Artistic Filters on Point Clouds in UCWinRoad

Dr. Rebeka Vital – Shenkar – Design. Engineering. Arts Tateyasu Okuma – Forum 8

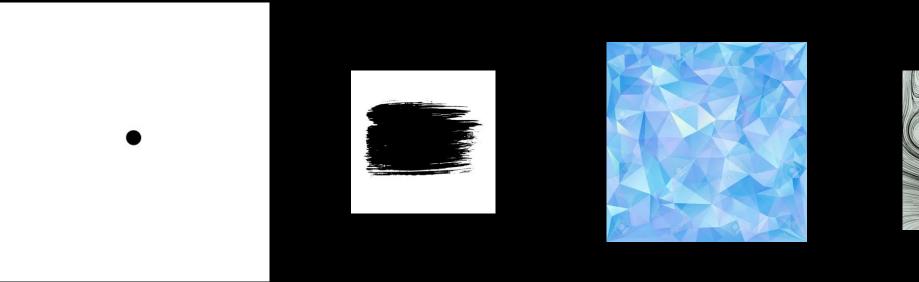




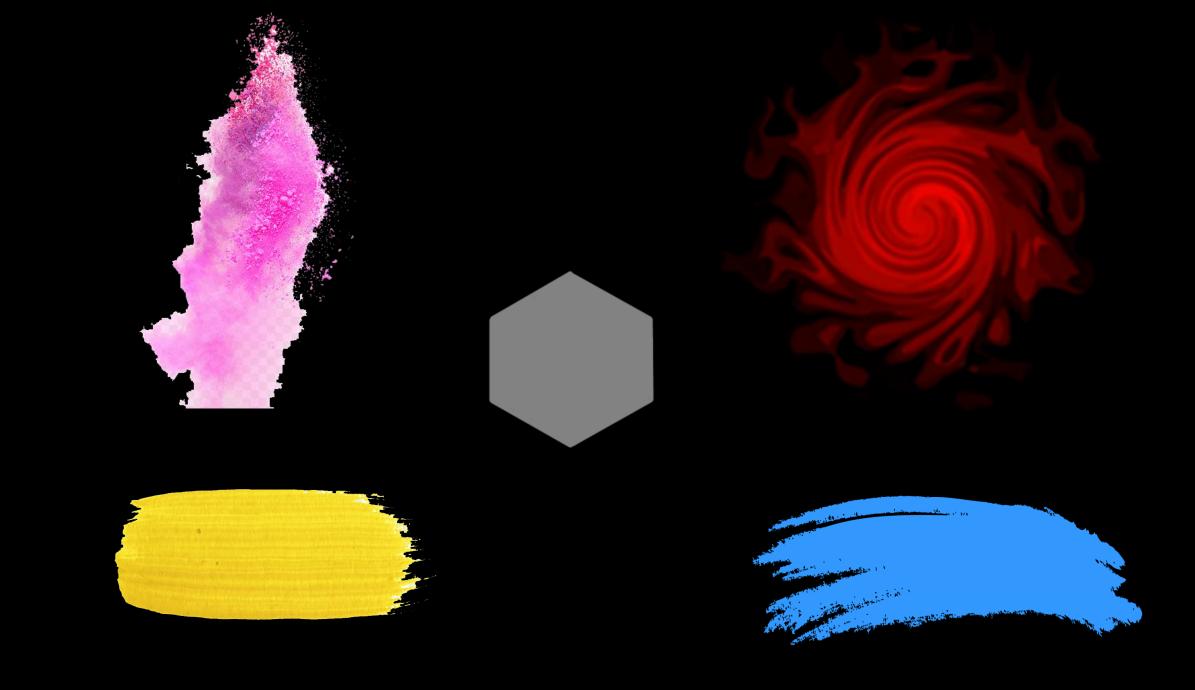
From Point

To Brush Stroke To Crystal

To Swirl Pattern

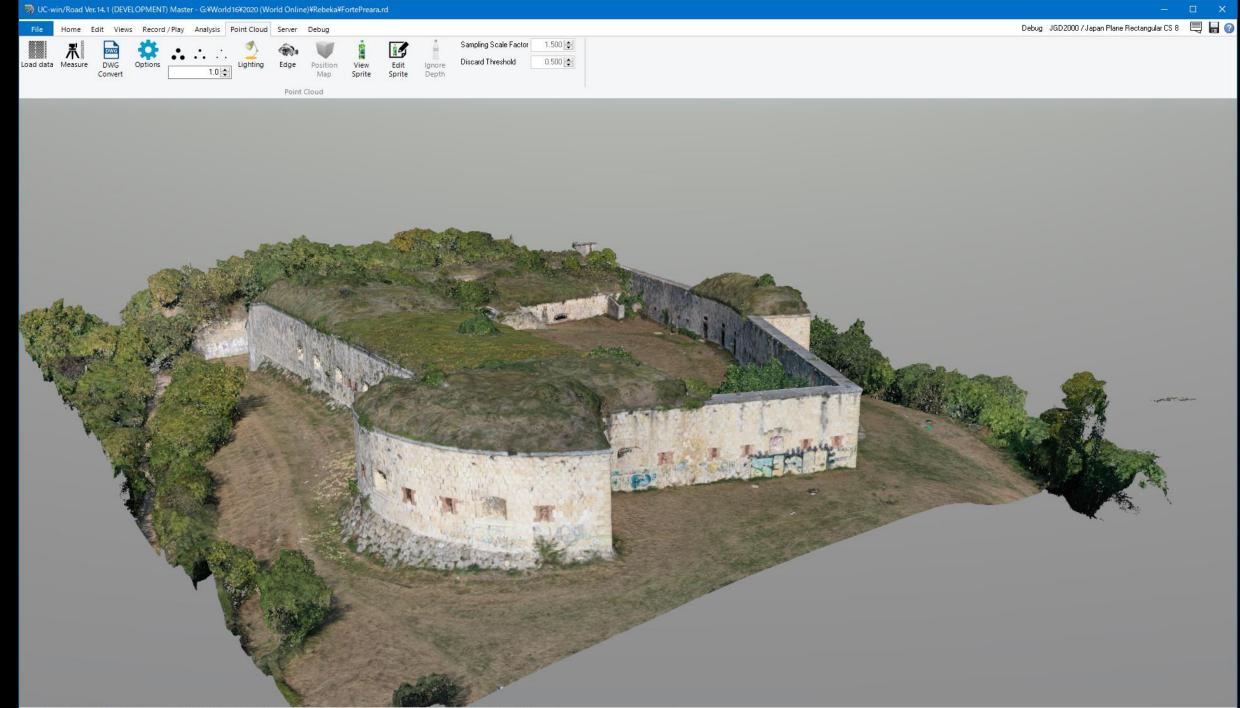






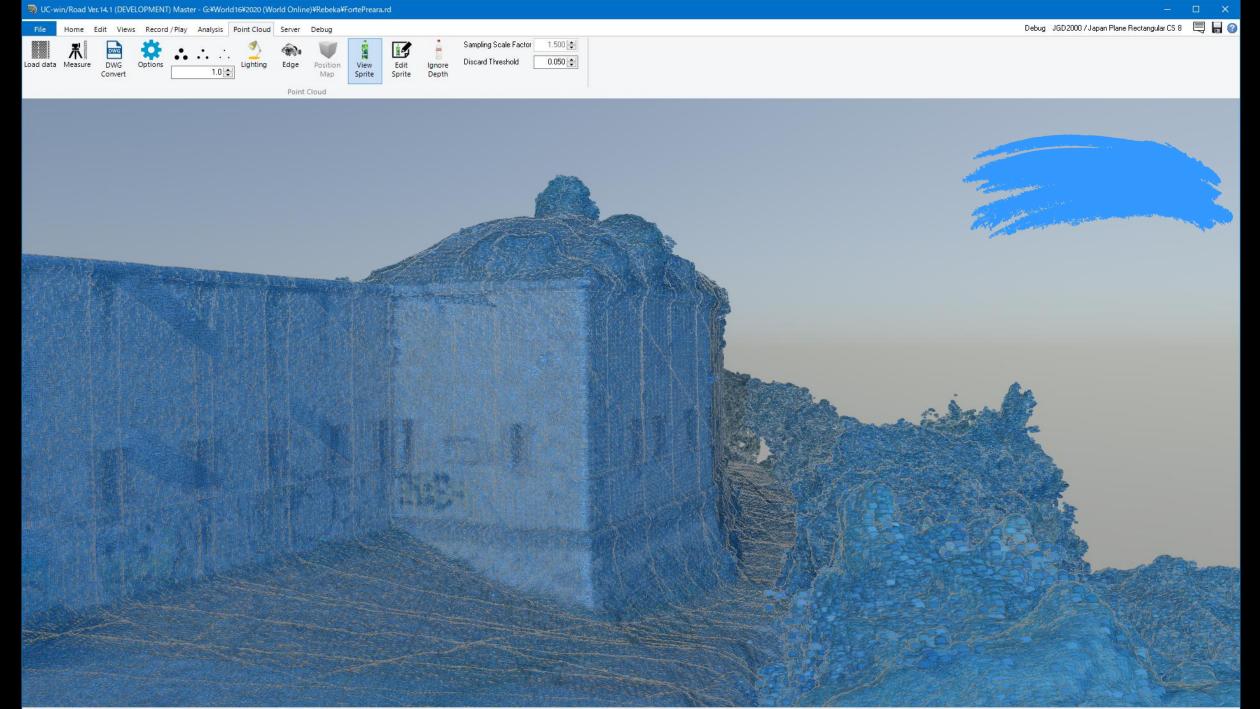


Forte Preara, Verona Pointcloud elaborated from drone Dji Mavic 2 Pro Elaborations by He.Su.Tech. group – Politecnico di Milano, Campus Mantova



DISP:27.1 Hz, SIM:49.6 Hz (0.20xRT)

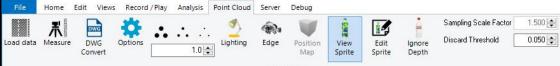
(4887.1, 4987.5) HEIGHT: 36.0m (dH: -514.8m) 36° 17' 54.0" N, 137° 55' 33.5" E - (33254.7, -51556.1)



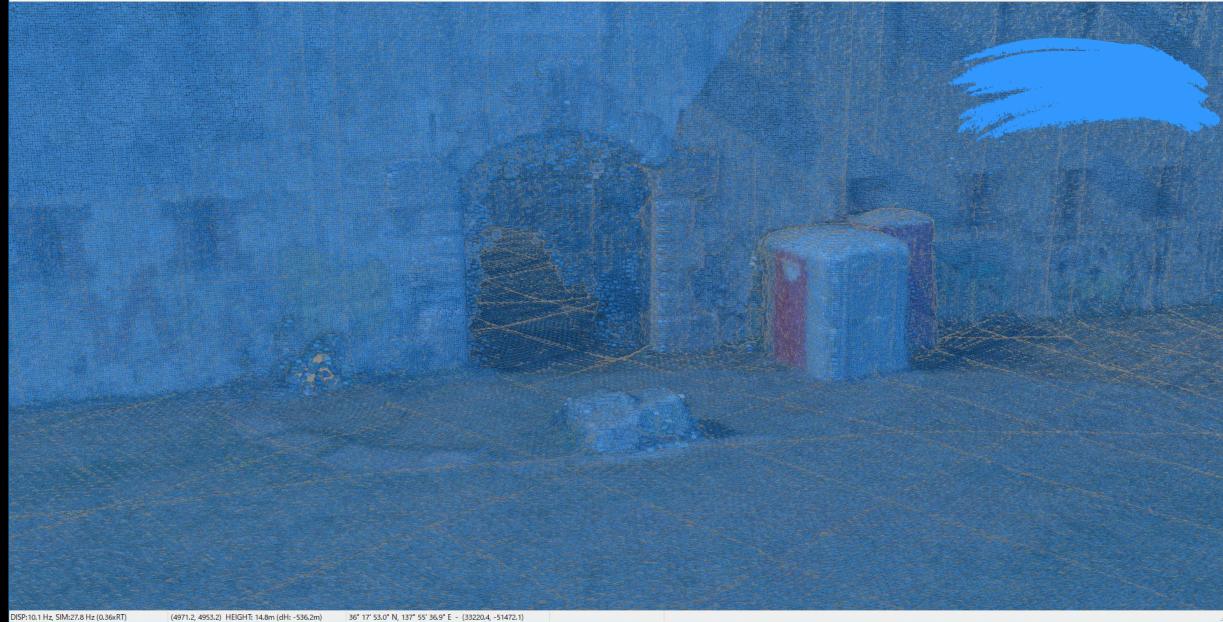
DISP:33.4 Hz, SIM:31.1 Hz (0.26xRT)

(4971.2, 4953.2) HEIGHT: 14.8m (dH: -536.2m) 36° 17' 53.0" N, 137° 55' 36.9" E - (33220.4, -51472.1)





Point Cloud

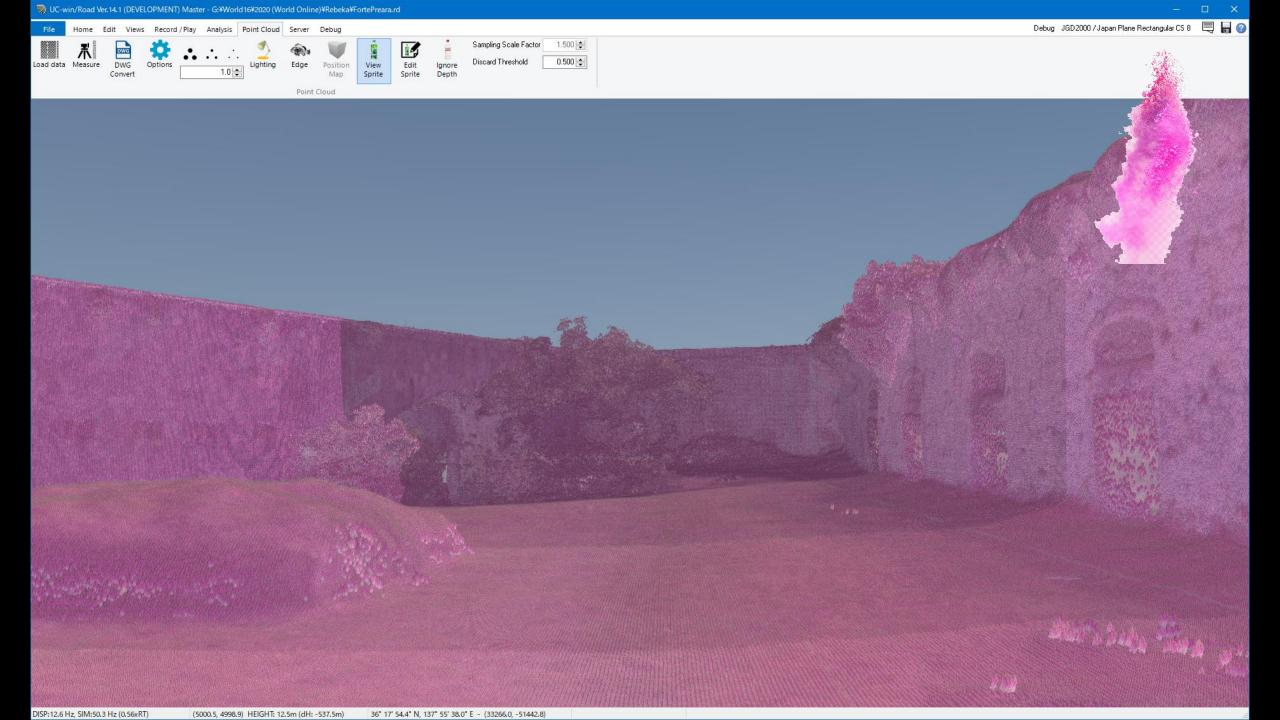


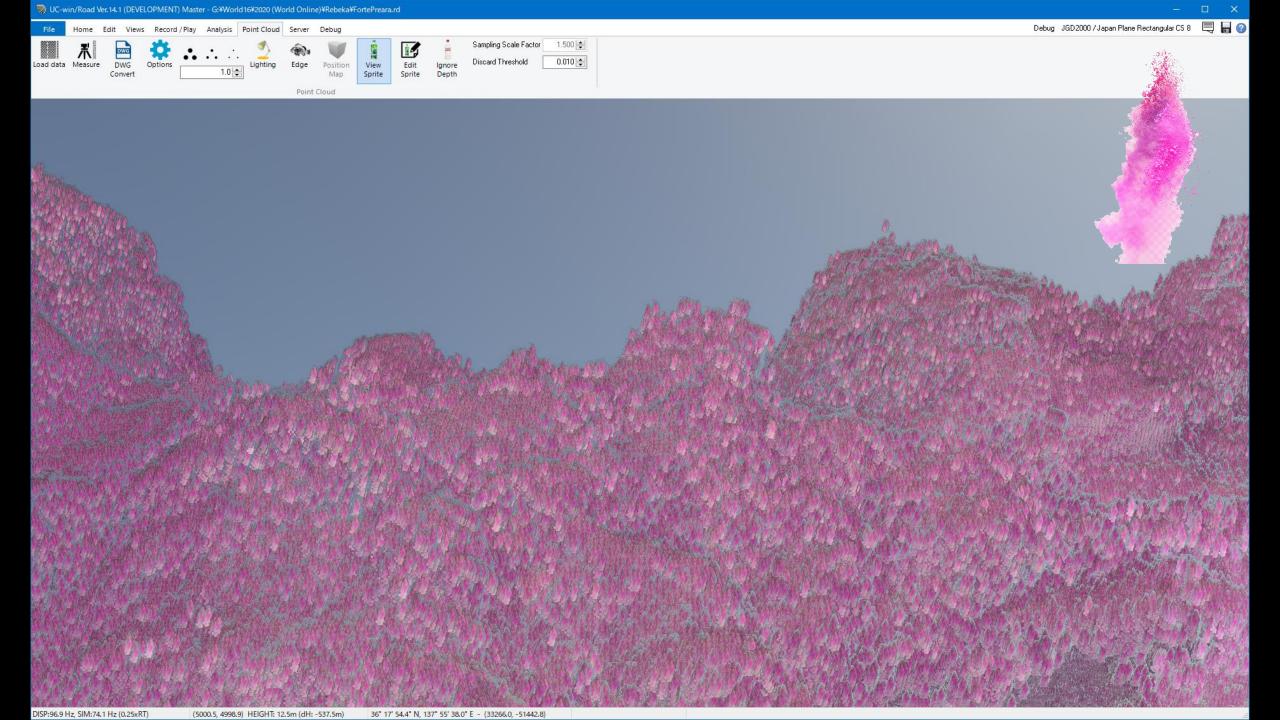
💖 UC-win/Road Ver.14.1 (DEVELOPMENT) Master - G:¥World16¥2020 (World Online)¥Rebeka¥FortePreara.rd Debug 🛛 JGD 2000 / Japan Plane Rectangular CS 8 🛛 🗮 🍘 Home Edit Views Record / Play Analysis Point Cloud Server Debug Load data Measure DWG Convert Sampling Scale Factor 1.500 🚔 1.0 .. ••• View Sprite 0.050 🚖 Edit Sprite Discard Threshold Position Map Ignore Depth Point Cloud

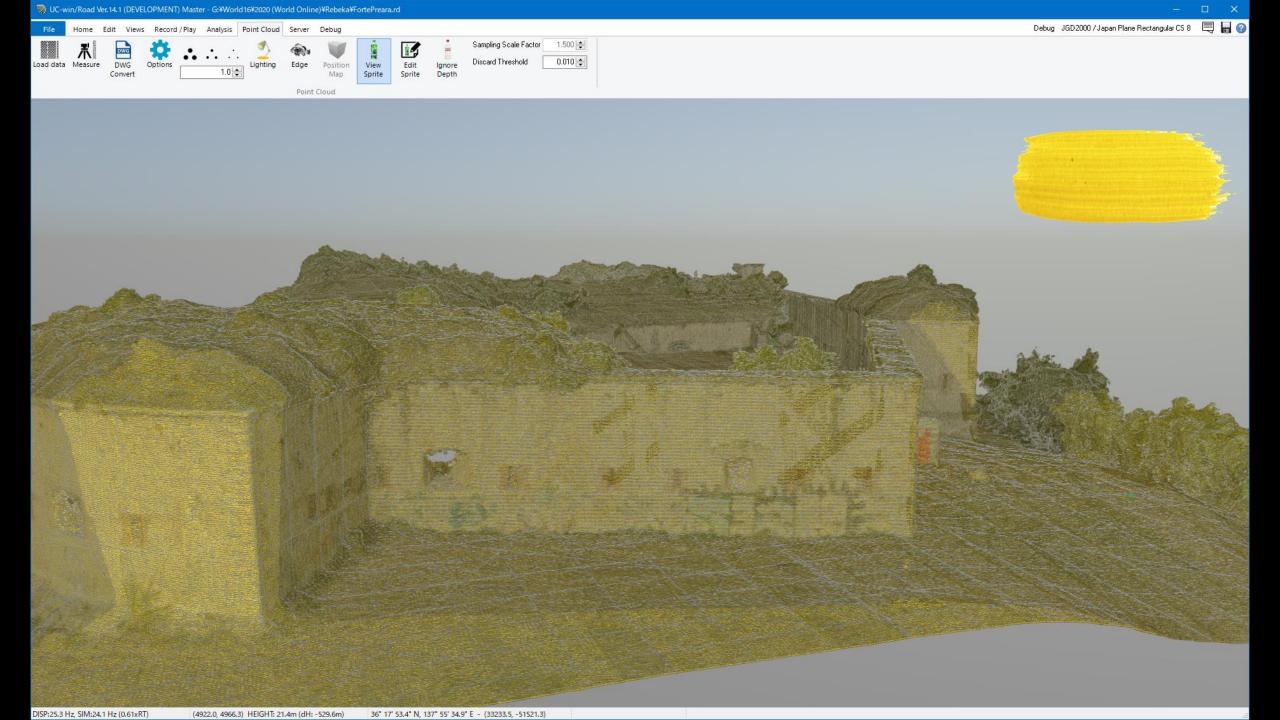
DISP:70.9 Hz, SIM:59.0 Hz (0.39xRT)

(4976.5, 4958.2) HEIGHT: 10.7m (dH: -540.2m)

36° 17' 53.1" N, 137° 55' 37.1" E - (33225.4, -51466.8)





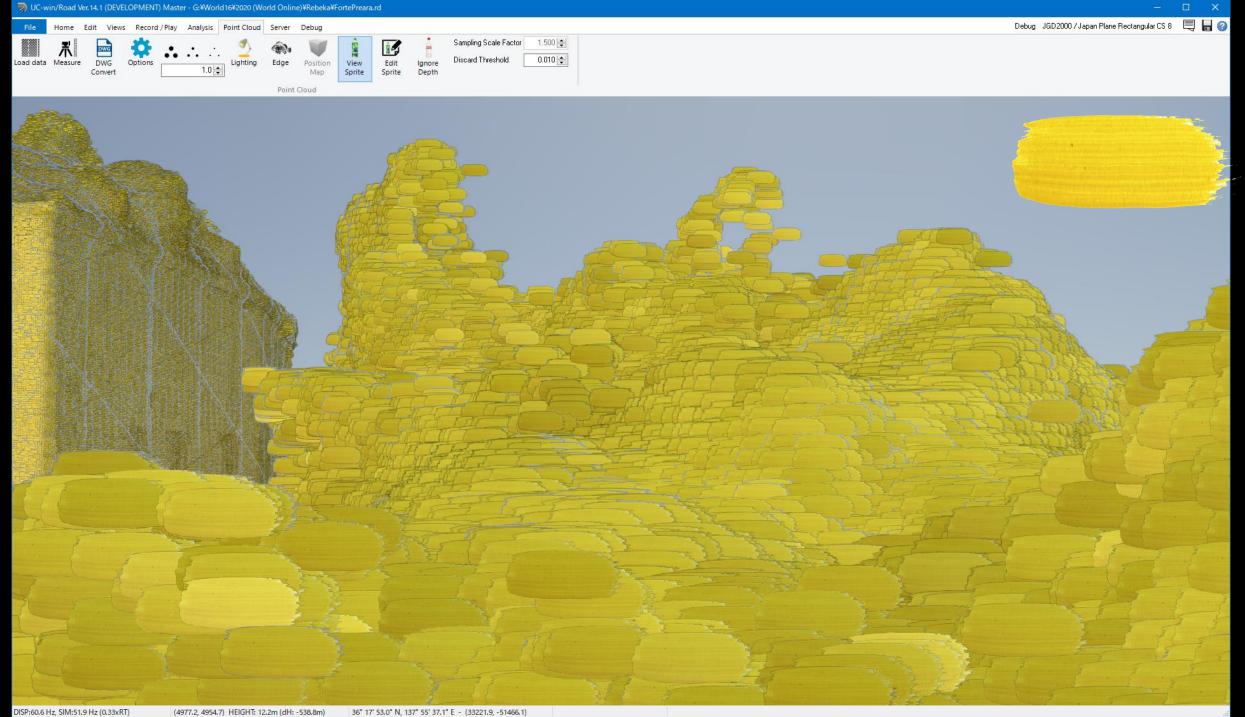




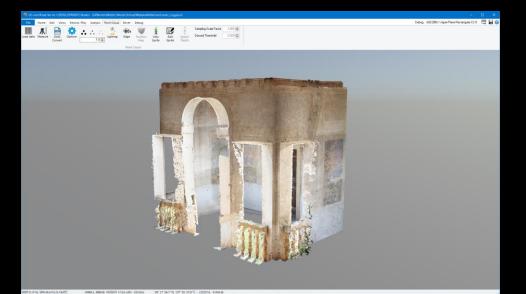
Sampling Scale Factor 1.500 -Discard Threshold 0.010 -

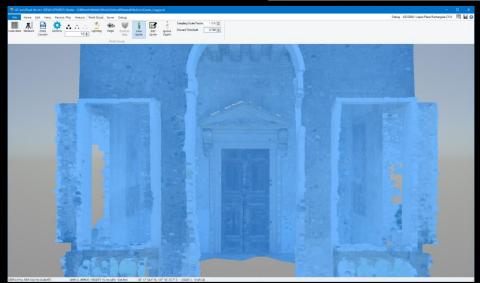


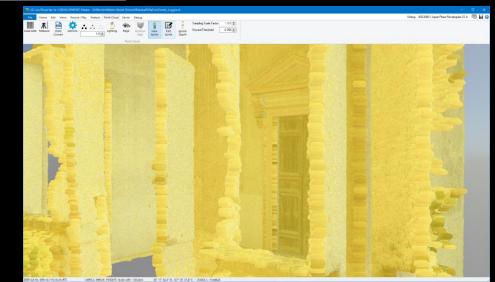
Debug 🛛 JGD 2000 / Japan Plane Rectangular CS 8 🛛 🗮 🍘



The artistic particle (brushstroke, watermark, etc) needs to define the shape of the points in the visualization. The color should be retained from the original point cloud.





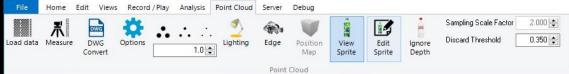






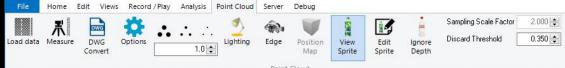
The state of the state 36° 17' 52.6" N, 137° 55' 37.0" E - (33208.6, -51470.0) DISP:30.3 Hz, SIM:30.3 Hz (1.00xRT) (4973.3, 4941.5) HEIGHT: 14.4m (dH: -536.6m)





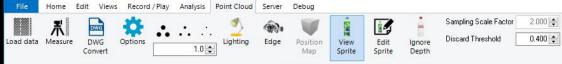










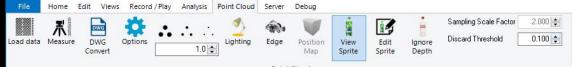


Point Cloud

0.400 🜲









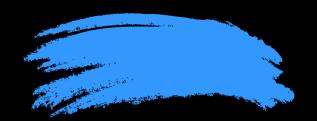


Original Points





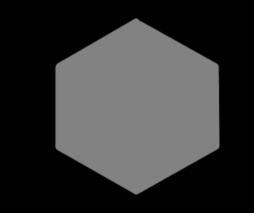


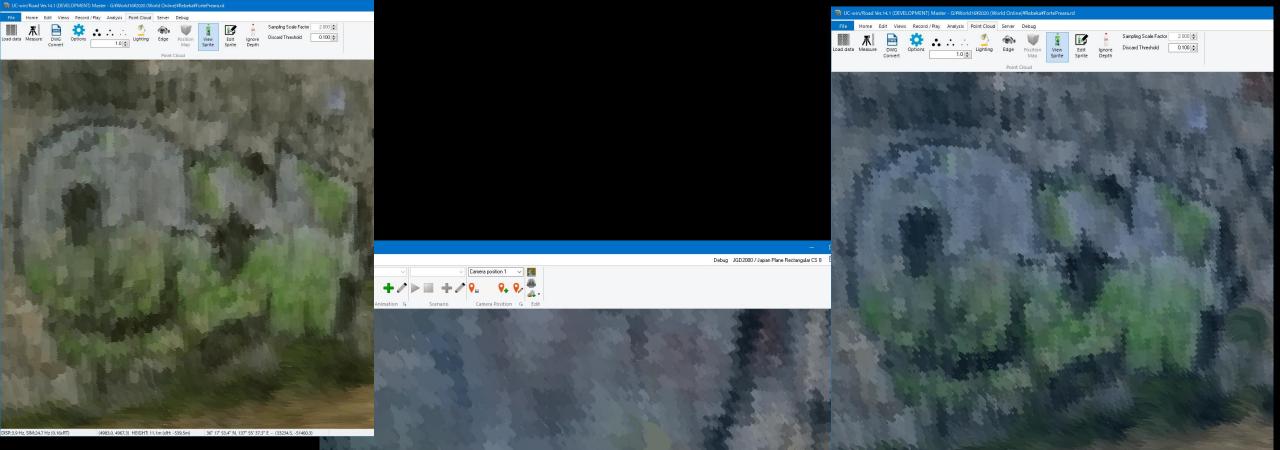












DISP:28.7 Hz, SIM:28.7 Hz (1.00xRT) (4983.0, 4967.3) HEIGHT: 11.1m (dH: -539.5m) 36° 17' 53.4" N, 137° 55' 37.3" E - (33234.5, -51460.3)

