Oct 4, 2007 14:00 after 0.5 hrs TT2 tunnel access to replace secondary heater power supply

Temperature (ºC) on HPU display
Primary: -23
Secondary: 14
### MERIT temperature log Oct 2-5, 2007

**CERN Merit**

Manual Log of temperature readout from Cryogenic, Mercury system, and Optics

<table>
<thead>
<tr>
<th>Date &amp; time</th>
<th>Cryogenic (degree K)</th>
<th>Mercury system (degree C)</th>
<th>Optics (degree C)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TT301C   TT302C TT303C TT304C</td>
<td>Primary set point</td>
<td>Secondary set point</td>
</tr>
<tr>
<td>10/2/2007 21:00</td>
<td>278 240 258 249</td>
<td>21.5 30.2 23 23.3</td>
<td>32 35 C, 15V 19 20 C, 70 V</td>
</tr>
<tr>
<td>10/3/2007 14:30</td>
<td>231.6 171.1 209.6 184</td>
<td>21.1 29.9 22.7 23</td>
<td>22 35 C, 15V 16 20 C, 70 V</td>
</tr>
<tr>
<td>10/3/2007 15:56</td>
<td>224.1 163.4 194.1 172.9</td>
<td>21.1 29.9 22.7 21</td>
<td>22 35 C, 15V 16 20 C, 70 V</td>
</tr>
<tr>
<td>10/3/2007 20:14</td>
<td>204.1 143.2 186.2 156</td>
<td>20.9 29.8 22.2 22.9</td>
<td>22 35 C, 15V 16 20 C, 70 V</td>
</tr>
<tr>
<td>10/4/2007 10:10</td>
<td>151 100.7 143.5 114.4</td>
<td>20.2 27.7 20.1 22.8</td>
<td>22 35 C, 15V 16 20 C, 70 V</td>
</tr>
<tr>
<td>10/4/2007 12:30</td>
<td>145 98.6 139.2 111.6</td>
<td>20.2 27.6 20 22.8</td>
<td>22 35 C, 15V 16 20 C, 70 V</td>
</tr>
<tr>
<td>10/4/2007 14:00</td>
<td>141 97.2 136 110</td>
<td>20.1 27.2 20 22.7</td>
<td>22 35 C, 15V 16 20 C, 70 V</td>
</tr>
<tr>
<td>10/4/2007 18:00</td>
<td>106 88 98.2 90.9</td>
<td>20.2 27.1 21.4 22.8</td>
<td>22 35 C, 15V 16 20 C, 70 V</td>
</tr>
<tr>
<td>10/4/2007 19:00</td>
<td>80.4 79.9 86.4 80</td>
<td>20.3 27.1 21.4 22.8</td>
<td>22 35 C, 15V 16 20 C, 70 V</td>
</tr>
<tr>
<td>10/4/2007 21:40</td>
<td>89.5 80.1 93.8 83</td>
<td>20.3 27.1 20.9 22.8</td>
<td>22 35 C, 15V 16 20 C, 70 V</td>
</tr>
<tr>
<td>10/5/2007 8:00</td>
<td>109.1 96.7 117.2 104.4</td>
<td>20.4 27.2 21.5 22.9</td>
<td>22 35 C, 18V 14 30 C, 110V</td>
</tr>
<tr>
<td>10/5/2007 11:35</td>
<td>96.5 90.9 102.9 96.1</td>
<td>20.7 29.1 22.4 23.4</td>
<td>22 35 C, 18V 14 30 C, 110V</td>
</tr>
<tr>
<td>10/5/2007 13:05</td>
<td>99.8 92.8 106.9 99</td>
<td>20.8 29.1 22.5 23.2</td>
<td>22 35 C, 18V 14 30 C, 110V</td>
</tr>
</tbody>
</table>
Plan of 10/5/07 TT2A access

HeeJin

• Inspect any damage to optics/reflector
• Align V#3 and #4 using FV and SMD by adjusting reflector
• Align V#1 using FV
• Align V#2 using Olympus camera
• Switch camera back to original arrangement, i.e., switch V#4 to Olympus to and V#2 to SMD
• Use bicycle pump to pump HPU gauge back to appropriate pressure

Thomas

• Send red laser to V#1 and V#2 and confirm a clear red circle exiting all-in-one optical head
• On V#4 touch up lens alignment onto SMD
• Check 25 W laser using IR viewer
• Replace Avalanche photodiode with regular photodiode

Others

• Use bicycle pump to pump HPU gauge back to appropriate pressure
• Check vacuum on solenoid

V#1 - PCMerit01 – 137.138.184.15
V#2 - PCMerit08 – 137.138.184.21
V#3 - PCMerit02 – 137.138.184.16
V#4 - CERN-highspeed1 – 137.138.184.9
Window98 VPN access through PCMerit01

Good news:
All items accomplished
All viewports and cameras are functioning

Bad news:
Only viewport #3 is in excellent condition
On all other viewports, the illumination fiber & ball lens have been shifted (by heat) and is irreversible.
Oct 5, 2007 11:30 after 2 hrs TT2A tunnel access to align optics

Temperature (ºC) on HPU display
Primary : -8
Secondary : 13
- Channel #0 - scintillating fiber, regular photodiode
- Channel #1 - 1st viewport, old FastVision camera
- Channel #2 - 2nd viewport, SMD camera
- Channel #3 - 3rd viewport, new FastVision camera
- Channel #4 - 4th viewport, Olympus Encore