(please answer in complete sentences - do not answer with a simple yes or no)

**Use case 1: Explosion of Molecular Structures:**what does the three dimensional structure of the virus and its inner compartments actually look like and how do they relate to each other hierarchically?  
<https://www.youtube.com/watch?v=FRyS-tffwNY>

1) do you feel, the presented transition could answer the posed questions adequately? if not, how could it be improved? Yes the transition does reveal

the main structural components of the virus, and you do see how each part fits together. Aren't the blue molecules, the outermost molecules, water? If so, why did you include them if you are only interested in the virus.

1b) what do you like/dislike about the transition? I like that it's simple movement, smooth movement and good speed. I don't dislike anything.

2) what kind of additional information could you infer from the transition that you were not able to infer from the target representation (final image) alone? How each component fit into each other

3) what do you like/dislike about the final representation?

 Nothing either way

4) can you estimate how long it would take you to manually create such a rep/trans with the tools that you commonly use? I've never tried to do this exact seperation/animation, but i don't think it would take too long. The virus structure loads into Maya in an organized way so that I don't really remember it being too difficult to manage.

 Note: I think you shoul call it "separation" or "partition" instead of "explosion", nothing actually explodes. Explosion implies that the parts move in all axes.

**Use case 2: Schematization of Molecular Structures:**

what types of molecules are contained in which compartment of virus, what do they look like, and in which approximate quantity are they present?  
<https://www.youtube.com/watch?v=vvCqX3nnyOk>

1) do you feel, the presented transition could answer the posed questions adequately? if not, how could it be improved? It does help show what the different types of molecules look like, because the animation takes away the layers that obstruct the deeper molecules. but it doesn't answer what types of molecules there are, labeling would actually answer that question. Maybe some people know all the different types of molecules by heart just by looking at them, but some don't. It gives no indication on quantity.

1b) what do you like/dislike about the transition?

 The transition itself is really nice, for the same reasons that I like the other one.

2) what kind of additional information could you infer from the transition that you were not able to infer from the target representation (final image) alone? The transition let's the viewer see the complexity of the structure, where the final image is simplified.

3) what do you like/dislike about the final representation?

 Nothing in particular.

4) can you estimate how long it would take you to manually create such a rep/trans with the tools that you commonly use? In Maya, I would do several sets of still renders by rendering the top layer, then erase the molecules I don't want to see anymore, then render the next layer. and then do the transition in post production in After Effects. The actual post production transition I would do with an animated mask reveal, it's very simple and would not take long. Setting up the Maya file would take the longest.

**Use case 3: Representation of Quantitative Relations:**

how large is the volume of each compartment and the molecules contained within in respect to each other?

<https://www.youtube.com/watch?v=oo4n78bY8ZE>

1) do you feel, the presented transition could answer the posed questions adequately? if not, how could it be improved?  I don't think it answers the relative volume of each compartment because it looks like it's just stacking the numbers of each type of molecule. So I can tell that there are more light blue molecules then red molecules. Also by the end I can't remember where the red tiles come from or the blue tiles, and I have no idea what each other represents.

1b) what do you like/dislike about the transition? The transition is really nice, it looks interesting, the movement is great!

2) what kind of additional information could you infer from the transition that you were not able to infer from the target representation (final image) alone? Nothing, the transition just looked cool. Obviously the target image says nothing alone, apart that there is more light blue somethings then red somethings. So the target image can't stand alone. But the particular transition doesn't provide addition information except maybe that the blue somethings came from the virus structure, but I don't know where it came from exactly.

3) nothing in particular, needs labels, don't know what I'm actually looking at.

4) no one in their right mind would try to do that manually. If I needed to make a graph that showed the relative amount of each type of molecule (which I have never been asked to do) then I would try to find a clever way to find out how many molecules of each type there are, I would start with the original "recipe", usually there is a recipe and that would say how many molecules are of each type. I would then make a the graph manually. Again, I've never tried, but I would never try to do a transition like that manually.