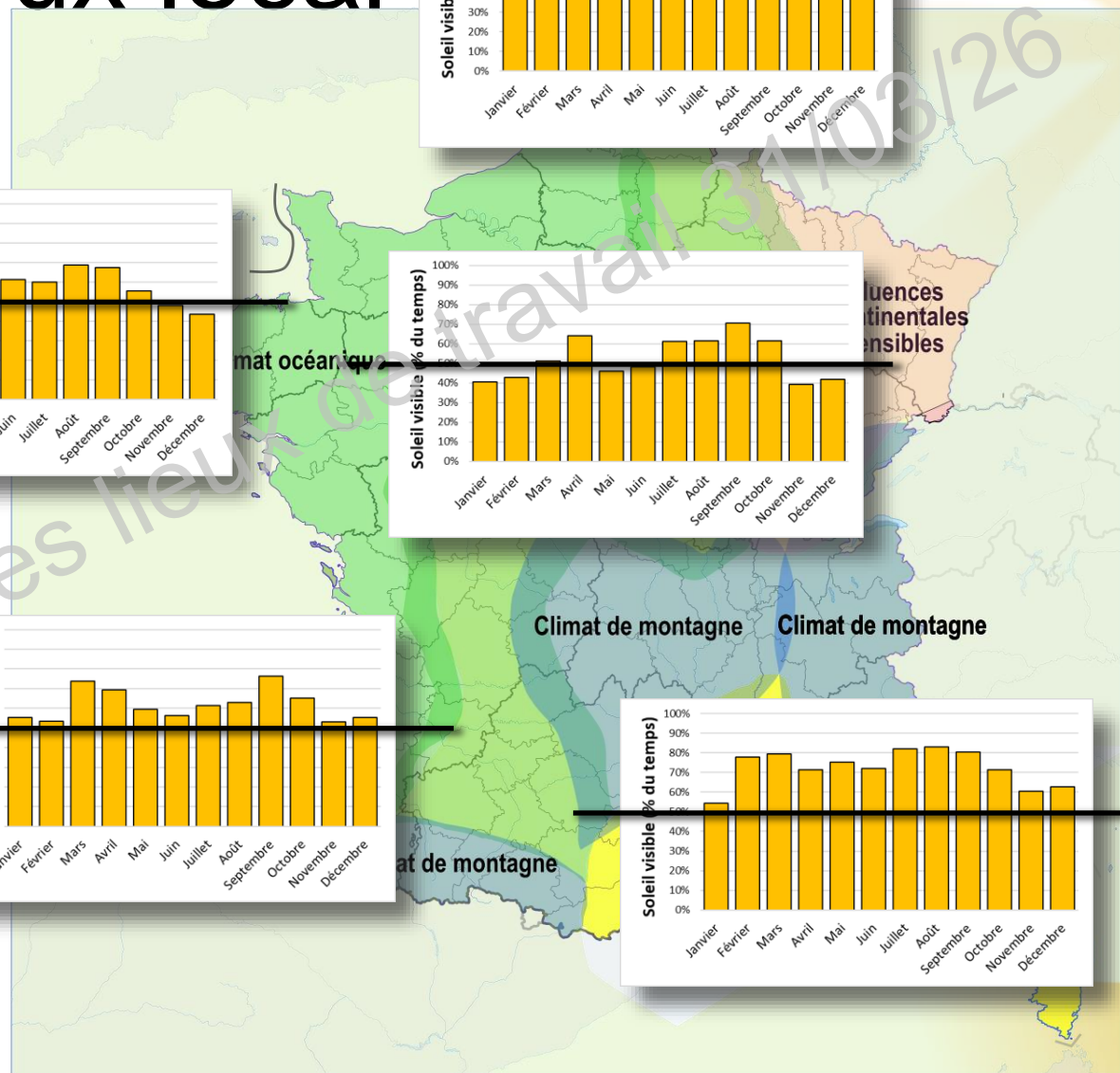
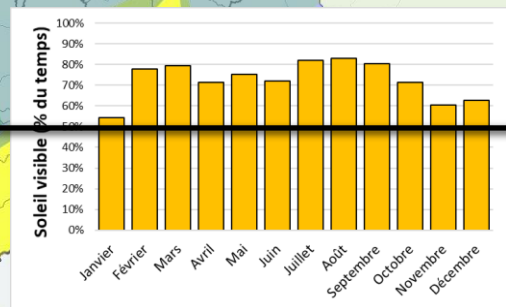
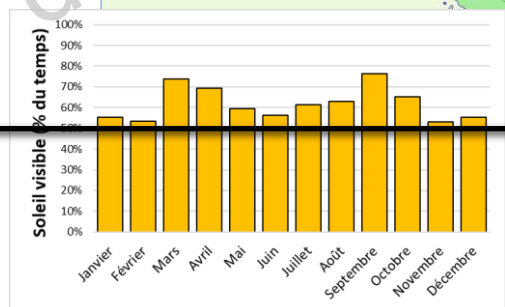
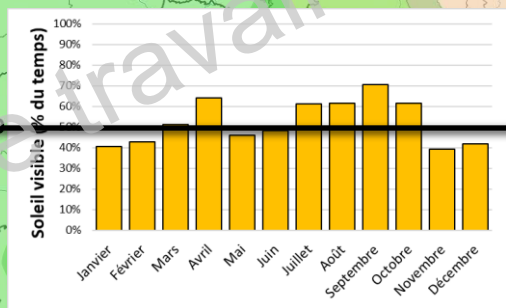
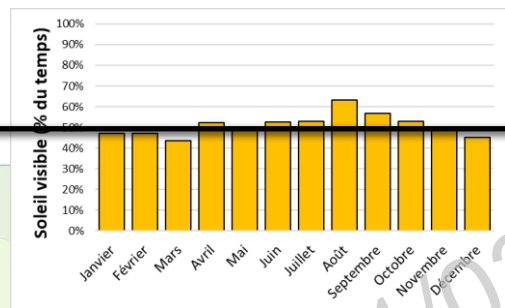
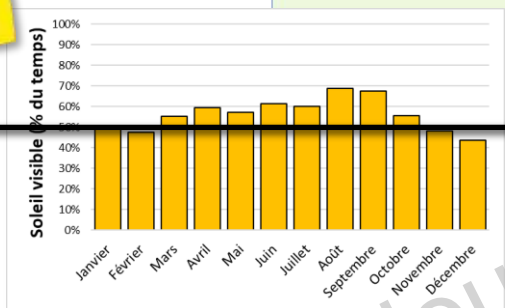
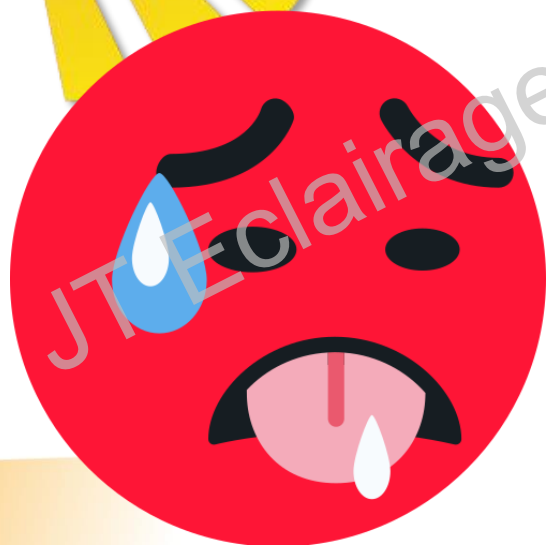
Eclairage des lieux 1/03/26

Le climat lumineux local



Eclairage des lieux de travail 103/26

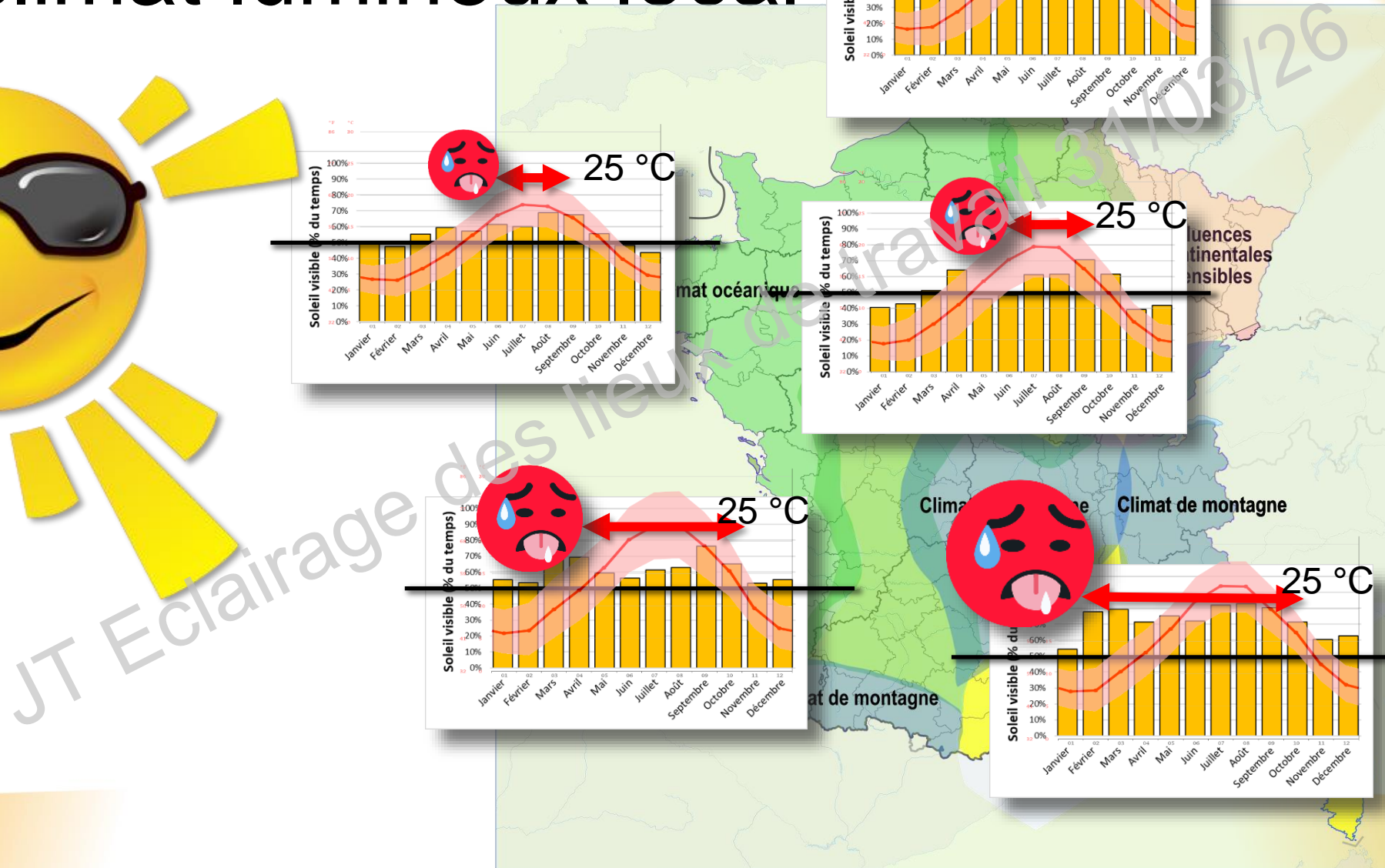
Le climat lumineux local



JT Travail 31/03/26

Eclairage des lieux

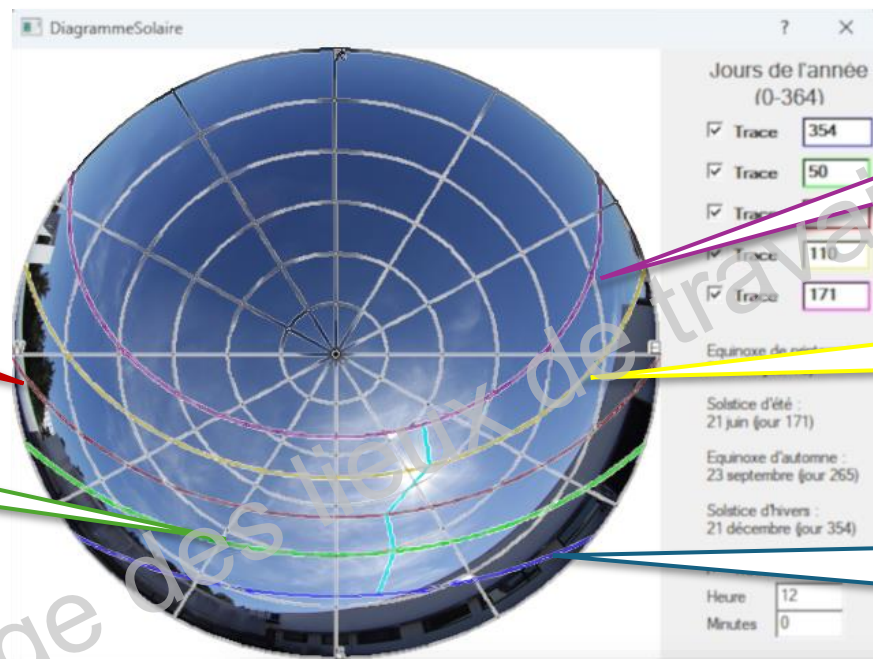
Le climat lumineux local



JT Eclairage des lieux

11/03/26

Climat et protections solaires



21 mars : équinoxe de printemps & automne

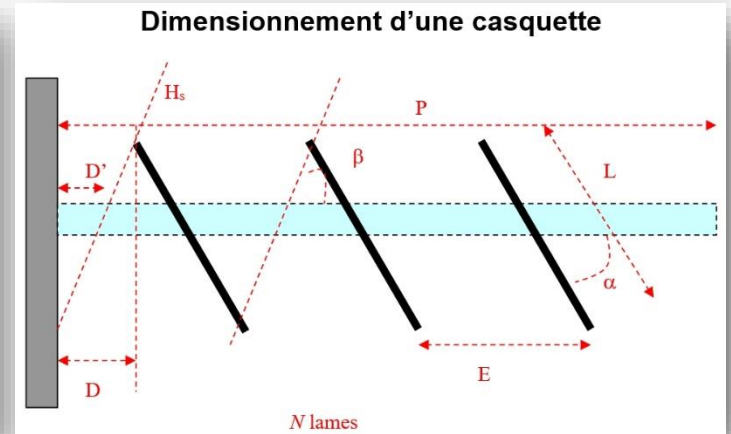
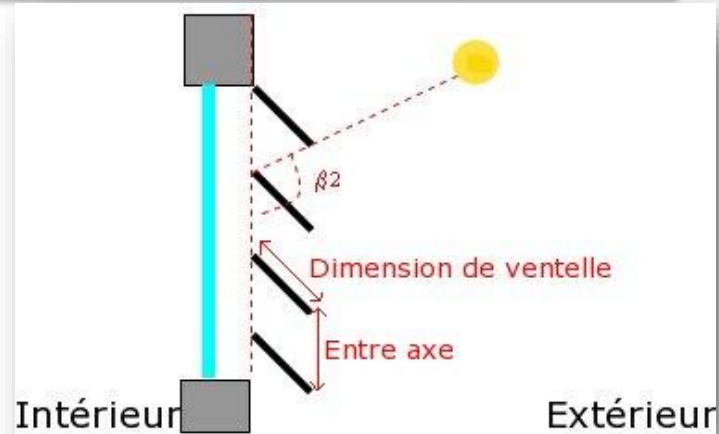
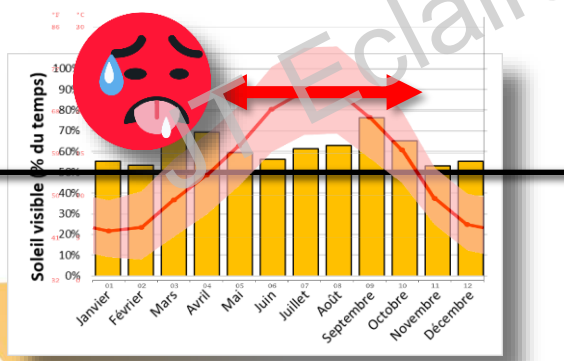
21 juin : solstice d'été

21 avril

21 février

21 décembre : solstice d'hiver

+



En conclusion

- Variation en couleur : de **jaune chaud** à **bleu**
- Eclairage variable $0,1 \rightarrow 100\ 000\ lx$
- Climats lumineux différents suivant les régions
- Disponibilité du soleil, idem
- Effets :
 - Eclairage naturel : conception du bâti en fonction du climat lumineux local
 - Protections solaires : suivant températures et ensoleillement mensuel

