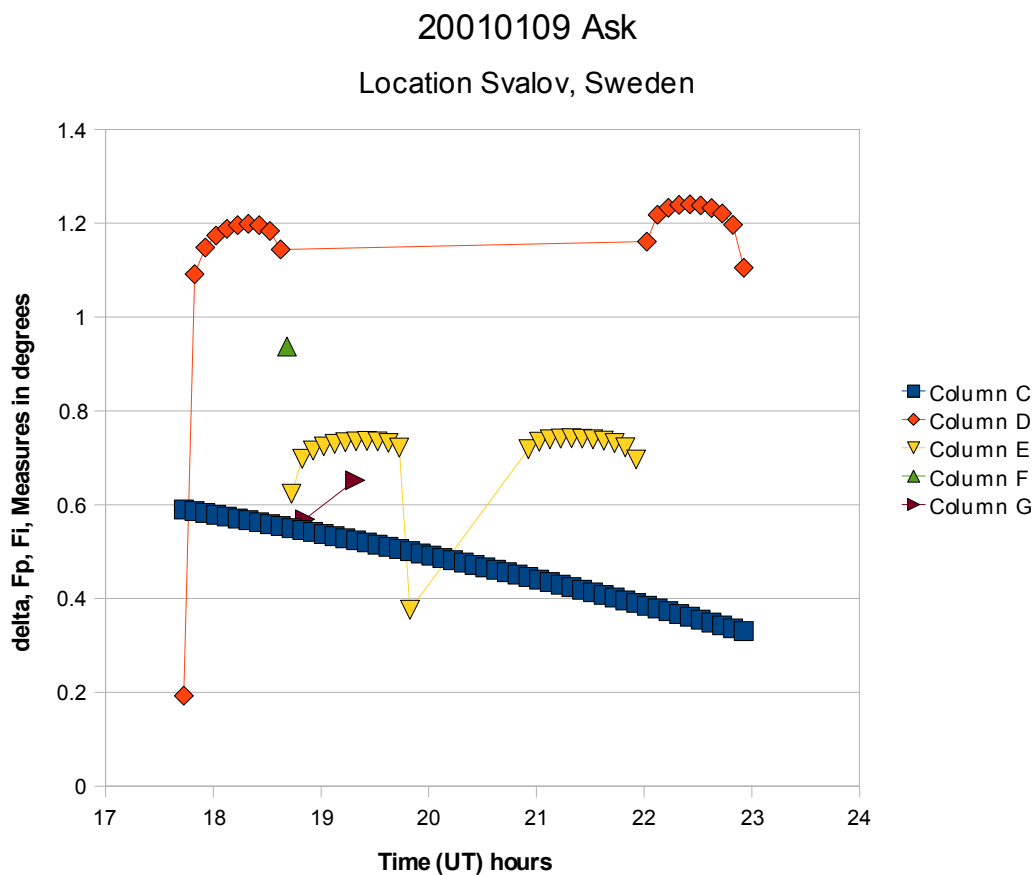


# Computed and measured penumbra and umbra for 20010109 for Bengt Ask



## LEGEND

Column **C** is the slant angle

Column **D** is the computed topocentric penumbra ( $F_p$ ) in degrees

Column **E** is the computed topocentric umbra ( $F_i$ ) in degrees

Column **F** is the measured penumbra from Bengt Ask's images ( $F_p$ )

Column **G** is the measured umbra from Bengt Ask's images ( $F_i$ ) in degrees.

## COMMENTS

The penumbra and umbra sizes have been computed by program *ViaX8.exe* when either edge is traversing the Moon. The observer's images have been calibrated to the Moon's size and the penumbra and umbra measured with *Digimizer*.

The chart is based on the observer's actual location for the correct computed values.

## CONCLUSIONS

There is only fair agreement in the measured umbra values when compared with that computed.

The penumbra measure (Column **F**) **agrees well** with the computed values.