

Tutoriel: construction d'un objet 3D avec SketchUp

 $\mbox{Ref}: \mbox{TV021213_TU_CT} \qquad \qquad \mbox{R\'edactrice}: \mbox{Cathy Tritschler}$

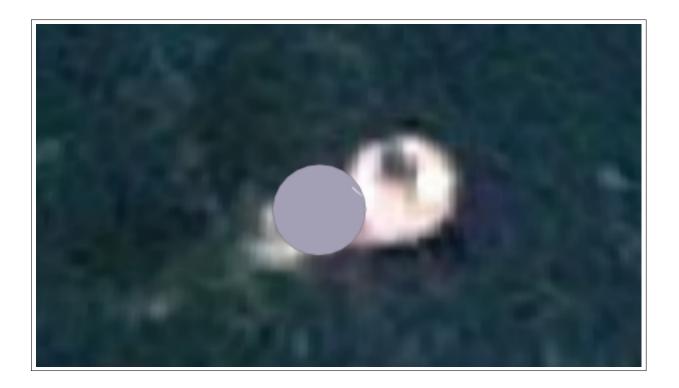


La tourelle de la Roche Mengam dans le goulet de Brest (France)



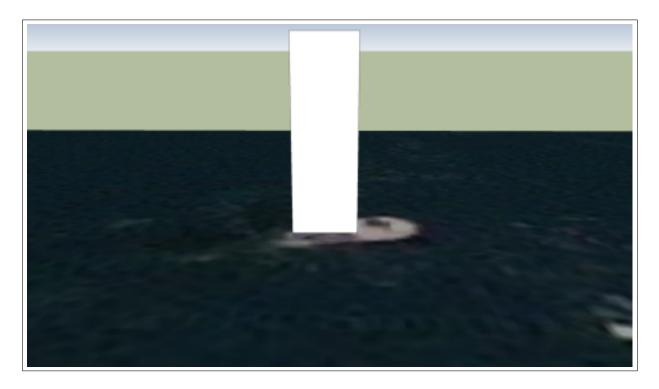


Etape 1 – Récupération de la géolocalisation dans GoogleEarth



Etape 2 – Tracé de l'emplacement de la base du modèle en s'aidant des dimensions que l'on aura pu trouver concernant le modèle



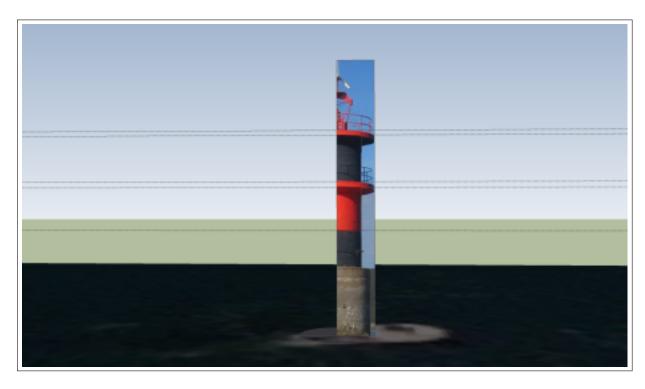


Etape 3 – Tracé d'un rectangle en élévation

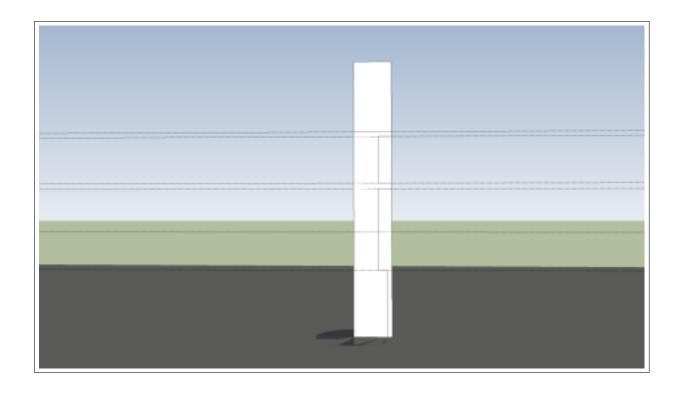


Etape 4 – Placage d'une photo qui servira à découper le profil du modèle



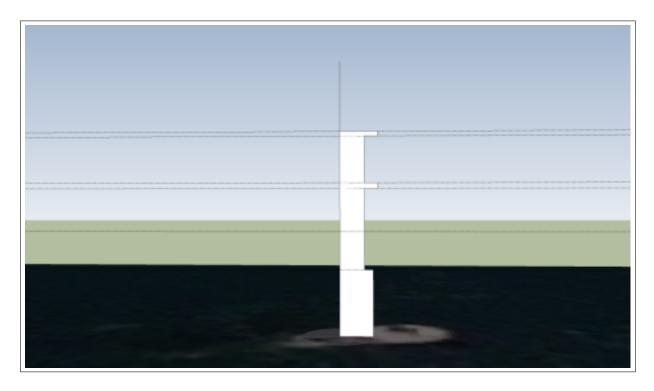


Etape 5 – $D\'{e}coupage~par~le~centre$

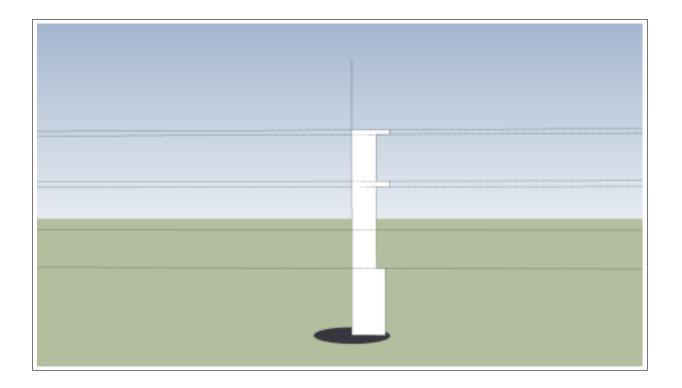


 $Etape\ 6-{\it Trac\'e}\ de\ la\ demi-coupe$



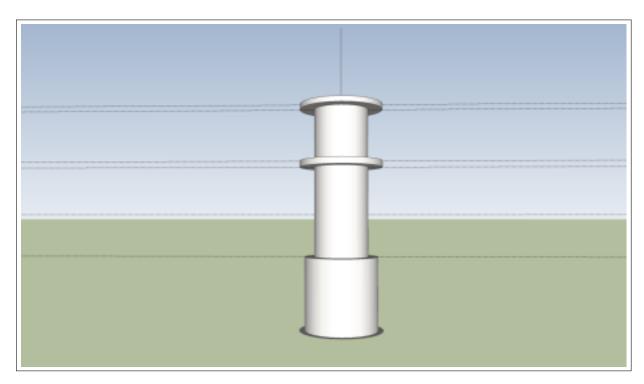


Etape 7 – Découpe du profil

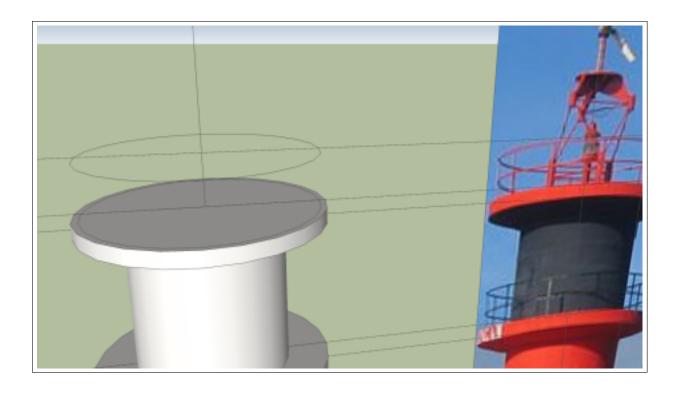


Etape 8 – Extrusion en suivant le cercle tracé à la base du modèle



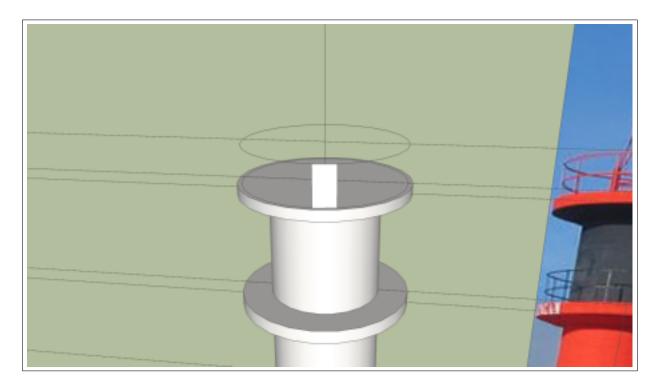


Etape 9 – Résultat après extrusion

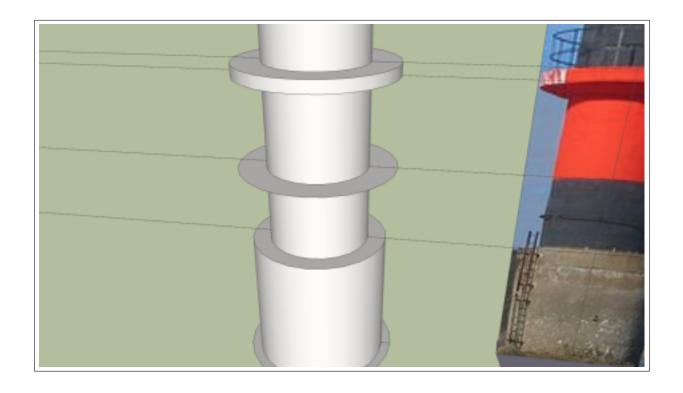


Etape 10-Trac'e d'un cercle délimitant le sommet et la base de la rambarde



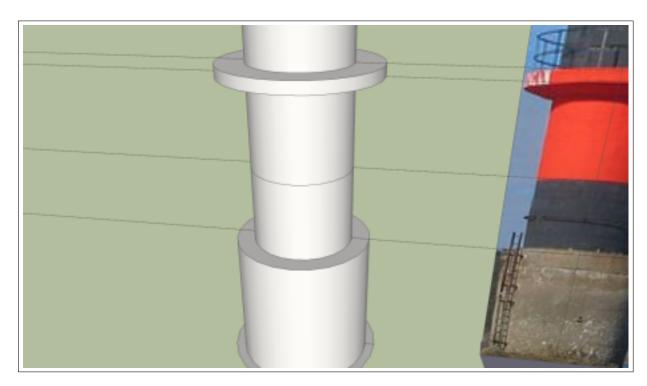


 ${\bf Etape}~11-Remplissage~de~la~rambarde~par~une~forme~plane$



Etape 12 – Délimitation des zones colorées (tracé d'un cercle et intersection)



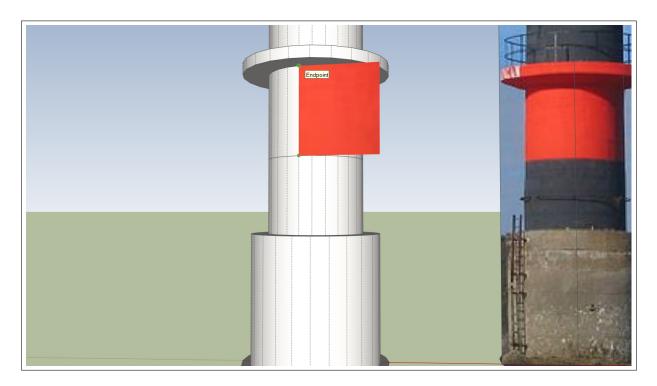


Etape 13 – Résultat après intersection et suppression du cercle provisoire créé

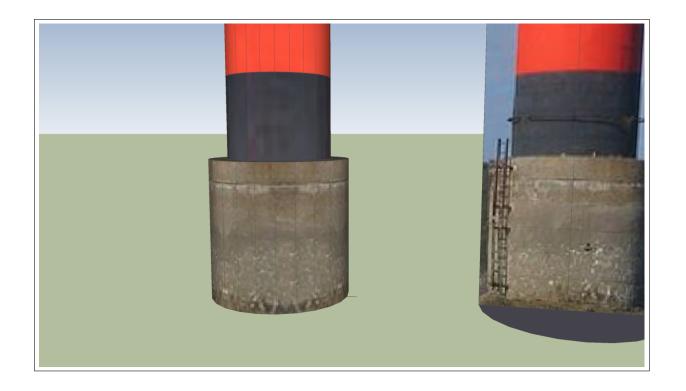


Etape 14 – Création d'un échantillon de texture via logiciel de retouche photo (ex photoshop, Gimp)



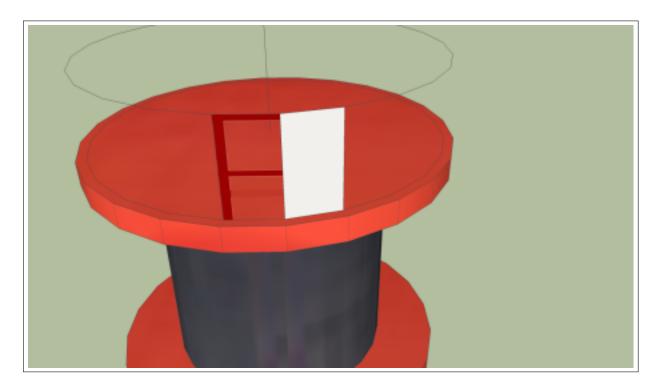


Etape 15 – Application de la texture créée

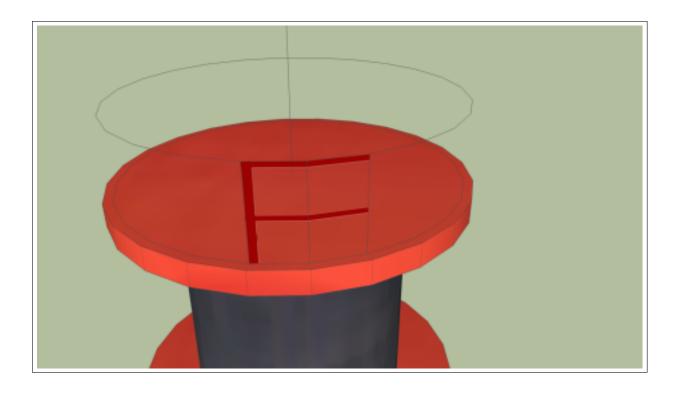


Etape 16 – Textures positionnées



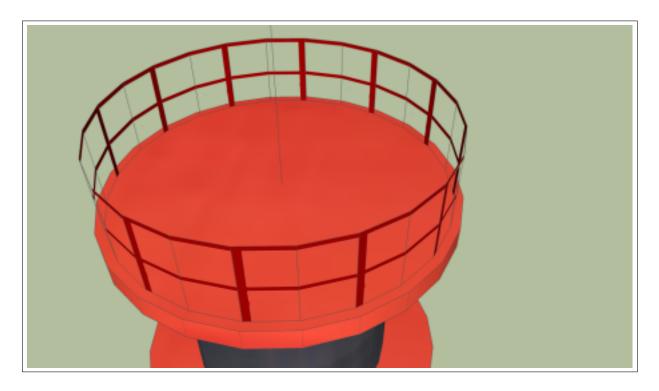


Etape 17 – Application de texture png transparente pour la rambarde

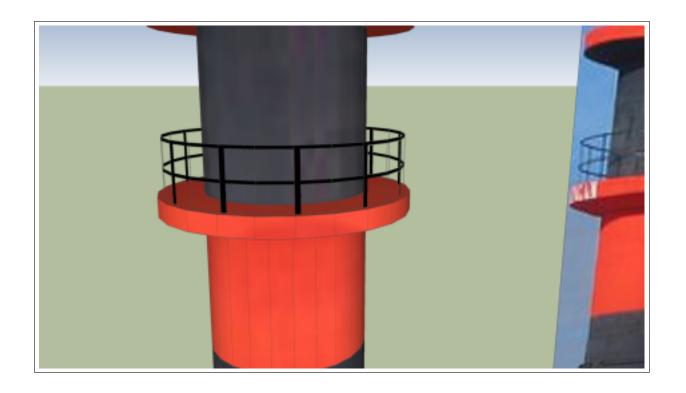


Etape 18 – Création du composant "élément de rambarde"





Etape 19 – $Duplication\ du\ composant$

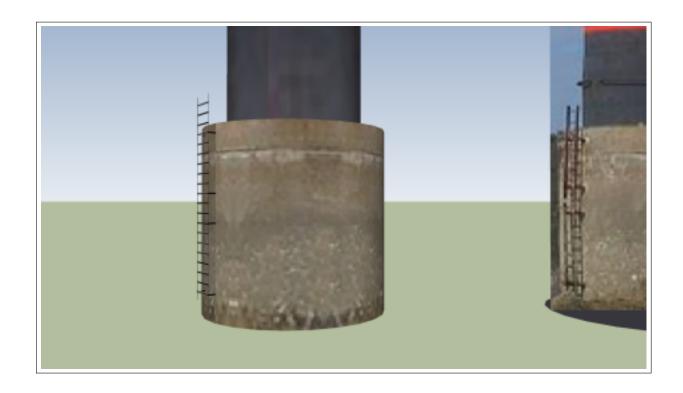


Etape 20 – $M\hat{e}me$ technique pour la rambarde noire



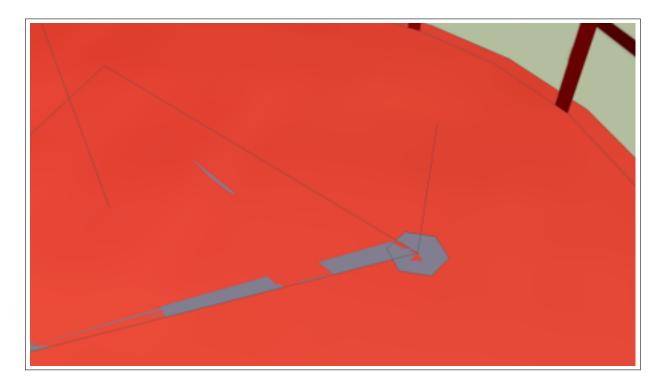


 $Etape\ 21-\textit{Cr\'eation de l'\'echelle (texture\ transparente\ plaqu\'ee\ sur\ une\ surface\ plane)}$

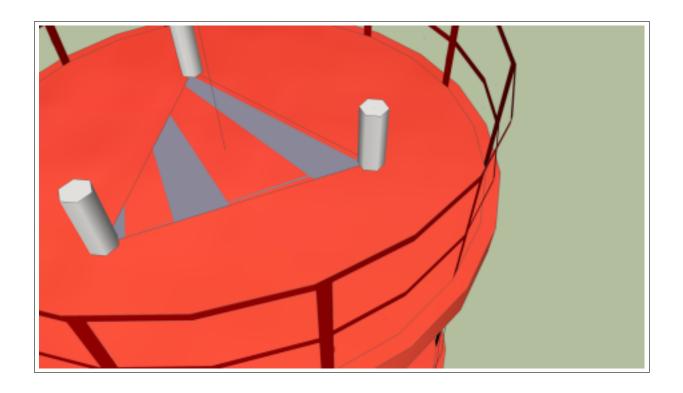


Etape 22 -



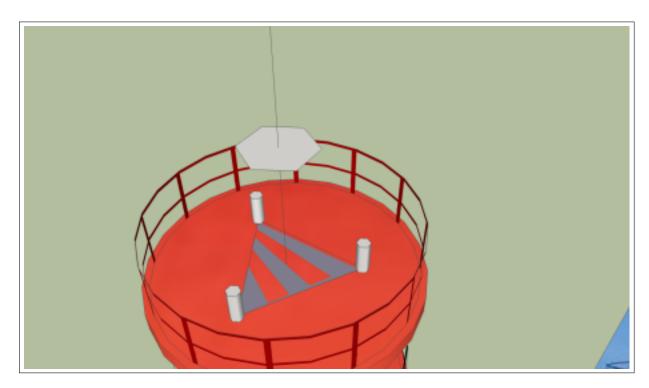


Etape 23 – Tracé de la structure au sommet de la tourelle

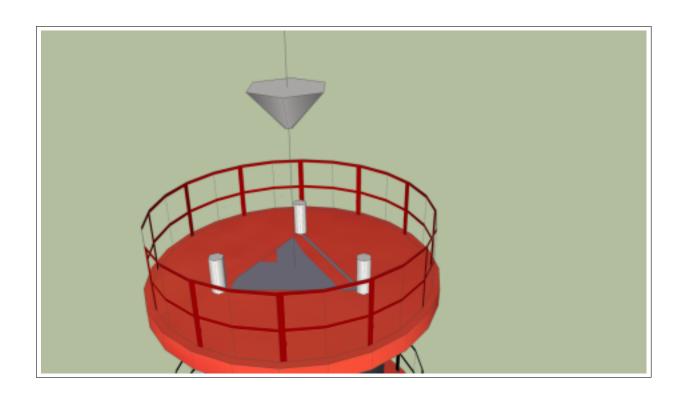


Etape 24 –



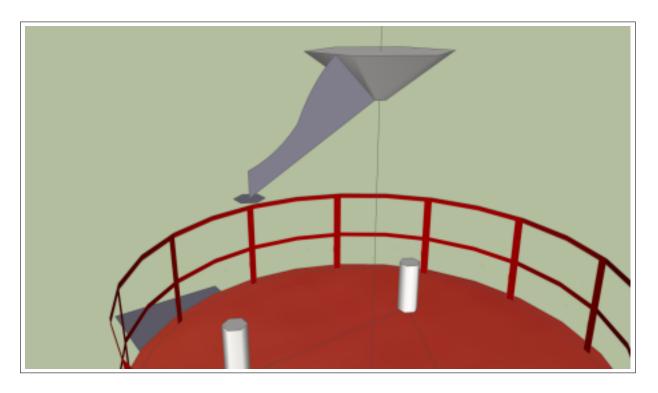


Etape 25 –

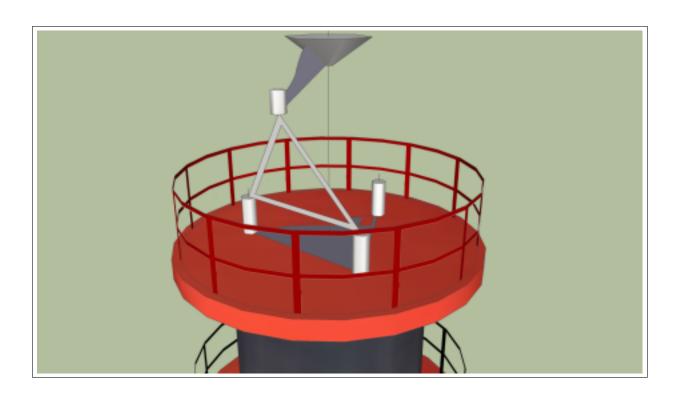


Etape 26 –



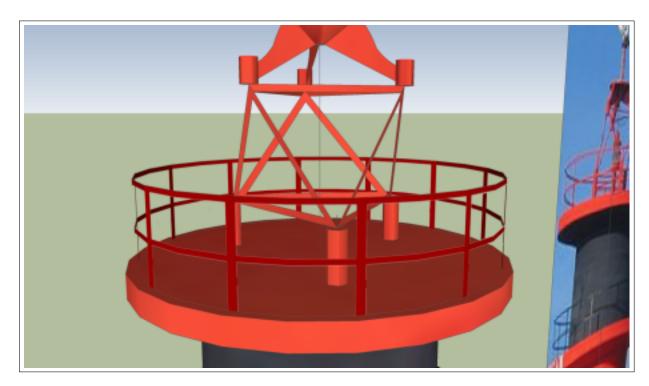


Etape 27 –

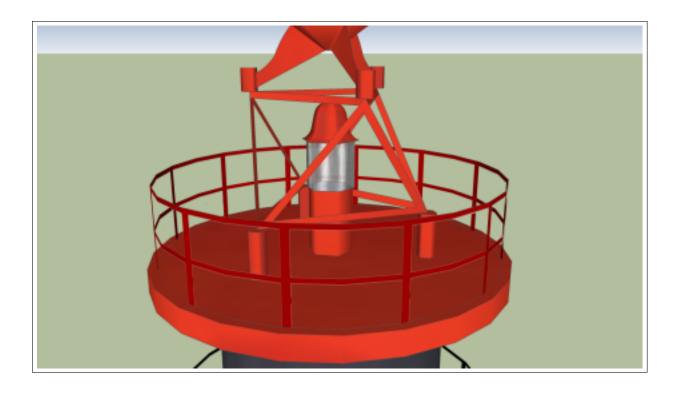


Etape 28 –



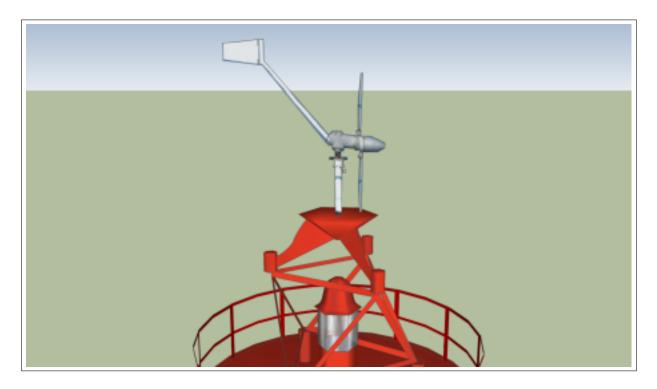


Etape 29 –



Etape 30 – $R\'{e}alisation\ lanterne$





Etape $31 - R\'{e}alisation \'{e}olienne$



Etape $32 - R\acute{e}sultat\ final$