



---

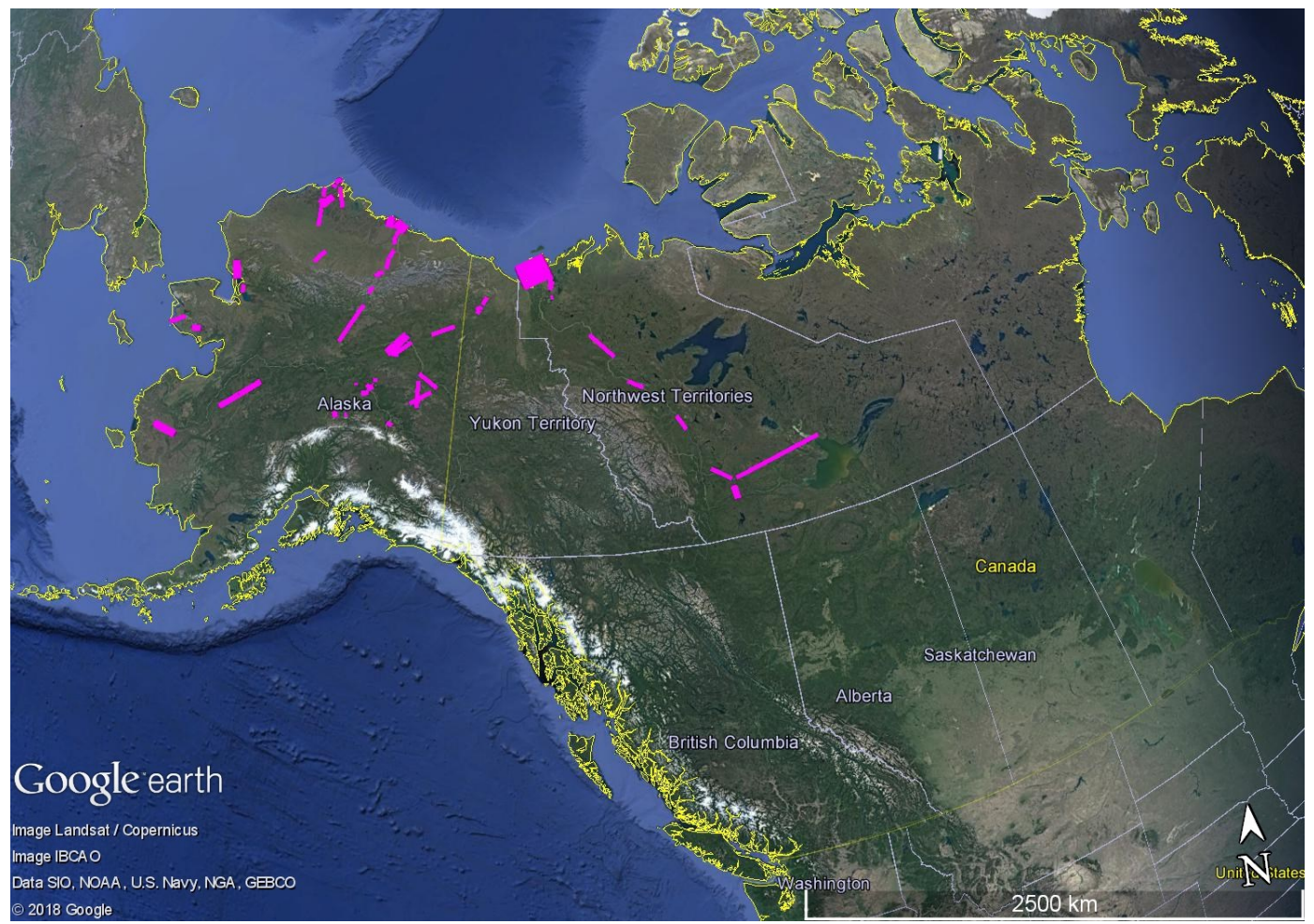
# AVIRIS-NG ABoVE: Organization of flight plans

7/8/2018

Thorpe, A. K.<sup>1</sup>

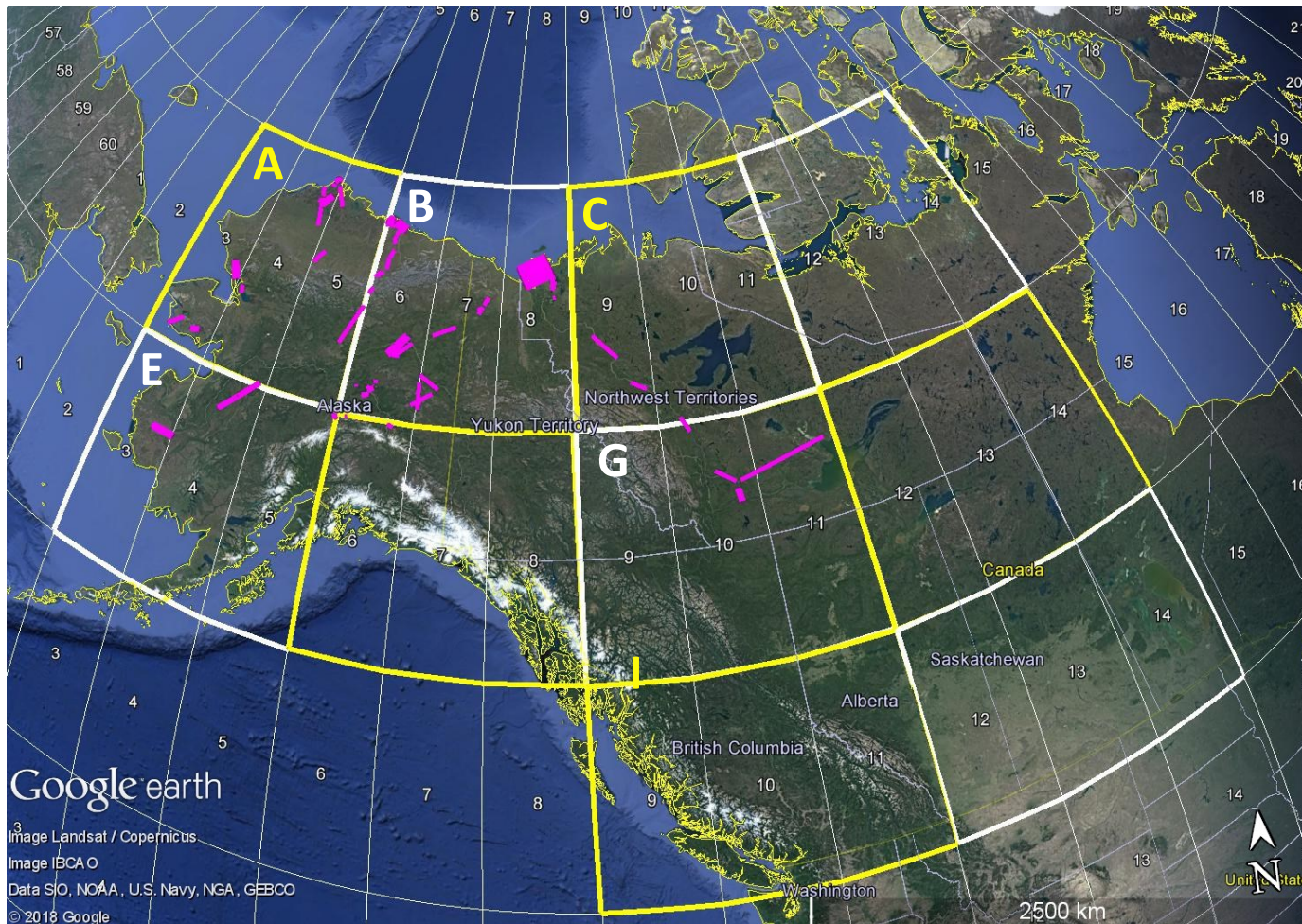
<sup>1</sup>Jet Propulsion Laboratory, California Institute of Technology

- Track Air files are organized to ensure that for each flight plan, flight lines are restricted to 3 UTM zones in the East/West orientation.





- Track Air files are organized to ensure that for each flight plan, flight lines are restricted to 3 UTM zones in the East/West orientation.
- Flight lines shown below are organized by 5 separate flight plans for Regions A, B, C, E, G.





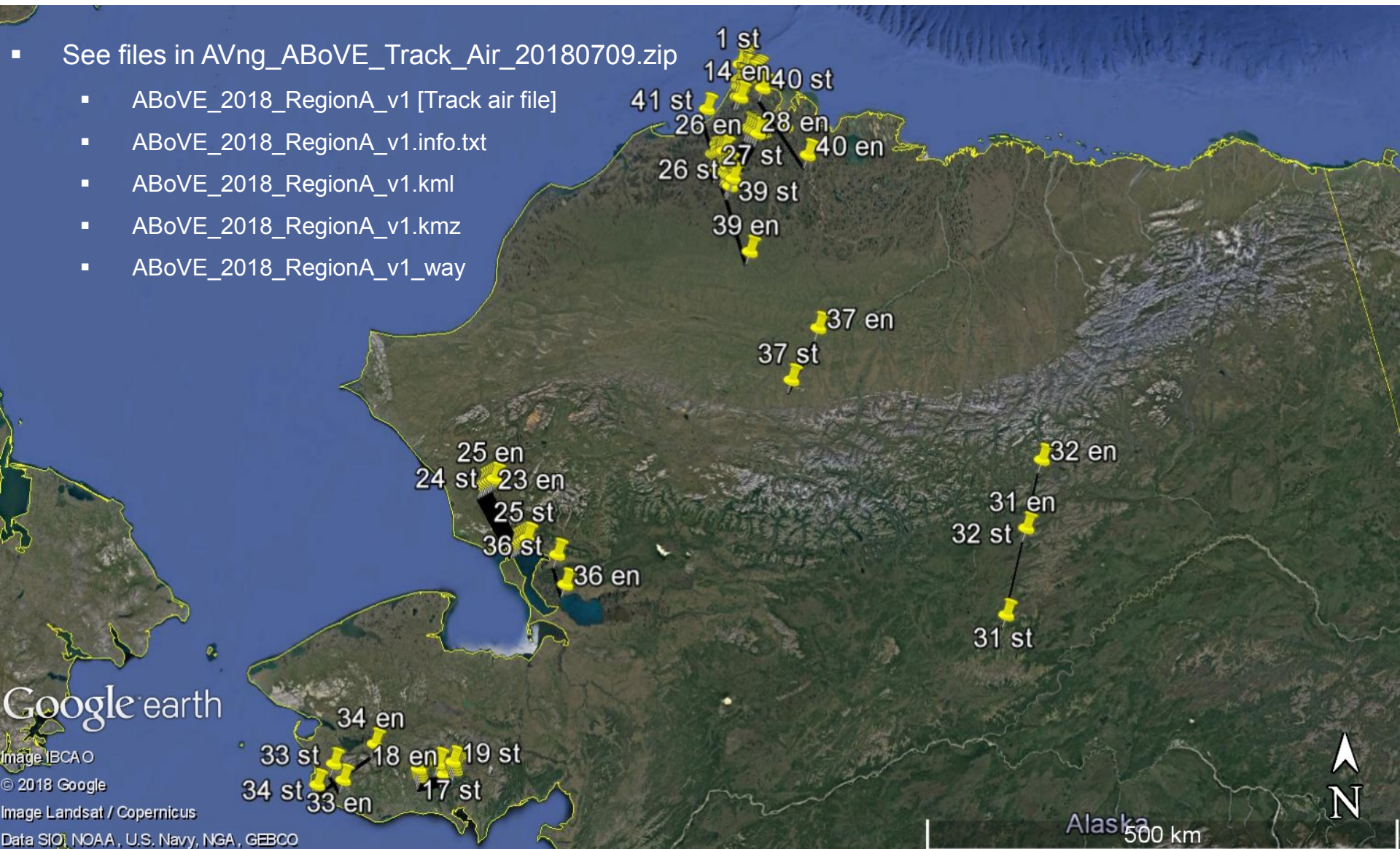
- Flight plans are organized as follows:

Region	NASA Flight Log	Deployment Base
A	18M026a	ABoVE 2018 (Region A, v1)
B	18M026b	ABoVE 2018 (Region B, v1)
C	18M026c	ABoVE 2018 (Region C, v1)
E	18M026e	ABoVE 2018 (Region E, v1)
G	18M026g	ABoVE 2018 (Region G, v1)



- See files in AVng\_ABoVE\_Track\_Air\_20180709.zip

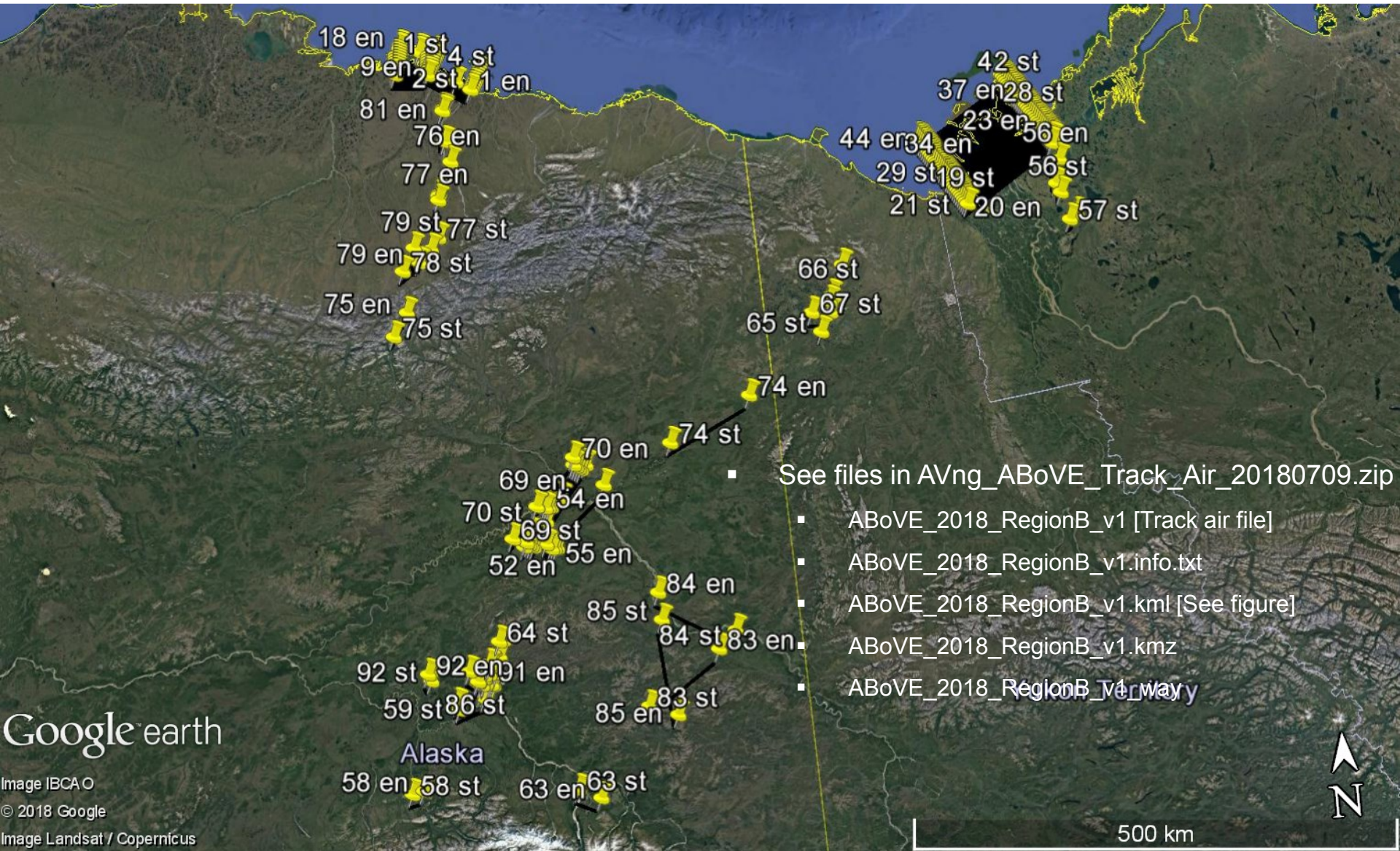
- ABoVE\_2018\_RegionA\_v1 [Track air file]
- ABoVE\_2018\_RegionA\_v1.info.txt
- ABoVE\_2018\_RegionA\_v1.kml
- ABoVE\_2018\_RegionA\_v1.kmz
- ABoVE\_2018\_RegionA\_v1\_way







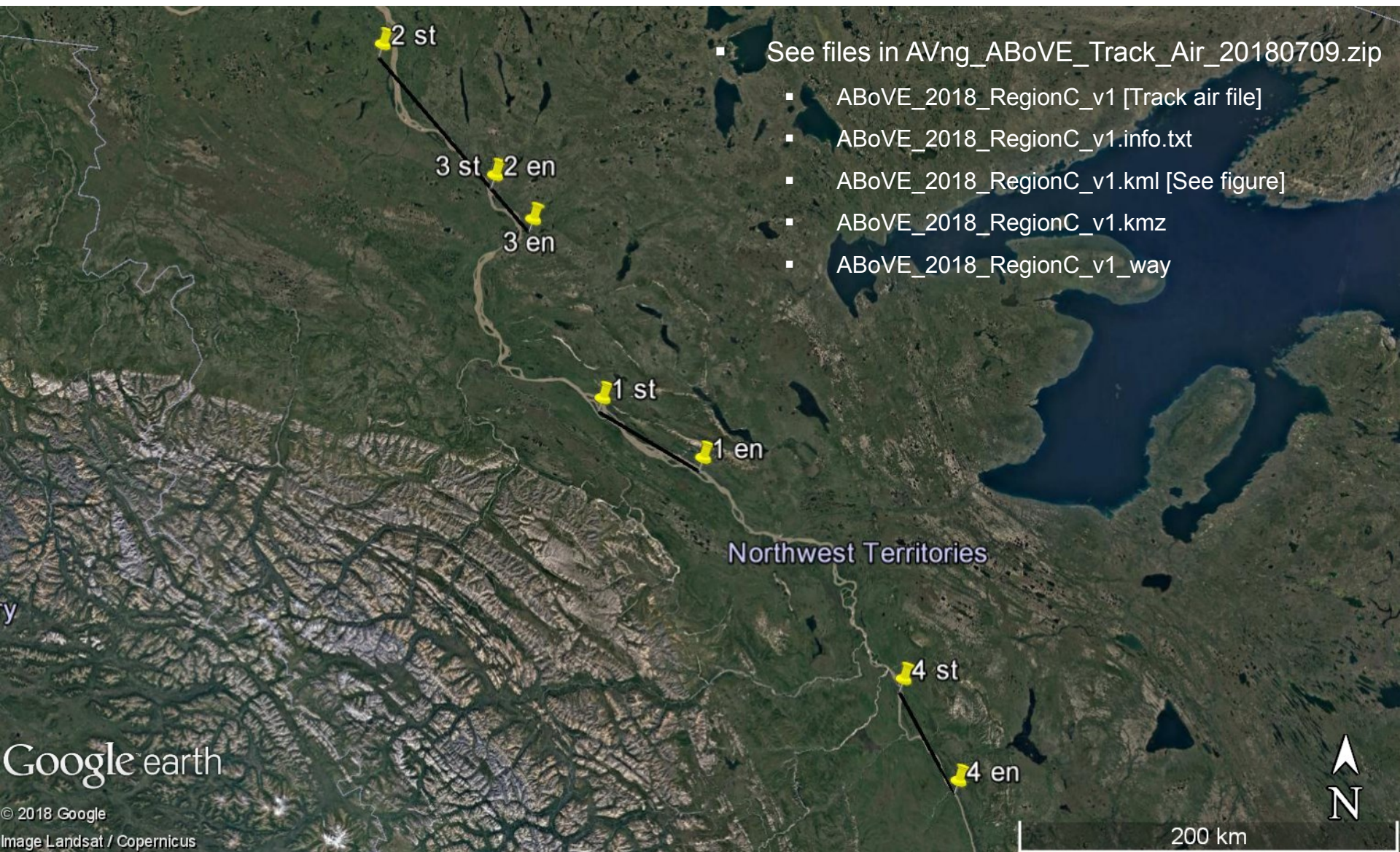
# Deployment base: ABoVE 2018 (Region B, v1)



- See files in AVng\_ABoVE\_Track\_Air\_20180709.zip
  - ABoVE\_2018\_RegionB\_v1 [Track air file]
  - ABoVE\_2018\_RegionB\_v1.info.txt
  - ABoVE\_2018\_RegionB\_v1.kml [See figure]
  - ABoVE\_2018\_RegionB\_v1.kmz
  - ABoVE\_2018\_RegionB\_Verway

Google earth  
 Image IBCAO  
 © 2018 Google  
 Image Landsat / Copernicus





- See files in AVng\_ABoVE\_Track\_Air\_20180709.zip
  - ABoVE\_2018\_RegionC\_v1 [Track air file]
  - ABoVE\_2018\_RegionC\_v1.info.txt
  - ABoVE\_2018\_RegionC\_v1.kml [See figure]
  - ABoVE\_2018\_RegionC\_v1.kmz
  - ABoVE\_2018\_RegionC\_v1\_way





# Deployment base: ABoVE 2018 (Region E, v1)

- See files in AVng\_ABoVE\_Track\_Air\_20180709.zip
  - ABoVE\_2018\_RegionE\_v1 [Track air file]
  - ABoVE\_2018\_RegionE\_v1.info.txt
  - ABoVE\_2018\_RegionE\_v1.kml [See figure]
  - ABoVE\_2018\_RegionE\_v1.kmz
  - ABoVE\_2018\_RegionE\_v1\_way

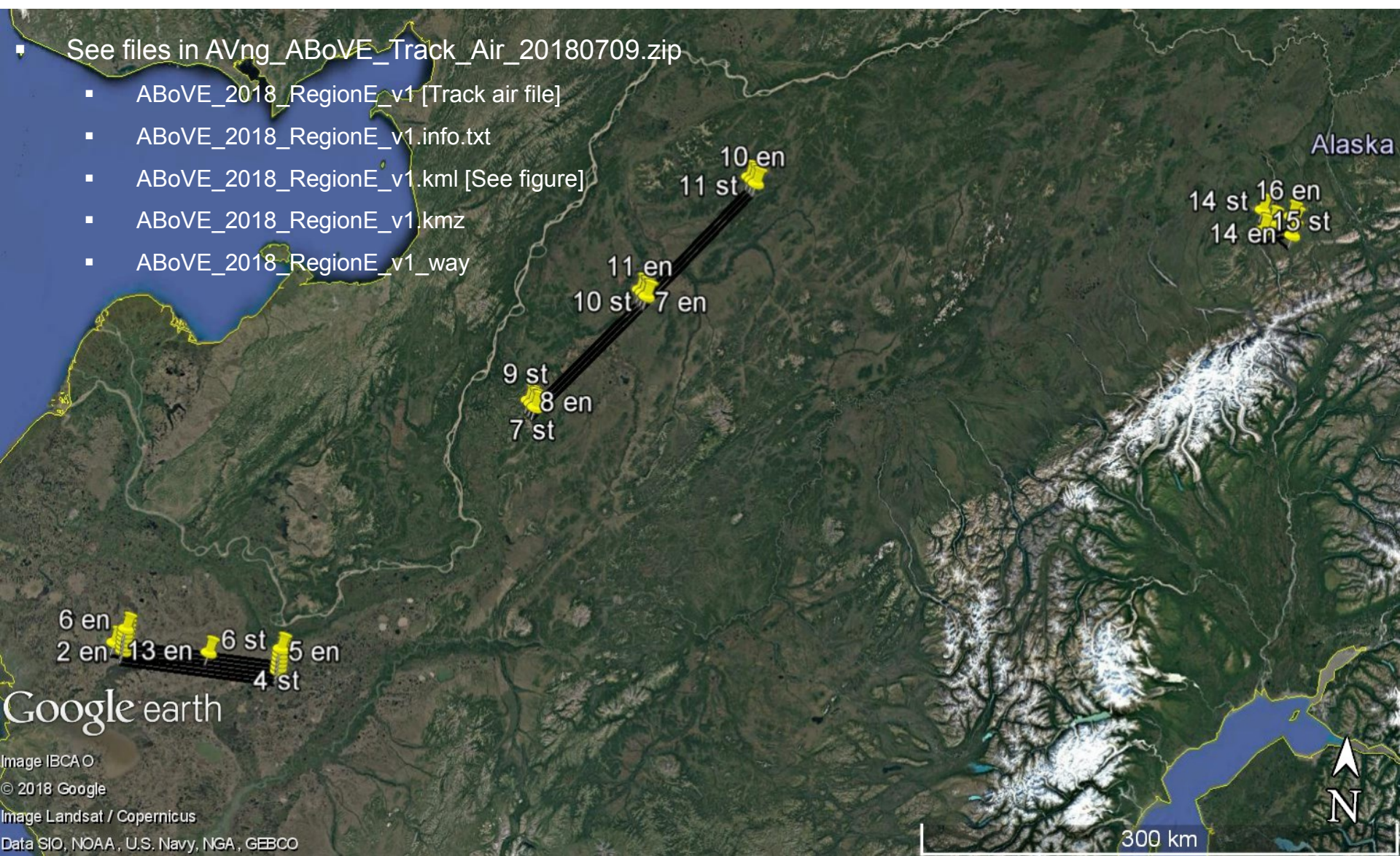
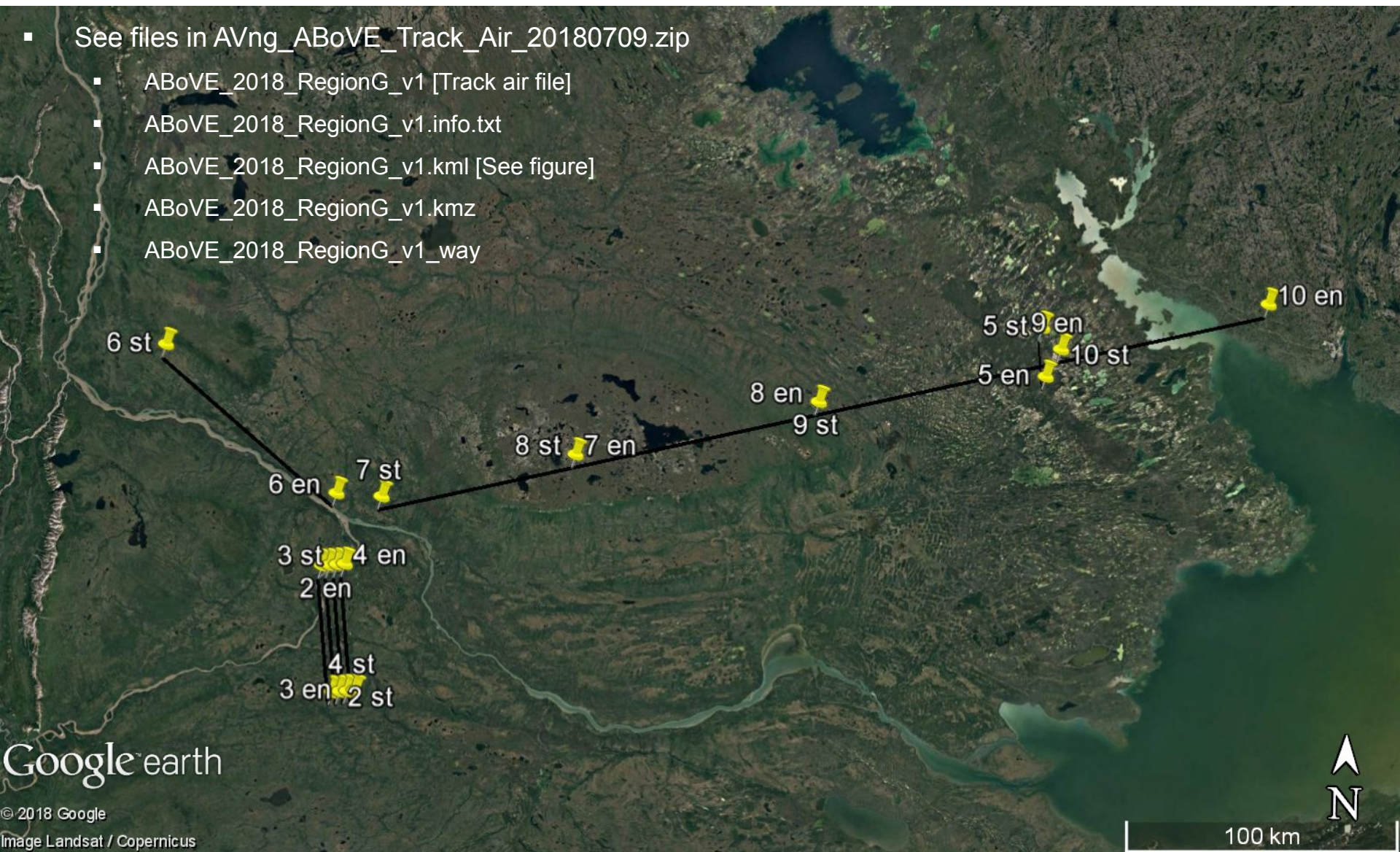


Image IBCAO  
© 2018 Google  
Image Landsat / Copernicus  
Data SIO, NOAA, U.S. Navy, NGA, GEBCO



- See files in AVng\_ABoVE\_Track\_Air\_20180709.zip
  - ABoVE\_2018\_RegionG\_v1 [Track air file]
  - ABoVE\_2018\_RegionG\_v1.info.txt
  - ABoVE\_2018\_RegionG\_v1.kml [See figure]
  - ABoVE\_2018\_RegionG\_v1.kmz
  - ABoVE\_2018\_RegionG\_v1\_way





- Flight crew should use Excel spreadsheet for tracking flight lines and progress (ABoVE\_2018\_AVng\_Lines\_20180708.xlsx)

Flight crew notes

Flight levels listed (typically around FL175=17,500 ft MSL)

Region A-J (Corresponds to track air files for Region A, B, ...)	Google Earth ID	NASA Flight Log	Site Name	Lat1	Lon1	Lat2	Lon2	Site Description	AV-NG Status Description (i.e. Acquired 7/14/2017, 5% cloud, light smoke)	AV-NG Status (0=incomplete, 1=cloudy (yellow, orange highlighter), 2=complete)	
A	A1	18M026a	AB_B01_L001_FL175	Barrow	71.305473	-156.7796	71.19132	-156.4857	Barrow grid		
A	A2	18M026a	AB_B01_L002_FL175	Barrow	71.207227	-156.4262	71.321644	-156.7204	Barrow grid		
A	A3	18M026a	AB_B01_L003_FL175	Barrow	71.337797	-156.6611	71.223116	-156.3665	Barrow grid		
A	A4	18M026a	AB_B01_L004_FL175	Barrow	71.238986	-156.3068	71.353931	-156.6017	Barrow grid		
A	A5	18M026a	AB_B06_L001_FL175	CoffeeLake	70.494244	-157.6041	70.347855	-157.5072	CH4 (fly listed FL and 150kt): Atqasuk area CH4 lakes		
A	A6	18M026a	AB_B06_L002_FL175	CoffeeLake	70.353341	-157.4279	70.499885	-157.5344	CH4 (fly listed FL and 150kt): Atqasuk area CH4 lakes		
A	A7	18M026a	AB_B06_L003_FL175	CoffeeLake	70.505497	-157.4587	70.358799	-157.3566	CH4 (fly listed FL and 150kt): Atqasuk area CH4 lakes		
A	A8	18M026a	AB_B06_L004_FL175	CoffeeLake	70.364227	-157.2832	70.511108	-157.3859	CH4 (fly listed FL and 150kt): Atqasuk area CH4 lakes		
A	A9	18M026a	AB_B06_L005_FL175	CoffeeLake	70.516633	-157.313	70.369627	-157.2108	CH4 (fly listed FL and 150kt): Atqasuk area CH4 lakes		
A	A10	18M026a	AB_B07_L001_FL175	PipelineLake	71.165058	-156.8399	71.260102	-156.6429	CH4 (fly listed FL and 150kt): Barrow - Pipeline Lake		
A	A11	18M026a	AB_B07_L002_FL175	PipelineLake	71.246123	-156.5787	71.15114	-156.7759	CH4 (fly listed FL and 150kt): Barrow - Pipeline Lake		
A	A12	18M026a	AB_B07_L003_FL175	PipelineLake	71.165058	-156.8399	71.260102	-156.6429	CH4 (fly listed FL and 150kt): Barrow - Pipeline Lake		
A	A13	18M026a	AB_B08_L001_FL175	SukokLake	71.008824	-156.888	71.103181	-156.8381	CH4 (fly listed FL and 150kt): Barrow - Sukok Lake		
A	A14	18M026a	AB_B08_L002_FL175	SukokLake	71.098395	-156.7625	71.004316	-156.8127	CH4 (fly listed FL and 150kt): Barrow - Sukok Lake		
A	A15	18M026a	AB_B08_L003_FL175	SukokLake	71.008824	-156.888	71.103181	-156.8381	CH4 (fly listed FL and 150kt): Barrow - Sukok Lake		
A	A16	18M026a	AB_B09_L001_FL188	NGEEArctic	64.76516	-164.1656	64.856399	-163.4349	NGEE-Artic		
A	A17	18M026a	AB_B09_L002_FL188	NGEEArctic	64.880297	-163.4515	64.78911	-164.1818	NGEE-Artic		
A	A18	18M026a	AB_B09_L003_FL188	NGEEArctic	64.813058	-164.198	64.904194	-163.4682	NGEE-Artic		
A	A19	18M026a	AB_B09_L004_FL188	NGEEArctic	64.928088	-163.4849	64.837004	-164.2143	NGEE-Artic		
A	A20	18M026a	AB_B12_L001_FL176	Kotzebue	67.4592	-163.2172	66.93796	-162.3727	CH4 (fly listed FL and 150kt): Kotzebue		
A	A21	18M026a	AB_B12_L002_FL176	Kotzebue	66.951395	-162.3191	67.472556	-163.1623	CH4 (fly listed FL and 150kt): Kotzebue		
A	A22	18M026a	AB_B12_L003_FL176	Kotzebue	67.485894	-163.1074	66.964811	-162.2654	CH4 (fly listed FL and 150kt): Kotzebue		
A	A23	18M026a	AB_B12_L004_FL176	Kotzebue	66.97821	-162.2117	67.499213	-163.0524	CH4 (fly listed FL and 150kt): Kotzebue		
A	A24	18M026a	AB_B12_L005_FL176	Kotzebue	67.512513	-162.9973	66.99159	-162.1579	CH4 (fly listed FL and 150kt): Kotzebue		
A	A25	18M026a	AB_B12_L006_FL176	Kotzebue	67.004952	-162.1041	67.525795	-162.9421	CH4 (fly listed FL and 150kt): Kotzebue		
A	A26	18M026a	AB_B13_L001_FL176	Atqasuk	70.267971	-157.0912	70.668044	-156.3759	CH4 (fly listed FL and 150kt): Atqasuk		
A	A27	18M026a	AB_B13_L002_FL176	Atqasuk	70.680834	-156.4406	70.280535	-157.155	CH4 (fly listed FL and 150kt): Atqasuk		
A	A28	18M026a	AB_B13_L003_FL176	Atqasuk	70.303071	-157.3188	70.60309	-156.063	CH4 (fly listed FL and 150kt): Atqasuk		

Methane lines in red (selected lines are as low as FL072=7,200 ft MSL)