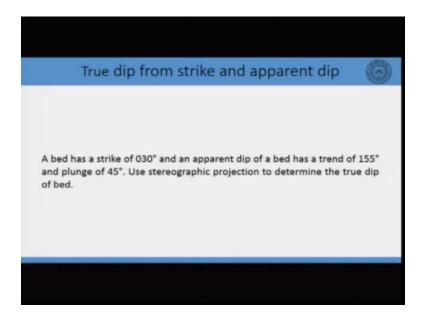
Structural Geology Professor Santanu Misra Department Of Earth Sciences Indian Institute Of Technology, Kanpur Lab Session: Stereonet II

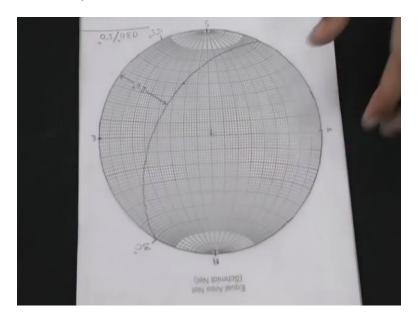
True Dip from Strike and One Apparent Dip

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How to determine the true dip if we have strike and one apparent dip. The question is the bed has a strike of 30 degree and apparent dip of a bed has a trend of 155 degree and plunge of 45 degree. So we will use the stereonet to determine the true dip. We have already drawn the primitive circle on the tracing paper.

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So first we will mark the strike, the strike in the question the strike is 30 degree. So this is 10 this is 20 this is 30. So the strike is already given and we have the value of one apparent dip, the trend is 155 degrees so, this is 90 this is 100, 110, 120, 130, 140, 150 and then this is 152, 154 this will be 155 in between. So this is 155.

Now I will rotate this tracing paper and bring this mark on, bring this 155 on the East West line and count the plunge. The plunge is 45 degree. 10, 20, 30, 40 this is 42, 44 and this in between will be the 45. So this point will represent the trend and plunge of one trend having 155 and the plunge 45.

Now again I will bring this tracing paper back to its original position and to determine the true dip what we know the strike. So what we will do we will just bring this strike on the north and will draw a line passing through this apparent dip. So that line on the great circle with represent the bed on the stereonet. So this is the point so since this strike is at this north so perpendicular to this strike will give the true dip.

So, we will count the true dip from this east side. So the true dip is as follows this is 10, 20, 30, 40, 50. So the value of true dip is 50 degree. So the attitude of the bed is 30 degree means this strike is 30 degree and dip is 50 degree. So this is the attitude of the bed 30 degree, 50 degree.