GRACE Science Data System Monthly Report
August 2005

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Highlights:

- Next GRACE Science Team Meeting (GSTM) will be held in Austin on October 13/14, 2005. Abstracts should be submitted until September 19, 2005, 12:00 UTC online at http://www.csr.utexas.edu/grace/GSTM! Here you can also find information on registration and housing.

Satellite Science Relevant Events:

- Nominal operation in Science Mode throughout the month
- The GRACE-1 Brouwer mean orbital elements on September 01, 2005 00:00:00 are as follows:

  A [m] = 6844339.621
  E [-] = 0.001924
  I [º] = 89.037725

  The satellites separation was 192 km on September 1 with a rate of 0.38 km/d. Thus, the next orbit maintenance maneuver has to be performed in about 6 months.

Level-0 raw data dump reception statistics at DLR ground stations Weilheim and Neustrelitz:

GRACE-1 Housekeeping:	99.7 %
GRACE-1 Science:	100.0 %
GRACE-2 Housekeeping:	99.8 %
GRACE-2 Science:	100.0 %

Level-1 Data Processing:

- Level-1B Release 01 instrument data have been processed at JPL and archived at GRACE-ISDC and JPL PO.DAAC.

The columns in the table are:

A) KBR1B product name
B) Total arc length with data (hours)
C) Number of observations used in residual calculation
D) KBR-GPS range residual RMS (cm)
E) minimum KBR-GPS range residual (cm)
F) maximum KBR-GPS range residual (cm)
G) number of continuous segments in the KBR product

A	B	C	D	E	F	G
KBR1B_2005-07-15_X_01.dat	23.8	17125	1.64	-4.4	5.2	2
KBR1B_2005-07-16_X_01.dat	23.8	17125	1.98	-7.7	4.7	2
KBR1B_2005-07-17_X_01.dat	24.0	17246	1.84	-4.3	4.9	2
KBR1B_2005-07-18_X_01.dat	23.8	17151	1.63	-4.3	4.8	3
KBR1B_2005-07-19_X_01.dat	24.0	17260	1.56	-4.1	4.2	1
KBR1B_2005-07-20_X_01.dat	23.9	17185	1.55	-4.3	3.3	2
KBR1B_2005-07-21_X_01.dat	23.8	17145	1.45	-3.7	4.1	2
KBR1B_2005-07-22_X_01.dat	24.0	17280	1.44	-5.3	3.0	1
KBR1B_2005-07-23_X_01.dat	24.0	17266	1.92	-4.7	6.0	2
KBR1B_2005-07-24_X_01.dat	23.9	17181	1.50	-3.6	4.9	3
KBR1B_2005-07-25_X_01.dat	24.0	17280	1.48	-3.5	4.6	1
KBR1B_2005-07-26_X_01.dat	24.0	17280	2.05	-6.6	8.1	1
KBR1B_2005-07-27_X_01.dat	23.9	17205	1.71	-3.8	4.2	2
KBR1B_2005-07-28_X_01.dat	24.0	17280	1.56	-4.2	5.4	1
KBR1B_2005-07-29_X_01.dat	23.7	17057	1.90	-4.9	5.3	4
KBR1B_2005-07-30_X_01.dat	23.9	17224	1.62	-4.5	5.1	2
KBR1B_2005-07-31_X_01.dat	24.0	17280	1.80	-5.4	6.0	1
KBR1B_2005-08-01_X_01.dat	23.8	17145	1.67	-4.5	4.8	2
KBR1B_2005-08-02_X_01.dat	24.0	17266	1.64	-4.3	4.8	2
KBR1B_2005-08-03_X_01.dat	23.7	17067	1.64	-4.1	4.6	5

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KBR1B_2005-08-04_X_01.dat  23.9  17199  1.66    -3.9    4.0  2
KBR1B_2005-08-05_X_01.dat  24.0  17265  1.65    -4.9    5.1  2
KBR1B_2005-08-06_X_01.dat  23.8  17111  1.72    -4.5    5.5  3
KBR1B_2005-08-07_X_01.dat  24.0  17240  2.00    -5.5    4.8  2
KBR1B_2005-08-08_X_01.dat  23.9  17185  1.70    -4.7    4.6  2
KBR1B_2005-08-09_X_01.dat  24.0  17174  1.85    -4.4    7.3  1
KBR1B_2005-08-10_X_01.dat  24.0  17260  1.34    -4.0    3.9  1
KBR1B_2005-08-11_X_01.dat  23.9  17183  2.16    -7.9    6.5  2
KBR1B_2005-08-12_X_01.dat  24.0  17246  1.76    -6.0    3.8  2
KBR1B_2005-08-13_X_01.dat  23.8  17109  1.59    -4.4    3.2  3
KBR1B_2005-08-14_X_01.dat  23.9  17185  1.61    -5.0    3.9  2
KBR1B_2005-08-15_X_01.dat  24.0  17260  1.57    -4.8    3.9  1
KBR1B_2005-08-16_X_01.dat  24.0  17260  1.39    -3.6    4.3  1
KBR1B_2005-08-17_X_01.dat  23.8  17125  1.44    -3.5    5.2  2
KBR1B_2005-08-18_X_01.dat  23.9  17181  1.93    -5.5    5.4  2
KBR1B_2005-08-19_X_01.dat  not yet distributed
…
KBR1B_2005-08-31_X_01.dat  not yet distributed
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- Release 01 Level-1B barotropic sea level products (OCN1B) and de-aliasing products (AOD1B) until August 31, 2005 were calculated by GFZ and archived at GRACE-ISDC.

Level-2 Data Processing:

- All 3 L2 centers at CSR, JPL and GFZ concentrated on improvements in the gravity model product quality and catching up on the remaining monthly field data processing.

GRACE Product Distribution:

- Constrained fields from UTCSR, and the associated Level-1B products, for April - June 2005 are now available to the GRACE Science Team at PO.DAAC/ISDC.

Miscellaneous:

- Selected and reviewed presentations from the July 2004 Joint CHAMP/GRACE Science Meeting will be published in a special issue of EGU´s ´Advances of Geosciences´.
- Science data users are encouraged to submit citations of their own and other works related with GRACE to the bibliography web page implemented at PO.DAAC: http://podaac.jpl.nasa.gov/grace/bibliography.html.