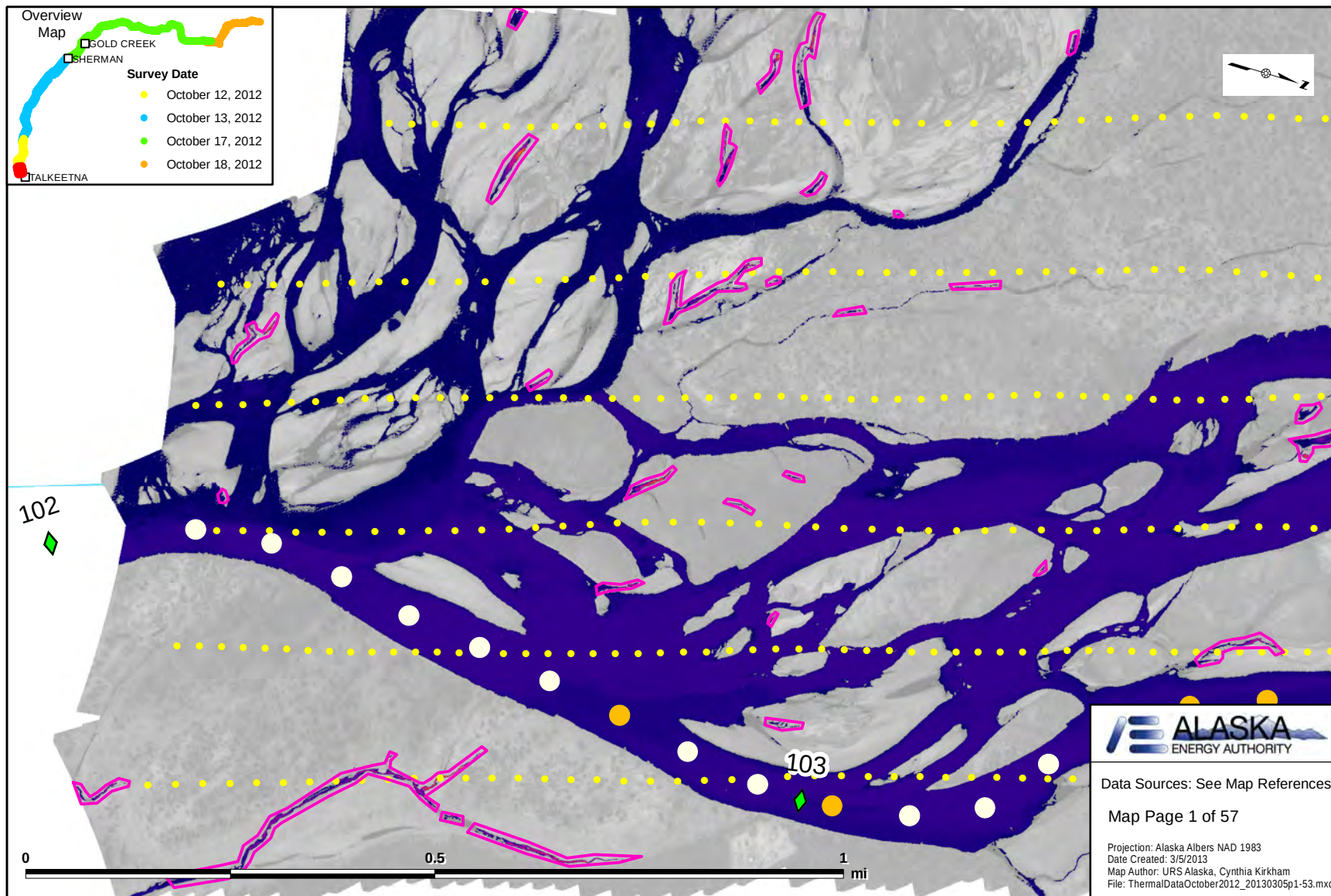


Susitna-Watana Hydroelectric Project Document ARLIS Uniform Cover Page

Title: Thermal infrared remote sensing pilot test - mapbook		SuWa 38
Author(s) – Personal: Cynthia Kirkham and Courtney Smith		
Author(s) – Corporate: [Prepared by] URS Alaska		
AEA-identified category, if specified: 2012 Environmental Studies		
AEA-identified series, if specified:		
Series (ARLIS-assigned report number): Susitna-Watana Hydroelectric Project document number 38		Existing numbers on document:
Published by: [Anchorage, Alaska : Alaska Energy Authority, 2013]		Date published: March 5, 2013
Published for: [Prepared for] Alaska Energy Authority		Date or date range of report: October 12-13 and 17-18, 2012
Volume and/or Part numbers:		Final or Draft status, as indicated:
Document type:		Pagination: 57 p.
Related work(s): Thermal infrared remote sensing pilot test (SuWa 37)		Pages added/changed by ARLIS:
Notes:		

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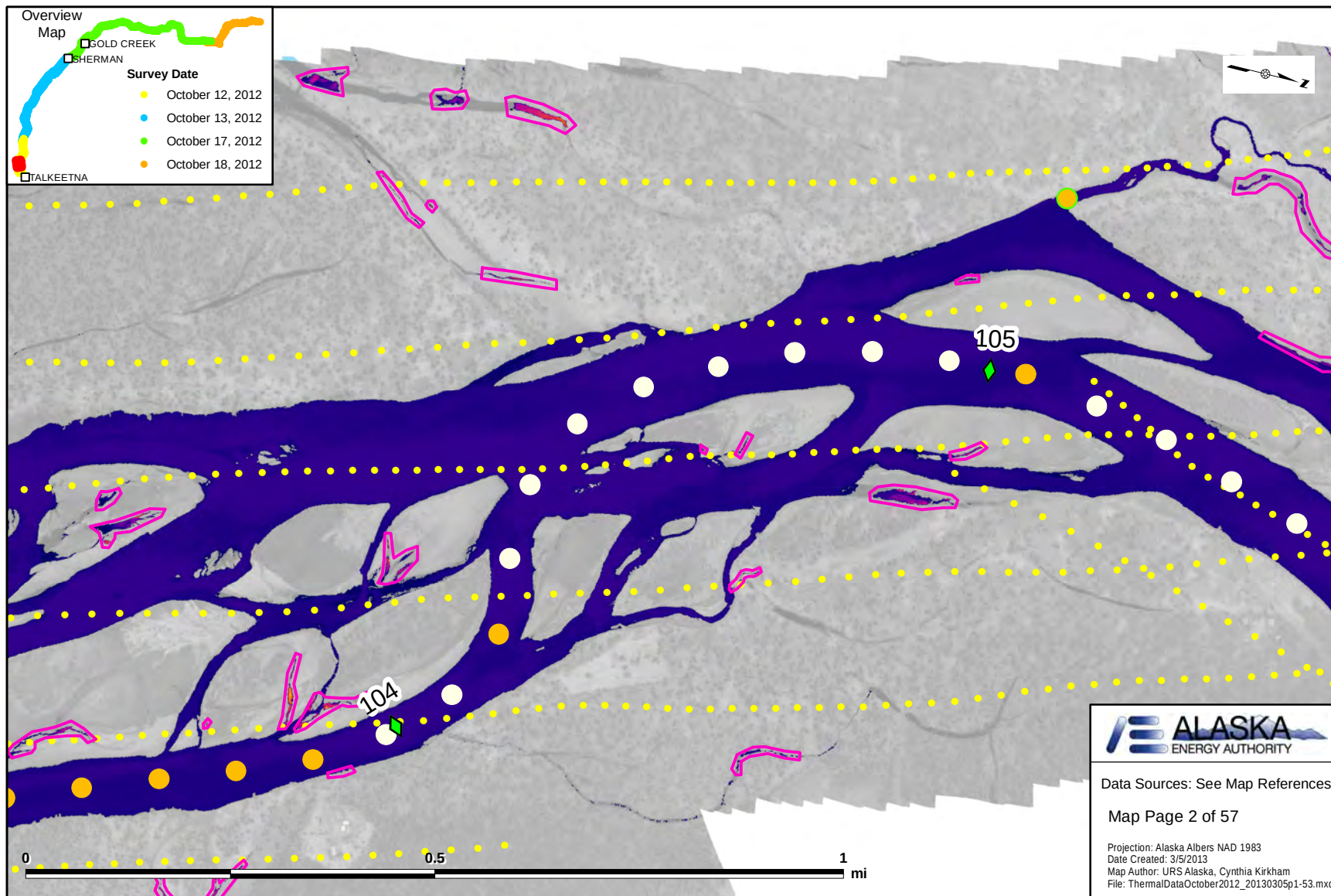
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October 12, 2012	271.7 - 272.1	271.7 - 272.1
October 13, 2012	272.2 - 272.6	272.2 - 272.6
October 17, 2012	272.7 - 273.1	272.7 - 273.1
October 18, 2012	273.2 - 273.6	273.2 - 273.6
Area of Increased Groundwater Activity	273.7 - 274.1	273.7 - 274.1
River Mile Index (2013)	274.2 - 274.5	274.2 - 274.5

October 12-13, 2012 Colorramp (Kelvin)



October 17-18, 2012 Colorramp (Kelvin)





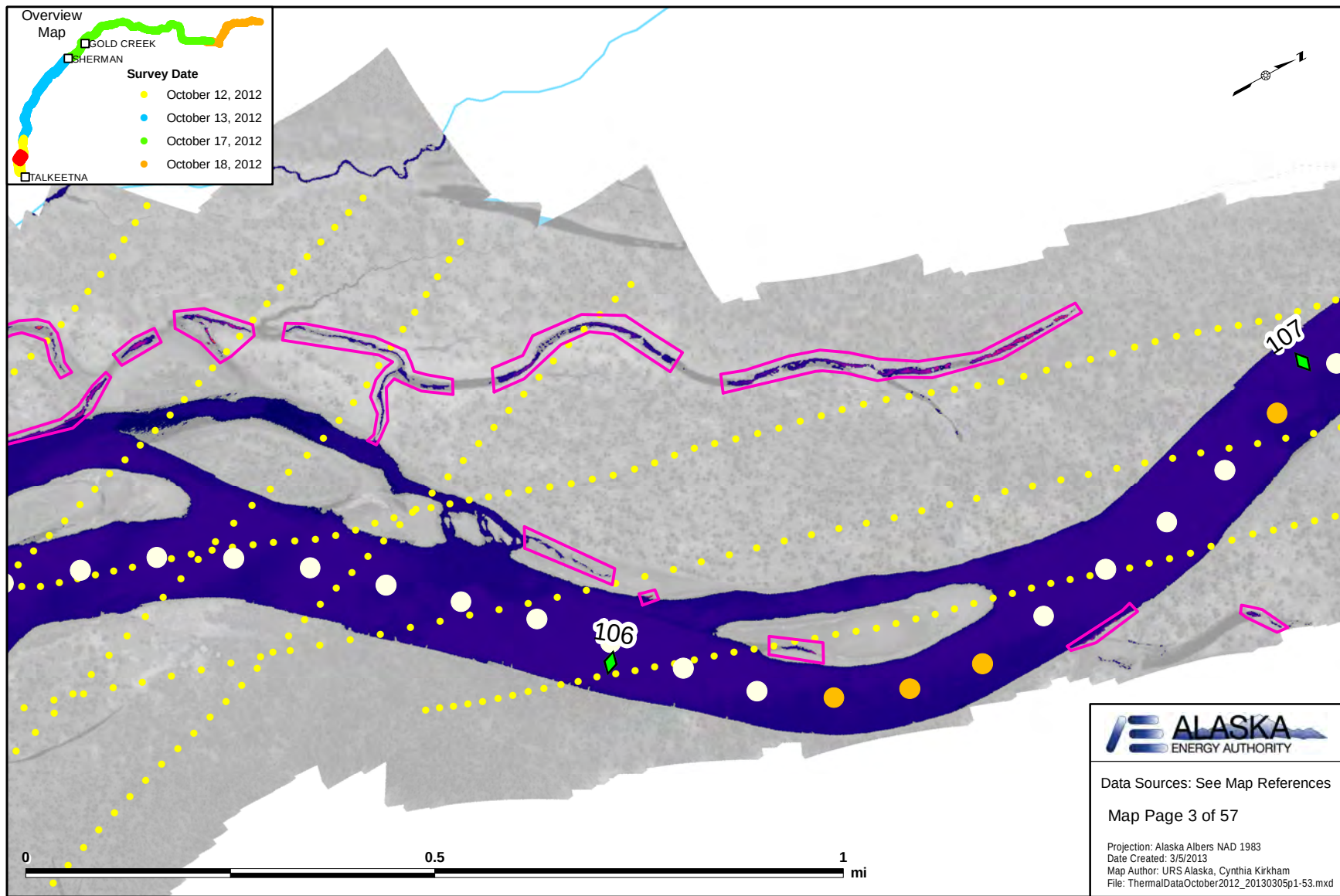
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October 17, 2012	272.7 - 273.1	272.7 - 273.1
October 18, 2012	273.2 - 273.6	273.2 - 273.6
Area of Increased Groundwater Activity	273.7 - 274.1	273.7 - 274.1
River Mile Index (2013)	274.2 - 274.5	274.2 - 274.5

October 12-13, 2012 Colorramp (Kelvin)



October 17-18, 2012 Colorramp (Kelvin)





ALASKA
ENERGY AUTHORITY

Data Sources: See Map References

Map Page 3 of 57

Projection: Alaska Albers NAD 1983
Date Created: 3/5/2013
Map Author: URS Alaska, Cynthia Kirkham
File: ThermalDataOctober2012_20130305p1-53.mxd

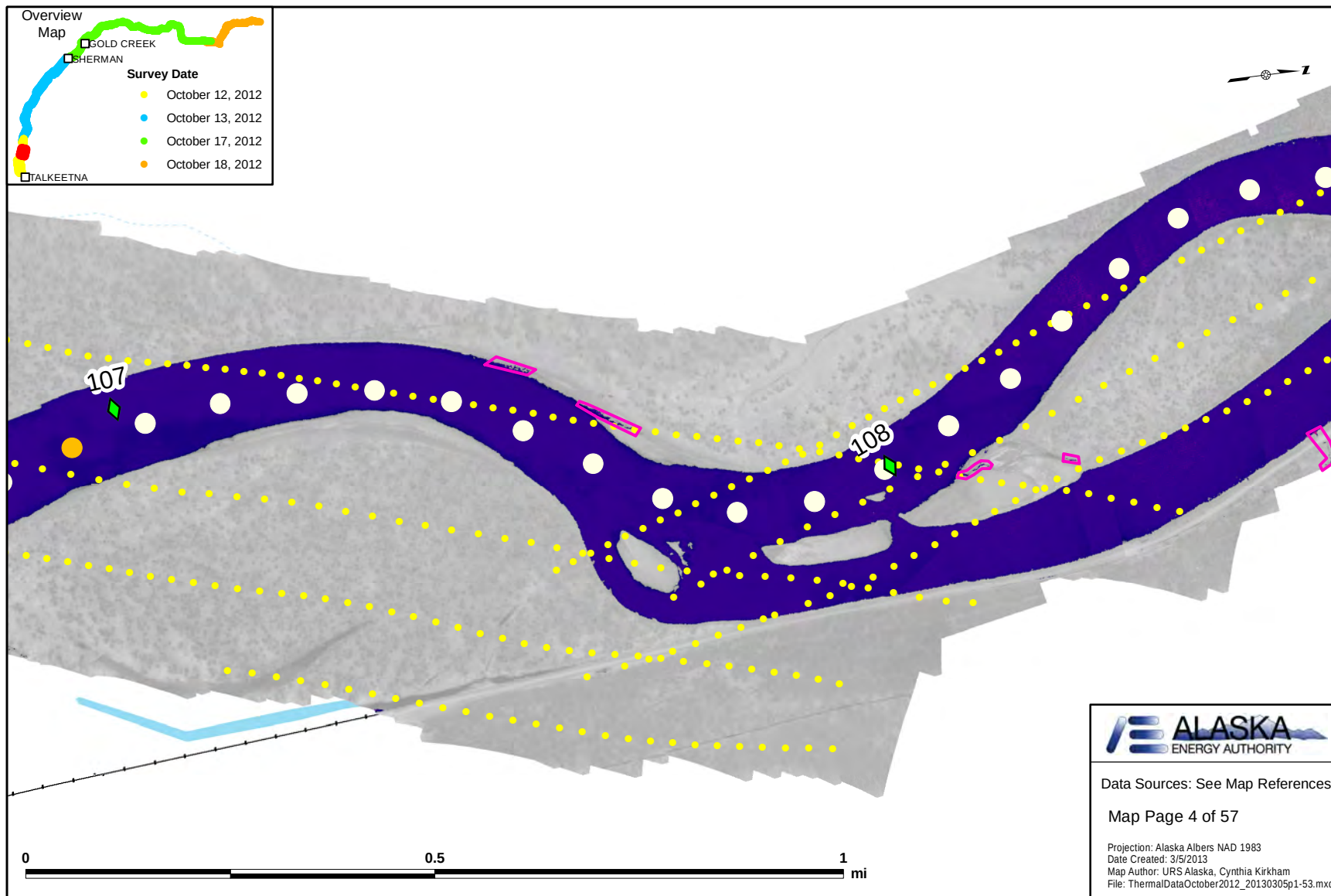
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● October 12, 2012	● 271.7 - 272.1	● 271.7 - 272.1
● October 13, 2012	● 272.2 - 272.6	● 272.2 - 272.6
● October 17, 2012	● 272.7 - 273.1	● 272.7 - 273.1
● October 18, 2012	● 273.2 - 273.6	● 273.2 - 273.6
□ Area of Increased Groundwater Activity	● 273.7 - 274.1	● 273.7 - 274.1
◆ River Mile Index (2013)	● 274.2 - 274.5	● 274.2 - 274.5

October 12-13, 2012 Colorramp (Kelvin)



October 17-18, 2012 Colorramp (Kelvin)





ALASKA ENERGY AUTHORITY

Data Sources: See Map References

Map Page 4 of 57

Projection: Alaska Albers NAD 1983
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 Map Author: URS Alaska, Cynthia Kirkham
 File: ThermalDataOctober2012_20130305p1-53.mxd

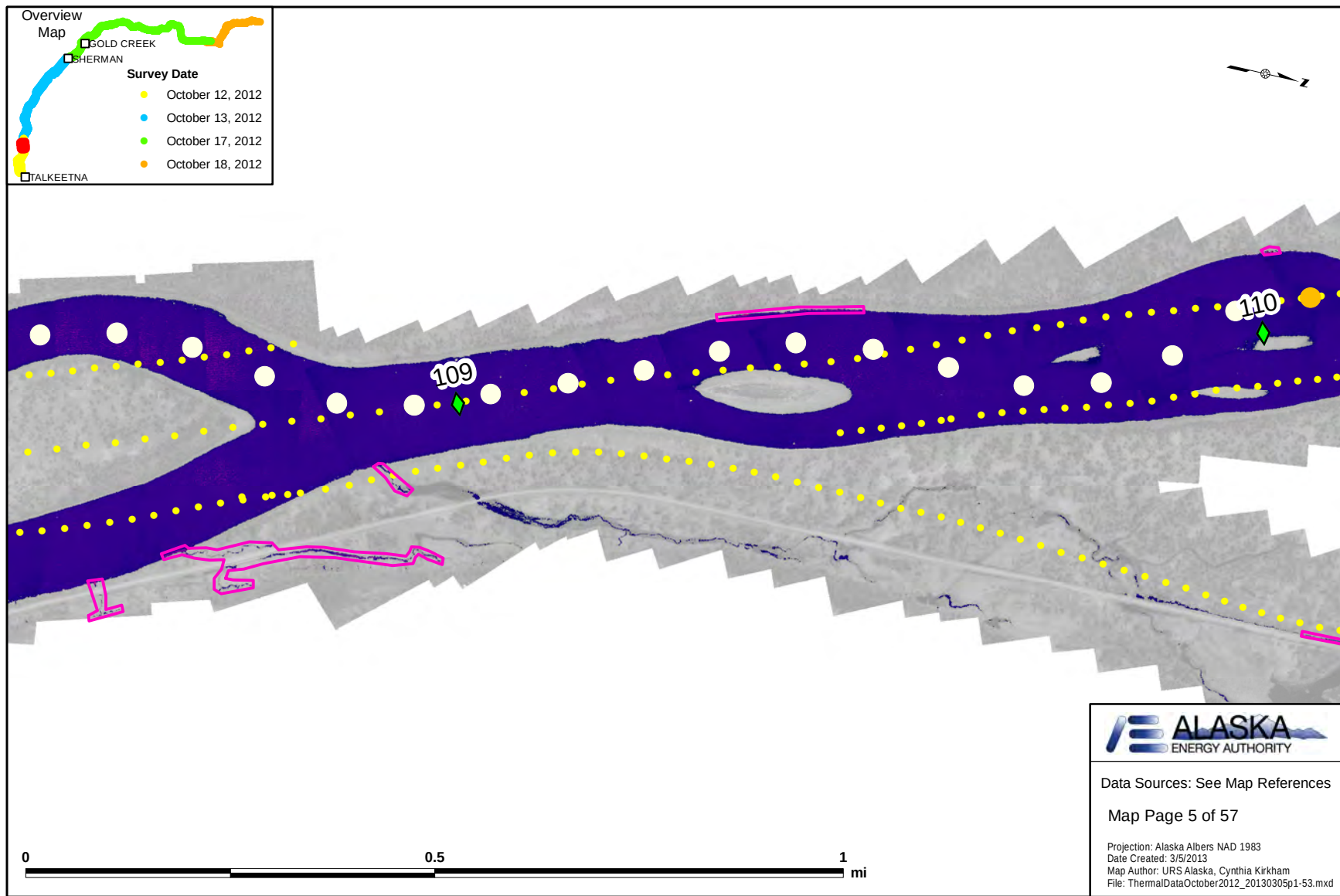
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● October 13, 2012	● 272.2 - 272.6	● 272.2 - 272.6
● October 17, 2012	● 272.7 - 273.1	● 272.7 - 273.1
● October 18, 2012	● 273.2 - 273.6	● 273.2 - 273.6
□ Area of Increased Groundwater Activity	● 273.7 - 274.1	● 273.7 - 274.1
◆ River Mile Index (2013)	● 274.2 - 274.5	● 274.2 - 274.5

October 12-13, 2012 Colorramp (Kelvin)



October 17-18, 2012 Colorramp (Kelvin)





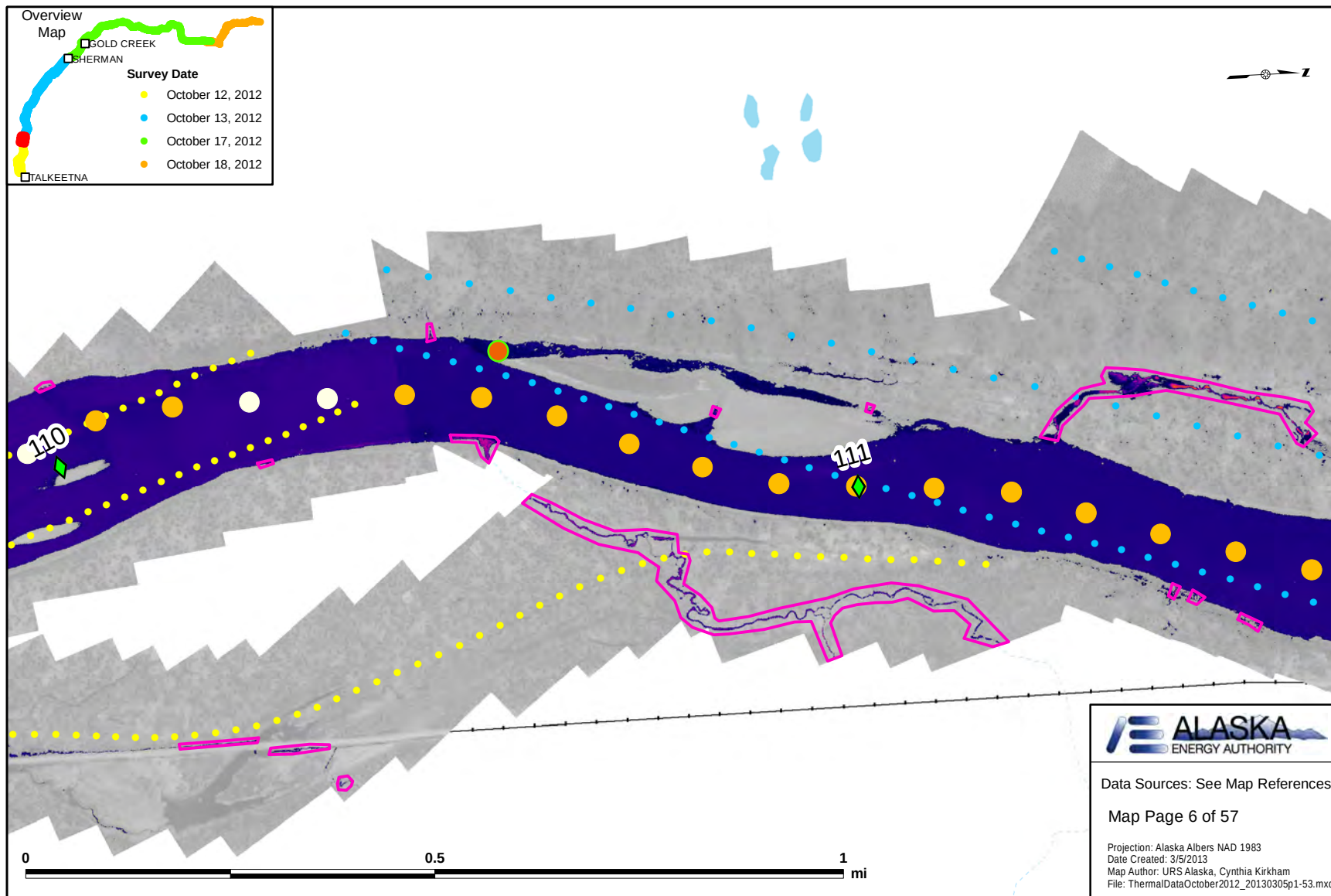
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October 17, 2012	272.7 - 273.1	272.7 - 273.1
October 18, 2012	273.2 - 273.6	273.2 - 273.6
Area of Increased Groundwater Activity	273.7 - 274.1	273.7 - 274.1
River Mile Index (2013)	274.2 - 274.5	274.2 - 274.5

October 12-13, 2012 Colorramp (Kelvin)



October 17-18, 2012 Colorramp (Kelvin)





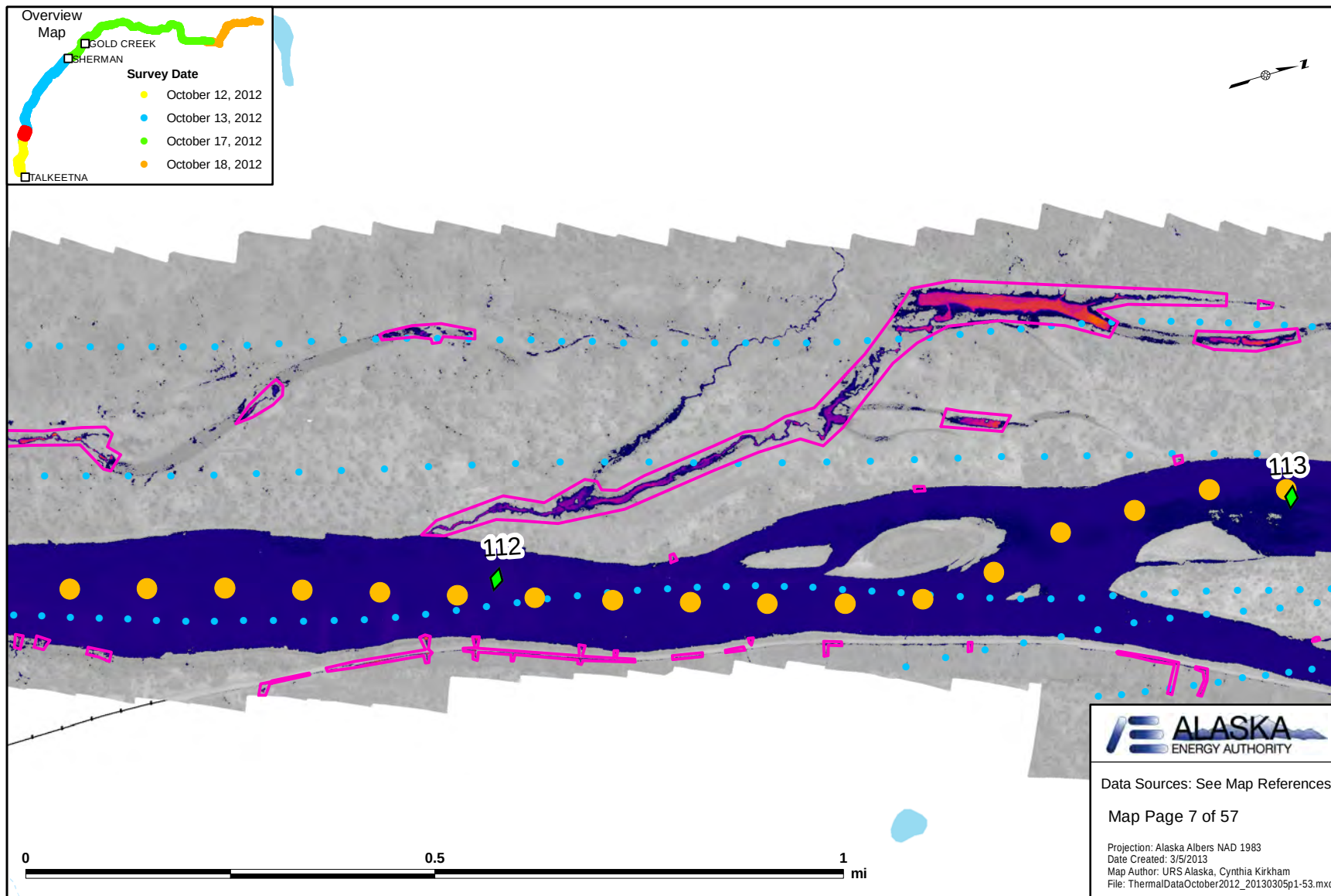
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October 17, 2012	272.7 - 273.1	272.7 - 273.1
October 18, 2012	273.2 - 273.6	273.2 - 273.6
Area of Increased Groundwater Activity	273.7 - 274.1	273.7 - 274.1
River Mile Index (2013)	274.2 - 274.5	274.2 - 274.5

October 12-13, 2012 Colorramp (Kelvin)



October 17-18, 2012 Colorramp (Kelvin)





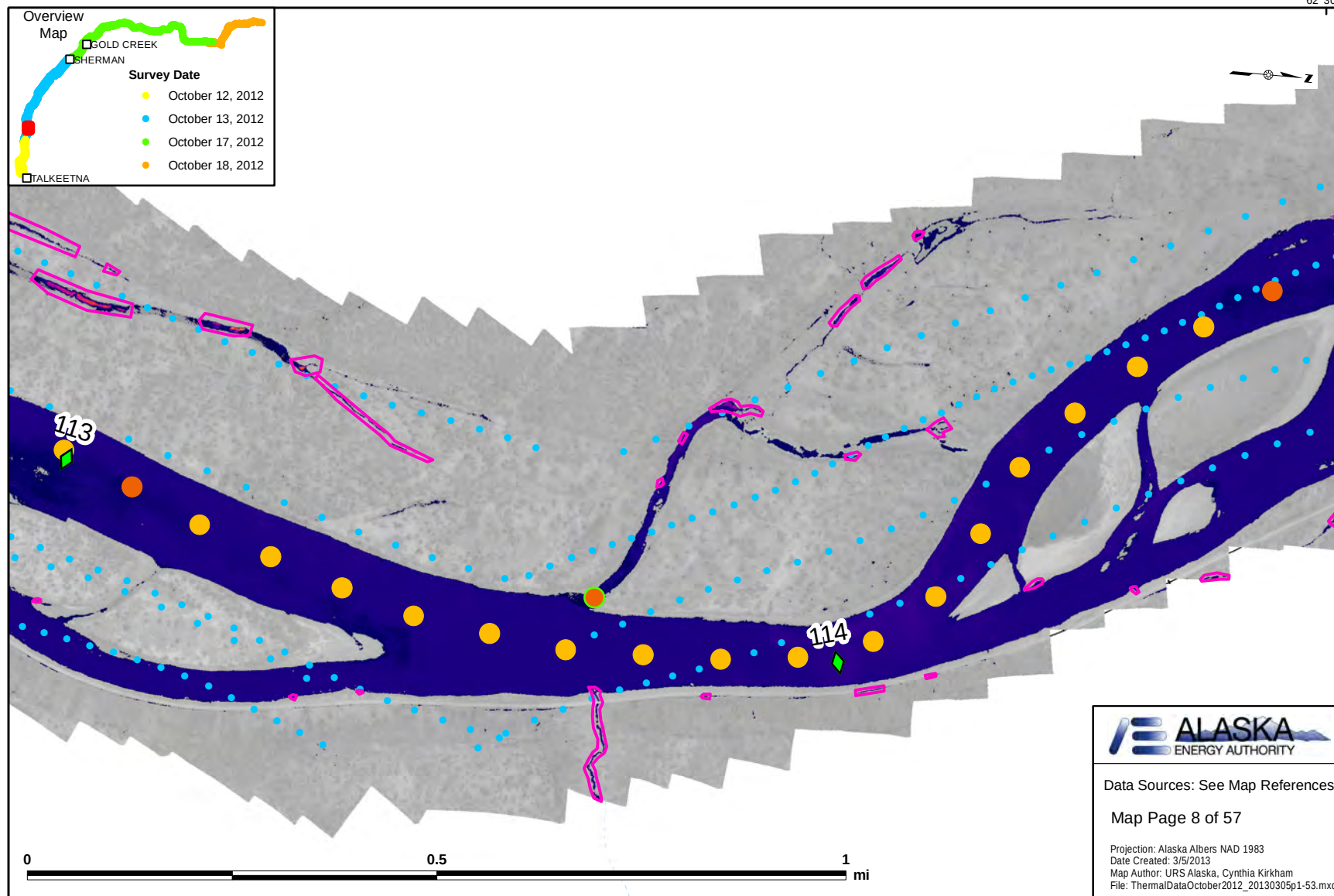
Flightlines (Color Coded by Survey Date)	Sampled Centerline Points (Kelvin)	Sampled Inflow Points (Kelvin)
October 12, 2012	271.7 - 272.1	271.7 - 272.1
October 13, 2012	272.2 - 272.6	272.2 - 272.6
October 17, 2012	272.7 - 273.1	272.7 - 273.1
October 18, 2012	273.2 - 273.6	273.2 - 273.6
Area of Increased Groundwater Activity	273.7 - 274.1	273.7 - 274.1
River Mile Index (2013)	274.2 - 274.5	274.2 - 274.5

October 12-13, 2012 Colorramp (Kelvin)



October 17-18, 2012 Colorramp (Kelvin)





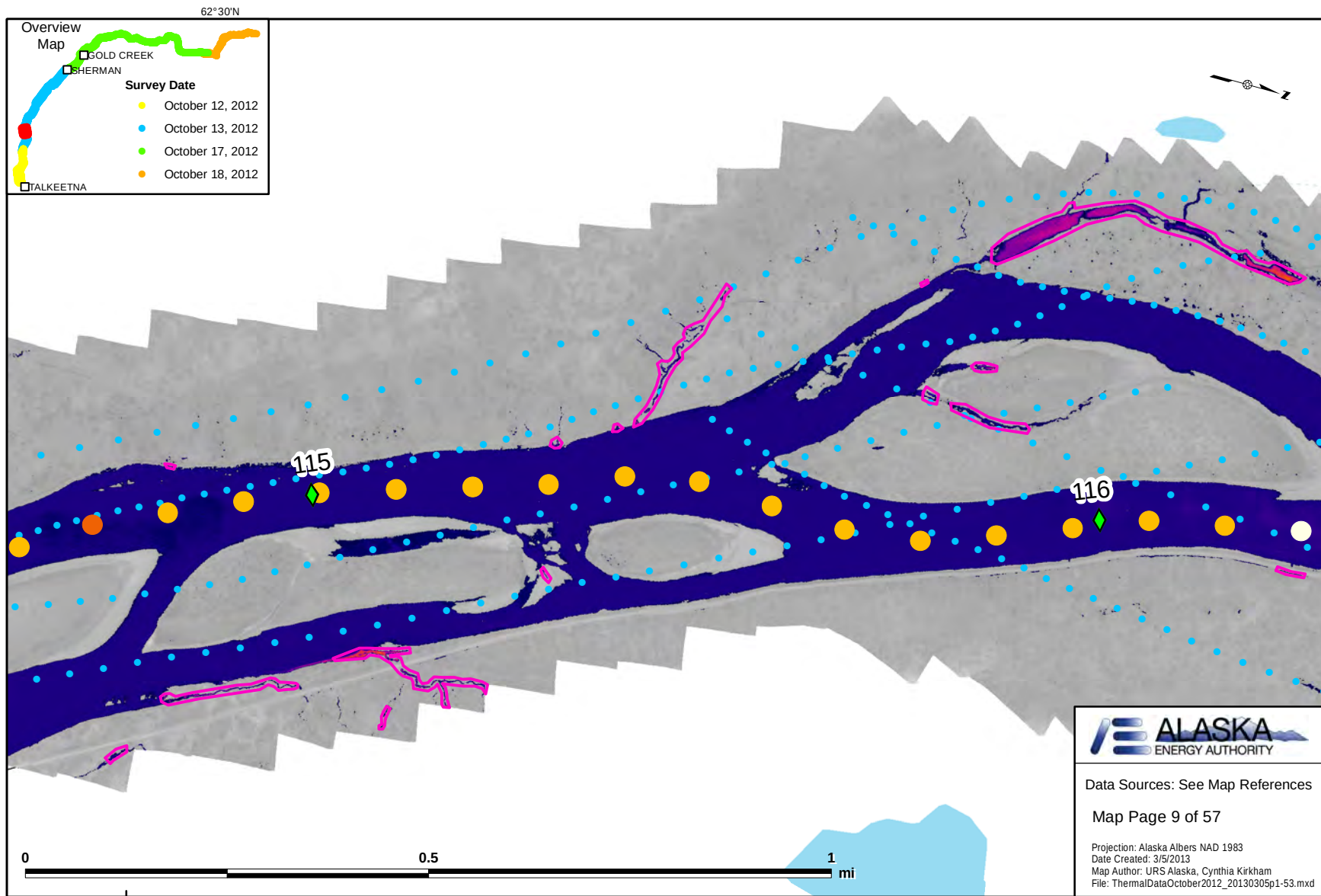
Flightlines (Color Coded by Survey Date)	Sampled Centerline Points (Kelvin)	Sampled Inflow Points (Kelvin)
October 12, 2012	271.7 - 272.1	271.7 - 272.1
October 13, 2012	272.2 - 272.6	272.2 - 272.6
October 17, 2012	272.7 - 273.1	272.7 - 273.1
October 18, 2012	273.2 - 273.6	273.2 - 273.6
Area of Increased Groundwater Activity	273.7 - 274.1	273.7 - 274.1
River Mile Index (2013)	274.2 - 274.5	274.2 - 274.5

October 12-13, 2012 Colorramp (Kelvin)



October 17-18, 2012 Colorramp (Kelvin)





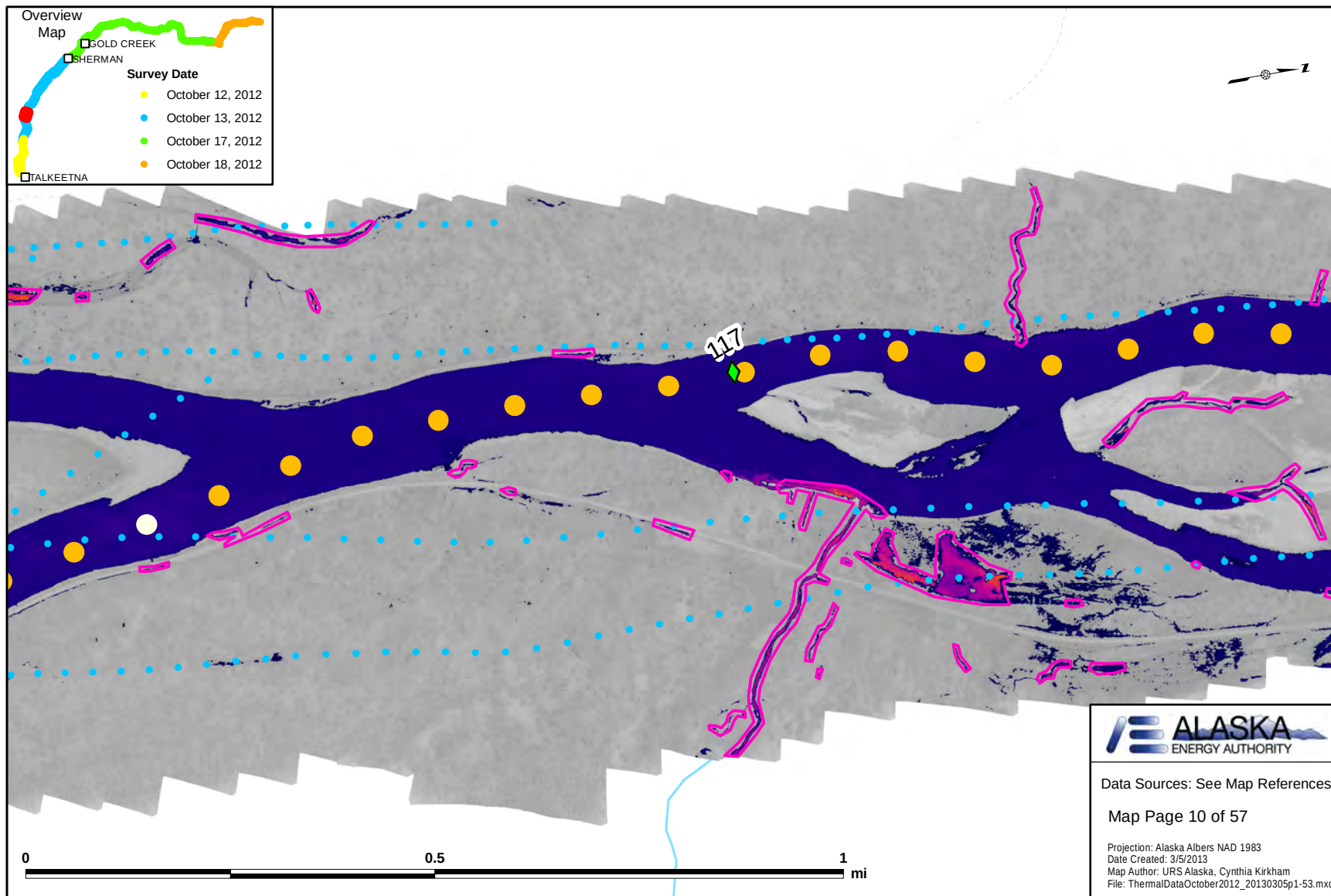
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October 13, 2012	272.2 - 272.6	272.2 - 272.6
October 17, 2012	272.7 - 273.1	272.7 - 273.1
October 18, 2012	273.2 - 273.6	273.2 - 273.6
Area of Increased Groundwater Activity	273.7 - 274.1	273.7 - 274.1
River Mile Index (2013)	274.2 - 274.5	274.2 - 274.5

October 12-13, 2012 Colorramp (Kelvin)



October 17-18, 2012 Colorramp (Kelvin)





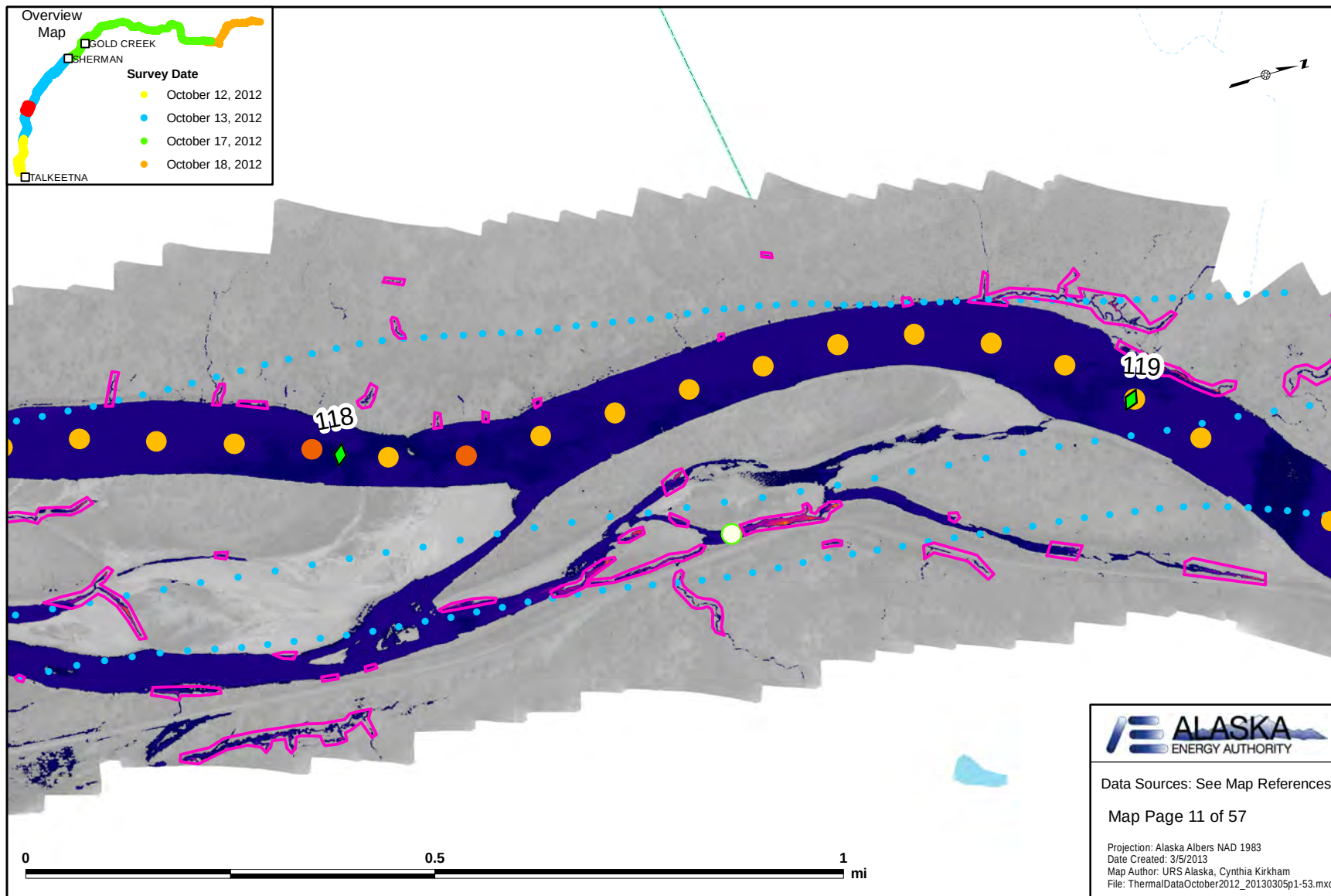
Flightlines (Color Coded by Survey Date)	Sampled Centerline Points (Kelvin)	Sampled Inflow Points (Kelvin)
October 12, 2012	271.7 - 272.1	271.7 - 272.1
October 13, 2012	272.2 - 272.6	272.2 - 272.6
October 17, 2012	272.7 - 273.1	272.7 - 273.1
October 18, 2012	273.2 - 273.6	273.2 - 273.6
Area of Increased Groundwater Activity	273.7 - 274.1	273.7 - 274.1
River Mile Index (2013)	274.2 - 274.5	274.2 - 274.5

October 12-13, 2012 Colorramp (Kelvin)



October 17-18, 2012 Colorramp (Kelvin)





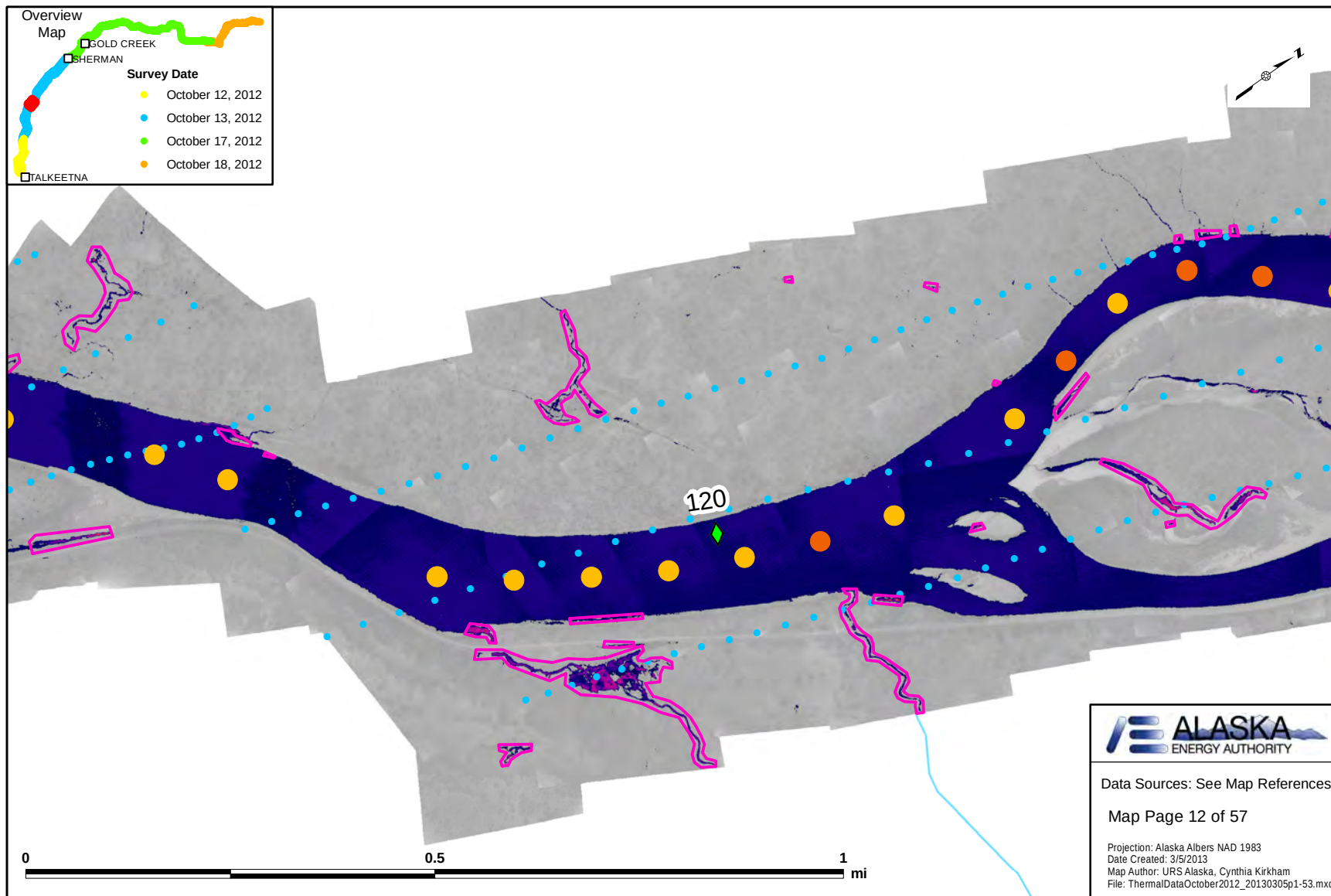
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October 12, 2012	271.7 - 272.1	271.7 - 272.1
October 13, 2012	272.2 - 272.6	272.2 - 272.6
October 17, 2012	272.7 - 273.1	272.7 - 273.1
October 18, 2012	273.2 - 273.6	273.2 - 273.6
Area of Increased Groundwater Activity	273.7 - 274.1	273.7 - 274.1
River Mile Index (2013)	274.2 - 274.5	274.2 - 274.5

October 12-13, 2012 Colorramp (Kelvin)



October 17-18, 2012 Colorramp (Kelvin)





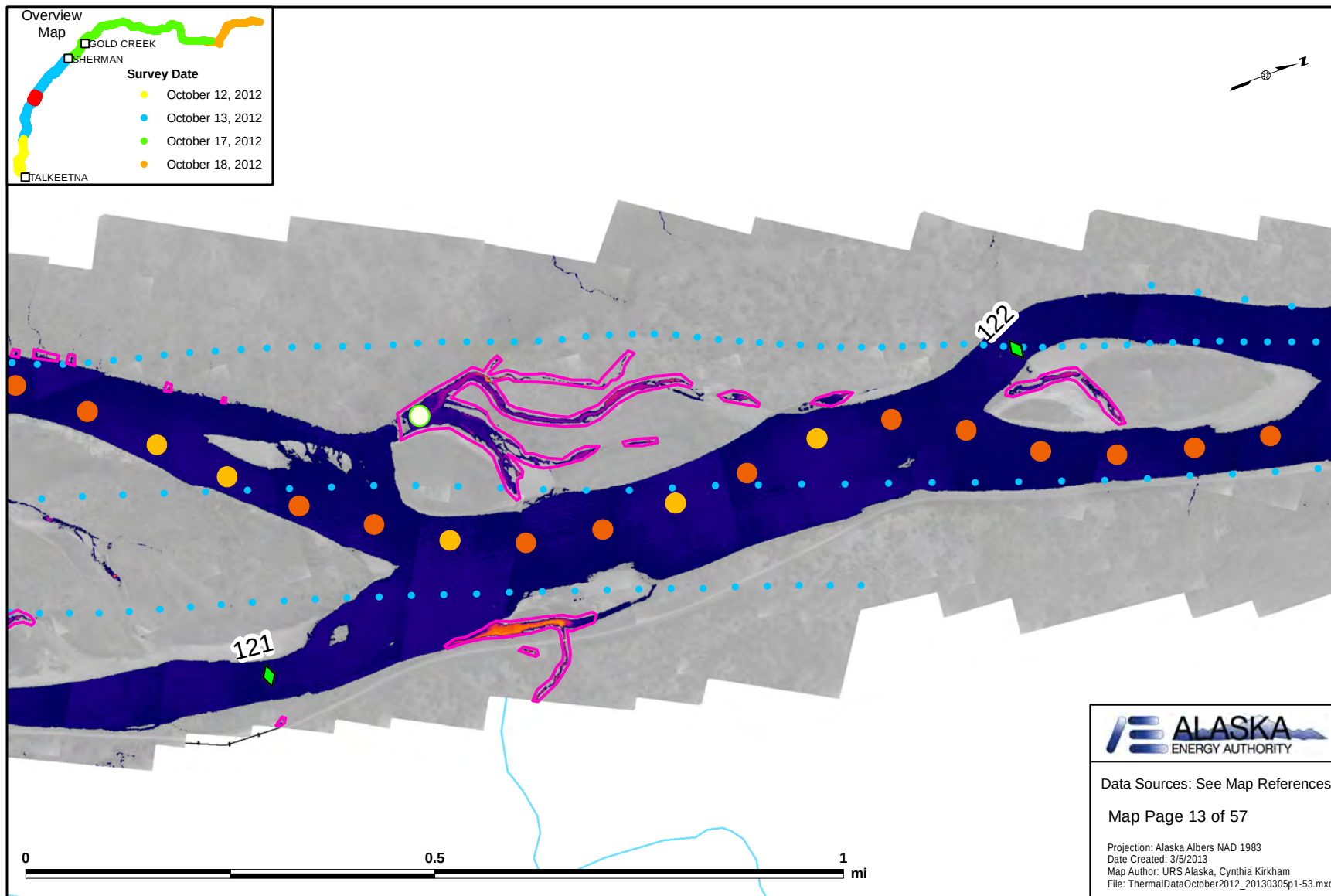
Flightlines (Color Coded by Survey Date)	Sampled Centerline Points (Kelvin)	Sampled Inflow Points (Kelvin)
● October 12, 2012	● 271.7 - 272.1	● 271.7 - 272.1
● October 13, 2012	● 272.2 - 272.6	● 272.2 - 272.6
● October 17, 2012	● 272.7 - 273.1	● 272.7 - 273.1
● October 18, 2012	● 273.2 - 273.6	● 273.2 - 273.6
□ Area of Increased Groundwater Activity	● 273.7 - 274.1	● 273.7 - 274.1
◆ River Mile Index (2013)	● 274.2 - 274.5	● 274.2 - 274.5

October 12-13, 2012 Colorramp (Kelvin)



October 17-18, 2012 Colorramp (Kelvin)





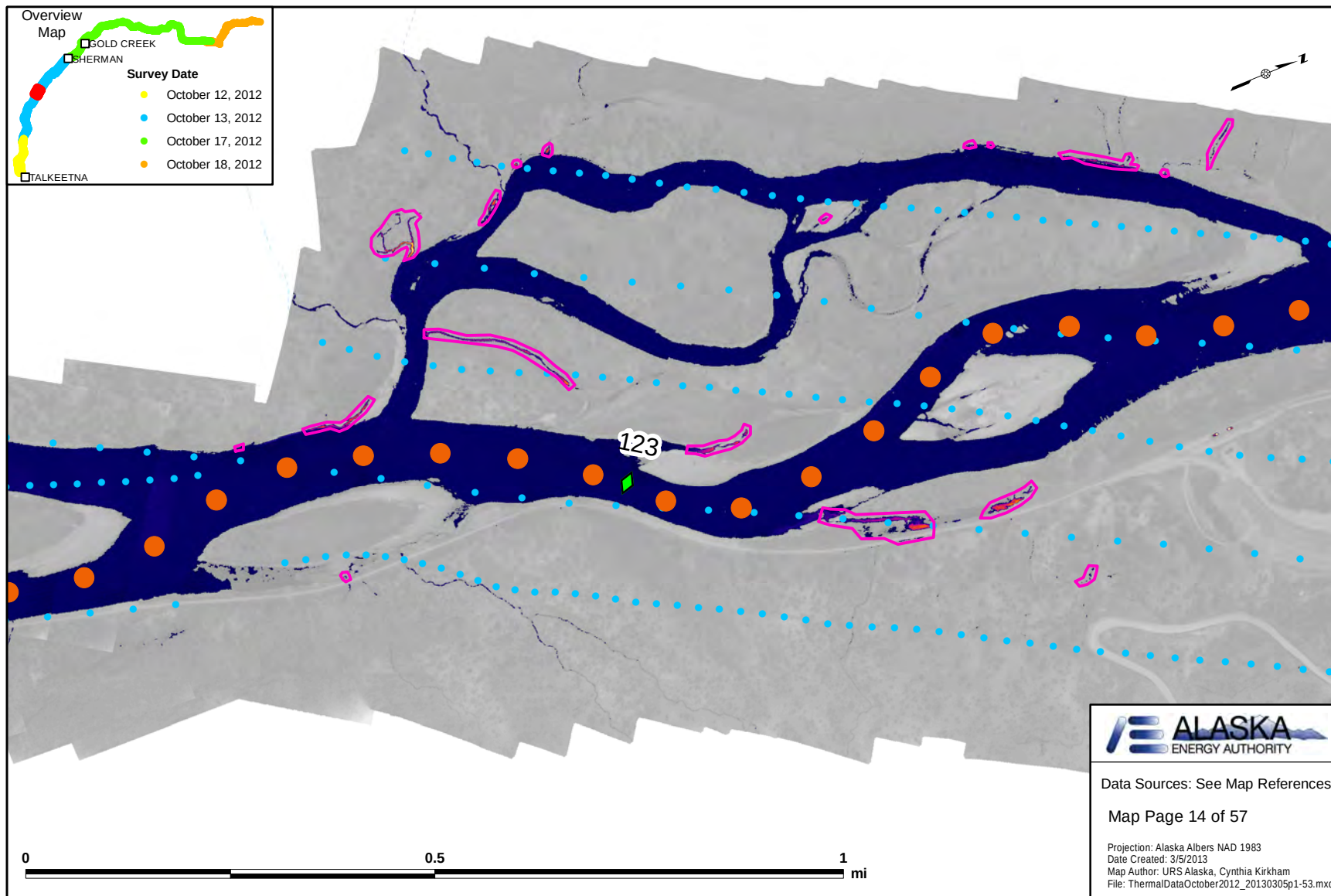
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October 12, 2012	271.7 - 272.1	271.7 - 272.1
October 13, 2012	272.2 - 272.6	272.2 - 272.6
October 17, 2012	272.7 - 273.1	272.7 - 273.1
October 18, 2012	273.2 - 273.6	273.2 - 273.6
Area of Increased Groundwater Activity	273.7 - 274.1	273.7 - 274.1
River Mile Index (2013)	274.2 - 274.5	274.2 - 274.5

October 12-13, 2012 Colorramp (Kelvin)



October 17-18, 2012 Colorramp (Kelvin)





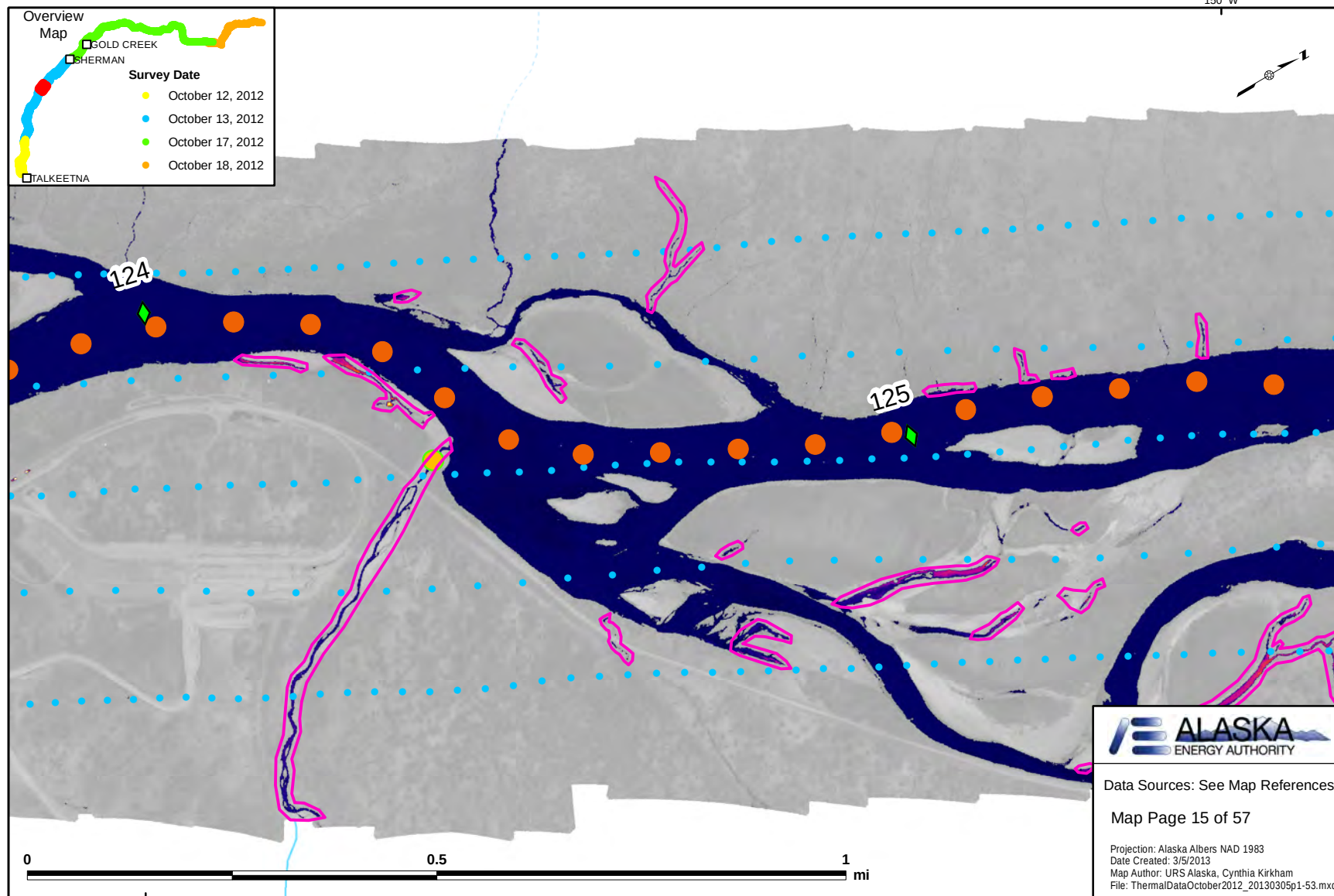
Flightlines (Color Coded by Survey Date)	Sampled Centerline Points (Kelvin)	Sampled Inflow Points (Kelvin)
October 12, 2012	271.7 - 272.1	271.7 - 272.1
October 13, 2012	272.2 - 272.6	272.2 - 272.6
October 17, 2012	272.7 - 273.1	272.7 - 273.1
October 18, 2012	273.2 - 273.6	273.2 - 273.6
Area of Increased Groundwater Activity	273.7 - 274.1	273.7 - 274.1
River Mile Index (2013)	274.2 - 274.5	274.2 - 274.5

October 12-13, 2012 Colorramp (Kelvin)



October 17-18, 2012 Colorramp (Kelvin)





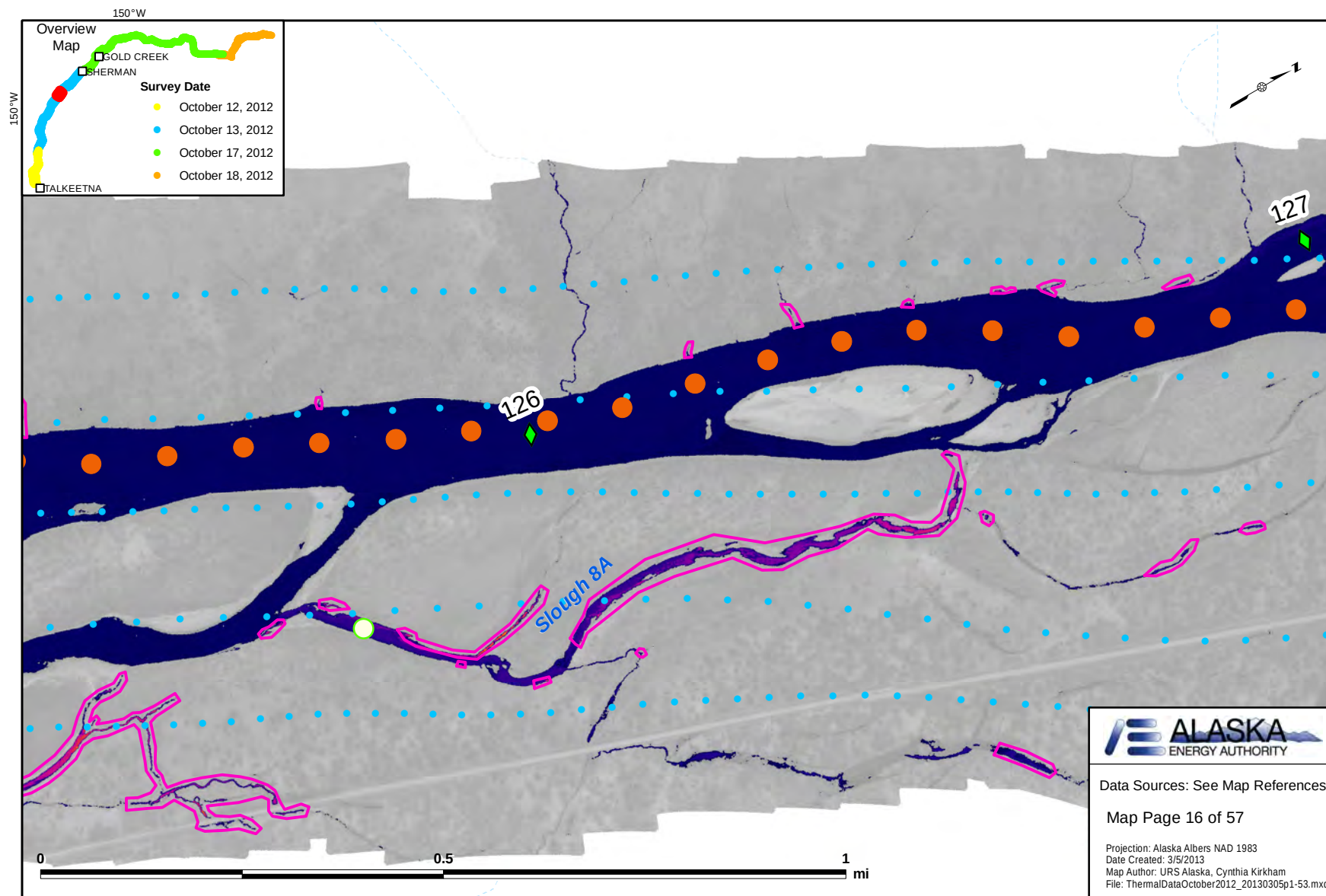
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October 12, 2012	271.7 - 272.1	271.7 - 272.1
October 13, 2012	272.2 - 272.6	272.2 - 272.6
October 17, 2012	272.7 - 273.1	272.7 - 273.1
October 18, 2012	273.2 - 273.6	273.2 - 273.6
Area of Increased Groundwater Activity	273.7 - 274.1	273.7 - 274.1
River Mile Index (2013)	274.2 - 274.5	274.2 - 274.5

October 12-13, 2012 Colorramp (Kelvin)



October 17-18, 2012 Colorramp (Kelvin)





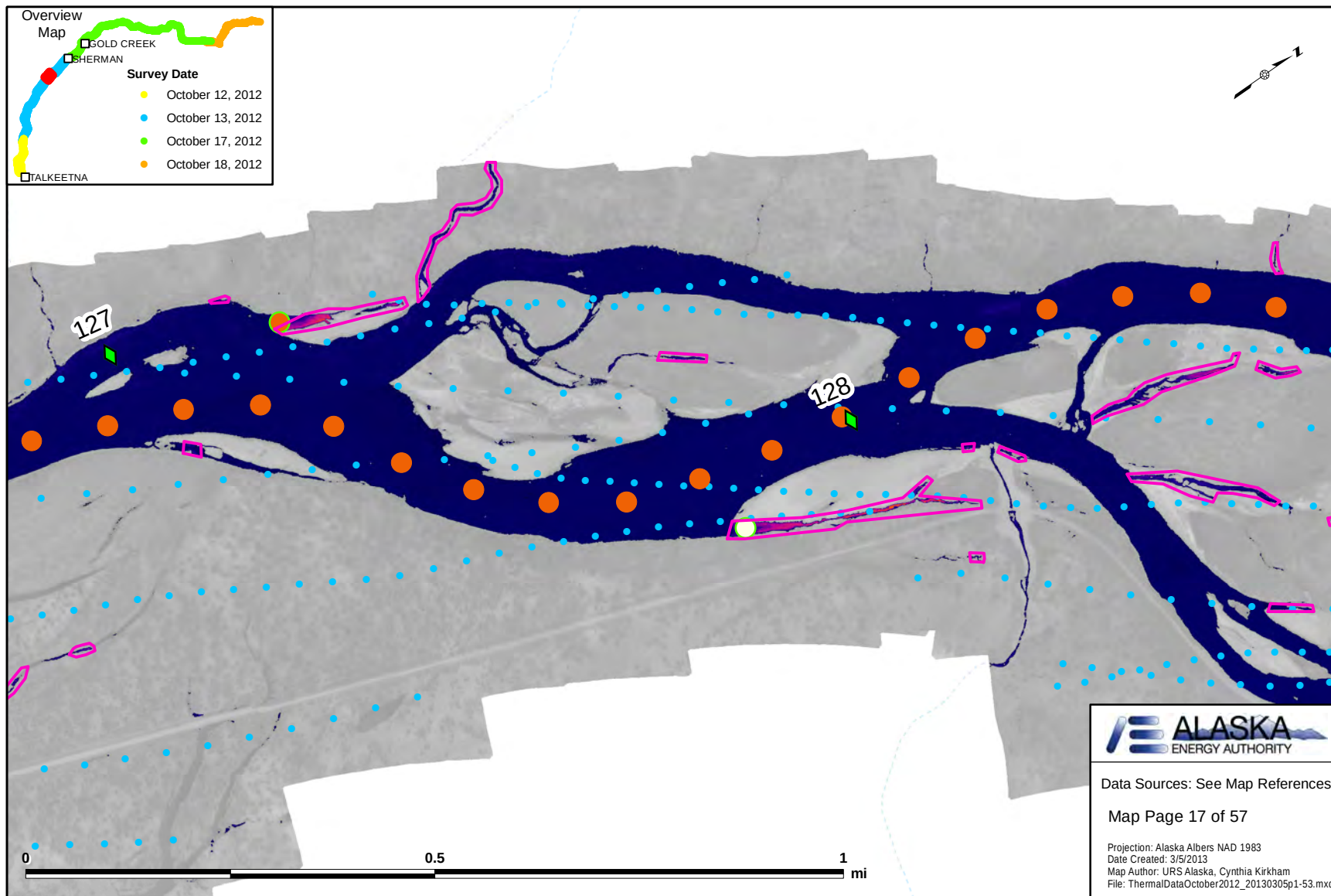
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October 13, 2012	272.2 - 272.6	272.2 - 272.6
October 17, 2012	272.7 - 273.1	272.7 - 273.1
October 18, 2012	273.2 - 273.6	273.2 - 273.6
Area of Increased Groundwater Activity	273.7 - 274.1	273.7 - 274.1
River Mile Index (2013)	274.2 - 274.5	274.2 - 274.5

October 12-13, 2012 Colorramp (Kelvin)



October 17-18, 2012 Colorramp (Kelvin)





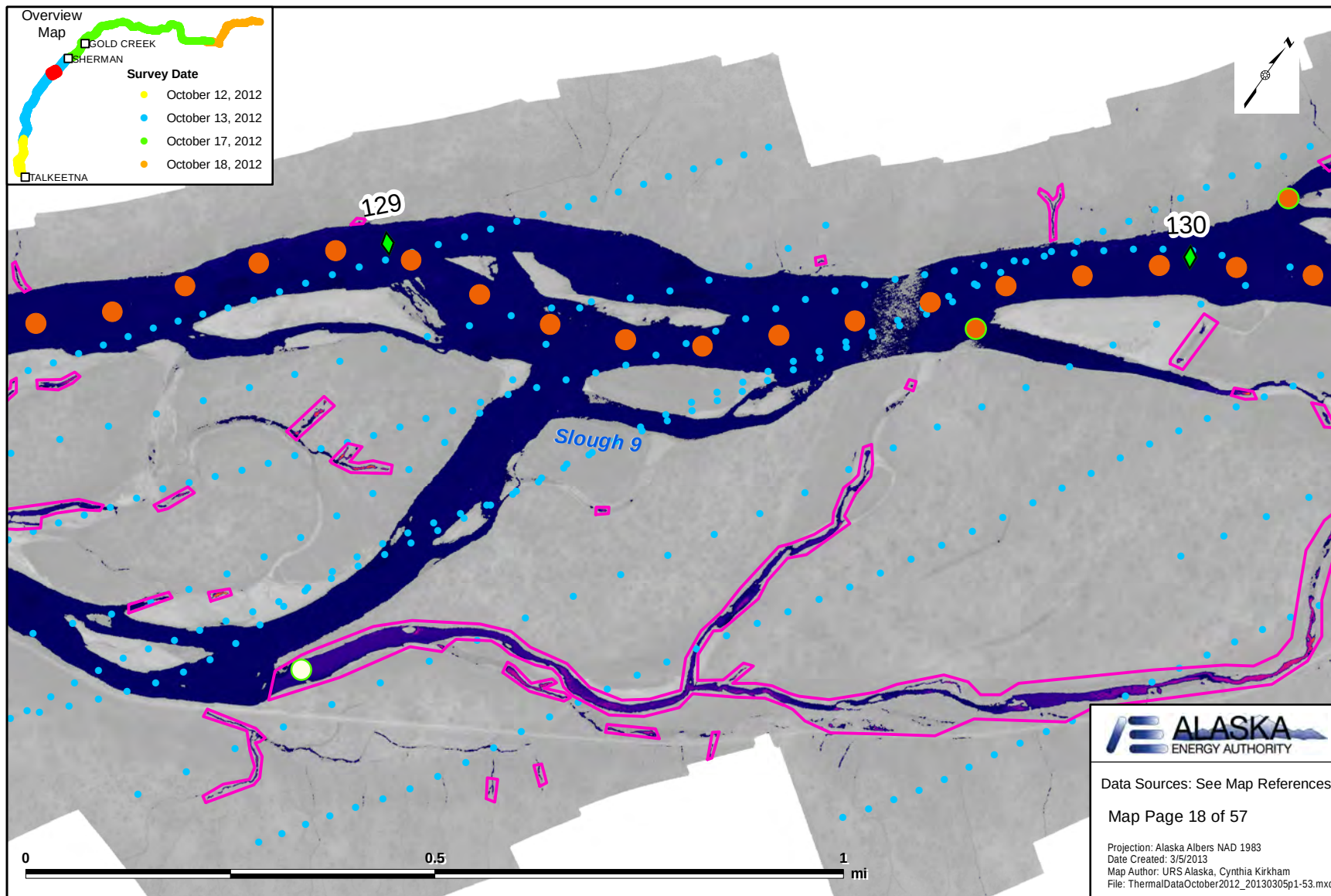
Flightlines (Color Coded by Survey Date)	Sampled Centerline Points (Kelvin)	Sampled Inflow Points (Kelvin)
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October 13, 2012	272.2 - 272.6	272.2 - 272.6
October 17, 2012	272.7 - 273.1	272.7 - 273.1
October 18, 2012	273.2 - 273.6	273.2 - 273.6
Area of Increased Groundwater Activity	273.7 - 274.1	273.7 - 274.1
River Mile Index (2013)	274.2 - 274.5	274.2 - 274.5

October 12-13, 2012 Colorramp (Kelvin)



October 17-18, 2012 Colorramp (Kelvin)





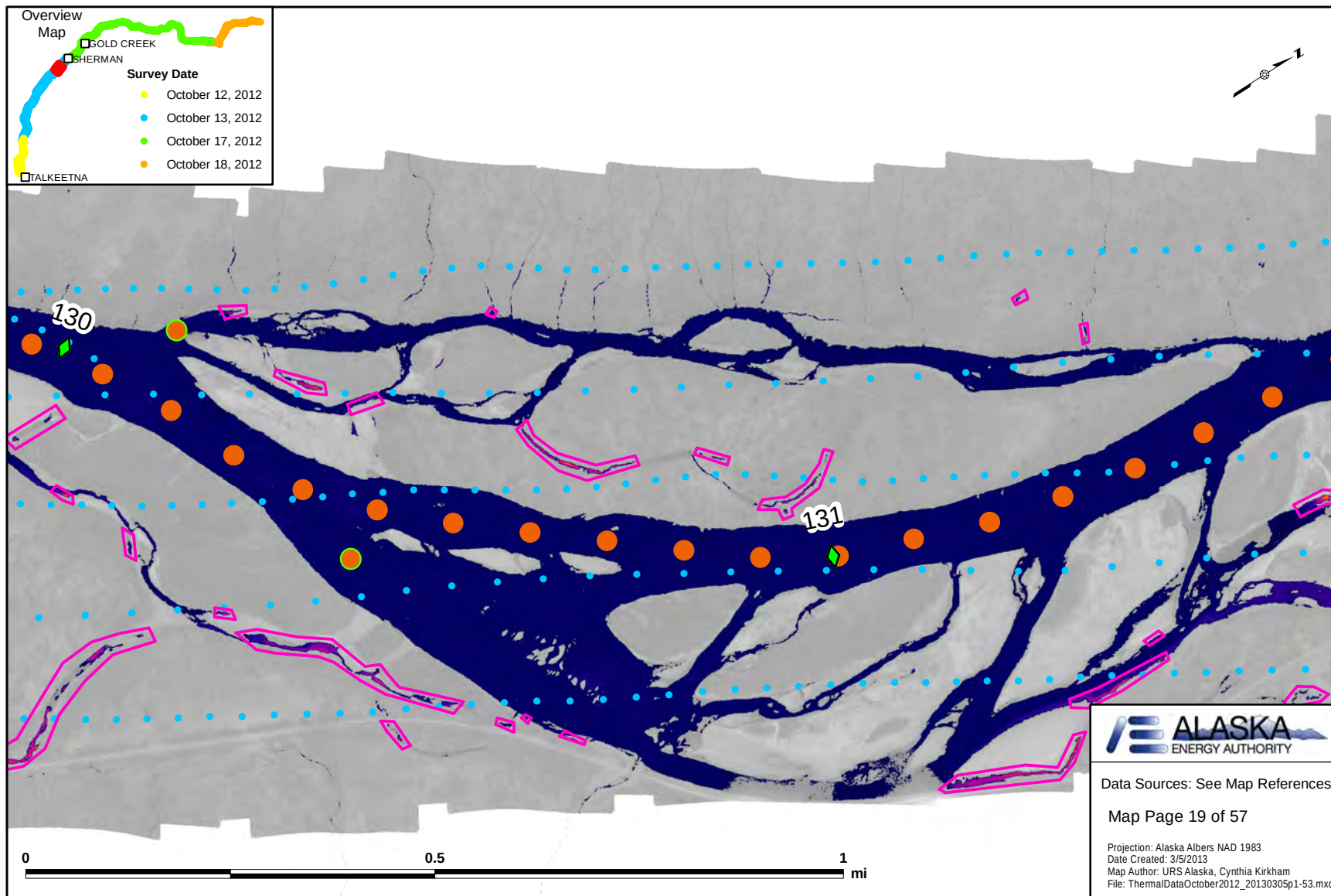
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October 17, 2012	272.7 - 273.1	272.7 - 273.1
October 18, 2012	273.2 - 273.6	273.2 - 273.6
Area of Increased Groundwater Activity	273.7 - 274.1	273.7 - 274.1
River Mile Index (2013)	274.2 - 274.5	274.2 - 274.5

October 12-13, 2012 Colormap (Kelvin)



October 17-18, 2012 Colormap (Kelvin)





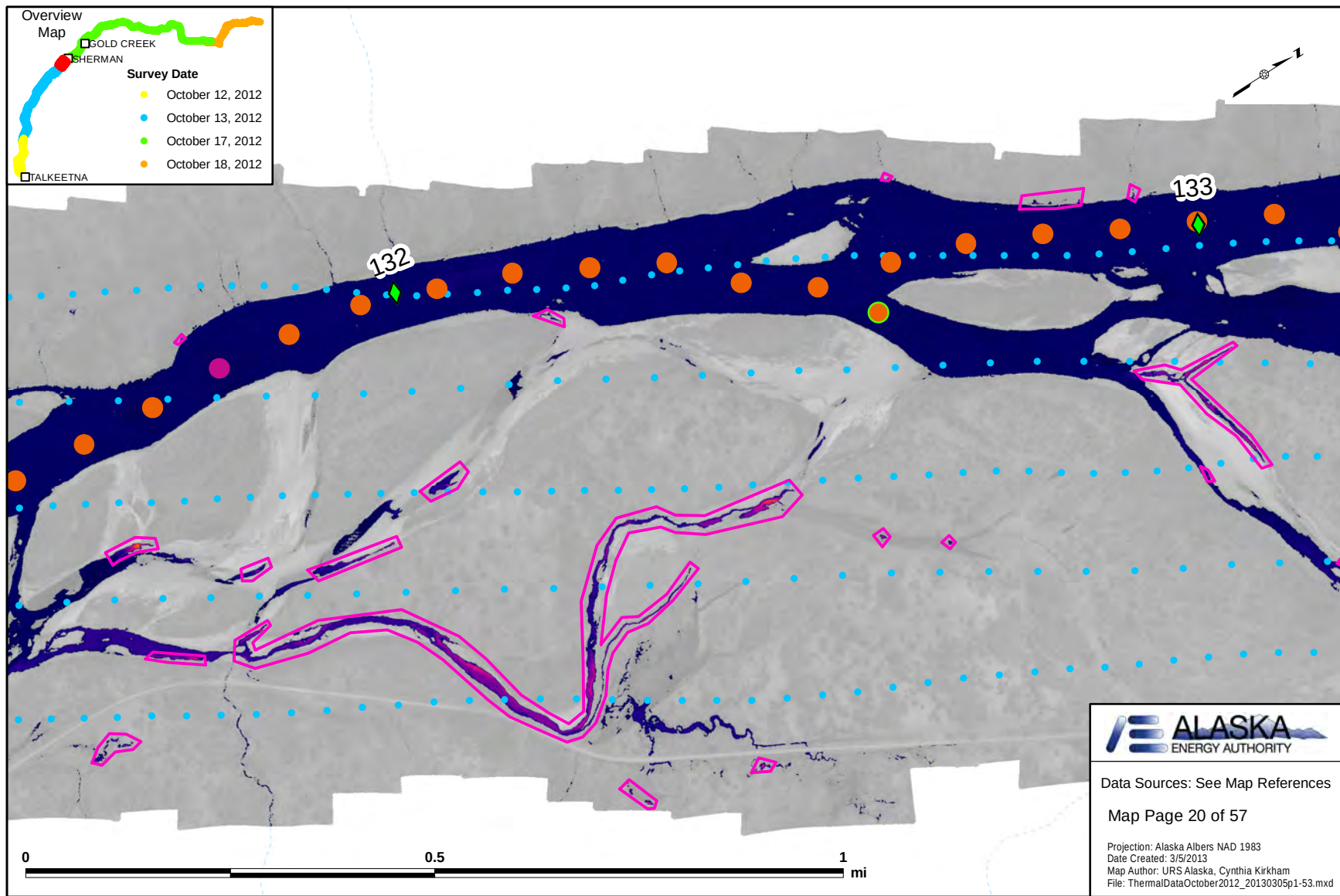
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October 13, 2012	272.2 - 272.6	272.2 - 272.6
October 17, 2012	272.7 - 273.1	272.7 - 273.1
October 18, 2012	273.2 - 273.6	273.2 - 273.6
Area of Increased Groundwater Activity	273.7 - 274.1	273.7 - 274.1
River Mile Index (2013)	274.2 - 274.5	274.2 - 274.5

October 12-13, 2012 Colorramp (Kelvin)



October 17-18, 2012 Colorramp (Kelvin)





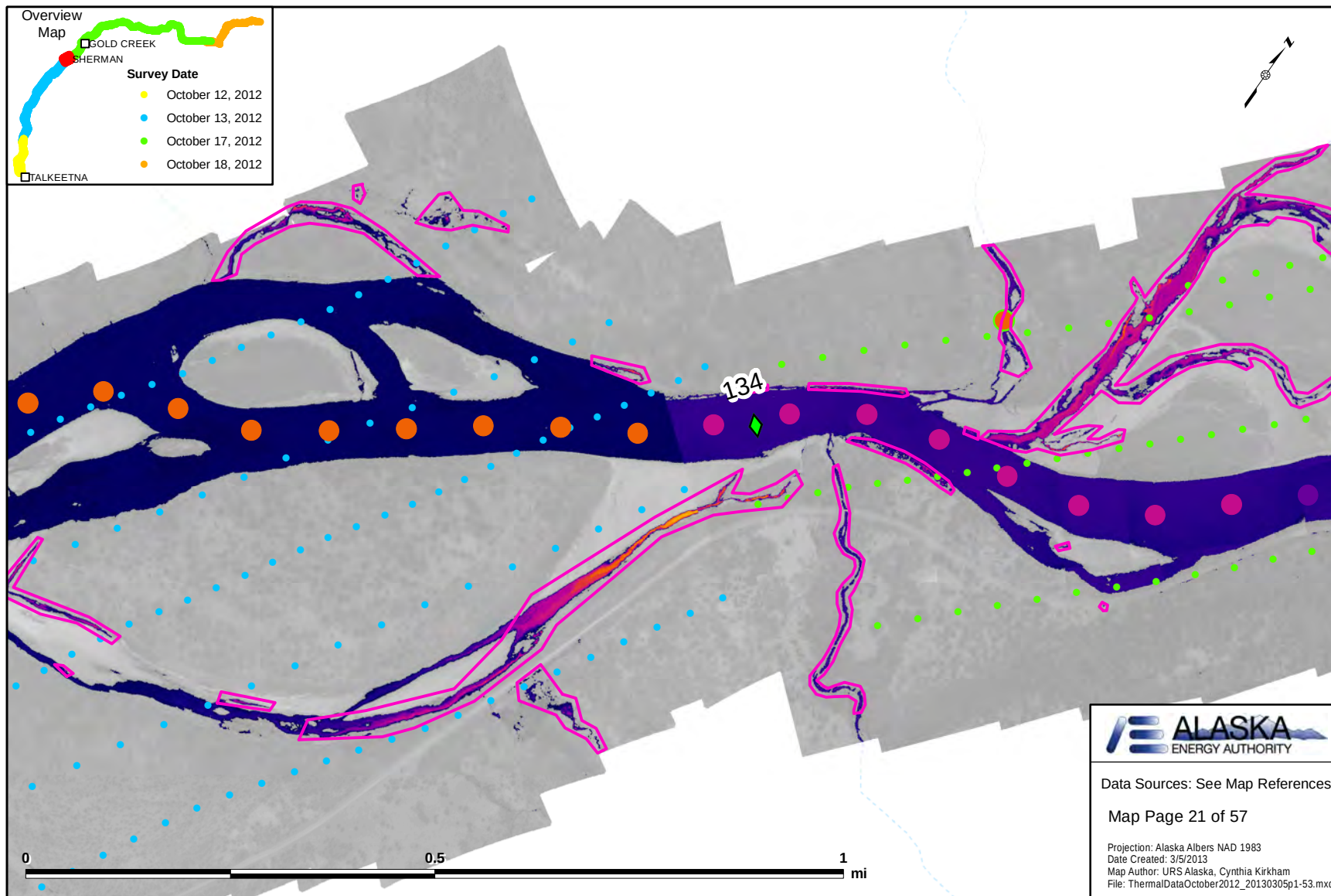
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October 13, 2012	272.2 - 272.6	272.2 - 272.6
October 17, 2012	272.7 - 273.1	272.7 - 273.1
October 18, 2012	273.2 - 273.6	273.2 - 273.6
Area of Increased Groundwater Activity	273.7 - 274.1	273.7 - 274.1
River Mile Index (2013)	274.2 - 274.5	274.2 - 274.5

October 12-13, 2012 Colorramp (Kelvin)



October 17-18, 2012 Colorramp (Kelvin)





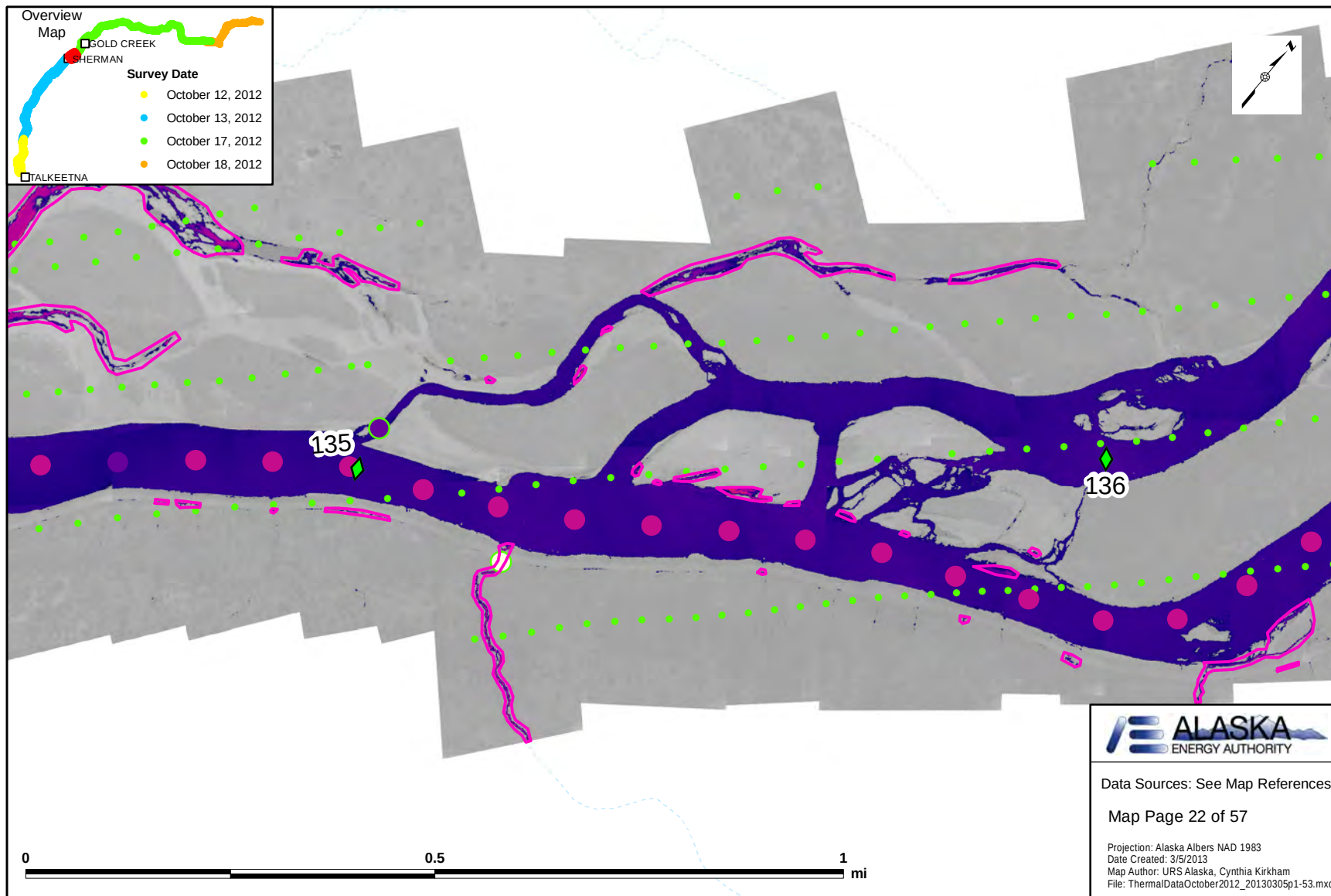
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October 13, 2012	272.2 - 272.6	272.2 - 272.6
October 17, 2012	272.7 - 273.1	272.7 - 273.1
October 18, 2012	273.2 - 273.6	273.2 - 273.6
Area of Increased Groundwater Activity	273.7 - 274.1	273.7 - 274.1
River Mile Index (2013)	274.2 - 274.5	274.2 - 274.5

October 12-13, 2012 Colorramp (Kelvin)



October 17-18, 2012 Colorramp (Kelvin)





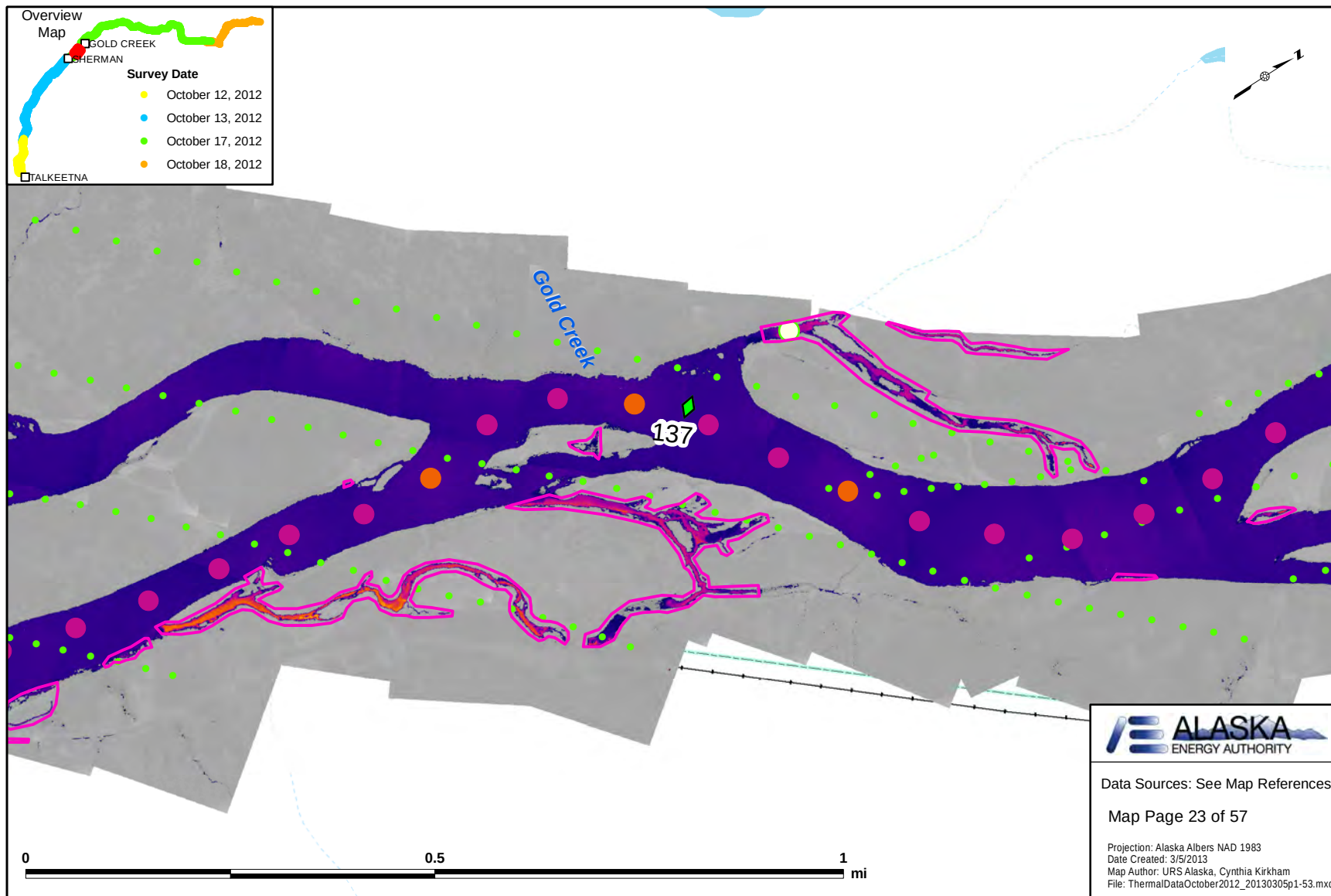
Flightlines (Color Coded by Survey Date)	Sampled Centerline Points (Kelvin)	Sampled Inflow Points (Kelvin)
October 12, 2012	271.7 - 272.1	271.7 - 272.1
October 13, 2012	272.2 - 272.6	272.2 - 272.6
October 17, 2012	272.7 - 273.1	272.7 - 273.1
October 18, 2012	273.2 - 273.6	273.2 - 273.6
Area of Increased Groundwater Activity	273.7 - 274.1	273.7 - 274.1
River Mile Index (2013)	274.2 - 274.5	274.2 - 274.5

October 12-13, 2012 Colorramp (Kelvin)



October 17-18, 2012 Colorramp (Kelvin)





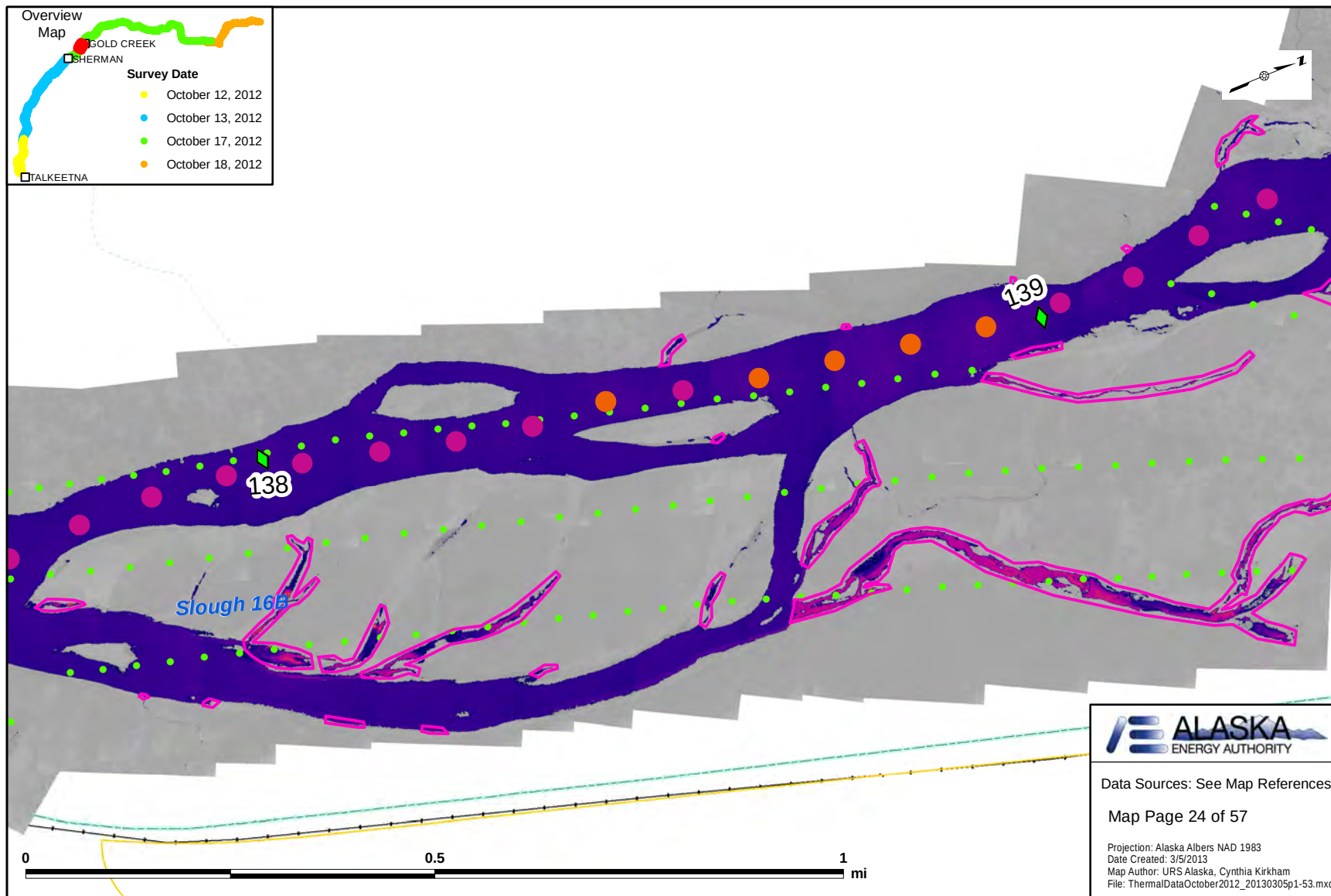
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October 17, 2012	272.7 - 273.1	272.7 - 273.1
October 18, 2012	273.2 - 273.6	273.2 - 273.6
Area of Increased Groundwater Activity	273.7 - 274.1	273.7 - 274.1
River Mile Index (2013)	274.2 - 274.5	274.2 - 274.5

October 12-13, 2012 Colorramp (Kelvin)



October 17-18, 2012 Colorramp (Kelvin)





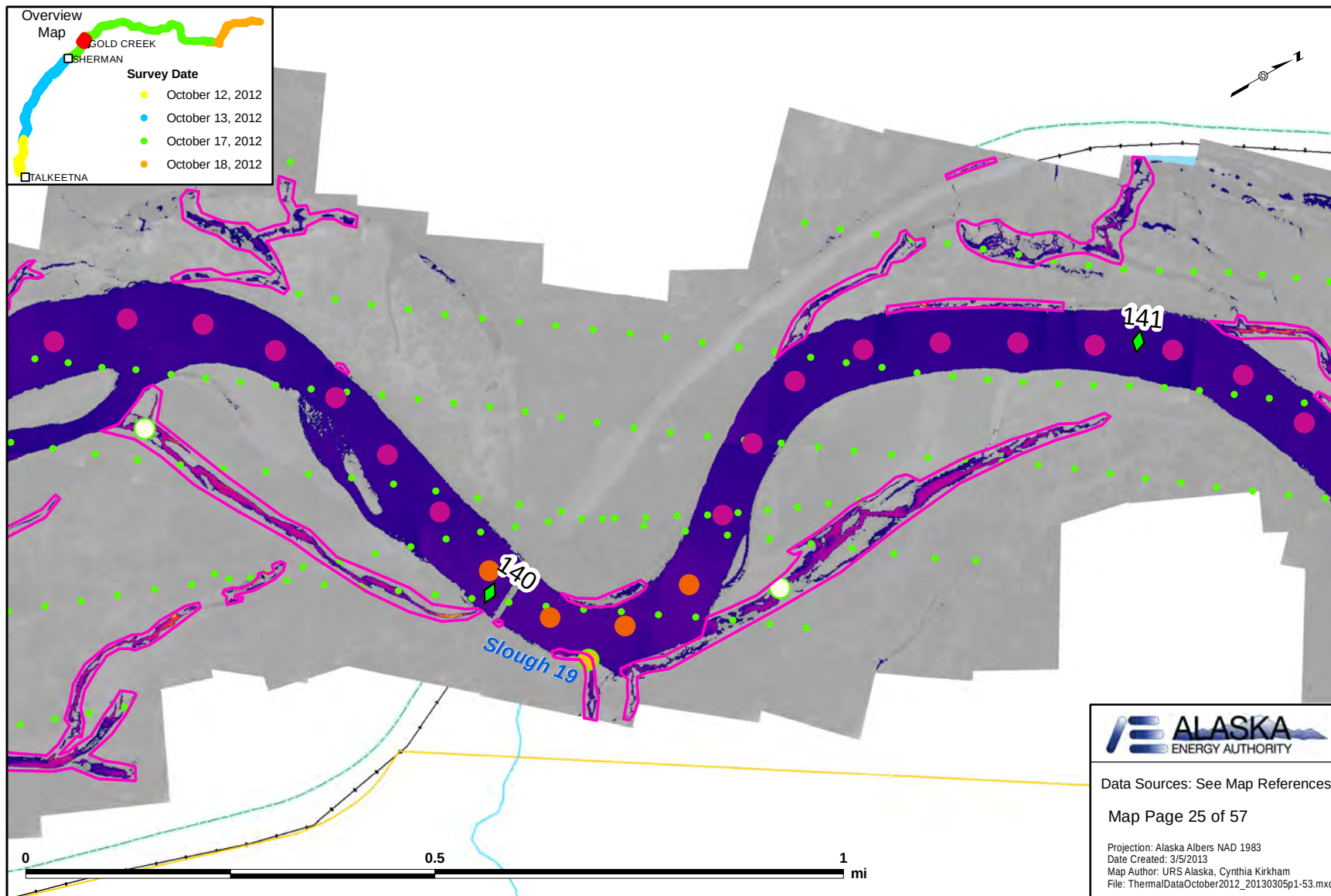
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October 13, 2012	272.2 - 272.6	272.2 - 272.6
October 17, 2012	272.7 - 273.1	272.7 - 273.1
October 18, 2012	273.2 - 273.6	273.2 - 273.6
Area of Increased Groundwater Activity	273.7 - 274.1	273.7 - 274.1
River Mile Index (2013)	274.2 - 274.5	274.2 - 274.5

October 12-13, 2012 Colorramp (Kelvin)



October 17-18, 2012 Colorramp (Kelvin)





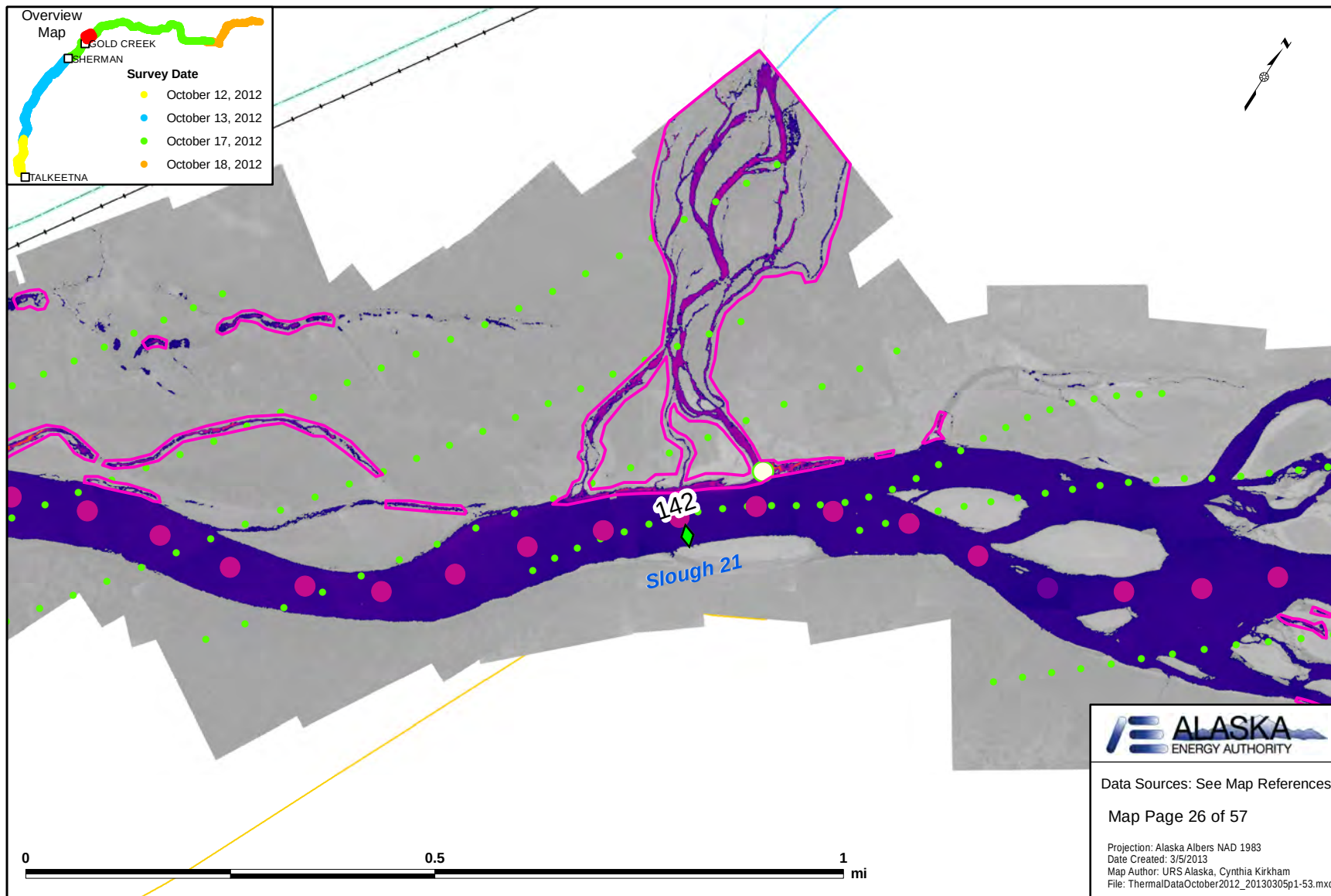
Flightlines (Color Coded by Survey Date)	Sampled Centerline Points (Kelvin)	Sampled Inflow Points (Kelvin)
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Area of Increased Groundwater Activity	273.7 - 274.1	273.7 - 274.1
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October 12-13, 2012 Colorramp (Kelvin)



October 17-18, 2012 Colorramp (Kelvin)





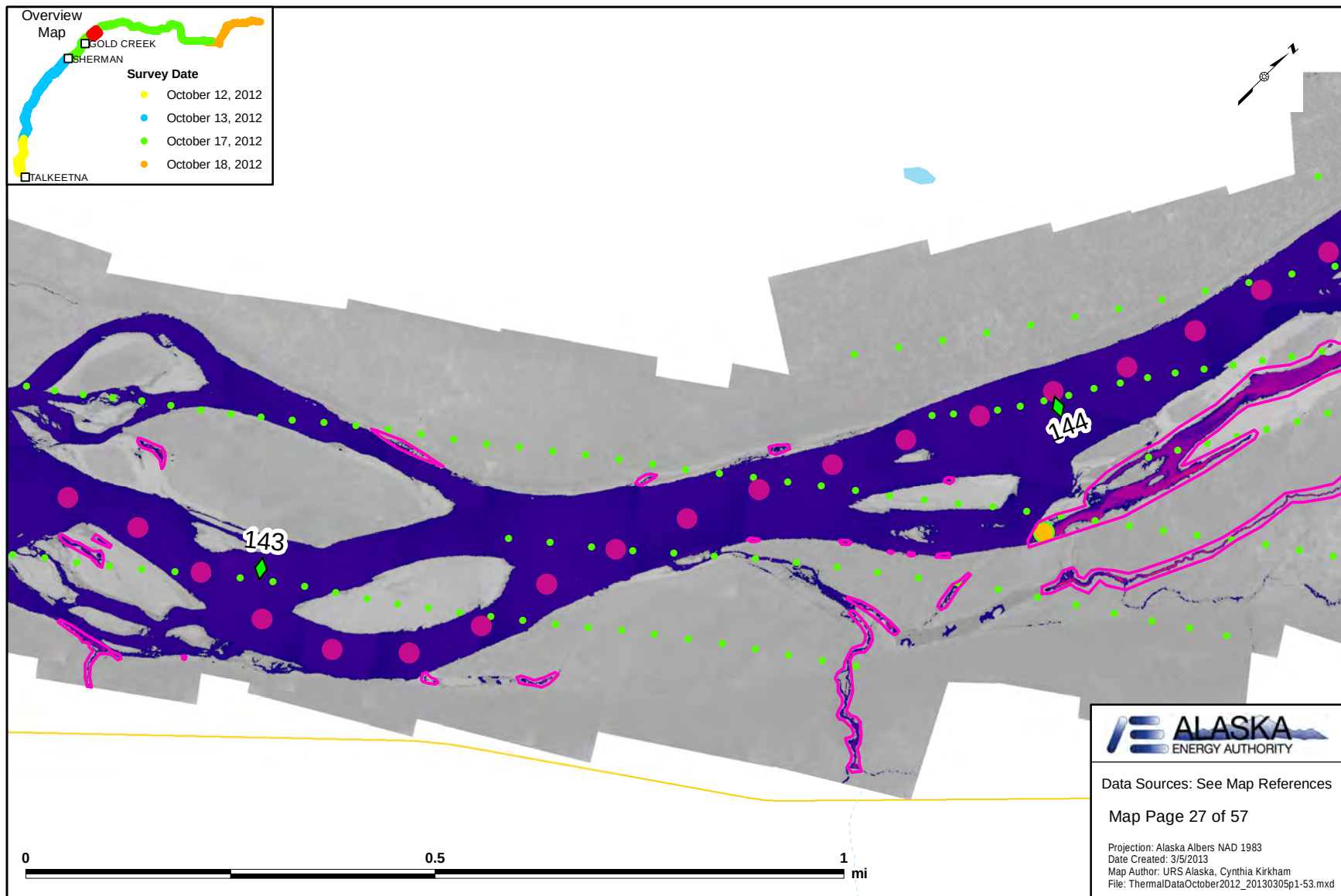
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October 17, 2012	272.7 - 273.1	272.7 - 273.1
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Area of Increased Groundwater Activity	273.7 - 274.1	273.7 - 274.1
River Mile Index (2013)	274.2 - 274.5	274.2 - 274.5

October 12-13, 2012 Colorramp (Kelvin)



October 17-18, 2012 Colorramp (Kelvin)





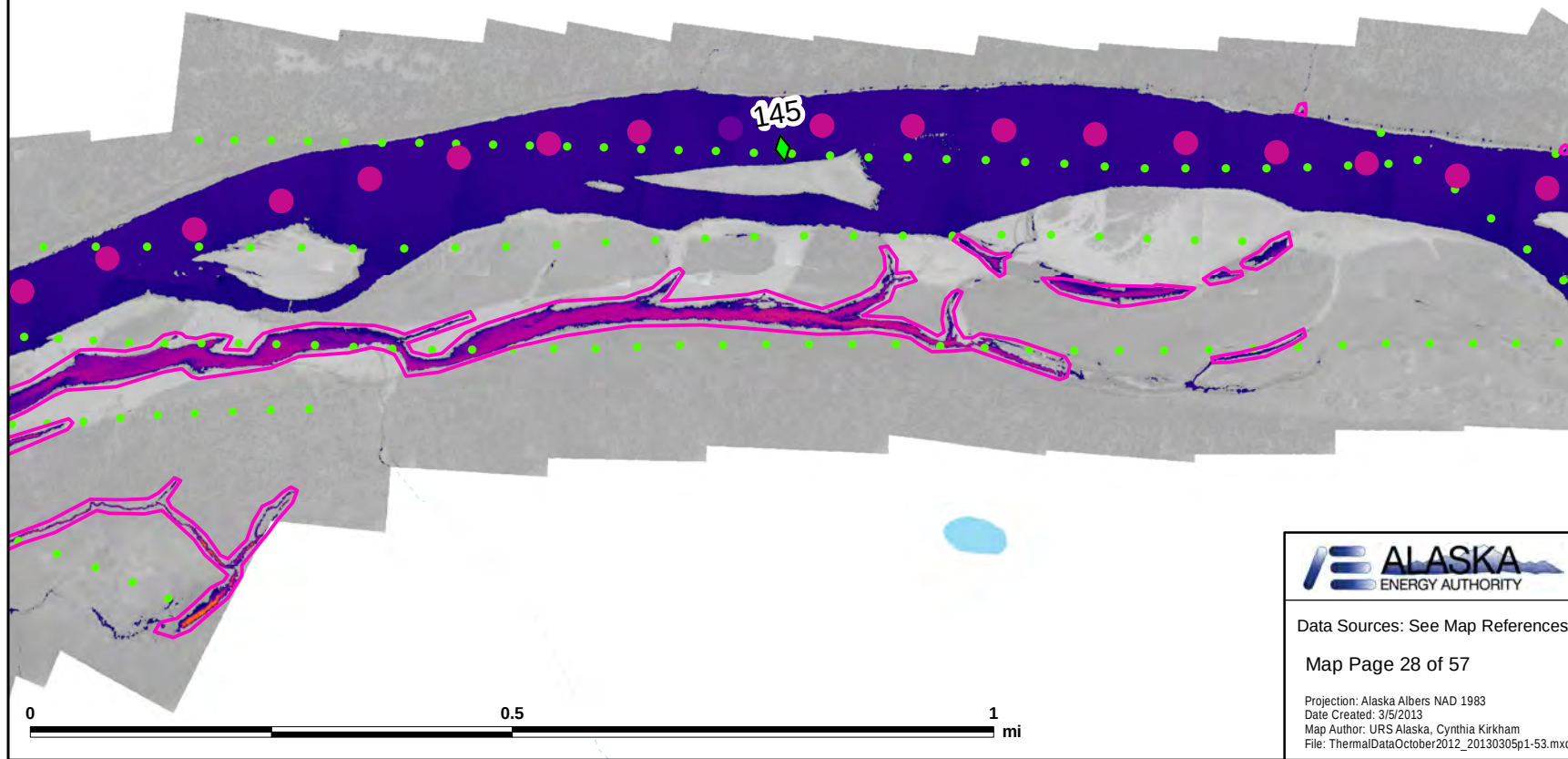
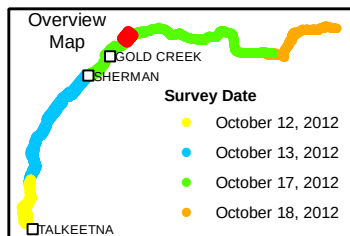
Flightlines (Color Coded by Survey Date)	Sampled Centerline Points (Kelvin)	Sampled Inflow Points (Kelvin)
October 12, 2012	271.7 - 272.1	271.7 - 272.1
October 13, 2012	272.2 - 272.6	272.2 - 272.6
October 17, 2012	272.7 - 273.1	272.7 - 273.1
October 18, 2012	273.2 - 273.6	273.2 - 273.6
Area of Increased Groundwater Activity	273.7 - 274.1	273.7 - 274.1
River Mile Index (2013)	274.2 - 274.5	274.2 - 274.5

October 12-13, 2012 Colorramp (Kelvin)



October 17-18, 2012 Colorramp (Kelvin)





Data Sources: See Map References

Map Page 28 of 57

Projection: Alaska Albers NAD 1983
Date Created: 3/5/2013
Map Author: URS Alaska, Cynthia Kirkham
File: ThermalDataOctober2012_20130305p1-53.mxd

Flightlines (Color Coded by Survey Date)

- October 12, 2012
- October 13, 2012
- October 17, 2012
- October 18, 2012

Area of Increased Groundwater Activity

River Mile Index (2013)

Sampled Centerline Points (Kelvin)

- 271.7 - 272.1
- 272.2 - 272.6
- 272.7 - 273.1
- 273.2 - 273.6
- 273.7 - 274.1
- 274.2 - 274.5

Sampled Inflow Points (Kelvin)

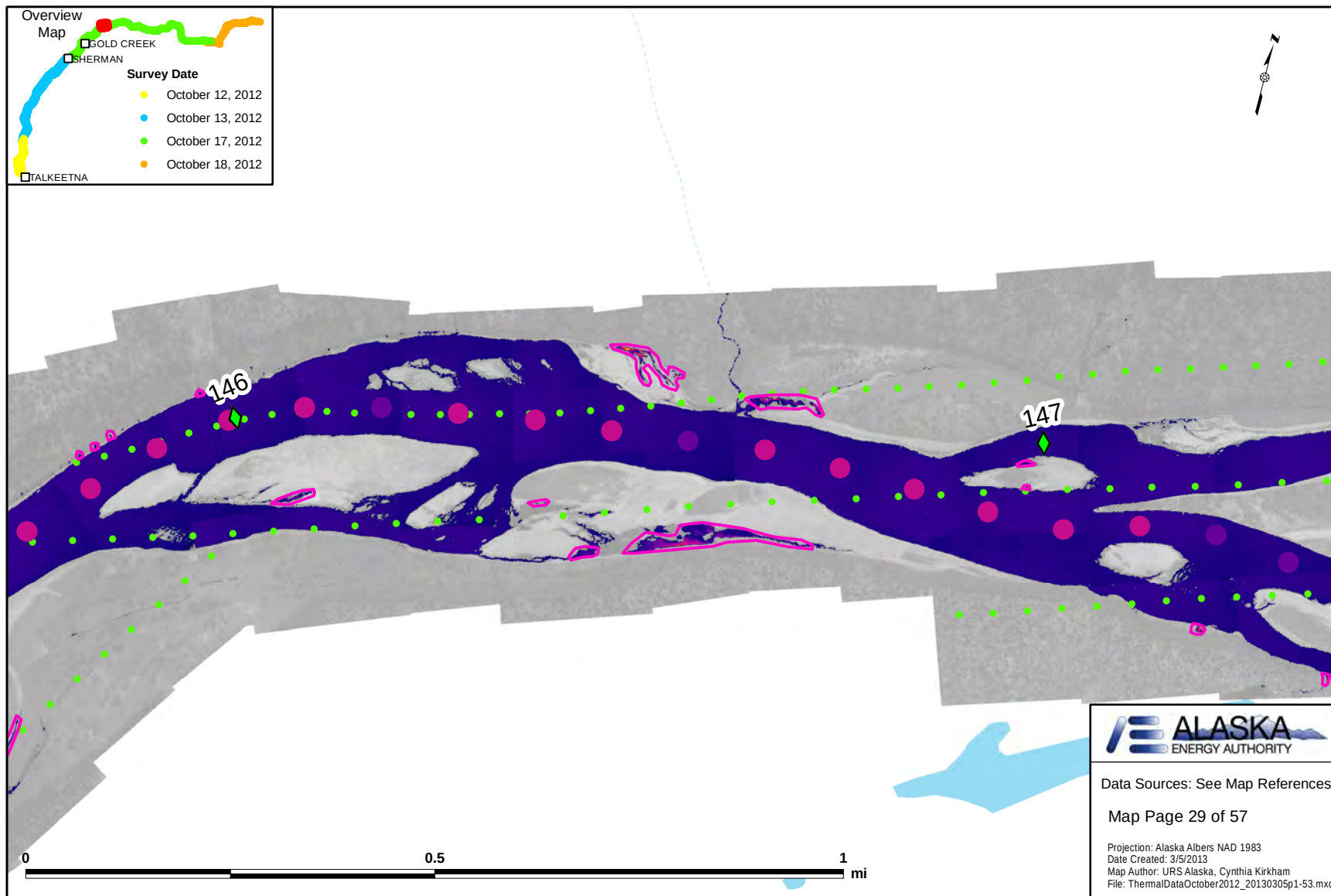
- 271.7 - 272.1
- 272.2 - 272.6
- 272.7 - 273.1
- 273.2 - 273.6
- 273.7 - 274.1
- 274.2 - 274.5

October 12-13, 2012 Colorramp (Kelvin)



October 17-18, 2012 Colorramp (Kelvin)





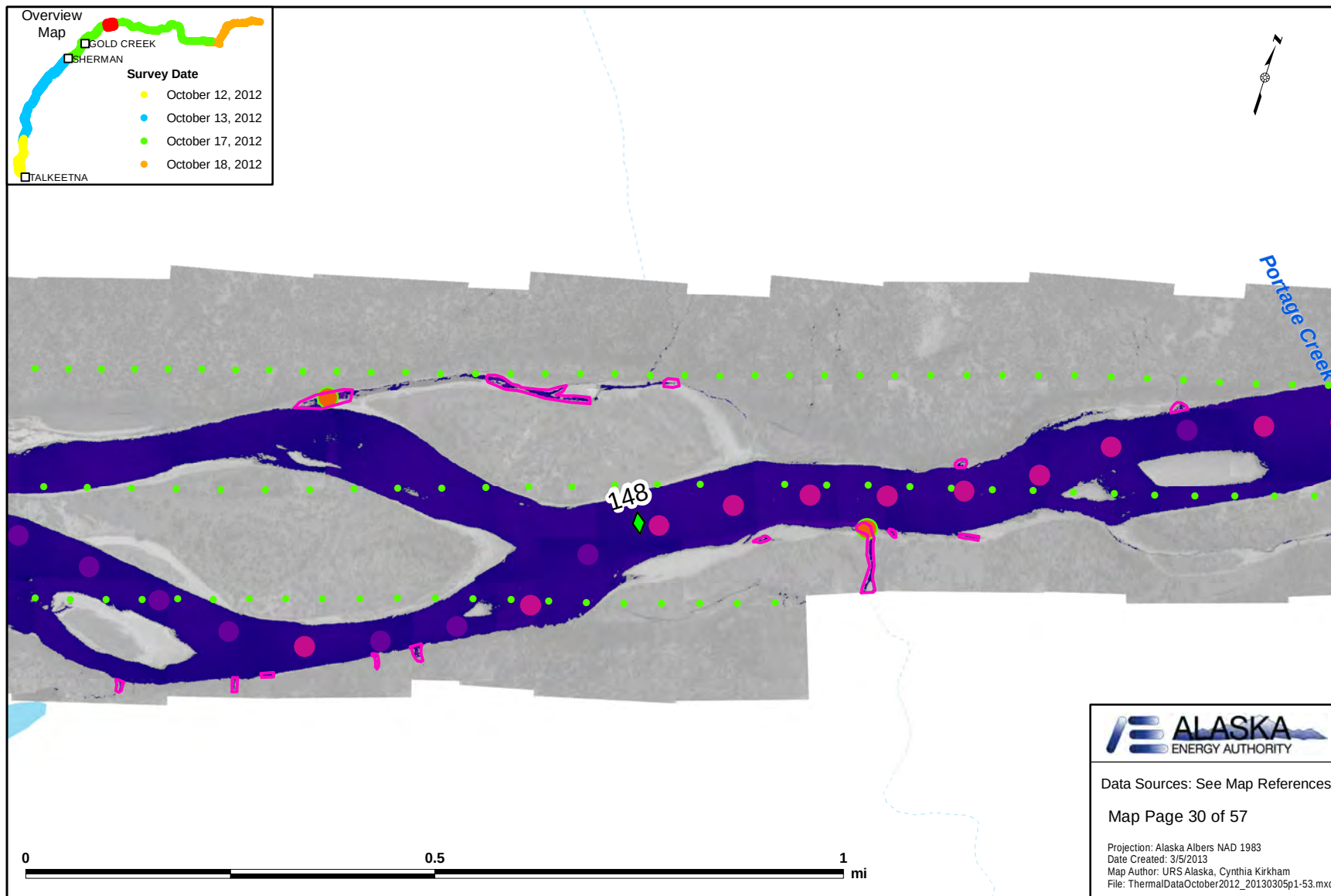
Flightlines (Color Coded by Survey Date)	Sampled Centerline Points (Kelvin)	Sampled Inflow Points (Kelvin)
October 12, 2012	271.7 - 272.1	271.7 - 272.1
October 13, 2012	272.2 - 272.6	272.2 - 272.6
October 17, 2012	272.7 - 273.1	272.7 - 273.1
October 18, 2012	273.2 - 273.6	273.2 - 273.6
Area of Increased Groundwater Activity	273.7 - 274.1	273.7 - 274.1
River Mile Index (2013)	274.2 - 274.5	274.2 - 274.5

October 12-13, 2012 Colorramp (Kelvin)



October 17-18, 2012 Colorramp (Kelvin)





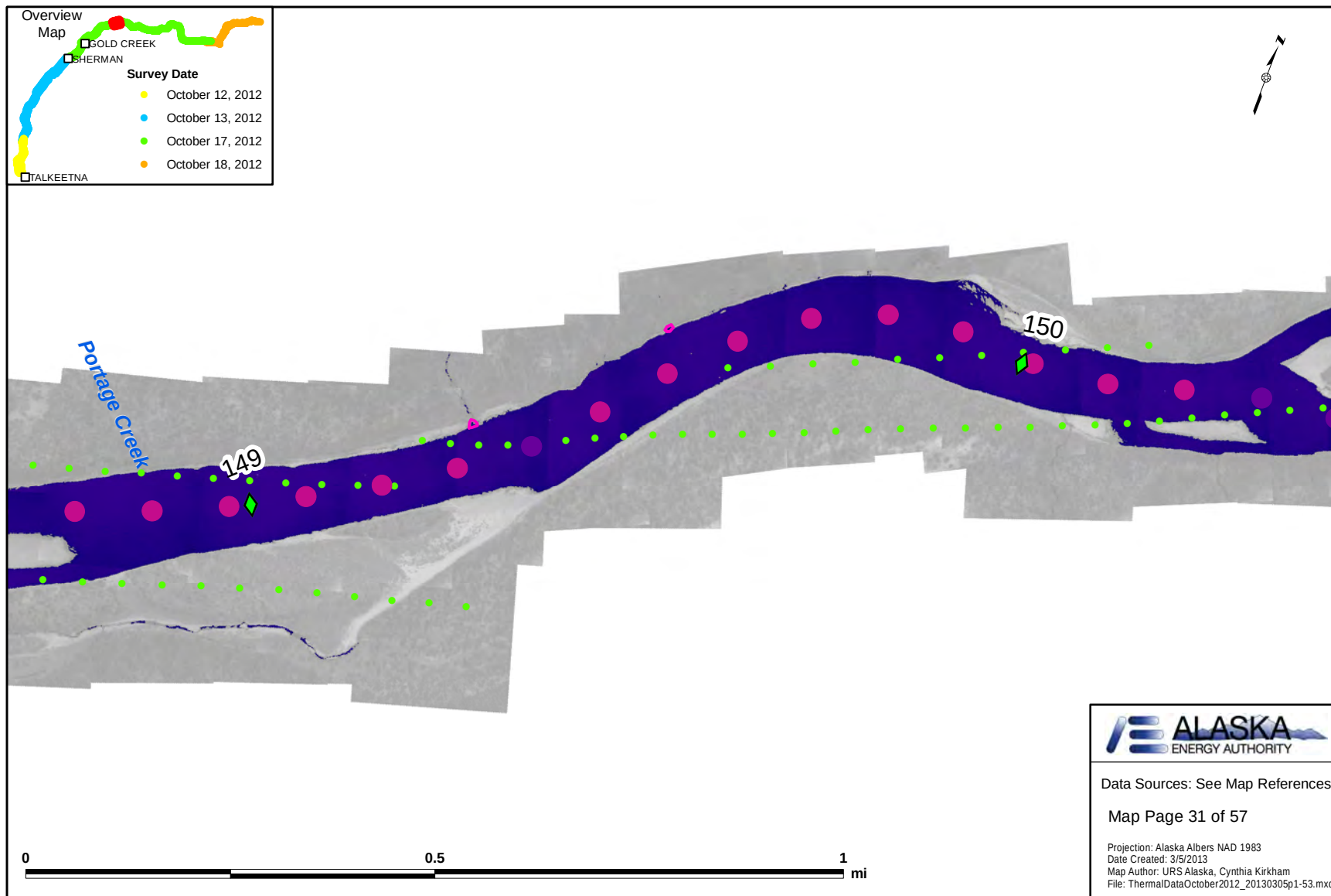
Flightlines (Color Coded by Survey Date)	Sampled Centerline Points (Kelvin)	Sampled Inflow Points (Kelvin)
October 12, 2012	271.7 - 272.1	271.7 - 272.1
October 13, 2012	272.2 - 272.6	272.2 - 272.6
October 17, 2012	272.7 - 273.1	272.7 - 273.1
October 18, 2012	273.2 - 273.6	273.2 - 273.6
Area of Increased Groundwater Activity	273.7 - 274.1	273.7 - 274.1
River Mile Index (2013)	274.2 - 274.5	274.2 - 274.5

October 12-13, 2012 Colorramp (Kelvin)



October 17-18, 2012 Colorramp (Kelvin)





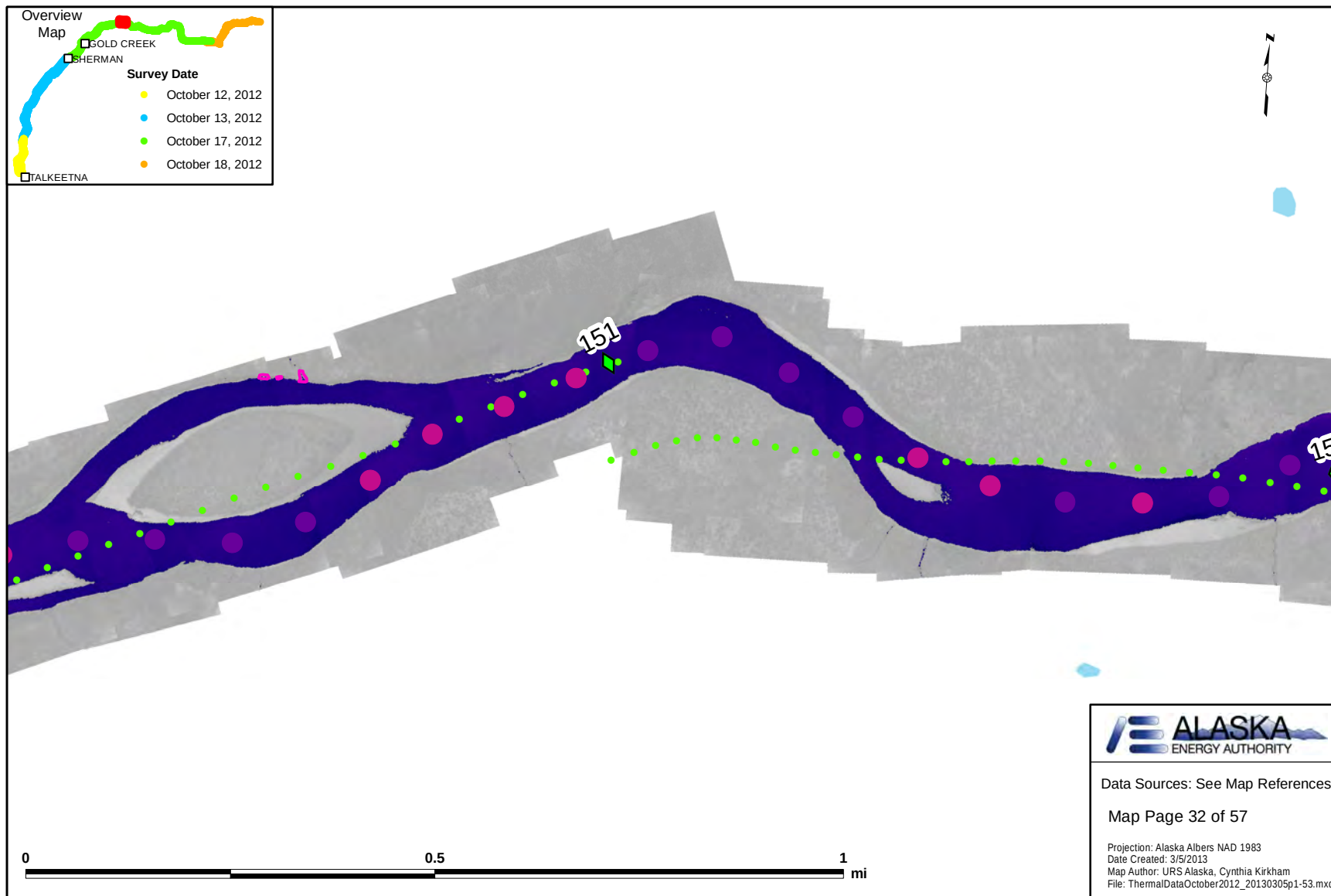
Flightlines (Color Coded by Survey Date)	Sampled Centerline Points (Kelvin)	Sampled Inflow Points (Kelvin)
October 12, 2012	271.7 - 272.1	271.7 - 272.1
October 13, 2012	272.2 - 272.6	272.2 - 272.6
October 17, 2012	272.7 - 273.1	272.7 - 273.1
October 18, 2012	273.2 - 273.6	273.2 - 273.6
Area of Increased Groundwater Activity	273.7 - 274.1	273.7 - 274.1
River Mile Index (2013)	274.2 - 274.5	274.2 - 274.5

October 12-13, 2012 Colorramp (Kelvin)



October 17-18, 2012 Colorramp (Kelvin)





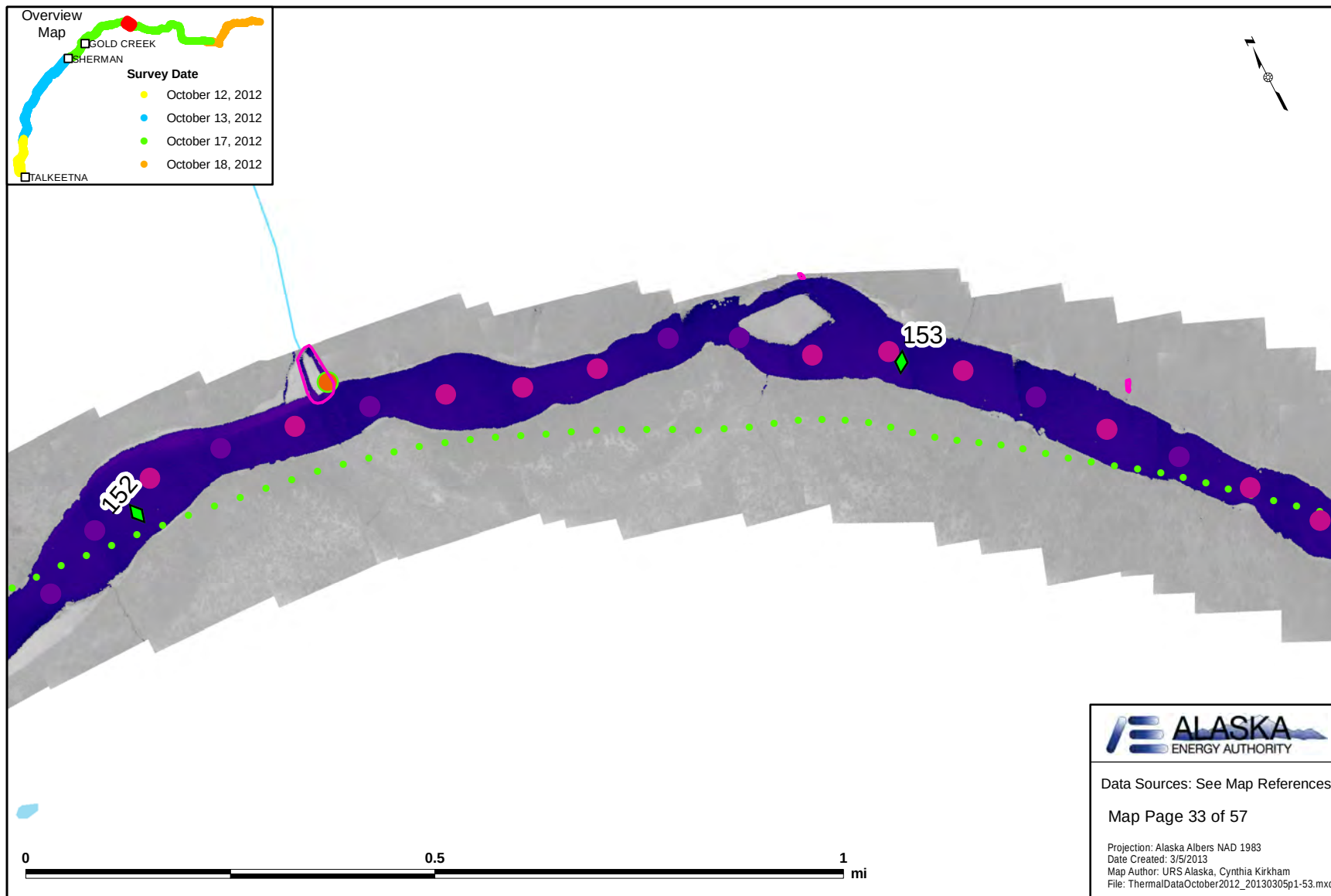
Flightlines (Color Coded by Survey Date)	Sampled Centerline Points (Kelvin)	Sampled Inflow Points (Kelvin)
● October 12, 2012	● 271.7 - 272.1	● 271.7 - 272.1
● October 13, 2012	● 272.2 - 272.6	● 272.2 - 272.6
● October 17, 2012	● 272.7 - 273.1	● 272.7 - 273.1
● October 18, 2012	● 273.2 - 273.6	● 273.2 - 273.6
□ Area of Increased Groundwater Activity	● 273.7 - 274.1	● 273.7 - 274.1
◆ River Mile Index (2013)	● 274.2 - 274.5	● 274.2 - 274.5

October 12-13, 2012 Colorramp (Kelvin)



October 17-18, 2012 Colorramp (Kelvin)





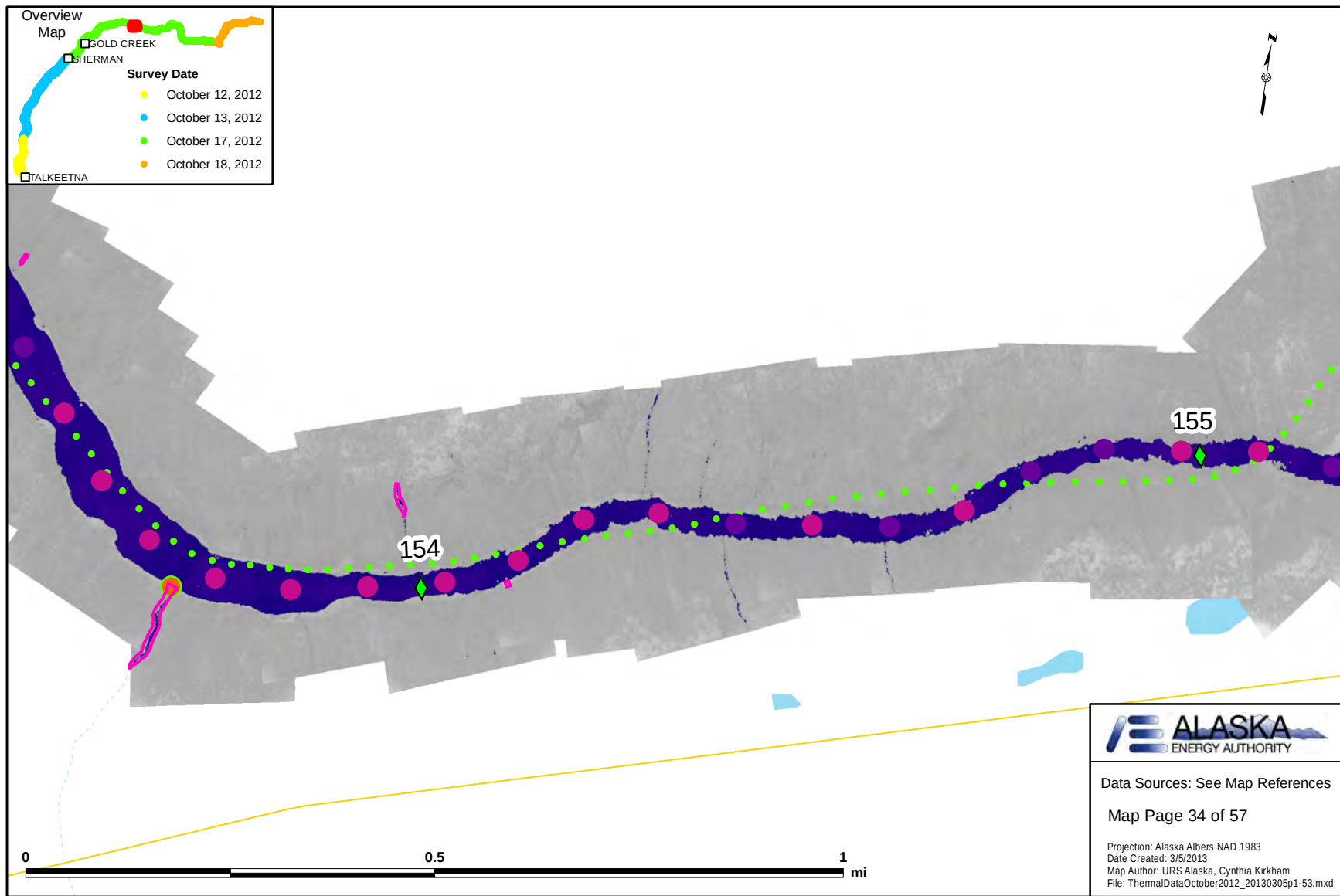
Flightlines (Color Coded by Survey Date)	Sampled Centerline Points (Kelvin)	Sampled Inflow Points (Kelvin)
October 12, 2012	271.7 - 272.1	271.7 - 272.1
October 13, 2012	272.2 - 272.6	272.2 - 272.6
October 17, 2012	272.7 - 273.1	272.7 - 273.1
October 18, 2012	273.2 - 273.6	273.2 - 273.6
Area of Increased Groundwater Activity	273.7 - 274.1	273.7 - 274.1
River Mile Index (2013)	274.2 - 274.5	274.2 - 274.5

October 12-13, 2012 Colorramp (Kelvin)



October 17-18, 2012 Colorramp (Kelvin)





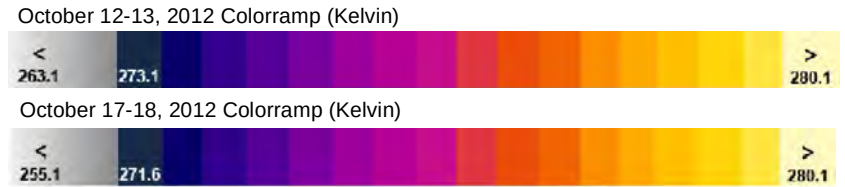
ALASKA ENERGY AUTHORITY

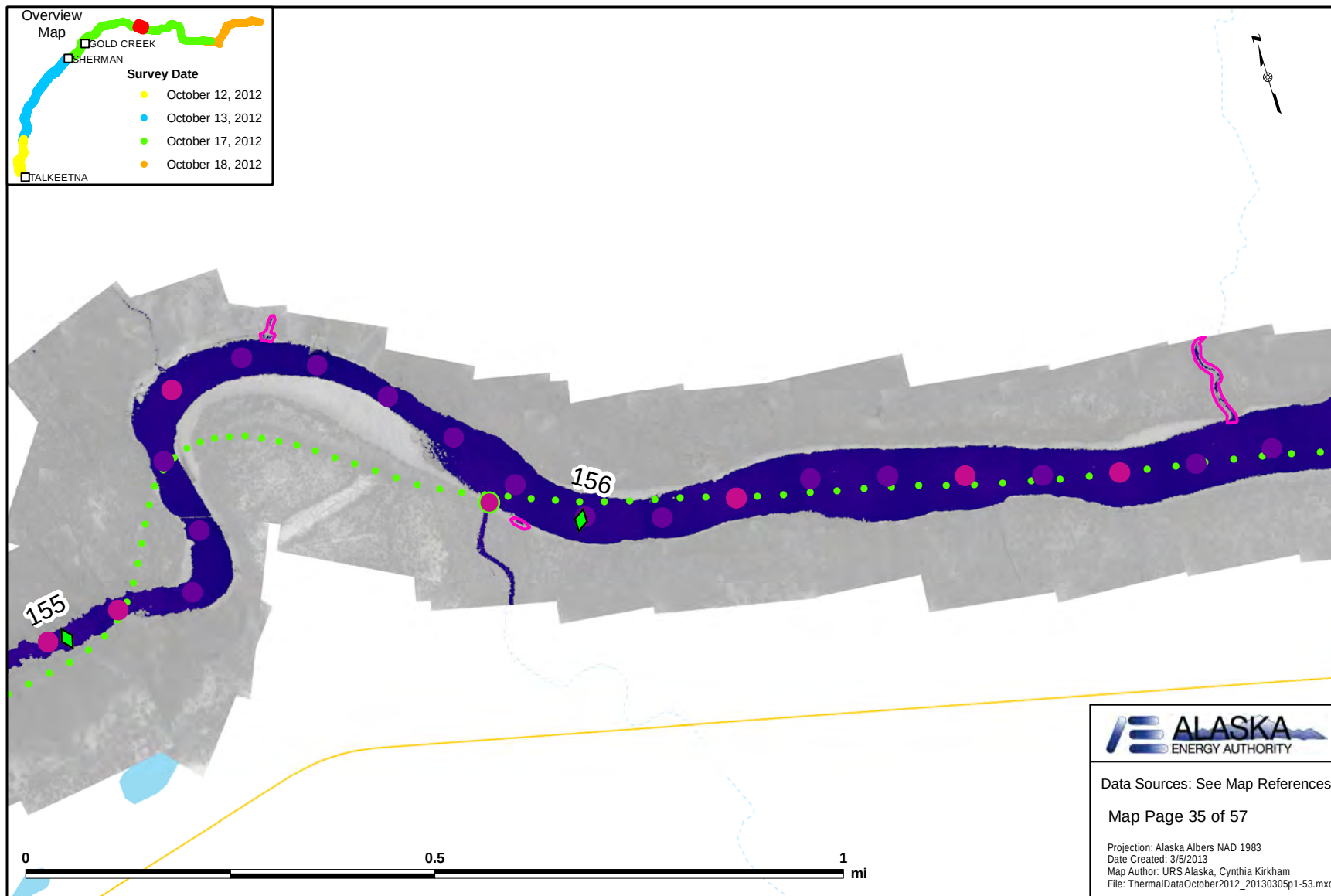
Data Sources: See Map References

Map Page 34 of 57

Projection: Alaska Albers NAD 1983
 Date Created: 3/5/2013
 Map Author: URS Alaska, Cynthia Kirkham
 File: ThermalDataOctober2012_20130305p1-53.mxd

Flightlines (Color Coded by Survey Date)	Sampled Centerline Points (Kelvin)	Sampled Inflow Points (Kelvin)
● October 12, 2012	● 271.7 - 272.1	● 271.7 - 272.1
● October 13, 2012	● 272.2 - 272.6	● 272.2 - 272.6
● October 17, 2012	● 272.7 - 273.1	● 272.7 - 273.1
● October 18, 2012	● 273.2 - 273.6	● 273.2 - 273.6
□ Area of Increased Groundwater Activity	● 273.7 - 274.1	● 273.7 - 274.1
◆ River Mile Index (2013)	● 274.2 - 274.5	● 274.2 - 274.5





Flightlines (Color Coded by Survey Date)	Sampled Centerline Points (Kelvin)	Sampled Inflow Points (Kelvin)
● October 12, 2012	● 271.7 - 272.1	● 271.7 - 272.1
● October 13, 2012	● 272.2 - 272.6	● 272.2 - 272.6
● October 17, 2012	● 272.7 - 273.1	● 272.7 - 273.1
● October 18, 2012	● 273.2 - 273.6	● 273.2 - 273.6
□ Area of Increased Groundwater Activity	● 273.7 - 274.1	● 273.7 - 274.1
◆ River Mile Index (2013)	● 274.2 - 274.5	● 274.2 - 274.5

October 12-13, 2012 Colorramp (Kelvin)



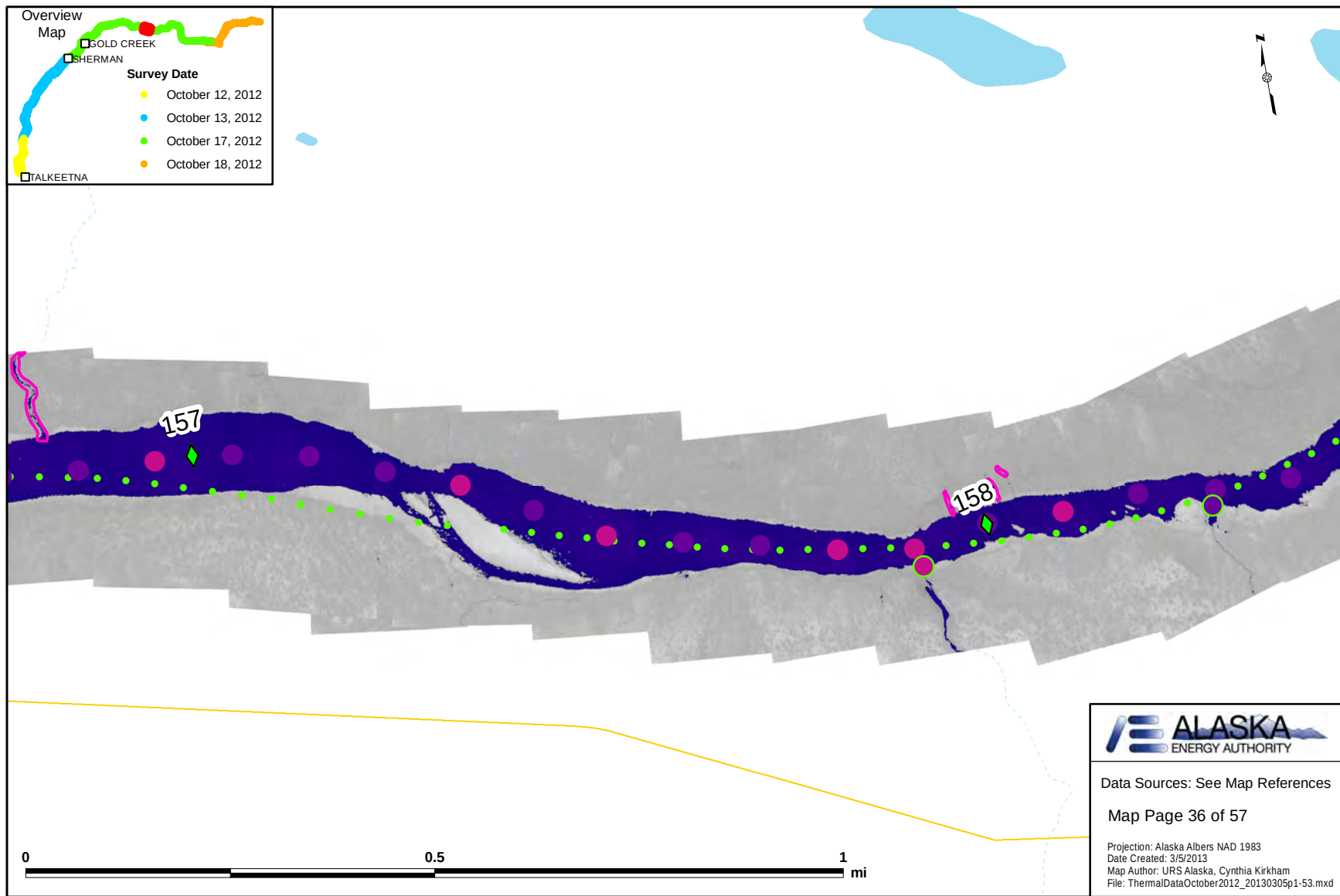
October 17-18, 2012 Colorramp (Kelvin)



Data Sources: See Map References

Map Page 35 of 57

Projection: Alaska Albers NAD 1983
Date Created: 3/5/2013
Map Author: URS Alaska, Cynthia Kirkham
File: ThermalDataOctober2012_20130305p1-53.mxd



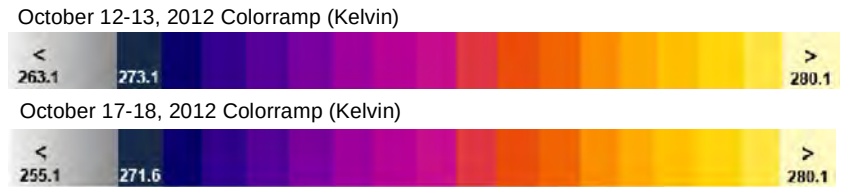
ALASKA
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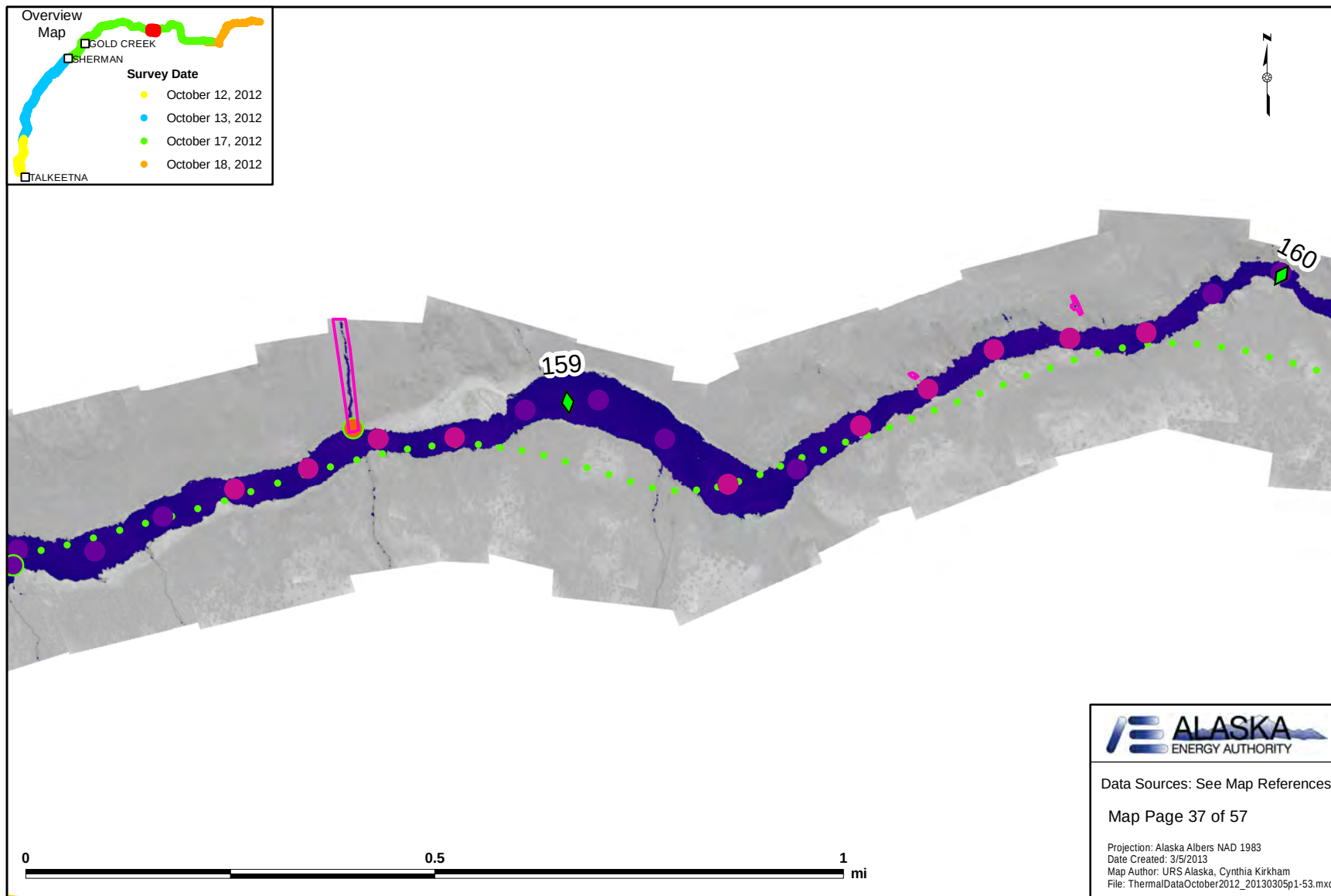
Data Sources: See Map References

Map Page 36 of 57

Projection: Alaska Albers NAD 1983
Date Created: 3/5/2013
Map Author: URS Alaska, Cynthia Kirkham
File: ThermalDataOctober2012_20130305p1-53.mxd

Flightlines (Color Coded by Survey Date)	Sampled Centerline Points (Kelvin)	Sampled Inflow Points (Kelvin)
● October 12, 2012	● 271.7 - 272.1	● 271.7 - 272.1
● October 13, 2012	● 272.2 - 272.6	● 272.2 - 272.6
● October 17, 2012	● 272.7 - 273.1	● 272.7 - 273.1
● October 18, 2012	● 273.2 - 273.6	● 273.2 - 273.6
□ Area of Increased Groundwater Activity	● 273.7 - 274.1	● 273.7 - 274.1
◆ River Mile Index (2013)	● 274.2 - 274.5	● 274.2 - 274.5





Data Sources: See Map References

Map Page 37 of 57

Projection: Alaska Albers NAD 1983
 Date Created: 3/5/2013
 Map Author: URS Alaska, Cynthia Kirkham
 File: ThermalDataOctober2012_20130305p1-53.mxd

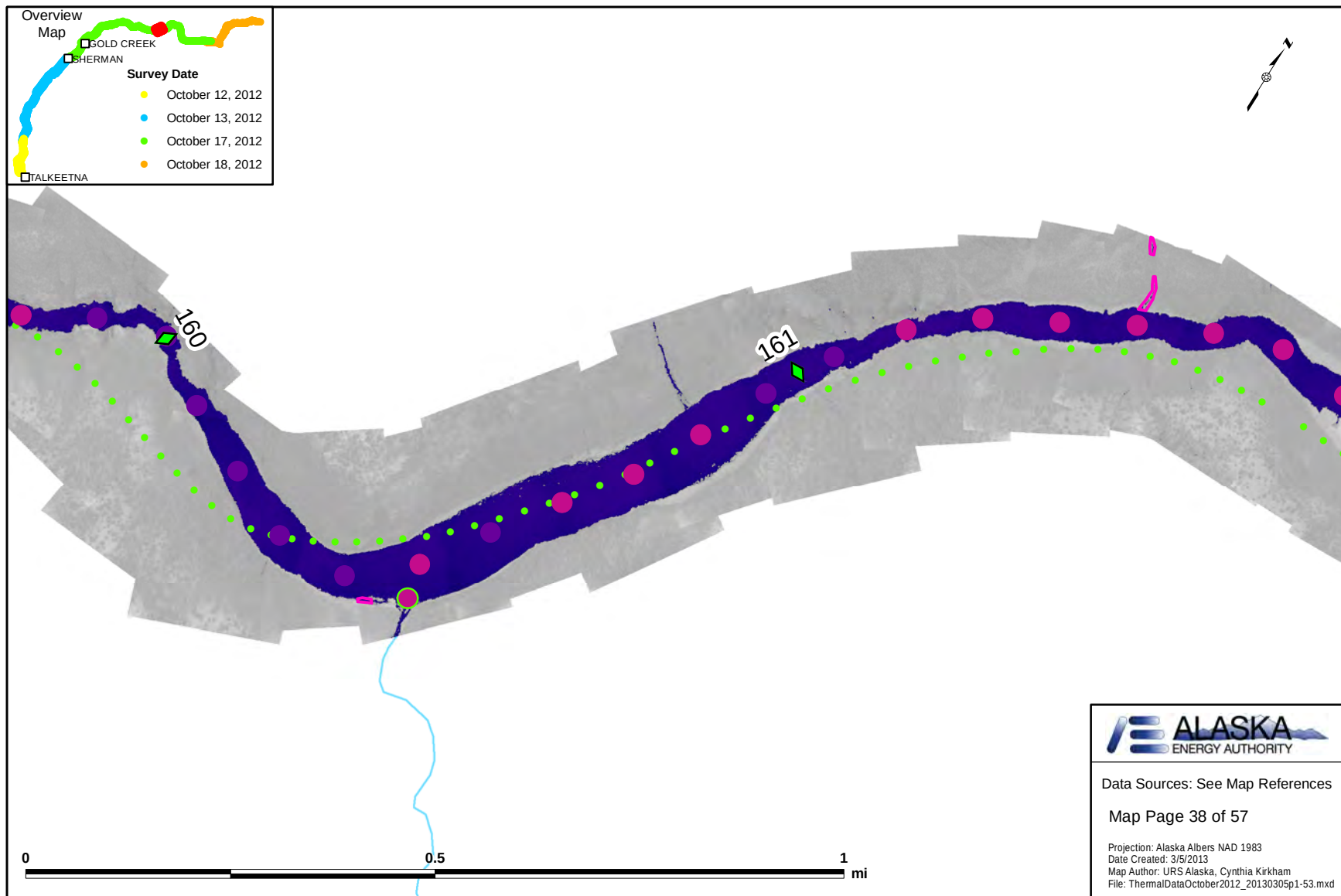
Flightlines (Color Coded by Survey Date)	Sampled Centerline Points (Kelvin)	Sampled Inflow Points (Kelvin)
● October 12, 2012	● 271.7 - 272.1	● 271.7 - 272.1
● October 13, 2012	● 272.2 - 272.6	● 272.2 - 272.6
● October 17, 2012	● 272.7 - 273.1	● 272.7 - 273.1
● October 18, 2012	● 273.2 - 273.6	● 273.2 - 273.6
□ Area of Increased Groundwater Activity	● 273.7 - 274.1	● 273.7 - 274.1
◆ River Mile Index (2013)	● 274.2 - 274.5	● 274.2 - 274.5

October 12-13, 2012 Colorramp (Kelvin)



October 17-18, 2012 Colorramp (Kelvin)





ALASKA ENERGY AUTHORITY

Data Sources: See Map References

Map Page 38 of 57

Projection: Alaska Albers NAD 1983
 Date Created: 3/5/2013
 Map Author: URS Alaska, Cynthia Kirkham
 File: ThermalDataOctober2012_20130305p1-53.mxd

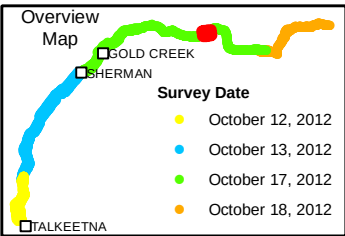
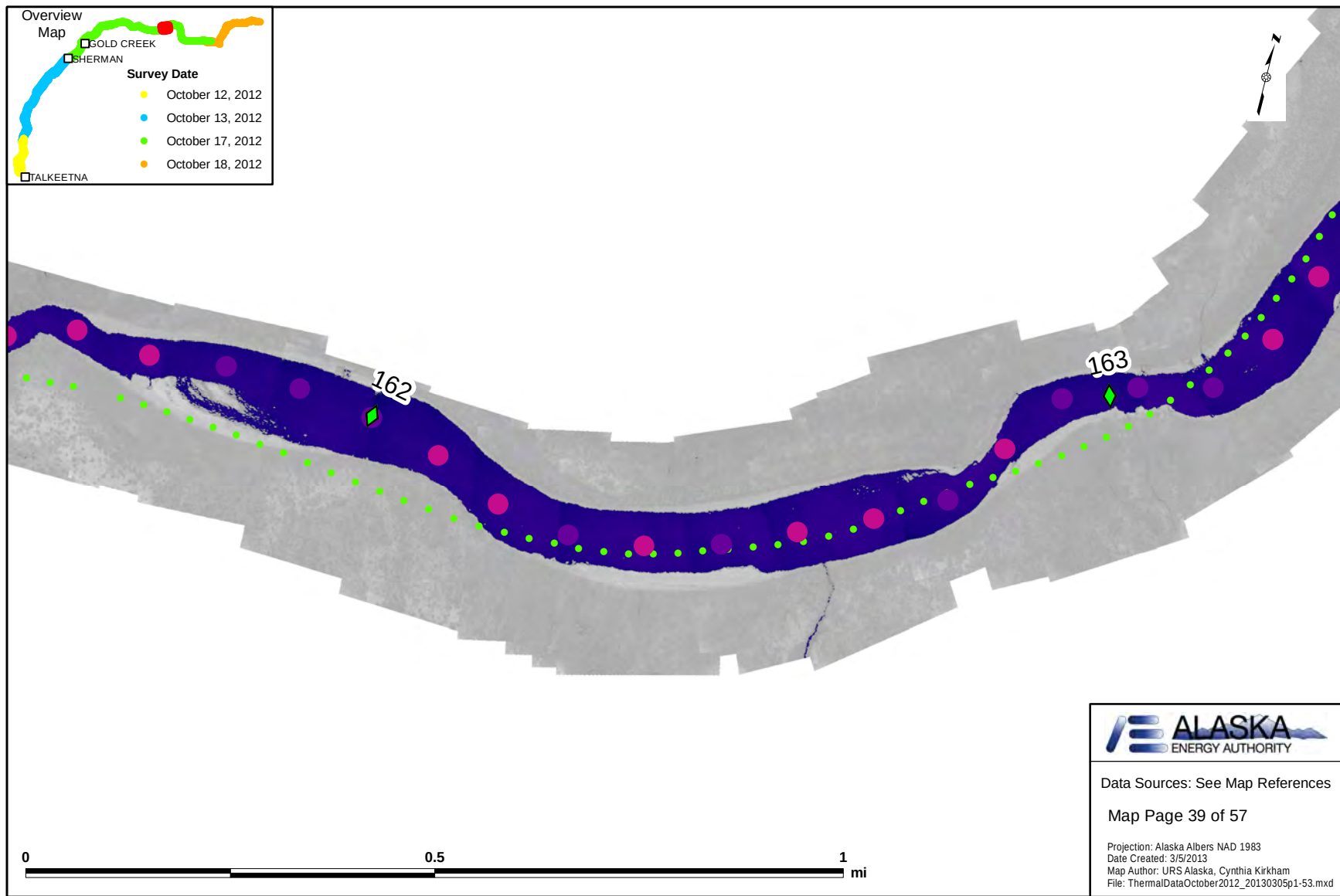
Flightlines (Color Coded by Survey Date)	Sampled Centerline Points (Kelvin)	Sampled Inflow Points (Kelvin)
● October 12, 2012	● 271.7 - 272.1	● 271.7 - 272.1
● October 13, 2012	● 272.2 - 272.6	● 272.2 - 272.6
● October 17, 2012	● 272.7 - 273.1	● 272.7 - 273.1
● October 18, 2012	● 273.2 - 273.6	● 273.2 - 273.6
□ Area of Increased Groundwater Activity	● 273.7 - 274.1	● 273.7 - 274.1
◆ River Mile Index (2013)	● 274.2 - 274.5	● 274.2 - 274.5

October 12-13, 2012 Colorramp (Kelvin)



October 17-18, 2012 Colorramp (Kelvin)





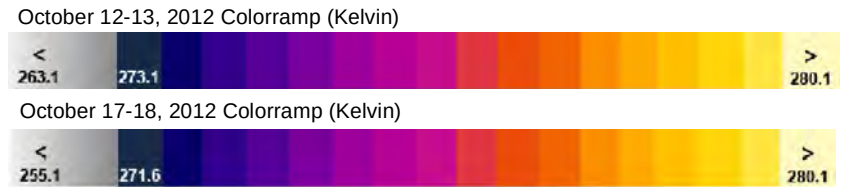
ALASKA ENERGY AUTHORITY

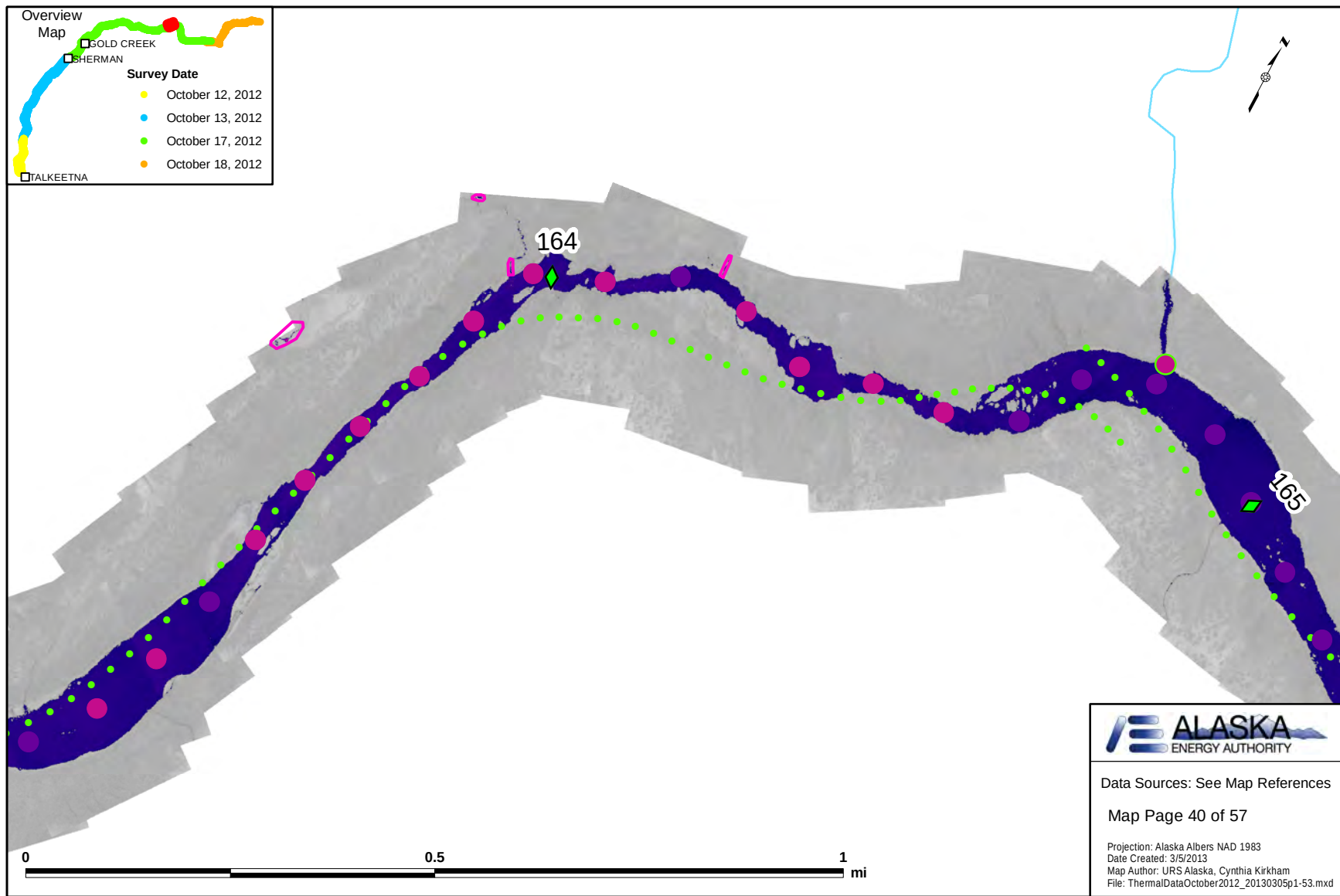
Data Sources: See Map References

Map Page 39 of 57

Projection: Alaska Albers NAD 1983
 Date Created: 3/5/2013
 Map Author: URS Alaska, Cynthia Kirkham
 File: ThermalDataOctober2012_20130305p1-53.mxd

Flightlines (Color Coded by Survey Date)	Sampled Centerline Points (Kelvin)	Sampled Inflow Points (Kelvin)
October 12, 2012	271.7 - 272.1	271.7 - 272.1
October 13, 2012	272.2 - 272.6	272.2 - 272.6
October 17, 2012	272.7 - 273.1	272.7 - 273.1
October 18, 2012	273.2 - 273.6	273.2 - 273.6
Area of Increased Groundwater Activity	273.7 - 274.1	273.7 - 274.1
River Mile Index (2013)	274.2 - 274.5	274.2 - 274.5





ALASKA
ENERGY AUTHORITY

Data Sources: See Map References

Map Page 40 of 57

Projection: Alaska Albers NAD 1983
Date Created: 3/5/2013
Map Author: URS Alaska, Cynthia Kirkham
File: ThermalDataOctober2012_20130305p1-53.mxd

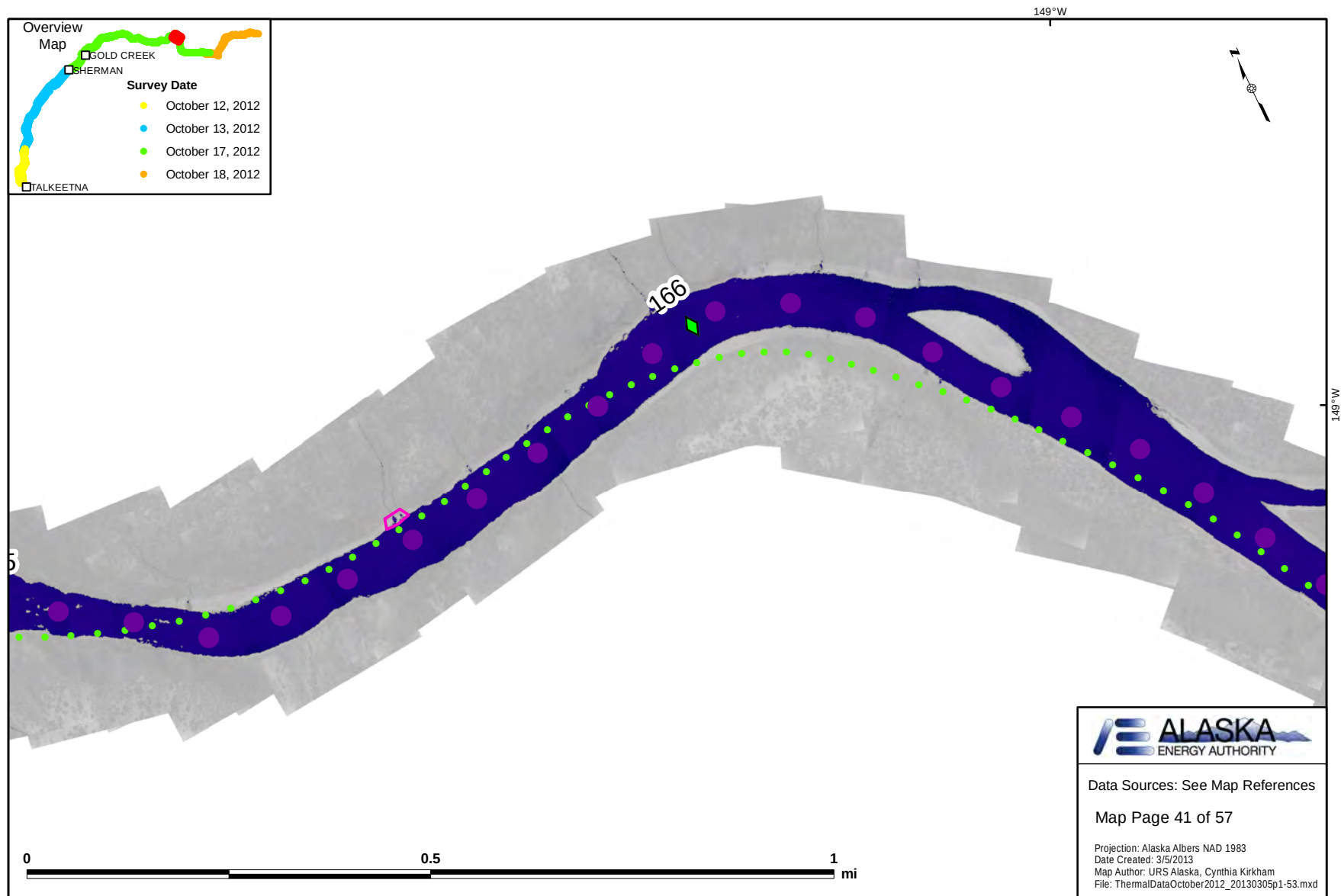
Flightlines (Color Coded by Survey Date)	Sampled Centerline Points (Kelvin)	Sampled Inflow Points (Kelvin)
● October 12, 2012	● 271.7 - 272.1	● 271.7 - 272.1
● October 13, 2012	● 272.2 - 272.6	● 272.2 - 272.6
● October 17, 2012	● 272.7 - 273.1	● 272.7 - 273.1
● October 18, 2012	● 273.2 - 273.6	● 273.2 - 273.6
□ Area of Increased Groundwater Activity	● 273.7 - 274.1	● 273.7 - 274.1
◆ River Mile Index (2013)	● 274.2 - 274.5	● 274.2 - 274.5

October 12-13, 2012 Colorramp (Kelvin)



October 17-18, 2012 Colorramp (Kelvin)





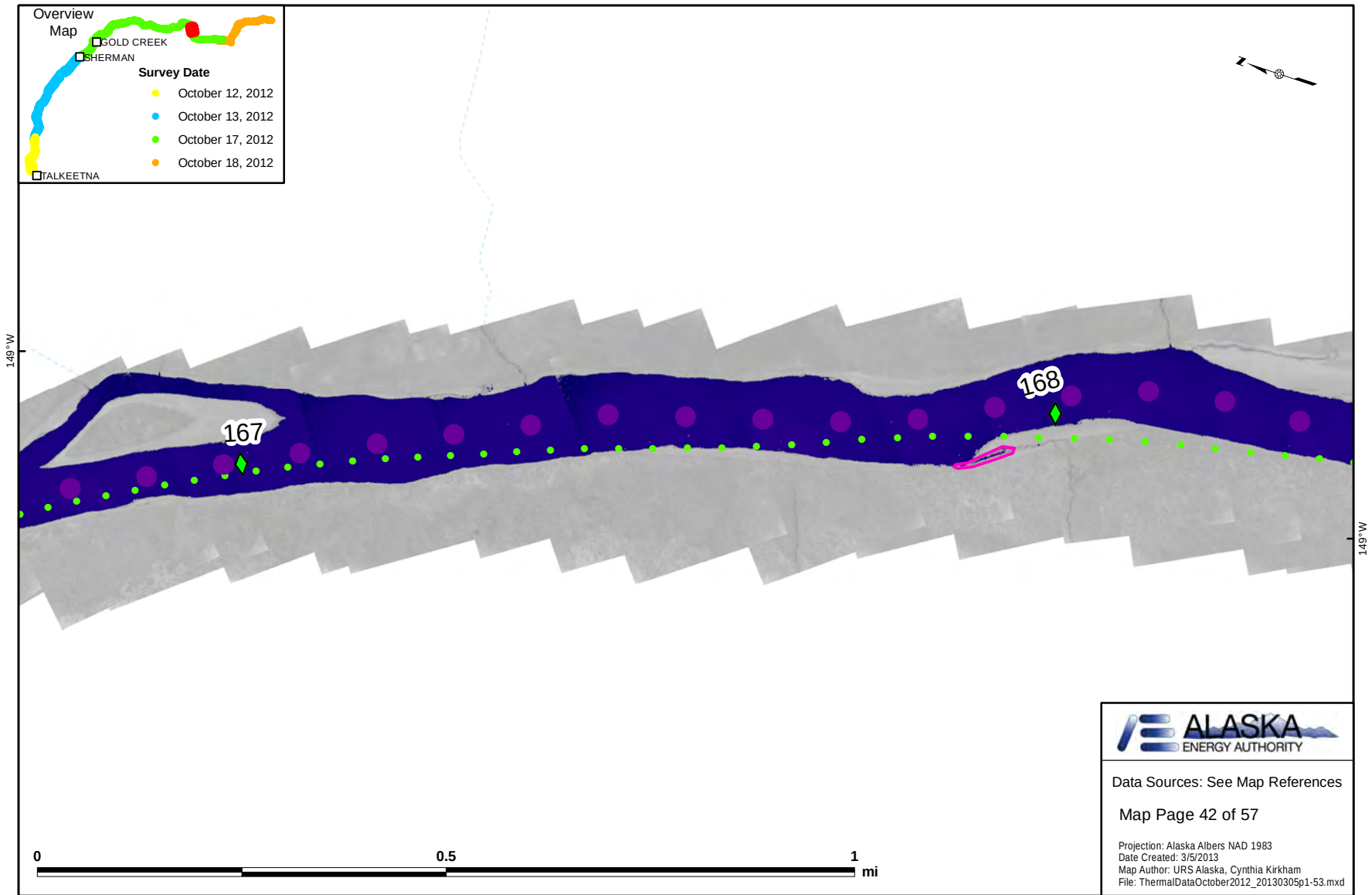
Flightlines (Color Coded by Survey Date)	Sampled Centerline Points (Kelvin)	Sampled Inflow Points (Kelvin)
October 12, 2012	271.7 - 272.1	271.7 - 272.1
October 13, 2012	272.2 - 272.6	272.2 - 272.6
October 17, 2012	272.7 - 273.1	272.7 - 273.1
October 18, 2012	273.2 - 273.6	273.2 - 273.6
Area of Increased Groundwater Activity	273.7 - 274.1	273.7 - 274.1
River Mile Index (2013)	274.2 - 274.5	274.2 - 274.5

October 12-13, 2012 Colorramp (Kelvin)



October 17-18, 2012 Colorramp (Kelvin)





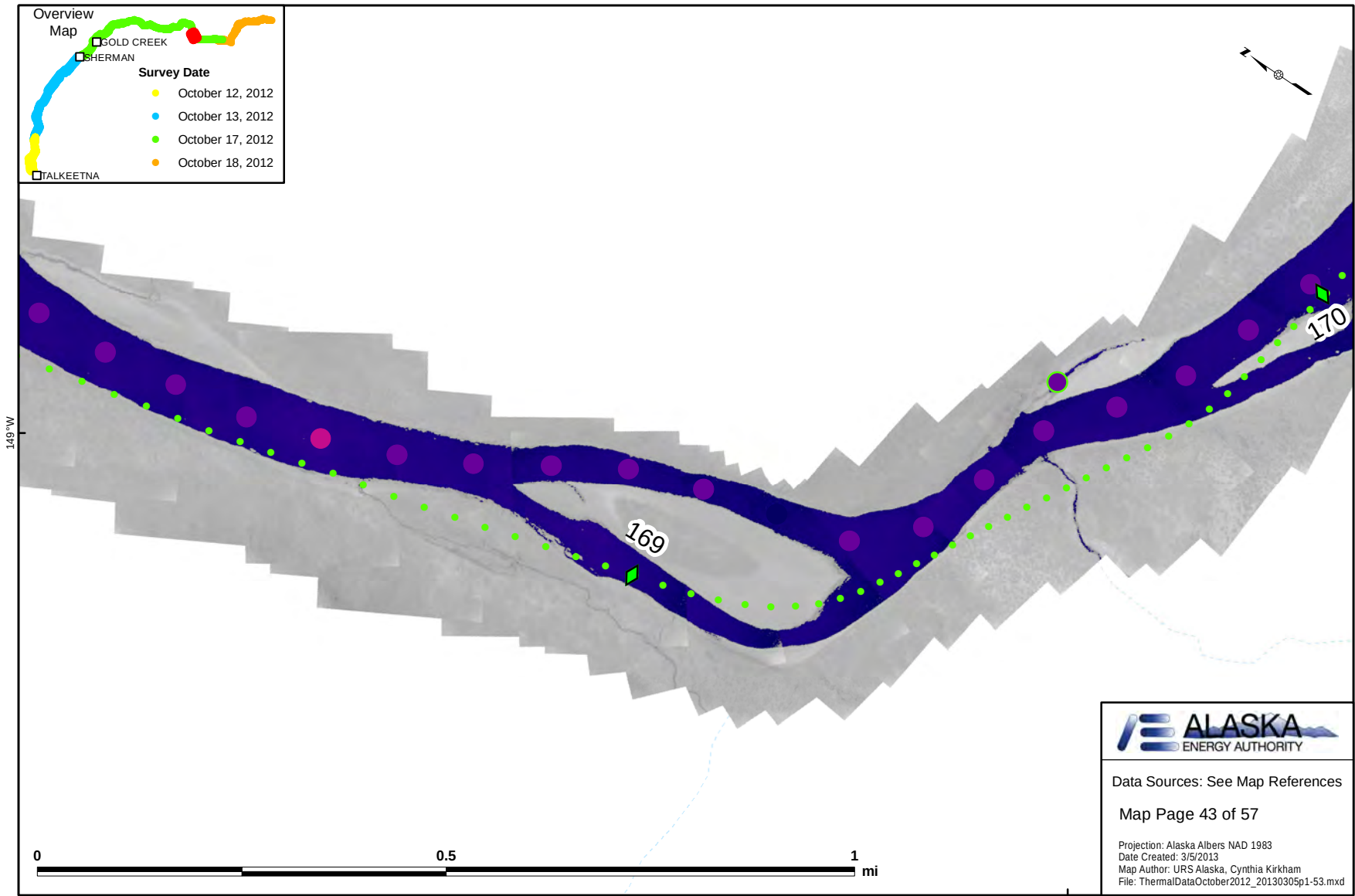
Flightlines (Color Coded by Survey Date)	Sampled Centerline Points (Kelvin)	Sampled Inflow Points (Kelvin)
October 12, 2012	271.7 - 272.1	271.7 - 272.1
October 13, 2012	272.2 - 272.6	272.2 - 272.6
October 17, 2012	272.7 - 273.1	272.7 - 273.1
October 18, 2012	273.2 - 273.6	273.2 - 273.6
Area of Increased Groundwater Activity	273.7 - 274.1	273.7 - 274.1
River Mile Index (2013)	274.2 - 274.5	274.2 - 274.5

October 12-13, 2012 Colorramp (Kelvin)



October 17-18, 2012 Colorramp (Kelvin)



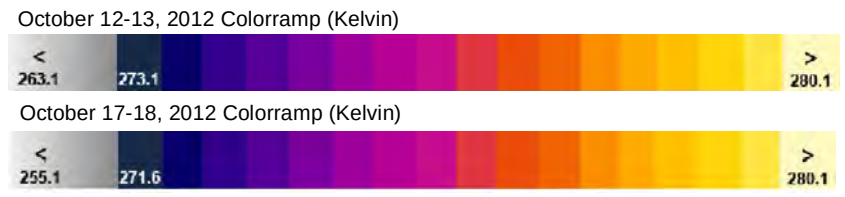


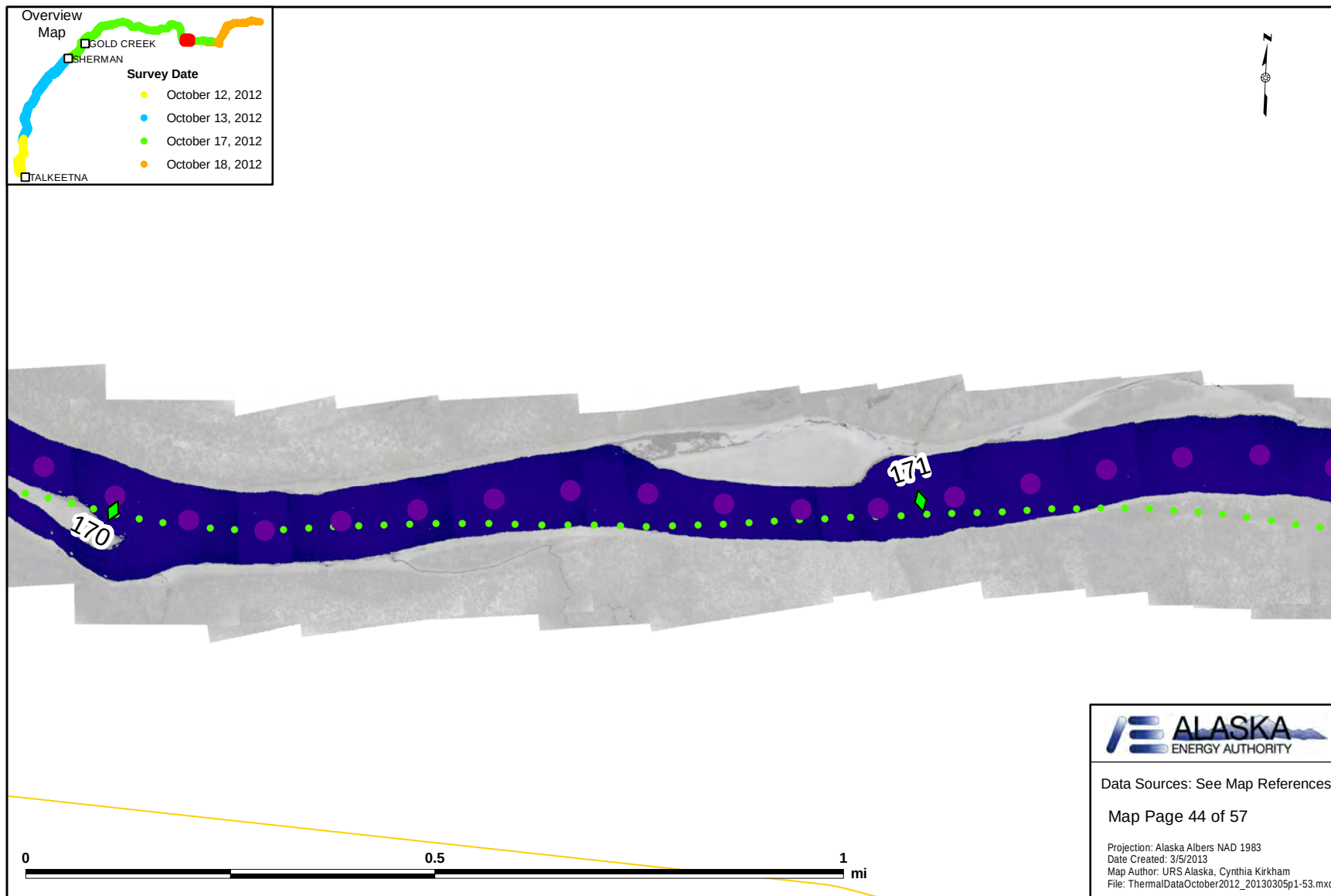
Data Sources: See Map References

Map Page 43 of 57

Projection: Alaska Albers NAD 1983
 Date Created: 3/5/2013
 Map Author: URS Alaska, Cynthia Kirkham
 File: ThermalDataOctober2012_20130305p1-53.mxd

Flightlines (Color Coded by Survey Date)	Sampled Centerline Points (Kelvin)	Sampled Inflow Points (Kelvin)
- October 12, 2012 - October 13, 2012 - October 17, 2012 - October 18, 2012	271.7 - 272.1 272.2 - 272.6 272.7 - 273.1 273.2 - 273.6 273.7 - 274.1 274.2 - 274.5	271.7 - 272.1 272.2 - 272.6 272.7 - 273.1 273.2 - 273.6 273.7 - 274.1 274.2 - 274.5
- Area of Increased Groundwater Activity - River Mile Index (2013)		





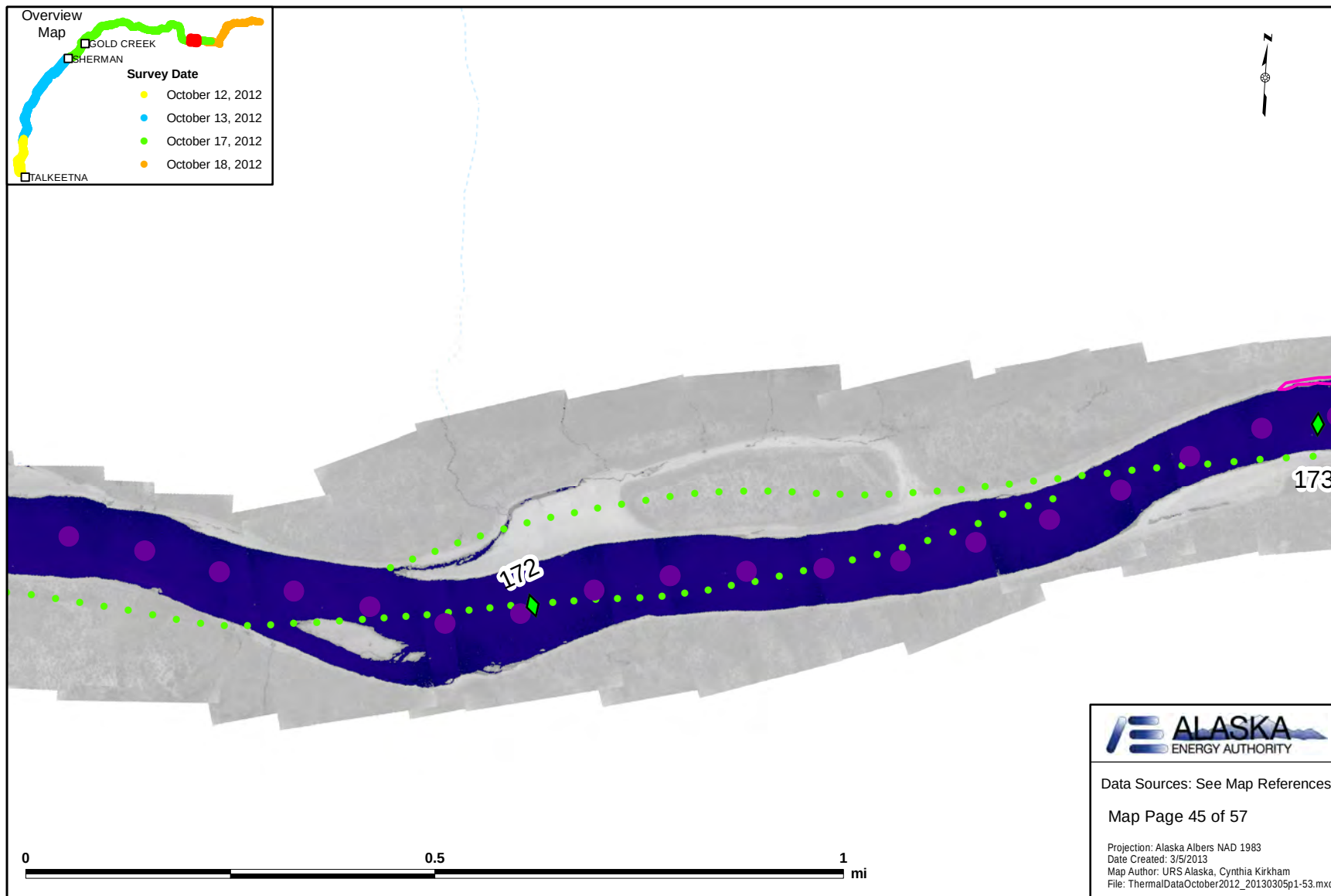
Flightlines (Color Coded by Survey Date)	Sampled Centerline Points (Kelvin)	Sampled Inflow Points (Kelvin)
October 12, 2012	271.7 - 272.1	271.7 - 272.1
October 13, 2012	272.2 - 272.6	272.2 - 272.6
October 17, 2012	272.7 - 273.1	272.7 - 273.1
October 18, 2012	273.2 - 273.6	273.2 - 273.6
Area of Increased Groundwater Activity	273.7 - 274.1	273.7 - 274.1
River Mile Index (2013)	274.2 - 274.5	274.2 - 274.5

October 12-13, 2012 Colorramp (Kelvin)



October 17-18, 2012 Colorramp (Kelvin)





Data Sources: See Map References

Map Page 45 of 57

Projection: Alaska Albers NAD 1983
 Date Created: 3/5/2013
 Map Author: URS Alaska, Cynthia Kirkham
 File: ThermalDataOctober2012_20130305p1-53.mxd

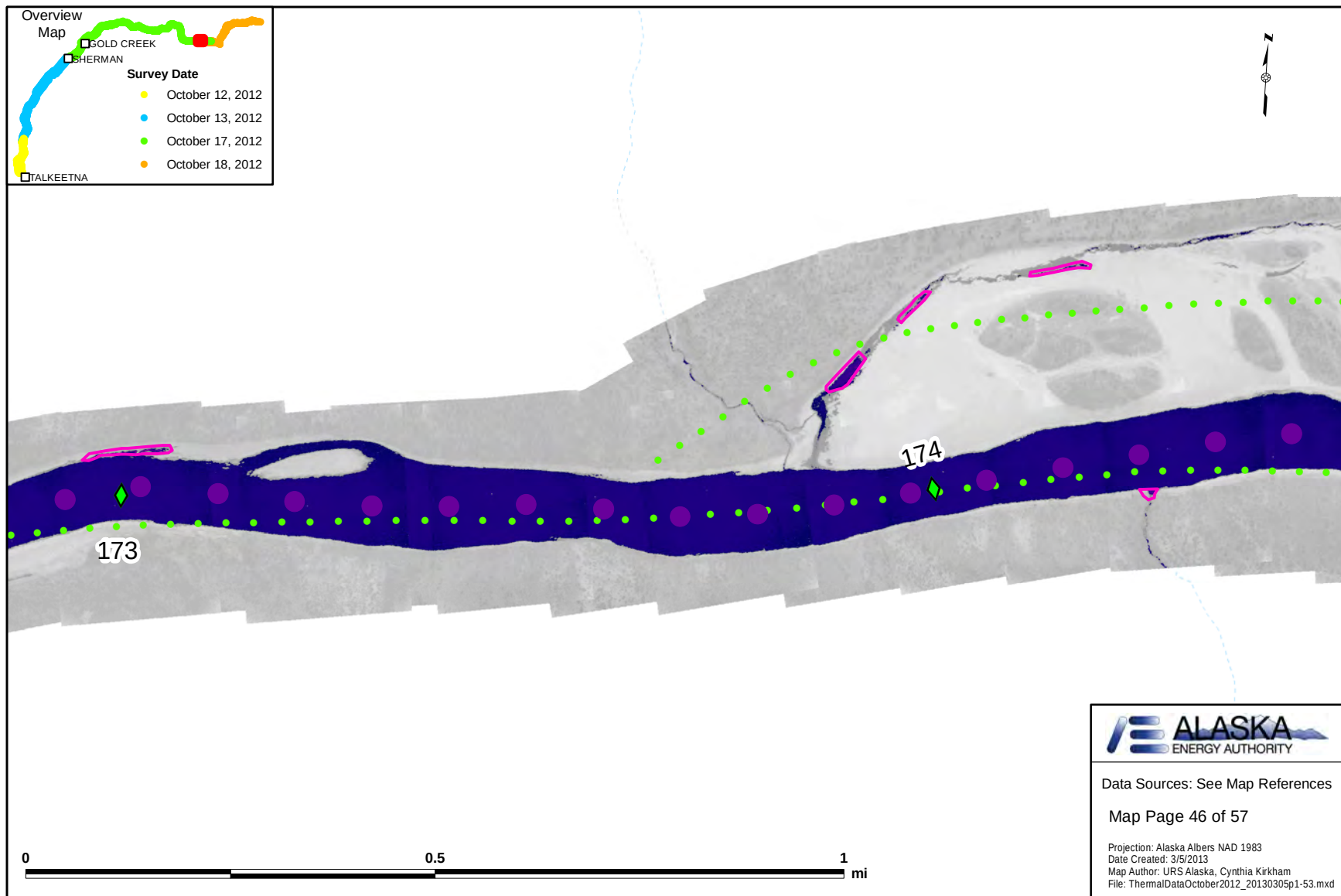
Flightlines (Color Coded by Survey Date)	Sampled Centerline Points (Kelvin)	Sampled Inflow Points (Kelvin)
● October 12, 2012	● 271.7 - 272.1	● 271.7 - 272.1
● October 13, 2012	● 272.2 - 272.6	● 272.2 - 272.6
● October 17, 2012	● 272.7 - 273.1	● 272.7 - 273.1
● October 18, 2012	● 273.2 - 273.6	● 273.2 - 273.6
□ Area of Increased Groundwater Activity	● 273.7 - 274.1	● 273.7 - 274.1
◆ River Mile Index (2013)	● 274.2 - 274.5	● 274.2 - 274.5

October 12-13, 2012 Colorramp (Kelvin)



October 17-18, 2012 Colorramp (Kelvin)





ALASKA
ENERGY AUTHORITY

Data Sources: See Map References

Map Page 46 of 57

Projection: Alaska Albers NAD 1983
Date Created: 3/5/2013
Map Author: URS Alaska, Cynthia Kirkham
File: ThermalDataOctober2012_20130305p1-53.mxd

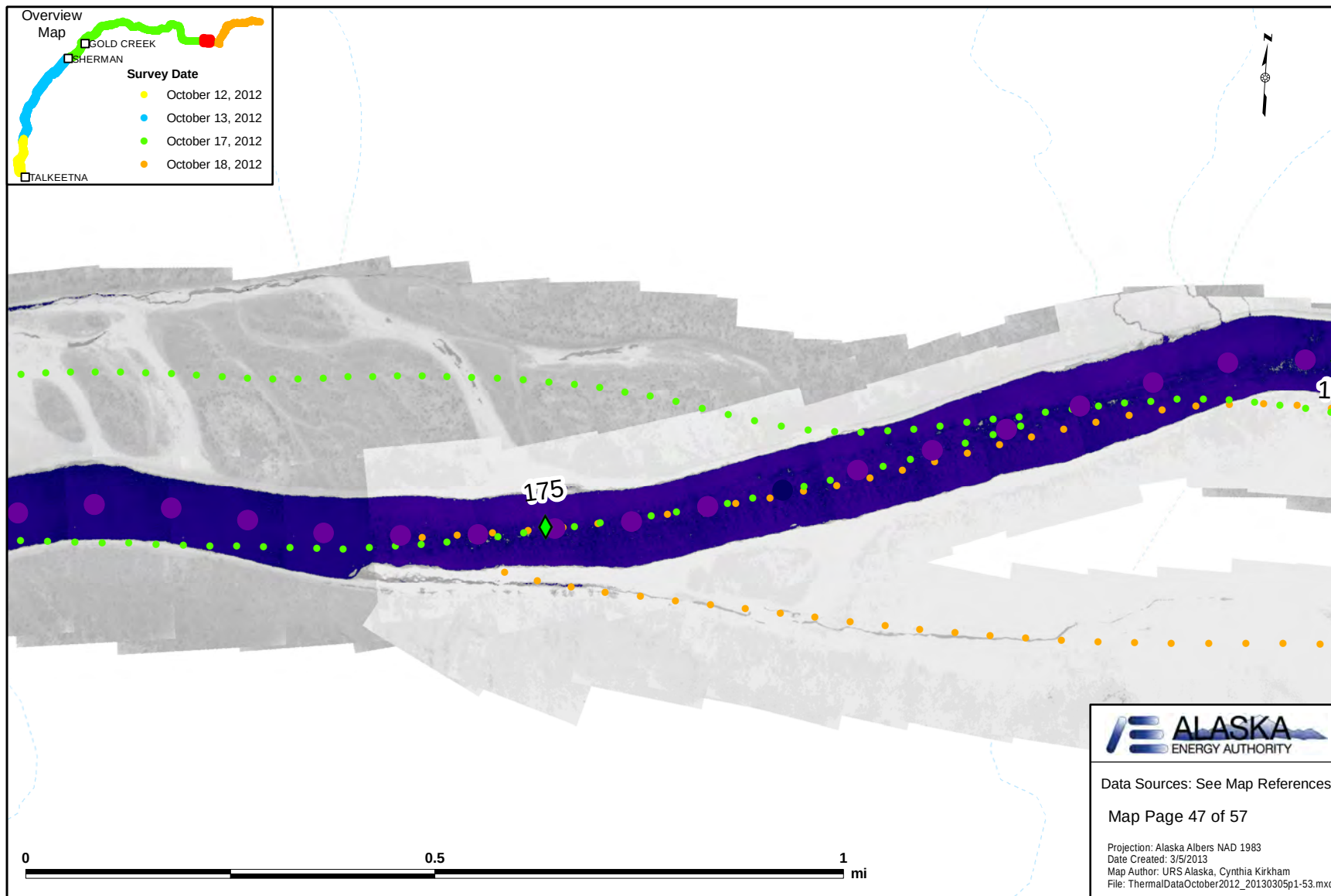
Flightlines (Color Coded by Survey Date)	Sampled Centerline Points (Kelvin)	Sampled Inflow Points (Kelvin)
October 12, 2012	271.7 - 272.1	271.7 - 272.1
October 13, 2012	272.2 - 272.6	272.2 - 272.6
October 17, 2012	272.7 - 273.1	272.7 - 273.1
October 18, 2012	273.2 - 273.6	273.2 - 273.6
Area of Increased Groundwater Activity	273.7 - 274.1	273.7 - 274.1
River Mile Index (2013)	274.2 - 274.5	274.2 - 274.5

October 12-13, 2012 Colormap (Kelvin)



October 17-18, 2012 Colormap (Kelvin)





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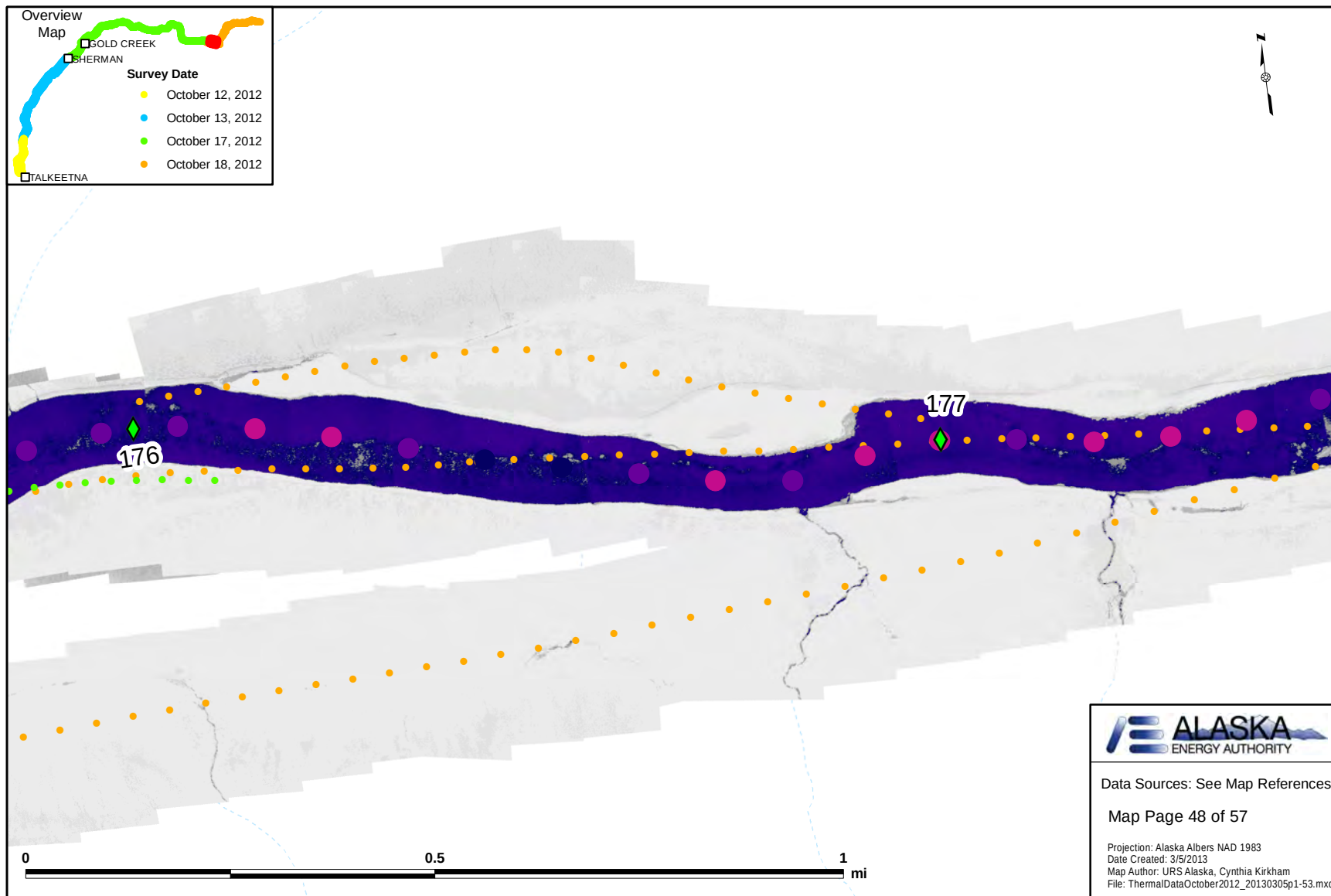
Data Sources: See Map References

Map Page 47 of 57

Projection: Alaska Albers NAD 1983
 Date Created: 3/5/2013
 Map Author: URS Alaska, Cynthia Kirkham
 File: ThermalDataOctober2012_20130305p1-53.mxd

Flightlines (Color Coded by Survey Date)	Sampled Centerline Points (Kelvin)	Sampled Inflow Points (Kelvin)
● October 12, 2012	● 271.7 - 272.1	● 271.7 - 272.1
● October 13, 2012	● 272.2 - 272.6	● 272.2 - 272.6
● October 17, 2012	● 272.7 - 273.1	● 272.7 - 273.1
● October 18, 2012	● 273.2 - 273.6	● 273.2 - 273.6
□ Area of Increased Groundwater Activity	● 273.7 - 274.1	● 273.7 - 274.1
◆ River Mile Index (2013)	● 274.2 - 274.5	● 274.2 - 274.5





Data Sources: See Map References

Map Page 48 of 57

Projection: Alaska Albers NAD 1983
 Date Created: 3/5/2013
 Map Author: URS Alaska, Cynthia Kirkham
 File: ThermalDataOctober2012_20130305p1-53.mxd

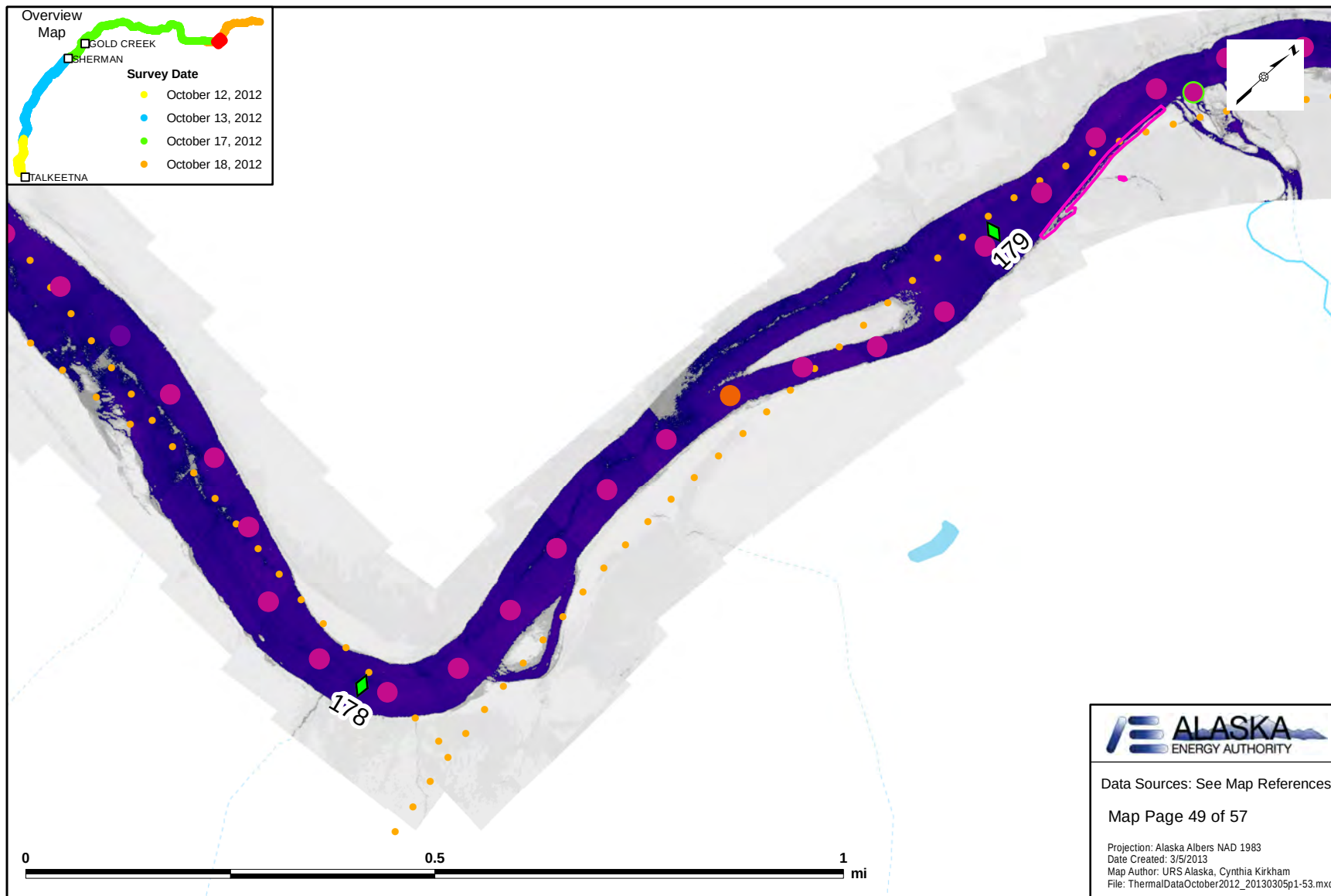
Flightlines (Color Coded by Survey Date)	Sampled Centerline Points (Kelvin)	Sampled Inflow Points (Kelvin)
October 12, 2012	271.7 - 272.1	271.7 - 272.1
October 13, 2012	272.2 - 272.6	272.2 - 272.6
October 17, 2012	272.7 - 273.1	272.7 - 273.1
October 18, 2012	273.2 - 273.6	273.2 - 273.6
Area of Increased Groundwater Activity	273.7 - 274.1	273.7 - 274.1
River Mile Index (2013)	274.2 - 274.5	274.2 - 274.5

October 12-13, 2012 Colorramp (Kelvin)



October 17-18, 2012 Colorramp (Kelvin)





Data Sources: See Map References

Map Page 49 of 57

Projection: Alaska Albers NAD 1983
 Date Created: 3/5/2013
 Map Author: URS Alaska, Cynthia Kirkham
 File: ThermalDataOctober2012_20130305p1-53.mxd

Flightlines (Color Coded by Survey Date)

- October 12, 2012
- October 13, 2012
- October 17, 2012
- October 18, 2012
- Area of Increased Groundwater Activity
- River Mile Index (2013)

Sampled Centerline Points (Kelvin)

- 271.7 - 272.1
- 272.2 - 272.6
- 272.7 - 273.1
- 273.2 - 273.6
- 273.7 - 274.1
- 274.2 - 274.5

Sampled Inflow Points (Kelvin)

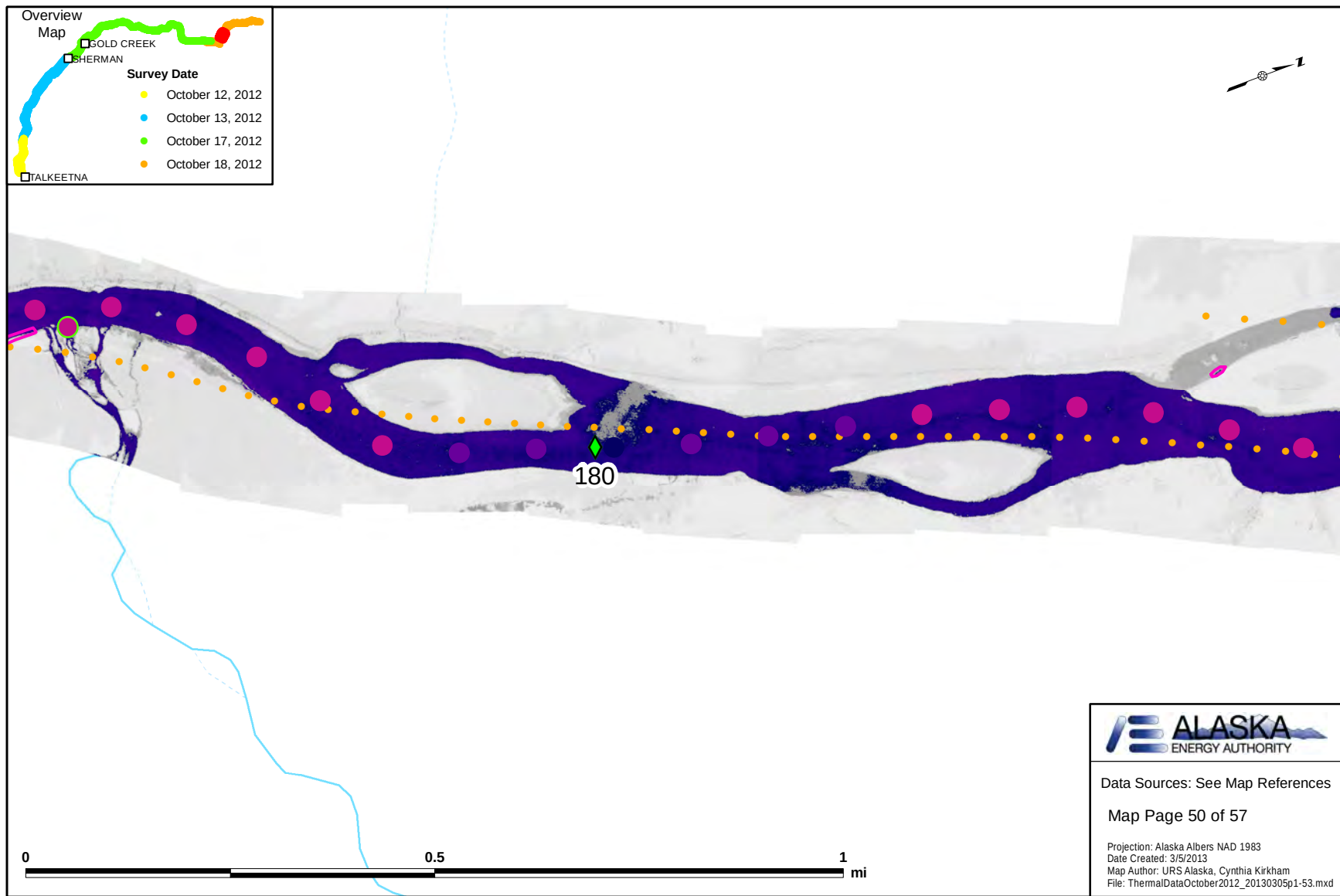
- 271.7 - 272.1
- 272.2 - 272.6
- 272.7 - 273.1
- 273.2 - 273.6
- 273.7 - 274.1
- 274.2 - 274.5

October 12-13, 2012 Colorramp (Kelvin)



October 17-18, 2012 Colorramp (Kelvin)





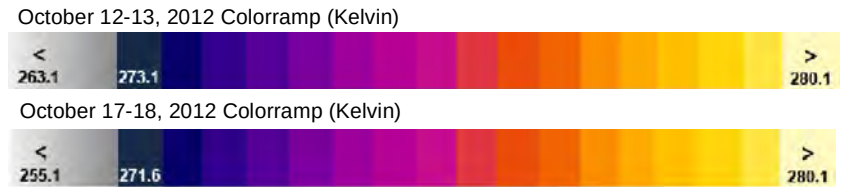
ALASKA ENERGY AUTHORITY

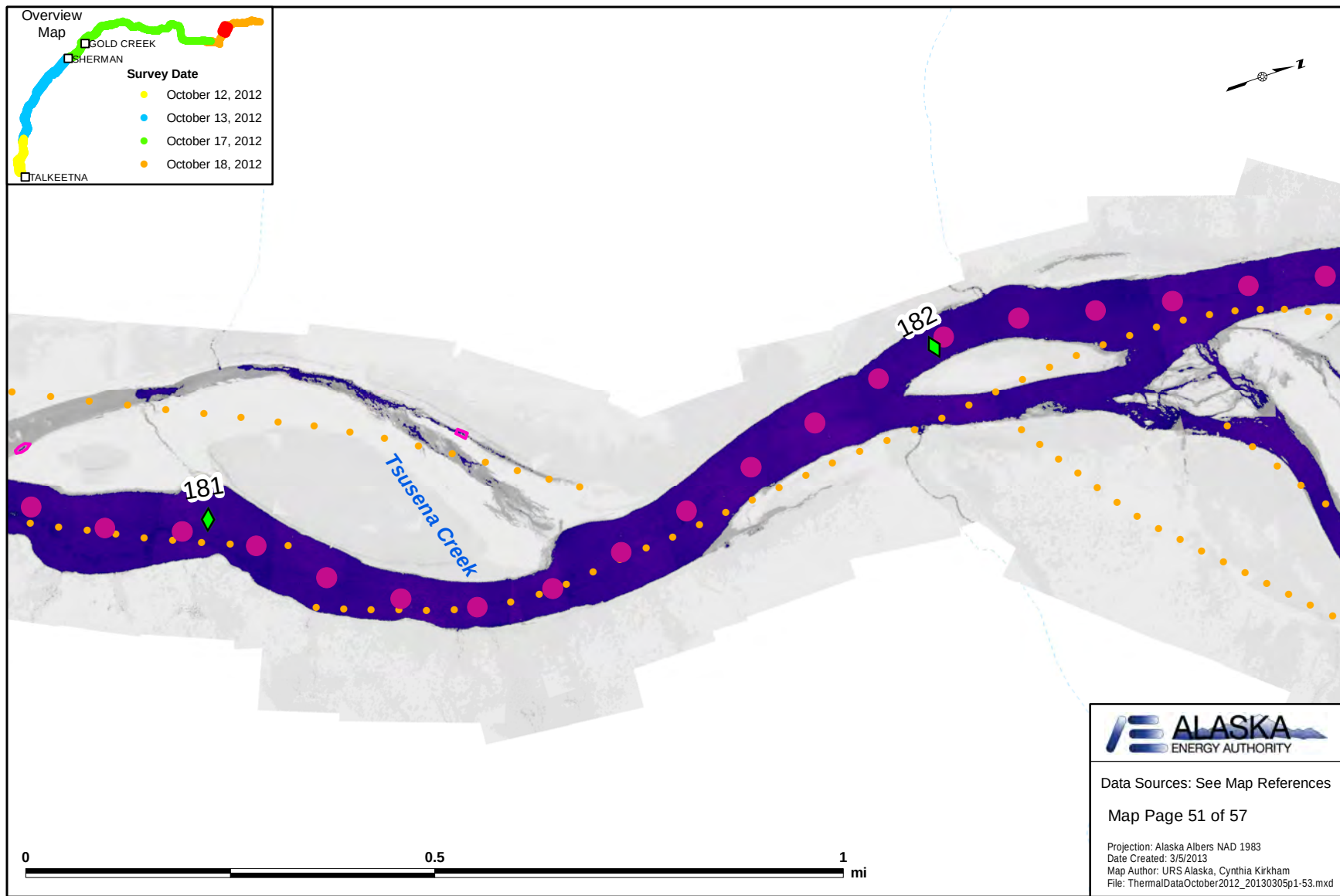
Data Sources: See Map References

Map Page 50 of 57

Projection: Alaska Albers NAD 1983
 Date Created: 3/5/2013
 Map Author: URS Alaska, Cynthia Kirkham
 File: ThermalDataOctober2012_20130305p1-53.mxd

Flightlines (Color Coded by Survey Date)	Sampled Centerline Points (Kelvin)	Sampled Inflow Points (Kelvin)
October 12, 2012	271.7 - 272.1	271.7 - 272.1
October 13, 2012	272.2 - 272.6	272.2 - 272.6
October 17, 2012	272.7 - 273.1	272.7 - 273.1
October 18, 2012	273.2 - 273.6	273.2 - 273.6
Area of Increased Groundwater Activity	273.7 - 274.1	273.7 - 274.1
River Mile Index (2013)	274.2 - 274.5	274.2 - 274.5





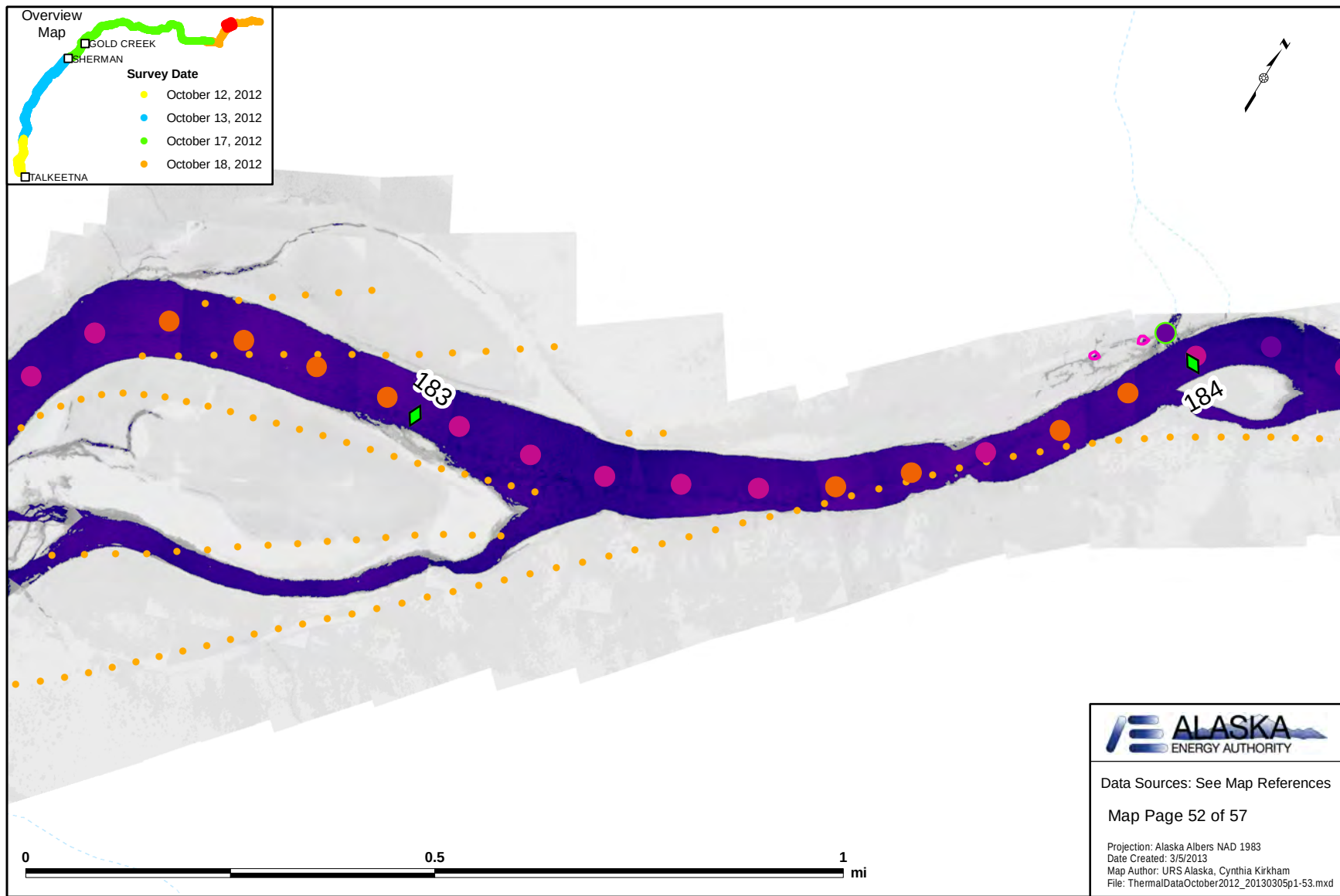
Flightlines (Color Coded by Survey Date)	Sampled Centerline Points (Kelvin)	Sampled Inflow Points (Kelvin)
October 12, 2012	271.7 - 272.1	271.7 - 272.1
October 13, 2012	272.2 - 272.6	272.2 - 272.6
October 17, 2012	272.7 - 273.1	272.7 - 273.1
October 18, 2012	273.2 - 273.6	273.2 - 273.6
Area of Increased Groundwater Activity	273.7 - 274.1	273.7 - 274.1
River Mile Index (2013)	274.2 - 274.5	274.2 - 274.5

October 12-13, 2012 Colorramp (Kelvin)



October 17-18, 2012 Colorramp (Kelvin)





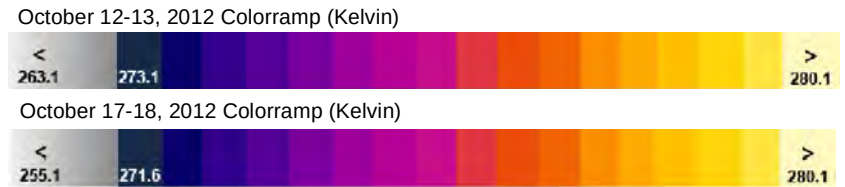
ALASKA ENERGY AUTHORITY

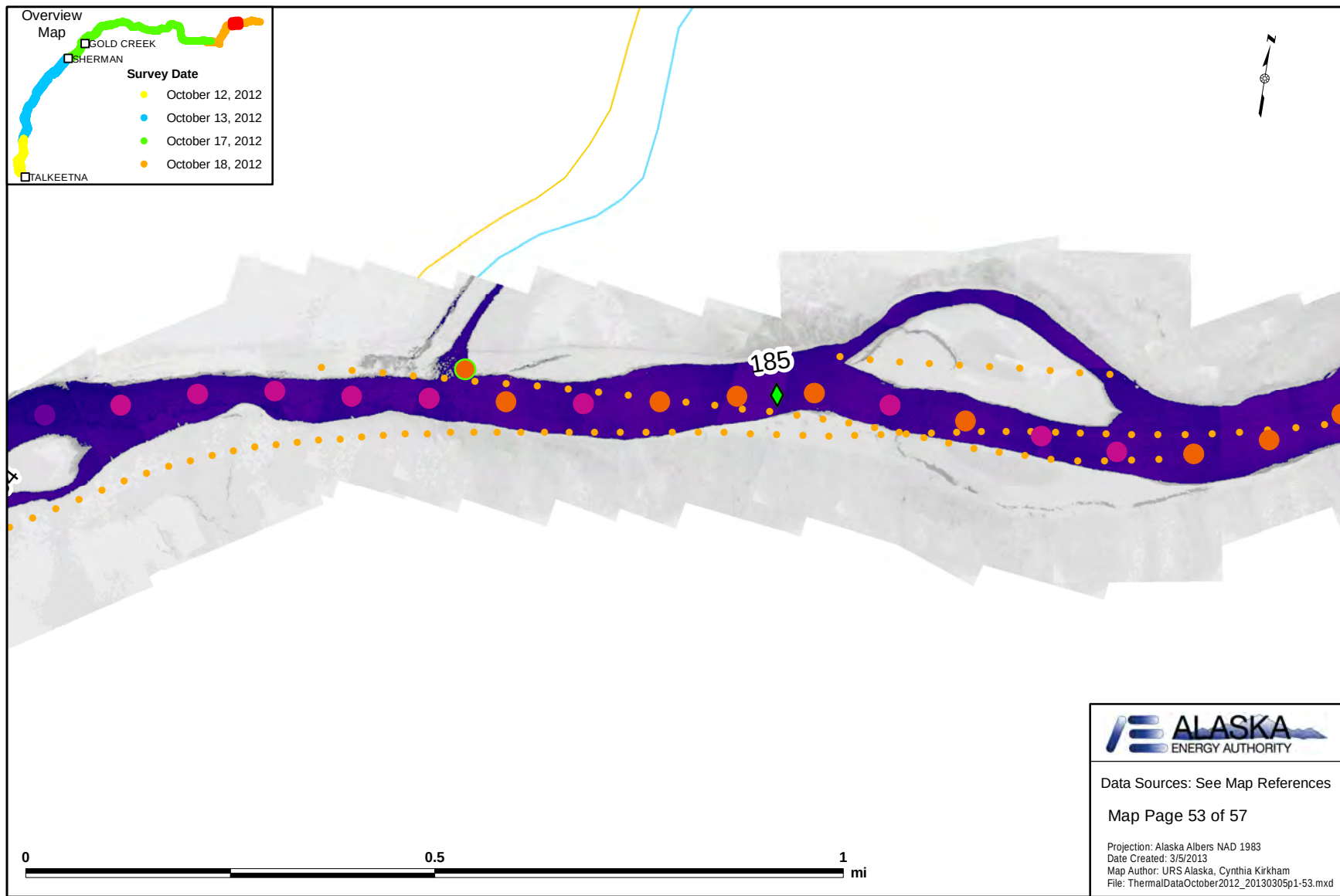
Data Sources: See Map References

Map Page 52 of 57

Projection: Alaska Albers NAD 1983
 Date Created: 3/5/2013
 Map Author: URS Alaska, Cynthia Kirkham
 File: ThermalDataOctober2012_20130305p1-53.mxd

Flightlines (Color Coded by Survey Date)	Sampled Centerline Points (Kelvin)	Sampled Inflow Points (Kelvin)
● October 12, 2012	● 271.7 - 272.1	● 271.7 - 272.1
● October 13, 2012	● 272.2 - 272.6	● 272.2 - 272.6
● October 17, 2012	● 272.7 - 273.1	● 272.7 - 273.1
● October 18, 2012	● 273.2 - 273.6	● 273.2 - 273.6
□ Area of Increased Groundwater Activity	● 273.7 - 274.1	● 273.7 - 274.1
◆ River Mile Index (2013)	● 274.2 - 274.5	● 274.2 - 274.5





Data Sources: See Map References

Map Page 53 of 57

Projection: Alaska Albers NAD 1983
 Date Created: 3/5/2013
 Map Author: URS Alaska, Cynthia Kirkham
 File: ThermalDataOctober2012_20130305p1-53.mxd

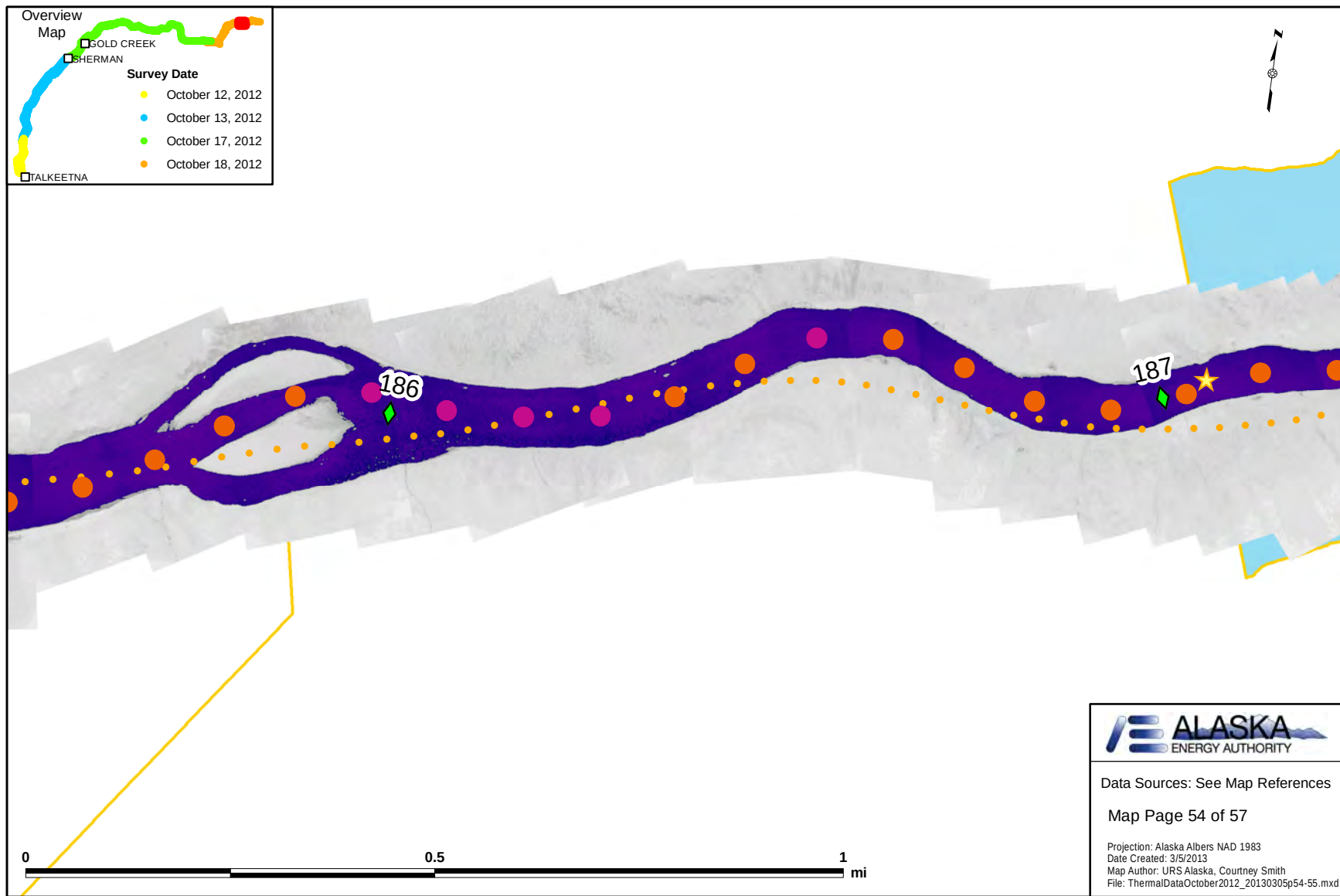
Flightlines (Color Coded by Survey Date)	Sampled Centerline Points (Kelvin)	Sampled Inflow Points (Kelvin)
October 12, 2012	271.7 - 272.1	271.7 - 272.1
October 13, 2012	272.2 - 272.6	272.2 - 272.6
October 17, 2012	272.7 - 273.1	272.7 - 273.1
October 18, 2012	273.2 - 273.6	273.2 - 273.6
Area of Increased Groundwater Activity	273.7 - 274.1	273.7 - 274.1
River Mile Index (2013)	274.2 - 274.5	274.2 - 274.5

October 12-13, 2012 Colorramp (Kelvin)



October 17-18, 2012 Colorramp (Kelvin)



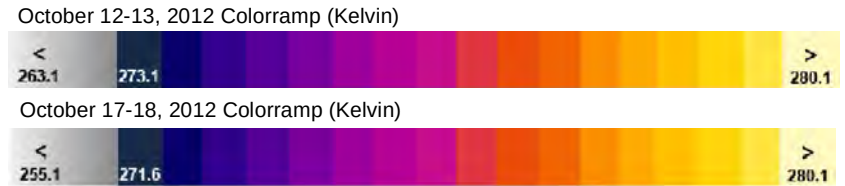


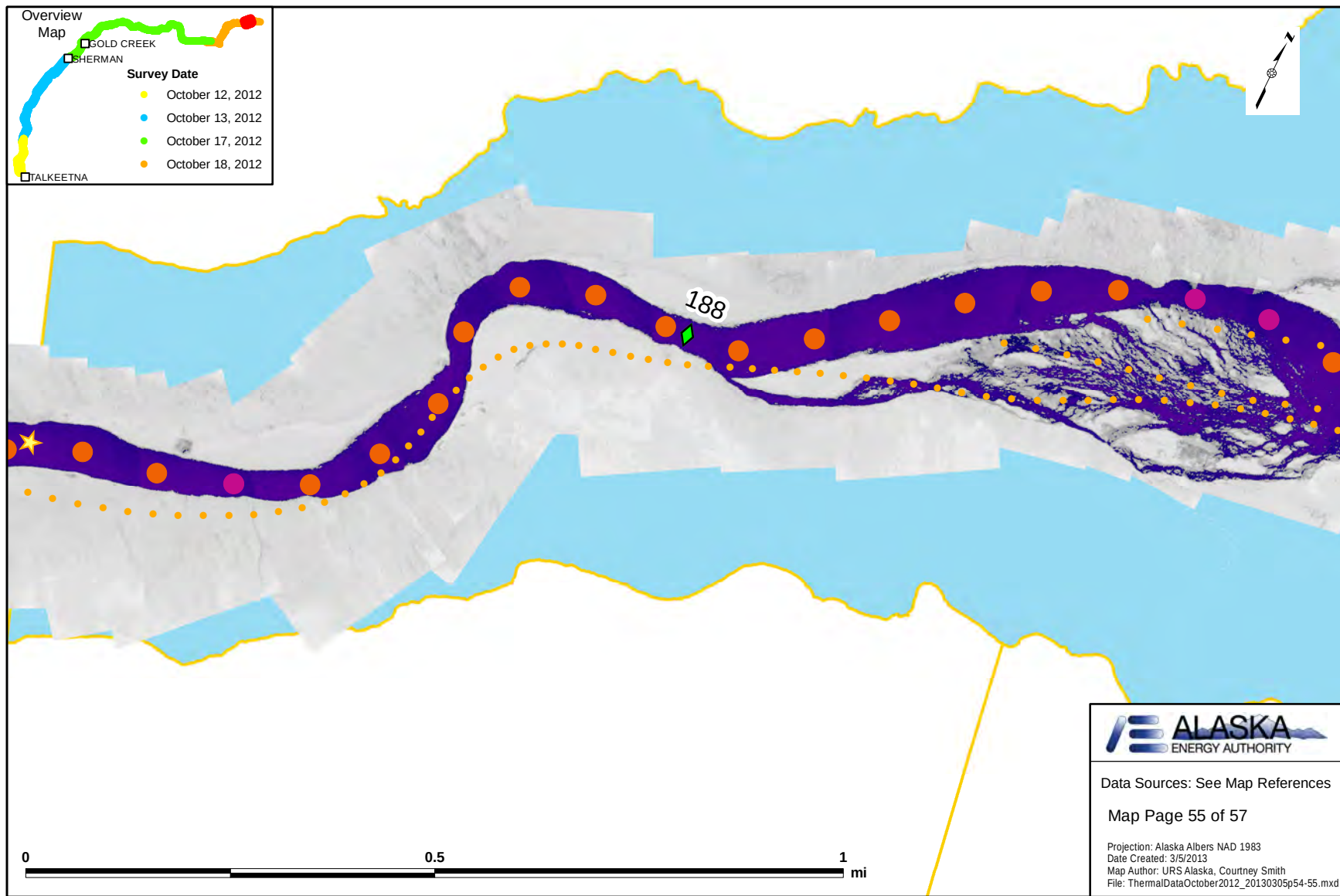
Data Sources: See Map References

Map Page 54 of 57

Projection: Alaska Albers NAD 1983
 Date Created: 3/5/2013
 Map Author: URS Alaska, Courtney Smith
 File: ThermalDataOctober2012_20130305p54-55.mxd

Flightlines (Color Coded by Survey Date)	Sampled Centerline Points (Kelvin)	Sampled Inflow Points (Kelvin)
- October 12, 2012 - October 13, 2012 - October 17, 2012 - October 18, 2012	271.7 - 272.1 272.2 - 272.6 272.7 - 273.1 273.2 - 273.6 273.7 - 274.1 274.2 - 274.5	271.7 - 272.1 272.2 - 272.6 272.7 - 273.1 273.2 - 273.6 273.7 - 274.1 274.2 - 274.5
- Area of Increased Groundwater Activity - River Mile Index (2013) - Proposed Watana Dam Site - Preliminary Project Area - Proposed Watana Reservoir		





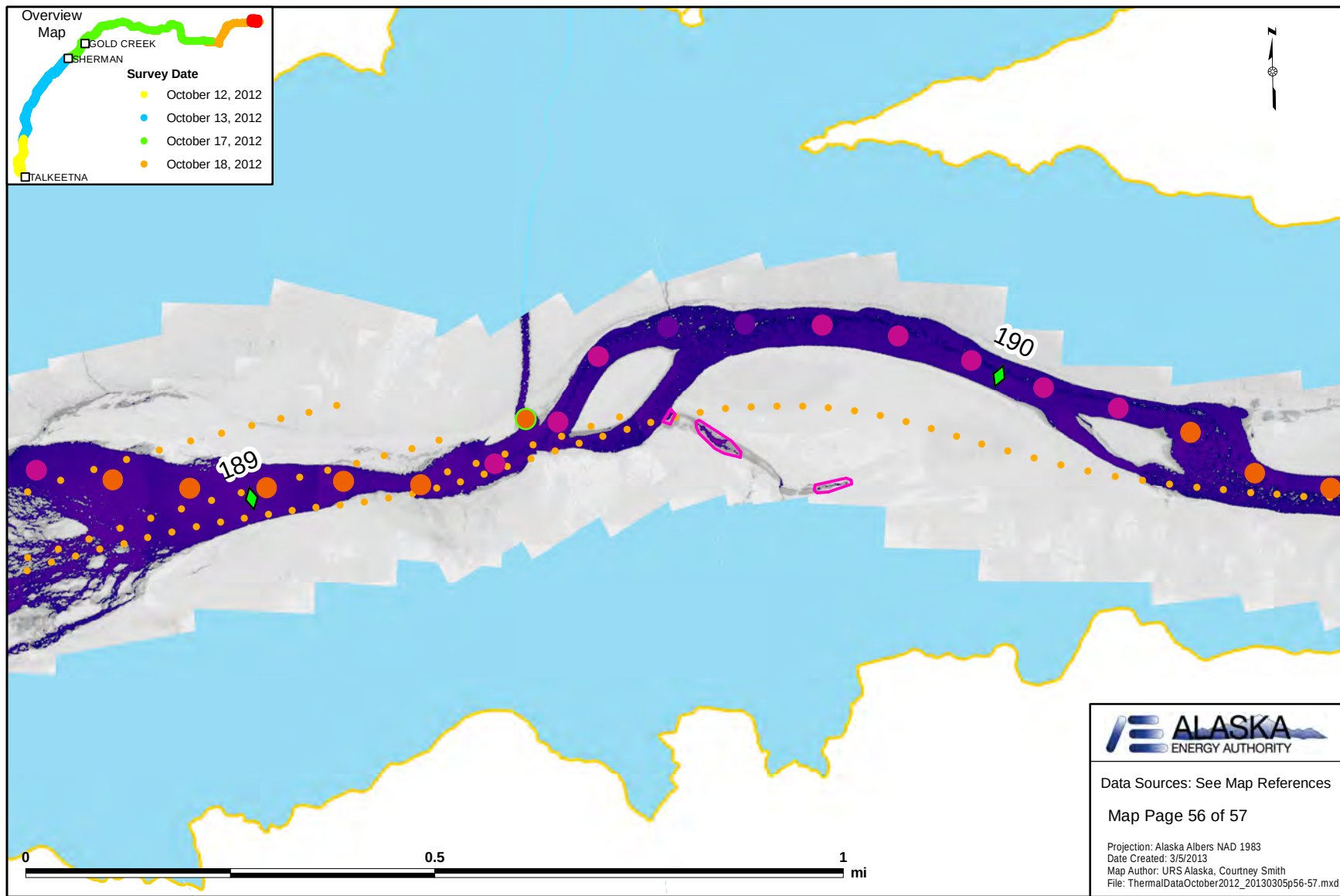
Flightlines (Color Coded by Survey Date)	Sampled Centerline Points (Kelvin)	Sampled Inflow Points (Kelvin)
October 12, 2012	271.7 - 272.1	271.7 - 272.1
October 13, 2012	272.2 - 272.6	272.2 - 272.6
October 17, 2012	272.7 - 273.1	272.7 - 273.1
October 18, 2012	273.2 - 273.6	273.2 - 273.6
Area of Increased Groundwater Activity	273.7 - 274.1	273.7 - 274.1
River Mile Index (2013)	274.2 - 274.5	274.2 - 274.5
Proposed Watana Dam Site		
Preliminary Project Area		
Proposed Watana Reservoir		

October 12-13, 2012 Colorramp (Kelvin)



October 17-18, 2012 Colorramp (Kelvin)





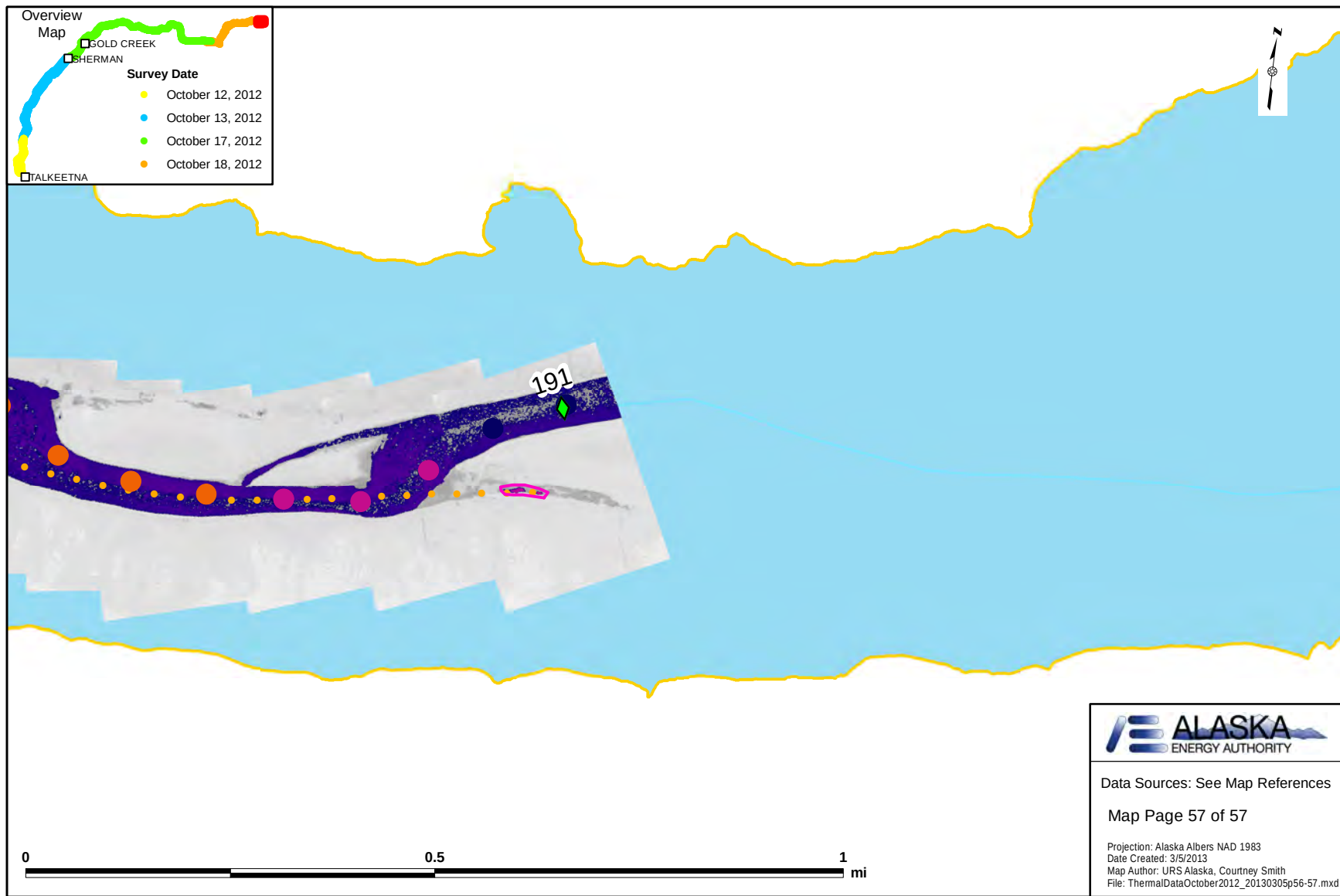
Flightlines (Color Coded by Survey Date)	Sampled Centerline Points (Kelvin)	Sampled Inflow Points (Kelvin)
October 12, 2012	271.7 - 272.1	271.7 - 272.1
October 13, 2012	272.2 - 272.6	272.2 - 272.6
October 17, 2012	272.7 - 273.1	272.7 - 273.1
October 18, 2012	273.2 - 273.6	273.2 - 273.6
Area of Increased Groundwater Activity	273.7 - 274.1	273.7 - 274.1
River Mile Index (2013)	274.2 - 274.5	274.2 - 274.5
Preliminary Project Area		
Proposed Watana Reservoir		

October 12-13, 2012 Colorramp (Kelvin)



October 17-18, 2012 Colorramp (Kelvin)





Data Sources: See Map References

Map Page 57 of 57

Projection: Alaska Albers NAD 1983
 Date Created: 3/5/2013
 Map Author: URS Alaska, Courtney Smith
 File: ThermalDataOctober2012_20130305p56-57.mxd

Flightlines (Color Coded by Survey Date)	Sampled Centerline Points (Kelvin)	Sampled Inflow Points (Kelvin)
● October 12, 2012	● 271.7 - 272.1	● 271.7 - 272.1
● October 13, 2012	● 272.2 - 272.6	● 272.2 - 272.6
● October 17, 2012	● 272.7 - 273.1	● 272.7 - 273.1
● October 18, 2012	● 273.2 - 273.6	● 273.2 - 273.6
● 273.7 - 274.1	● 273.7 - 274.1	● 273.7 - 274.1
● 274.2 - 274.5	● 274.2 - 274.5	● 274.2 - 274.5
□ Area of Increased Groundwater Activity		
◆ River Mile Index (2013)		
□ Preliminary Project Area		
⬡ Proposed Watana Reservoir		

October 12-13, 2012 Colorramp (Kelvin)



October 17-18, 2012 Colorramp (Kelvin)

