1] in re E'^°•.'≈^[‘|•|’]]±O@N-T-F-S;S-U-T-R-O-N;U-N-I-X;CTRL+A-M-I-G-A;fx^3;F-X-^-3.//.

2] in re Sensor\_SOLD/SUTRON963.9 = [sic][NONE];

3] in re Sensor\_SOLD/Non-SUTRON963.9 = [sic][x(tm)];

4] in re Paradigm/SCHOOLING/ YEARS = [sic][y(tm@-540—1088±O/:ohiscot13/m-i-n-gsystemsltd.git/\*.\*io[]]^’|°•.|')];

5] in re Paradigm/Certification(s)/ YEARS [}S.S.:x\_\_\_\_\_\_\_][sic][z(tm)];

6] in re Paradigm/EMPLOYMENT/ YEARS [=NOT}S.S.:x\_\_\_\_\_\_\_\_][sic][xyz(tm))];

7] in re Paradigm/CURRENT\_EMPLOYMENT+ [sic][xyz(tm)];

---> [7-8-9] = (8+)=[=NOT2LOCK]=[=NOT2JAM[B]]=+FISA@+F.B.I.]=[sic];(x\_\_\_\_)

9] in re PARADIGM\_FUTURE/+PRESENT/WORK<SYMBOL=NOT/><SYMBOL=NOTdots+SYMBOL=NOTsign>

10] in re VERIFICATION/CURRENT\_SCHOOLING[sic][}S.S.:x\_\_\_\_\_\_\_];

11] in re VERIFICATION/CURRENT\_EDUCATION[sic][}S.S.:x\_\_\_\_\_\_\_];

.12] in re FAT 32;

.12A] +1] in re N-T-F-S;

.12B] FIGURE <Floating\_Point=NOT\*> ILLUSTRATION[sic](s);

.12C] FALSE+ = N-T-F-S <=NOT> FAT32 IN ERROR of

.12C+1] VIOLATION of SENSOR MANUAL 8800-1173 at

.12C+2] SUTRON<Degree0/SuperScript>VR+ SUTRON<Degree01/SuperScript>=<NOT>VR+SUTRON<Degree01/SuperScript>VR

.12C+2<Degree0>]SUTRON-<Degree0/SuperScript>VR+ SUTRON963.9+=[=NOTSUTRON963.9\_]//

•.13] in re FAT 16;

•.13A] +1] in re N-T-F-S;

•.13B] FIGURE <Floating\_Point=NOT\*> ILLUSTRATION[sic](s);

•.13C] FALSE+ = N-T-F-S <=NOT> FAT16 IN ERROR of

•.13C+1] VIOLATION of SENSOR MANUAL 8800-1173 at

•.13C+2] SUTRON<Degree0/SuperScript>VR+ SUTRON<Degree01/SuperScript>=<NOT>VR+SUTRON<Degree01/SuperScript>VR

•.13+2<Degree0>]SUTRON-<Degree0/SuperScript>VR+ SUTRON963.9+=[=NOTSUTRON963.9\_]//

14] as --->[7-8-9];

15] in re Bank\Account(s).;

16] in re Attorney-in-fact viade Apostille\_Convention/+//ESKOM/[sic];

17] in re Organized.org(c)2010, 2016/[sic];

18] in re Insurance.+(tm)sic];

19] in re Space\_Treaty\_Law 2002,(tm)1994(c)2010[2013]2014, 2016;

20] [UNKNOWN]

21] [UNKNOWING]

4:24PM 9/6/2017,1/14/2018

10:30PM 6/5/2023 © Reference ID±O@sao@ucsb.edu.:

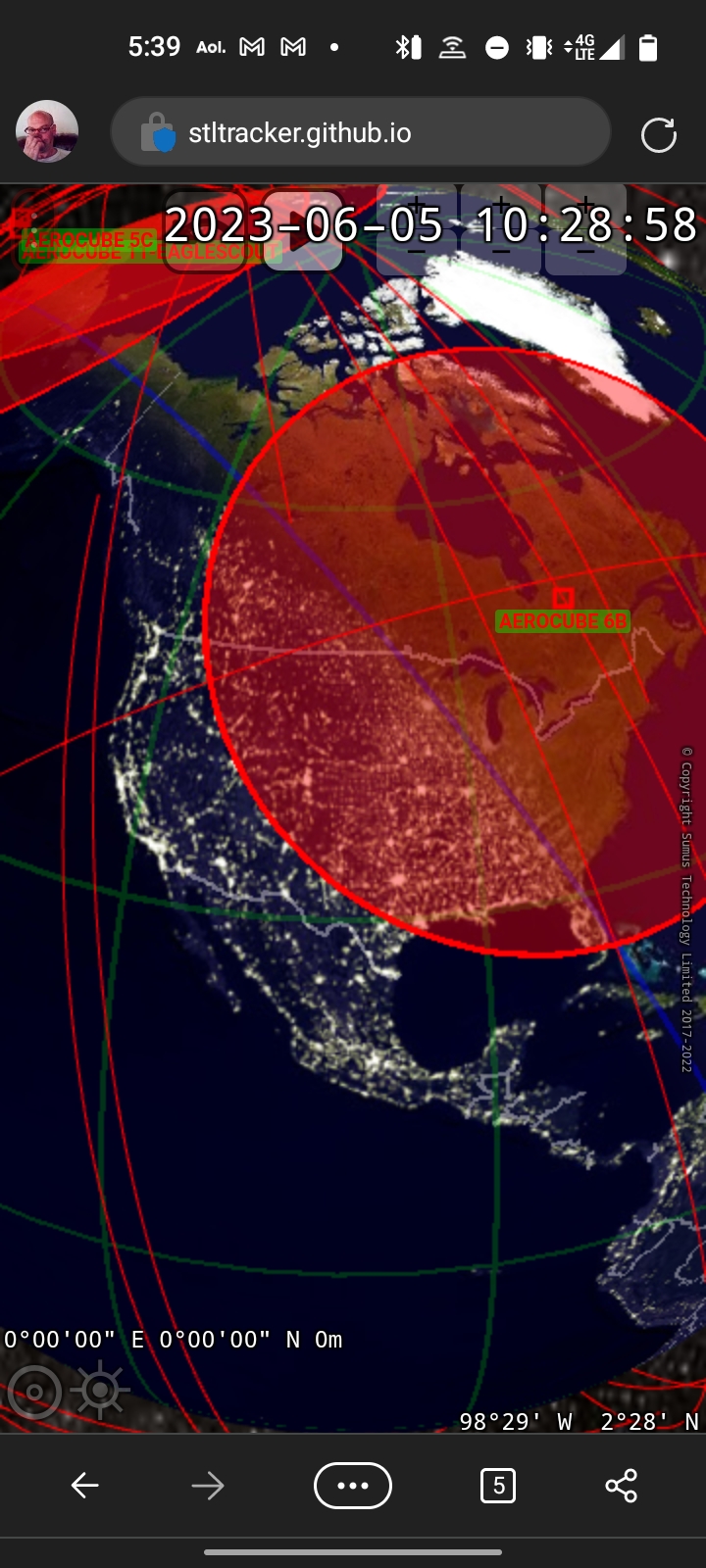
Begin.

>>>>E°•.°•.≈EOF<<<<

(CE);

CE;

CE°•.+['|•|']]^°•.84@O\*,\*io[['|•|']

(

); NB≈[CE°•.+[←←]’|•|’]^°•.84@^EEOF ASIS ACCOMODATION ONLY © ScottMJaffe, Intellectual Property A23–9214685±O@M.I.N.G. SYSTEMS Ltd.\*.\*github.io]

({Landsat Imagery from a CubeSat: Results and Operational Lessons from the R3 Satellite’s

First 18 Months in Space});

\:(Dee W. Pack, Garrett Kinum, Patrick D. Johnson, Timothy S. Wilkinson, Christopher M. Coffman, Cameron R.

Purcell, Jon C. Mauerhan, Brian S. Hardy, Ray Russell, Kevin Mercy

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ABSTRACT

R3 is a 3-U CubeSat launched on a RocketLab Electron into a 500 km circular orbit at 85° inclination on December

16th, 2018. The spacecraft flies a multispectral sensor that takes data in the six Landsat visible and near infrared bands.

The R3 sensor mates a custom refractive telescope with a Materion Precision Optics Landsat filter, and an ON

Semiconductor fast-framing high-sensitivity Si CMOS array, to produce 50-km wide, 44-m resolution Landsat-like

Image strips. Data are taken in push-broom mode and are downlinked via a 100Mbps compact lasercom system.

Frames are then co-added on the ground in time-delay-integration (TDI) fashion to increase signal-to-noise ratio and

Create multi-spectral Earth images from the compact sensor. The system is an engineering concept demonstration of

A compact multispectral sensor in CubeSat form. We describe our ConOps, flight operations, sensor focus and

Alignment, initial imaging check out, and initial comparisons of R3 data to Landsat-8 imagery of the same Earth

Locations. RGB, color infrared, and normalized differential vegetation index (NDVI) products are compared between

CUMULOS and Landsat-8. Results show good multispectral image quality from the CubeSat sensor, and illustrate

The ability of R3 to detect vegetation and other features in a manner similar to Landsat, as well as the challenge in

Perfectly exposing all 6 VIS/NIR Landsat bands using our commercial 10-bit CMOS array. We also highlight the

Performance of the compact laser communications system which enabled the successful performance of this mission.})\;

(\_);

EOF.

E°•.+CONCLUSION ONLY°•.EOF

±O@End.

NB::O@R3±TOMsat≈Aerocube Series Array 11±O@5-11B

Begin.