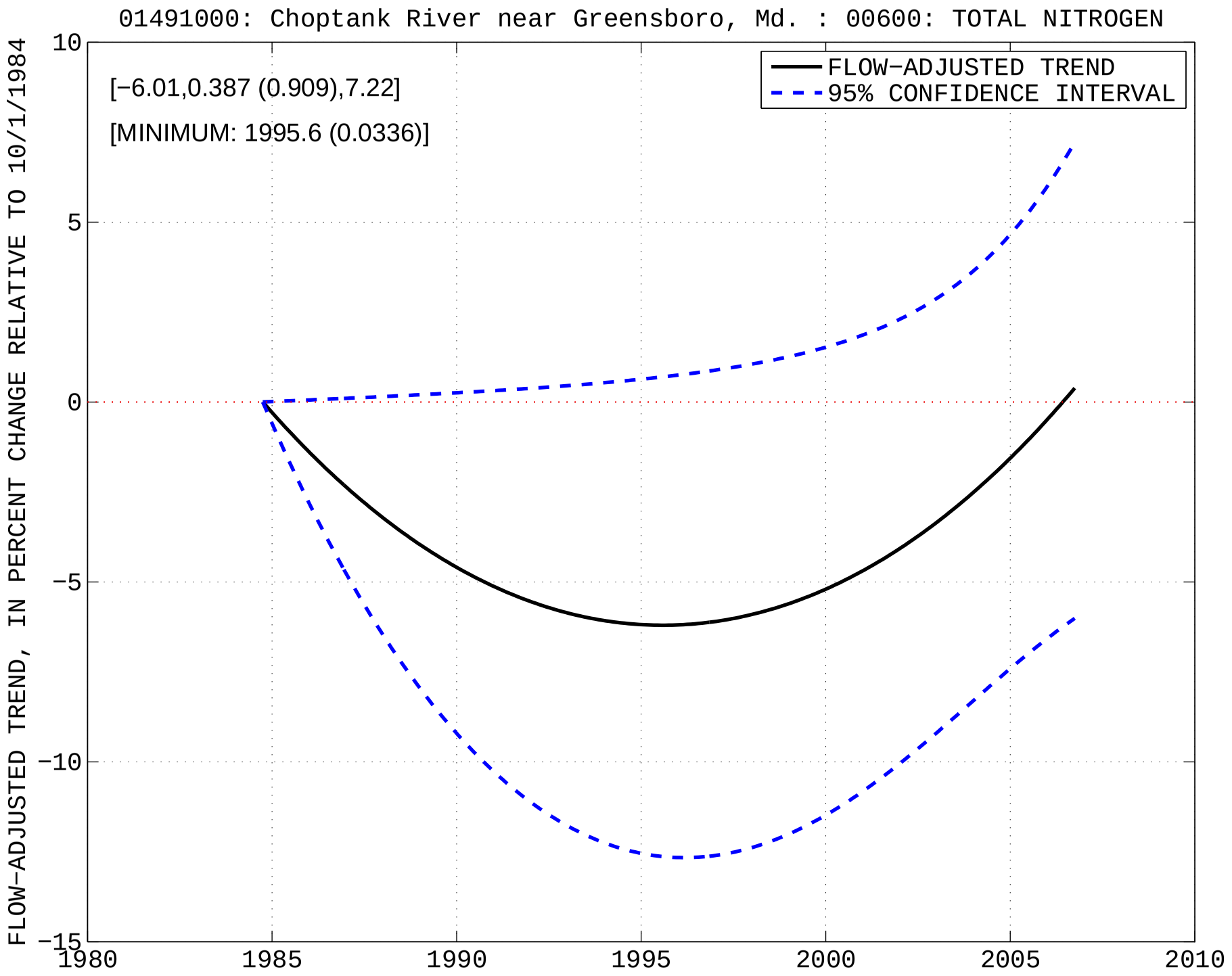
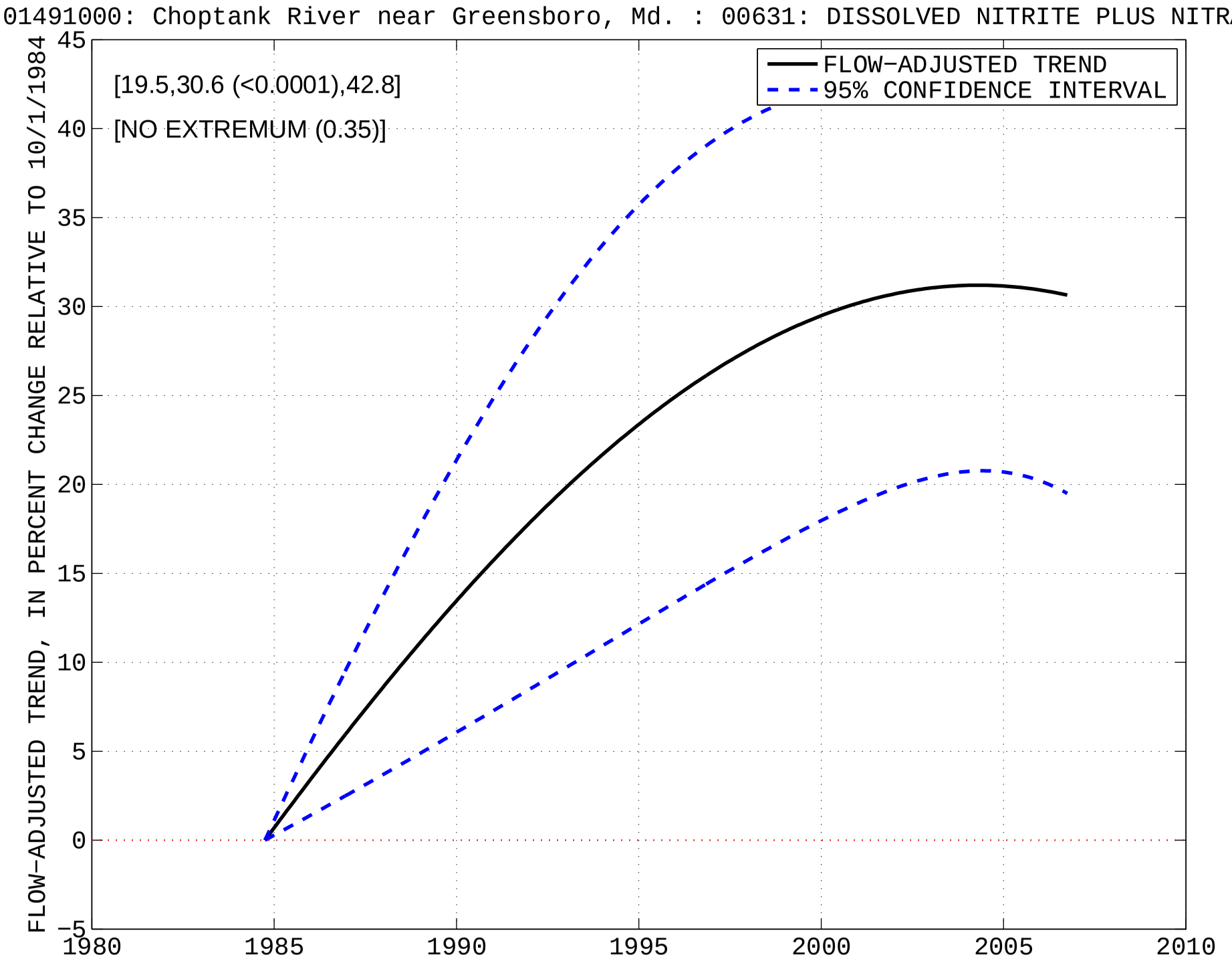
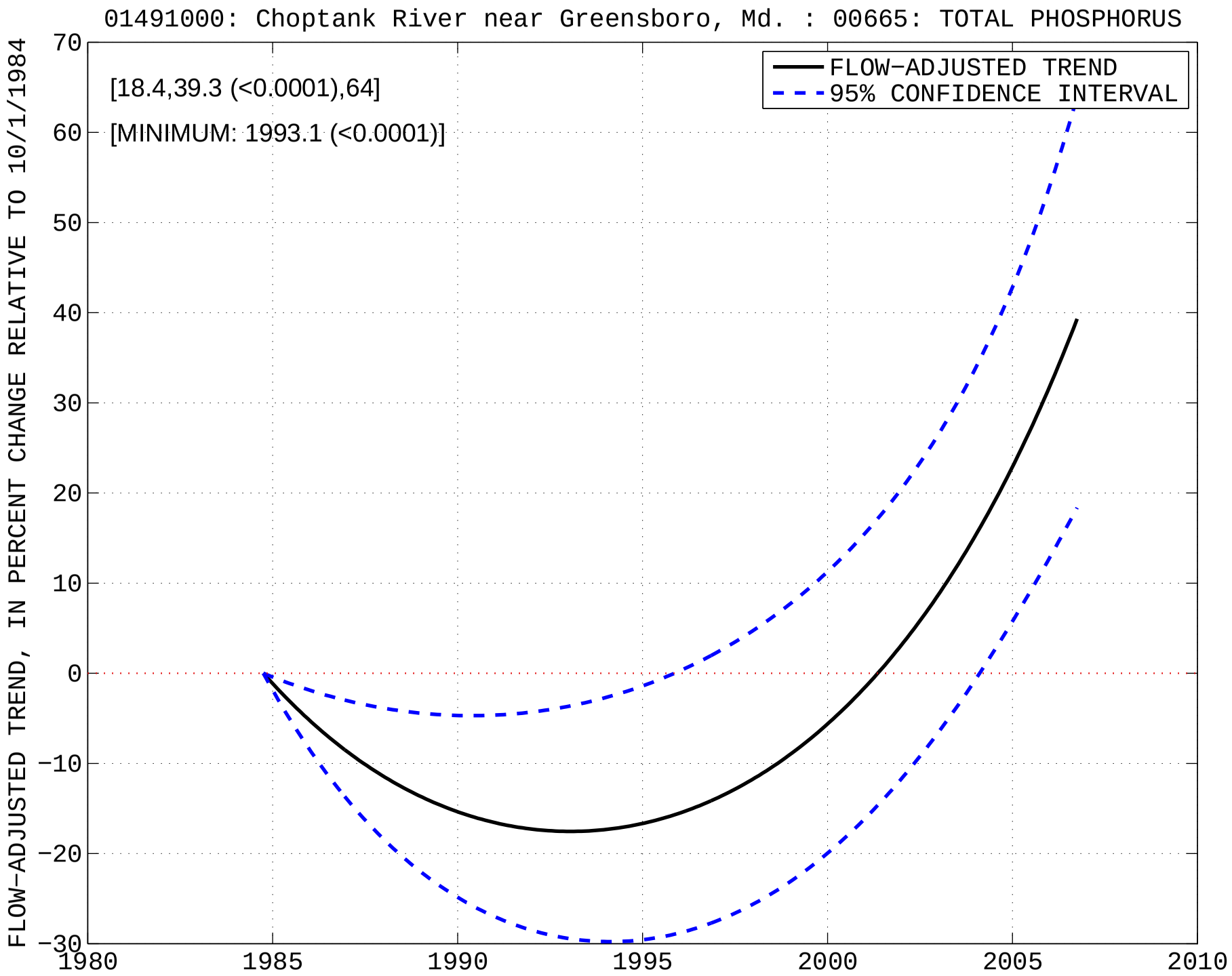
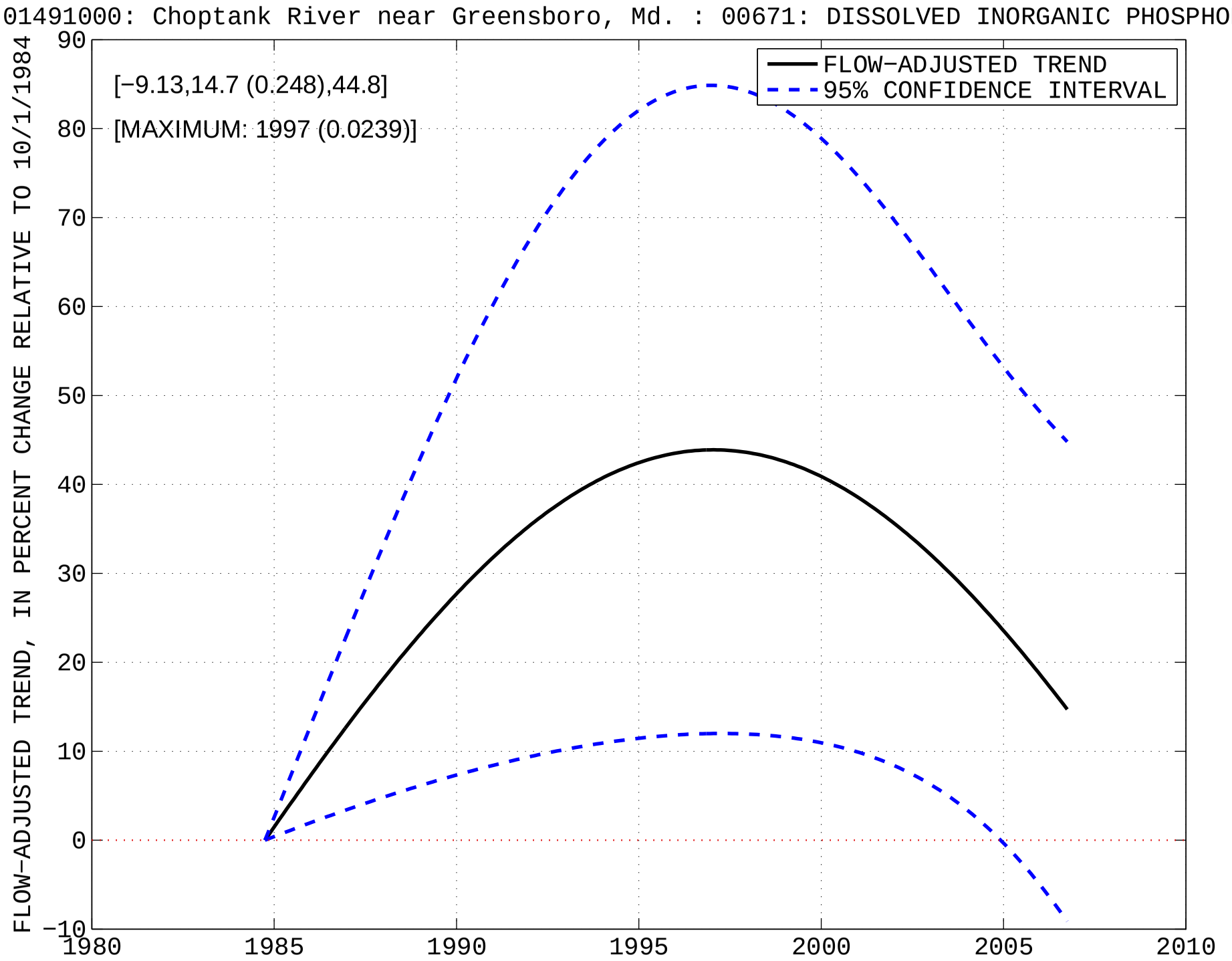
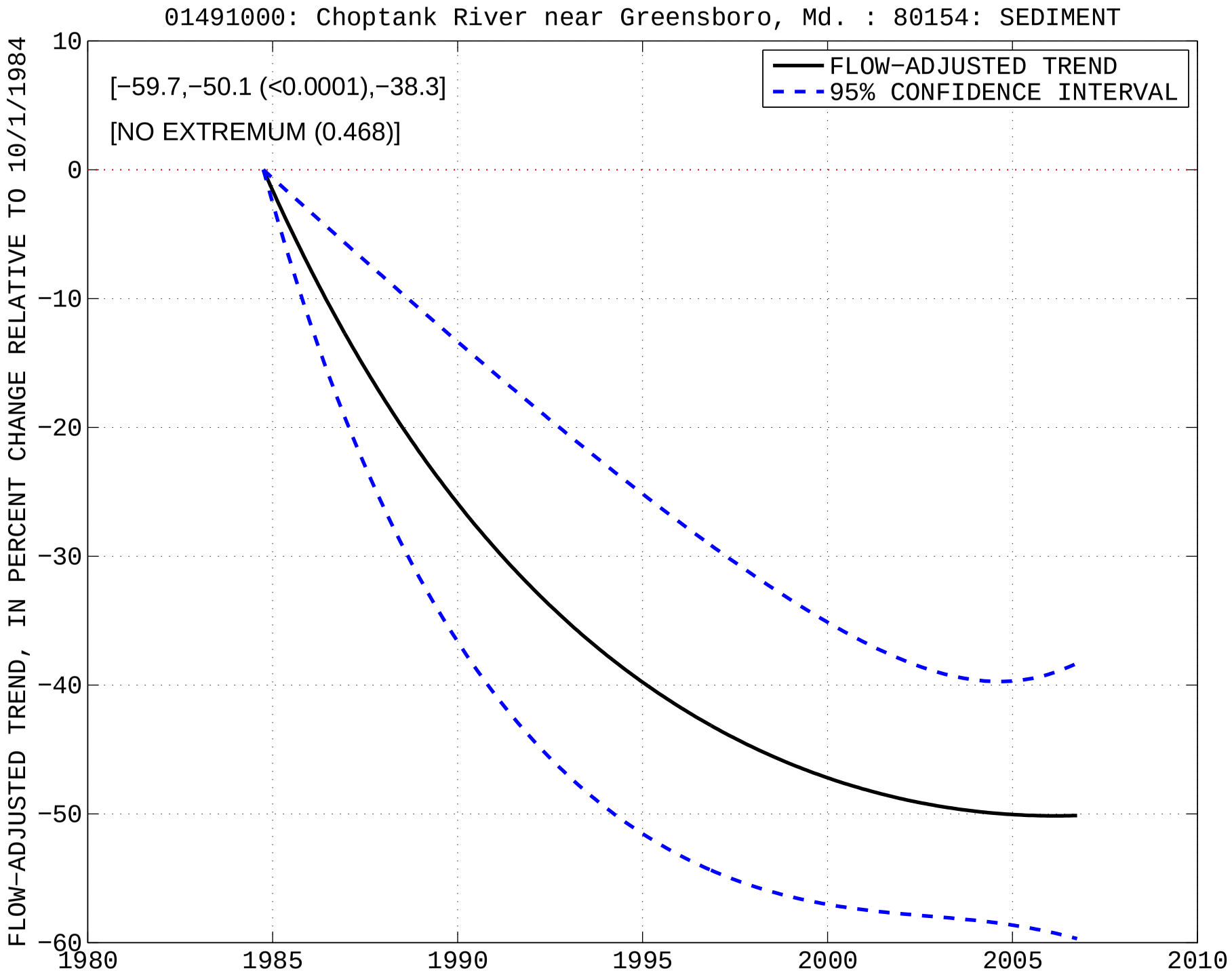
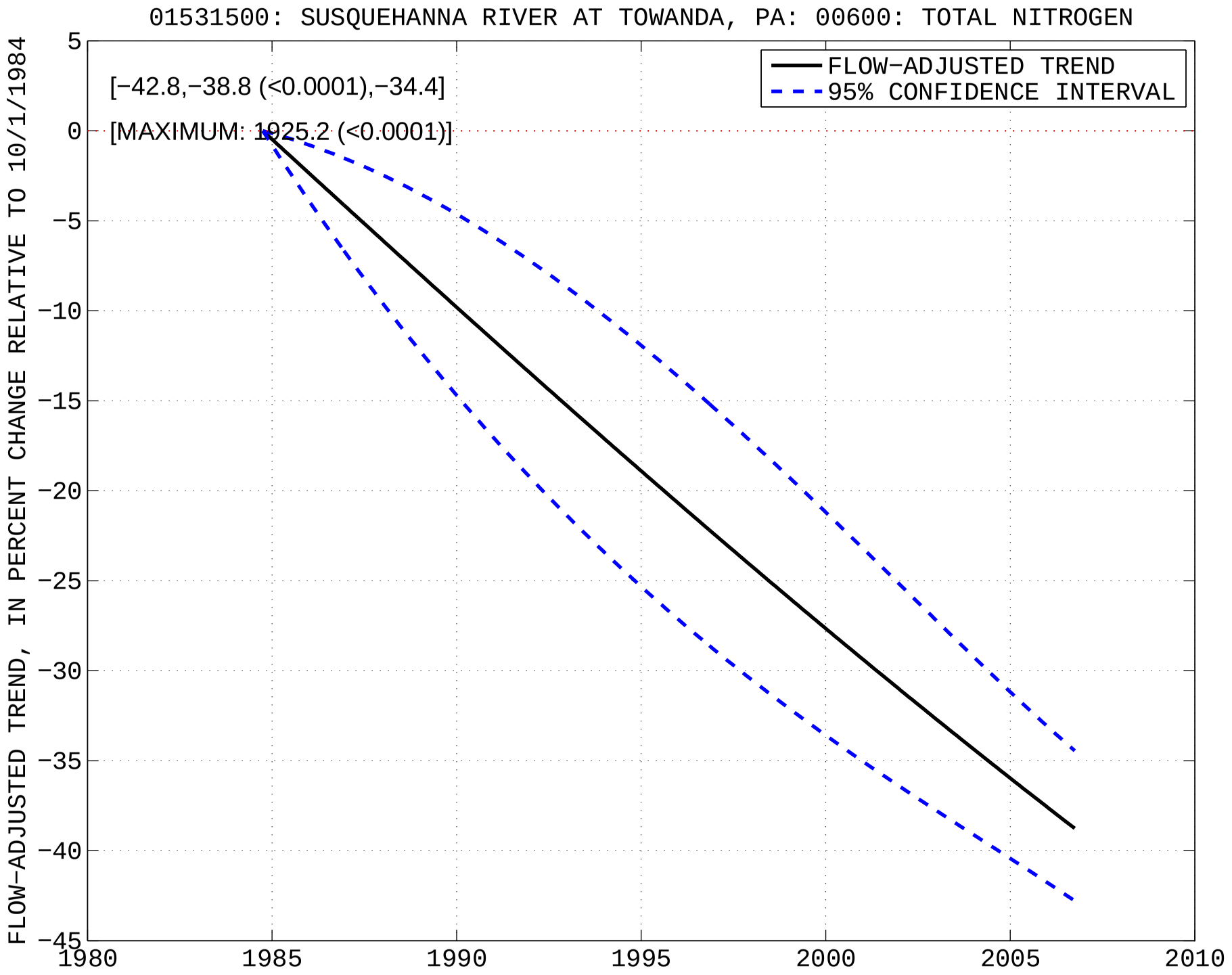

01491000: Choptank River near Greensboro, Md. : 00600: TOTAL NITROGEN
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[−6.01,0.387 (0.909),7.22]
[MINIMUM: 1995.6 (0.0336)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
10
5
0
−5
−10
−15
1980
1985
1990
1995
2000
2005
2010

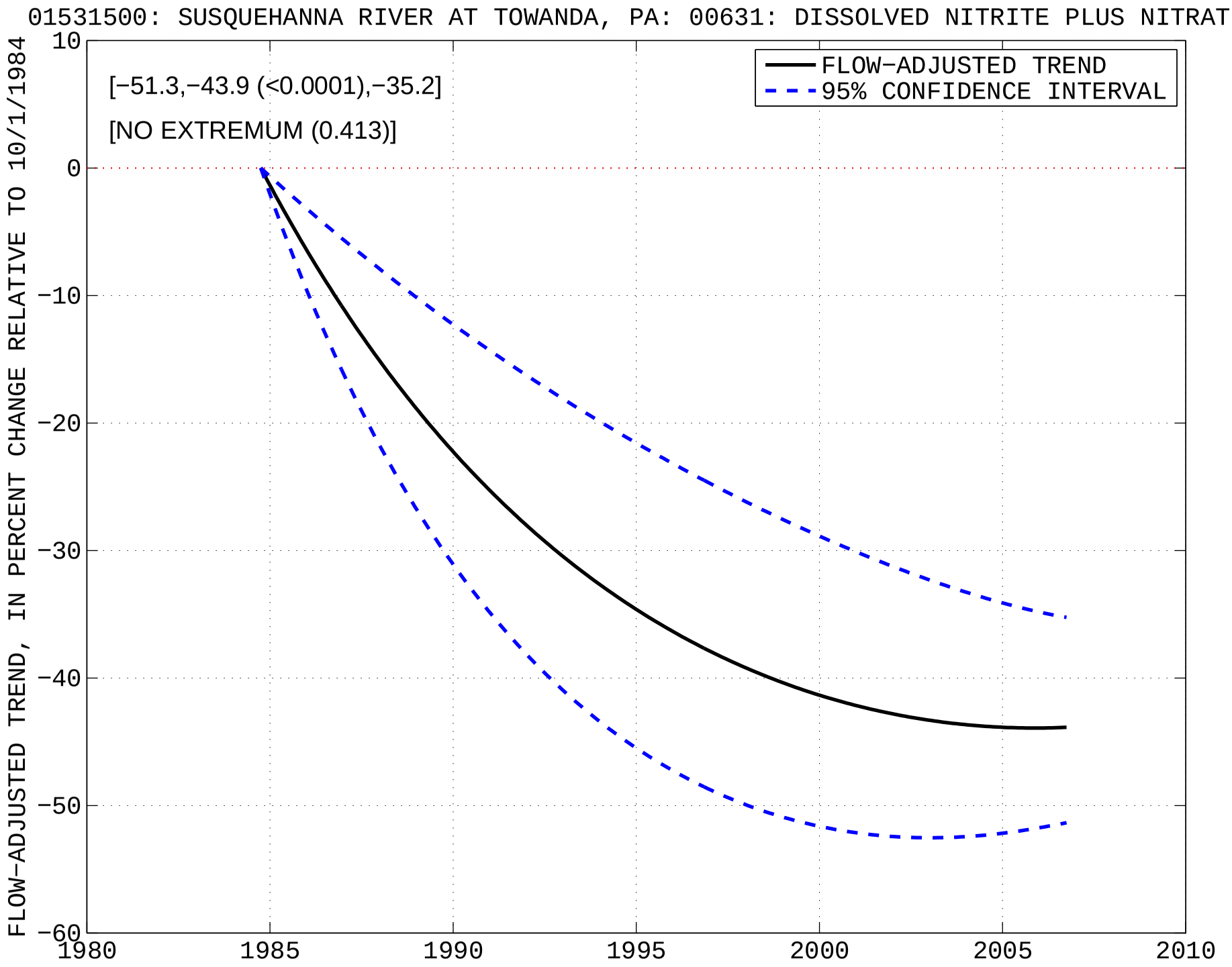

01491000: Choptank River near Greensboro, Md. : 00631: DISSOLVED NITRITE PLUS NITRATE
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
[19.5,30.6 (<0.0001),42.8]
[NO EXTREMUM (0.35)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
45
40
35
30
25
20
15
10
5
0
-5
1980
1985
1990
1995
2000
2005
2010

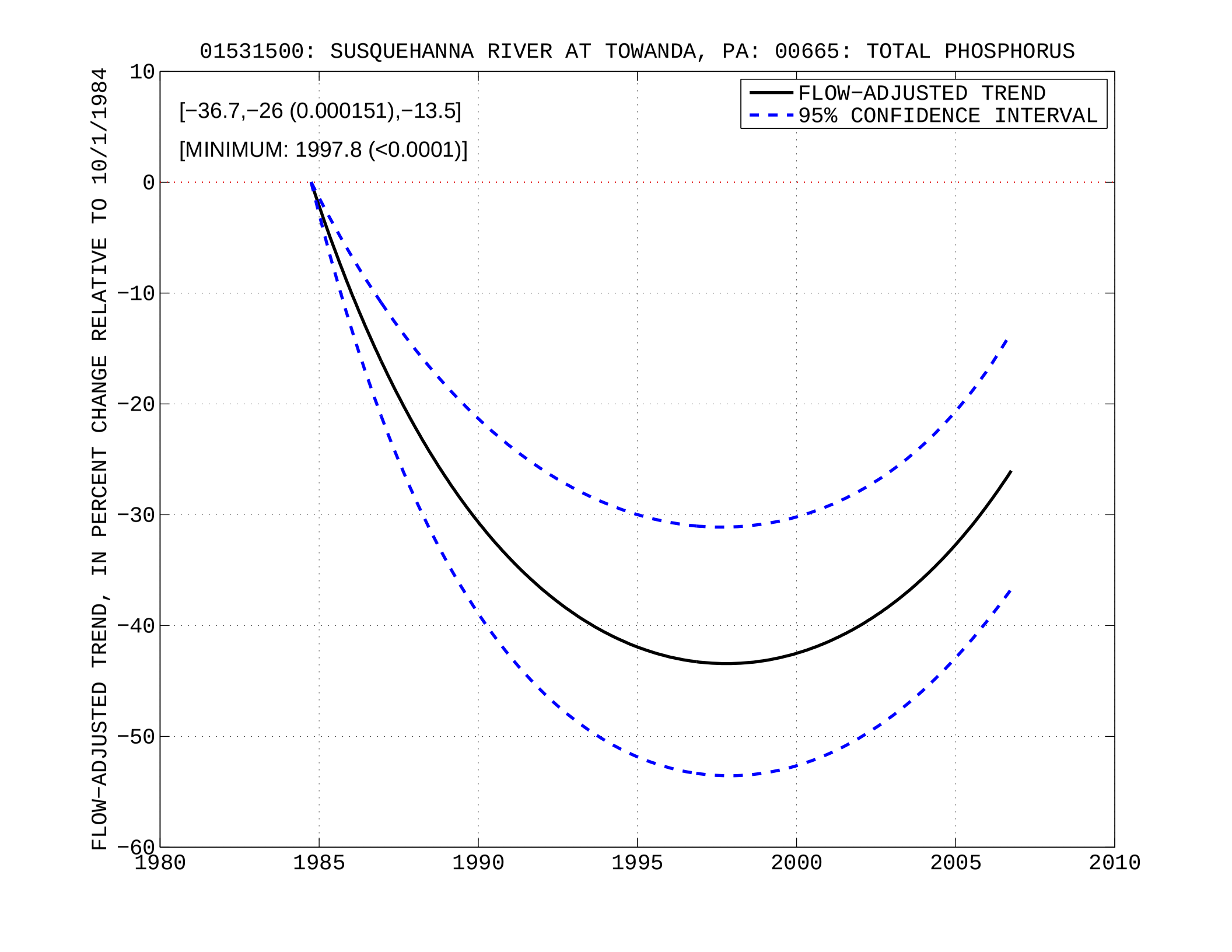

01491000: Choptank River near Greensboro, Md. : 00665: TOTAL PHOSPHORUS
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[18.4,39.3 (<0.0001),64]
[MINIMUM: 1993.1 (<0.0001)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
70
60
50
40
30
20
10
0
-10
-20
-30
1980
1985
1990
1995
2000
2005
2010

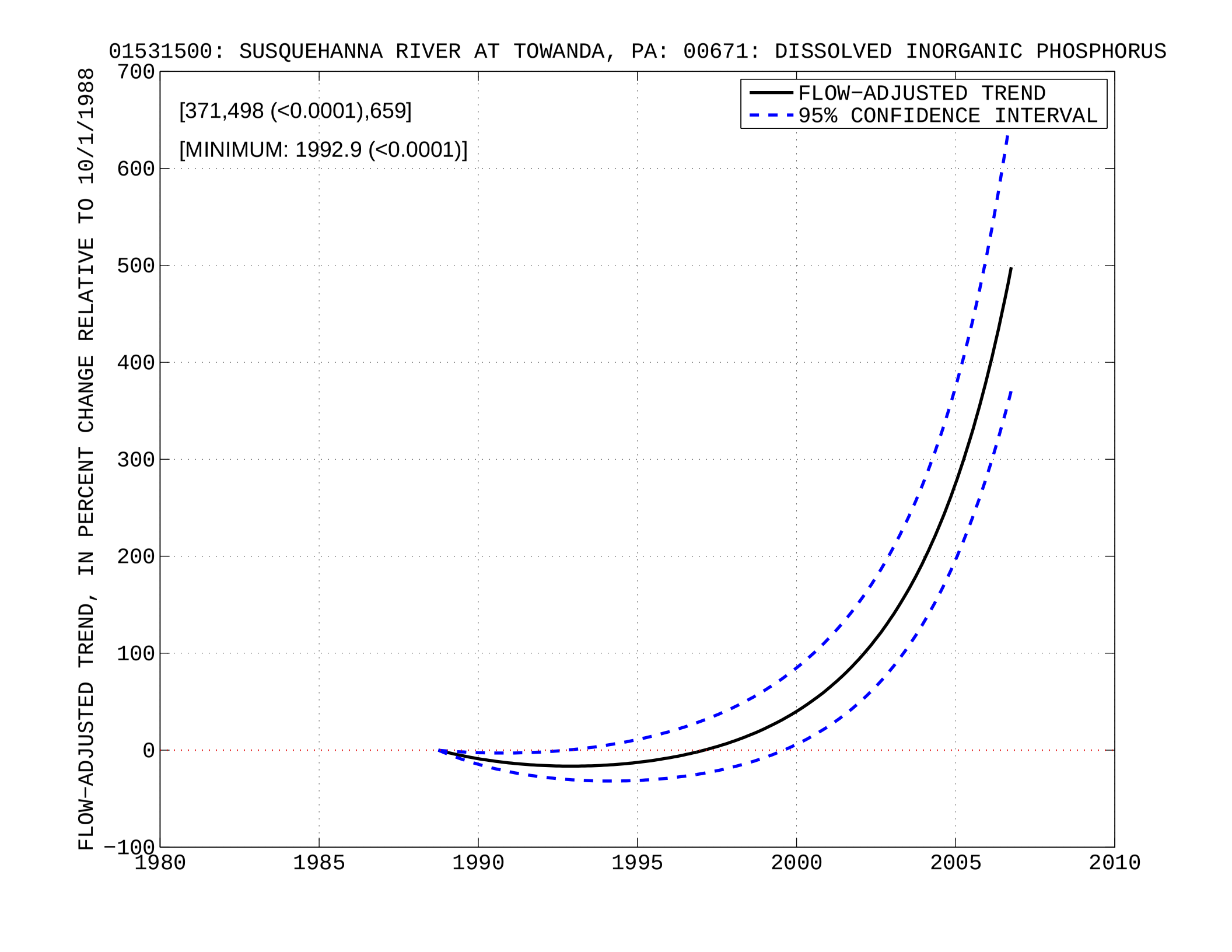

01491000: Choptank River near Greensboro, Md. : 00671: DISSOLVED INORGANIC PHOSPHORUS
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
[-9.13,14.7 (0.248),44.8]
[MAXIMUM: 1997 (0.0239)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
90
80
70
60
50
40
30
20
10
0
-10
1980
1985
1990
1995
2000
2005
2010

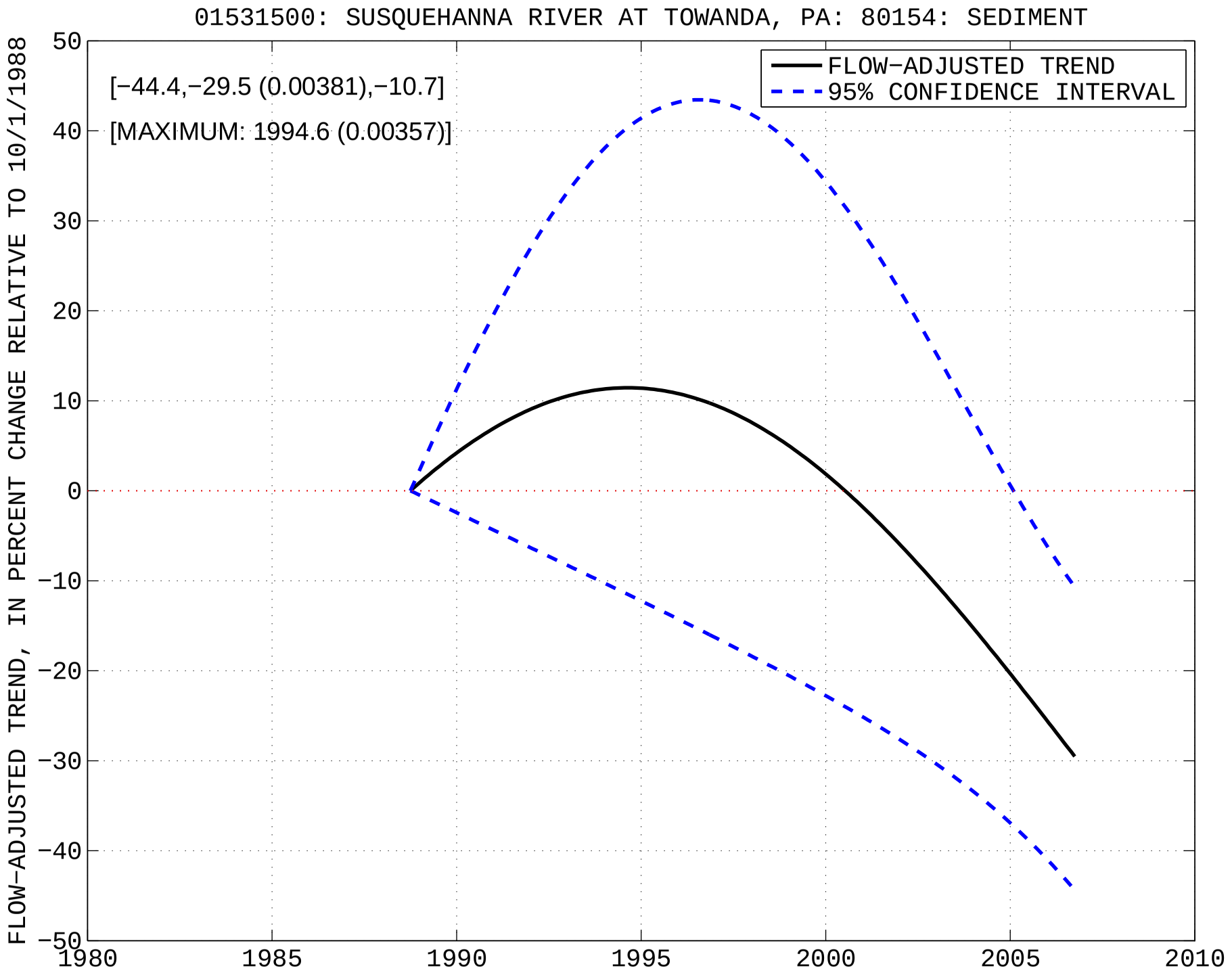

01491000: Choptank River near Greensboro, Md. : 80154: SEDIMENT
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[−59.7,−50.1 (<0.0001),−38.3]
[NO EXTREMUM (0.468)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
10
0
−10
−20
−30
−40
−50
−60
1980
1985
1990
1995
2000
2005
2010

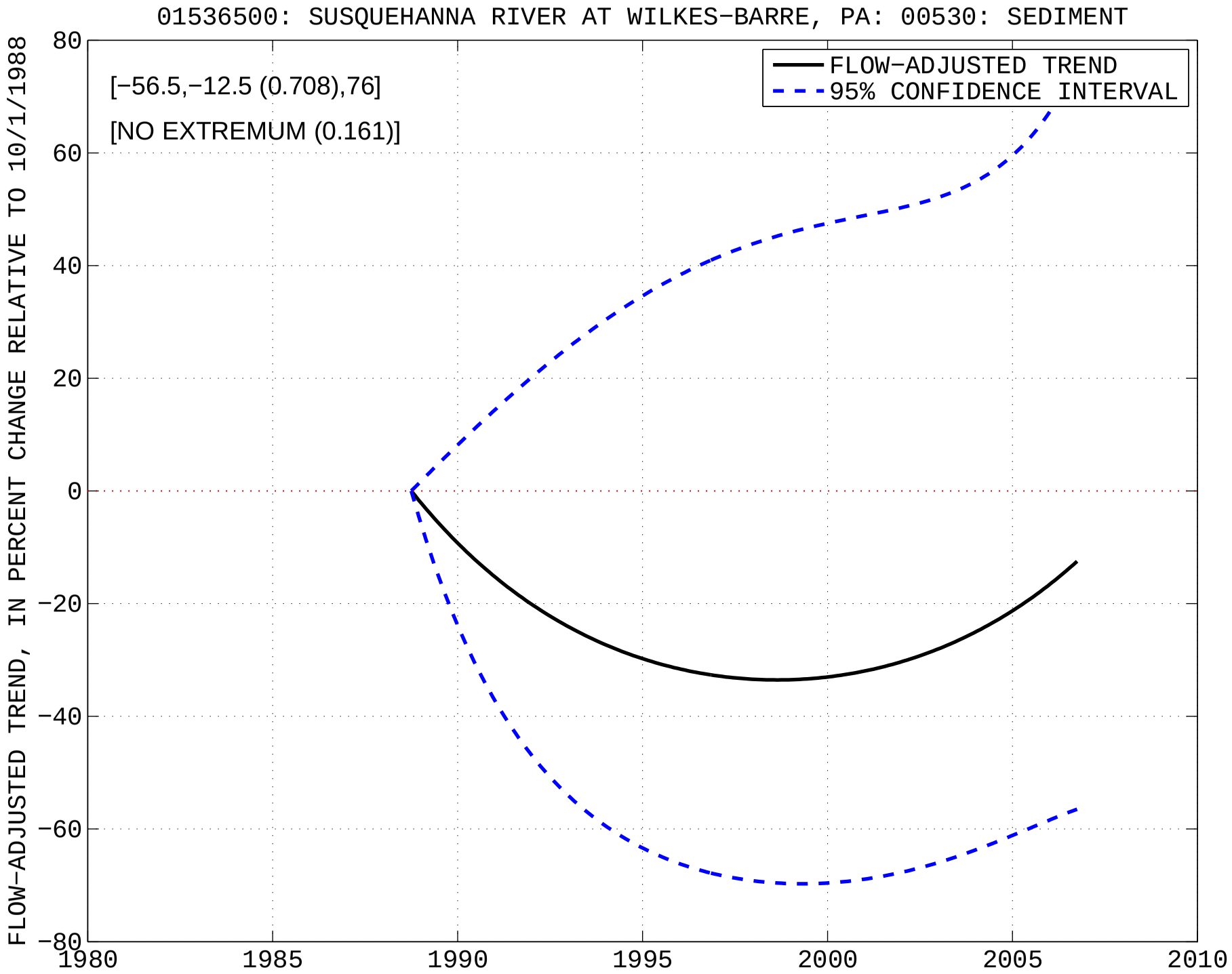

01531500: SUSQUEHANNA RIVER AT TOWANDA, PA: 00600: TOTAL NITROGEN
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[−42.8,−38.8 (<0.0001),−34.4]
[MAXIMUM: 1925.2 (<0.0001)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
5
0
−5
−10
−15
−20
−25
−30
−35
−40
−45
1980
1985
1990
1995
2000
2005
2010

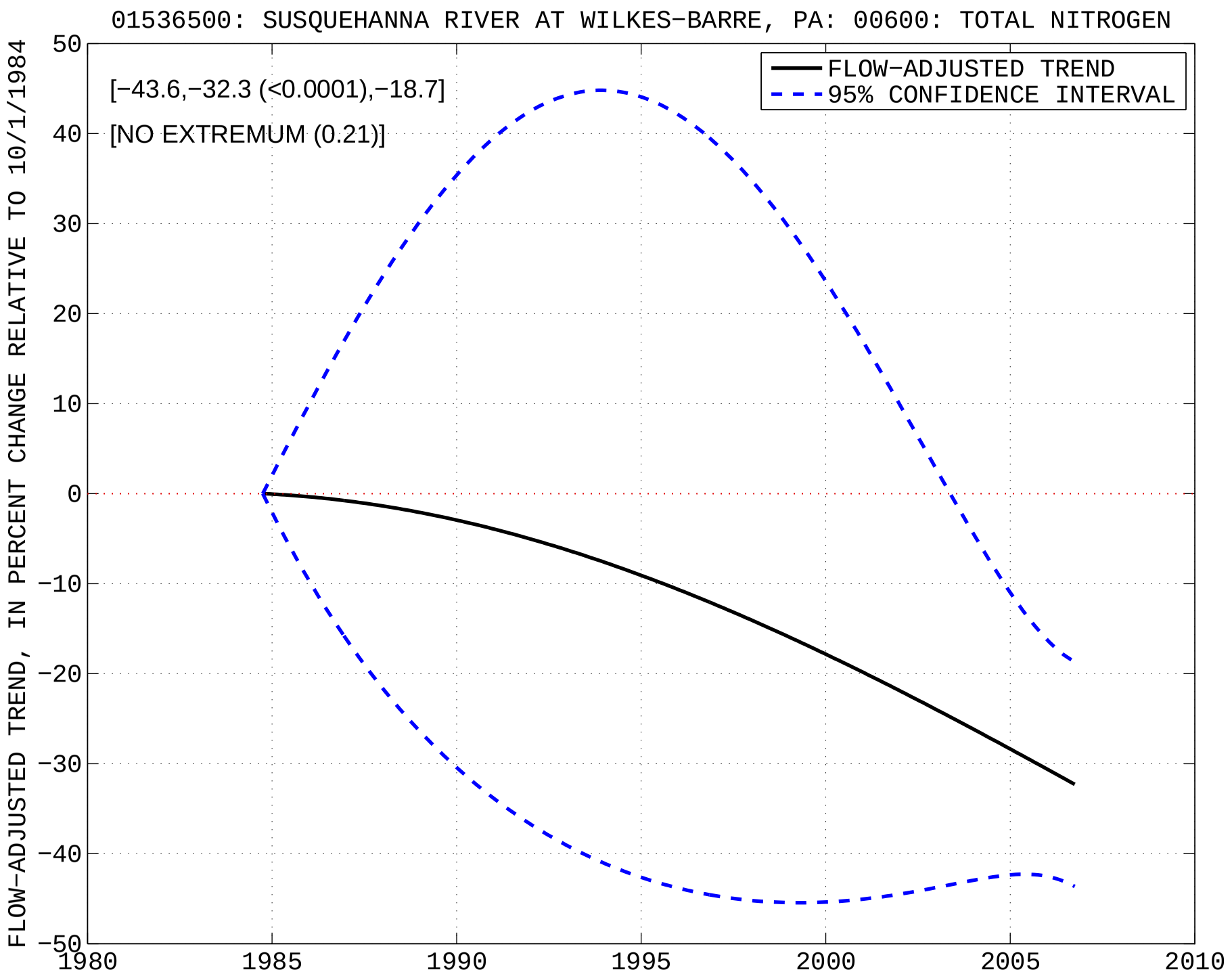

01531500: SUSQUEHANNA RIVER AT TOWANDA, PA: 00631: DISSOLVED NITRITE PLUS NITRATE
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
10
0
-10
-20
-30
-40
-50
-60
1980
1985
1990
1995
2000
2005
2010
[-51.3,-43.9 (<0.0001),-35.2]
[NO EXTREMUM (0.413)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL

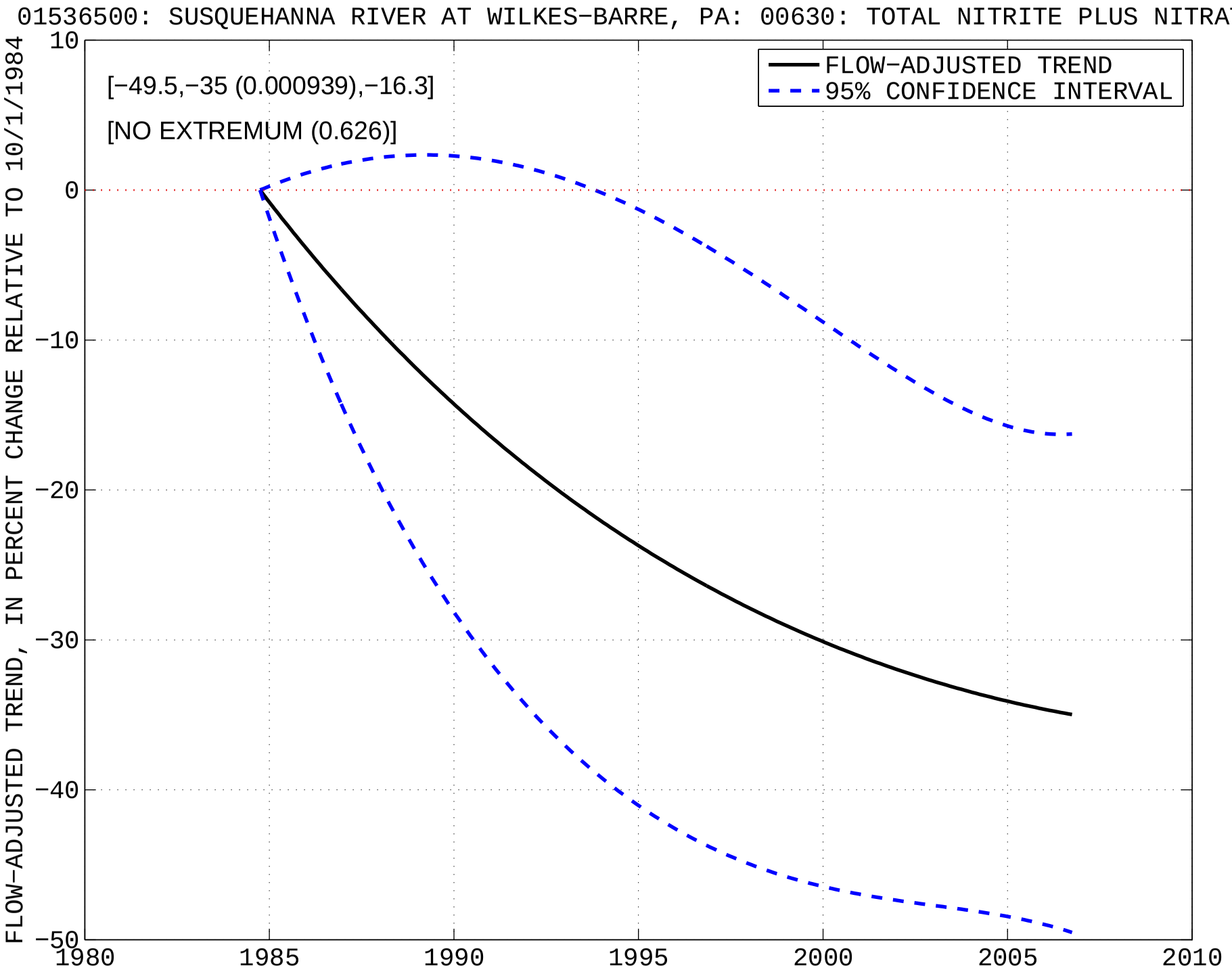

01531500: SUSQUEHANNA RIVER AT TOWANDA, PA: 00665: TOTAL PHOSPHORUS
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[-36.7,-26 (0.000151),-13.5]
[MINIMUM: 1997.8 (<0.0001)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
10
0
-10
-20
-30
-40
-50
-60
1980
1985
1990
1995
2000
2005
2010

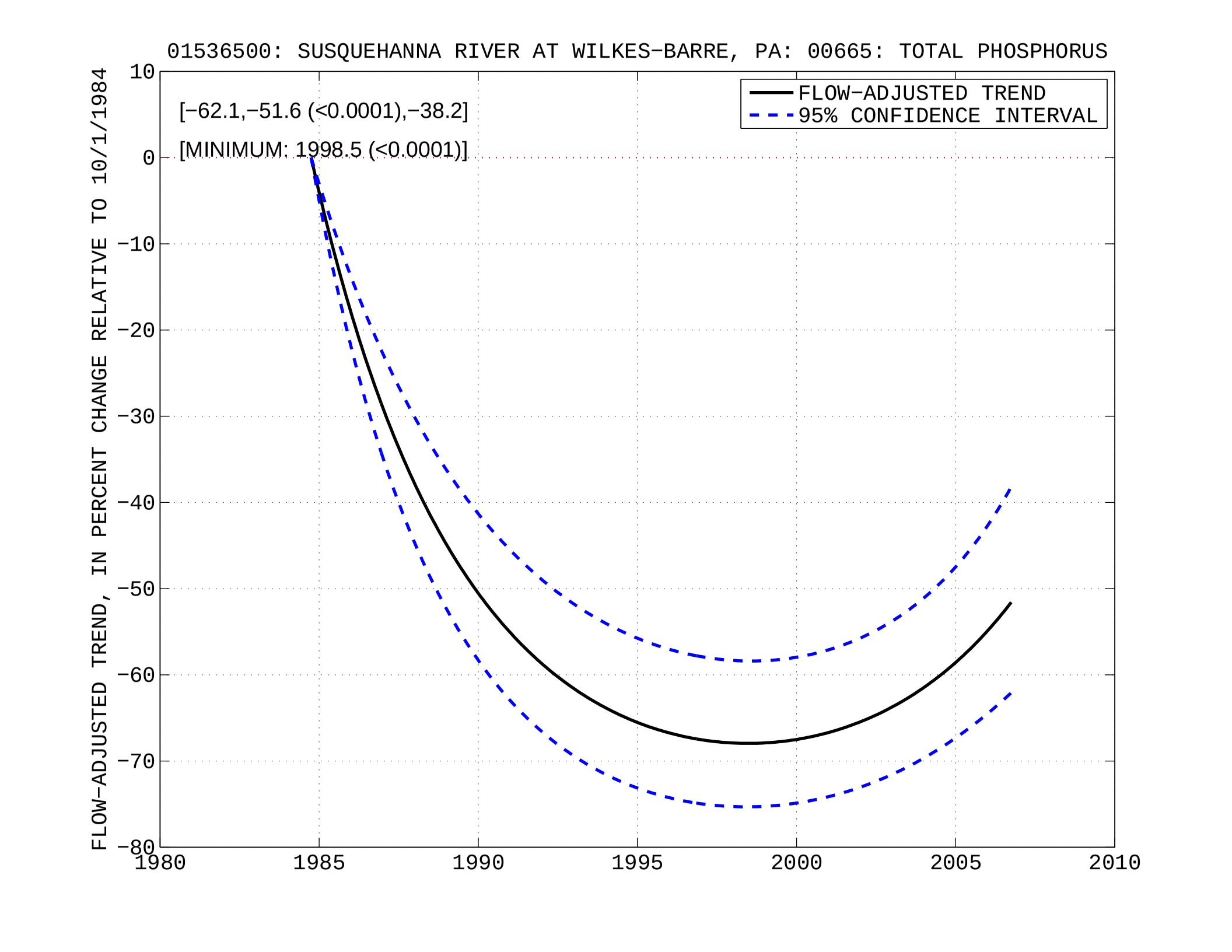

01531500: SUSQUEHANNA RIVER AT TOWANDA, PA: 00671: DISSOLVED INORGANIC PHOSPHORUS
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1988
700
600
500
400
300
200
100
0
-100
1980
1985
1990
1995
2000
2005
2010
[371,498 (<0.0001),659]
[MINIMUM: 1992.9 (<0.0001)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL

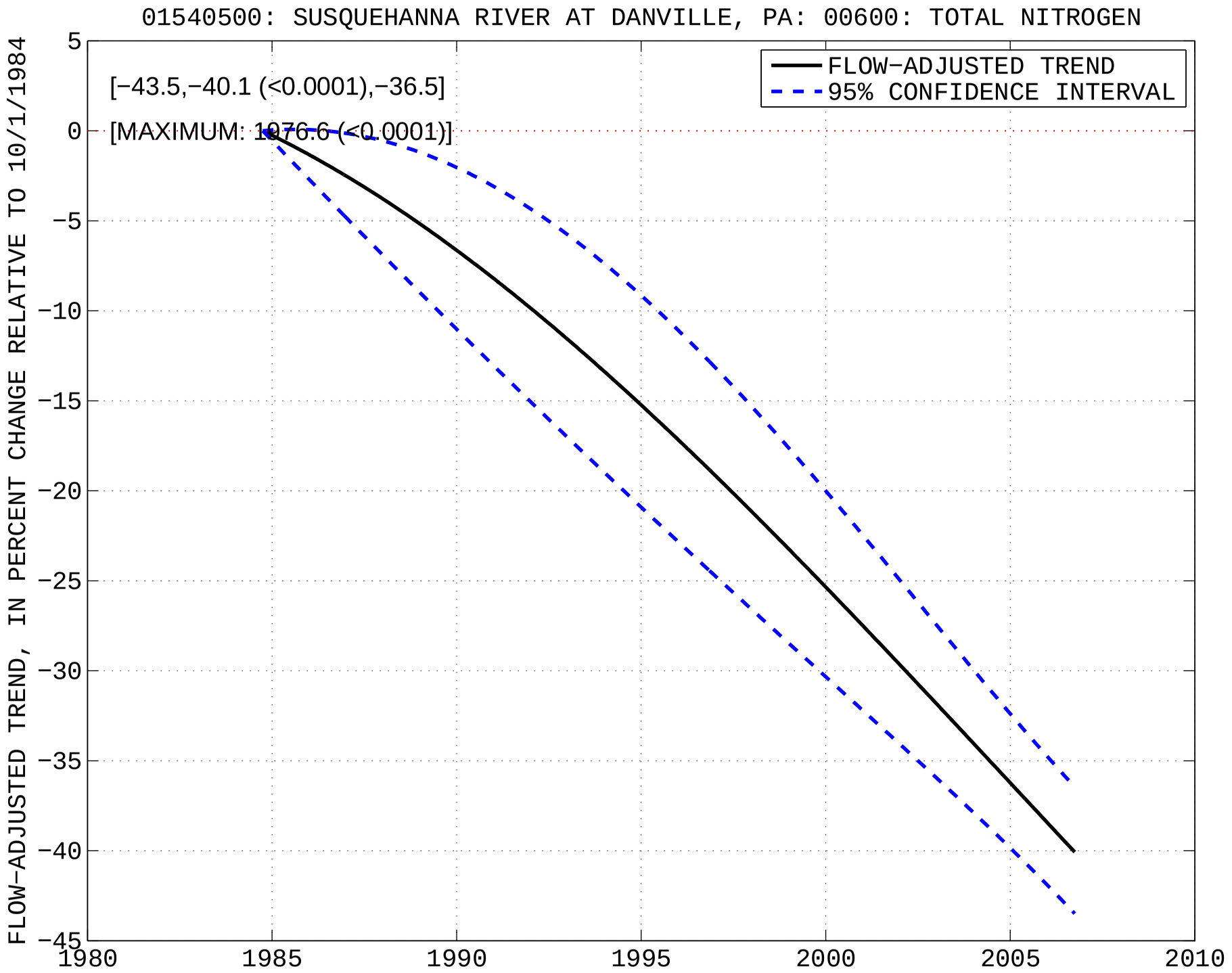

01531500: SUSQUEHANNA RIVER AT TOWANDA, PA: 80154: SEDIMENT
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[−44.4,−29.5 (0.00381),−10.7]
[MAXIMUM: 1994.6 (0.00357)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1988
50
40
30
20
10
0
−10
−20
−30
−40
−50
1980
1985
1990
1995
2000
2005
2010

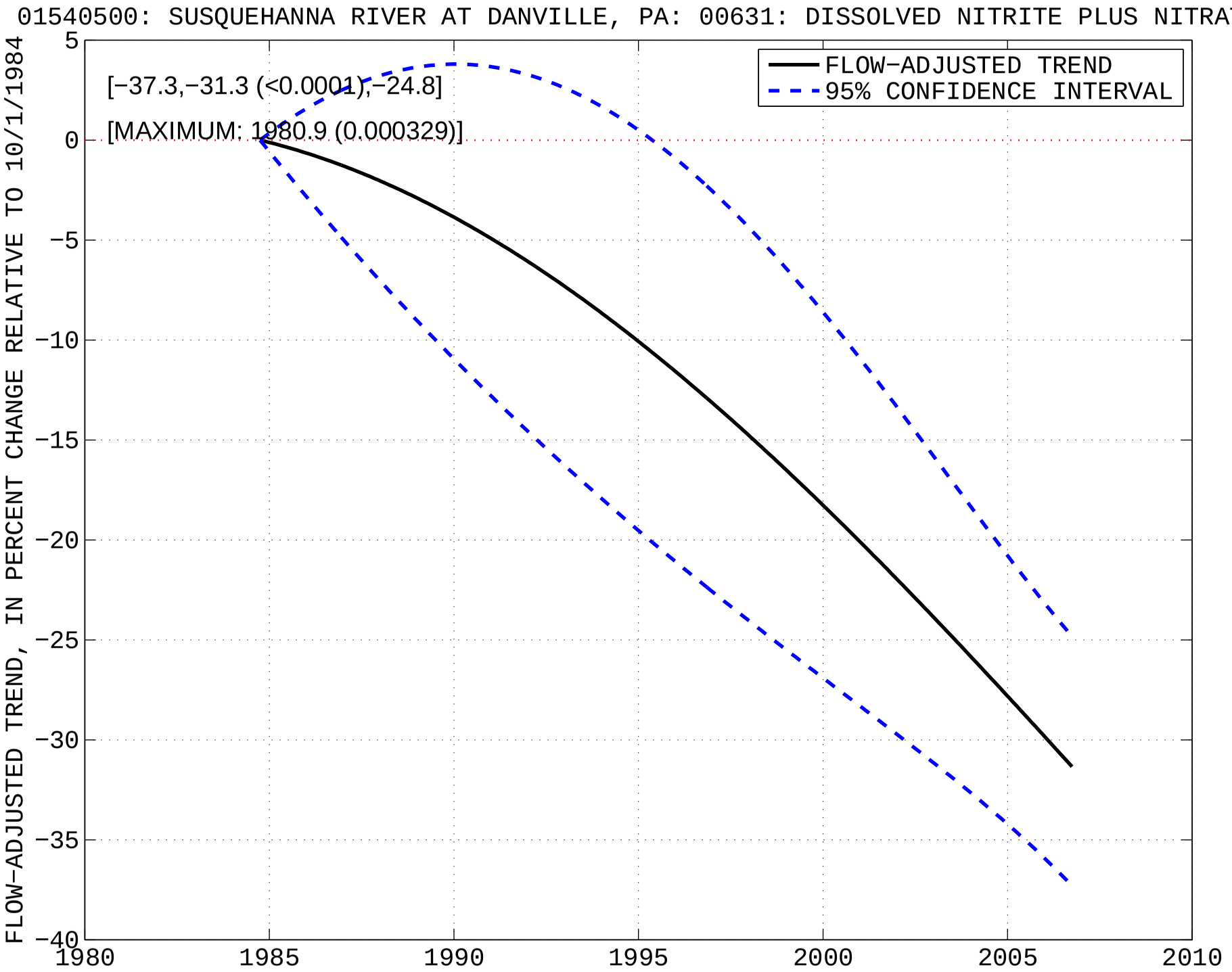

01536500: SUSQUEHANNA RIVER AT WILKES-BARRE, PA: 00530: SEDIMENT
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[-56.5,-12.5 (0.708),76]
[NO EXTREMUM (0.161)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1988
80
60
40
20
0
-20
-40
-60
-80
1980
1985
1990
1995
2000
2005
2010

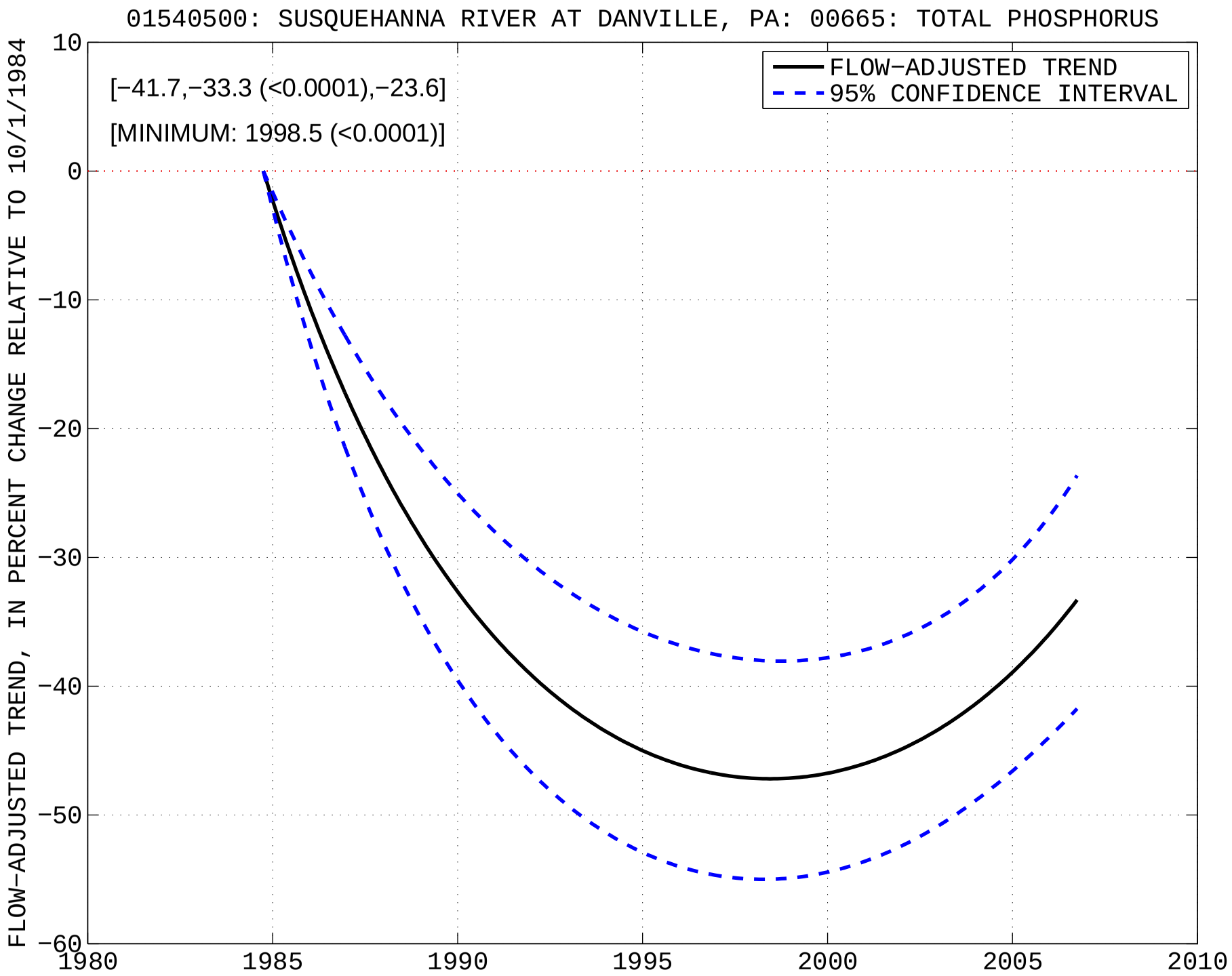

01536500: SUSQUEHANNA RIVER AT WILKES-BARRE, PA: 00600: TOTAL NITROGEN
[−43.6,−32.3 (<0.0001),−18.7]
[NO EXTREMUM (0.21)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
50
40
30
20
10
0
−10
−20
−30
−40
−50
1980
1985
1990
1995
2000
2005
2010

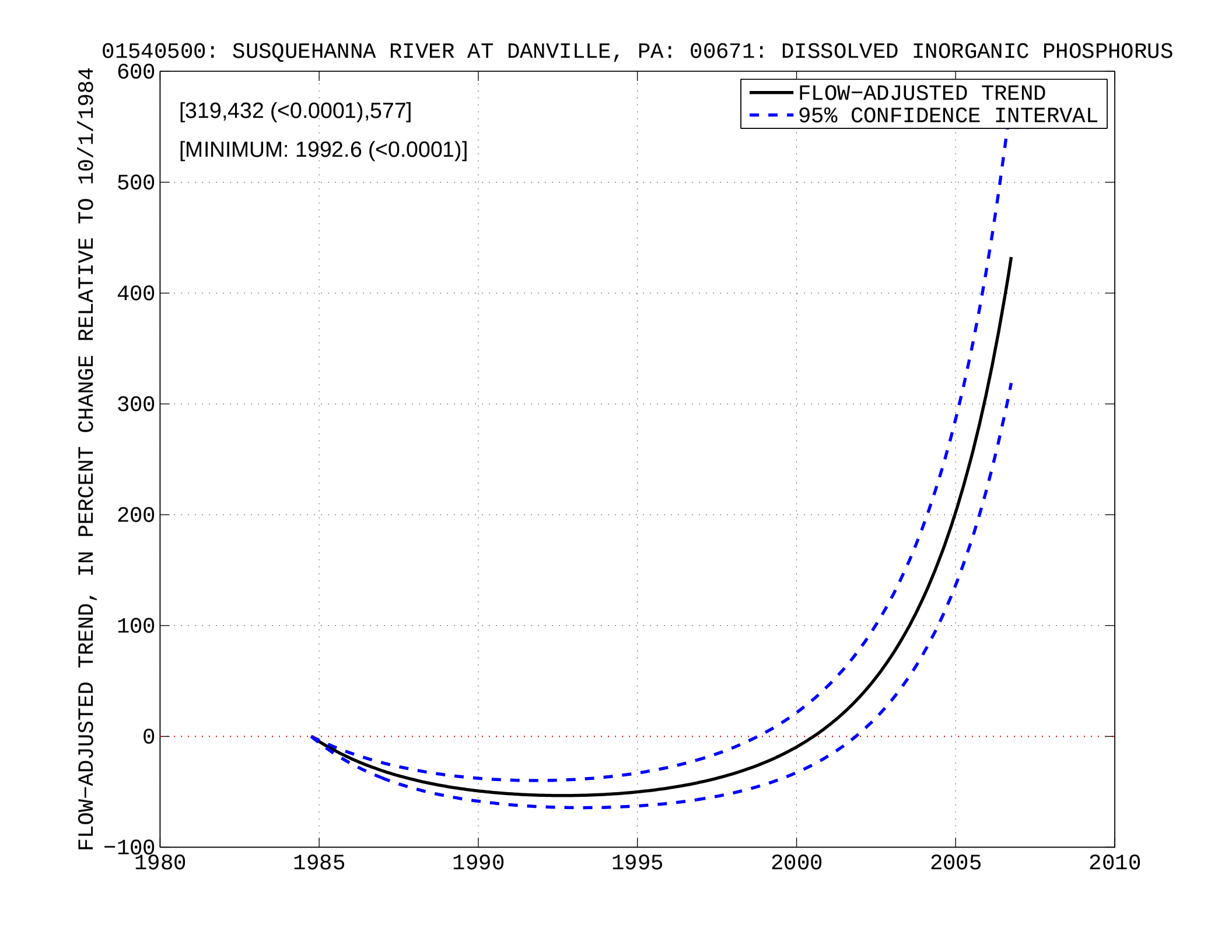

01536500: SUSQUEHANNA RIVER AT WILKES-BARRE, PA: 00630: TOTAL NITRITE PLUS NITRATE
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[-49.5,-35 (0.000939),-16.3]
[NO EXTREMUM (0.626)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
10
0
-10
-20
-30
-40
-50
1980
1985
1990
1995
2000
2005
2010

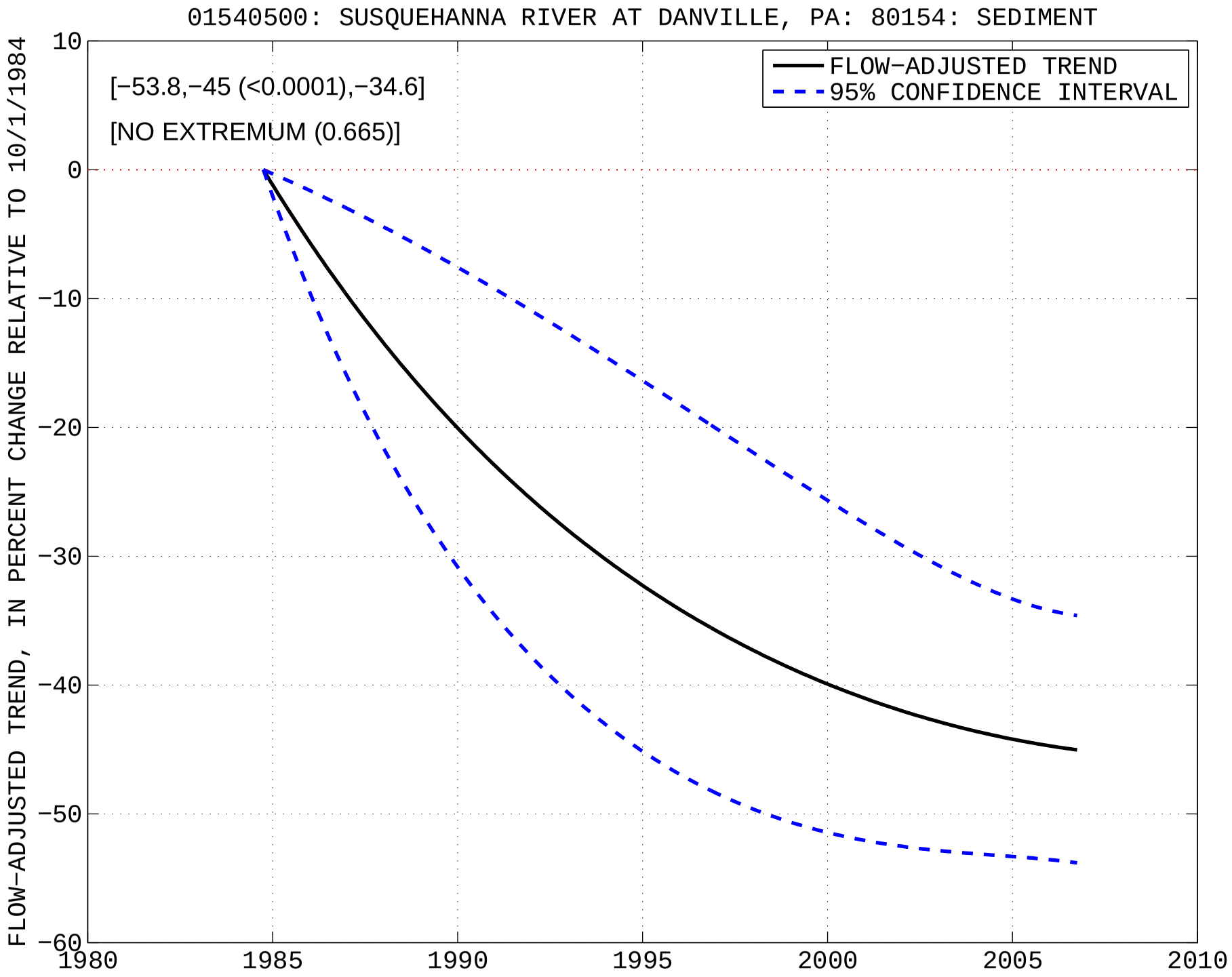

01536500: SUSQUEHANNA RIVER AT WILKES-BARRE, PA: 00665: TOTAL PHOSPHORUS
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
[−62.1,−51.6 (<0.0001),−38.2]
[MINIMUM: 1998.5 (<0.0001)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
10
0
−10
−20
−30
−40
−50
−60
−70
−80
1980
1985
1990
1995
2000
2005
2010

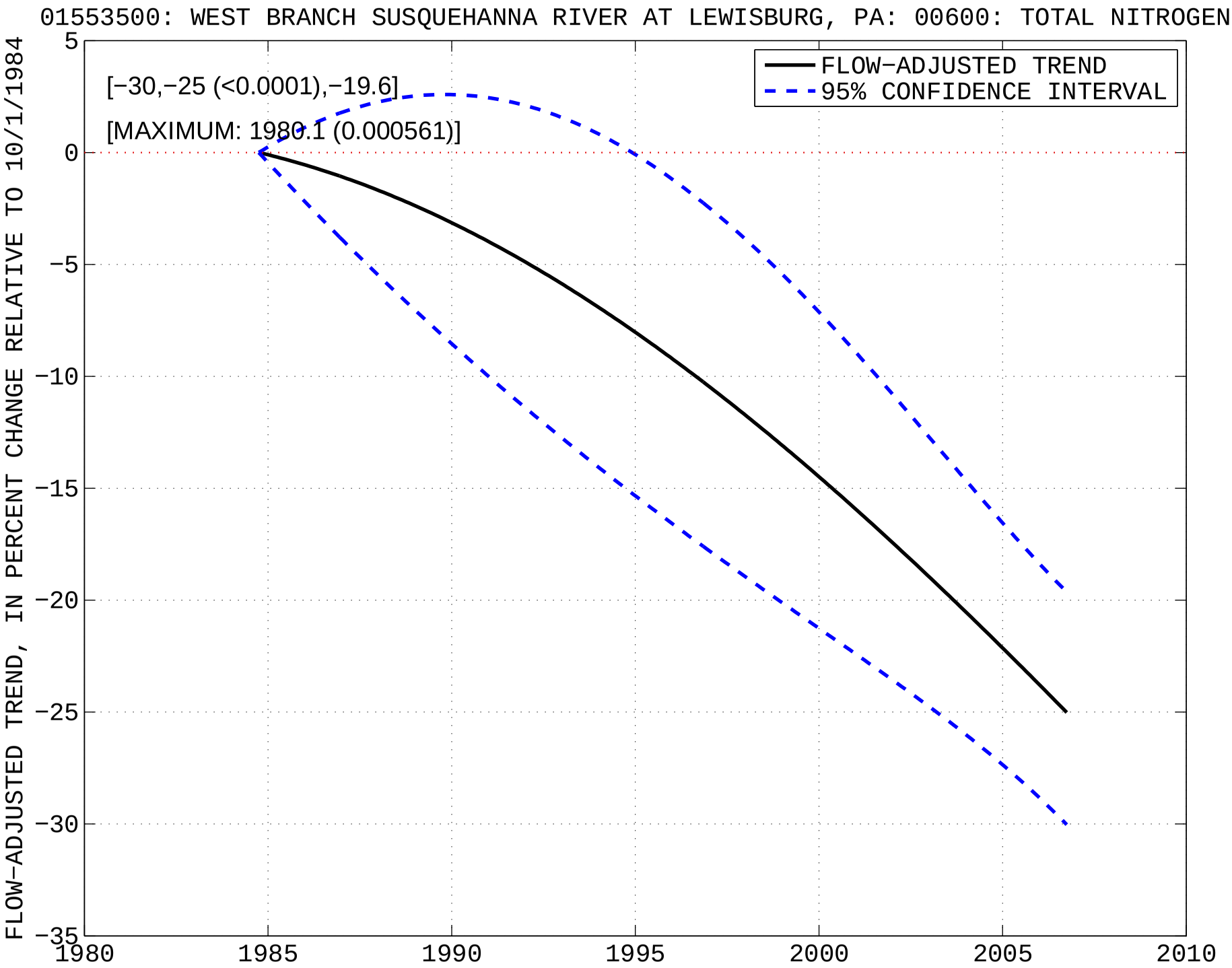

01540500: SUSQUEHANNA RIVER AT DANVILLE, PA: 00600: TOTAL NITROGEN
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[−43.5,−40.1 (<0.0001),−36.5]
[MAXIMUM: 1976.6 (<0.0001)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
5
0
−5
−10
−15
−20
−25
−30
−35
−40
−45
1980
1985
1990
1995
2000
2005
2010

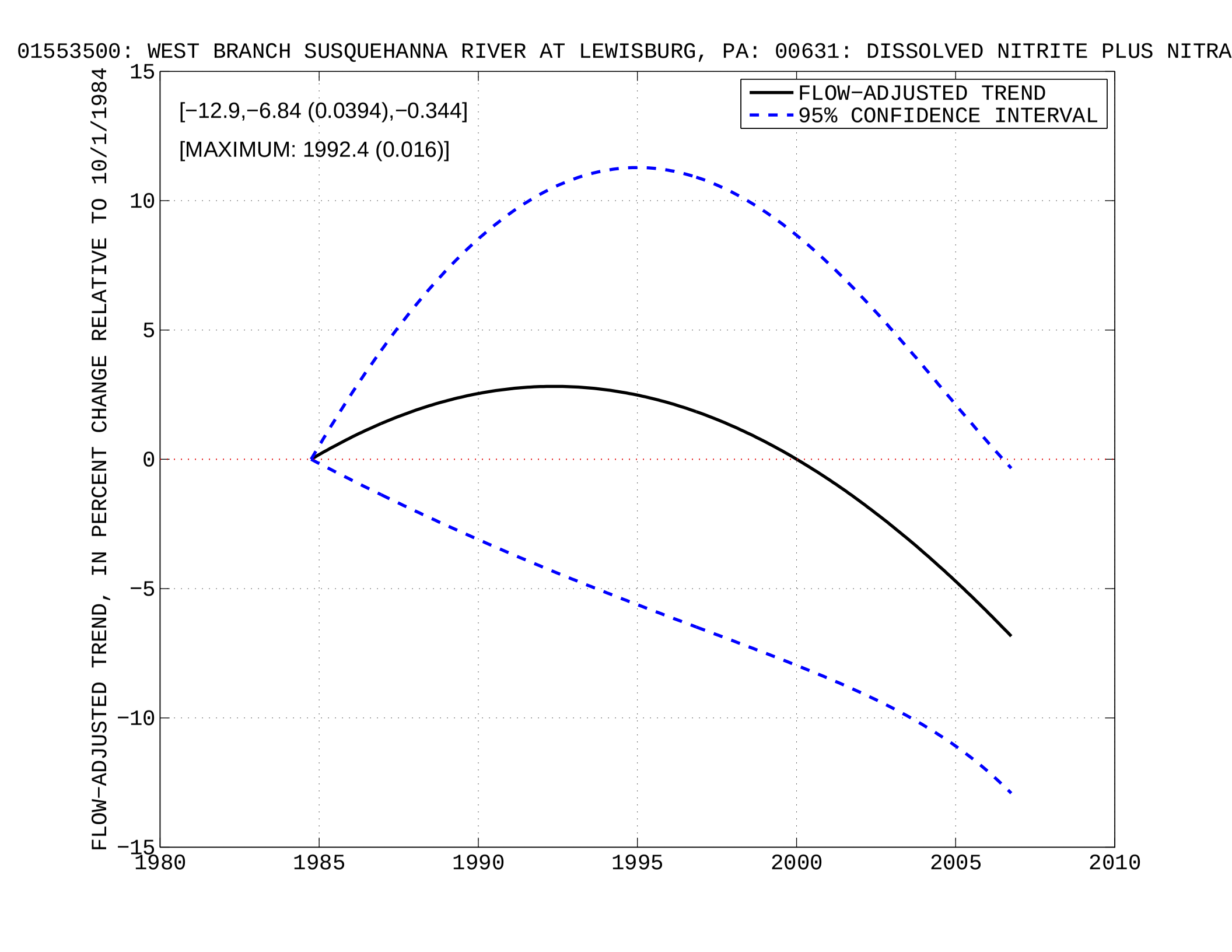

01540500: SUSQUEHANNA RIVER AT DANVILLE, PA: 00631: DISSOLVED NITRITE PLUS NITRATE
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[−37.3,−31.3 (<0.0001),−24.8]
[MAXIMUM: 1980.9 (0.000329)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
5
0
−5
−10
−15
−20
−25
−30
−35
−40
1980
1985
1990
1995
2000
2005
2010

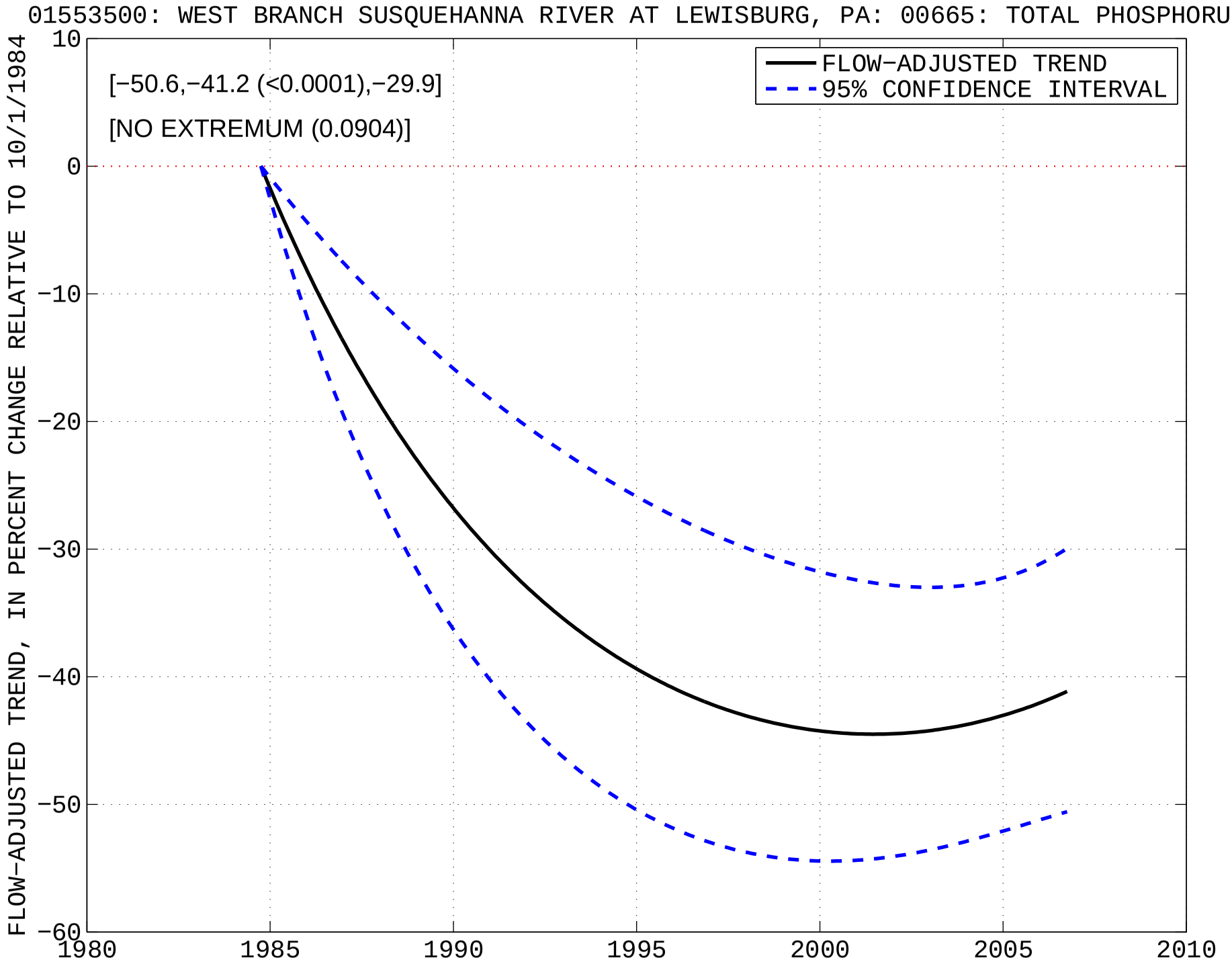

01540500: SUSQUEHANNA RIVER AT DANVILLE, PA: 00665: TOTAL PHOSPHORUS
[−41.7,−33.3 (<0.0001),−23.6]
[MINIMUM: 1998.5 (<0.0001)]
FLOW−ADJUSTED TREND
95% CONFIDENCE INTERVAL
FLOW−ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
10
0
−10
−20
−30
−40
−50
−60
1980
1985
1990
1995
2000
2005
2010

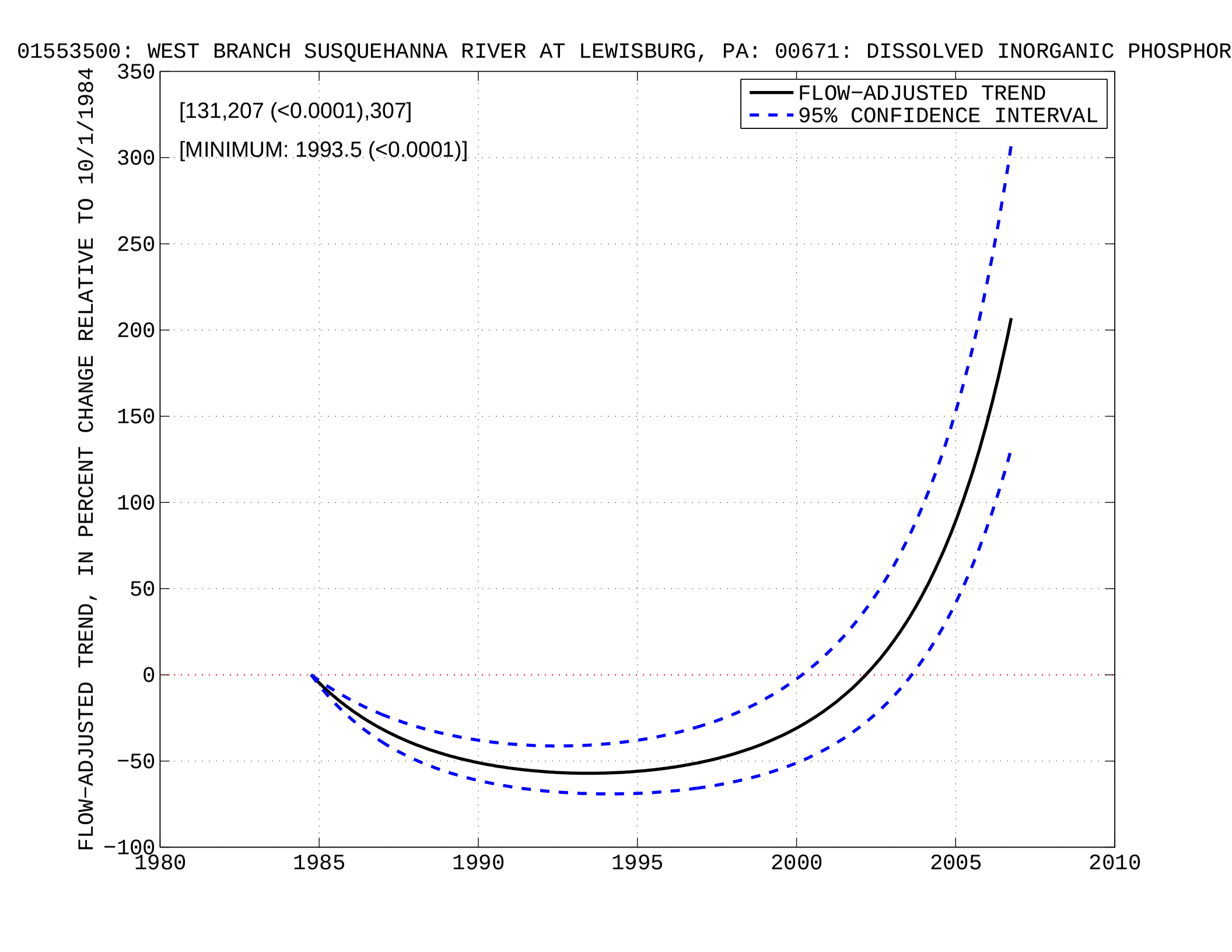

01540500: SUSQUEHANNA RIVER AT DANVILLE, PA: 00671: DISSOLVED INORGANIC PHOSPHORUS
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
600
500
400
300
200
100
0
-100
1980
1985
1990
1995
2000
2005
2010
[319,432 (<0.0001),577]
[MINIMUM: 1992.6 (<0.0001)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL

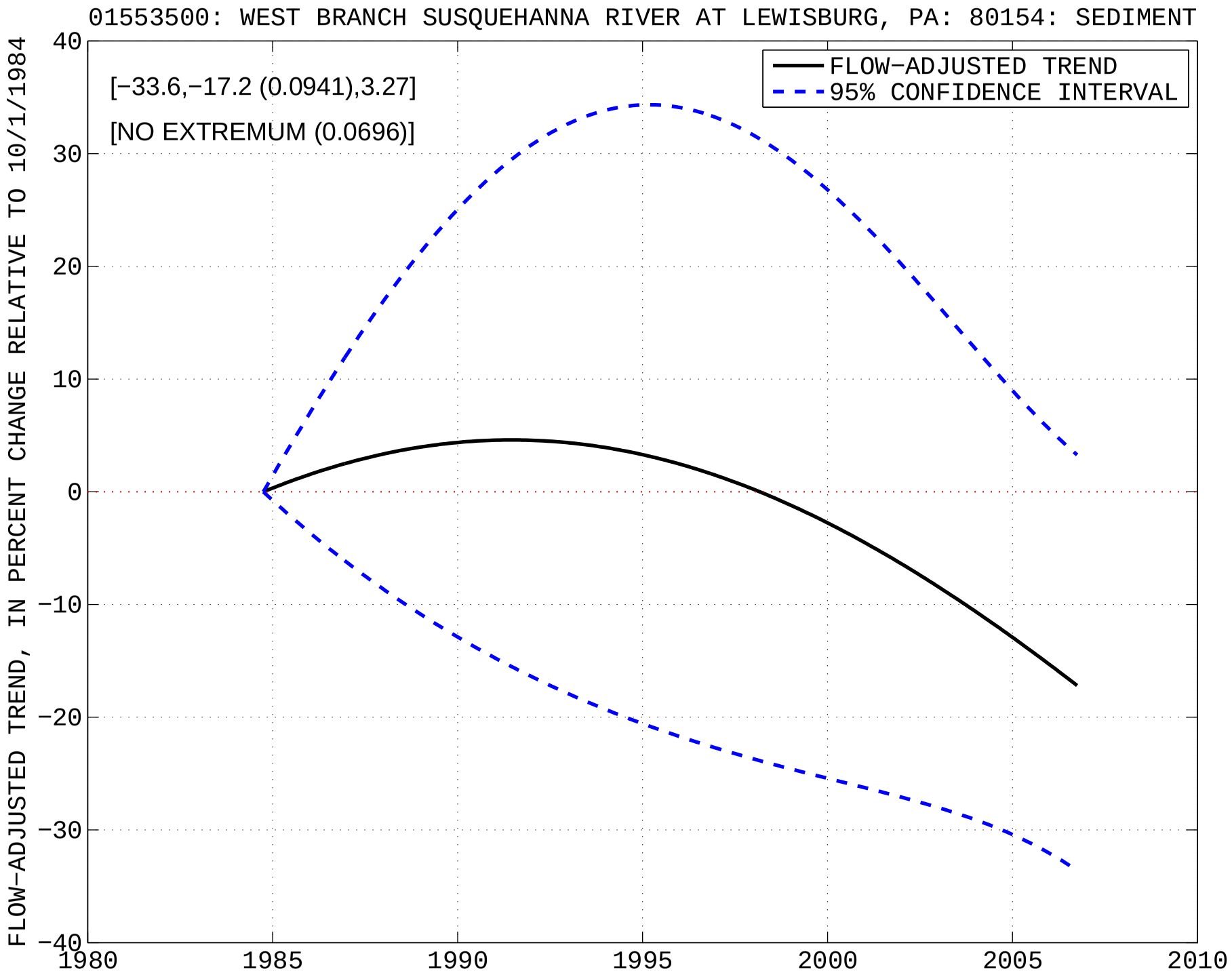

01540500: SUSQUEHANNA RIVER AT DANVILLE, PA: 80154: SEDIMENT
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[−53.8,−45 (<0.0001),−34.6]
[NO EXTREMUM (0.665)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
10
0
−10
−20
−30
−40
−50
−60
1980
1985
1990
1995
2000
2005
2010

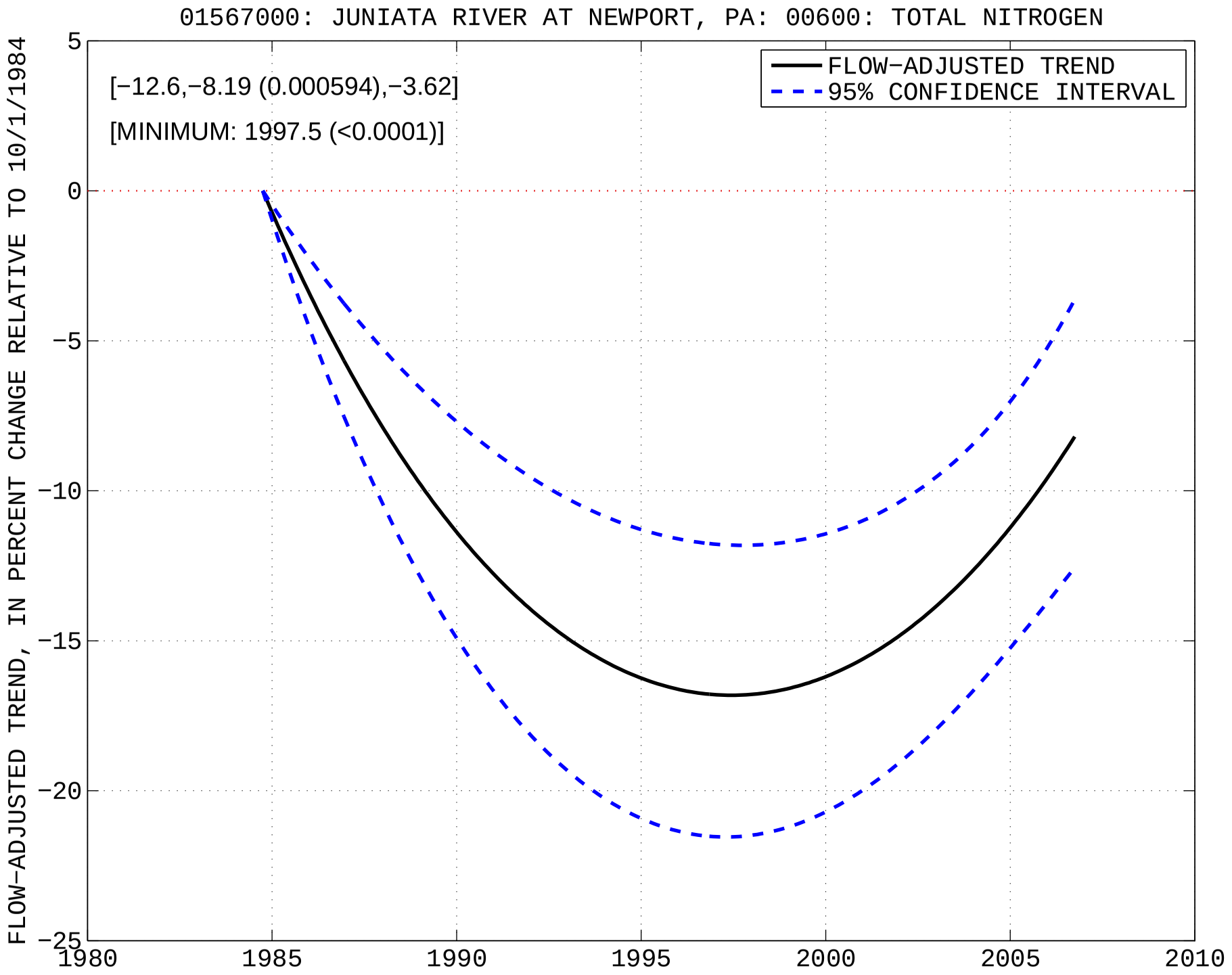

01553500: WEST BRANCH SUSQUEHANNA RIVER AT LEWISBURG, PA: 00600: TOTAL NITROGEN
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
[−30,−25 (<0.0001),−19.6]
[MAXIMUM: 1980.1 (0.000561)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
5
0
−5
−10
−15
−20
−25
−30
−35
1980
1985
1990
1995
2000
2005
2010

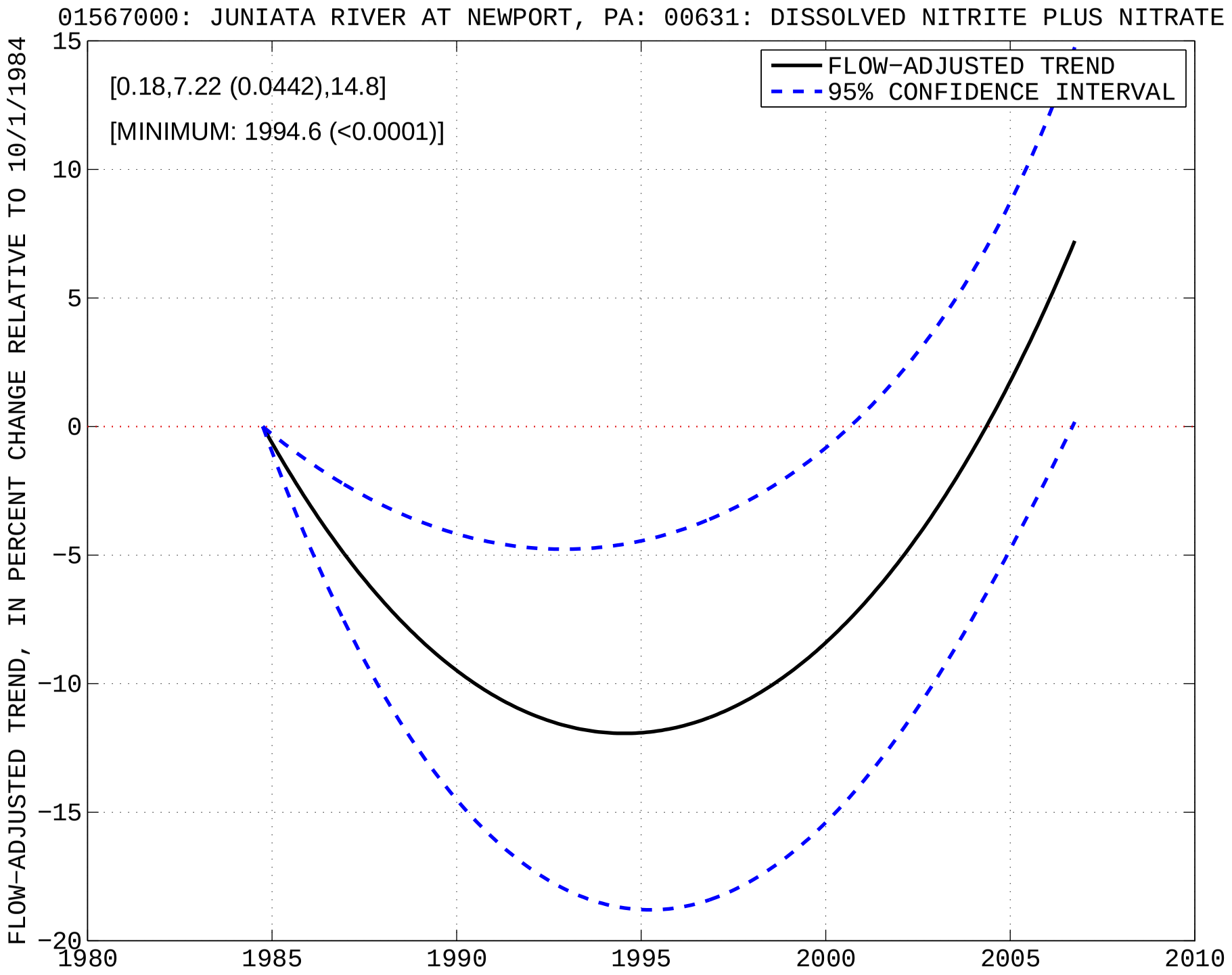

01553500: WEST BRANCH SUSQUEHANNA RIVER AT LEWISBURG, PA: 00631: DISSOLVED NITRITE PLUS NITRA
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
15
10
5
0
-5
-10
-15
1980
1985
1990
1995
2000
2005
2010
[-12.9,-6.84 (0.0394),-0.344]
[MAXIMUM: 1992.4 (0.016)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL

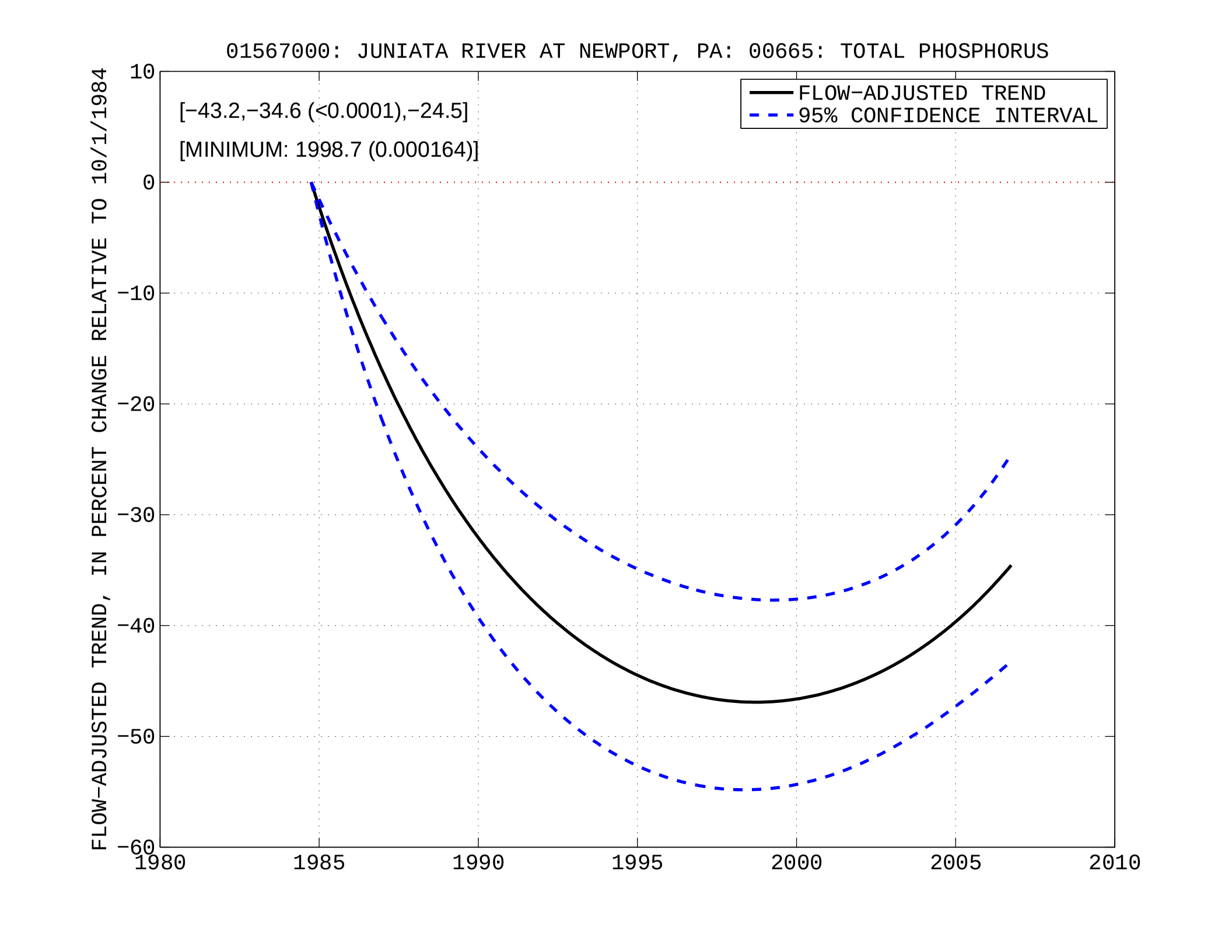

01553500: WEST BRANCH SUSQUEHANNA RIVER AT LEWISBURG, PA: 00665: TOTAL PHOSPHORUS
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
[−50.6,−41.2 (<0.0001),−29.9]
[NO EXTREMUM (0.0904)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
10
0
−10
−20
−30
−40
−50
−60
1980
1985
1990
1995
2000
2005
2010

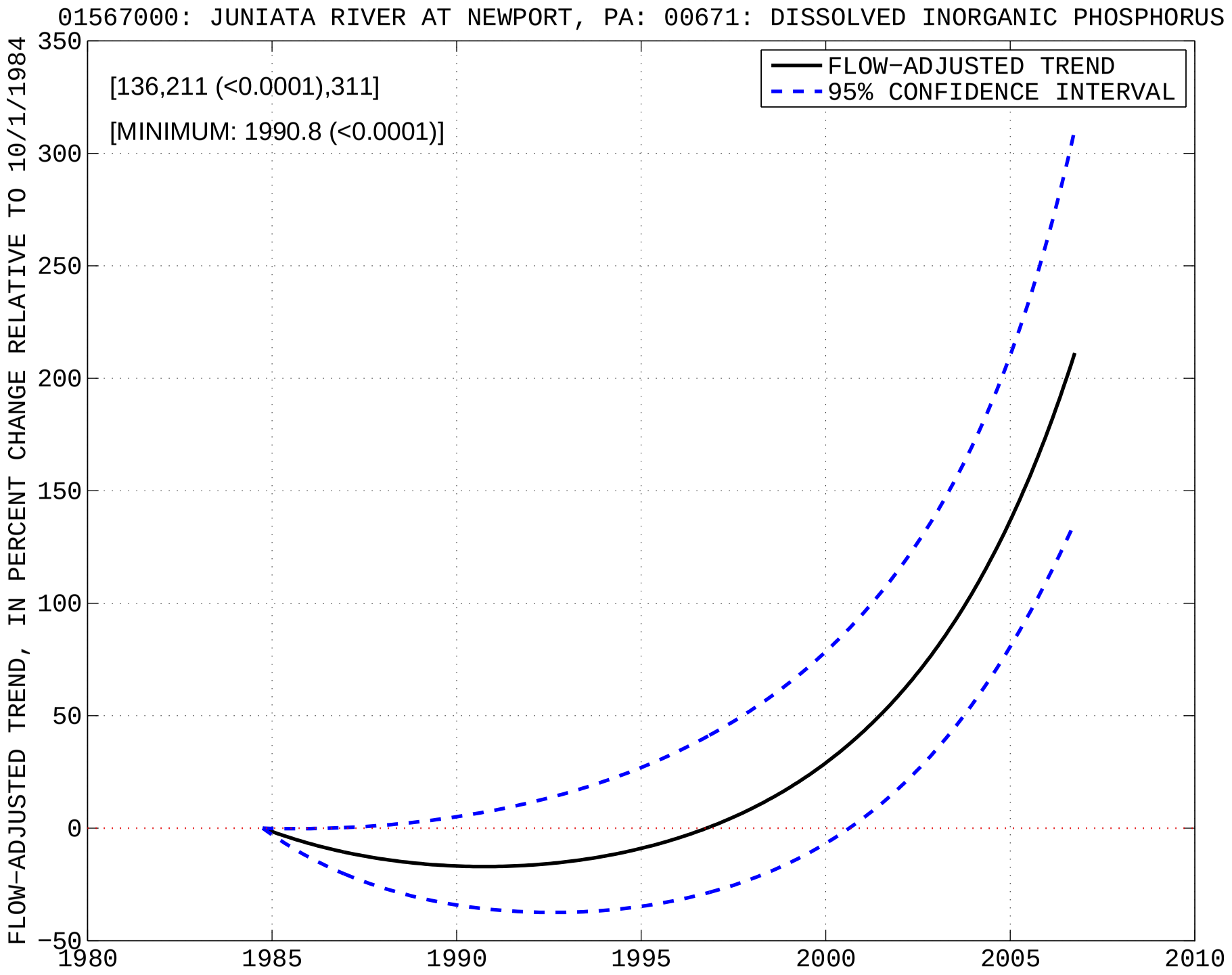

01553500: WEST BRANCH SUSQUEHANNA RIVER AT LEWISBURG, PA: 00671: DISSOLVED INORGANIC PHOSPHOR
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
350
300
250
200
150
100
50
0
-50
-100
1980
1985
1990
1995
2000
2005
2010
[131,207 (<0.0001),307]
[MINIMUM: 1993.5 (<0.0001)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL

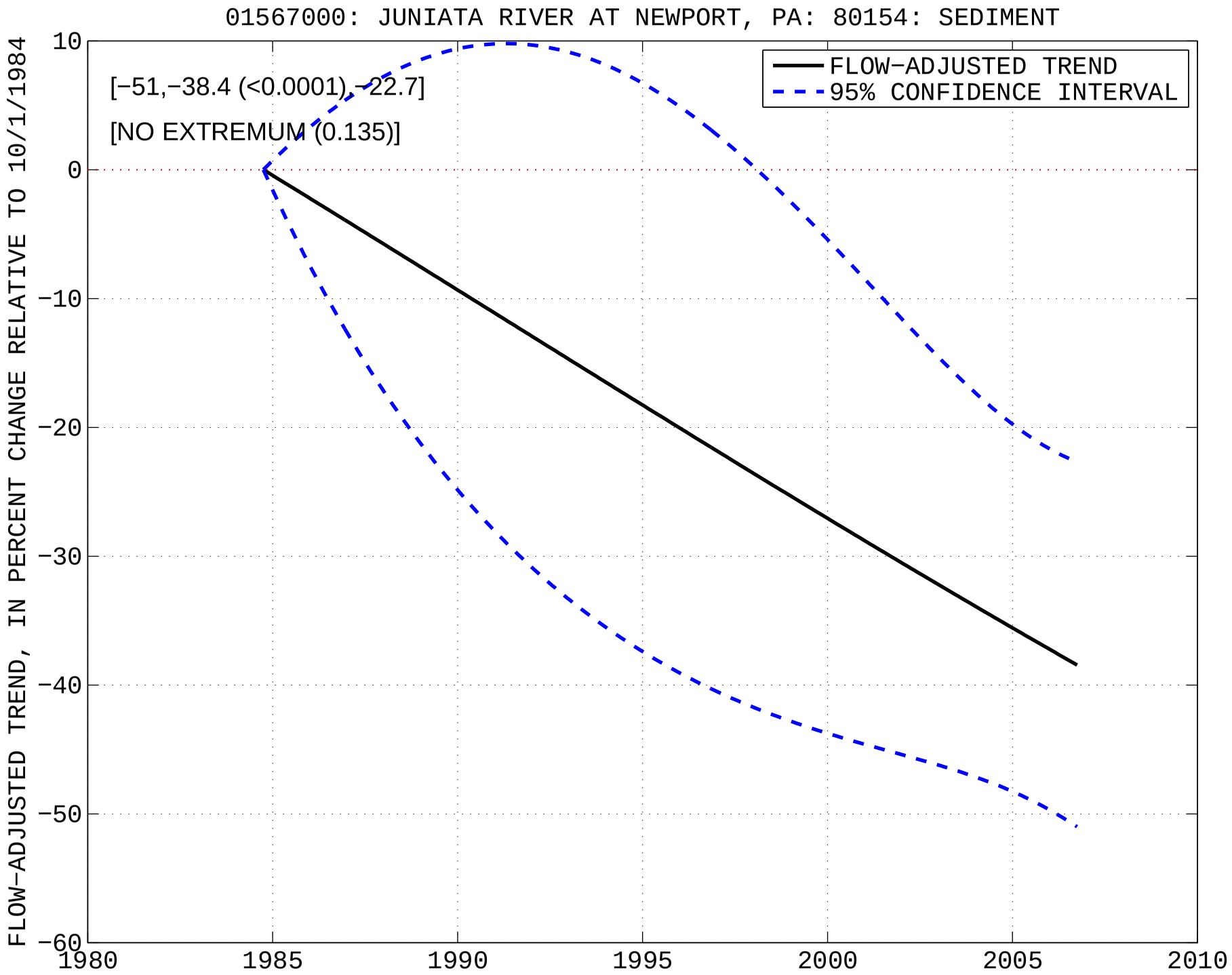

01553500: WEST BRANCH SUSQUEHANNA RIVER AT LEWISBURG, PA: 80154: SEDIMENT
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[−33.6,−17.2 (0.0941),3.27]
[NO EXTREMUM (0.0696)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
40
30
20
10
0
−10
−20
−30
−40
1980
1985
1990
1995
2000
2005
2010

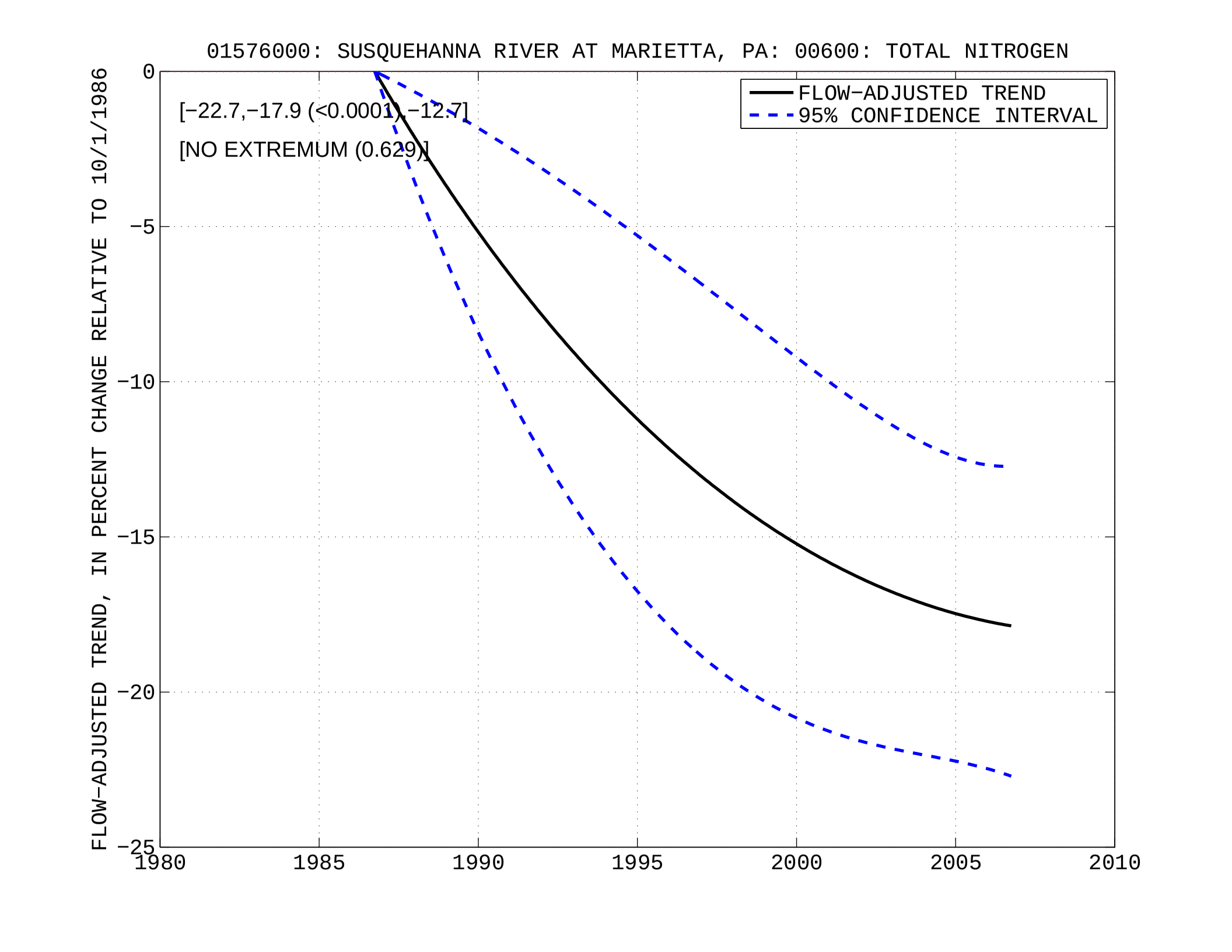

01567000: JUNIATA RIVER AT NEWPORT, PA: 00600: TOTAL NITROGEN
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
[−12.6,−8.19 (0.000594),−3.62]
[MINIMUM: 1997.5 (<0.0001)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
5
0
−5
−10
−15
−20
−25
1980
1985
1990
1995
2000
2005
2010

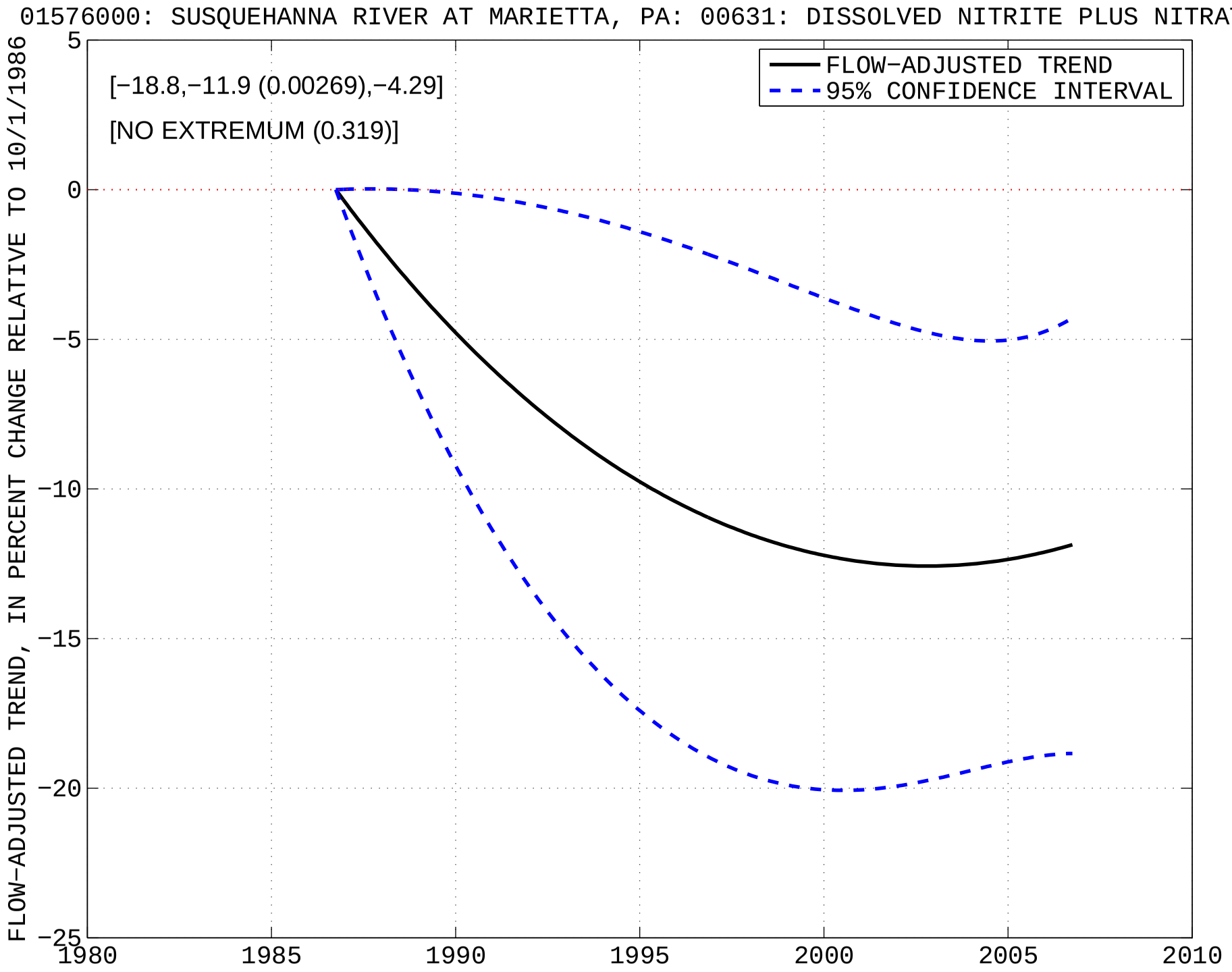

01567000: JUNIATA RIVER AT NEWPORT, PA: 00631: DISSOLVED NITRITE PLUS NITRATE
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
[0.18,7.22 (0.0442),14.8]
[MINIMUM: 1994.6 (<0.0001)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
15
10
5
0
-5
-10
-15
-20
1980
1985
1990
1995
2000
2005
2010

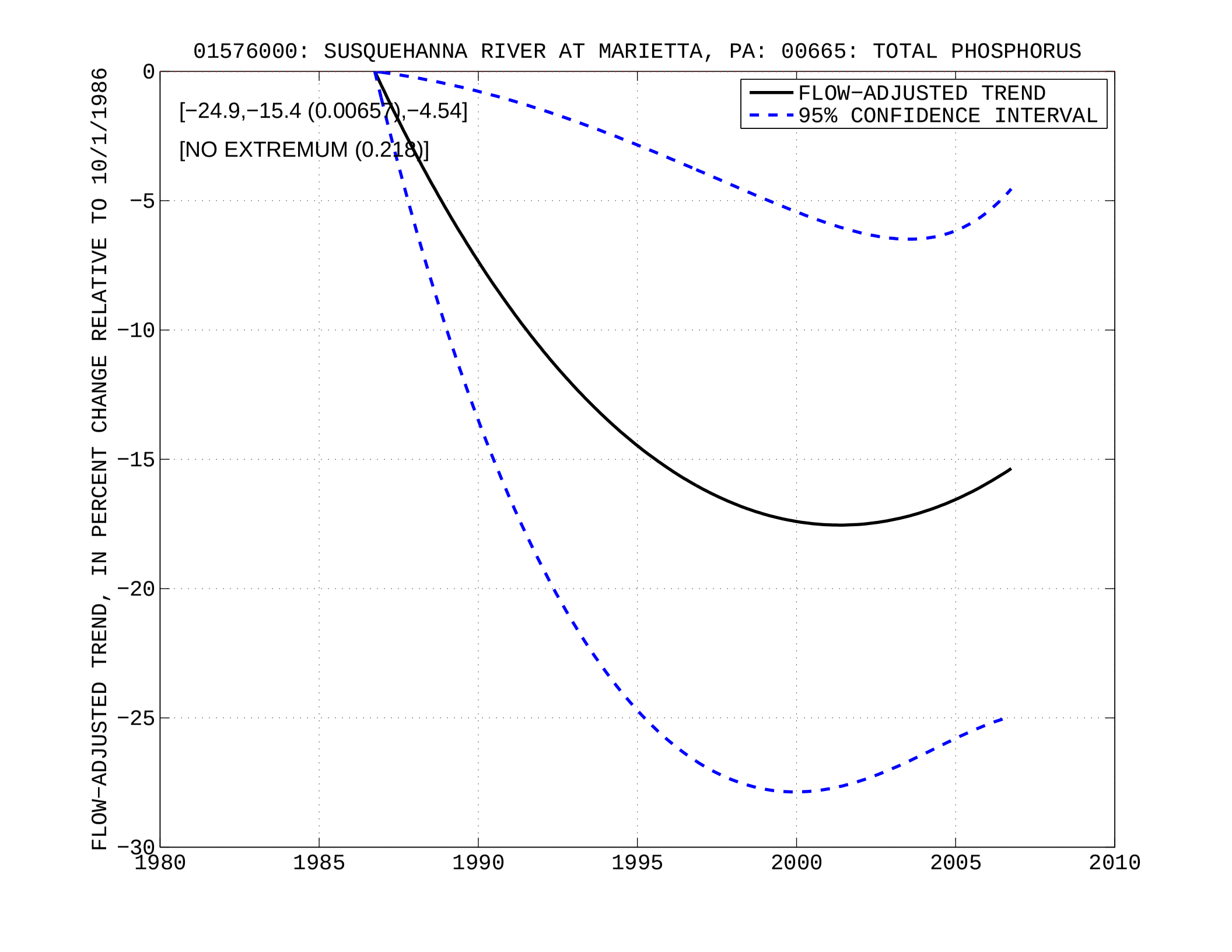

01567000: JUNIATA RIVER AT NEWPORT, PA: 00665: TOTAL PHOSPHORUS
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
[−43.2,−34.6 (<0.0001),−24.5]
[MINIMUM: 1998.7 (0.000164)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
10
0
−10
−20
−30
−40
−50
−60
1980
1985
1990
1995
2000
2005
2010

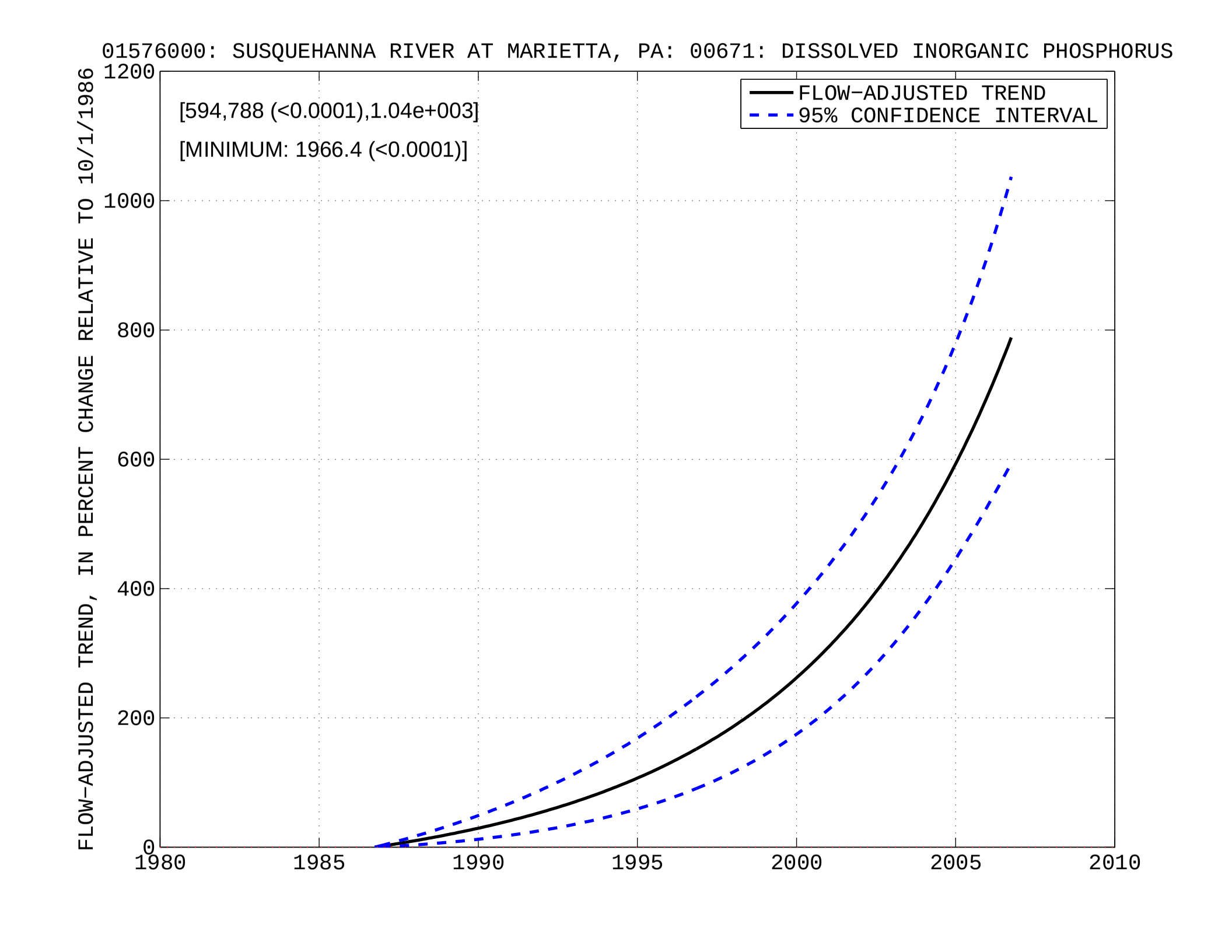

01567000: JUNIATA RIVER AT NEWPORT, PA: 00671: DISSOLVED INORGANIC PHOSPHORUS
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[136,211 (<0.0001),311]
[MINIMUM: 1990.8 (<0.0001)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
350
300
250
200
150
100
50
0
-50
1980
1985
1990
1995
2000
2005
2010

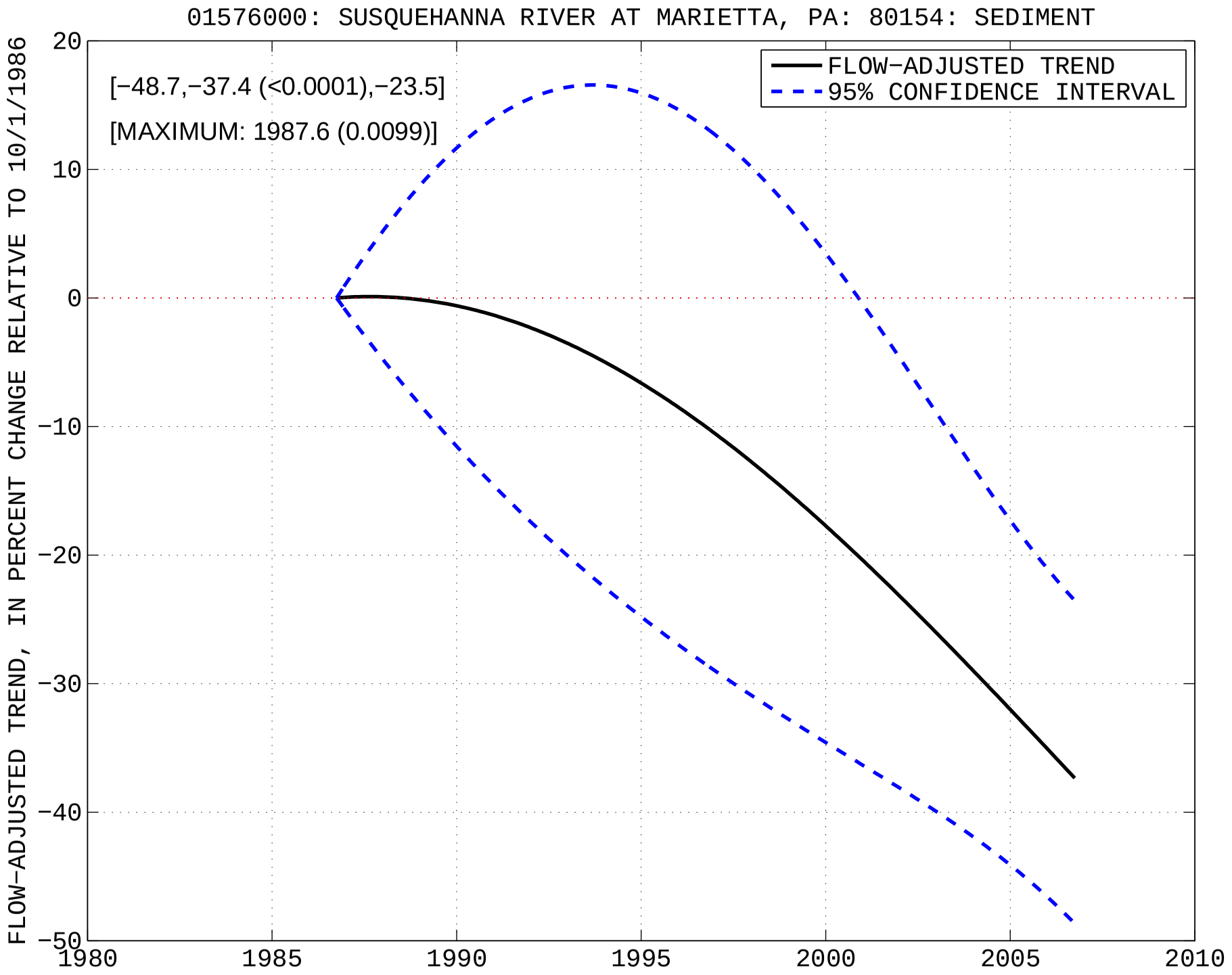

01567000: JUNIATA RIVER AT NEWPORT, PA: 80154: SEDIMENT
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[−51,−38.4 (<0.0001),−22.7]
[NO EXTREMUM (0.135)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
10
0
−10
−20
−30
−40
−50
−60
1980
1985
1990
1995
2000
2005
2010

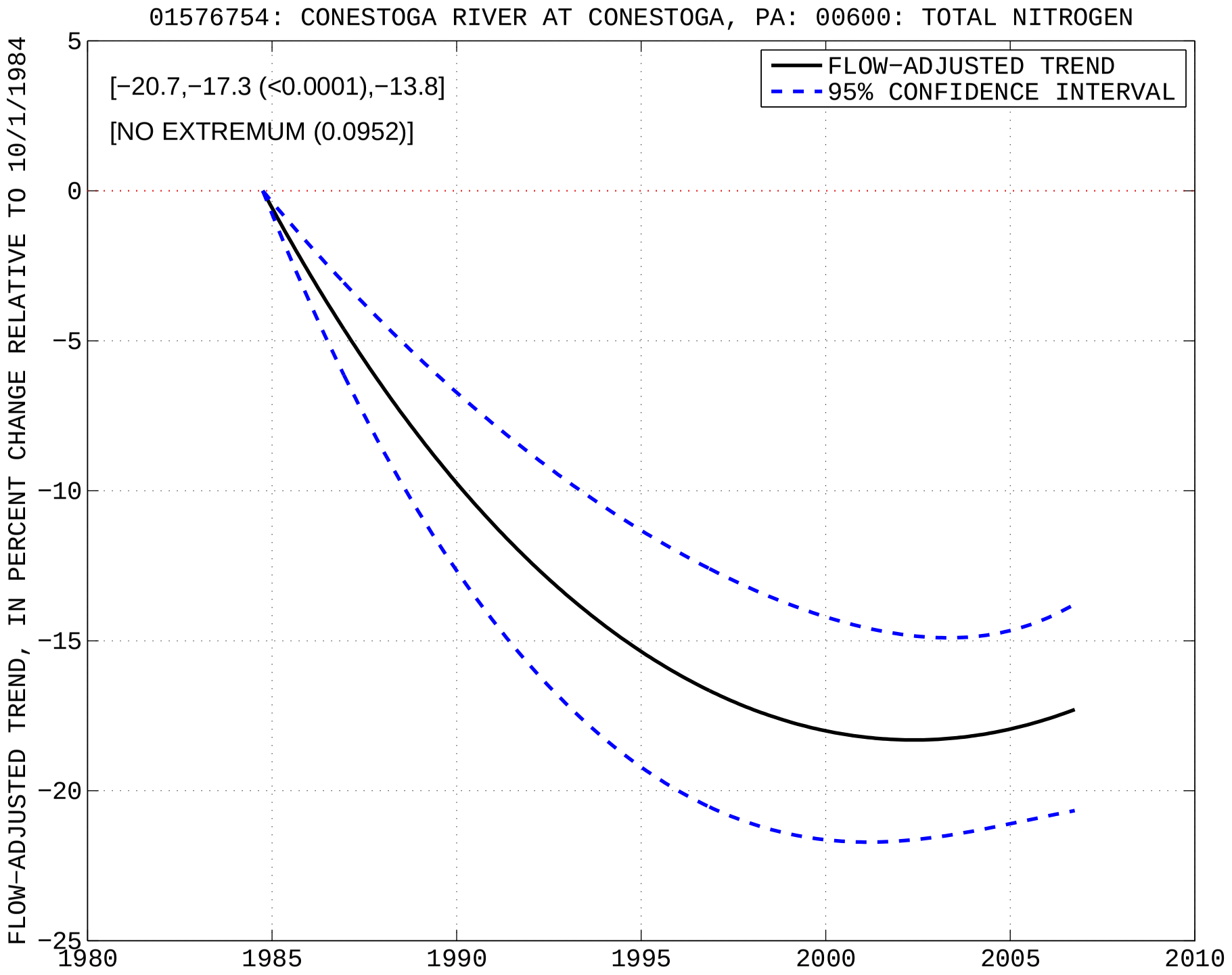

01576000: SUSQUEHANNA RIVER AT MARIETTA, PA: 00600: TOTAL NITROGEN
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[−22.7,−17.9 (<0.0001),−12.7]
[NO EXTREMUM (0.629)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1986
0
−5
−10
−15
−20
−25
1980
1985
1990
1995
2000
2005
2010

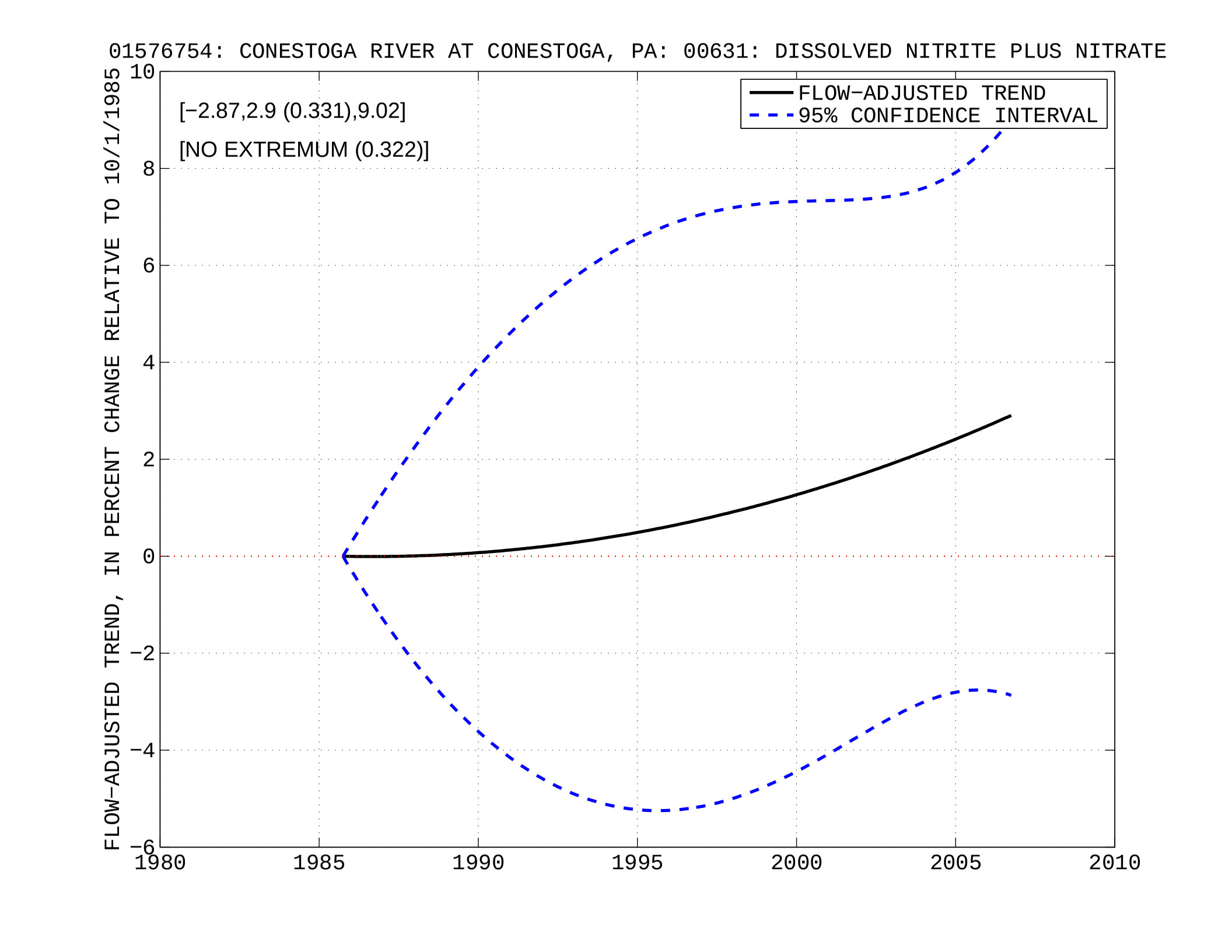

01576000: SUSQUEHANNA RIVER AT MARIETTA, PA: 00631: DISSOLVED NITRITE PLUS NITRATE
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1986
[−18.8,−11.9 (0.00269),−4.29]
[NO EXTREMUM (0.319)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
5
0
−5
−10
−15
−20
−25
1980
1985
1990
1995
2000
2005
2010

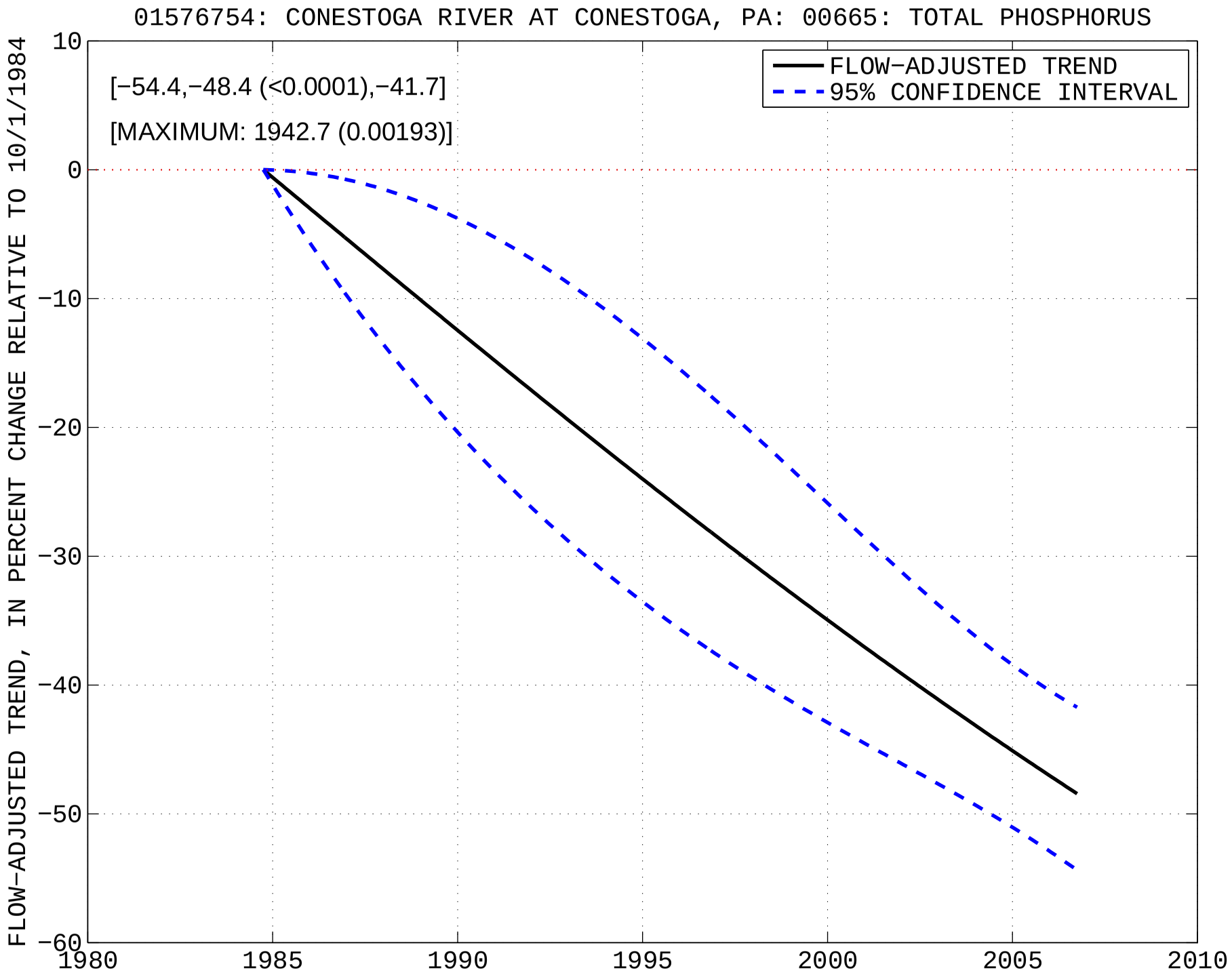

01576000: SUSQUEHANNA RIVER AT MARIETTA, PA: 00665: TOTAL PHOSPHORUS
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[−24.9,−15.4 (0.00657),−4.54]
[NO EXTREMUM (0.218)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1986
0
−5
−10
−15
−20
−25
−30
1980
1985
1990
1995
2000
2005
2010

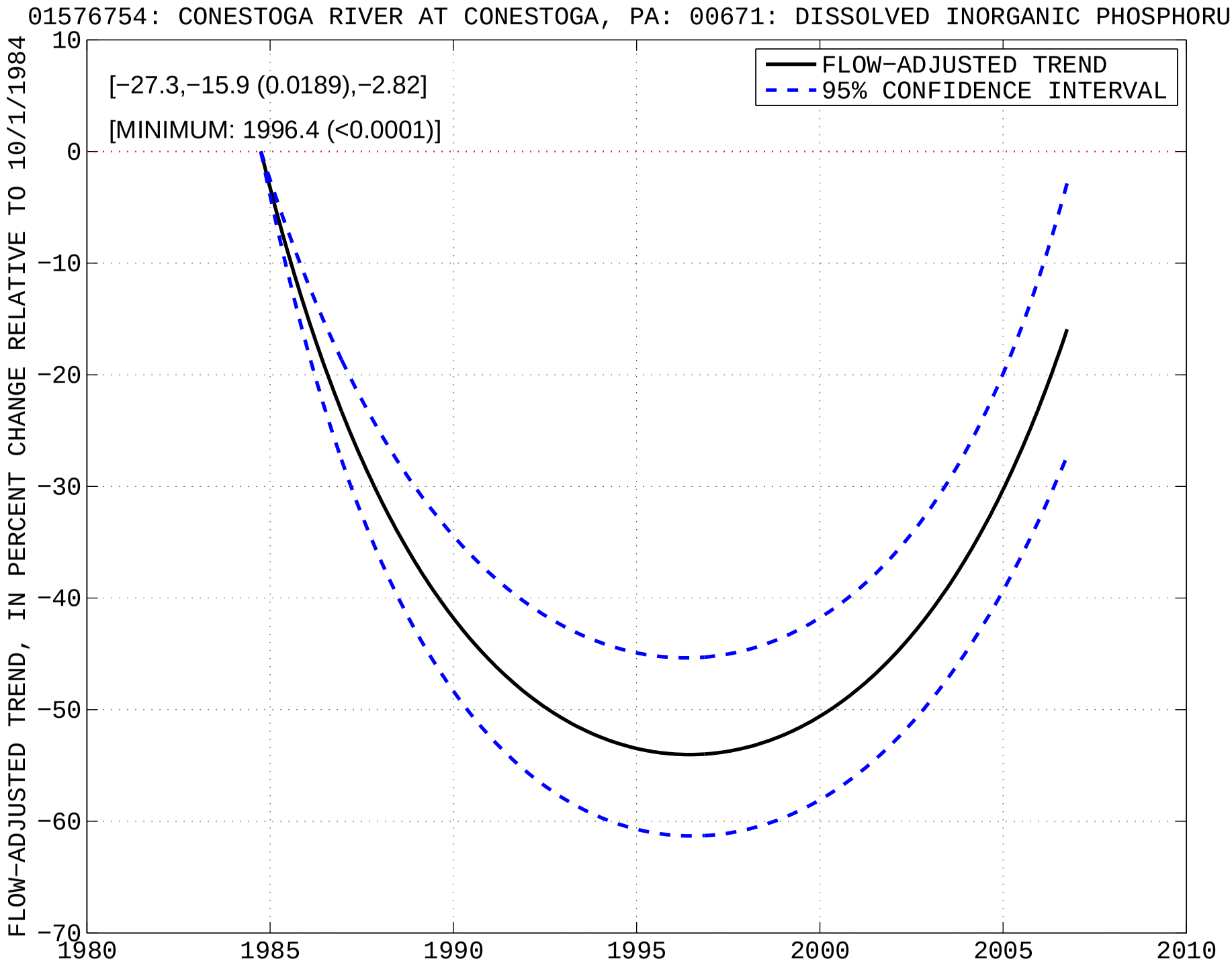

01576000: SUSQUEHANNA RIVER AT MARIETTA, PA: 00671: DISSOLVED INORGANIC PHOSPHORUS
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1986
[594,788 (<0.0001),1.04e+003]
[MINIMUM: 1966.4 (<0.0001)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
0
200
400
600
800
1000
1200
1980
1985
1990
1995
2000
2005
2010

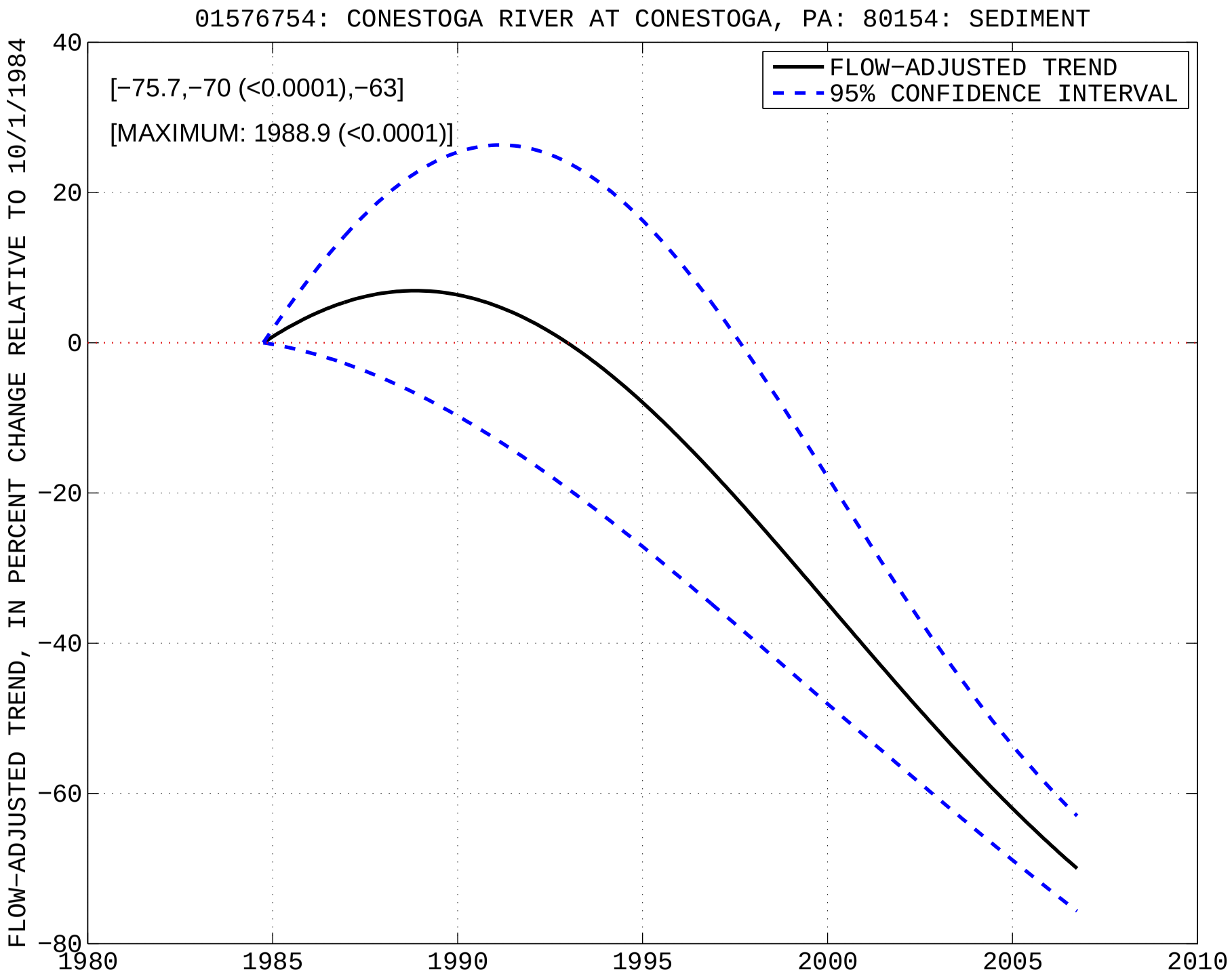

01576000: SUSQUEHANNA RIVER AT MARIETTA, PA: 80154: SEDIMENT
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[−48.7,−37.4 (<0.0001),−23.5]
[MAXIMUM: 1987.6 (0.0099)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1986
20
10
0
−10
−20
−30
−40
−50
1980
1985
1990
1995
2000
2005
2010

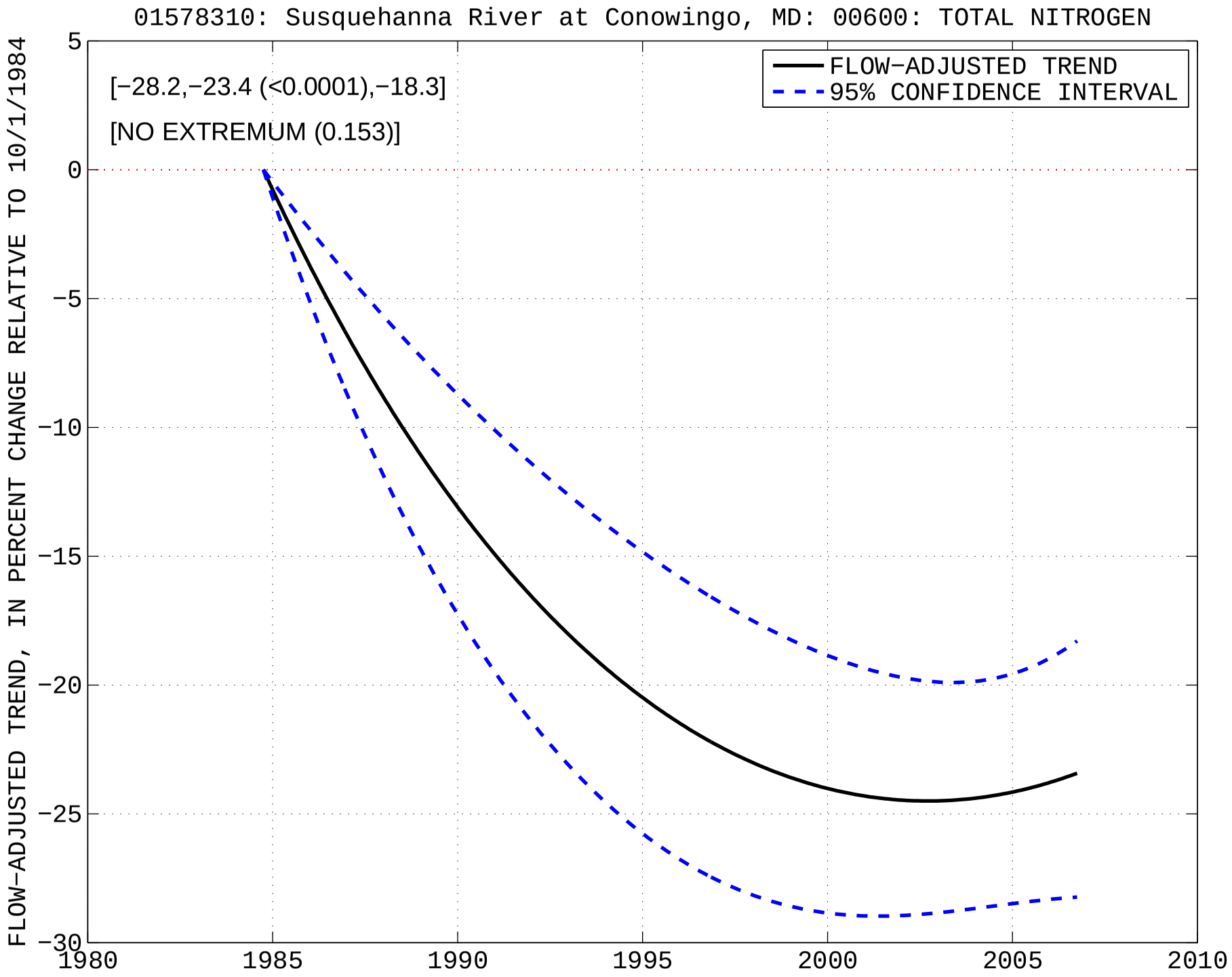

01576754: CONESTOGA RIVER AT CONESTOGA, PA: 00600: TOTAL NITROGEN
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
[−20.7,−17.3 (<0.0001),−13.8]
[NO EXTREMUM (0.0952)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
5
0
−5
−10
−15
−20
−25
1980
1985
1990
1995
2000
2005
2010

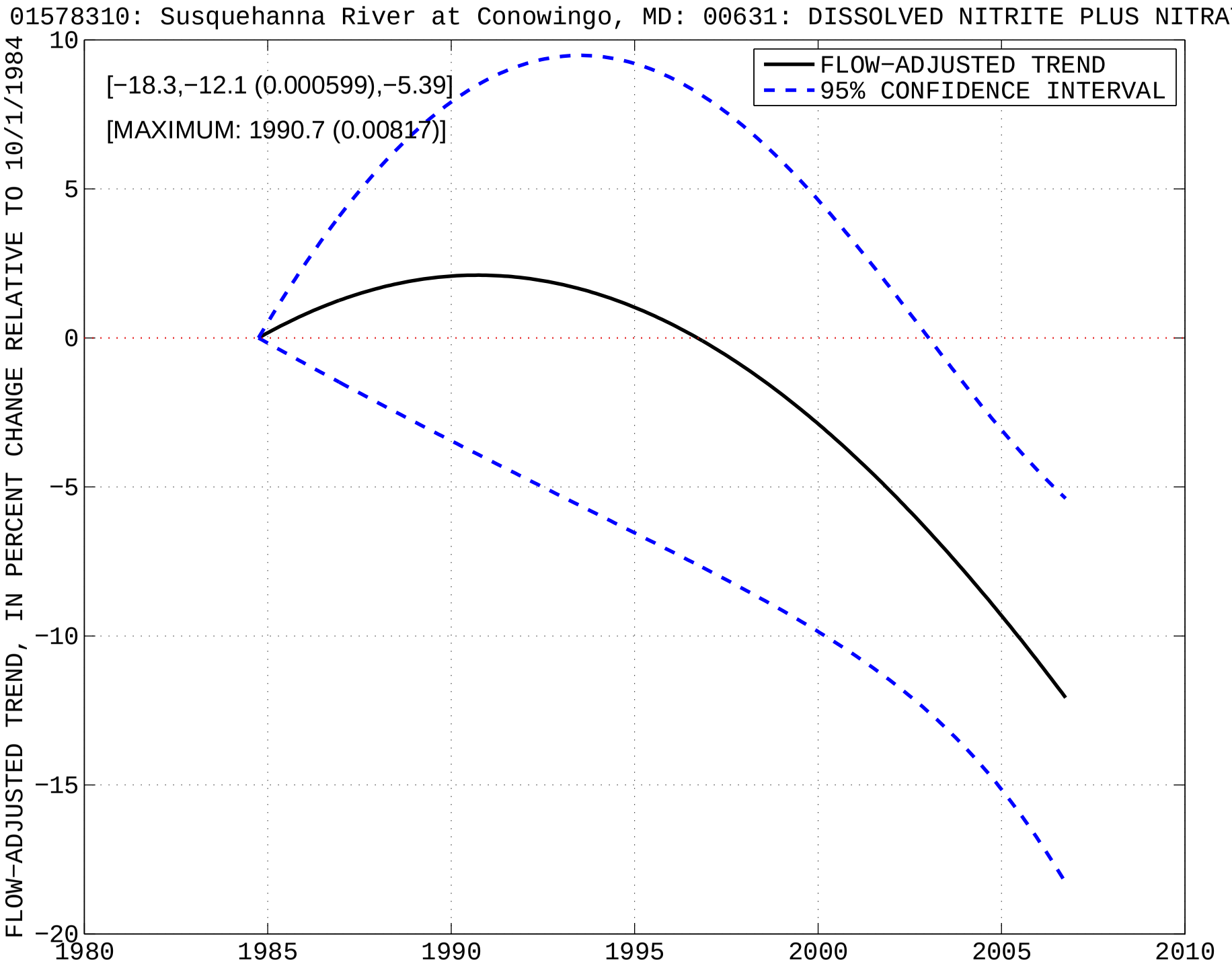

01576754: CONESTOGA RIVER AT CONESTOGA, PA: 00631: DISSOLVED NITRITE PLUS NITRATE
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1985
[−2.87,2.9 (0.331),9.02]
[NO EXTREMUM (0.322)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
10
8
6
4
2
0
−2
−4
−6
1980
1985
1990
1995
2000
2005
2010

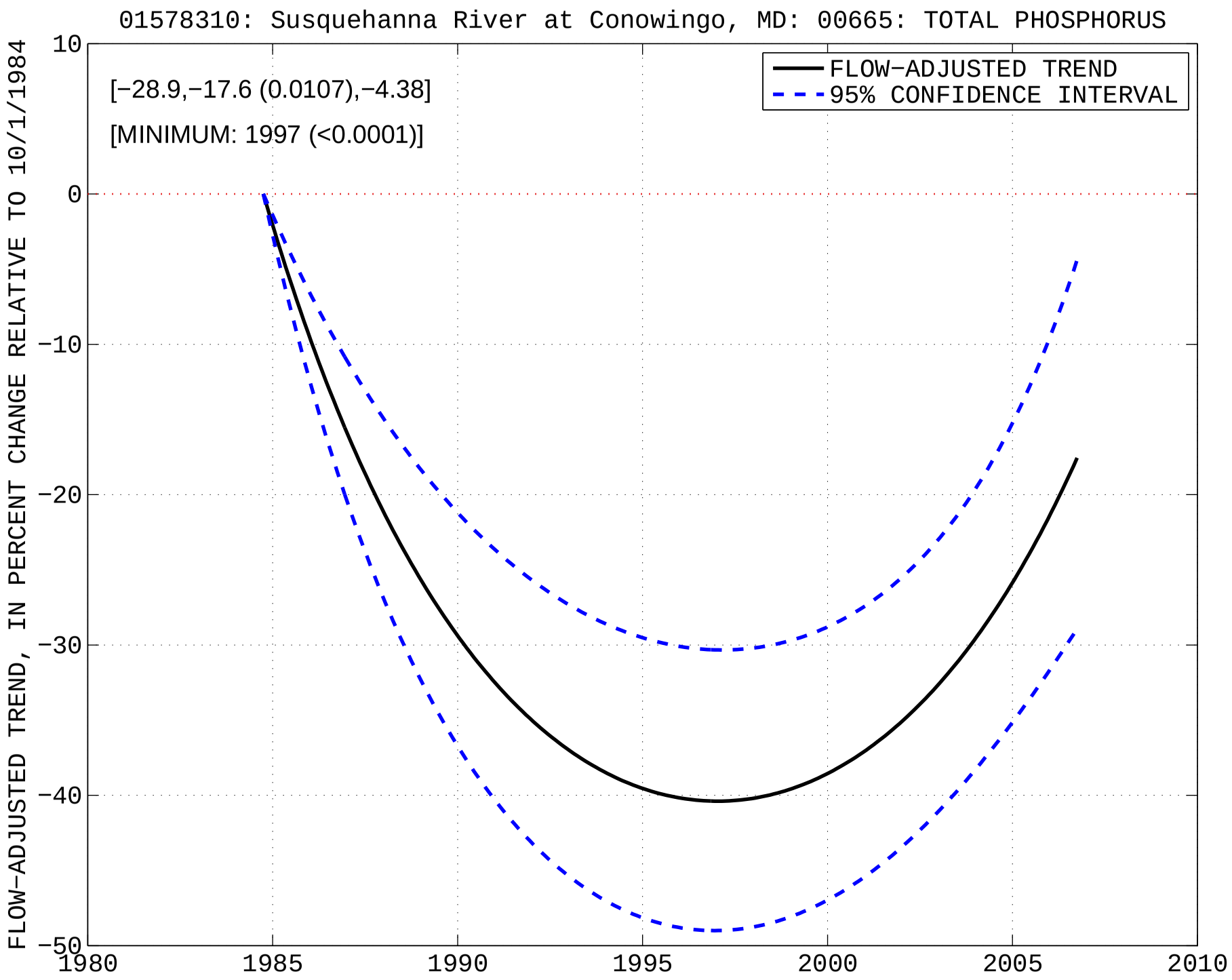

01576754: CONESTOGA RIVER AT CONESTOGA, PA: 00665: TOTAL PHOSPHORUS
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[−54.4,−48.4 (<0.0001),−41.7]
[MAXIMUM: 1942.7 (0.00193)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
10
0
−10
−20
−30
−40
−50
−60
1980
1985
1990
1995
2000
2005
2010

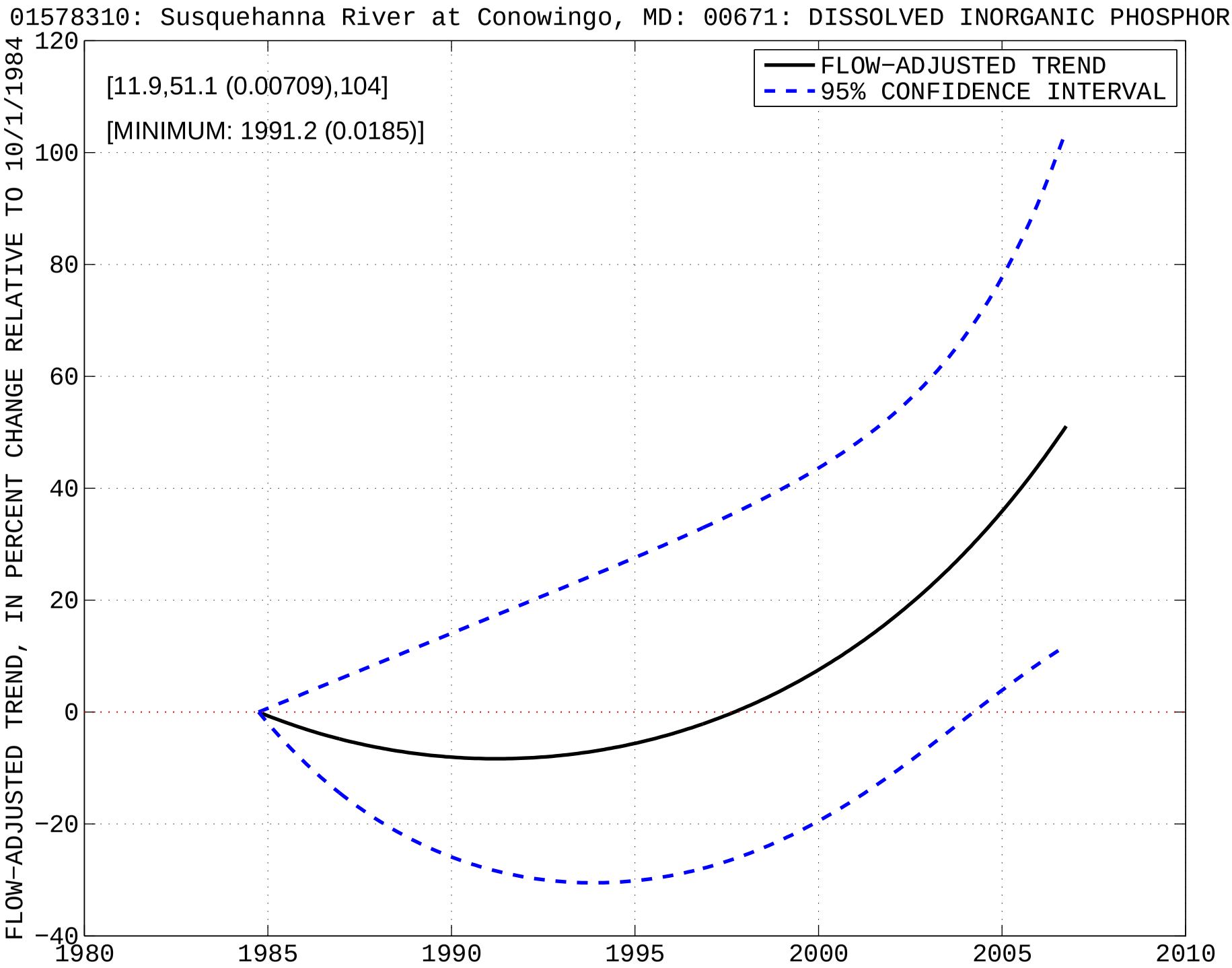

01576754: CONESTOGA RIVER AT CONESTOGA, PA: 00671: DISSOLVED INORGANIC PHOSPHORUS
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[−27.3,−15.9 (0.0189),−2.82]
[MINIMUM: 1996.4 (<0.0001)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
10
0
−10
−20
−30
−40
−50
−60
−70
1980
1985
1990
1995
2000
2005
2010

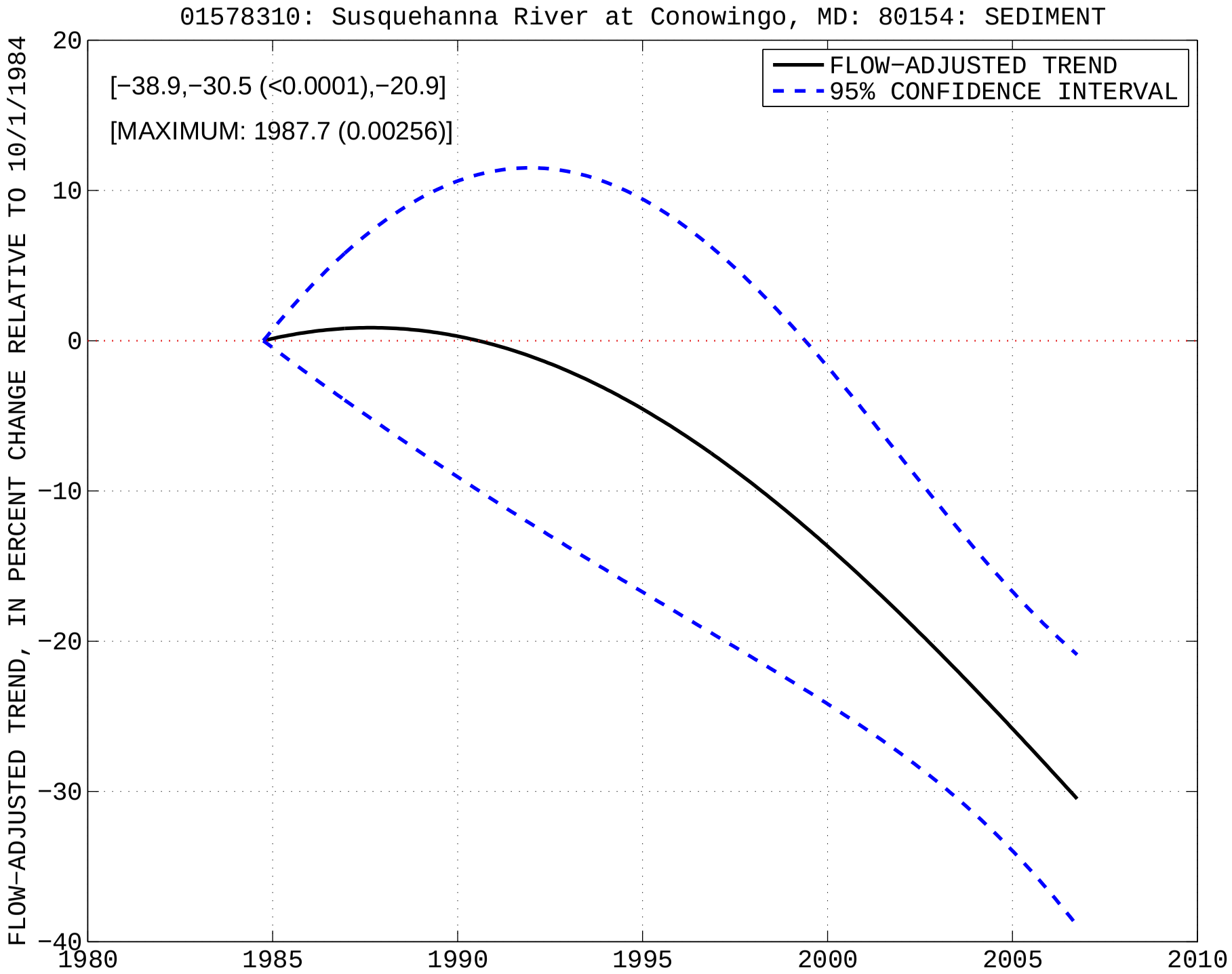

01576754: CONESTOGA RIVER AT CONESTOGA, PA: 80154: SEDIMENT
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[−75.7,−70 (<0.0001),−63]
[MAXIMUM: 1988.9 (<0.0001)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
40
20
0
−20
−40
−60
−80
1980
1985
1990
1995
2000
2005
2010

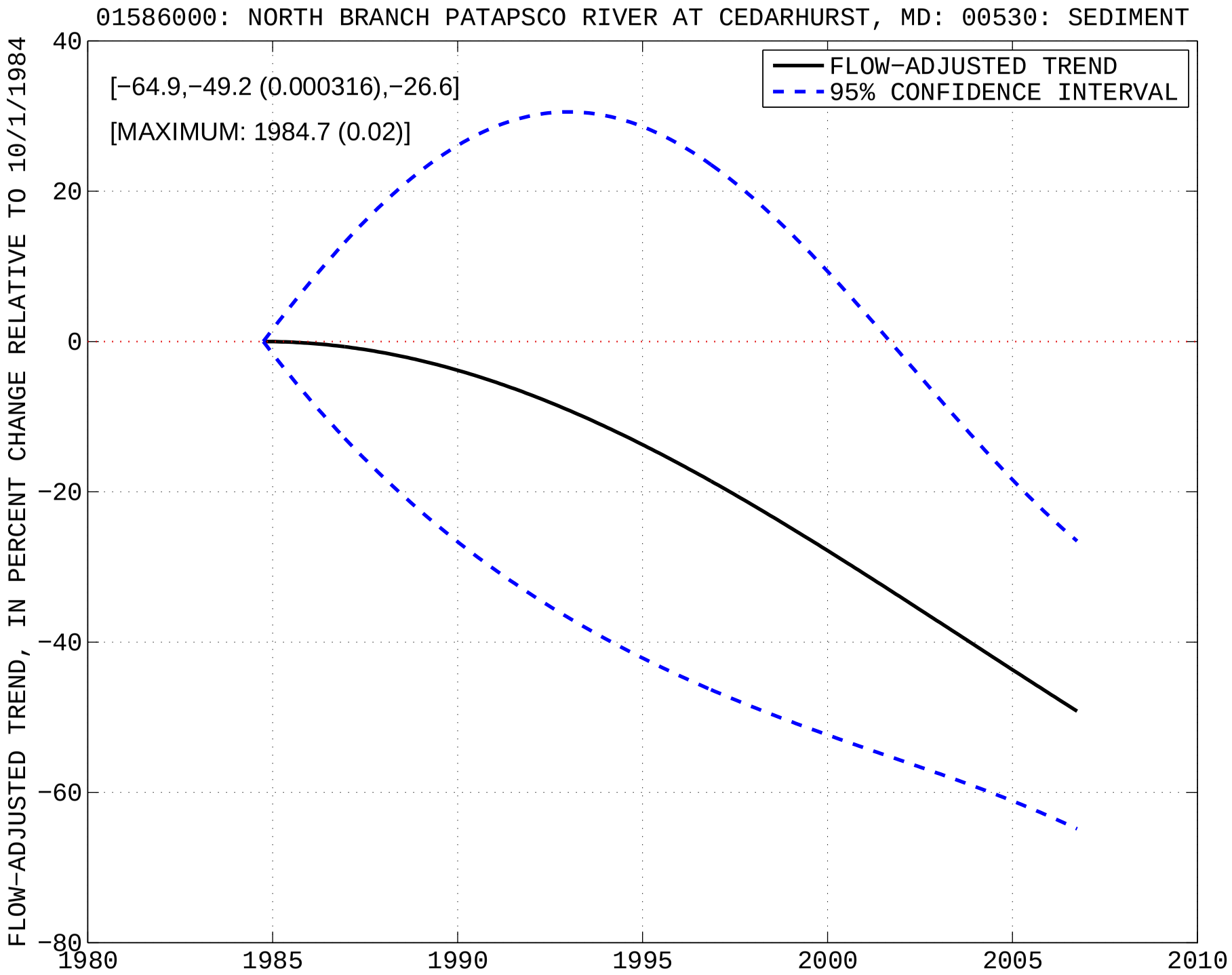

01578310: Susquehanna River at Conowingo, MD: 00600: TOTAL NITROGEN
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[−28.2,−23.4 (<0.0001),−18.3]
[NO EXTREMUM (0.153)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
5
0
−5
−10
−15
−20
−25
−30
1980
1985
1990
1995
2000
2005
2010

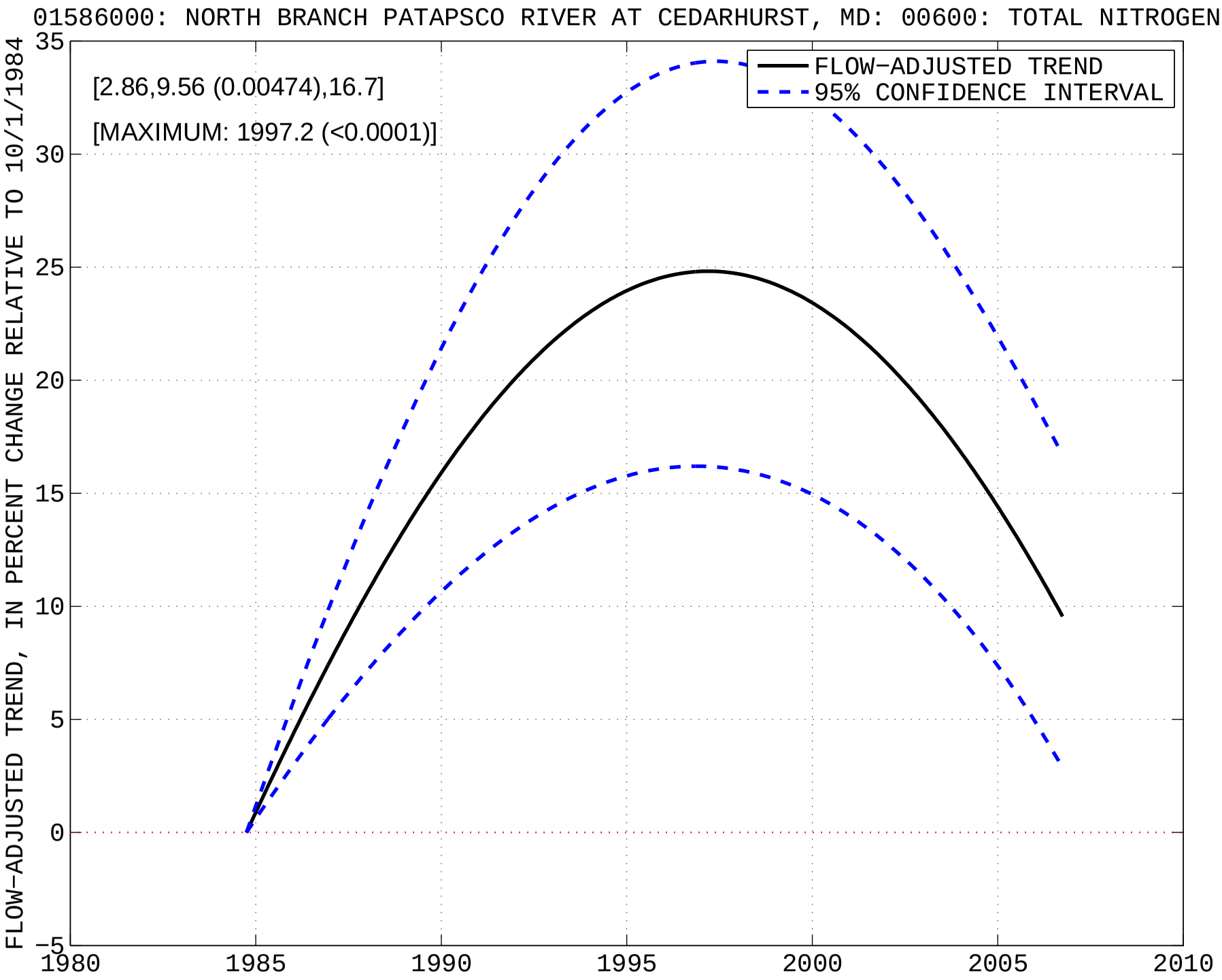

01578310: Susquehanna River at Conowingo, MD: 00631: DISSOLVED NITRITE PLUS NITRATE
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
10
5
0
-5
-10
-15
-20
1980
1985
1990
1995
2000
2005
2010
[-18.3,-12.1 (0.000599),-5.39]
[MAXIMUM: 1990.7 (0.00817)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL

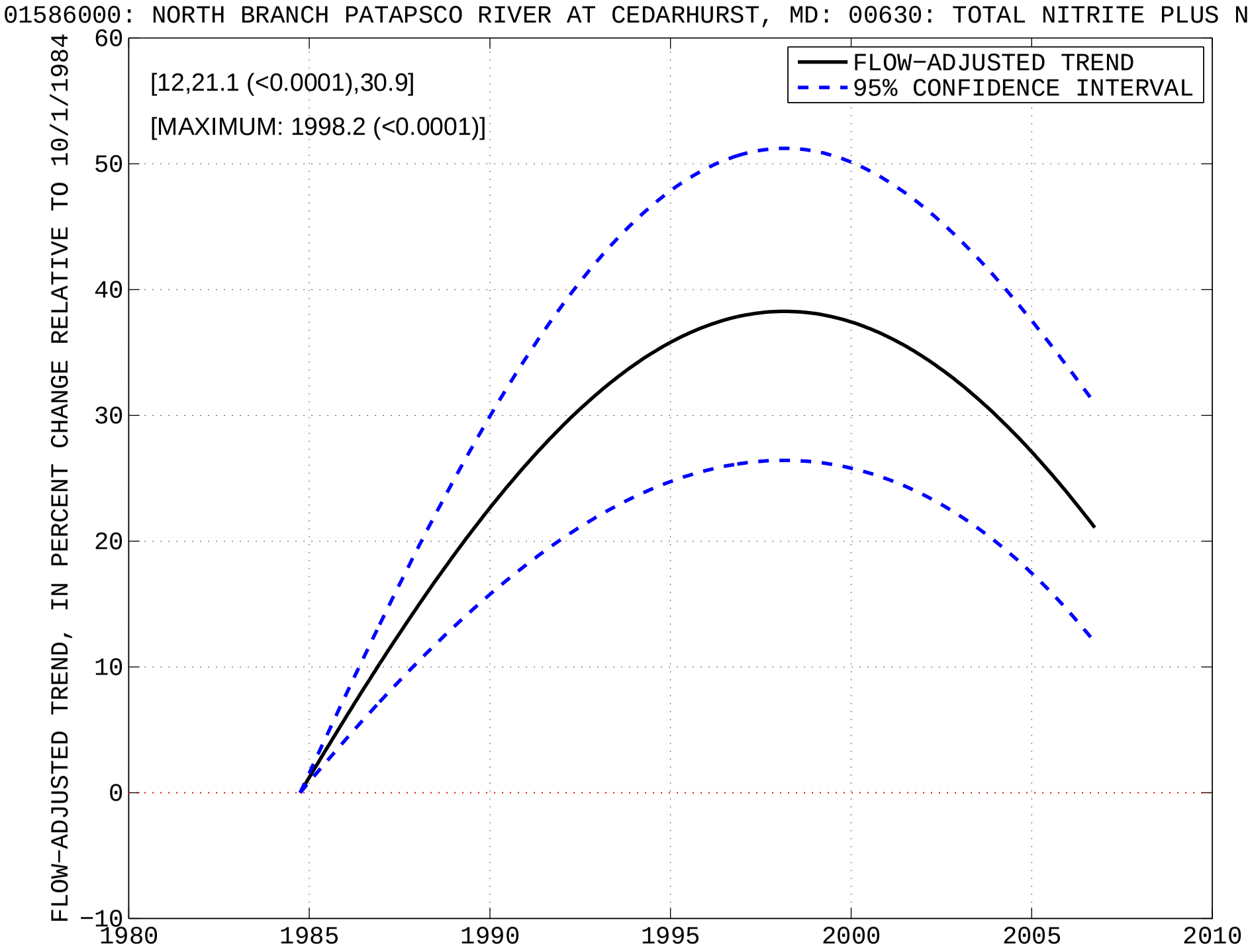

01578310: Susquehanna River at Conowingo, MD: 00665: TOTAL PHOSPHORUS
[−28.9,−17.6 (0.0107),−4.38]
[MINIMUM: 1997 (<0.0001)]
FLOW−ADJUSTED TREND
95% CONFIDENCE INTERVAL
FLOW−ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
10
0
−10
−20
−30
−40
−50
1980
1985
1990
1995
2000
2005
2010

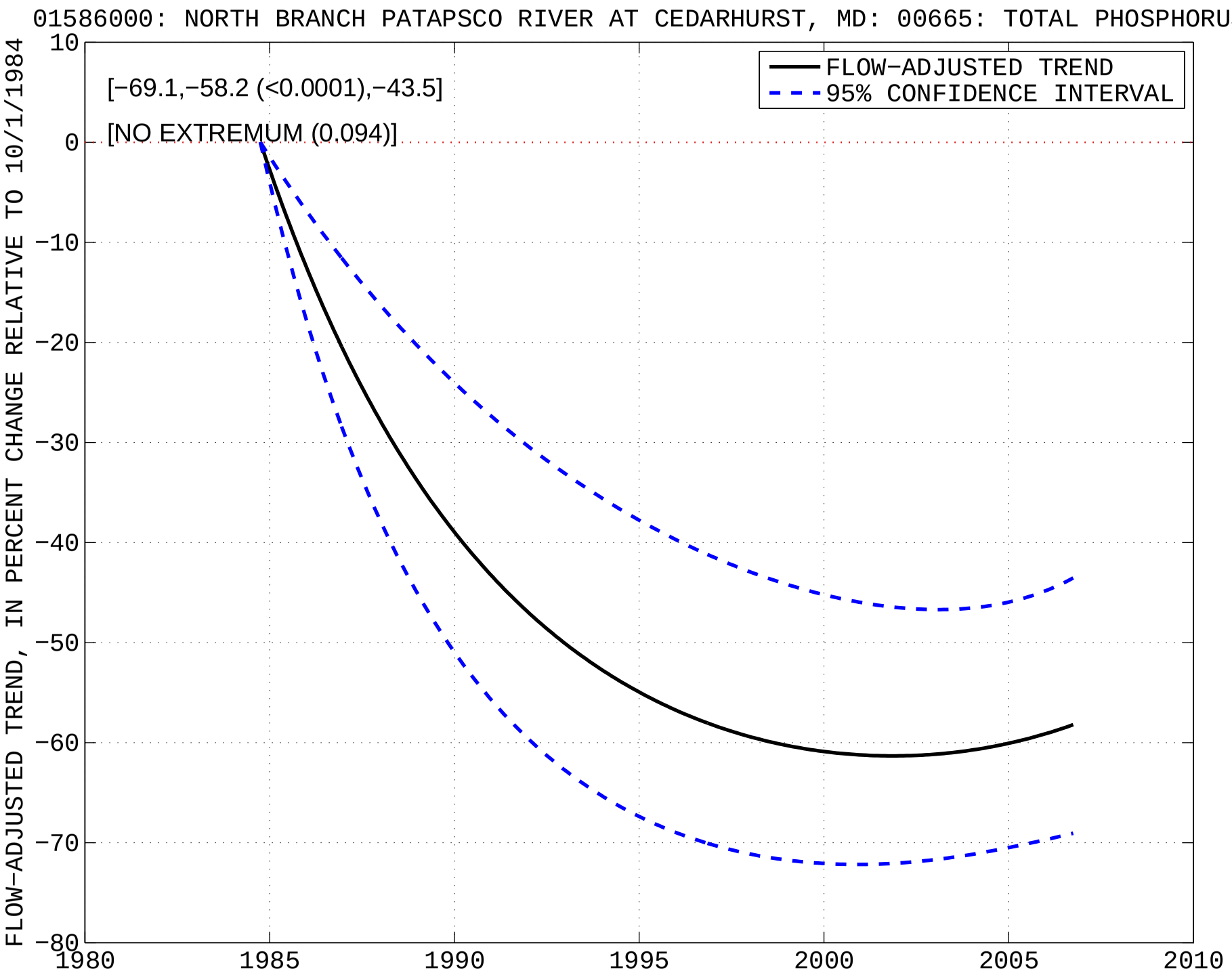

01578310: Susquehanna River at Conowingo, MD: 00671: DISSOLVED INORGANIC PHOSPHORUS
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[11.9,51.1 (0.00709),104]
[MINIMUM: 1991.2 (0.0185)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
120
100
80
60
40
20
0
-20
-40
1980
1985
1990
1995
2000
2005
2010

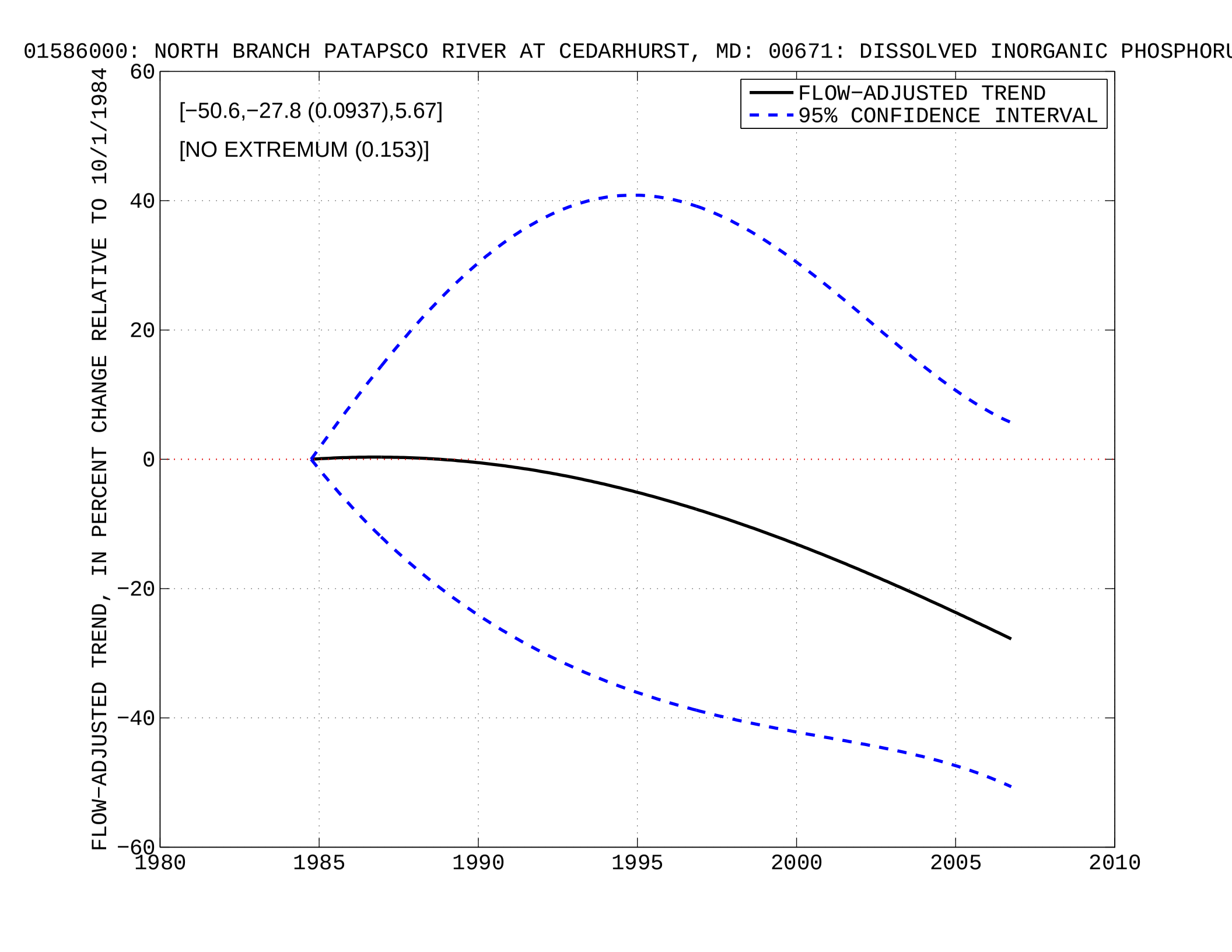

01578310: Susquehanna River at Conowingo, MD: 80154: SEDIMENT
[−38.9,−30.5 (<0.0001),−20.9]
[MAXIMUM: 1987.7 (0.00256)]
FLOW−ADJUSTED TREND
95% CONFIDENCE INTERVAL
FLOW−ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
20
10
0
−10
−20
−30
−40
1980
1985
1990
1995
2000
2005
2010

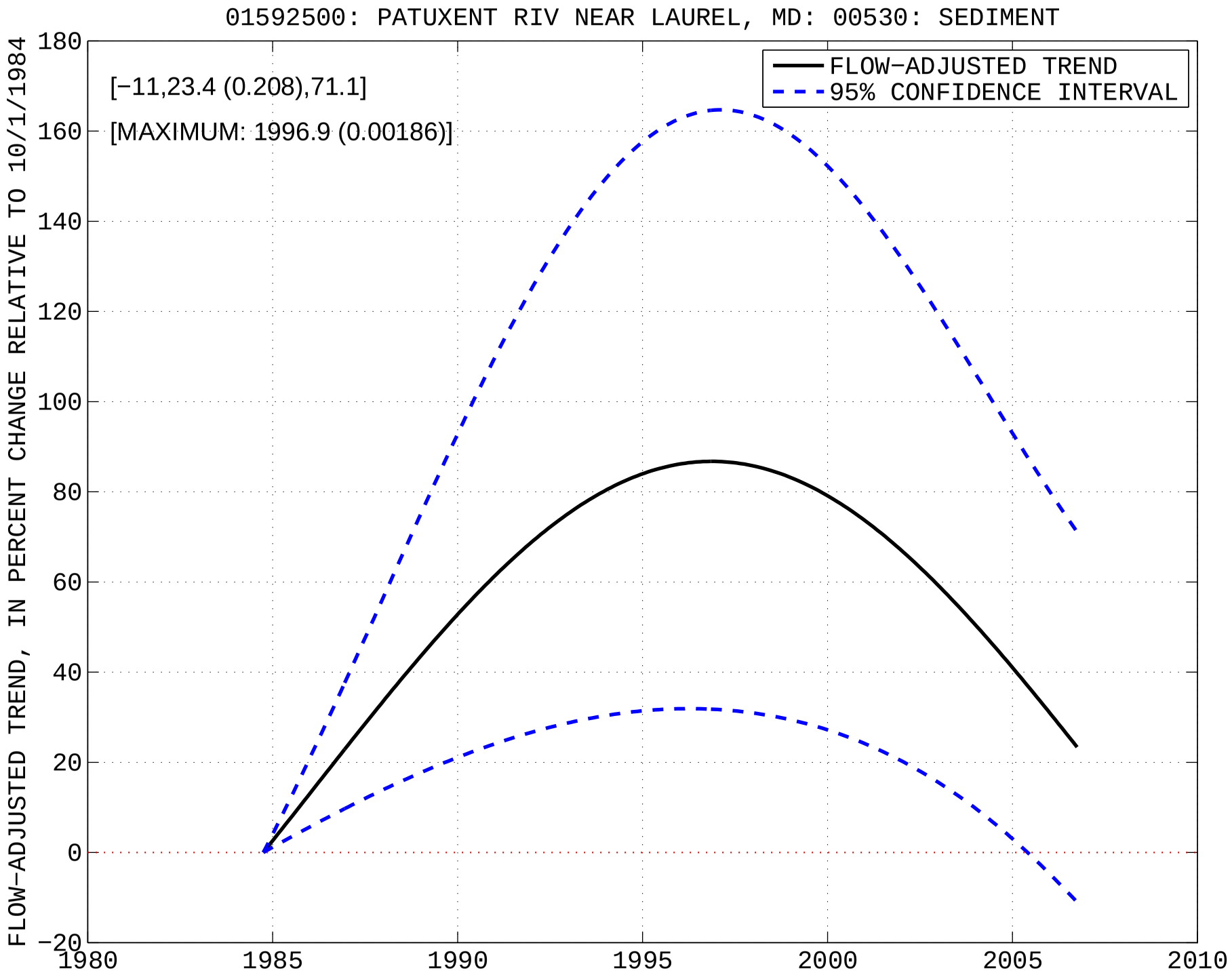

01586000: NORTH BRANCH PATAPSCO RIVER AT CEDARHURST, MD: 00530: SEDIMENT
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
[−64.9,−49.2 (0.000316),−26.6]
[MAXIMUM: 1984.7 (0.02)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
40
20
0
−20
−40
−60
−80
1980
1985
1990
1995
2000
2005
2010

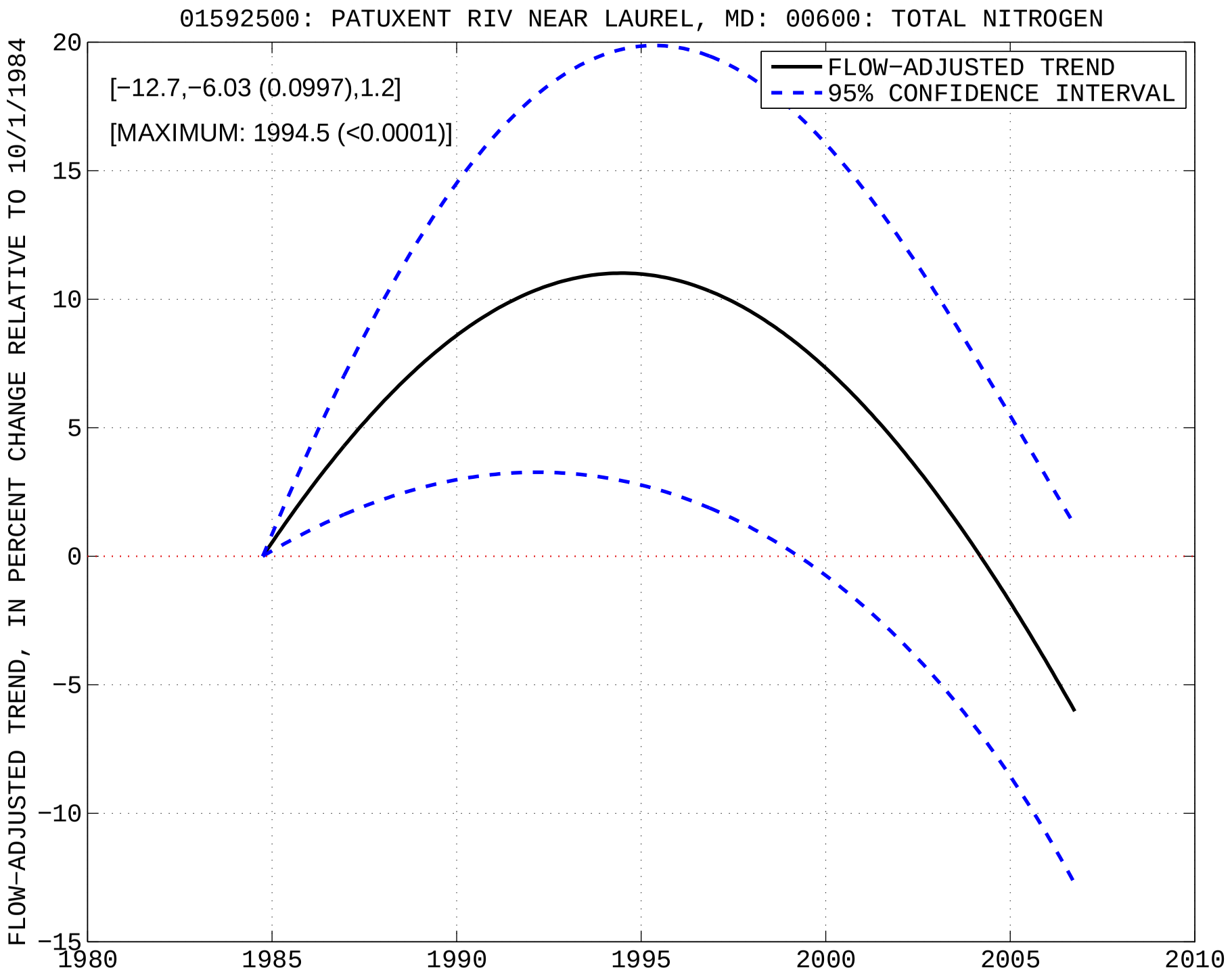

01586000: NORTH BRANCH PATAPSCO RIVER AT CEDARHURST, MD: 00600: TOTAL NITROGEN
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
[2.86,9.56 (0.00474),16.7]
[MAXIMUM: 1997.2 (<0.0001)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
35
30
25
20
15
10
5
0
-5
1980
1985
1990
1995
2000
2005
2010

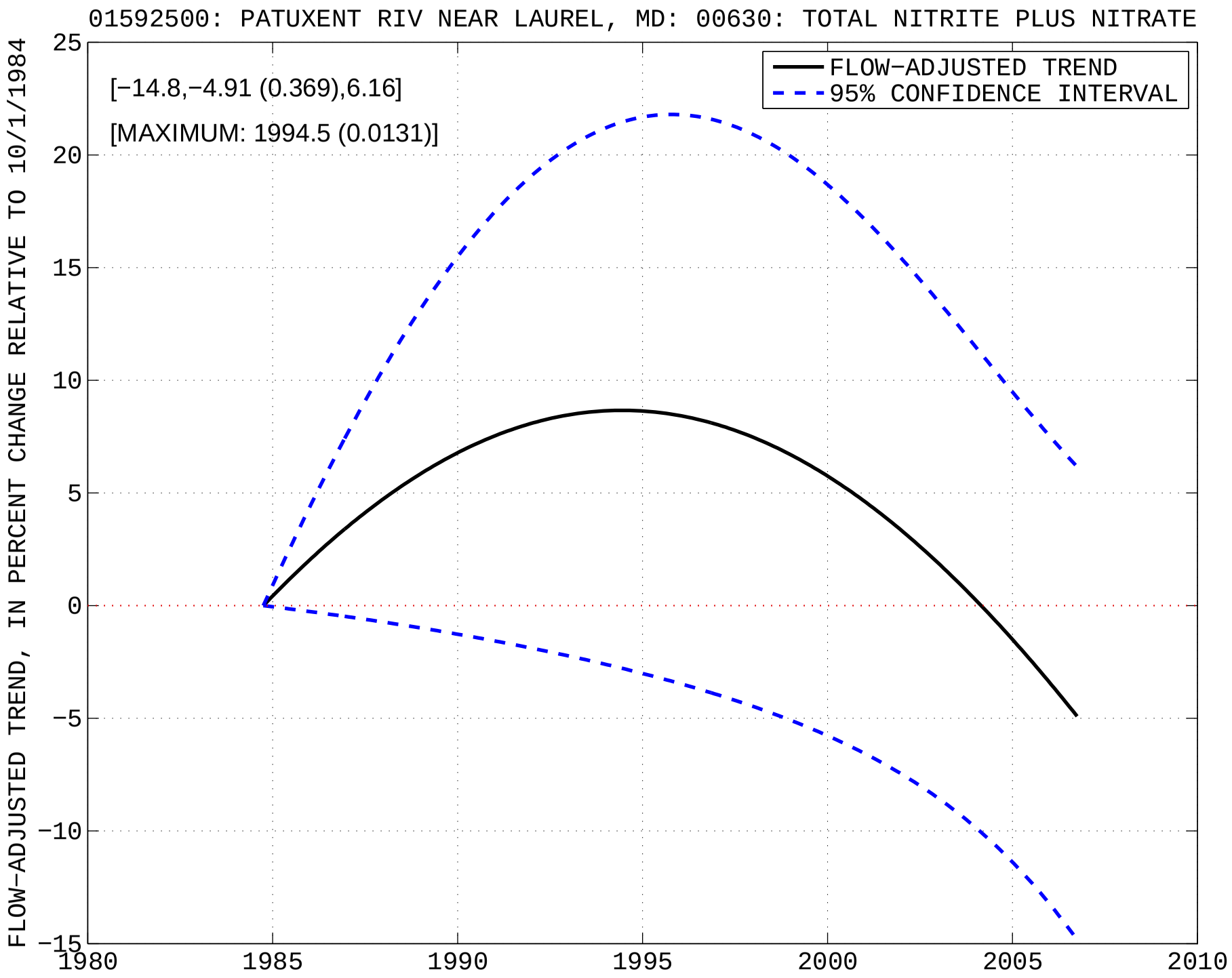

01586000: NORTH BRANCH PATAPSCO RIVER AT CEDARHURST, MD: 00630: TOTAL NITRITE PLUS NITRATE
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
[12,21.1 (<0.0001),30.9]
[MAXIMUM: 1998.2 (<0.0001)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
60
50
40
30
20
10
0
-10
1980
1985
1990
1995
2000
2005
2010

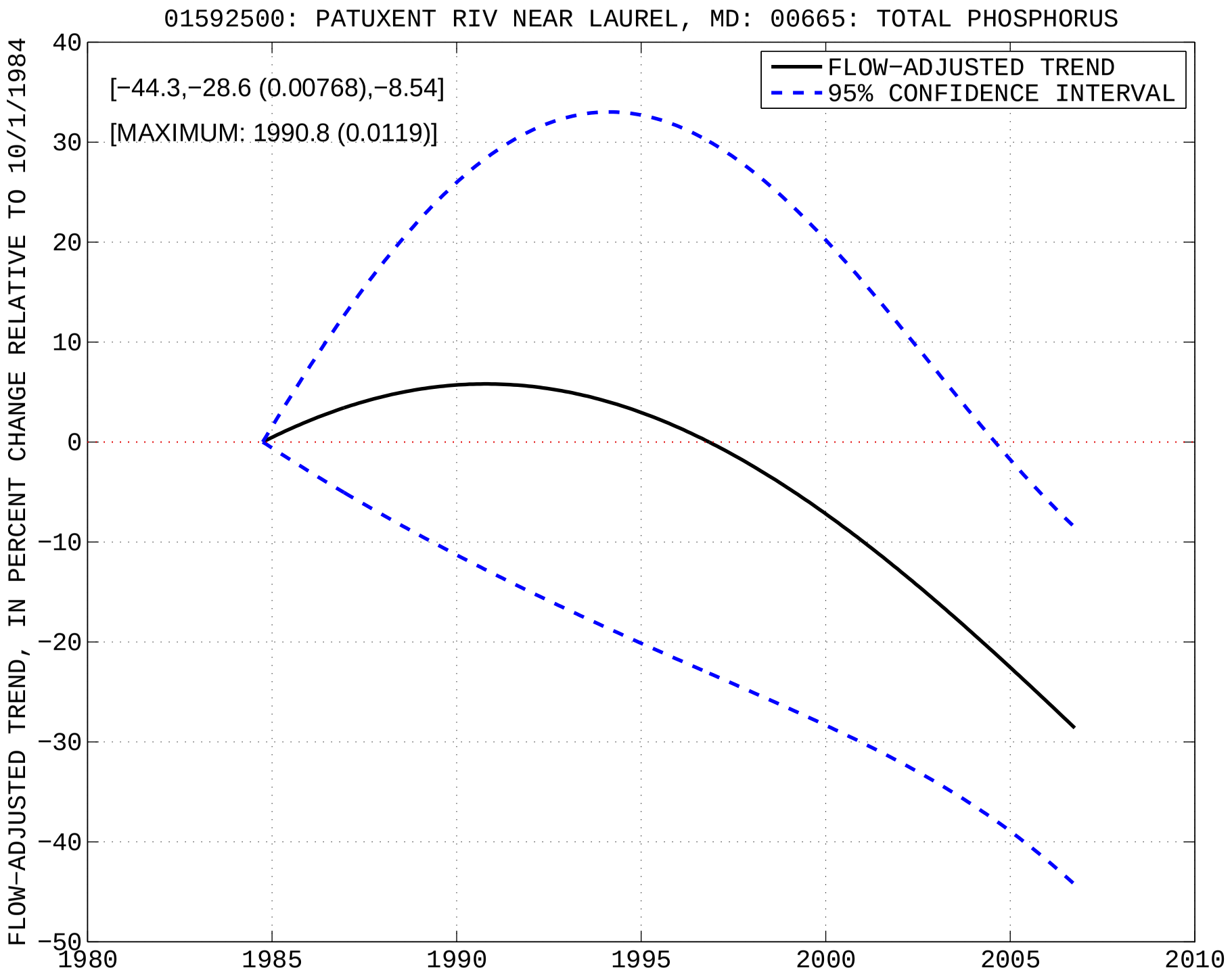

01586000: NORTH BRANCH PATAPSCO RIVER AT CEDARHURST, MD: 00665: TOTAL PHOSPHORUS
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[−69.1,−58.2 (<0.0001),−43.5]
[NO EXTREMUM (0.094)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
10
0
−10
−20
−30
−40
−50
−60
−70
−80
1980
1985
1990
1995
2000
2005
2010

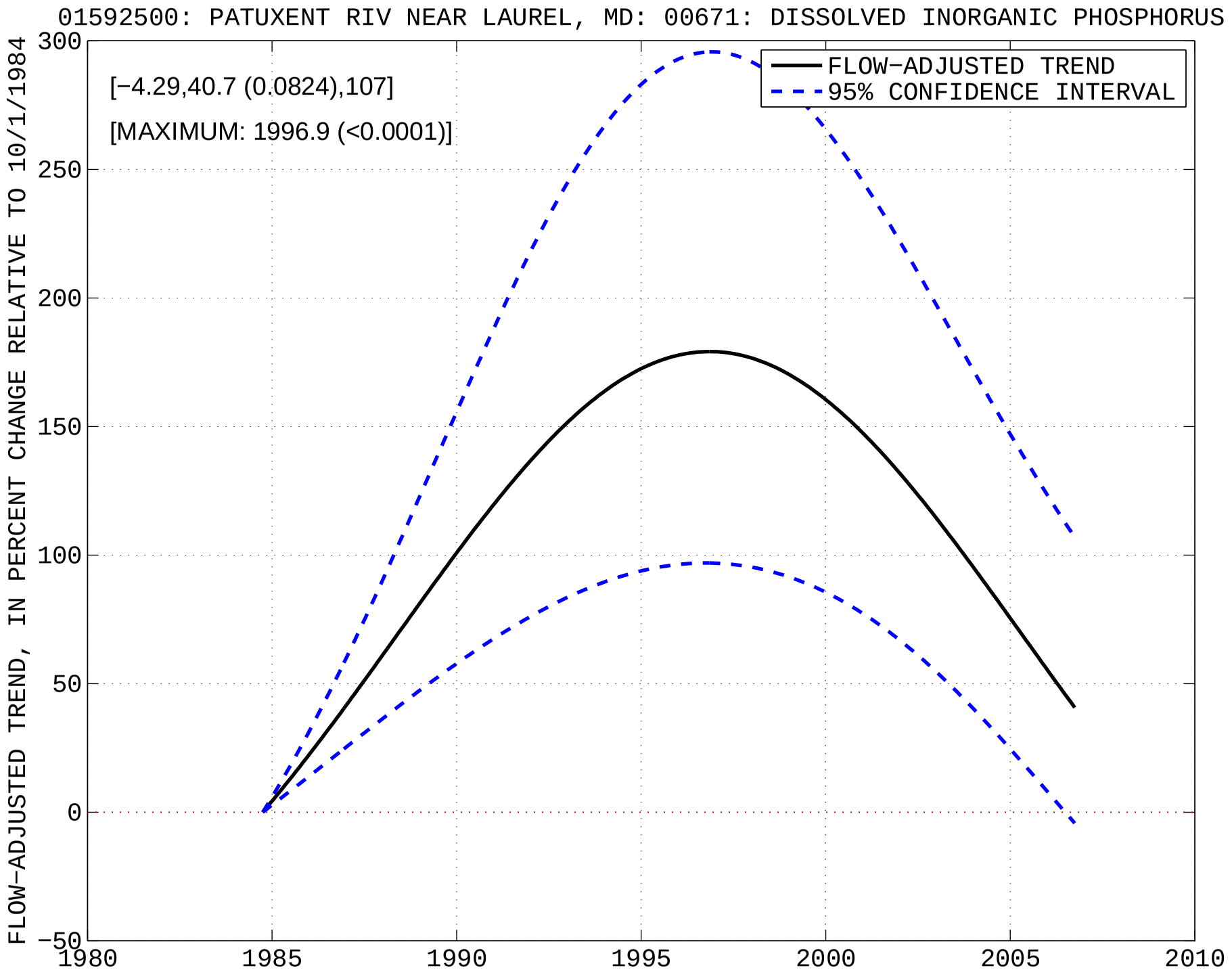

01586000: NORTH BRANCH PATAPSCO RIVER AT CEDARHURST, MD: 00671: DISSOLVED INORGANIC PHOSPHORU
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[−50.6,−27.8 (0.0937),5.67]
[NO EXTREMUM (0.153)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
60
40
20
0
−20
−40
−60
1980
1985
1990
1995
2000
2005
2010

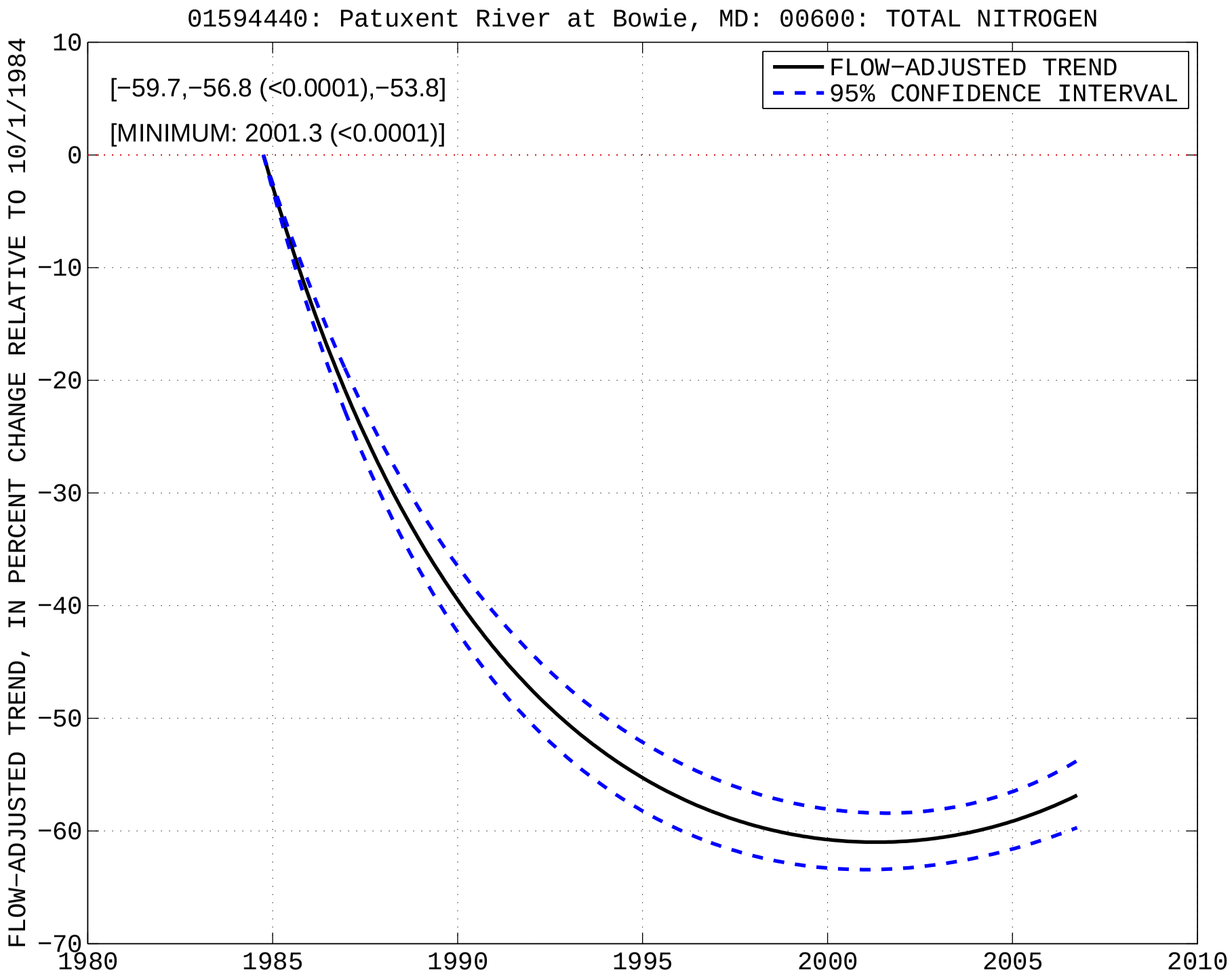

01592500: PATUXENT RIV NEAR LAUREL, MD: 00530: SEDIMENT
[−11,23.4 (0.208),71.1]
[MAXIMUM: 1996.9 (0.00186)]
FLOW−ADJUSTED TREND
95% CONFIDENCE INTERVAL
FLOW−ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
180
160
140
120
100
80
60
40
20
0
−20
1980
1985
1990
1995
2000
2005
2010

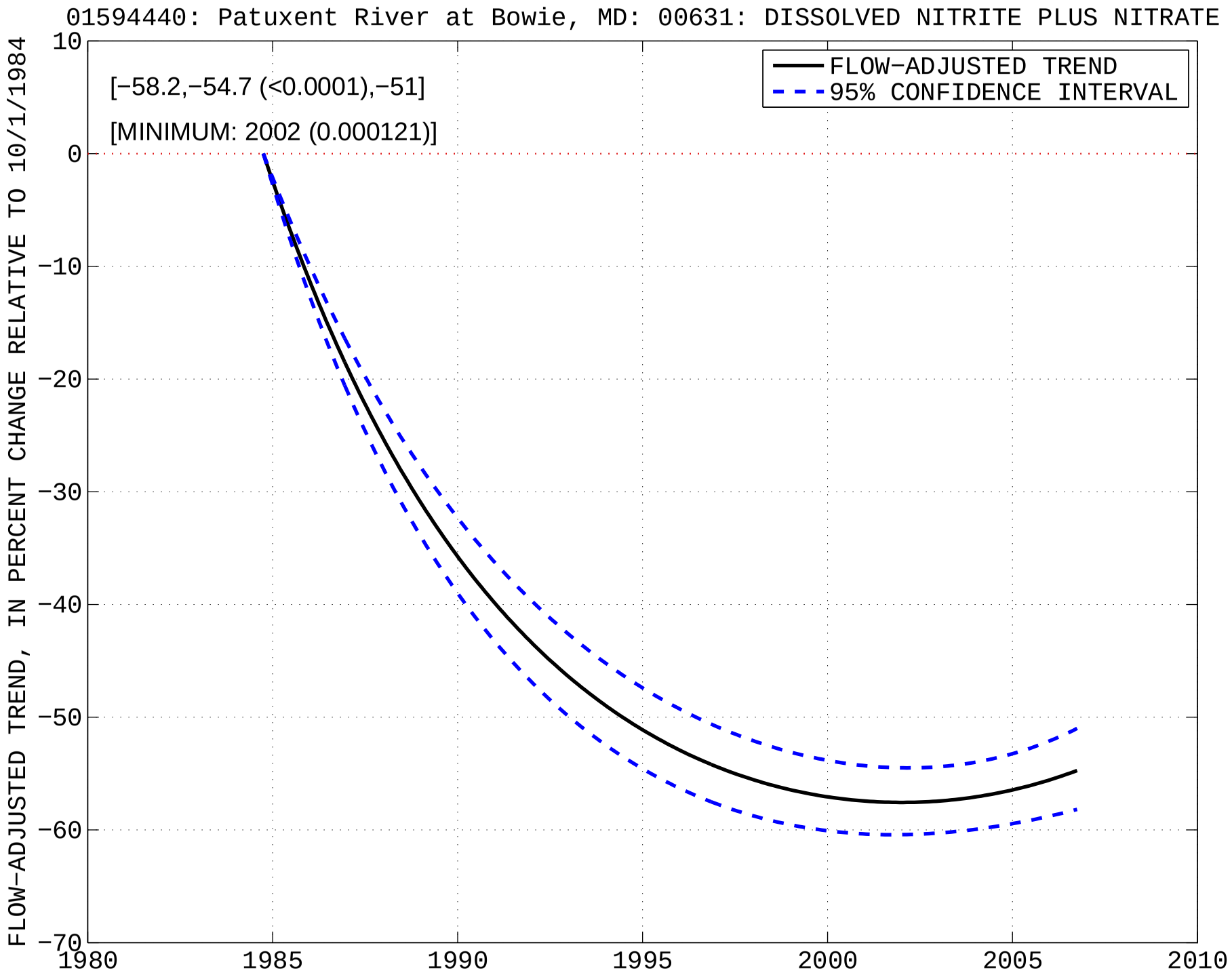

01592500: PATUXENT RIV NEAR LAUREL, MD: 00600: TOTAL NITROGEN
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
[−12.7,−6.03 (0.0997),1.2]
[MAXIMUM: 1994.5 (<0.0001)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
20
15
10
5
0
−5
−10
−15
1980
1985
1990
1995
2000
2005
2010

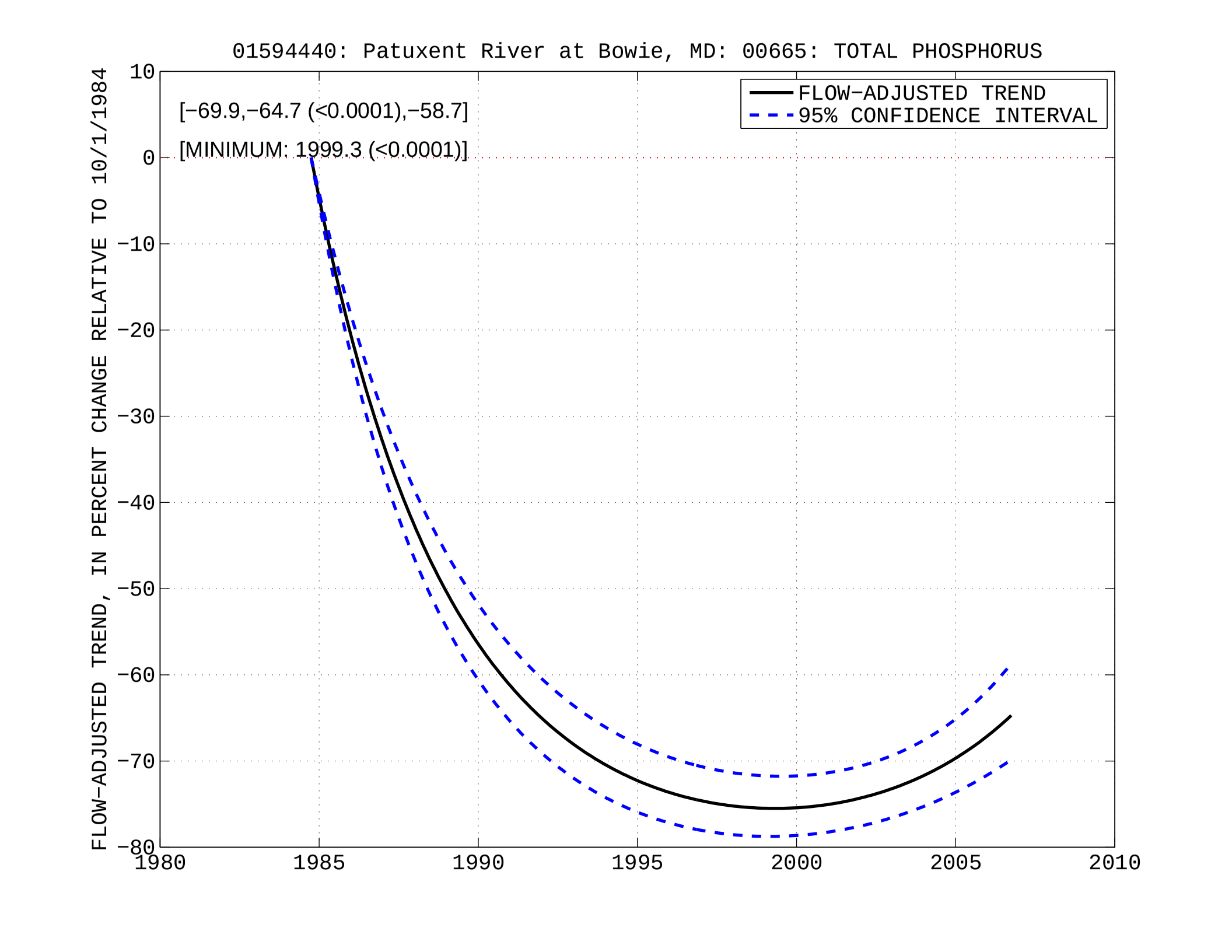

01592500: PATUXENT RIV NEAR LAUREL, MD: 00630: TOTAL NITRITE PLUS NITRATE
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
[−14.8,−4.91 (0.369),6.16]
[MAXIMUM: 1994.5 (0.0131)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
25
20
15
10
5
0
−5
−10
−15
1980
1985
1990
1995
2000
2005
2010

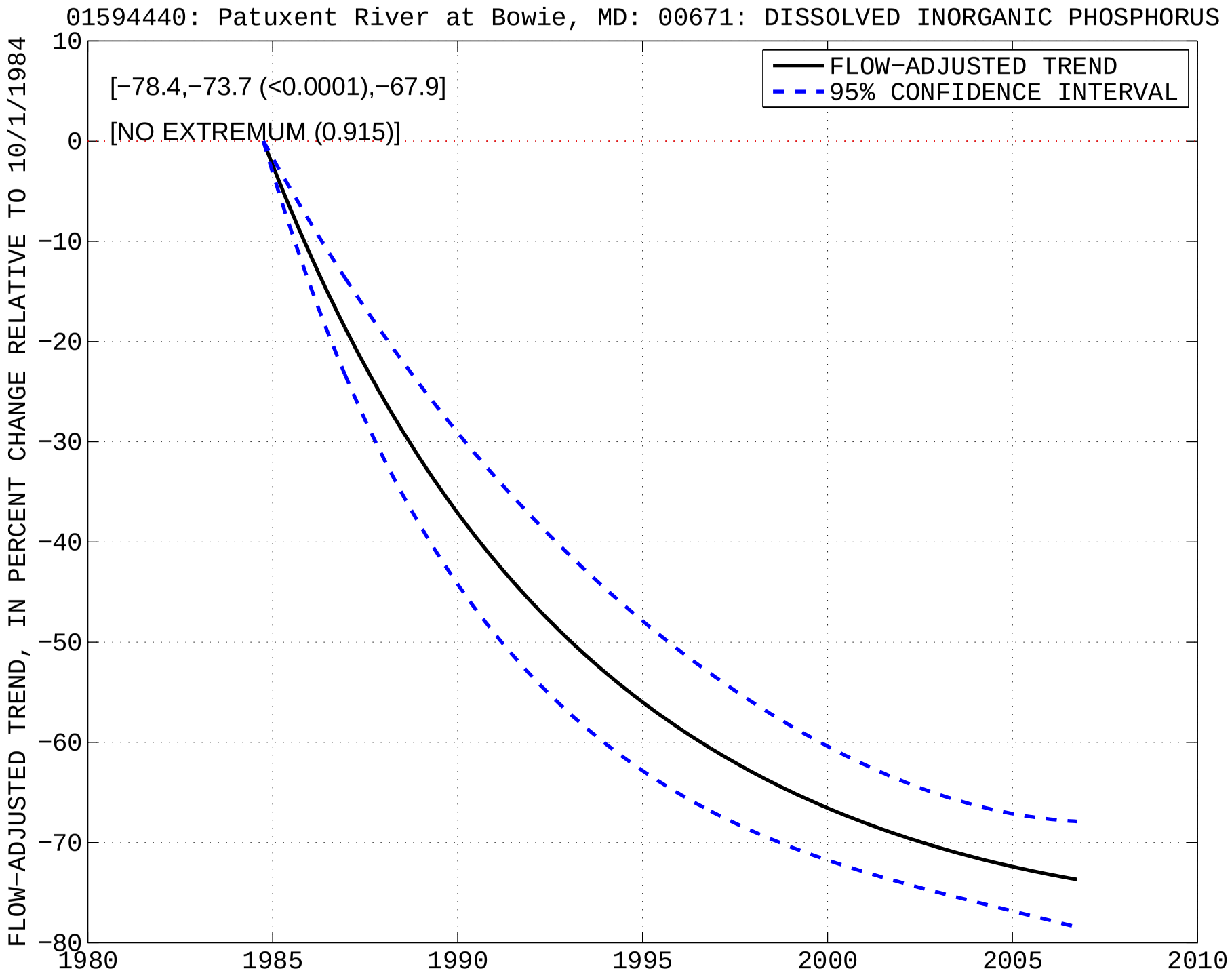

01592500: PATUXENT RIV NEAR LAUREL, MD: 00665: TOTAL PHOSPHORUS
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[−44.3,−28.6 (0.00768),−8.54]
[MAXIMUM: 1990.8 (0.0119)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
40
30
20
10
0
−10
−20
−30
−40
−50
1980
1985
1990
1995
2000
2005
2010

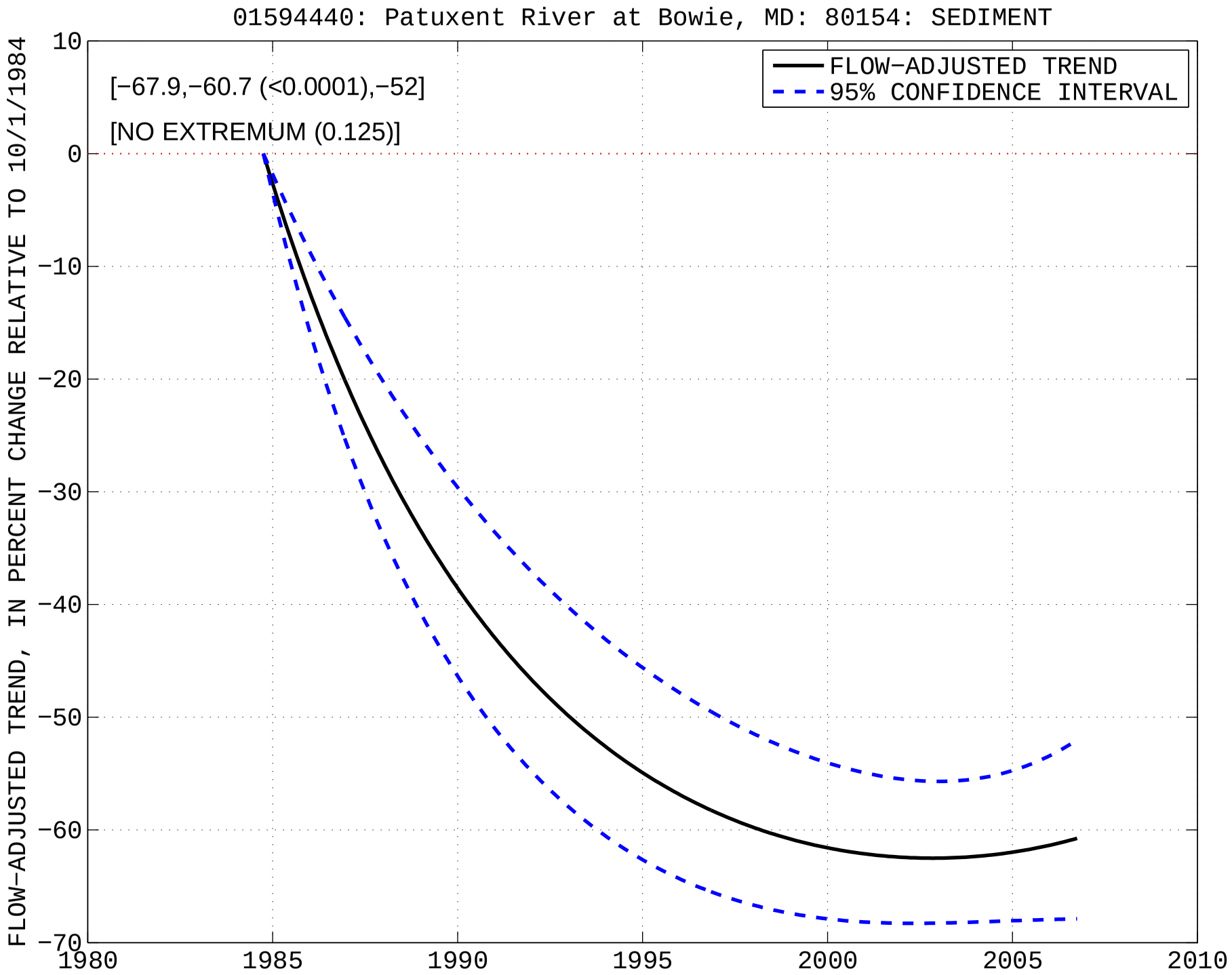

01592500: PATUXENT RIV NEAR LAUREL, MD: 00671: DISSOLVED INORGANIC PHOSPHORUS
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
[-4.29,40.7 (0.0824),107]
[MAXIMUM: 1996.9 (<0.0001)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
300
250
200
150
100
50
0
-50
1980
1985
1990
1995
2000
2005
2010

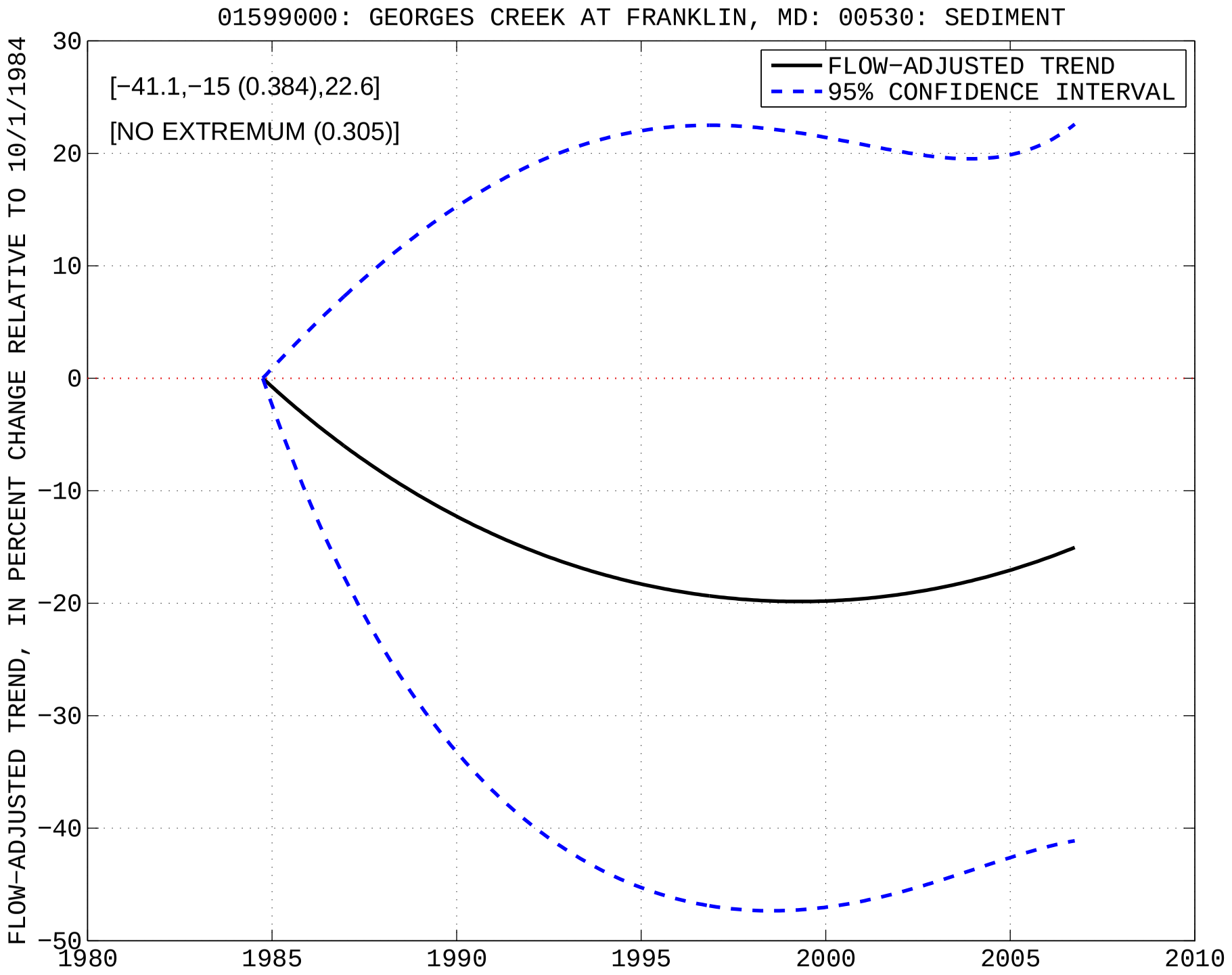

01594440: Patuxent River at Bowie, MD: 00600: TOTAL NITROGEN
[−59.7,−56.8 (<0.0001),−53.8]
[MINIMUM: 2001.3 (<0.0001)]
FLOW−ADJUSTED TREND
95% CONFIDENCE INTERVAL
FLOW−ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
10
0
−10
−20
−30
−40
−50
−60
−70
1980
1985
1990
1995
2000
2005
2010

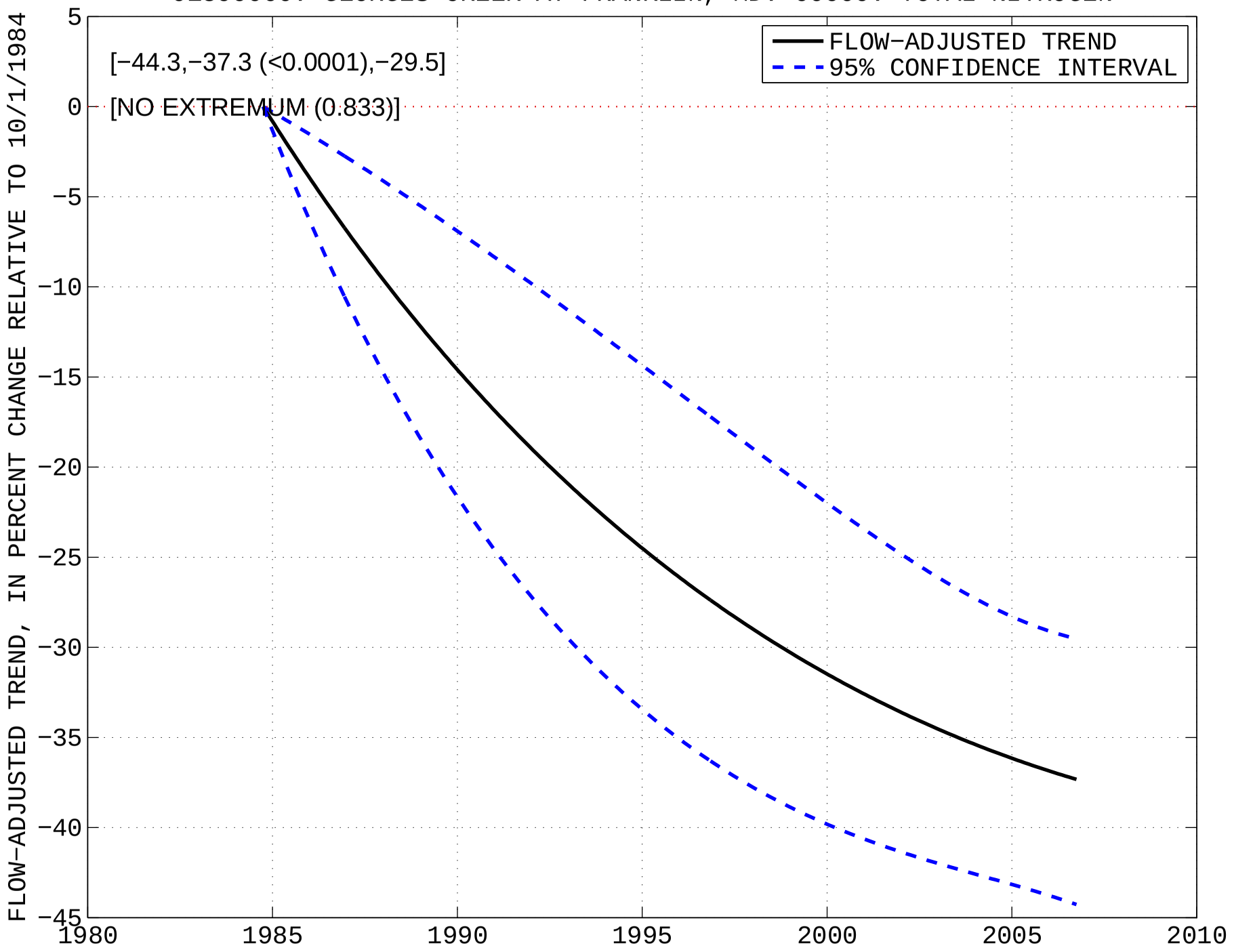

01594440: Patuxent River at Bowie, MD: 00631: DISSOLVED NITRITE PLUS NITRATE
[−58.2,−54.7 (<0.0001),−51]
[MINIMUM: 2002 (0.000121)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
10
0
−10
−20
−30
−40
−50
−60
−70
1980
1985
1990
1995
2000
2005
2010

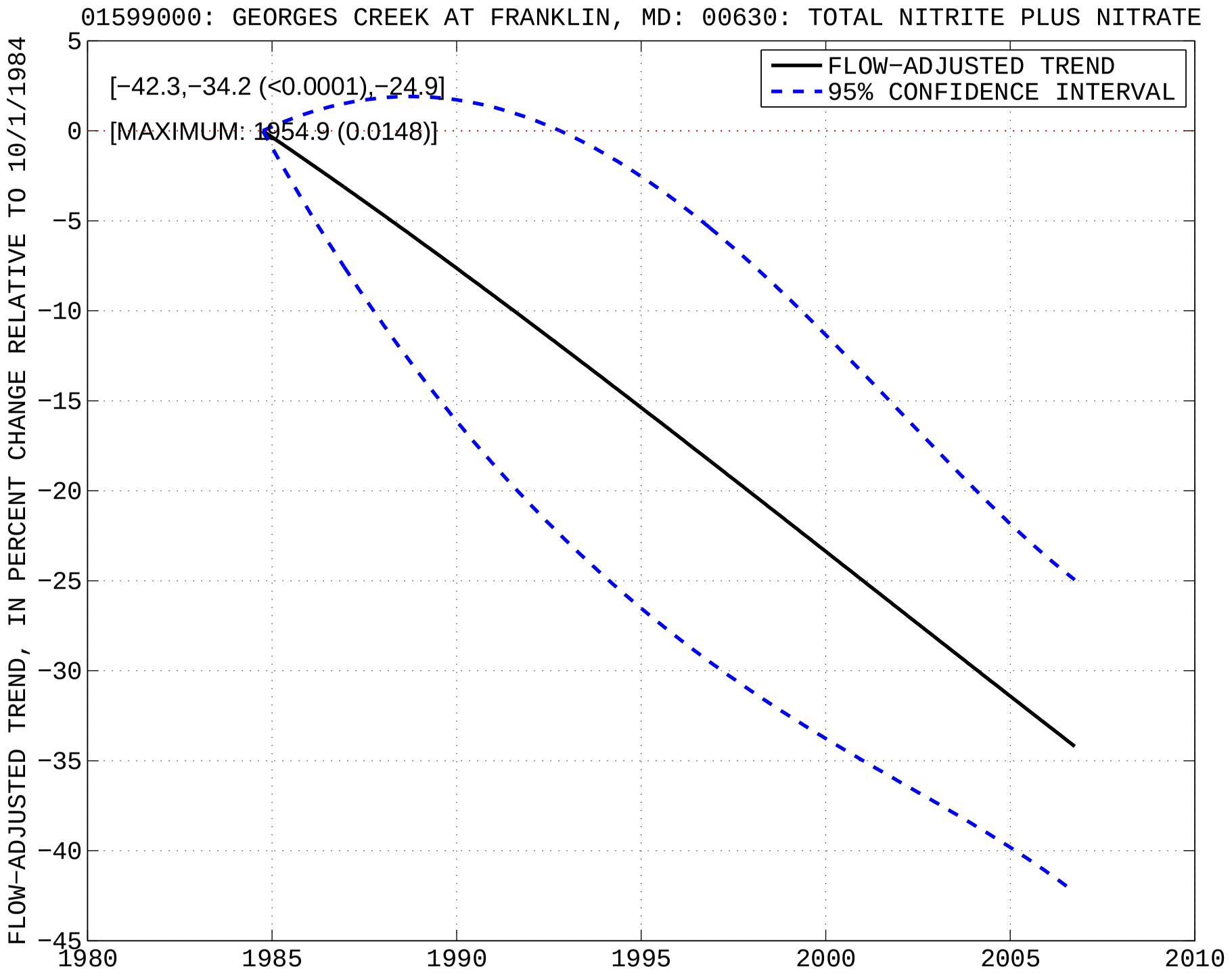

01594440: Patuxent River at Bowie, MD: 00665: TOTAL PHOSPHORUS
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[−69.9,−64.7 (<0.0001),−58.7]
[MINIMUM: 1999.3 (<0.0001)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
10
0
−10
−20
−30
−40
−50
−60
−70
−80
1980
1985
1990
1995
2000
2005
2010

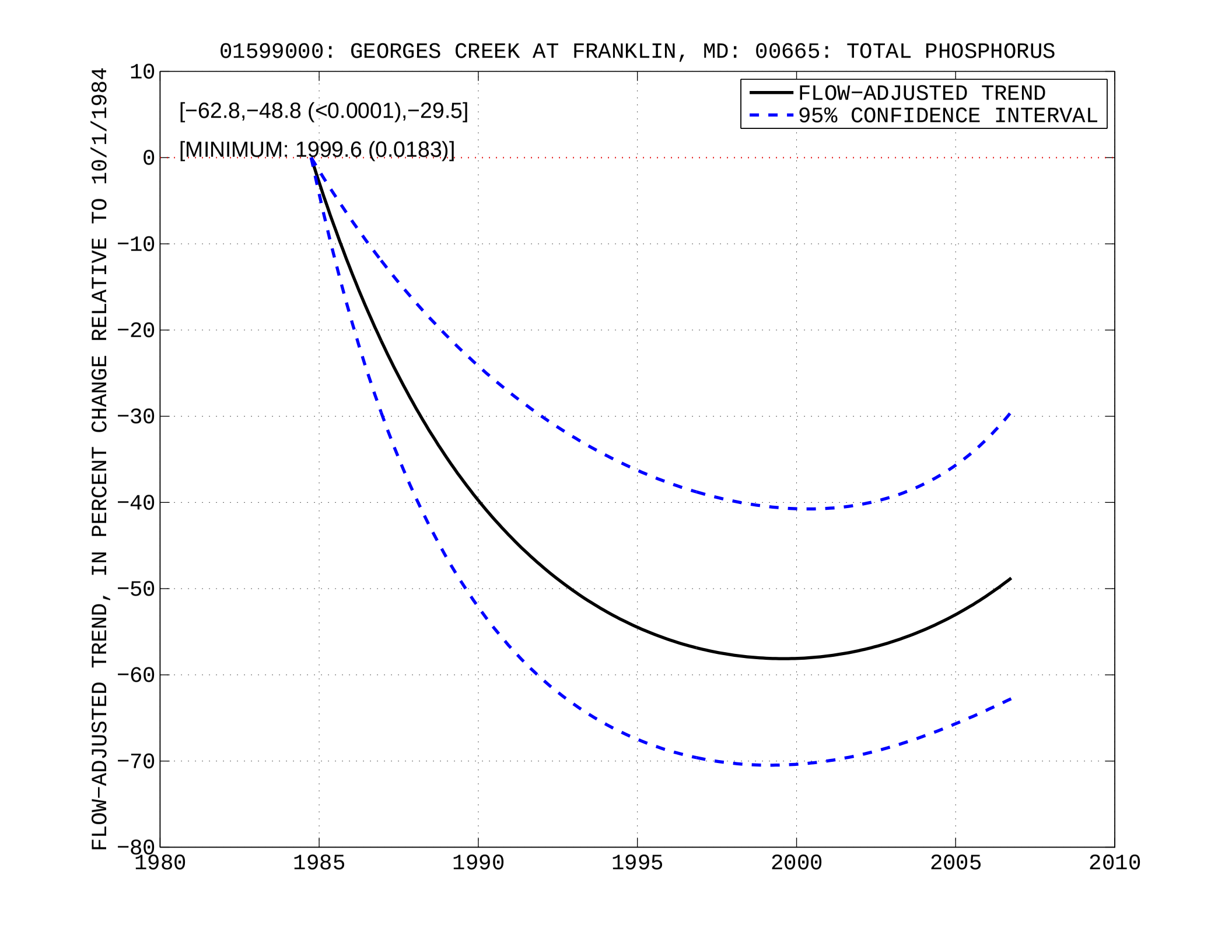

01594440: Patuxent River at Bowie, MD: 00671: DISSOLVED INORGANIC PHOSPHORUS
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[−78.4,−73.7 (<0.0001),−67.9]
[NO EXTREMUM (0.915)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
10
0
−10
−20
−30
−40
−50
−60
−70
−80
1980
1985
1990
1995
2000
2005
2010

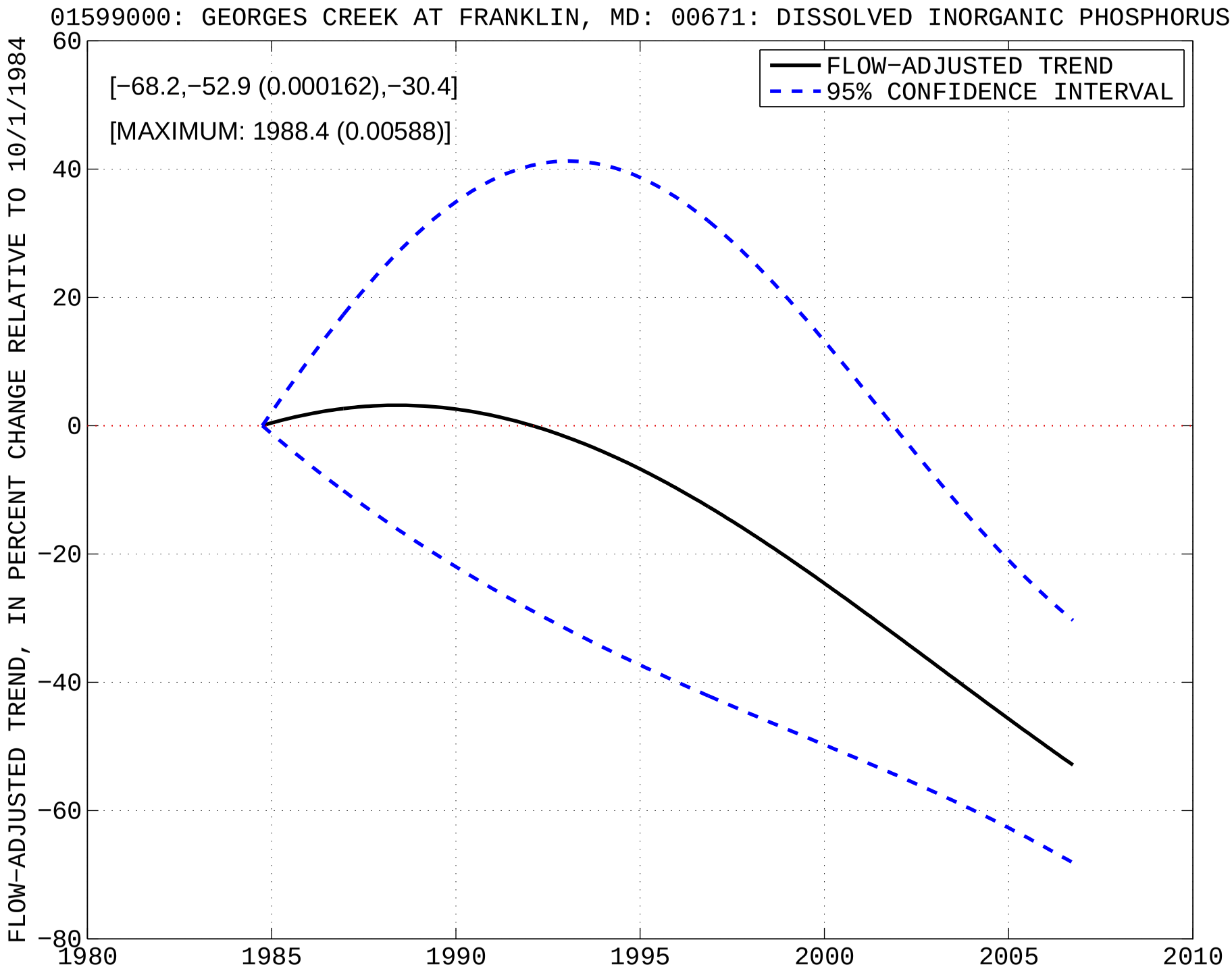

01594440: Patuxent River at Bowie, MD: 80154: SEDIMENT
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[−67.9,−60.7 (<0.0001),−52]
[NO EXTREMUM (0.125)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
10
0
−10
−20
−30
−40
−50
−60
−70
1980
1985
1990
1995
2000
2005
2010

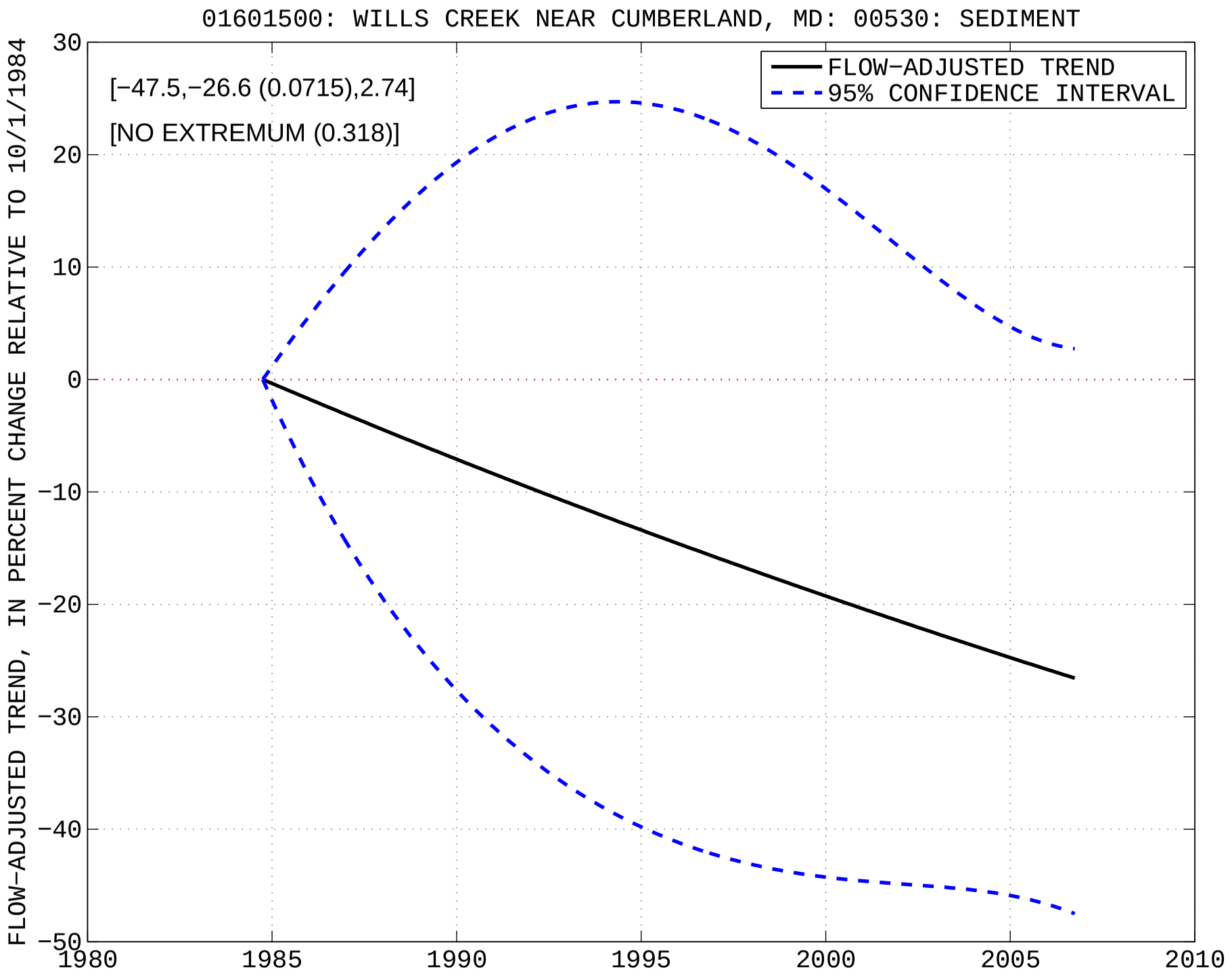

01599000: GEORGES CREEK AT FRANKLIN, MD: 00530: SEDIMENT
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[−41.1,−15 (0.384),22.6]
[NO EXTREMUM (0.305)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
30
20
10
0
−10
−20
−30
−40
−50
1980
1985
1990
1995
2000
2005
2010

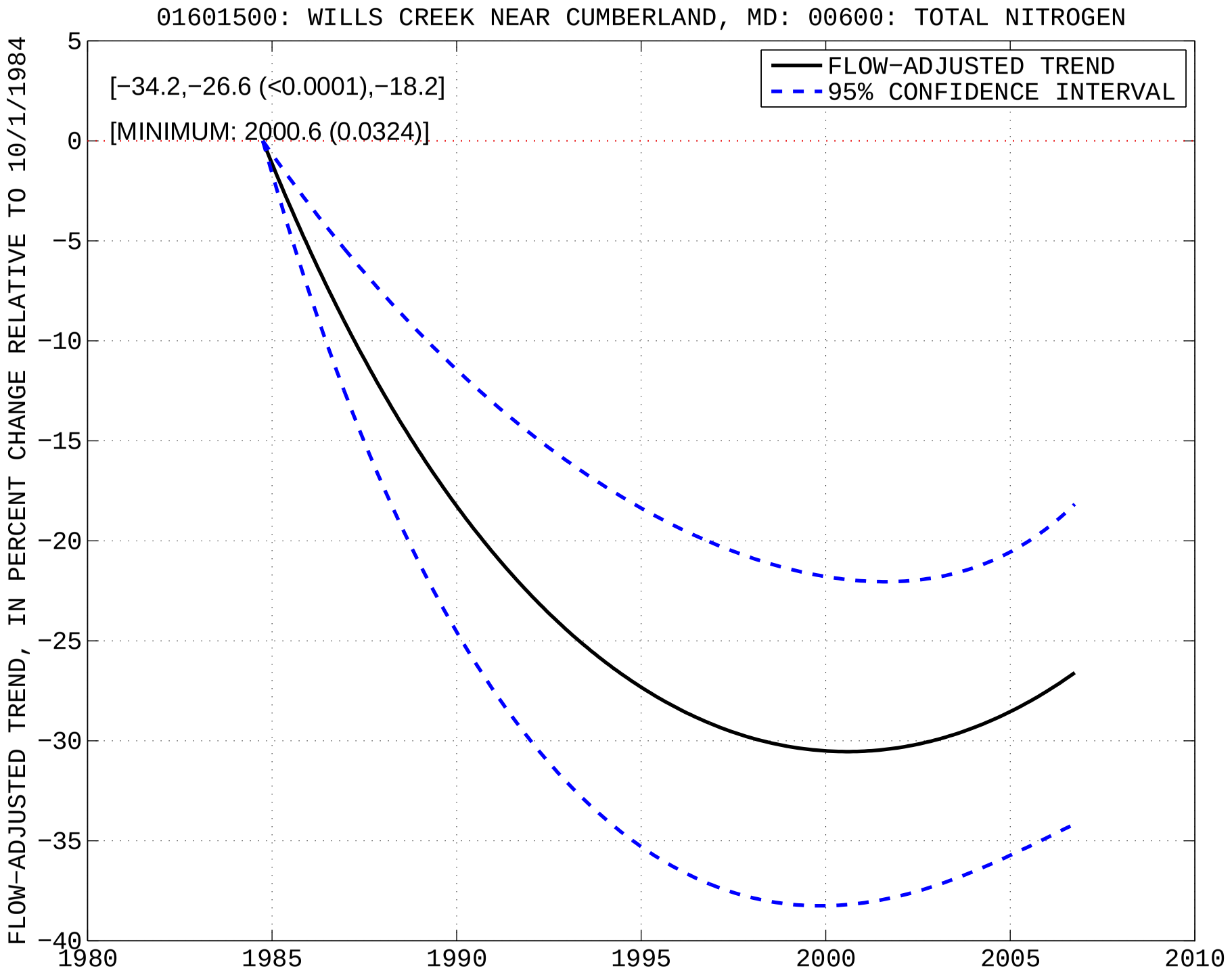

01599000: GEORGES CREEK AT FRANKLIN, MD: 00600: TOTAL NITROGEN
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[−44.3,−37.3 (<0.0001),−29.5]
[NO EXTREMUM (0.833)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
5
0
−5
−10
−15
−20
−25
−30
−35
−40
−45
1980
1985
1990
1995
2000
2005
2010

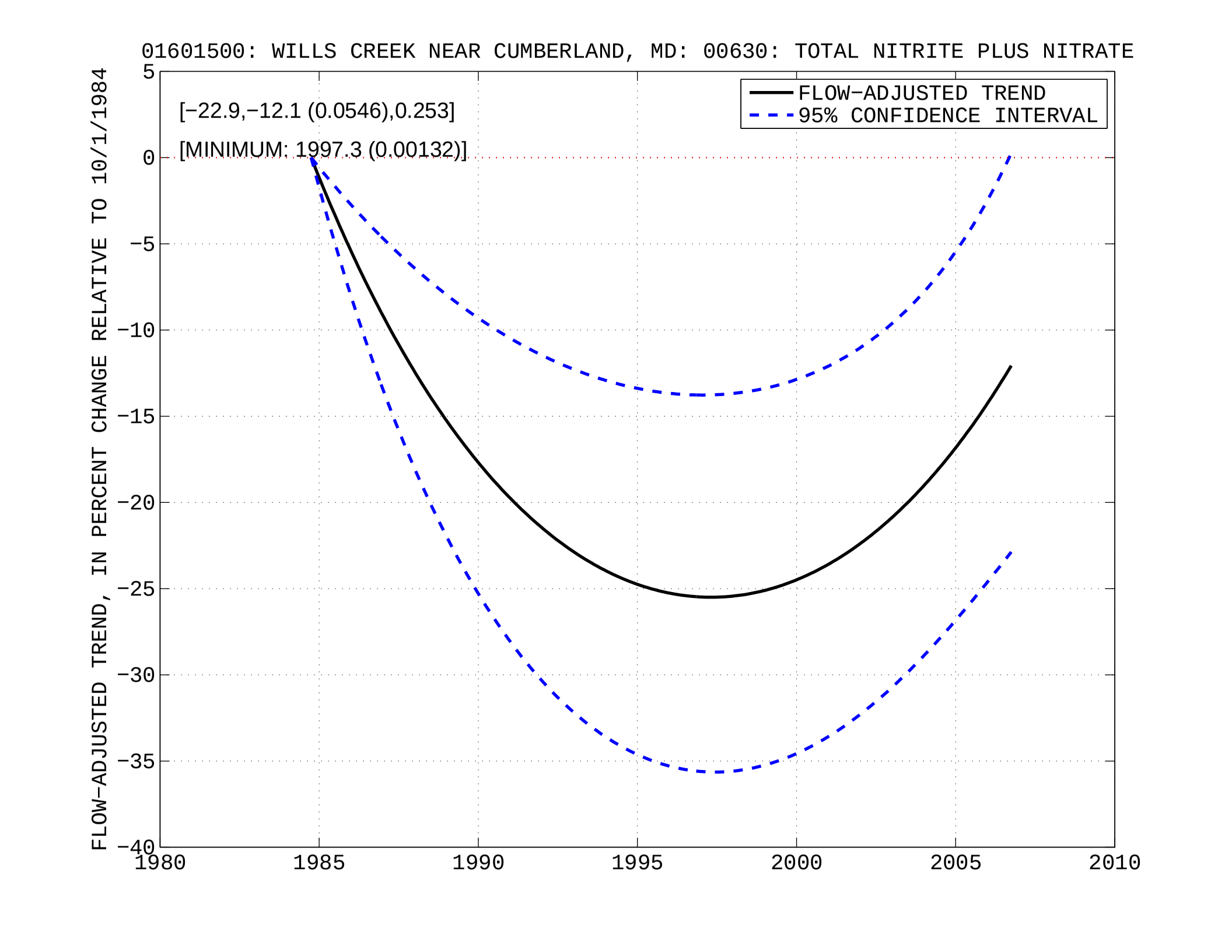

01599000: GEORGES CREEK AT FRANKLIN, MD: 00630: TOTAL NITRITE PLUS NITRATE
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[−42.3,−34.2 (<0.0001),−24.9]
[MAXIMUM: 1954.9 (0.0148)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
5
0
−5
−10
−15
−20
−25
−30
−35
−40
−45
1980
1985
1990
1995
2000
2005
2010

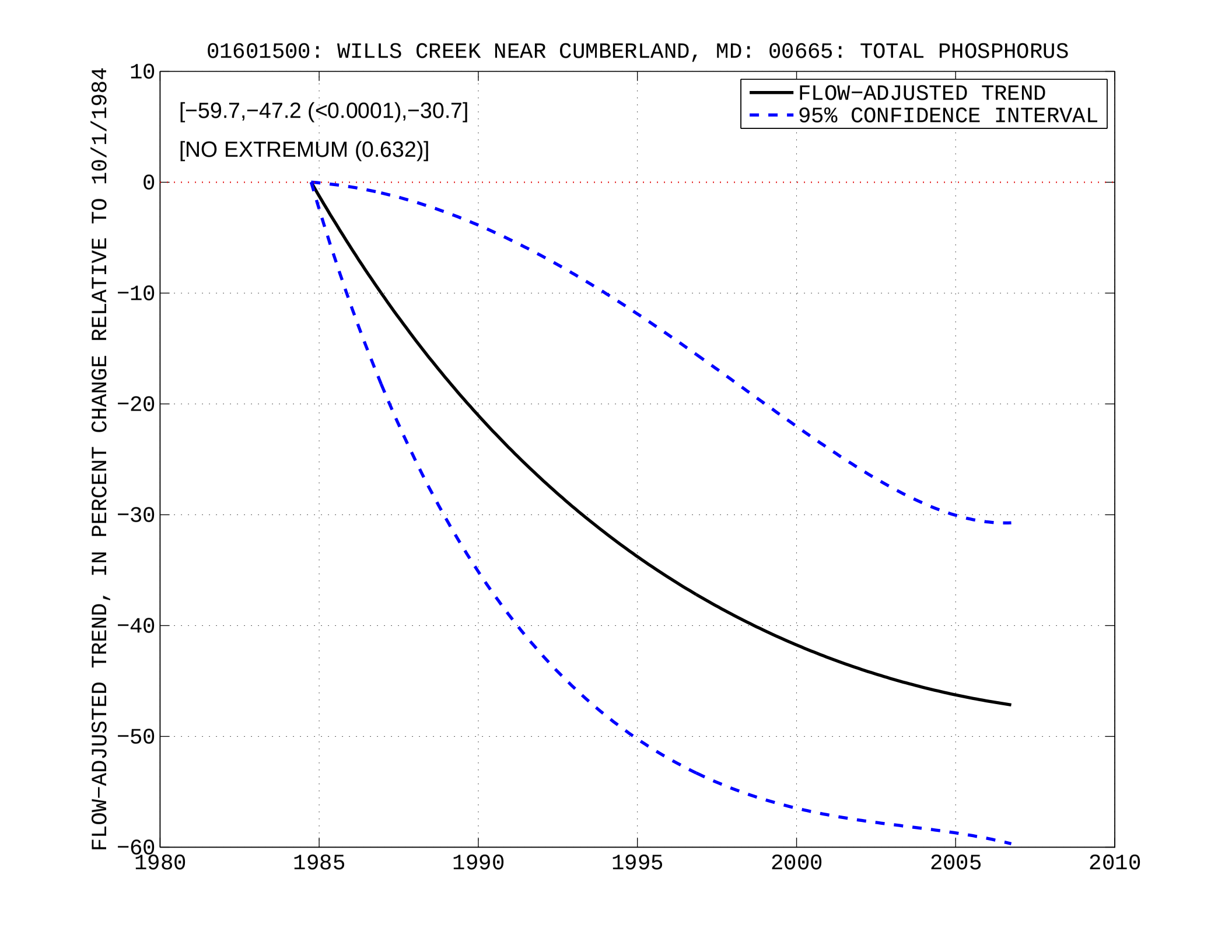

01599000: GEORGES CREEK AT FRANKLIN, MD: 00665: TOTAL PHOSPHORUS
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[−62.8,−48.8 (<0.0001),−29.5]
[MINIMUM: 1999.6 (0.0183)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
10
0
−10
−20
−30
−40
−50
−60
−70
−80
1980
1985
1990
1995
2000
2005
2010

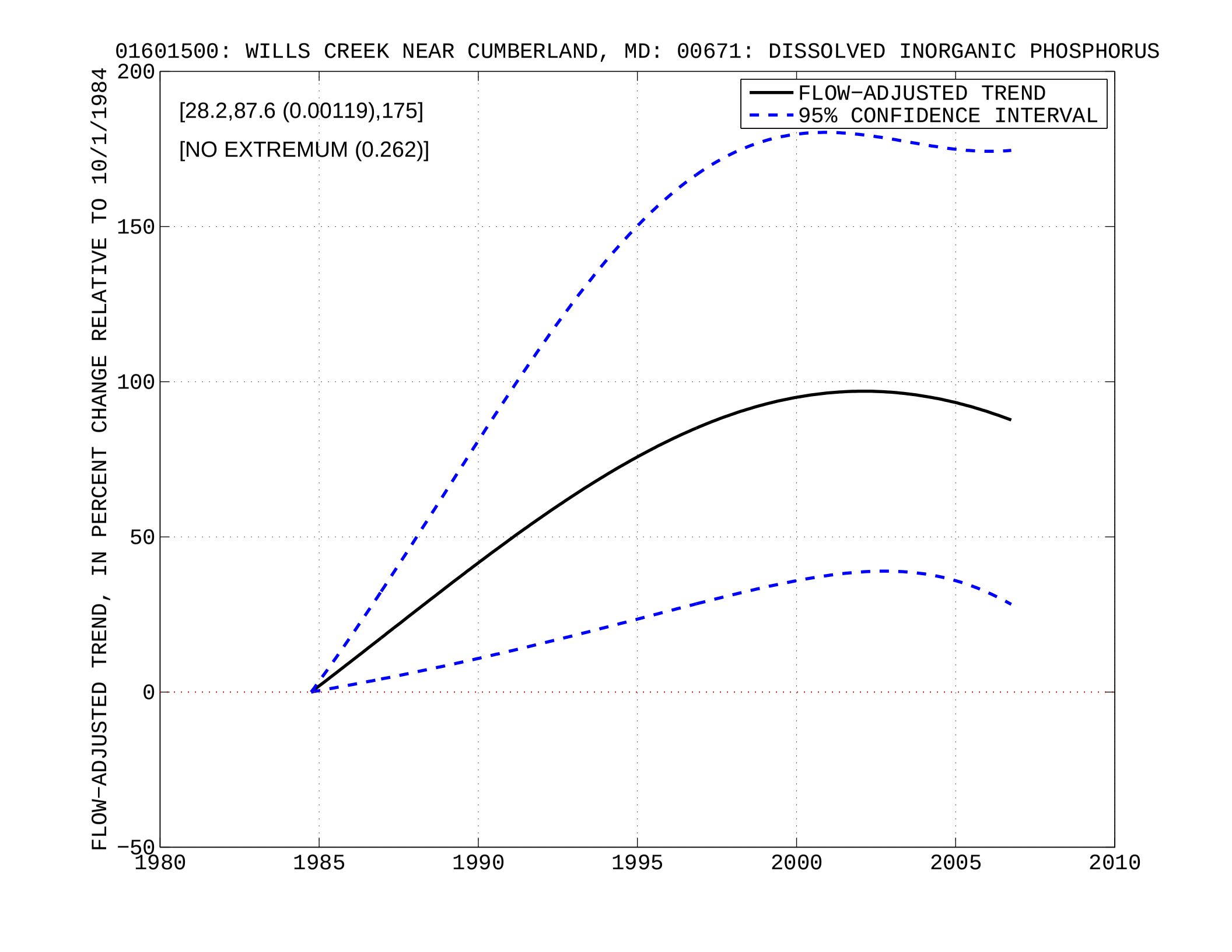

01599000: GEORGES CREEK AT FRANKLIN, MD: 00671: DISSOLVED INORGANIC PHOSPHORUS
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[−68.2,−52.9 (0.000162),−30.4]
[MAXIMUM: 1988.4 (0.00588)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
60
40
20
0
−20
−40
−60
−80
1980
1985
1990
1995
2000
2005
2010

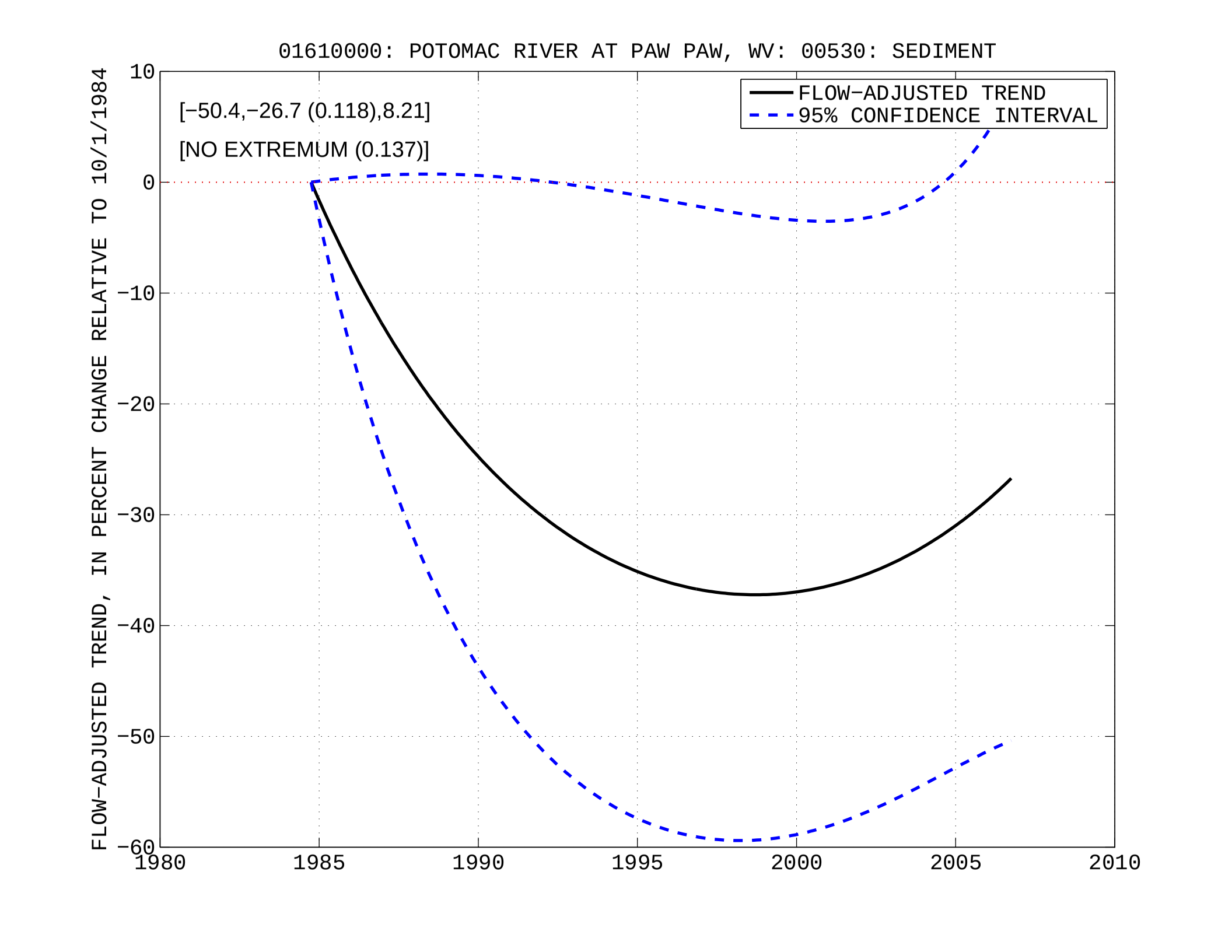

01601500: WILLS CREEK NEAR CUMBERLAND, MD: 00530: SEDIMENT
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
[−47.5,−26.6 (0.0715),2.74]
[NO EXTREMUM (0.318)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
30
20
10
0
−10
−20
−30
−40
−50
1980
1985
1990
1995
2000
2005
2010

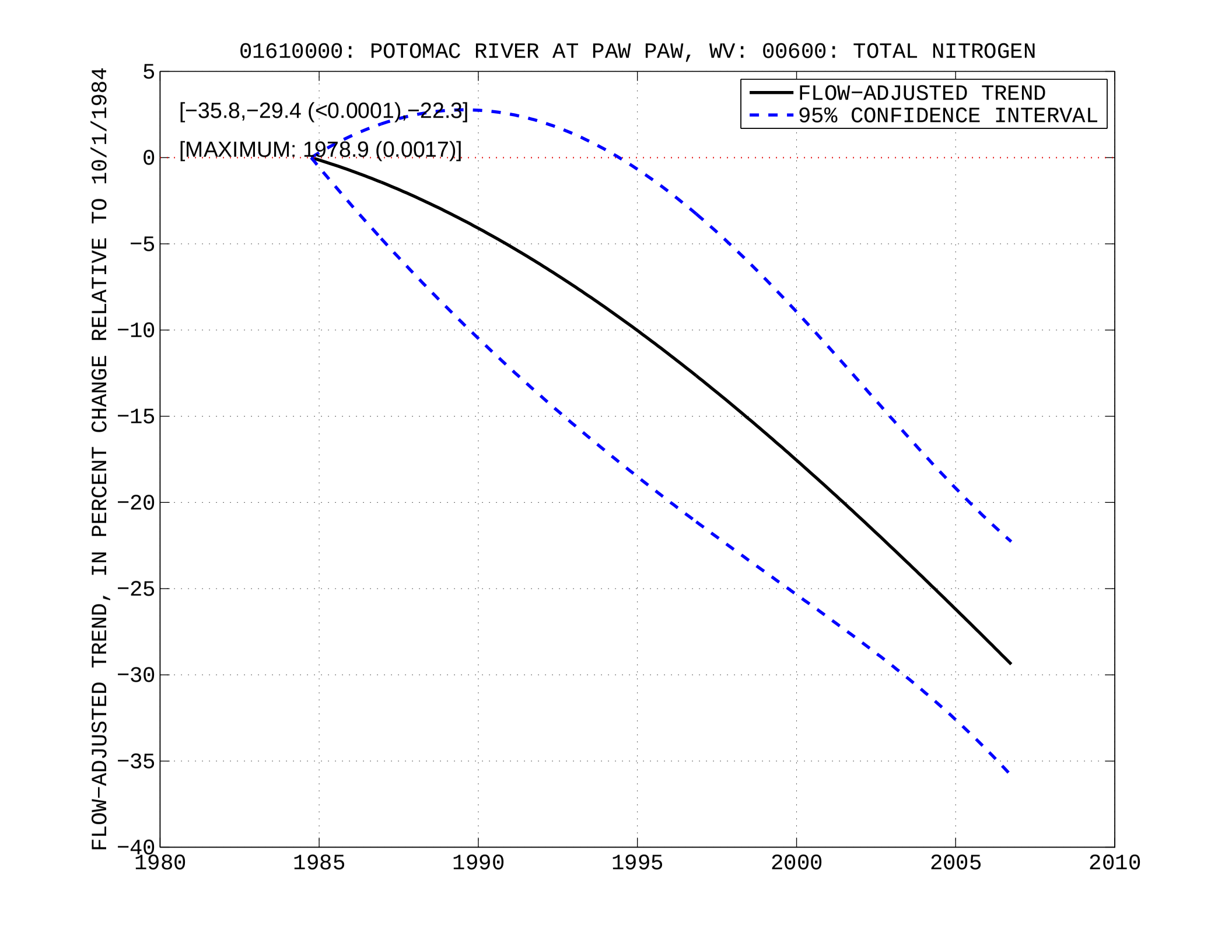

01601500: WILLS CREEK NEAR CUMBERLAND, MD: 00600: TOTAL NITROGEN
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[−34.2,−26.6 (<0.0001),−18.2]
[MINIMUM: 2000.6 (0.0324)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
5
0
−5
−10
−15
−20
−25
−30
−35
−40
1980
1985
1990
1995
2000
2005
2010

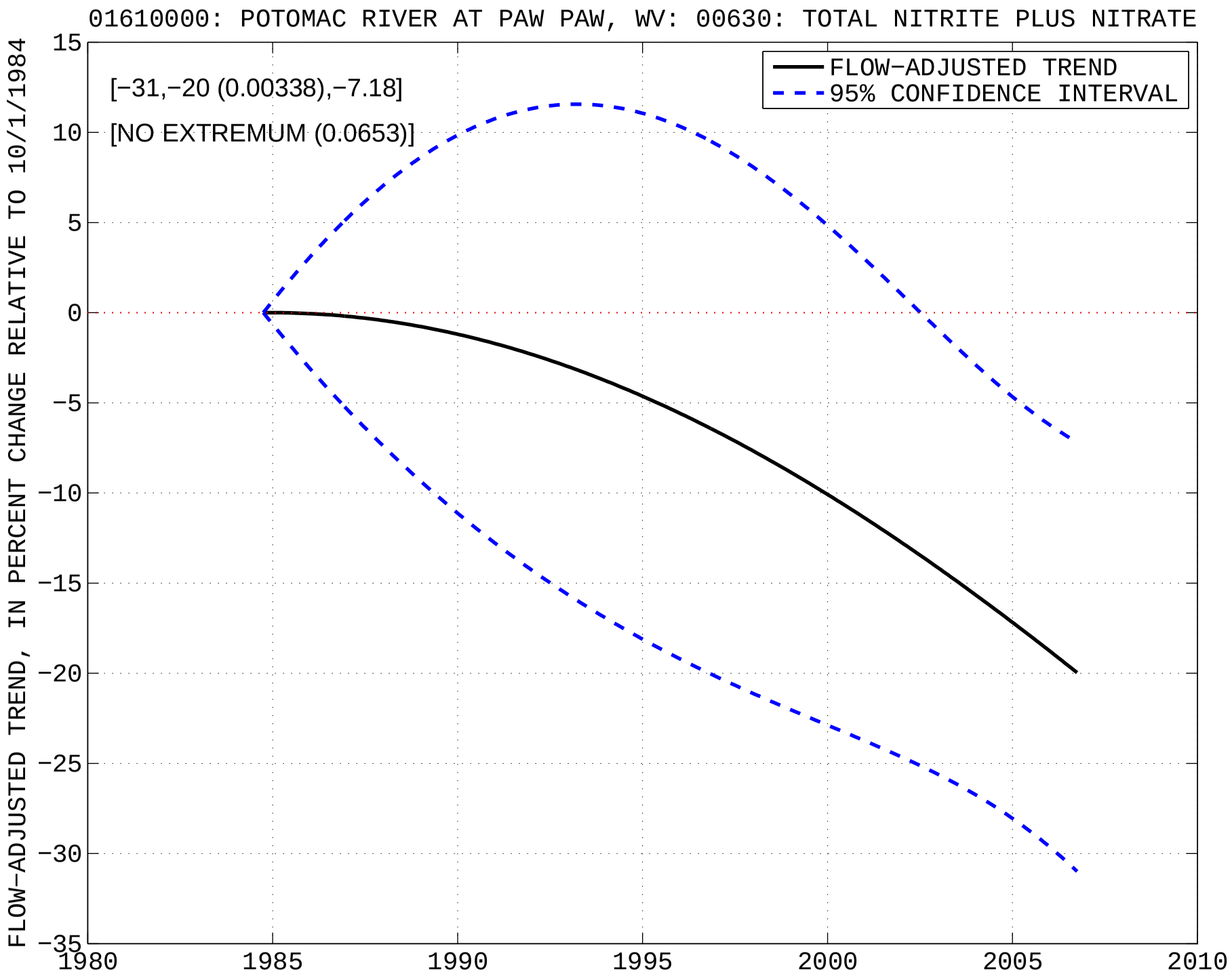

01601500: WILLS CREEK NEAR CUMBERLAND, MD: 00630: TOTAL NITRITE PLUS NITRATE
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
[−22.9,−12.1 (0.0546),0.253]
[MINIMUM: 1997.3 (0.00132)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
5
0
−5
−10
−15
−20
−25
−30
−35
−40
1980
1985
1990
1995
2000
2005
2010

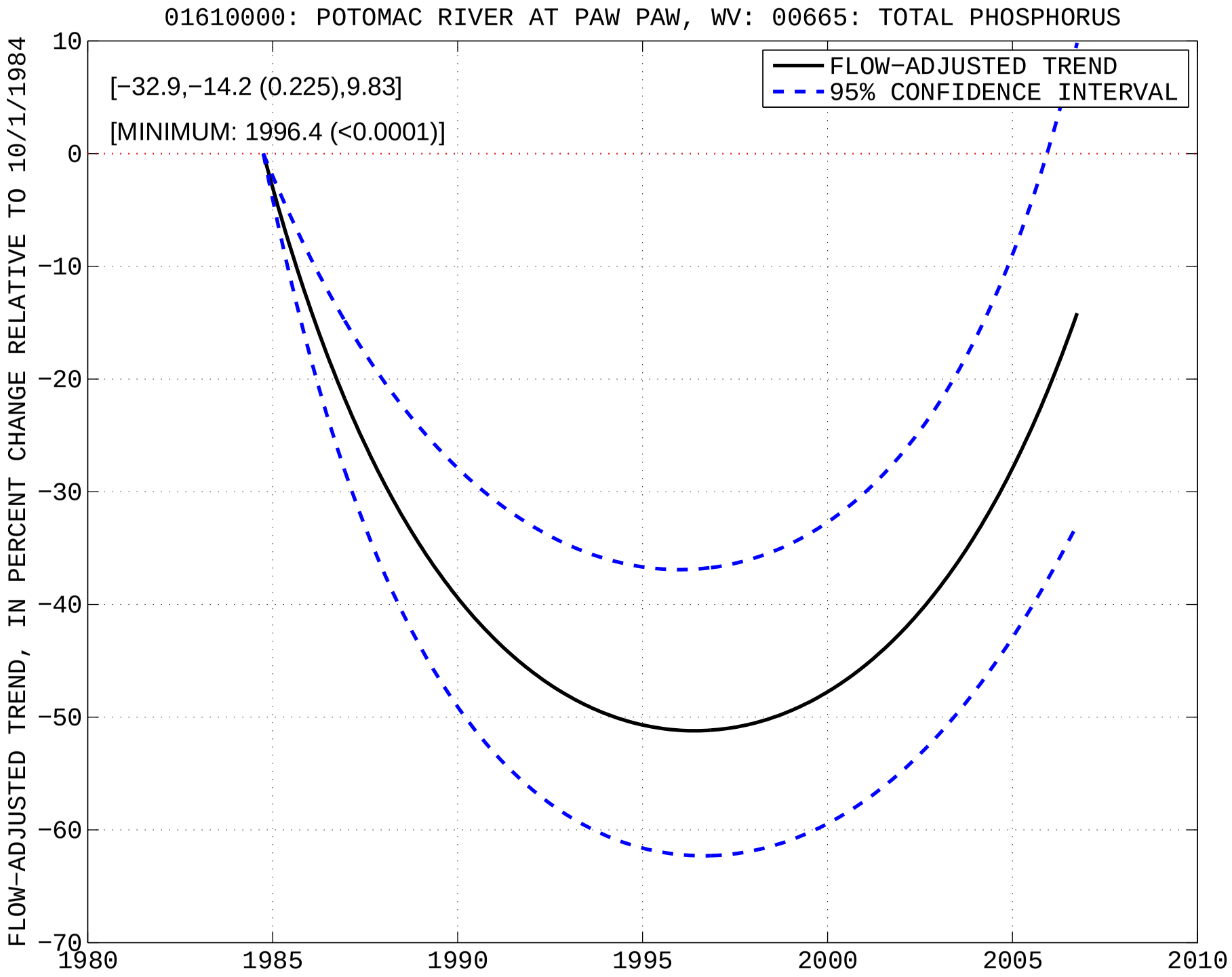

01601500: WILLS CREEK NEAR CUMBERLAND, MD: 00665: TOTAL PHOSPHORUS
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[−59.7,−47.2 (<0.0001),−30.7]
[NO EXTREMUM (0.632)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
10
0
−10
−20
−30
−40
−50
−60
1980
1985
1990
1995
2000
2005
2010

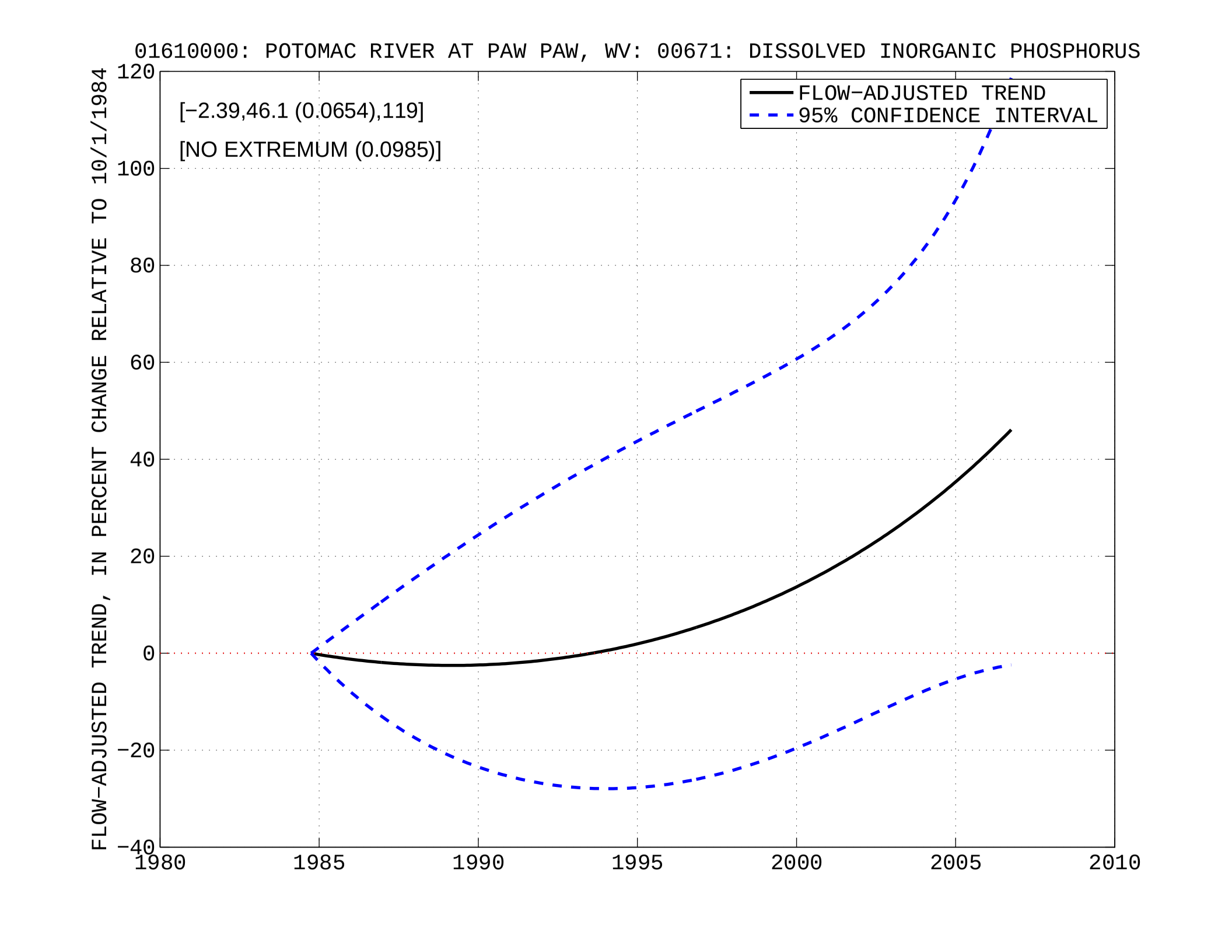

01601500: WILLS CREEK NEAR CUMBERLAND, MD: 00671: DISSOLVED INORGANIC PHOSPHORUS
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
200
150
100
50
0
-50
1980
1985
1990
1995
2000
2005
2010
[28.2,87.6 (0.00119),175]
[NO EXTREMUM (0.262)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL

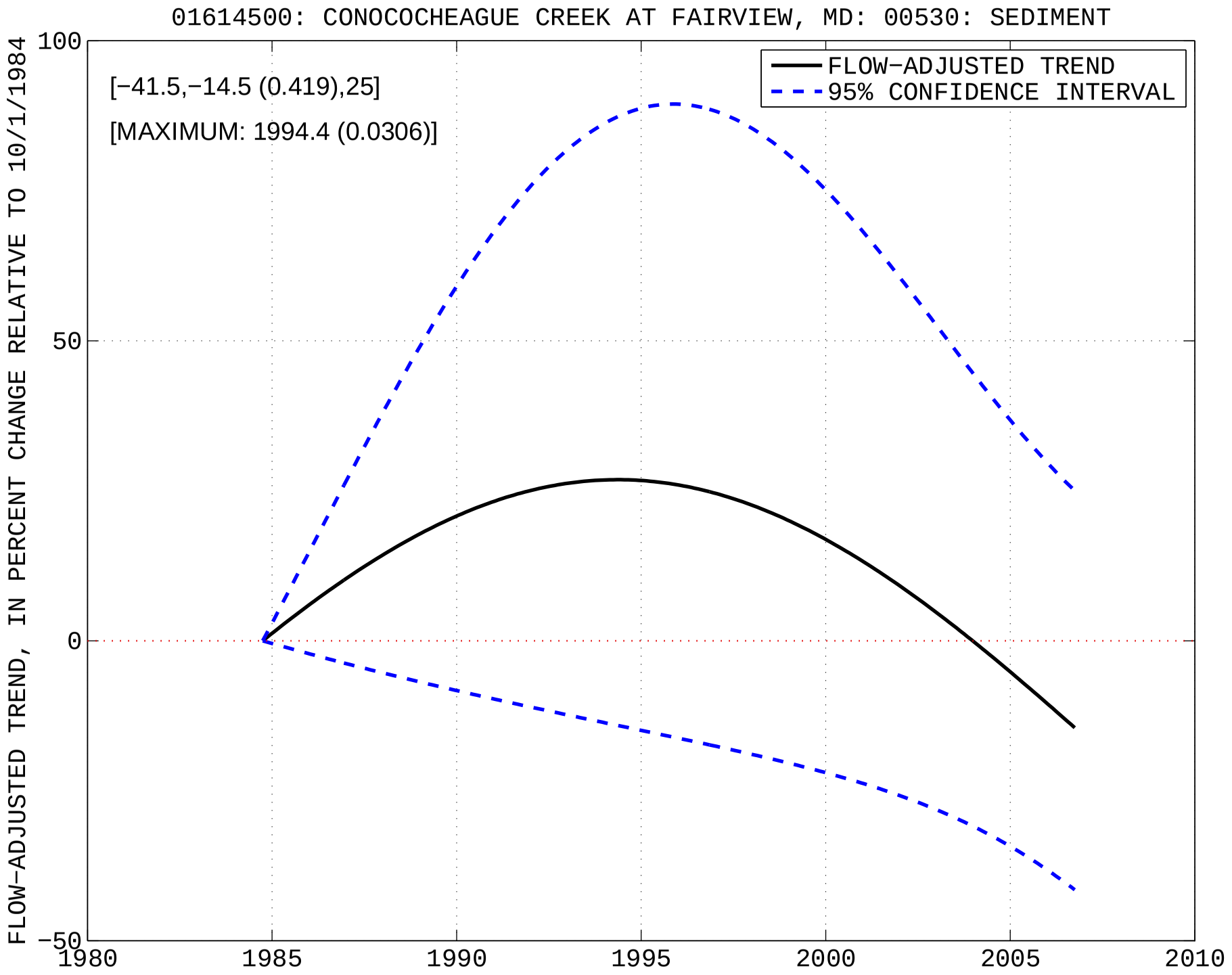

01610000: POTOMAC RIVER AT PAW PAW, WV: 00530: SEDIMENT
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
[−50.4,−26.7 (0.118),8.21]
[NO EXTREMUM (0.137)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
10
0
−10
−20
−30
−40
−50
−60
1980
1985
1990
1995
2000
2005
2010

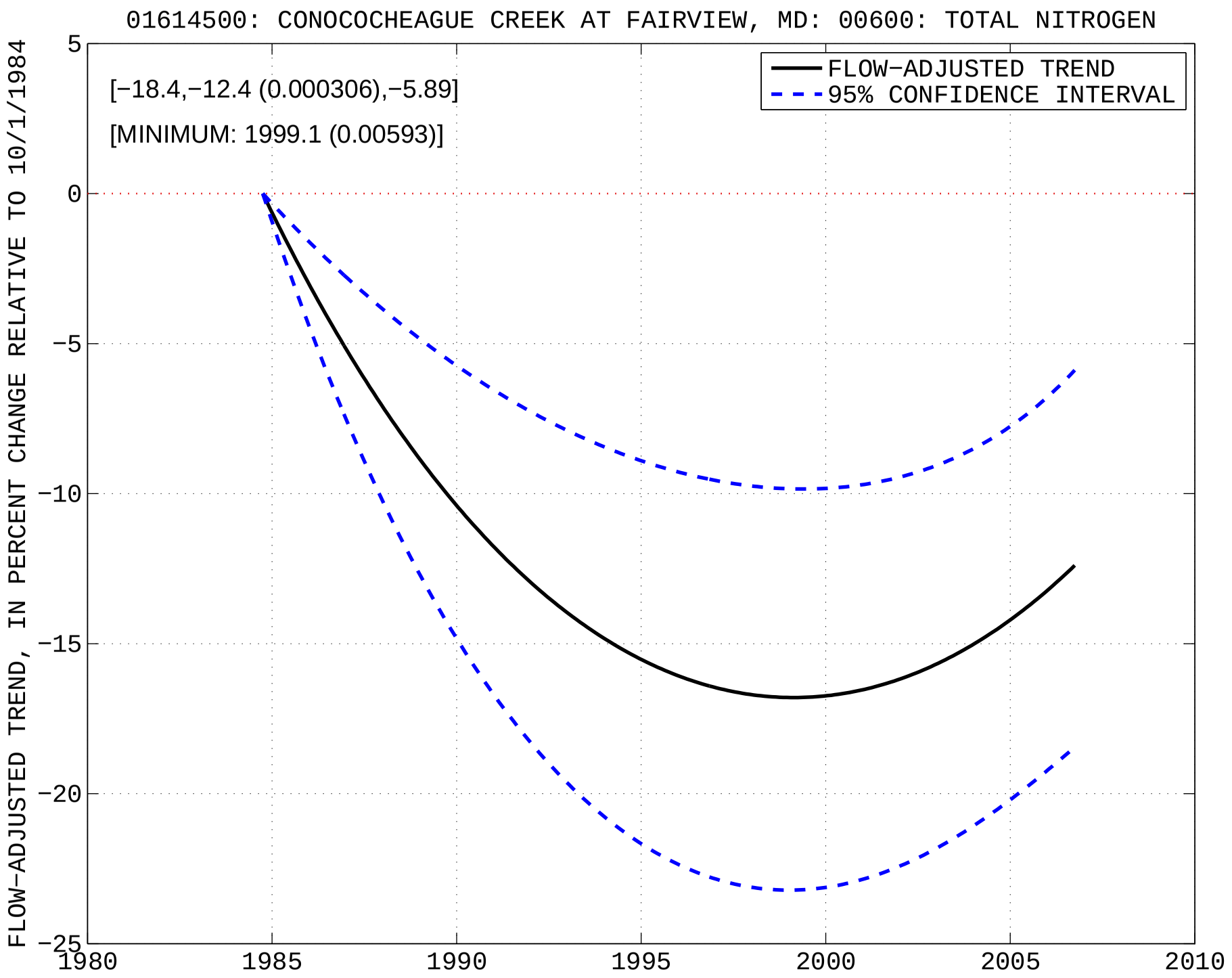

01610000: POTOMAC RIVER AT PAW PAW, WV: 00600: TOTAL NITROGEN
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[−35.8,−29.4 (<0.0001),−22.3]
[MAXIMUM: 1978.9 (0.0017)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
5
0
−5
−10
−15
−20
−25
−30
−35
−40
1980
1985
1990
1995
2000
2005
2010

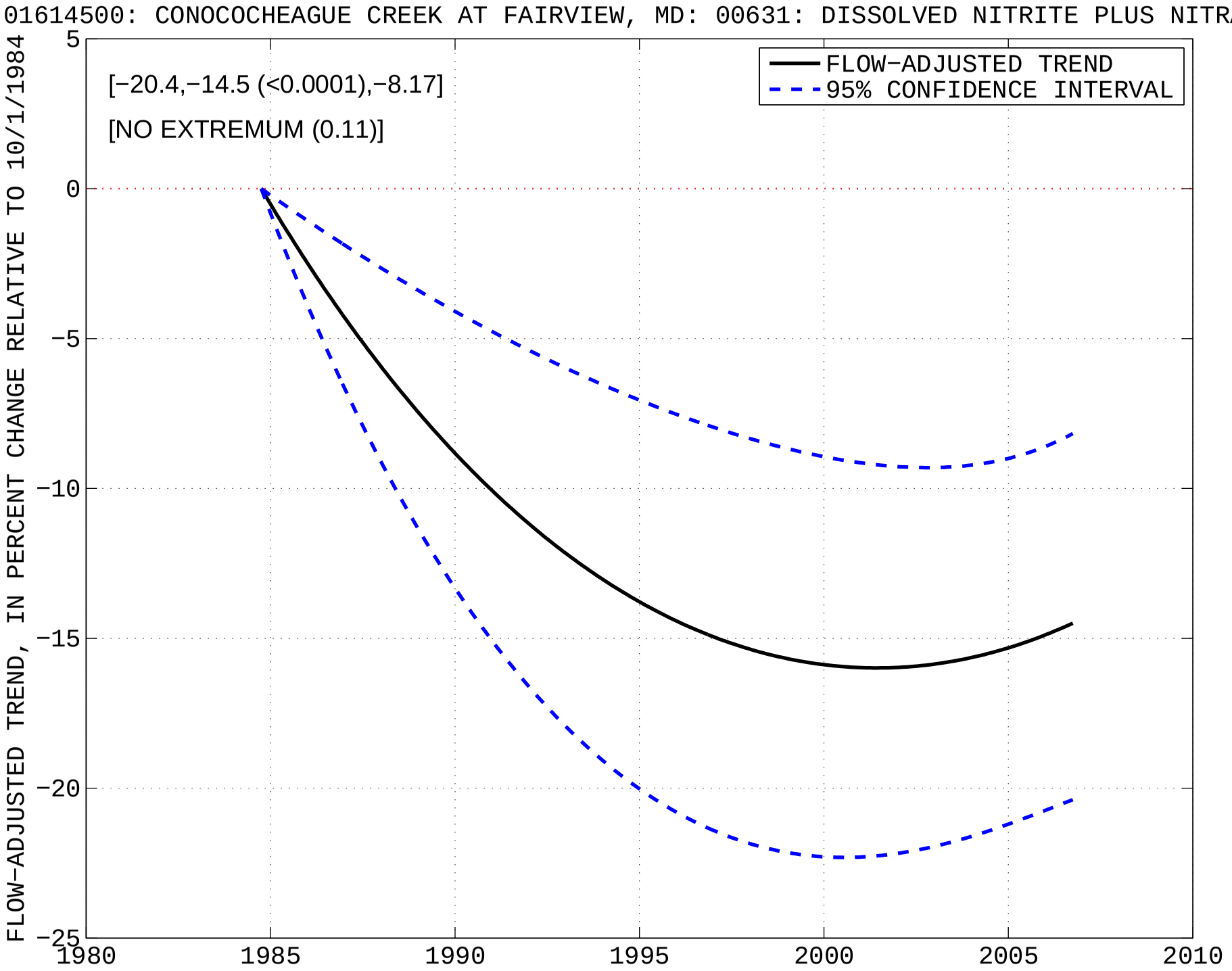

01610000: POTOMAC RIVER AT PAW PAW, WV: 00630: TOTAL NITRITE PLUS NITRATE
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
[-31,-20 (0.00338),-7.18]
[NO EXTREMUM (0.0653)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
15
10
5
0
-5
-10
-15
-20
-25
-30
-35
1980
1985
1990
1995
2000
2005
2010

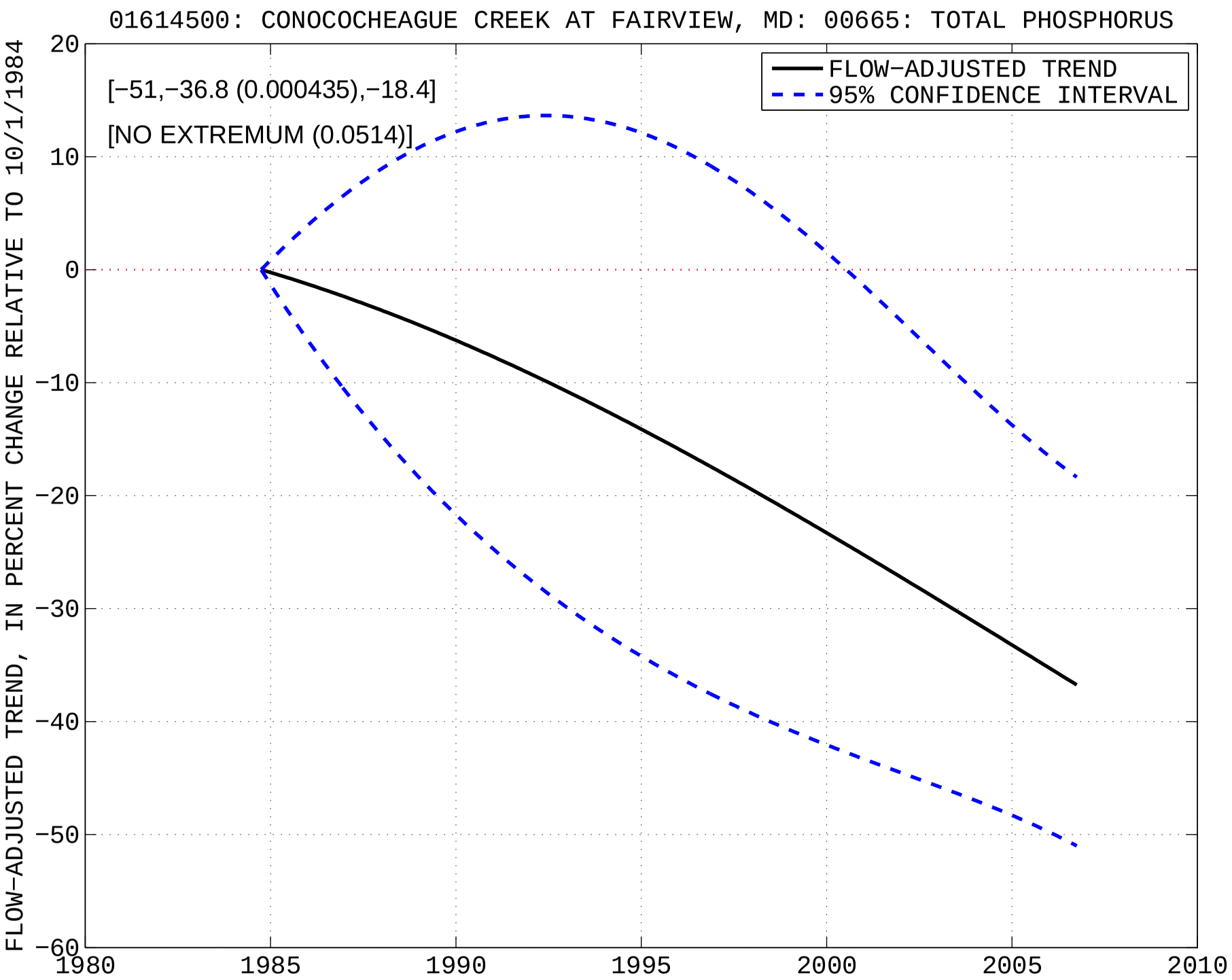

01610000: POTOMAC RIVER AT PAW PAW, WV: 00665: TOTAL PHOSPHORUS
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[−32.9,−14.2 (0.225),9.83]
[MINIMUM: 1996.4 (<0.0001)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
10
0
−10
−20
−30
−40
−50
−60
−70
1980
1985
1990
1995
2000
2005
2010

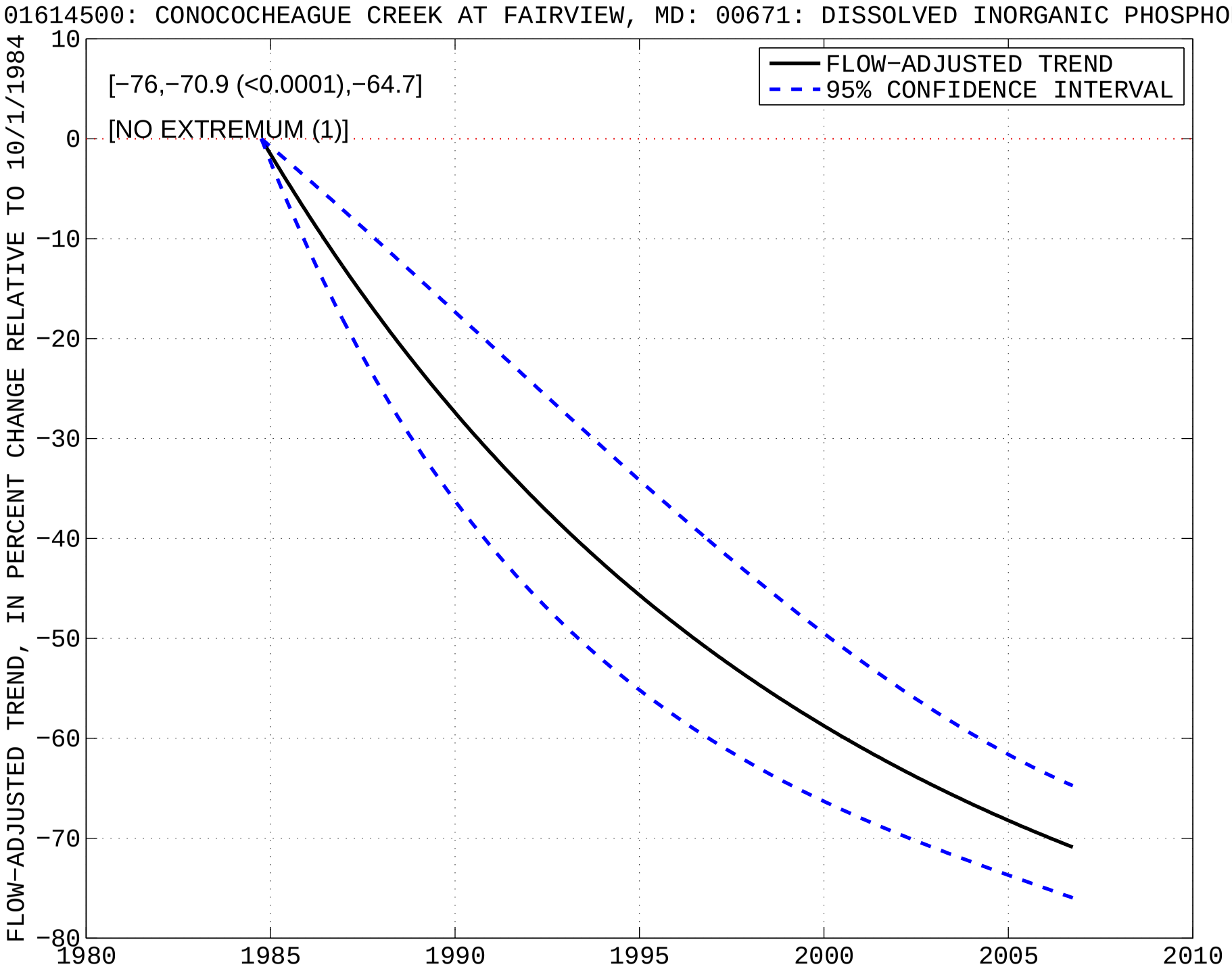

01610000: POTOMAC RIVER AT PAW PAW, WV: 00671: DISSOLVED INORGANIC PHOSPHORUS
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
[−2.39,46.1 (0.0654),119]
[NO EXTREMUM (0.0985)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
120
100
80
60
40
20
0
−20
−40
1980
1985
1990
1995
2000
2005
2010

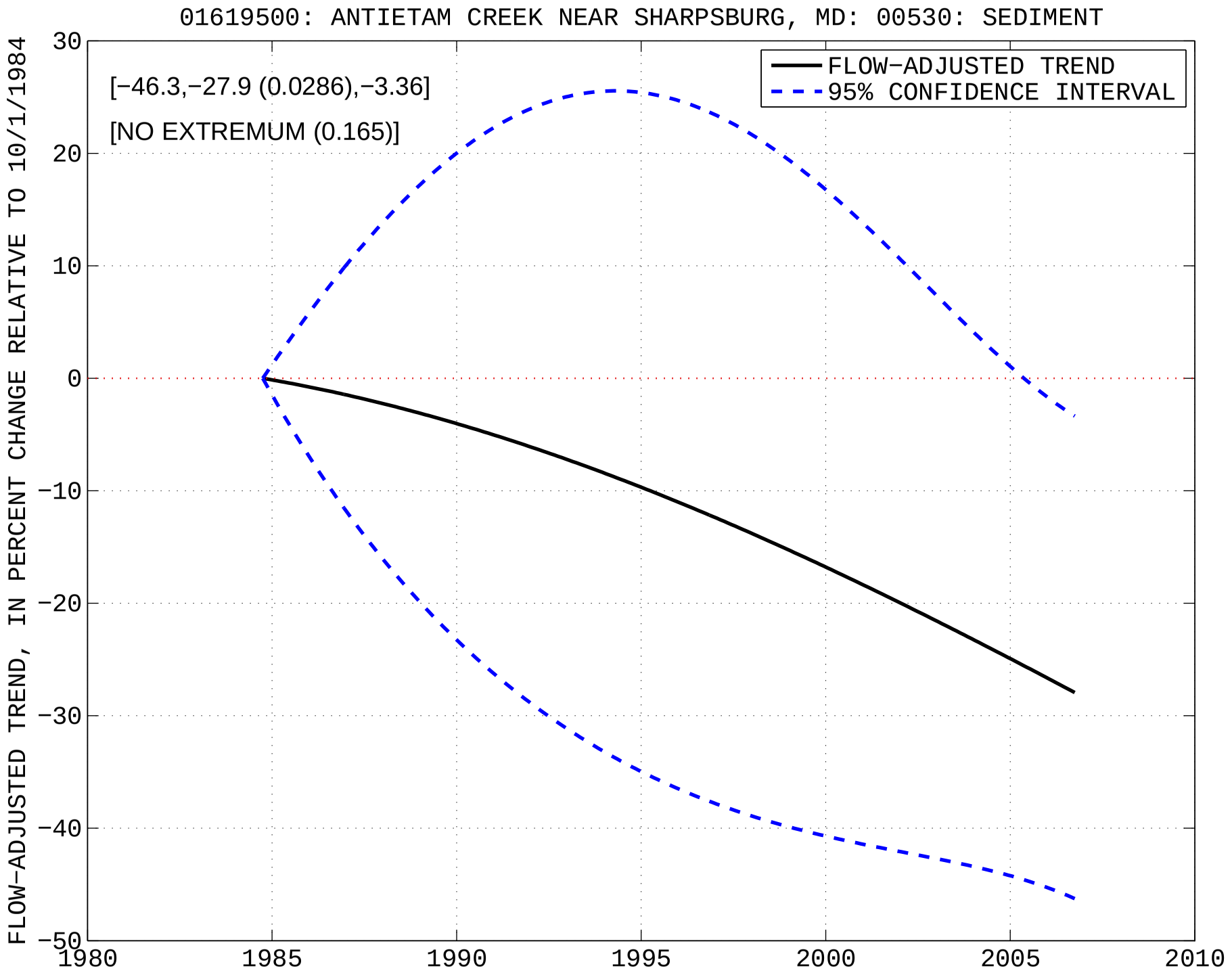

01614500: CONOCOCHEAGUE CREEK AT FAIRVIEW, MD: 00530: SEDIMENT
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[−41.5,−14.5 (0.419),25]
[MAXIMUM: 1994.4 (0.0306)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
100
50
0
−50
1980
1985
1990
1995
2000
2005
2010

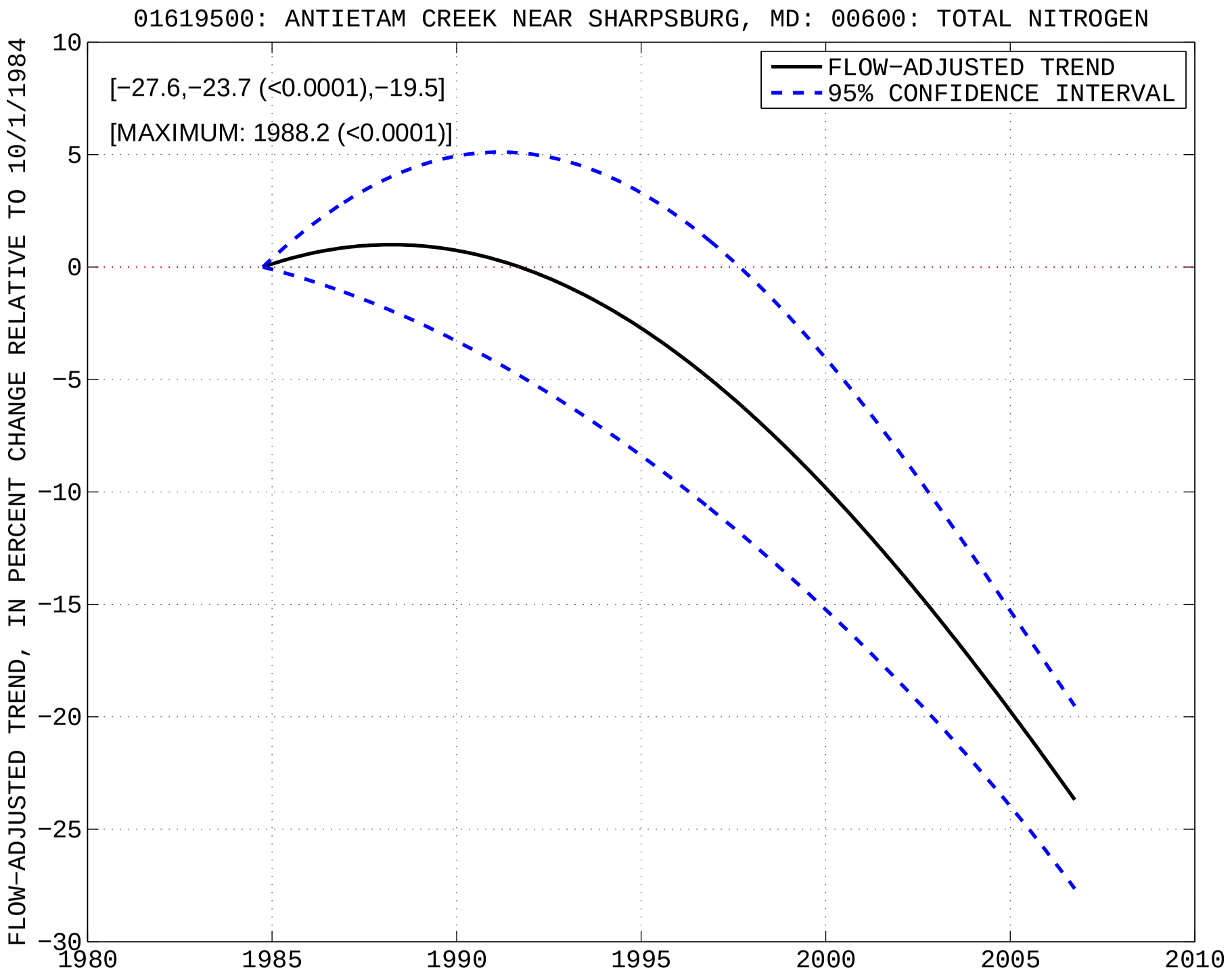

01614500: CONOCOCHEAGUE CREEK AT FAIRVIEW, MD: 00600: TOTAL NITROGEN
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
[−18.4,−12.4 (0.000306),−5.89]
[MINIMUM: 1999.1 (0.00593)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
5
0
−5
−10
−15
−20
−25
1980
1985
1990
1995
2000
2005
2010

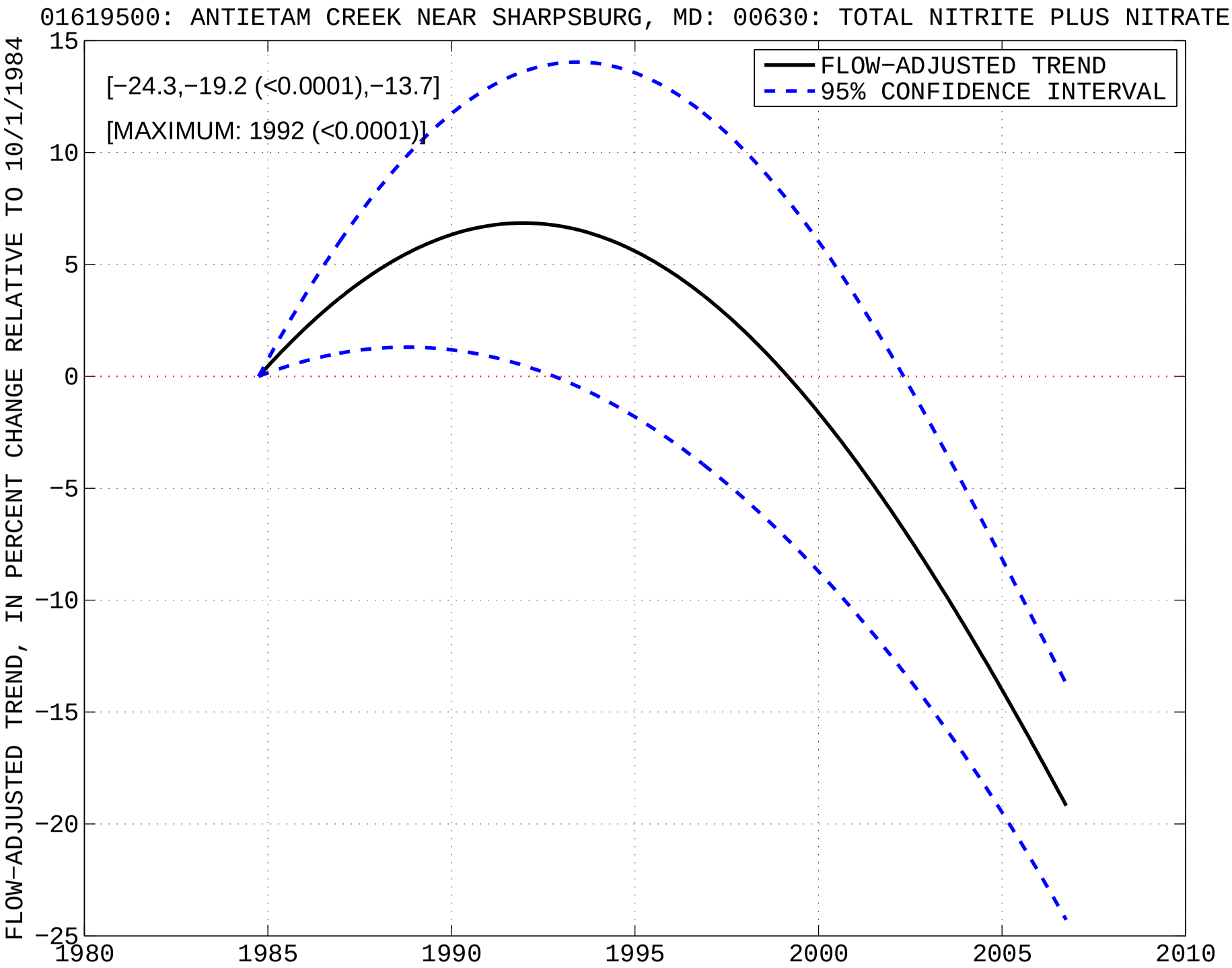

01614500: CONOCOCHEAGUE CREEK AT FAIRVIEW, MD: 00631: DISSOLVED NITRITE PLUS NITRATE
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
[−20.4,−14.5 (<0.0001),−8.17]
[NO EXTREMUM (0.11)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
5
0
−5
−10
−15
−20
−25
1980
1985
1990
1995
2000
2005
2010

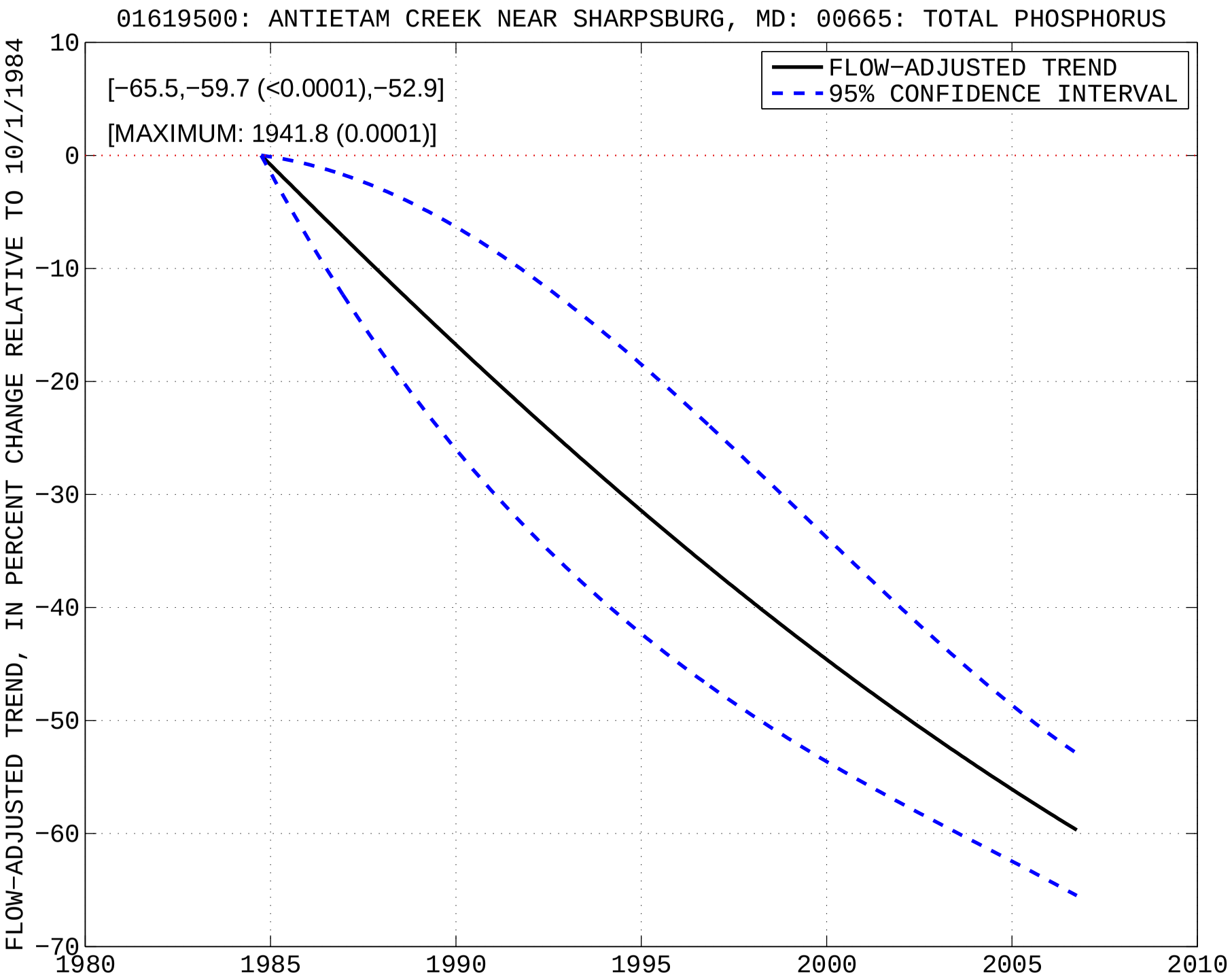

01614500: CONOCOCHEAGUE CREEK AT FAIRVIEW, MD: 00665: TOTAL PHOSPHORUS
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[−51,−36.8 (0.000435),−18.4]
[NO EXTREMUM (0.0514)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
20
10
0
−10
−20
−30
−40
−50
−60
1980
1985
1990
1995
2000
2005
2010

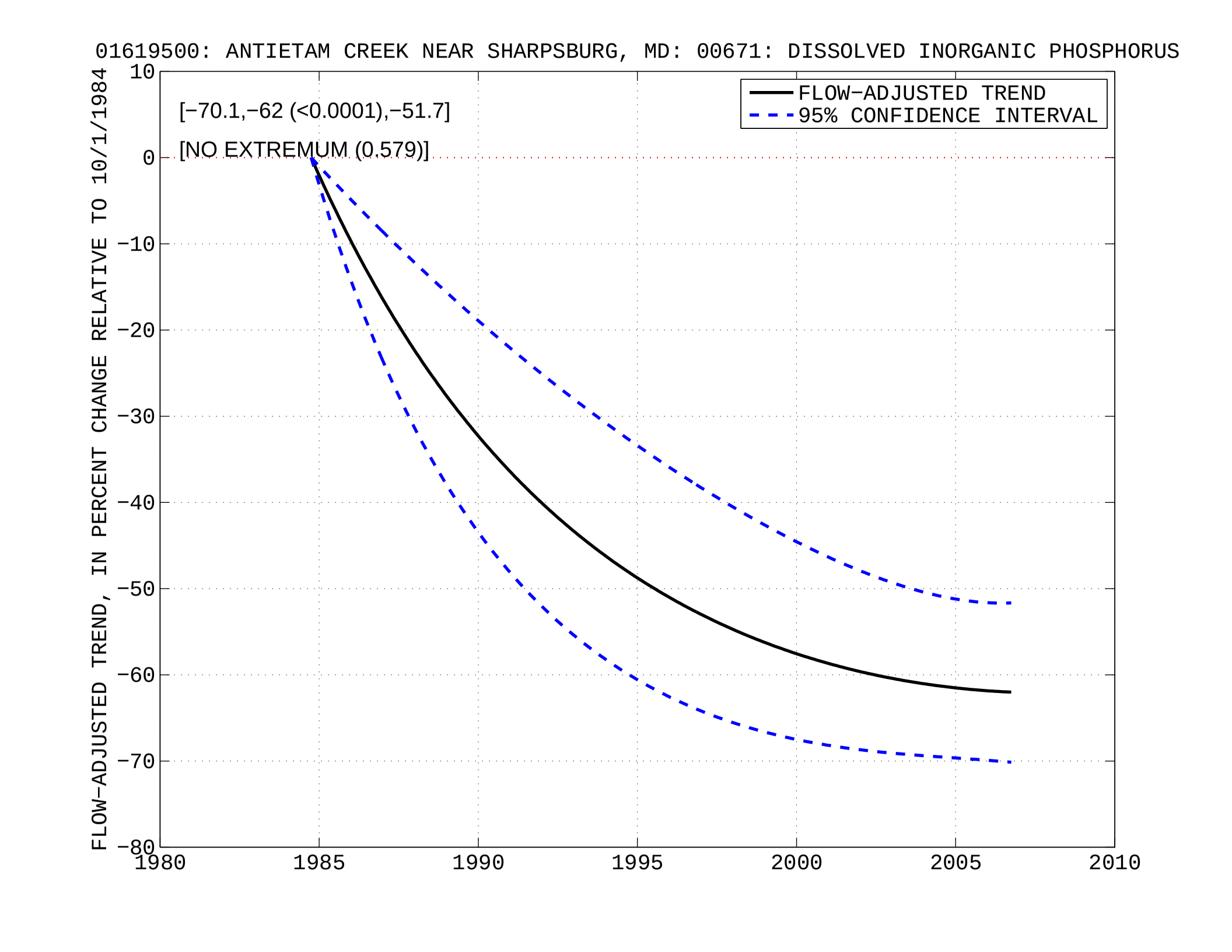

01614500: CONOCOCHEAGUE CREEK AT FAIRVIEW, MD: 00671: DISSOLVED INORGANIC PHOSPHORUS
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
10
0
-10
-20
-30
-40
-50
-60
-70
-80
1980
1985
1990
1995
2000
2005
2010
[-76,-70.9 (<0.0001),-64.7]
[NO EXTREMUM (1)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL

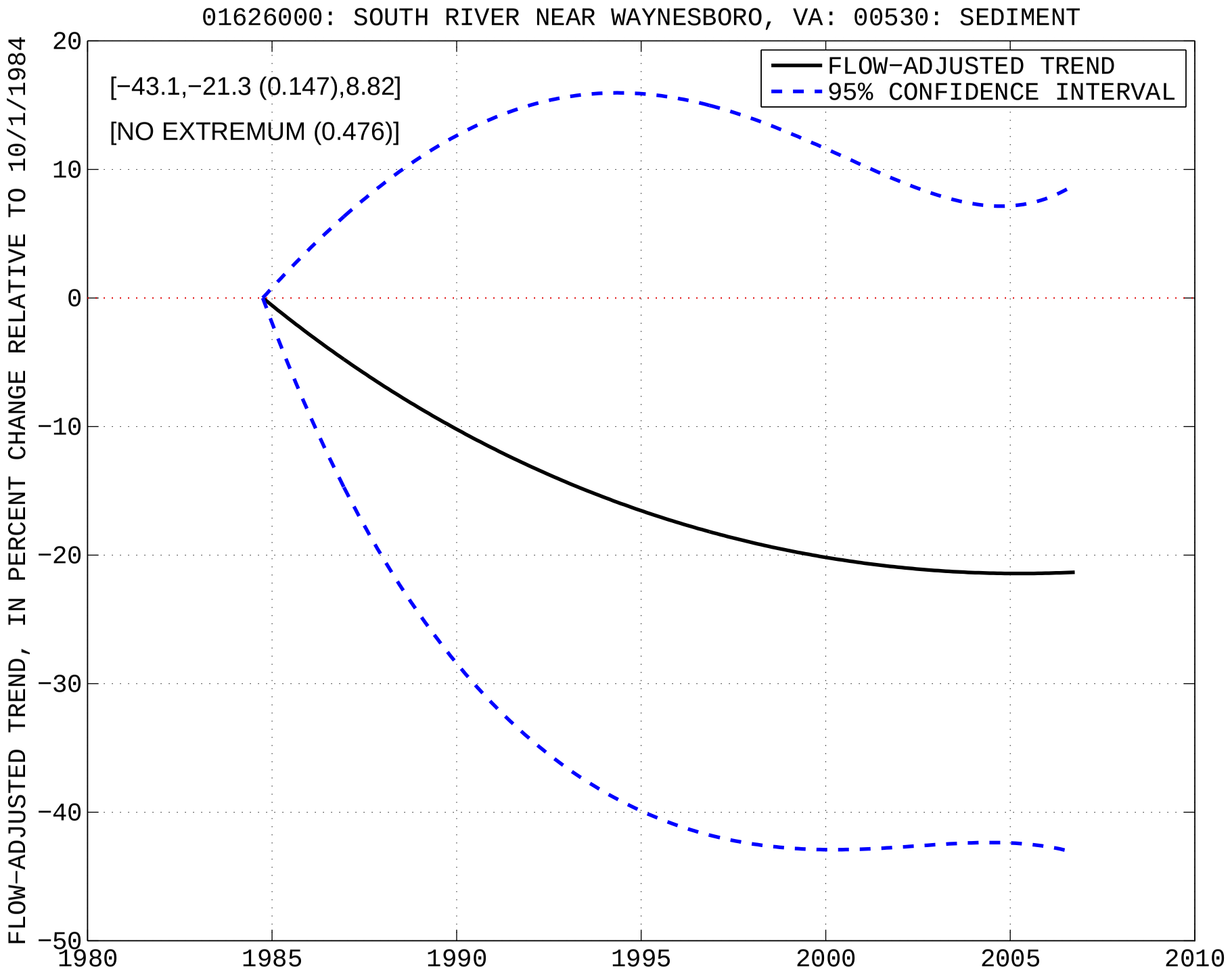

01619500: ANTIETAM CREEK NEAR SHARPSBURG, MD: 00530: SEDIMENT
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[−46.3,−27.9 (0.0286),−3.36]
[NO EXTREMUM (0.165)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
30
20
10
0
−10
−20
−30
−40
−50
1980
1985
1990
1995
2000
2005
2010

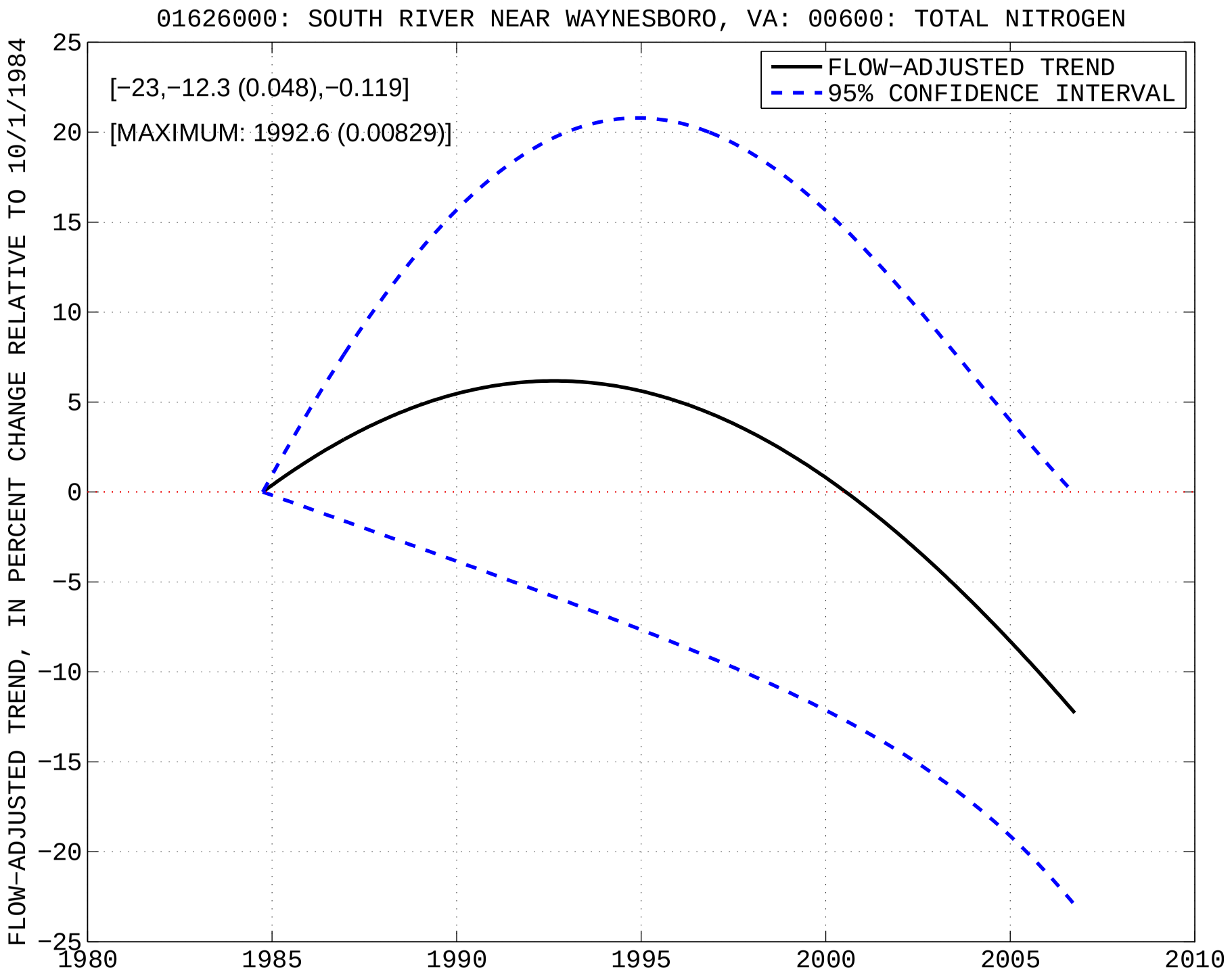

01619500: ANTIETAM CREEK NEAR SHARPSBURG, MD: 00600: TOTAL NITROGEN
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
[−27.6,−23.7 (<0.0001),−19.5]
[MAXIMUM: 1988.2 (<0.0001)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
10
5
0
−5
−10
−15
−20
−25
−30
1980
1985
1990
1995
2000
2005
2010

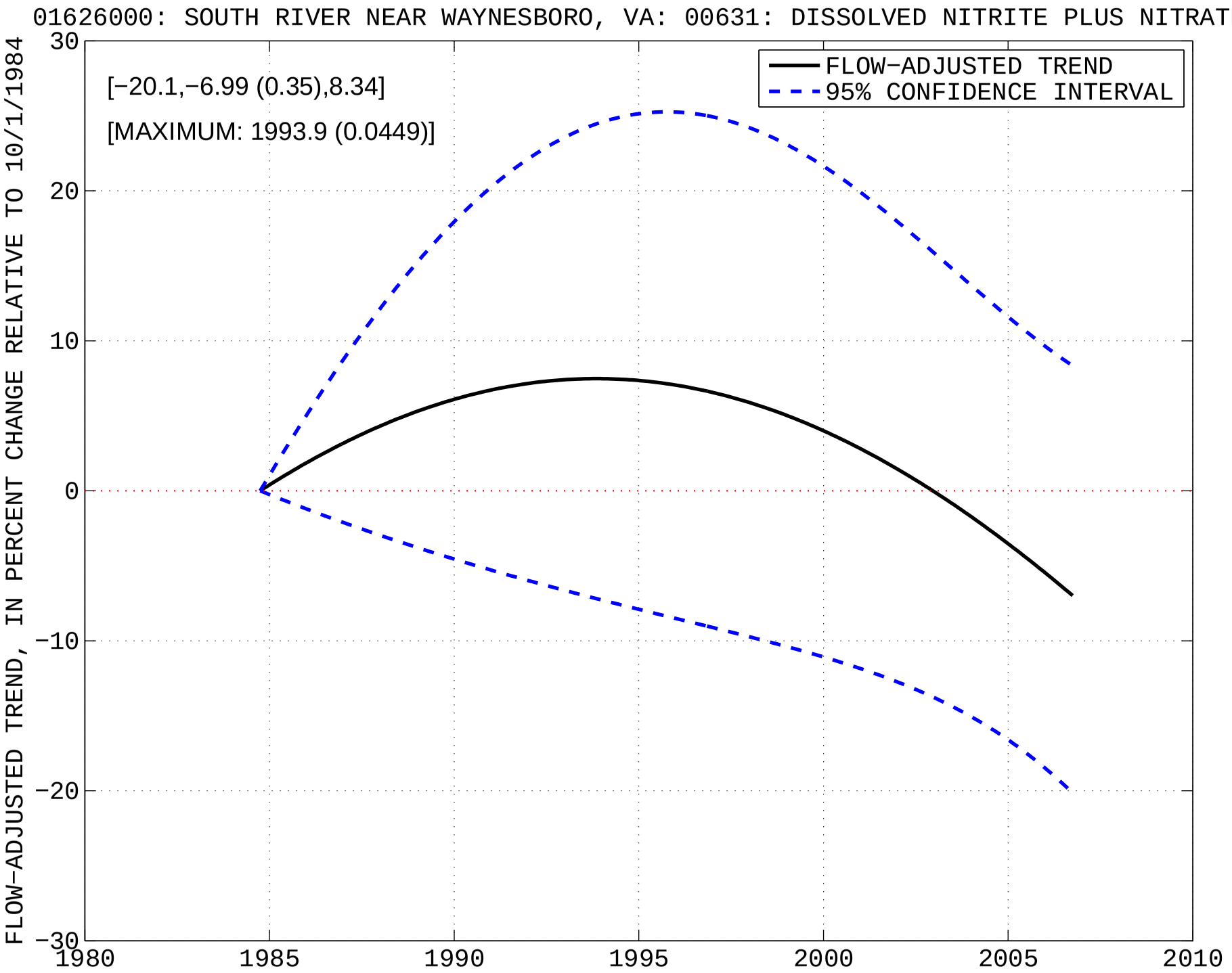

01619500: ANTIETAM CREEK NEAR SHARPSBURG, MD: 00630: TOTAL NITRITE PLUS NITRATE
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
[−24.3,−19.2 (<0.0001),−13.7]
[MAXIMUM: 1992 (<0.0001)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
15
10
5
0
−5
−10
−15
−20
−25
1980
1985
1990
1995
2000
2005
2010

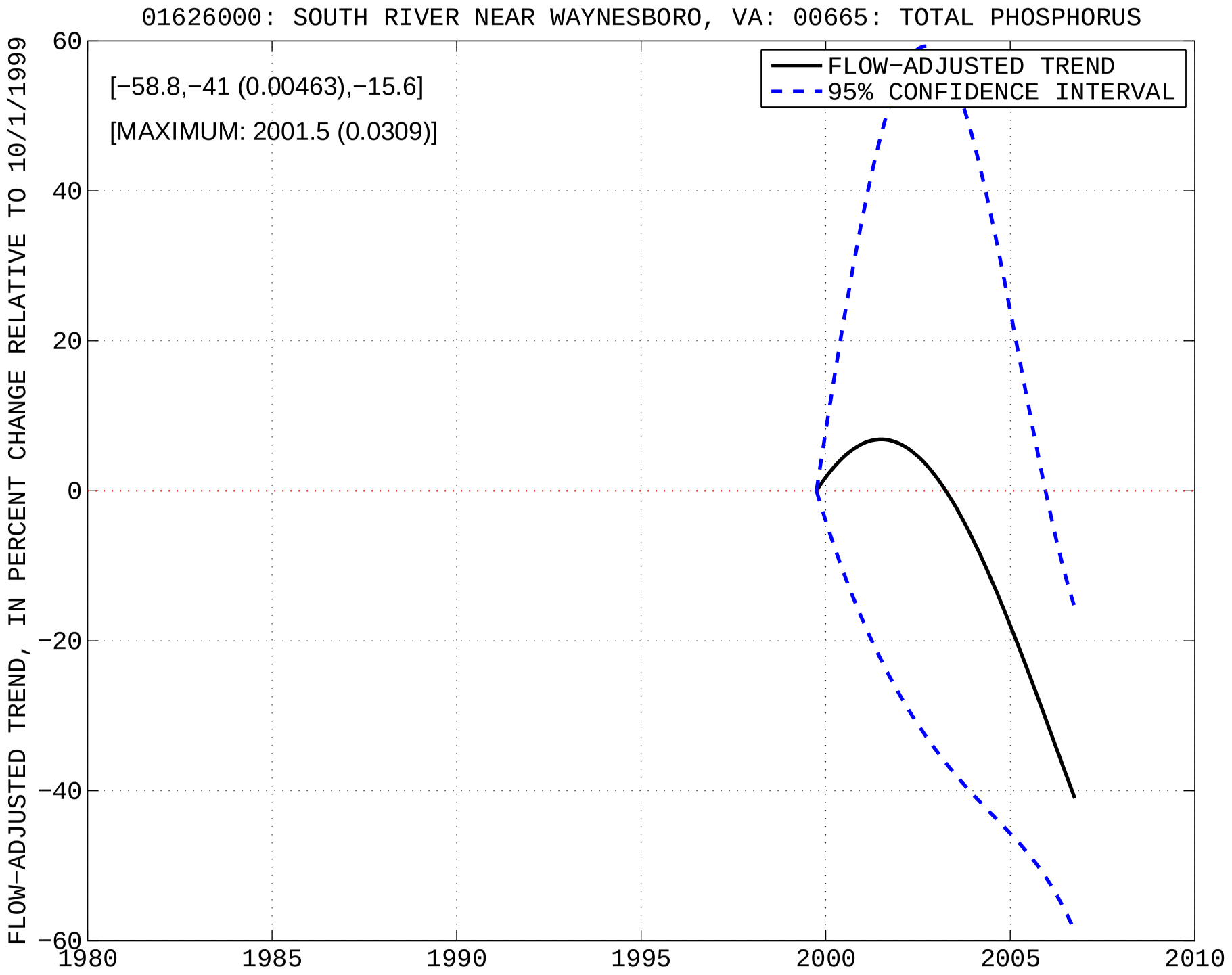

01619500: ANTIETAM CREEK NEAR SHARPSBURG, MD: 00665: TOTAL PHOSPHORUS
[−65.5,−59.7 (<0.0001),−52.9]
[MAXIMUM: 1941.8 (0.0001)]
FLOW−ADJUSTED TREND
95% CONFIDENCE INTERVAL
FLOW−ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
10
0
−10
−20
−30
−40
−50
−60
−70
1980
1985
1990
1995
2000
2005
2010

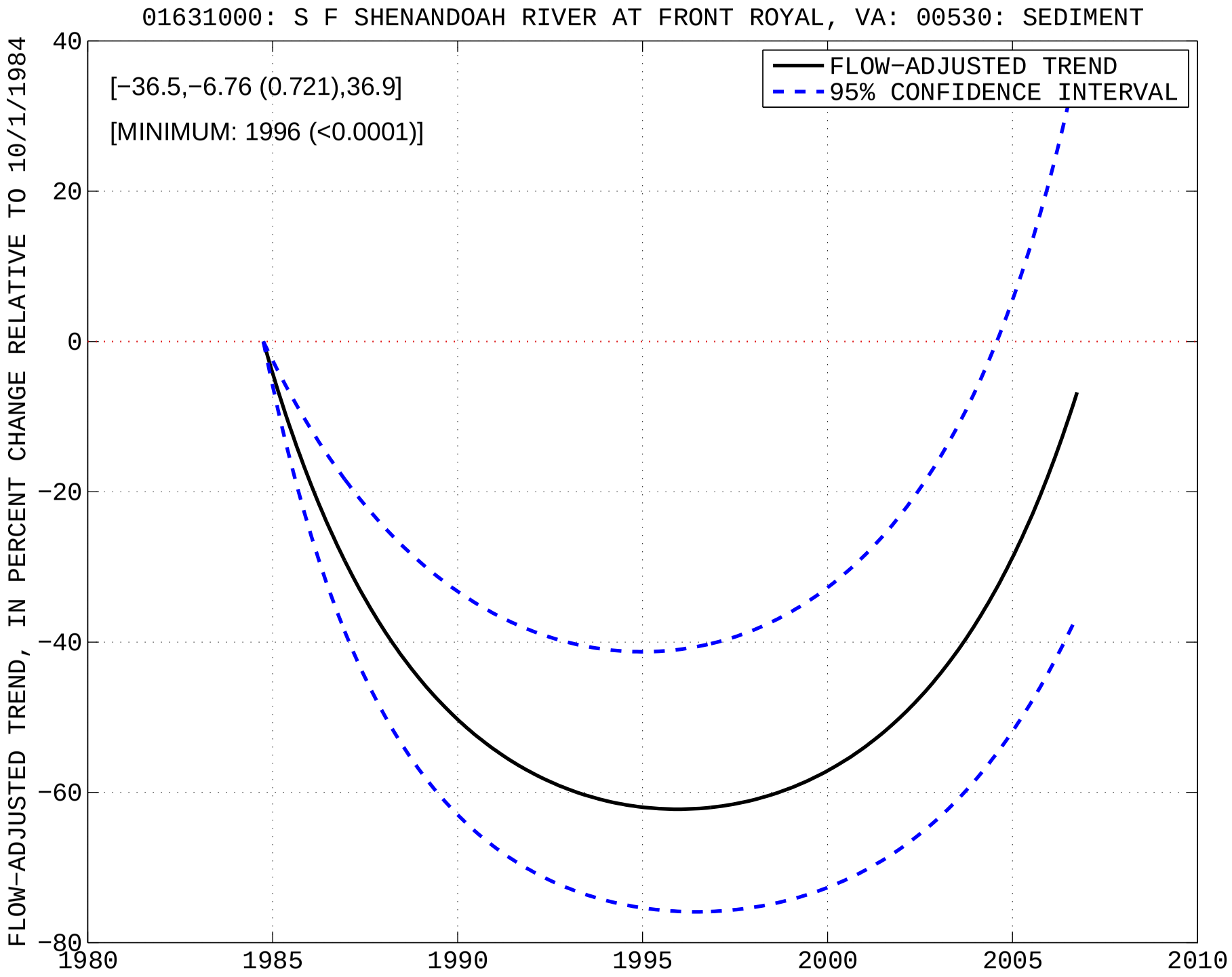

01619500: ANTIETAM CREEK NEAR SHARPSBURG, MD: 00671: DISSOLVED INORGANIC PHOSPHORUS
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[−70.1,−62 (<0.0001),−51.7]
[NO EXTREMUM (0.579)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
10
0
−10
−20
−30
−40
−50
−60
−70
−80
1980
1985
1990
1995
2000
2005
2010

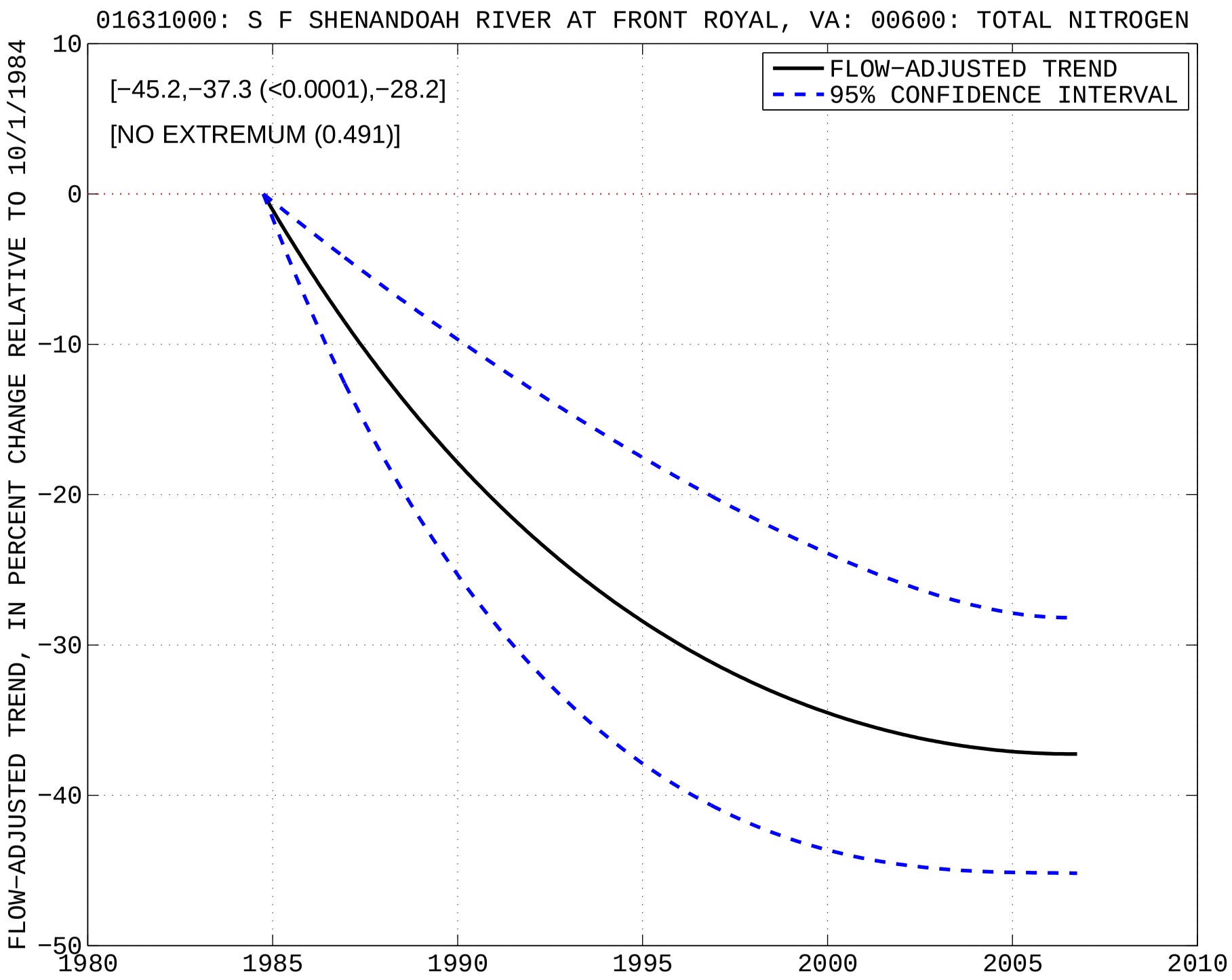

01626000: SOUTH RIVER NEAR WAYNESBORO, VA: 00530: SEDIMENT
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[−43.1,−21.3 (0.147),8.82]
[NO EXTREMUM (0.476)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
20
10
0
−10
−20
−30
−40
−50
1980
1985
1990
1995
2000
2005
2010

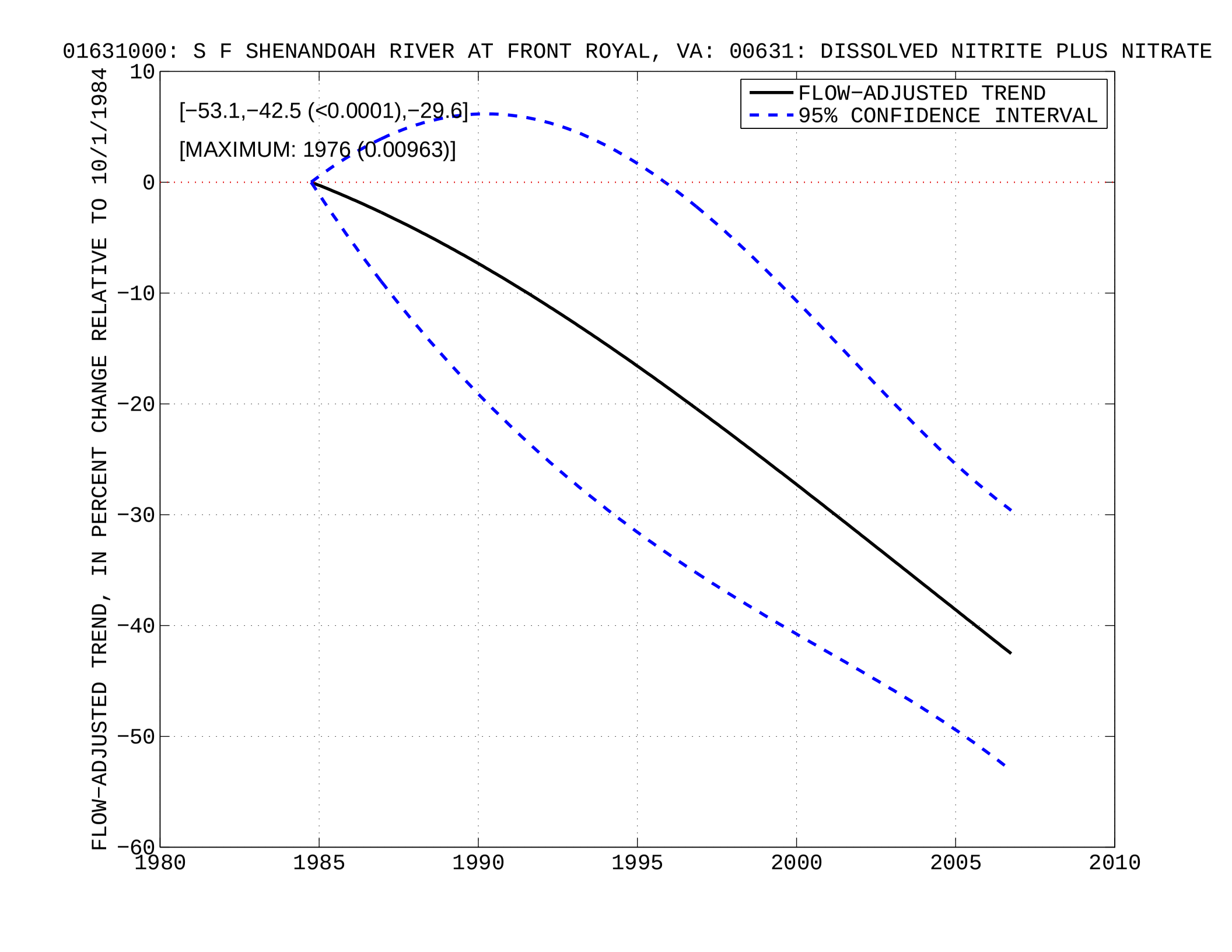

01626000: SOUTH RIVER NEAR WAYNESBORO, VA: 00600: TOTAL NITROGEN
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[−23,−12.3 (0.048),−0.119]
[MAXIMUM: 1992.6 (0.00829)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
25
20
15
10
5
0
−5
−10
−15
−20
−25
1980
1985
1990
1995
2000
2005
2010

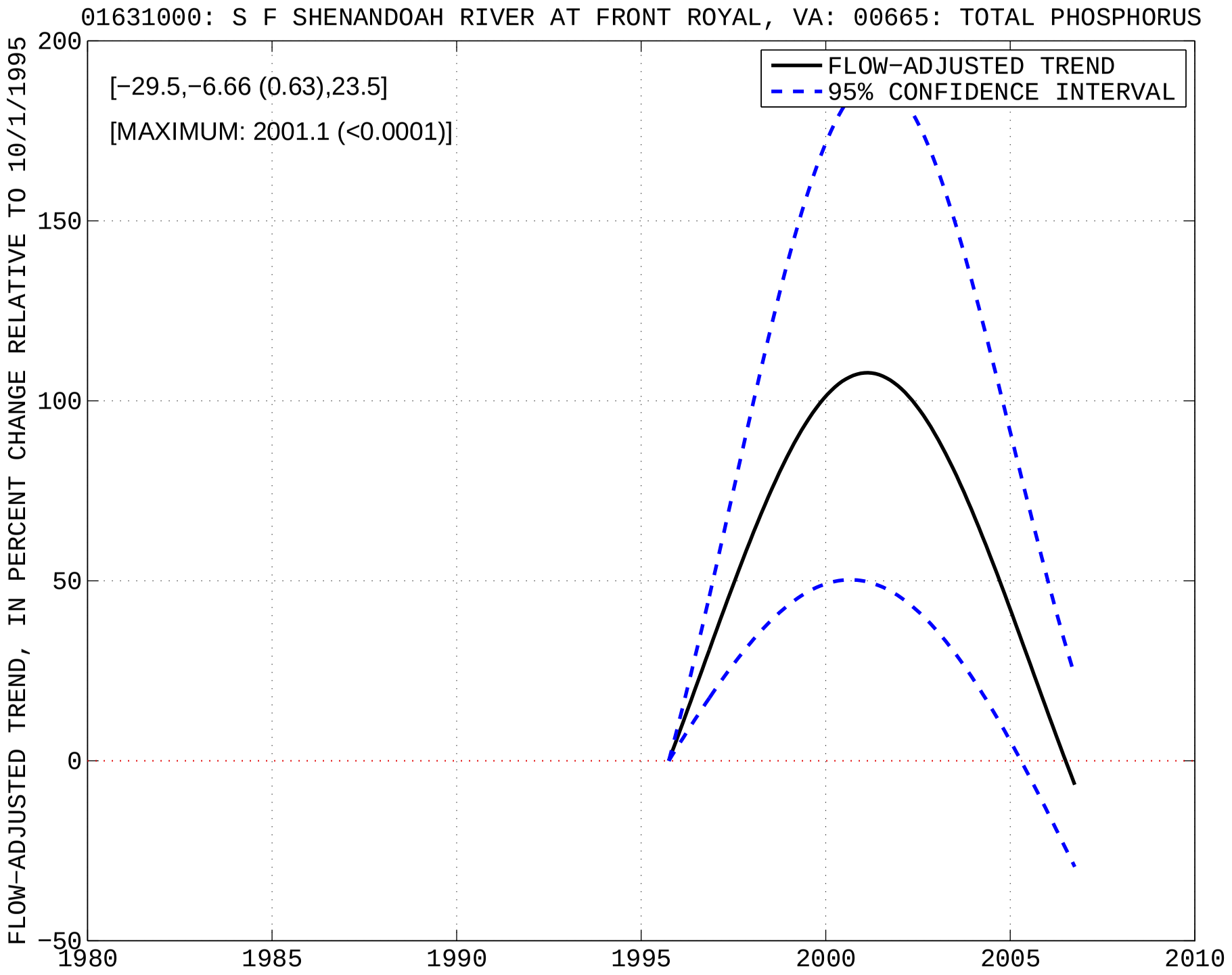

01626000: SOUTH RIVER NEAR WAYNESBORO, VA: 00631: DISSOLVED NITRITE PLUS NITRATE
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
[−20.1,−6.99 (0.35),8.34]
[MAXIMUM: 1993.9 (0.0449)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
30
20
10
0
−10
−20
−30
1980
1985
1990
1995
2000
2005
2010

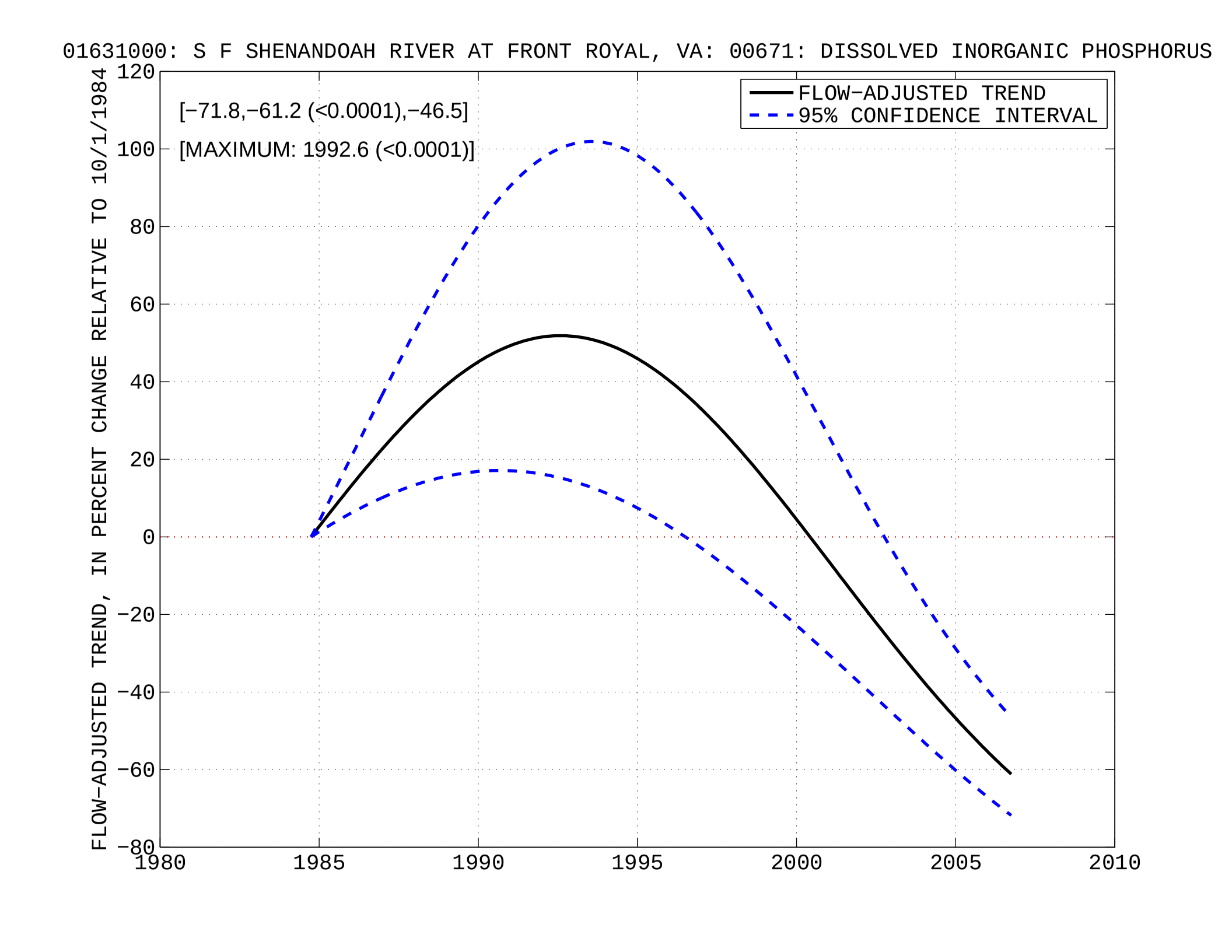

01626000: SOUTH RIVER NEAR WAYNESBORO, VA: 00665: TOTAL PHOSPHORUS
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[−58.8,−41 (0.00463),−15.6]
[MAXIMUM: 2001.5 (0.0309)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1999
60
40
20
0
−20
−40
−60
1980
1985
1990
1995
2000
2005
2010

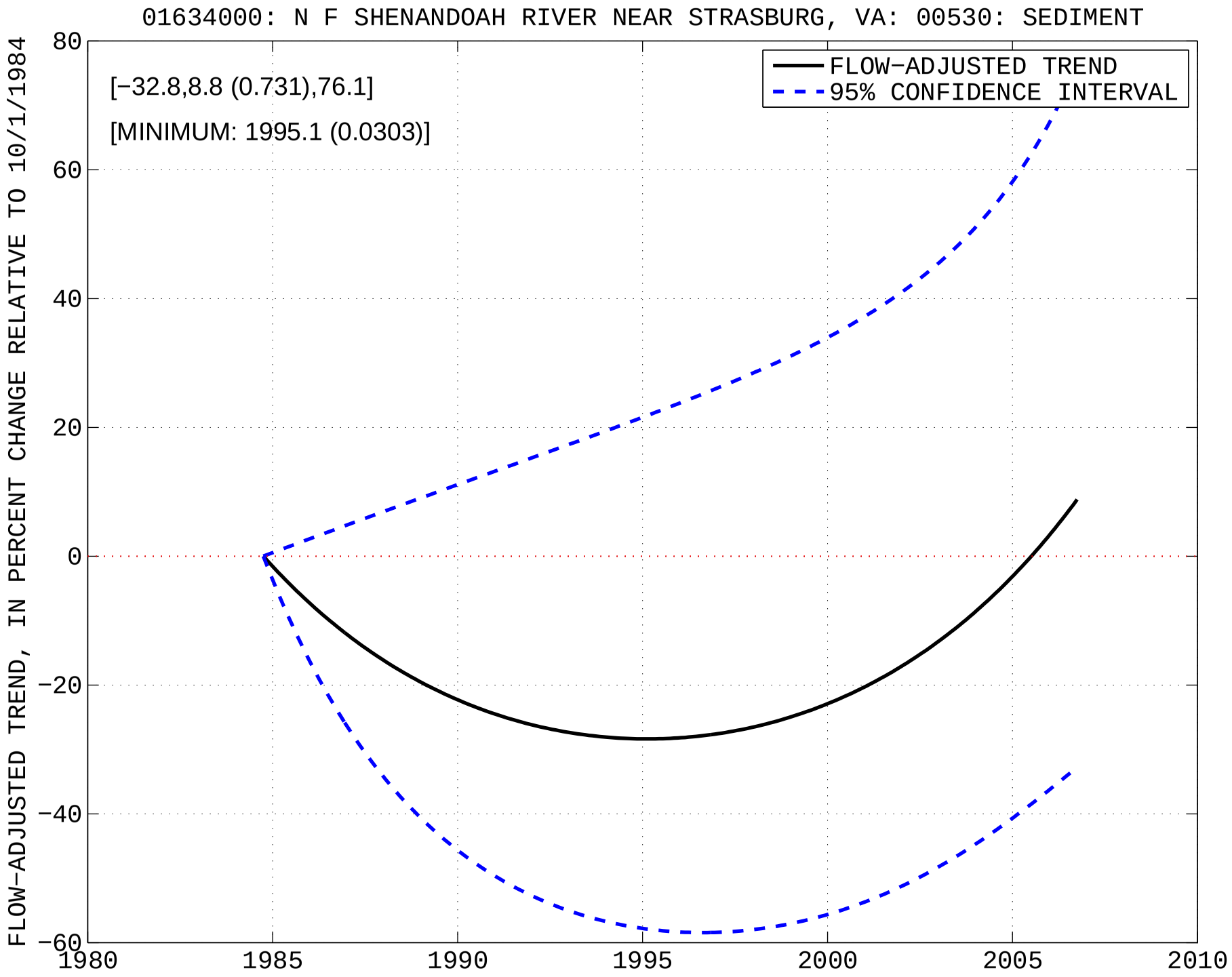

01631000: S F SHENANDOAH RIVER AT FRONT ROYAL, VA: 00530: SEDIMENT
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[−36.5,−6.76 (0.721),36.9]
[MINIMUM: 1996 (<0.0001)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
40
20
0
−20
−40
−60
−80
1980
1985
1990
1995
2000
2005
2010

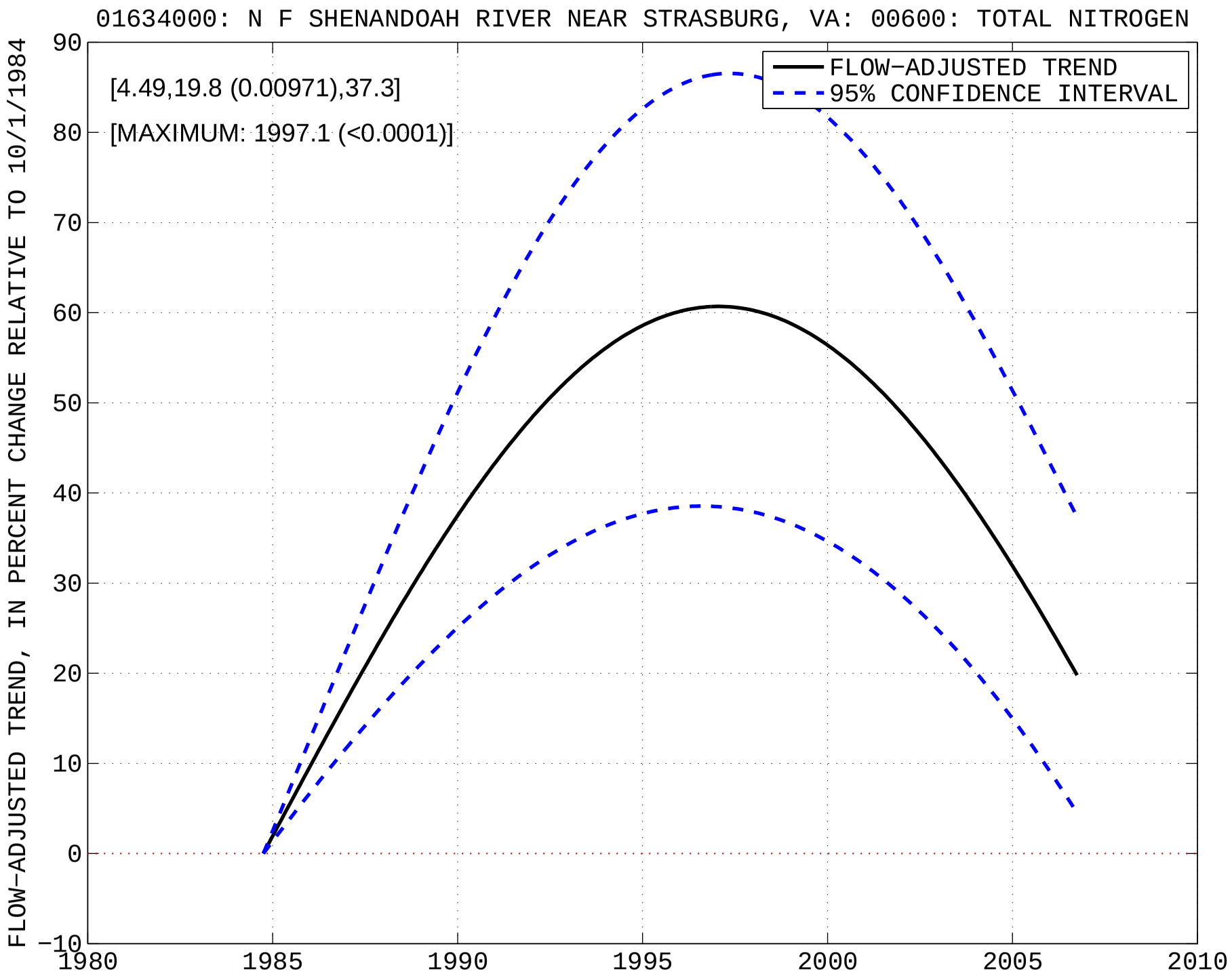

01631000: S F SHENANDOAH RIVER AT FRONT ROYAL, VA: 00600: TOTAL NITROGEN
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[−45.2,−37.3 (<0.0001),−28.2]
[NO EXTREMUM (0.491)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
10
0
−10
−20
−30
−40
−50
1980
1985
1990
1995
2000
2005
2010

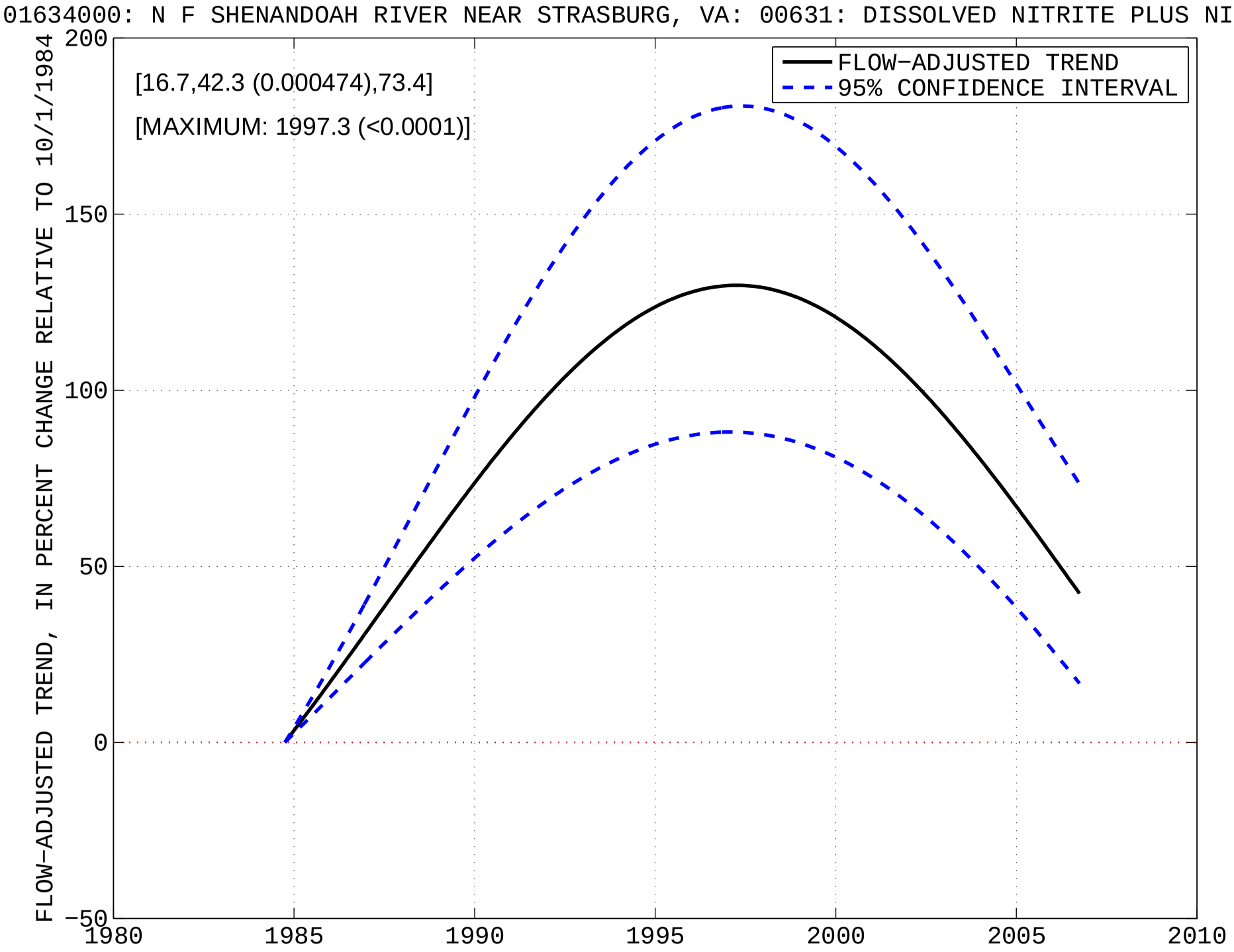

01631000: S F SHENANDOAH RIVER AT FRONT ROYAL, VA: 00631: DISSOLVED NITRITE PLUS NITRATE
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
10
0
-10
-20
-30
-40
-50
-60
1980
1985
1990
1995
2000
2005
2010
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[-53.1,-42.5 (<0.0001),-29.6]
[MAXIMUM: 1976 (0.00963)]

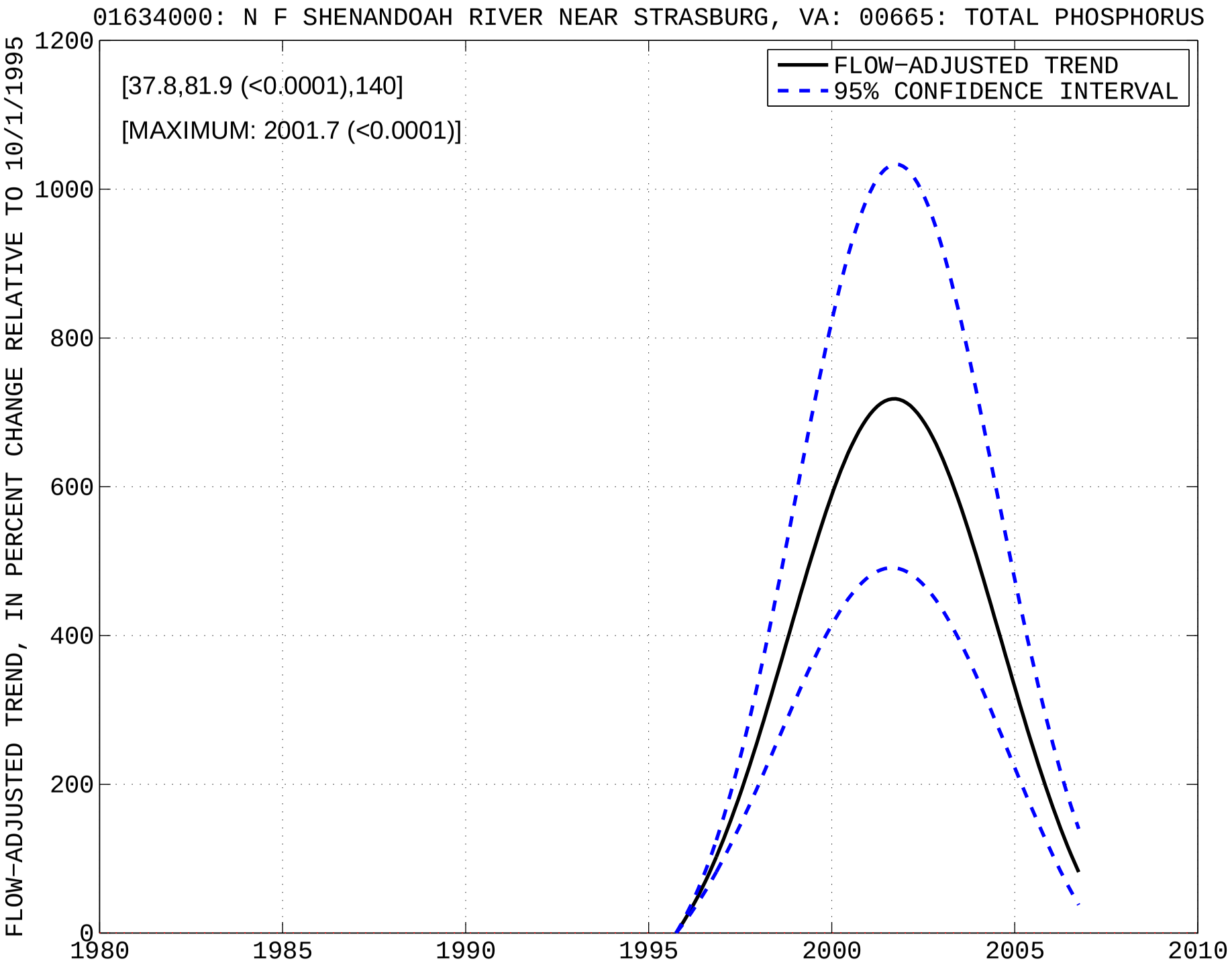

01631000: S F SHENANDOAH RIVER AT FRONT ROYAL, VA: 00665: TOTAL PHOSPHORUS
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1995
[−29.5,−6.66 (0.63),23.5]
[MAXIMUM: 2001.1 (<0.0001)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
200
150
100
50
0
−50
1980
1985
1990
1995
2000
2005
2010

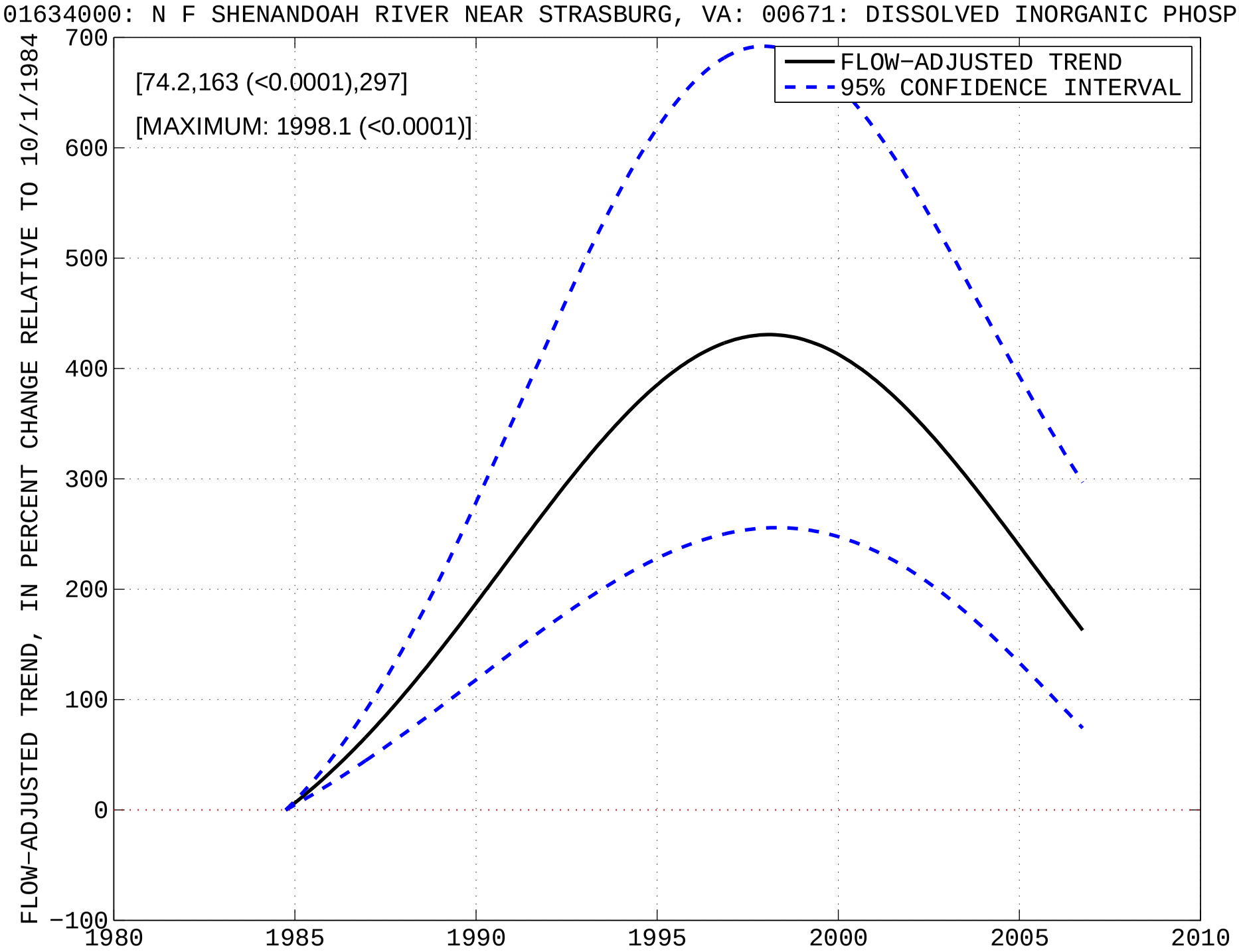

01631000: S F SHENANDOAH RIVER AT FRONT ROYAL, VA: 00671: DISSOLVED INORGANIC PHOSPHORUS
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
120
100
80
60
40
20
0
-20
-40
-60
-80
1980
1985
1990
1995
2000
2005
2010
[-71.8,-61.2 (<0.0001),-46.5]
[MAXIMUM: 1992.6 (<0.0001)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL

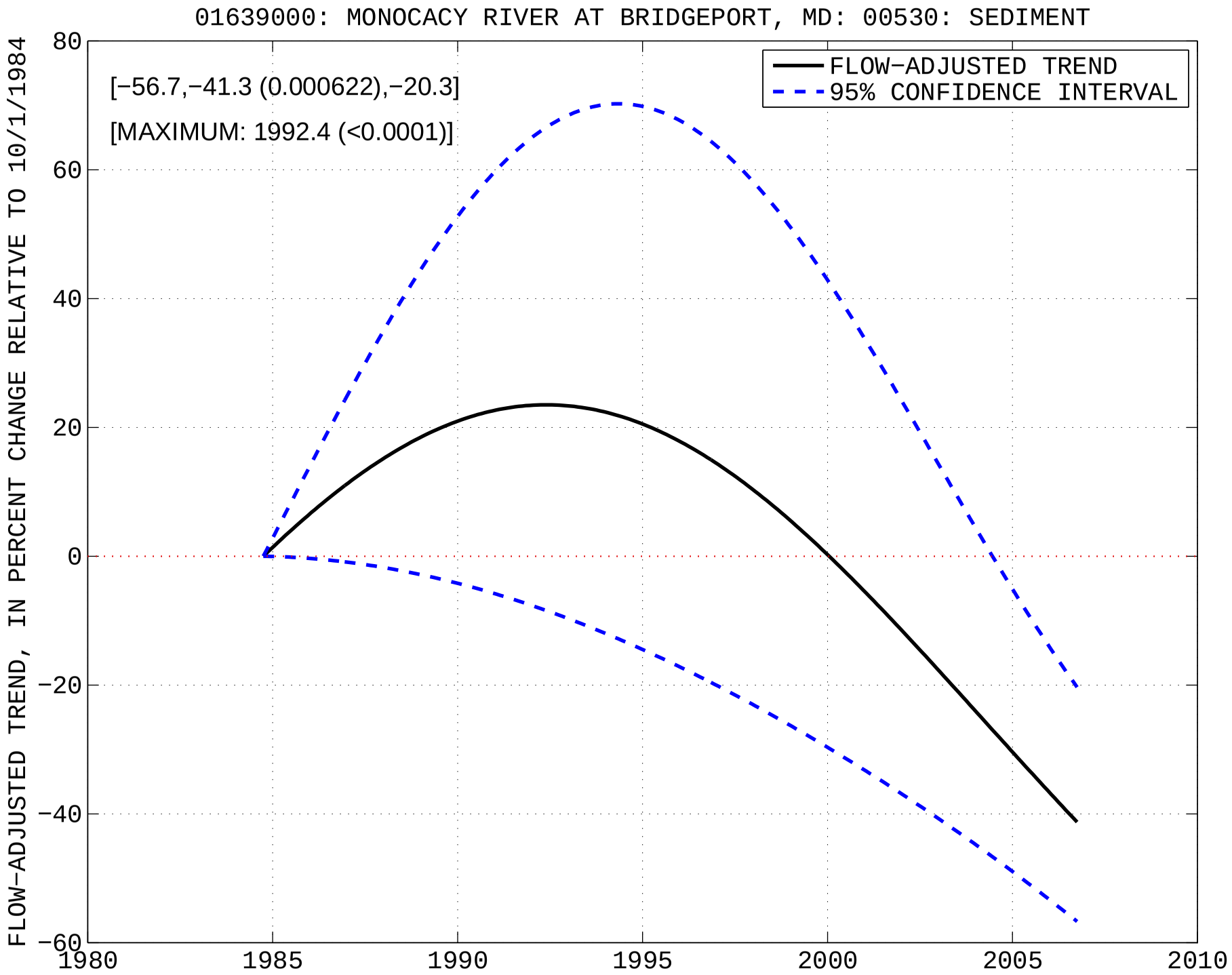

01634000: N F SHENANDOAH RIVER NEAR STRASBURG, VA: 00530: SEDIMENT
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[−32.8,8.8 (0.731),76.1]
[MINIMUM: 1995.1 (0.0303)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
80
60
40
20
0
−20
−40
−60
1980
1985
1990
1995
2000
2005
2010

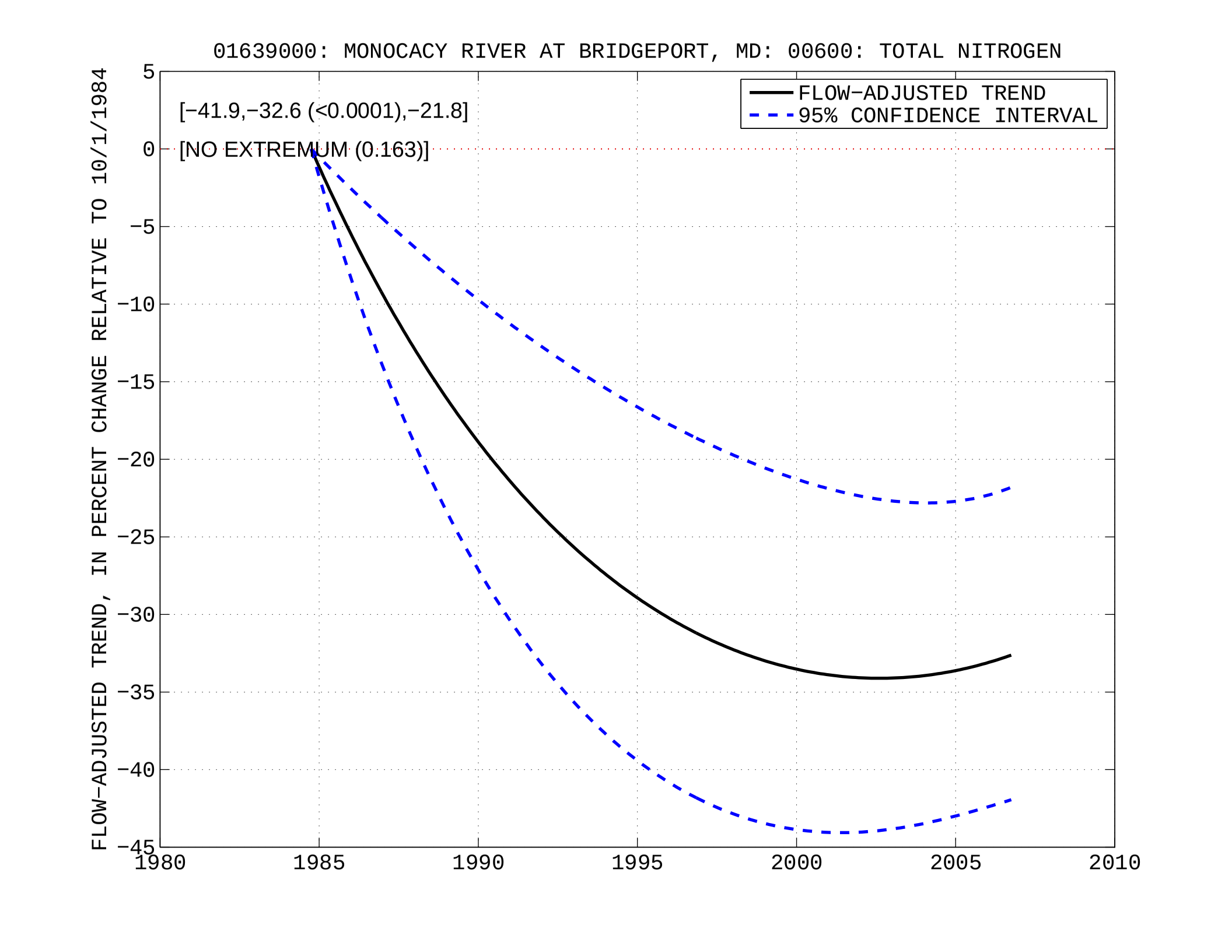

01634000: N F SHENANDOAH RIVER NEAR STRASBURG, VA: 00600: TOTAL NITROGEN
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
[4.49,19.8 (0.00971),37.3]
[MAXIMUM: 1997.1 (<0.0001)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
90
80
70
60
50
40
30
20
10
0
-10
1980
1985
1990
1995
2000
2005
2010

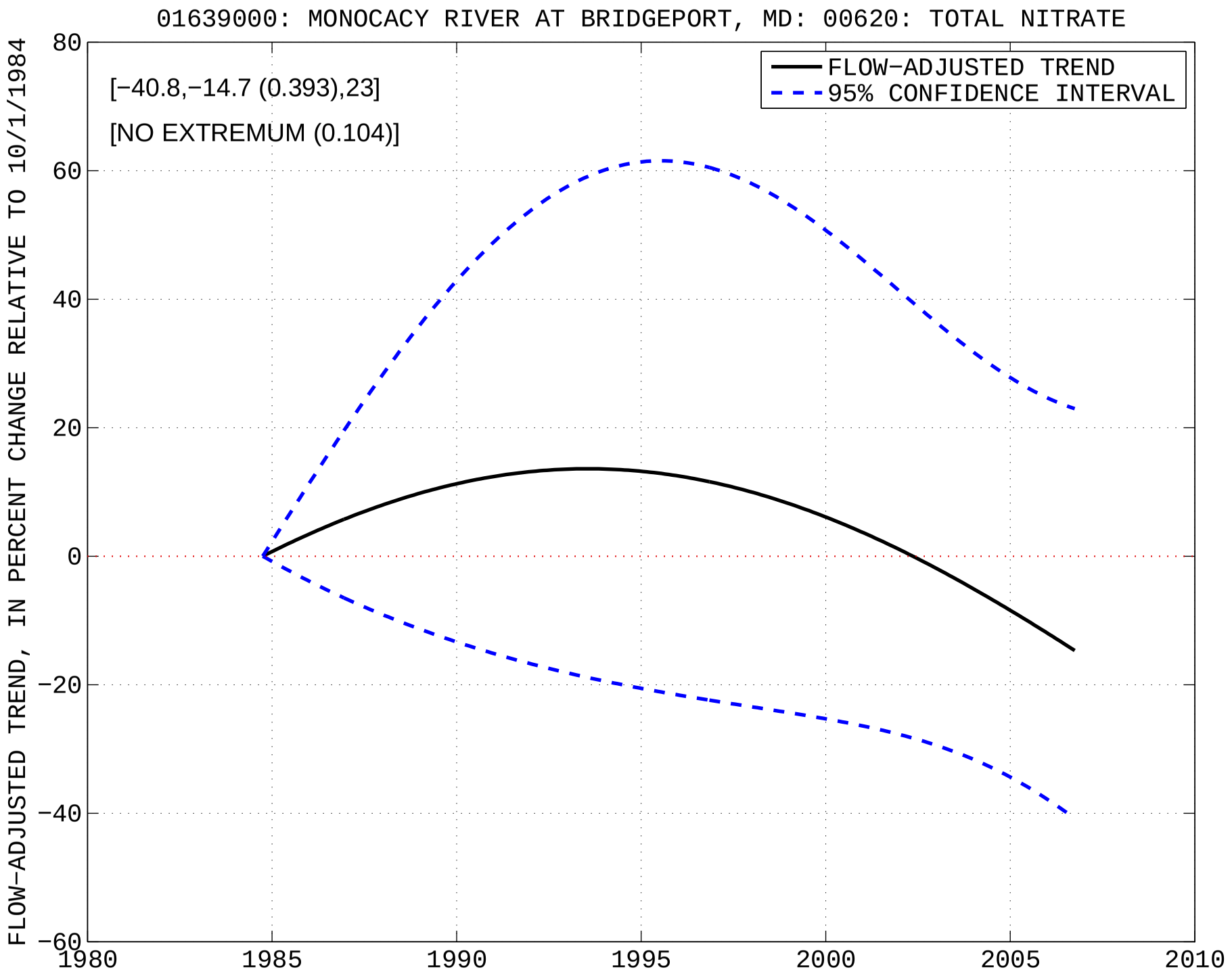

01634000: N F SHENANDOAH RIVER NEAR STRASBURG, VA: 00631: DISSOLVED NITRITE PLUS NITRATE
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
200
150
100
50
0
-50
1980
1985
1990
1995
2000
2005
2010
[16.7,42.3 (0.000474),73.4]
[MAXIMUM: 1997.3 (<0.0001)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL

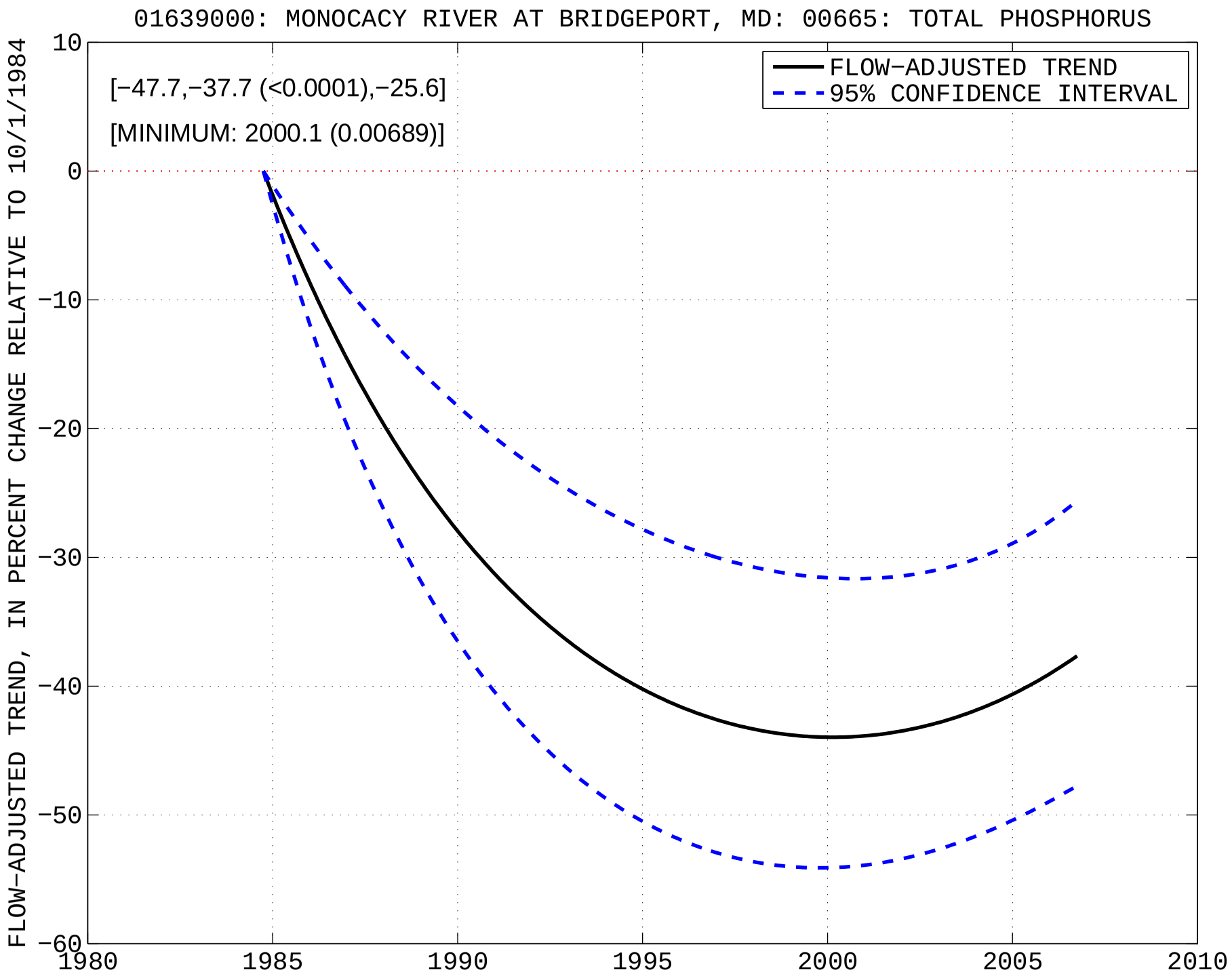

01634000: N F SHENANDOAH RIVER NEAR STRASBURG, VA: 00665: TOTAL PHOSPHORUS
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1995
[37.8,81.9 (<0.0001),140]
[MAXIMUM: 2001.7 (<0.0001)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
1200
1000
800
600
400
200
0
1980
1985
1990
1995
2000
2005
2010

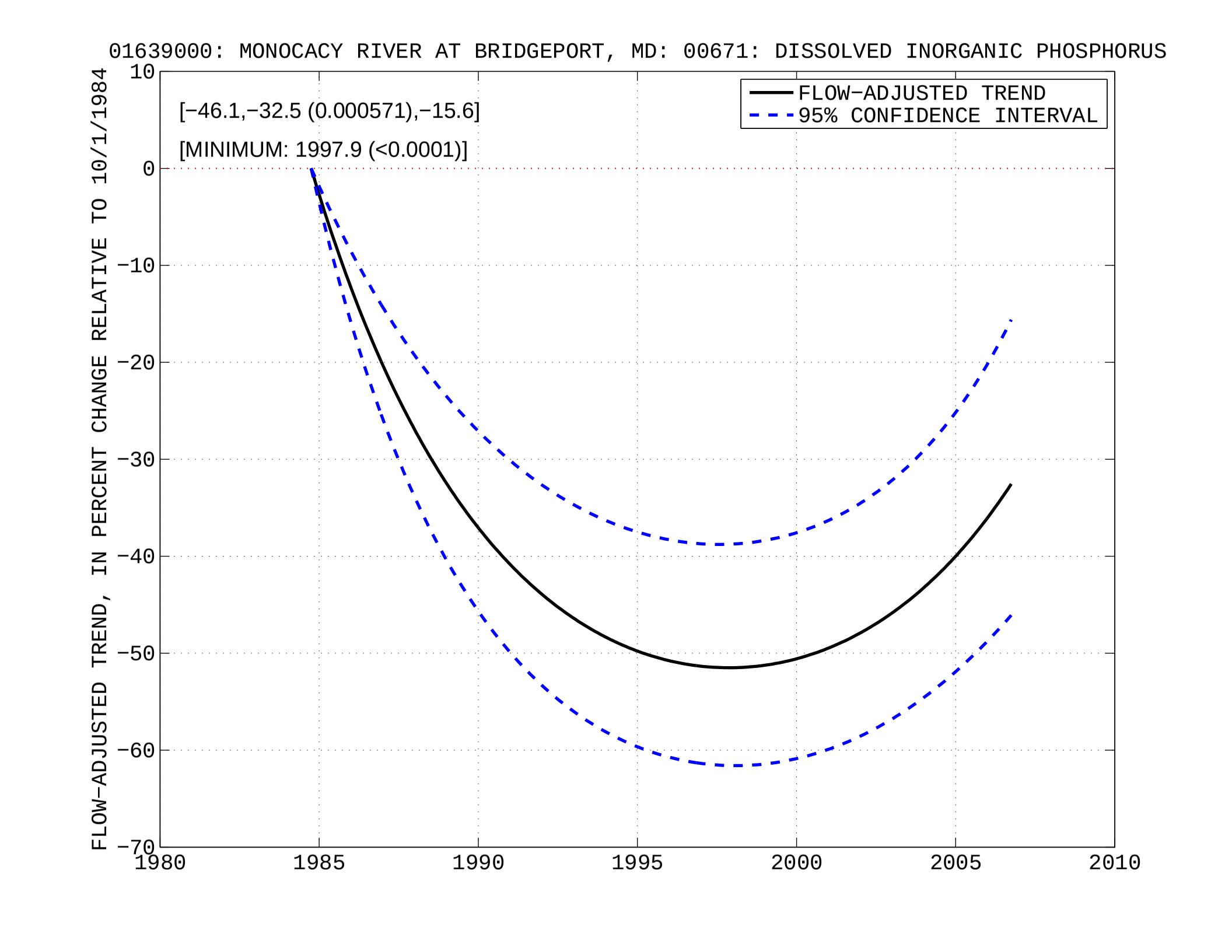

01634000: N F SHENANDOAH RIVER NEAR STRASBURG, VA: 00671: DISSOLVED INORGANIC PHOSPHORUS
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
700
600
500
400
300
200
100
0
-100
1980
1985
1990
1995
2000
2005
2010
[74.2,163 (<0.0001),297]
[MAXIMUM: 1998.1 (<0.0001)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL

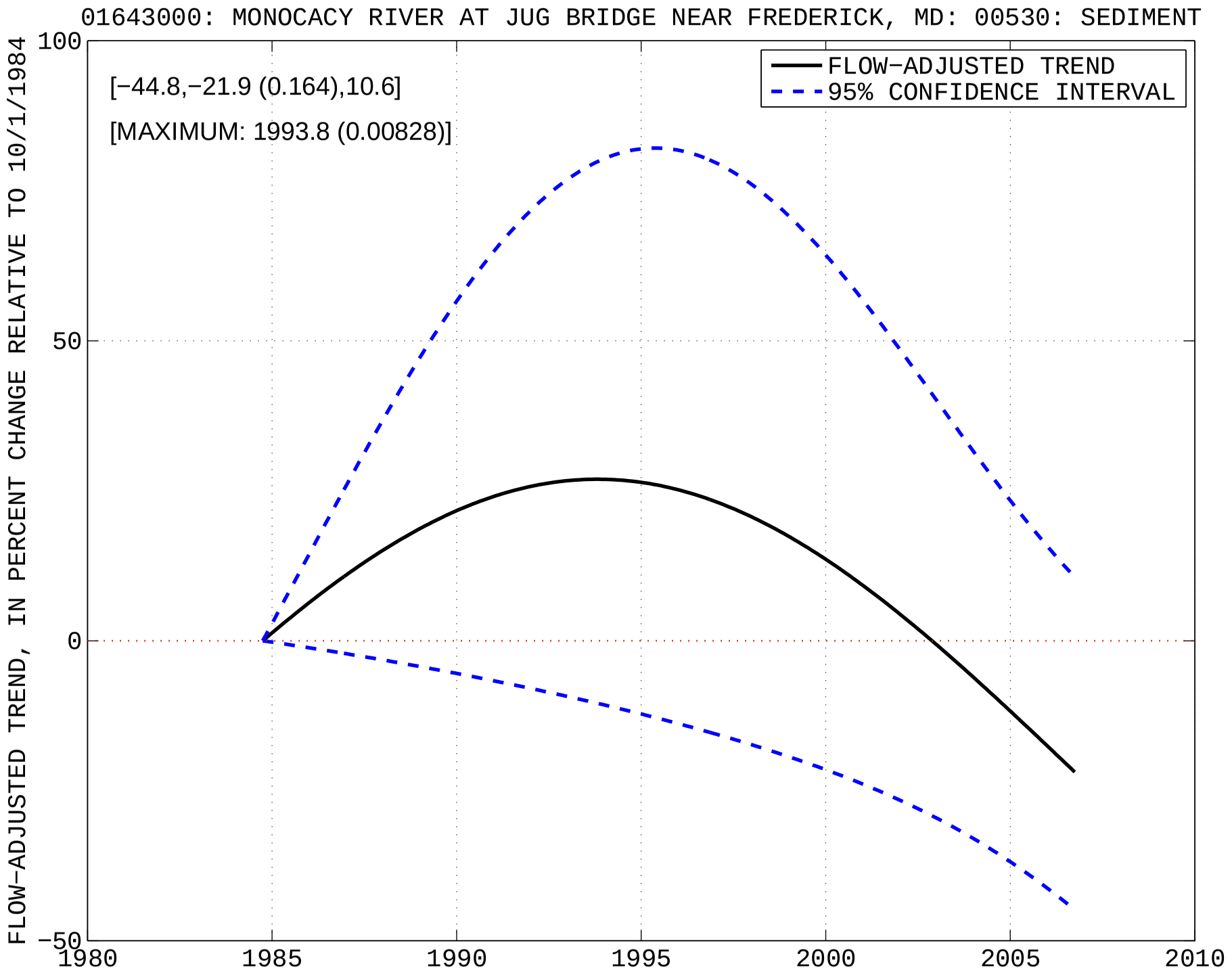

01639000: MONOCACY RIVER AT BRIDGEPORT, MD: 00530: SEDIMENT
[−56.7,−41.3 (0.000622),−20.3]
[MAXIMUM: 1992.4 (<0.0001)]
FLOW−ADJUSTED TREND
95% CONFIDENCE INTERVAL
FLOW−ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
80
60
40
20
0
−20
−40
−60
1980
1985
1990
1995
2000
2005
2010

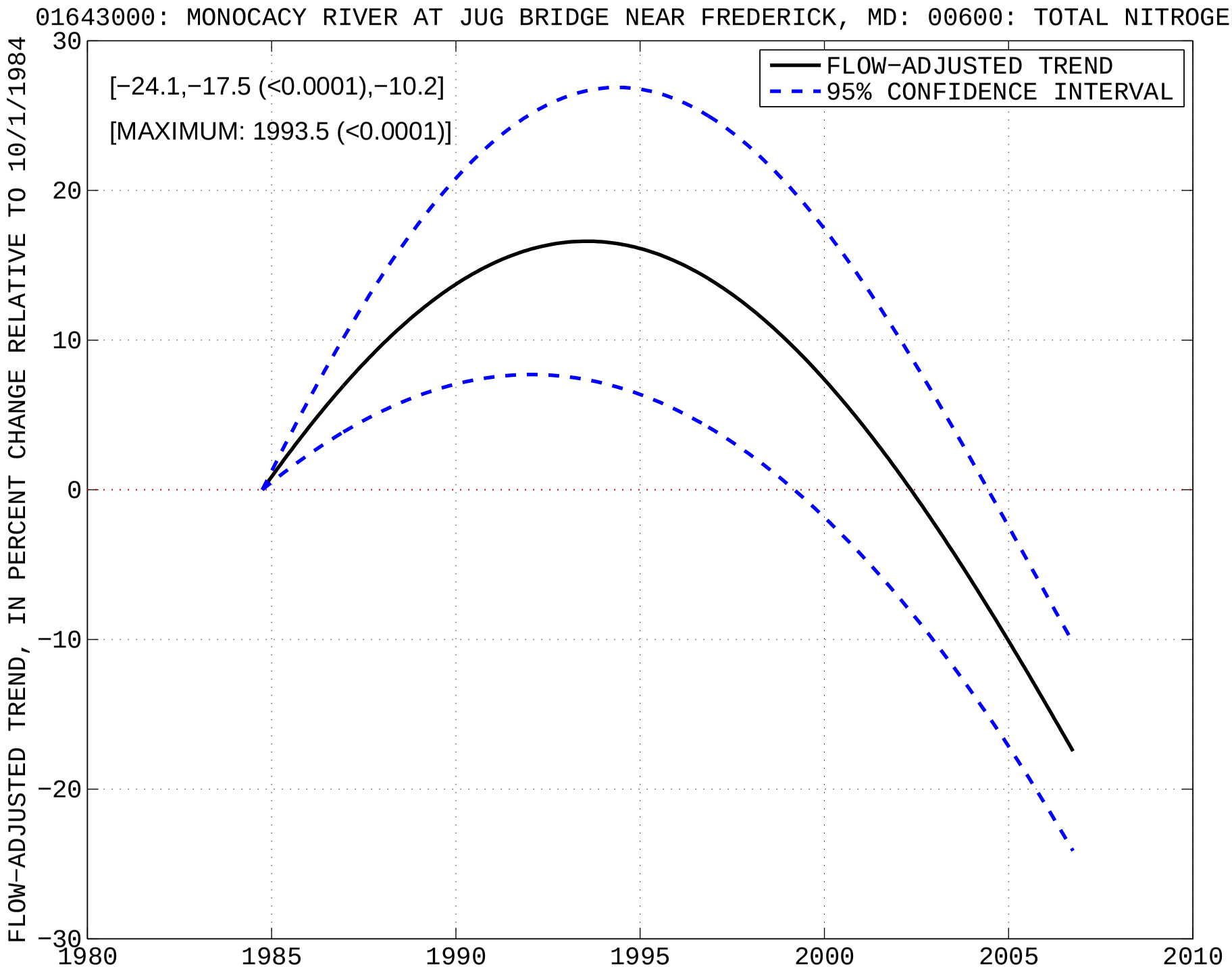

01639000: MONOCACY RIVER AT BRIDGEPORT, MD: 00600: TOTAL NITROGEN
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
[−41.9,−32.6 (<0.0001),−21.8]
[NO EXTREMUM (0.163)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
5
0
−5
−10
−15
−20
−25
−30
−35
−40
−45
1980
1985
1990
1995
2000
2005
2010

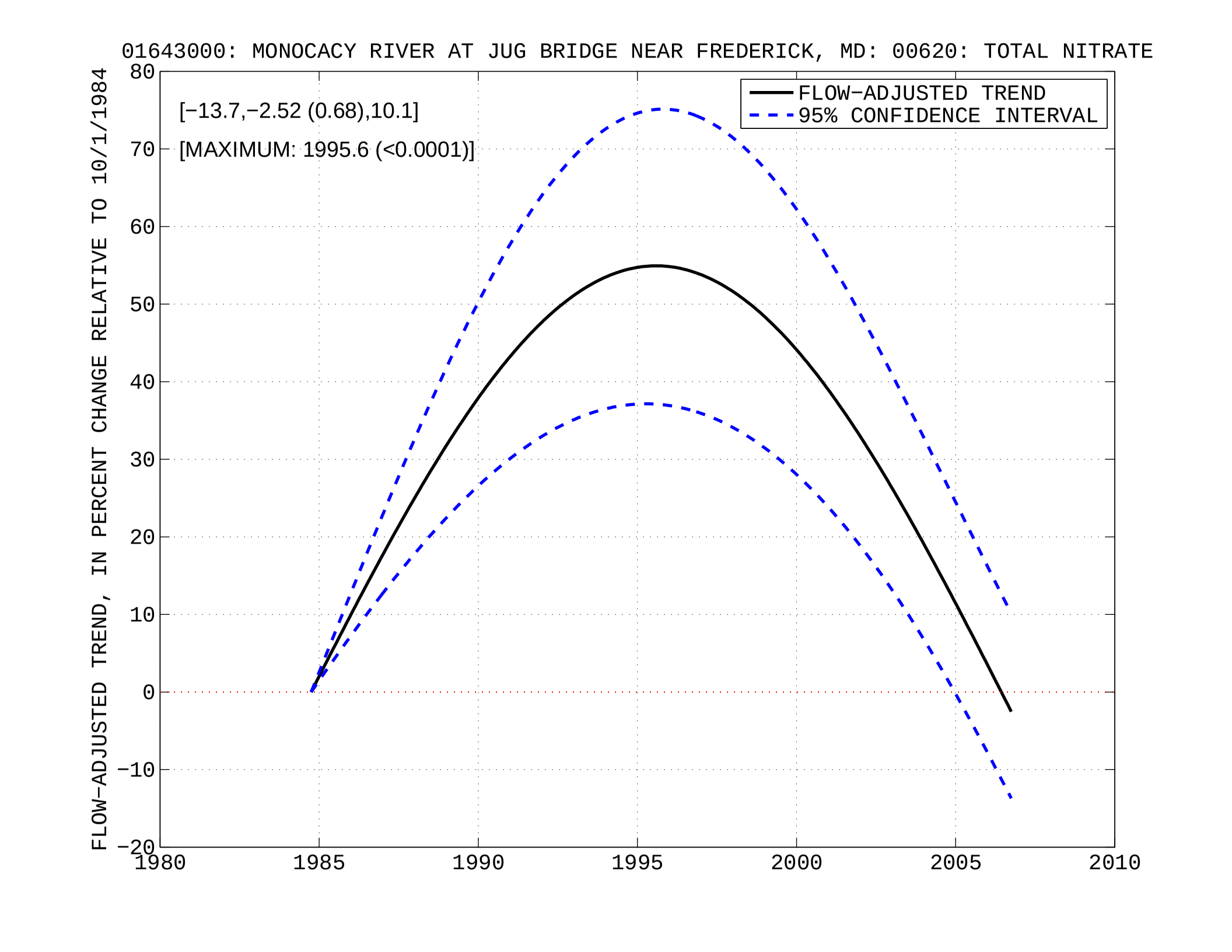

01639000: MONOCACY RIVER AT BRIDGEPORT, MD: 00620: TOTAL NITRATE
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
[−40.8,−14.7 (0.393),23]
[NO EXTREMUM (0.104)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
80
60
40
20
0
−20
−40
−60
1980
1985
1990
1995
2000
2005
2010

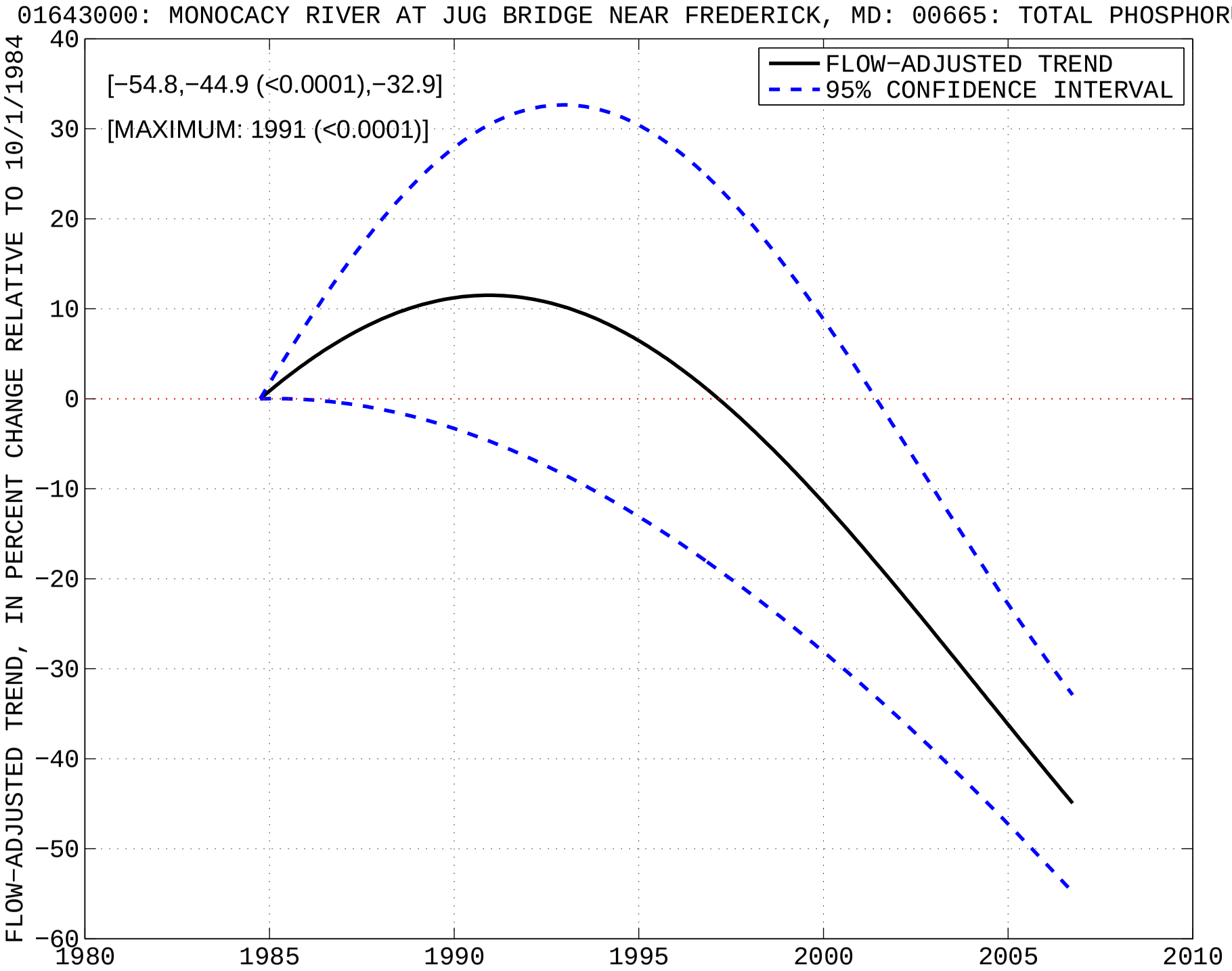

01639000: MONOCACY RIVER AT BRIDGEPORT, MD: 00665: TOTAL PHOSPHORUS
[−47.7,−37.7 (<0.0001),−25.6]
[MINIMUM: 2000.1 (0.00689)]
FLOW−ADJUSTED TREND
95% CONFIDENCE INTERVAL
FLOW−ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
10
0
−10
−20
−30
−40
−50
−60
1980
1985
1990
1995
2000
2005
2010

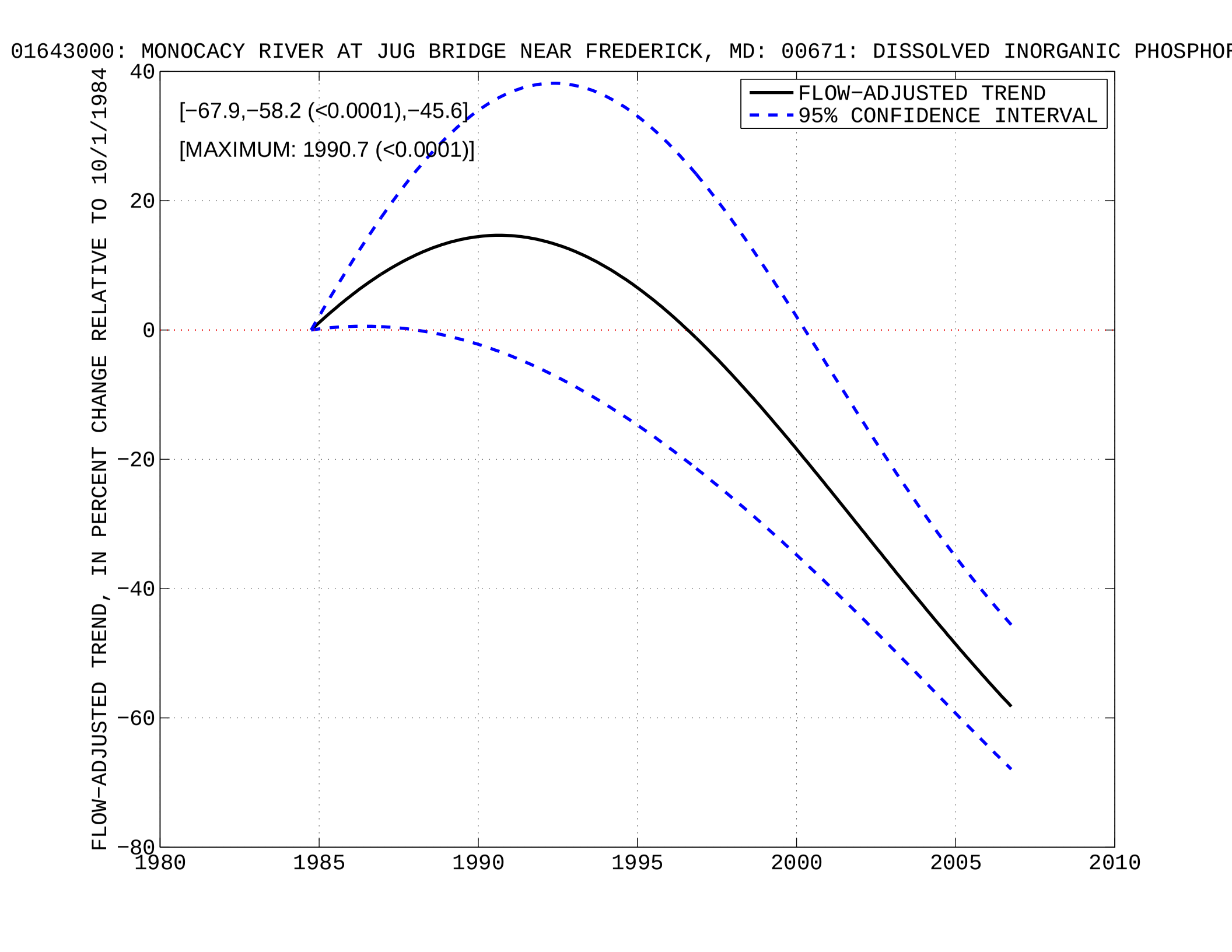

01639000: MONOCACY RIVER AT BRIDGEPORT, MD: 00671: DISSOLVED INORGANIC PHOSPHORUS
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
10
0
-10
-20
-30
-40
-50
-60
-70
1980
1985
1990
1995
2000
2005
2010
[-46.1,-32.5 (0.000571),-15.6]
[MINIMUM: 1997.9 (<0.0001)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL

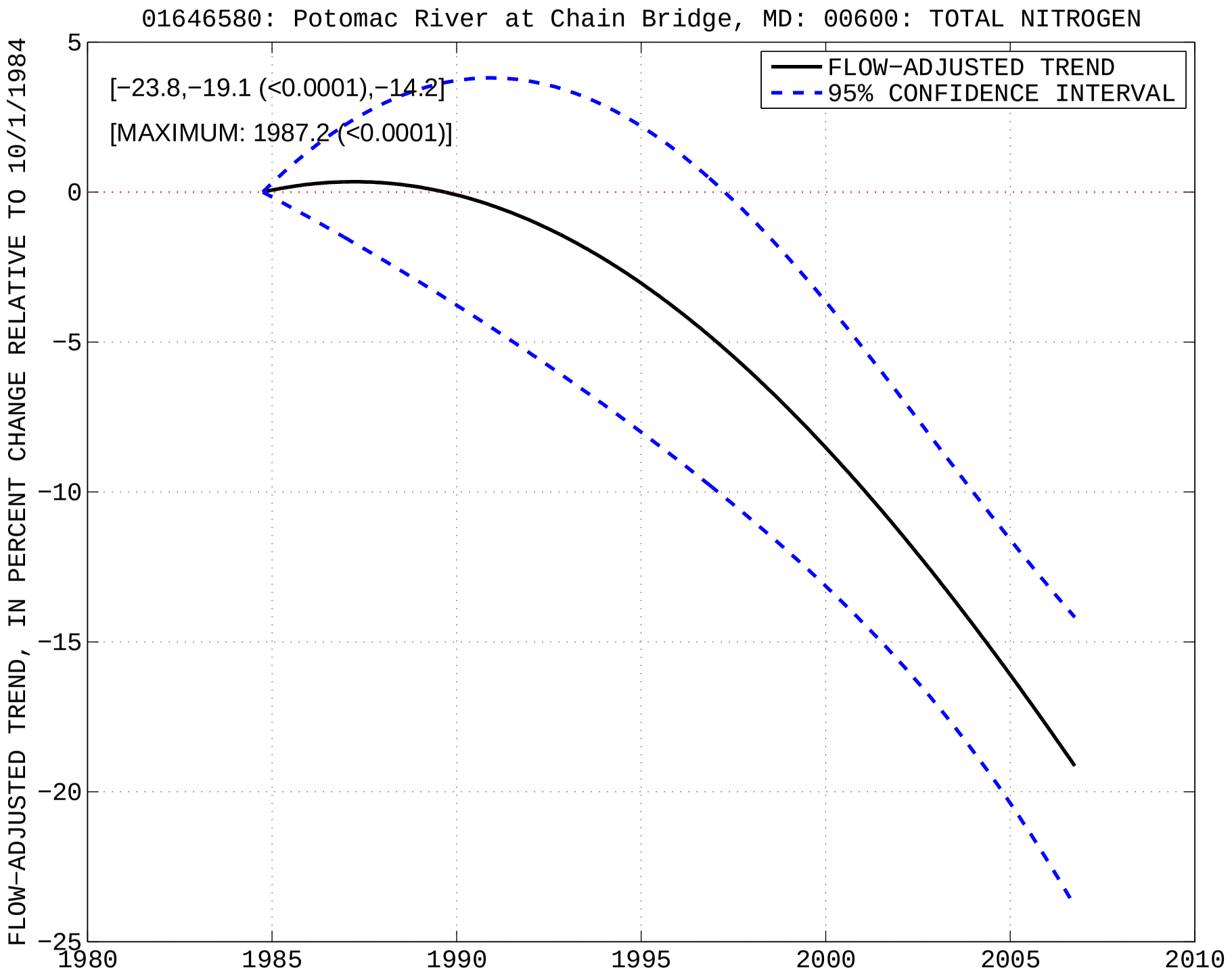

01643000: MONOCACY RIVER AT JUG BRIDGE NEAR FREDERICK, MD: 00530: SEDIMENT
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[−44.8,−21.9 (0.164),10.6]
[MAXIMUM: 1993.8 (0.00828)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
100
50
0
−50
1980
1985
1990
1995
2000
2005
2010

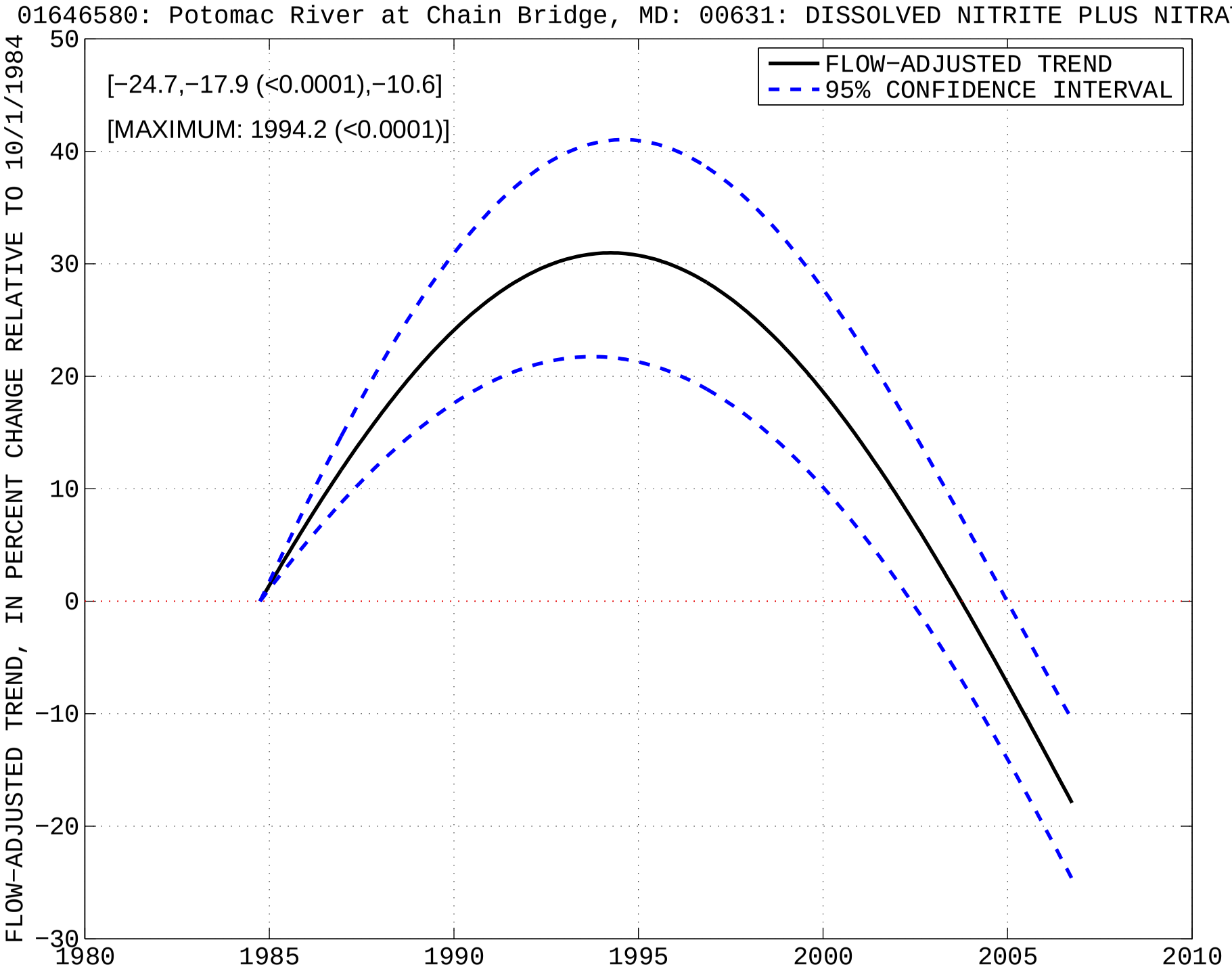

01643000: MONOCACY RIVER AT JUG BRIDGE NEAR FREDERICK, MD: 00600: TOTAL NITROGEN
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
[−24.1,−17.5 (<0.0001),−10.2]
[MAXIMUM: 1993.5 (<0.0001)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
30
20
10
0
−10
−20
−30
1980
1985
1990
1995
2000
2005
2010

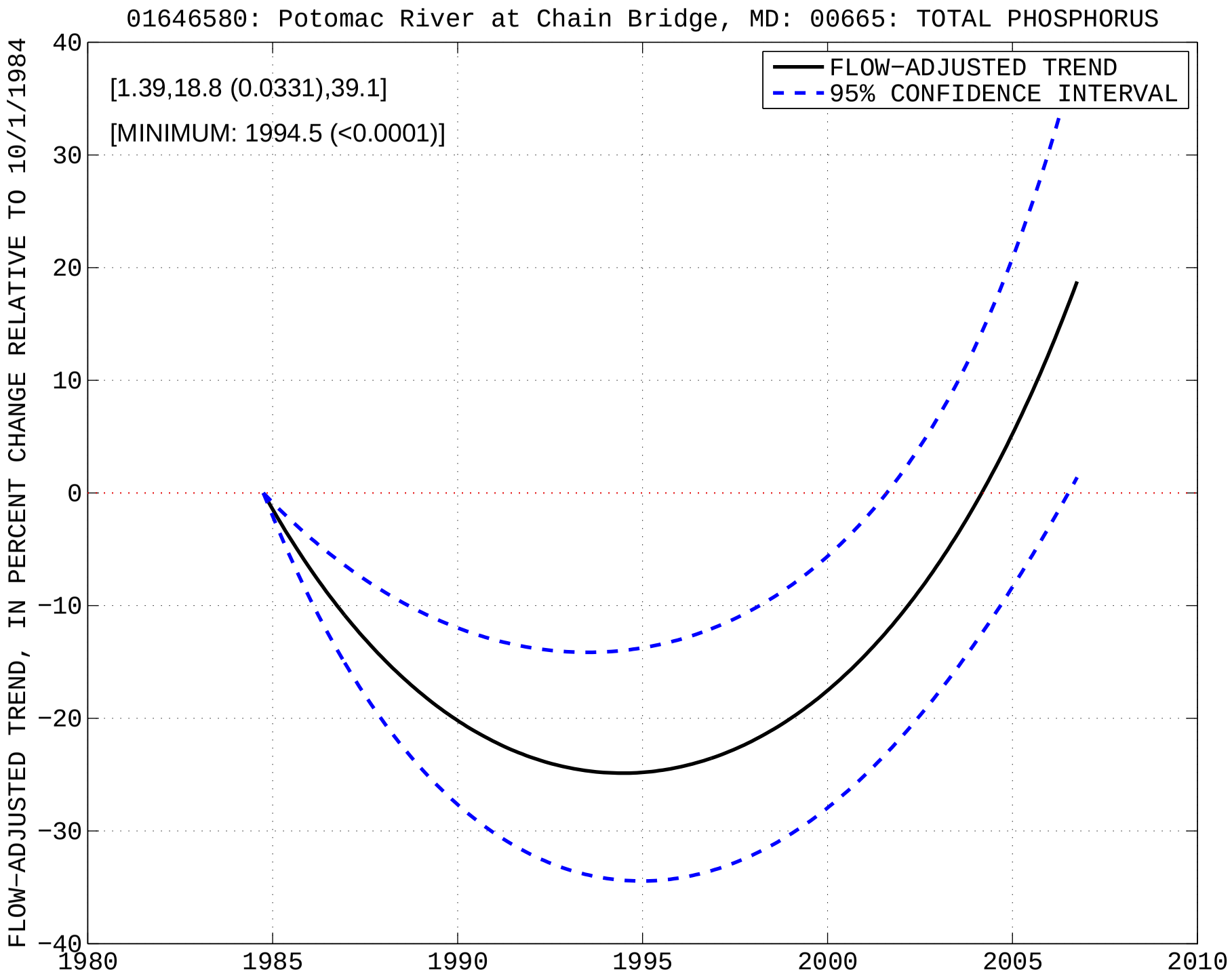

01643000: MONOCACY RIVER AT JUG BRIDGE NEAR FREDERICK, MD: 00620: TOTAL NITRATE
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
[−13.7,−2.52 (0.68),10.1]
[MAXIMUM: 1995.6 (<0.0001)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
80
70
60
50
40
30
20
10
0
−10
−20
1980
1985
1990
1995
2000
2005
2010

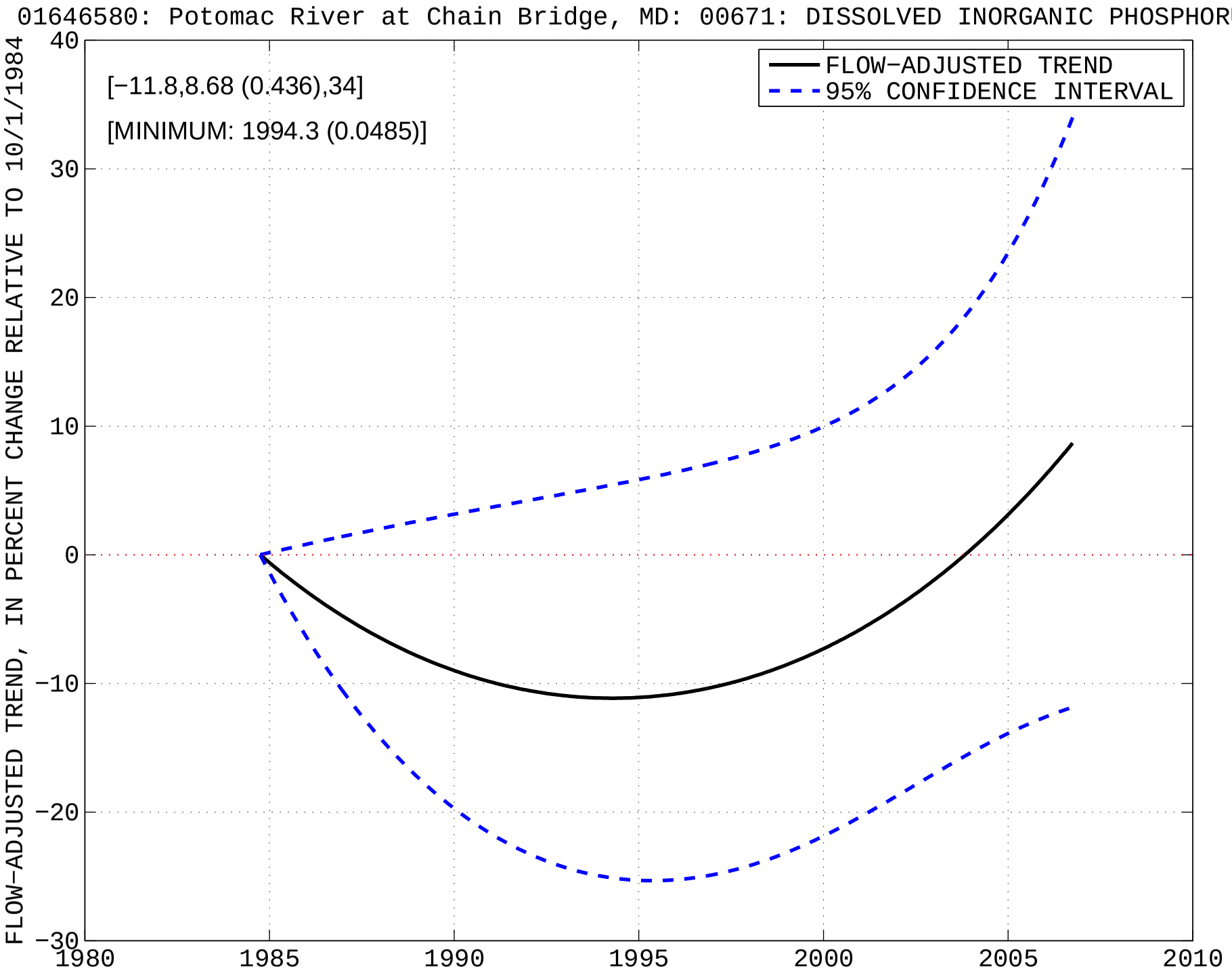

01643000: MONOCACY RIVER AT JUG BRIDGE NEAR FREDERICK, MD: 00665: TOTAL PHOSPHORUS
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
[−54.8,−44.9 (<0.0001),−32.9]
[MAXIMUM: 1991 (<0.0001)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
40
30
20
10
0
−10
−20
−30
−40
−50
−60
1980
1985
1990
1995
2000
2005
2010

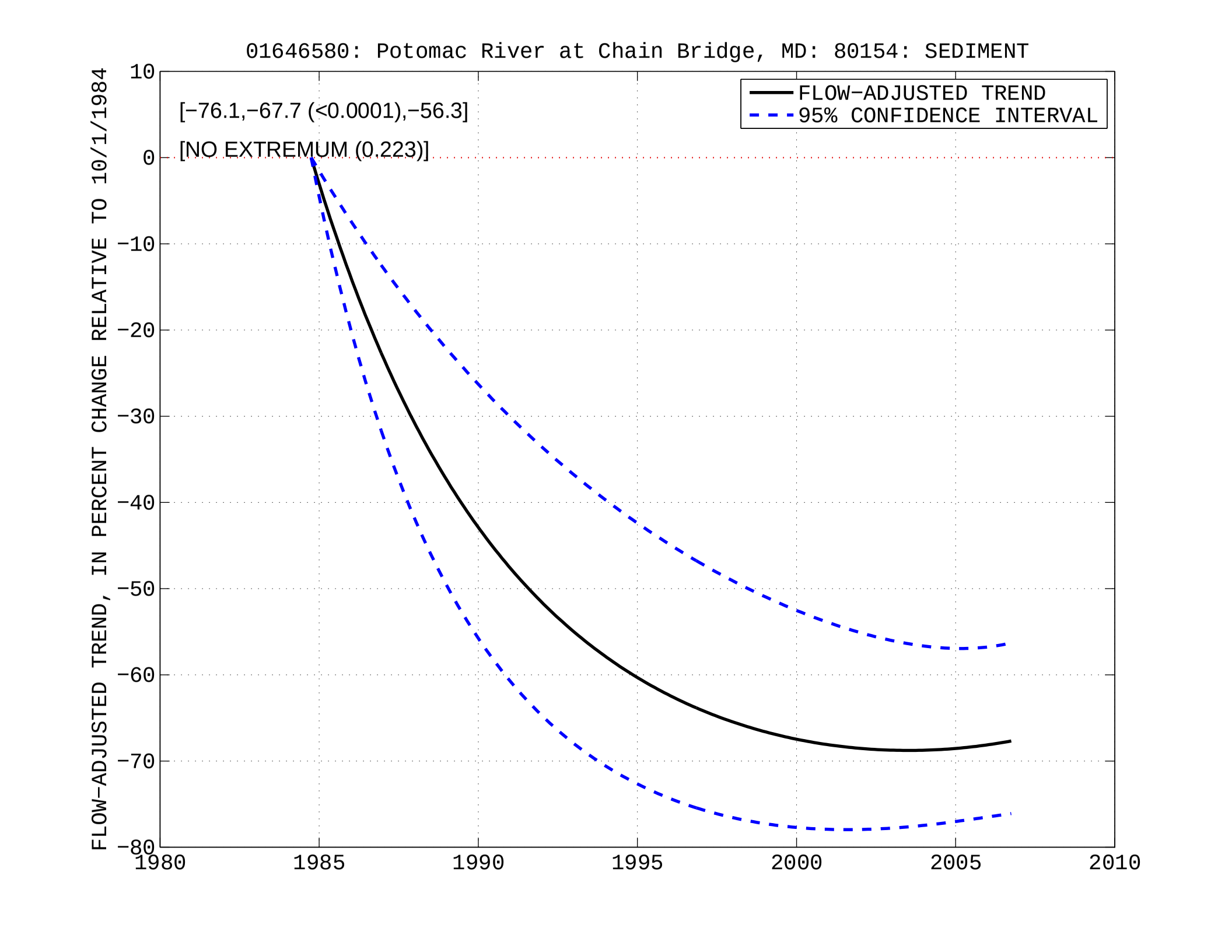

01643000: MONOCACY RIVER AT JUG BRIDGE NEAR FREDERICK, MD: 00671: DISSOLVED INORGANIC PHOSPHOR
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
40
20
0
-20
-40
-60
-80
1980
1985
1990
1995
2000
2005
2010
[−67.9,−58.2 (<0.0001),−45.6]
[MAXIMUM: 1990.7 (<0.0001)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL

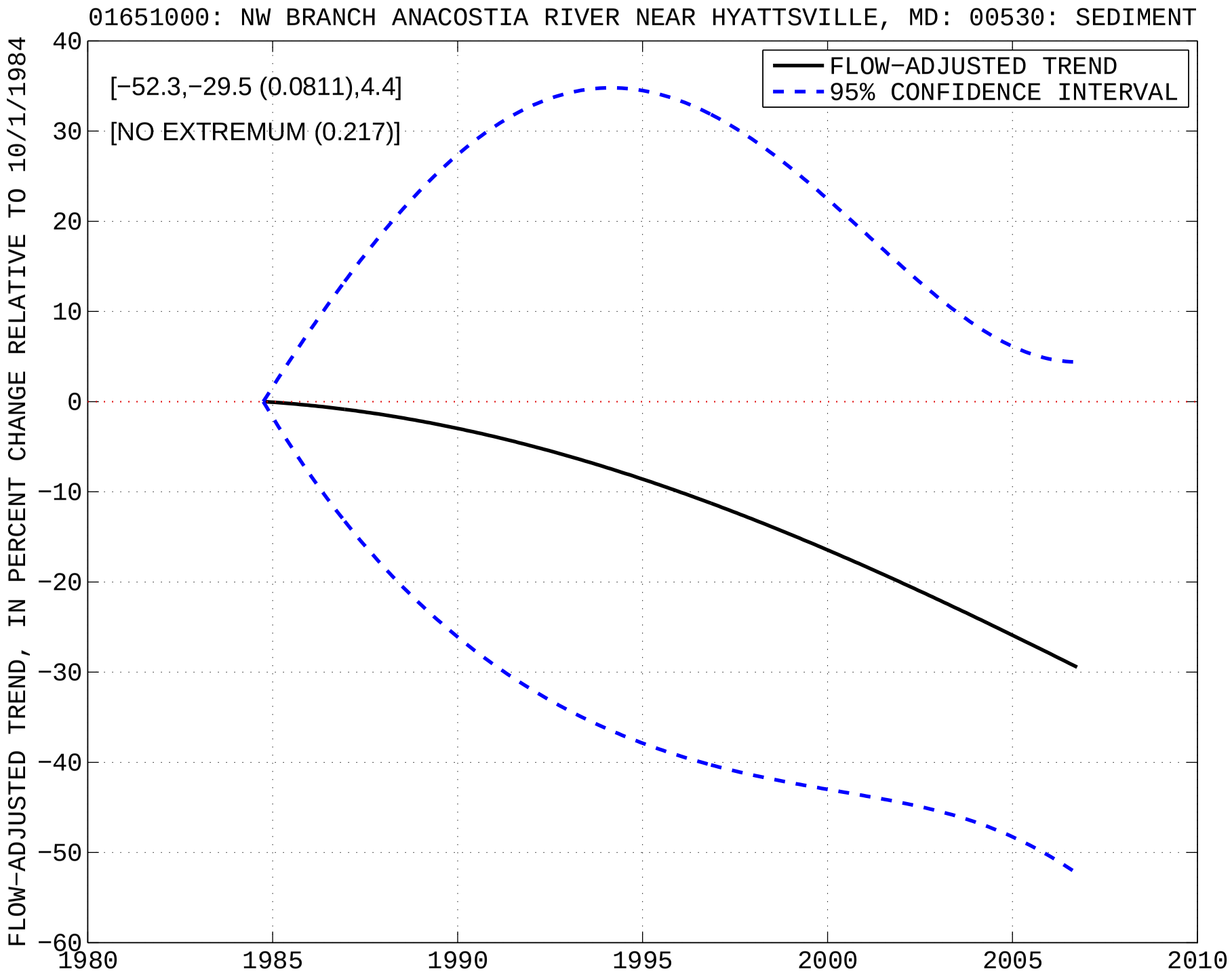

01646580: Potomac River at Chain Bridge, MD: 00600: TOTAL NITROGEN
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
[−23.8,−19.1 (<0.0001),−14.2]
[MAXIMUM: 1987.2 (<0.0001)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
5
0
−5
−10
−15
−20
−25
1980
1985
1990
1995
2000
2005
2010

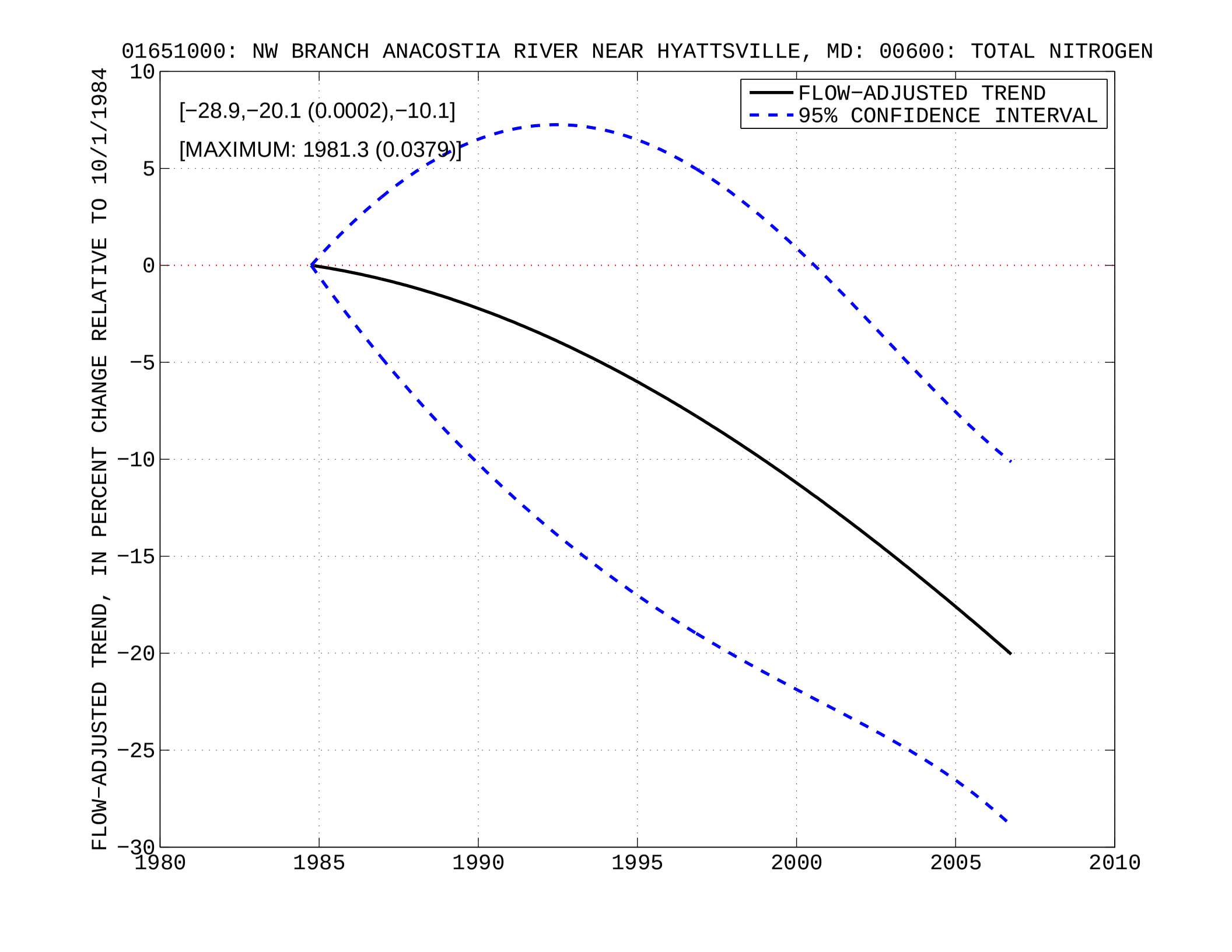

01646580: Potomac River at Chain Bridge, MD: 00631: DISSOLVED NITRITE PLUS NITRATE
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
[−24.7,−17.9 (<0.0001),−10.6]
[MAXIMUM: 1994.2 (<0.0001)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
50
40
30
20
10
0
−10
−20
−30
1980
1985
1990
1995
2000
2005
2010

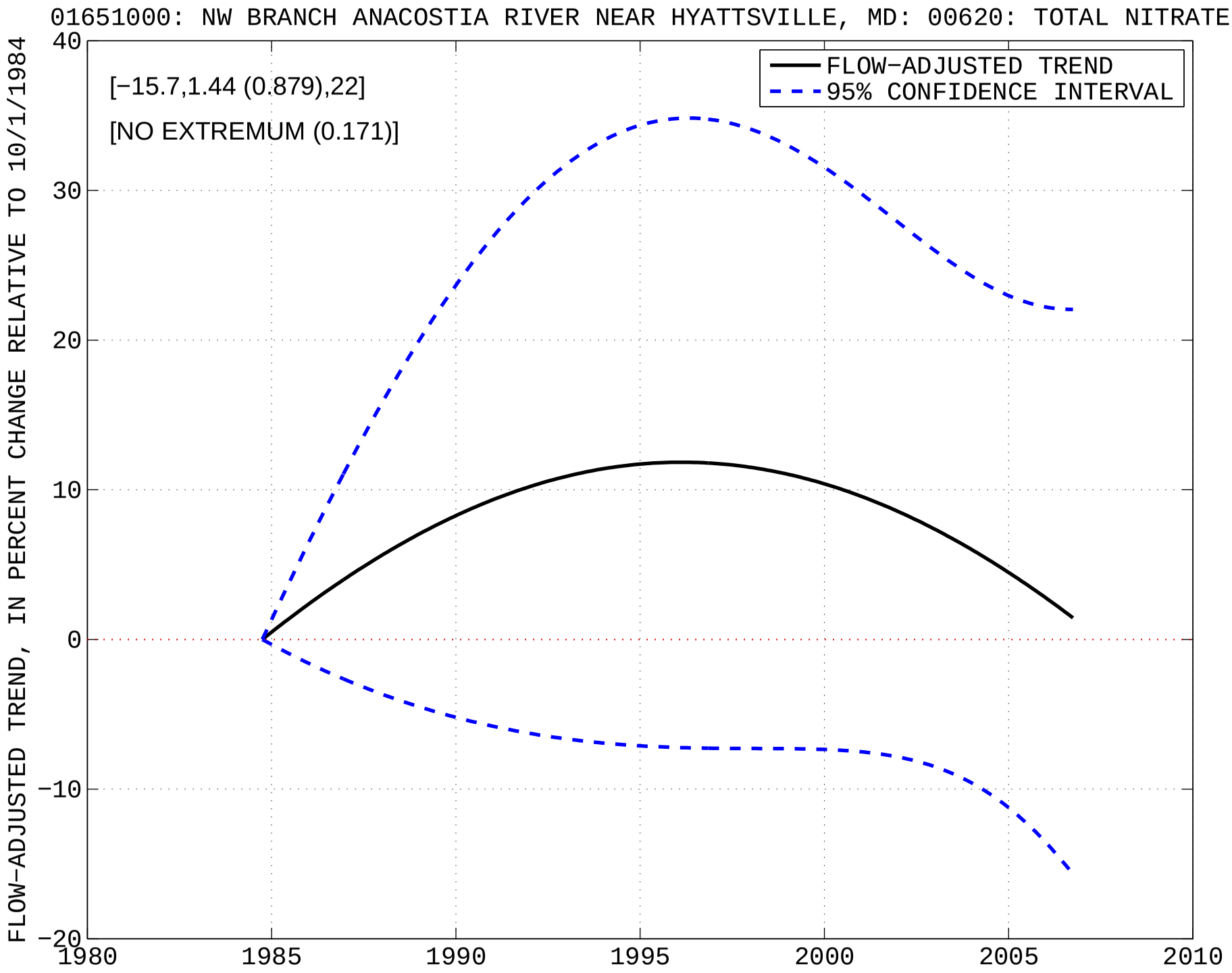

01646580: Potomac River at Chain Bridge, MD: 00665: TOTAL PHOSPHORUS
[1.39,18.8 (0.0331),39.1]
[MINIMUM: 1994.5 (<0.0001)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
40
30
20
10
0
-10
-20
-30
-40
1980
1985
1990
1995
2000
2005
2010

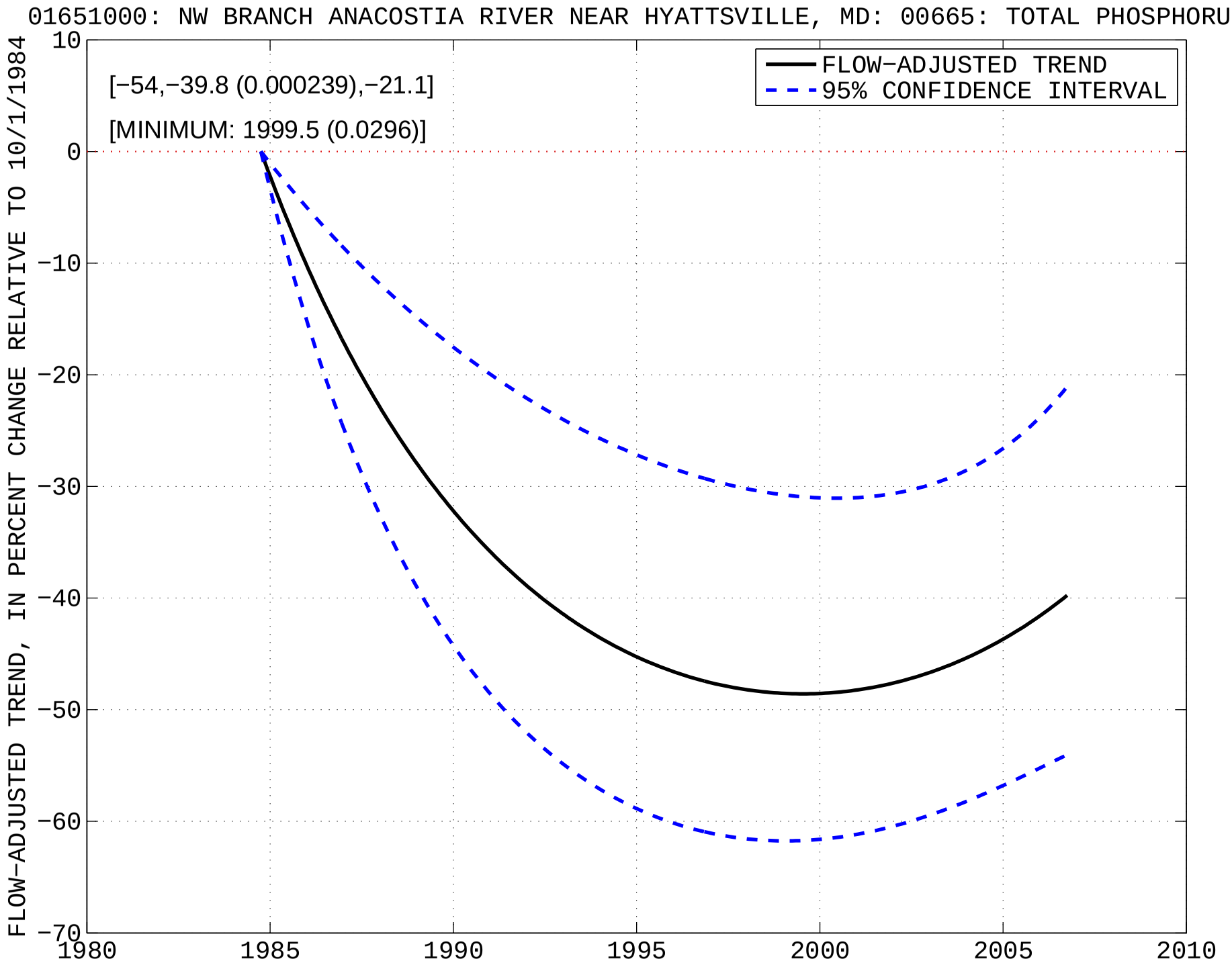

01646580: Potomac River at Chain Bridge, MD: 00671: DISSOLVED INORGANIC PHOSPHORUS
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[−11.8,8.68 (0.436),34]
[MINIMUM: 1994.3 (0.0485)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
40
30
20
10
0
−10
−20
−30
1980
1985
1990
1995
2000
2005
2010

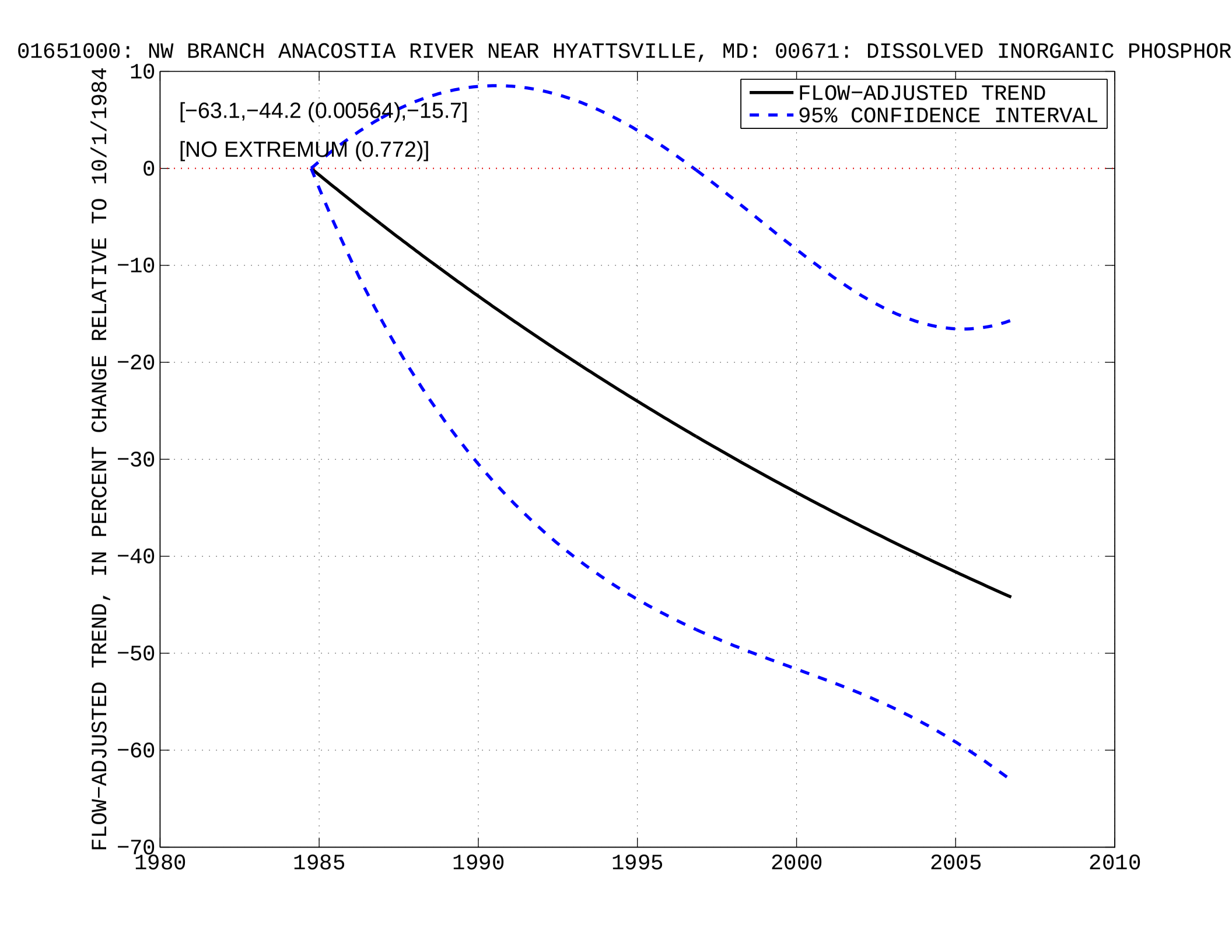

01646580: Potomac River at Chain Bridge, MD: 80154: SEDIMENT
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
[−76.1,−67.7 (<0.0001),−56.3]
[NO EXTREMUM (0.223)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
10
0
−10
−20
−30
−40
−50
−60
−70
−80
1980
1985
1990
1995
2000
2005
2010

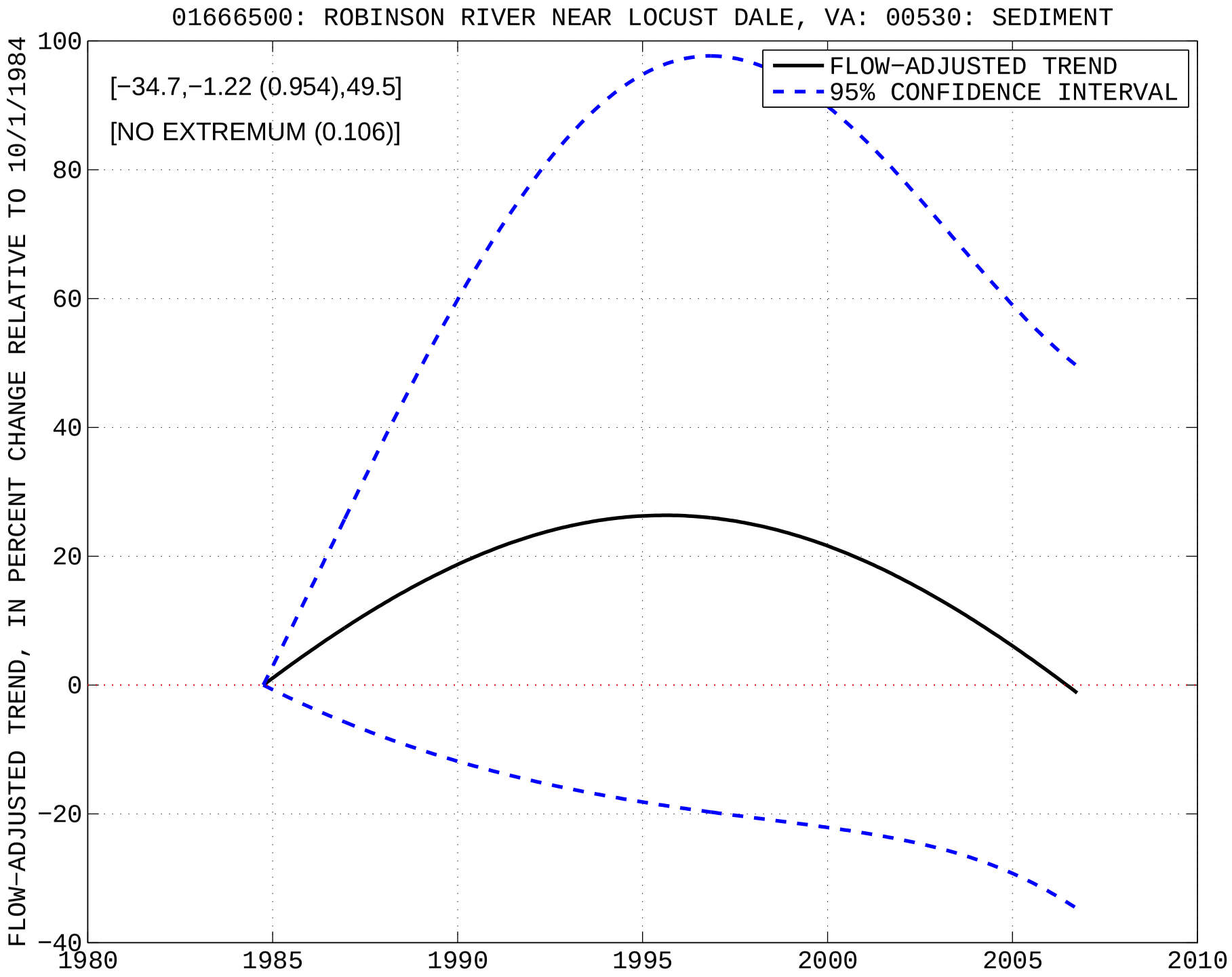

01651000: NW BRANCH ANACOSTIA RIVER NEAR HYATTSVILLE, MD: 00530: SEDIMENT
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[−52.3,−29.5 (0.0811),4.4]
[NO EXTREMUM (0.217)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
40
30
20
10
0
−10
−20
−30
−40
−50
−60
1980
1985
1990
1995
2000
2005
2010

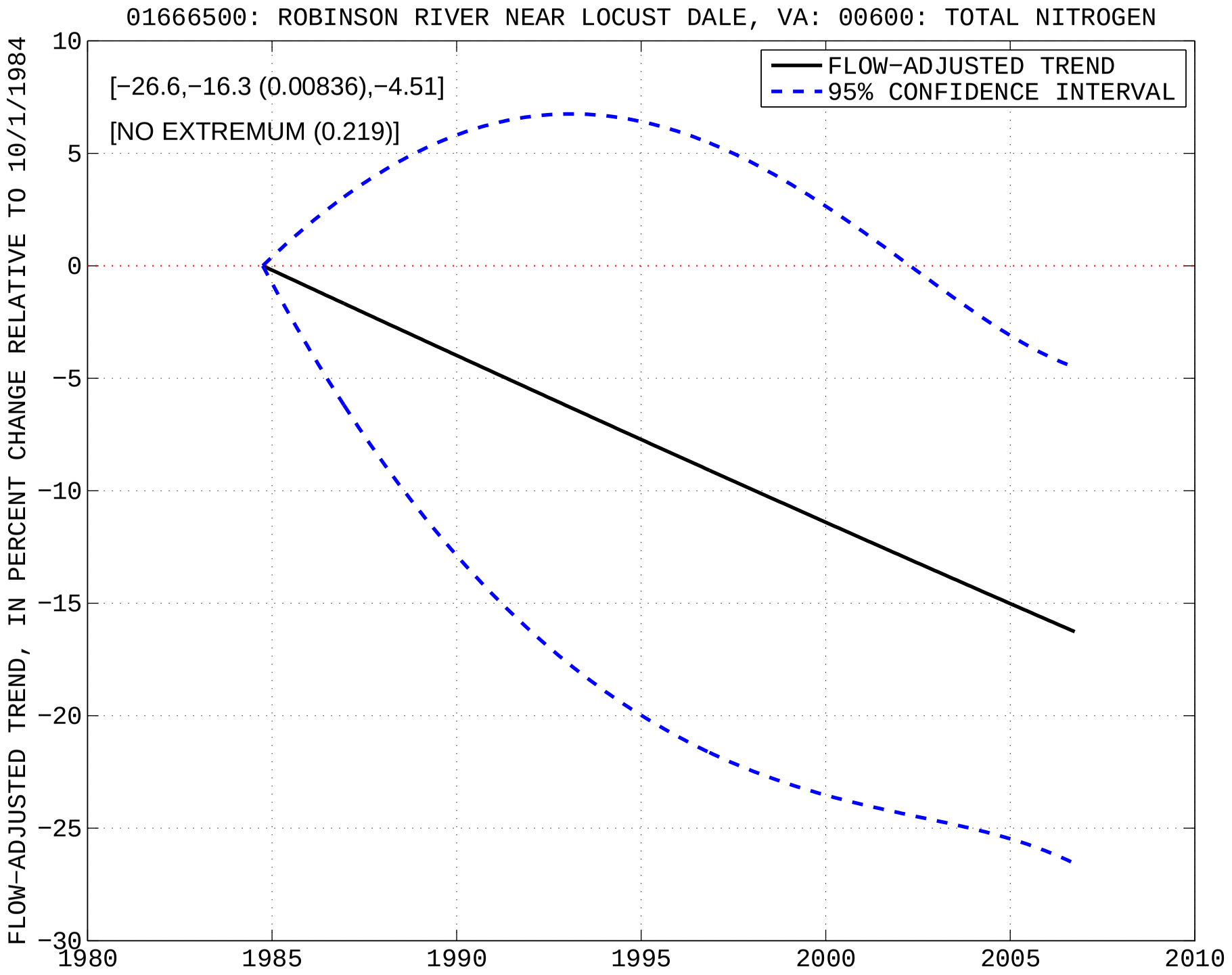

01651000: NW BRANCH ANACOSTIA RIVER NEAR HYATTSVILLE, MD: 00600: TOTAL NITROGEN
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
10
5
0
-5
-10
-15
-20
-25
-30
1980
1985
1990
1995
2000
2005
2010
[-28.9,-20.1 (0.0002),-10.1]
[MAXIMUM: 1981.3 (0.0379)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL

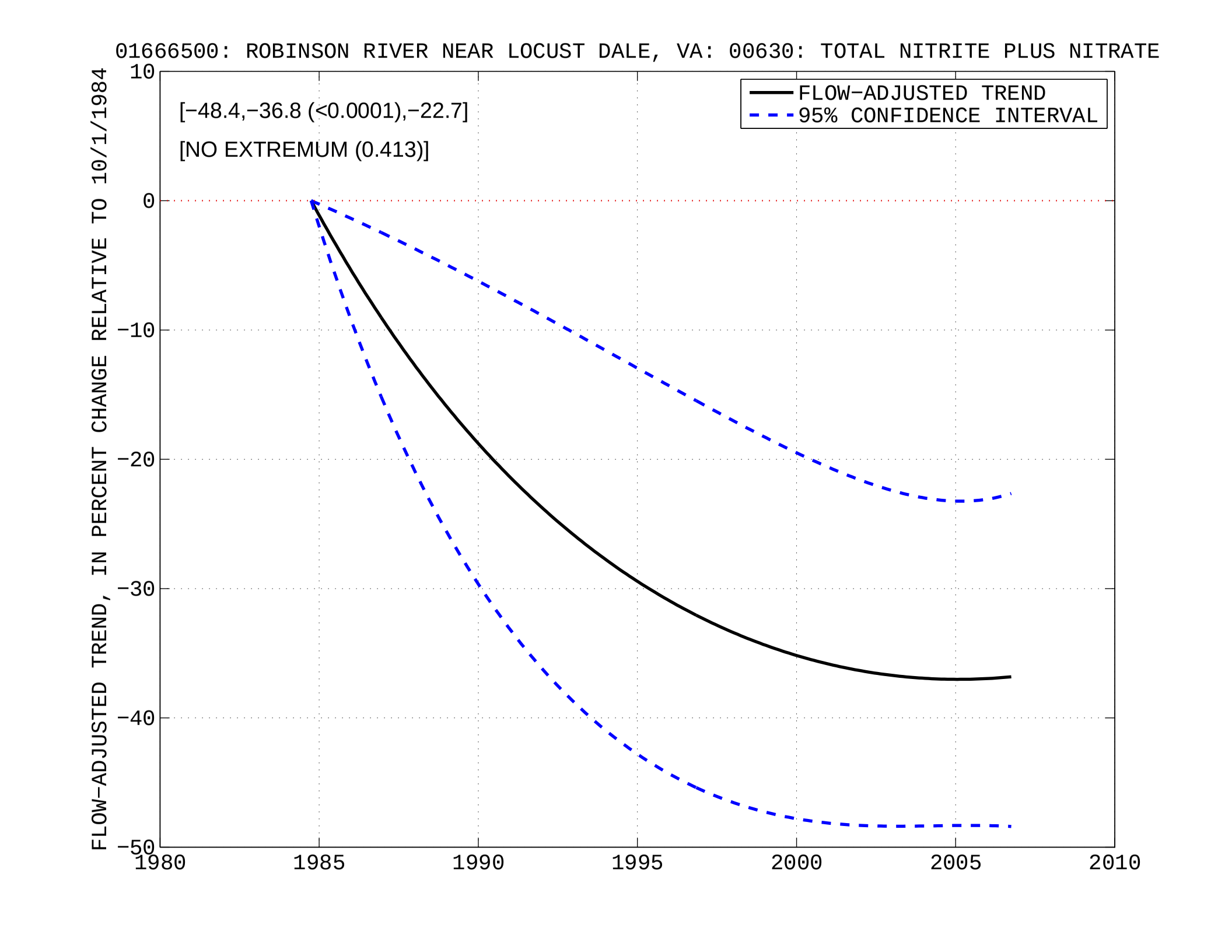

01651000: NW BRANCH ANACOSTIA RIVER NEAR HYATTSVILLE, MD: 00620: TOTAL NITRATE
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
[-15.7,1.44 (0.879),22]
[NO EXTREMUM (0.171)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
40
30
20
10
0
-10
-20
1980
1985
1990
1995
2000
2005
2010

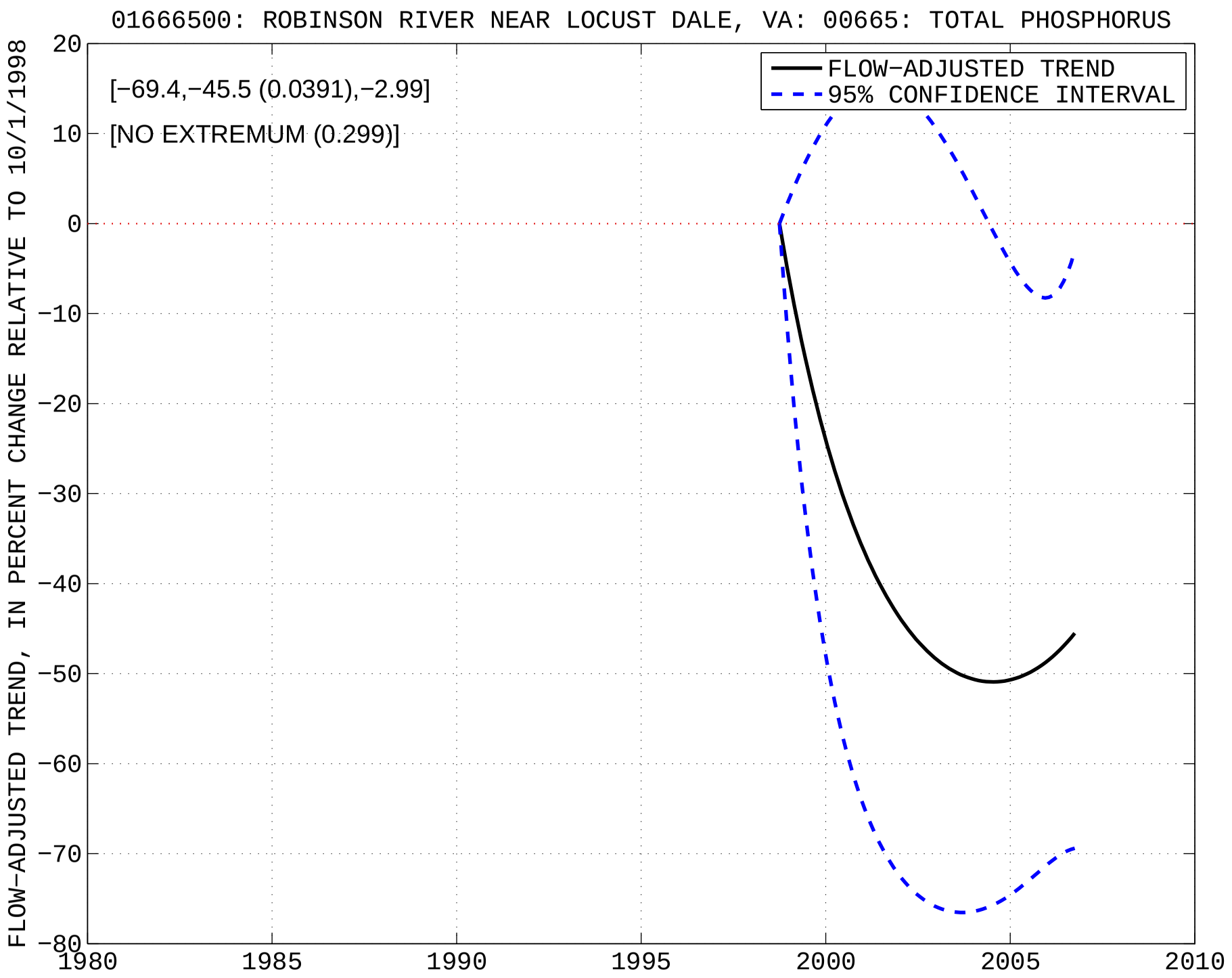

01651000: NW BRANCH ANACOSTIA RIVER NEAR HYATTSVILLE, MD: 00665: TOTAL PHOSPHORUS
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[−54,−39.8 (0.000239),−21.1]
[MINIMUM: 1999.5 (0.0296)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
10
0
−10
−20
−30
−40
−50
−60
−70
1980
1985
1990
1995
2000
2005
2010

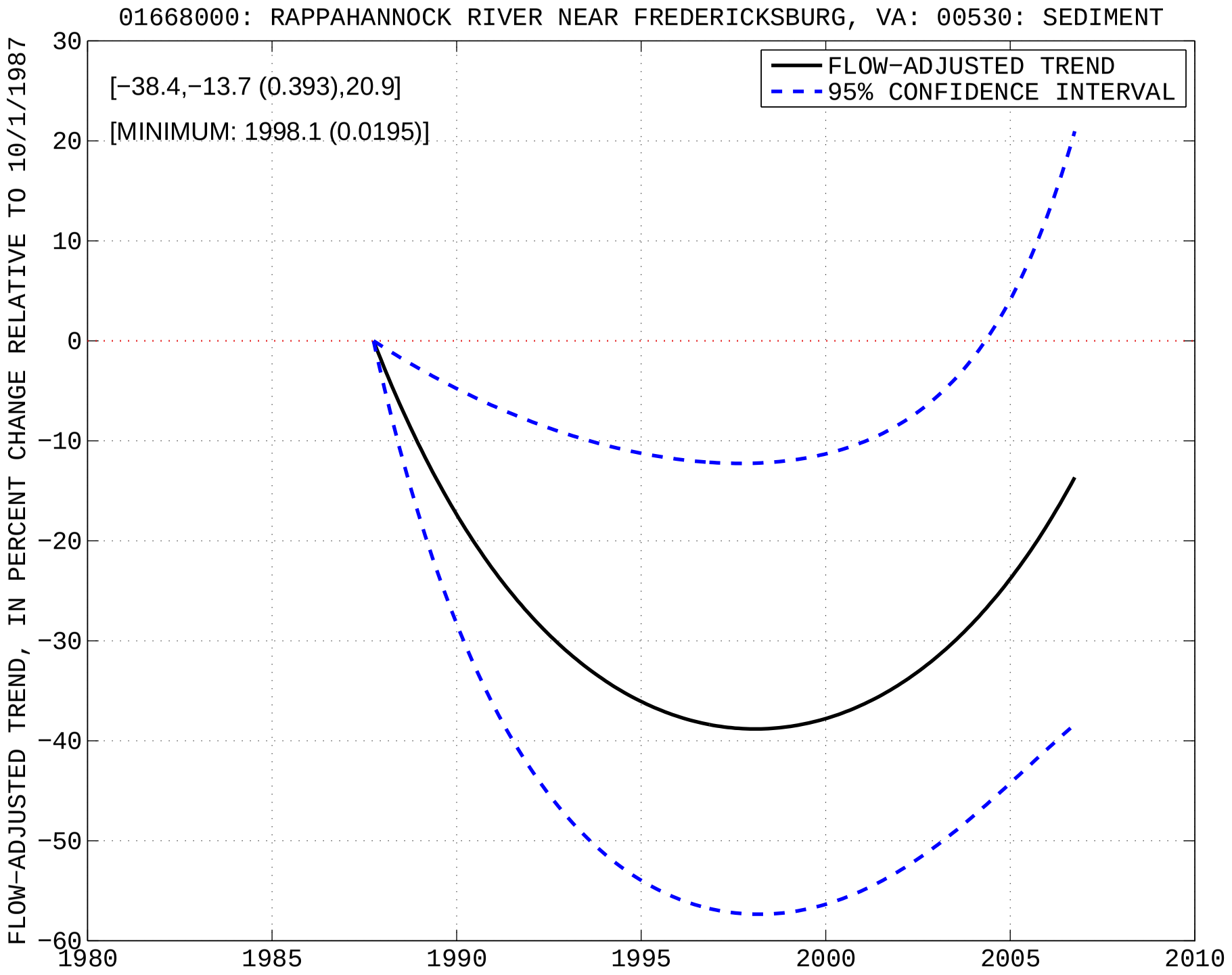

01651000: NW BRANCH ANACOSTIA RIVER NEAR HYATTSVILLE, MD: 00671: DISSOLVED INORGANIC PHOSPHOR
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
10
0
-10
-20
-30
-40
-50
-60
-70
1980
1985
1990
1995
2000
2005
2010
[-63.1,-44.2 (0.00564),-15.7]
[NO EXTREMUM (0.772)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL

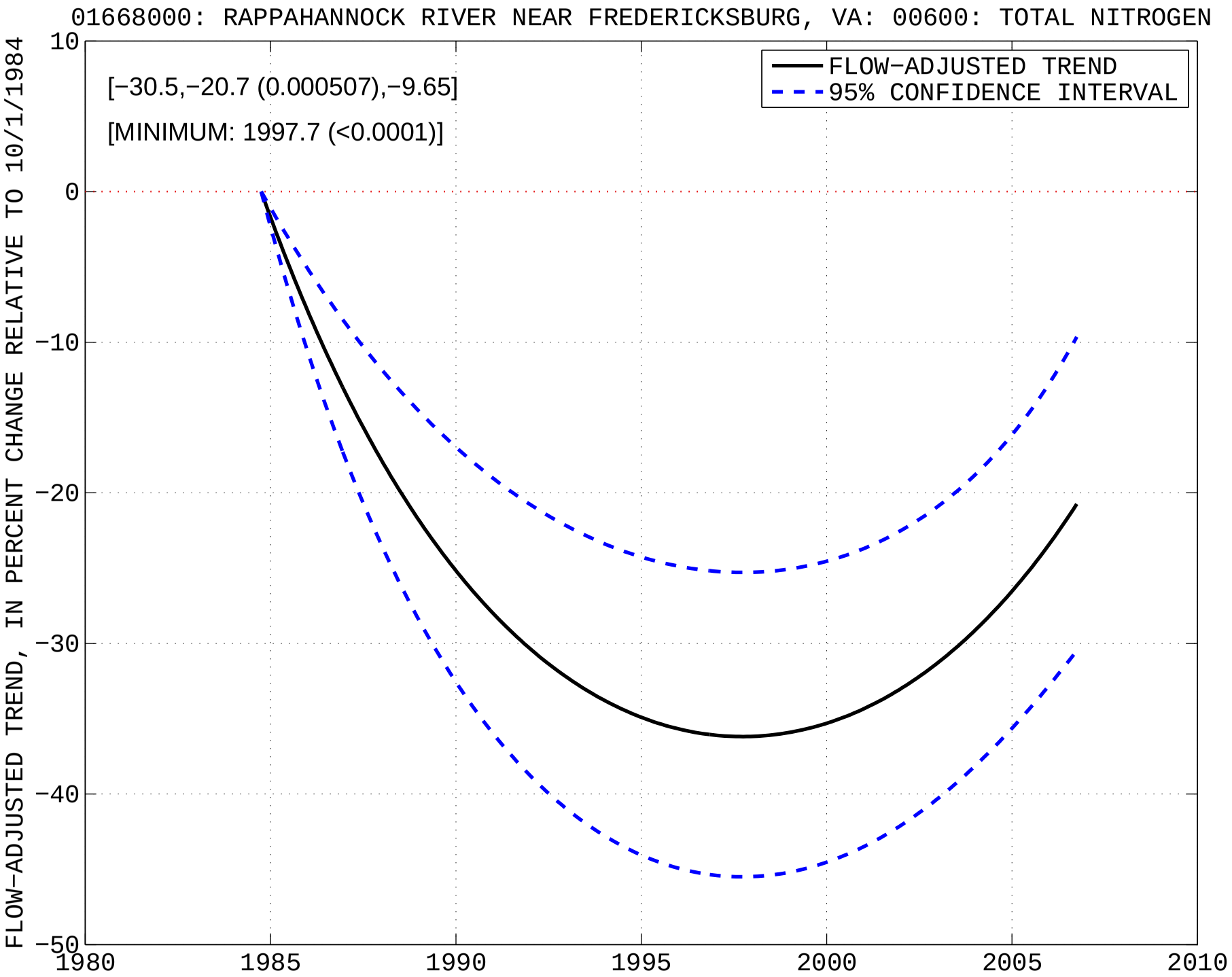

01666500: ROBINSON RIVER NEAR LOCUST DALE, VA: 00530: SEDIMENT
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
[−34.7,−1.22 (0.954),49.5]
[NO EXTREMUM (0.106)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
100
80
60
40
20
0
−20
−40
1980
1985
1990
1995
2000
2005
2010

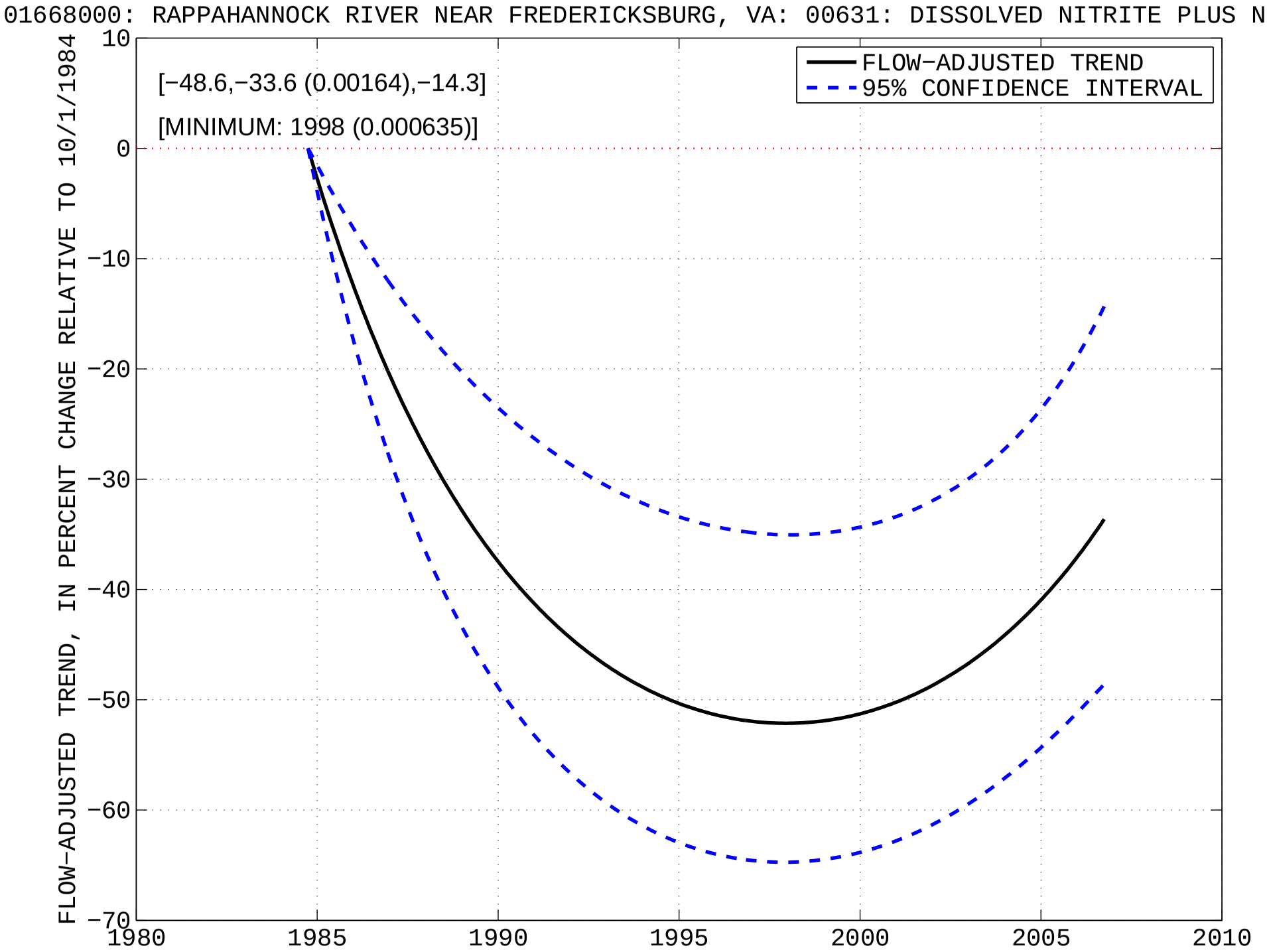

01666500: ROBINSON RIVER NEAR LOCUST DALE, VA: 00600: TOTAL NITROGEN
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[−26.6,−16.3 (0.00836),−4.51]
[NO EXTREMUM (0.219)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
10
5
0
−5
−10
−15
−20
−25
−30
1980
1985
1990
1995
2000
2005
2010

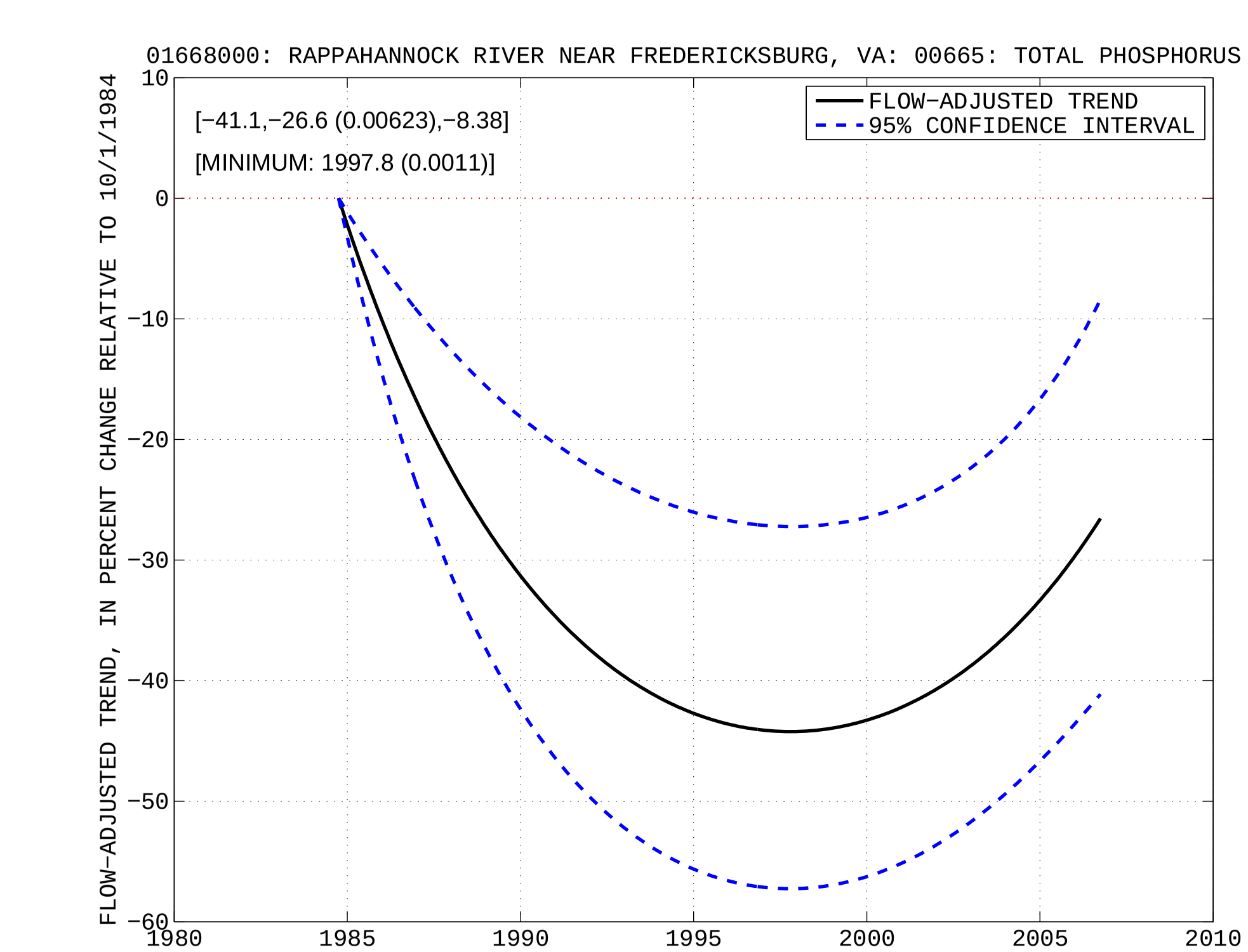

01666500: ROBINSON RIVER NEAR LOCUST DALE, VA: 00630: TOTAL NITRITE PLUS NITRATE
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
10
0
-10
-20
-30
-40
-50
1980
1985
1990
1995
2000
2005
2010
[-48.4,-36.8 (<0.0001),-22.7]
[NO EXTREMUM (0.413)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL

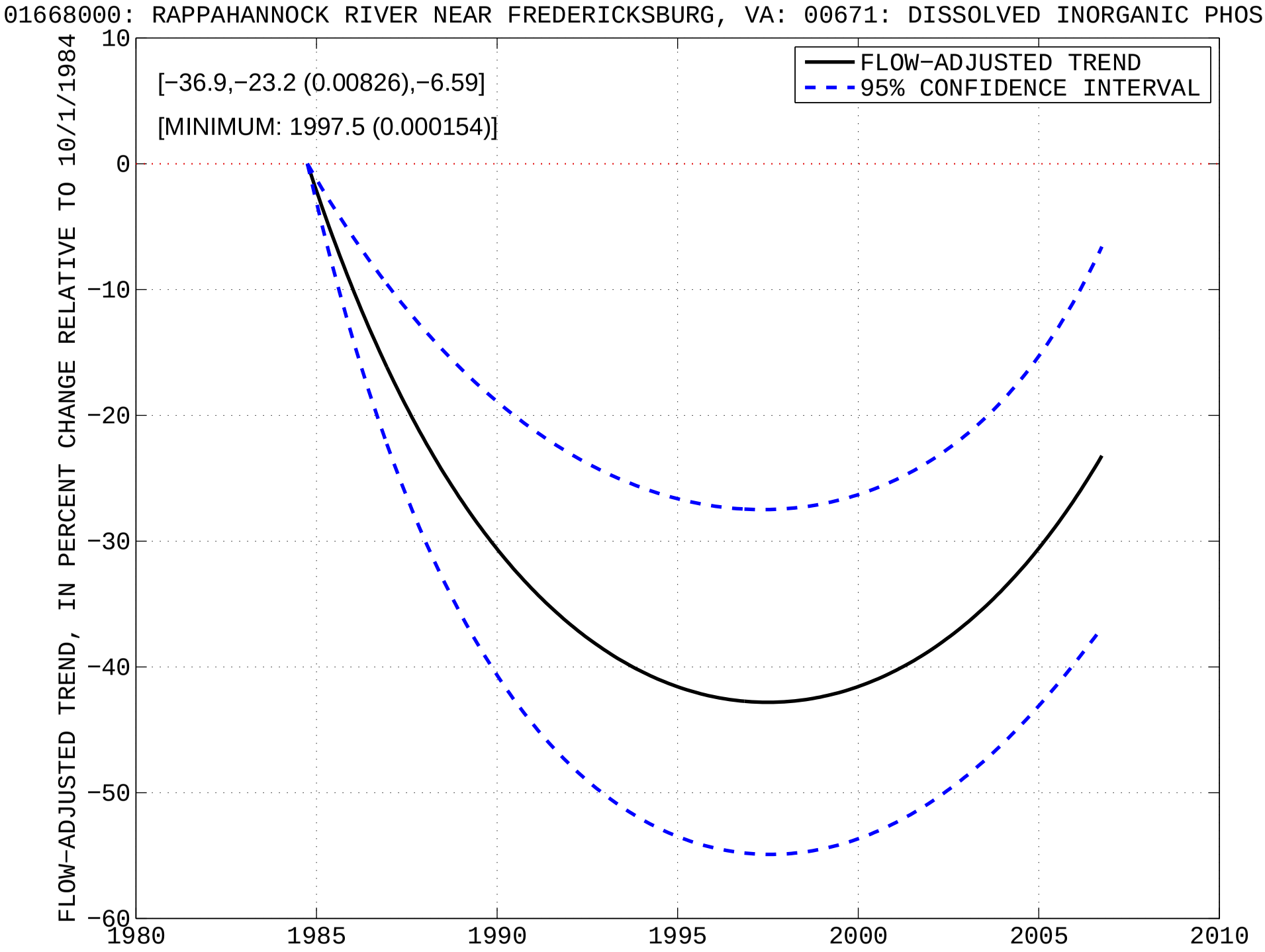

01666500: ROBINSON RIVER NEAR LOCUST DALE, VA: 00665: TOTAL PHOSPHORUS
[−69.4,−45.5 (0.0391),−2.99]
[NO EXTREMUM (0.299)]
FLOW−ADJUSTED TREND
95% CONFIDENCE INTERVAL
FLOW−ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1998
20
10
0
−10
−20
−30
−40
−50
−60
−70
−80
1980
1985
1990
1995
2000
2005
2010

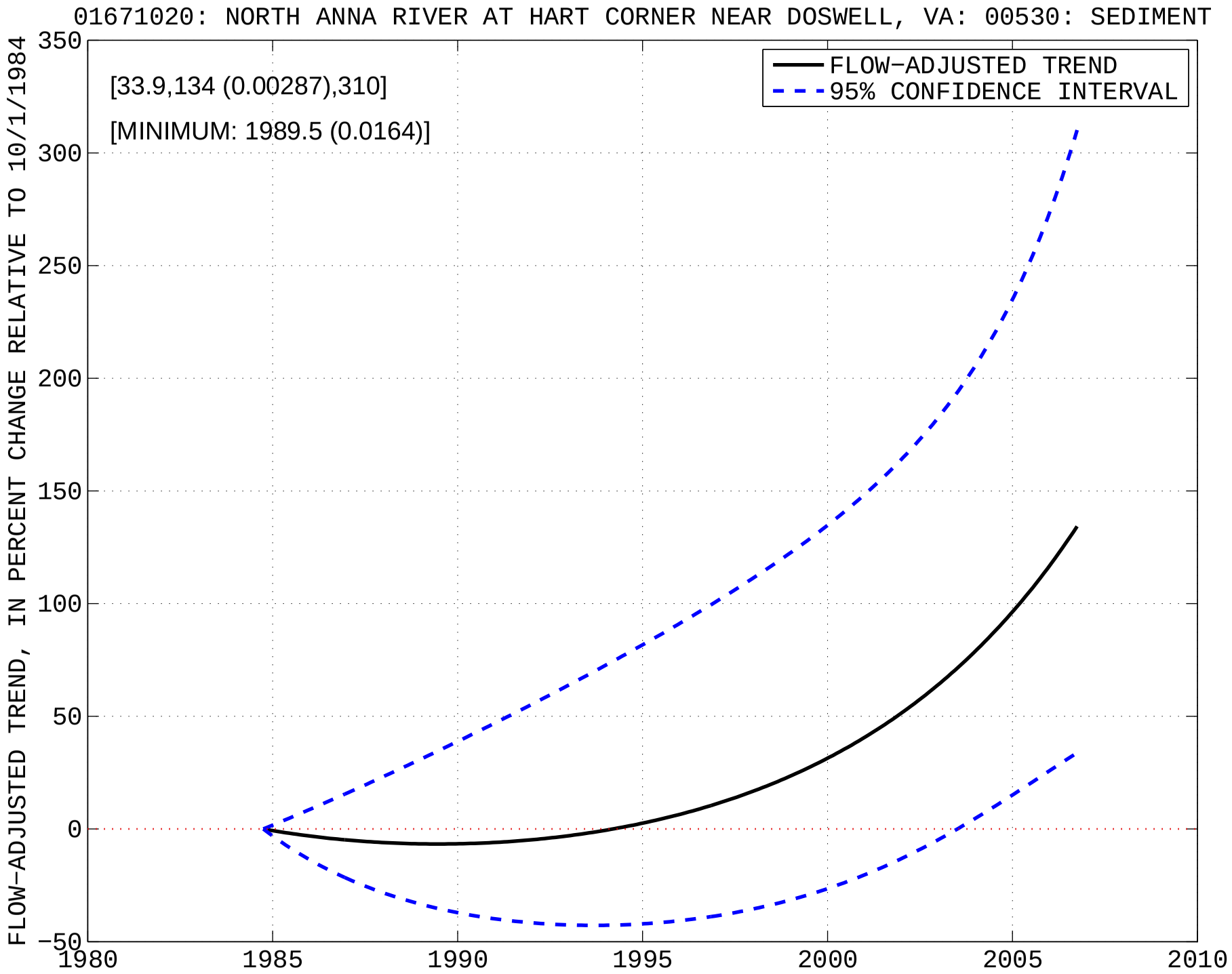

01668000: RAPPAHANNOCK RIVER NEAR FREDERICKSBURG, VA: 00530: SEDIMENT
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[−38.4,−13.7 (0.393),20.9]
[MINIMUM: 1998.1 (0.0195)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1987
30
20
10
0
−10
−20
−30
−40
−50
−60
1980
1985
1990
1995
2000
2005
2010

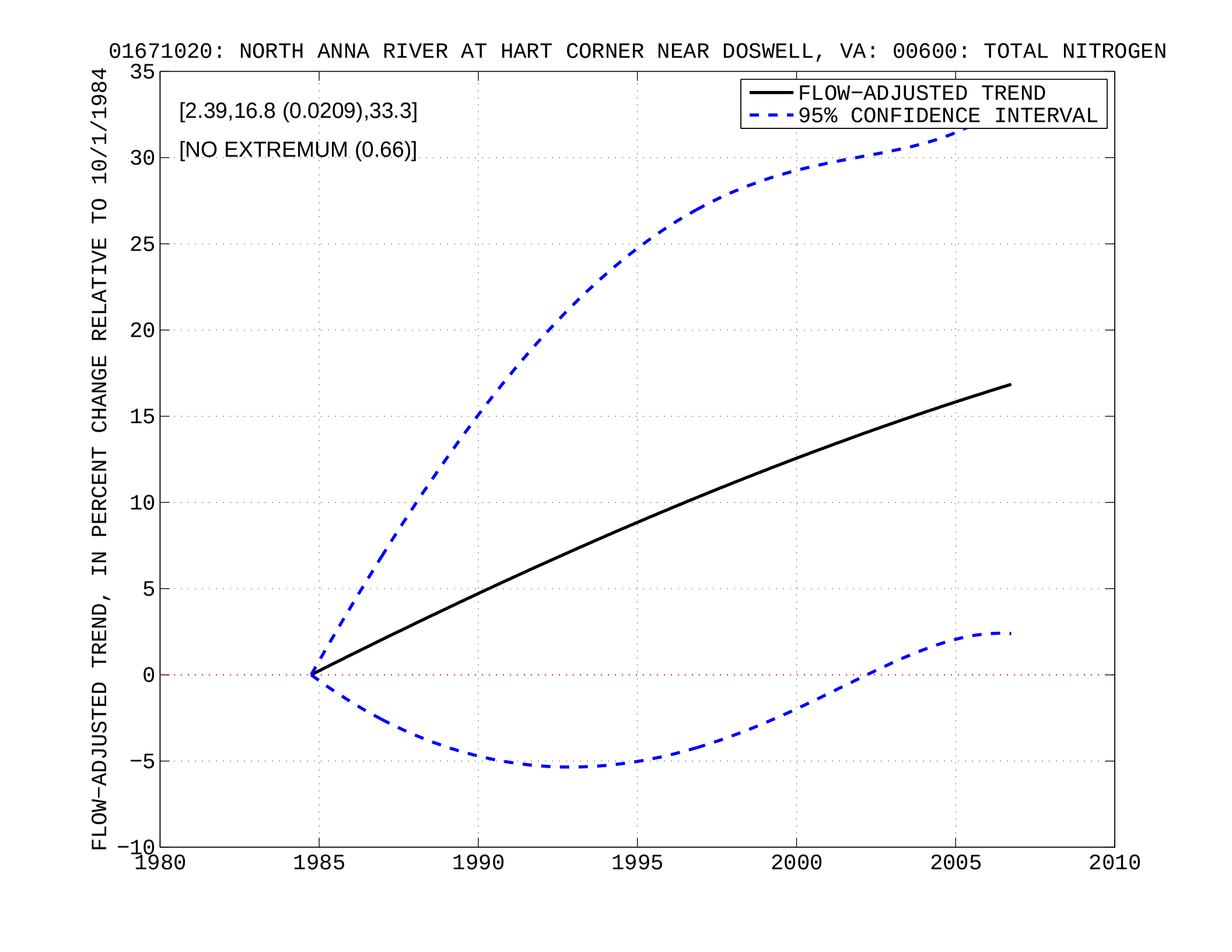

01668000: RAPPAHANNOCK RIVER NEAR FREDERICKSBURG, VA: 00600: TOTAL NITROGEN
[−30.5,−20.7 (0.000507),−9.65]
[MINIMUM: 1997.7 (<0.0001)]
FLOW−ADJUSTED TREND
95% CONFIDENCE INTERVAL
FLOW−ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
10
0
−10
−20
−30
−40
−50
1980
1985
1990
1995
2000
2005
2010

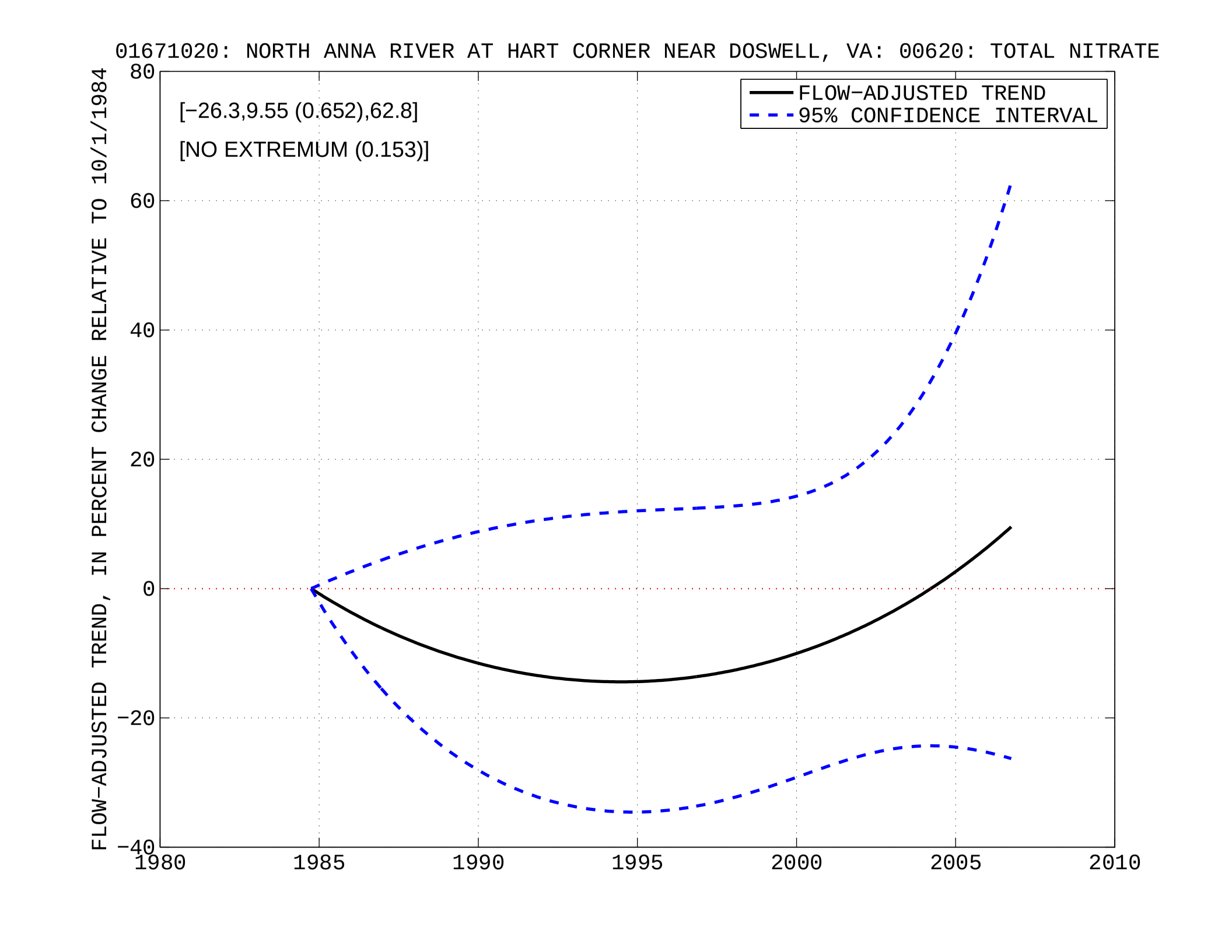

01668000: RAPPAHANNOCK RIVER NEAR FREDERICKSBURG, VA: 00631: DISSOLVED NITRITE PLUS NITRATE
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
10
0
-10
-20
-30
-40
-50
-60
-70
1980
1985
1990
1995
2000
2005
2010
[-48.6,-33.6 (0.00164),-14.3]
[MINIMUM: 1998 (0.000635)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL

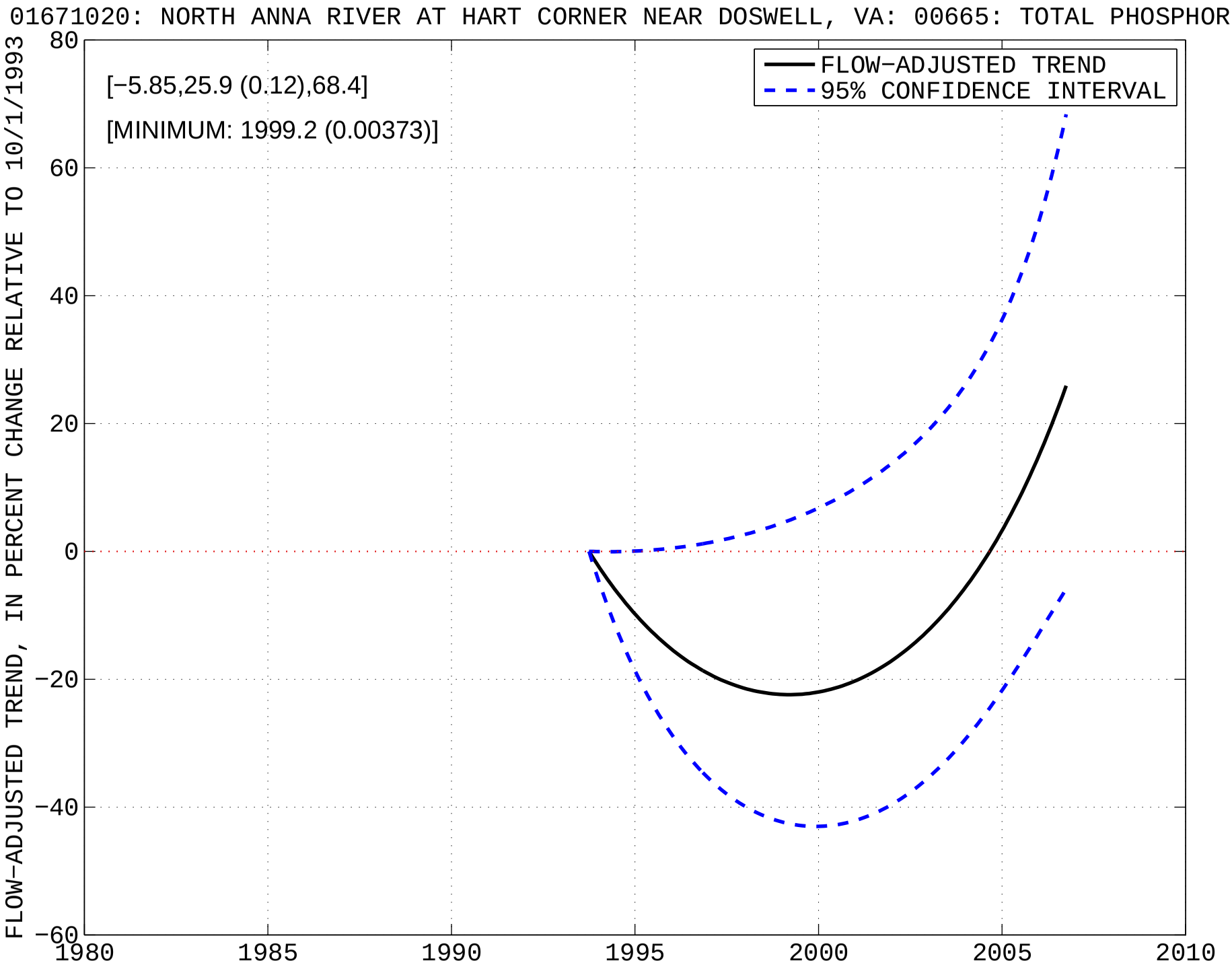

01668000: RAPPAHANNOCK RIVER NEAR FREDERICKSBURG, VA: 00665: TOTAL PHOSPHORUS
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[−41.1,−26.6 (0.00623),−8.38]
[MINIMUM: 1997.8 (0.0011)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
10
0
−10
−20
−30
−40
−50
−60
1980
1985
1990
1995
2000
2005
2010

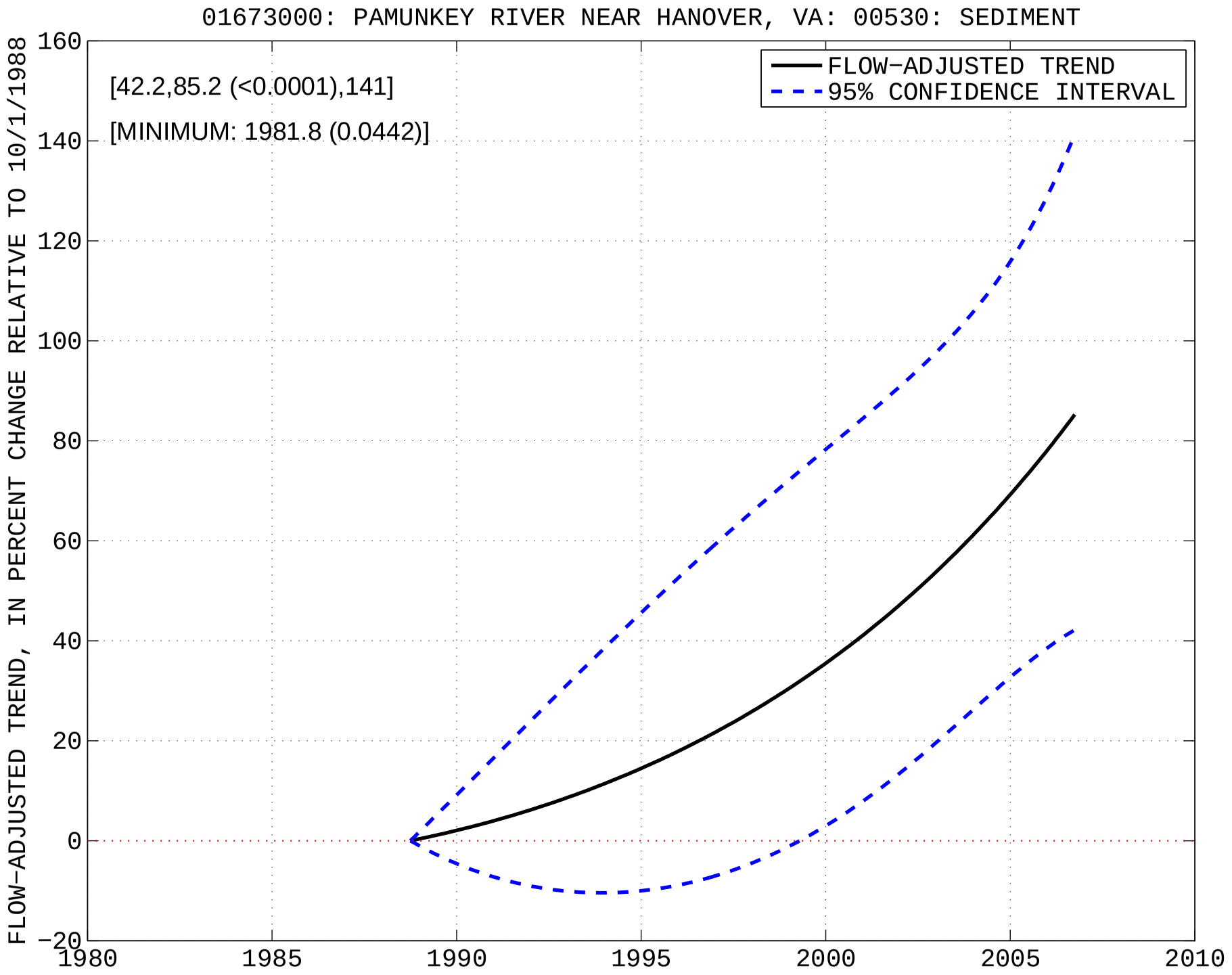

01668000: RAPPAHANNOCK RIVER NEAR FREDERICKSBURG, VA: 00671: DISSOLVED INORGANIC PHOSPHORUS
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
10
0
-10
-20
-30
-40
-50
-60
1980
1985
1990
1995
2000
2005
2010
[-36.9,-23.2 (0.00826),-6.59]
[MINIMUM: 1997.5 (0.000154)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL

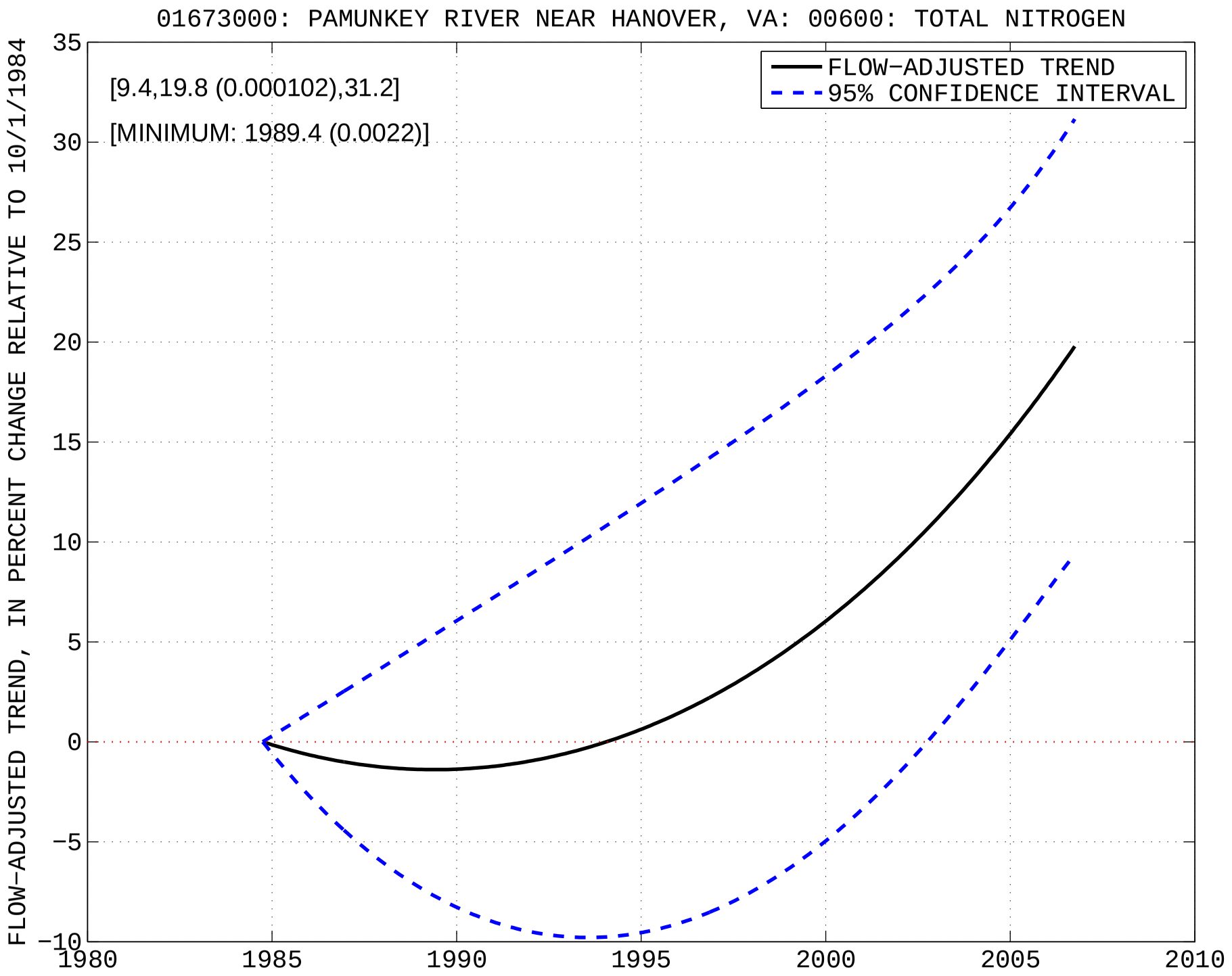

01671020: NORTH ANNA RIVER AT HART CORNER NEAR DOSWELL, VA: 00530: SEDIMENT
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[33.9,134 (0.00287),310]
[MINIMUM: 1989.5 (0.0164)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
350
300
250
200
150
100
50
0
-50
1980
1985
1990
1995
2000
2005
2010

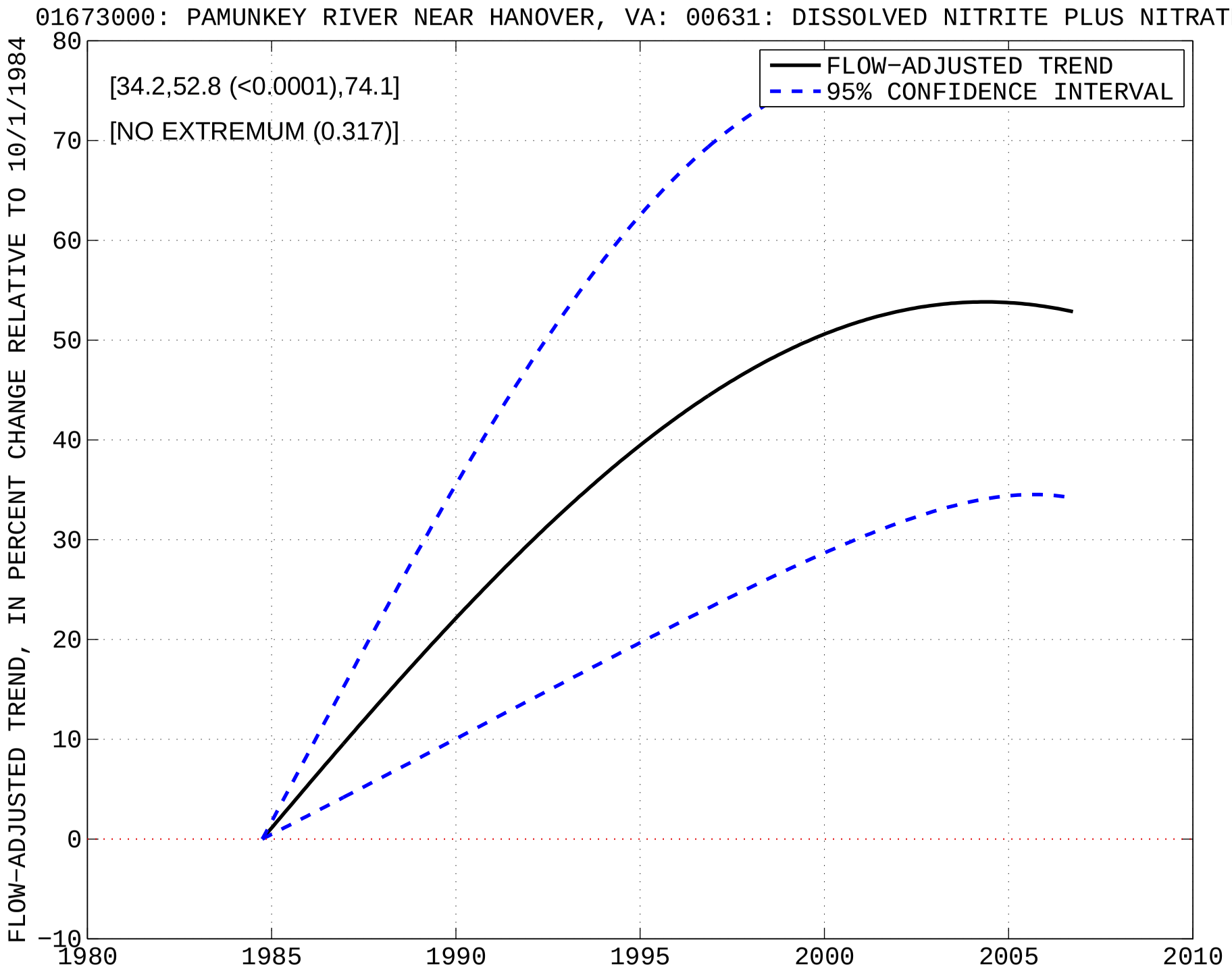

01671020: NORTH ANNA RIVER AT HART CORNER NEAR DOSWELL, VA: 00600: TOTAL NITROGEN
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
[2.39,16.8 (0.0209),33.3]
[NO EXTREMUM (0.66)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
35
30
25
20
15
10
5
0
-5
-10
1980
1985
1990
1995
2000
2005
2010

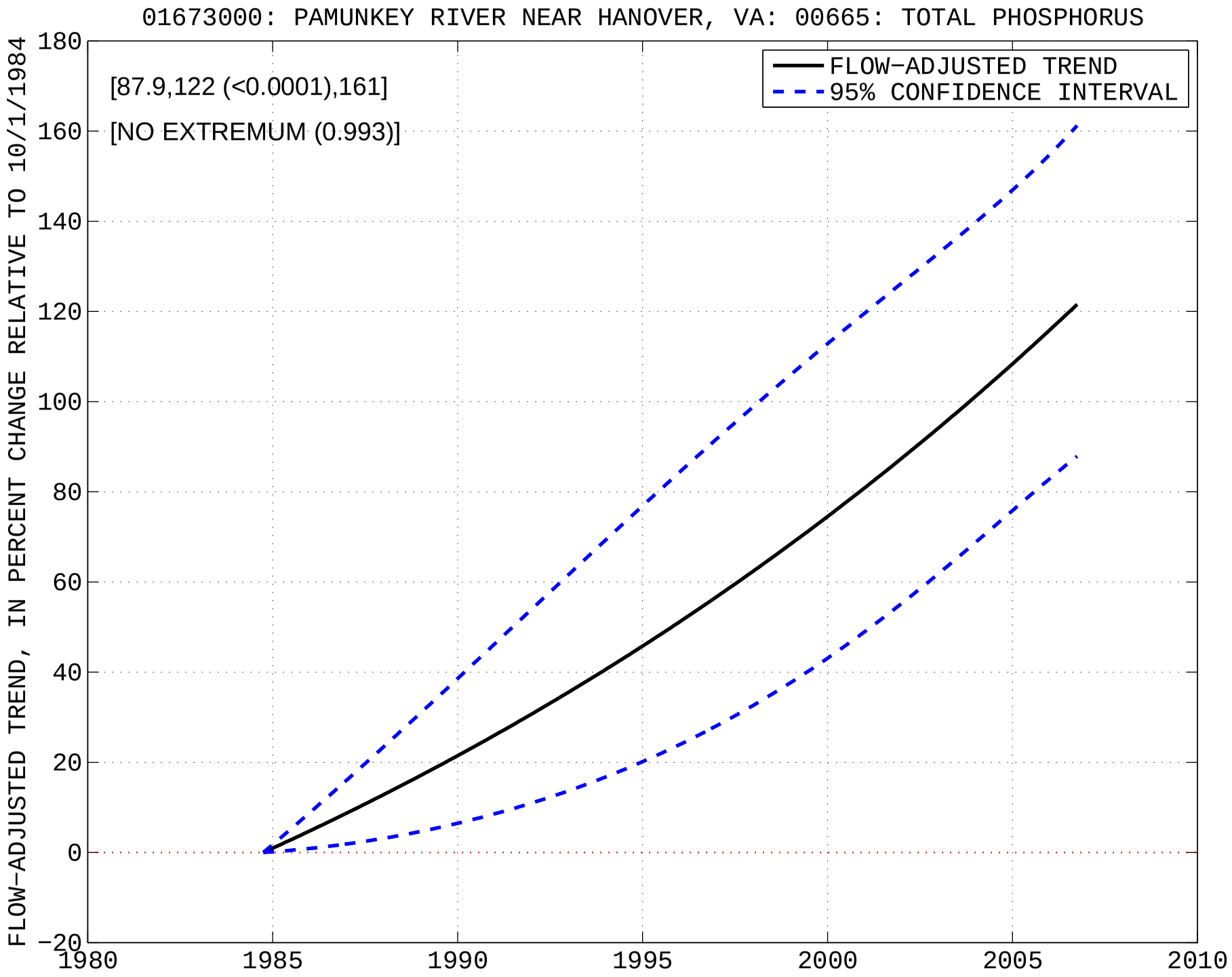

01671020: NORTH ANNA RIVER AT HART CORNER NEAR DOSWELL, VA: 00620: TOTAL NITRATE
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
[−26.3,9.55 (0.652),62.8]
[NO EXTREMUM (0.153)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
80
60
40
20
0
−20
−40
1980
1985
1990
1995
2000
2005
2010

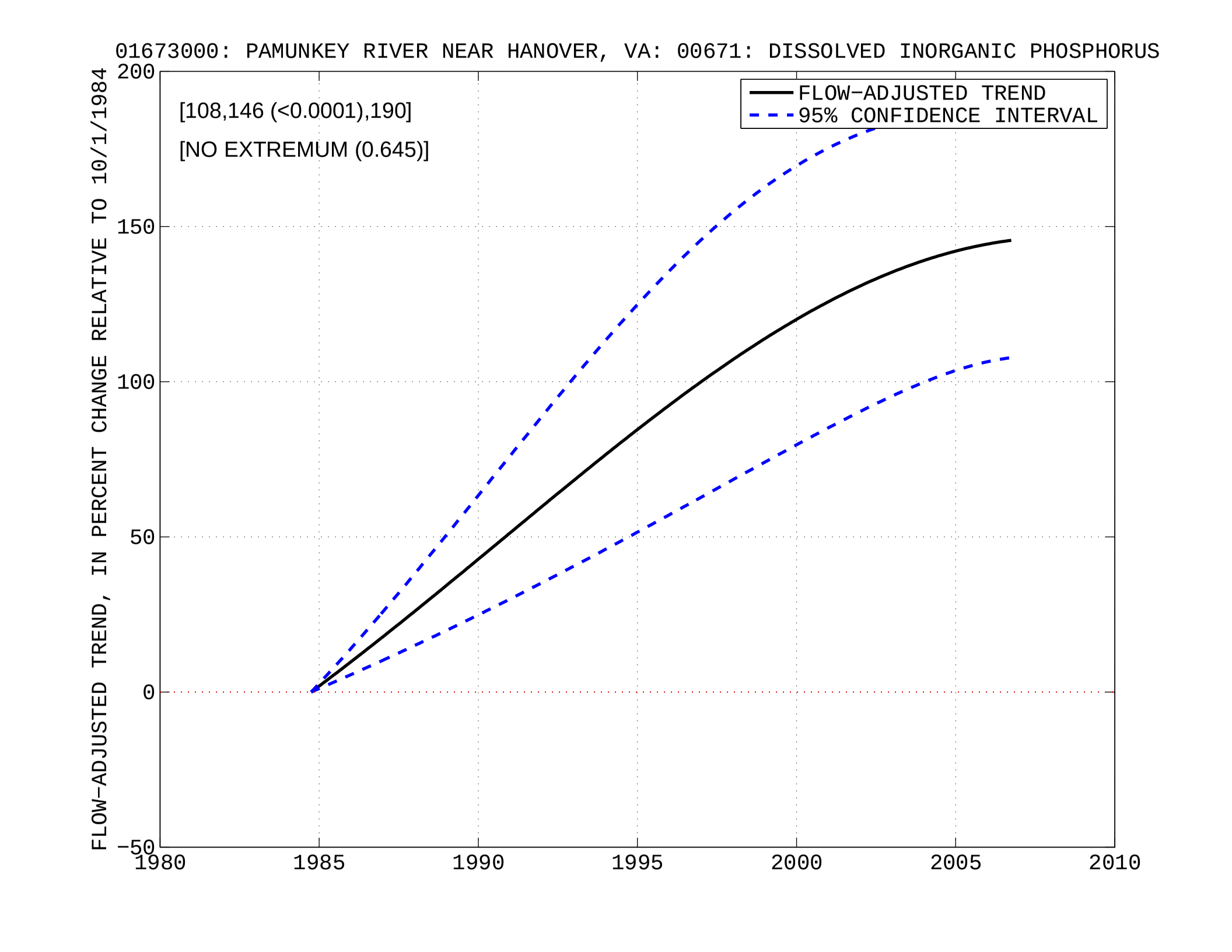

01671020: NORTH ANNA RIVER AT HART CORNER NEAR DOSWELL, VA: 00665: TOTAL PHOSPHORUS
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1993
[-5.85,25.9 (0.12),68.4]
[MINIMUM: 1999.2 (0.00373)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
80
60
40
20
0
-20
-40
-60
1980
1985
1990
1995
2000
2005
2010

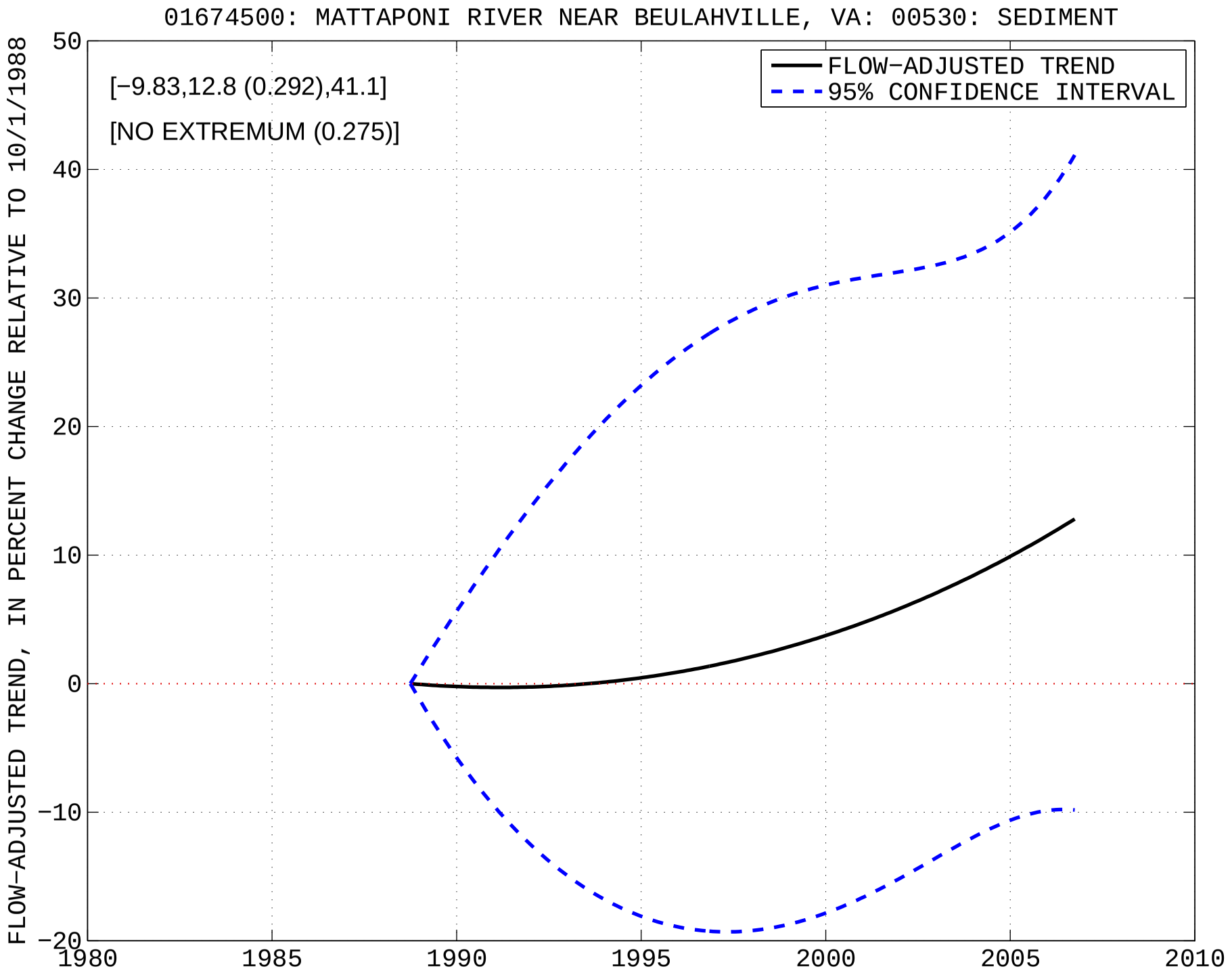

01673000: PAMUNKEY RIVER NEAR HANOVER, VA: 00530: SEDIMENT
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1988
[42.2,85.2 (<0.0001),141]
[MINIMUM: 1981.8 (0.0442)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
160
140
120
100
80
60
40
20
0
-20
1980
1985
1990
1995
2000
2005
2010

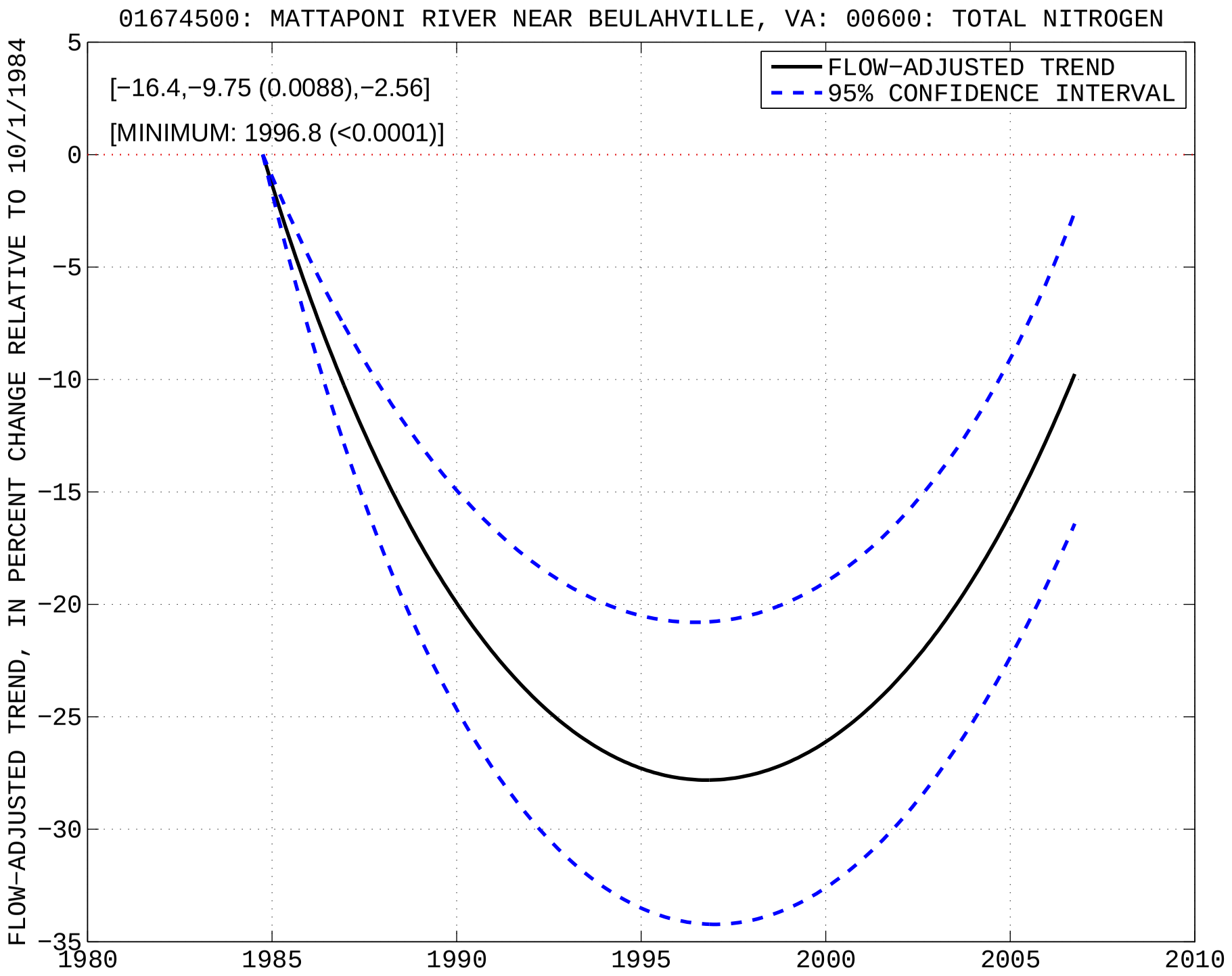

01673000: PAMUNKEY RIVER NEAR HANOVER, VA: 00600: TOTAL NITROGEN
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[9.4,19.8 (0.000102),31.2]
[MINIMUM: 1989.4 (0.0022)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
35
30
25
20
15
10
5
0
-5
-10
1980
1985
1990
1995
2000
2005
2010

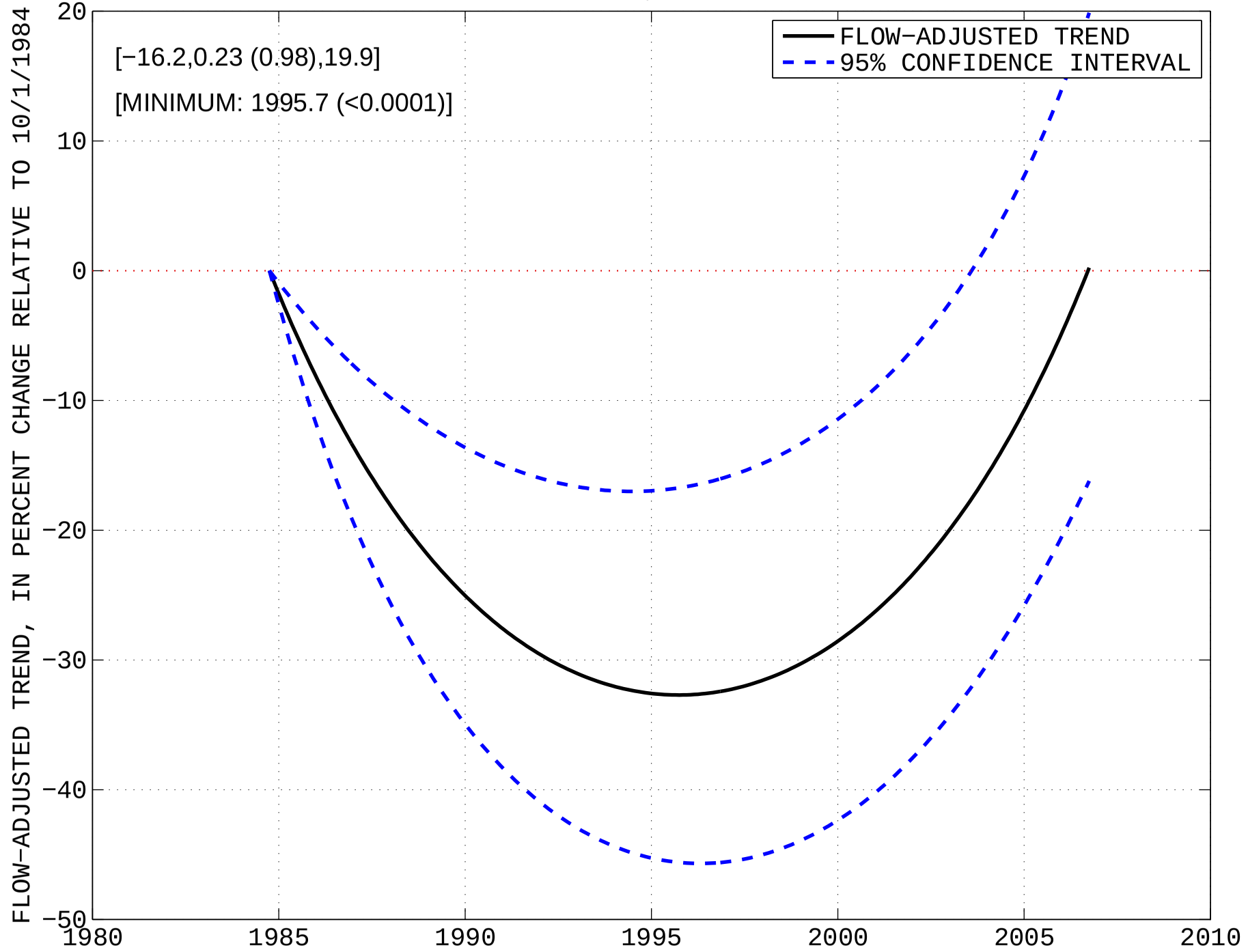

01673000: PAMUNKEY RIVER NEAR HANOVER, VA: 00631: DISSOLVED NITRITE PLUS NITRATE
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
[34.2,52.8 (<0.0001),74.1]
[NO EXTREMUM (0.317)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
80
70
60
50
40
30
20
10
0
-10
1980
1985
1990
1995
2000
2005
2010

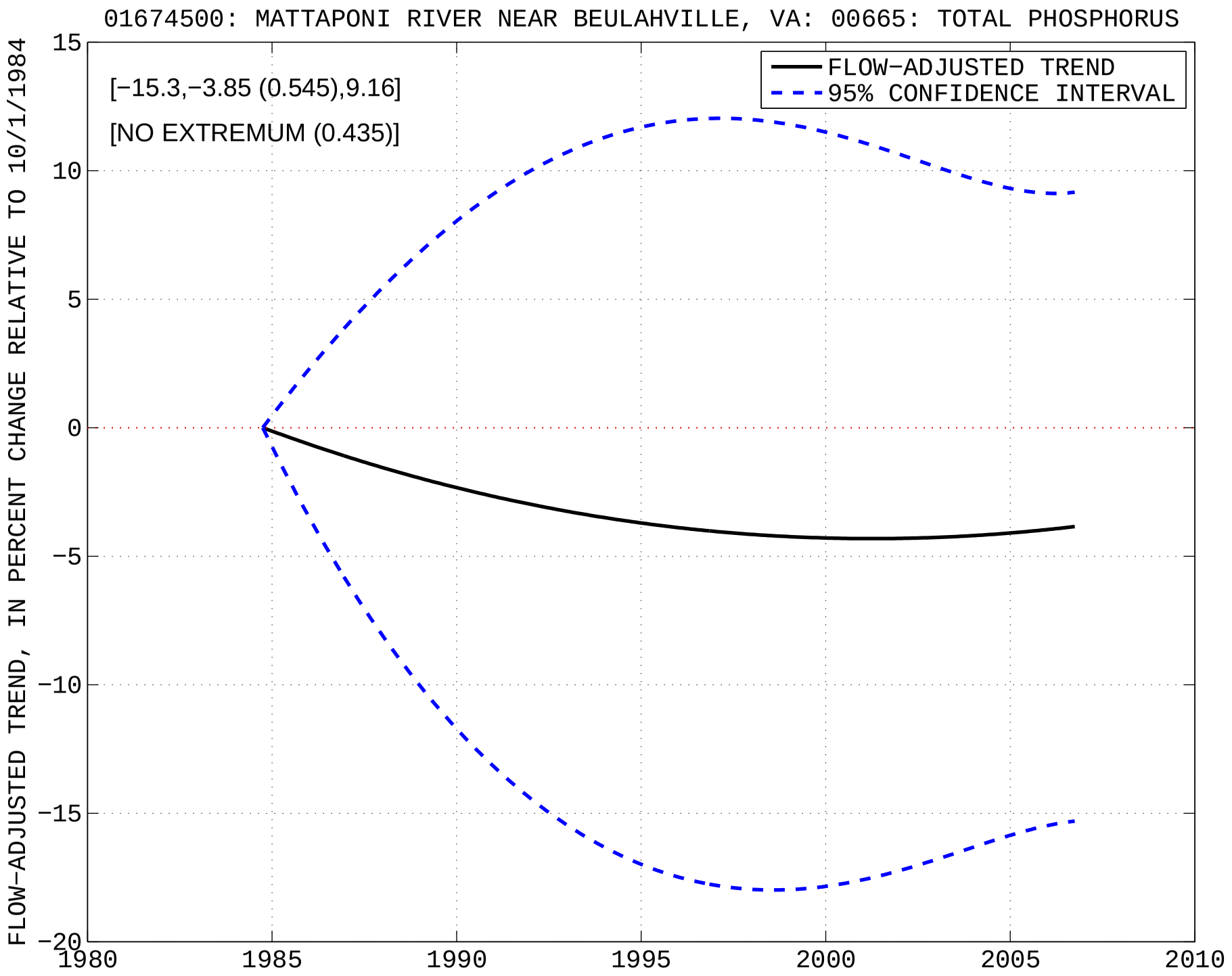

01673000: PAMUNKEY RIVER NEAR HANOVER, VA: 00665: TOTAL PHOSPHORUS
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[87.9,122 (<0.0001),161]
[NO EXTREMUM (0.993)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
180
160
140
120
100
80
60
40
20
0
-20
1980
1985
1990
1995
2000
2005
2010

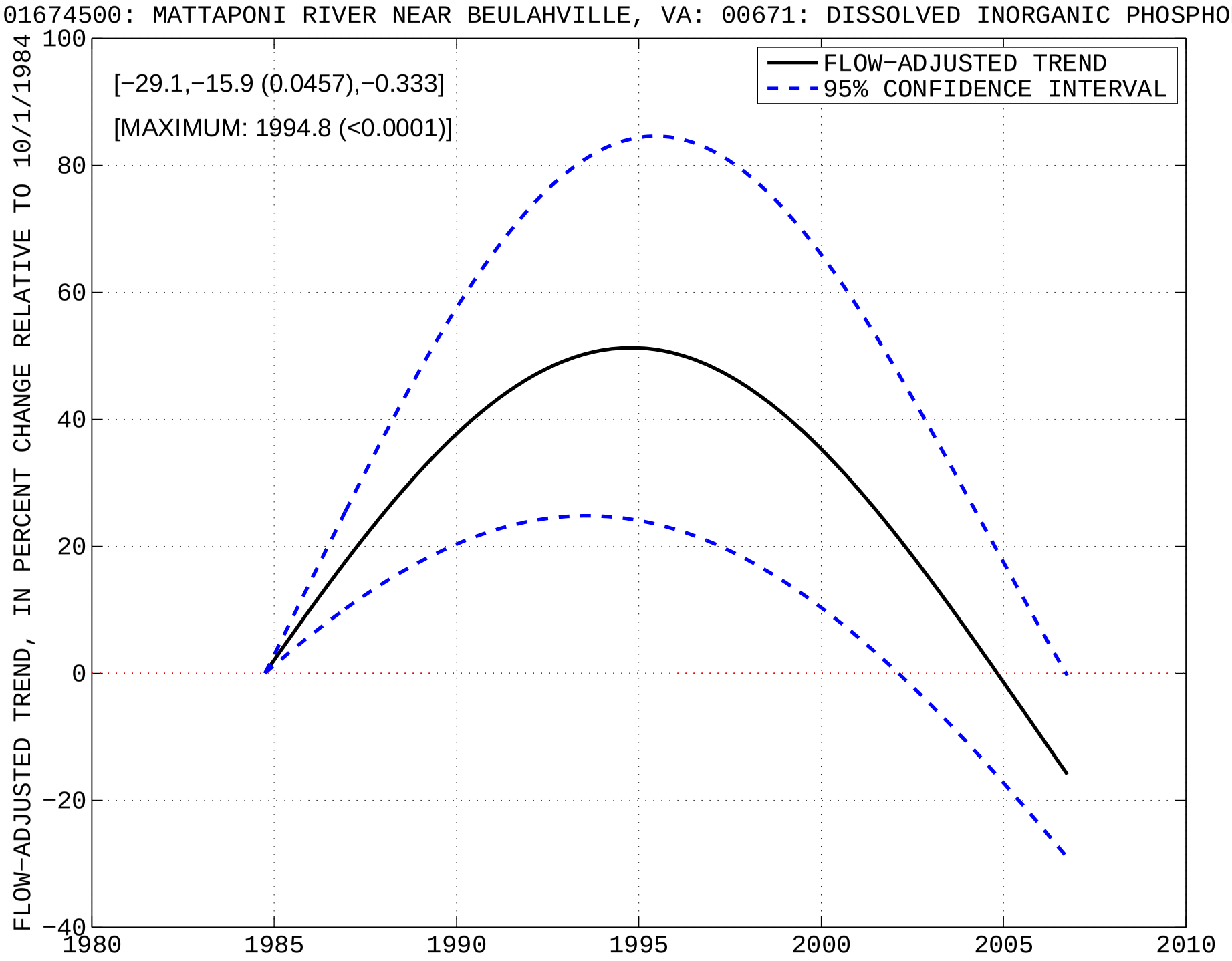

01673000: PAMUNKEY RIVER NEAR HANOVER, VA: 00671: DISSOLVED INORGANIC PHOSPHORUS
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
200
150
100
50
0
-50
1980
1985
1990
1995
2000
2005
2010
[108,146 (<0.0001),190]
[NO EXTREMUM (0.645)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL

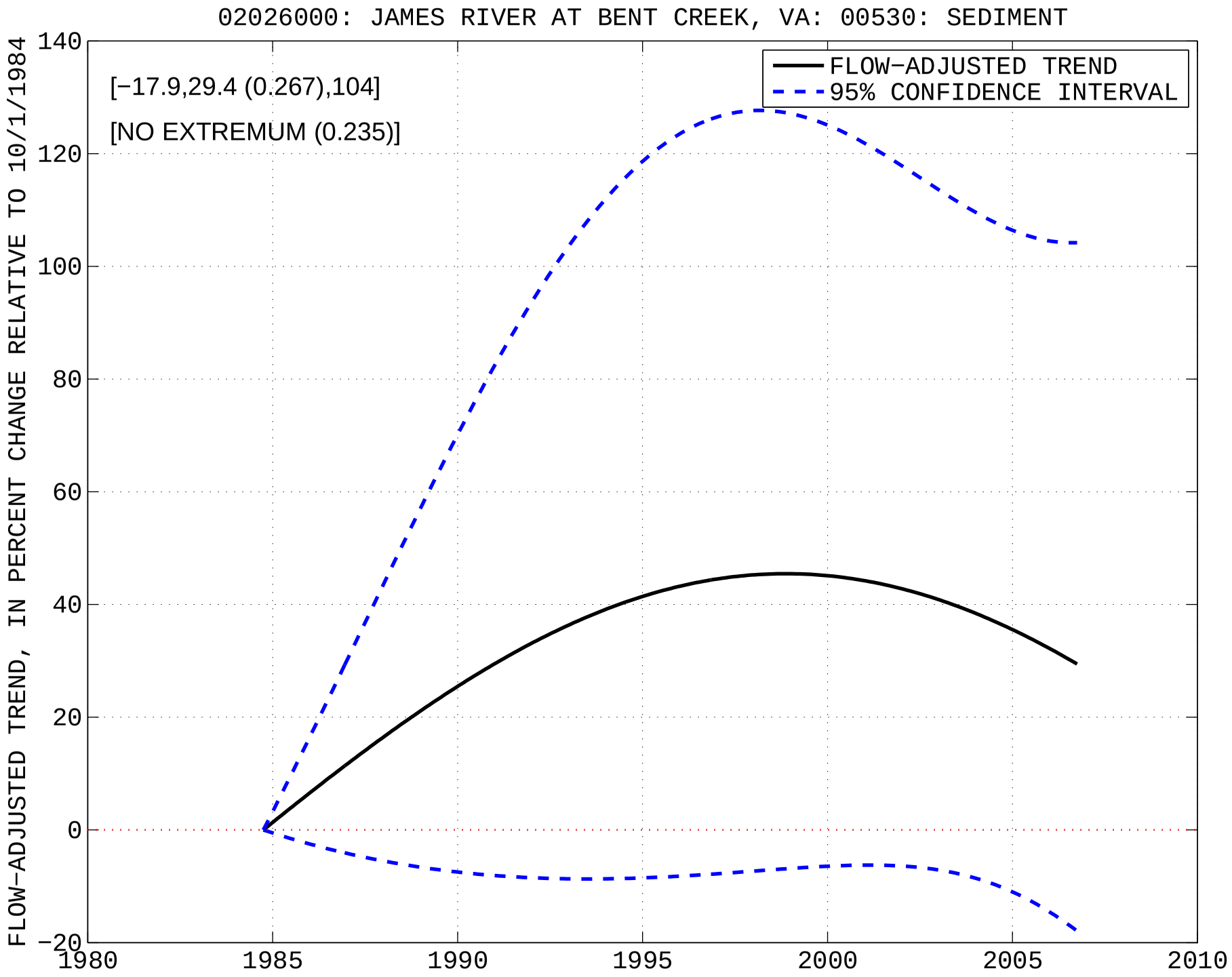

01674500: MATTAPONI RIVER NEAR BEULAHVILLE, VA: 00530: SEDIMENT
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1988
[-9.83,12.8 (0.292),41.1]
[NO EXTREMUM (0.275)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
50
40
30
20
10
0
-10
-20
1980
1985
1990
1995
2000
2005
2010

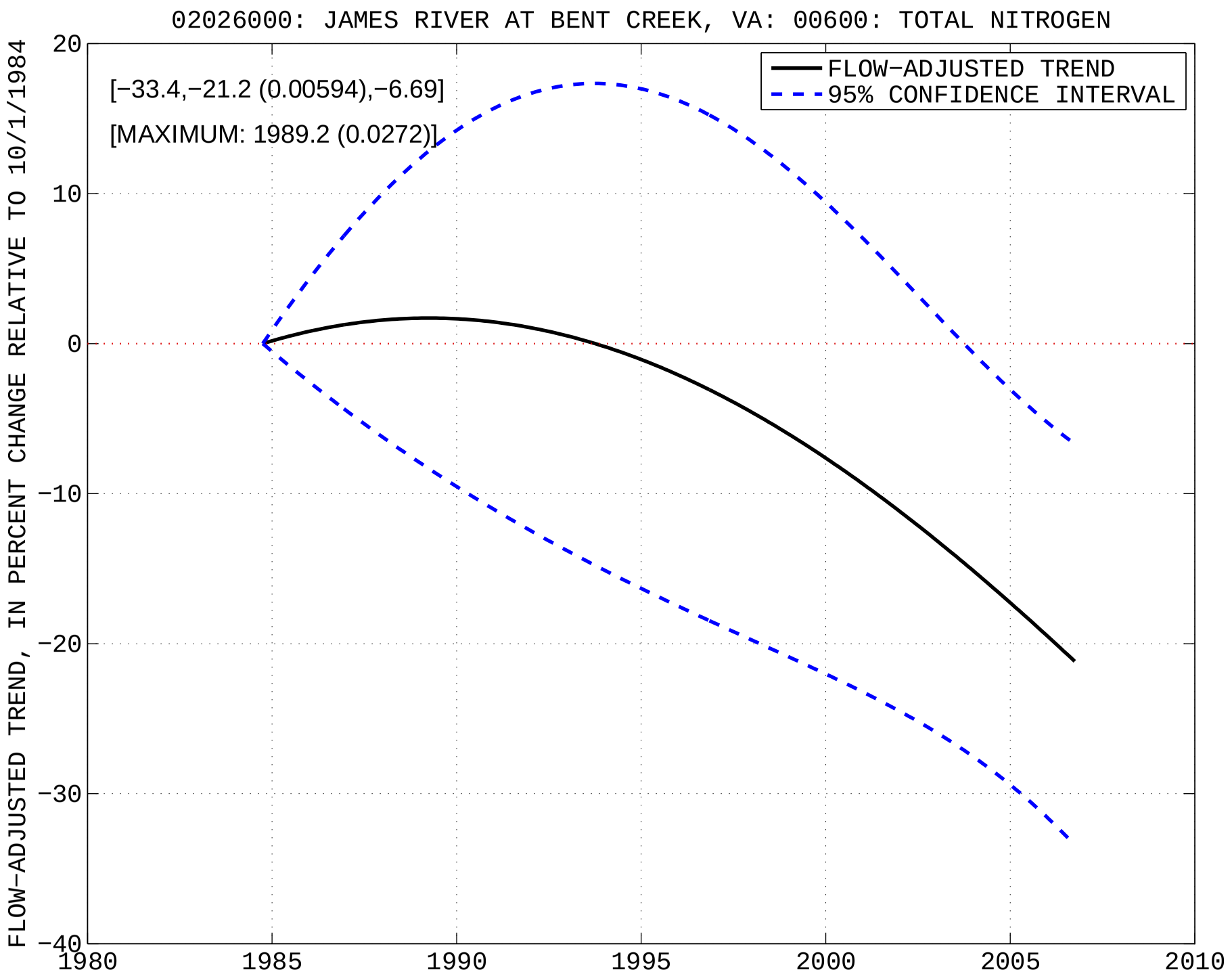

01674500: MATTAPONI RIVER NEAR BEULAHVILLE, VA: 00600: TOTAL NITROGEN
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[−16.4,−9.75 (0.0088),−2.56]
[MINIMUM: 1996.8 (<0.0001)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
5
0
−5
−10
−15
−20
−25
−30
−35
1980
1985
1990
1995
2000
2005
2010

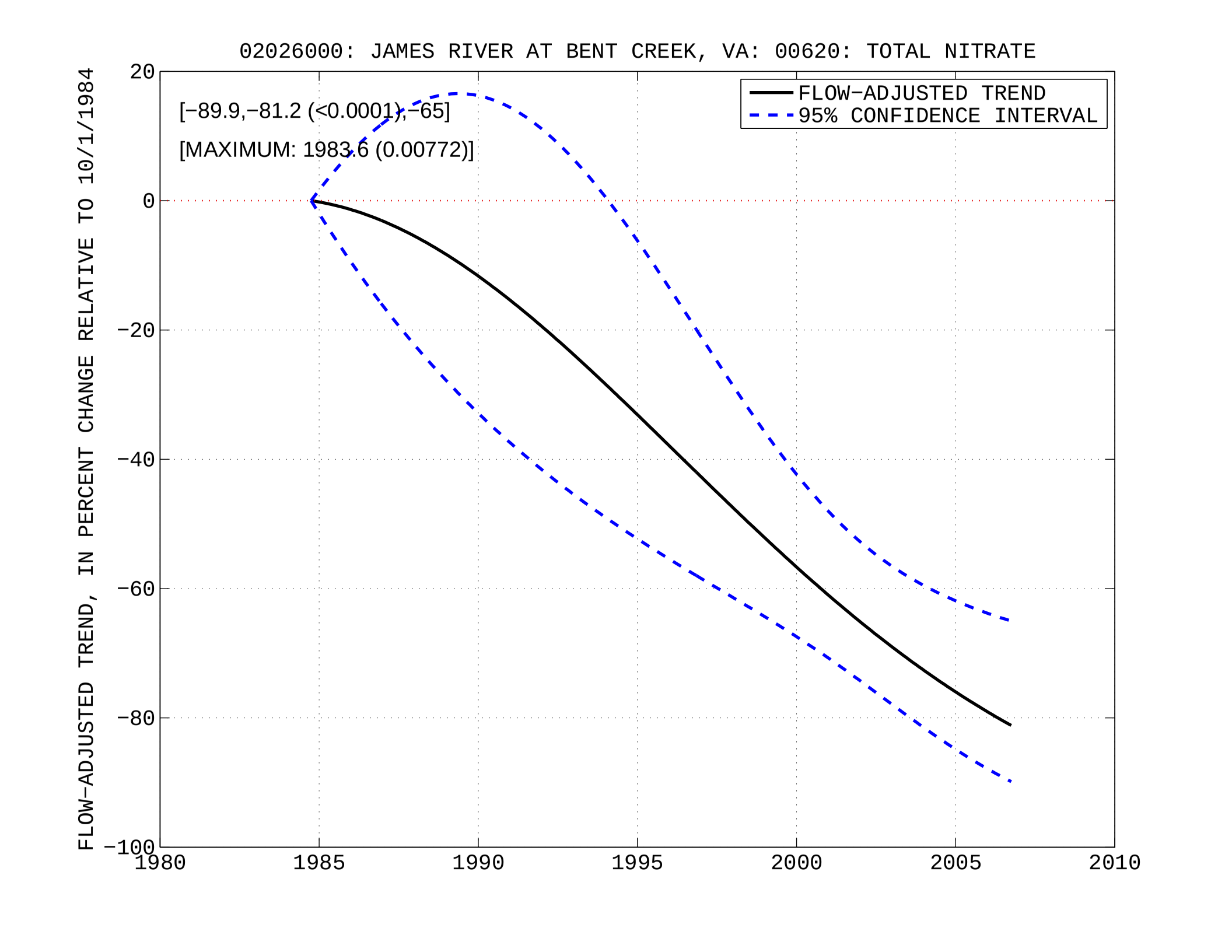

01674500: MATTAPONI RIVER NEAR BEULAHVILLE, VA: 00631: DISSOLVED NITRITE PLUS NITRATE
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
[-16.2,0.23 (0.98),19.9]
[MINIMUM: 1995.7 (<0.0001)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
20
10
0
-10
-20
-30
-40
-50
1980
1985
1990
1995
2000
2005
2010

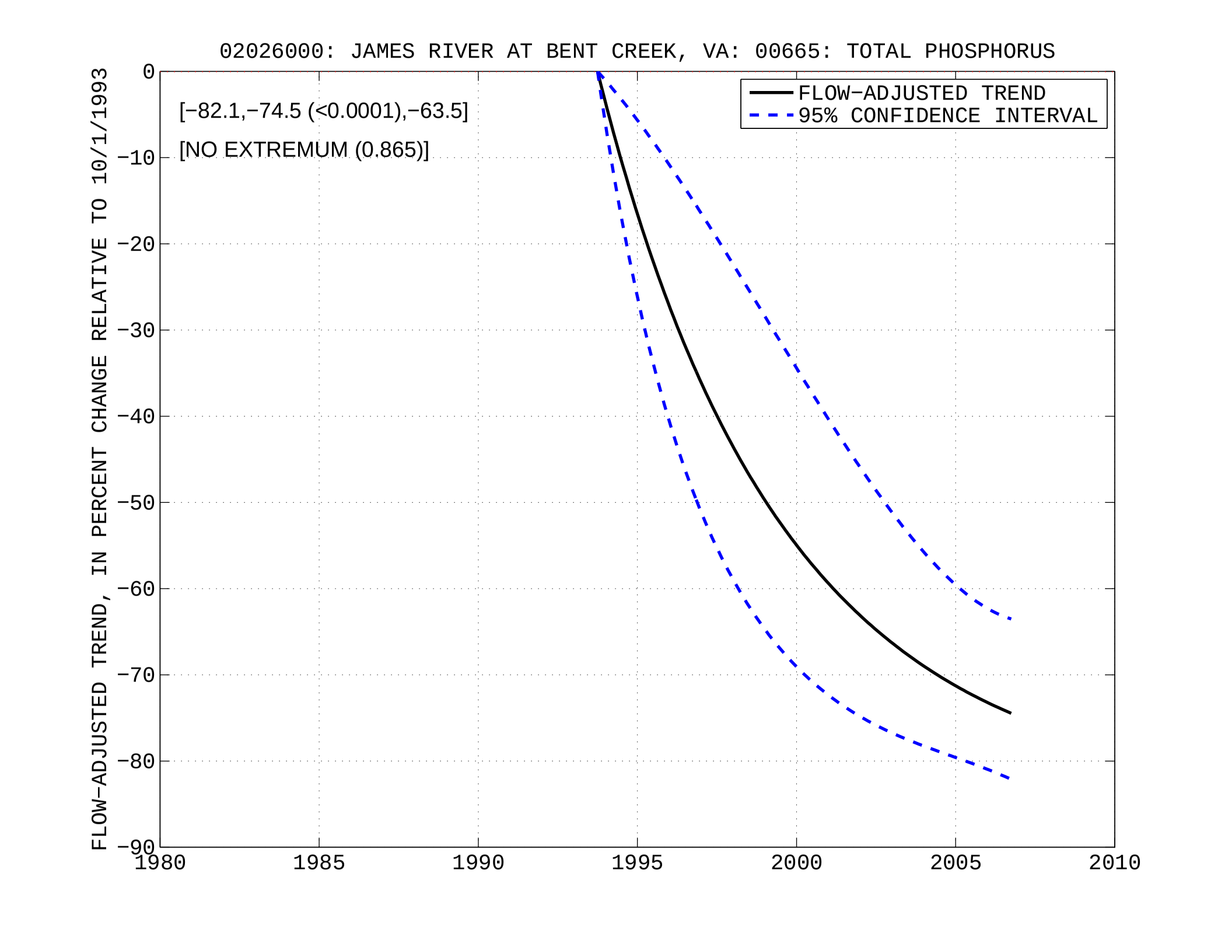

01674500: MATTAPONI RIVER NEAR BEULAHVILLE, VA: 00665: TOTAL PHOSPHORUS
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
[−15.3,−3.85 (0.545),9.16]
[NO EXTREMUM (0.435)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
15
10
5
0
−5
−10
−15
−20
1980
1985
1990
1995
2000
2005
2010

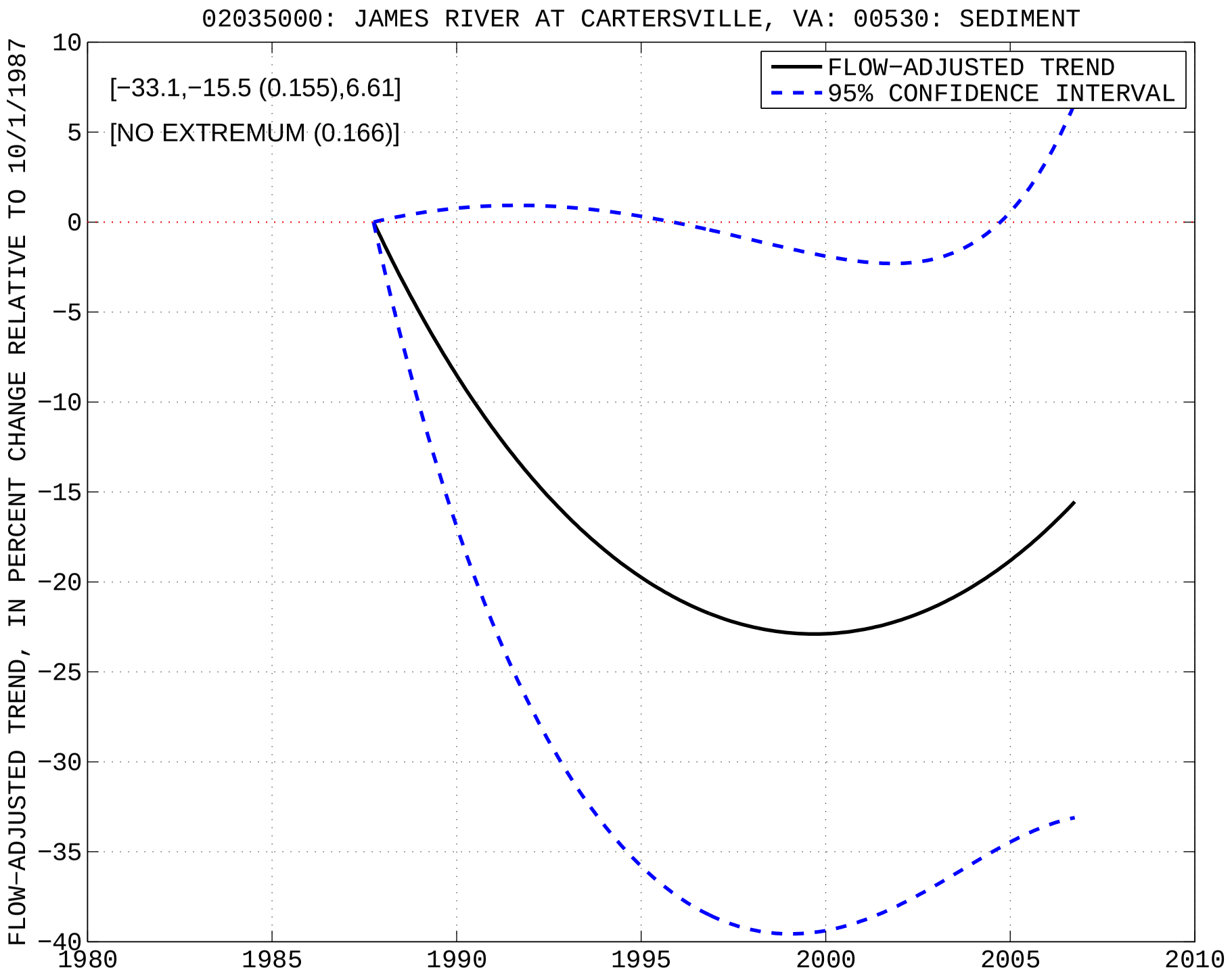

01674500: MATTAPONI RIVER NEAR BEULAHVILLE, VA: 00671: DISSOLVED INORGANIC PHOSPHORUS
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[−29.1,−15.9 (0.0457),−0.333]
[MAXIMUM: 1994.8 (<0.0001)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
100
80
60
40
20
0
−20
−40
1980
1985
1990
1995
2000
2005
2010

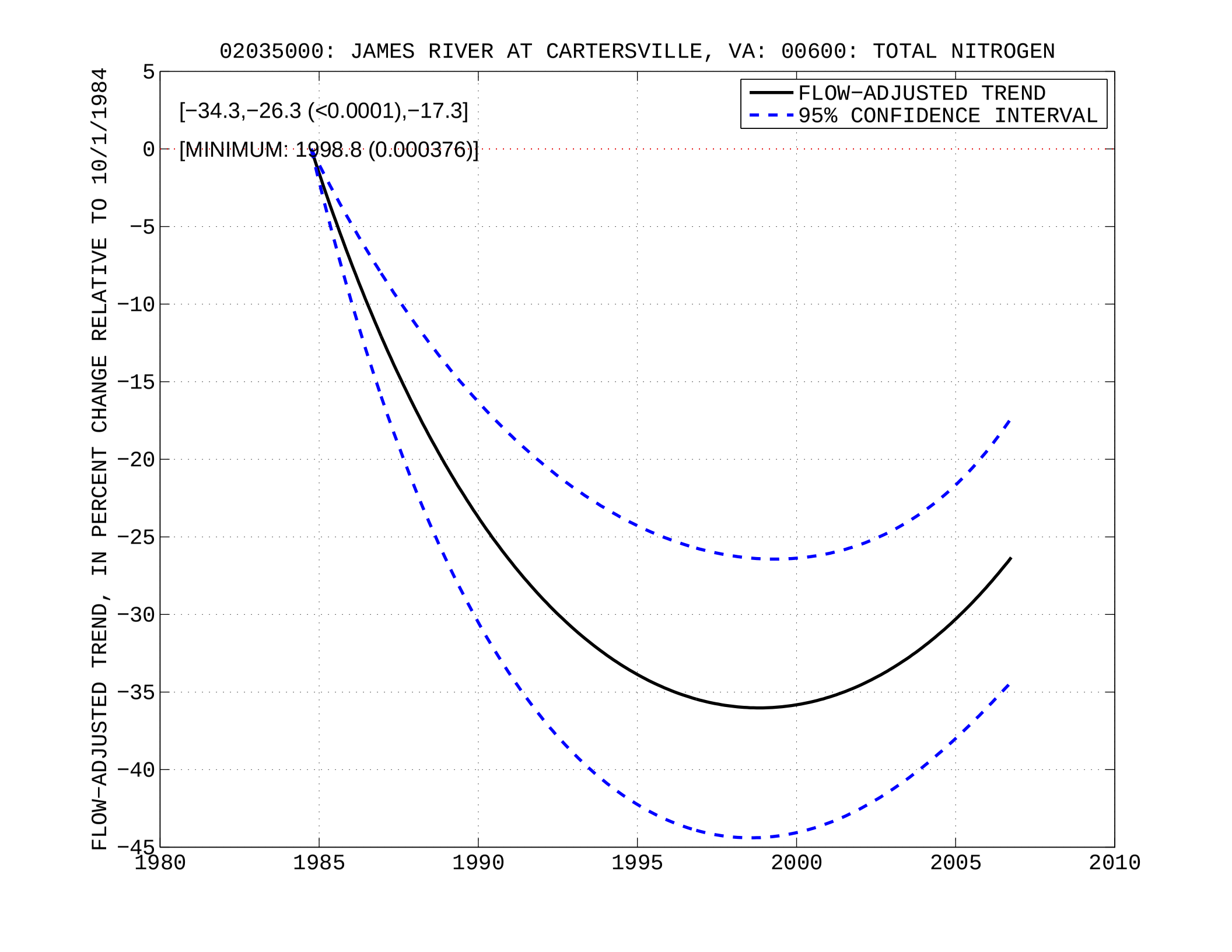

02026000: JAMES RIVER AT BENT CREEK, VA: 00530: SEDIMENT
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[−17.9,29.4 (0.267),104]
[NO EXTREMUM (0.235)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
140
120
100
80
60
40
20
0
−20
1980
1985
1990
1995
2000
2005
2010

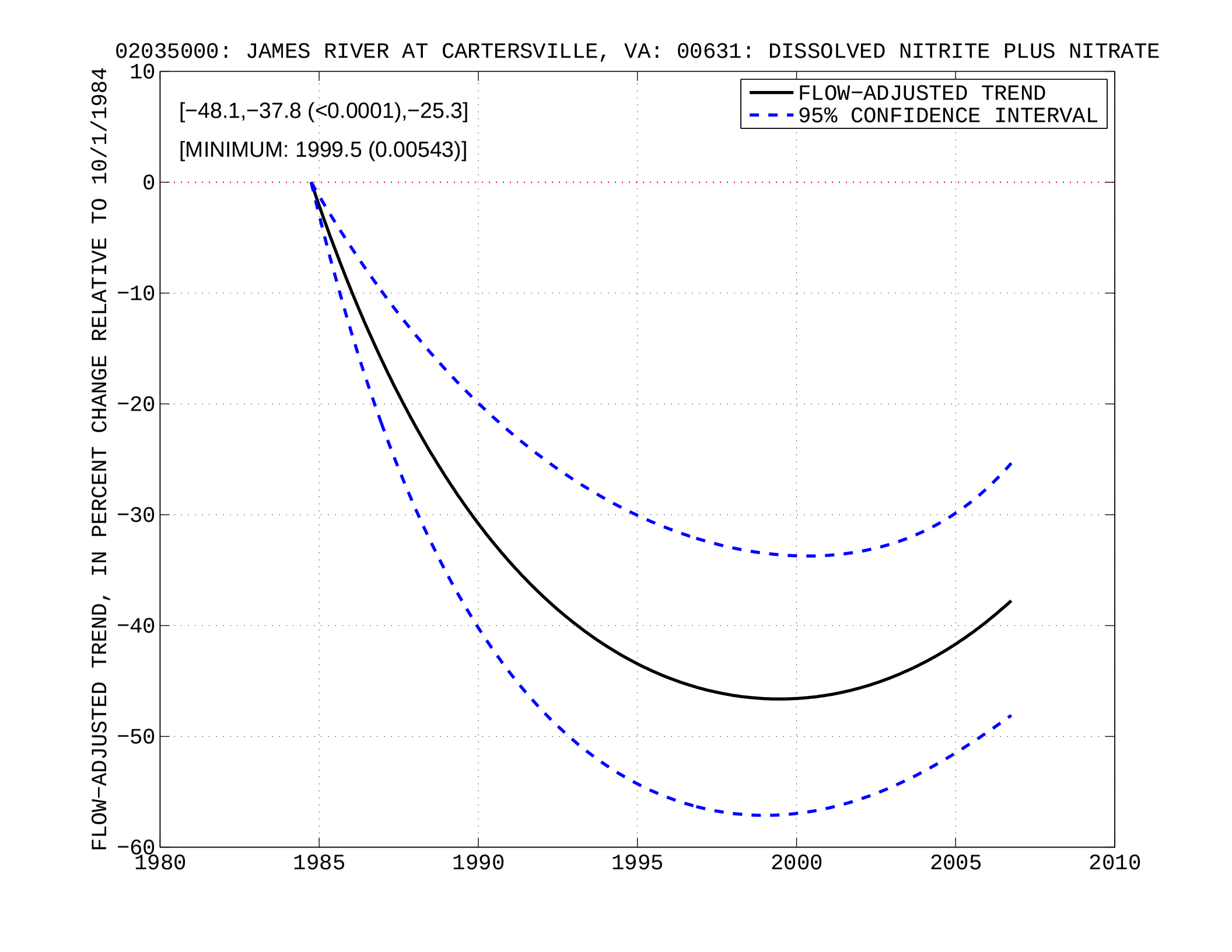

02026000: JAMES RIVER AT BENT CREEK, VA: 00600: TOTAL NITROGEN
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
[−33.4,−21.2 (0.00594),−6.69]
[MAXIMUM: 1989.2 (0.0272)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
20
10
0
−10
−20
−30
−40
1980
1985
1990
1995
2000
2005
2010

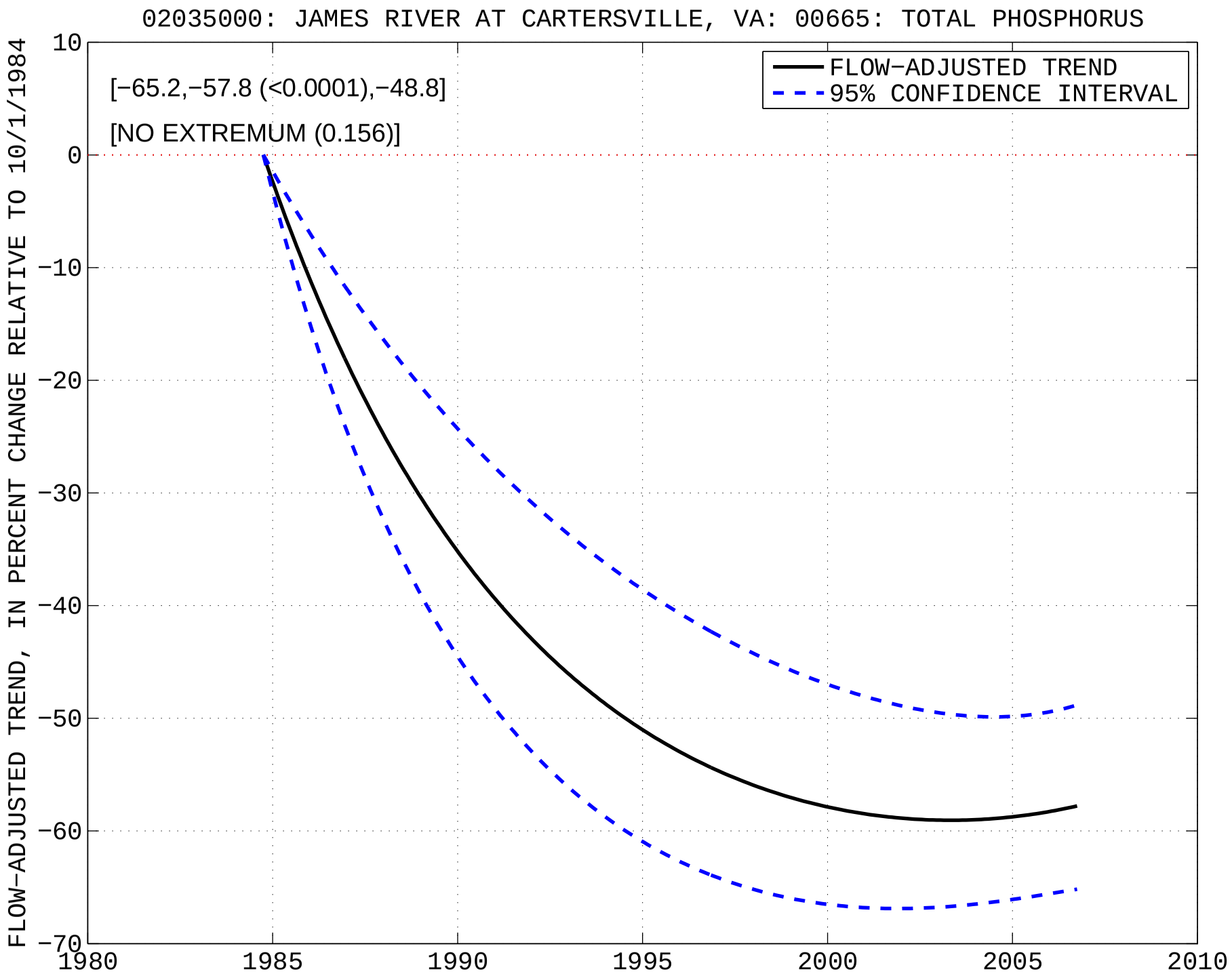

02026000: JAMES RIVER AT BENT CREEK, VA: 00620: TOTAL NITRATE
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[−89.9,−81.2 (<0.0001),−65]
[MAXIMUM: 1983.6 (0.00772)]
20
0
−20
−40
−60
−80
−100
1980
1985
1990
1995
2000
2005
2010

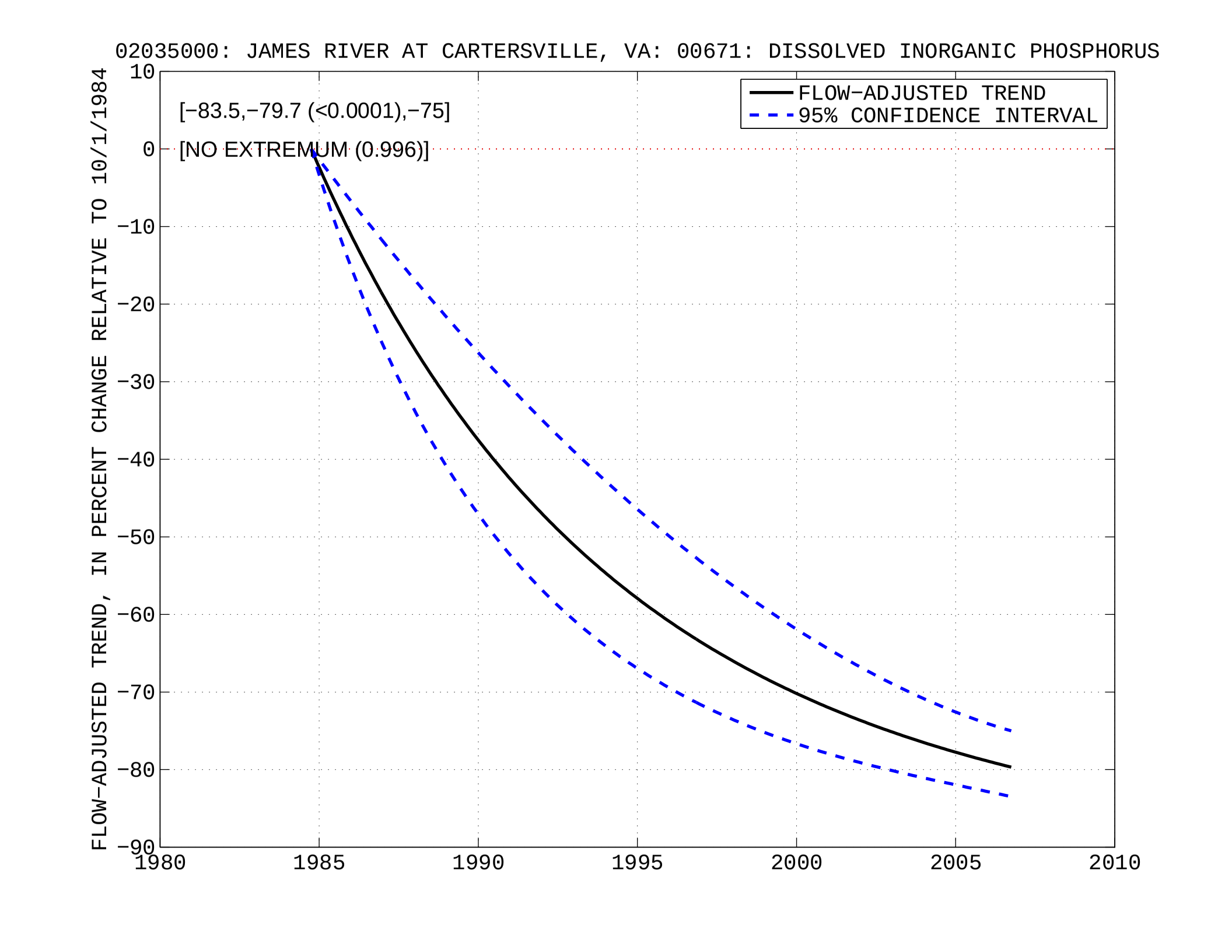

02026000: JAMES RIVER AT BENT CREEK, VA: 00665: TOTAL PHOSPHORUS
[−82.1,−74.5 (<0.0001),−63.5]
[NO EXTREMUM (0.865)]
FLOW−ADJUSTED TREND
95% CONFIDENCE INTERVAL
FLOW−ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1993
0
−10
−20
−30
−40
−50
−60
−70
−80
−90
1980
1985
1990
1995
2000
2005
2010

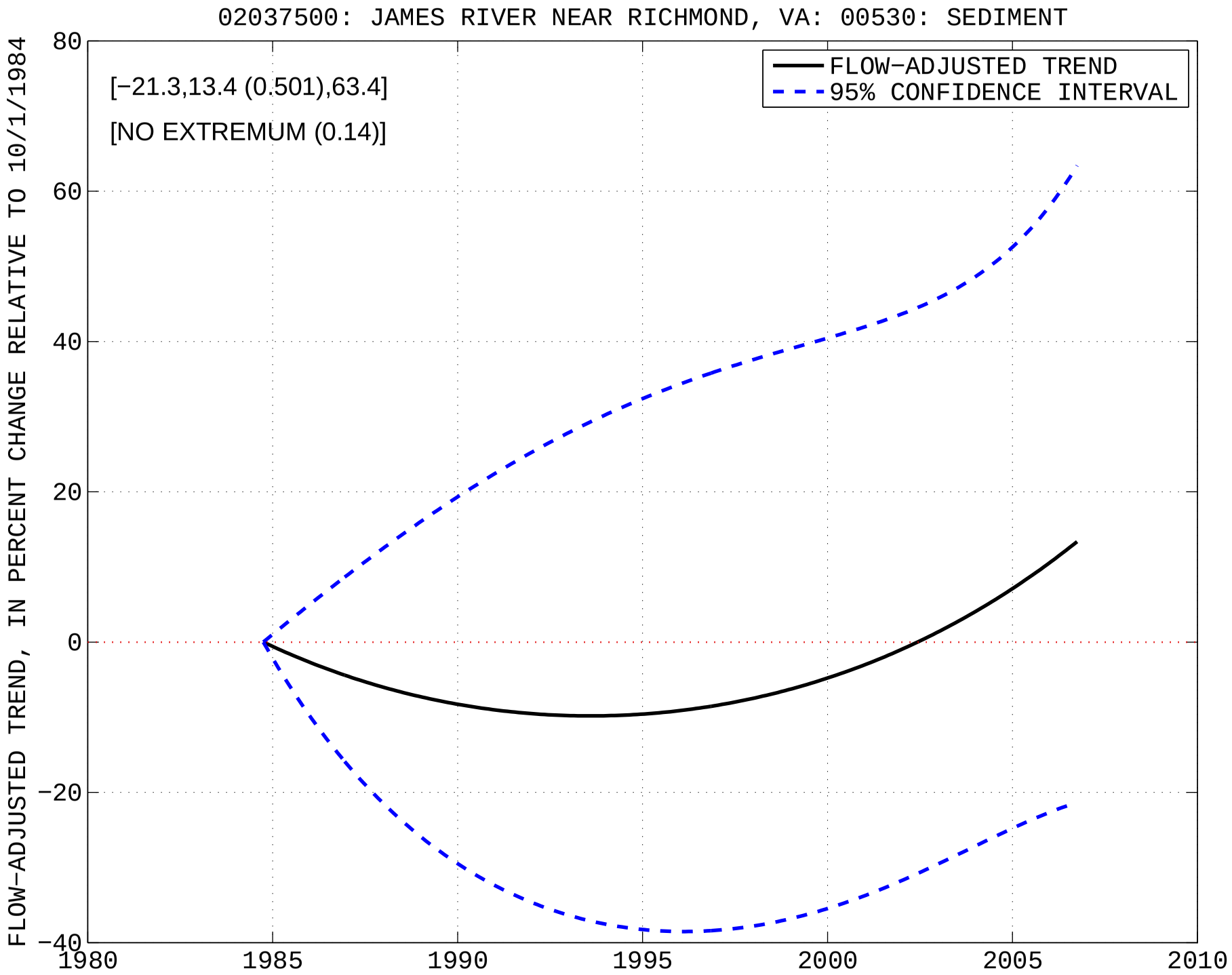

02035000: JAMES RIVER AT CARTERSVILLE, VA: 00530: SEDIMENT
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[−33.1,−15.5 (0.155),6.61]
[NO EXTREMUM (0.166)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1987
10
5
0
−5
−10
−15
−20
−25
−30
−35
−40
1980
1985
1990
1995
2000
2005
2010

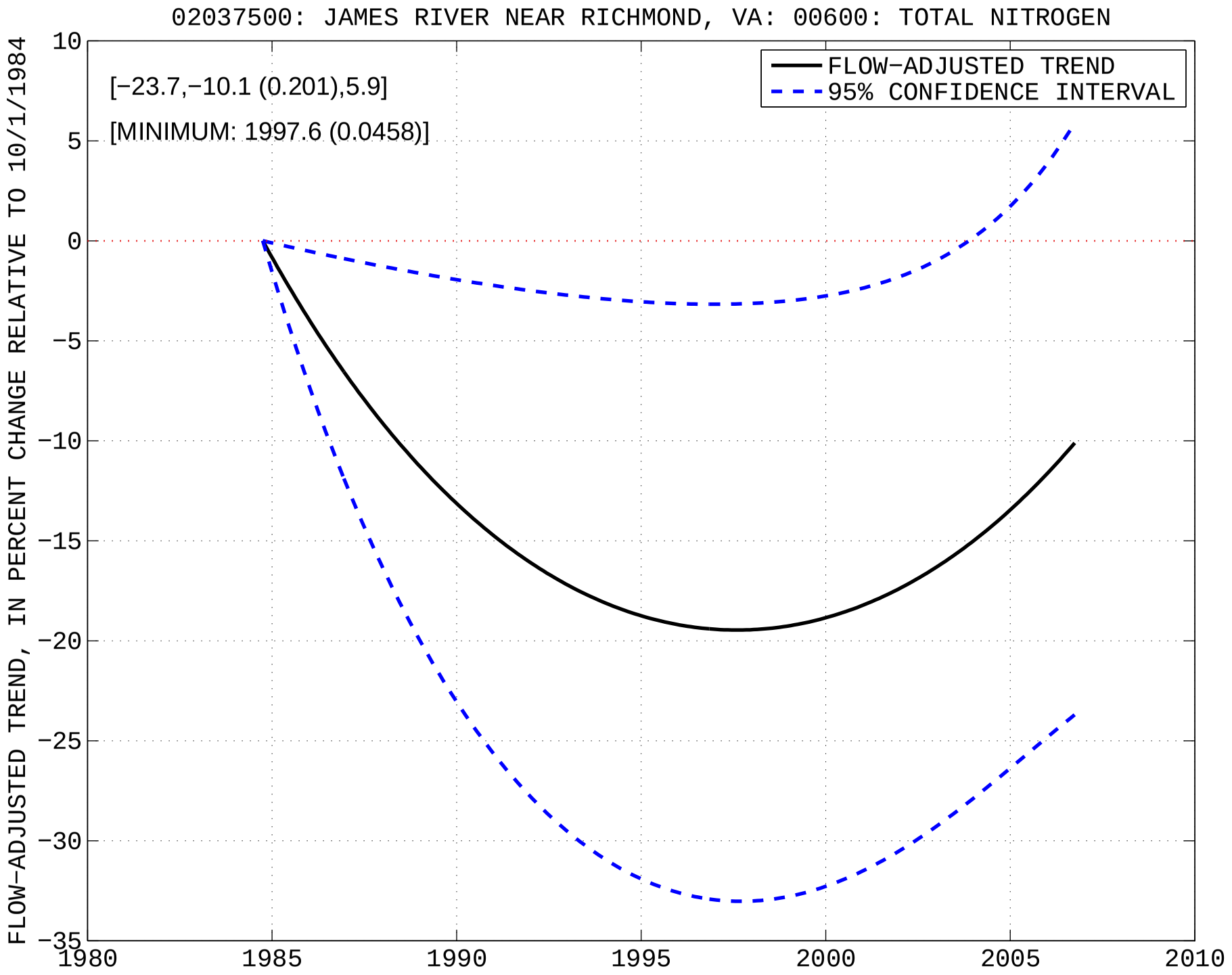

02035000: JAMES RIVER AT CARTERSVILLE, VA: 00600: TOTAL NITROGEN
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[−34.3,−26.3 (<0.0001),−17.3]
[MINIMUM: 1998.8 (0.000376)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
5
0
−5
−10
−15
−20
−25
−30
−35
−40
−45
1980
1985
1990
1995
2000
2005
2010

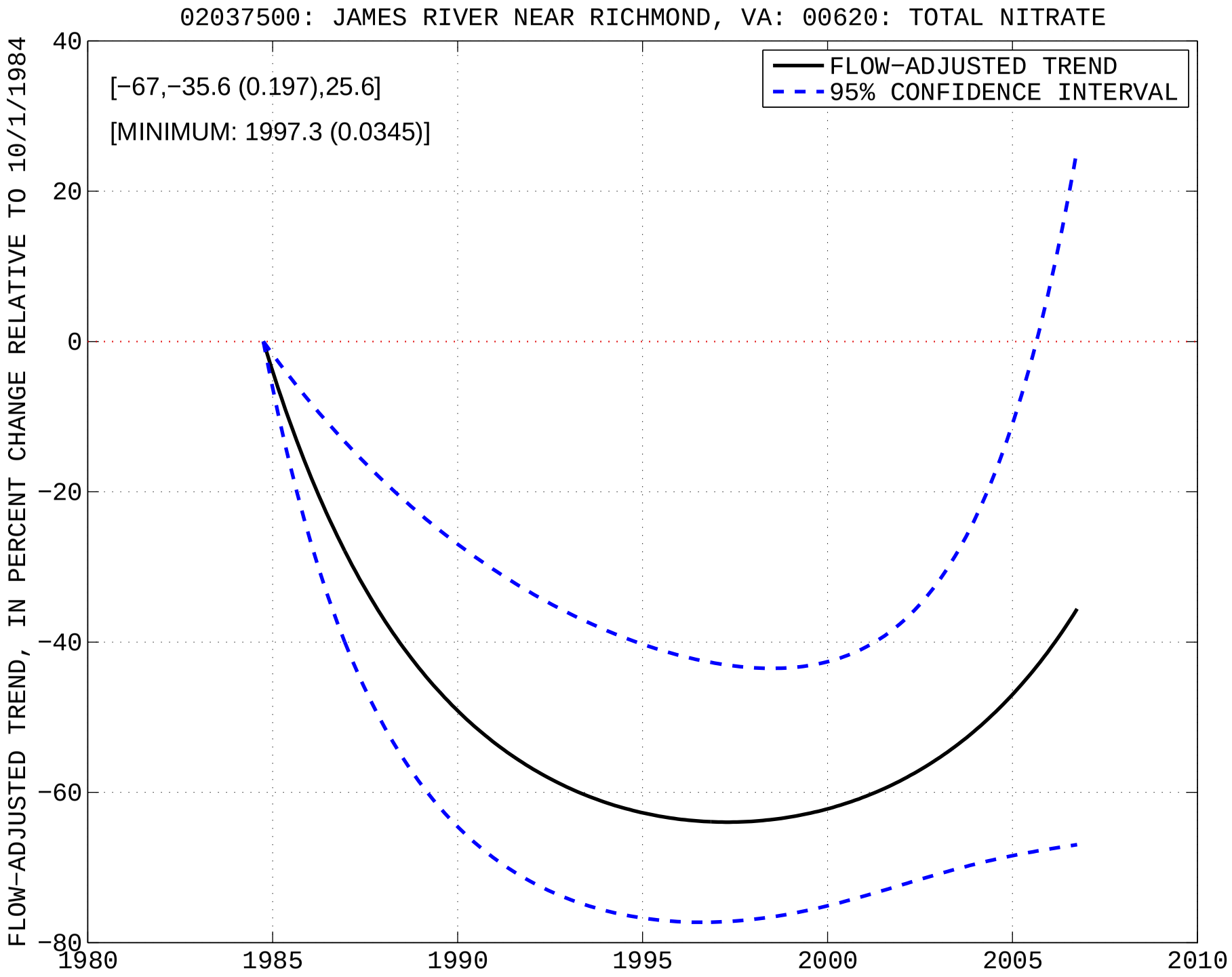

02035000: JAMES RIVER AT CARTERSVILLE, VA: 00631: DISSOLVED NITRITE PLUS NITRATE
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
[−48.1,−37.8 (<0.0001),−25.3]
[MINIMUM: 1999.5 (0.00543)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
10
0
−10
−20
−30
−40
−50
−60
1980
1985
1990
1995
2000
2005
2010

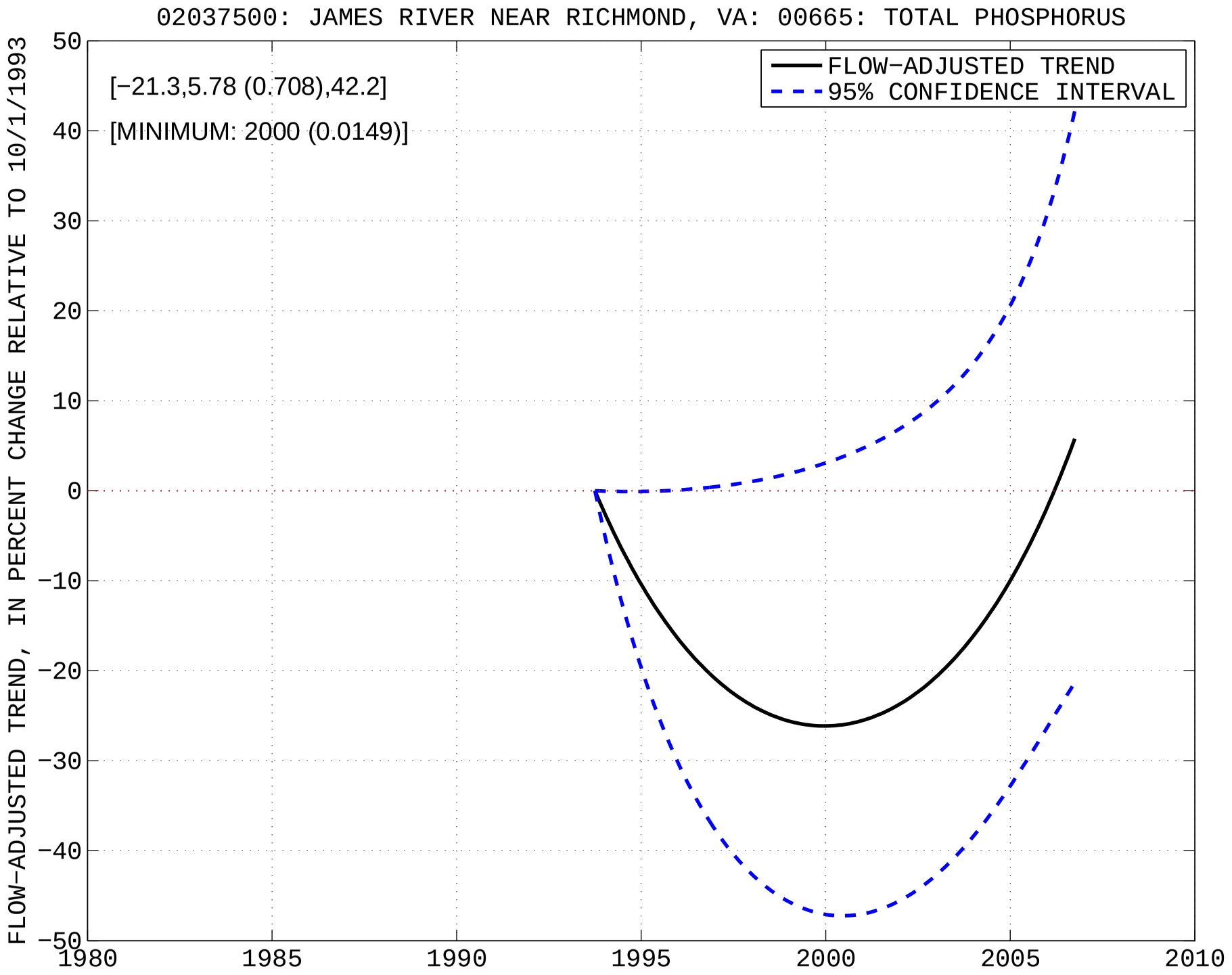

02035000: JAMES RIVER AT CARTERSVILLE, VA: 00665: TOTAL PHOSPHORUS
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[−65.2,−57.8 (<0.0001),−48.8]
[NO EXTREMUM (0.156)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
10
0
−10
−20
−30
−40
−50
−60
−70
1980
1985
1990
1995
2000
2005
2010

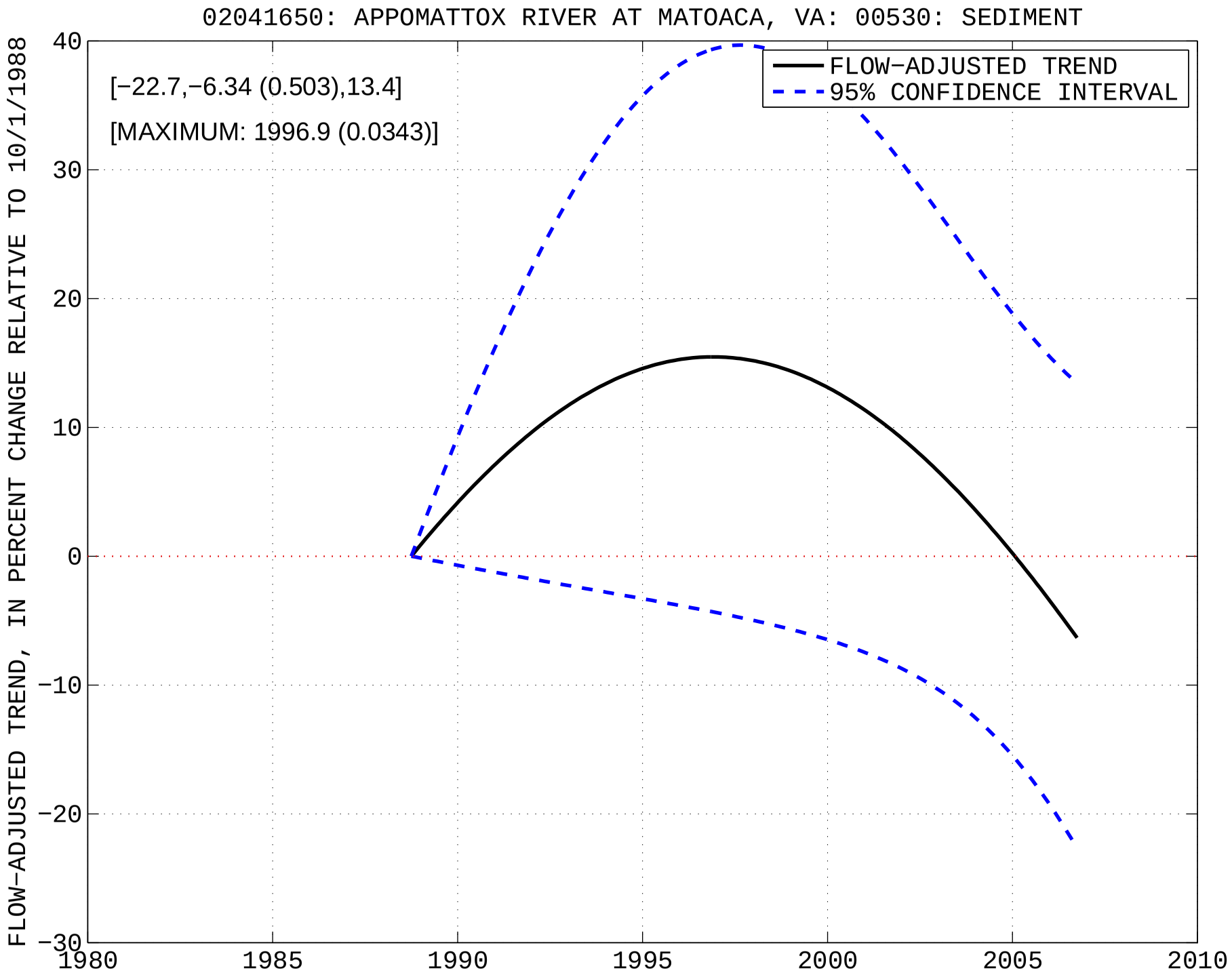

02035000: JAMES RIVER AT CARTERSVILLE, VA: 00671: DISSOLVED INORGANIC PHOSPHORUS
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
10
0
-10
-20
-30
-40
-50
-60
-70
-80
-90
1980
1985
1990
1995
2000
2005
2010
[-83.5,-79.7 (<0.0001),-75]
[NO EXTREMUM (0.996)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL

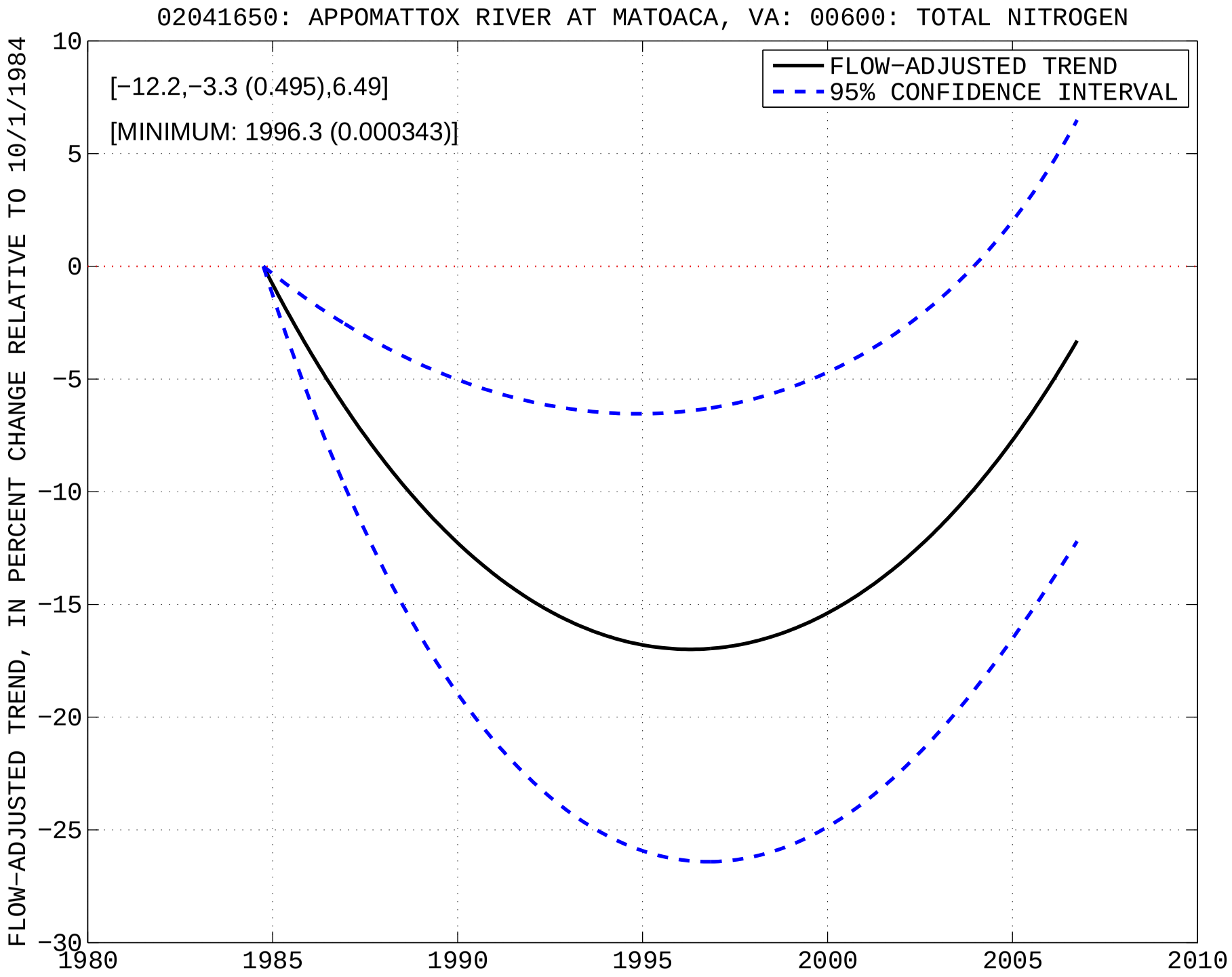

02037500: JAMES RIVER NEAR RICHMOND, VA: 00530: SEDIMENT
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
[−21.3,13.4 (0.501),63.4]
[NO EXTREMUM (0.14)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
80
60
40
20
0
−20
−40
1980
1985
1990
1995
2000
2005
2010

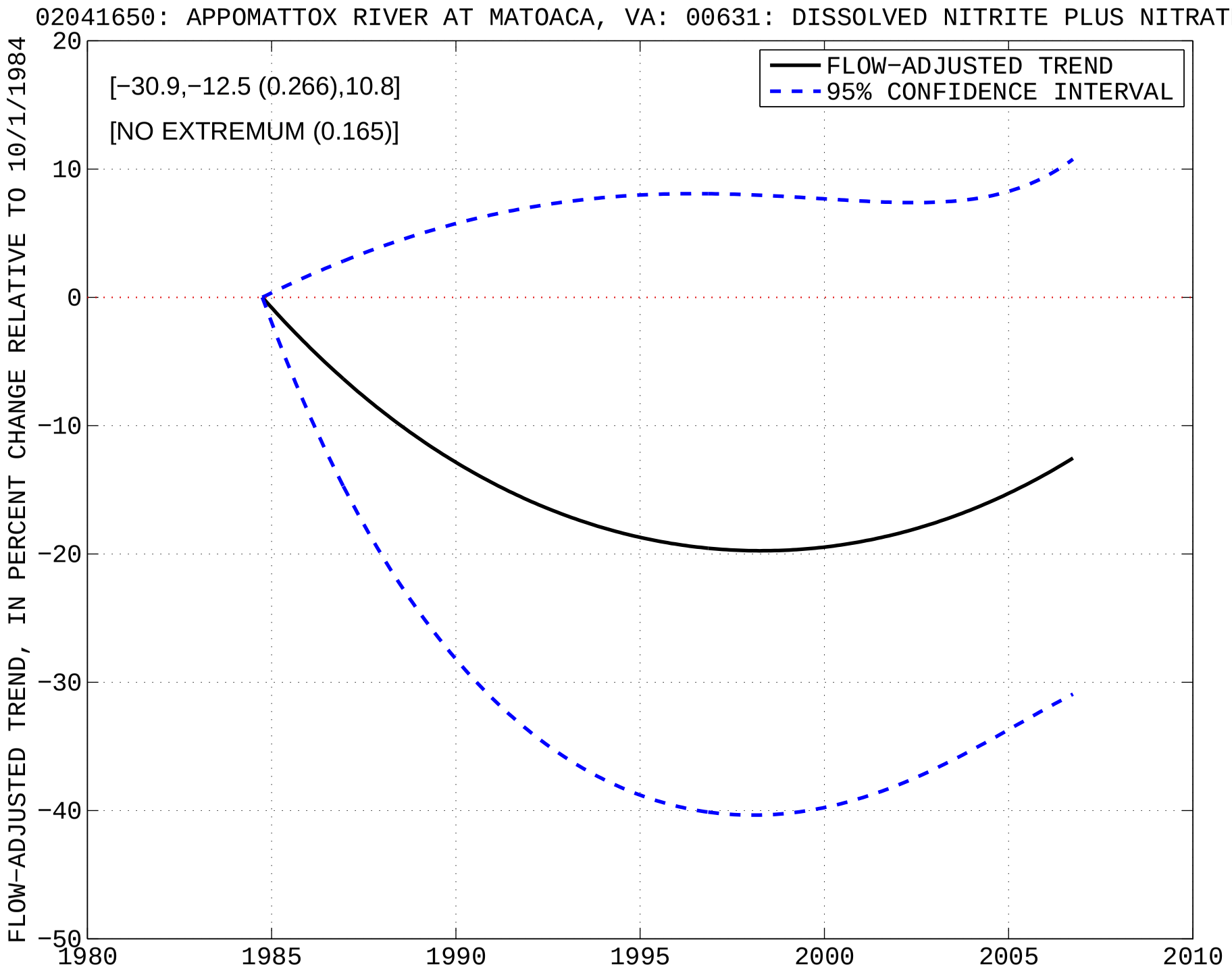

02037500: JAMES RIVER NEAR RICHMOND, VA: 00600: TOTAL NITROGEN
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[−23.7,−10.1 (0.201),5.9]
[MINIMUM: 1997.6 (0.0458)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
10
5
0
−5
−10
−15
−20
−25
−30
−35
1980
1985
1990
1995
2000
2005
2010

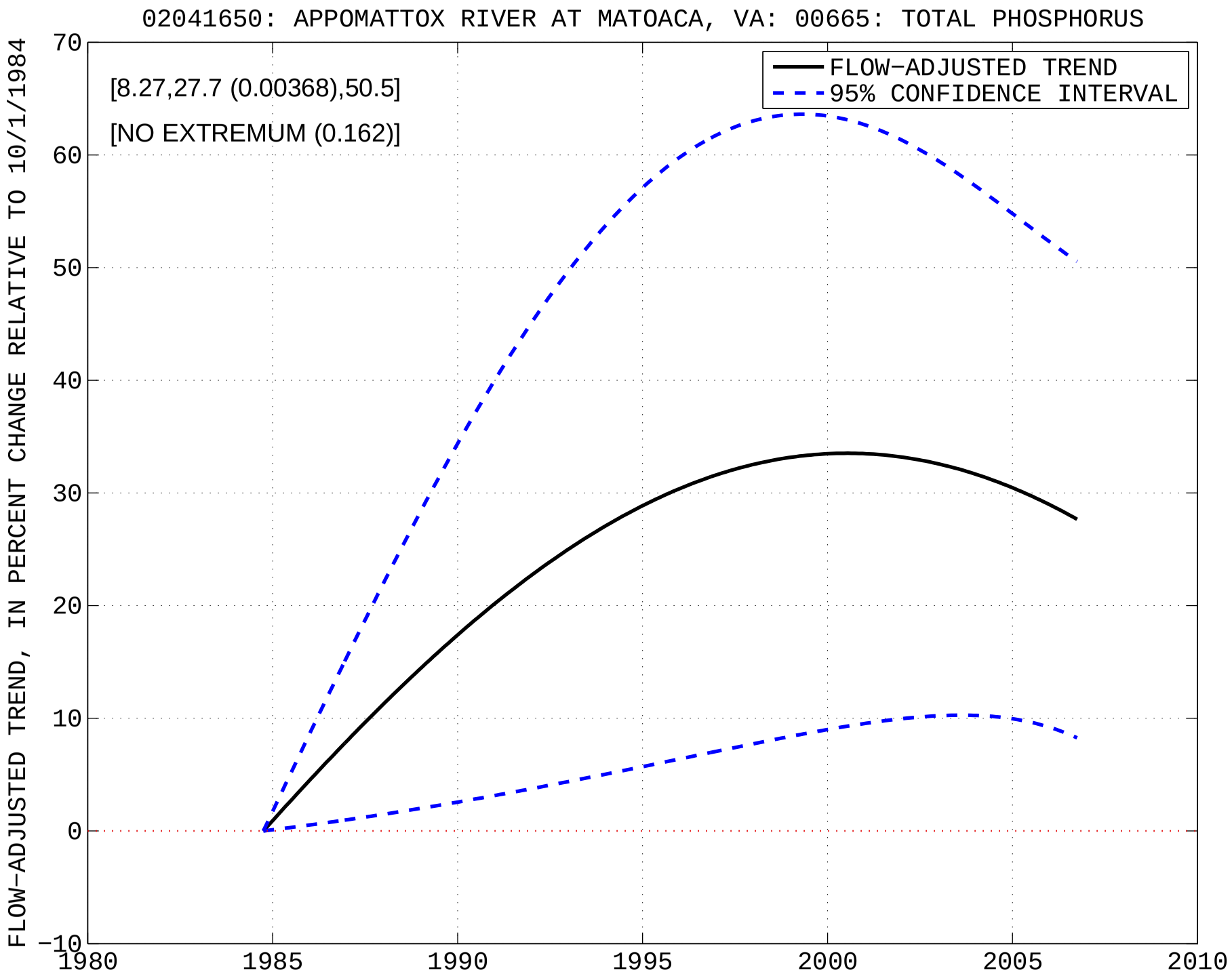

02037500: JAMES RIVER NEAR RICHMOND, VA: 00620: TOTAL NITRATE
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[−67,−35.6 (0.197),25.6]
[MINIMUM: 1997.3 (0.0345)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
40
20
0
−20
−40
−60
−80
1980
1985
1990
1995
2000
2005
2010

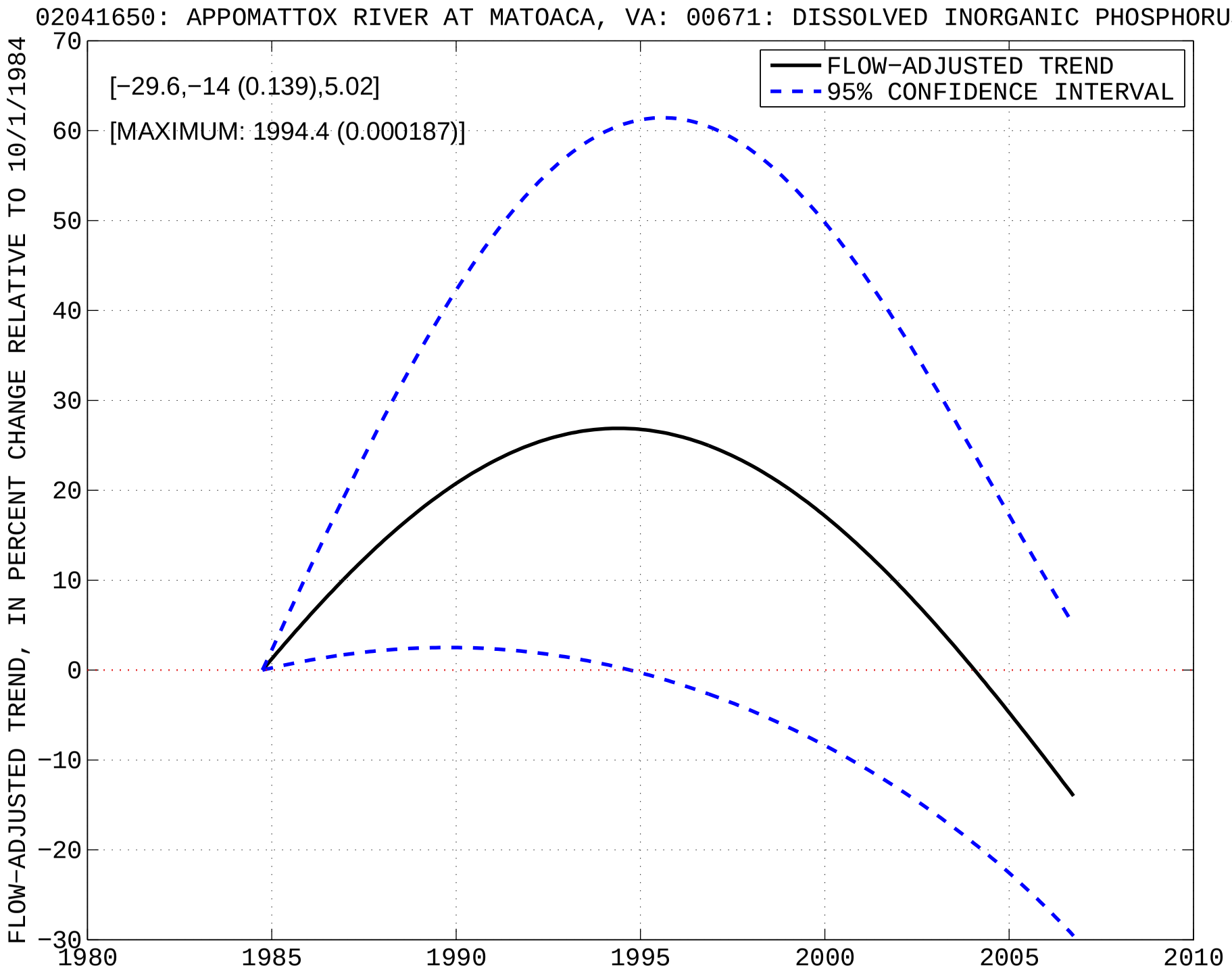

02037500: JAMES RIVER NEAR RICHMOND, VA: 00665: TOTAL PHOSPHORUS
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[-21.3,5.78 (0.708),42.2]
[MINIMUM: 2000 (0.0149)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1993
50
40
30
20
10
0
-10
-20
-30
-40
-50
1980
1985
1990
1995
2000
2005
2010

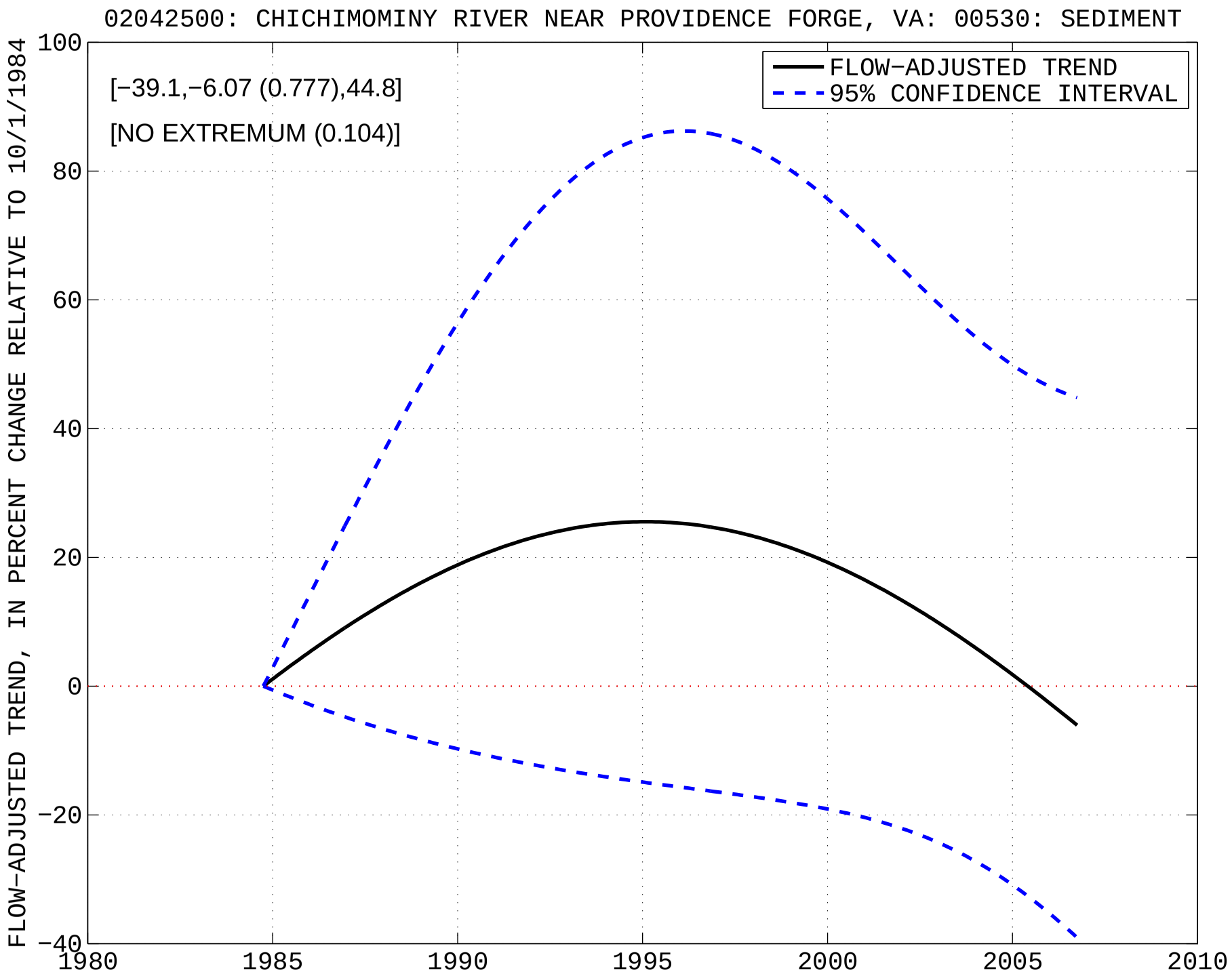

02041650: APPOMATTOX RIVER AT MATOACA, VA: 00530: SEDIMENT
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1988
[−22.7,−6.34 (0.503),13.4]
[MAXIMUM: 1996.9 (0.0343)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
40
30
20
10
0
−10
−20
−30
1980
1985
1990
1995
2000
2005
2010

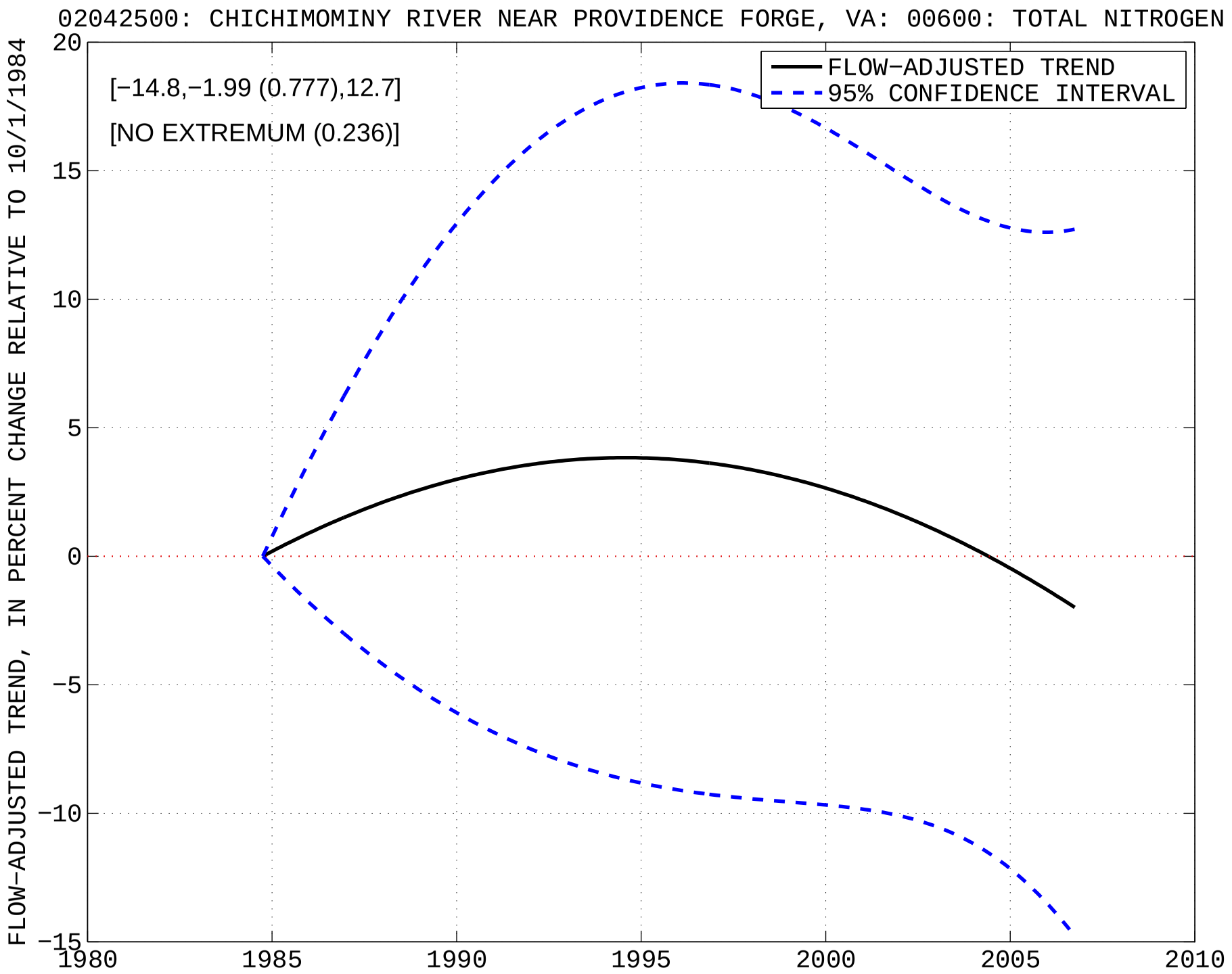

02041650: APPOMATTOX RIVER AT MATOACA, VA: 00600: TOTAL NITROGEN
[−12.2,−3.3 (0.495),6.49]
[MINIMUM: 1996.3 (0.000343)]
FLOW−ADJUSTED TREND
95% CONFIDENCE INTERVAL
FLOW−ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
10
5
0
−5
−10
−15
−20
−25
−30
1980
1985
1990
1995
2000
2005
2010

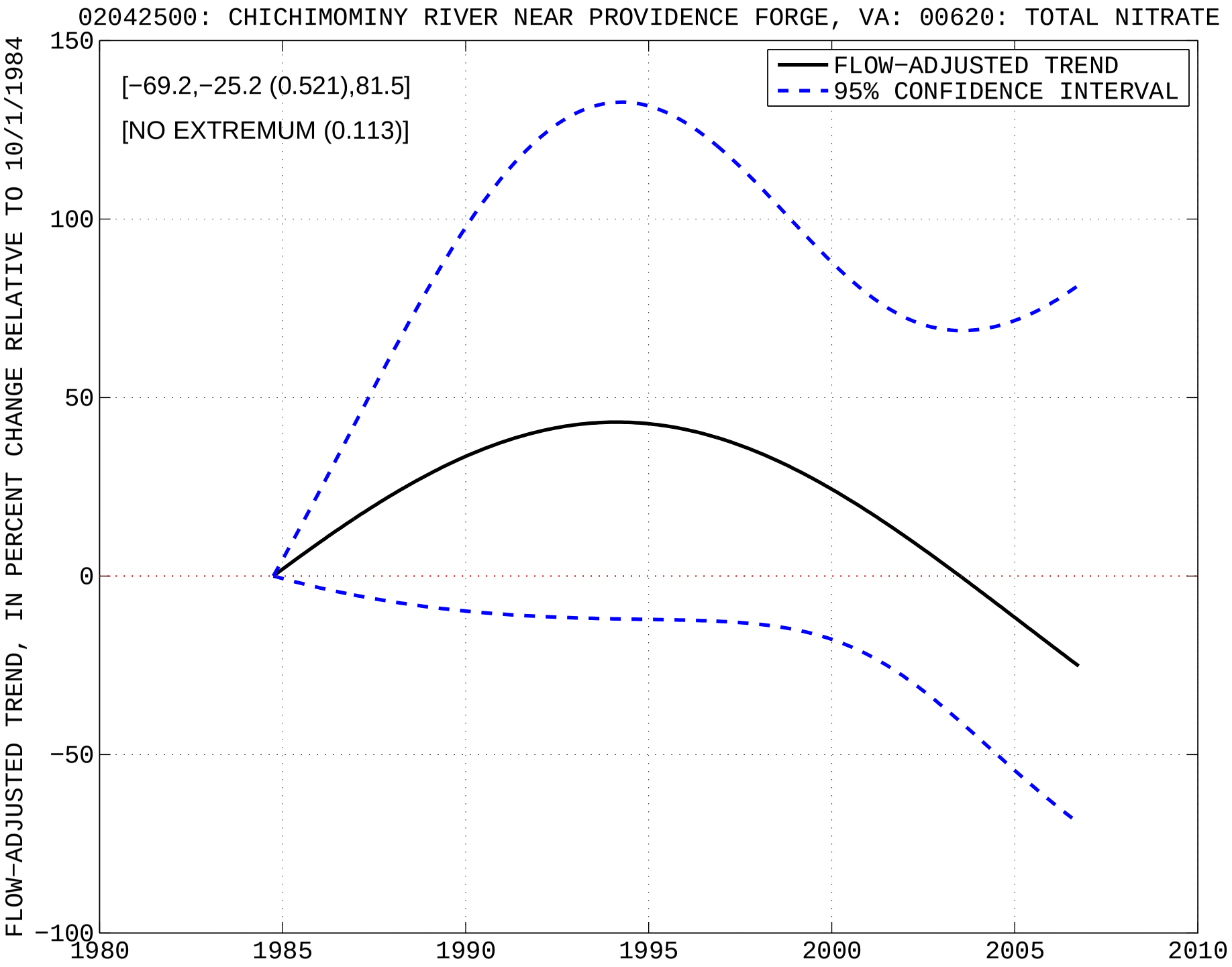

02041650: APPOMATTOX RIVER AT MATOACA, VA: 00631: DISSOLVED NITRITE PLUS NITRATE
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
[−30.9,−12.5 (0.266),10.8]
[NO EXTREMUM (0.165)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
20
10
0
−10
−20
−30
−40
−50
1980
1985
1990
1995
2000
2005
2010

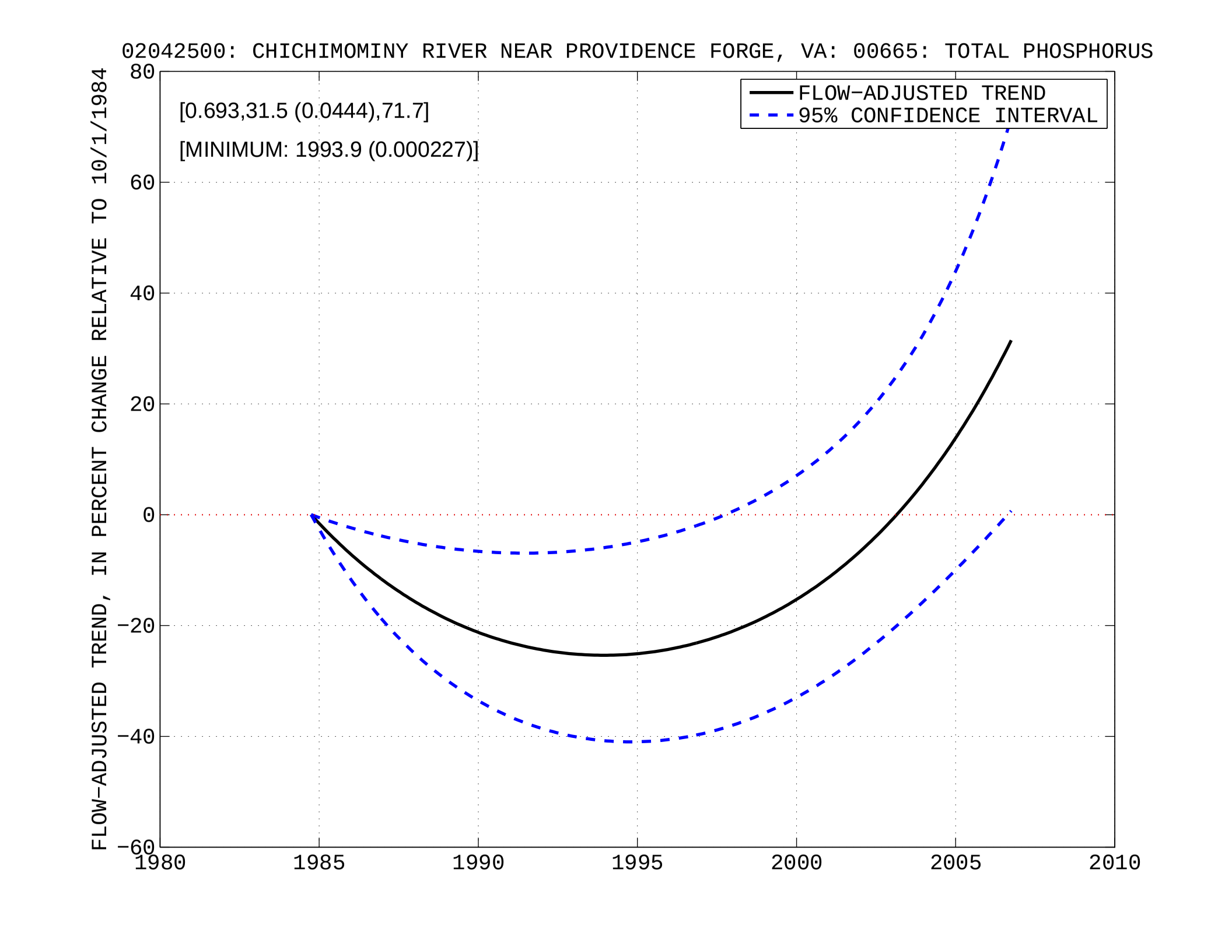

02041650: APPOMATTOX RIVER AT MATOACA, VA: 00665: TOTAL PHOSPHORUS
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[8.27,27.7 (0.00368),50.5]
[NO EXTREMUM (0.162)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
70
60
50
40
30
20
10
0
-10
1980
1985
1990
1995
2000
2005
2010


02041650: APPOMATTOX RIVER AT MATOACA, VA: 00671: DISSOLVED INORGANIC PHOSPHORUS
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[−29.6,−14 (0.139),5.02]
[MAXIMUM: 1994.4 (0.000187)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
70
60
50
40
30
20
10
0
−10
−20
−30
1980
1985
1990
1995
2000
2005
2010


02042500: CHICHIMOMINY RIVER NEAR PROVIDENCE FORGE, VA: 00530: SEDIMENT
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[−39.1,−6.07 (0.777),44.8]
[NO EXTREMUM (0.104)]
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
100
80
60
40
20
0
−20
−40
1980
1985
1990
1995
2000
2005
2010


02042500: CHICHIMOMINY RIVER NEAR PROVIDENCE FORGE, VA: 00600: TOTAL NITROGEN
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
[−14.8,−1.99 (0.777),12.7]
[NO EXTREMUM (0.236)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
20
15
10
5
0
−5
−10
−15
1980
1985
1990
1995
2000
2005
2010


02042500: CHICHIMOMINY RIVER NEAR PROVIDENCE FORGE, VA: 00620: TOTAL NITRATE
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
150
100
50
0
-50
-100
1980
1985
1990
1995
2000
2005
2010
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
[-69.2,-25.2 (0.521),81.5]
[NO EXTREMUM (0.113)]


02042500: CHICHIMOMINY RIVER NEAR PROVIDENCE FORGE, VA: 00665: TOTAL PHOSPHORUS
FLOW-ADJUSTED TREND, IN PERCENT CHANGE RELATIVE TO 10/1/1984
[0.693,31.5 (0.0444),71.7]
[MINIMUM: 1993.9 (0.000227)]
FLOW-ADJUSTED TREND
95% CONFIDENCE INTERVAL
80
60
40
20
0
-20
-40
-60
1980
1985
1990
1995
2000
2005
2010