STEREO SECCHI COR1 Status

O. C. St. Cyr
for J.M. Davila and COR1 science team

Heliophysics Science Division – Code 670
NASA-Goddard Space Flight Center
(Chris.StCyr@nasa.gov; 301-286-2575)
COR1 Status

• COR1-A and COR1-B are both observing regularly as part of the synoptic program
  • Both are returning scientifically-useful images!

• First light:
  • COR1-A  -- December 4, 2006
  • COR1-B  -- December 13, 2006

• COR1-B has lower stray light than COR1-A
  • COR1-B objective lens changed at KSC
COR1 pB (24-Jan-2007)
minimum daily pixel

Behind

Ahead
COR1 “B” (24-Jan-2007)
running difference median

Behind

Ahead
First CME Height-time Plot

LASCO/C2

COR1

$\langle V \rangle = 200 \text{ km/s}$

$a = 5.9 \text{ m/s/s}$

2006/12/30

Gopalswamy and Yashiro
### 15-Jan to 18-Feb-2007

<table>
<thead>
<tr>
<th></th>
<th>COR1-A</th>
<th>COR1-B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observing [Days]</td>
<td>31</td>
<td>35</td>
</tr>
<tr>
<td>Data Gaps [Days]</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Average [Images/Day]</td>
<td>67</td>
<td>62</td>
</tr>
<tr>
<td>Cadence [min]</td>
<td>21.5</td>
<td>23.2</td>
</tr>
<tr>
<td>CMEs Detected</td>
<td>27</td>
<td>24</td>
</tr>
<tr>
<td>Questionable CMEs</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>Stars Detected</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Debris Sightings</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
Background Stars

• Stars passing through FOV provide an opportunity to verify alignment and may be useful for intensity calibration

• Four stars observed during last week of January
COR1 Science Team

- J. M. Davila, O. C. St. Cyr, B. Thompson, J. Gurman, N. Gopalswamy, and W. Thompson (SECCHI co-I’s)
- J. McAteer, M. Kramer, H. Cremades, H. Xie, S. Yashiro, N. Reginald, G. Stenborg, T. Moran
- S. Jones (graduate student)
- Undergraduate students at MLSO (J. Burkepile)
- Image enhancement at Mees (Huw Morgan)
COR1 Work-in-Progress

• Several people working on different methods to remove stray light pattern
  • Dynamic versus static

• Using stars to determine COR1 intensity calibration and Sun location
  • Stars identified in both A and B

• Preliminary event list started (duty cycle, CMEs, stars, space debris, etc...)
COR1-B Lunar Transit Movie

Base difference in B

2007-02-24 00:13