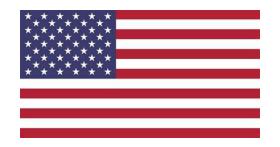
Breaststroke



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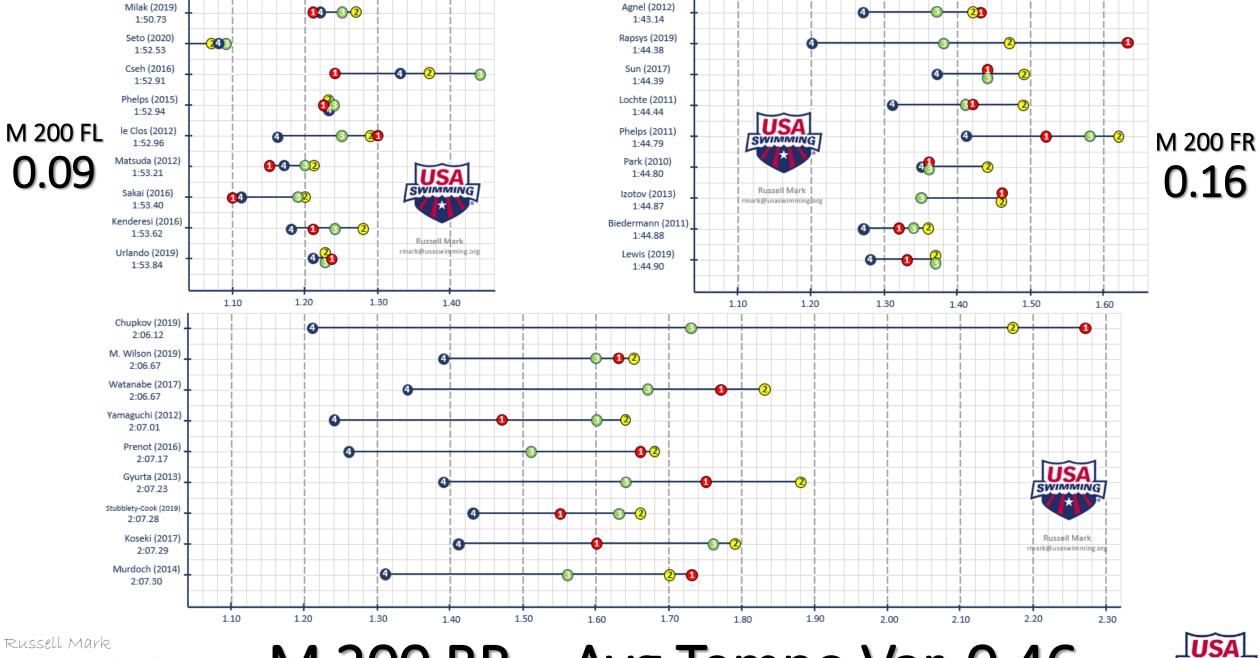


Breaststroke Tempo

- Fly The smallest variance across athletes & within a race
- Breast The largest variance within a race
- Effective breaststroke racing must have multiple gears
- Tempo up at the end of a race
- 60th cycle will produce less propulsion than 1st cycle... won't have the same speed to glide from... must make up for that with tempo
- Technique / DPS is the foundation, but don't be afraid of tempo





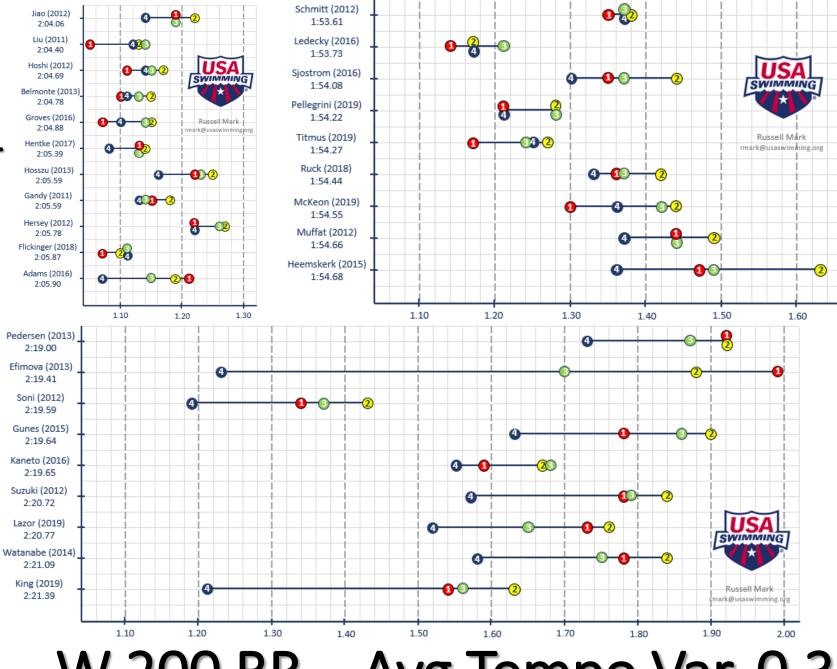


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M 200 BR – Avg Tempo Var. 0.46



W 200 FL 0.08



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W 200 FR

0.11

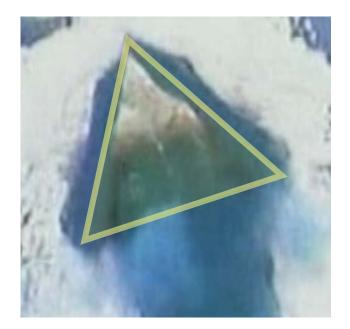
Breaststroke Technique Priorities

- 1) Great line in between strokes
 - Head between arms
 - Fingertips to toes just under the surface
 - Face can be tilted forward

2) Attack forward

- Body & Arms
- Triangle of Space
- 3) Kick your hips high
 - Legs extend slightly downward before getting into line

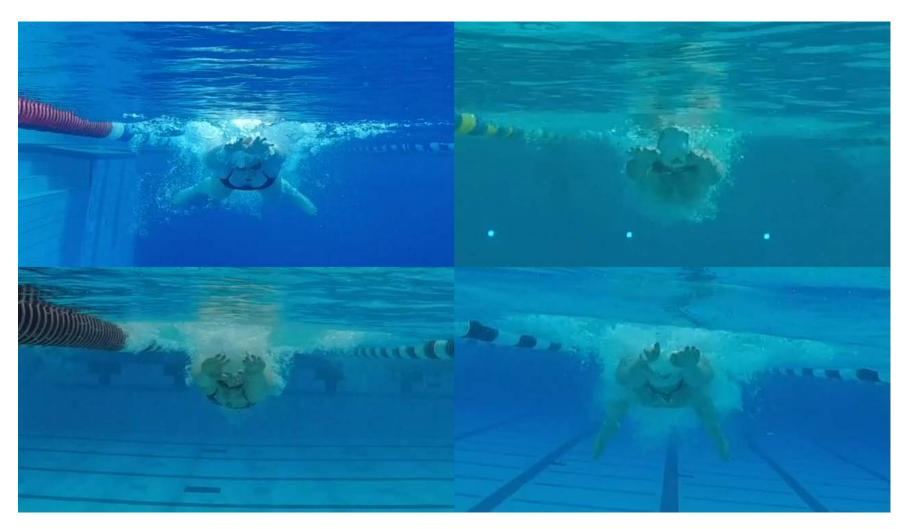








Pull Catch, Width, Breath Timing



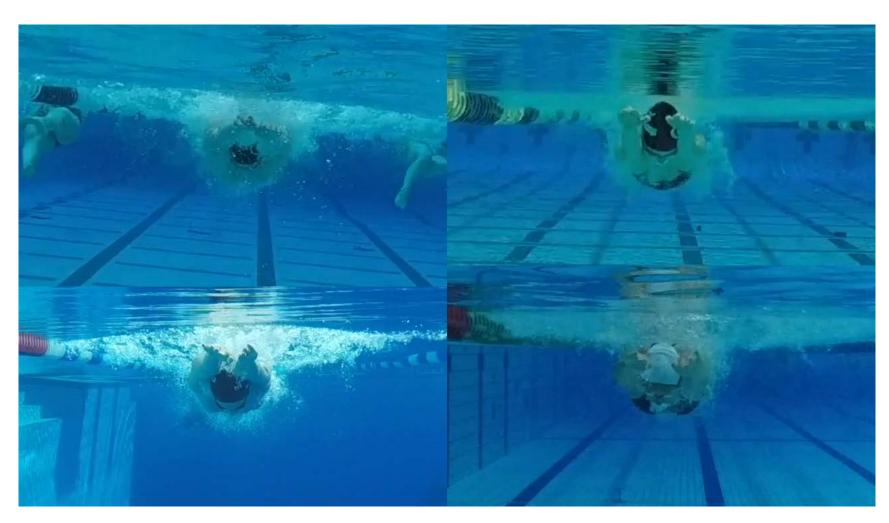
- Trend towards more athletes with sharper and earlier catch (elbows up, fingers down)
- Pull water back while hands go wide
- Pull water back while hands pull inward & get depth
- Breathe during inward pull. Patience with the breath.

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Pull Variations



- Still many breaststrokers with straighter outsweep
- Everything else the same:
- Patience with breath
- Deep hands on inward pull

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Pull Shape

- Hands make round shape
- No sharp corners
- Outward & Inward pull water back
- Hands converge
- Elbows DO NOT
- Elbows can press next to the body and form a Triangle of Space
- Δ is where head/chest shoot into







Pull Shape

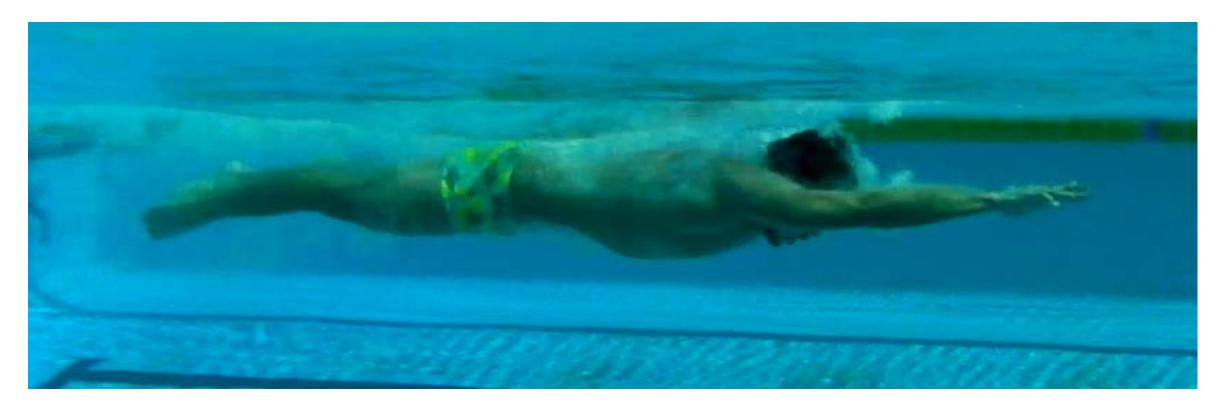
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- Elbows DO NOT
- Elbows can press next to the body and form a Triangle of Space
- Δ is where head/chest shoot into







Body Line / High Hips



- Start and end each stroke in a great line
- Dynamic surge forward
- Hard to do without the Triangle of Space





High Hips / Tail Wave



- Watch the wave at the lower back
- Turbulence that crashes together and sits at the hips
 - = DRAG

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High Hips / Tail Wave



- Minimal wave & less turbulence:
- Getting upper body in line
- Great surge forward
- Kick the hips high

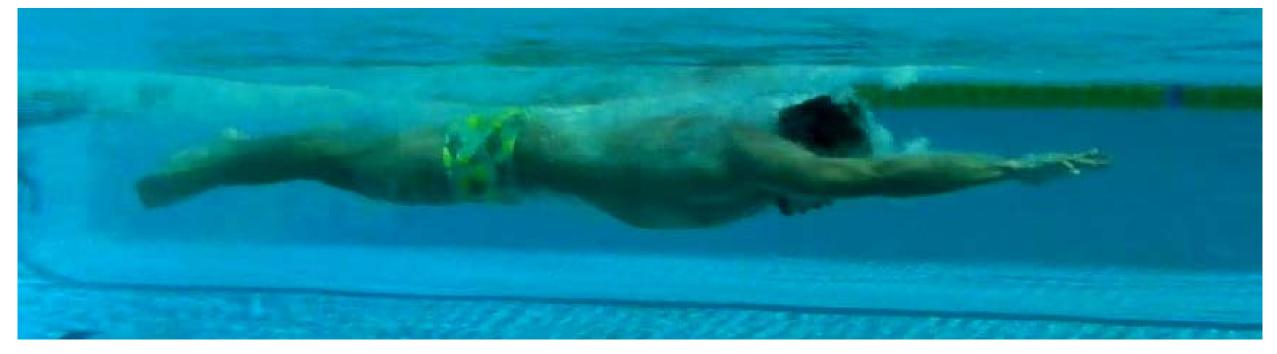
Kick Hips High



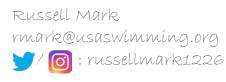
- From the peak setup of the kick/heels:
- Legs extend at a downward angle
- This applies maximum pressure against the water
- 。 Also gets the hips up
- Then legs lift into line
- The feet do not kick along the surface of the water
- Will help swimmers that dive downward



Timing



- Pull back while the legs are in line
 - Heels start to lift as hands transition to recovery
- Kick back while upper body is in line
 - FAST HEELS drawing the feet upward to setup the kick
 - Not necessarily kicking earlier





Kick Timing & Kick Width

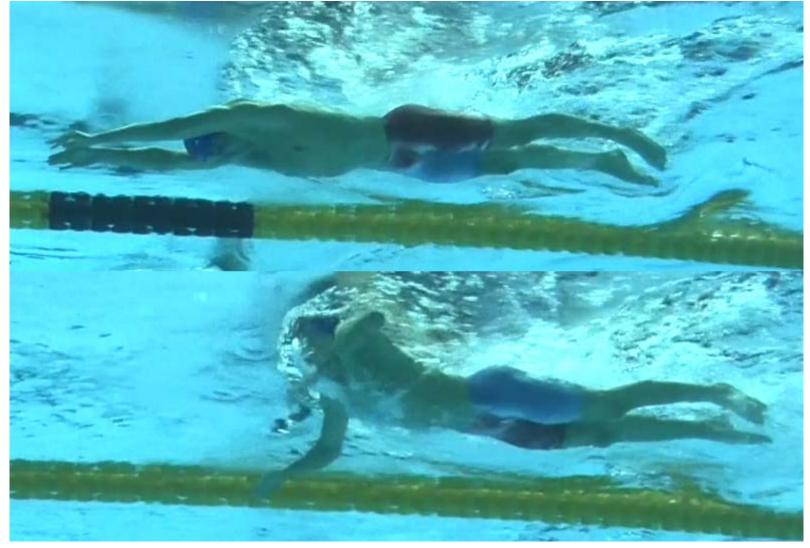


- Kick back while upper body is in line
- Knees wider than the hips, similar to shoulder width
- Feet should be in line or wider than knees





Tempo Mechanics



- Faster tempo means:
- Less glide
- Similar hand speed through the pull
- Feet come up slightly quicker (not earlier)
- Hands open up to next pull much earlier
- Legs still finish the kick

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