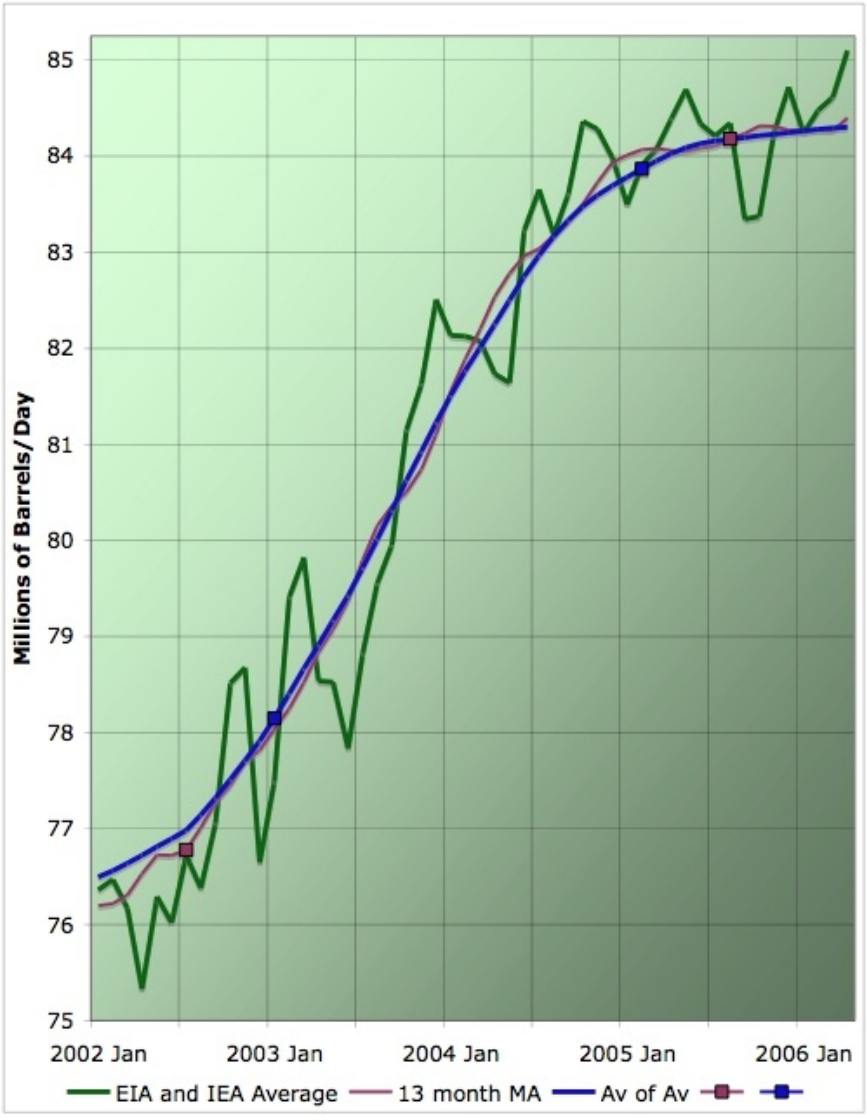
The Oil Drum
DISCUSSIONS ABOUT ENERGY AND OUR FUTURE

May IEA Oil Market Report

Posted by Stuart Staniford on May 18, 2006 - 7:30pm
Topic: Supply/Production
Tags: peak oil, plateau [list all tags]



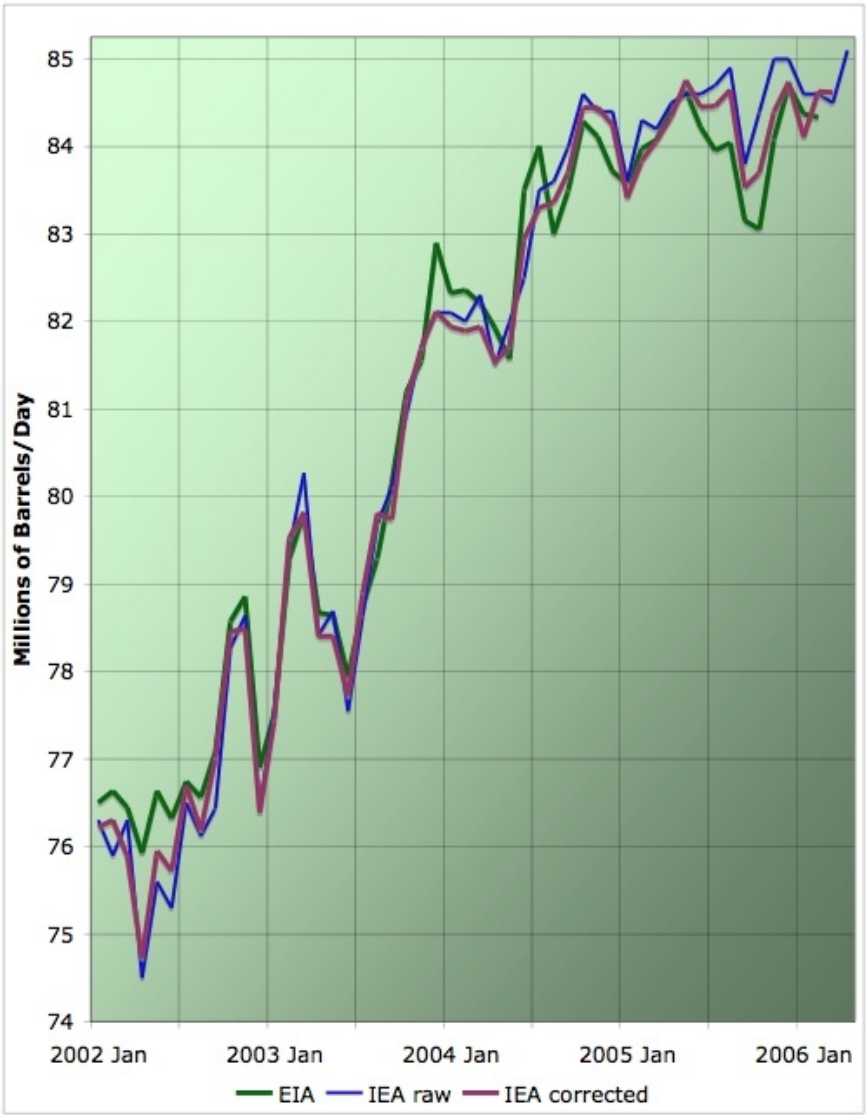
Average daily oil production, by month, averaged from estimates by the EIA and IEA, together with 13 month centered moving average, and recursed moving average of the moving average. The last two data points in the monthly data are from the IEA alone, and the moving average windows are reduced at the graph edges to only include the data that exists. Click to enlarge. Believed to be all liquids. Graph is not zero-scaled. Source: IEA, and EIA.

Holy Monkeyboards Oilman! What's that gentle upward tilt doing on our hitherto pristine plateau?

According to the IEA Oil Market Report (which I am late in getting too - apologies but real life has called insistently of late), the oil industry has had a good couple of months:

> World oil supply in April rose by 485 kb/d to 85.1 mb/d. Increases from OPEC, the FSU, Africa and North America were partly offset by seasonal North Sea outages. ... April OPEC crude supply rose by 170 kb/d to 30.0 mb/d. This followed higher output in Iraq, despite ongoing pipeline problems, and to a lesser extent Nigeria, Venezuela and Libya.

Thus not only is their preliminary figure for April the highest ever, but they revised the fairly high figure for March a little higher. Here's the graph of the IEA's initial monthly estimates, together with their revised estimate the following month and the more tardy (and careful?) EIA estimates.



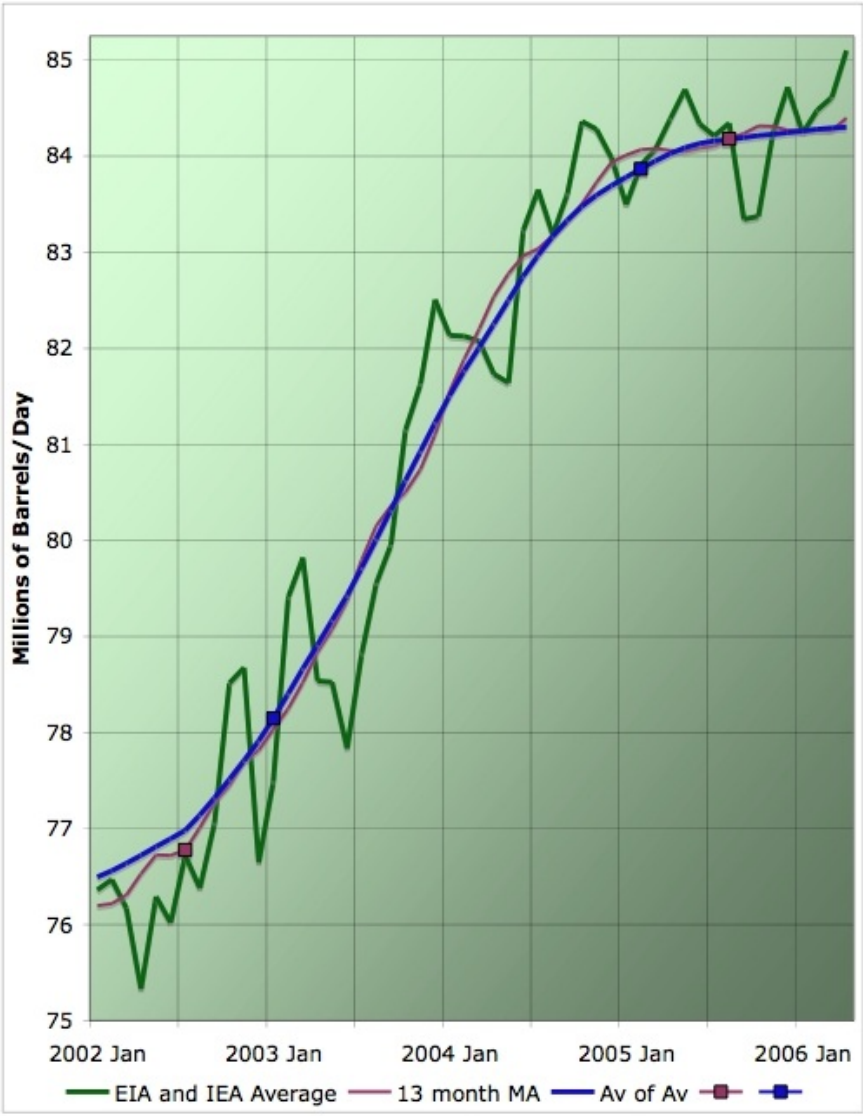
Average daily oil production, by month, from various estimates. Click to enlarge. Believed to be all liquids. Graph is not zero-scaled. Source: IEA, and EIA. The IEA raw line is what they initially state each month. The IEA corrected line is calculated from the month-on-month production change quoted the following month.

It looks like April 2006 is definitely a contender for highest month ever. That's at this early stage;

we'll have to see what the data revisions bring.

Now to the moving average graph. Firstly, I have a confession to make. When I introduced the second moving average last month, I made a spreadsheet error (or a graph labeling error, depending on your point of view). The thing advertised on the graph there as the "13 month moving average" was actually the 13 month moving average of the 9 month moving average, **not** the 13 month moving average of the monthly data (which itself is obtained by taking the IEA and EIA estimates of the monthly supply). My apologies for any confusion.

However, I've decided that this average of average is actually more or less what I want. So the new graph shows the 13 month centered moving average, together with the 13 months average of that 13 month average (ie something which draws support from just over two years worth of data, but with the center weighted more heavily). That (the blue line) gives us a nice smooth trend.

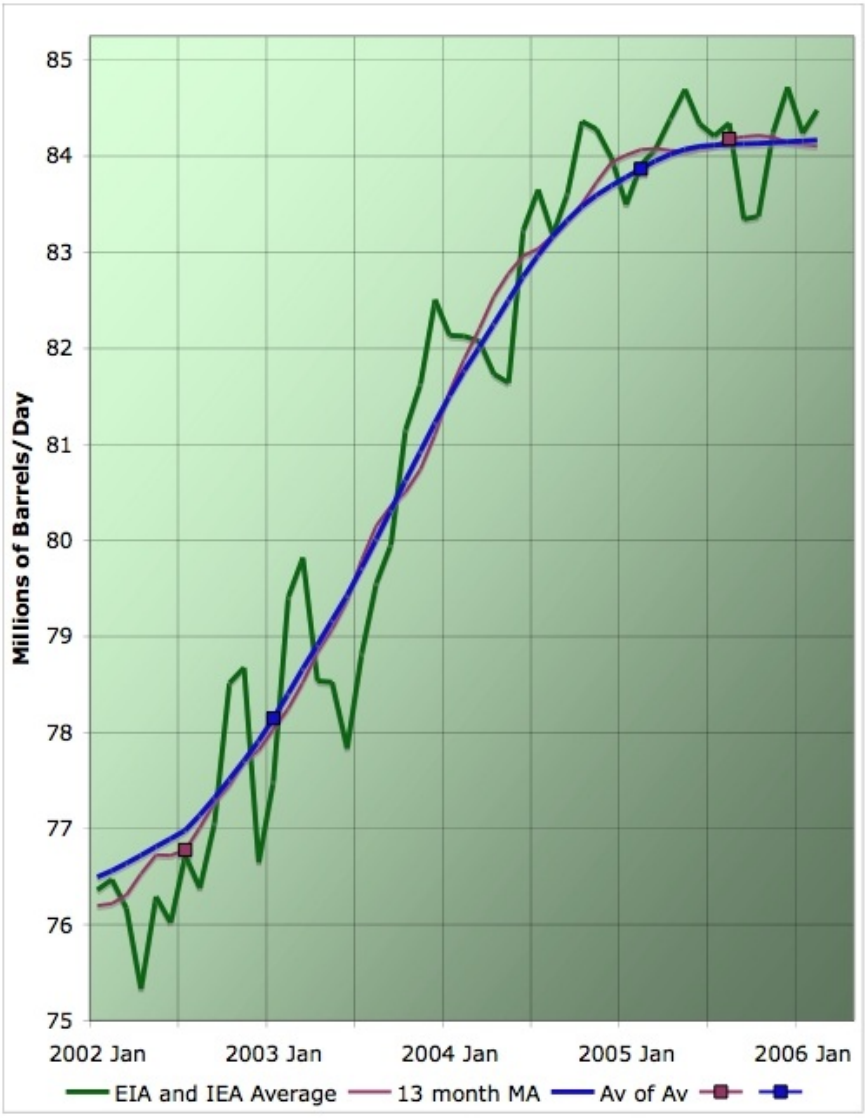


Average daily oil production, by month, averaged from estimates by the EIA and IEA, together with 13 month centered moving average, and recursed moving average of the moving average. The last two data points in the monthly data are from the IEA alone, and the moving average windows are reduced at the graph edges to only include the data that exists. Click to enlarge. Believed to be all liquids. Graph is not zero-scaled. Source: IEA, and EIA.

However, caution is in order! My preference is to extend the averages out to the limit of the data, with the window obviously being reduced accordingly. This allows us to get the best idea of the trend that the data we have to date can give us. However, a drawback of this, as Halfin has noted in the past, is that future months of data can thus move around the moving average curves in the past. This is particularly noticeable this month. That is in part because I have included the IEA numbers for March and April, even though we have no EIA numbers to average them with. The inclusion of these two very strong production estimates has dragged the moving average curves into a slight upward incline.

To make it clear how much of the two moving average curves are beyond any change, I have added appropriately colored squares at the last data point that is entirely supported by existing data reported by both agencies. Anything past the squares has some potential to change, with the potential for change greater and greater towards the right edge of the graph. In particular, a hurricane season similar to the last two in the Gulf could well put the plateau back into dead flat or even declining mode.

To give you some indication of the sensitivities here, this last graph shows the curves as they would be if I did not include the IEA estimates for March and April (which are not yet balanced with an EIA estimate).



Average daily oil production, by month, averaged from estimates by the EIA and IEA, together with 13 month centered moving average, and recursed moving average of the moving average. Data only through February 2006. The moving average windows are reduced at the graph edges to only include the data that exists. Click to enlarge. Believed to be all liquids. Graph is not zero-scaled. Source: IEA, and EIA.

As you can see, that leaves the flatness of the plateau pretty much intact.

Past coverage relevant to the plateau:

- OPEC Declines and the World Plateau
- Plateau Continues, Aided by Outages
- Plateau Update
- Cigar Now?
- Missing Barrels
- Close, but no cigar
- November Statistics Updates
- IEA Monthly Report for December
- Refining the Plateau
- Can Acts of God and Bush Explain the Plateau?
- November IEA global production
- Happy Peak Oil Day?
- Where Supply Increases Come From

Other relevant coverage:

- Hubbert Theory says Peak is Slow Squeeze
- Miles Data Predicts Big Economic Slowdown
- Why Peak Oil is Probably About Now