

---

Subject: Re: difference between DEM and DSM  
Posted by [Mort Canty](#) on Fri, 30 Jul 2010 17:43:47 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

Am 30.07.2010 16:52, schrieb skymaxwell@gmail.com:

> Good day !  
>  
>  
> I want create digital elevation model (DEM) and digital surface  
> model(DSM) by IDL.  
> I know how to do DEM, but how build DSM ?  
> What data required to build it and what theory ? Any links to read  
> about this subject will appreciate.  
>  
>  
> Thanks  
>

Wikipedia?

A digital elevation model - also sometimes called a digital terrain model (DTM) - generally refers to a representation of the Earth's surface (or subset of this), excluding features such as vegetation, buildings, bridges, etc. The DEM often comprises much of the raw dataset, which may have been acquired through techniques such as photogrammetry, LiDAR, IfSAR, land surveying, etc. A digital surface model (DSM) on the other hand includes buildings, vegetation, and roads, as well as natural terrain features. The DEM provides a so-called bare-earth model, devoid of landscape features. While a DSM may be useful for landscape modeling, city modeling and visualization applications, a DEM is often required for flood or drainage modeling, land-use studies, geological applications, and much more.

---