

\*\*\*ITRF 00\*\*\*

MODOT CARTHAGE (MOCA), MISSOURI

Retrieved from NGS DataBase on 12/04/09 at 10:40:32.

Antenna Reference Point(ARP): MODOT CARTHAGE CORS ARP

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PID = DL6014

ITRF00 POSITION (EPOCH 1997.0)

Computed in Dec. 2009 using 16 days of data.

X =	-386614.691 m	latitude	=	37 10 39.19024 N
Y =	-5073616.351 m	longitude	=	094 21 27.27027 W
Z =	3833274.743 m	ellipsoid height	=	269.931 m

ITRF00 VELOCITY

Predicted with HTDP\_3.0 Dec. 2009.

VX =	-0.0143 m/yr	northward	=	-0.0040 m/yr
VY =	-0.0008 m/yr	eastward	=	-0.0142 m/yr
VZ =	-0.0036 m/yr	upward	=	-0.0007 m/yr

NAD\_83 (CORS96) POSITION (EPOCH 2002.0)

Transformed from ITRF00 (epoch 1997.0) position in Dec. 2009.

X =	-386614.147 m	latitude	=	37 10 39.16622 N
Y =	-5073617.750 m	longitude	=	094 21 27.24398 W
Z =	3833274.840 m	ellipsoid height	=	271.067 m

NAD\_83 (CORS96) VELOCITY

Transformed from ITRF00 velocity in Dec. 2009.

VX =	0.0018 m/yr	northward	=	-0.0002 m/yr
VY =	0.0006 m/yr	eastward	=	0.0017 m/yr
VZ =	-0.0008 m/yr	upward	=	-0.0011 m/yr

L1 Phase Center of the current GPS antenna: MODOT CARTHAGE CORS L1 PC C

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The CONVERTED FROM ABSOLUTE igs05\_1480.atx antenna

(Antenna Code = TRM57971.00 NONE) was installed on 08/02/09.

The L2 phase center is 0.020 m below the L1 phase center.

PID = DL6015

ITRF00 POSITION (EPOCH 1997.0)

Computed in Dec. 2009 using 16 days of data.

X =	-386614.696 m	latitude	=	37 10 39.19026 N
Y =	-5073616.419 m	longitude	=	094 21 27.27027 W
Z =	3833274.795 m	ellipsoid height	=	270.016 m

The ITRF00 VELOCITY of the L1 PC is the same as that for the ARP.

NAD\_83 (CORS96) POSITION (EPOCH 2002.0)

Transformed from ITRF00 (epoch 1997.0) position in Dec. 2009.

X =	-386614.153 m	latitude	=	37 10 39.16624 N
Y =	-5073617.818 m	longitude	=	094 21 27.24398 W
Z =	3833274.892 m	ellipsoid height	=	271.153 m

| The NAD\_83 (CORS96) VELOCITY of the L1 PC is the same as that for the ARP. |

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- \* Latitude, longitude and ellipsoid height are computed from their corresponding cartesian coordinates using dimensions for the GRS 80 ellipsoid: semi-major axis = 6,378,137.0 meters  
flattening = 1/298.257222101...
  
- \* WARNING: Mixing of antenna types can lead to errors of up to 10 cm. in height unless antenna-phase-center variation is properly modeled.
  
- \* For additional information about the interpretation and/or derivation of these positions and velocities, consult <http://www.ngs.noaa.gov/CORS/Coords.html>  
For additional information on the relation of the GPS antenna to other relevant points at the site and on GPS equipment, consult the link <http://www.ngs.noaa.gov/cors/Logfiles.html>