

# *Another Bull Market Consolidation or*

*Have Oil Prices*

*Headed South*

*for the*

*Winter?*



**John Cook**  
**Director, EIA Petroleum Division**  
**New York Energy Forum**  
**September 5, 2006**

# WHAC -A- MOLE

Weather/  
Hurricane  
Effects

Limited Spare  
Capacity

Strong Global  
Demand

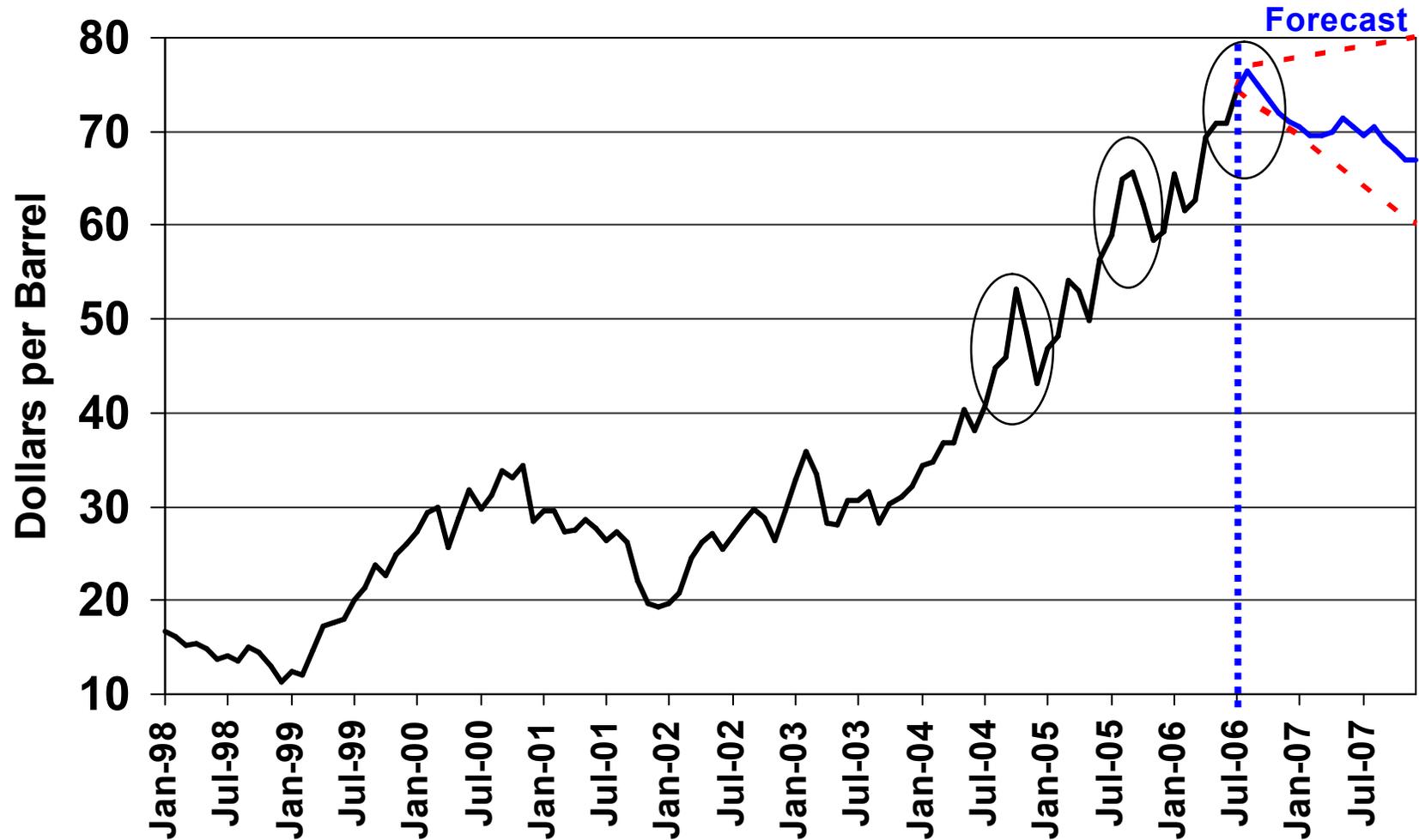
Low  
Forward  
Cover

Solid Economic  
Growth

Geopolitical  
Concerns



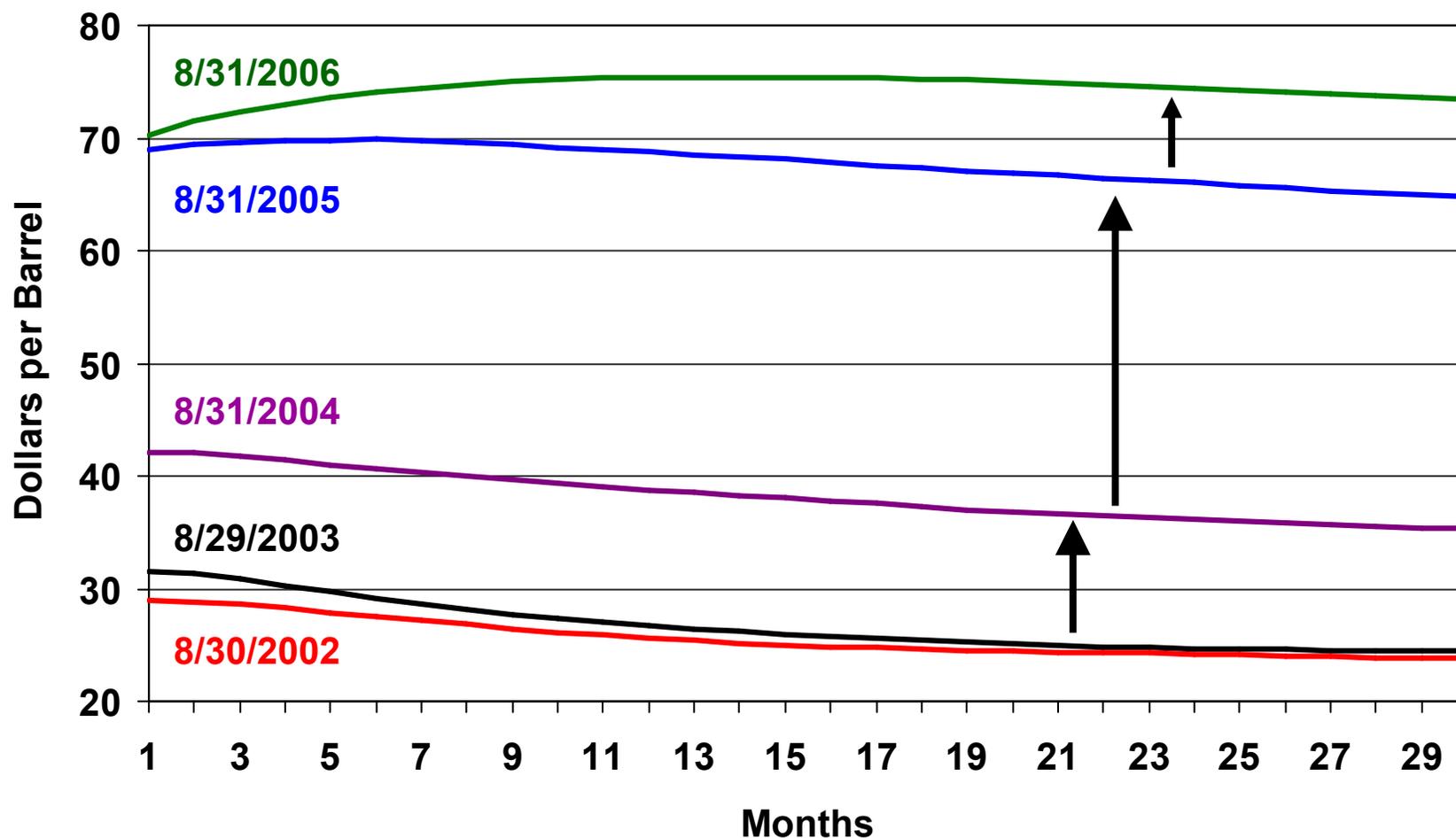
# WTI Crude Oil Price: 1998-2007



Sources: History: EIA; Projections: Short-Term Energy Outlook, August 2006.

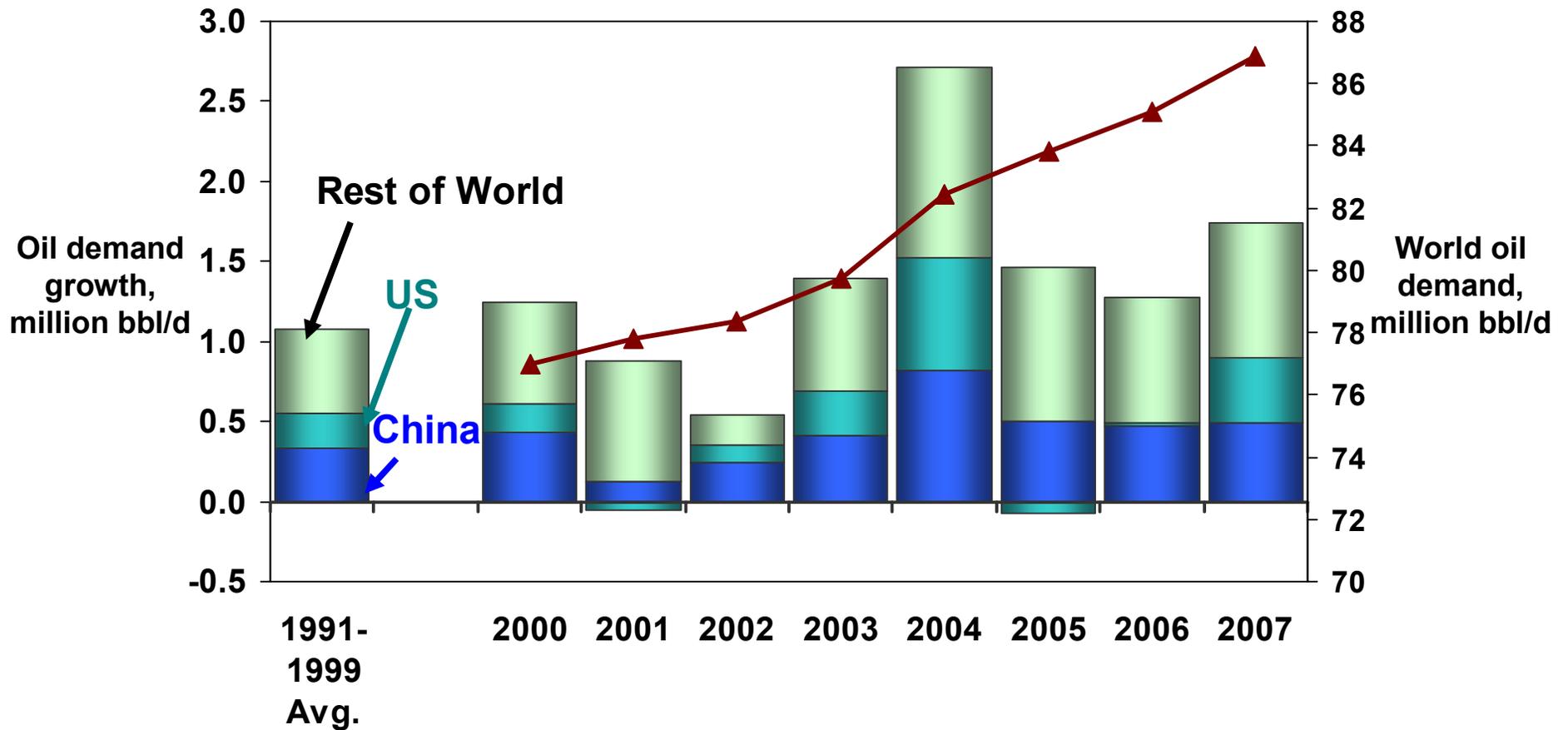


# WTI Futures Curves: The Deferred Price Has Also Increased in Recent Years



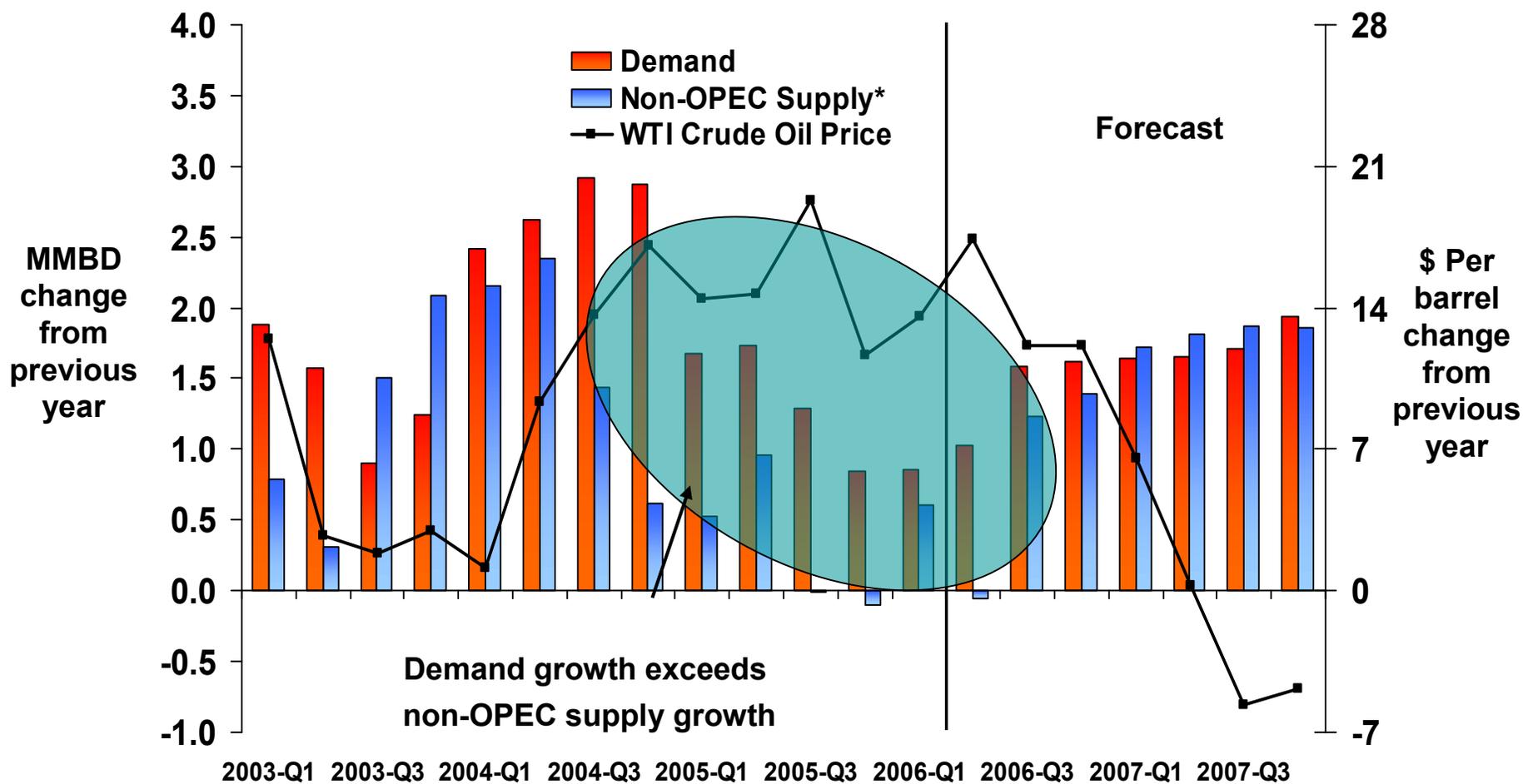
Source: New York Mercantile Exchange.

# World Oil Demand Growth



Source: EIA, Short-Term Energy Outlook, August 2006.

# Growth in World Consumption & Non-OPEC Production

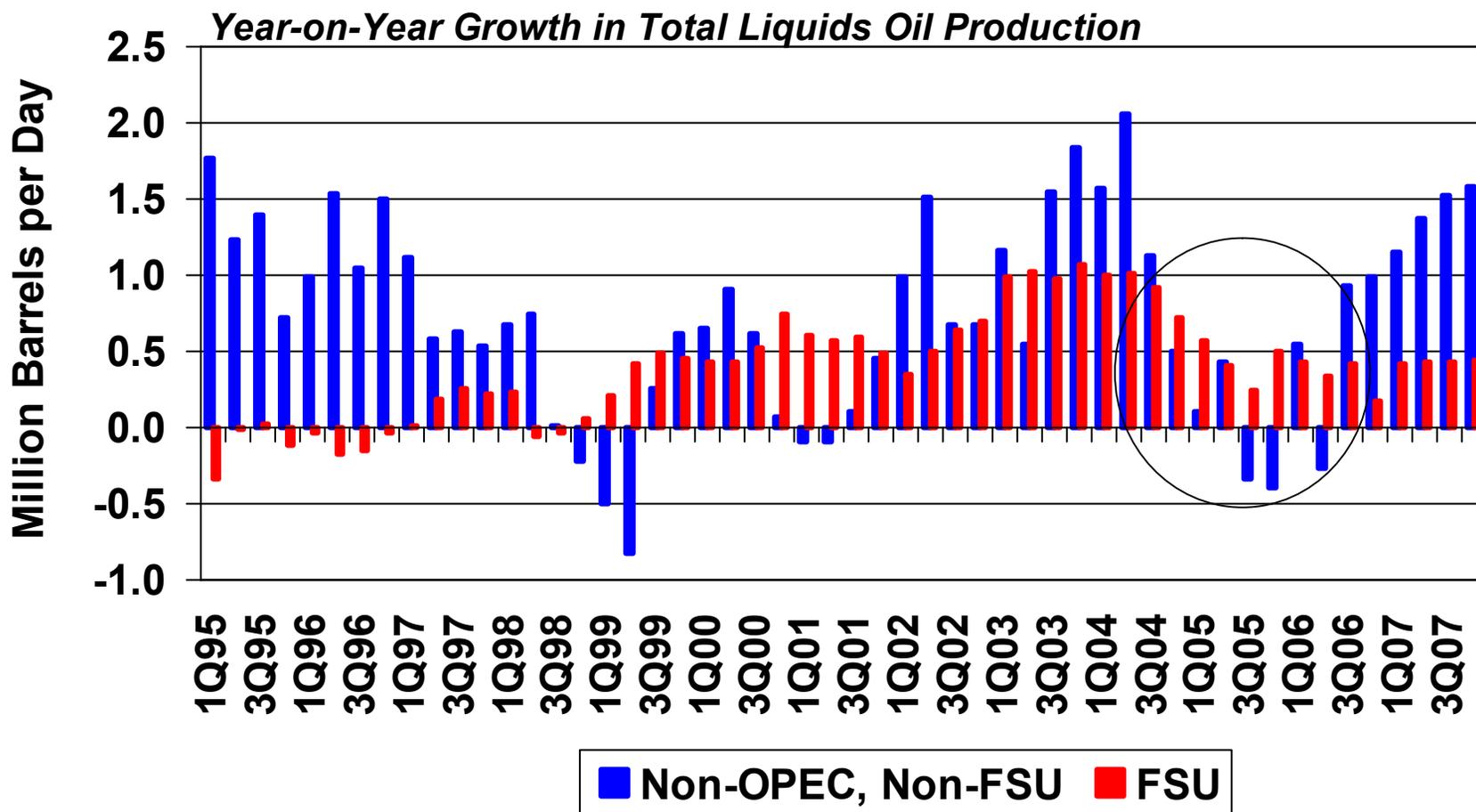


\*Includes OPEC non-crude production, MMBD= million barrels per day

Source: EIA, Short-Term Energy Outlook, August 2006.

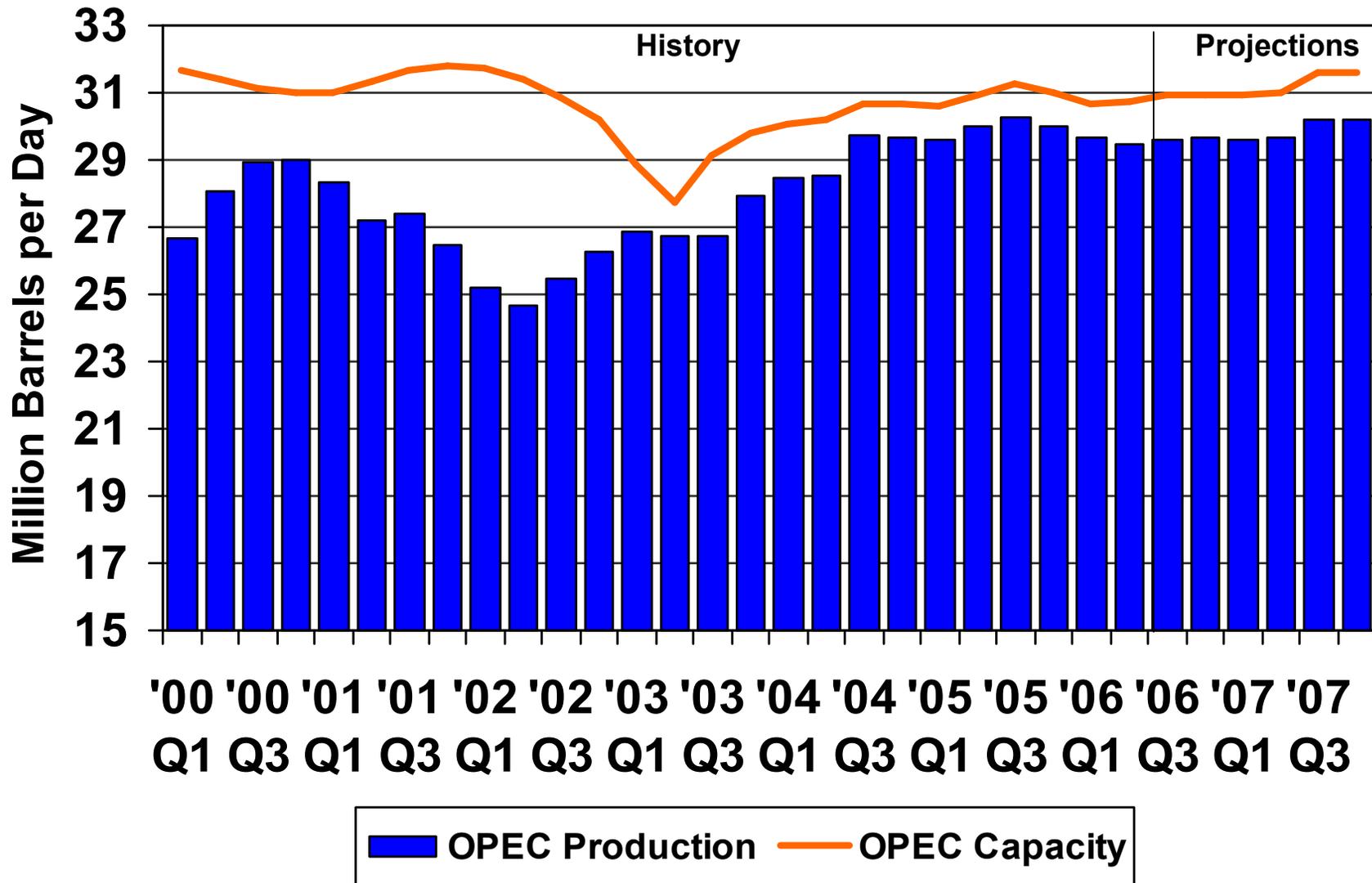


# Recent Non-OPEC Supply Growth Is Mostly from Former Soviet Union (FSU) Countries



Source: EIA, Short-Term Energy Outlook, August 2006.

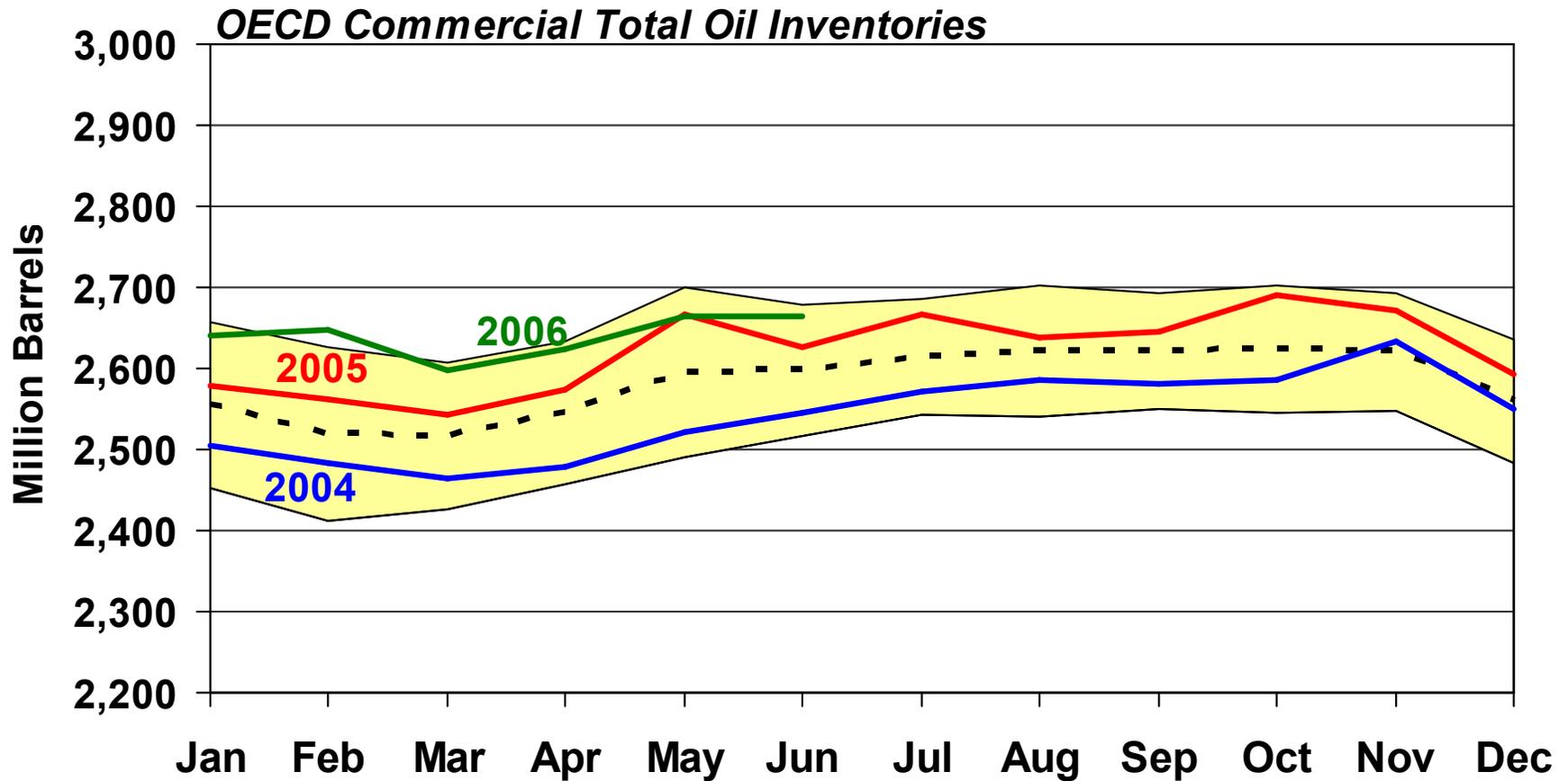
# Will OPEC Keep Markets Adequately Supplied?



Sources: History: EIA; Projections: Short-Term Energy Outlook, August 2006.



# OECD Total Commercial Oil Stocks Above Average Levels This Year

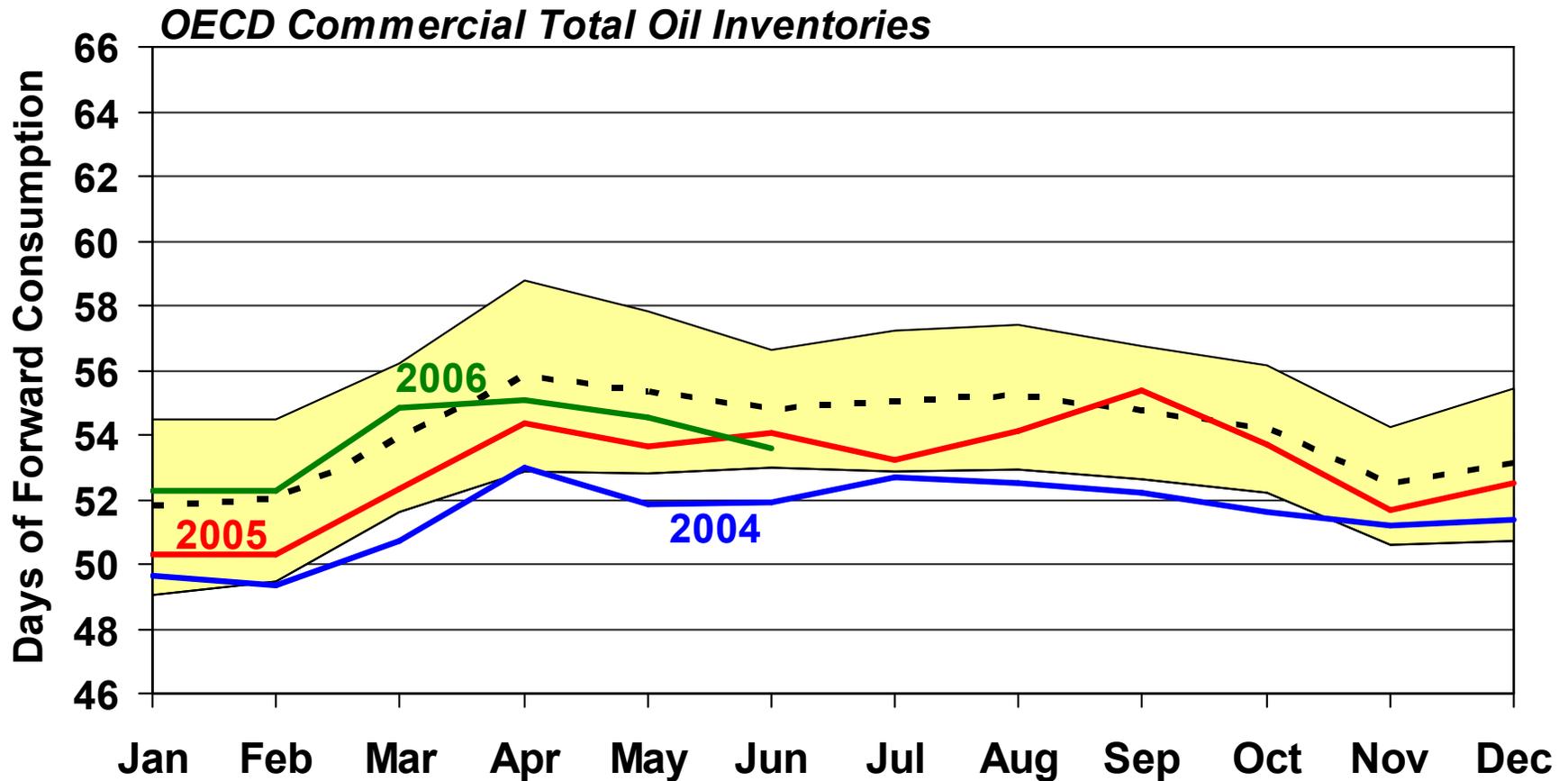


**NOTE: Colored Band is Normal Stock Range.  
Dashed line is 1996-2005 average.**

Source: International Energy Agency database, August 2006.



# But OECD Total Commercial Oil Stocks Low in Terms of Days Supply

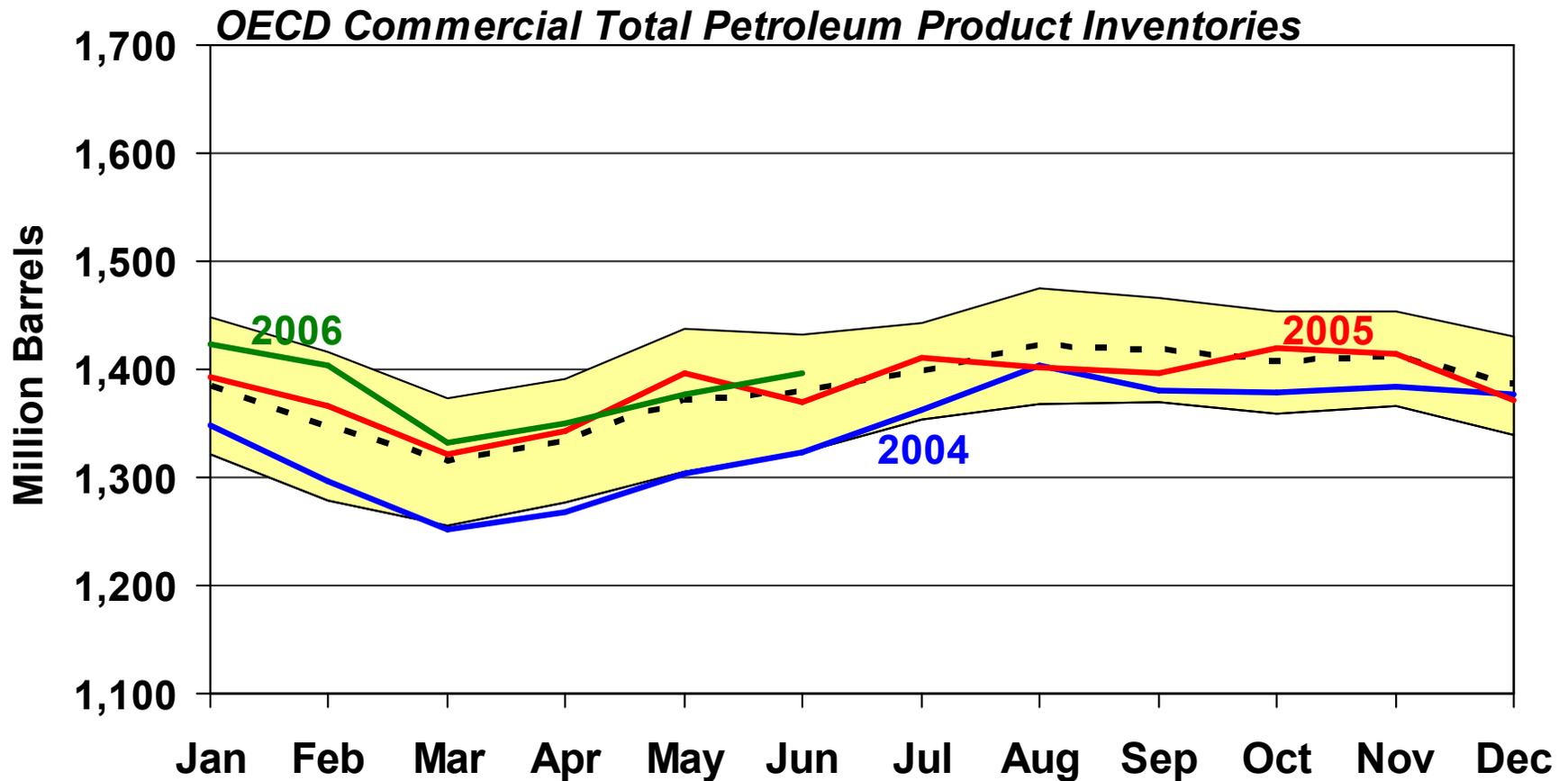


**NOTE: Colored Band is Normal Stock Range.  
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Source: International Energy Agency database, August 2006.



# OECD Total Commercial Petroleum Product Stocks Are About Average in Absolute Levels

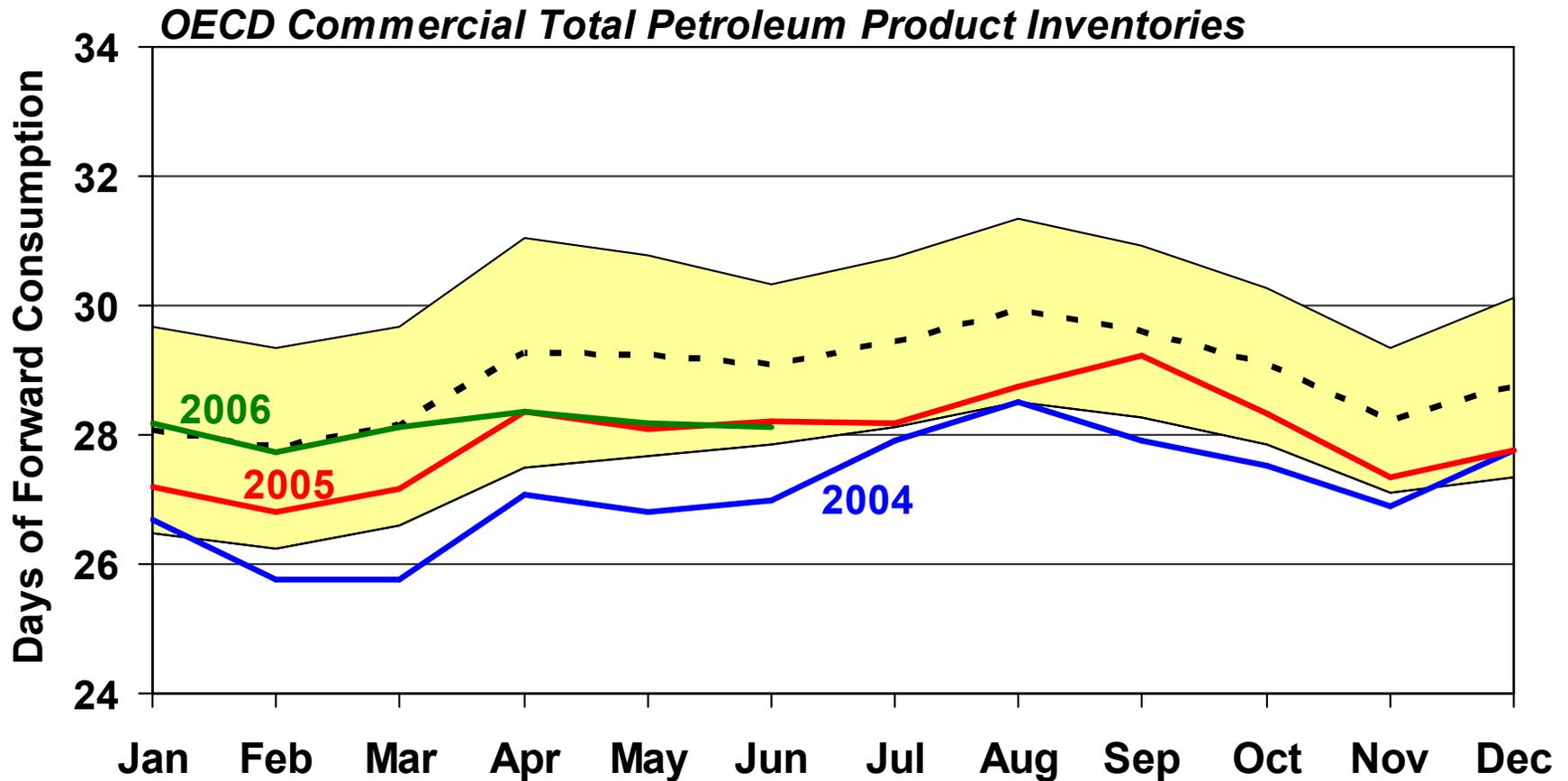


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Source: International Energy Agency database, August 2006.



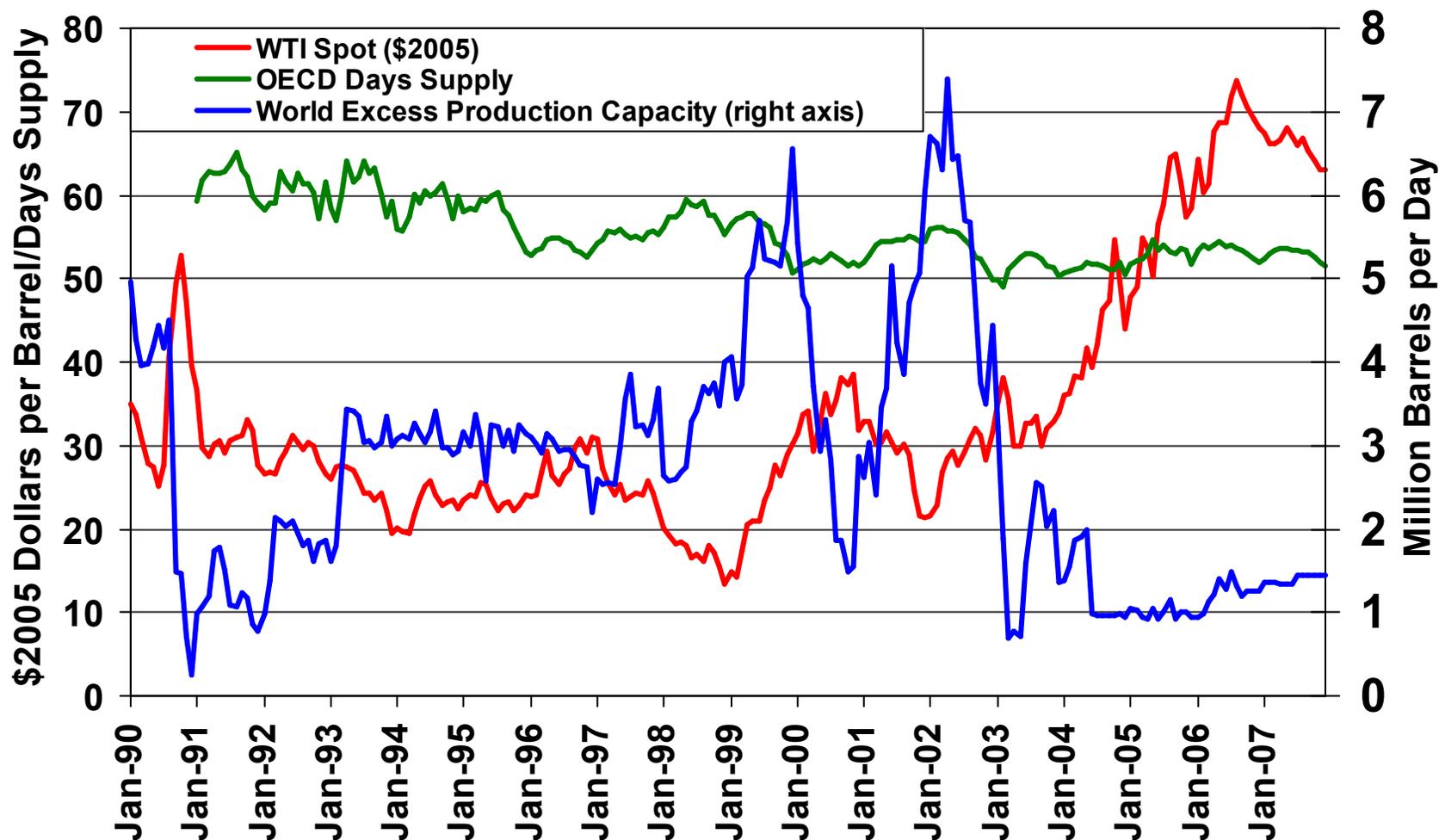
# OECD Total Commercial Petroleum Product Stocks Are Low in Terms of Days Supply



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Source: International Energy Agency database, August 2006.

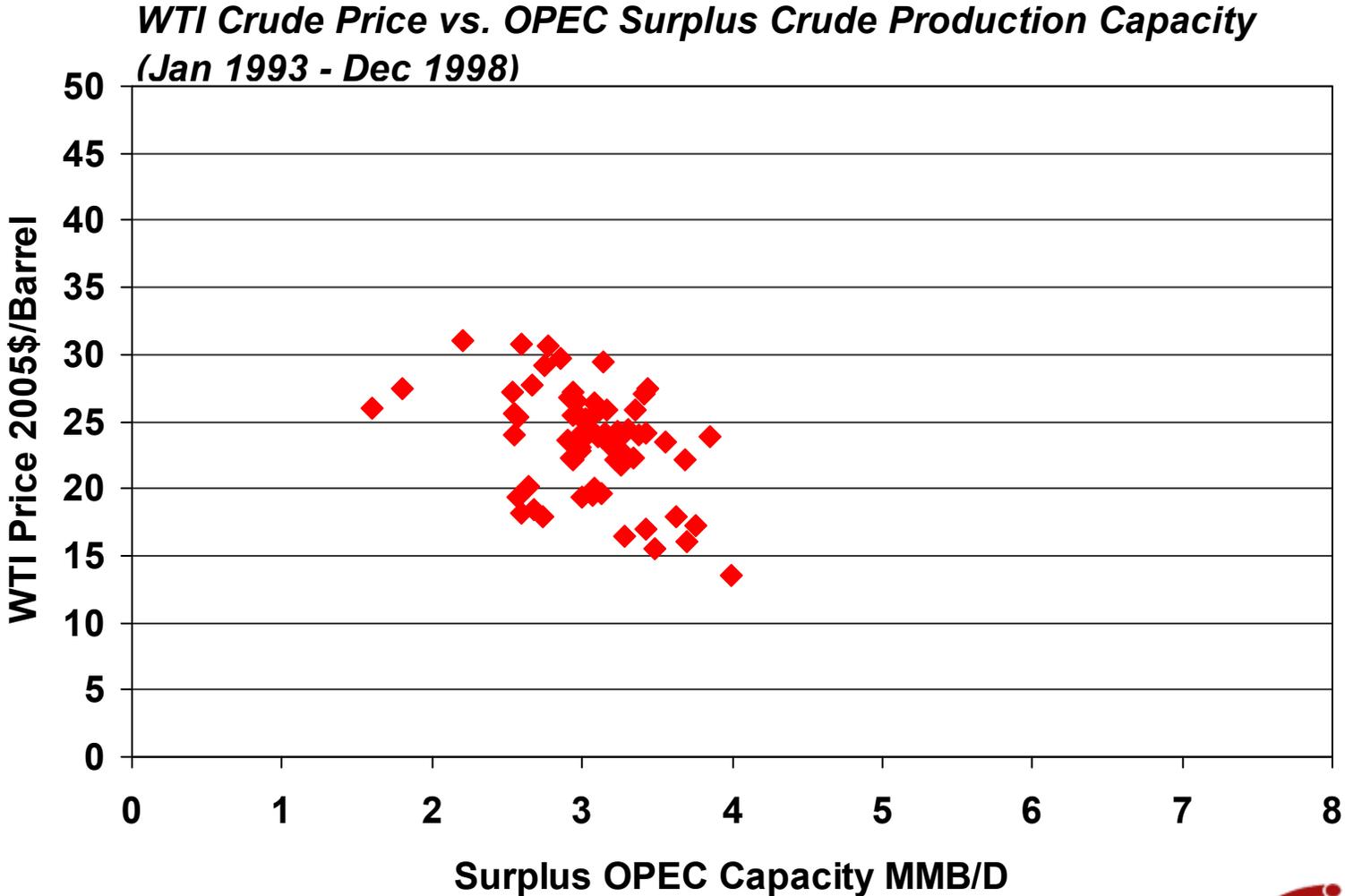
# As Spare Capacity Increases in 2006 and 2007, OECD Days Supply Will Fall



Sources: WTI: Reuters; OECD Days Supply: International Energy Agency; World Excess Production Capacity: U.S. Energy Information Administration estimates.



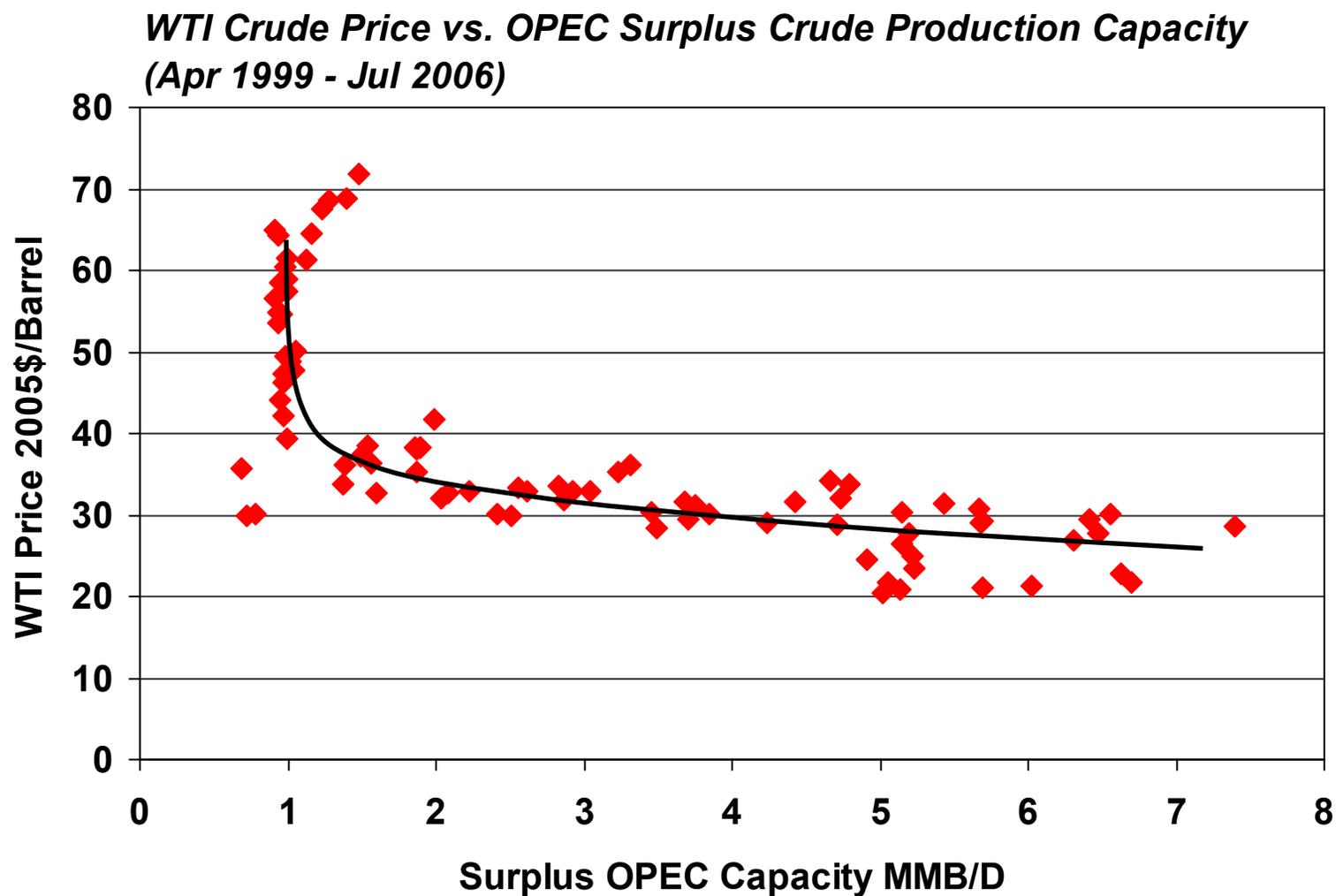
# During Mid 1990's, Surplus Capacity Did Not Affect Price



Source: Reuters WTI; EIA Calculations



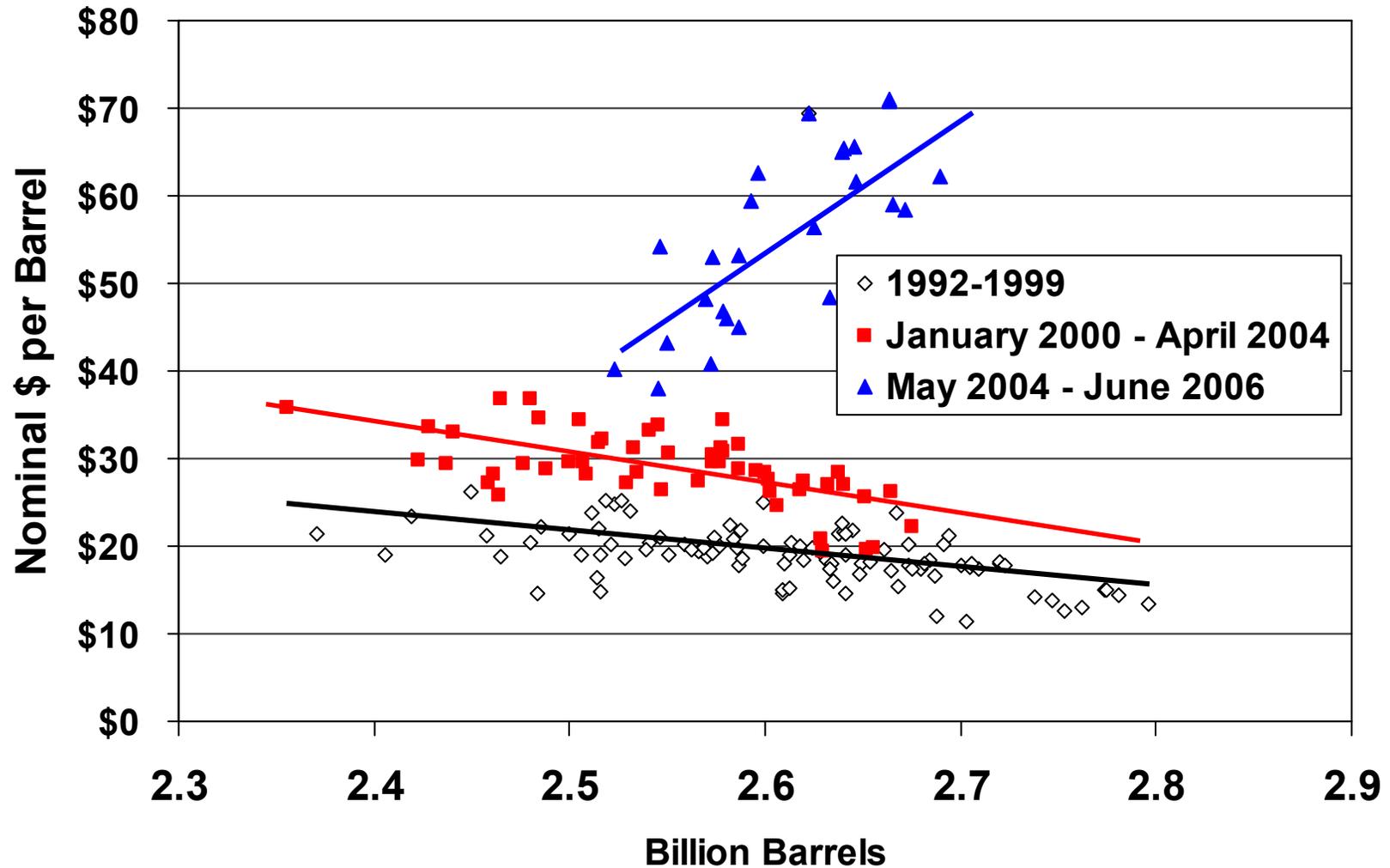
# In Recent Years, Available Crude Capacity Affected Price



Source: Reuters WTI; EIA Calculations

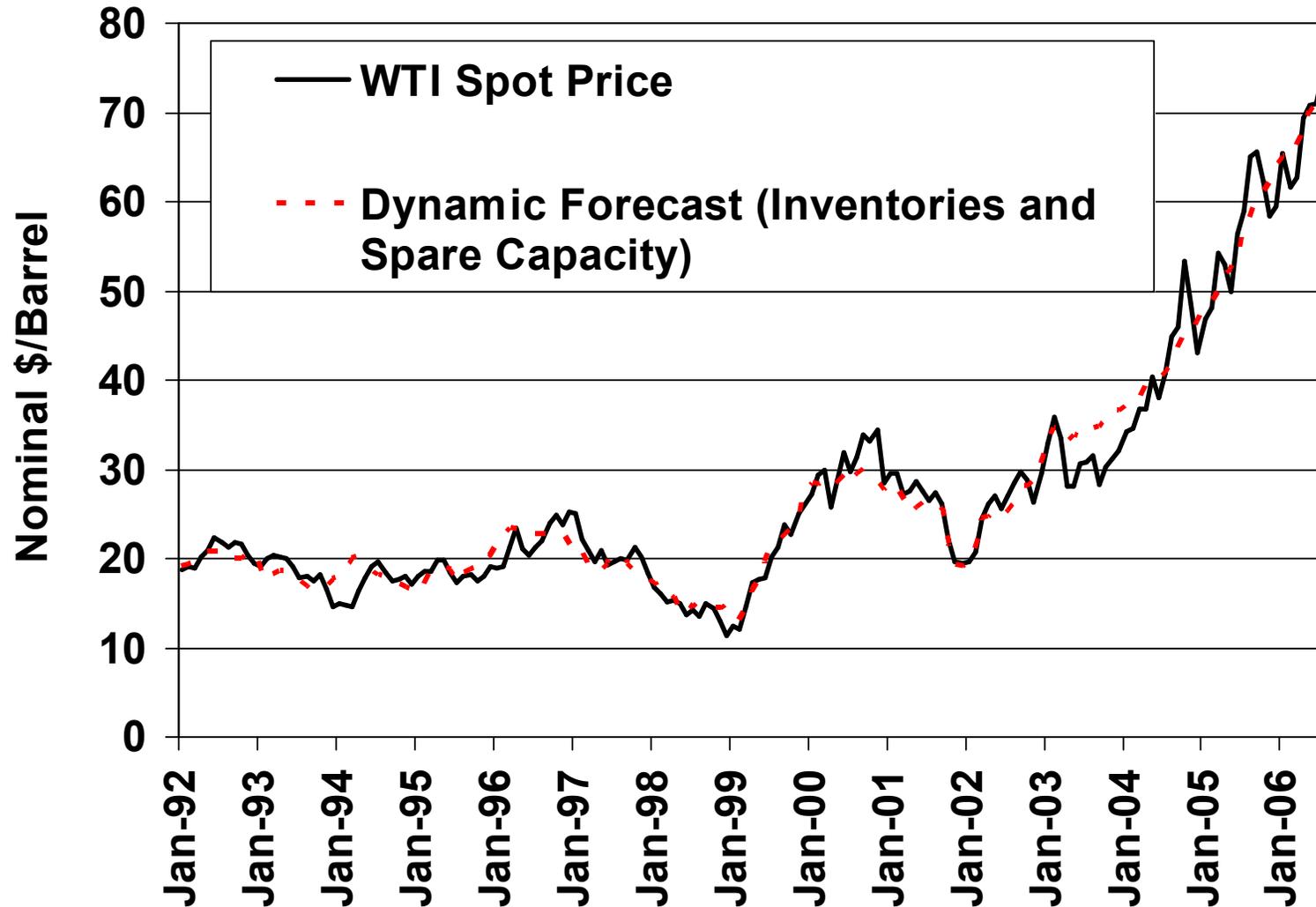


# WTI Crude Oil Price / Inventory Relationship



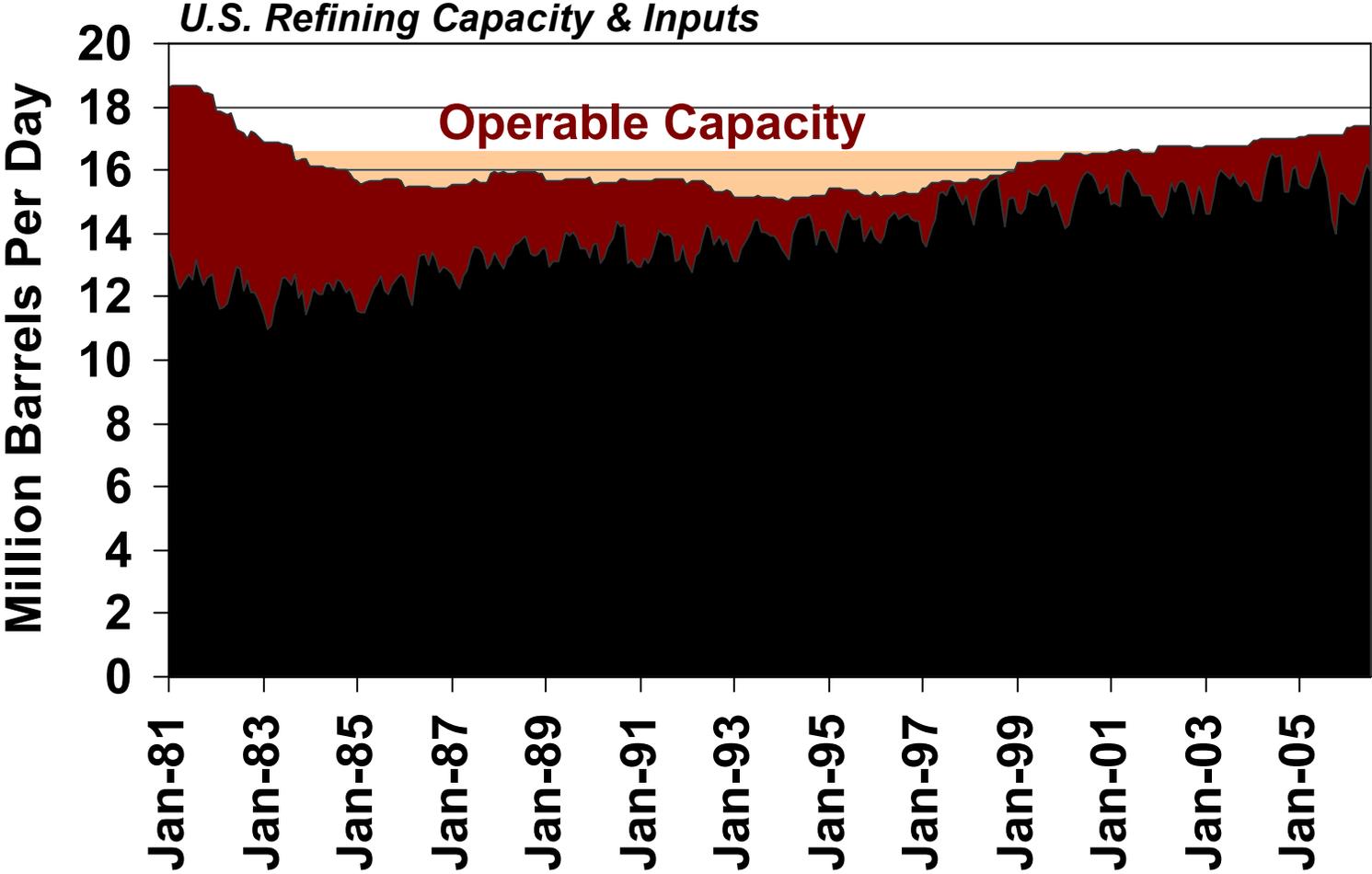
Sources: Reuters database and International Energy Agency database, August 2006.

# OECD Inventories and Spare Production Capacity Have Explained Most of Recent Price Variation



Source: Reuters spot prices, EIA modeling.

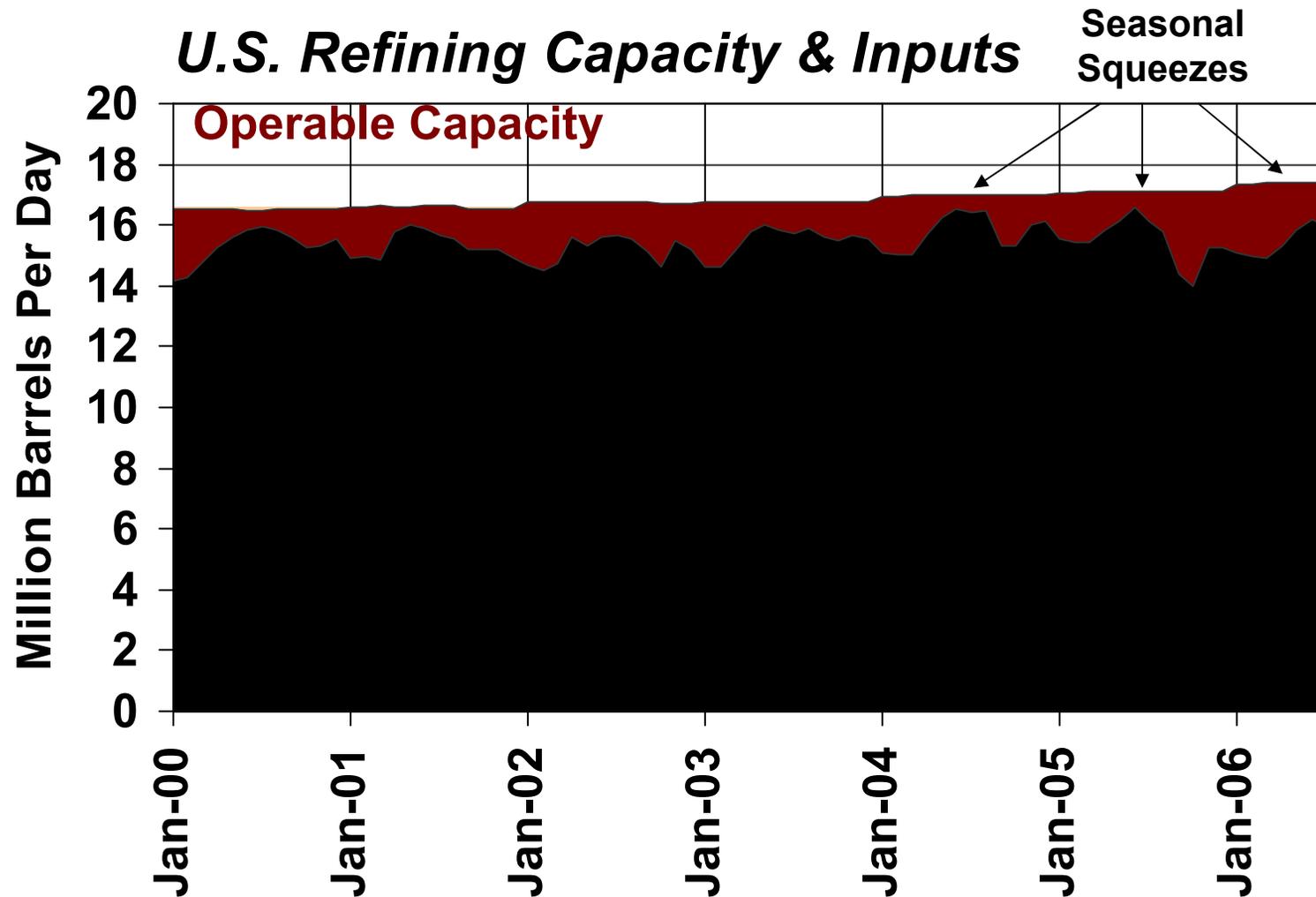
# U.S. Refining Capacity Surplus Disappearing, Creating Short-Term Challenge



Source: U.S. Energy Information Administration.



# Capacity Surplus Varies Seasonally

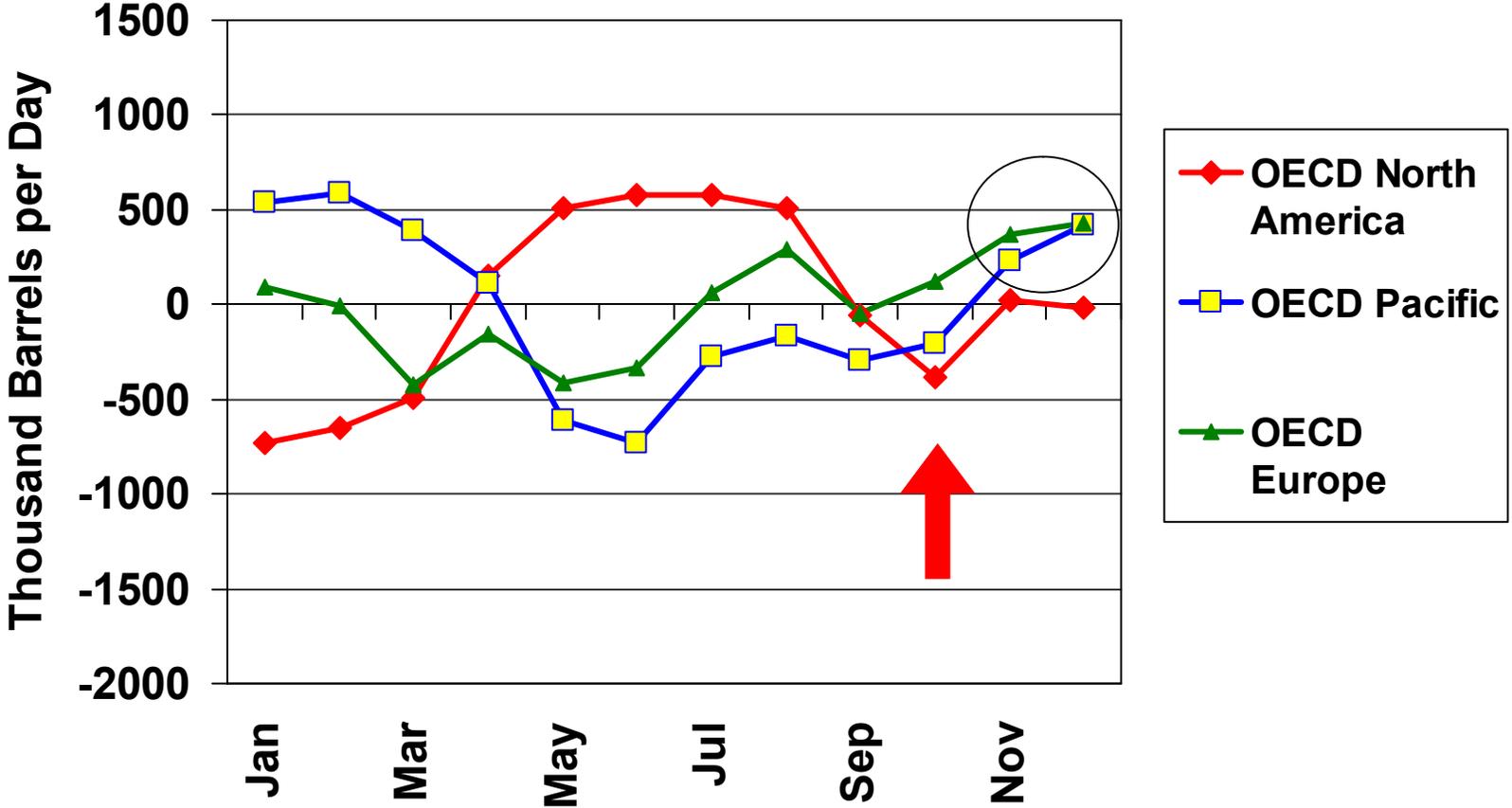


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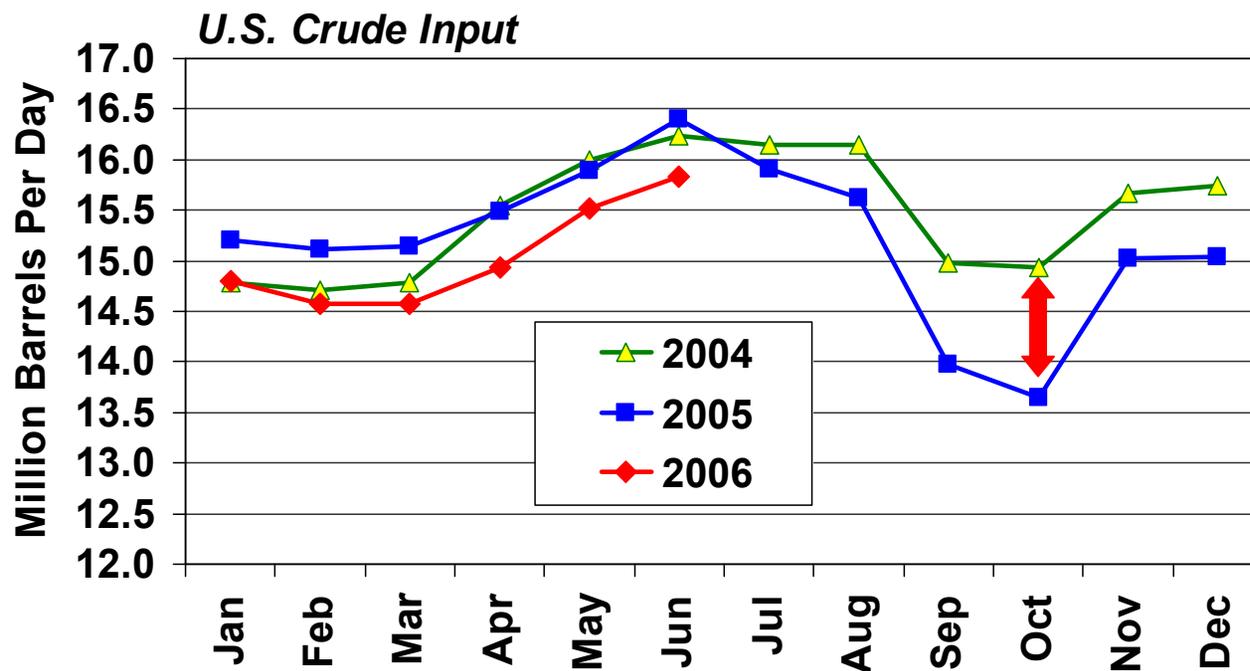
# Seasonal Crude Use Down In Fall Worldwide

## Typical Crude Input Deviations from Annual Average



Source: BP World Statistics 2005.

# Initially, Other Regions Help Balance U.S Losses

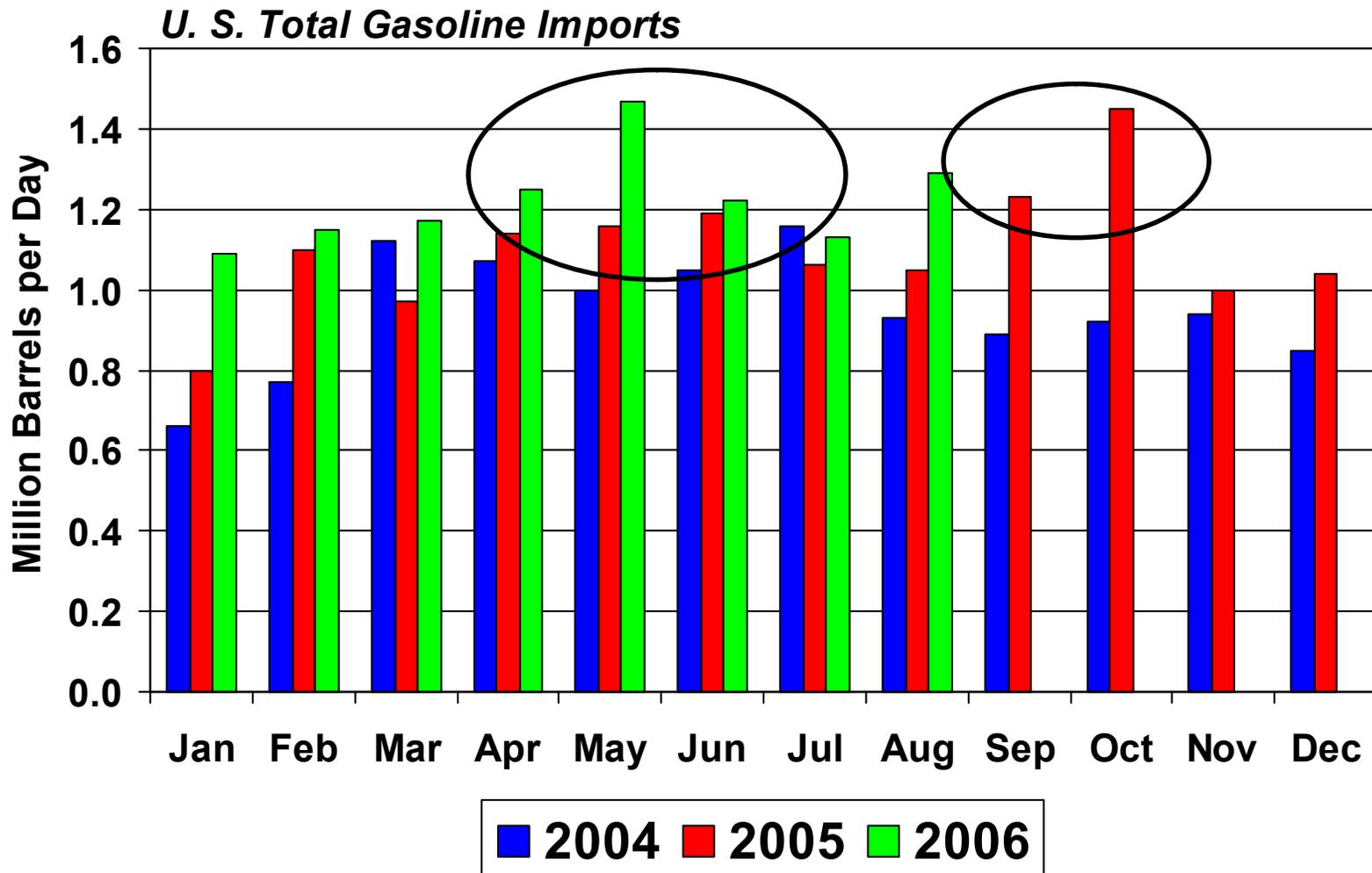


Crude Input Changes 2004-2005					
	Aug	Sep	Oct	Nov	Dec
US	-0.5	-1.0	-1.3	-0.6	-0.7
OECD Europe	0.0	0.5	0.6	0.7	-0.1
OECD Asia	-0.2	0.6	0.3	0.0	0.1

Source: International Energy Agency database, August 2006, EIA Data

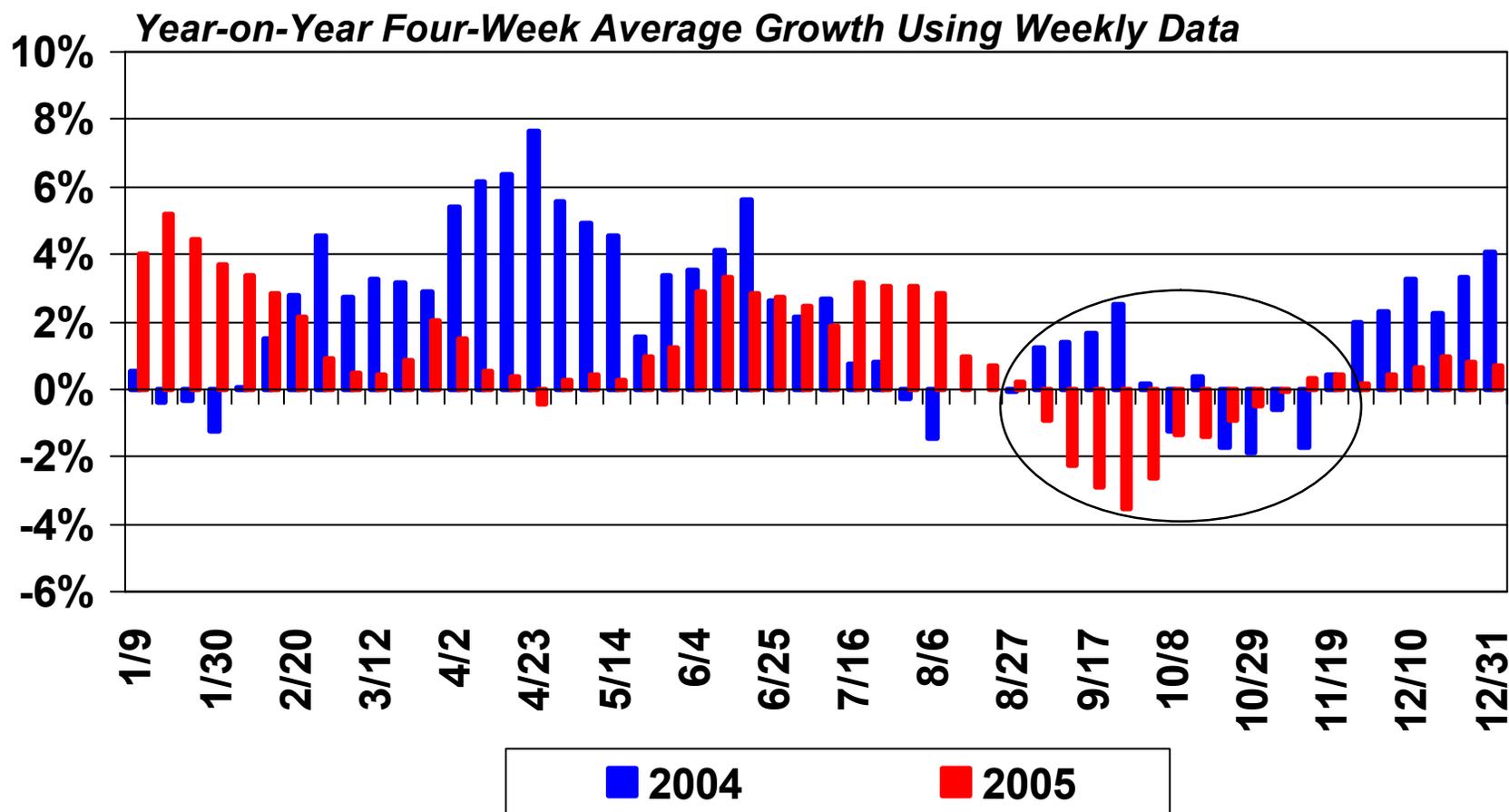


# Gasoline Imports Are An Increasingly Important Supply Source



Source: U.S. Energy Information Administration.

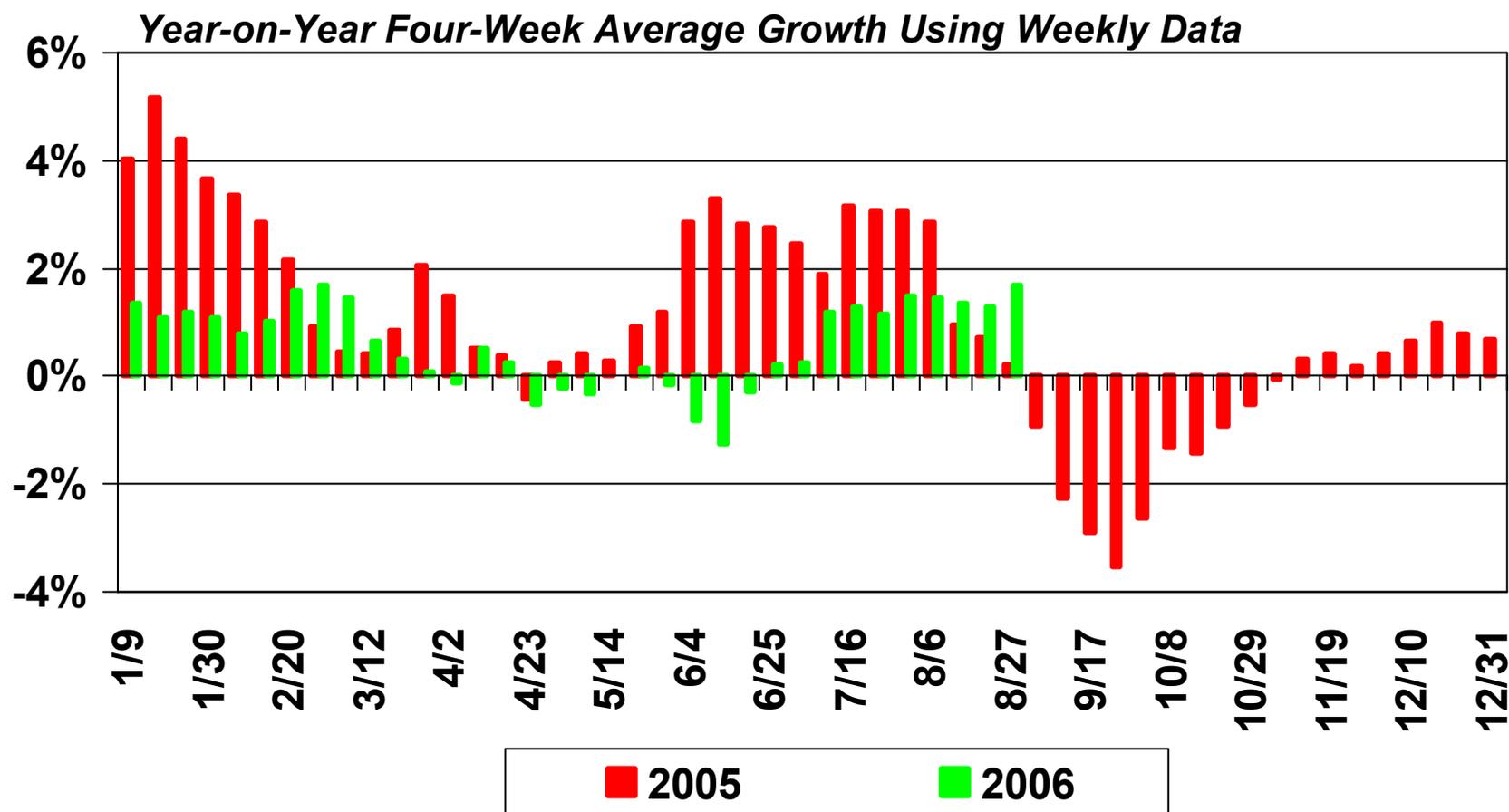
# U.S. Four-Week Average Finished Gasoline Demand Begins to Show More Typical Growth



Source: EIA Weekly Petroleum Status Report.



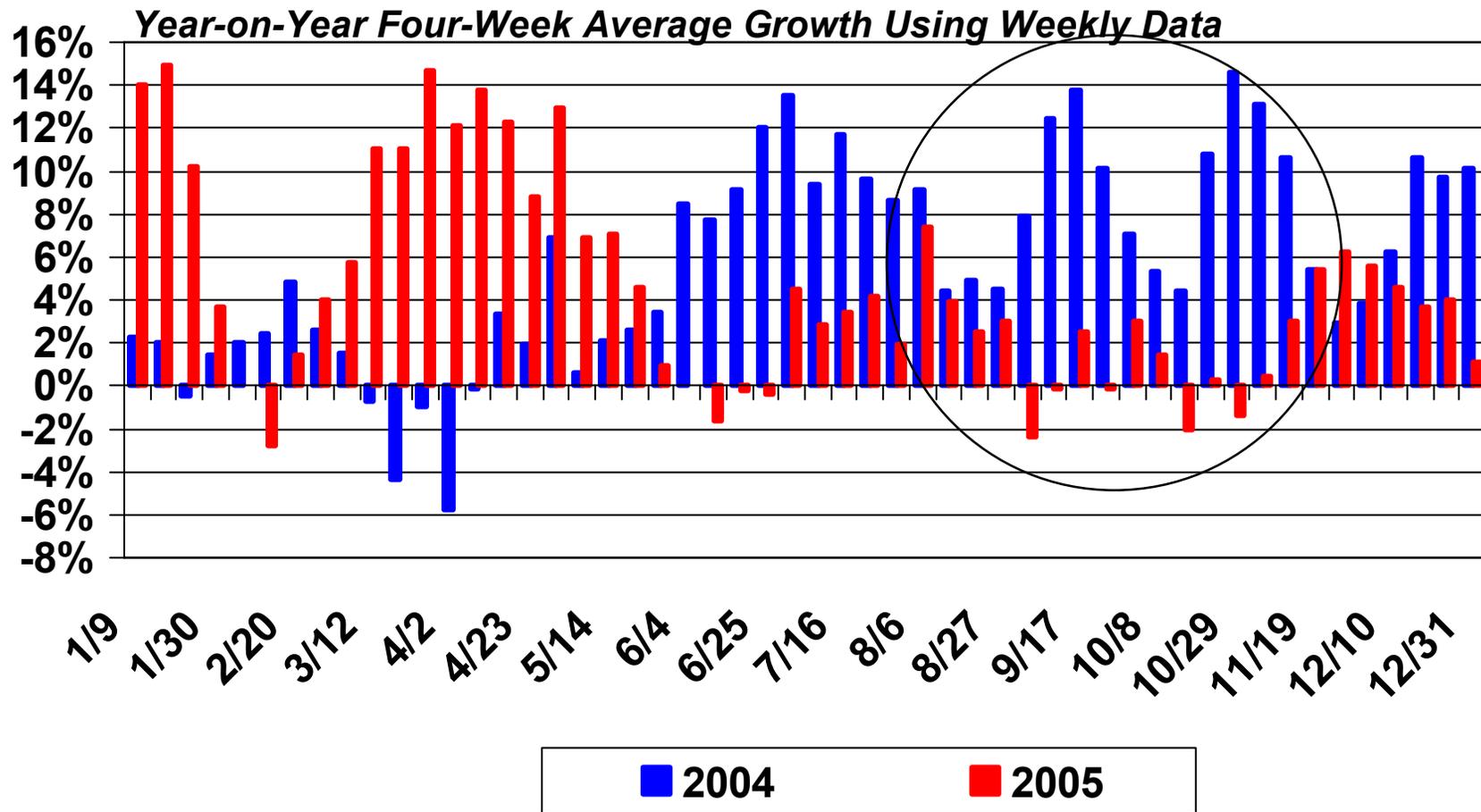
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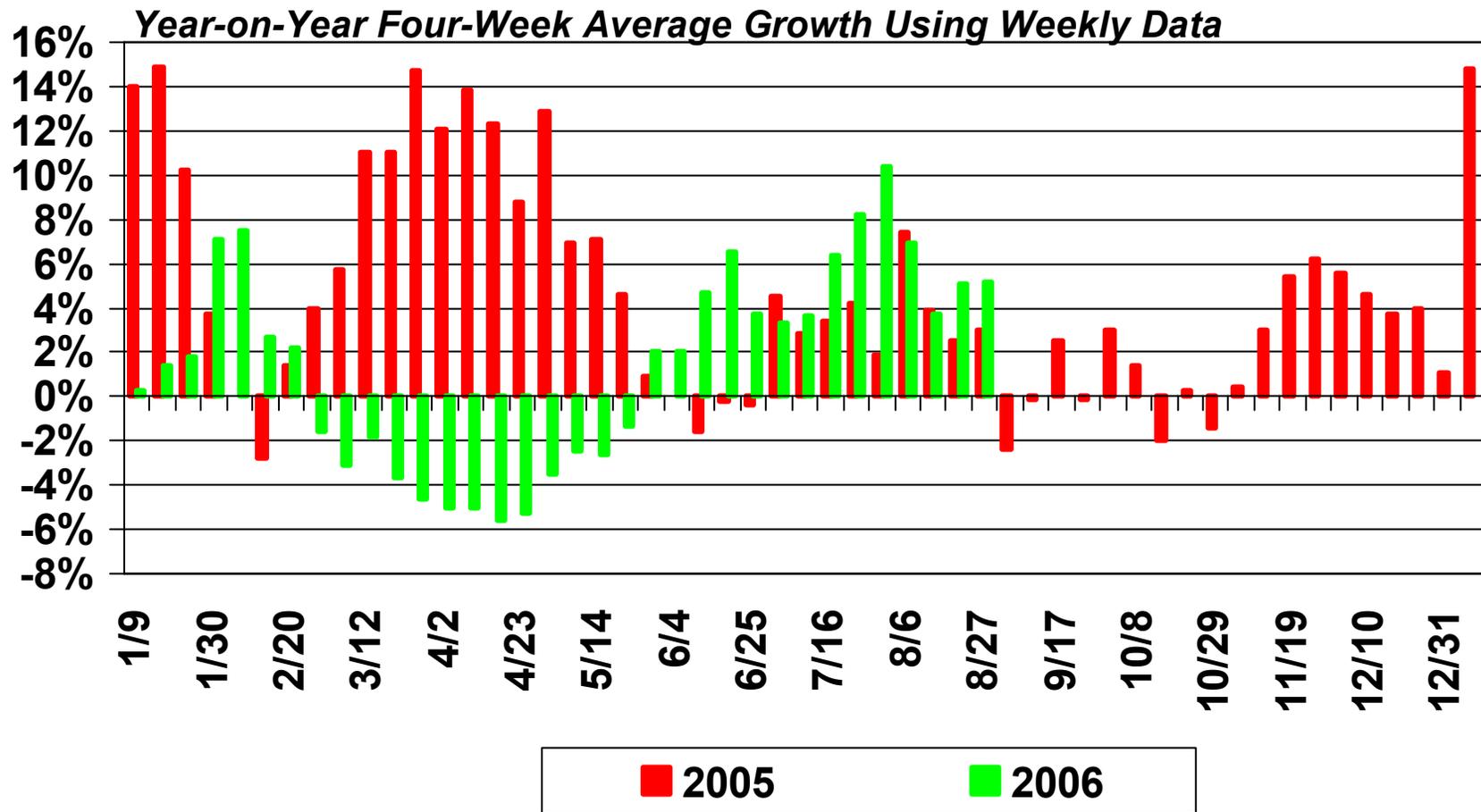
# U.S. Four-Week Average Diesel Demand Has Returned to Pre-Hurricane Growth



Source: EIA Weekly Petroleum Status Report.



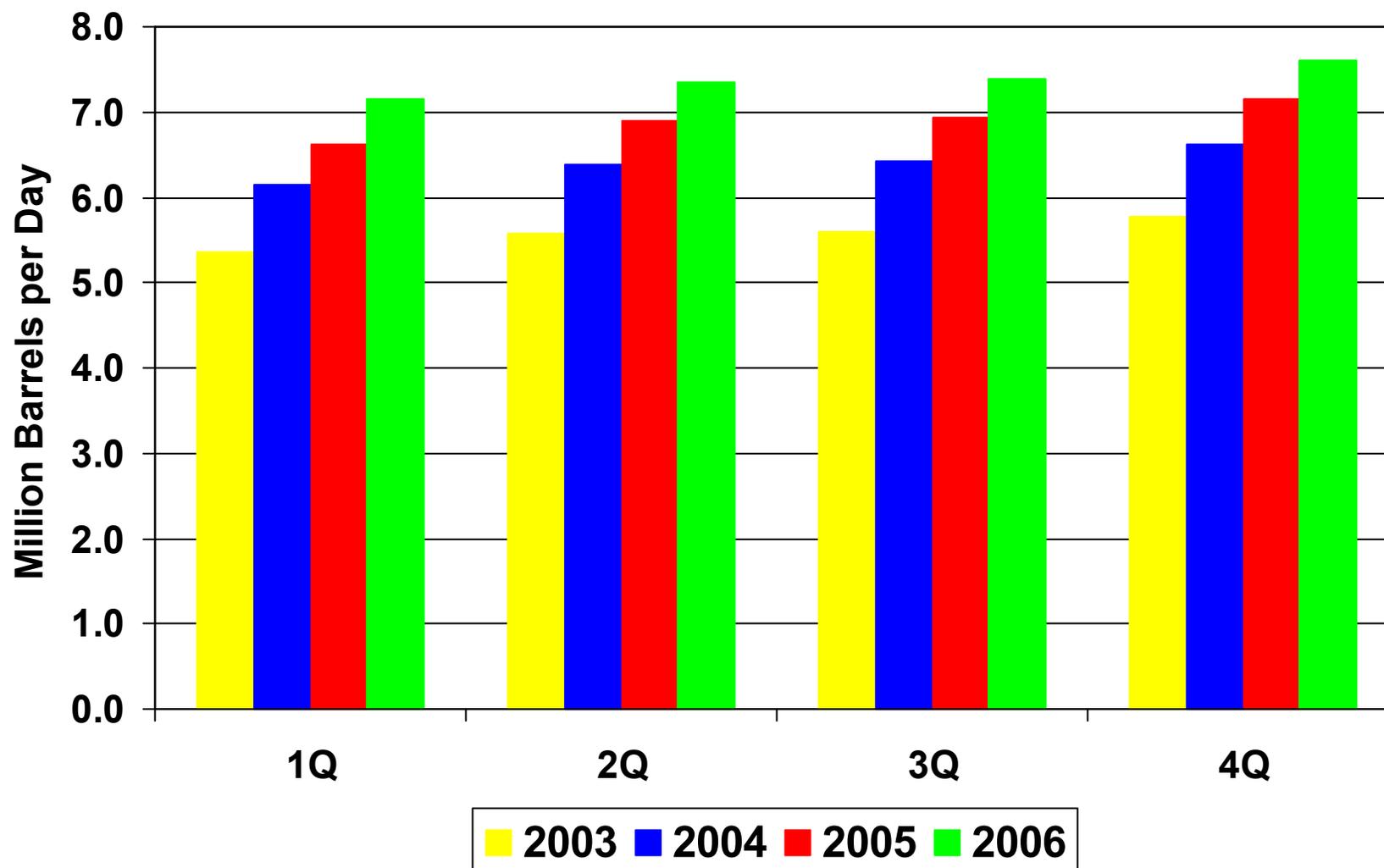
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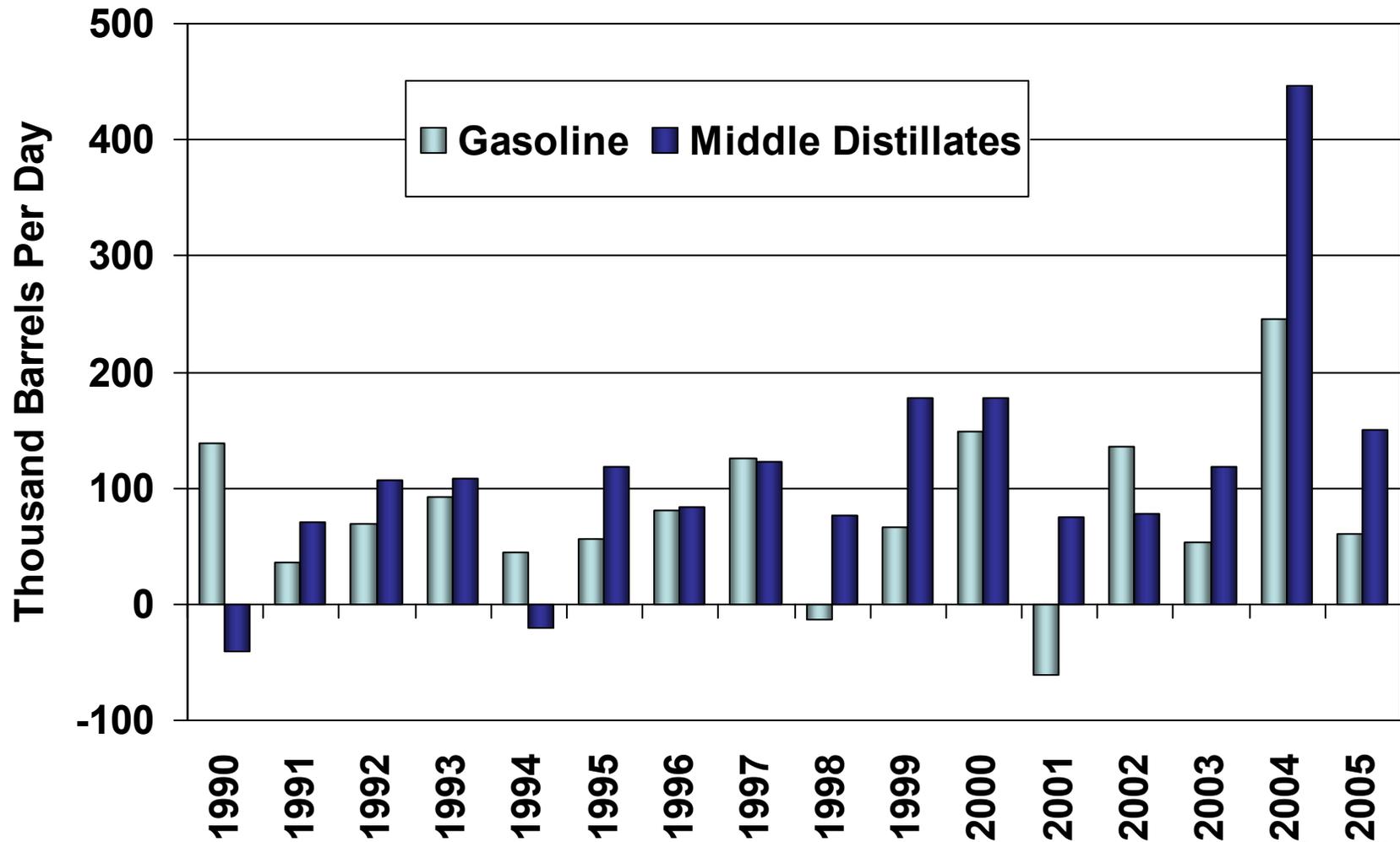
# Chinese Oil Demand Continues Strong Growth



Sources: History: EIA; Projections: Short-Term Energy Outlook, August 2006.

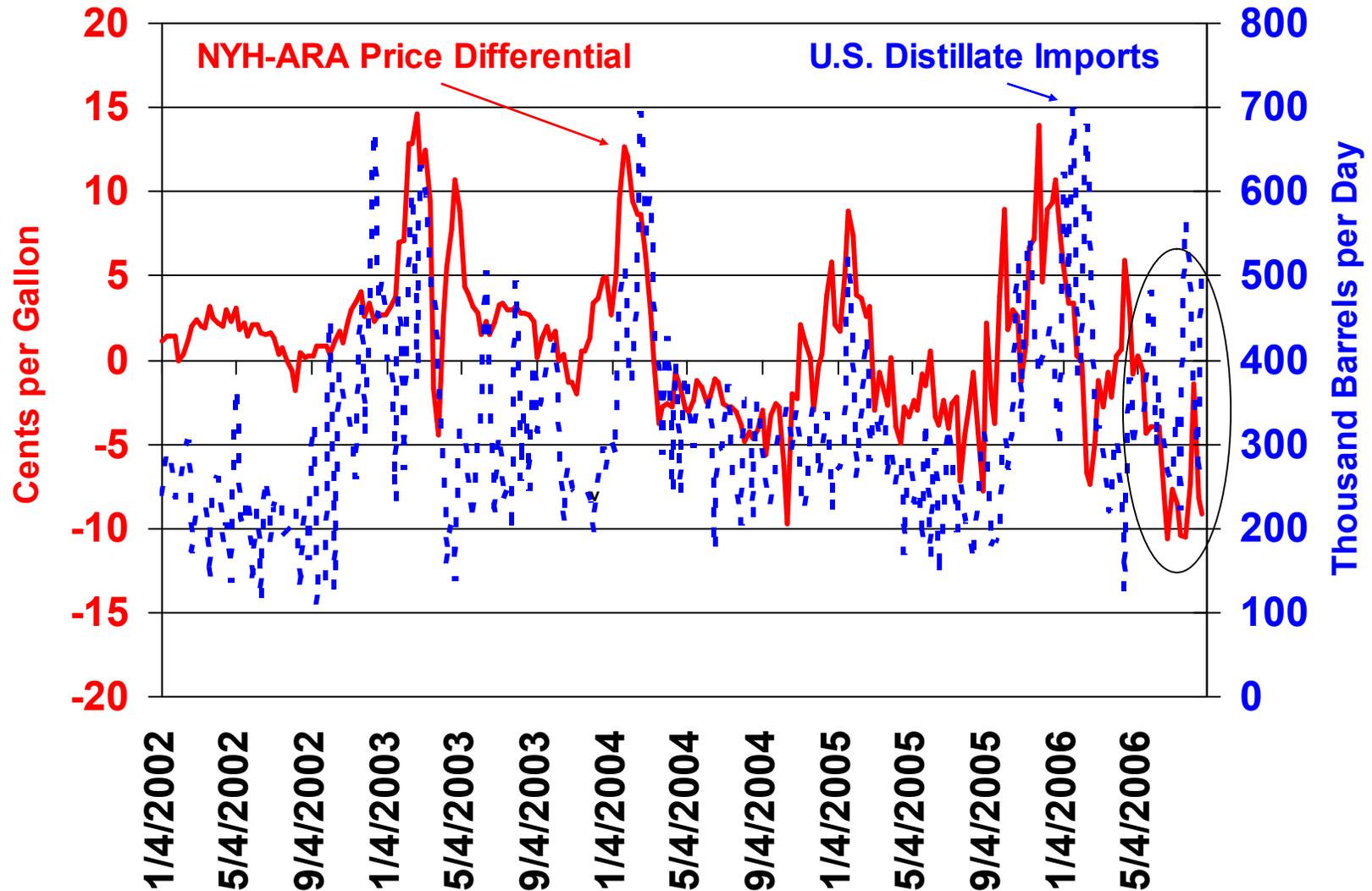


# Much of China's Oil Demand Growth in Last 2 Years Has Come From Gasoline and Diesel



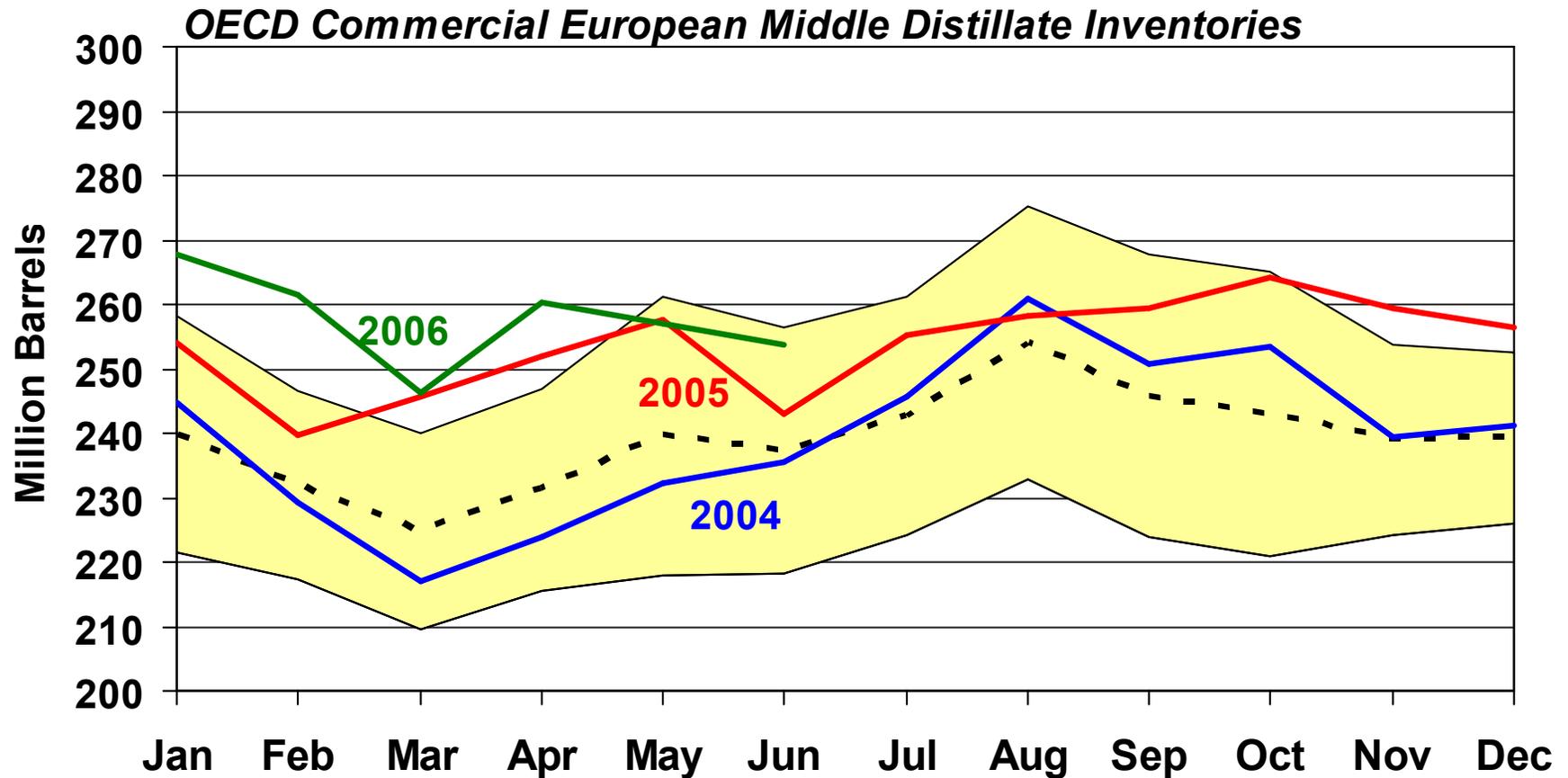
Source: BP World Statistics 2005.

# Trans-Atlantic Arbitrage Brings Higher Distillate Imports



Source: EIA Weekly Petroleum Status Report.

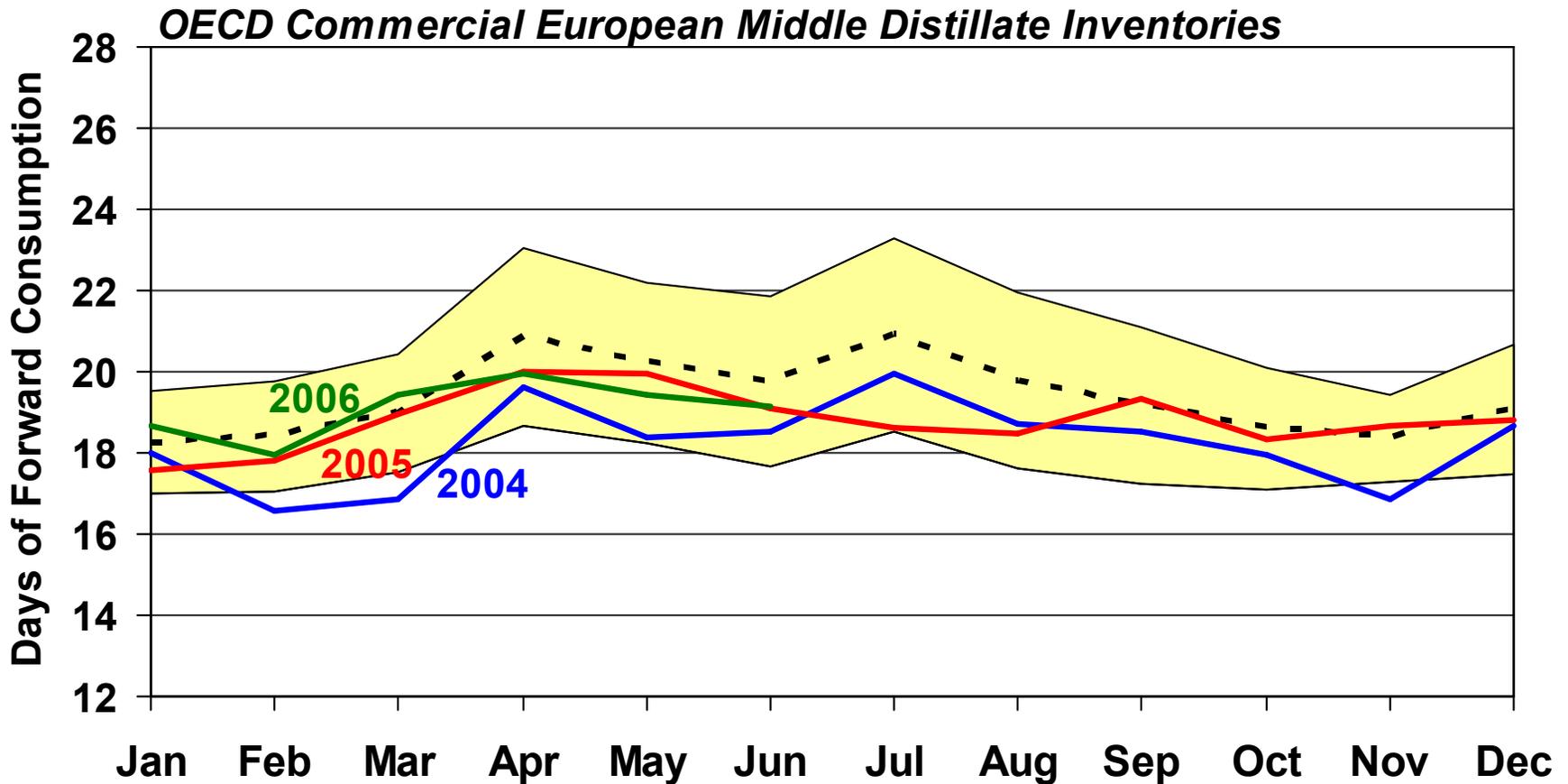
# OECD European Commercial Distillate Stocks Lie in the Upper Half of the Average Range



**NOTE: Colored Band is Normal Stock Range.  
Dashed line is 1996-2005 average.**

Source: International Energy Agency database, August 2006.

# OECD European Commercial Distillate Stocks Are Relatively Low in Terms of Days Supply



**NOTE: Colored Band is Normal Stock Range.  
Dashed line is 1996-2005 average.**

Source: International Energy Agency database, August 2006.



# Conclusions

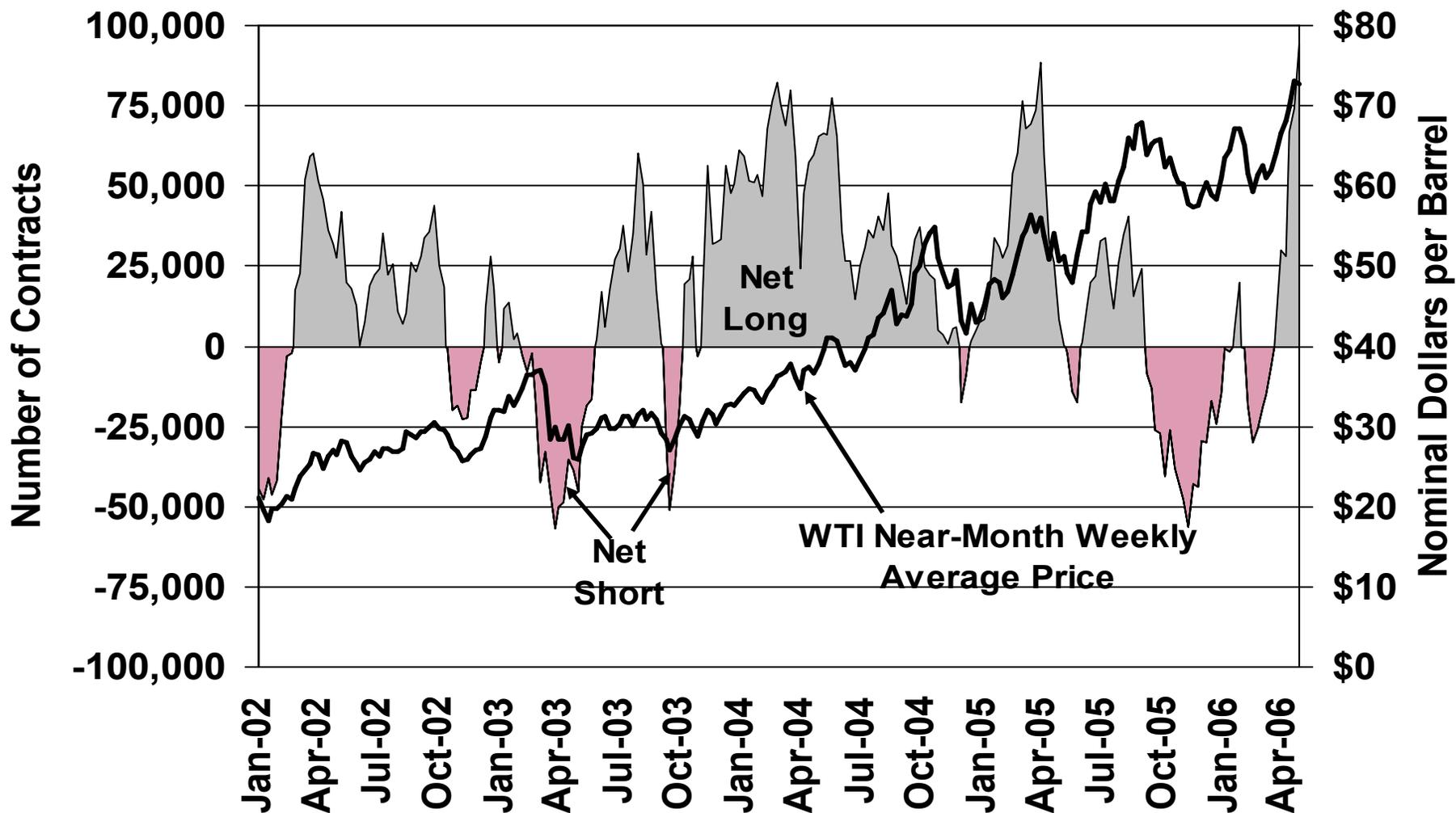
- **World oil demand growth, while off 2004 highs, is expected to continue at relatively high rates in 2006 and 2007.**
- **Non-OPEC oil supply is expected to grow by less than world oil demand in both 2006 and 2007.**
- **This will require either:**
  - **More OPEC production, limiting any increase in spare production capacity, or**
  - **Larger inventory drawdowns, sustaining relatively low stocks on a days supply basis.**
- **Global strength in distillate demand may mean a jump in U.S. spot prices to attract necessary imports this winter.**
- **Thus, oil markets are expected to remain tight this winter, with oil prices likely recovering from current relative seasonal softness.**

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or contact Dr. John Cook at [john.cook@eia.doe.gov](mailto:john.cook@eia.doe.gov) or (202) 586-5986



# Back-up Slides

# Changes in Speculative Activity Do Not Explain Changes in WTI Prices.

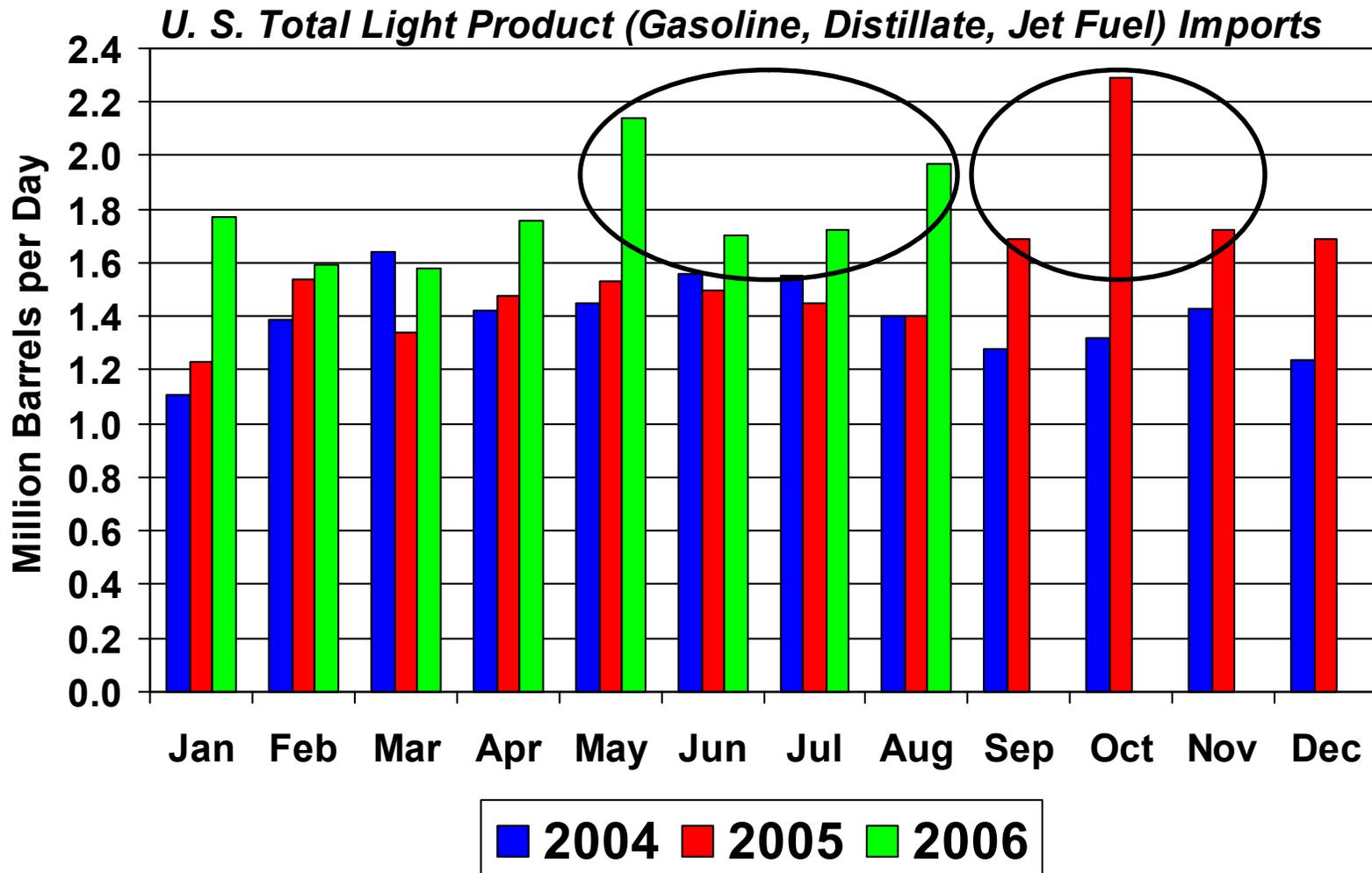


Net Position of Non-Commercial Participants in WTI Futures Contracts Since 2002

Source: NYMEX Commitment of Traders Report, Commodity Futures Trading Commission. Graph includes data up to May 2, 2006.

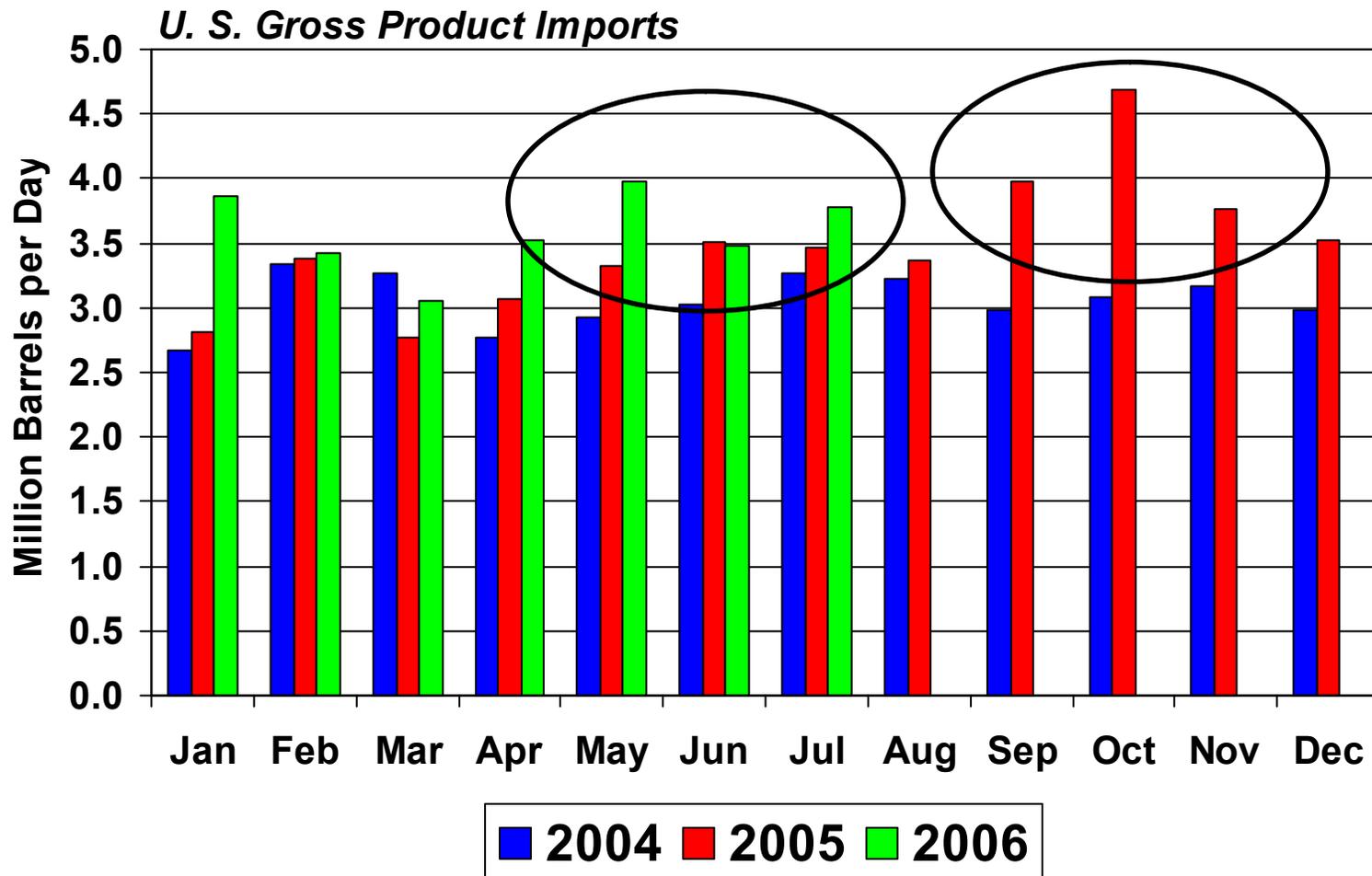


# Light Product Imports Are An Increasingly Important Supply Source



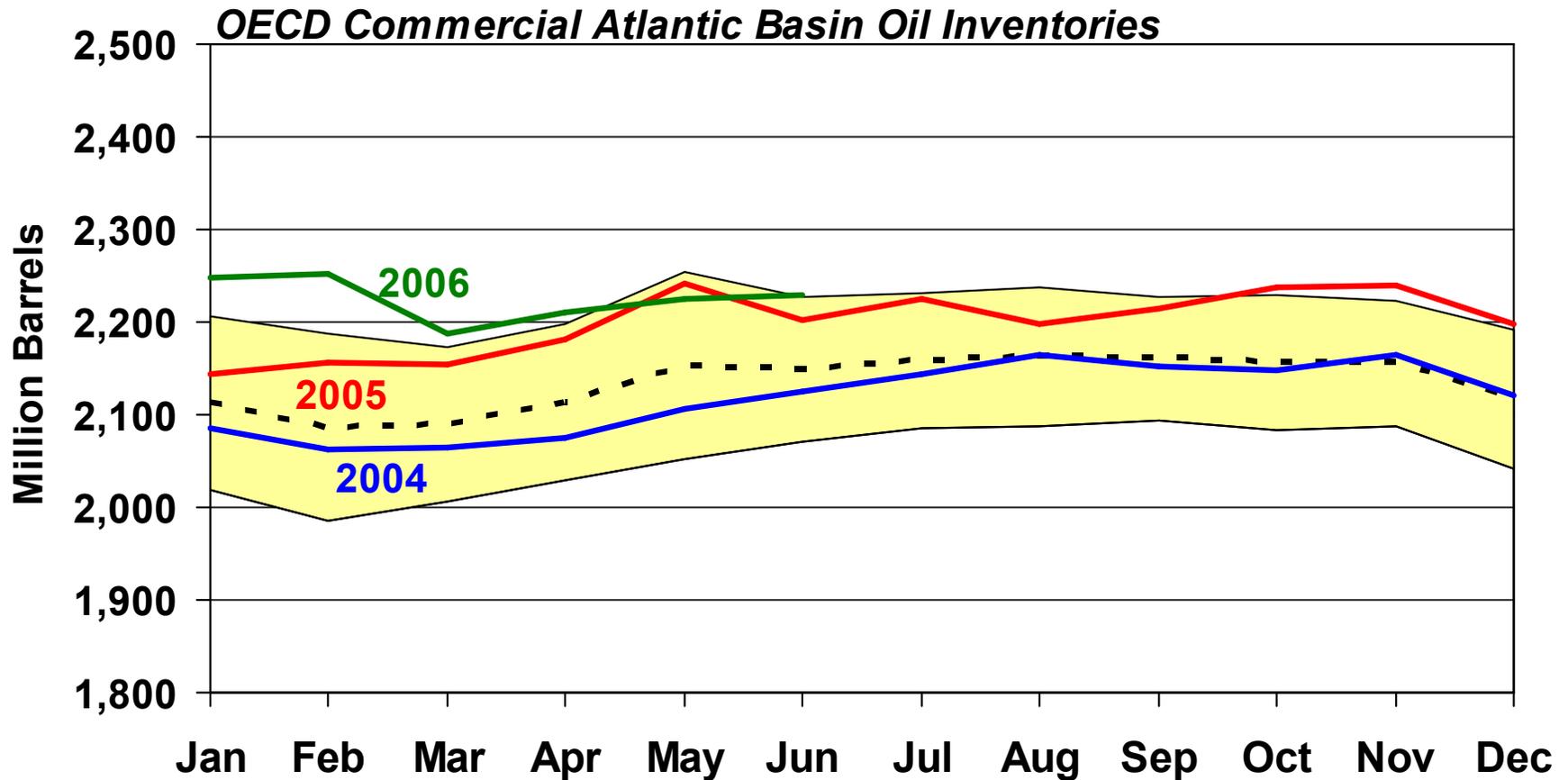
Source: U.S. Energy Information Administration.

# Product Imports Are An Increasingly Important Supply Source



Source: U.S. Energy Information Administration.

# OECD Atlantic Basin Commercial Oil Stocks (Absolute Levels)

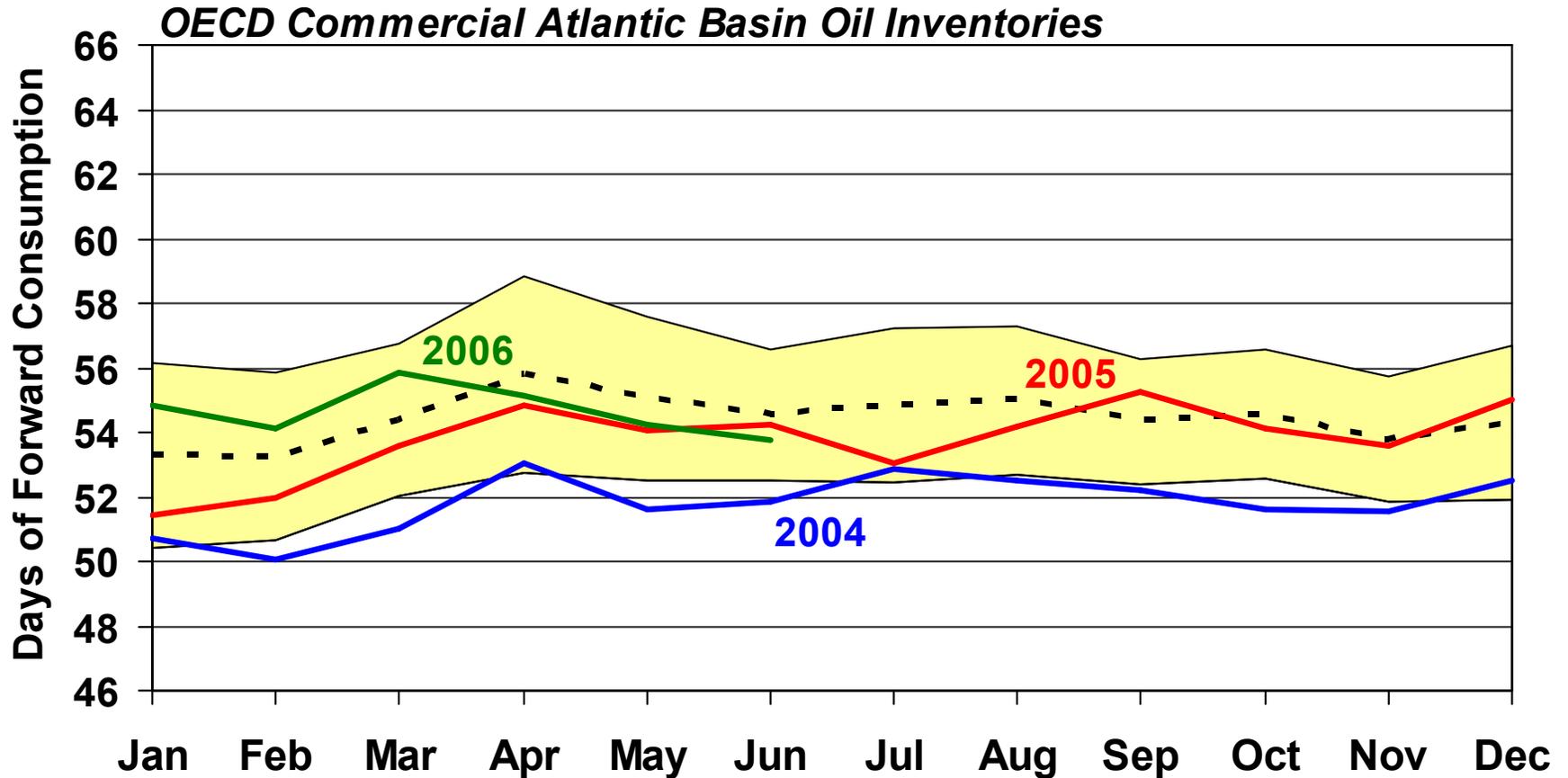


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Source: International Energy Agency database, August 2006.



# Regionally, OECD Atlantic Basin Commercial Oil Stocks Are Below Average in Terms of Days Supply

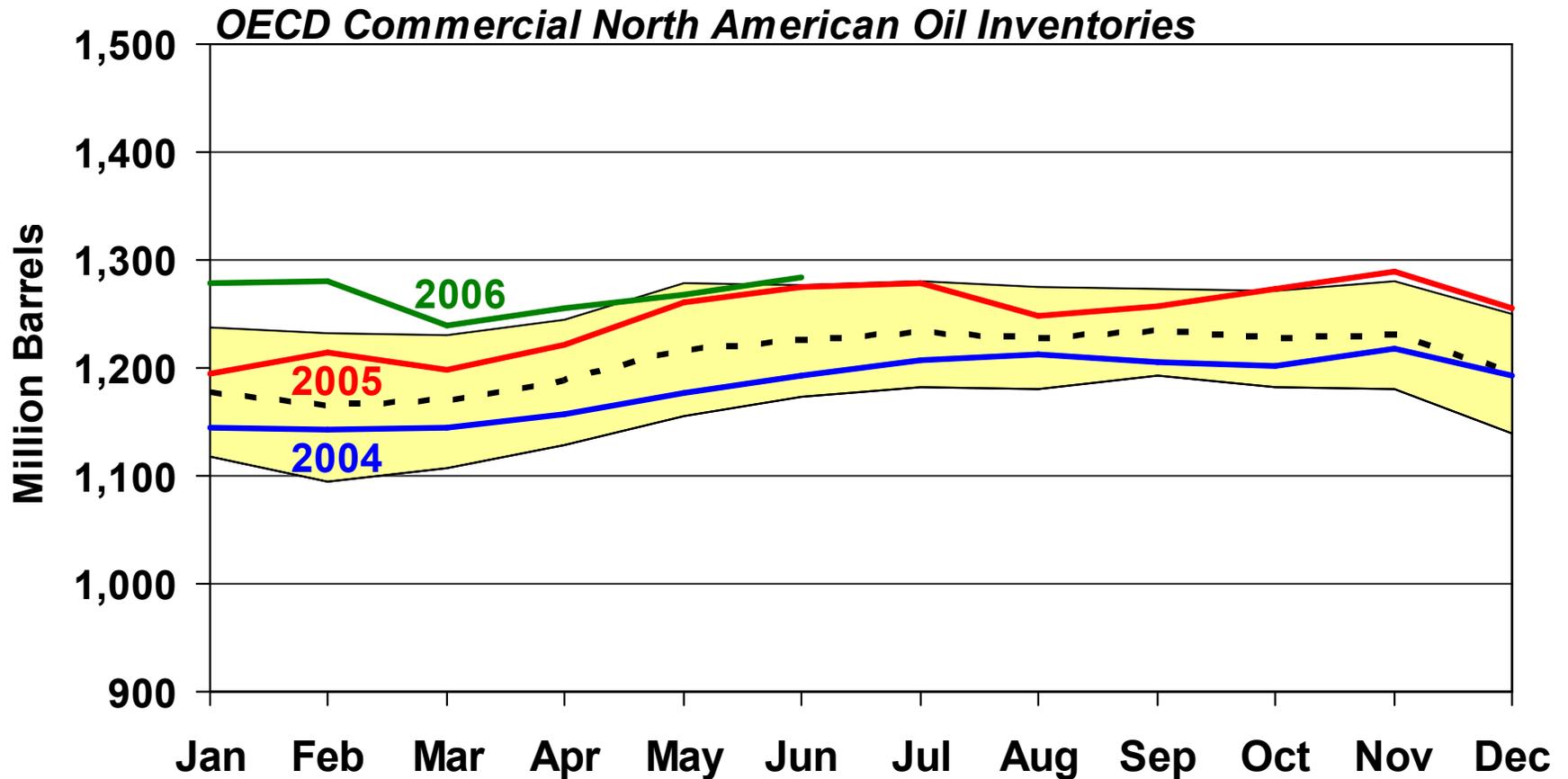


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Source: International Energy Agency database, August 2006.



# OECD North American Commercial Oil Stocks (Absolute Levels)

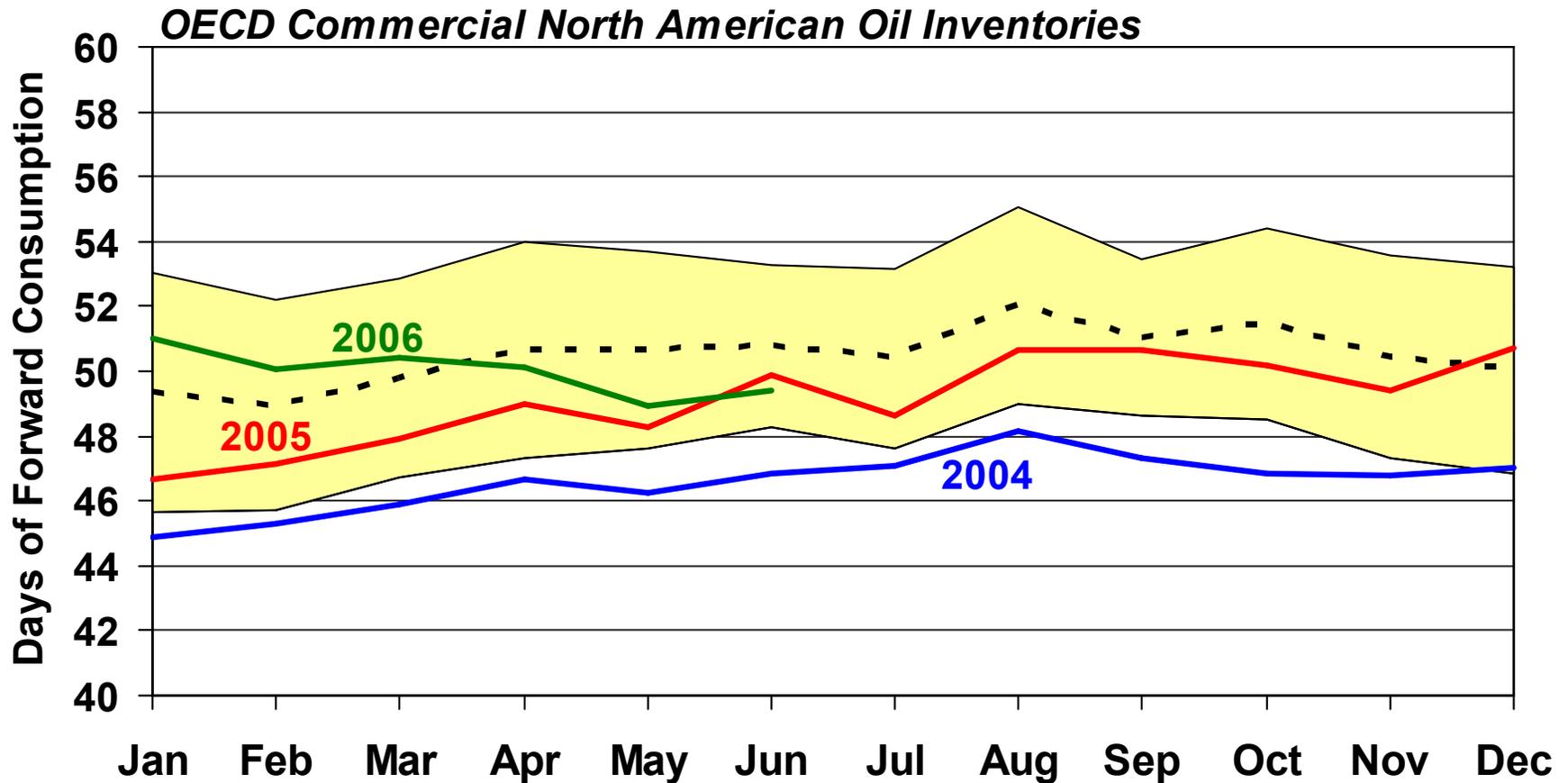


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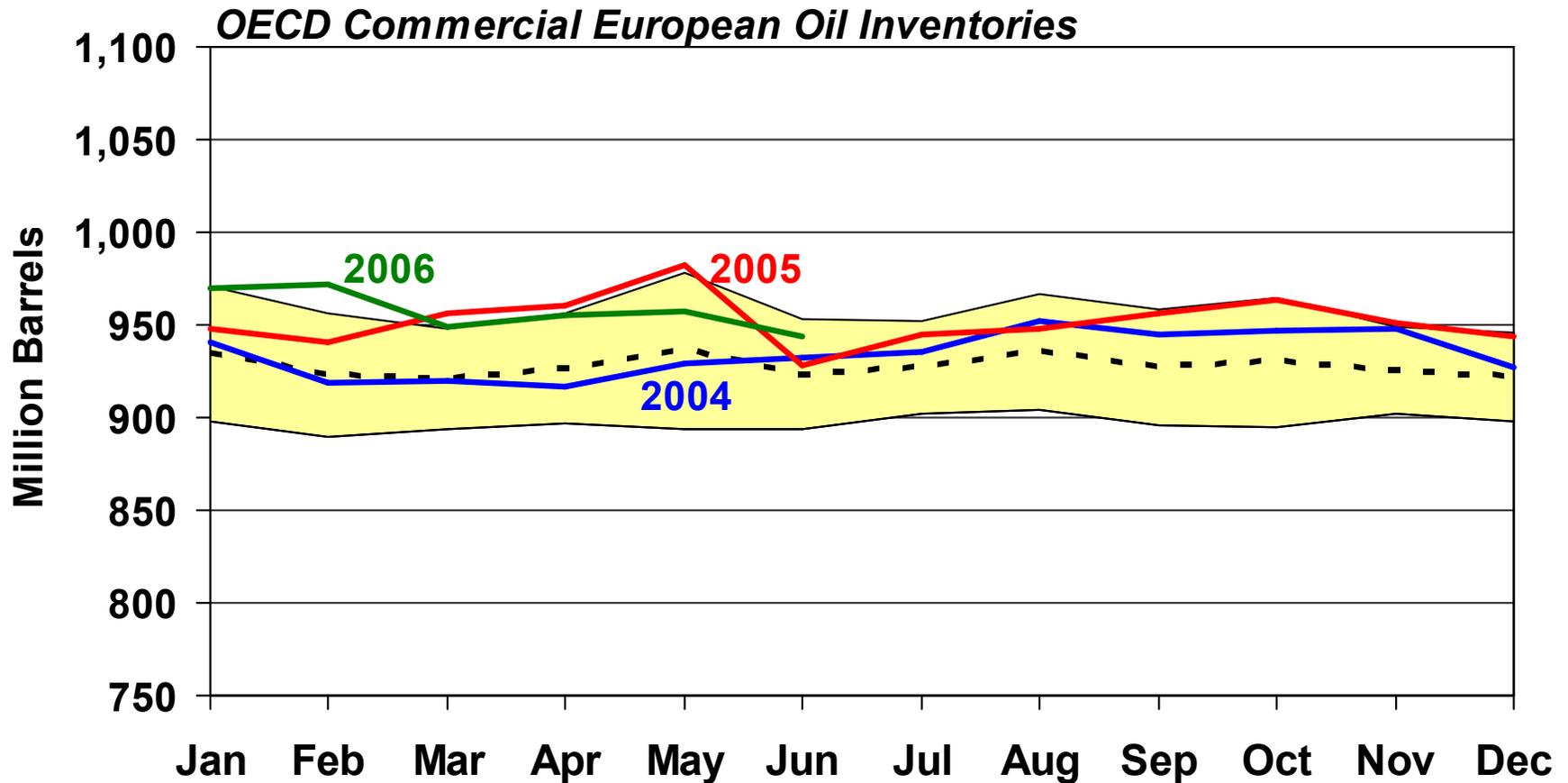
# OECD North American Commercial Oil Stocks Also Low in Terms of Days Supply



**NOTE: Colored Band is Normal Stock Range.  
Dashed line is 1996-2005 average.**

Source: International Energy Agency database, August 2006.

# OECD European Commercial Oil Stocks (Absolute Levels)

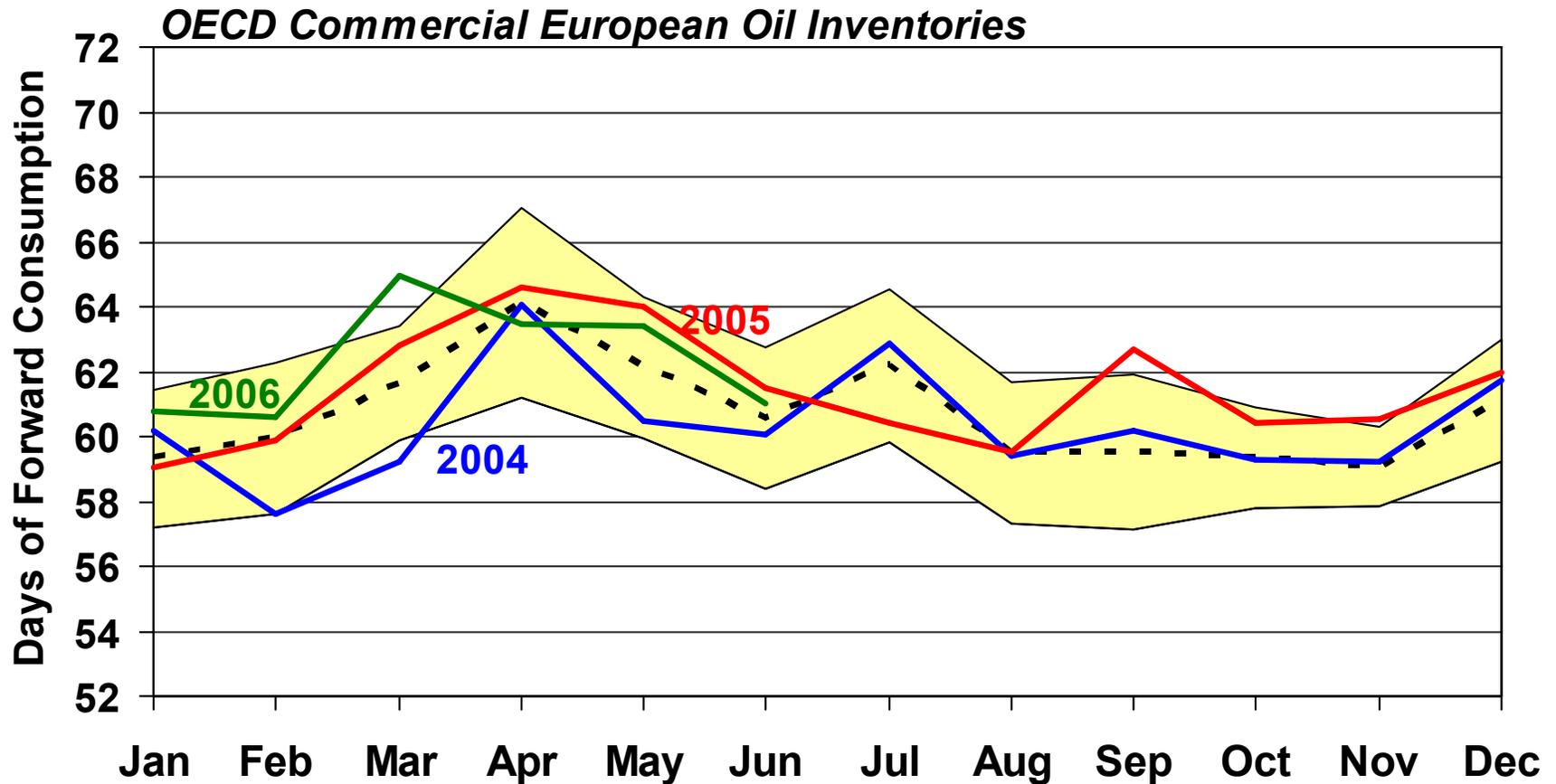


**NOTE: Colored Band is Normal Stock Range.  
Dashed line is 1996-2005 average.**

Source: International Energy Agency database, August 2006.



# OECD European Commercial Oil Stocks About Average in Terms of Days Supply

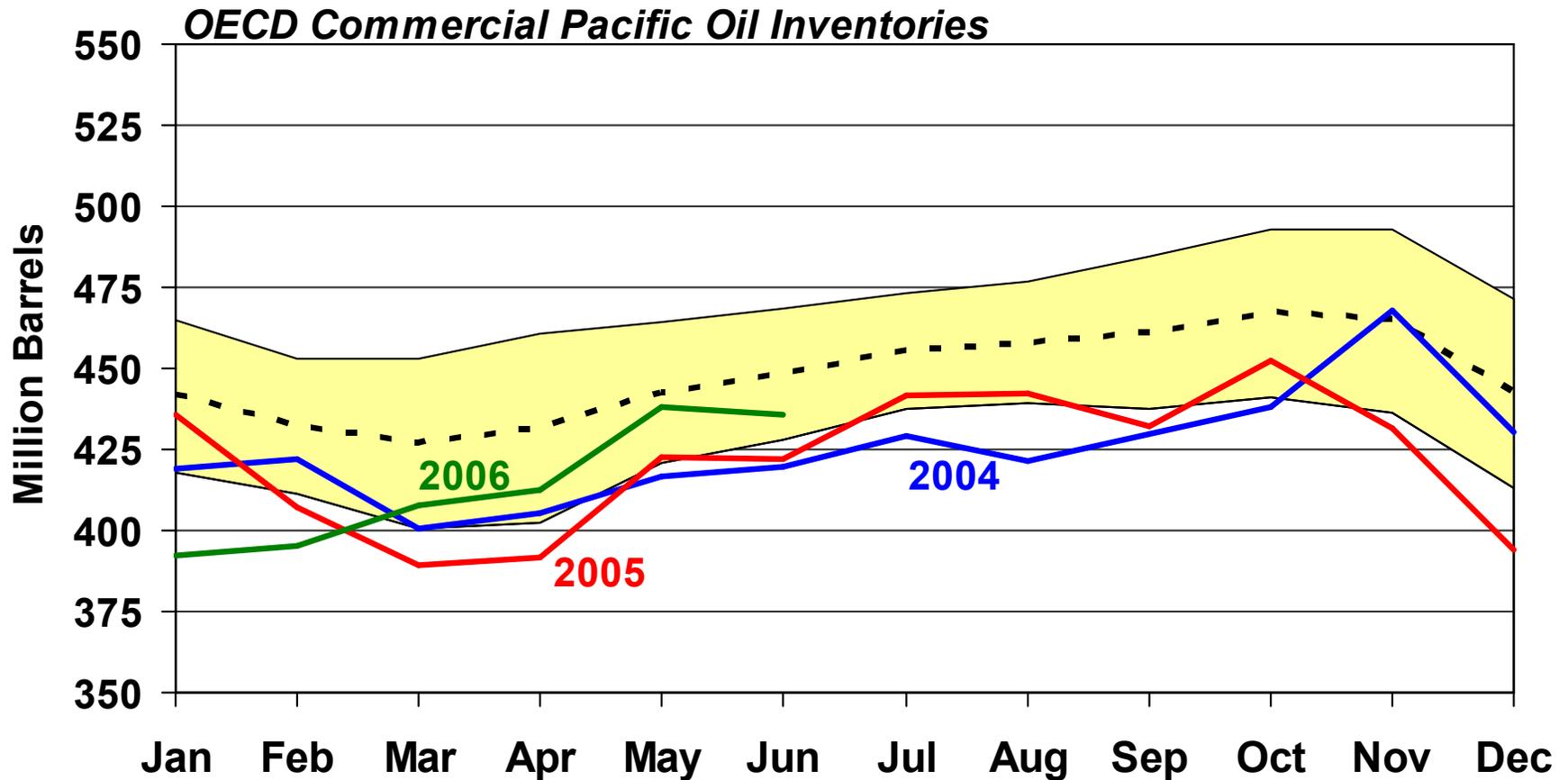


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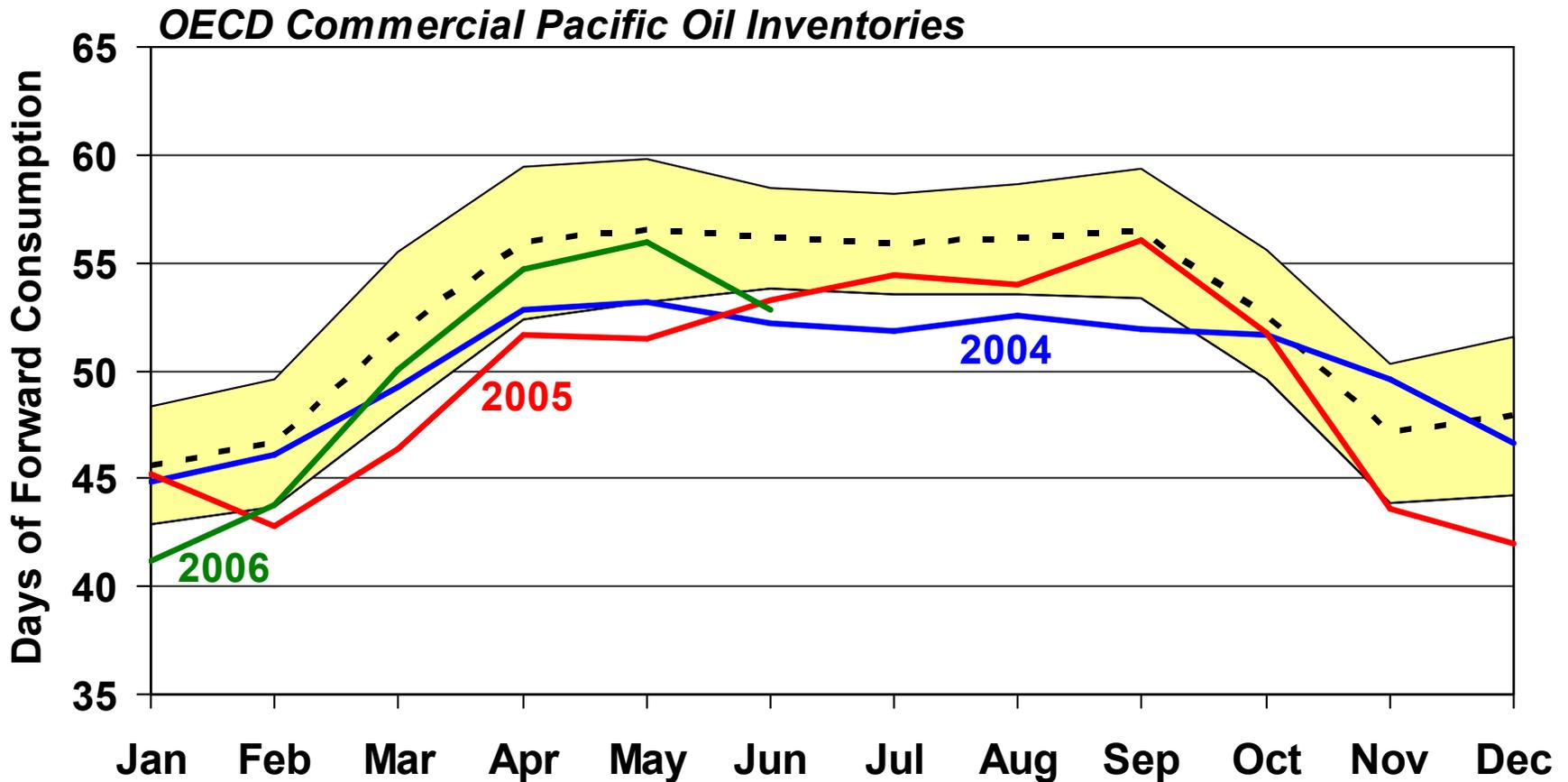
# OECD Pacific Commercial Oil Stocks (Absolute Levels)



**NOTE: Colored Band is Normal Stock Range.  
Dashed line is 1996-2005 average.**

Source: International Energy Agency database, August 2006.

# OECD Pacific Commercial Oil Stocks Once Again Low in Terms of Days Supply

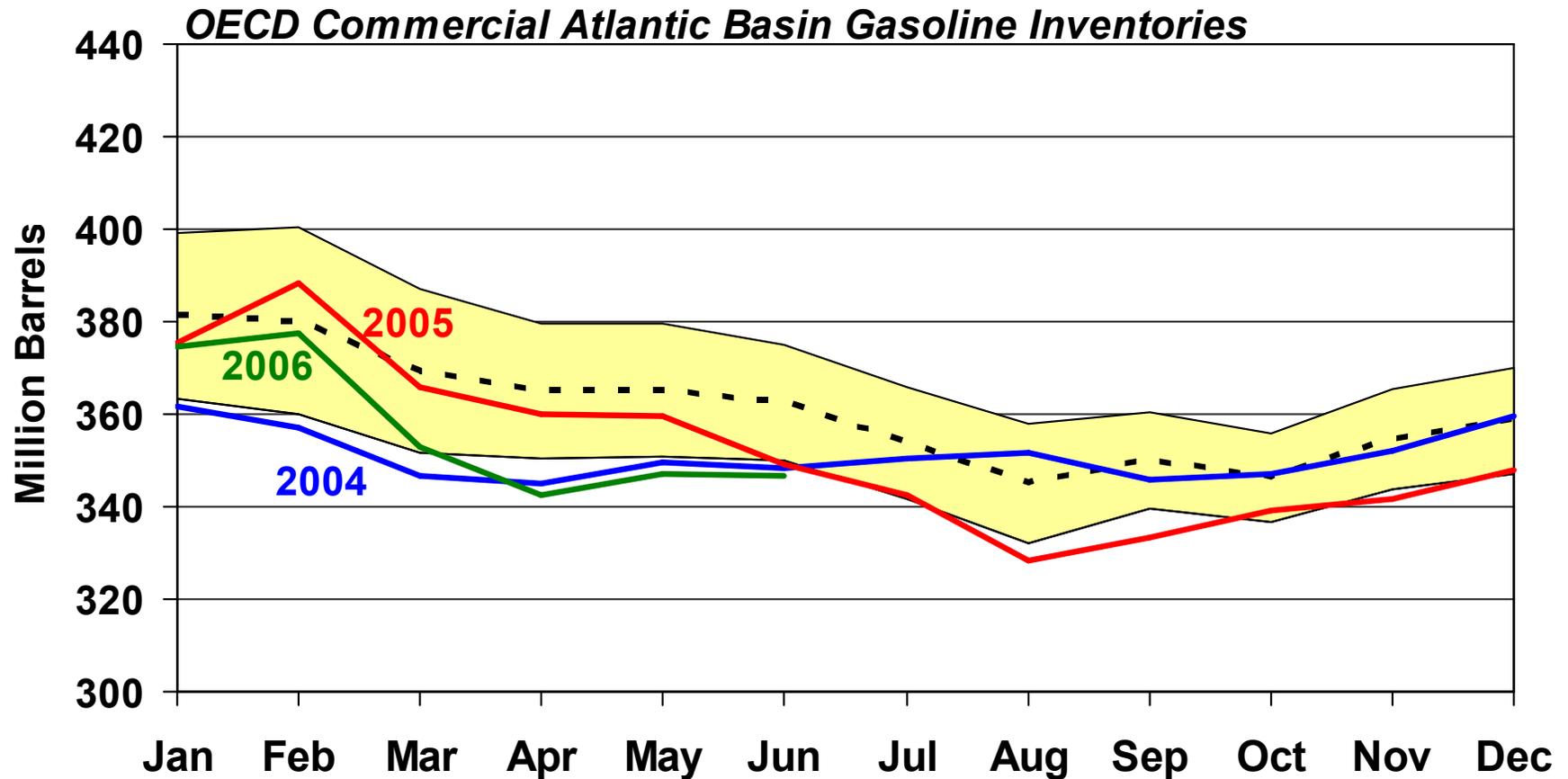


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Source: International Energy Agency database, August 2006.



# OECD Atlantic Basin Commercial Gasoline Stocks (Absolute Levels)

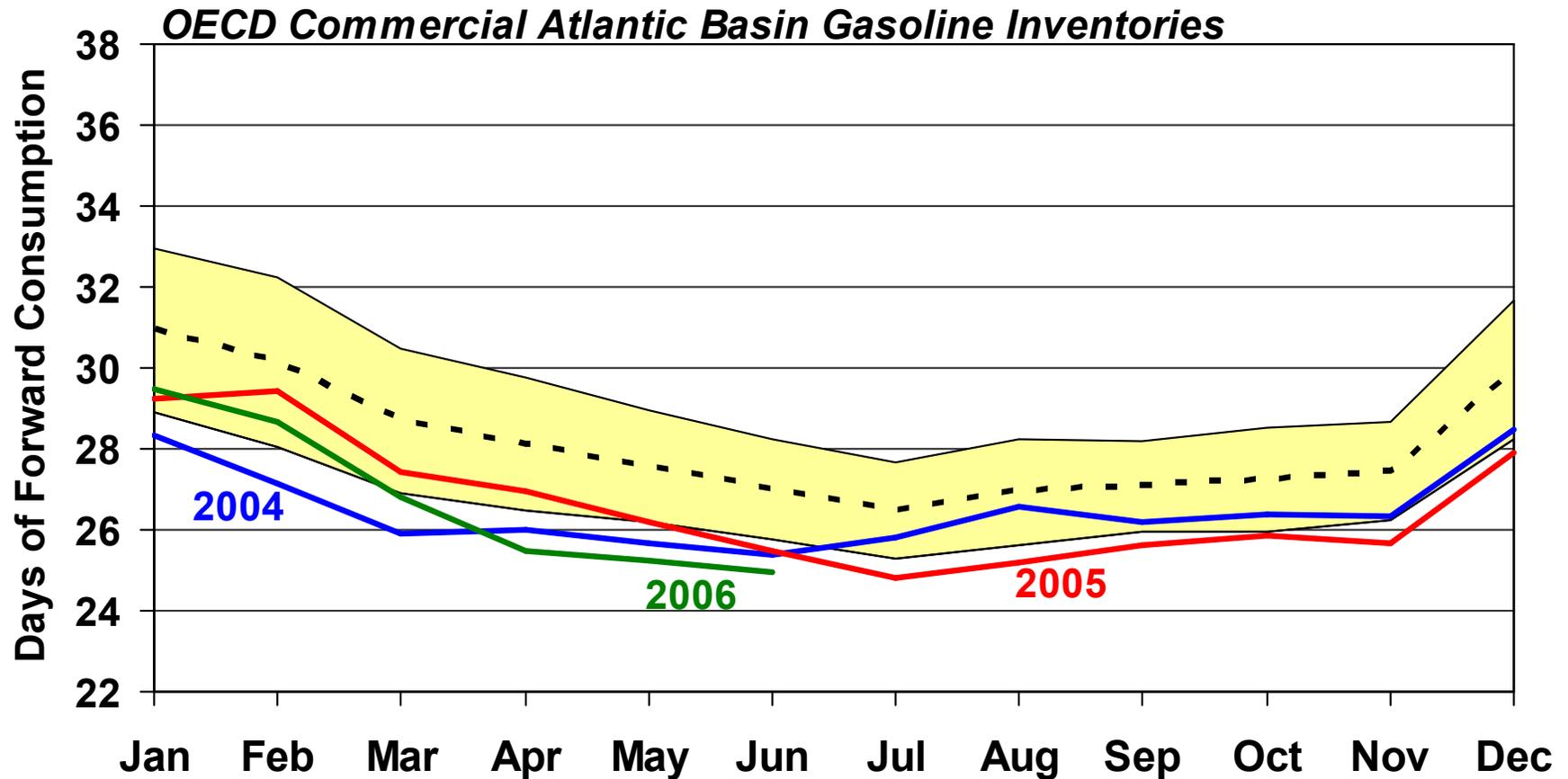


**NOTE: Colored Band is Normal Stock Range.  
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Source: International Energy Agency database, August 2006.



# OECD Atlantic Basin Commercial Gasoline Stocks Well Below Average in Terms of Days Supply

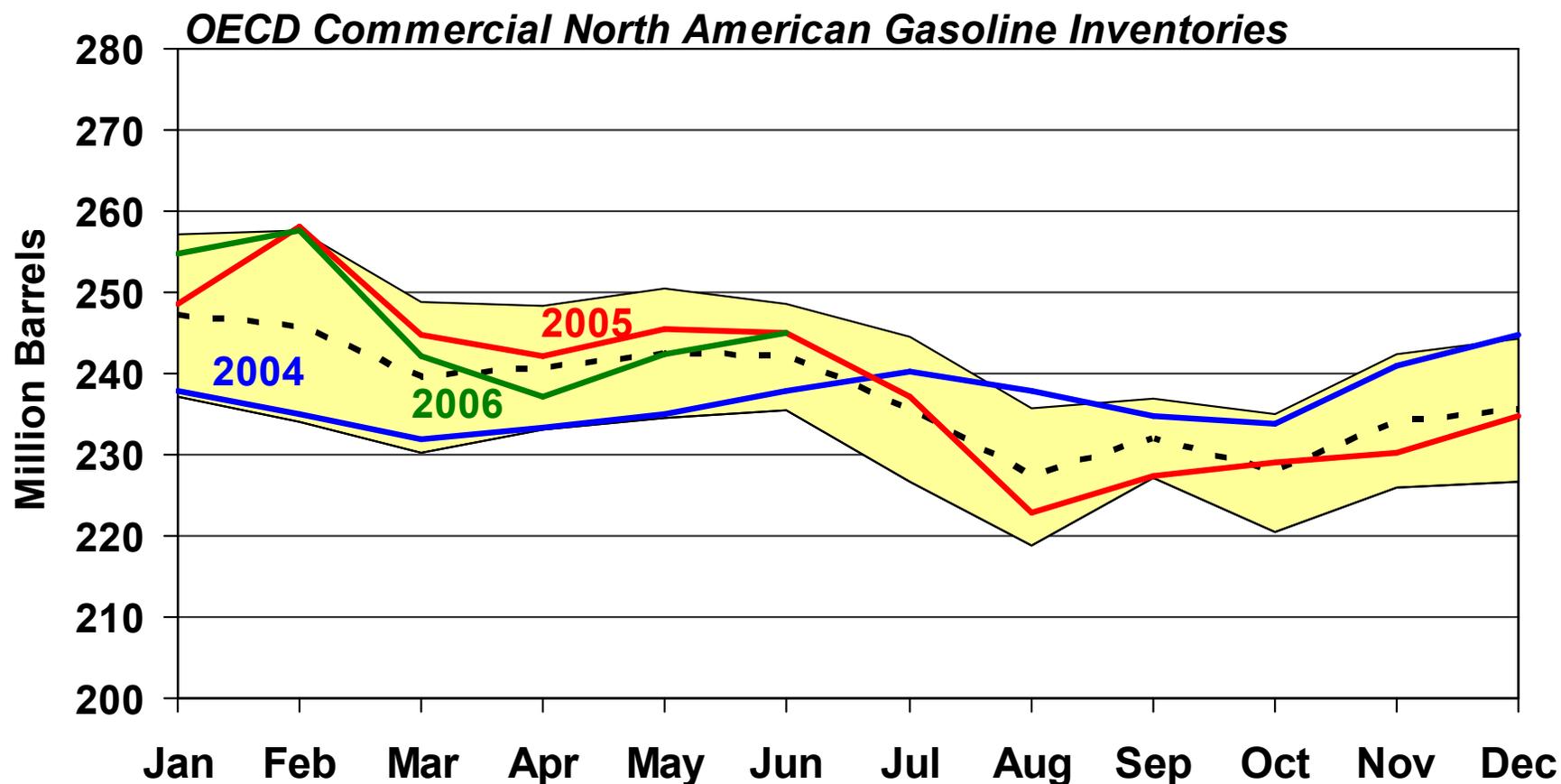


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# OECD North American Commercial Gasoline Stocks (Absolute Levels)

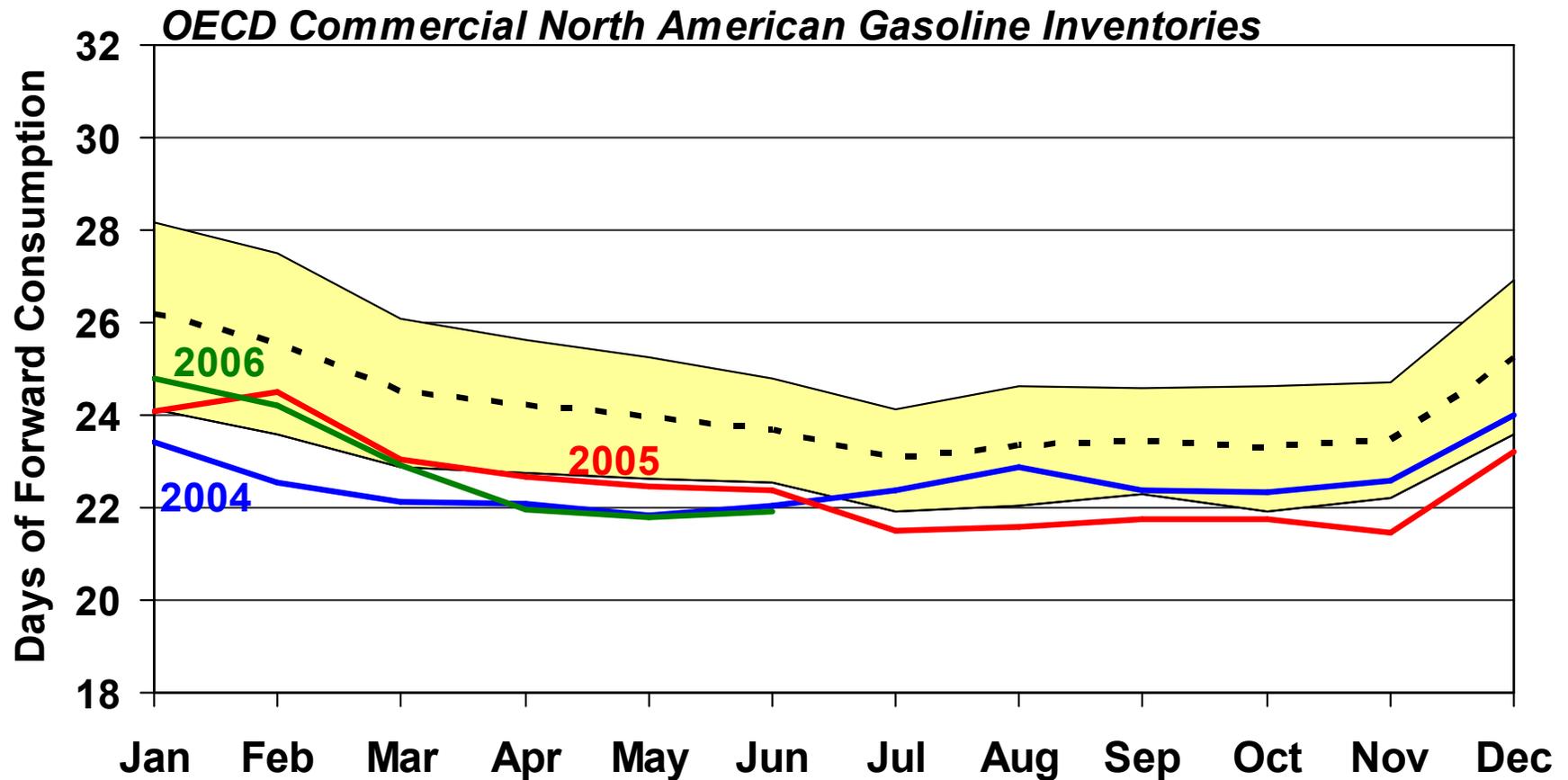


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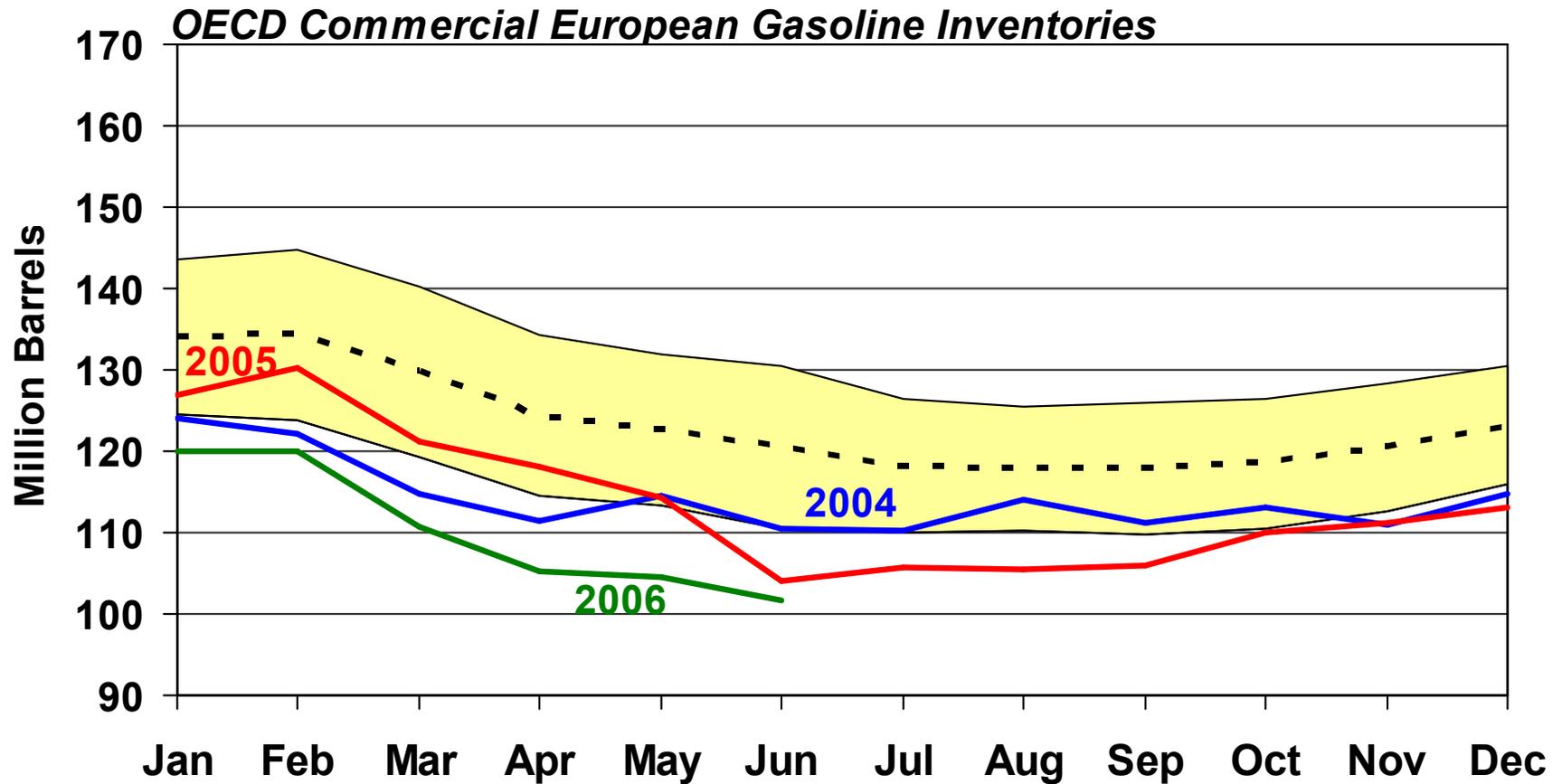


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# OECD European Commercial Gasoline Stocks (Absolute Levels)

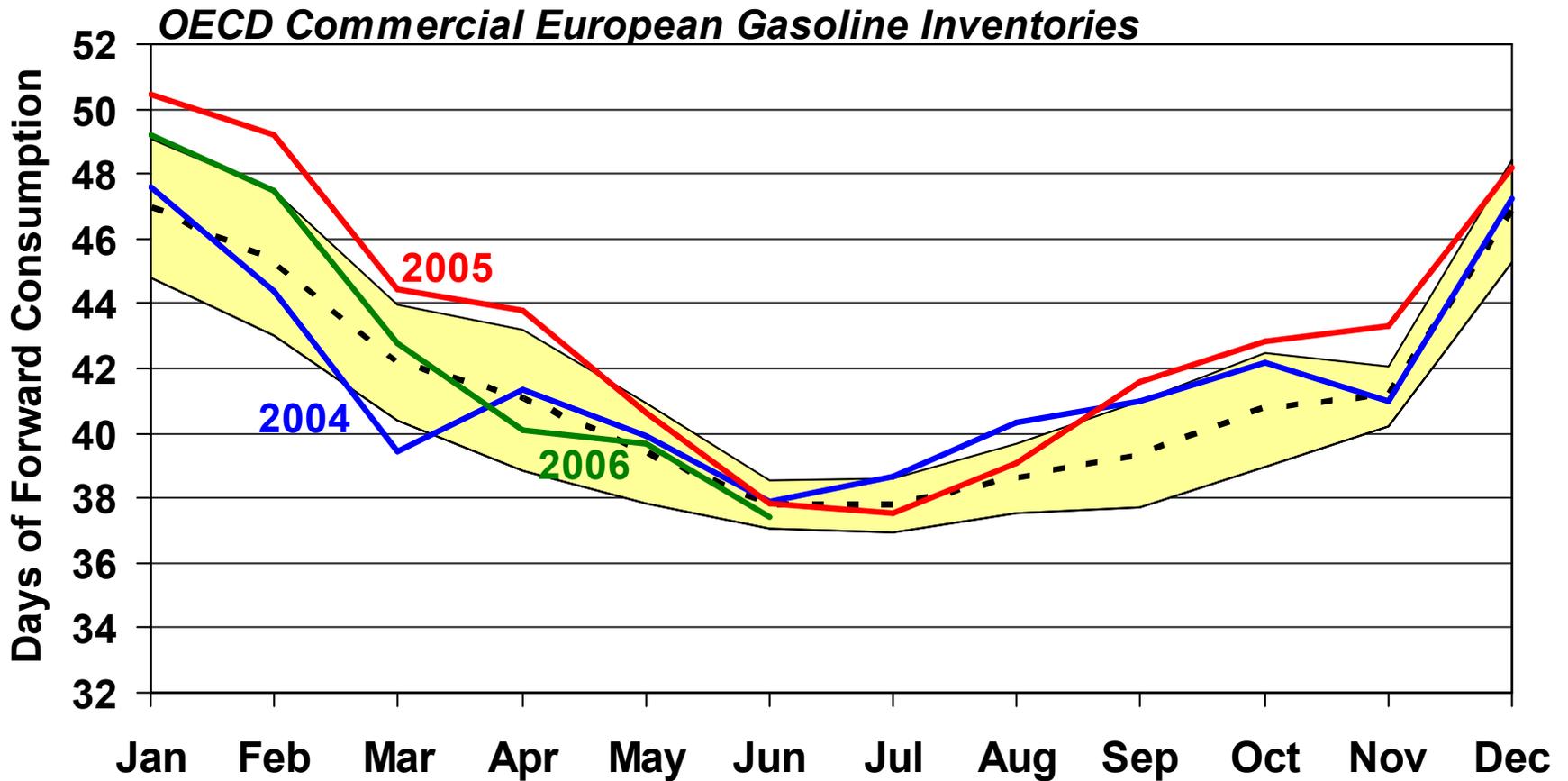


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Source: International Energy Agency database, August 2006.



# OECD European Commercial Gasoline Stocks (Days Supply)

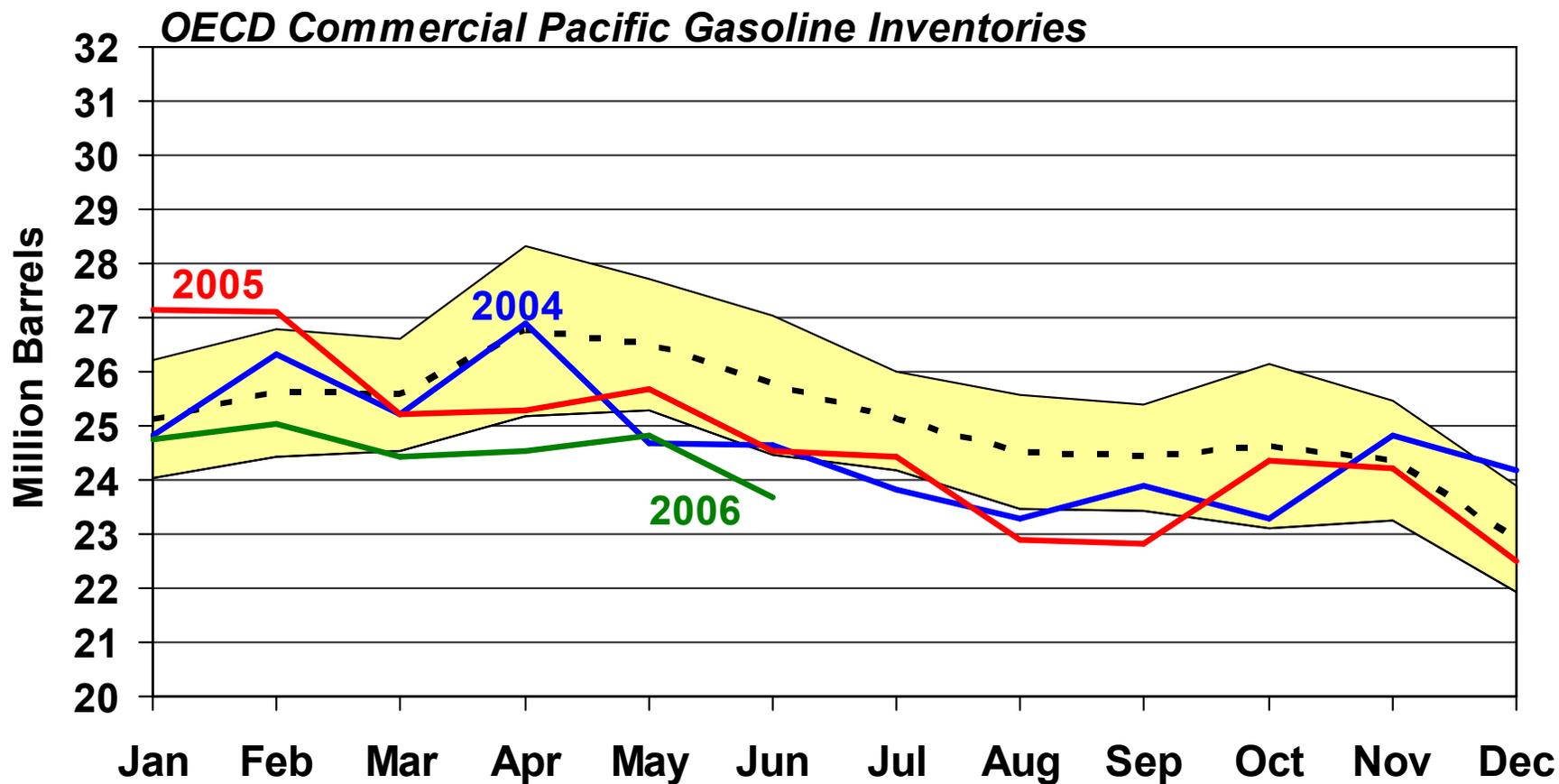


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Source: International Energy Agency database, August 2006.



# OECD Pacific Commercial Gasoline Stocks (Absolute Levels)

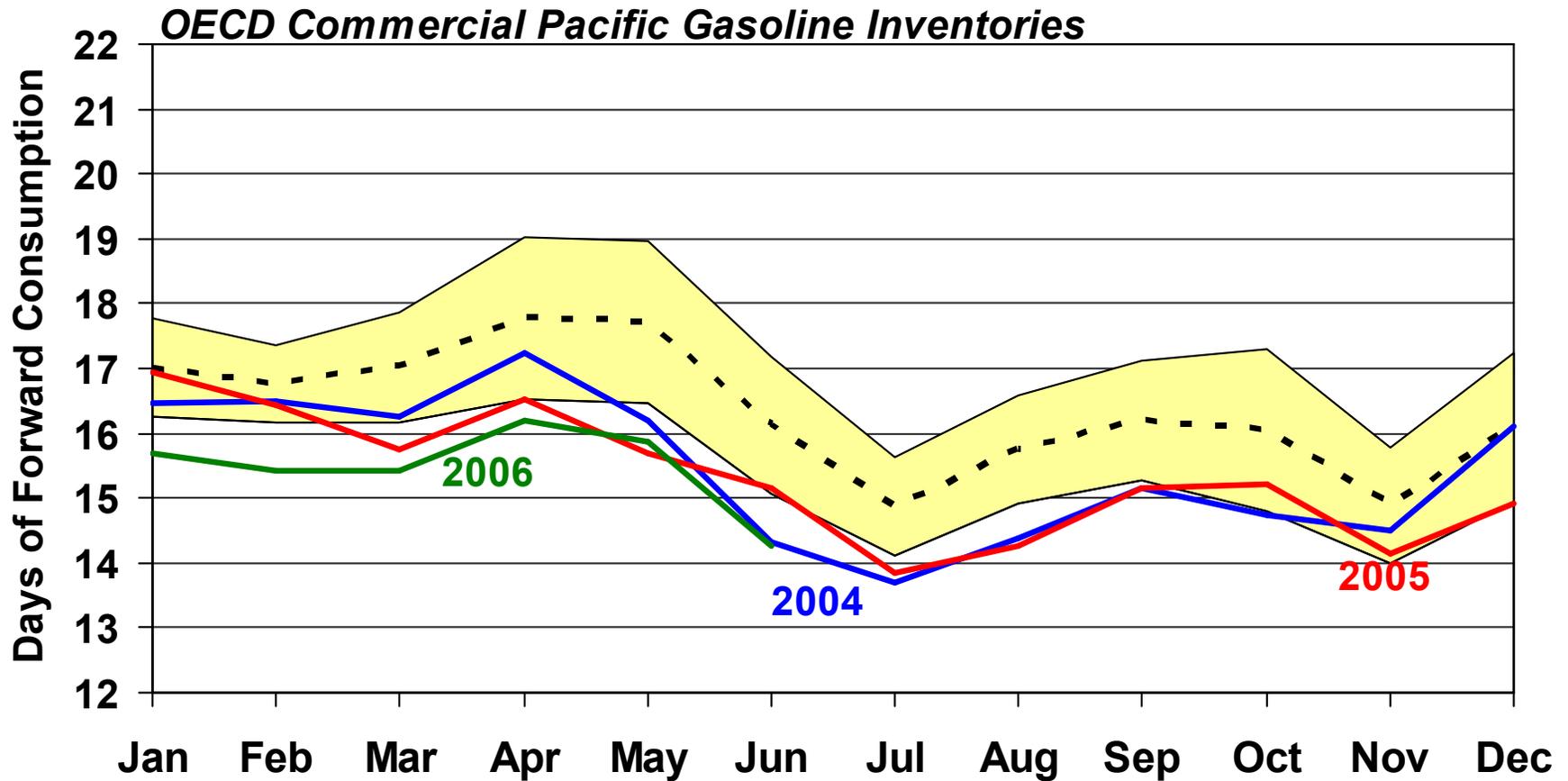


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# OECD Pacific Commercial Gasoline Stocks (Days Supply)

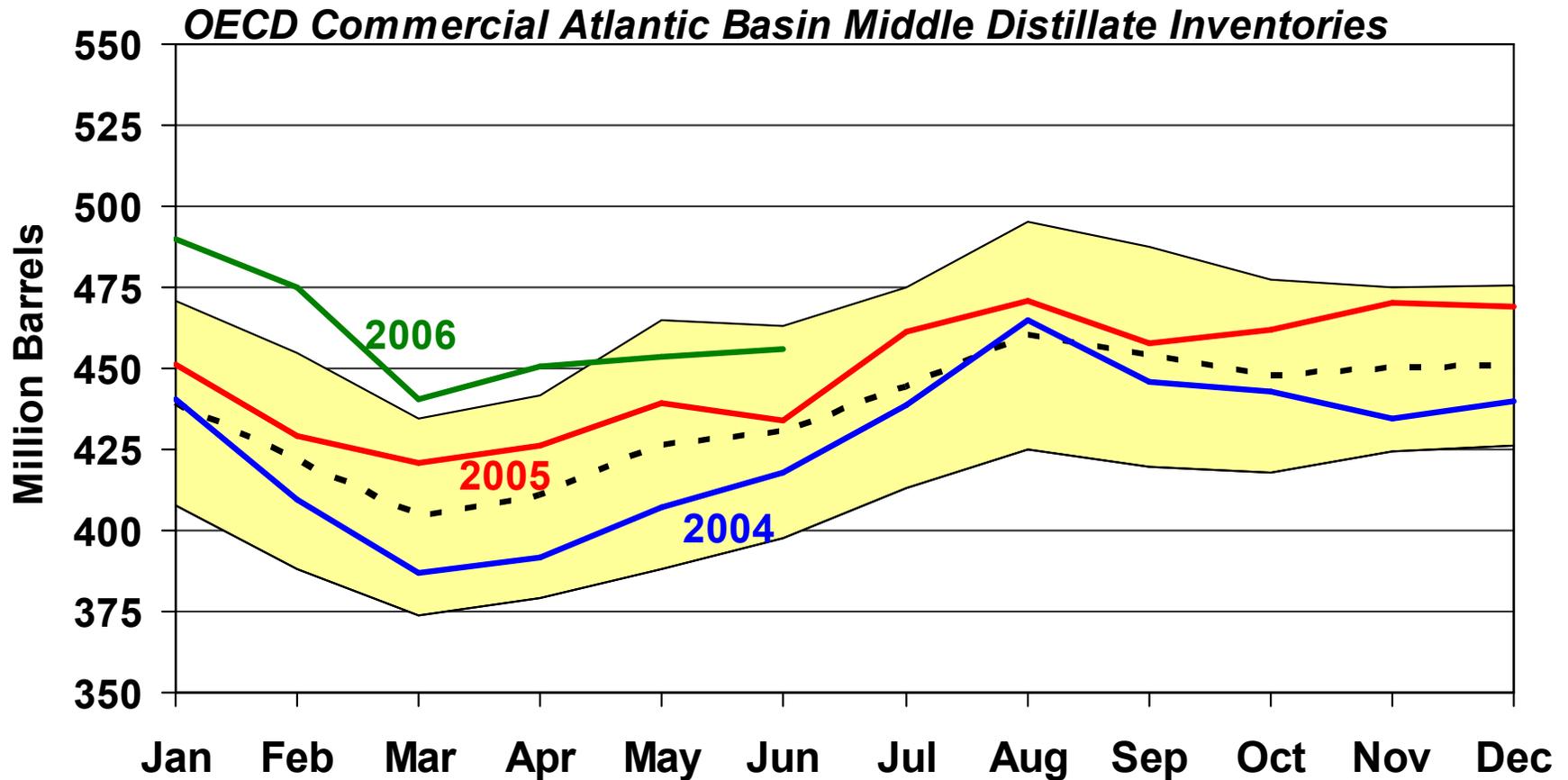


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# OECD Atlantic Basin Commercial Distillate Stocks (Absolute Levels)

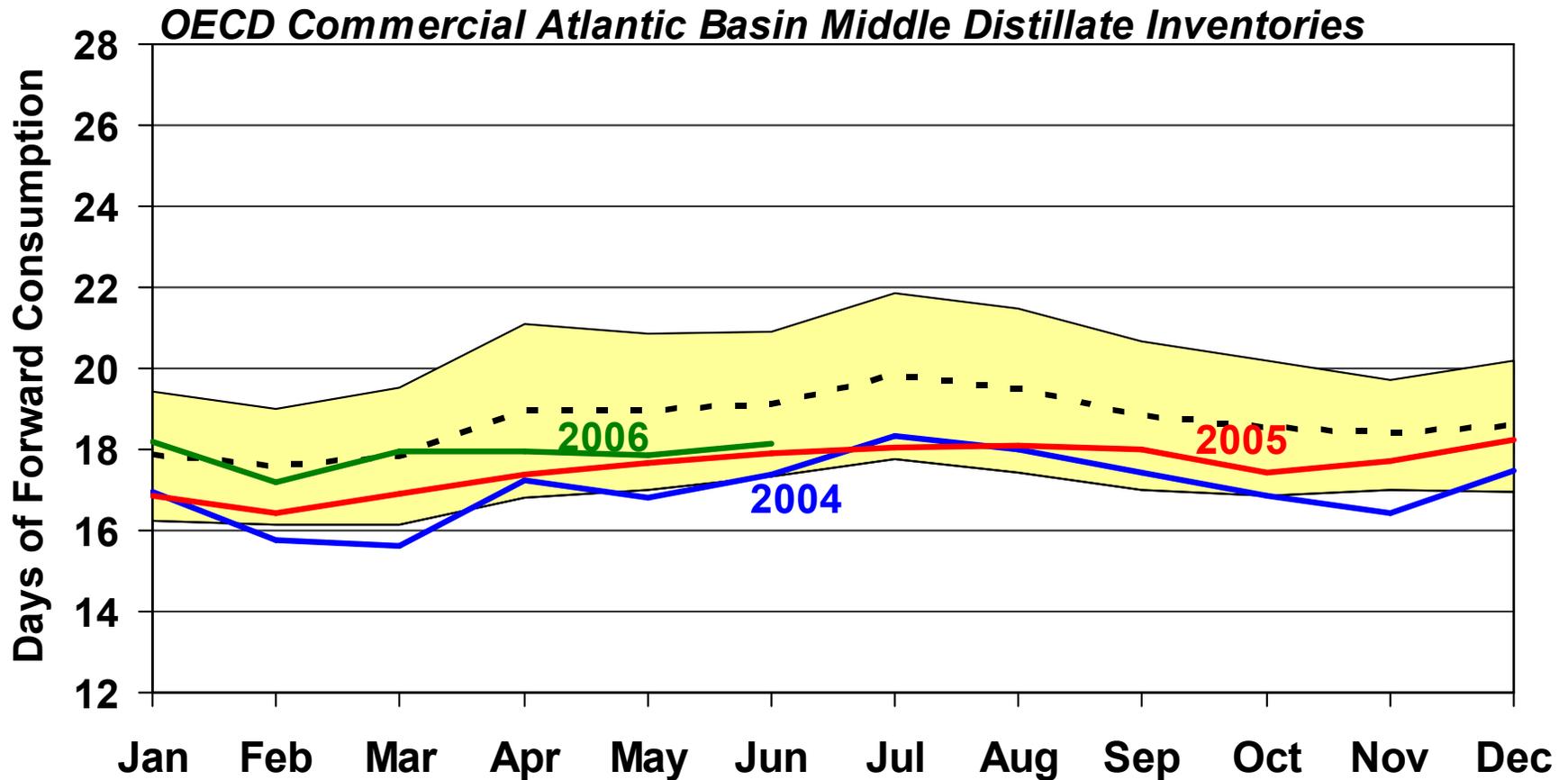


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Source: International Energy Agency database, August 2006.



# OECD Atlantic Basin Commercial Distillate Stocks Also Low in Terms of Days Supply

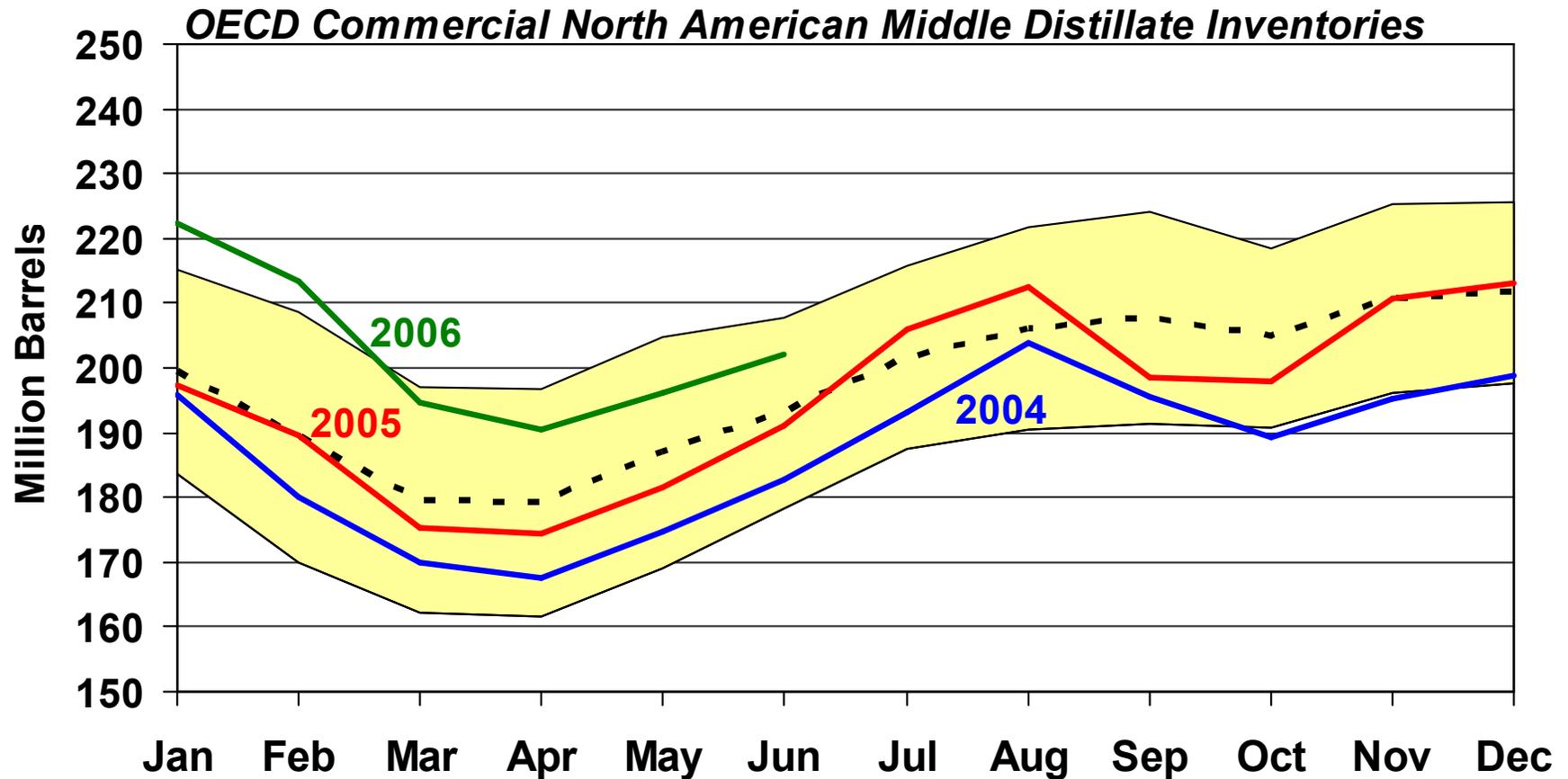


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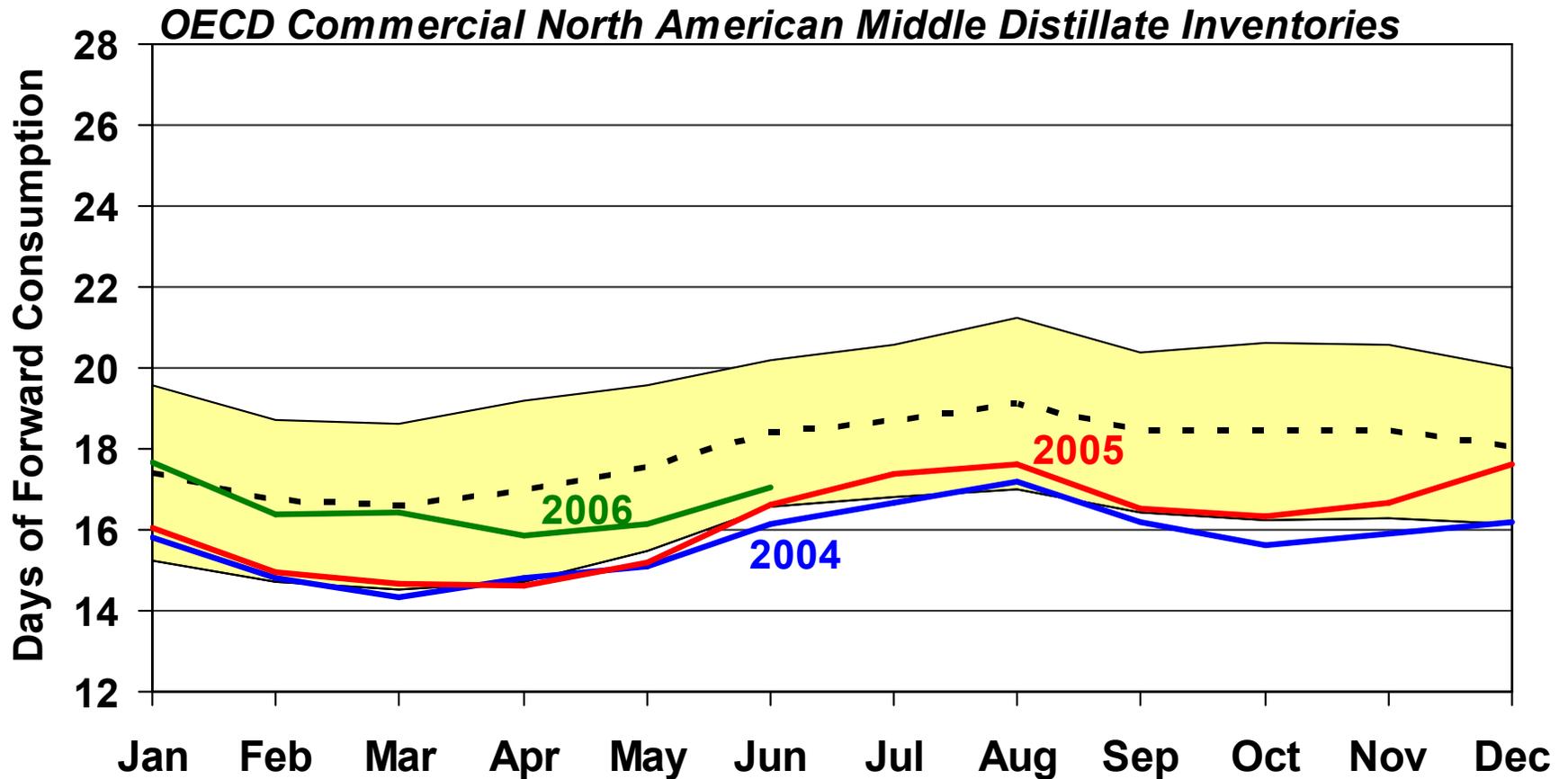
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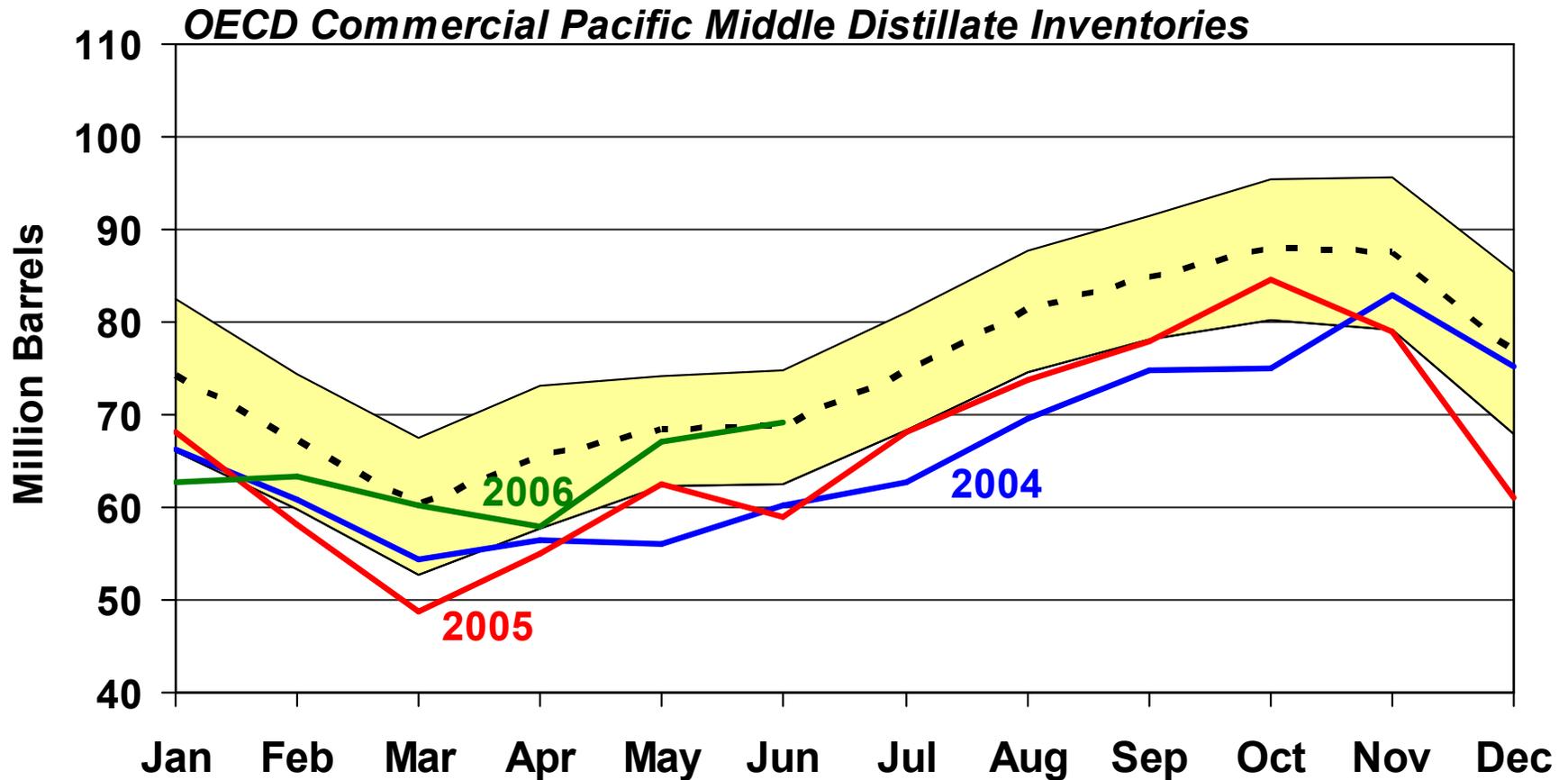


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# OECD Pacific Commercial Distillate Stocks (Absolute Levels)

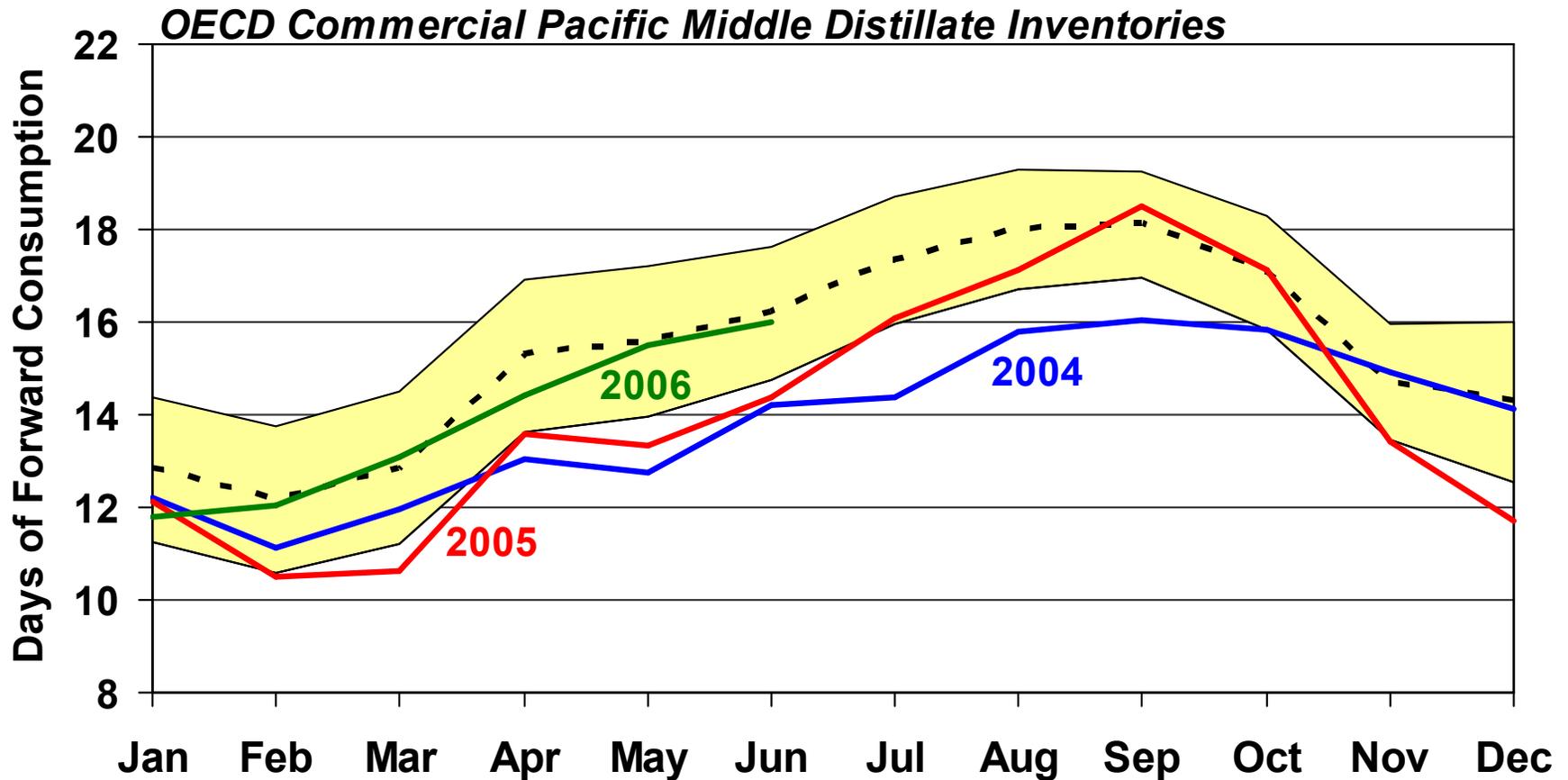


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# OECD Pacific Commercial Distillate Stocks About Average in Terms of Days Supply

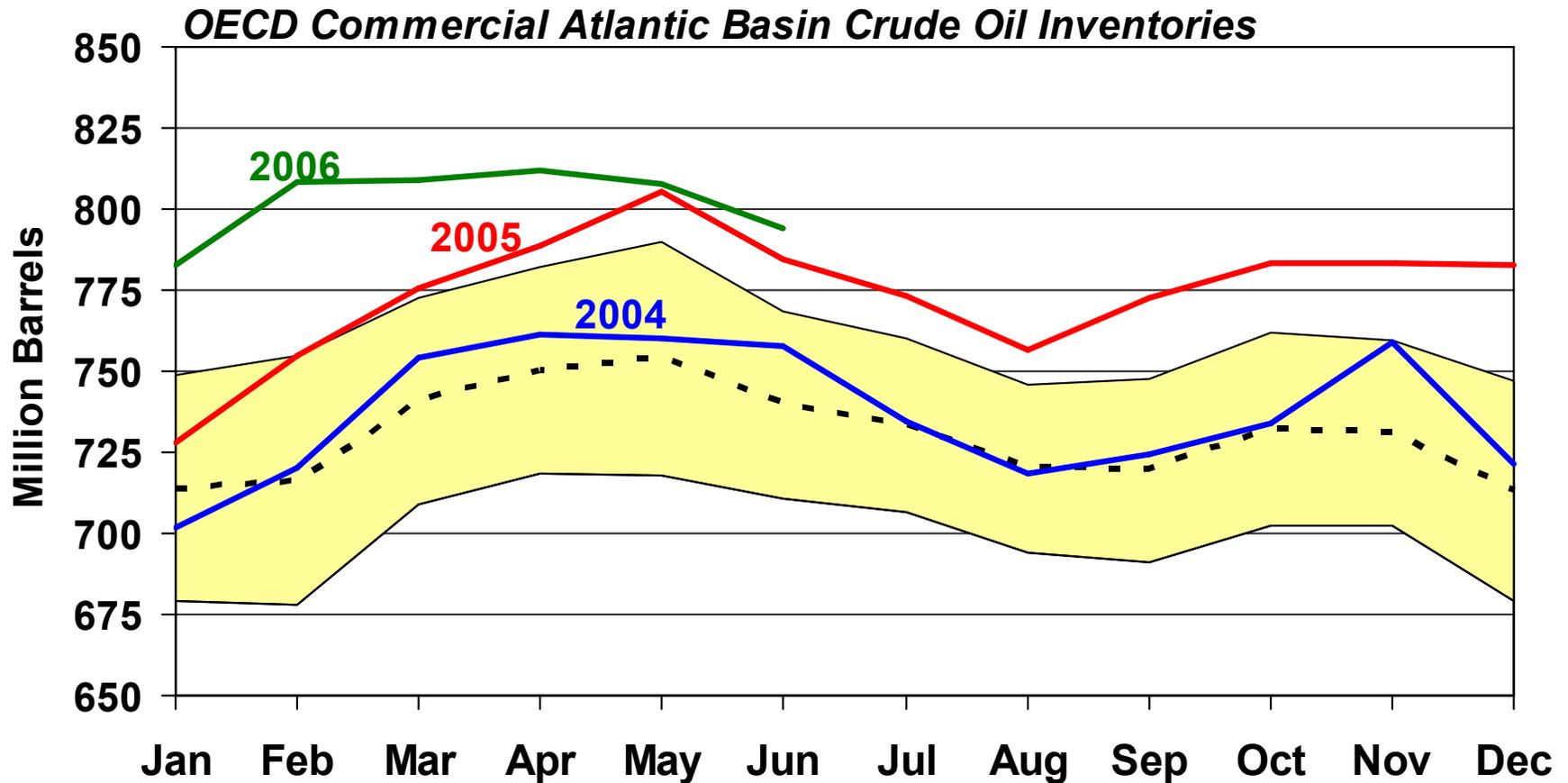


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# OECD Atlantic Basin Commercial Crude Oil Stocks (Absolute Levels)

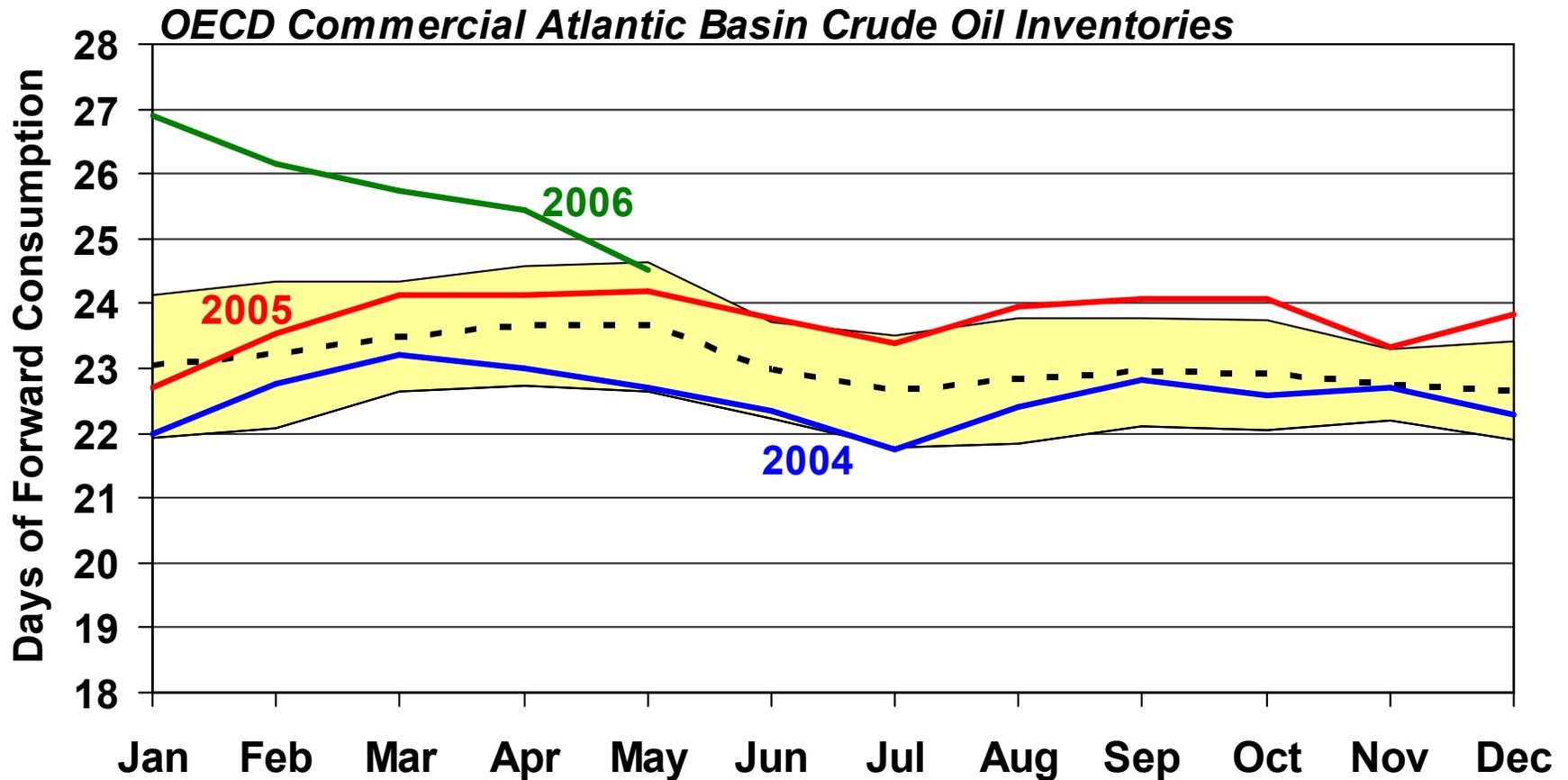


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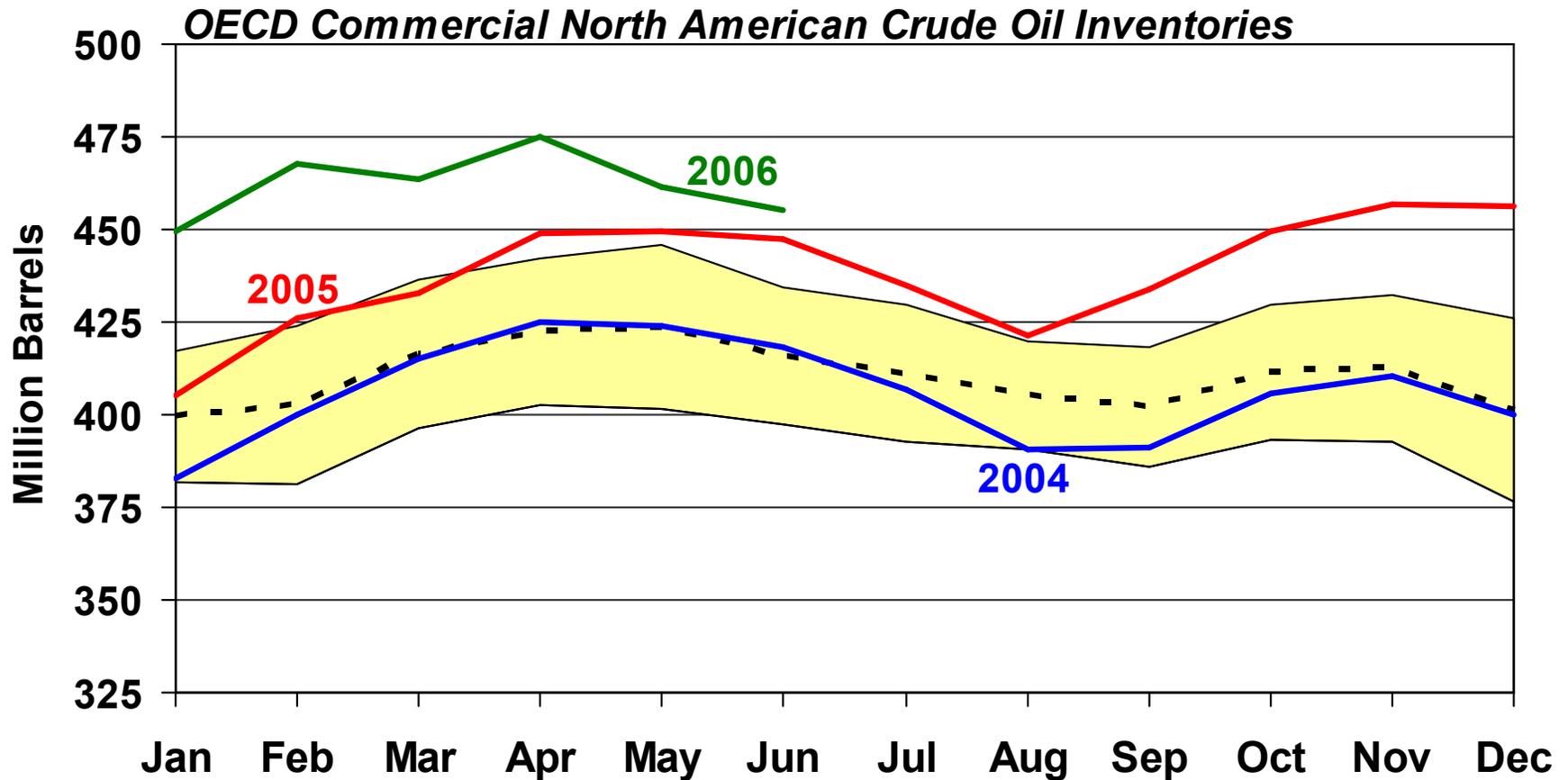


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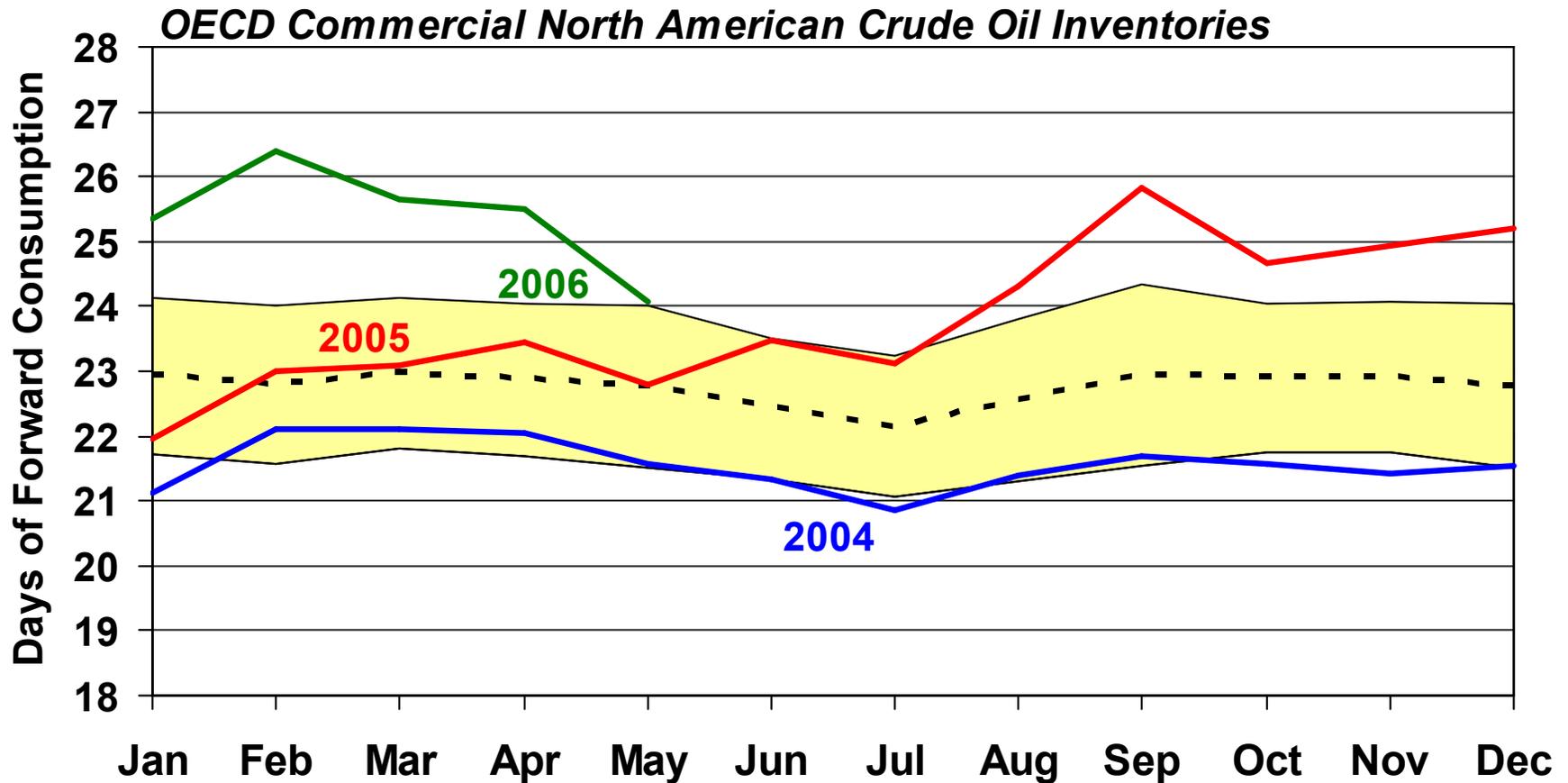


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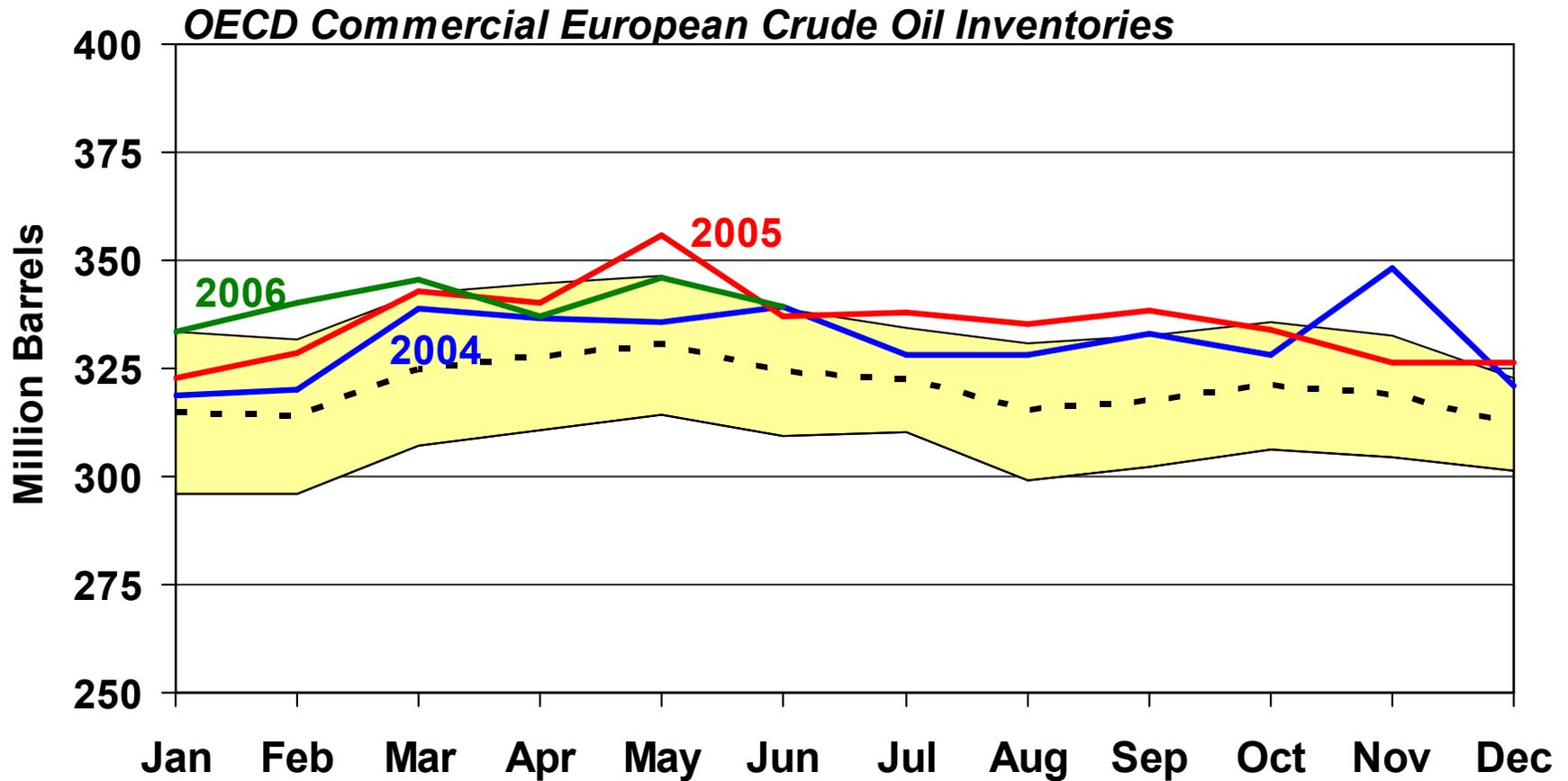


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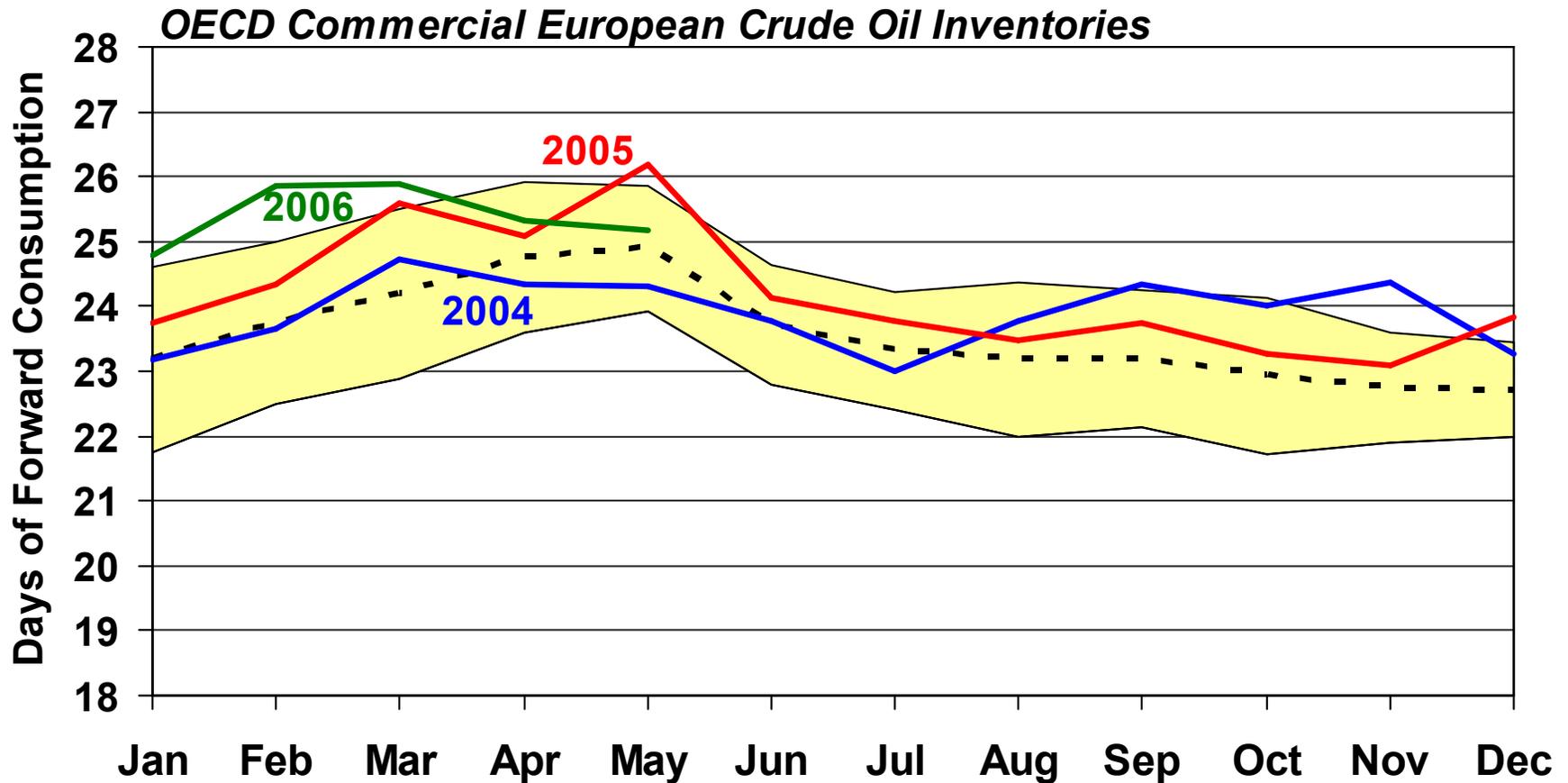


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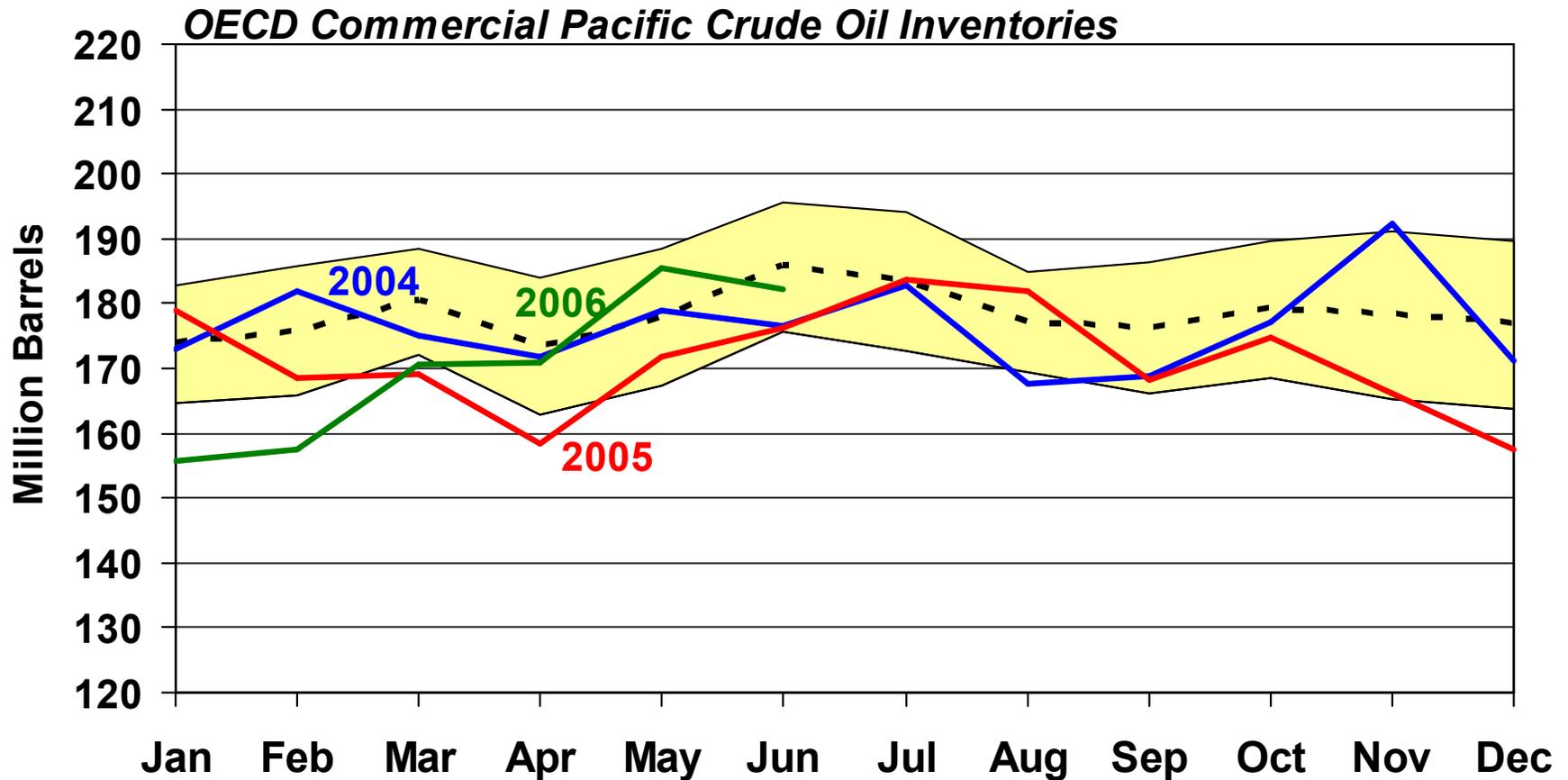


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Dashed line is 1996-2005 average.**

Source: International Energy Agency database, August 2006.



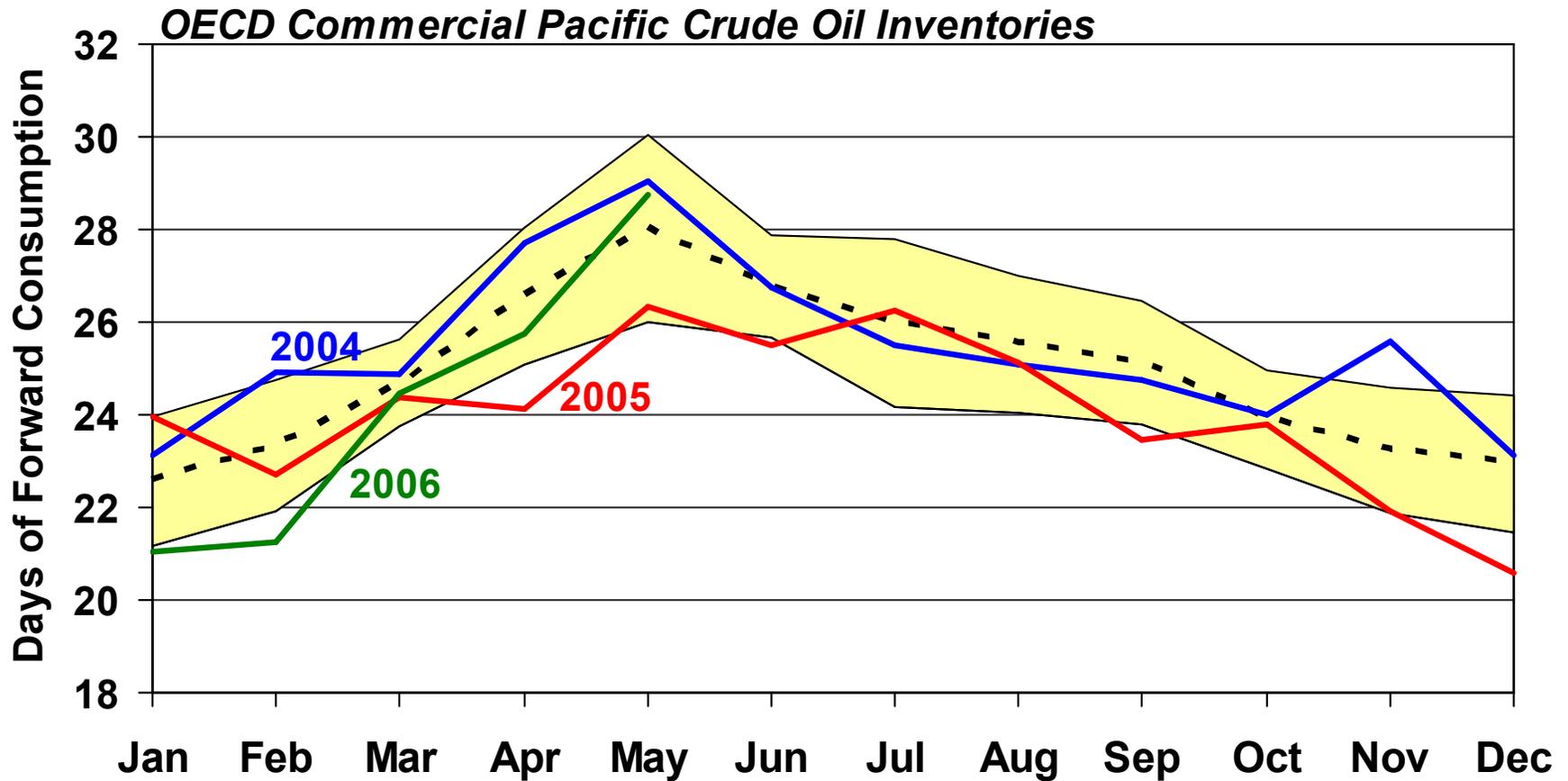
# OECD Pacific Commercial Crude Oil Stocks (Absolute Levels)



**NOTE: Colored Band is Normal Stock Range.  
Dashed line is 1996-2005 average.**

Source: International Energy Agency database, August 2006.

# OECD Pacific Commercial Crude Oil Stocks (Days Supply)



**NOTE: Colored Band is Normal Stock Range.  
Dashed line is 1996-2005 average.**

Source: International Energy Agency database, August 2006.