



Supplement of

Synthesis of surface snowfall rates and radar-observed storm structures in 10+ years of northeastern US winter storms

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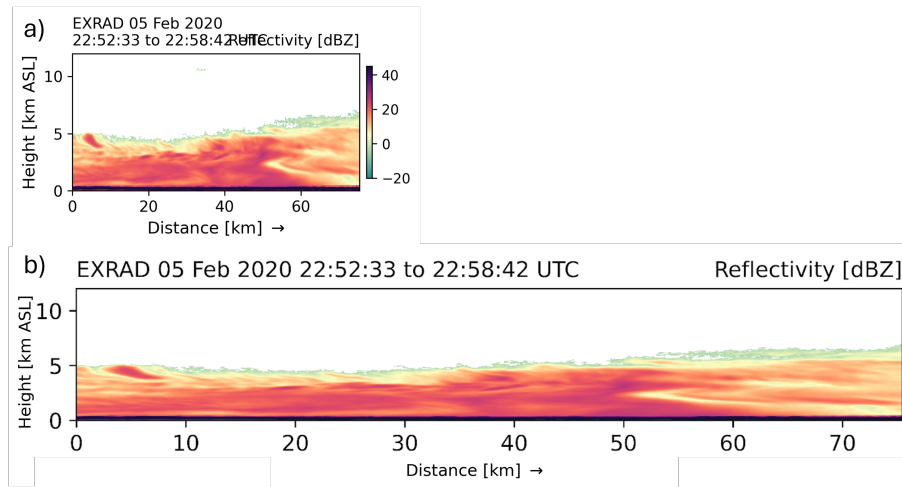


Figure S1: An example transect of reflectivity from the EXRAD radar plotted with a (a) 3:1 aspect ratio and (b) 1:1 aspect ratio

Table S1: List of storm days between 1996-2023 used in the analysis. Dates are in YYYYMMDD format.

19960102	19960103	19960104	19960107	19960108	19960109	19960110	19960112
19960129	19960131	19960202	19960203	19960208	19960211	19960214	19960216
19960217	19960302	19960305	19960306	19960307	19960308	19960329	19961126
19961127	19961206	19961231	19970109	19970110	19970111	19970124	19970127
19970128	19970131	19970204	19970208	19970214	19970216	19970217	19970303
19970306	19970308	19970310	19970314	19970331	19971114	19971116	19971122
19971210	19971223	19971227	19971229	19971230	19980116	19980118	19980119
19980123	19980124	19980125	19980224	19980314	19980322	19981224	19981229
19981230	19990108	19990109	19990112	19990113	19990114	19990115	19990128
19990129	19990208	19990212	19990225	19990306	19990307	19990314	19990315
19990322	20000113	20000120	20000121	20000125	20000126	20000130	20000131
20000203	20000214	20000218	20000219	20000317	20001214	20001219	20001220
20001222	20001230	20001231	20010105	20010106	20010108	20010109	20010119
20010121	20010127	20010202	20010205	20010206	20010208	20010222	20010223
20010225	20010301	20010302	20010304	20010305	20010306	20010309	20010310
20010326	20010330	20011208	20011209	20020106	20020107	20020117	20020119
20020121	20020131	20020211	20020318	20020320	20021116	20021117	20021118
20021127	20021202	20021205	20021206	20021211	20021212	20021216	20021225
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20030212	20030216	20030217	20030218	20030306	20030313	20030330	20031205
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20050225	20050228	20050301	20050302	20050308	20050309	20050311	20050312
20050323	20050324	20051124	20051204	20051206	20051209	20051216	20051231
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20140121	20140122	20140125	20140129	20140203	20140205	20140209	20140213
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20161205	20161212	20161217	20161229	20161230	20170106	20170107	20170114
20170118	20170124	20170131	20170201	20170207	20170209	20170211	20170212
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20171209	20171212	20171213	20171214	20171215	20171222	20171225	20171230
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20230222	20230223	20230225	20230227	20230228	20230303	20230304	20230311
20230314							

All available transects from NASA IMPACTS with snow to the surface

In this section we present all 57 available transects from the 3 NASA IMPACTS deployment which have snow to the surface. For each transect we present the reflectivity, velocity, spectrum width, and LDR fields from the instrument with the shortest wavelength available (usually CRS, but occasionally HIWRAP Ku-band) and the reflectivity field from the instrument with the longest wavelength available (usually EXRAD, but occasionally HIWRAP Ka-band). We include snapshots of the NEXRAD regional maps to provide context for the transects. If available, we include the VAD winds on the EXRAD reflectivity transects and CFADs of wind speed and direction to summarize the wind patterns. Each transect is annotated with one or two vertical, dashed, black lines which annotates the approximate location where the enhanced reflectivity features are in the regional maps. The time of the regional maps and transects as well as the field and instrument plotted is labeled above each sub-figure.

2020

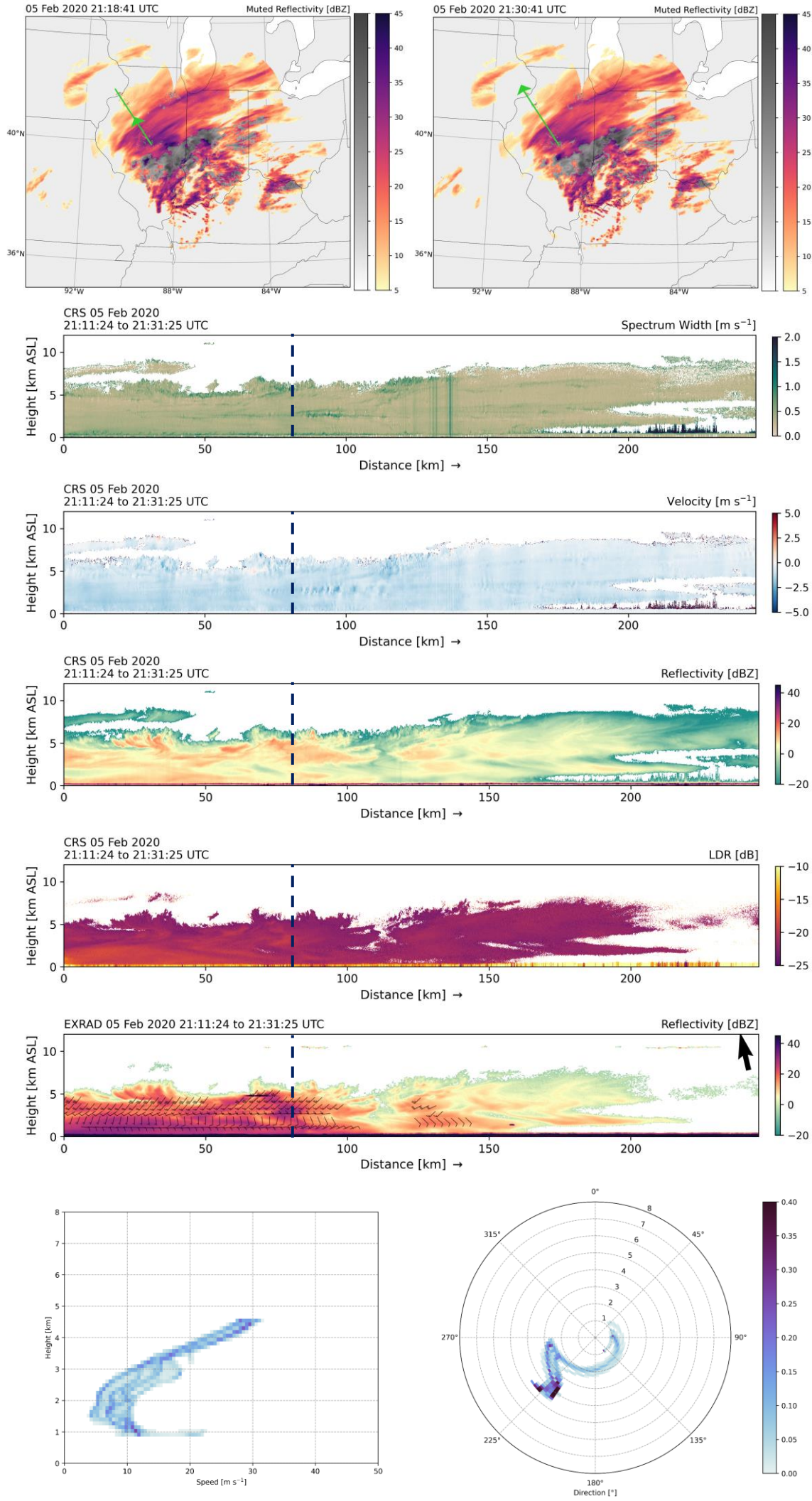


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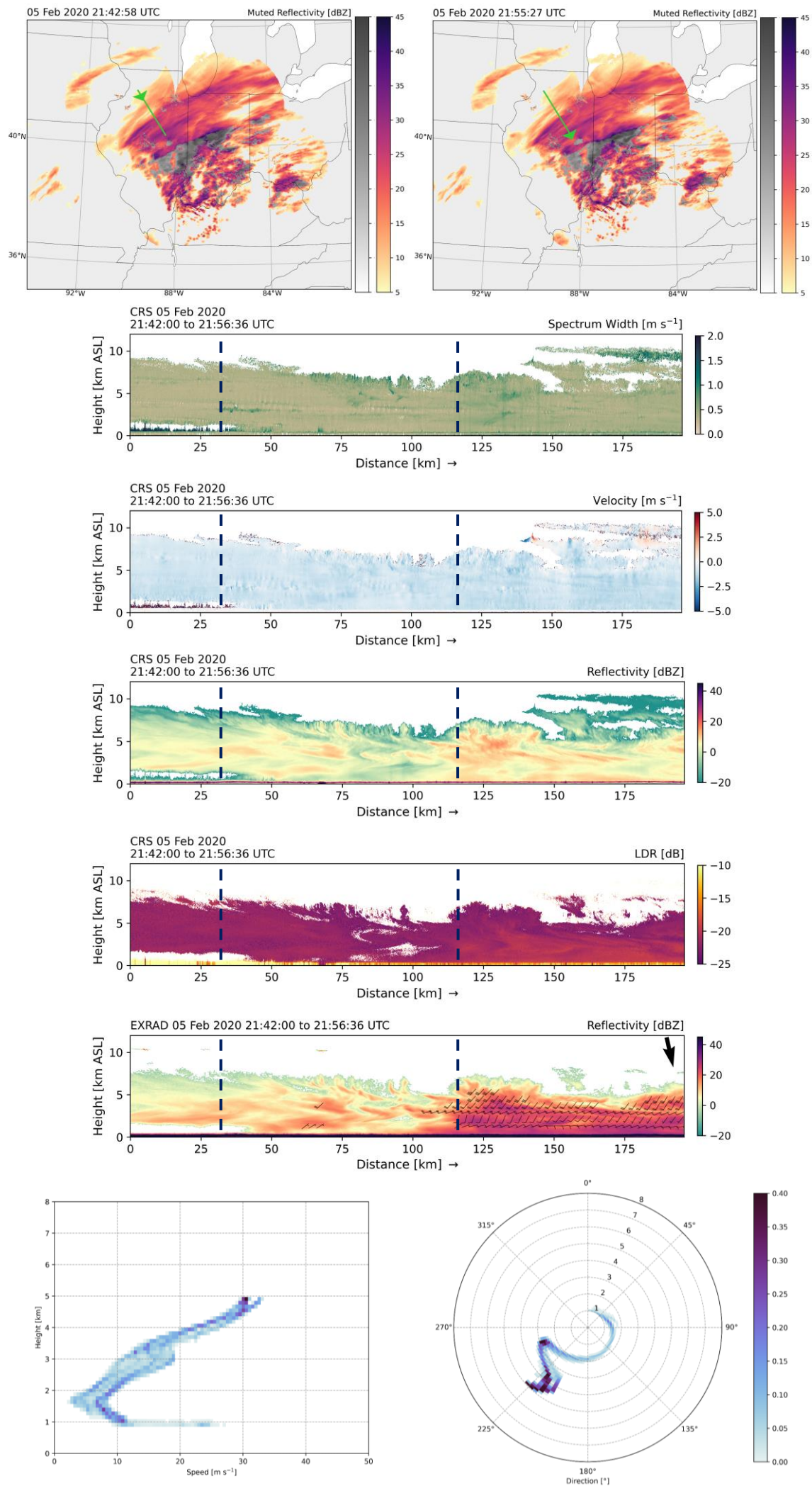


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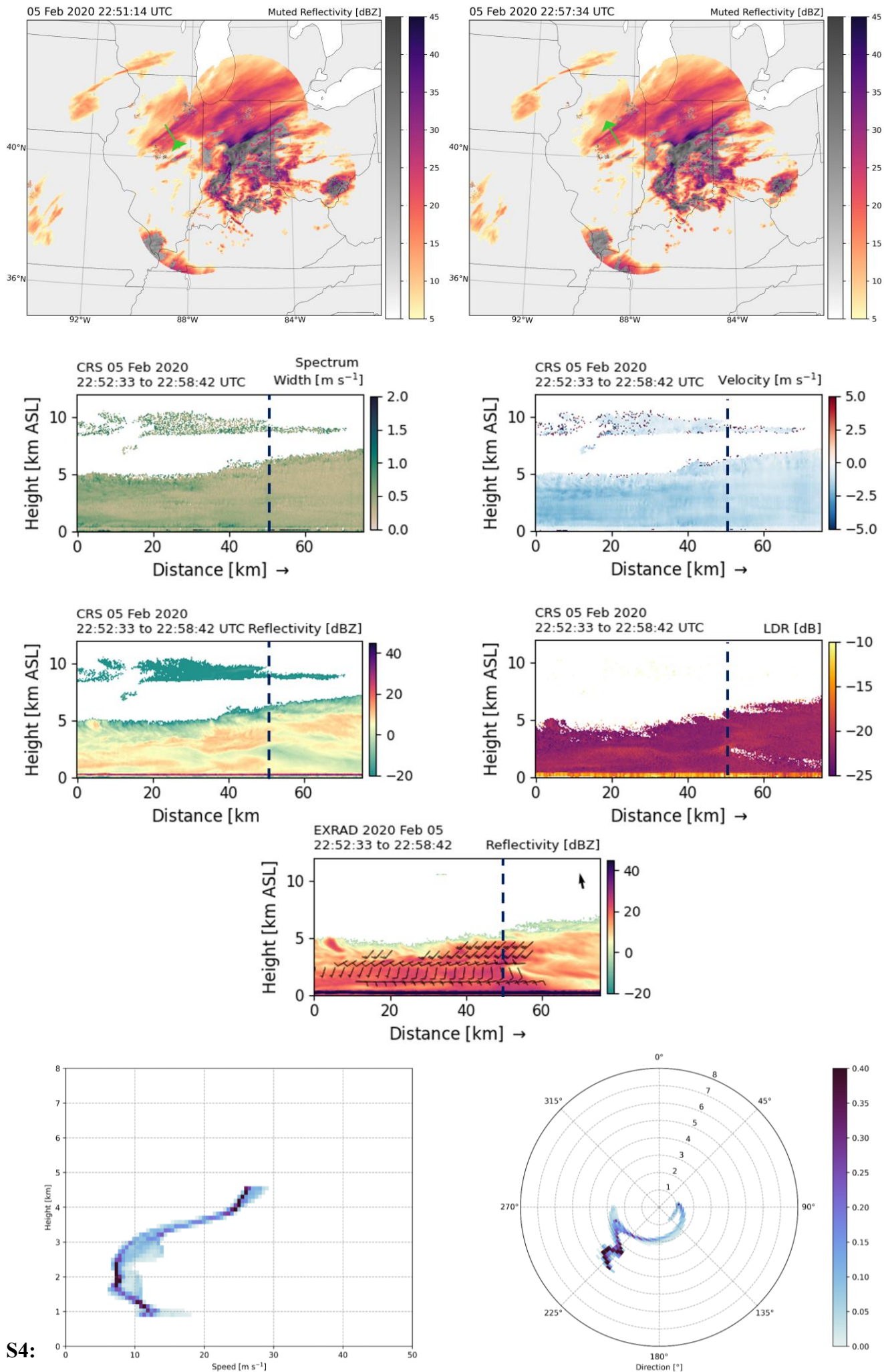


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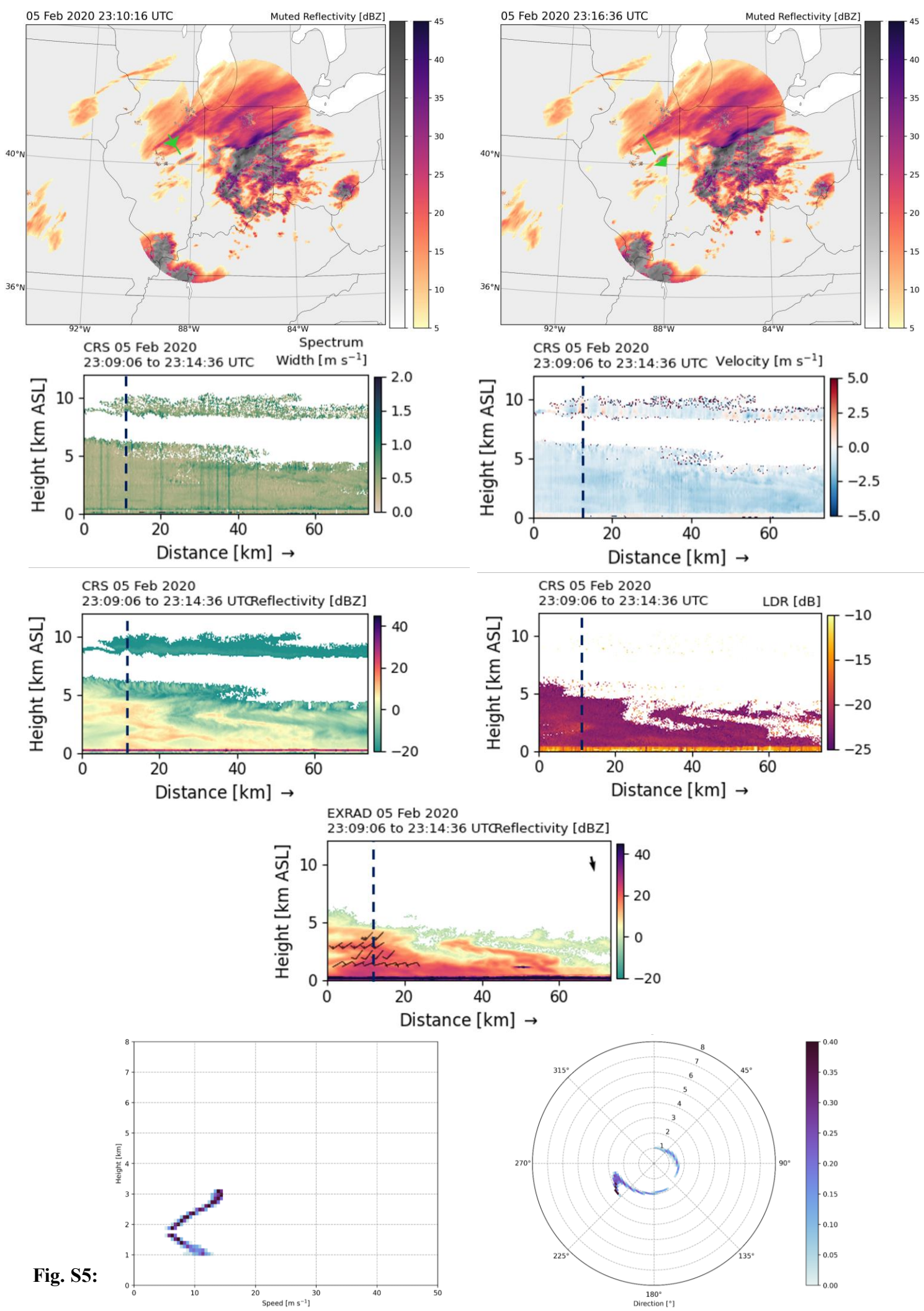


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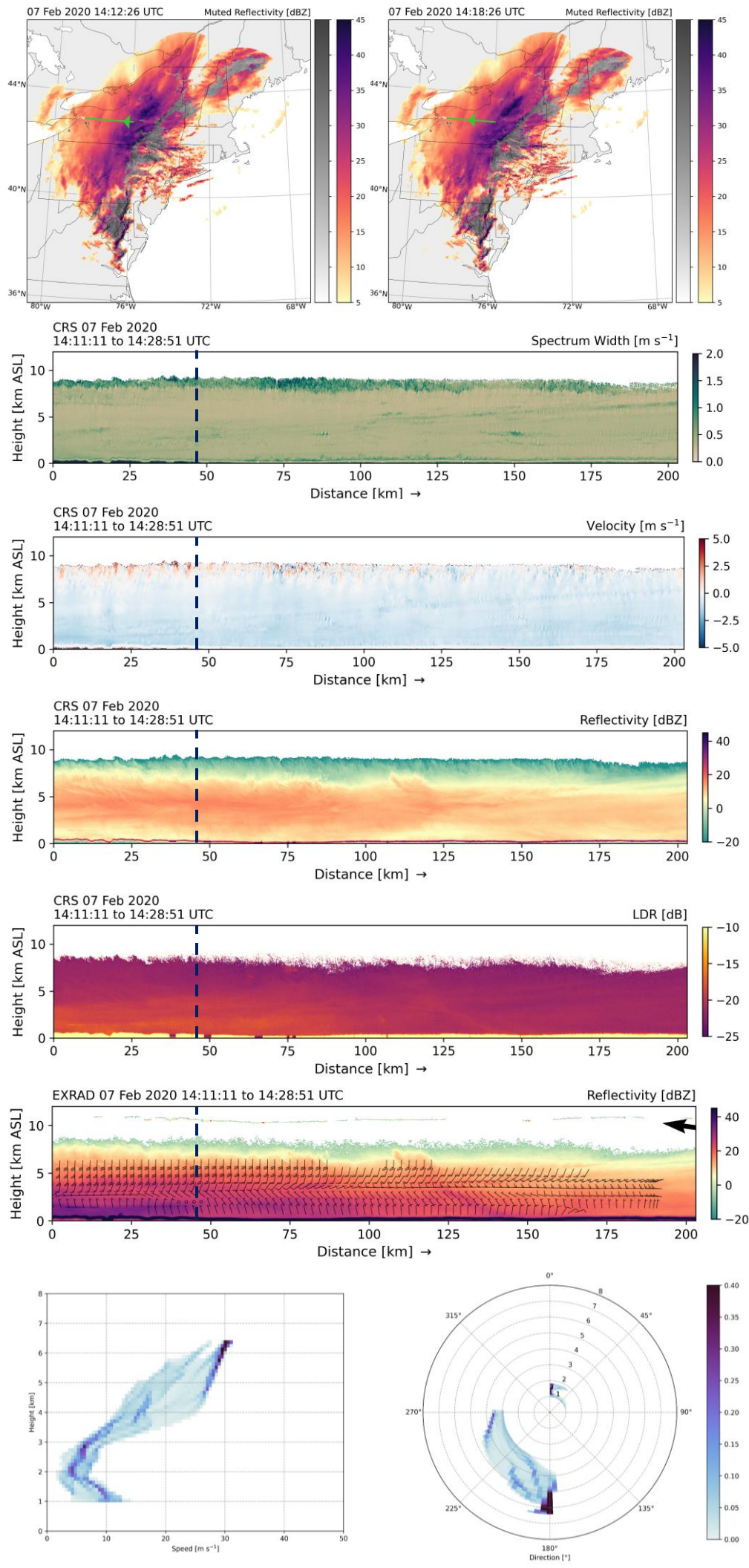


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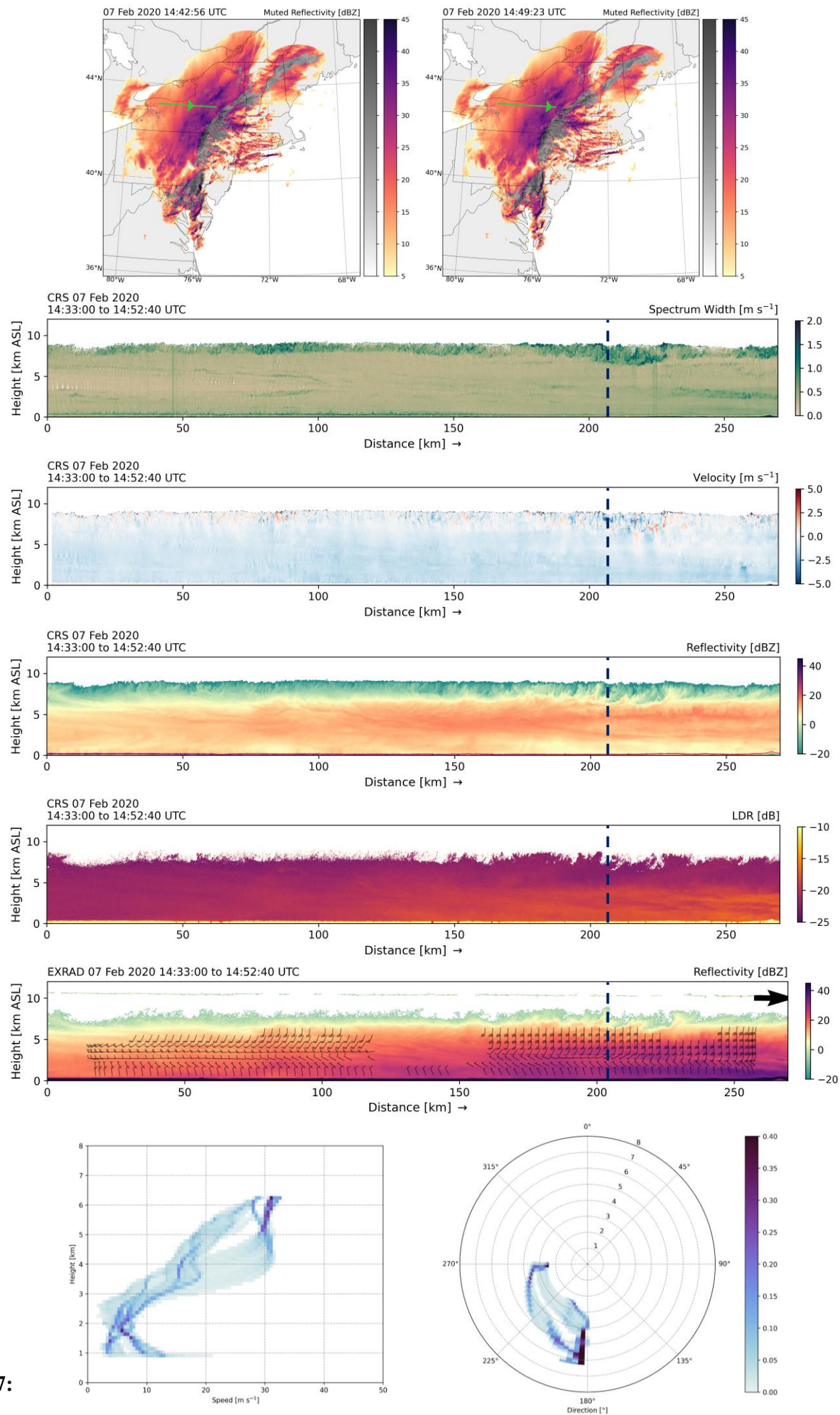


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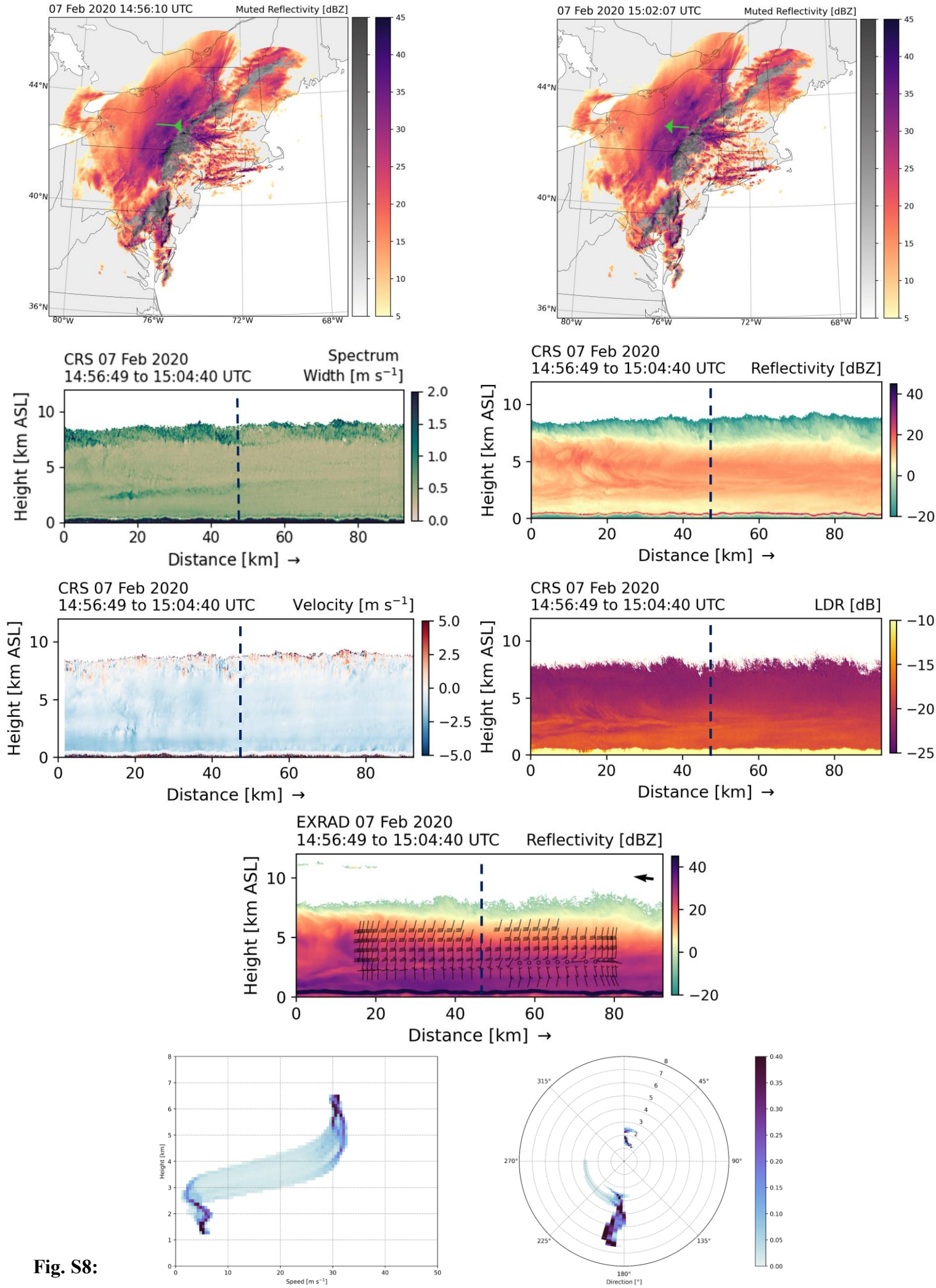


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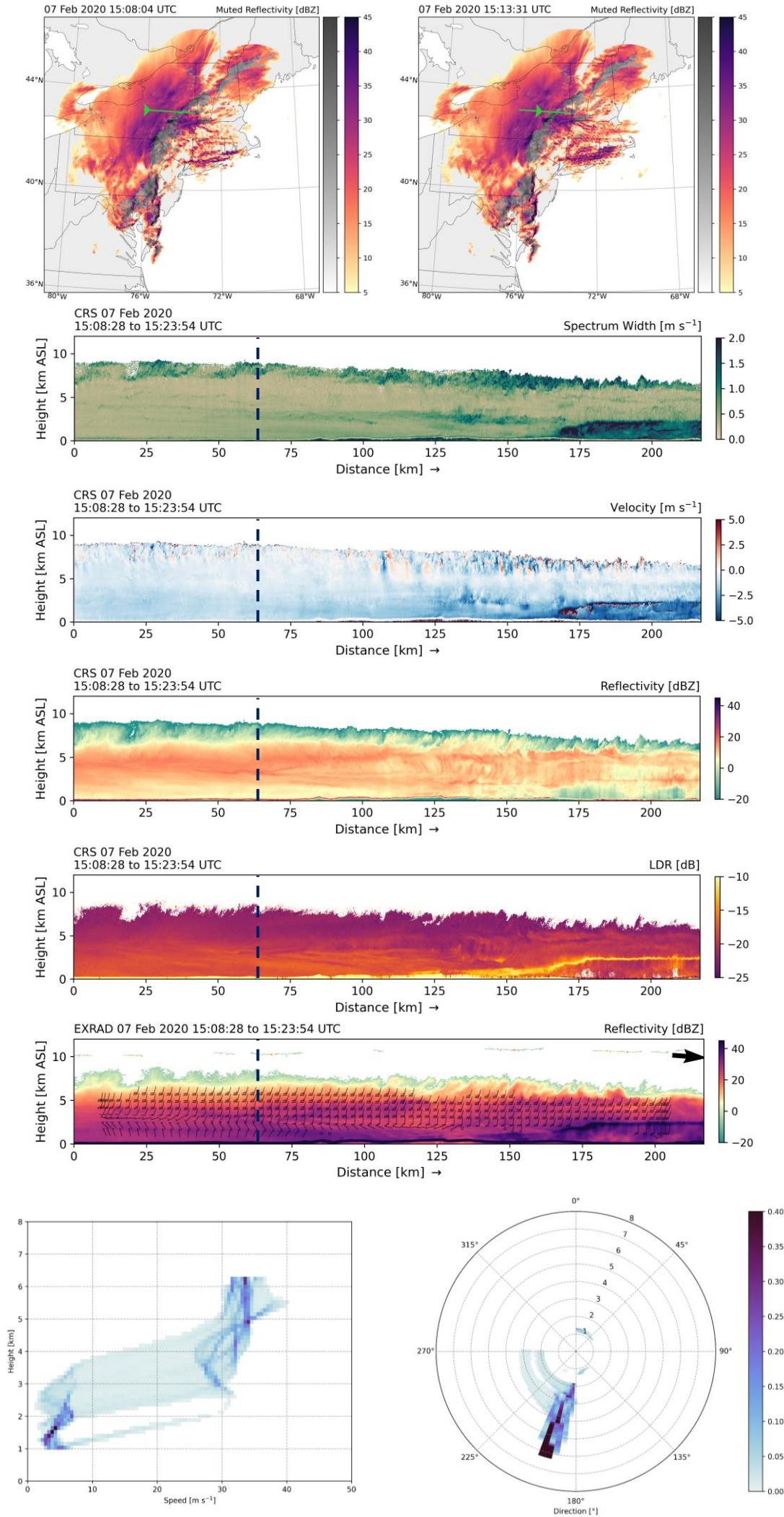
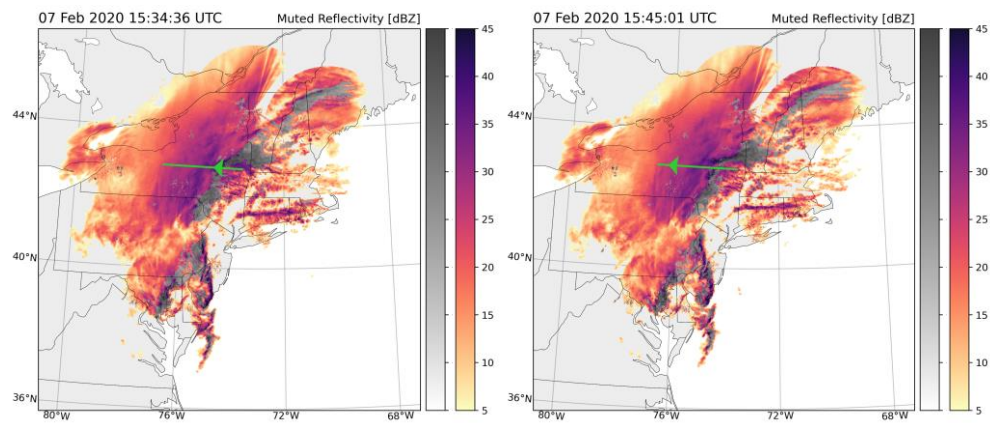
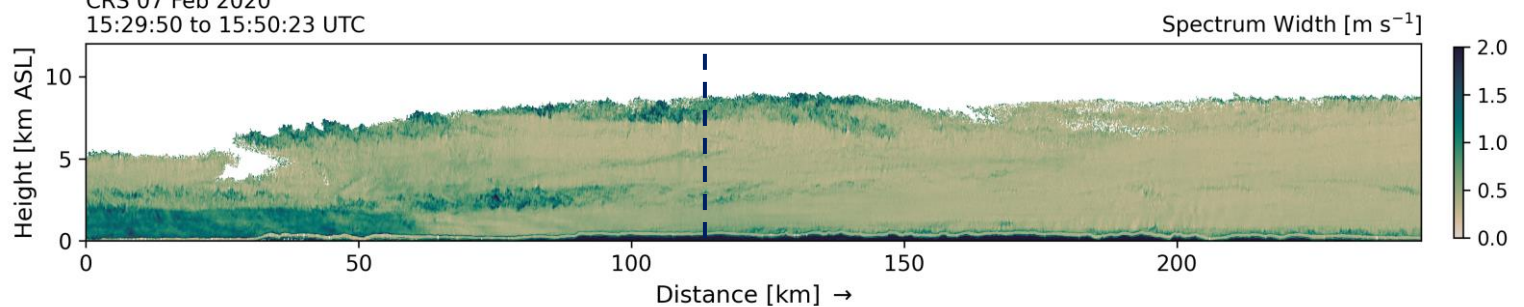


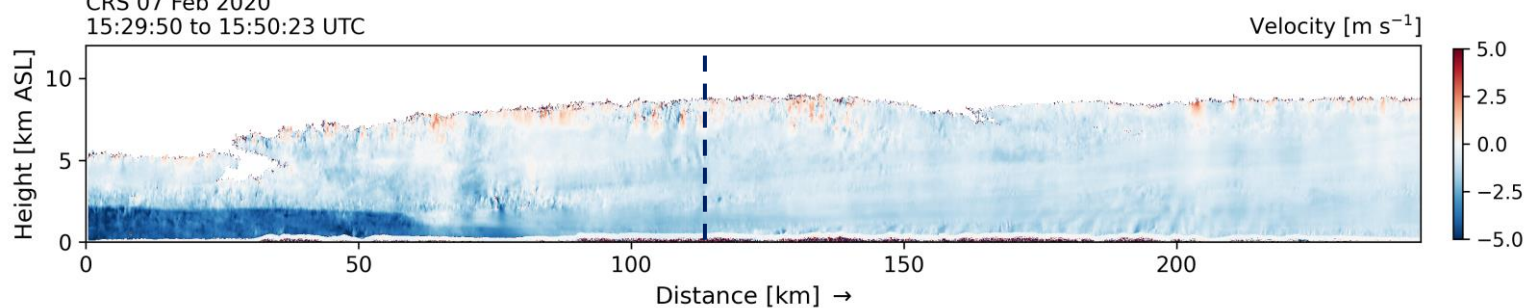
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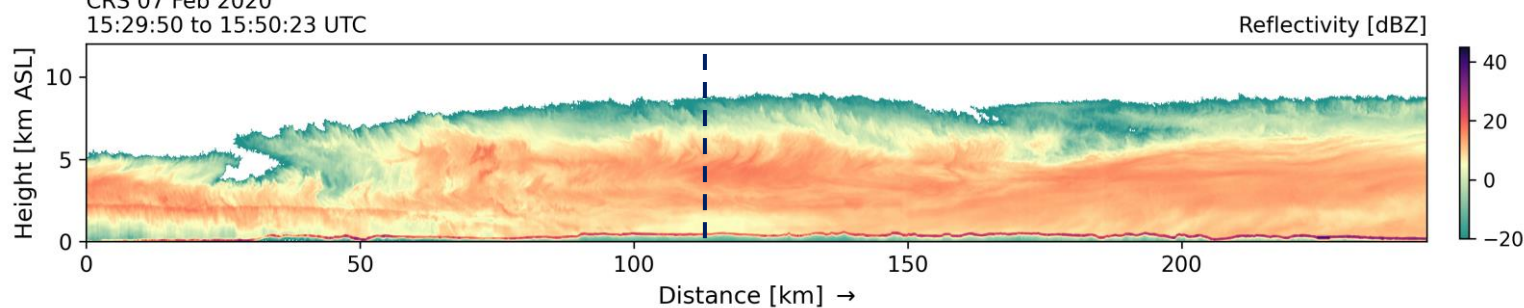
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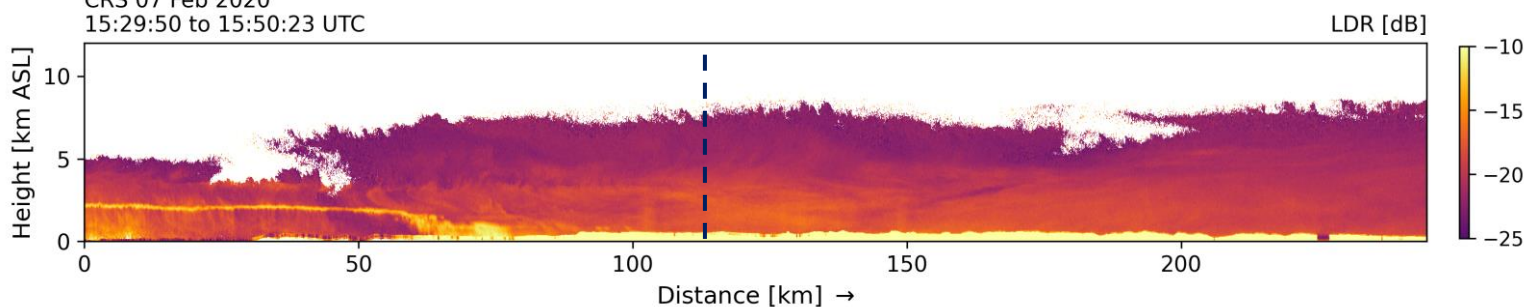
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EXRAD 07 Feb 2020 15:29:50 to 15:50:23 UTC

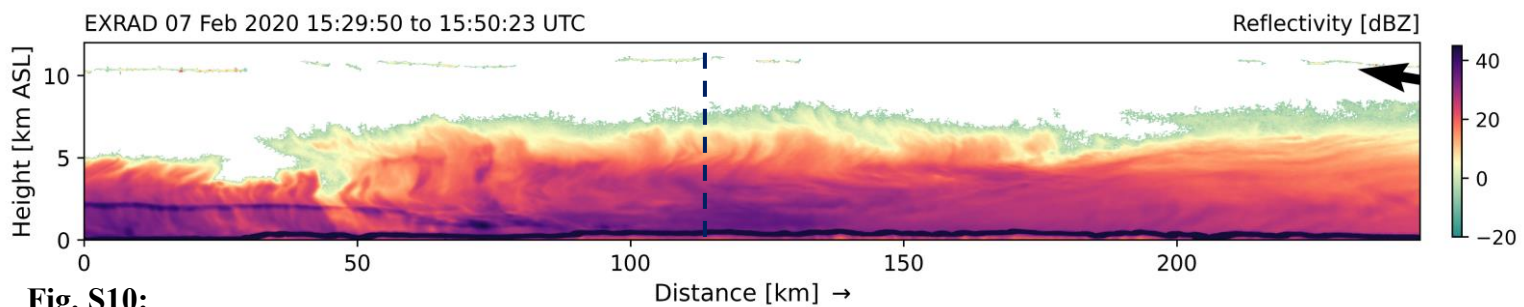


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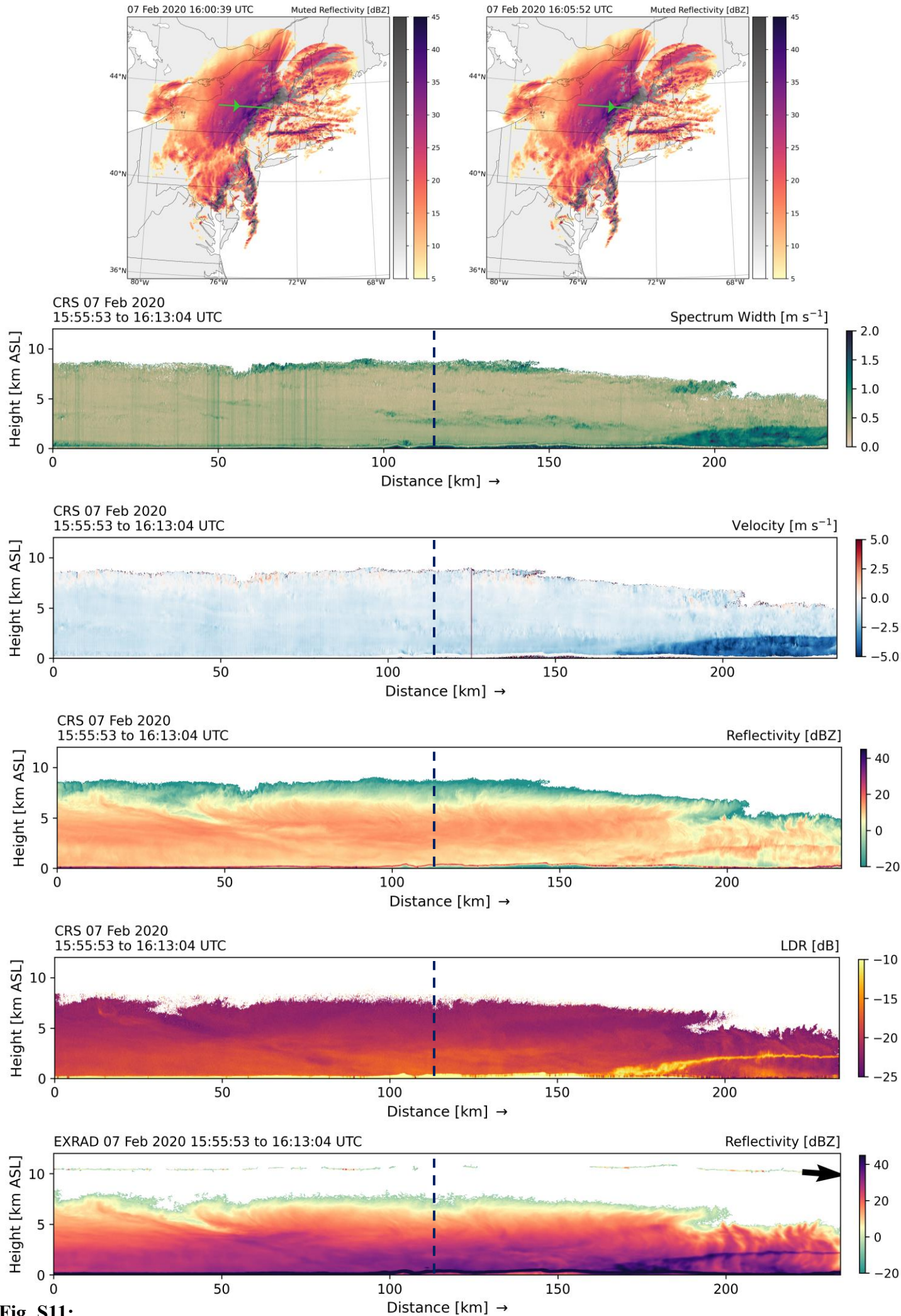


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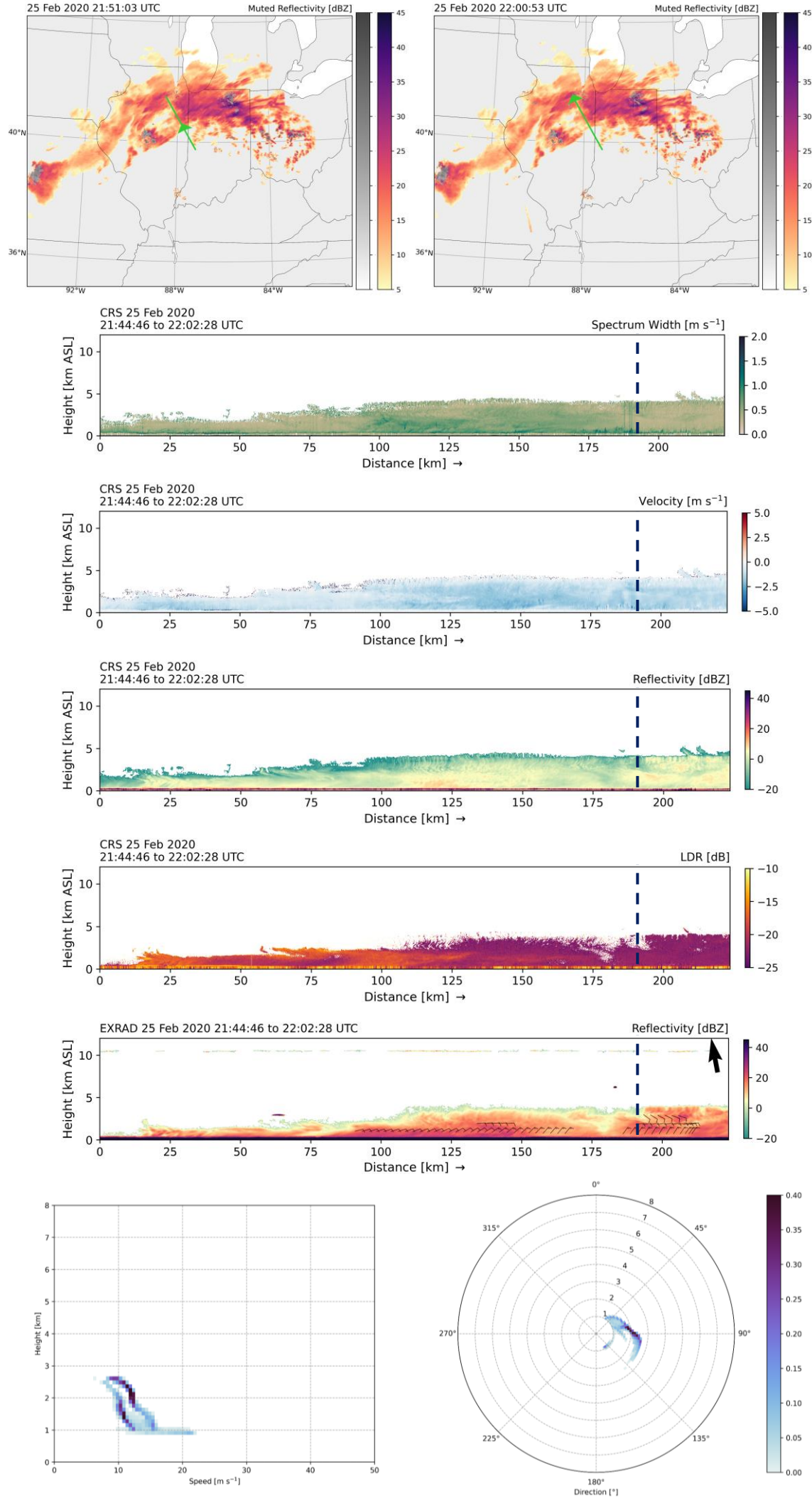


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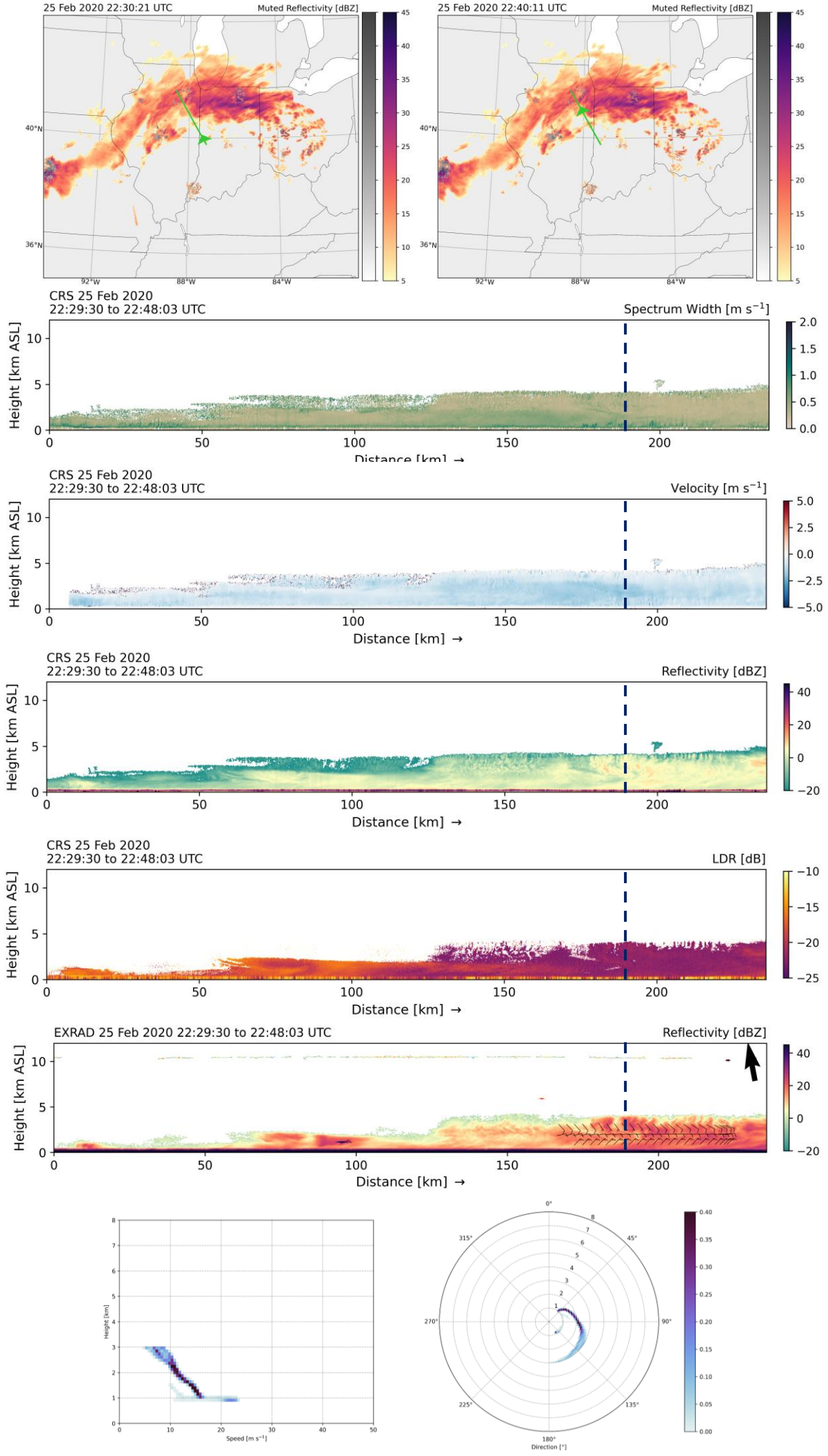


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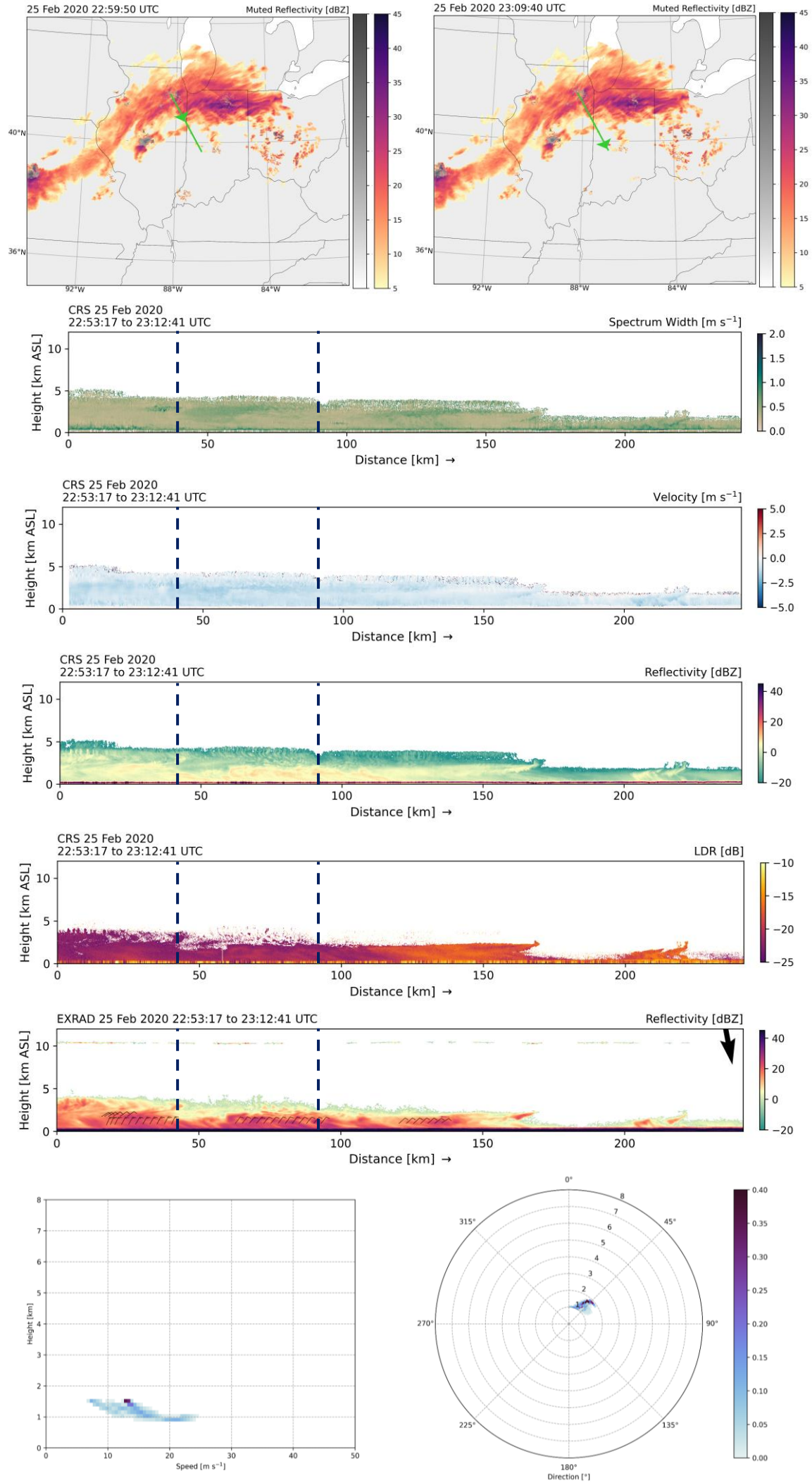


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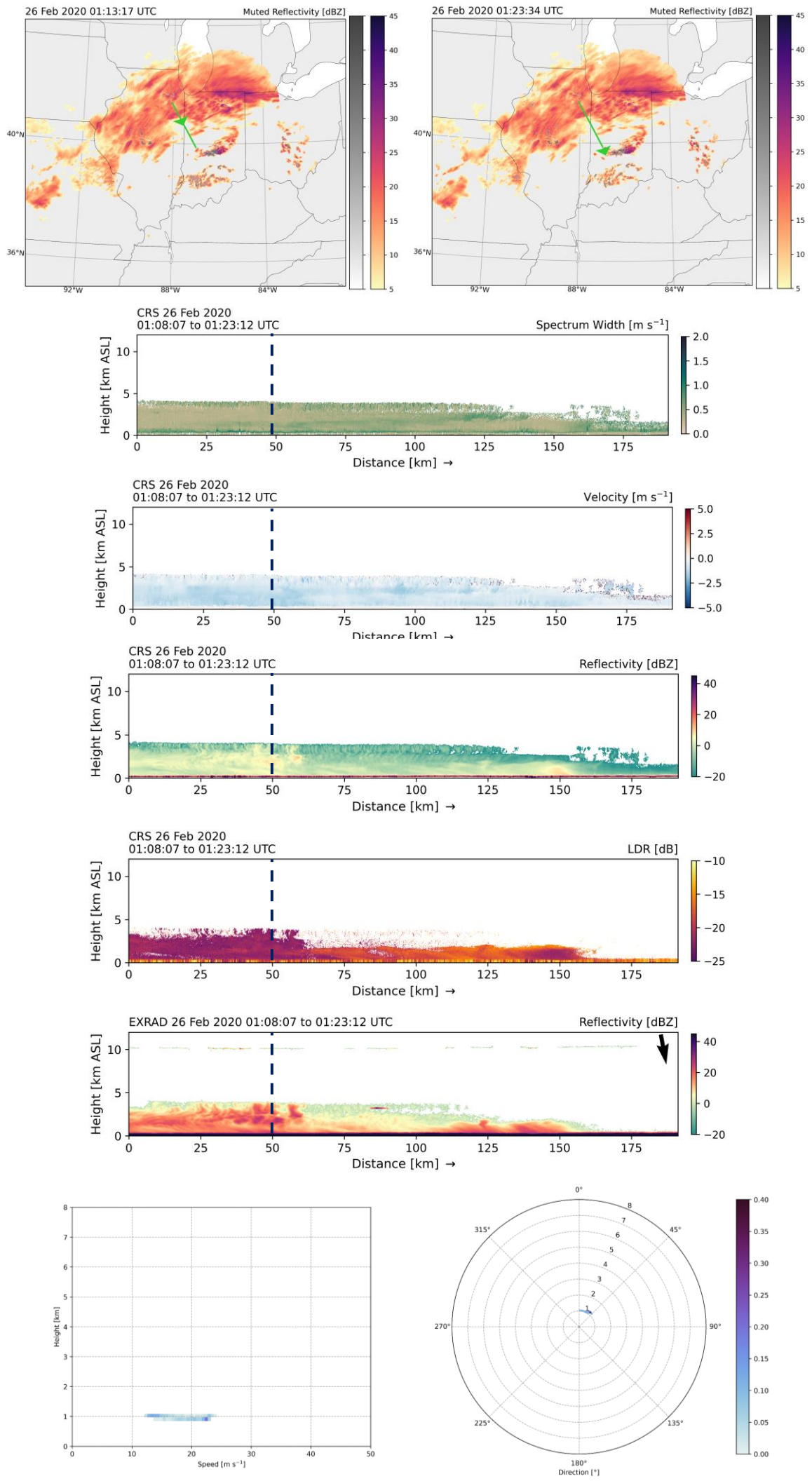


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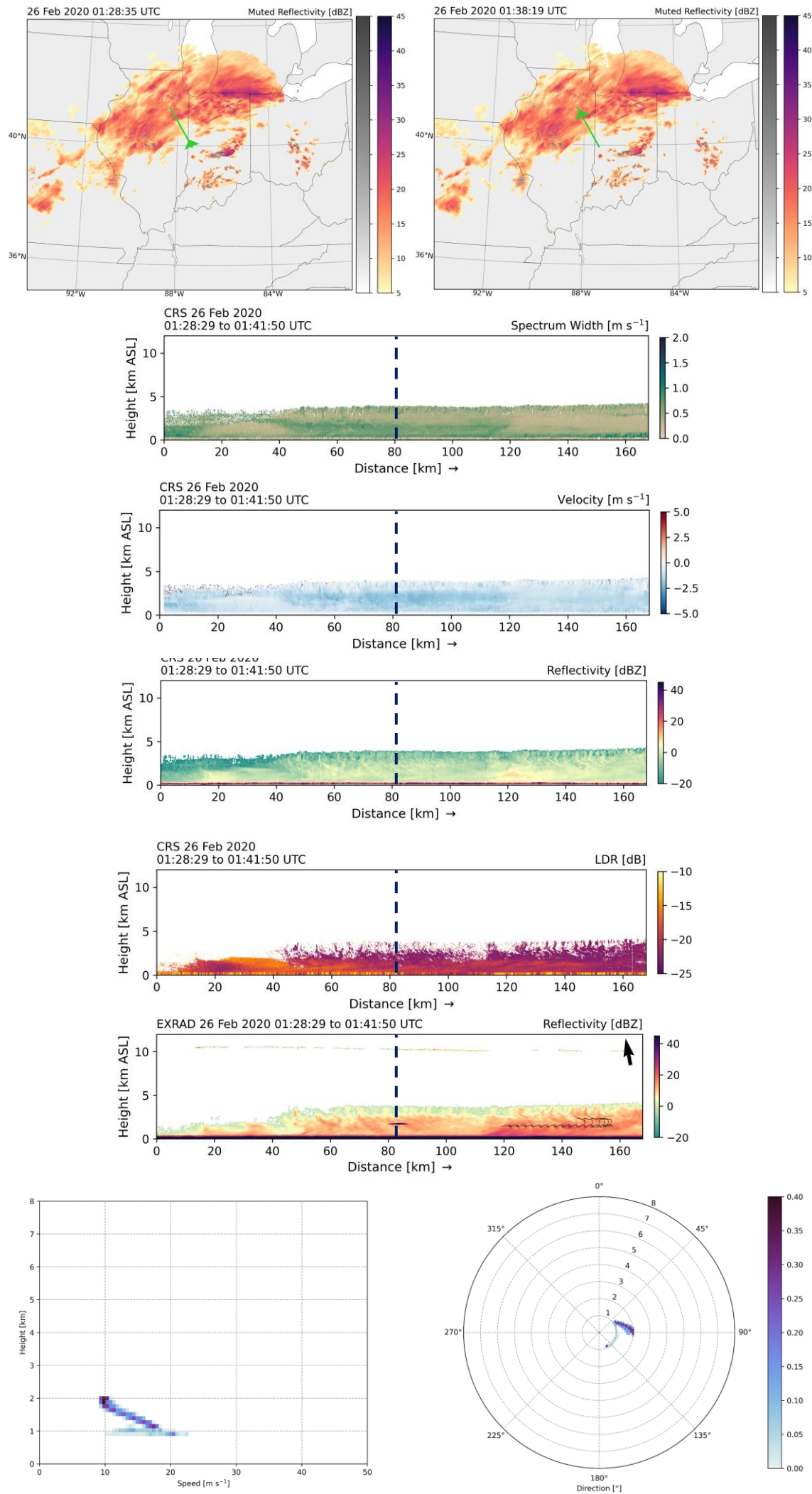


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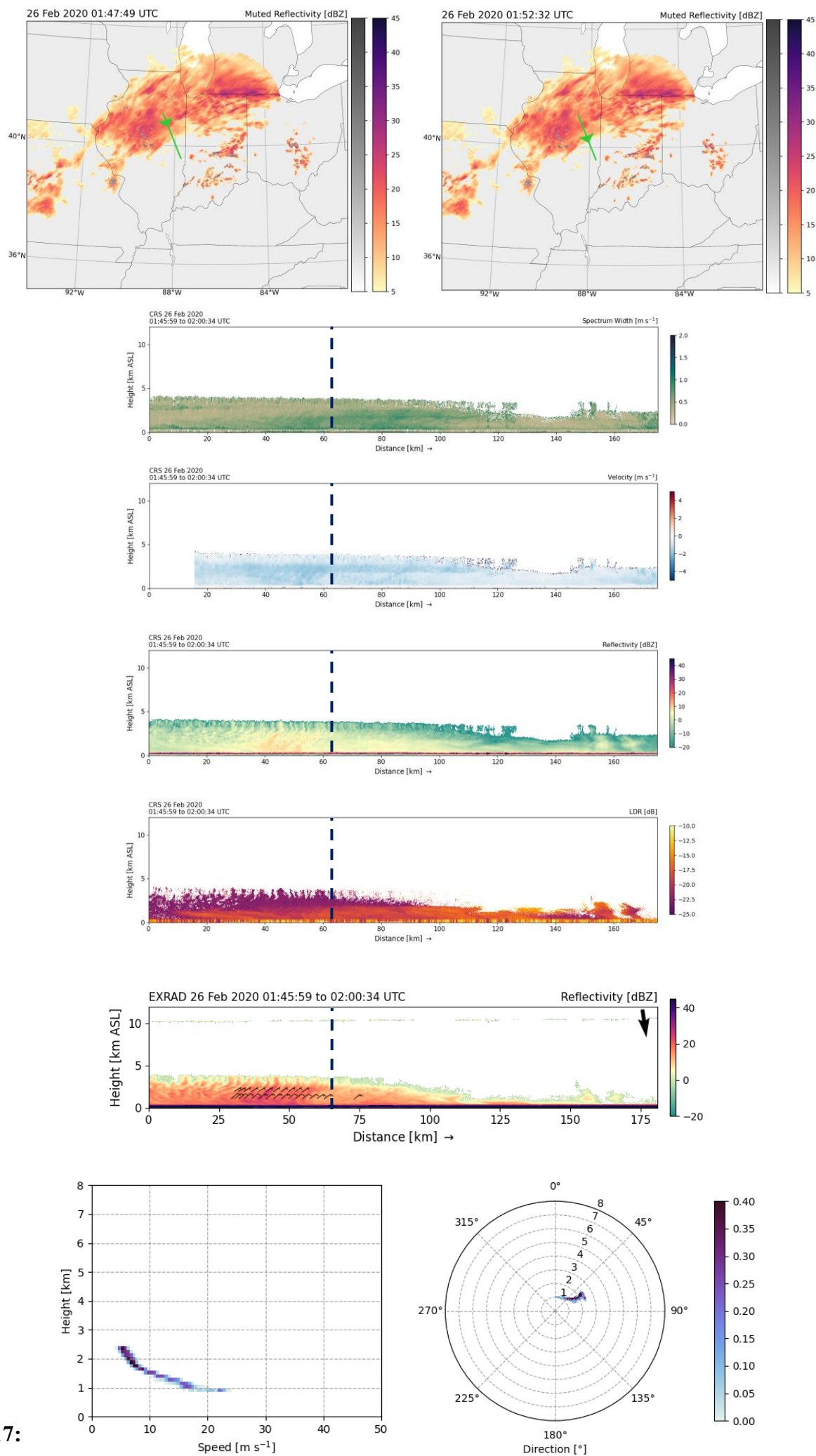


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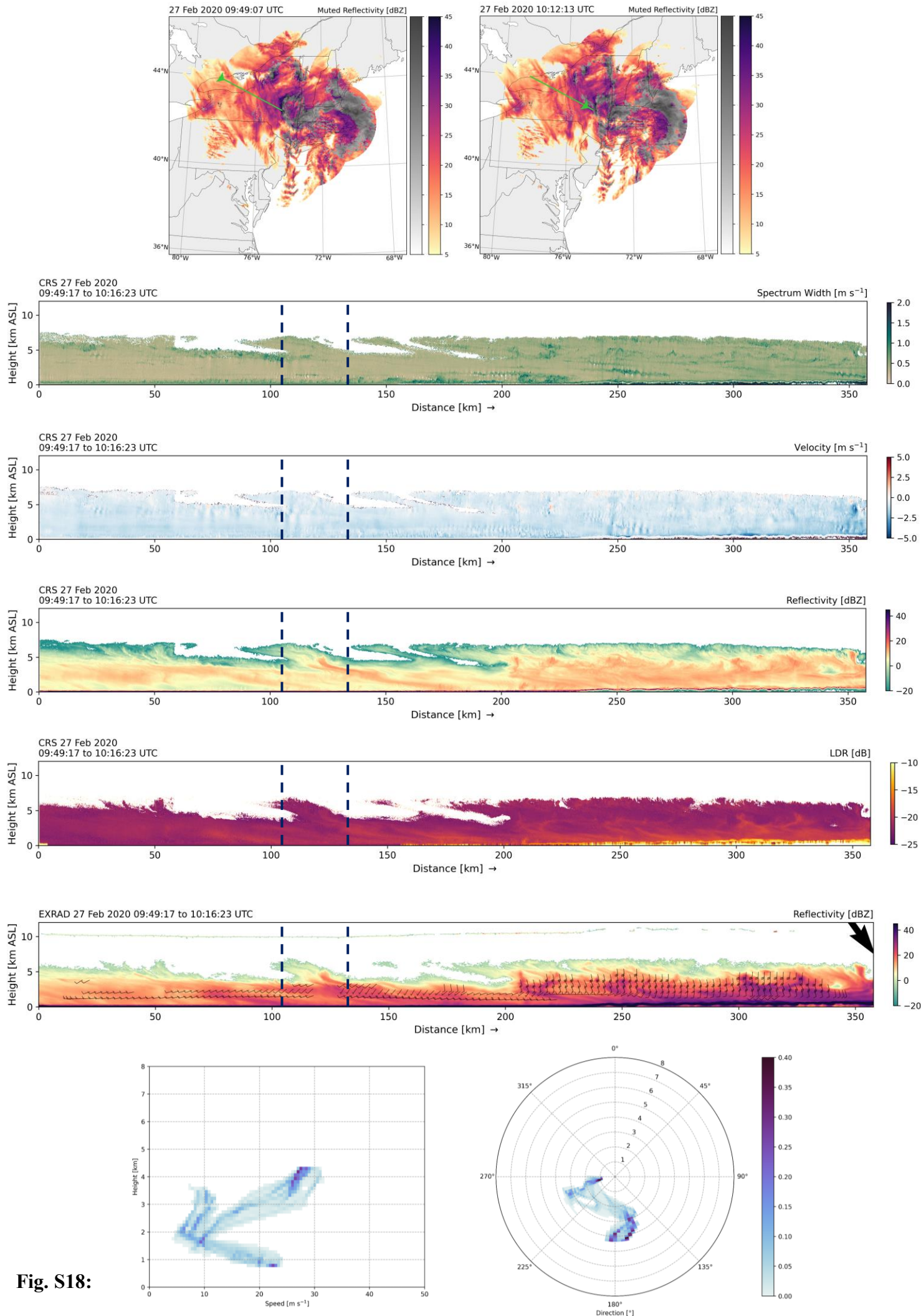


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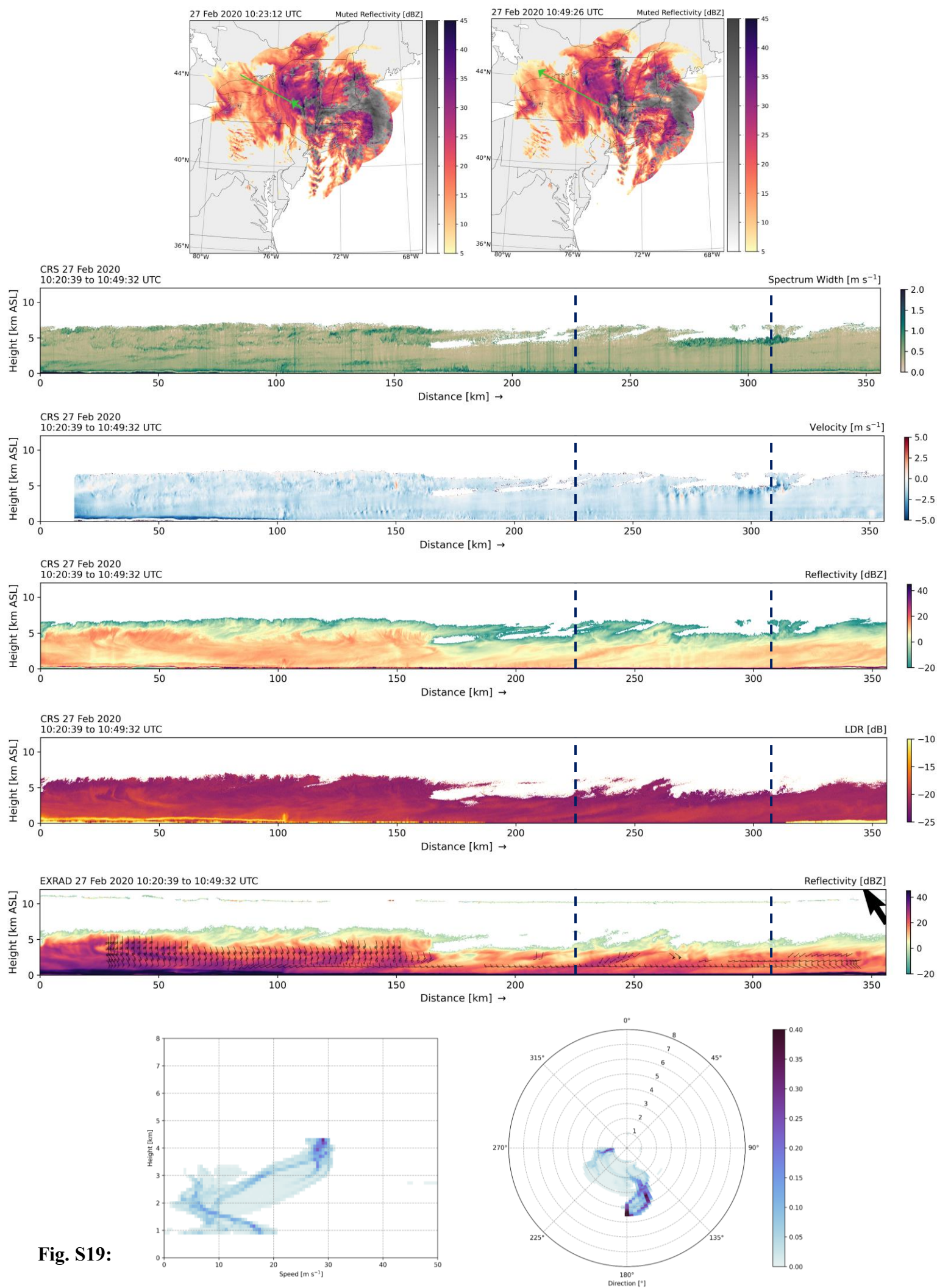


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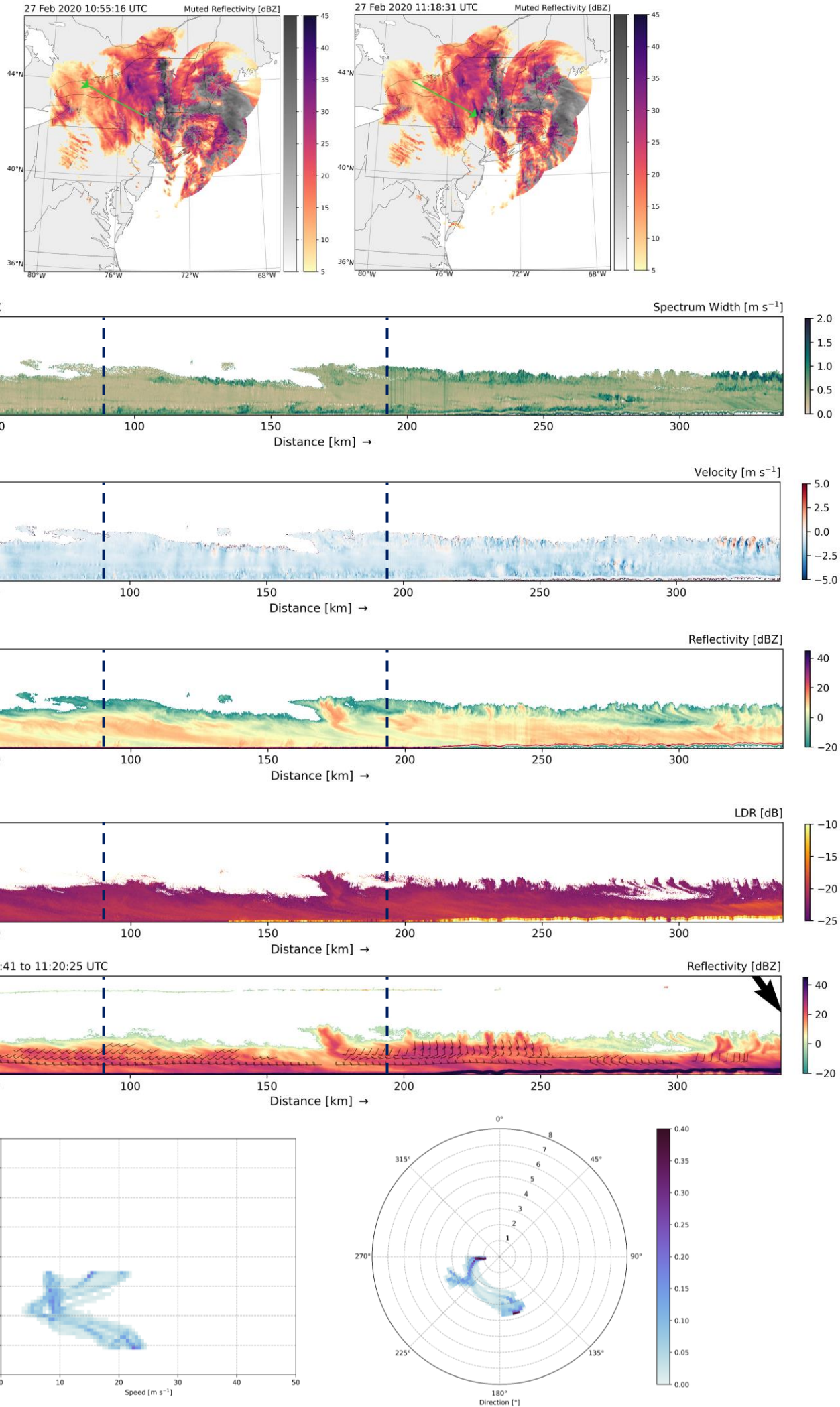


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2022

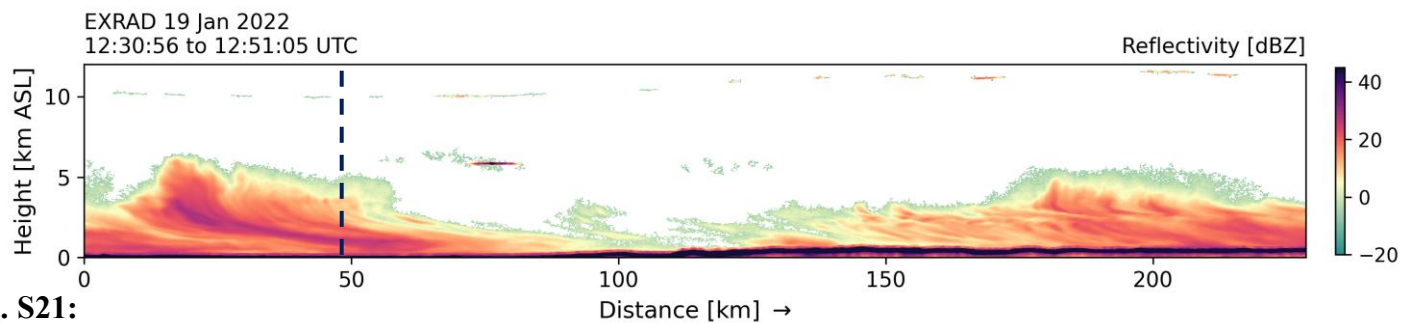
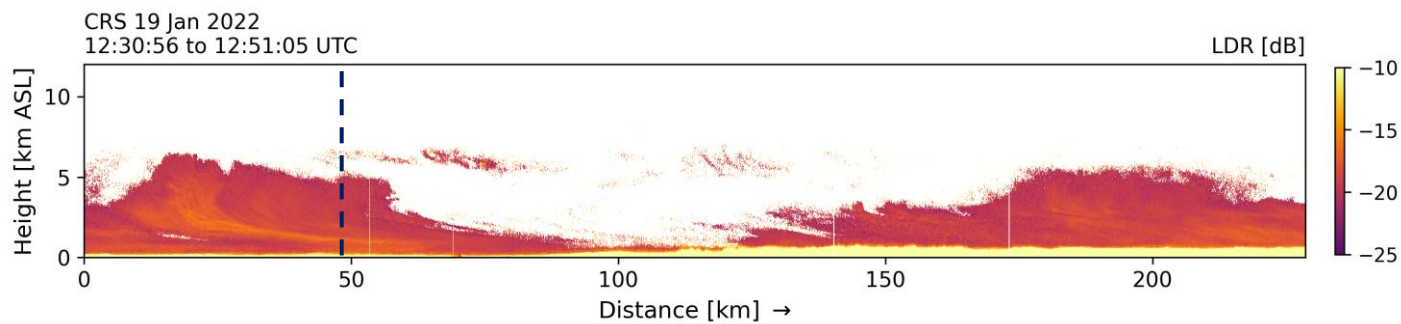
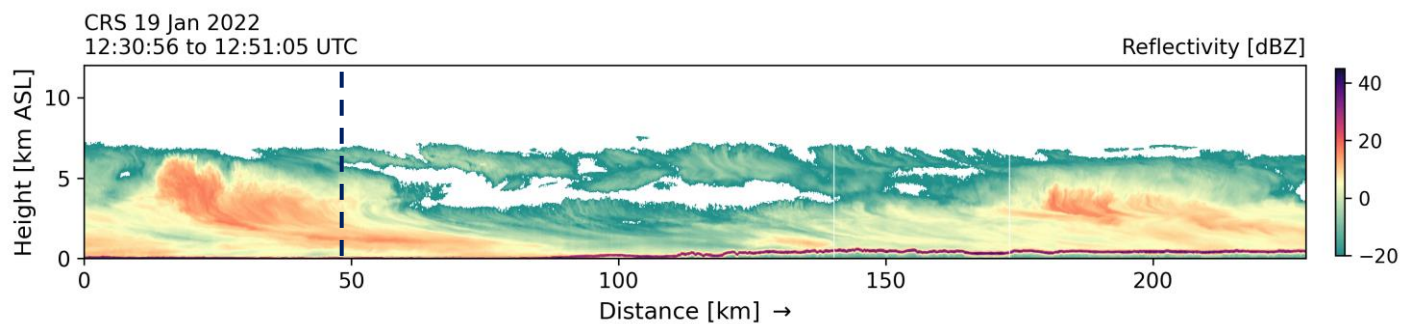
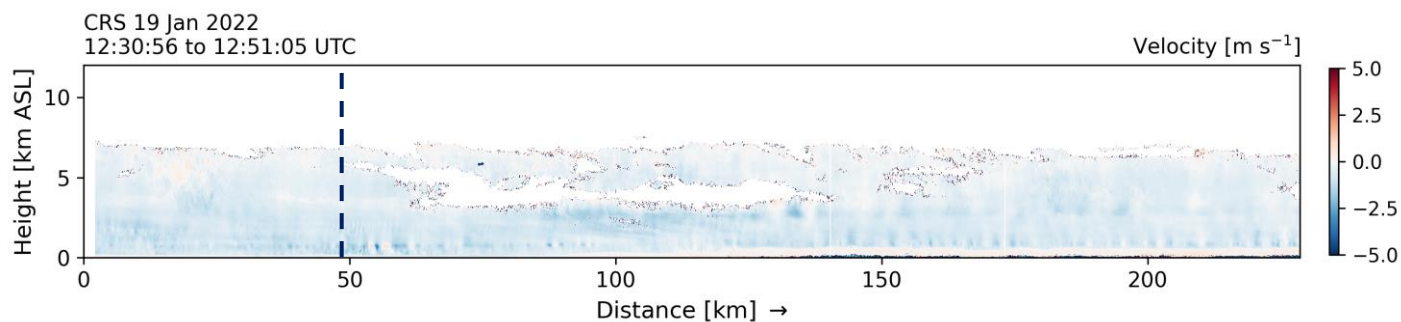
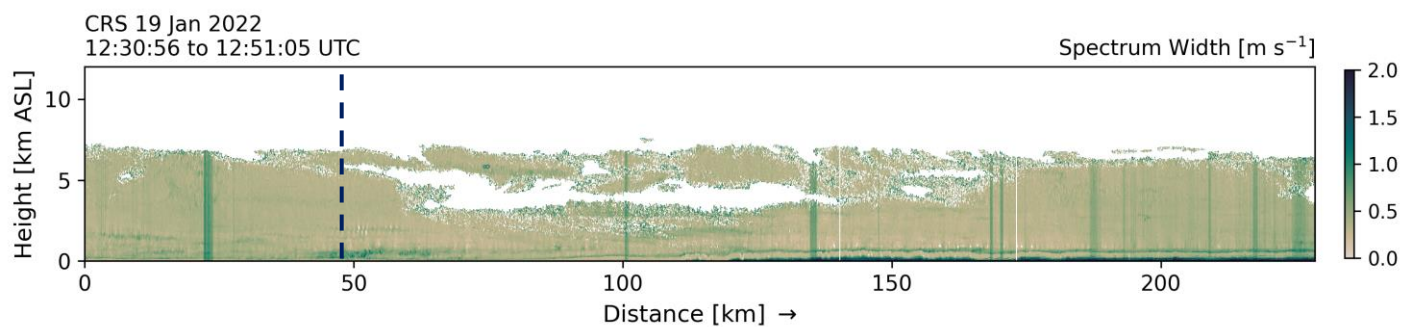
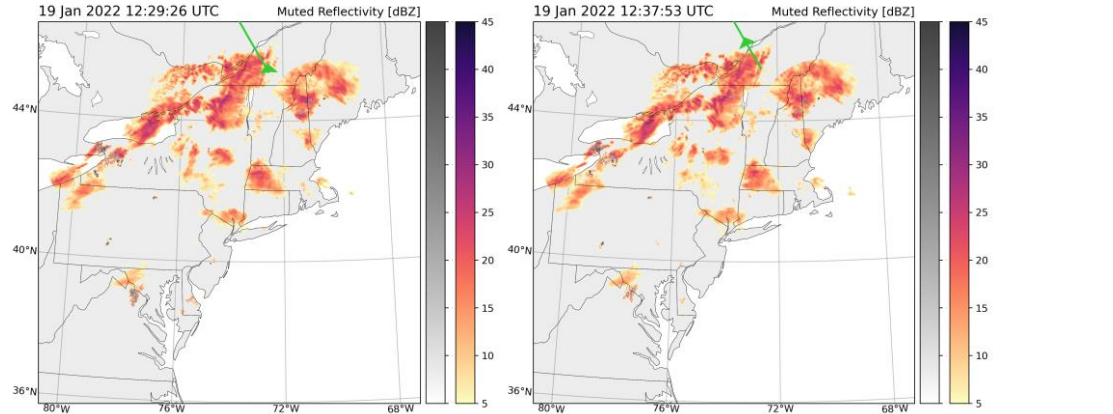


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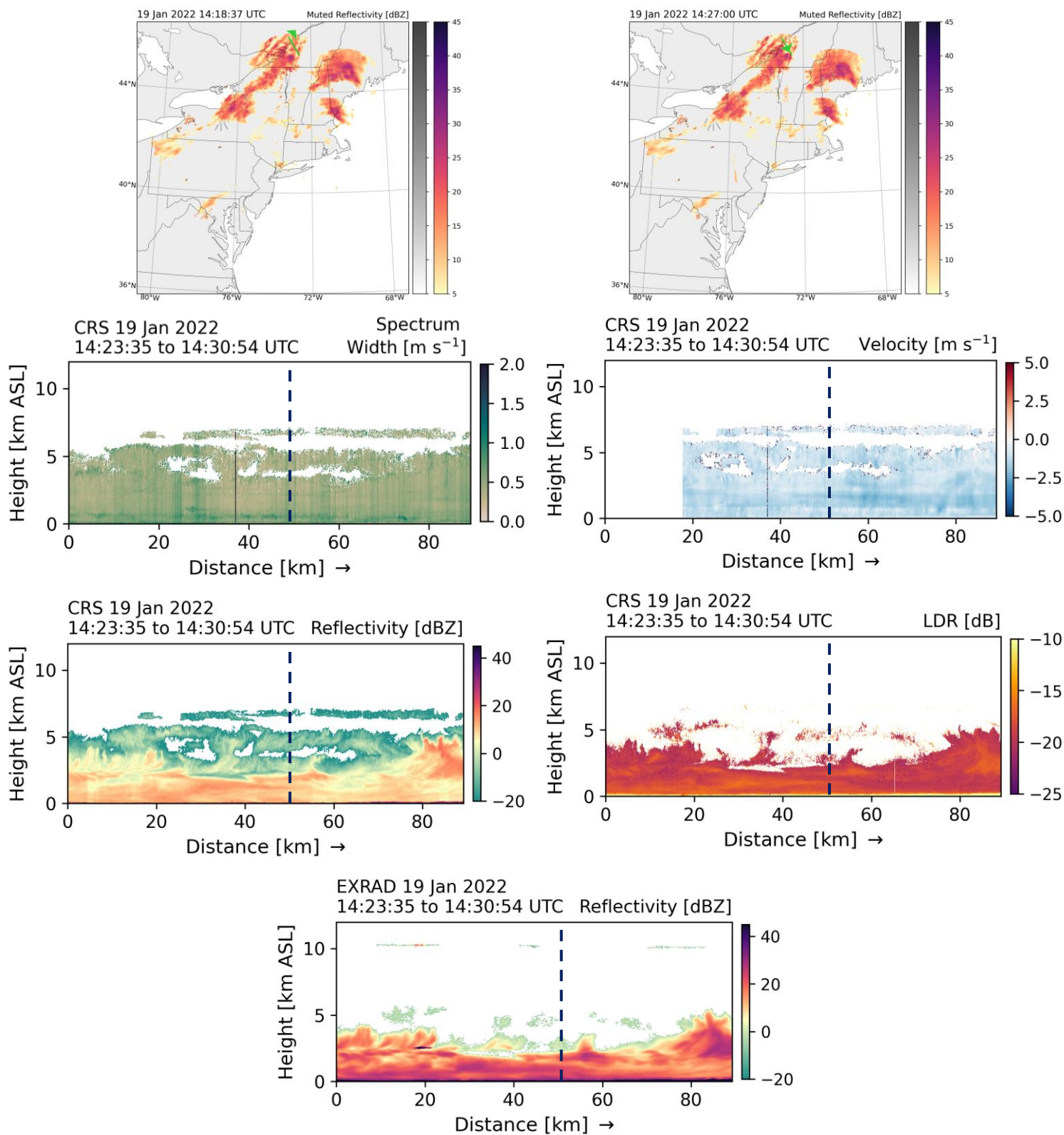


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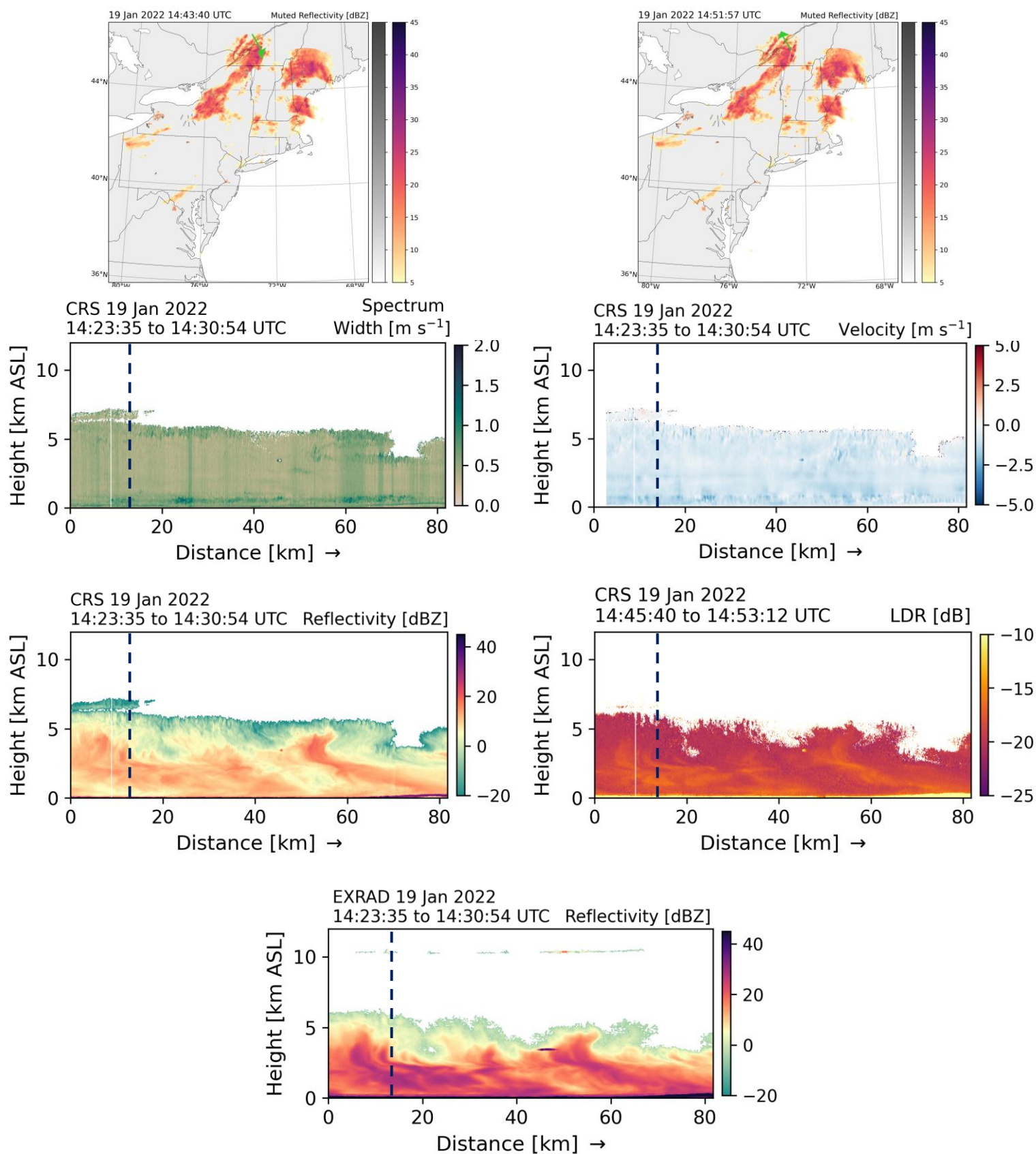


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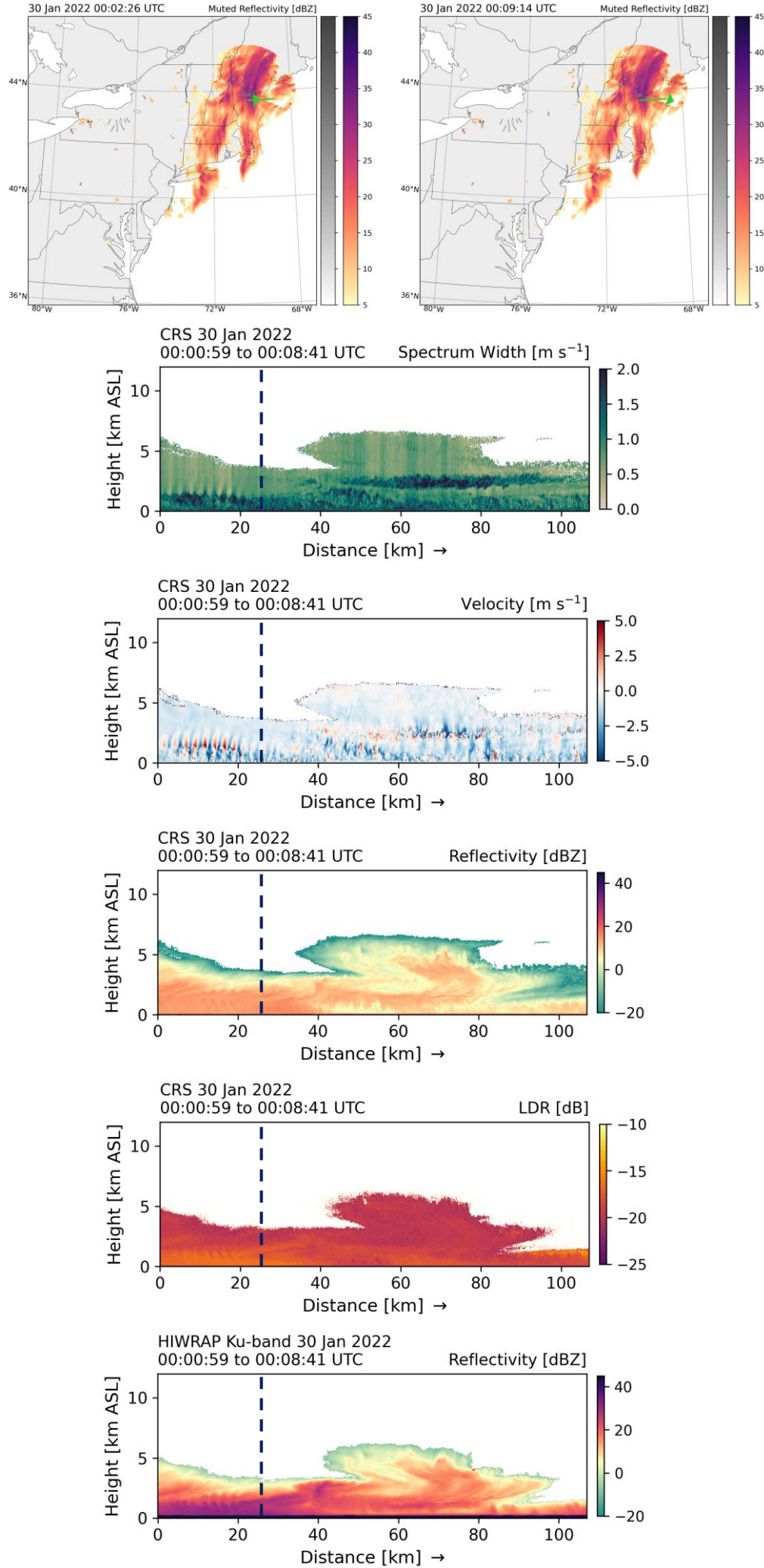


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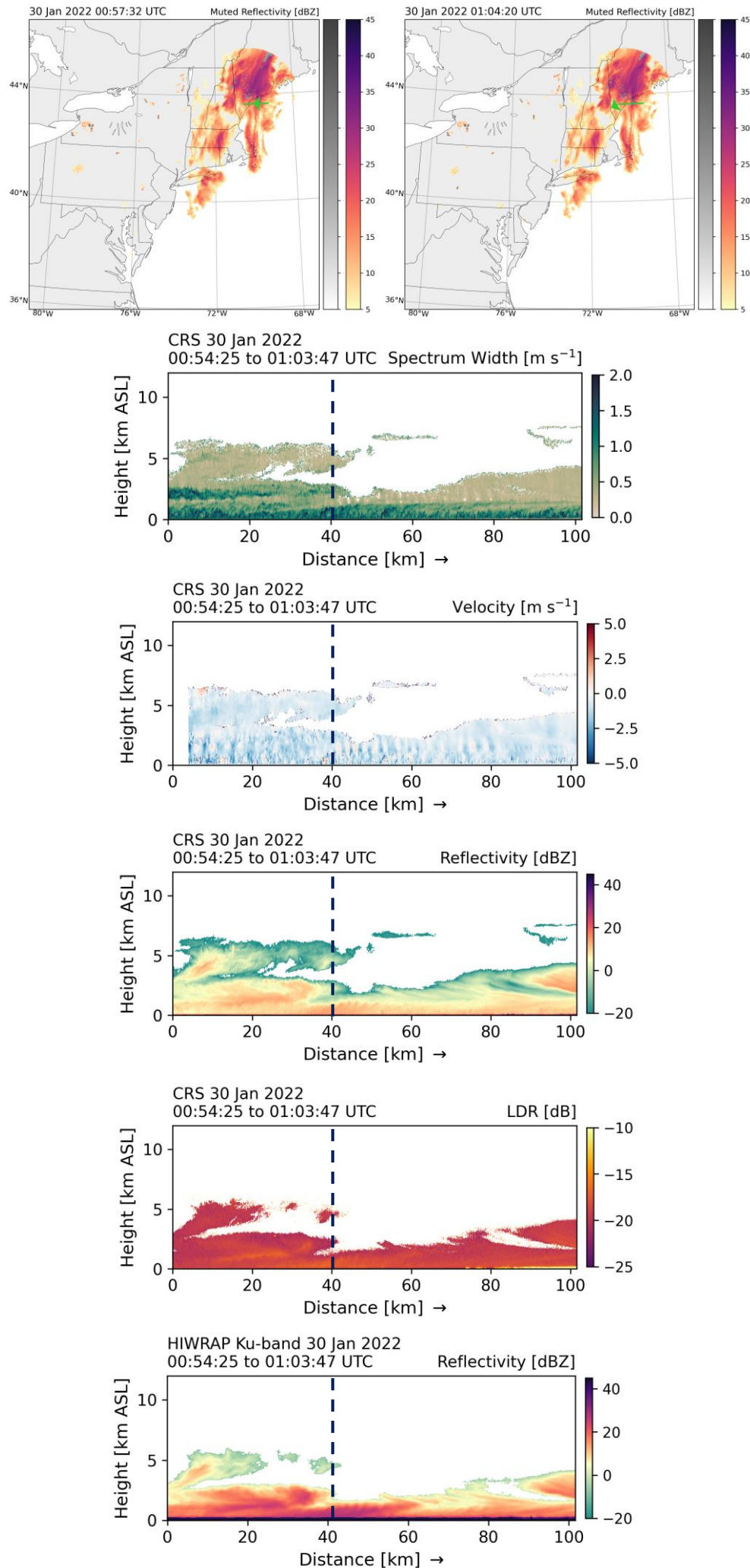


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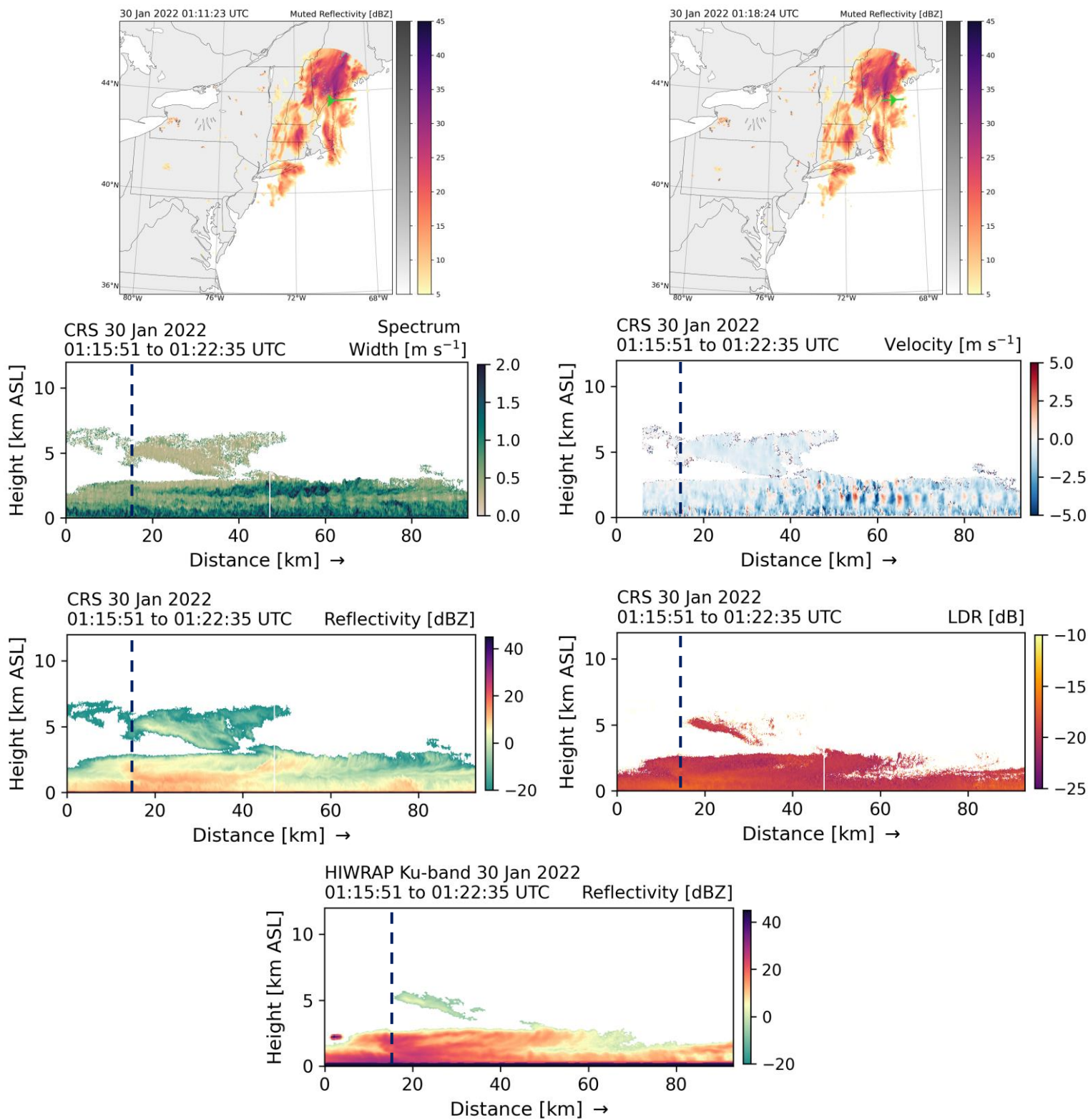


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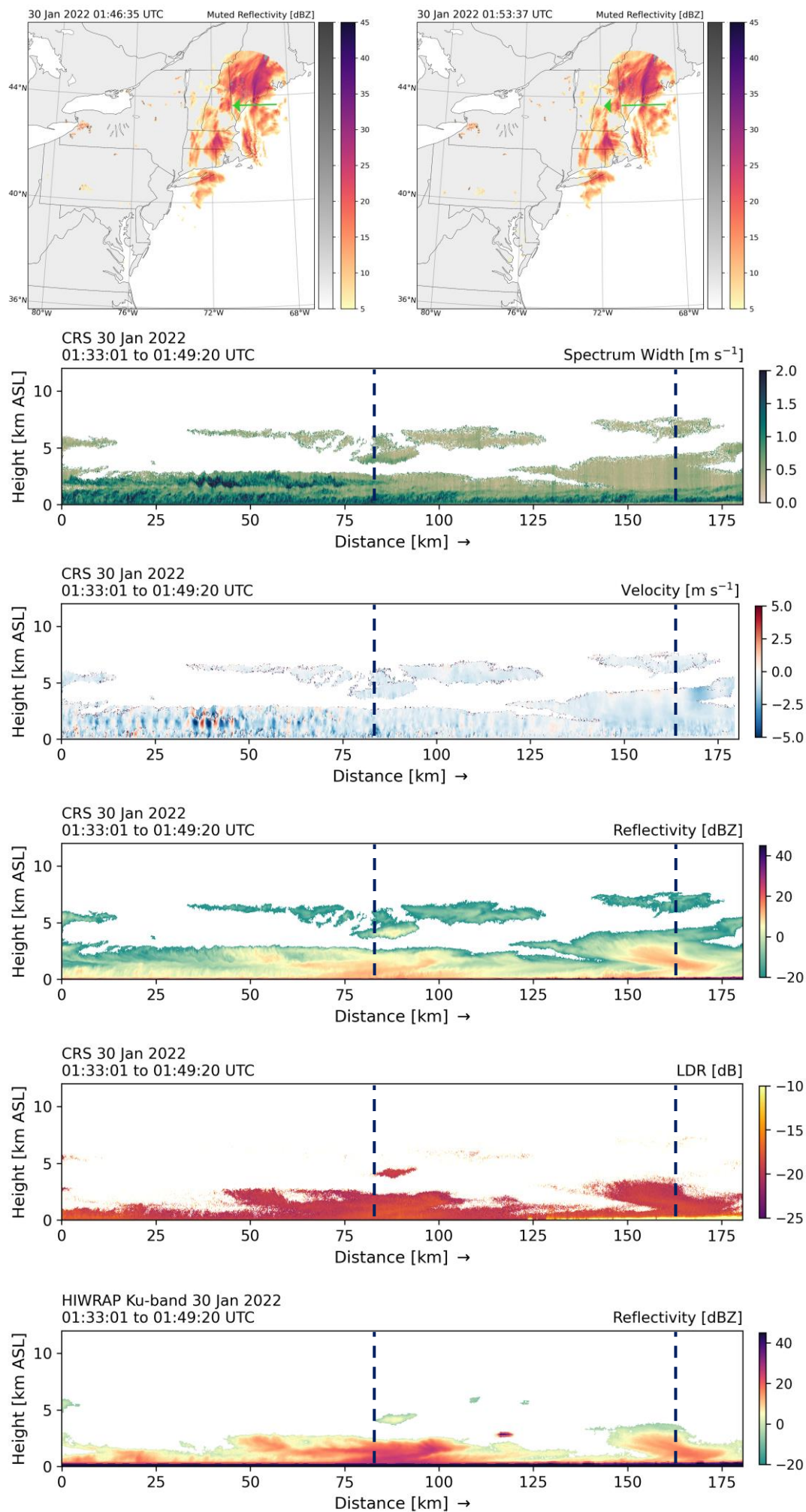


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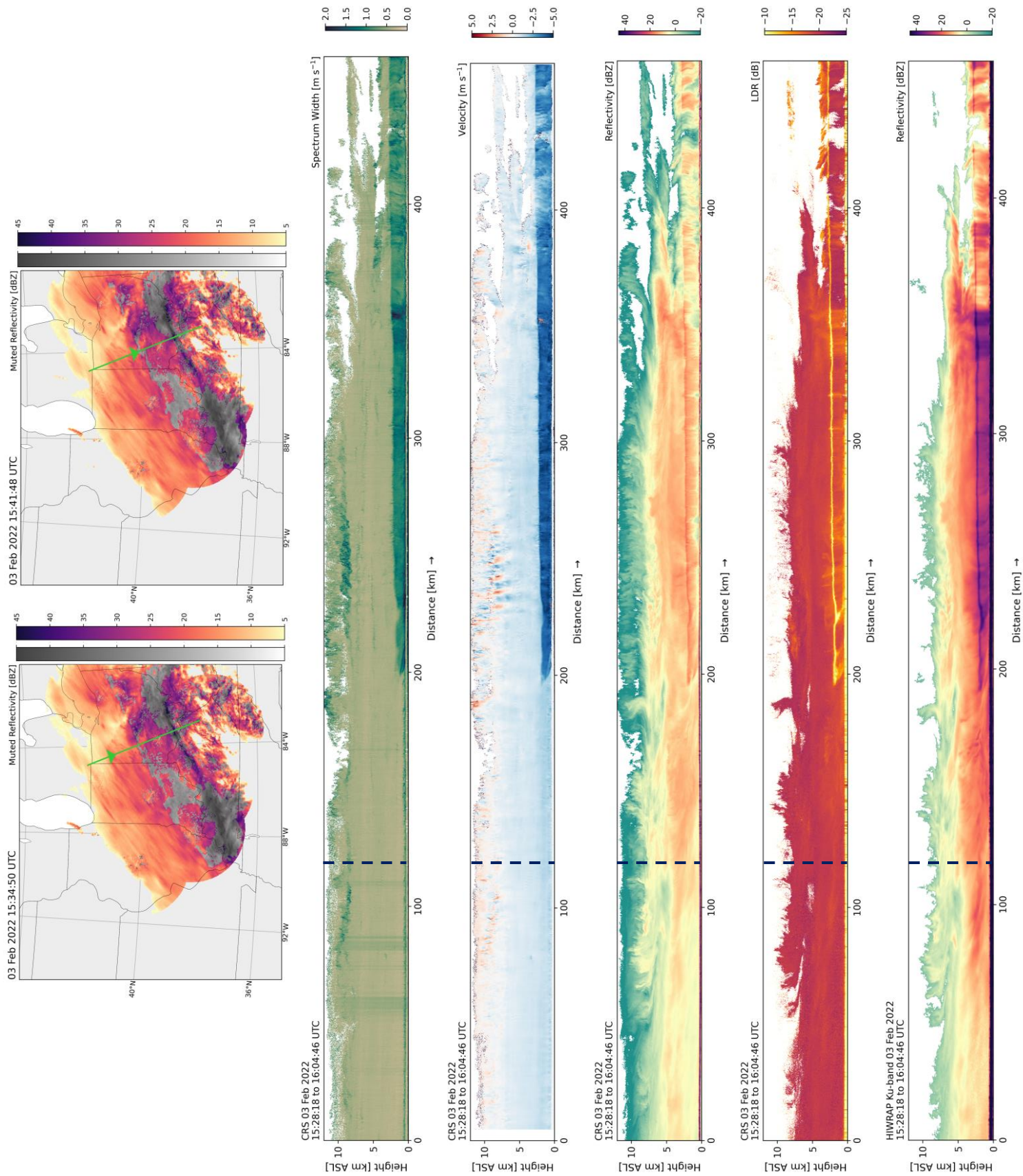


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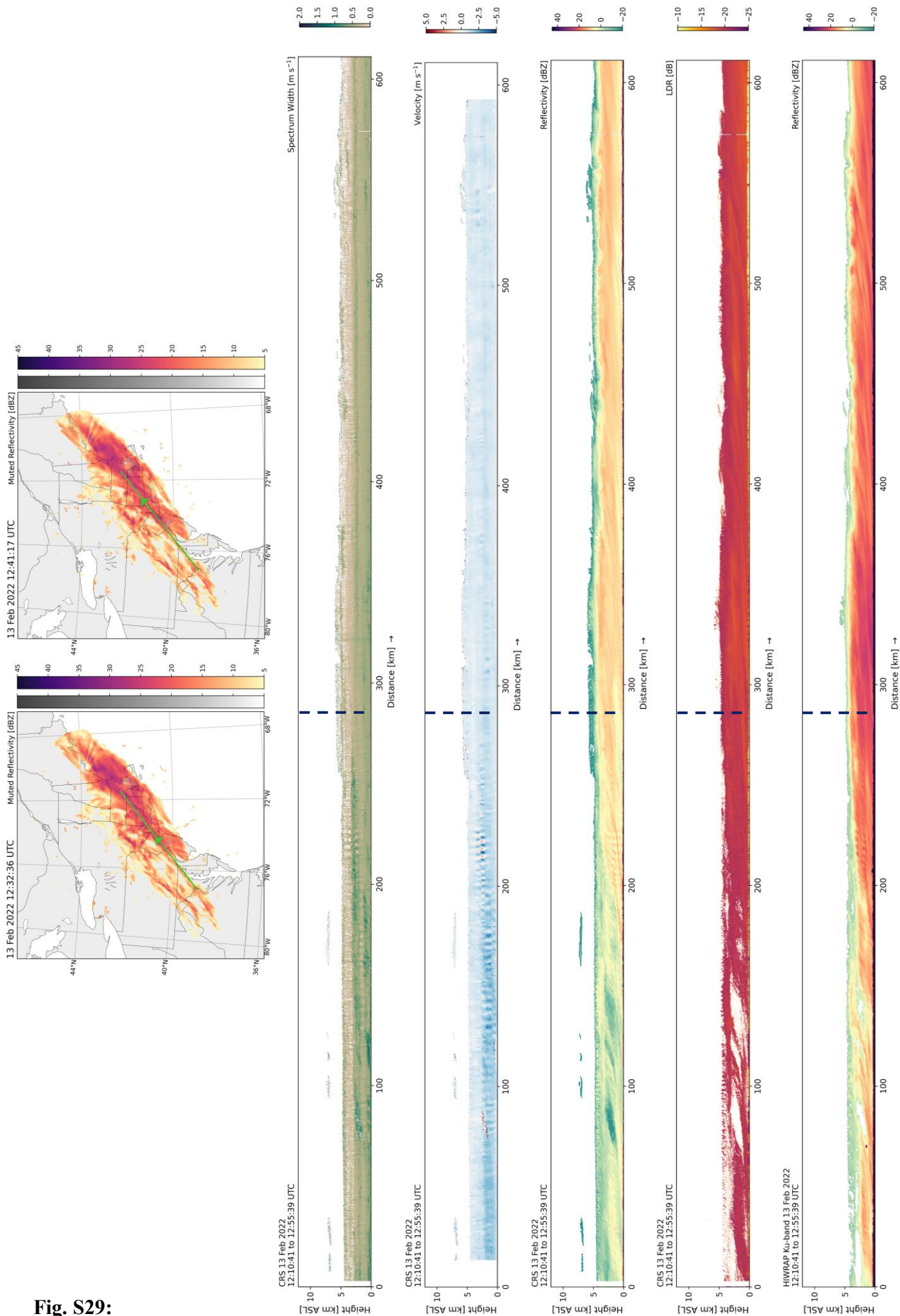


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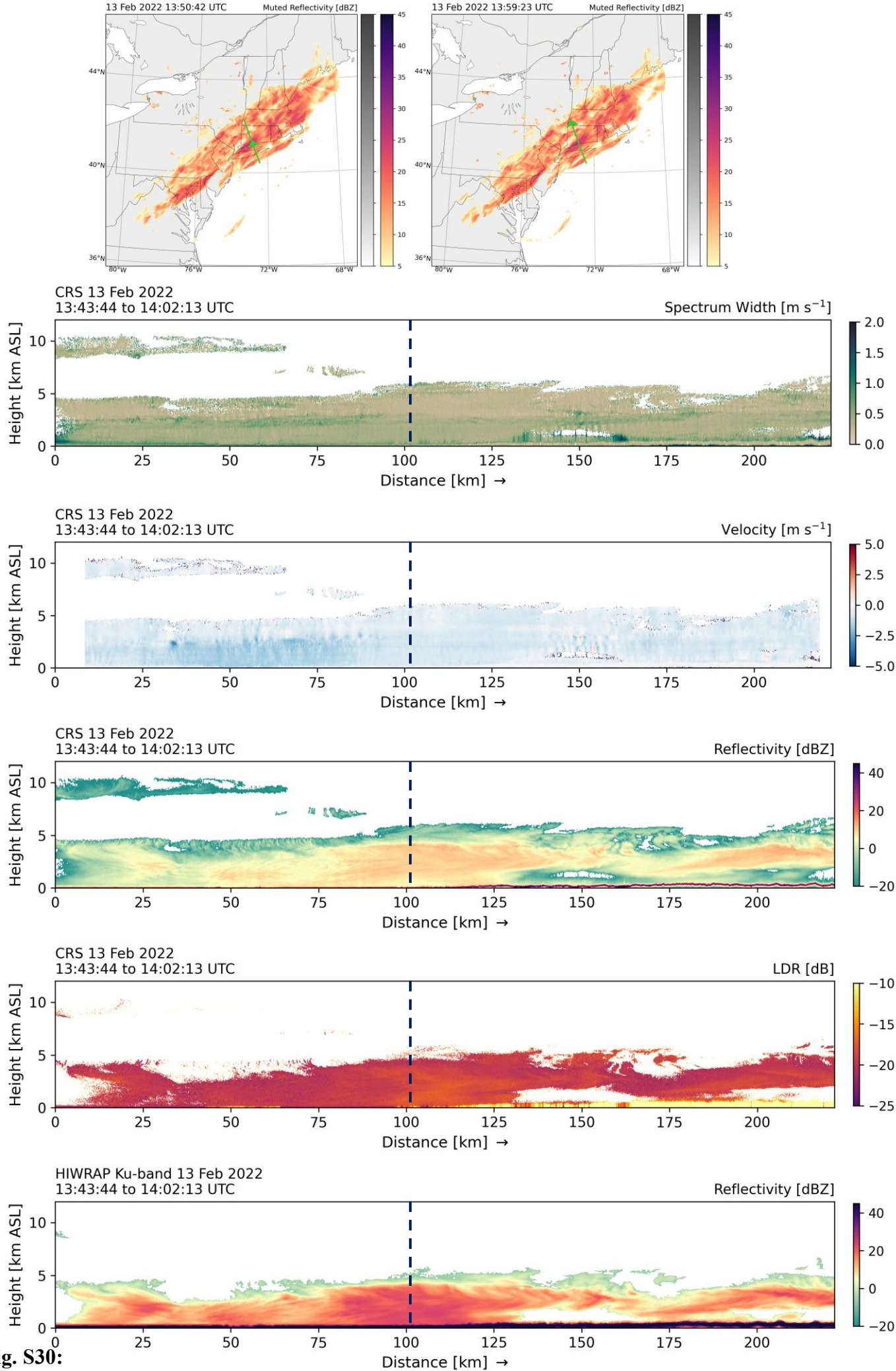


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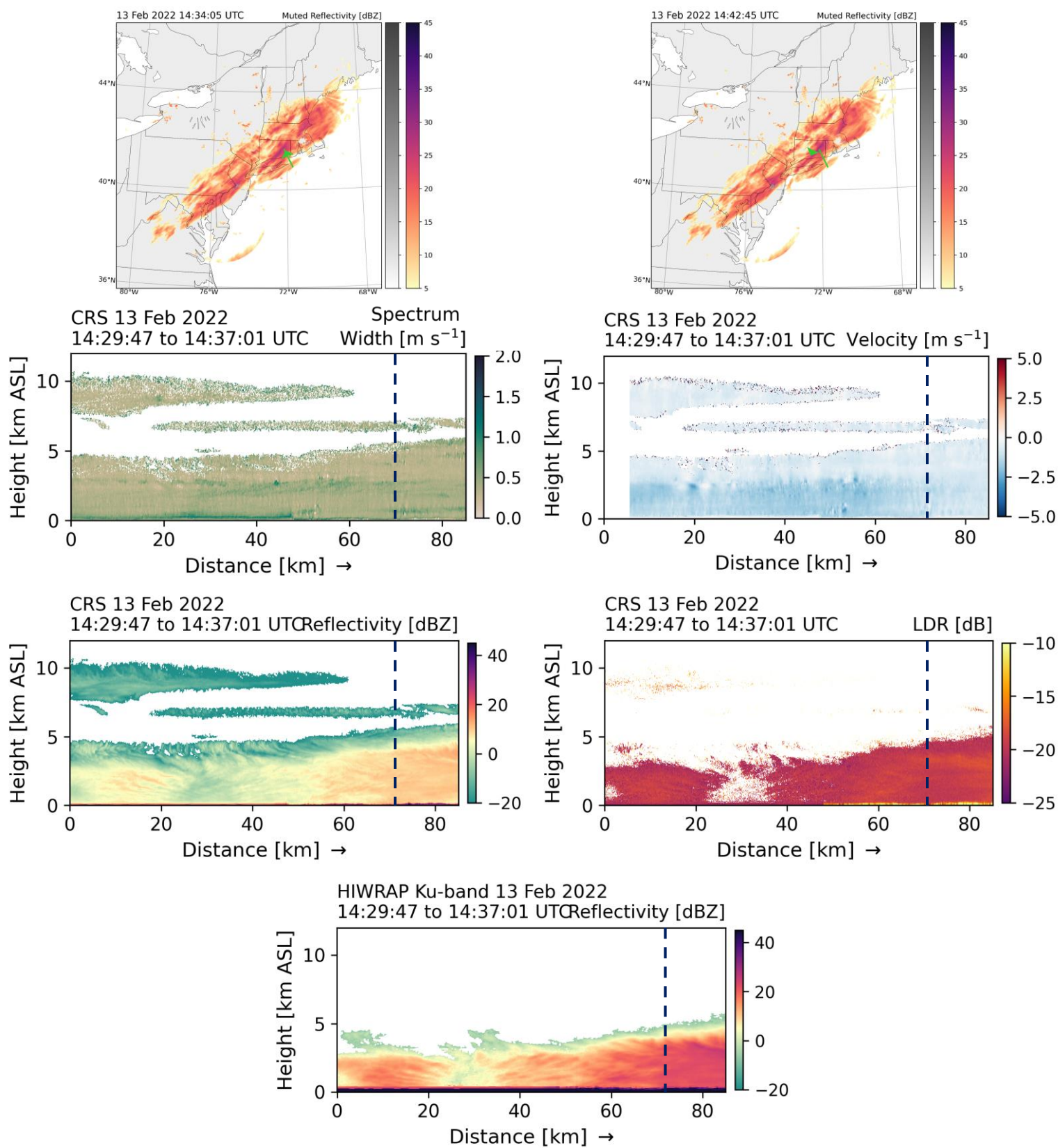


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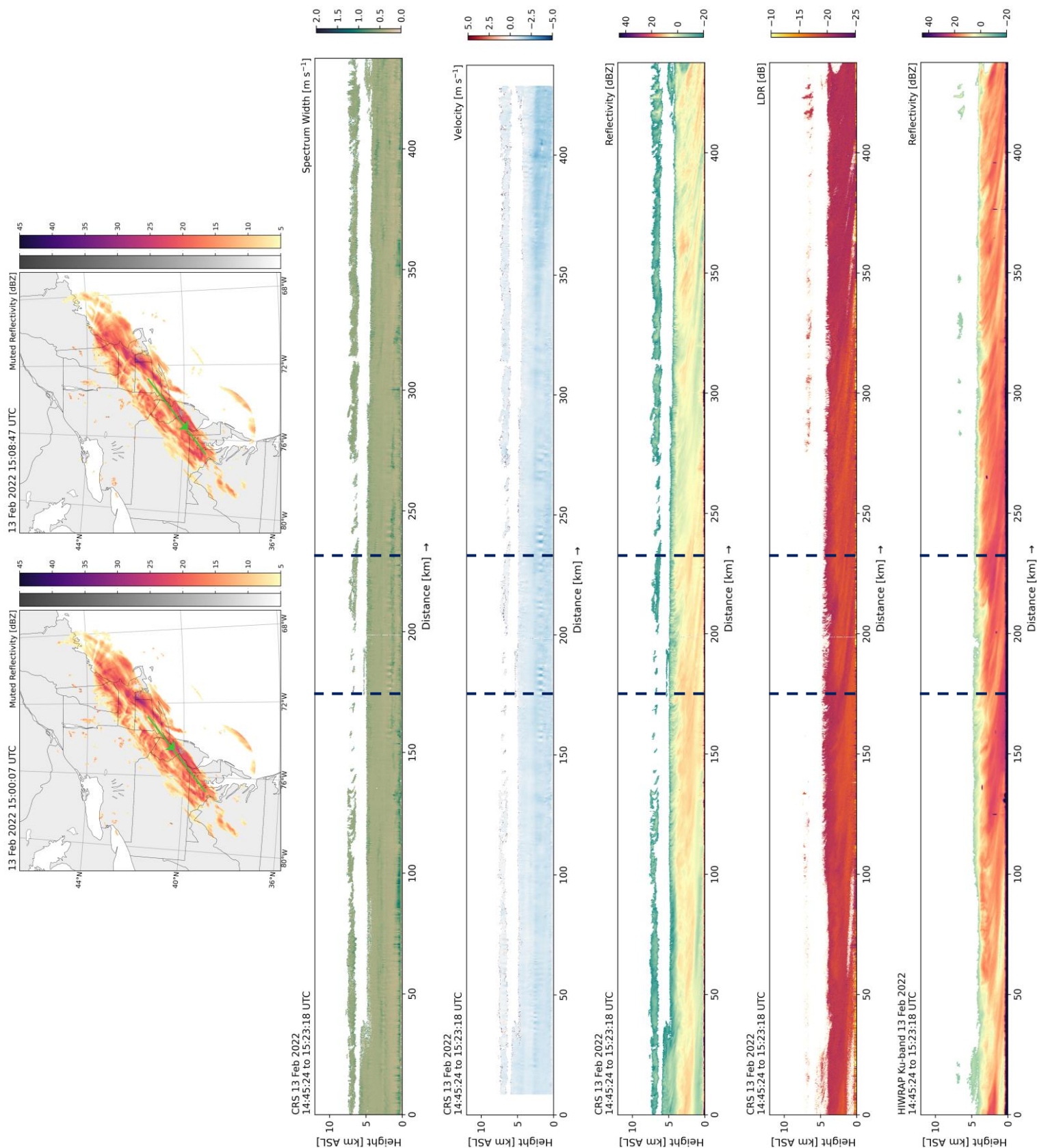
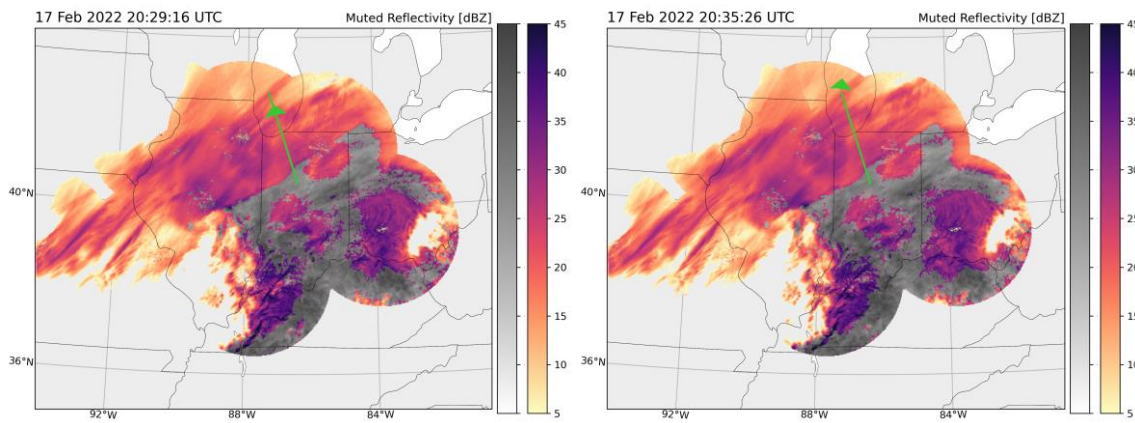
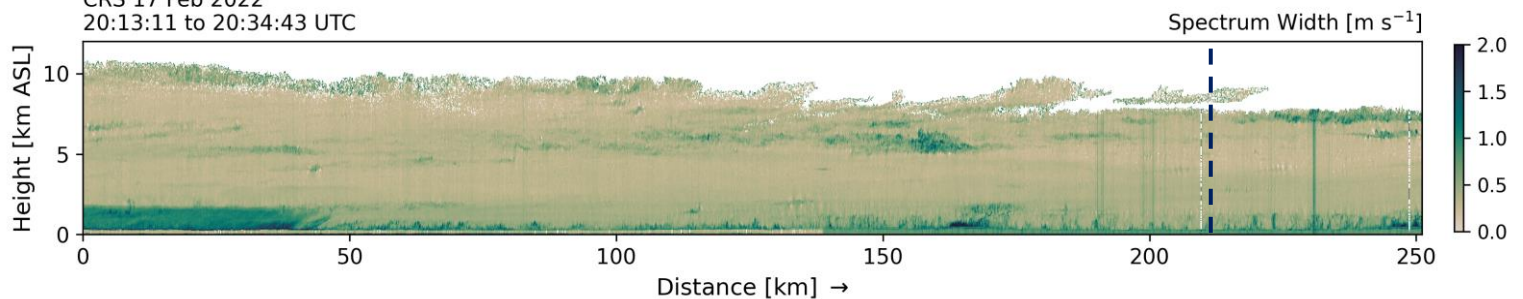


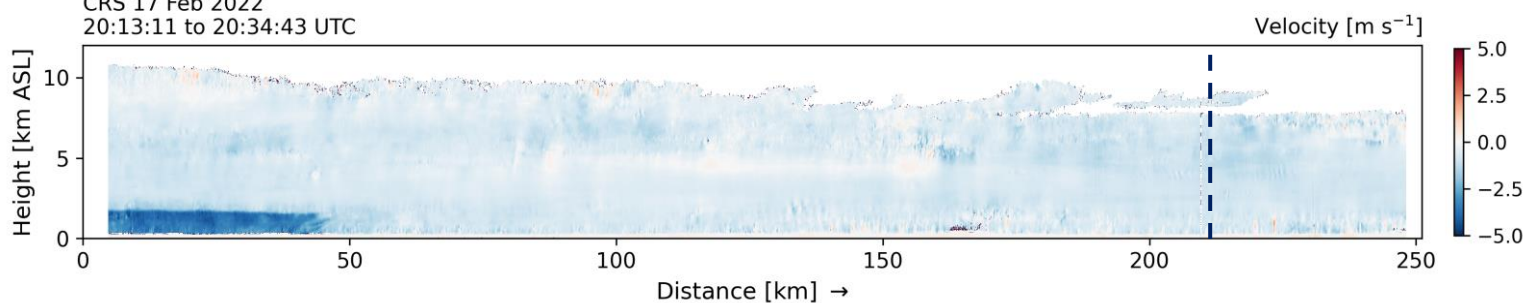
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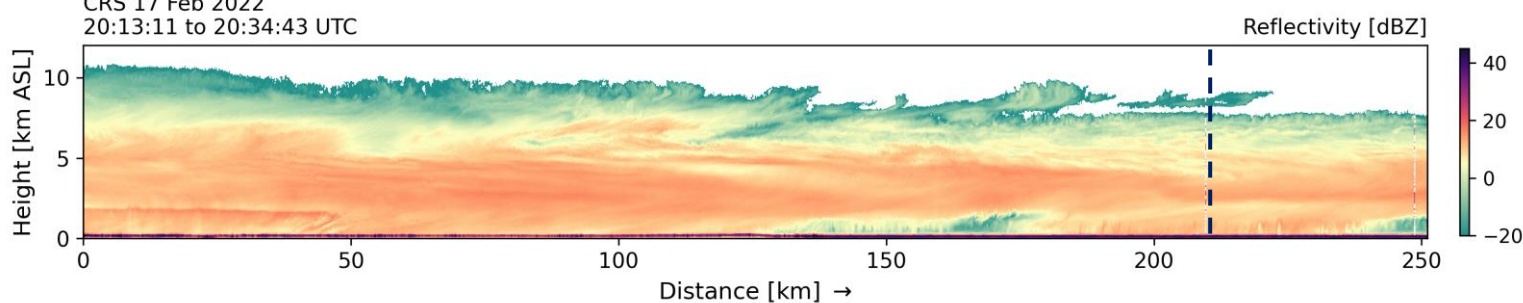
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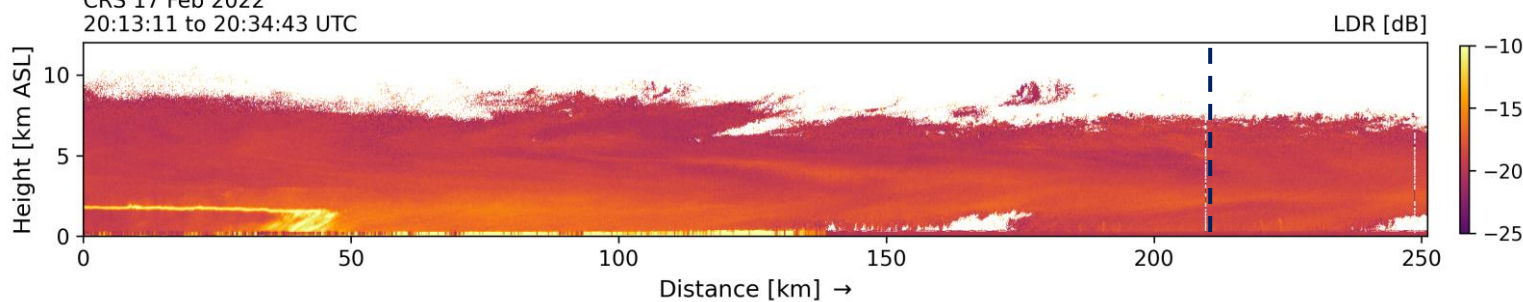
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HIWRAP Ku-band 17 Feb 2022
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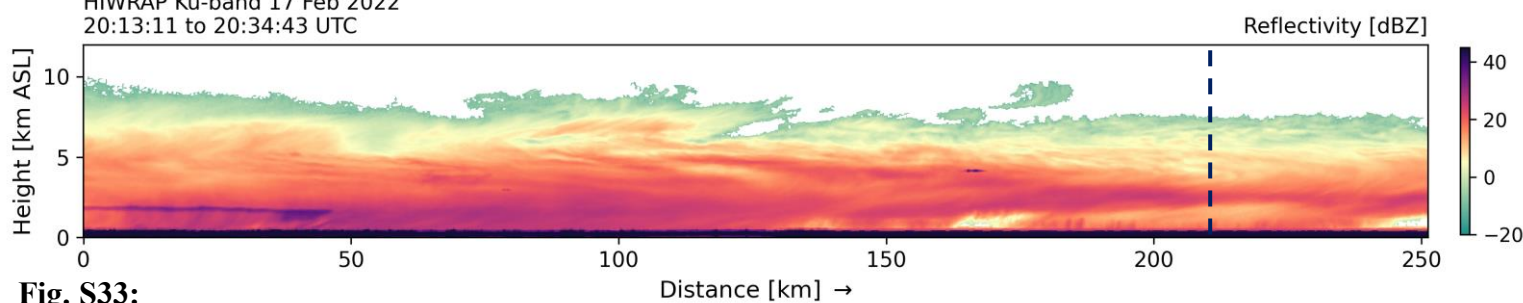


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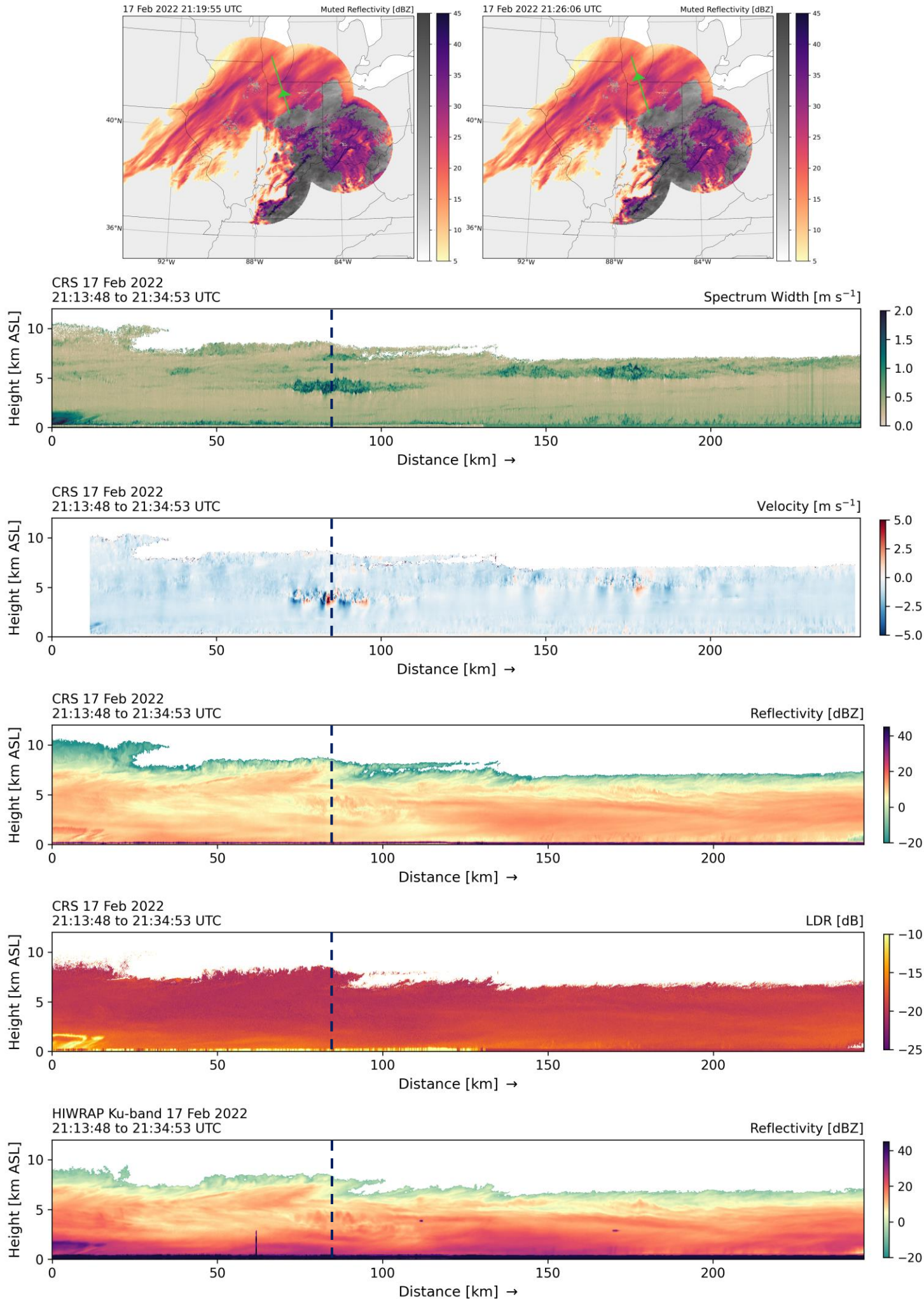


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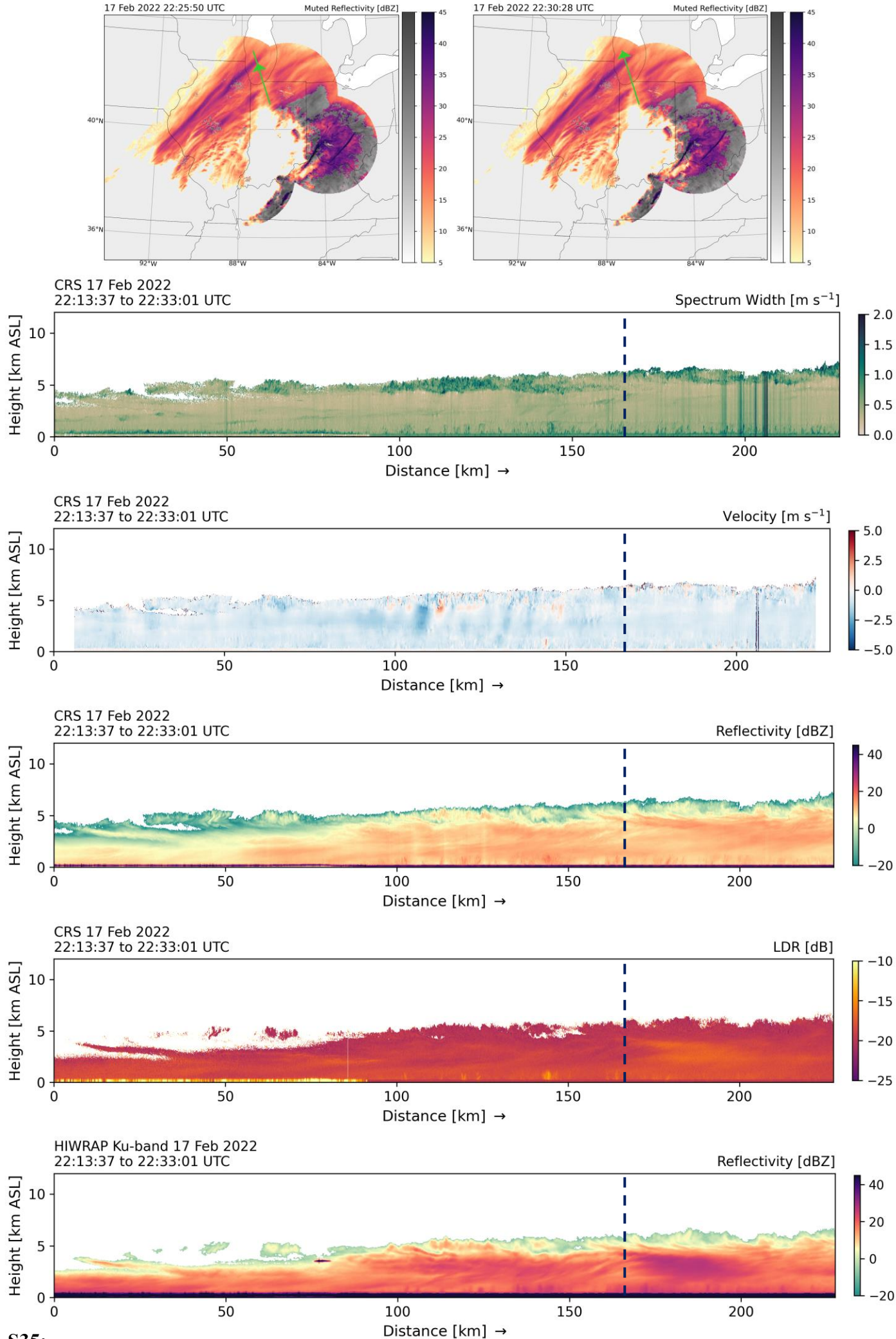


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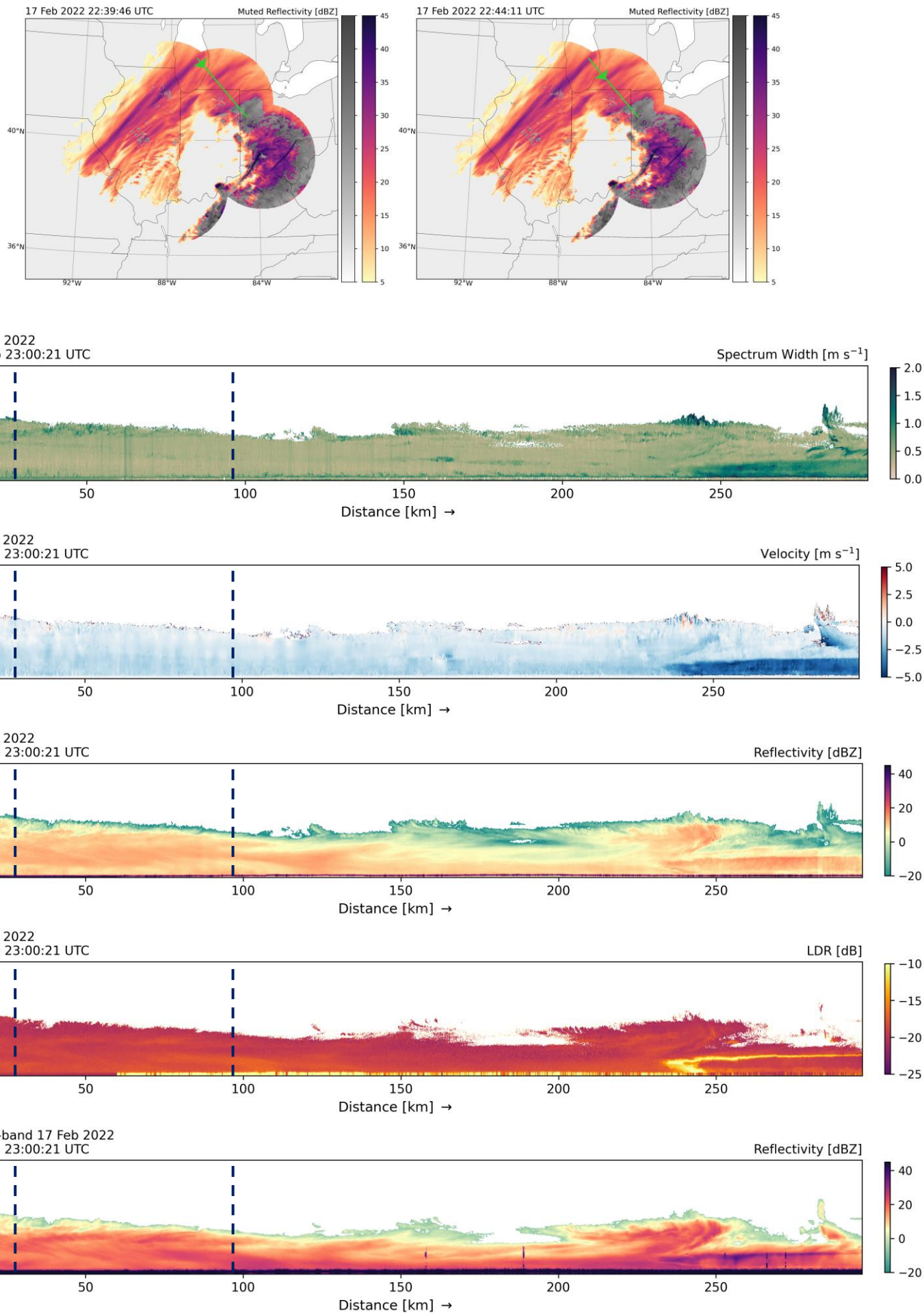


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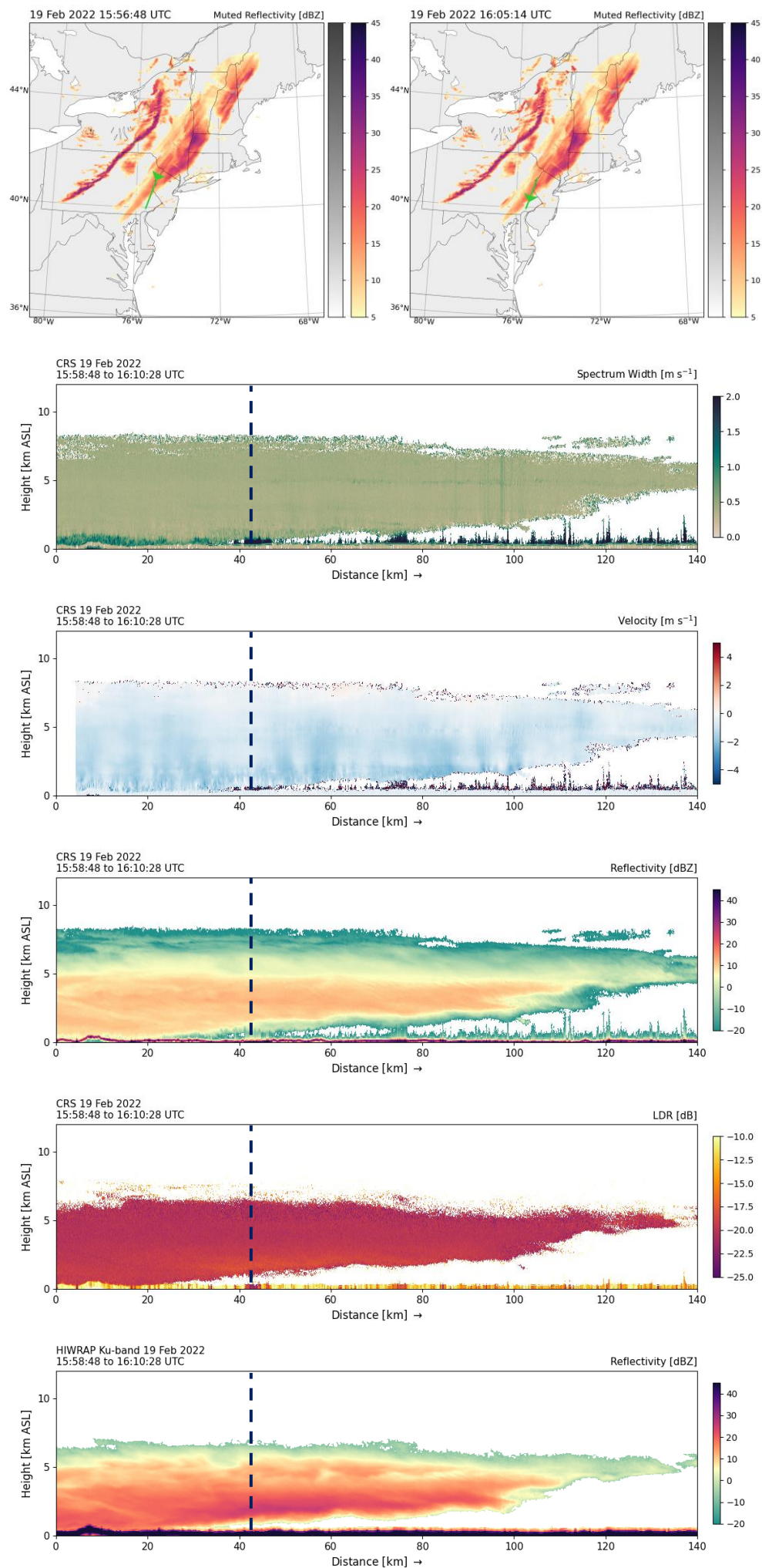


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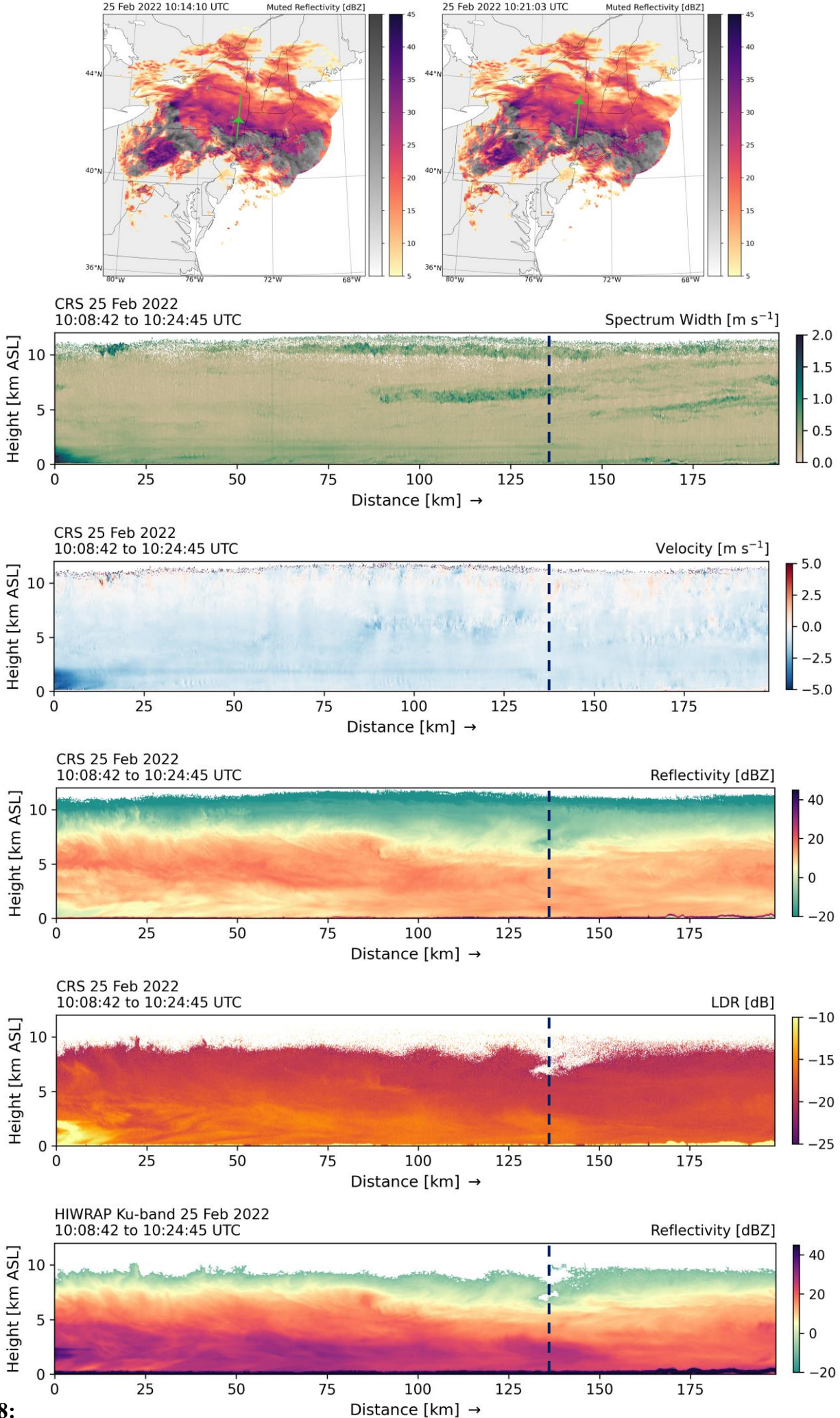


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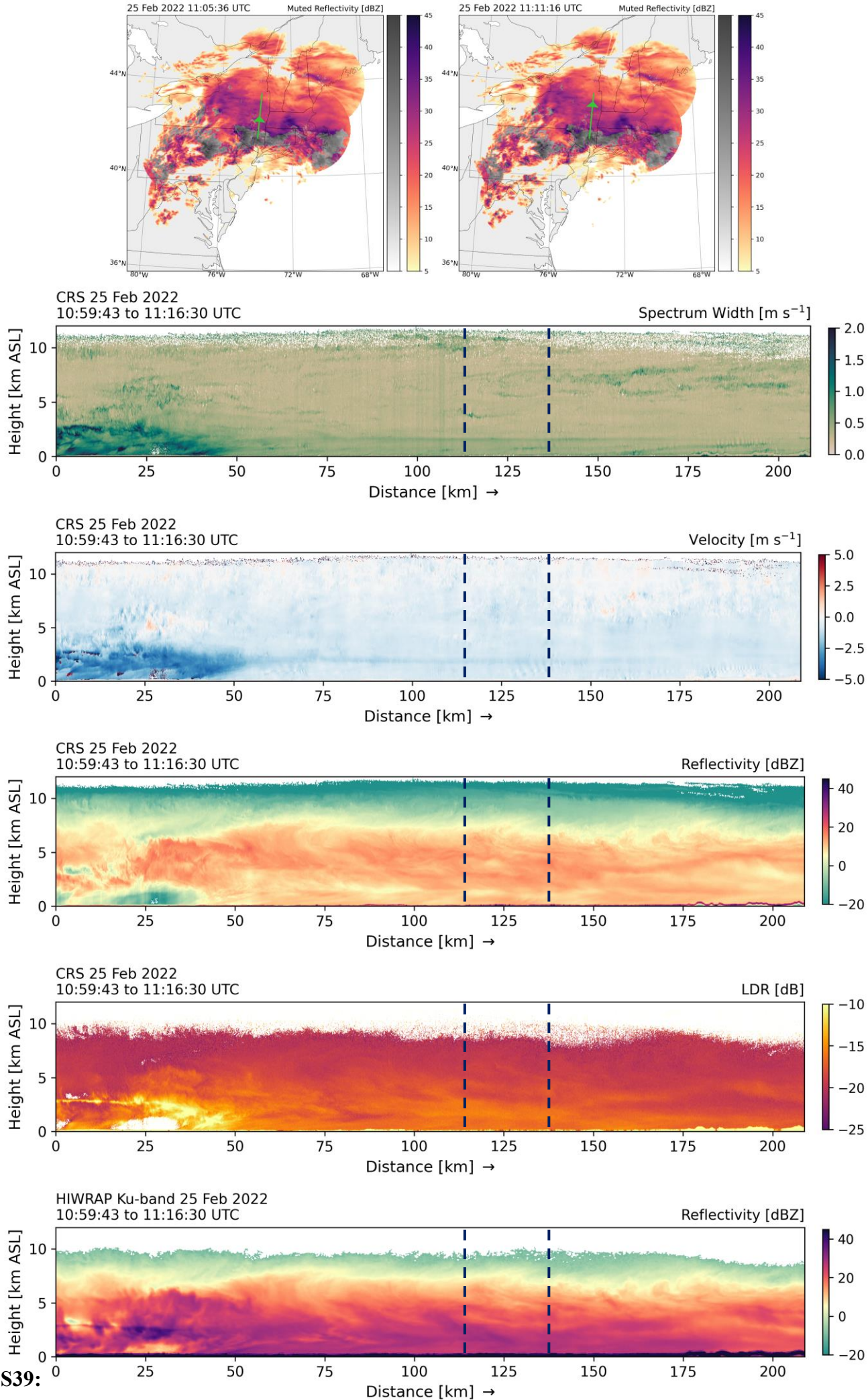


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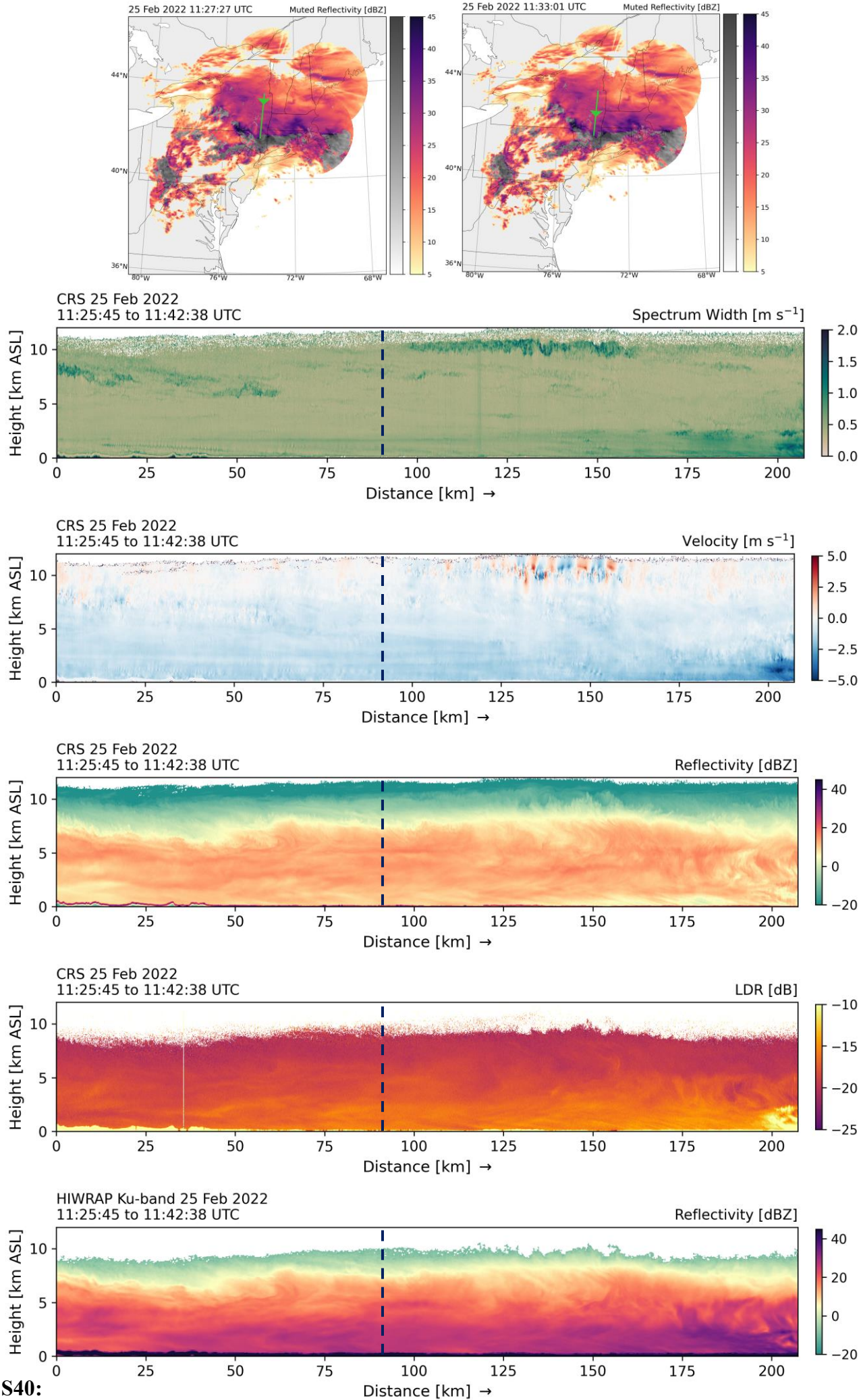


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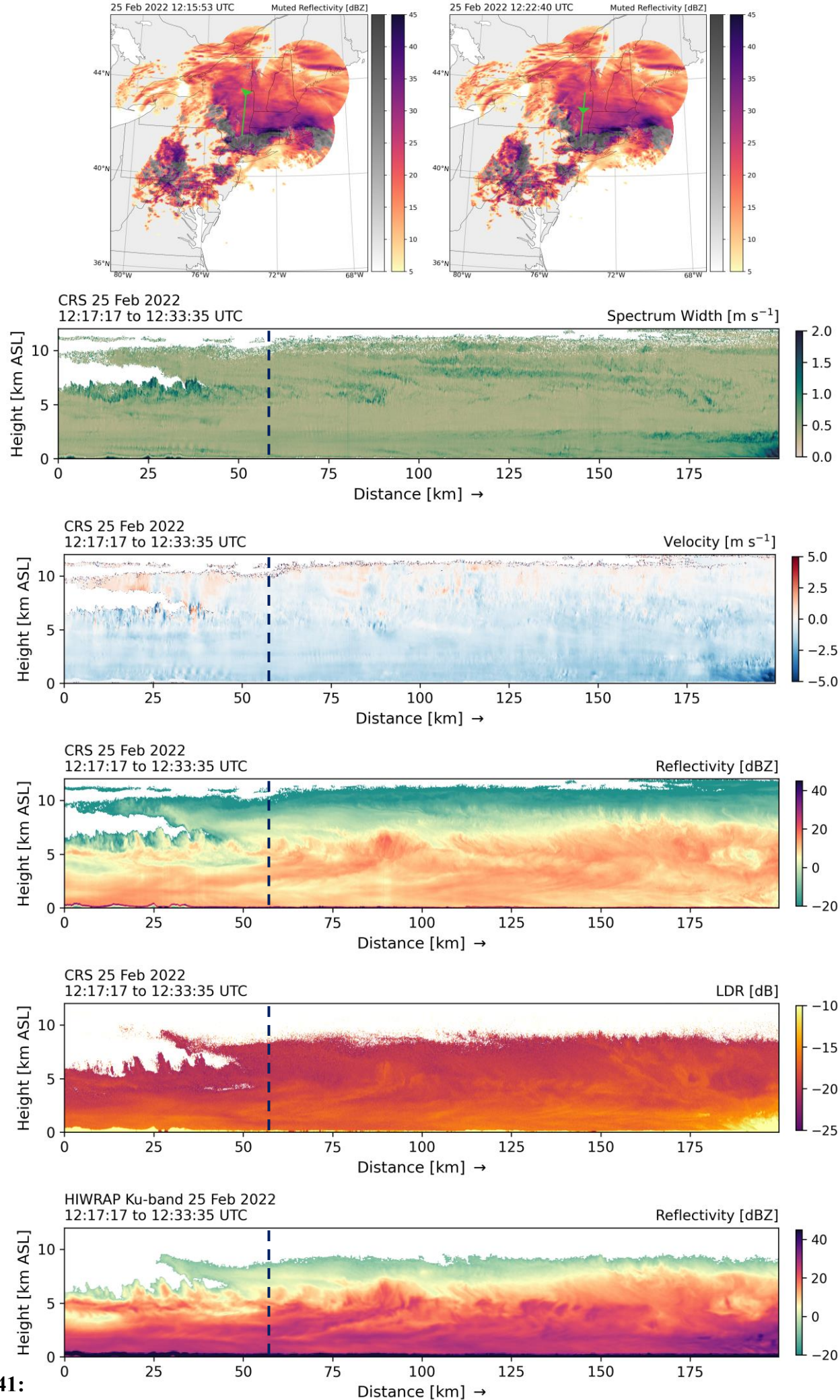


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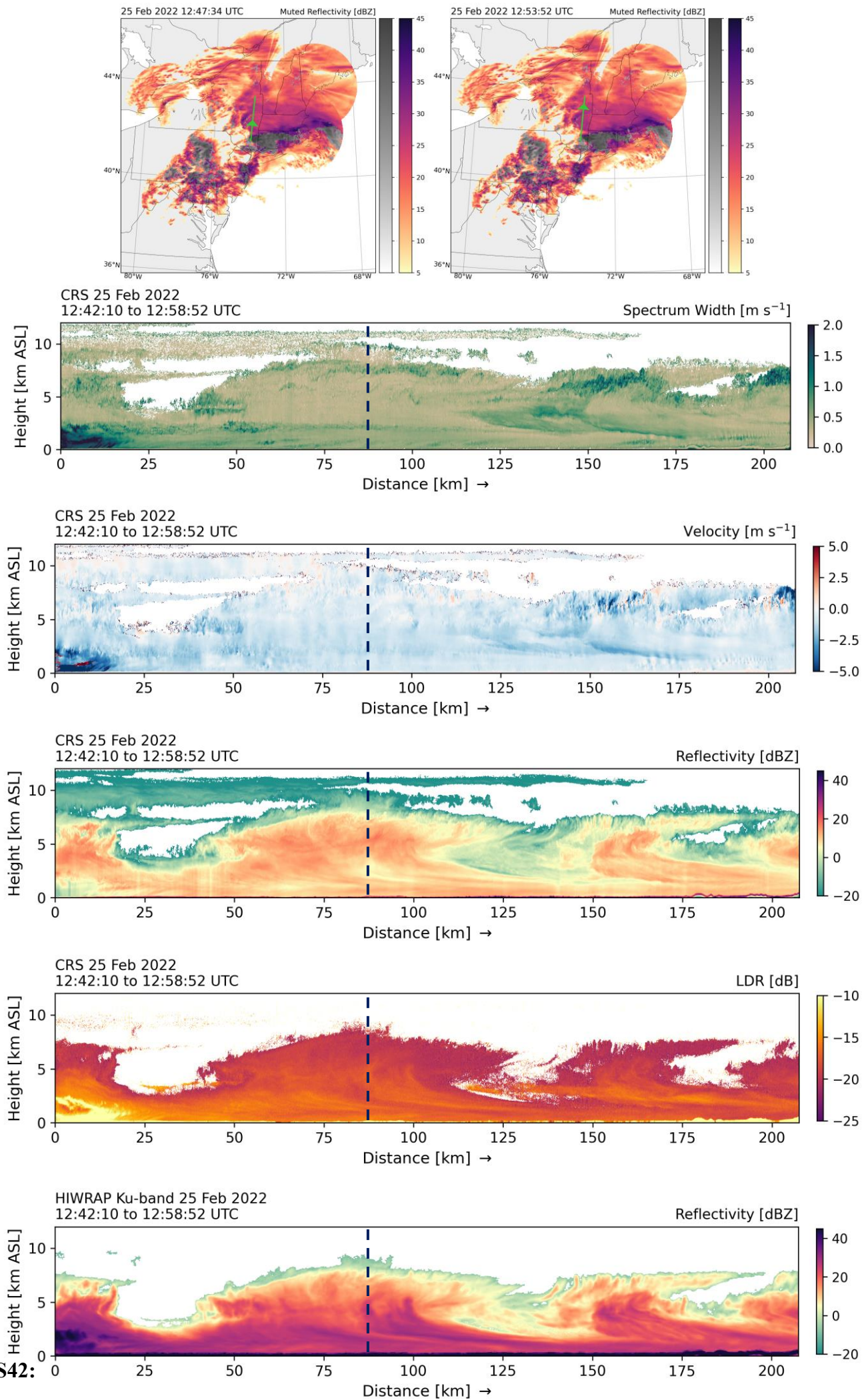


Fig. S42:

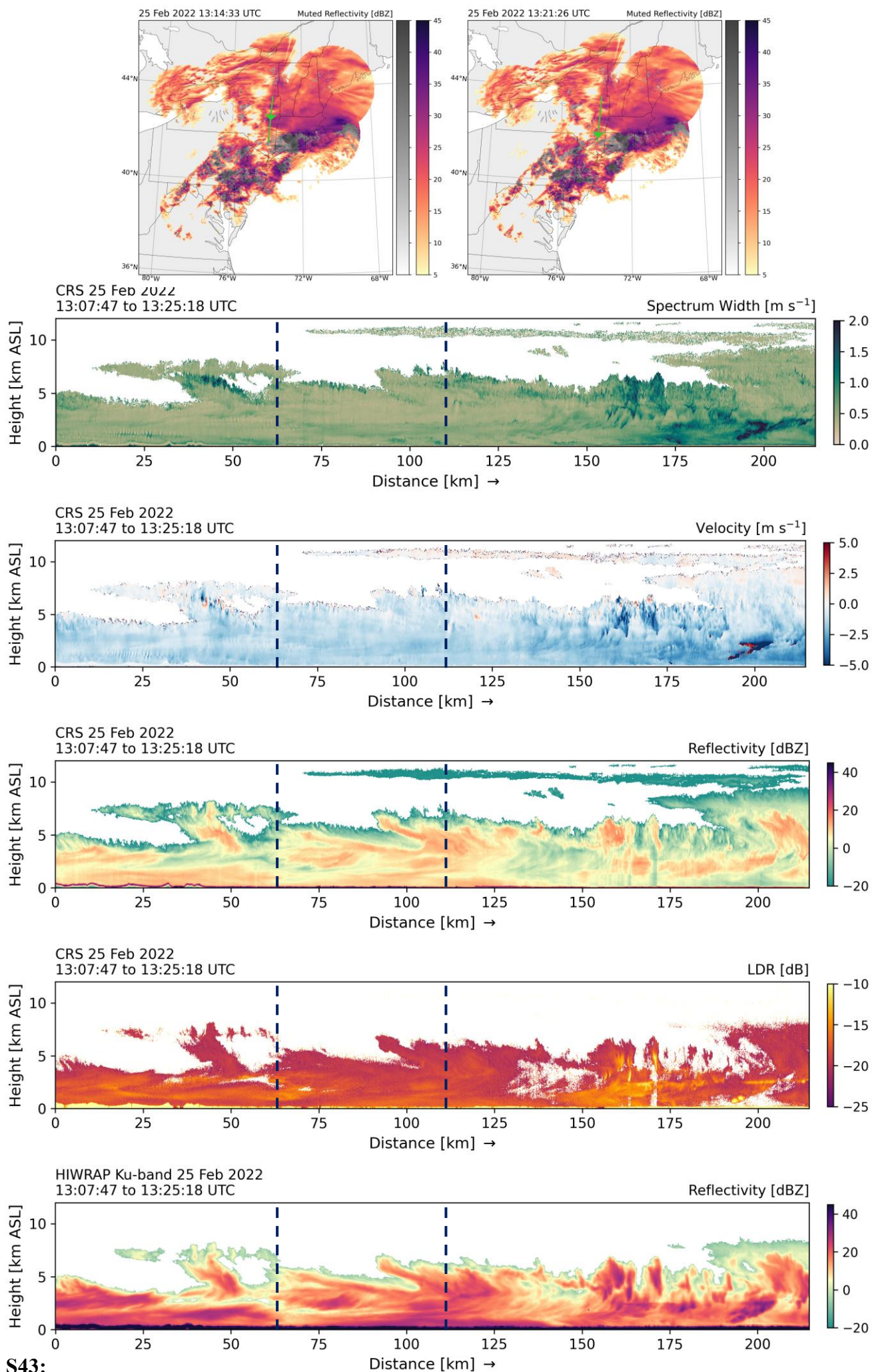
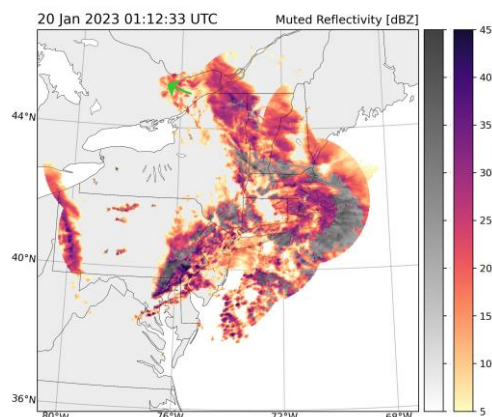
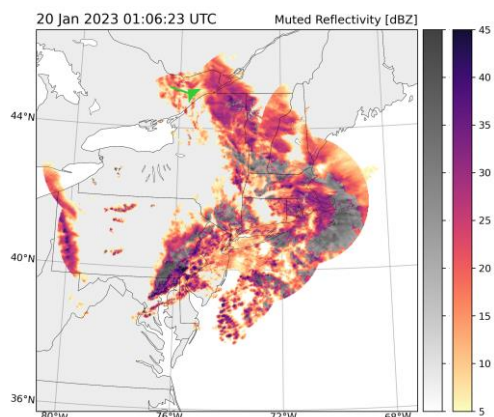
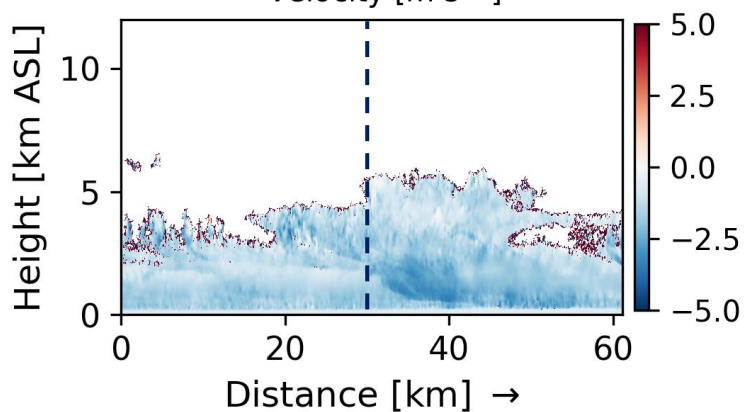


Fig. S43:

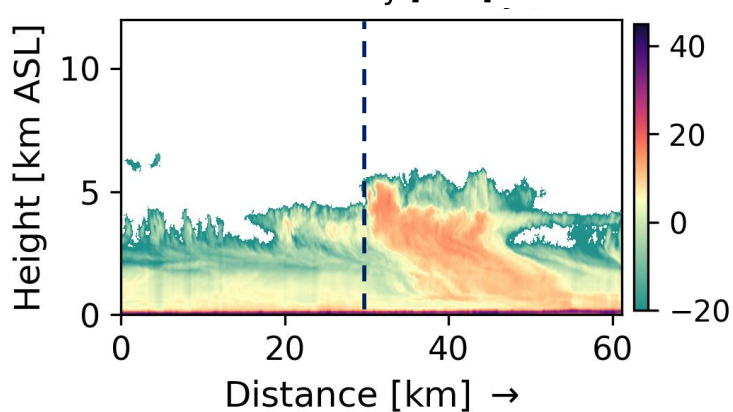
2023



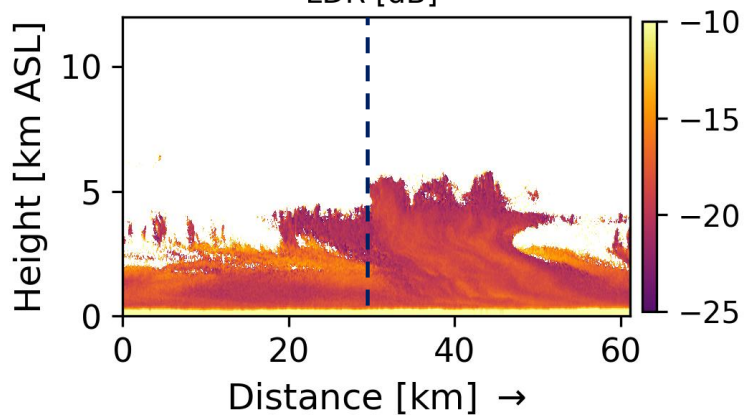
CRS 20 Jan 2023 01:08:07 to 01:13:36 UTC
Velocity [m s^{-1}]



CRS 20 Jan 2023 01:08:07 to 01:13:36 UTC
Reflectivity [dBZ]



CRS 20 Jan 2023 01:08:07 to 01:13:36 UTC
LDR [dB]



EXRAD 20 Jan 2023 01:08:07 to 01:13:36 UTC
Reflectivity [dBZ]

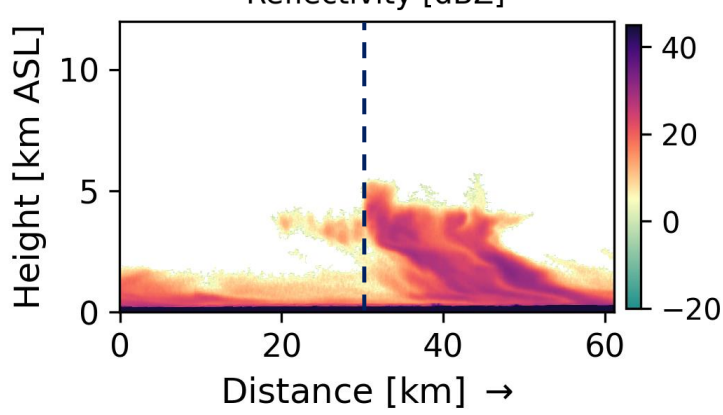


Fig. S44:

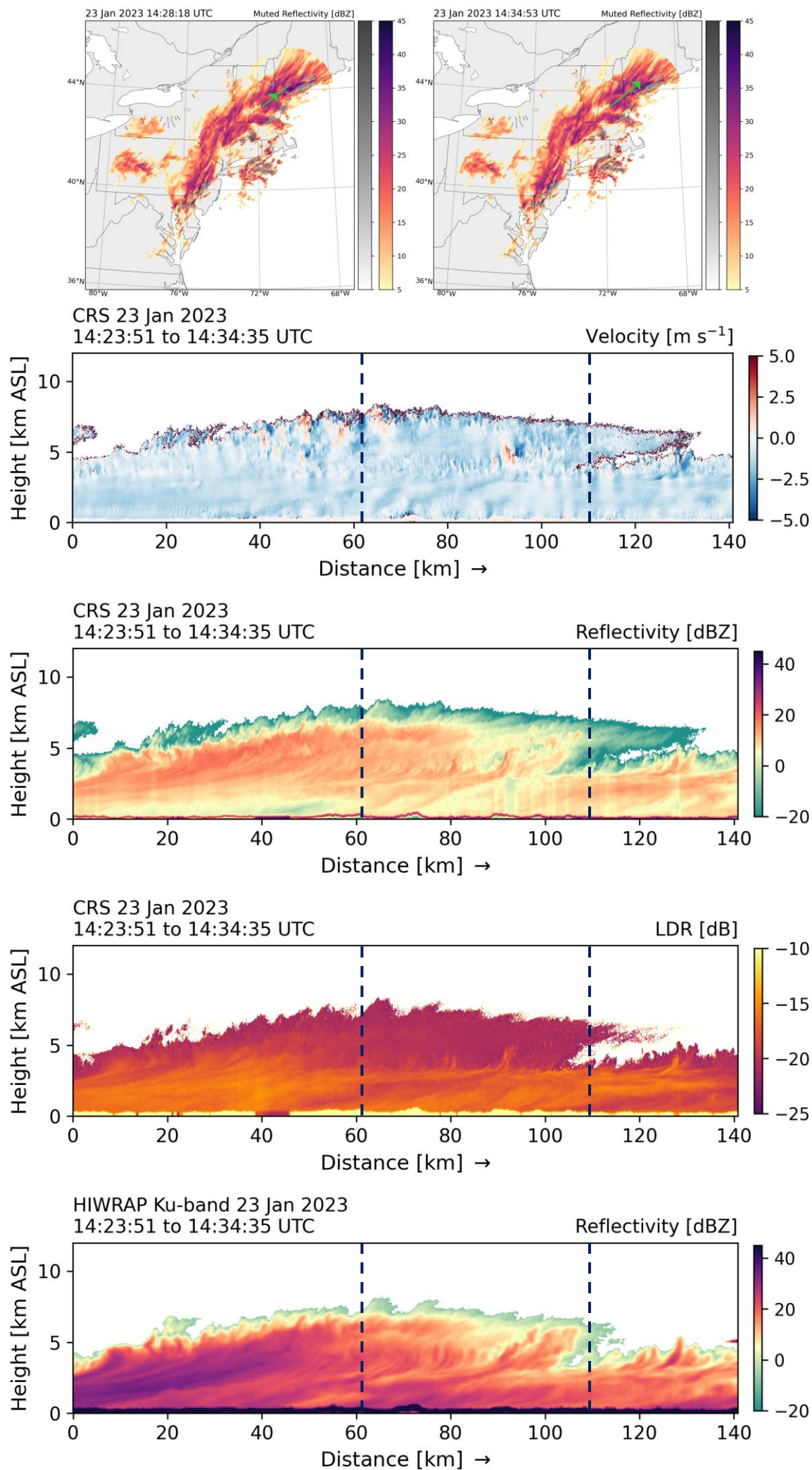


Fig. S45:

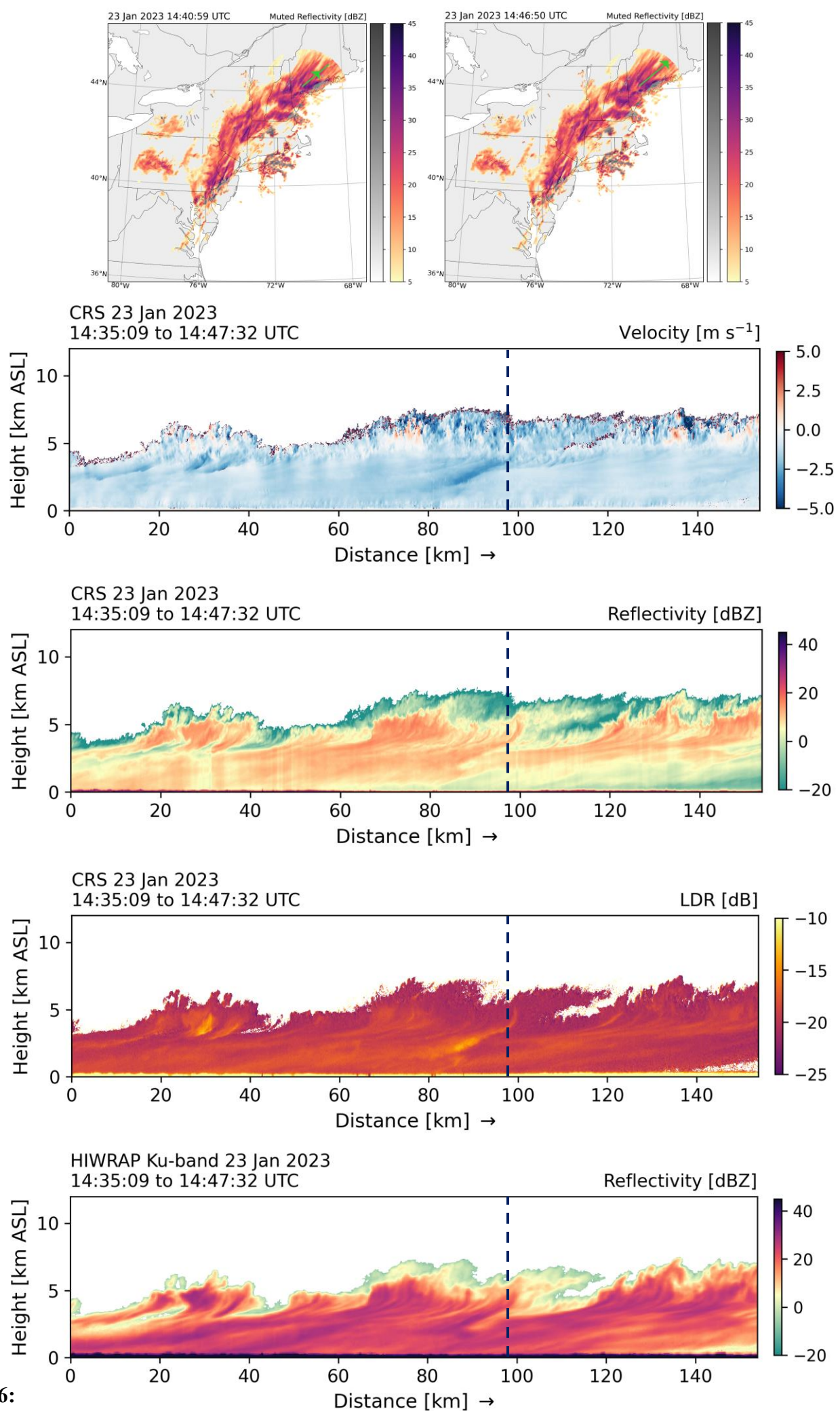


Fig. S46:

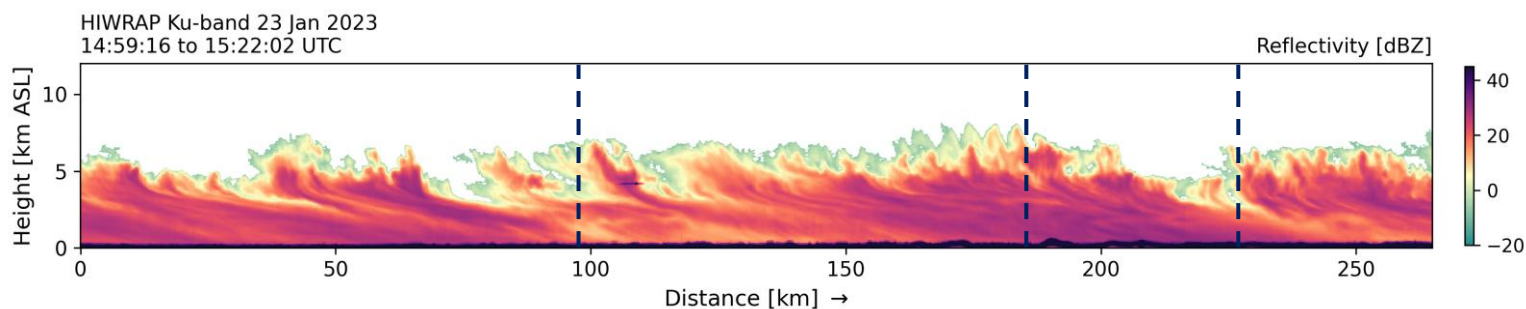
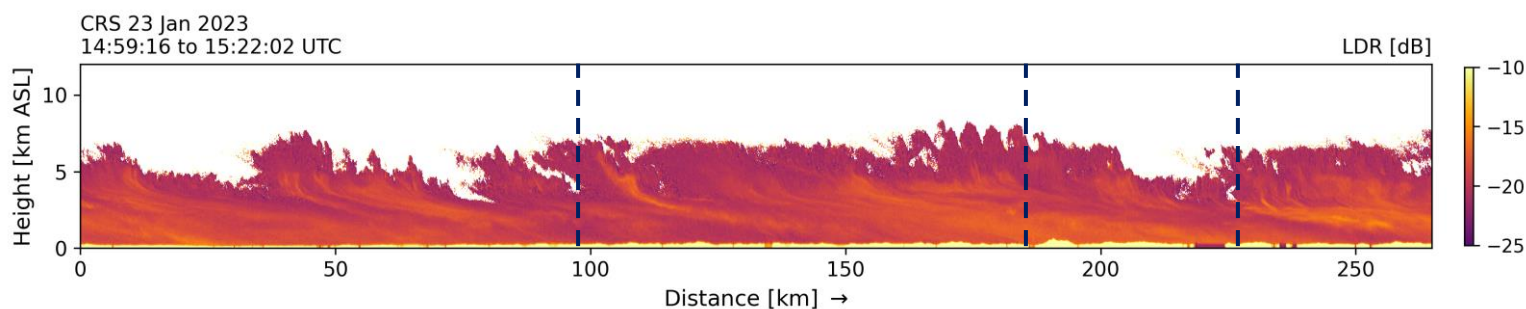
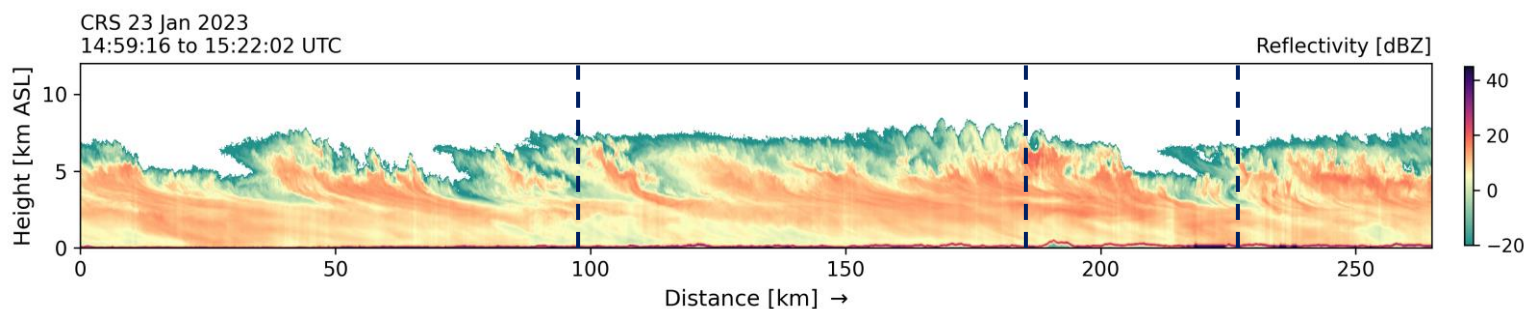
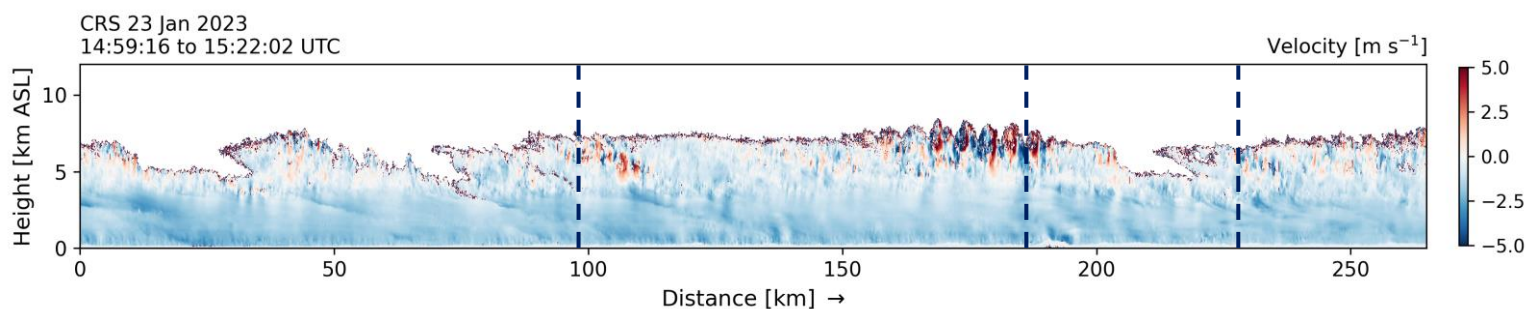
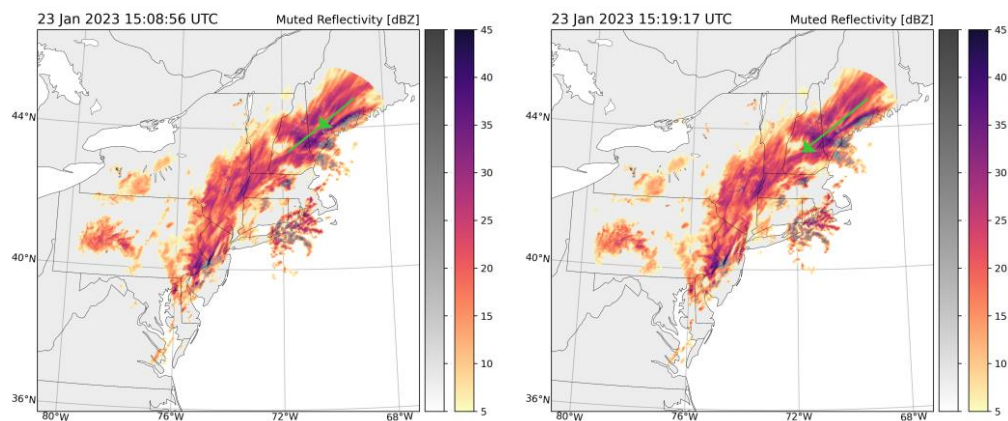


Fig. S47:

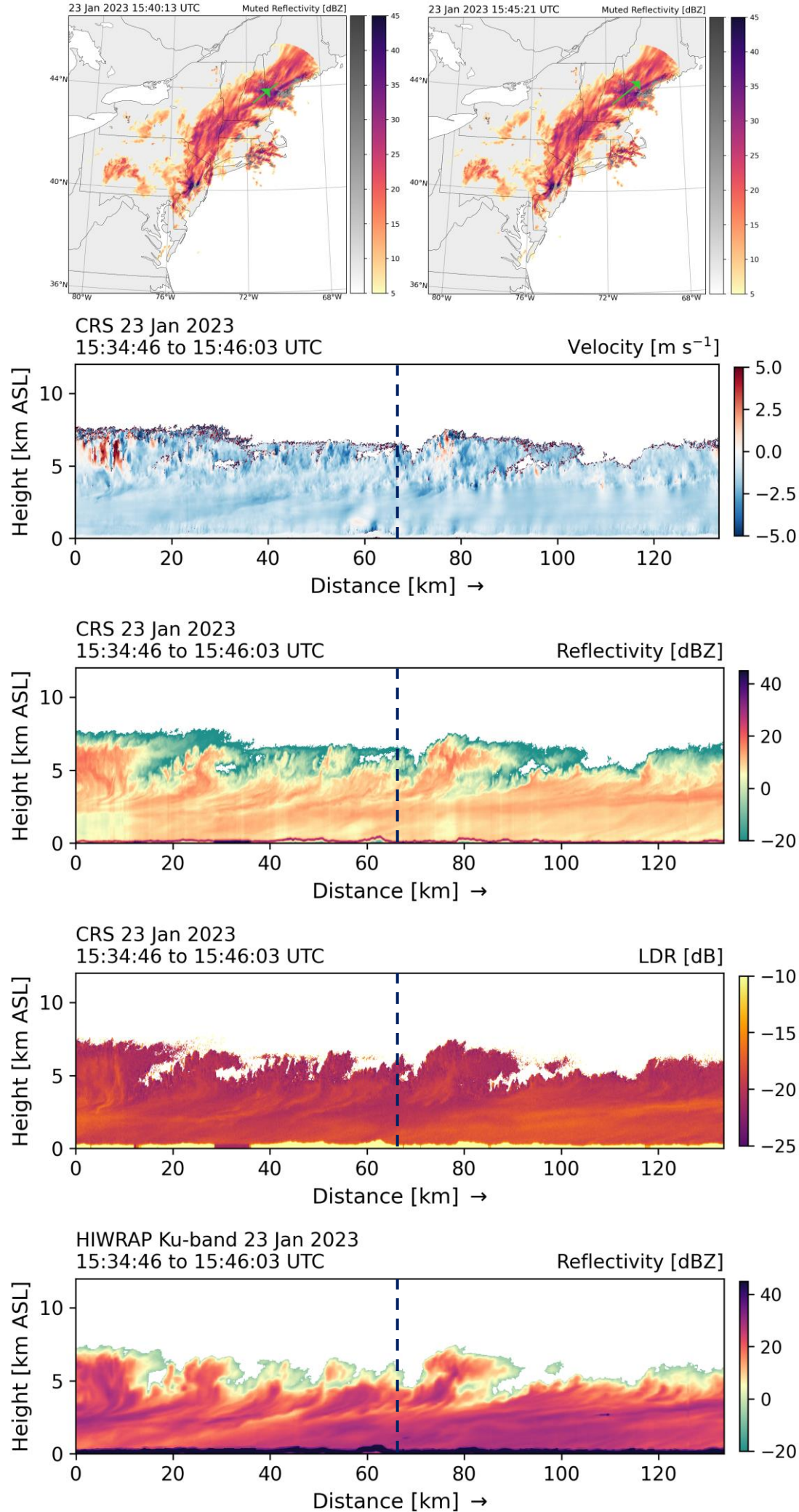


Fig. S48:

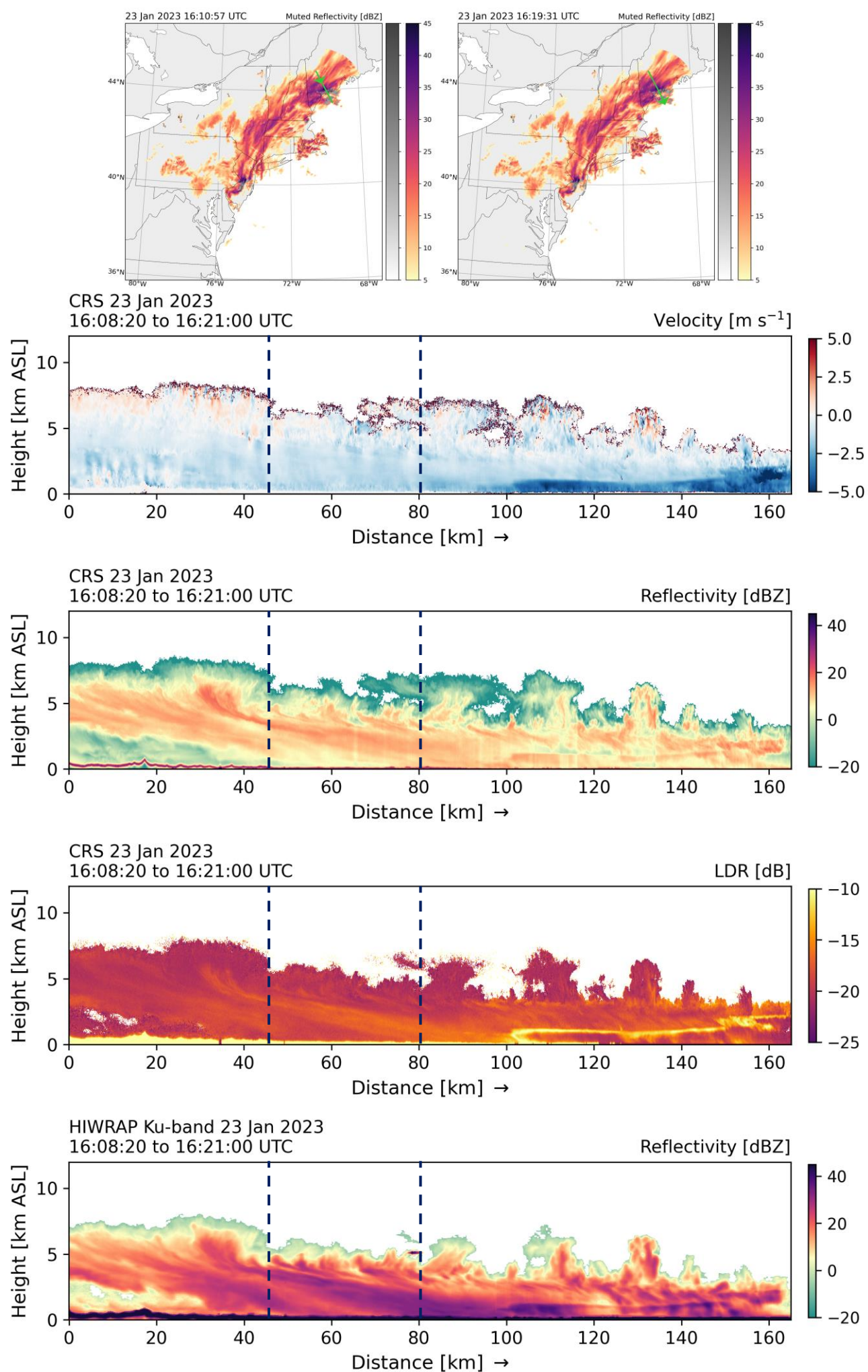


Fig. S49:

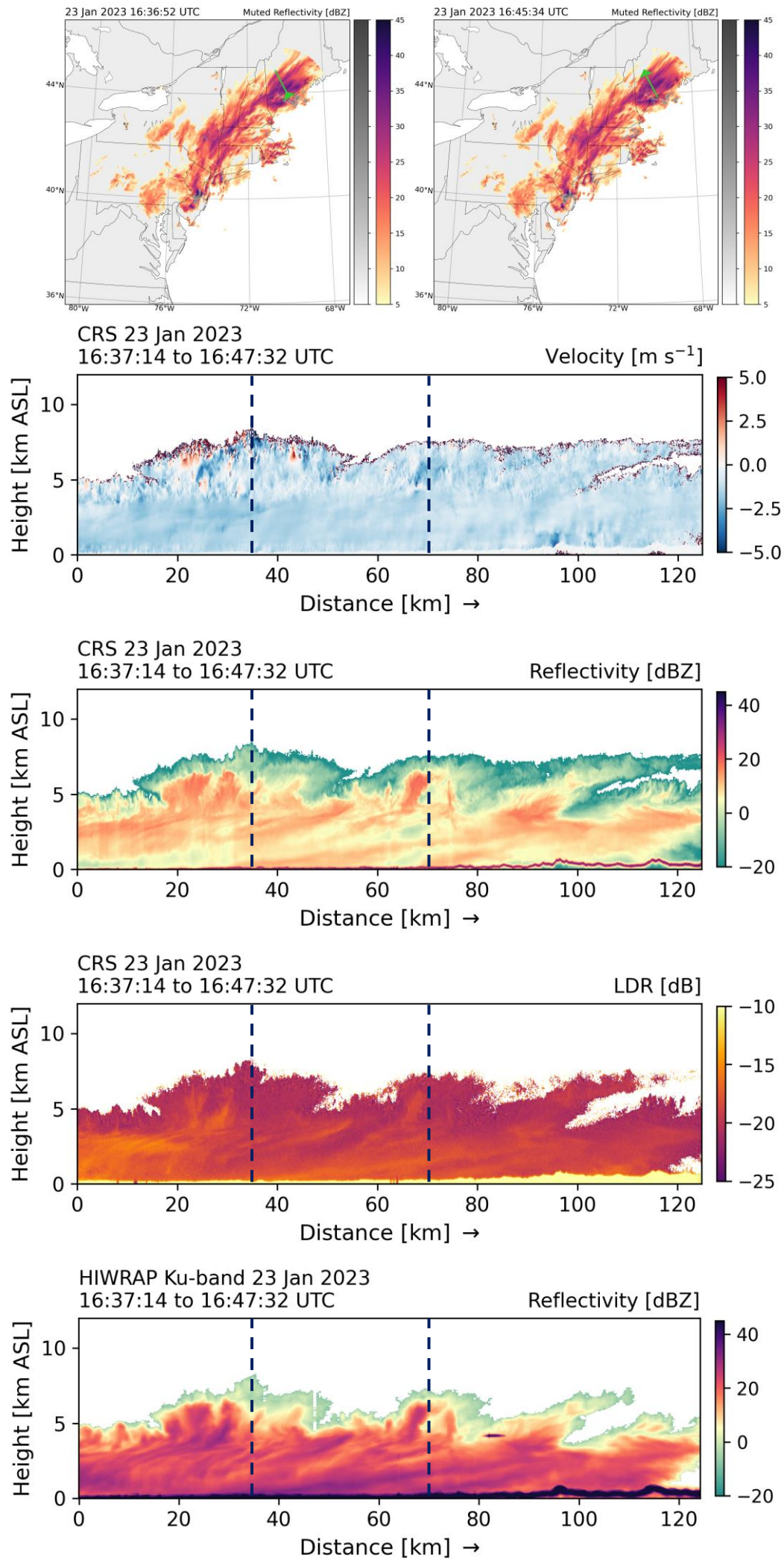


Fig. S50:

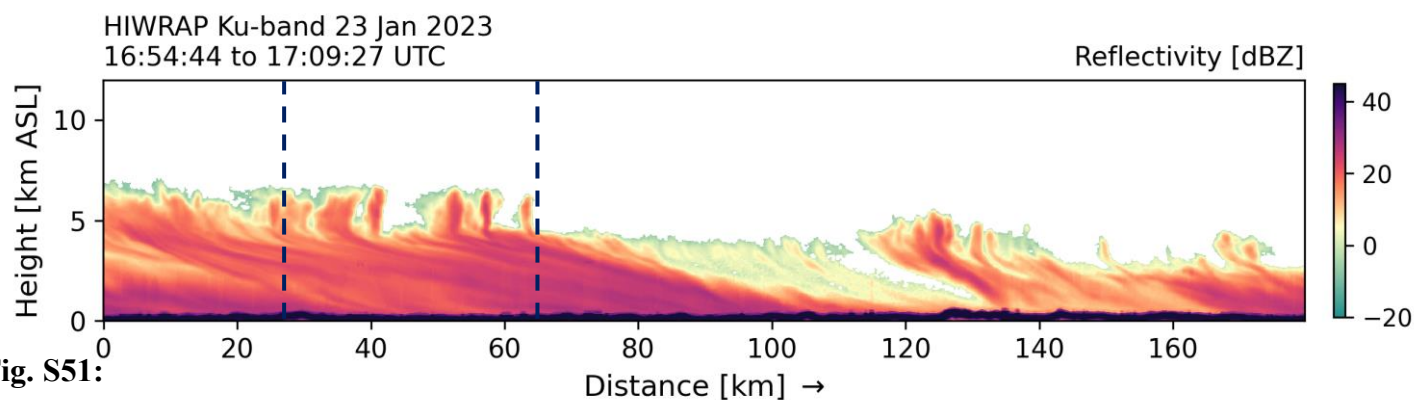
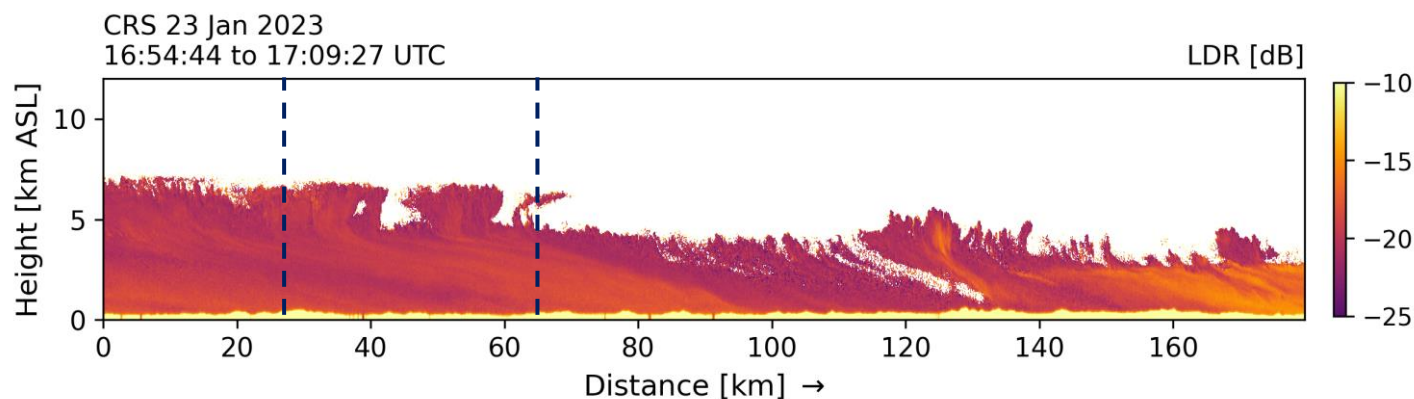
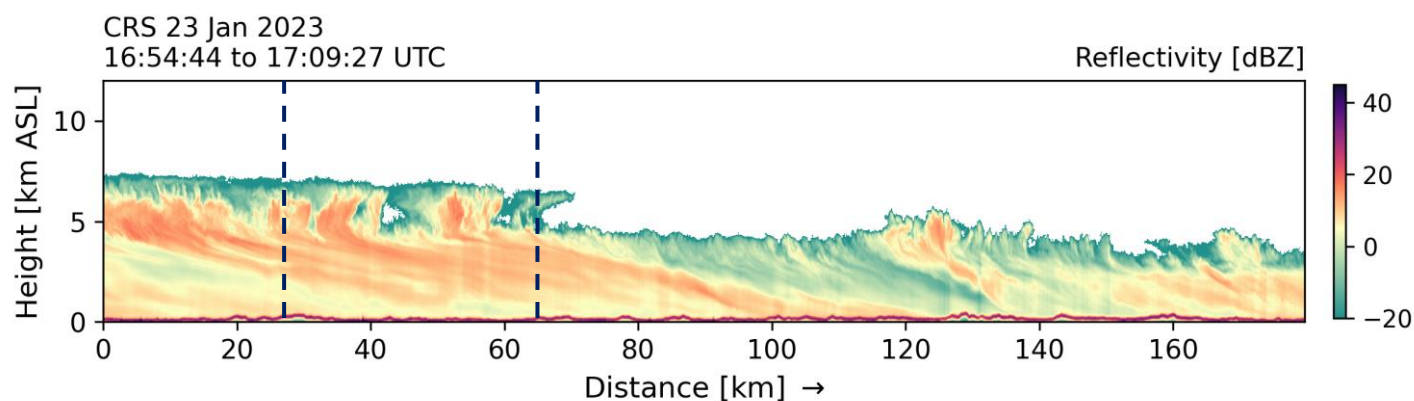
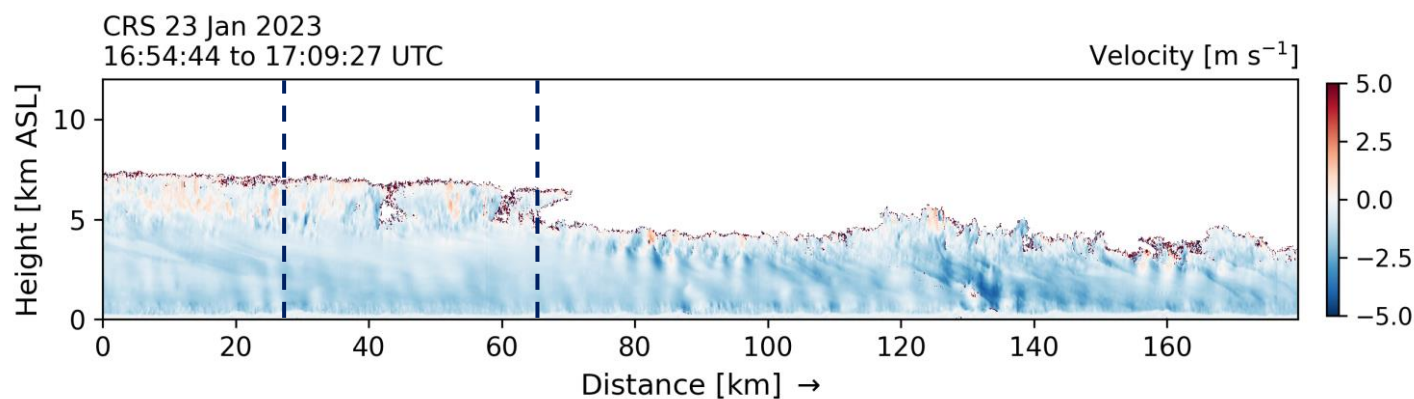
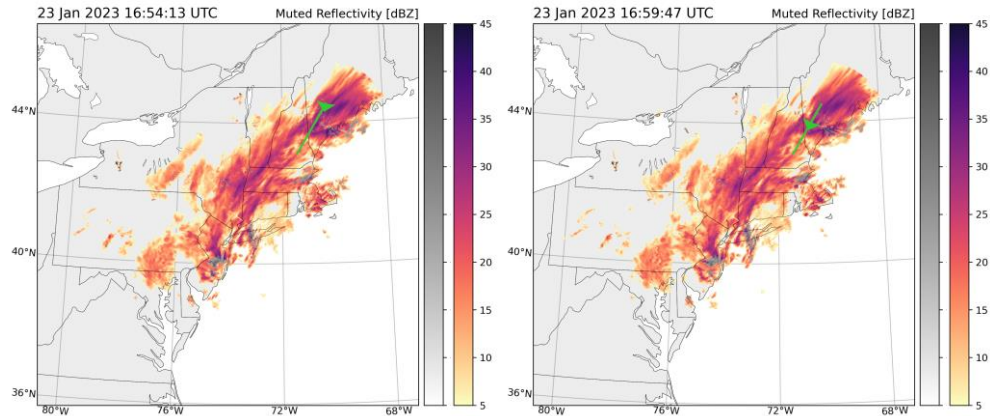


Fig. S51:

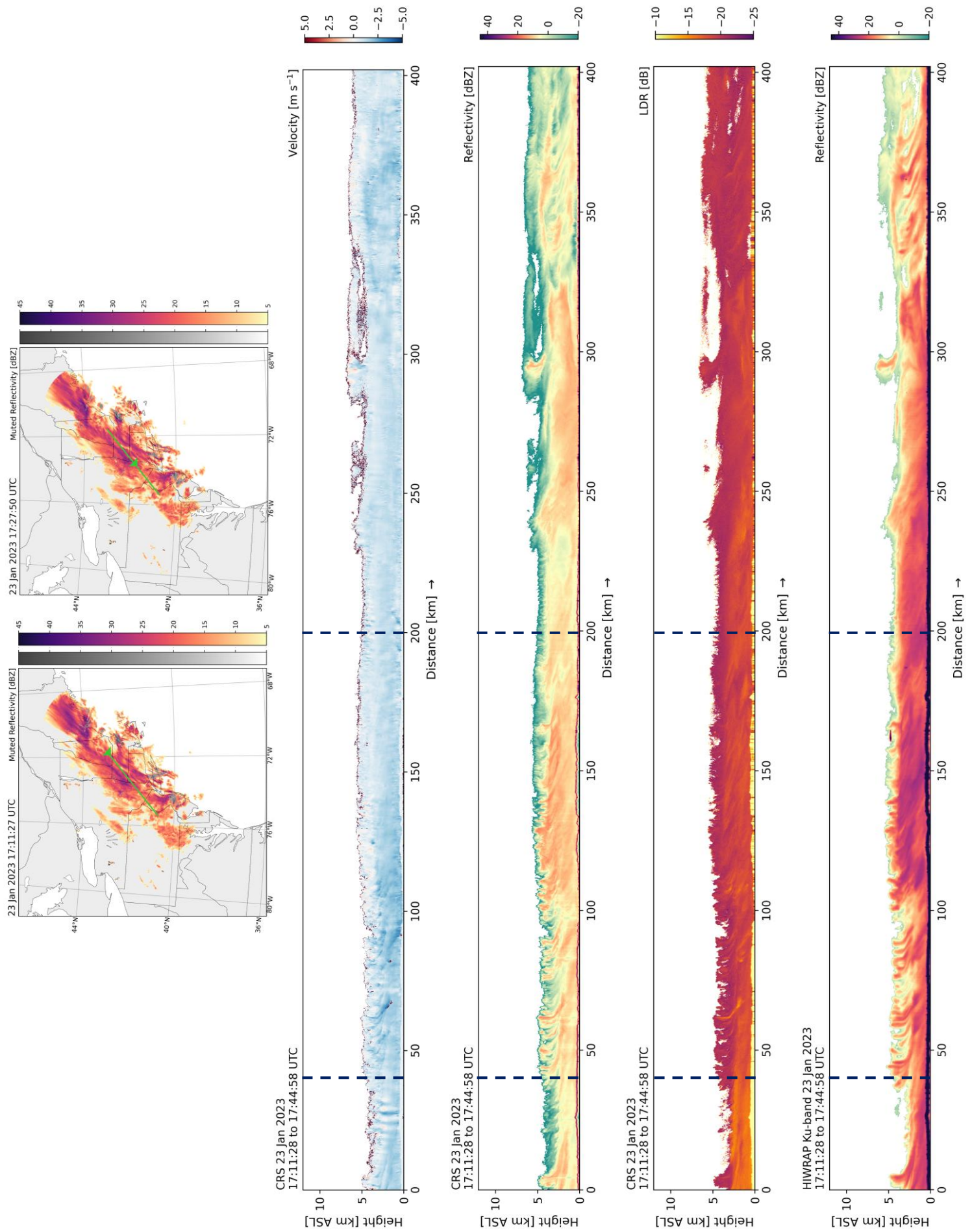


Fig. S52:

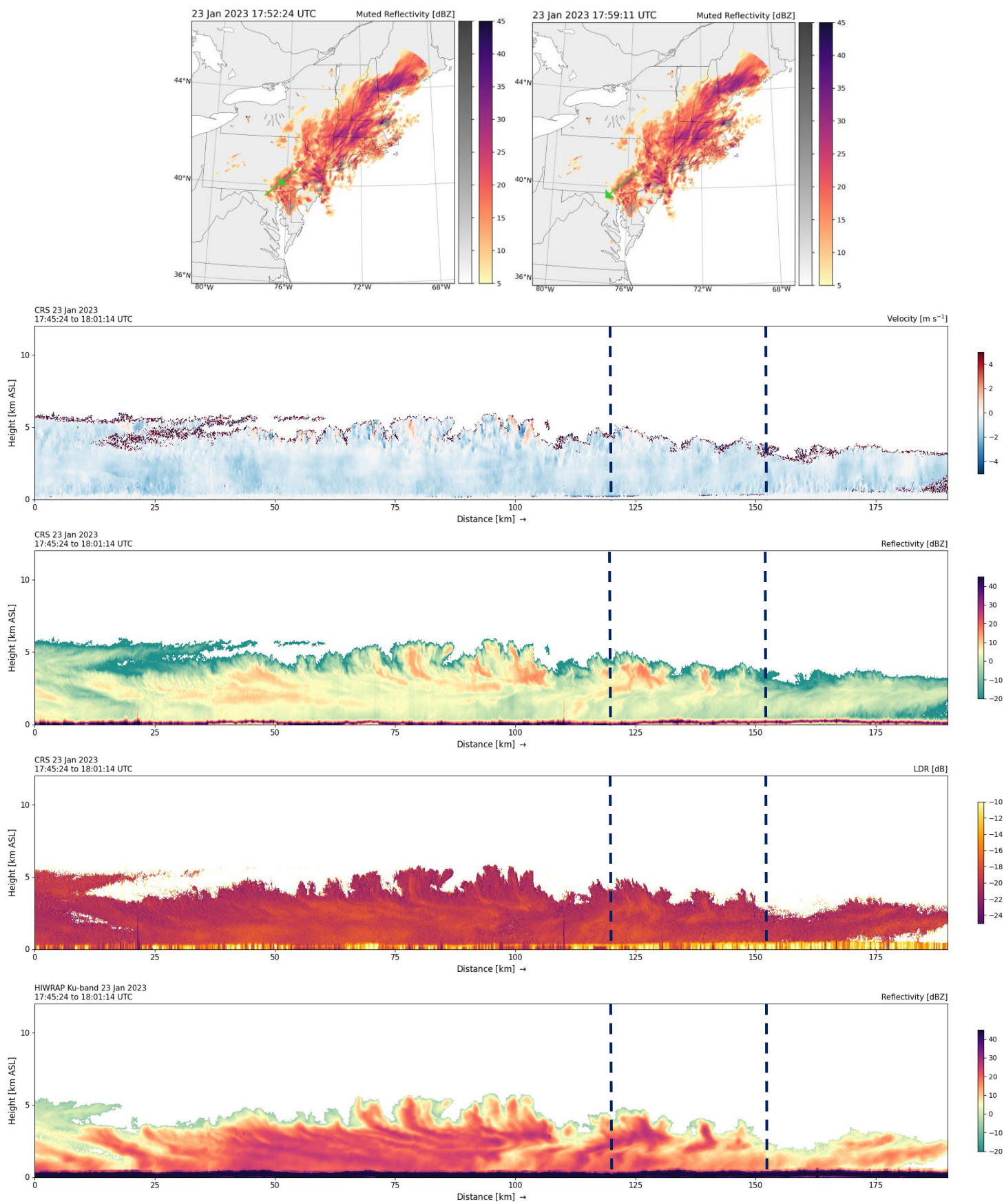


Fig. S53:

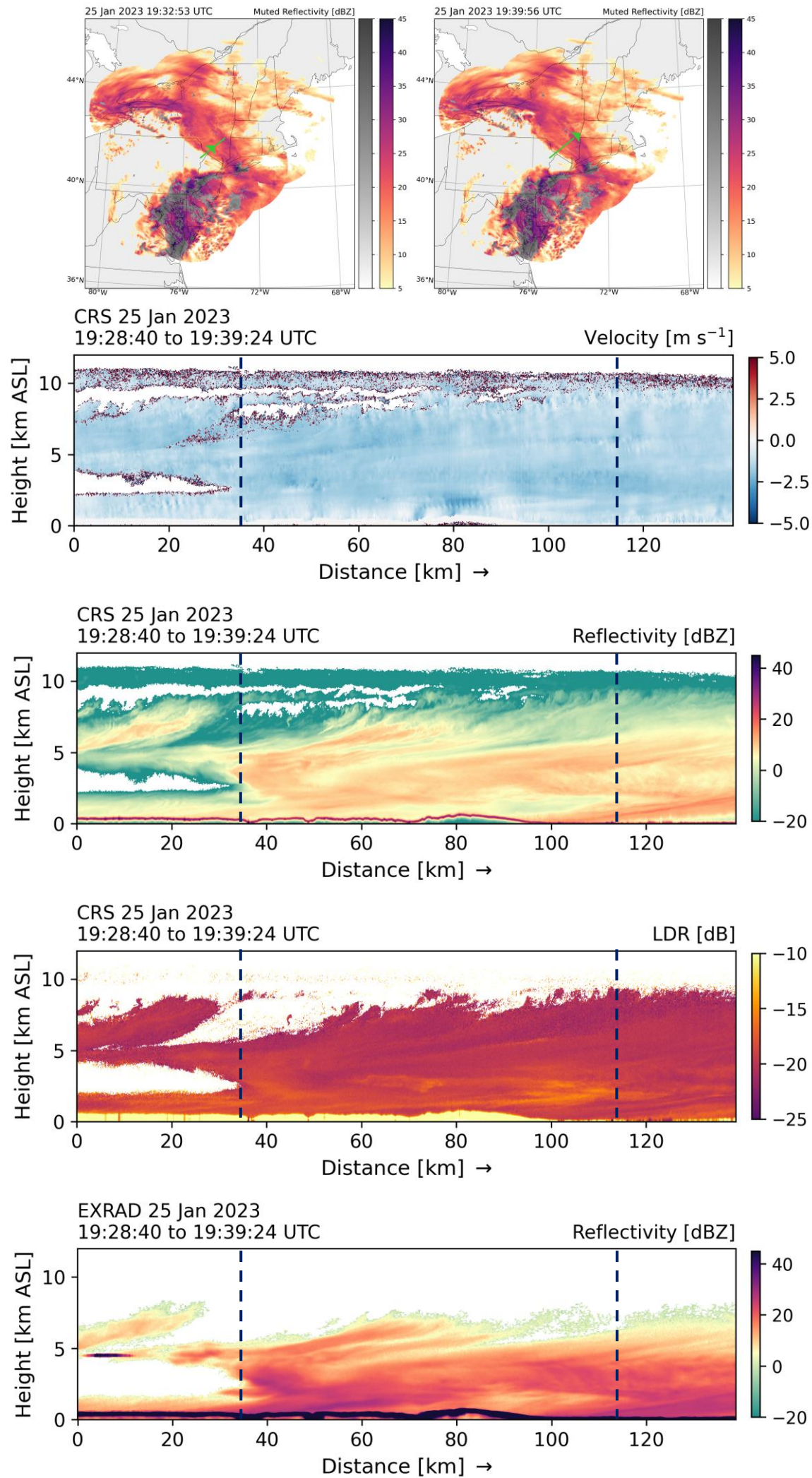


Fig. S54:

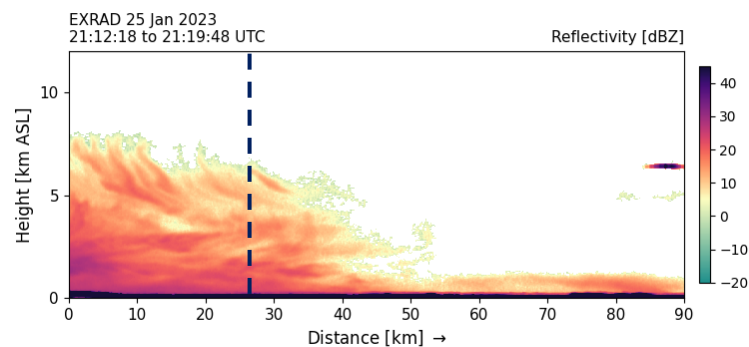
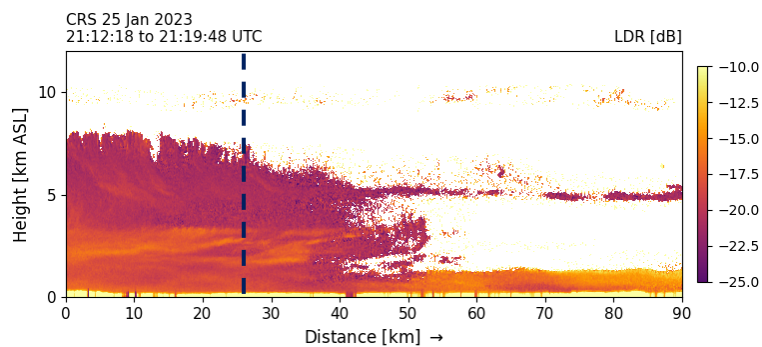
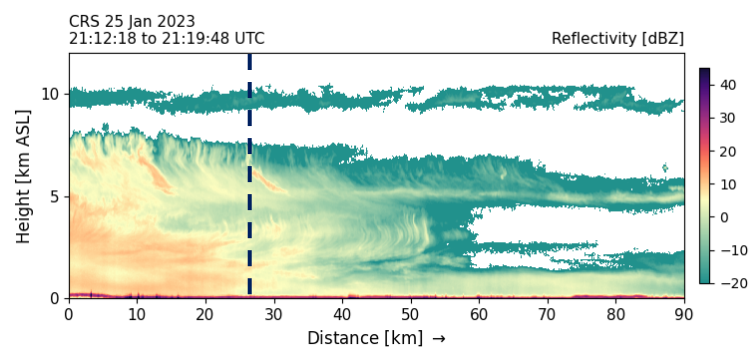
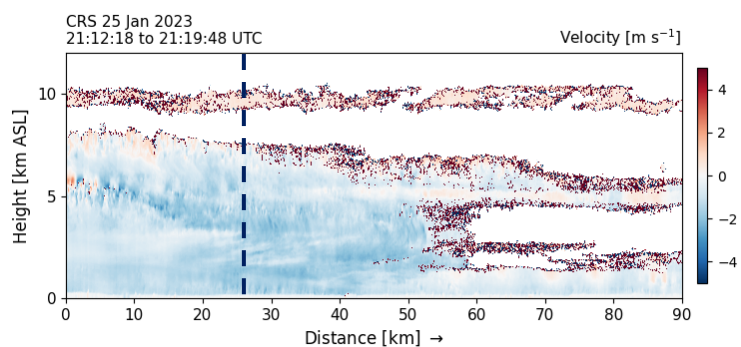
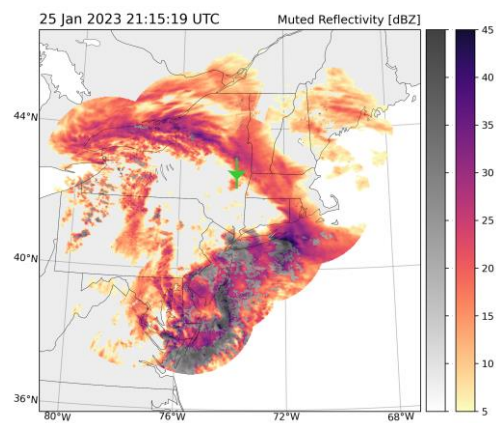
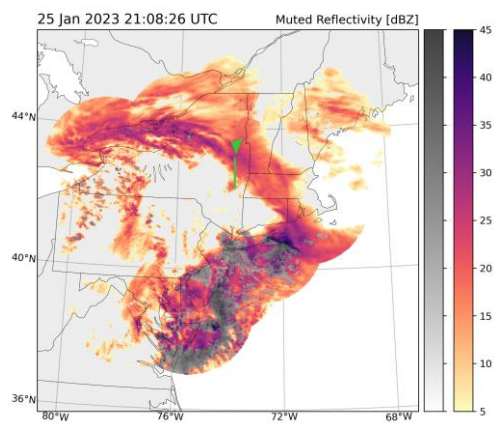


Fig. S55:

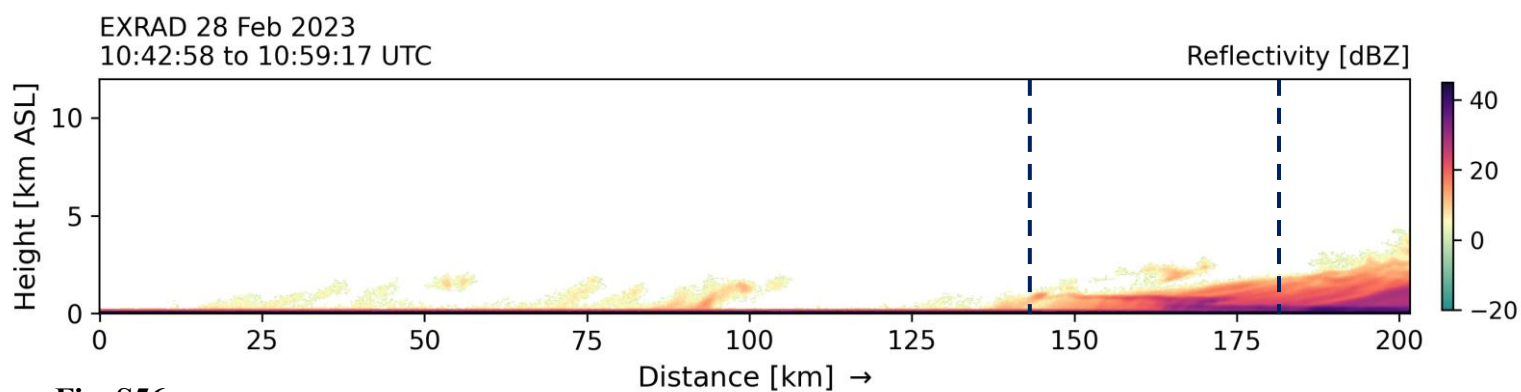
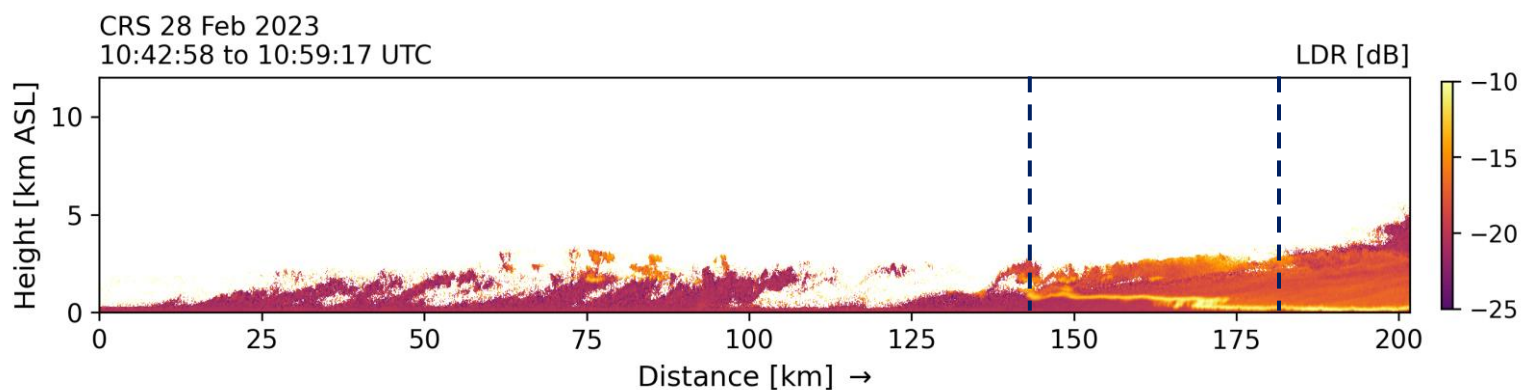
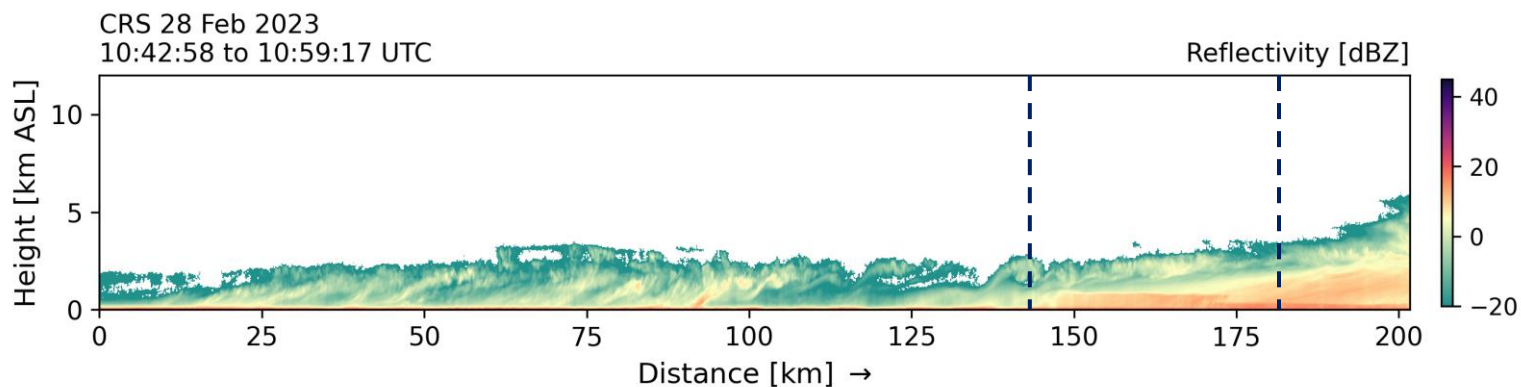
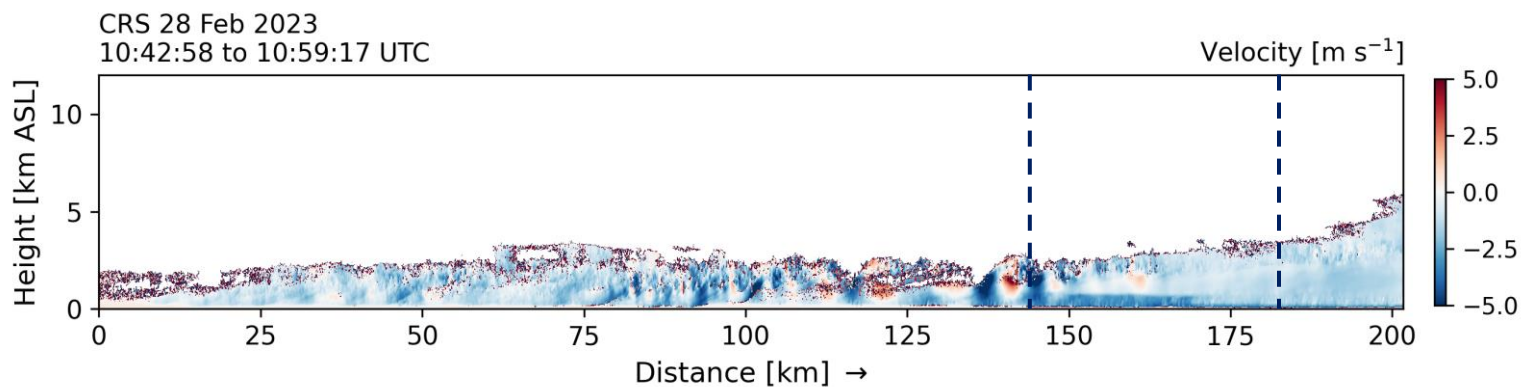
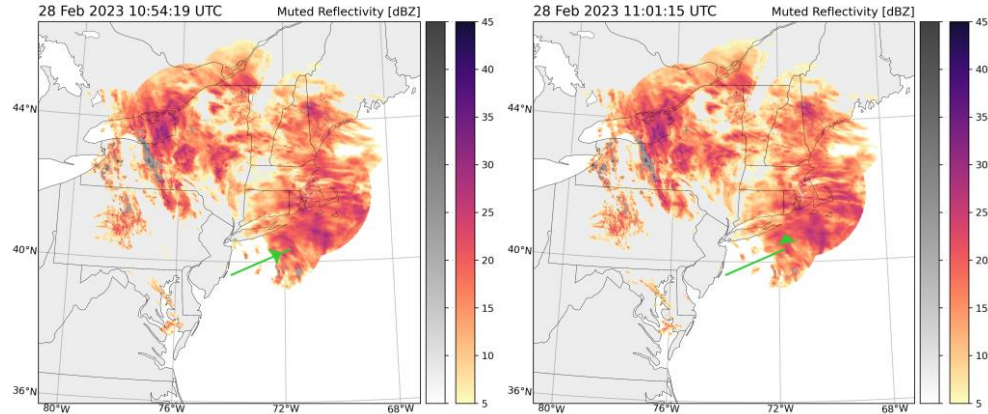


Fig. S56:

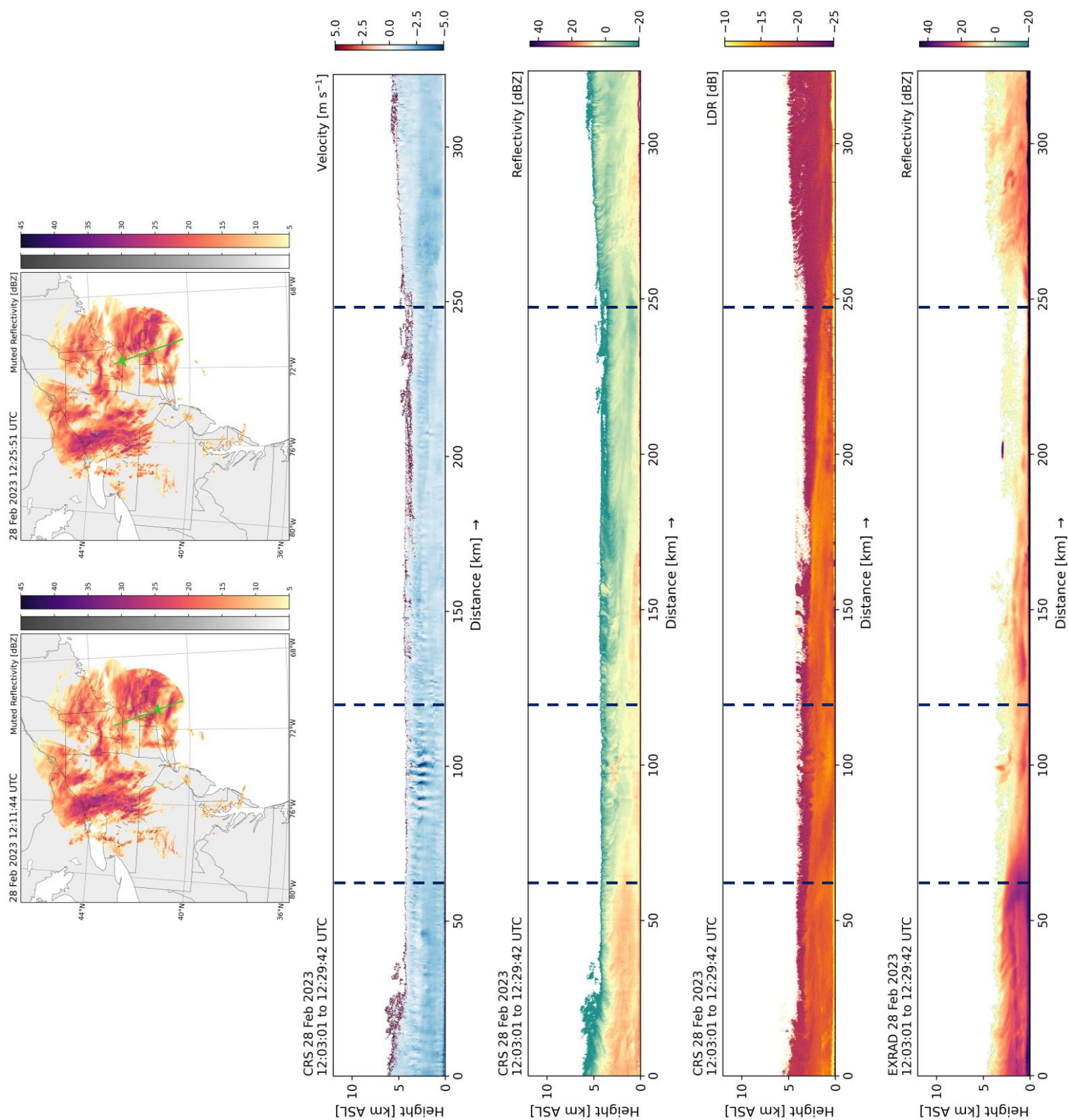


Fig. S57:

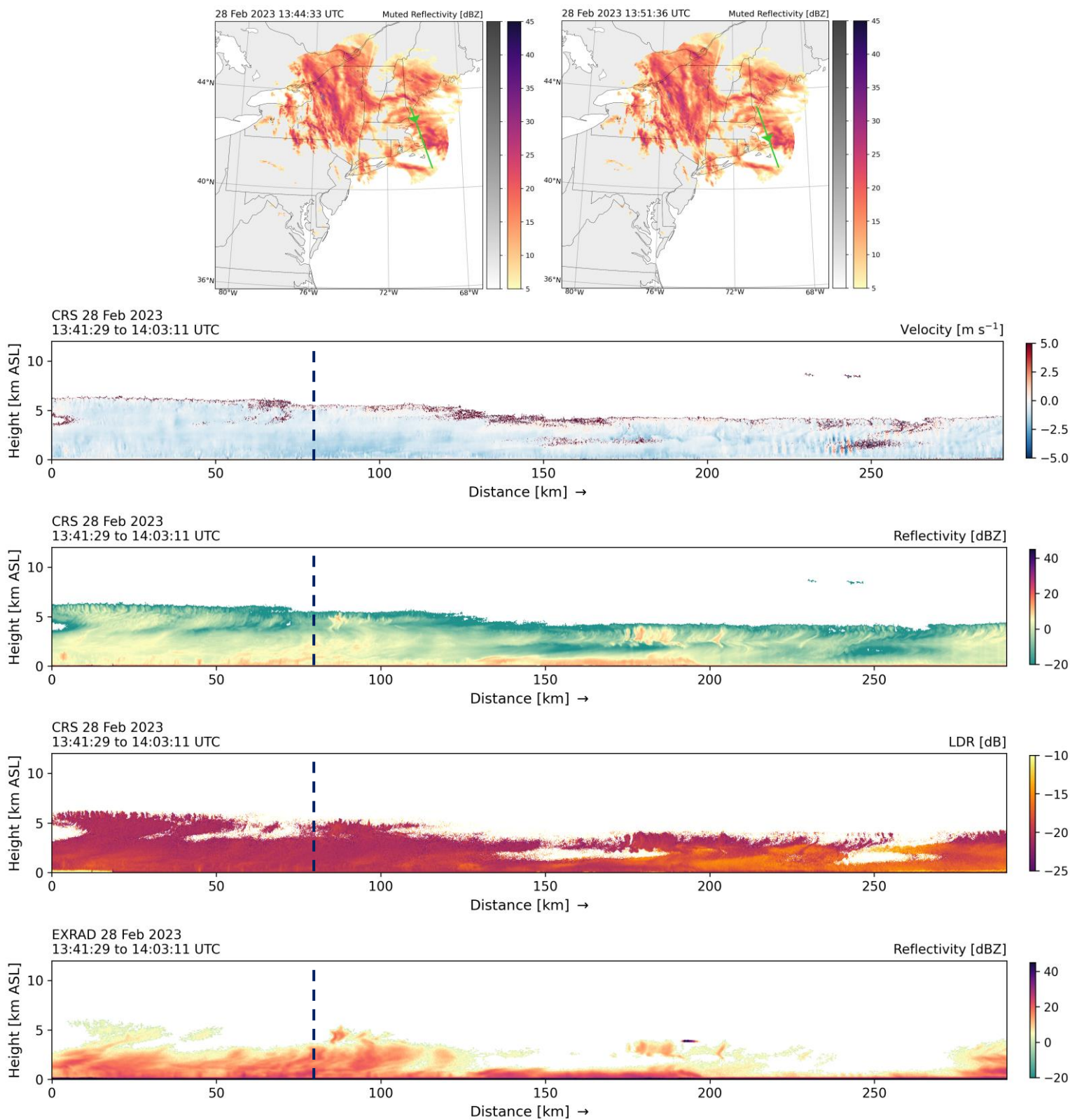


Fig. S58: