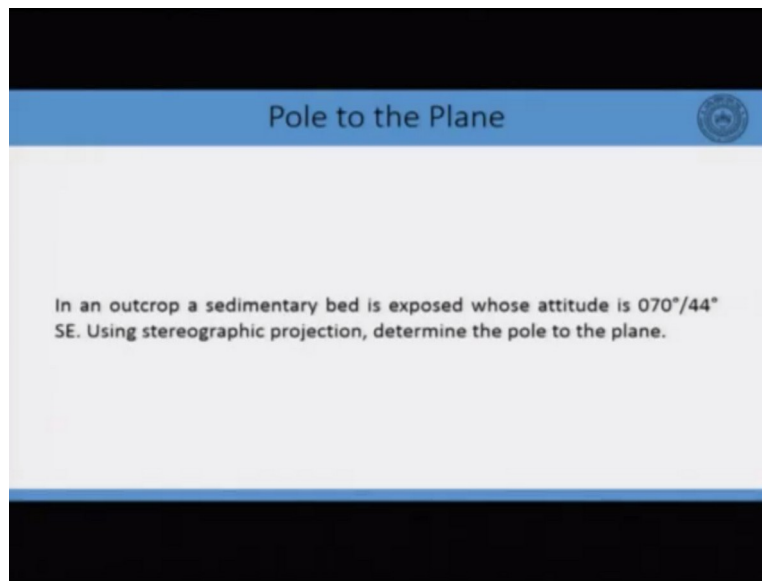


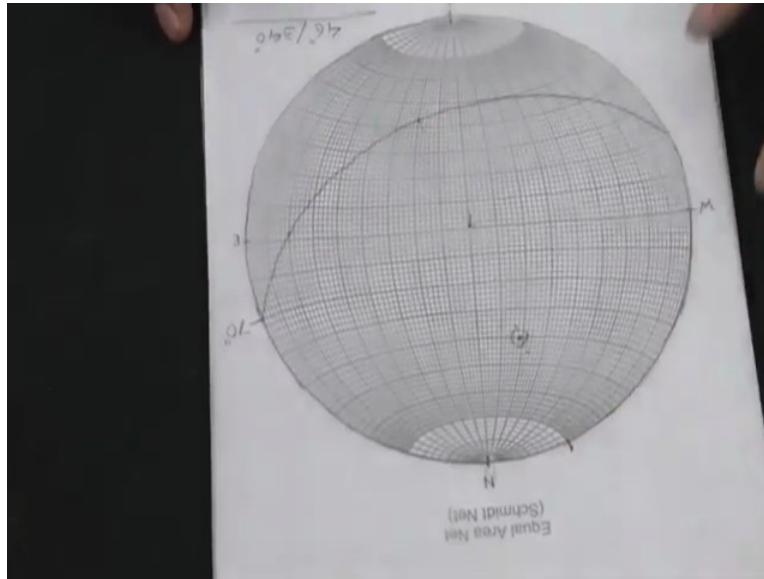
Structural Geology
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Lab Session: Stereonet III
Pole to the Plane

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Now we will learn how to plot the pole to the plane on this stereonet, if we know the attitude of the plane its strike and its dip say then how we will plot the pole to the plane on the stereonet. Pole is basically the perpendicular to the plane the question is in an outcrop is a sedimentary bed is exposed whose attitude is 70 degree 44 degree southeast means the strike is 70 degree and dip is 44 degree and its dip direction is southeast. So, how to plot the pole to the plane on the stereonet.

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So we have drawn the primitive circle on the stereonet or we have drawn the primitive circle on the tracing paper and marked its direction north east south west. The question is the bed has a strike of 70 degree and dip 44 degree. So first we will mark the strike 10, 20, 30, 40, 50, 60, 70, this is a 70 degree strike.

Now we will rotate this tracing paper and bring this 70 degree strike on the north and dip is 44 degrees. We will count it from the east. So, this is 10, 20, 30, 40 this is 42 this is 44 and we will draw a line passing through this point.

This line represents the attitude of the bed on this stereonet. Since, we have to plot the pole to the plane so the pole is basically the 90 degree to the plane. So we will count 90 degrees from this point 44 degree on the east west line. So this is 4 degree to 4 we will add it later. This is 10, 20, 30, 40, 50, 60, 70, 80. 80 and this 4 is 84 this here it will be the total it will be 84 and we will add 6 degrees more to make it 90 so 86, 88, 89 so this point will represent the pole to the plane or are either you can also at from this end too so this is 2, 4, 6 this is 6 degree so we will add it later so this is 10, 20, 30, 40, 50, 60, 70, 80. Now this is 80 plus this 6 so it is 86 so 88, 90. So we will arrive on the same point if we will add from either end. If we want to know the trend and plunge of this pole to the plane so we will mark here on the east west line to determine its trend and the plunge is 10, 20, 30,

40, 40 plus 246 degrees. So the plunge is 46 degree and the trend is this is 360 suppose if we come 270, 280, 290, 300, 310, 320, 330, 340.

So the trend is 340 so the trend and plunge of this pole to the plane is the plunge is 46 degree towards 340 degree and this point represents the pole to this plane and the plane the question is that it strikes the 70 degree and it dips towards south east and the dip is 44 degree.