12/09/2010

Mission: ‘Colorado SNOTEL sites’; including ‘Freemont Pass’ and ‘Loveland Basin’

Weather: cloudy in transit; openings over target
Comments: The pilot reported that, although the flight was generally cloudy, he could see lights while over our targets in CO. Loveland ski area reported 0 new snow in the previous 24 hours; 4” of new snow in the previous 48 hours; and 16: of new snow in the previous 72 hours.

Sample rate: 5 kHz
Energy levels throughout channels: static
FOV: ‘spread pattern’ (see image below)

Footprint geometry for initial flights

maximum off-nadir angle is +/- 1.05 km

“±” angles are to the left side as the plane flies forwards

for December flights, was set to +/- 100 m
Angle to Channel map:

<table>
<thead>
<tr>
<th>Fiber</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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<tbody>
<tr>
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<tr>
<td>Channel</td>
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<td>96</td>
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<td>100</td>
<td>44</td>
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<tr>
<td>Power (Mw)</td>
<td>32</td>
<td>33.6</td>
<td>25</td>
<td>12.2</td>
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<td>Raw Energy (Mw, u)</td>
<td>6.4</td>
<td>6.72</td>
<td>5</td>
<td>3.44</td>
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<td>4</td>
<td>4.76</td>
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<tr>
<td>Filtered Energy (u)</td>
<td>3.44</td>
<td>3.29</td>
<td>2.45</td>
<td>1.69</td>
<td>2.50</td>
<td>1.45</td>
<td>1.56</td>
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<td>Path Lengths (mm, mm)</td>
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<td>16</td>
<td>32</td>
<td>48</td>
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<td>Angle (mrad)</td>
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<td>1.9</td>
<td>0.2</td>
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<tr>
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<td>Aperture offset on ground (mm)</td>
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Points of interest:

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<th>Time (UTC)</th>
<th>TOF File</th>
<th>Description</th>
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<tr>
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<tr>
<td>00:43:42</td>
<td>21</td>
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<td>02:20:50</td>
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<td>end of run over SNOTEL targets</td>
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<td>03:36:47</td>
<td>47</td>
<td>Laser off</td>
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