

Very Early Summary of APR-3 from OLYMPEX DC-8 Flights

17 February 2016

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(Disclaimer: APR3 data are very preliminary)

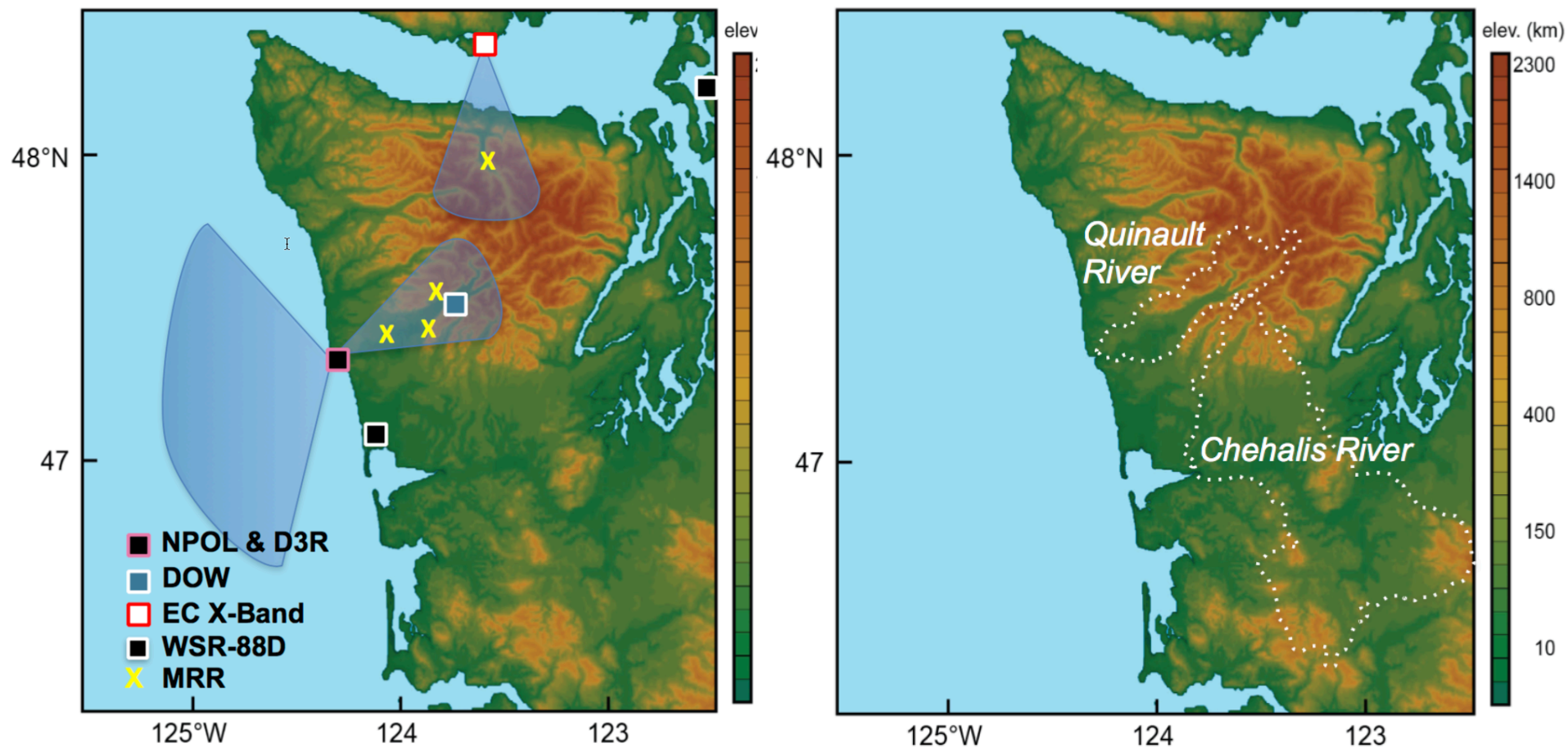


Figure 14: Locations of all the available ground radars for OLYMPEX and the RHI scanning regions for NPOL and EC X-band.

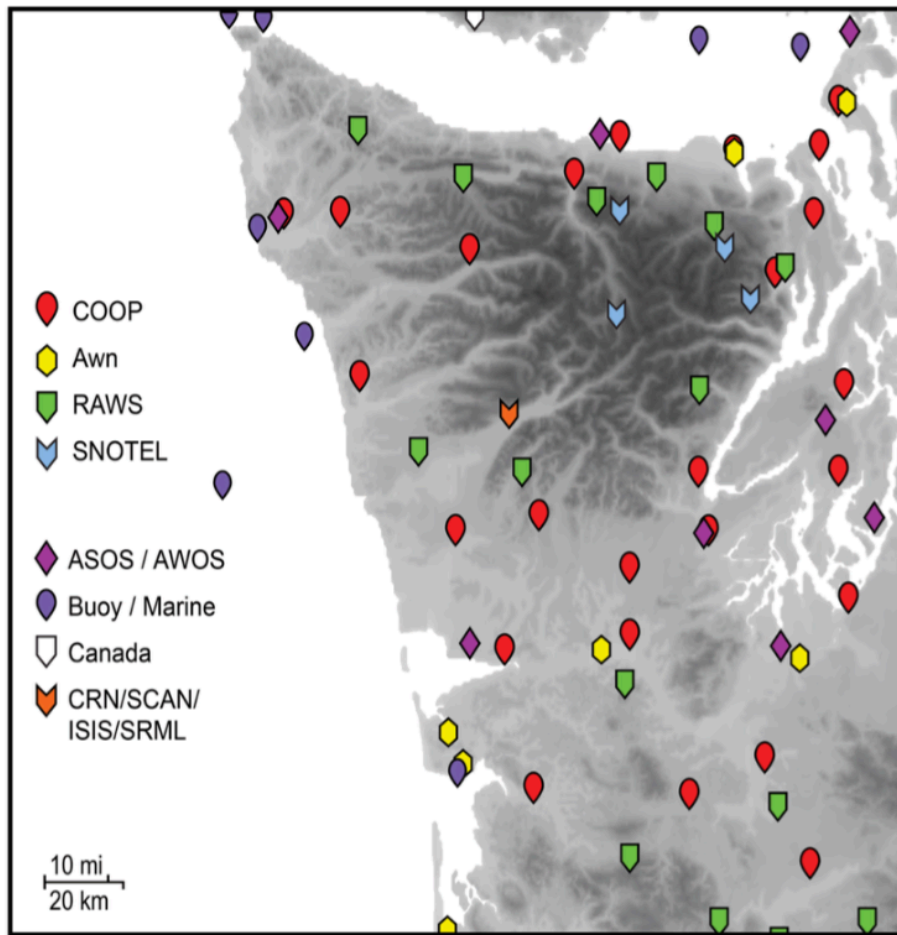


Figure 7: The existing network of surface observations in and around the Olympic Peninsula. ASOS, SNOTEL, RAWS, Buoy, CRN and Canadian sites all report various meteorological parameters hourly, the COOP sites report precipitation once a day.

<http://olympex.atmos.washington.edu>



Figure 6: Idealized depiction of the three sectors of a typical midlatitude cyclone. Cloud outlines as seen from satellite imagery shown in blue, standard frontal symbols shown in blue (cold front) and purple (occluded front): Prefrontal (top), Frontal (middle) and Post Frontal (bottom).

DC-8 Instruments

APR-3 (Heritage Ku/Ka-band APR-2 with the added W-band)

MASC (Microwave Atmospheric Sounder on Cubesat)

COSMIR

Dropsondes (over ocean), 3-4 per flight

Many flight segments well-coordinated with ER-2 (above) and Citation (below), not discussed for this time

<http://olympex.atmos.washington.edu>

APR-3 Data Collection

http://olympex.atmos.washington.edu/index.html?x=Science_Summaries

Nov 12-13: Prefrontal Rain, then cold frontal rain

Nov 18: Shallow small-scale post-frontal convection

Nov 23-24: Weak frontal system passage

Nov 25: Clear-sky flights

Dec 01-02: Stratiform/Orographics

Dec 03: Baroclinic system w/orographics

Dec 04: Leftover post-frontal convection

Dec 05: Large frontal system

Dec 08: Atmospheric river type event w/orographics

Dec 10: Good post-frontal convection event

Dec 12: Occluded frontal passage

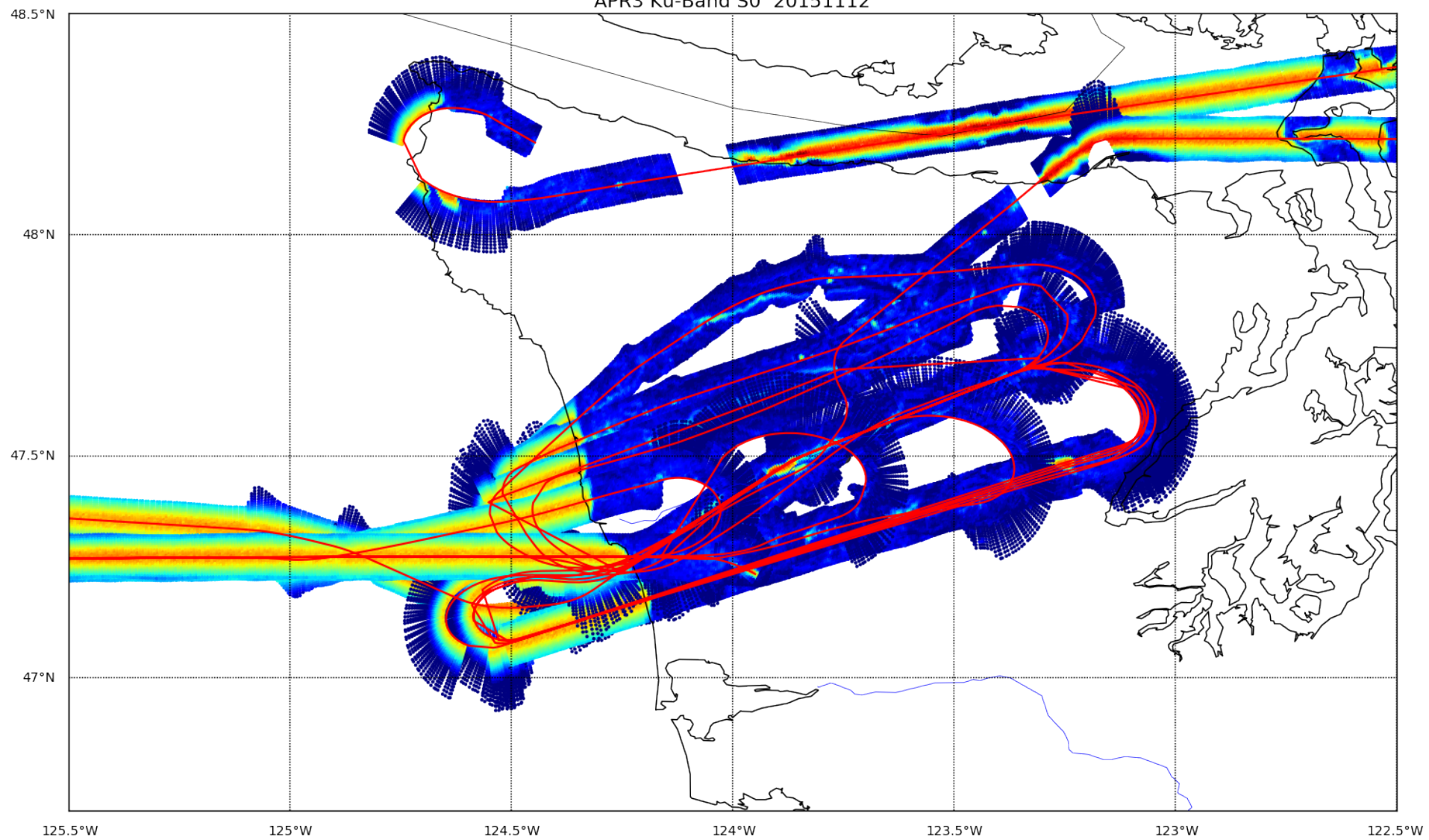
Dec 13: Post-frontal convection

Dec 18: Weak/mixed frontal passage

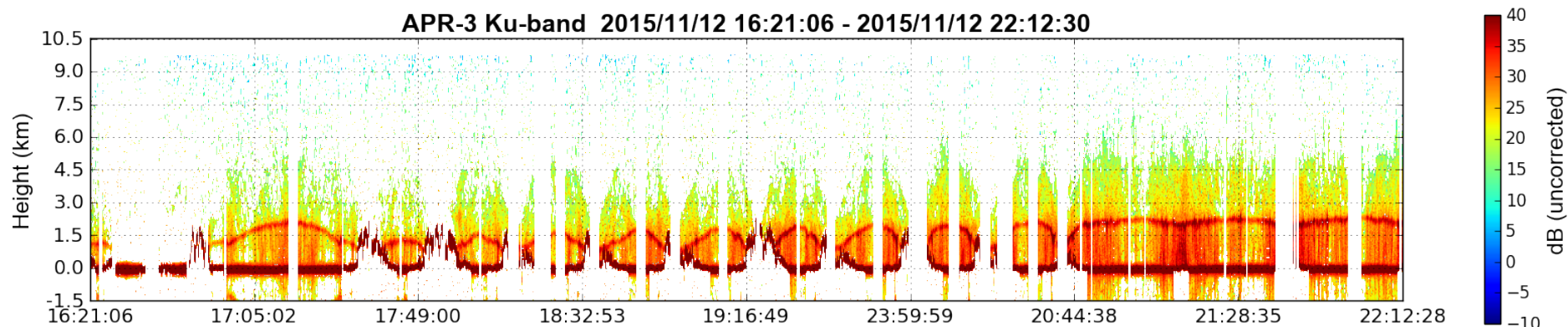
Dec 19: Weak post-frontal convection

<http://olympex.atmos.washington.edu>

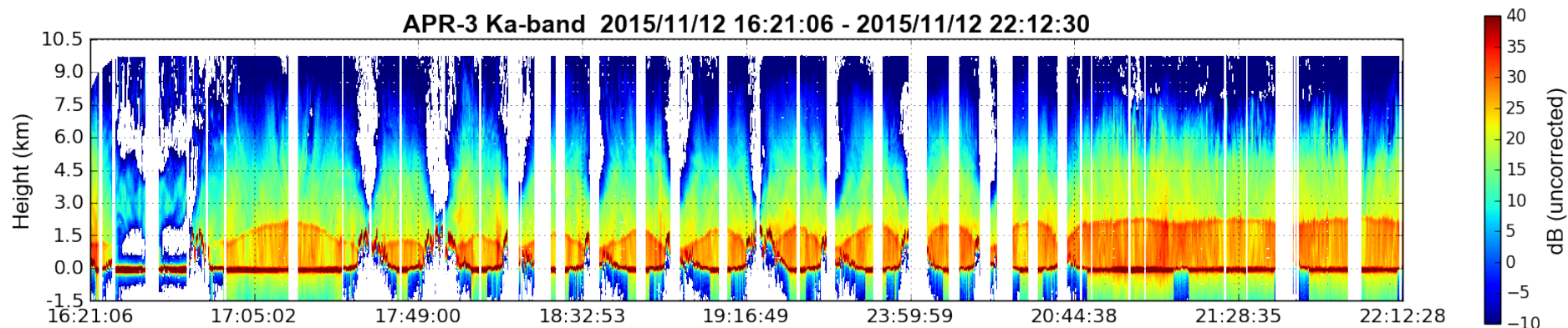
APR3 Ku-Band S0 20151112



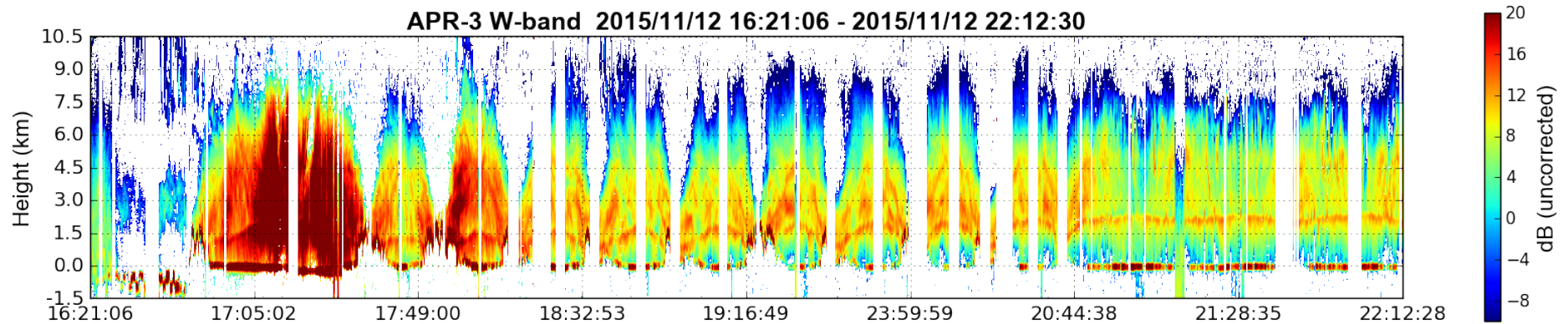
APR-3 Ku-band 2015/11/12 16:21:06 - 2015/11/12 22:12:30



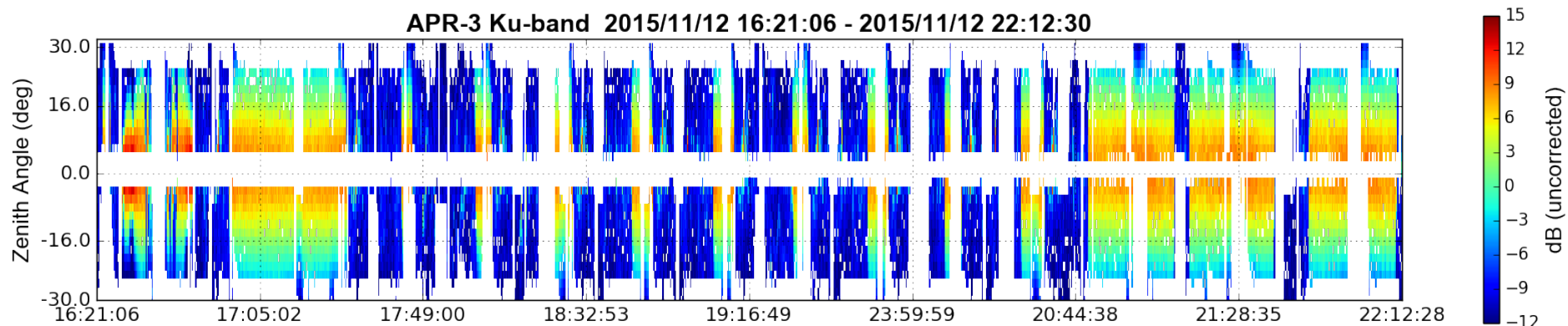
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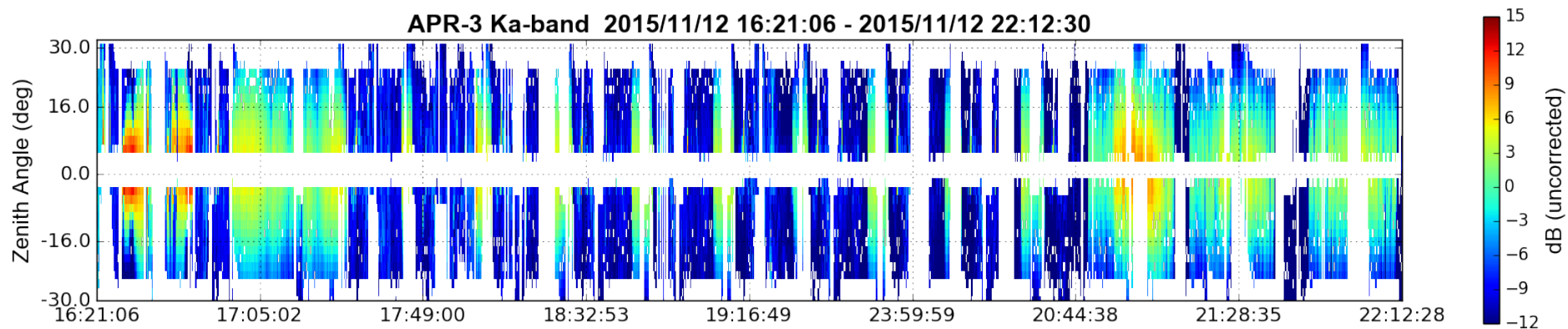
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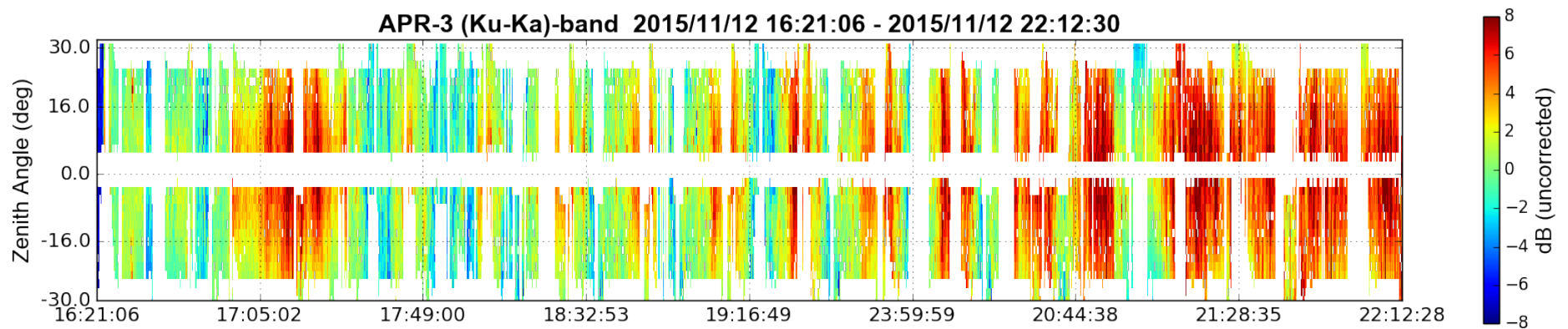
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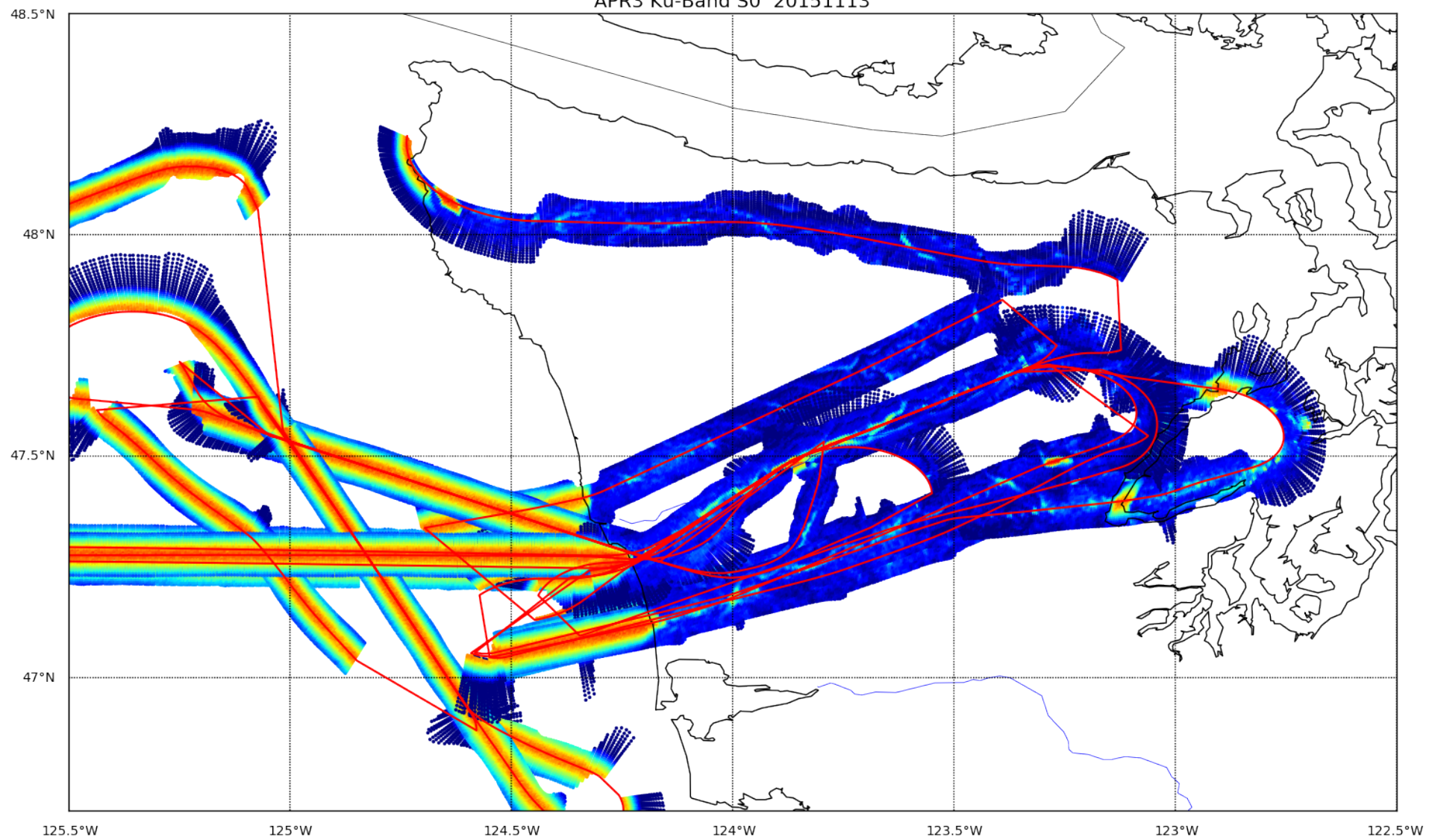
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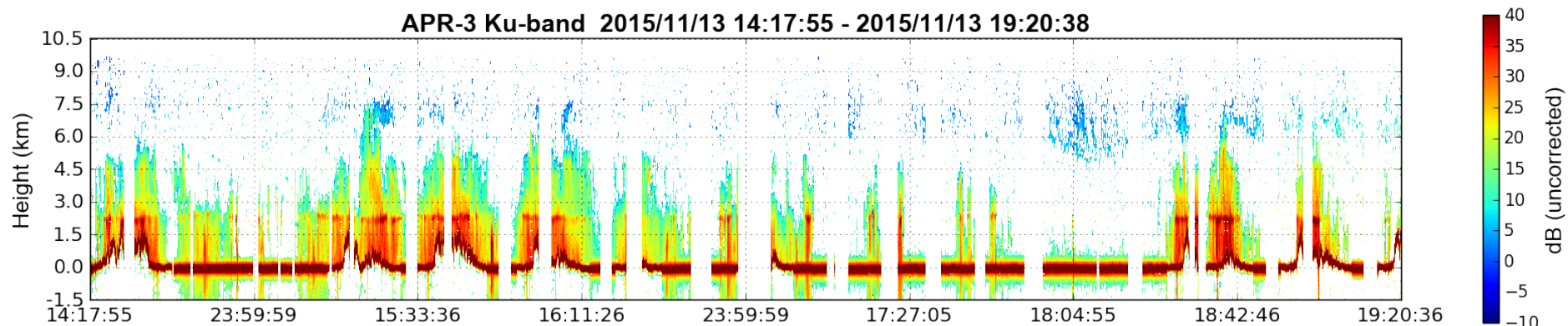
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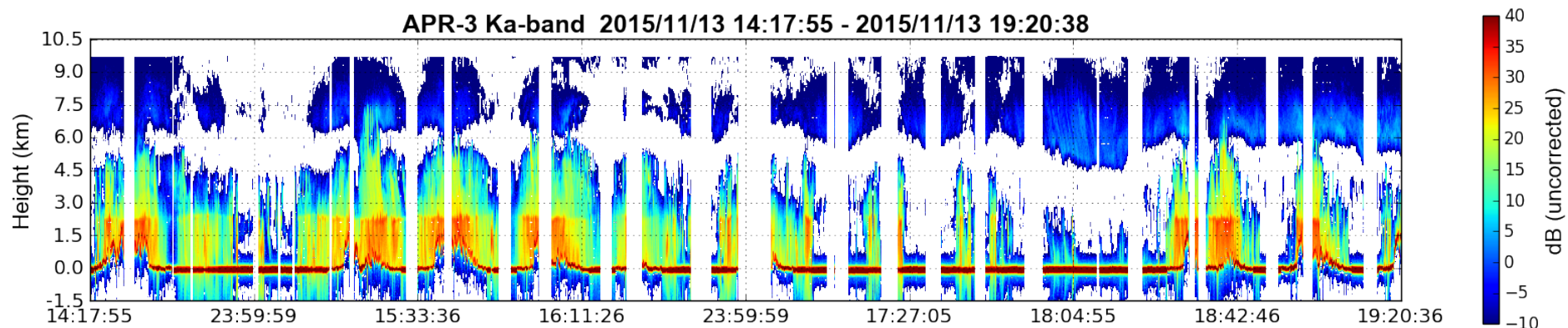
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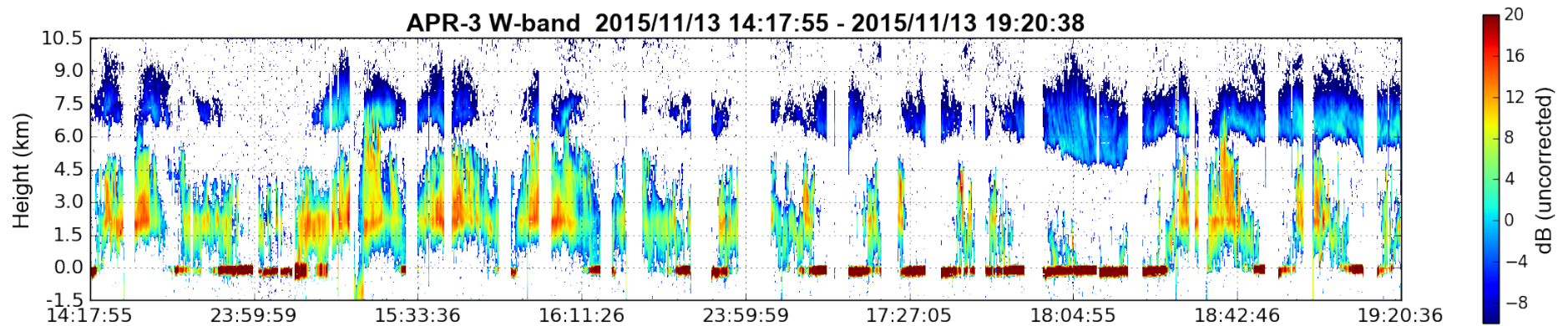
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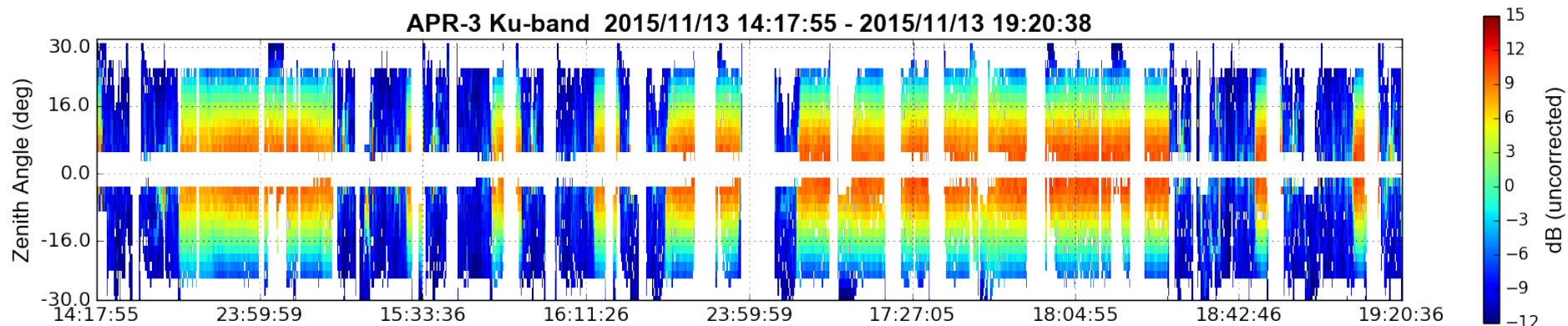
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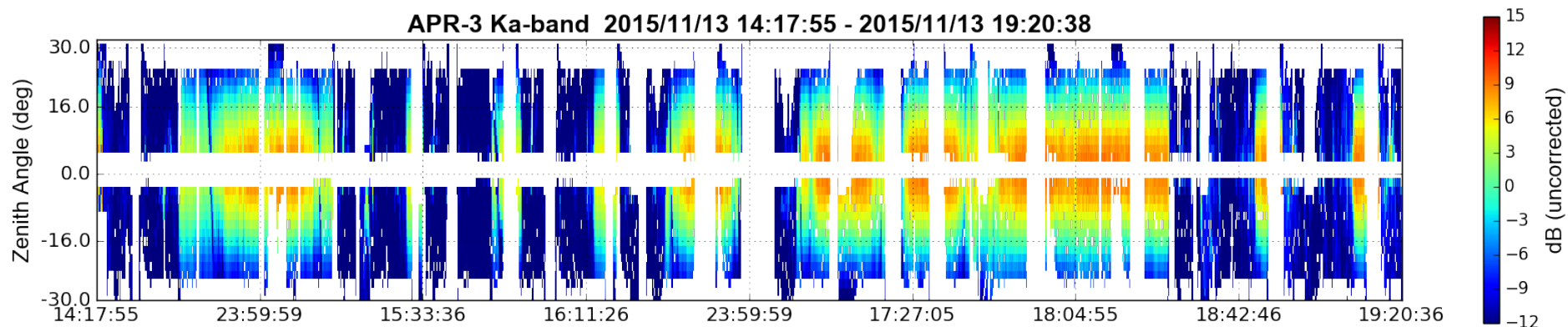
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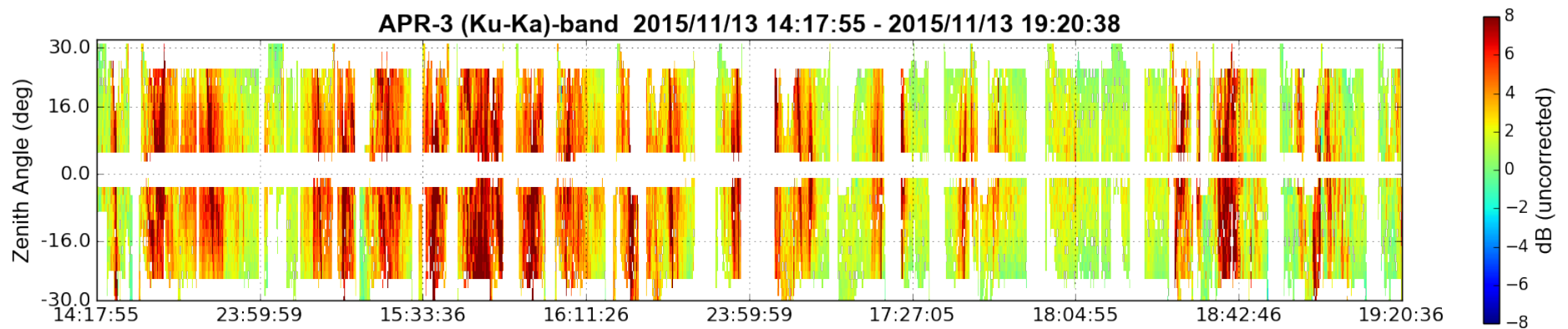
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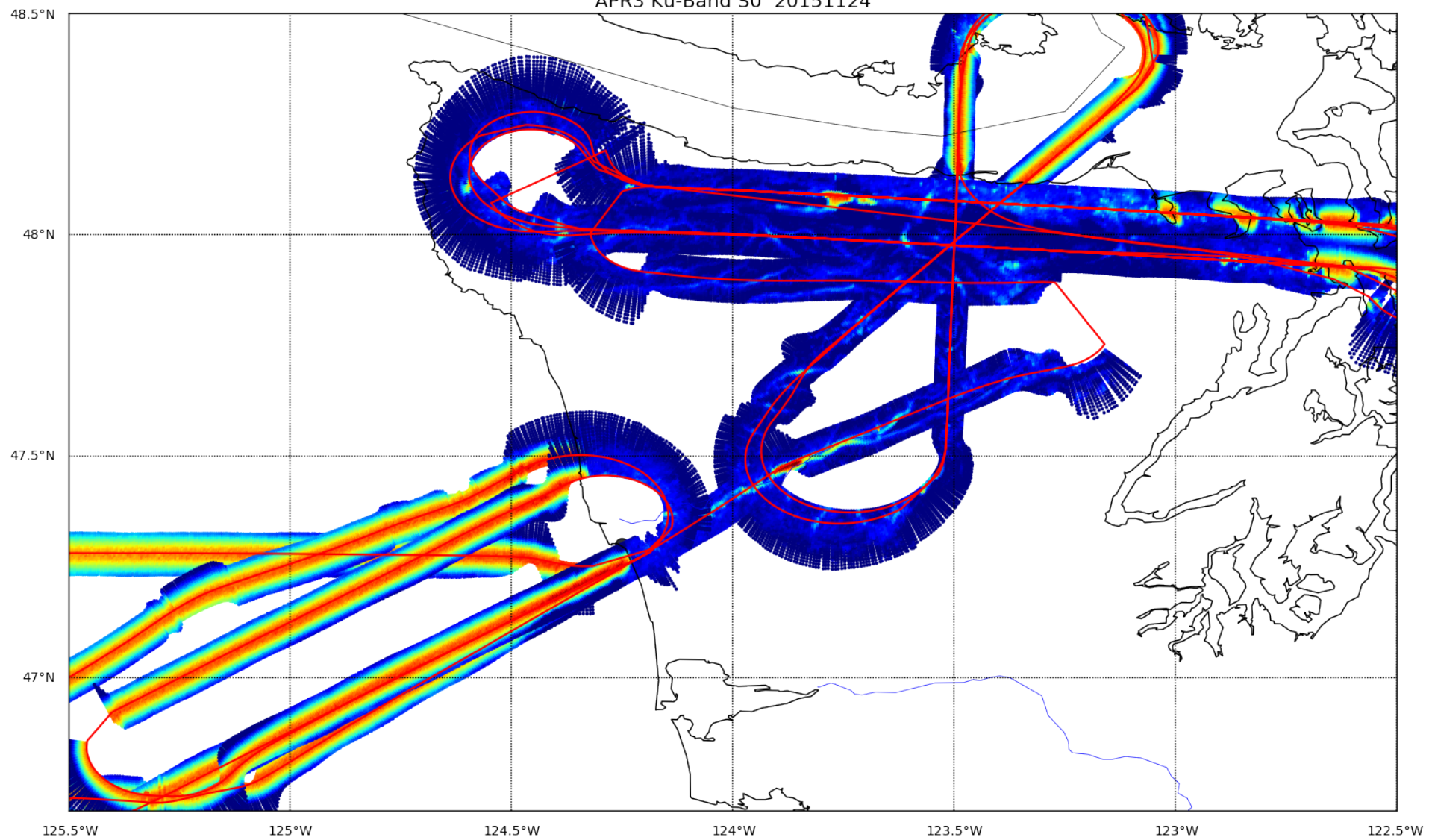
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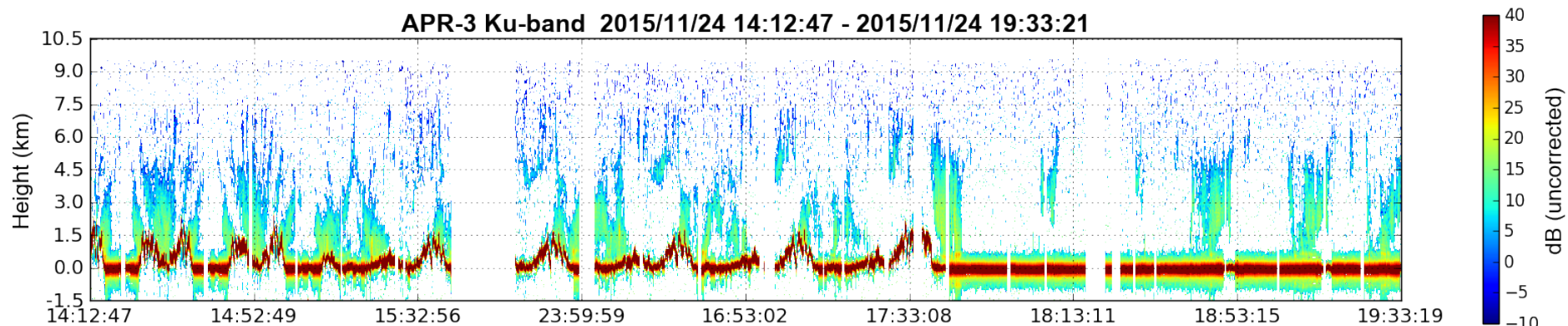
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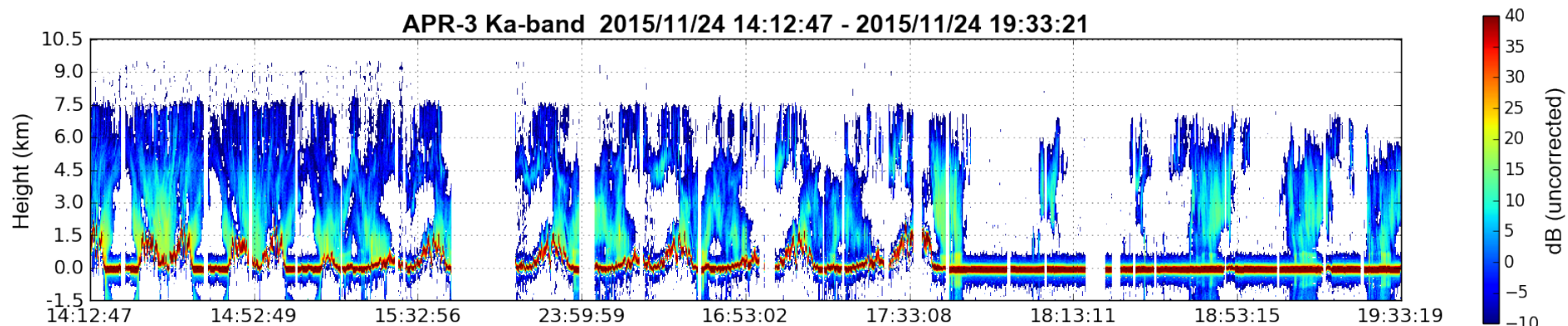
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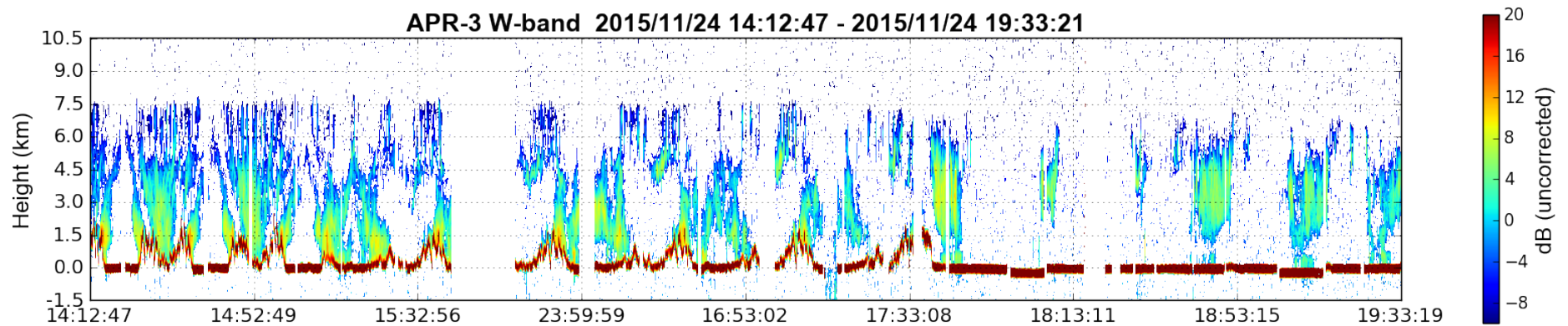
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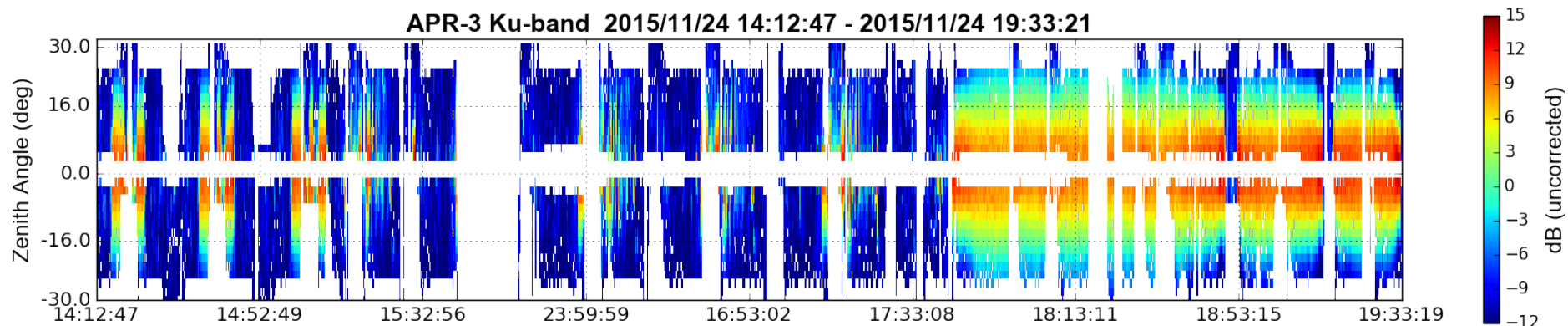
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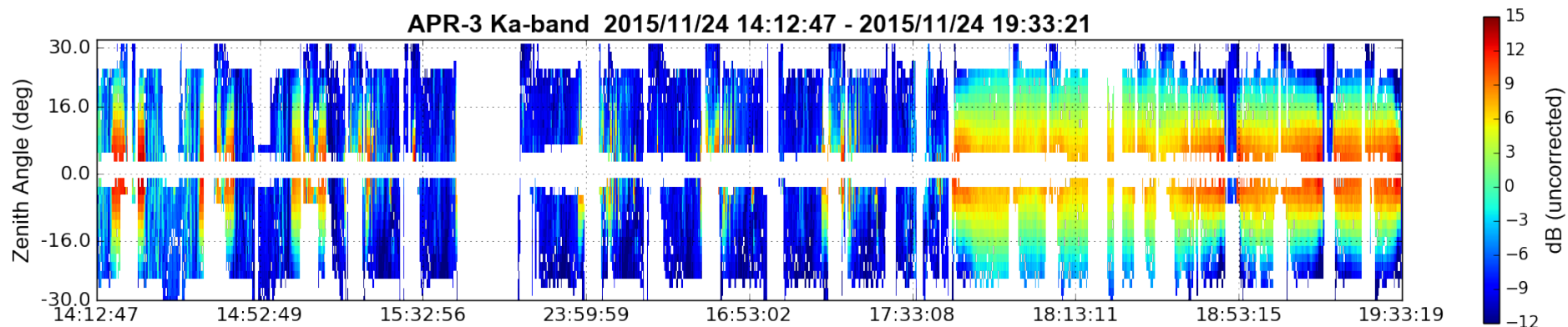
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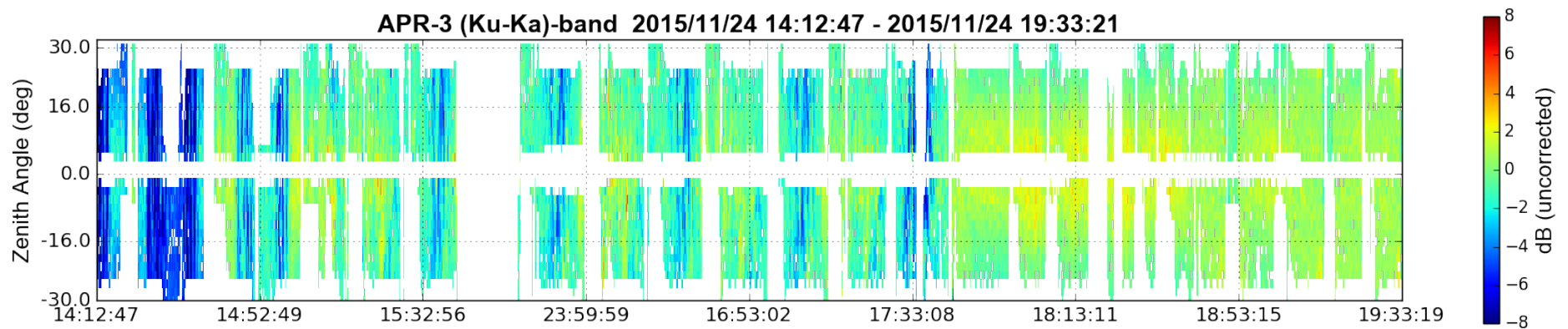
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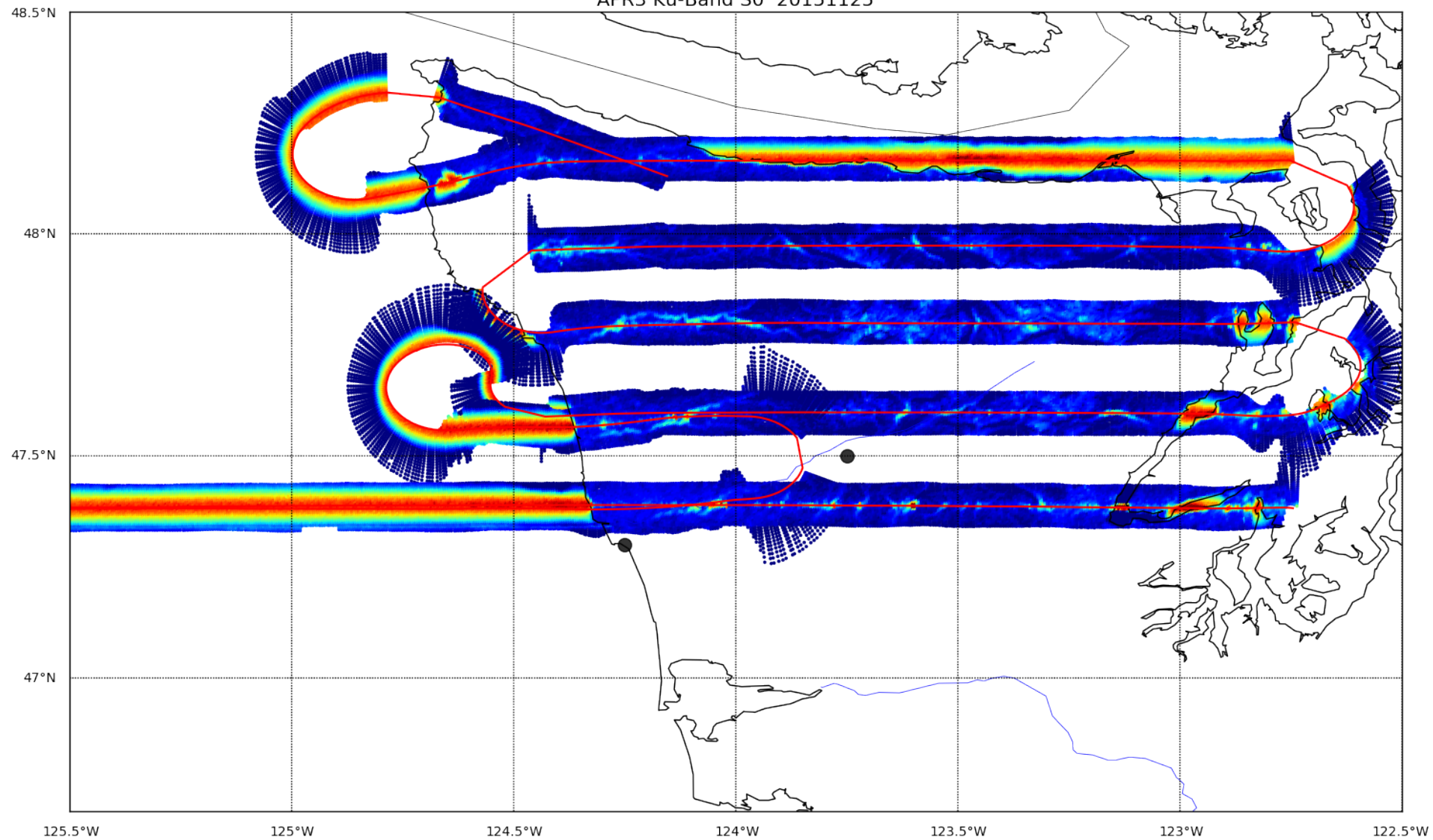
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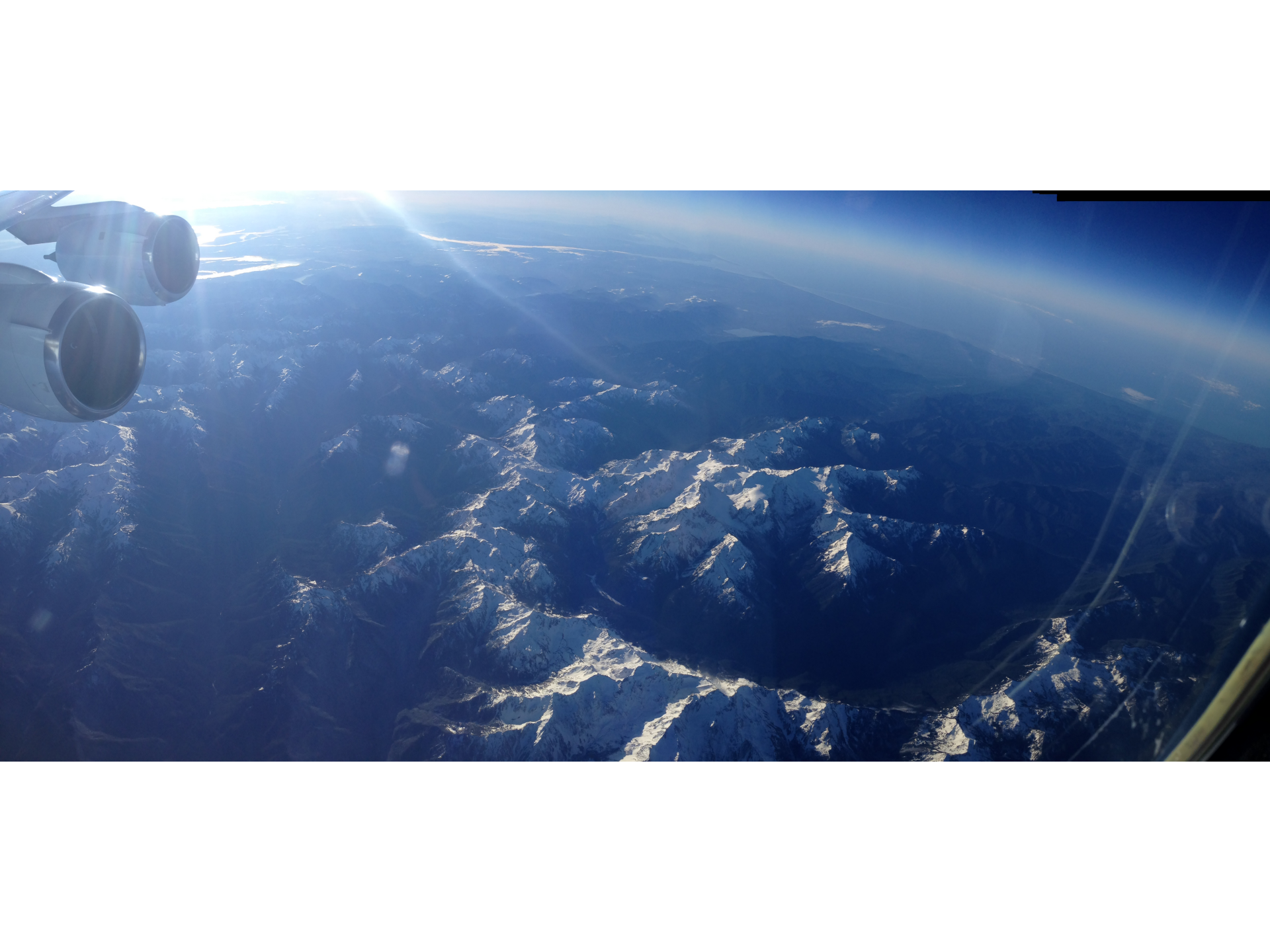


APR-3 (Ku-Ka)-band 2015/11/24 14:12:47 - 2015/11/24 19:33:21

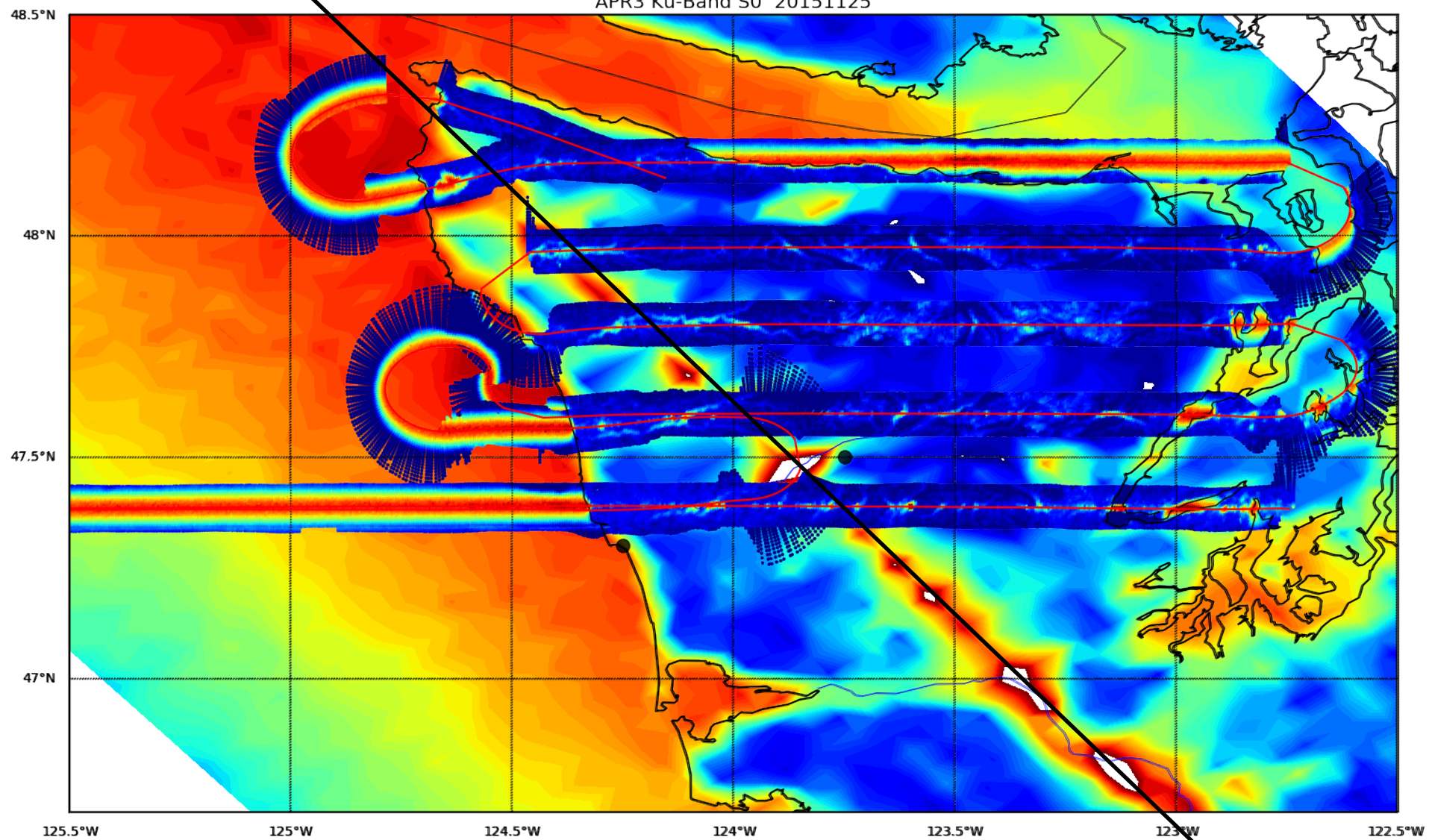


APR3 Ku-Band S0 20151125

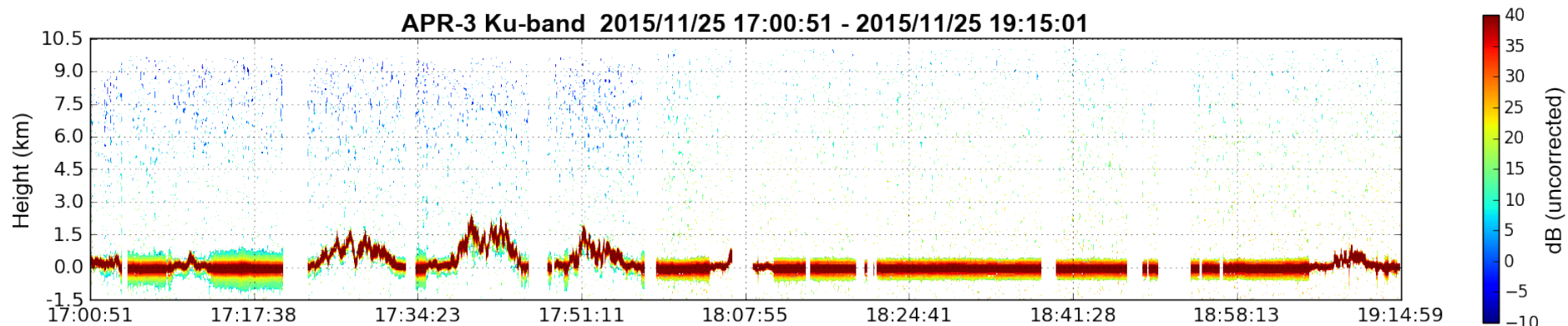




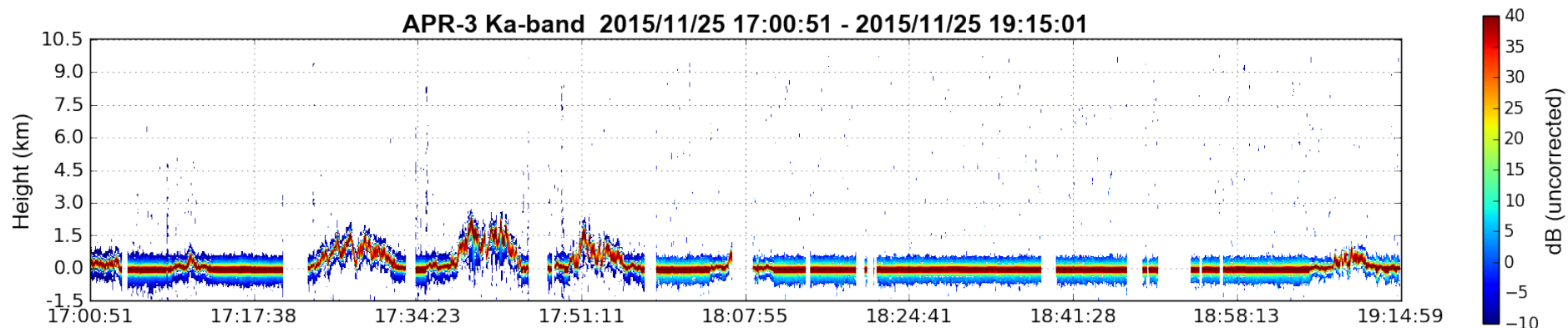
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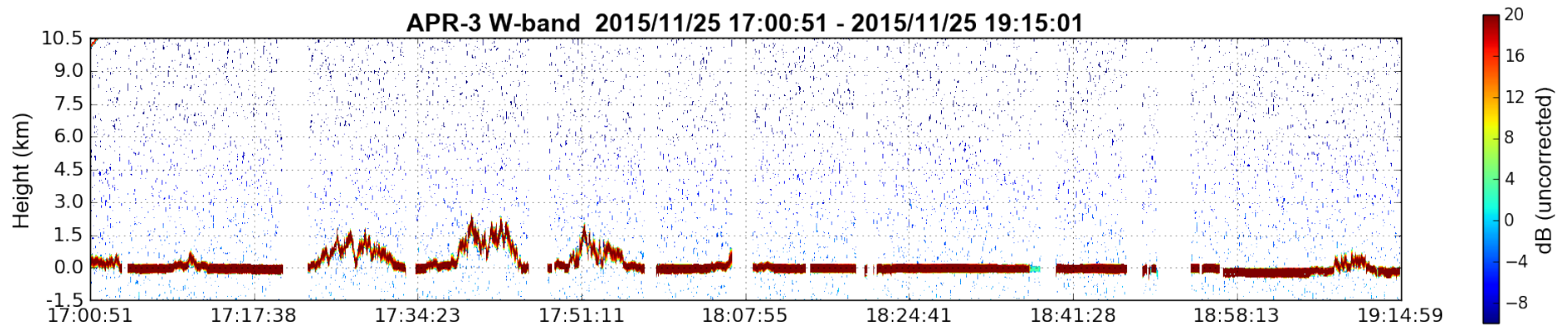
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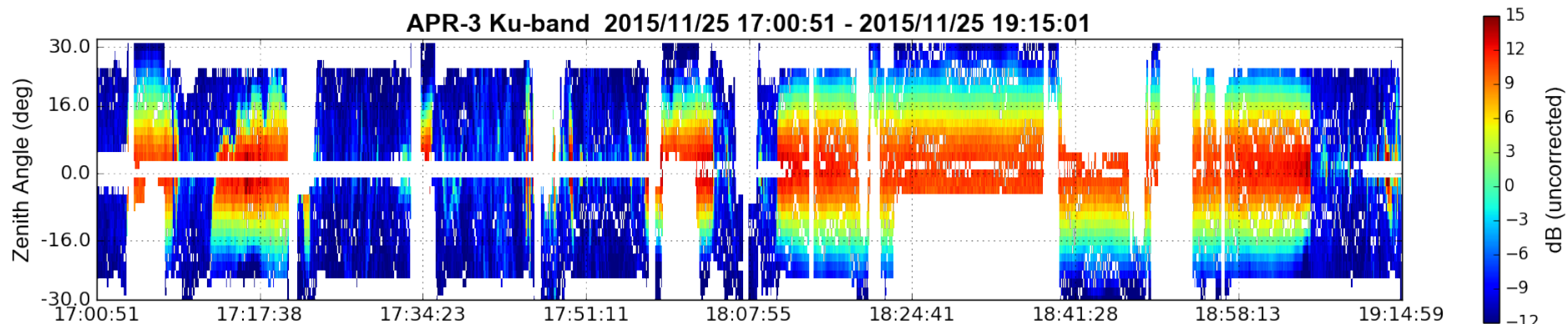
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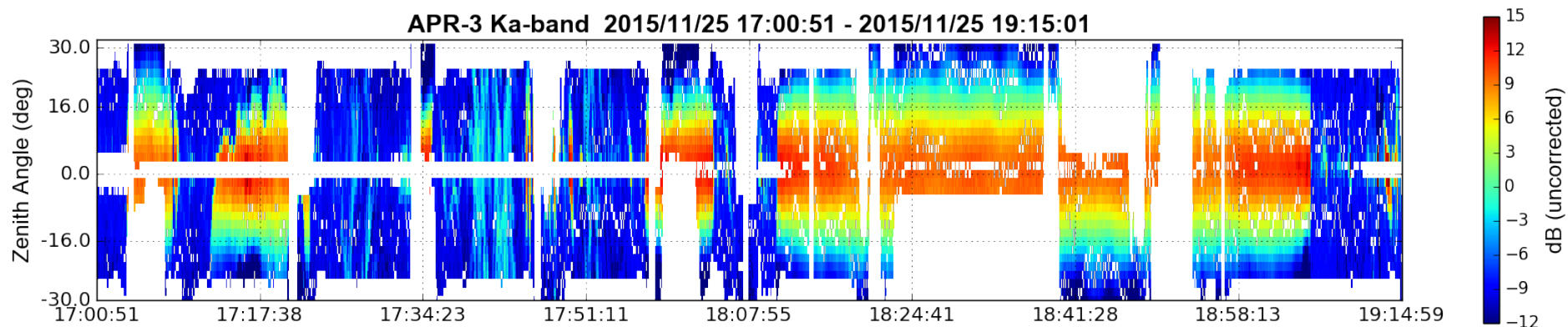
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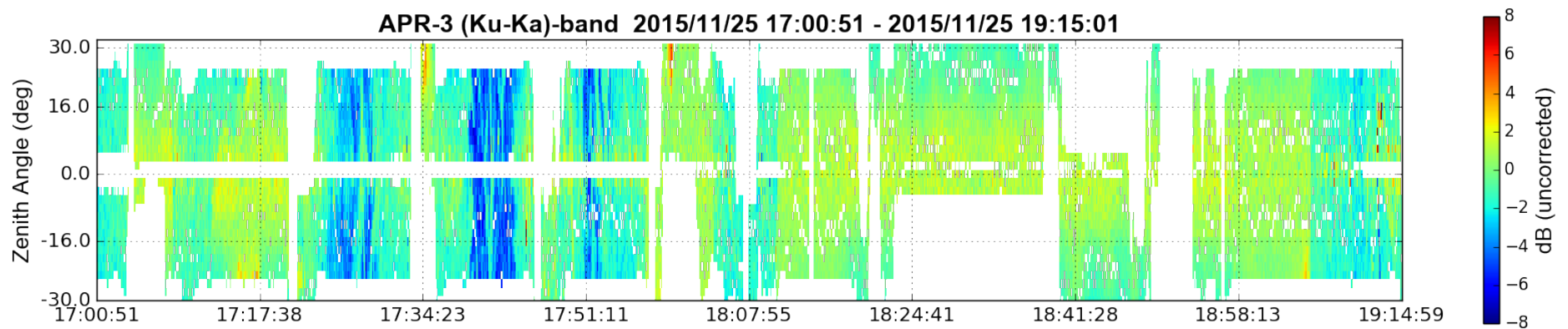
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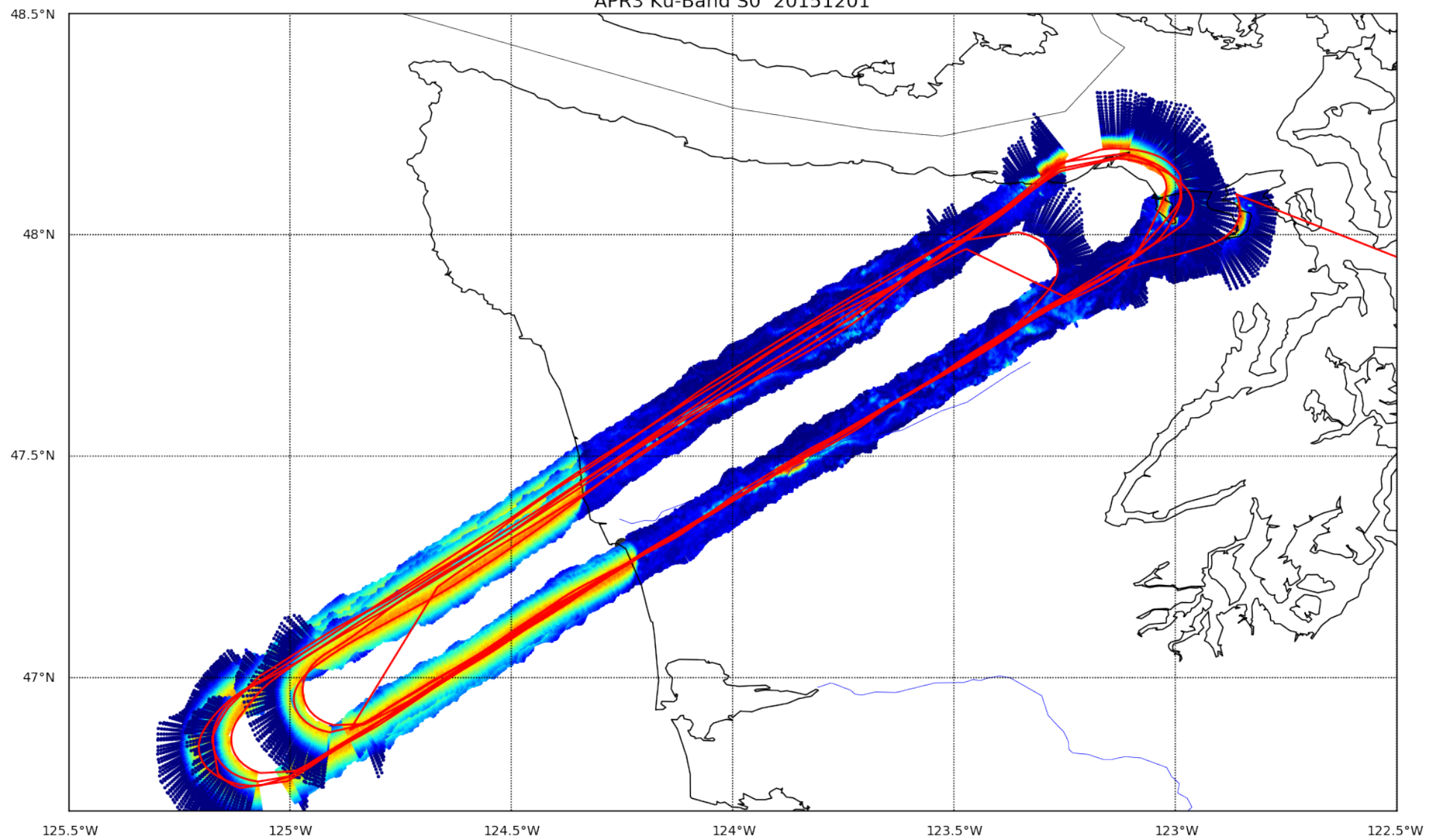
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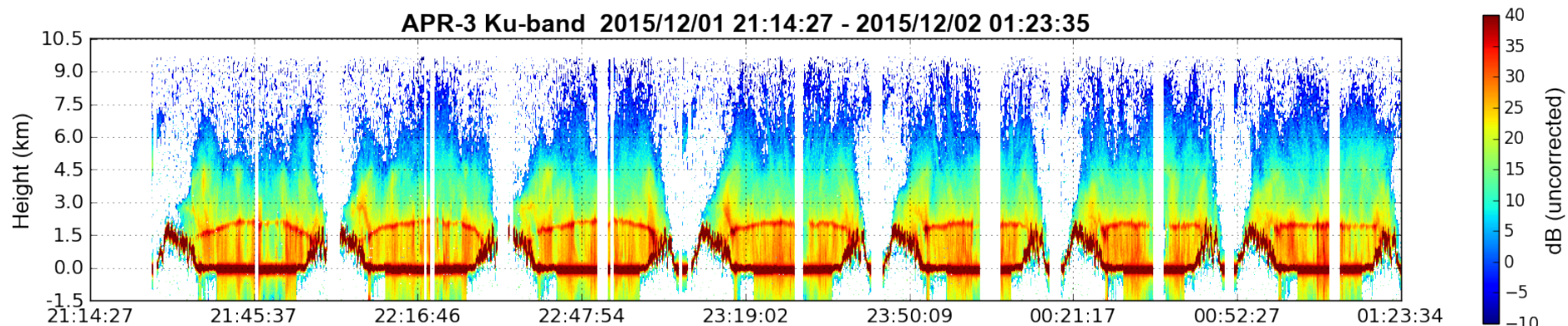
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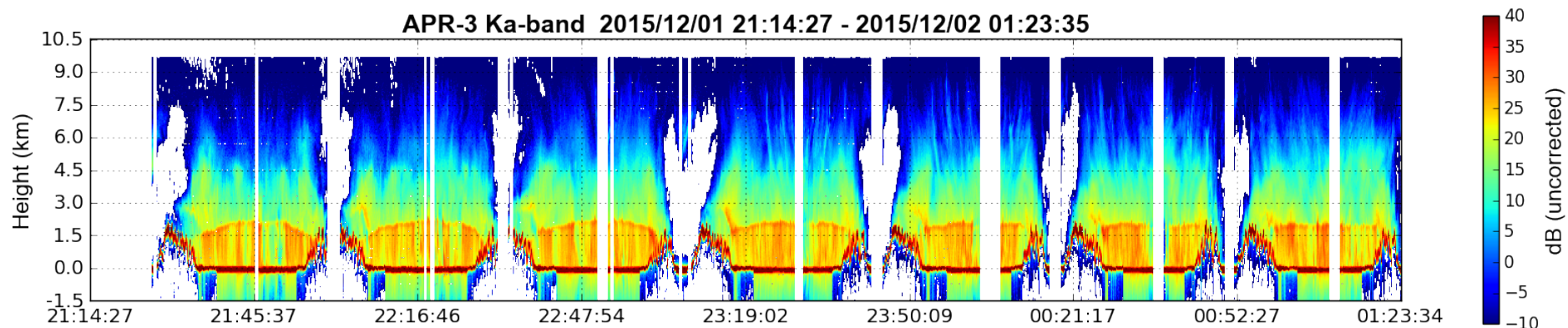
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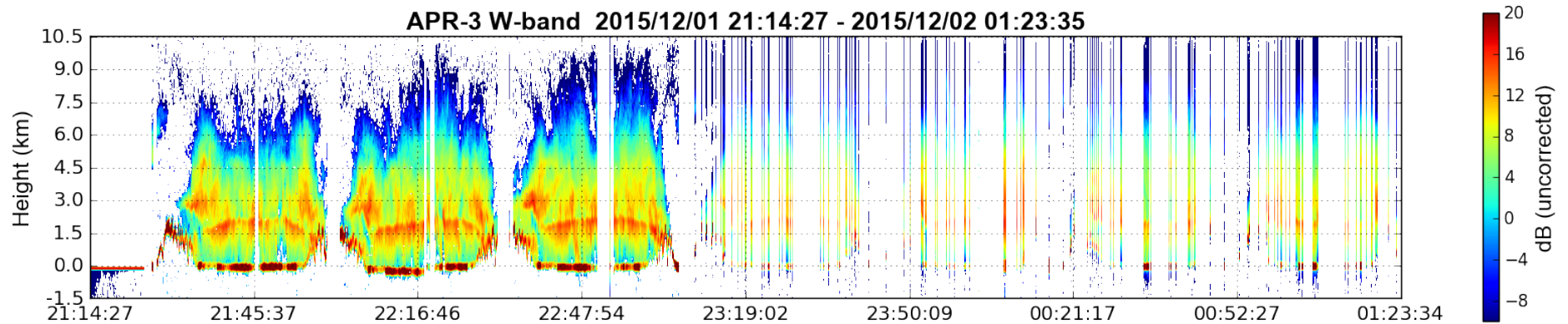
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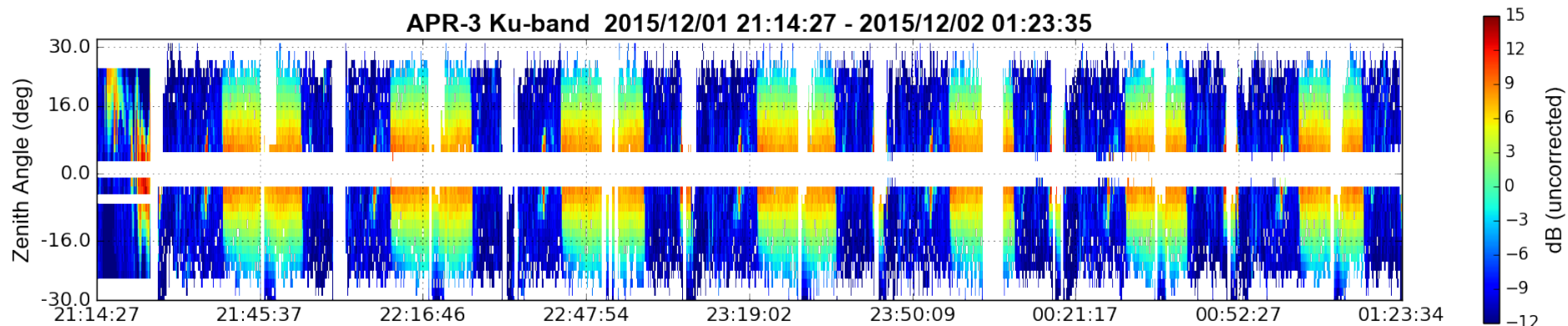
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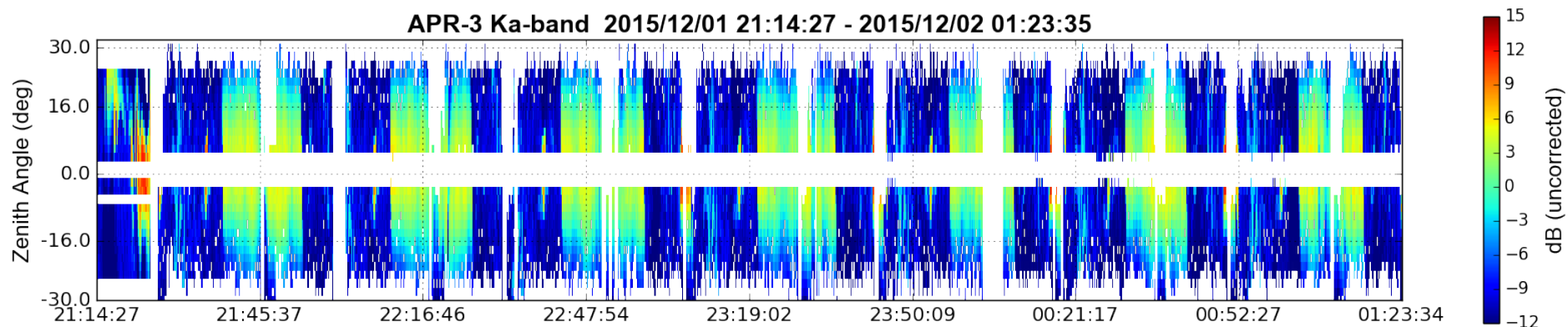
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APR-3 Ku-band 2015/12/01 21:14:27 - 2015/12/02 01:23:35



APR-3 Ka-band 2015/12/01 21:14:27 - 2015/12/02 01:23:35



APR-3 (Ku-Ka)-band 2015/12/01 21:14:27 - 2015/12/02 01:23:35

