

## Supplementary Information

for

### Structural stability of SARS-CoV-2 degrades with temperature

#### Authors:

A.Sharma<sup>1</sup>, B. Preece<sup>1</sup>, H, Swann<sup>1</sup>, X. Fan<sup>2</sup>, R.J.McKenney<sup>2</sup>, K.M.Ori-McKenney<sup>2</sup>, S. Saffarian<sup>1,3,4\*</sup> and M.D.Vershinin<sup>1,3,4\*</sup>

#### Affiliations:

<sup>1</sup> Department of Physics and Astronomy, University of Utah, Salt Lake City, Utah, USA.

<sup>2</sup> Department of Molecular and Cellular Biology, University of California, Davis, Davis, CA, USA

<sup>3</sup> Center for Cell and Genome Science, University of Utah, Salt Lake City, Utah, USA.

<sup>4</sup> Department of Biology, University of Utah, Salt Lake City, Utah, USA.

\* To whom correspondence may be addressed.

Email: [Vershinin@physics.utah.edu](mailto:Vershinin@physics.utah.edu)

Email: [Saffarian@physics.utah.edu](mailto:Saffarian@physics.utah.edu)

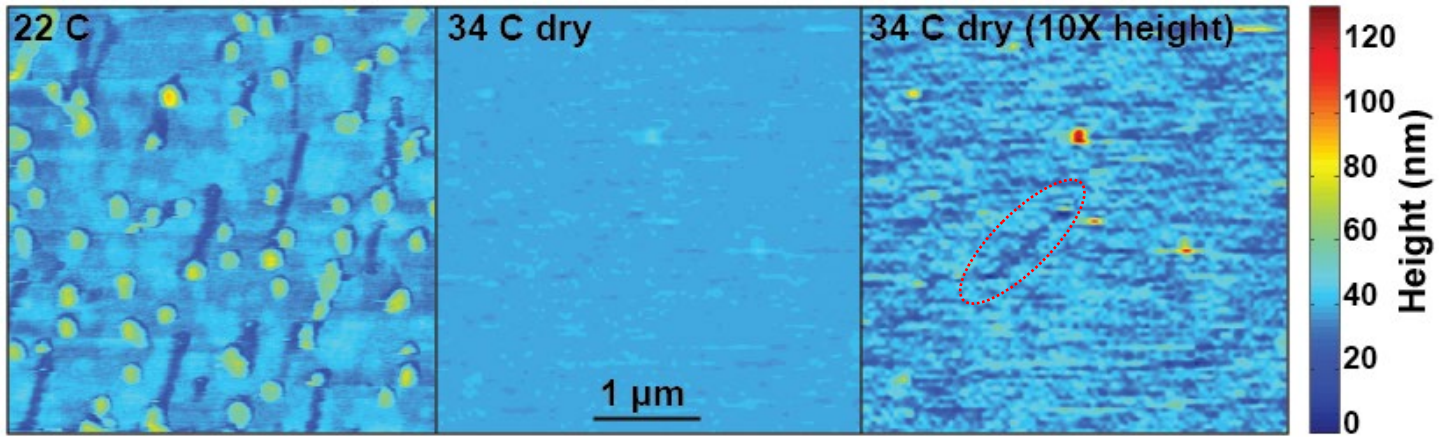


Fig. S1 A comparison of features seen at 22 °C and 34 °C in 4 μm x 4 μm fields of view. VLPs and MT washout sites are readily identifiable for scans at room temperature, but are difficult to see with an identical colormap presentation due to elevated background noise. However, artificially extending the z range of the data helps reveal the presence of MT washout sites (right panel, washout site highlighted with red oval). Faint modulation in the rightmost image is most likely due to electronic noise in the imaging system although a mechanical vibration noise contribution cannot be excluded.

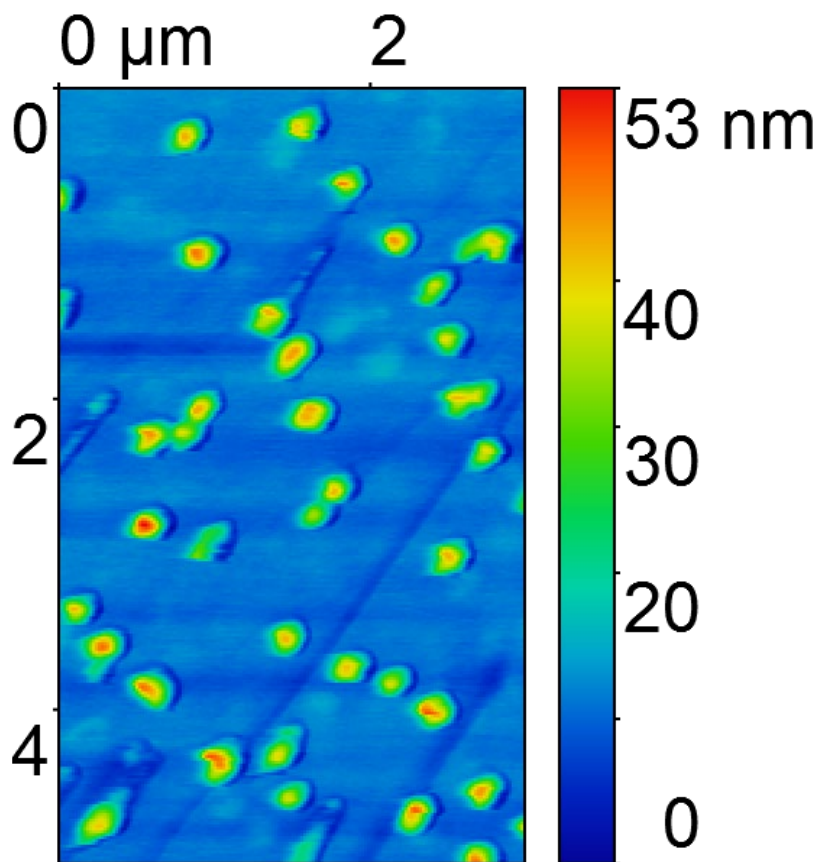


Fig. S2. SARS-CoV-2 VLPs remain stable at room temperature and high humidity (92.5% RH, 19.9 g/m<sup>3</sup> AH) for an extended time period, exceeding 3 hours.