

Image Resolution App

<http://cimss.ssec.wisc.edu/education/apps/abi/>

Click on Fog (Visible)

Reduce the Resolution (Res) to 1:4 – from (nominal) 1 km to 4 km. How does this change the visual representation of the fog in river and mountain valleys in Pennsylvania? If the temporal resolution switches from 1 (1-minute) to 15 (15-minute), how easy is it still to quickly differentiate between low and mid-level clouds?

Click on Convection (Infrared)

Reduce the Resolution (Res) to 1:4 – at what point do the various Enhanced Vs lose their structure? Note that this answer is different for the different Enhanced Vs. Change the temporal resolution – make it 15 instead of 1. How long does it typically take an overshooting top to emerge and decay? Which time step best captures the evolution of the cloud top?

Click on Convection (Visible)

Again, change the temporal resolution and make it 15 instead of 1. How long in the visible does it typically take for Overshooting tops to emerge and decay. Which time step is best to capture the evolution of the cloud top? Is this the same answer you got for Infrared. If you reduce the visible spatial resolution to be comparable to IR – nominal 4 km vs. 1km – does the timescale of the overshooting tops in the visible change?

Click on Fires (shortwave window)

When the time resolution is 15 (vs 1 on the right hand side), how many minutes elapse between when the southern fire is first detected on the right and when it appears on the left? Does this lag change when you make the resolution 4 vs. 1? By how much?