

**FLUCTUATION IN GLACIAL LAKES IN SHIMSHAL VALLEY,  
GILGIT-BALTISTAN**

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**Abstract**

The global warming effects on glaciers, lakes and rivers in the Shimshal valley, Hunza, Nagar District, Gilgit-Baltistan are prominent since past one and half century. But there is no such change in size and shape of the glaciers in the Shimshal valley as around the globe. This effect is known as Karakorum anomaly. This study is done to find the changes that have occurred in the glacial lakes of Shimshal valley in the past six years. The highest elevation point is 4578 m and lowest elevation point is 2753 m relative to sea level. The average slop of the valley is 2.3% while it is NW orientated. Shimshal valley is rich in glaciers and glacier related features. The valley has many glacial lakes which range from large to small in size, volume, shape, area and perimeter. The glaciers on eastern side of valley are more branched and vastly distributed while on western side they are less branched. Two different time's data are taken, for year 2008 and for year 2014. Lakes for both times have different areas. The average covered area for year 2008 is 0.0913 sq. km and for year 2014 is 0.0882 sq. km .The dataset for year two 2014 show that the volume of glacier in Shimshal valley has increased as compare to year 2008 and the volume of lakes has decrease as compare to 2008.