

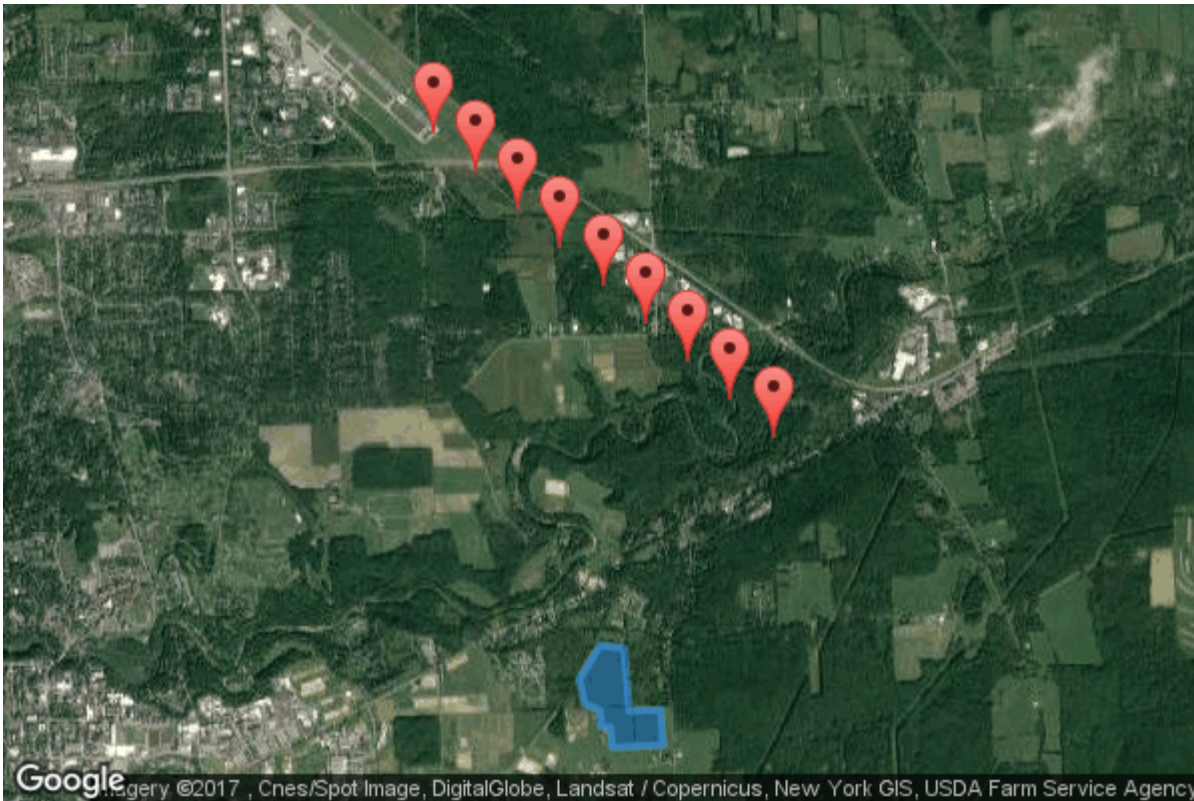
# Solar Glare Hazard Analysis Flight Path Report

Generated March 30, 2017, 11:50 a.m.

Flight path: 1

No glare found

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## Analysis & PV array parameters

Analysis name	Ellis Tract
PV array axis tracking	none
Orientation of array (deg)	180.0
Tilt of solar panels (deg)	20.0
Rated power (kW)	13500.0
Vary reflectivity	True
PV surface material	Smooth glass with ARC

Timezone offset	-5.0
Subtended angle of sun (mrad)	9.3
Peak DNI (W/m <sup>2</sup> )	1000.0
Ocular transmission coefficient	0.5
Pupil diameter (m)	0.002
Eye focal length (m)	0.017
Time interval (min)	1
Correlate slope error with material	False
Slope error (mrad)	10.0

## Flight path parameters

Direction (deg)	311.86
Glide slope (deg)	3.0
Consider pilot visibility from cockpit	False

## PV array vertices

<b>id</b>	<b>Latitude (deg)</b>	<b>Longitude (deg)</b>	<b>Ground Elevation (ft)</b>	<b>Height of panels above ground (ft)</b>	<b>Total elevation (ft)</b>
1	42.4522463114	-76.4334511757	1033.64	8.0	1041.64
2	42.4524679637	-76.4355111122	997.35	8.0	1005.35
3	42.4503147371	-76.4373135567	977.71	8.0	985.71
4	42.4486997686	-76.4368414879	975.79	8.0	983.79
5	42.4483514366	-76.4355540276	999.13	8.0	1007.13
6	42.447306429	-76.4354681969	988.34	8.0	996.34
7	42.4472747618	-76.4346528053	1002.93	8.0	1010.93
8	42.4459763941	-76.434481144	987.14	8.0	995.14
9	42.4461030653	-76.4301037788	1033.94	8.0	1041.94
10	42.4483831032	-76.4303183556	1063.24	8.0	1071.24
11	42.4482881033	-76.4330220222	1051.27	8.0	1059.27

## Flight Path Observation Points

	<b>Latitude (deg)</b>	<b>Longitude (deg)</b>	<b>Ground Elevation (ft)</b>	<b>Eye-level height above ground (ft)</b>	<b>Glare?</b>
Threshold	42.4847574791	-76.4498233795	1092.28	50.0	No
1/4 mi	42.4823459819	-76.446169494	1077.24	134.21	No
1/2 mi	42.4799344847	-76.4425156084	1079.17	201.47	No
3/4 mi	42.4775229875	-76.4388617229	1070.59	279.23	No
1 mi	42.4751114903	-76.4352078373	1063.19	355.79	No
1 1/4 mi	42.4726999931	-76.4315539517	1049.47	438.7	No

	<b>Latitude (deg)</b>	<b>Longitude (deg)</b>	<b>Ground Elevation (ft)</b>	<b>Eye-level height above ground (ft)</b>	<b>Glare?</b>
1 1/2 mi	42.4702884959	-76.4279000662	1079.39	477.96	No
1 3/4 mi	42.4678769987	-76.4242461806	963.59	662.95	No
2 mi	42.4654655015	-76.4205922951	984.41	711.3	No

No glare found.

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