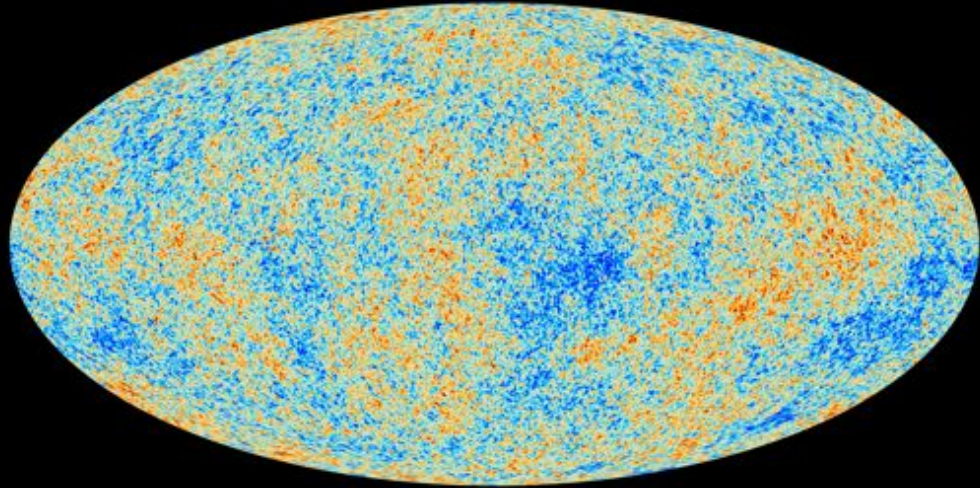
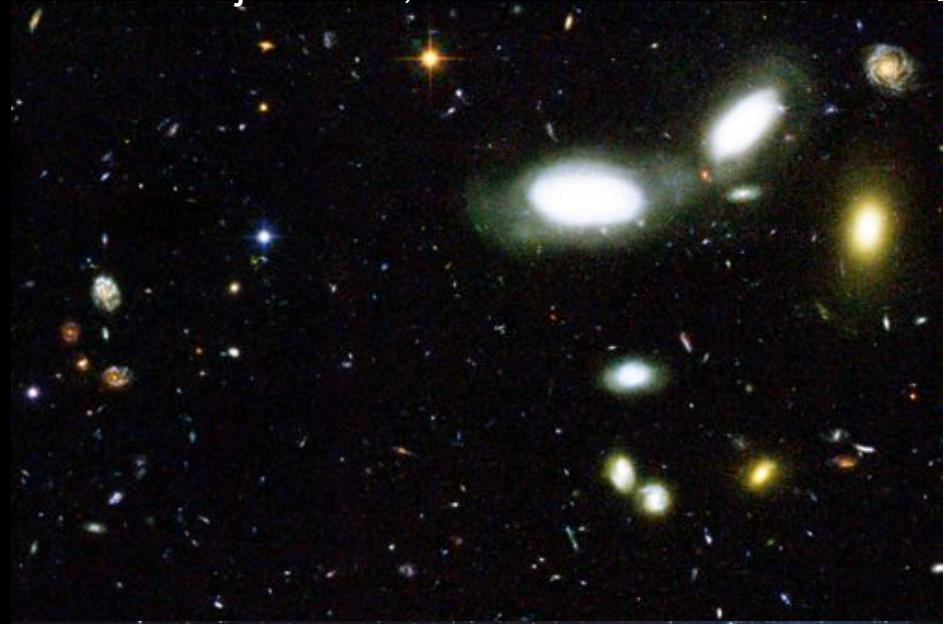


# vie des galaxies : la formation d'étoiles

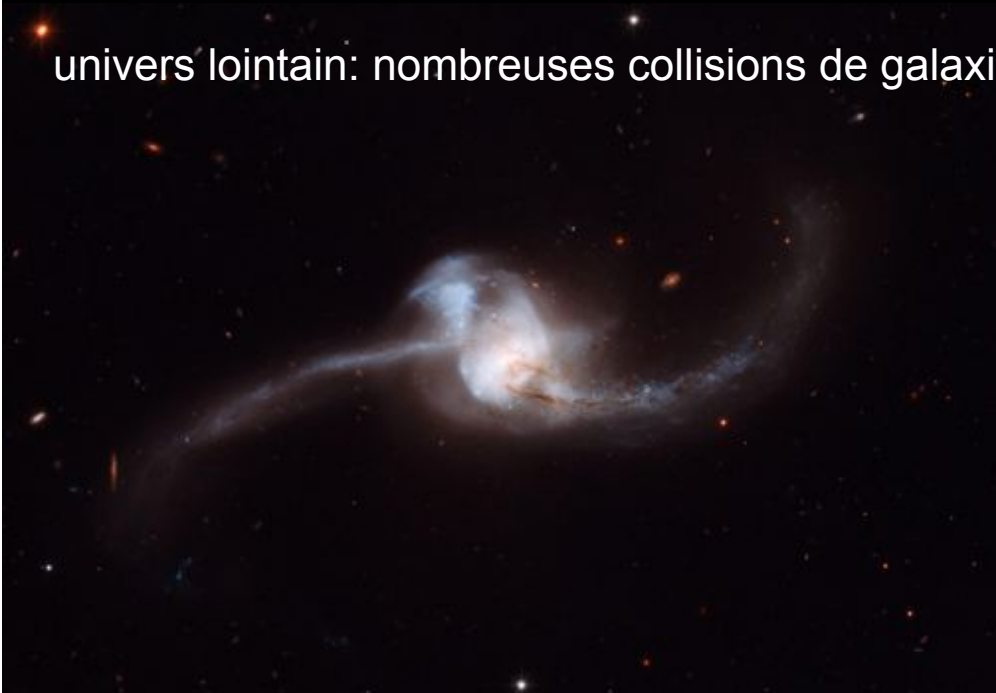
il y a 13,8 milliards d'années, contraste = 0,00001



aujourd'hui, contraste = 1 000 000



univers lointain: nombreuses collisions de galaxies



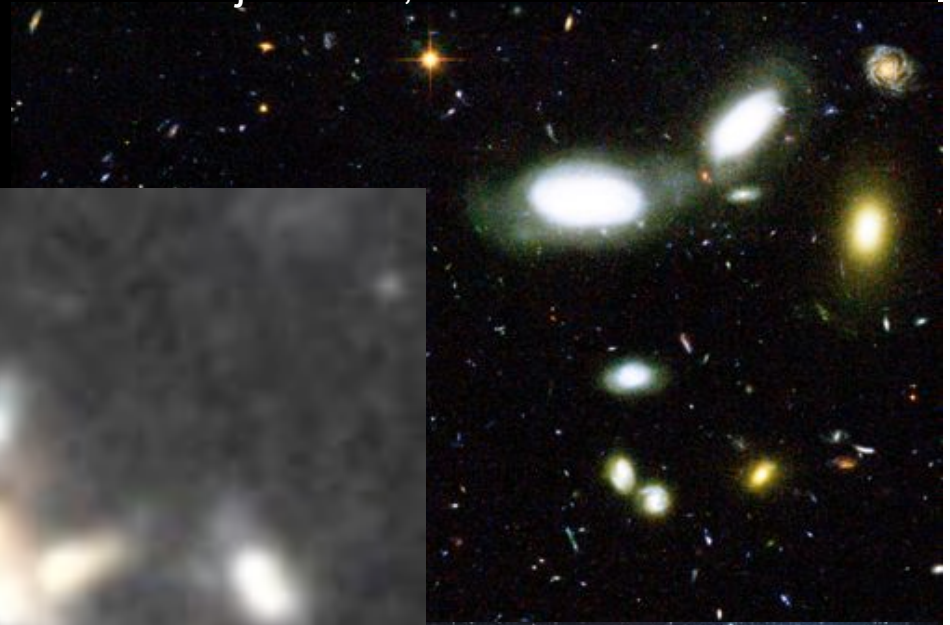
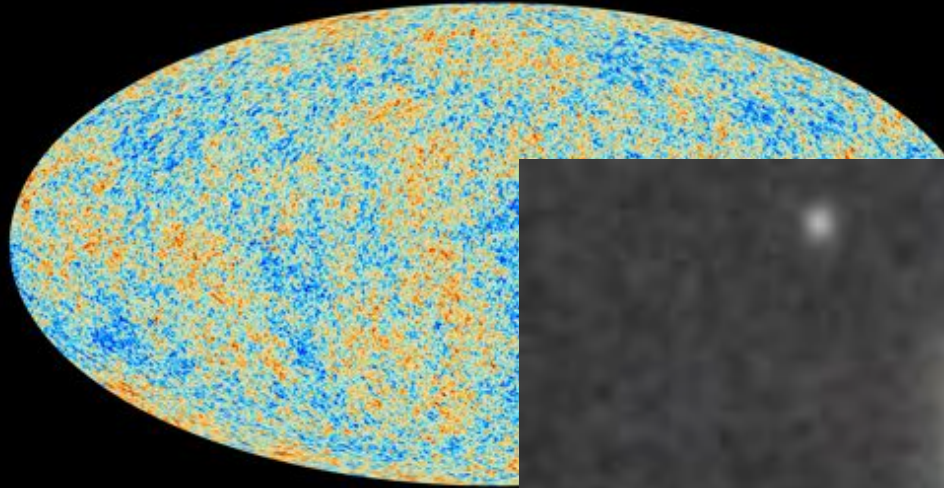
Andromède



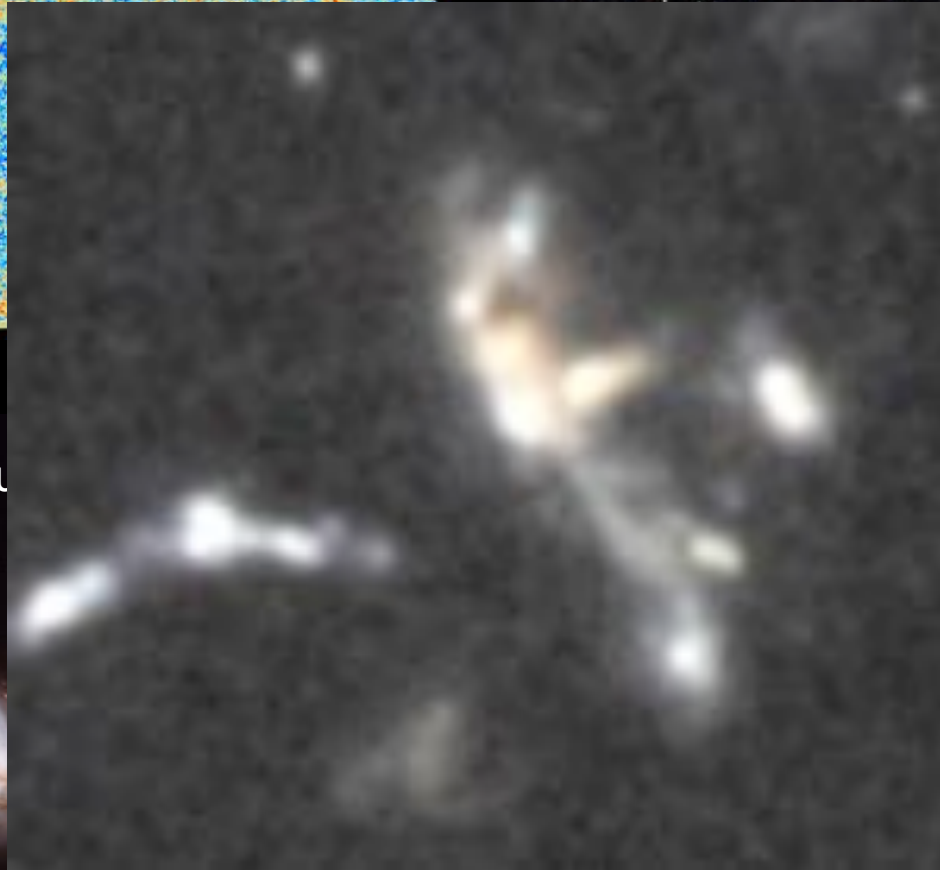
# vie des galaxies : la formation d'étoiles

il y a 13,8 milliards d'années, contraste = 0,00001

aujourd'hui, contraste = 1 000 000

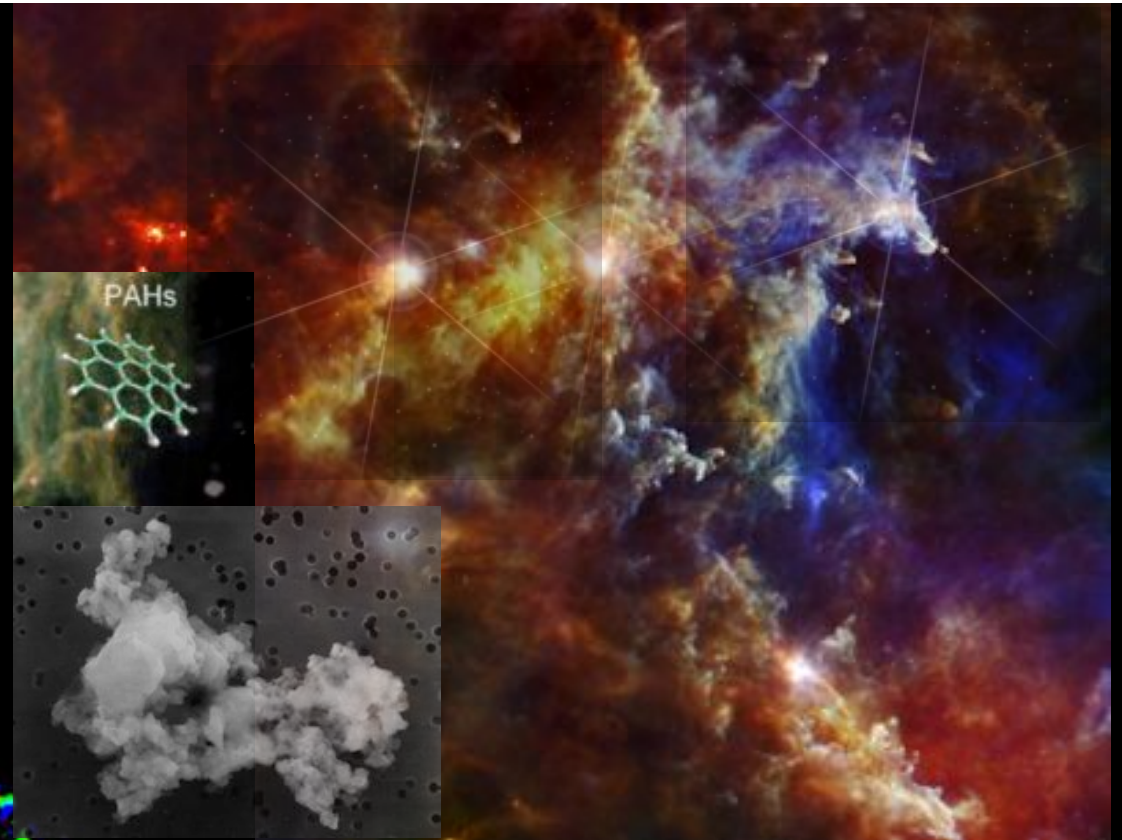


univers lointain: nombreux

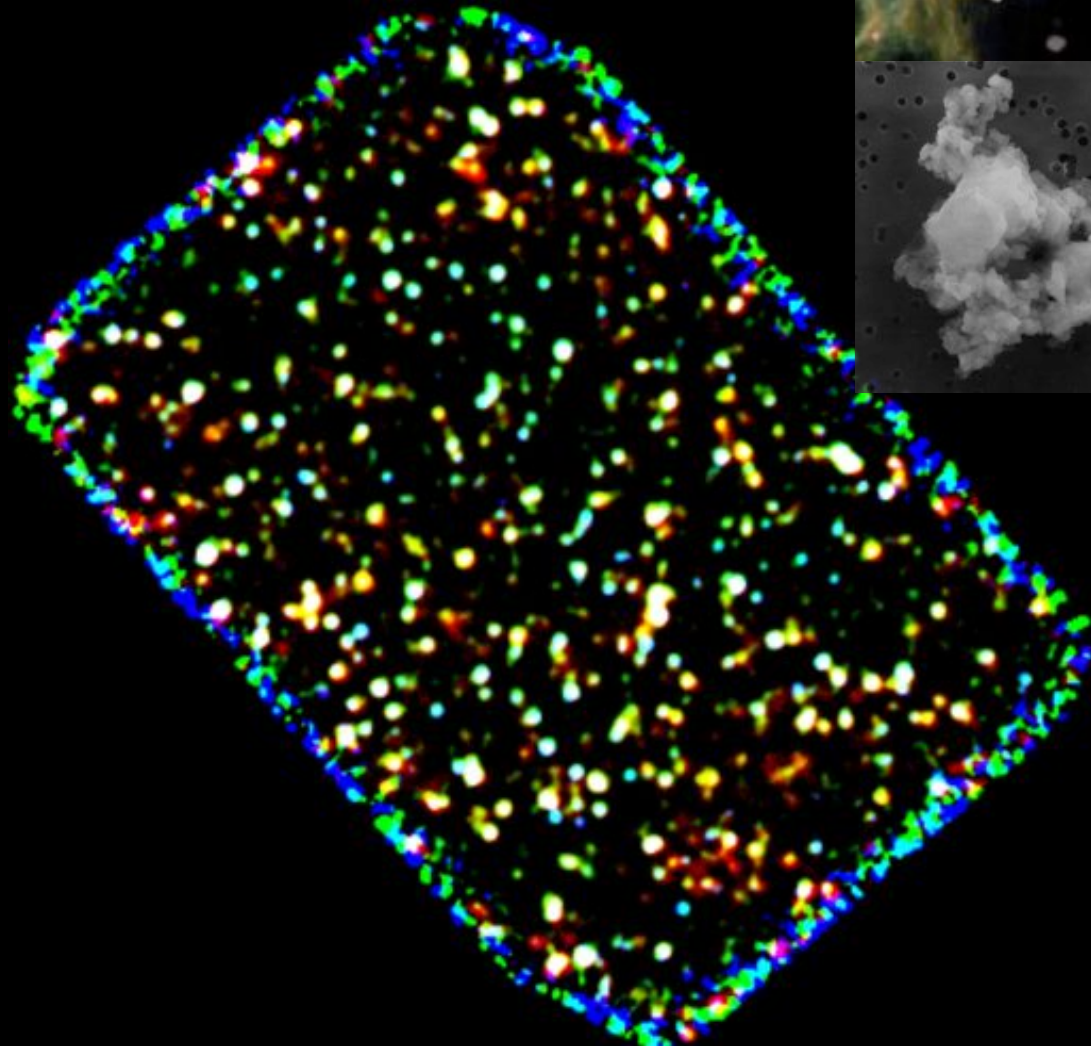
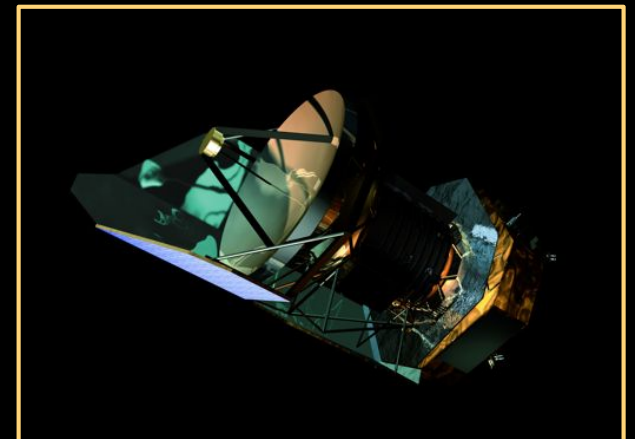


Andromède

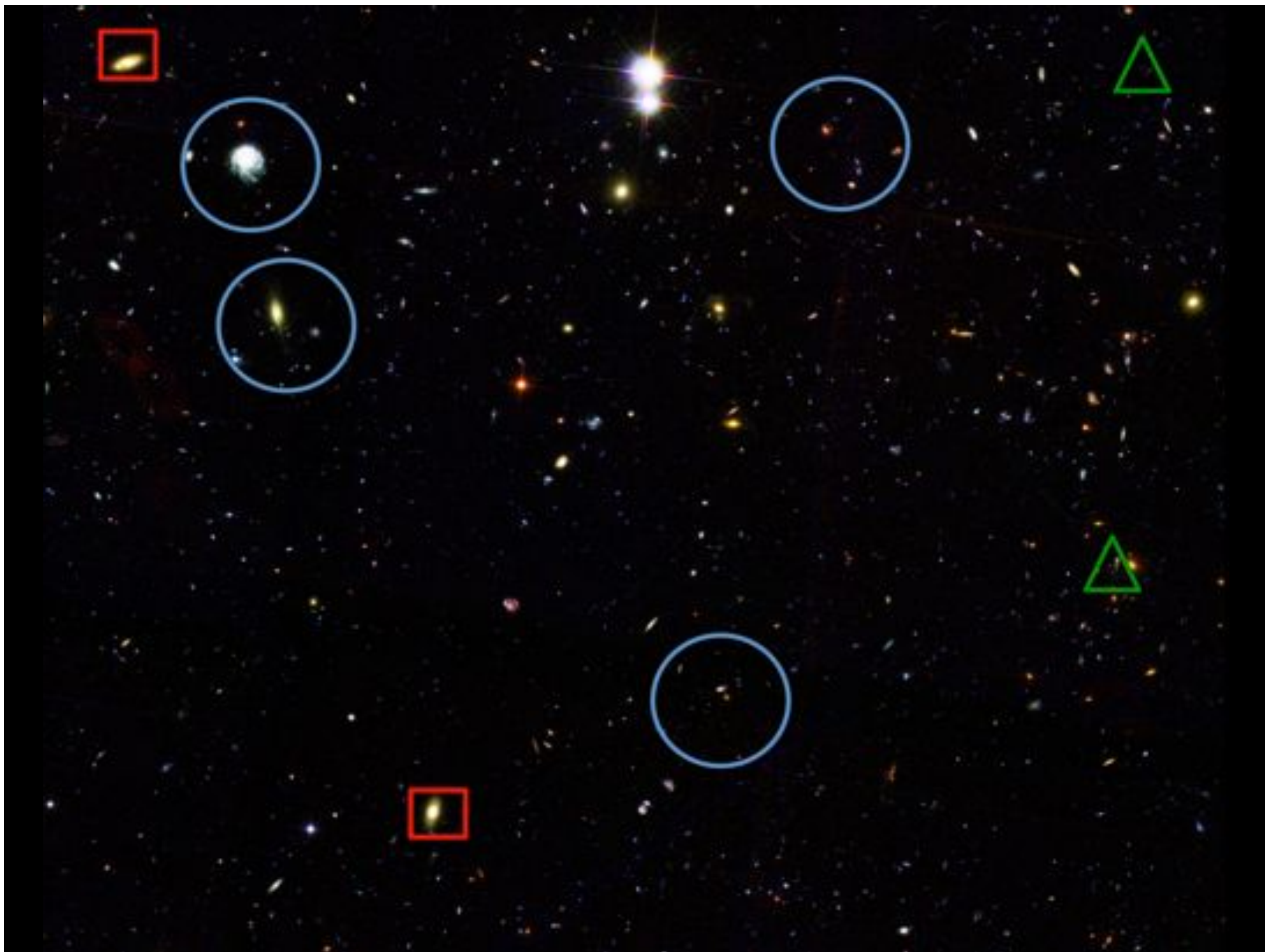
GOODS-Herschel  
l'histoire de la formation  
d'étoiles de 2000 galaxies  
sur 12 milliards d'années

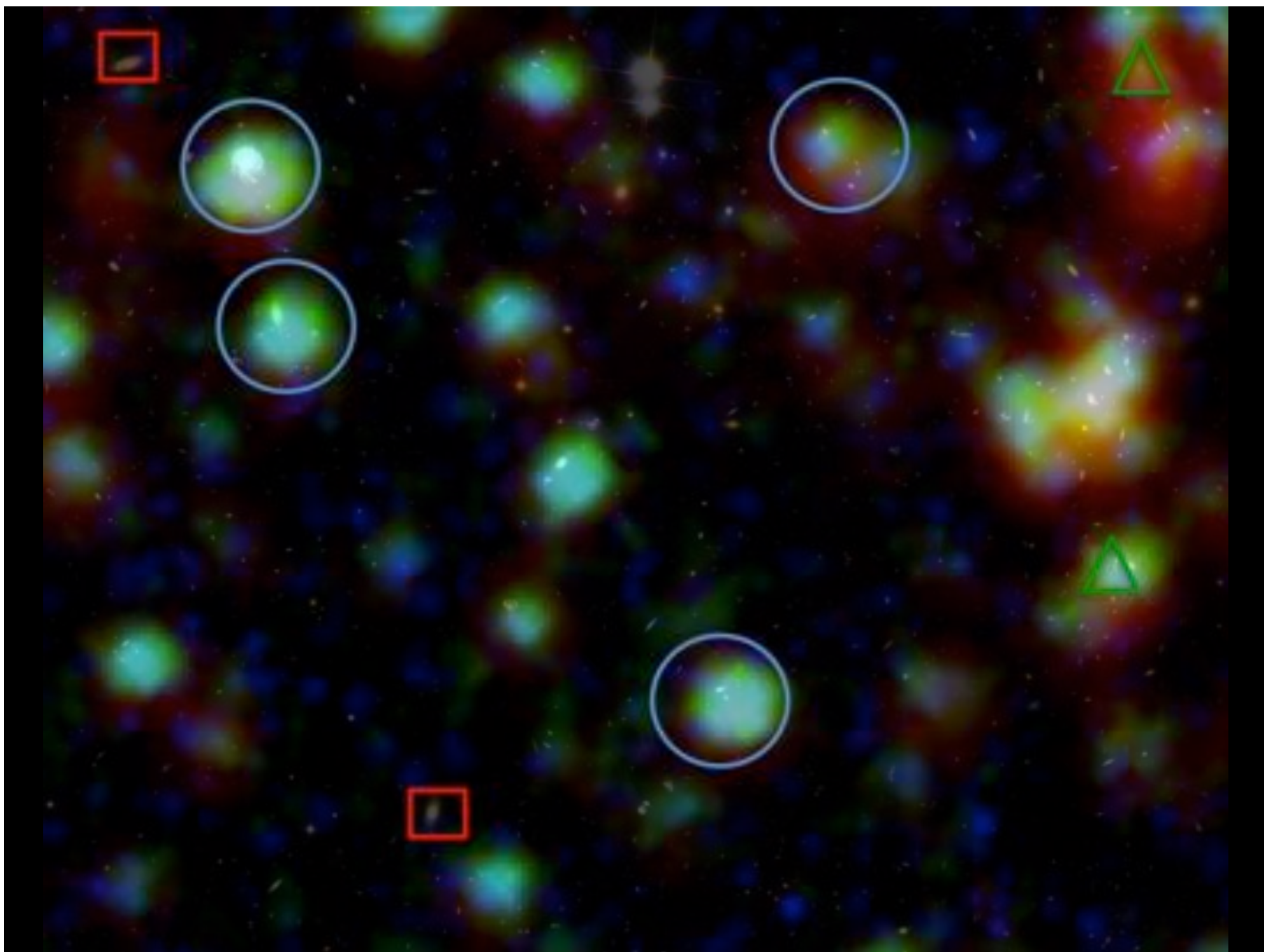


Satellite Herschel  
lancé le 14 mai 2009  
fin de vie le 29 avril 2013

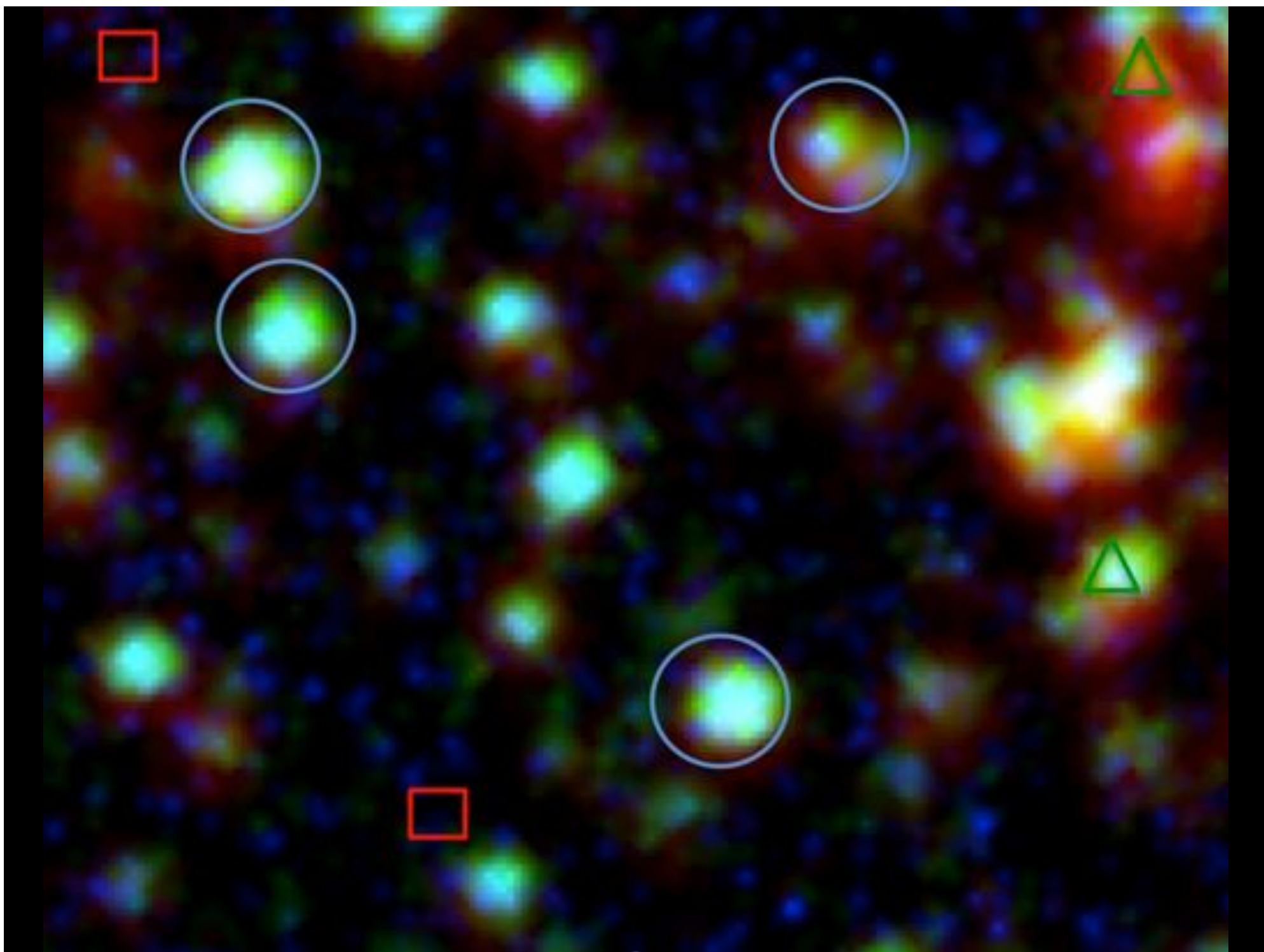




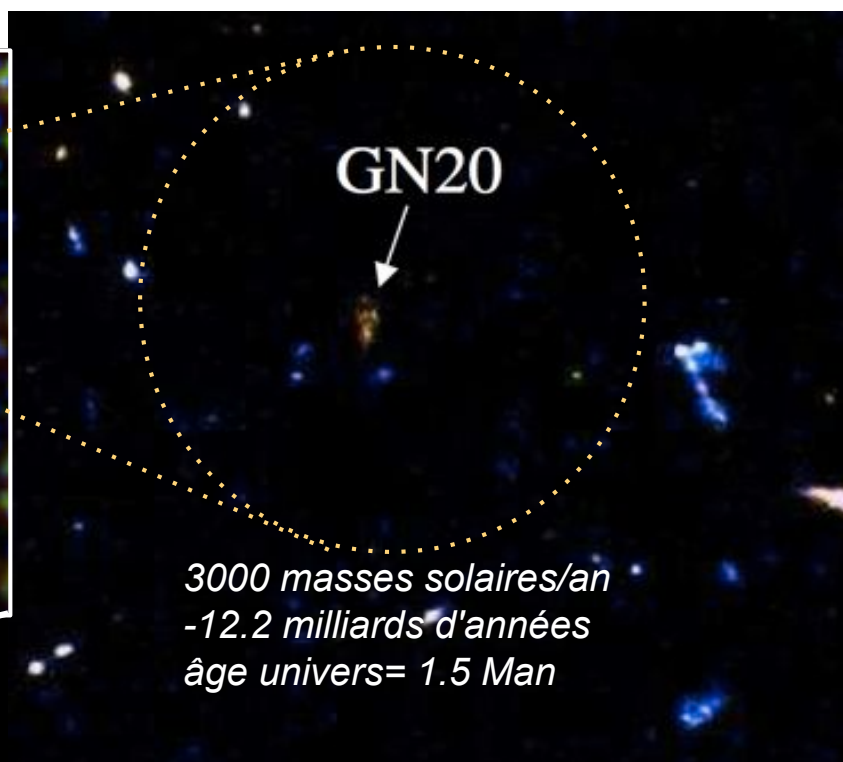
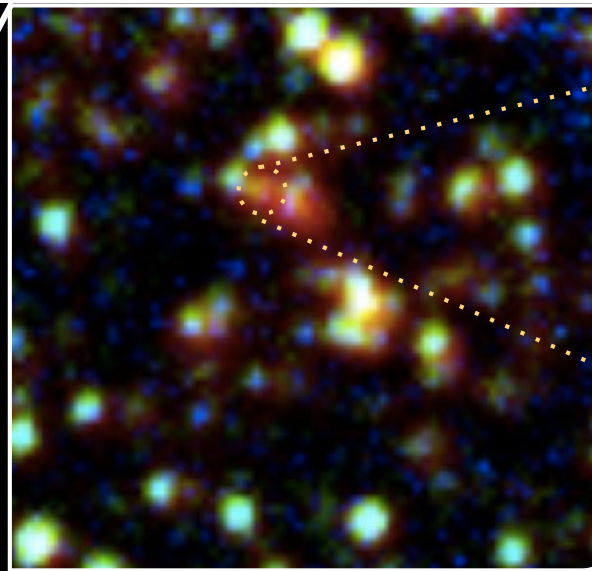






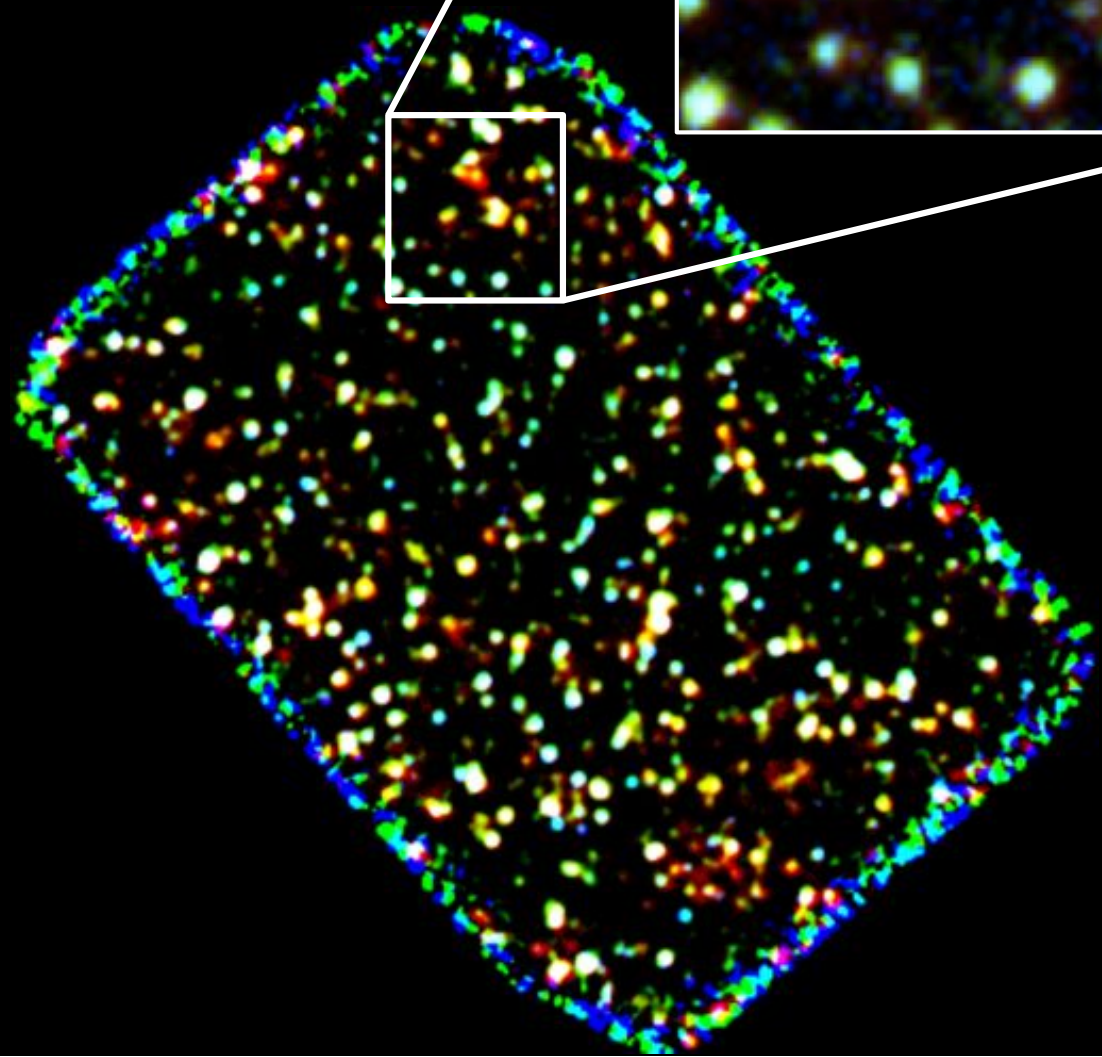
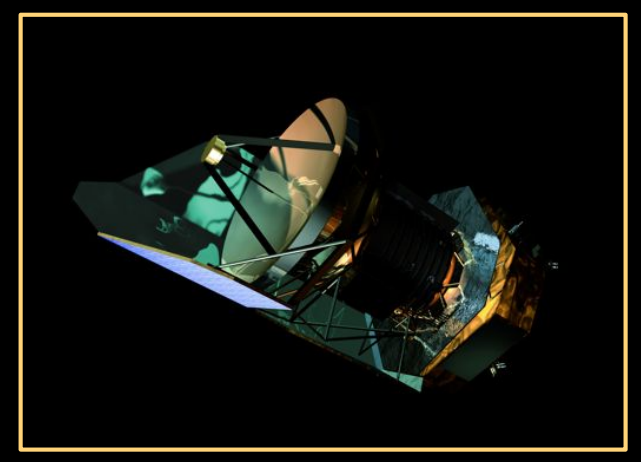


GOODS-Herschel  
l'histoire de la formation  
d'étoiles de 2000 galaxies  
sur 12 milliards d'années

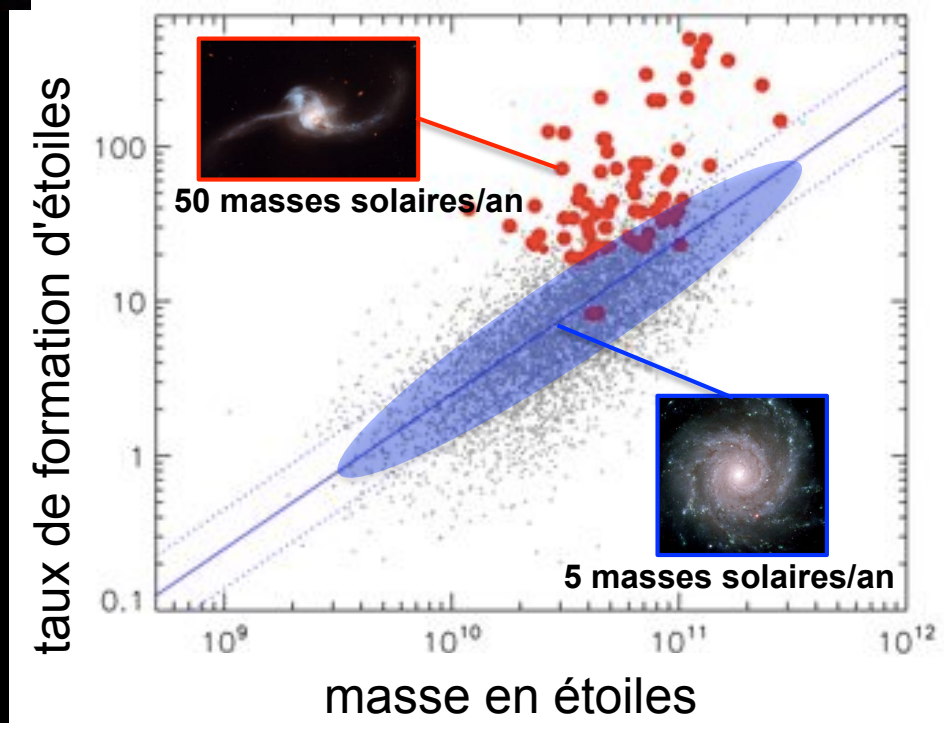
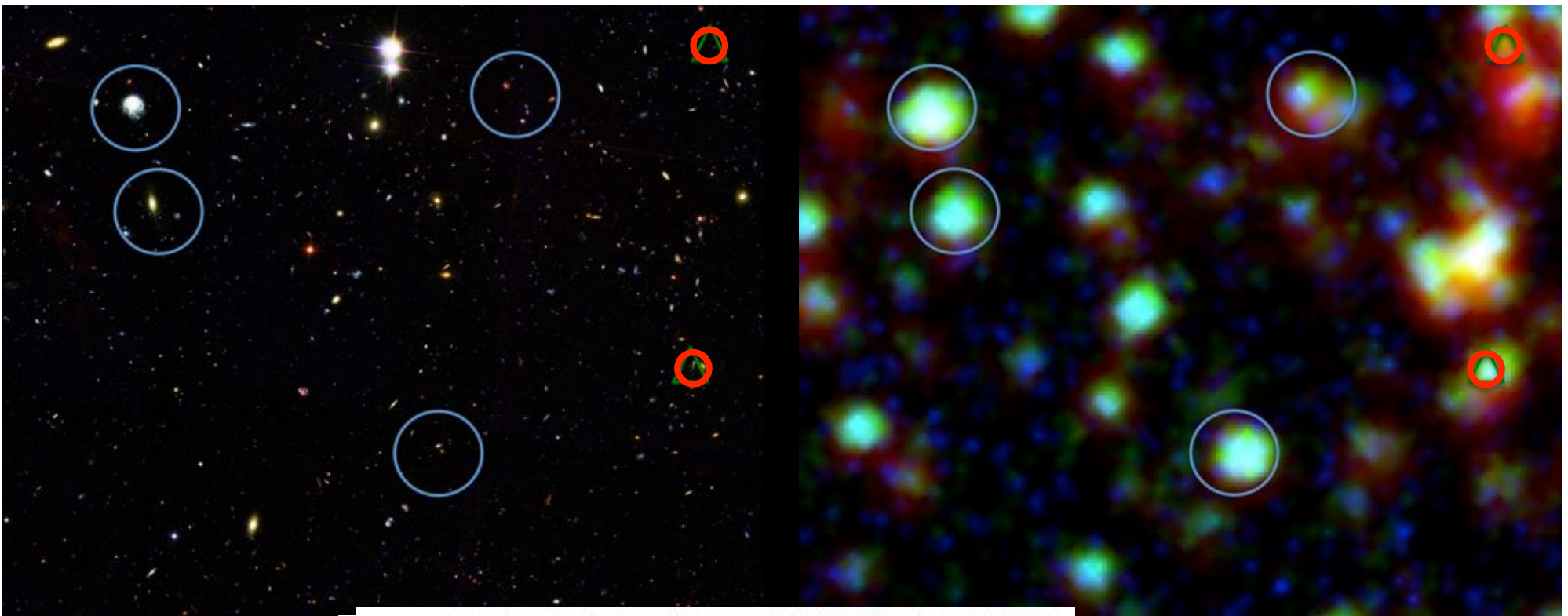


*3000 masses solaires/an  
-12.2 milliards d'années  
âge univers= 1.5 Man*

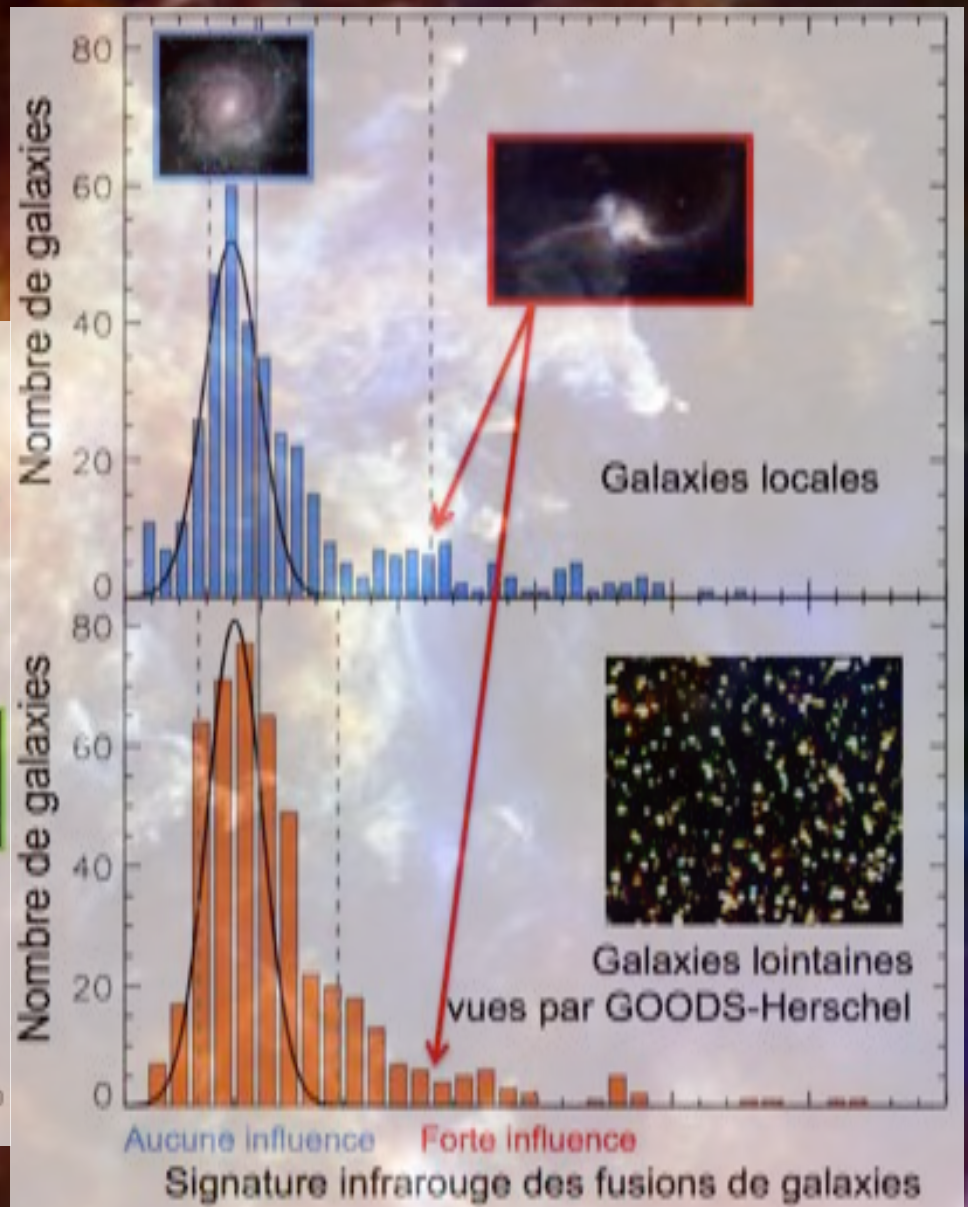
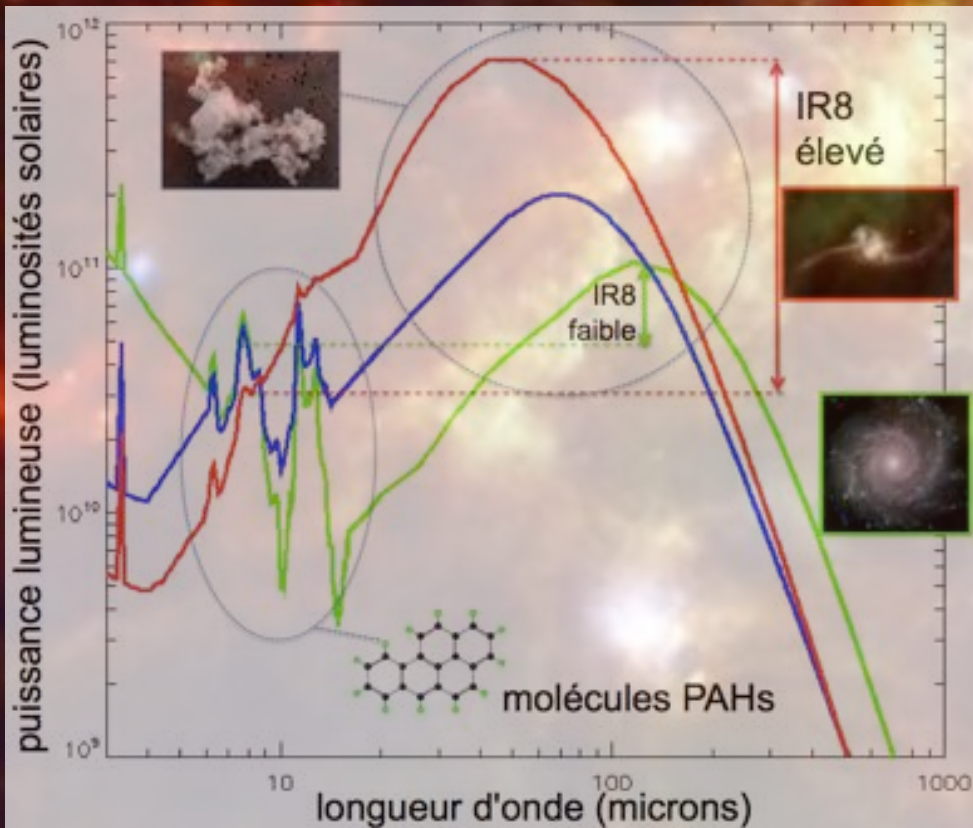
Satellite Herschel  
lancé le 14 mai 2009  
fin de vie le 29 avril 2013





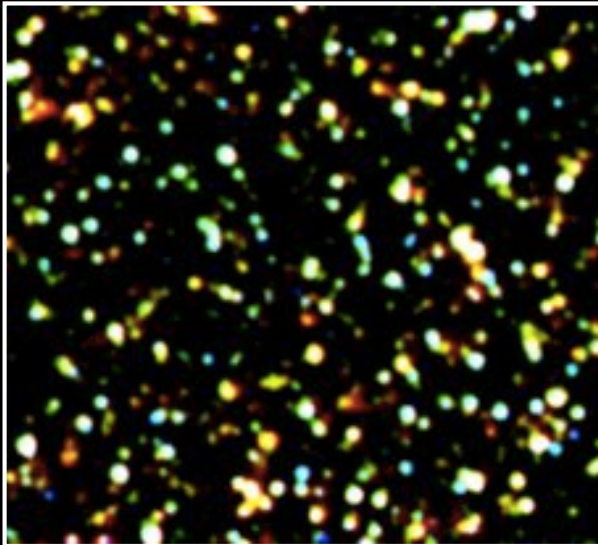








Échelle cosmologique  
10 millions d'années-lumière



Galaxies  
10 000 années-lumière



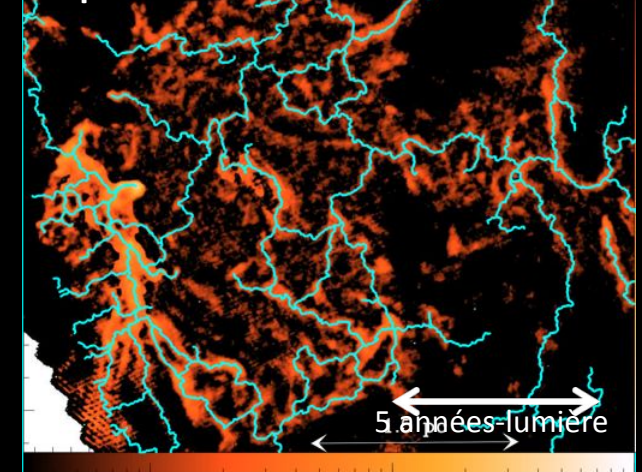
Régions de formation d'étoiles  
10 années-lumière



Simulation numérique (RAMSES)



Nuage moléculaire Polaris  
vu par Herschel





**VISIBLE**

**UN-VISIBLE**

