

National Radio Astronomy Observatory  
 Socorro, New Mexico  
 VLBA Antenna Memo #65  
 Mauna Kea, Hawaii Drive #1 Wheel/Bearing Replacement  
 July 19-August 6, 2006

During the July Mauna Kea antenna maintenance visit various sized pieces of metal were discovered in the grease of the inside and outside azimuth bearings on drive #1. A team consisting of, Steve Aragon, Eric Carlowe, Kelly Greene, Ramon Gutierrez and Ken Lakies were scheduled to extend there stay and replace the wheel assembly.



<b>New Wheel</b>	<b>Measured</b>	<b>Specified</b>
Conic Radius	300.266"	300.000" +/- .250"
Vertical error	93.25'33"	93.26'23" +/- 1'24"
Horizontal error	1'22"	<1'24"
Coupling run out	0.002"	<0.005"

The new wheel assembly Radius could not be reduced further do to the lack play left in the pillow block mounting holes. The new wheel assembly ran smoothly with no popping or grinding noises.