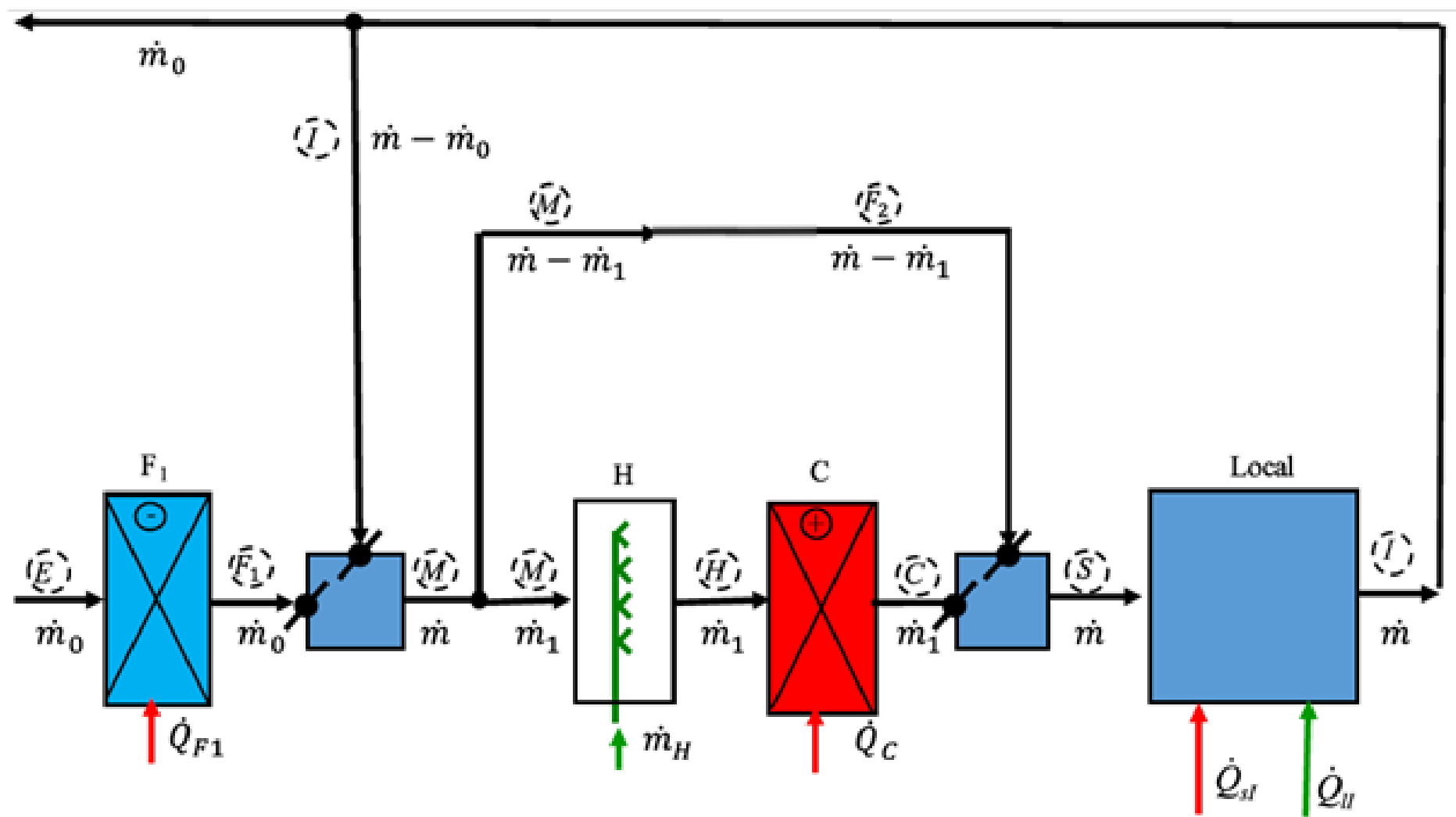
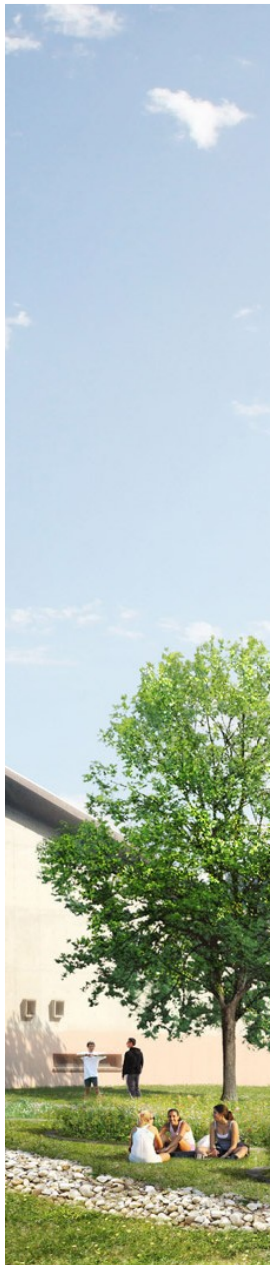
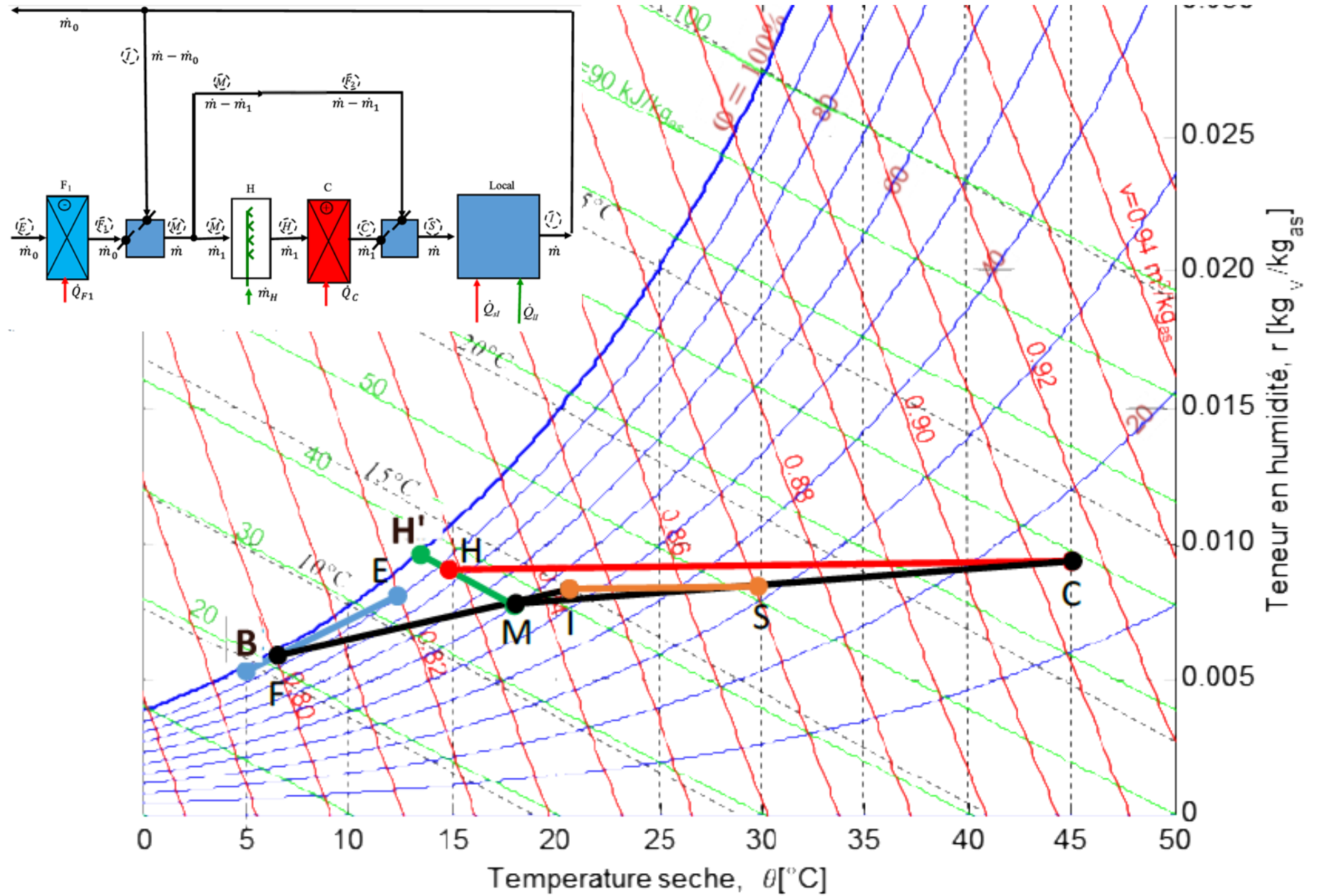
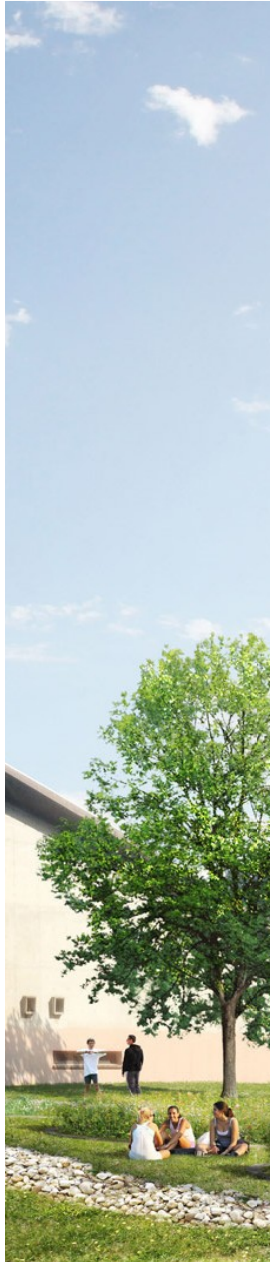
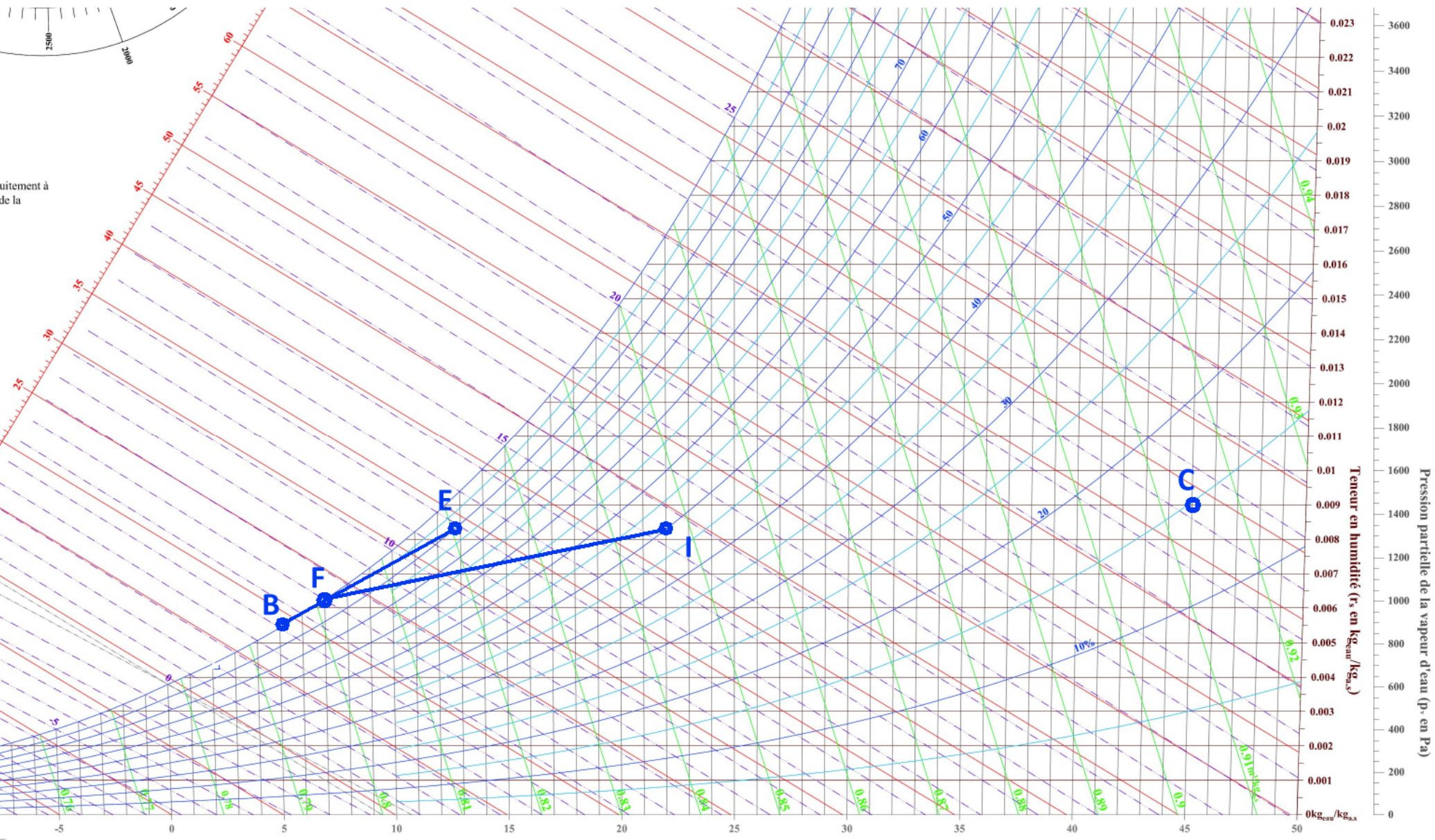


DS du 8 juin 2017







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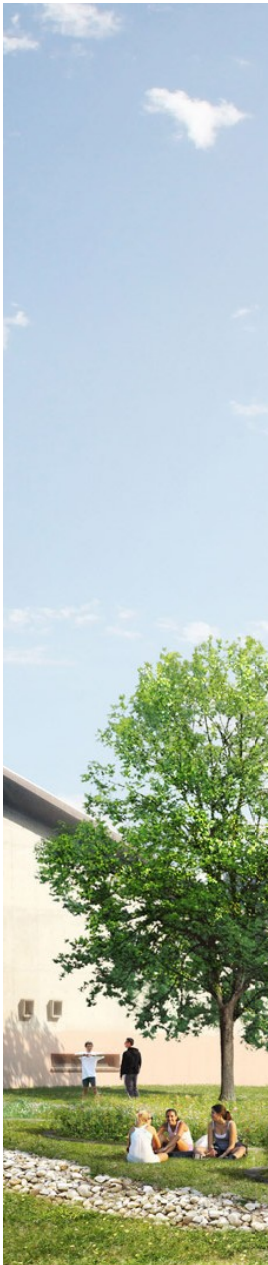
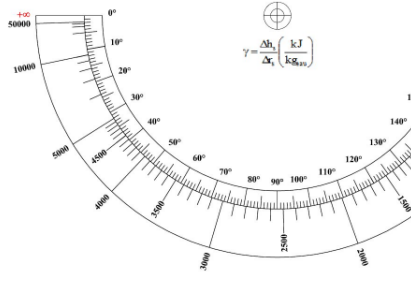


Diagramme de l'air humide

Altitude: 0 m - pression: 101325 Pa



$$\begin{cases} \theta_H = RL\theta_{H'} + (1 - RL)\theta_M \\ r_H = RLr_{H'} + (1 - RL)r_M \end{cases}$$

$\theta_M = 17,8$
 $\theta_H = 14,4$
 $\theta_{H'} = 13,3$

$r_M = 7,65$	g/kgas
$r_{H'} = 9,45$	g/kgas
$r_H = 9$	g/kgas

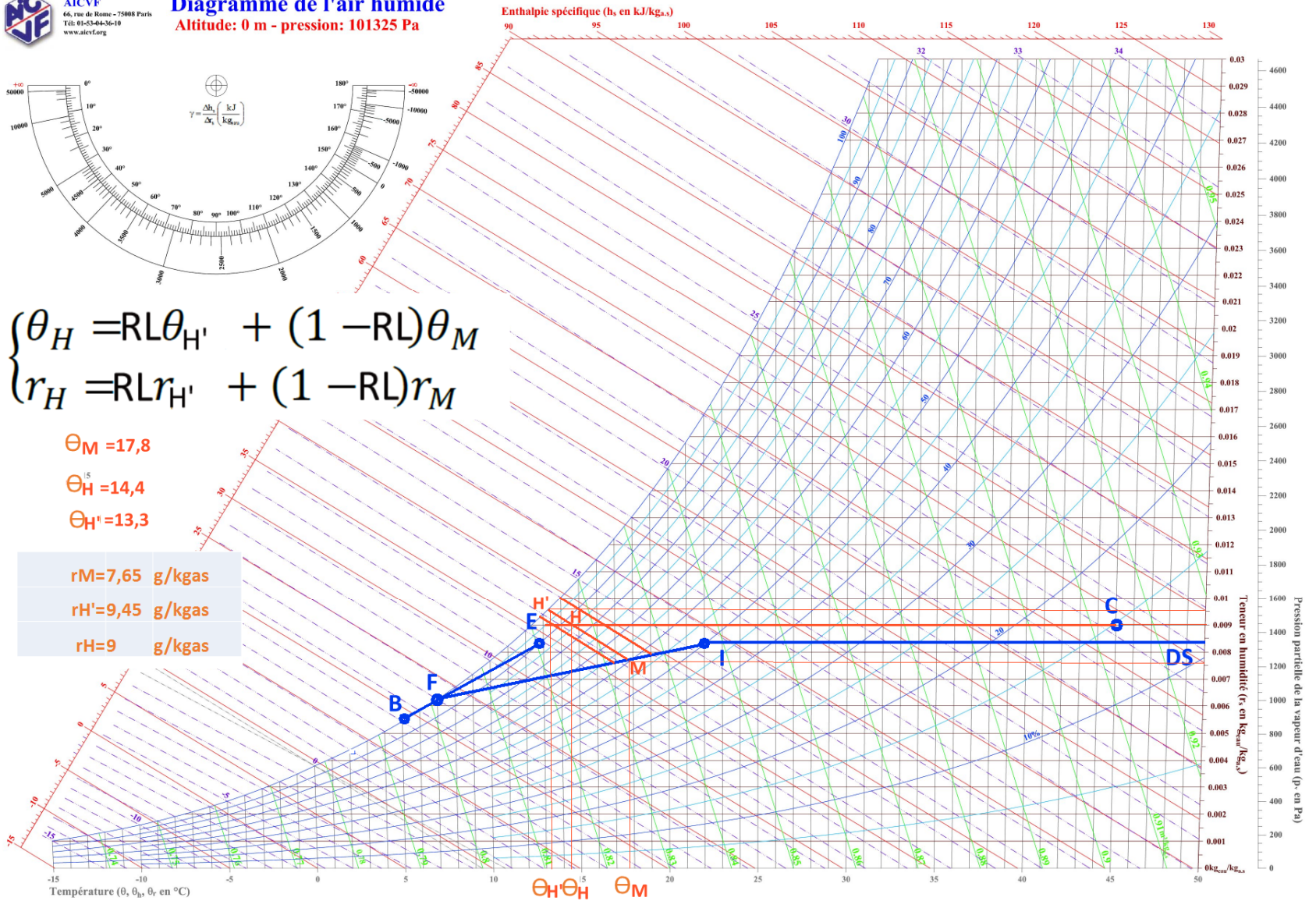
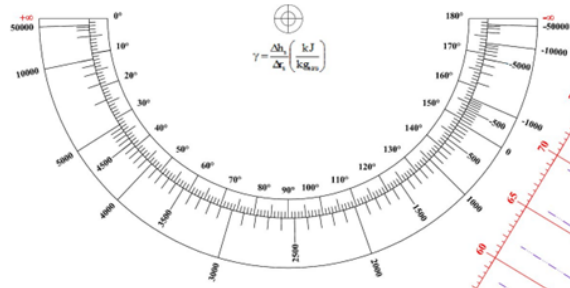




Diagramme de l'air humide

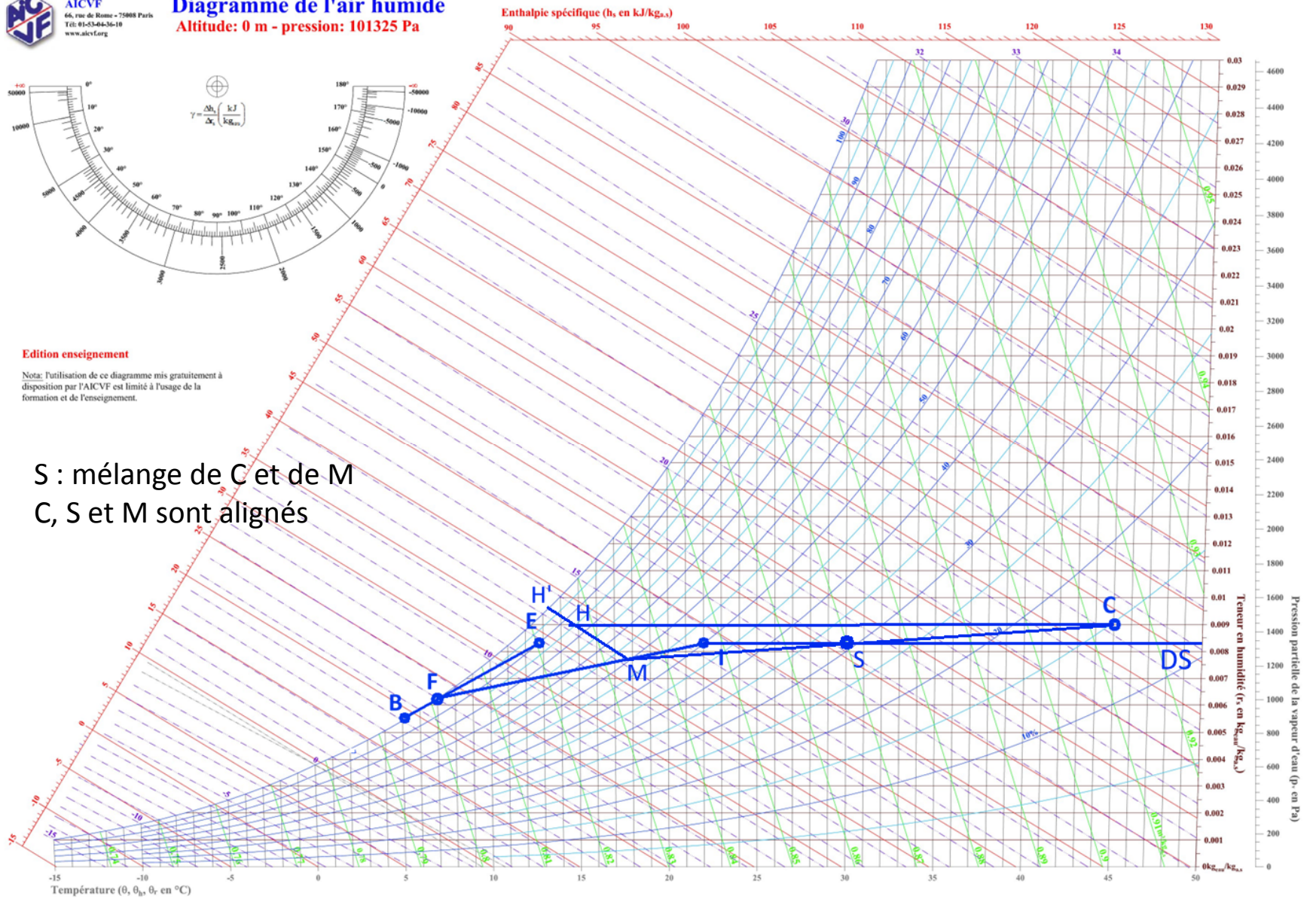
Altitude: 0 m - pression: 101325 Pa



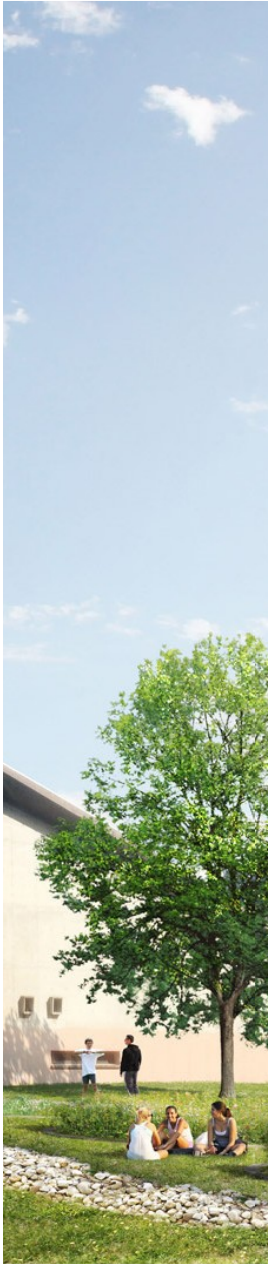
Edition enseignement

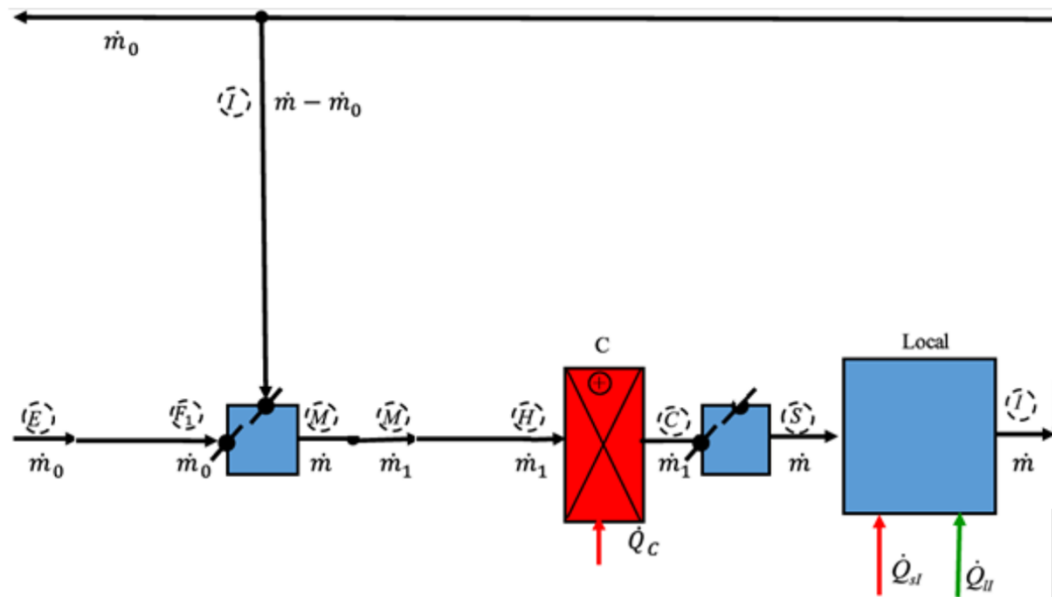
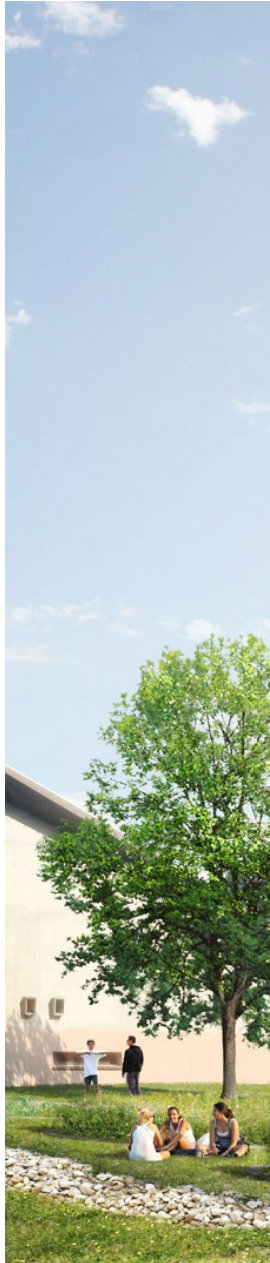
Nota: l'utilisation de ce diagramme mis gratuitement à disposition par l'AICVF est limitée à l'usage de la formation et de l'enseignement.

S : mélange de C et de M
C, S et M sont alignés



Résultats





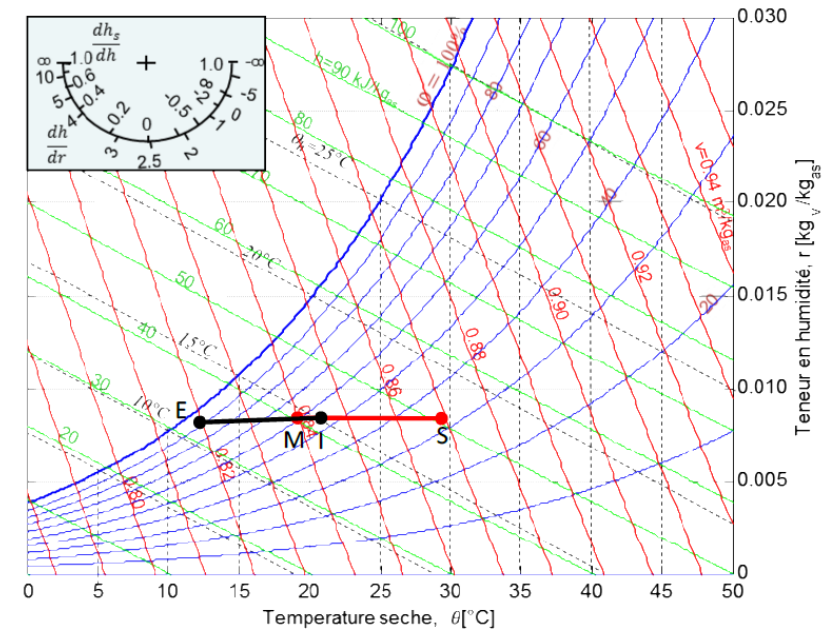
Etape 1 : bilan sensible I

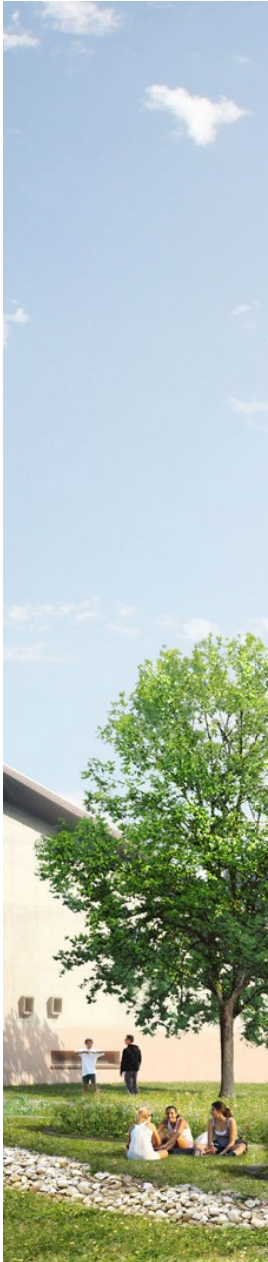
$$\dot{m}c\theta_S + \dot{Q}_{sl} = \dot{m}c\theta_I \rightarrow \theta_S = \theta_I - \frac{\dot{Q}_{sl}}{\dot{m}c} = 29.5^\circ\text{C}$$

Etape 2 : bilan latent I & M

$$\begin{cases} \dot{m}lr_S + \dot{Q}_{ll} = \dot{m}lr_I \\ \dot{m}_0lr_I + (\dot{m} - \dot{m}_0)lr_I = \dot{m}lr_S \end{cases}$$

$$r_S = r_E = 8.22 \text{ g/kg}; r_M = r_S = r_I = 8.22 \text{ g/kg}$$





Etape 4 : bilan sensible M

$$\dot{m}\theta_M = \dot{m}_0\theta_E + (\dot{m} - \dot{m}_0)\theta_I \rightarrow$$

Résultat : $\theta_M = 19.4\text{ }^{\circ}\text{C}$

Etape 5 : bilan sensible C

$$\dot{Q}_C = \dot{m}c(\theta_S - \theta_M) = 107.9\text{ kW}$$