



Central Airspace Management Unit

“World Cup 2010 Experience” (South Africa)



Presented by: Armando de Olim
Acting Pool Manager: ATFM

Scope



- **Internal Planning**
- **Airport Slots**
- **Advance ATFM system**
- **Air Defence**
- **Performance**
- **Communication**
- **Previous Experience**





Airports in Africa



Airports

Airports



Central Airspace Management Unit Profile

The responsibility for the management of **air traffic flow and capacity management** within South African airspace resides with the Central Airspace Management Unit (CAMU). The unit's responsibilities include comprehensive **management of the airspace capacity, slot allocation program, flexible use of airspace (FUA)** and the re-routing of traffic affected by adverse weather or restricted airspace.





Regulatory & Procedural Preparation – Internal Planning

- Three rounds of Operational plans
- Monthly meetings
- Airport and Airspace capacity plans
- ATFM Procedures and roll out
- HOD extensions at most airports
- CAMU extended services
- CAMU-Increased staff by 50% using temps
- Staffing- “buy back”
- ATM Initiatives
- Airport Management Centre



Regulatory & Procedural Preparation - Airport Slots

- 17 additional airports were designated as “coordinated airports”
- Most airports were “drop and go” airports
- Airport slot constraints
 - Runway throughput
 - Terminal buildings
 - Gates/Parking
- Declared capacities based on worst restriction
- Normal airport slot rules difficult to maintain fairness over a short event – Ministerial Order declared
- Reconfirmation of slots order issued



Operational Impact & Lesson Learnt – Airport Slots

- Major impact in balancing strategic capacity
- New coordinated airports required training
- CTOTs issued based on airport slots
- Managing parking constraint difficult and should remain decentralized –affects airport slots issued
- Operators at times changed aircraft types which does affect parking and terminal
- Provided a realistic forecast of traffic demand
- Most bizjets and ad-hoc operators booked slot thru local bizjet operator – Execjet – could be difficult to match slot with REG



Regulatory & Procedural Preparation – Advance ATFM system

- Advance air traffic flow management system introduced
- Huge undertaking as no previous tactical ATFM system existed
- Extensive collaboration/training with ATS units, AO, airport authorities to ensure that the ATFM concept was understood
- Operational only 6 weeks before kick off!
- Risks – managing possible problems with the ATFM system – onsite support and 24 hour Ops



Regulatory & Procedural Preparation – Advance ATFM system

- Daily ATC slots issued for the 3 main coordinated airports and ad-hoc for others



Operational Impact & Lesson Learnt – Advance ATFM system

- CTOTs out of airports could be delayed due to match extensions – extra time
- Return to Base (RTB) traffic patterns – Flights thru night
- Repositioning flights affect ATS operations and but benefited airport authorities
- During the matches, airspace and airport demand low – could have been used for non event traffic more effectively



Operational Impact & Lesson Learnt – Advance ATFM system

- Large numbers of biz jets and VIPs always difficult to manage – capacity could be reduced strategically to accommodate possible impact
- Biz Jets and VIPs increased more towards the end of the SWC
- High demand between both semi final destinations – no RTB on 1st semi final
- System outage, heavy fog, and refueling issues caused late departures from FACT to FALF for 2nd semi final



Operational Impact & Lesson Learnt – Advance ATFM system

- CAMU ATFM Tool, proved to be an efficiency intervention in the ATM environment
- System able to predict traffic flows several hours ahead
- Global airspace awareness
- CDM thru CAMUWEB platform
- AOs could manage their own slots



Regulatory & Procedural Preparation – Air Defence

- Minimum impact on most of the normal flying activities around venues within the mandate of a safe and secure airspace
- Maximum ac under control leads to a reduced threat
- Temporary Restricted Airspace
 - No Fly zones
 - ADIZ
- Airspace Management
 - Departure and Arrival routes
 - Track Verification
 - ATC interaction between SA Air Force and ATNS
 - Rules of Engagement





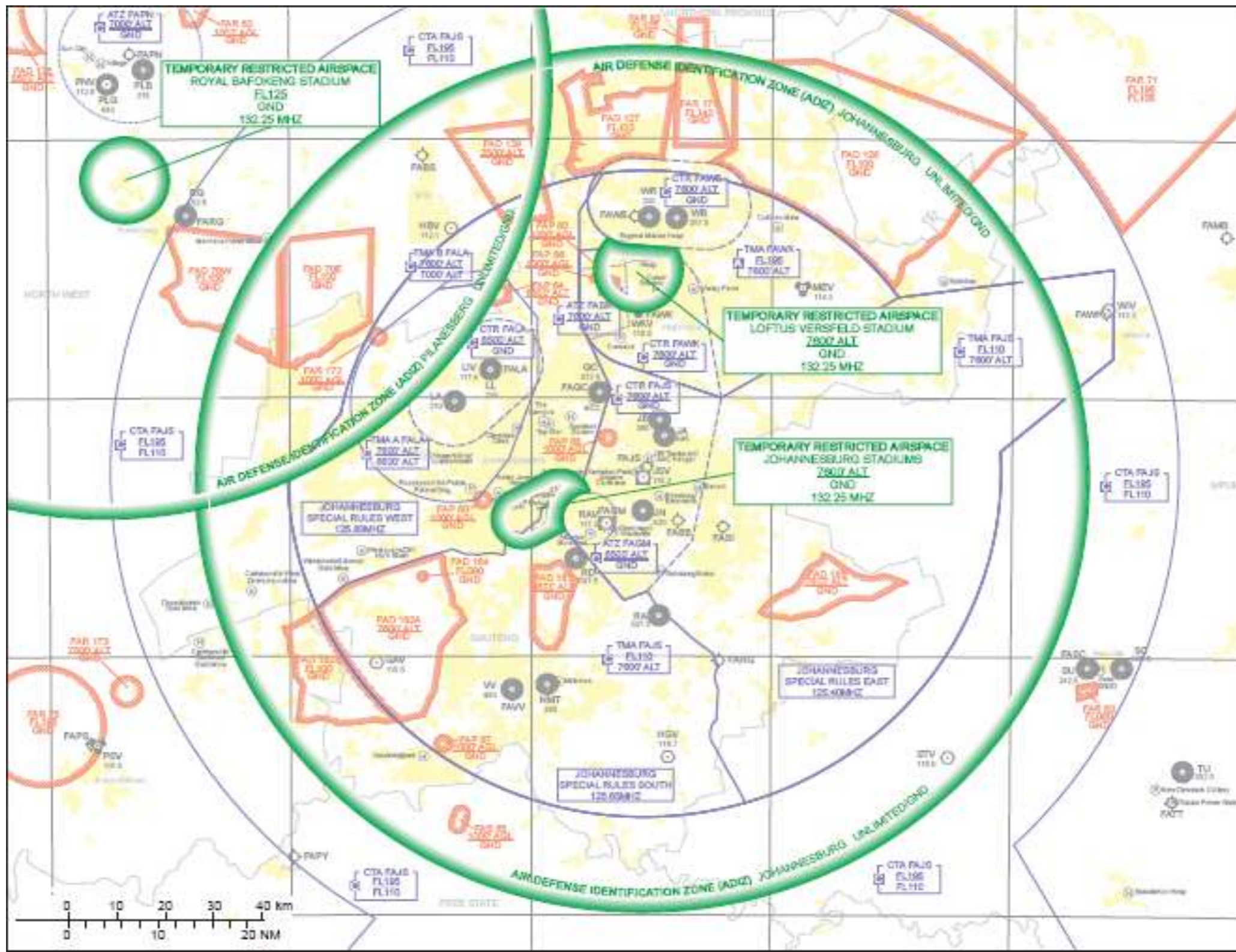
Regulatory & Procedural Preparation – Air Defence

- Flight crew and passengers vetting – 48 hours prior
- Flight Authorization Clearances – 24 hours prior
- Schedule flights were exempt but monitored
- ATNS Radar feed – National Air Picture
- Compulsory Flight Planning requirement
- Restricted local recreational and training flights within match time buffers





Regulatory & Procedural Preparation – Air Defence





World Cup Stadiums Cities 2010

SOUTH AFRICAN STADIUMS FOR THE 2010 WORLD CUP





Performance: Air Traffic Movements OR Tambo Int Airport

- 4.5 Million passengers* (1 Jun -19 Jul)
- 52000 flights* (1 Jun -19 Jul)

*Department of Transport (RSA)

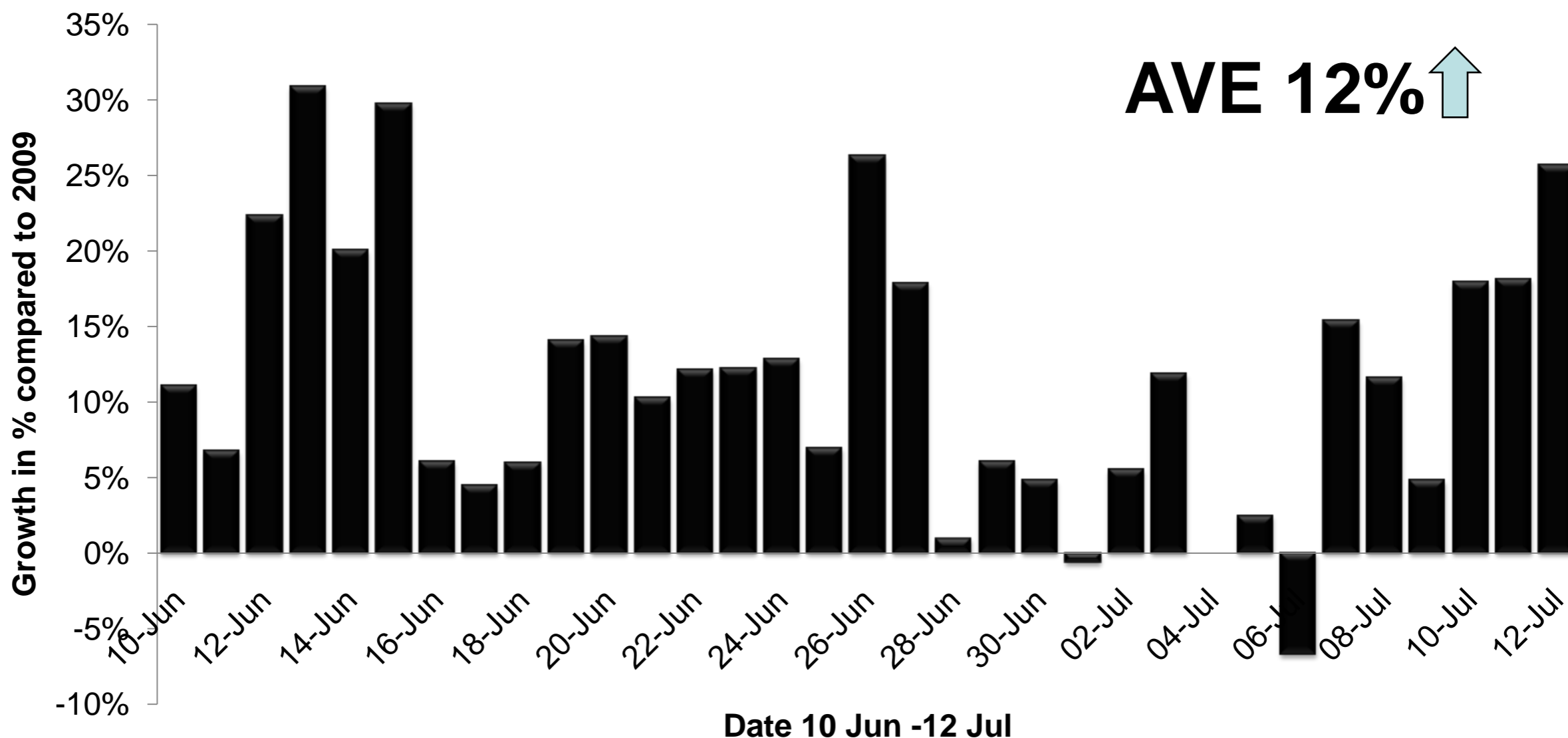


Performance: Air Traffic Movements



OR Tambo International Airport - FAJS

AVE 12%

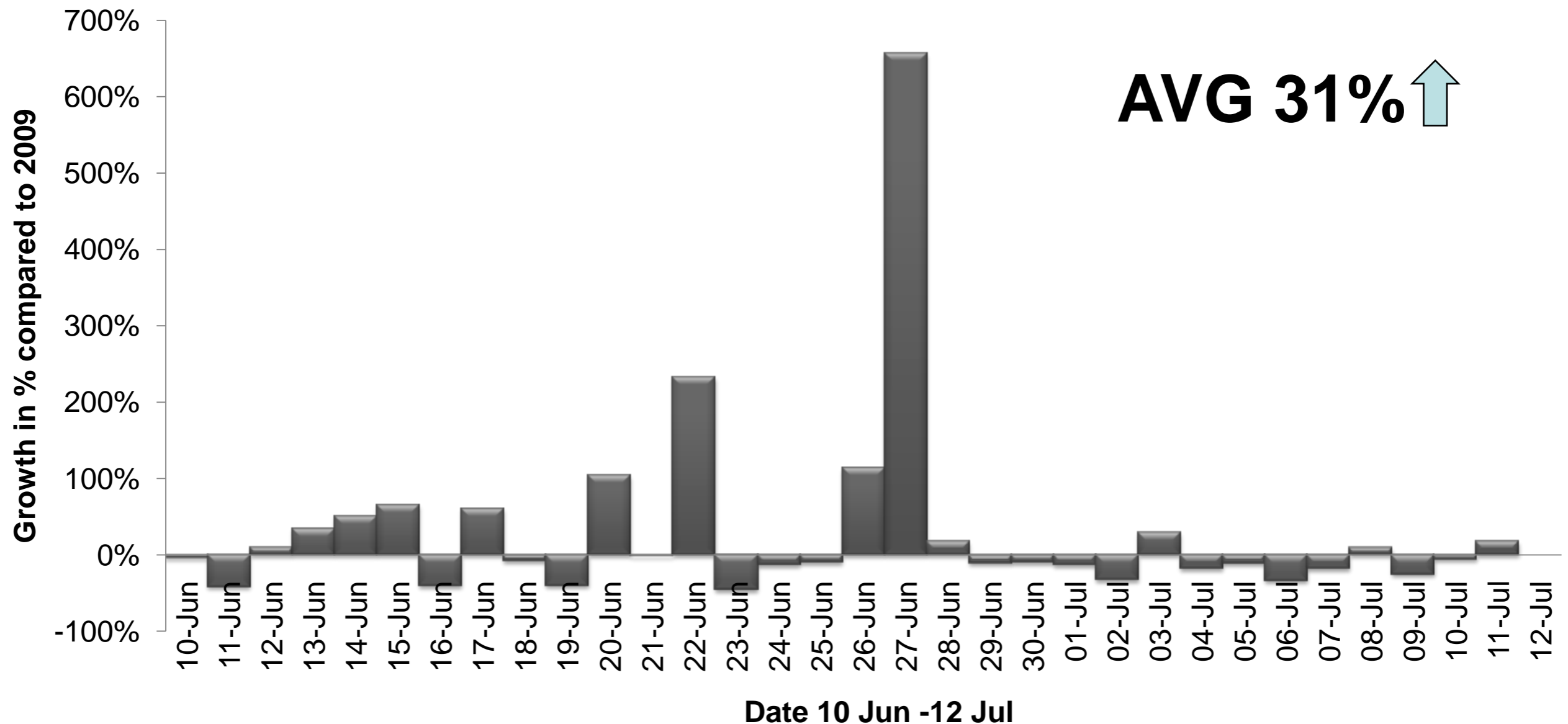


Data excl VFR and military flights



Performance: Air Traffic Movements

Bloemfontein Airport - FABL

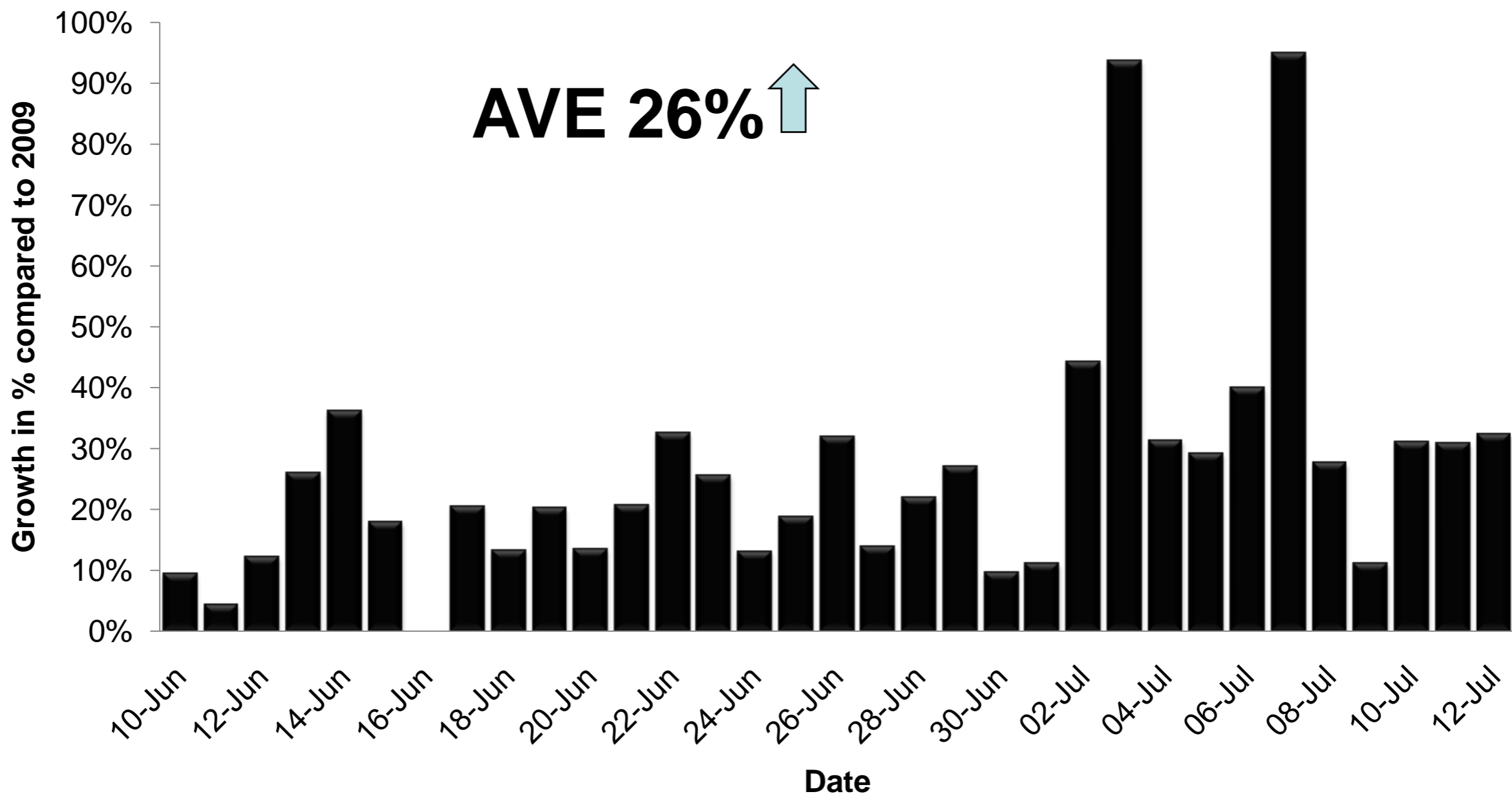


Data excl VFR and military flights



Performance: Air Traffic Movements

Cape Town International Airport - FACT

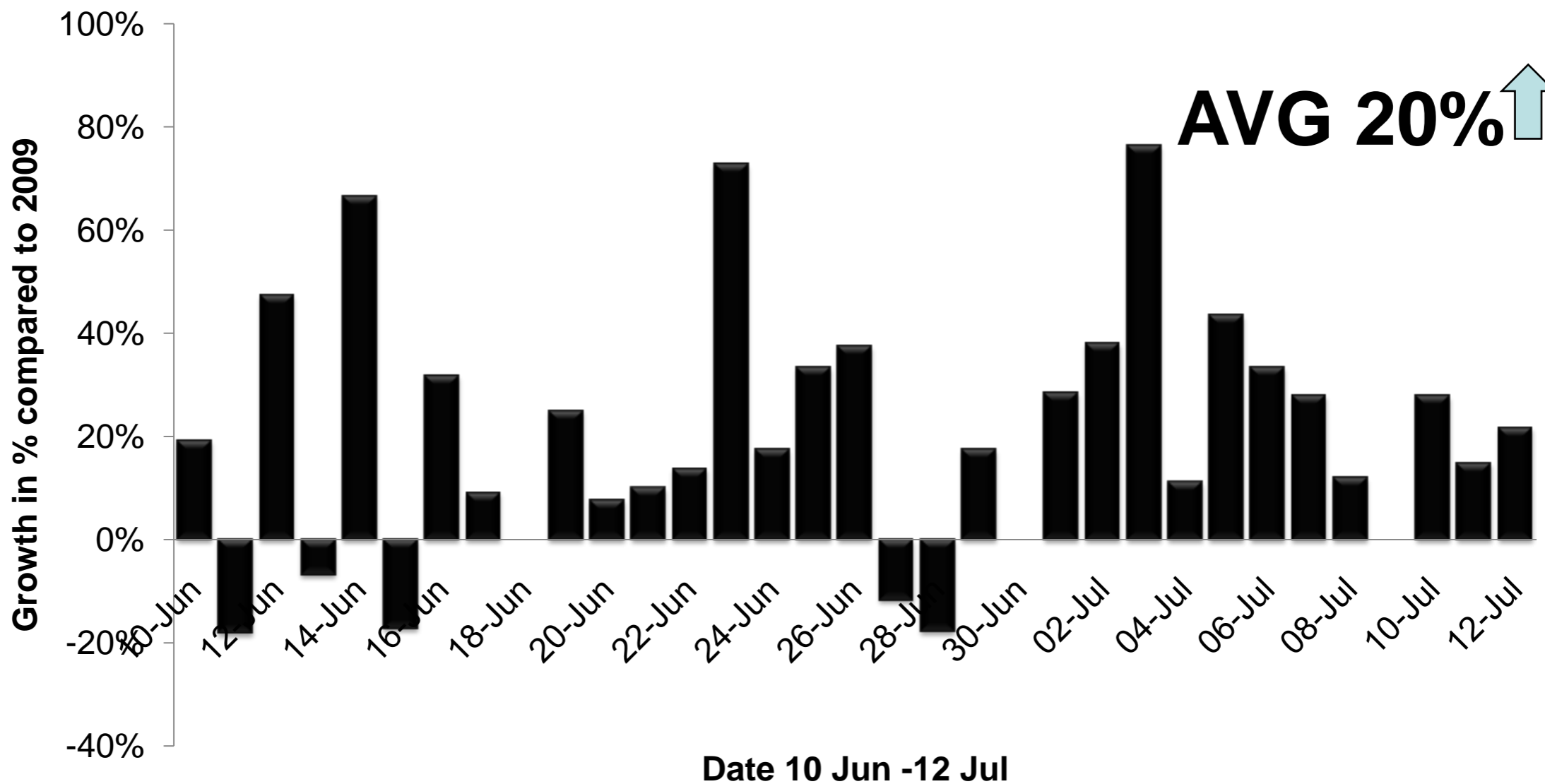


Data excl VFR and military flights



Performance: Air Traffic Movements

George Airport - FAGG



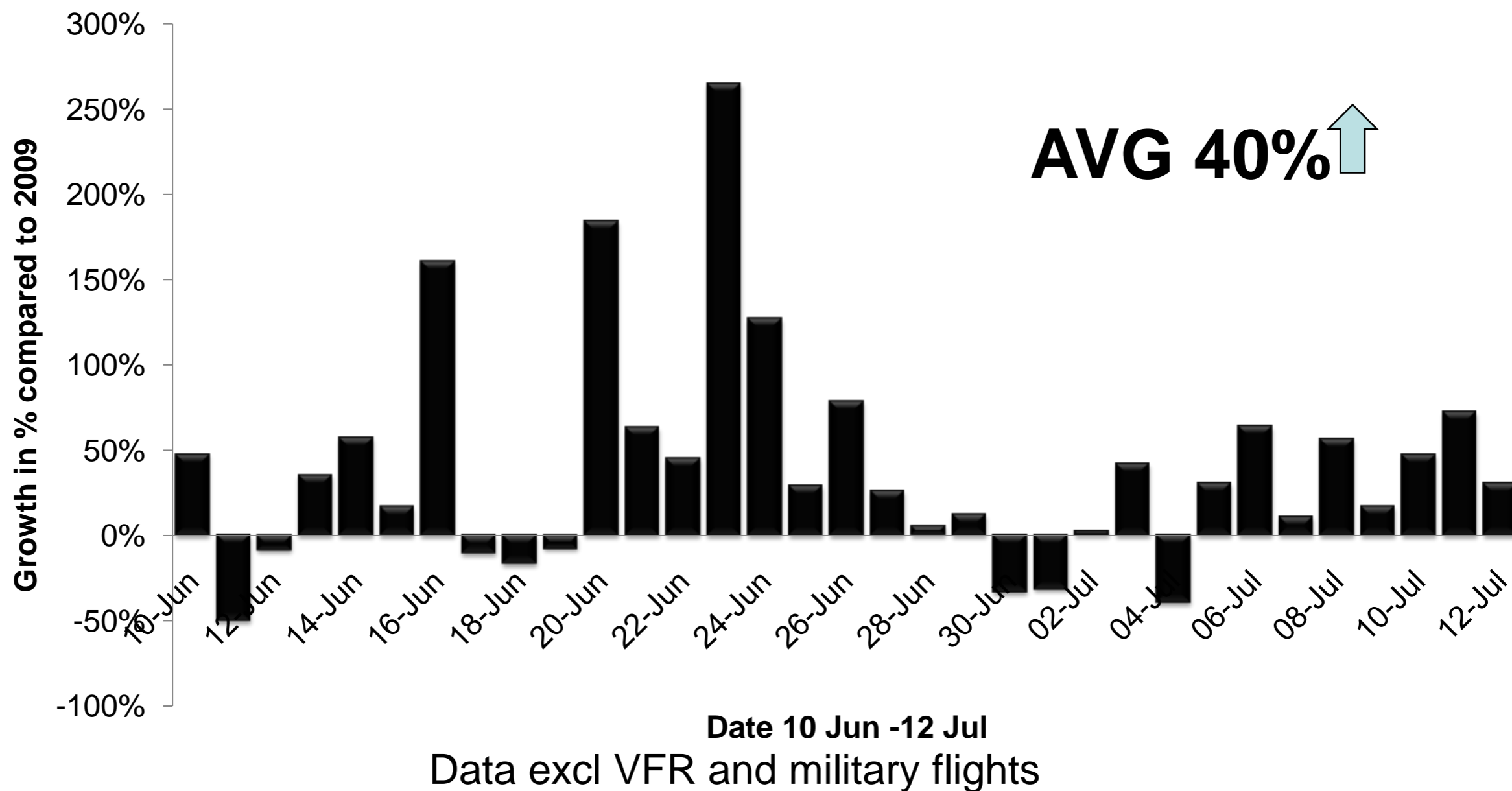
Date 10 Jun -12 Jul

Data excl VFR and military flights



Performance: Air Traffic Movements

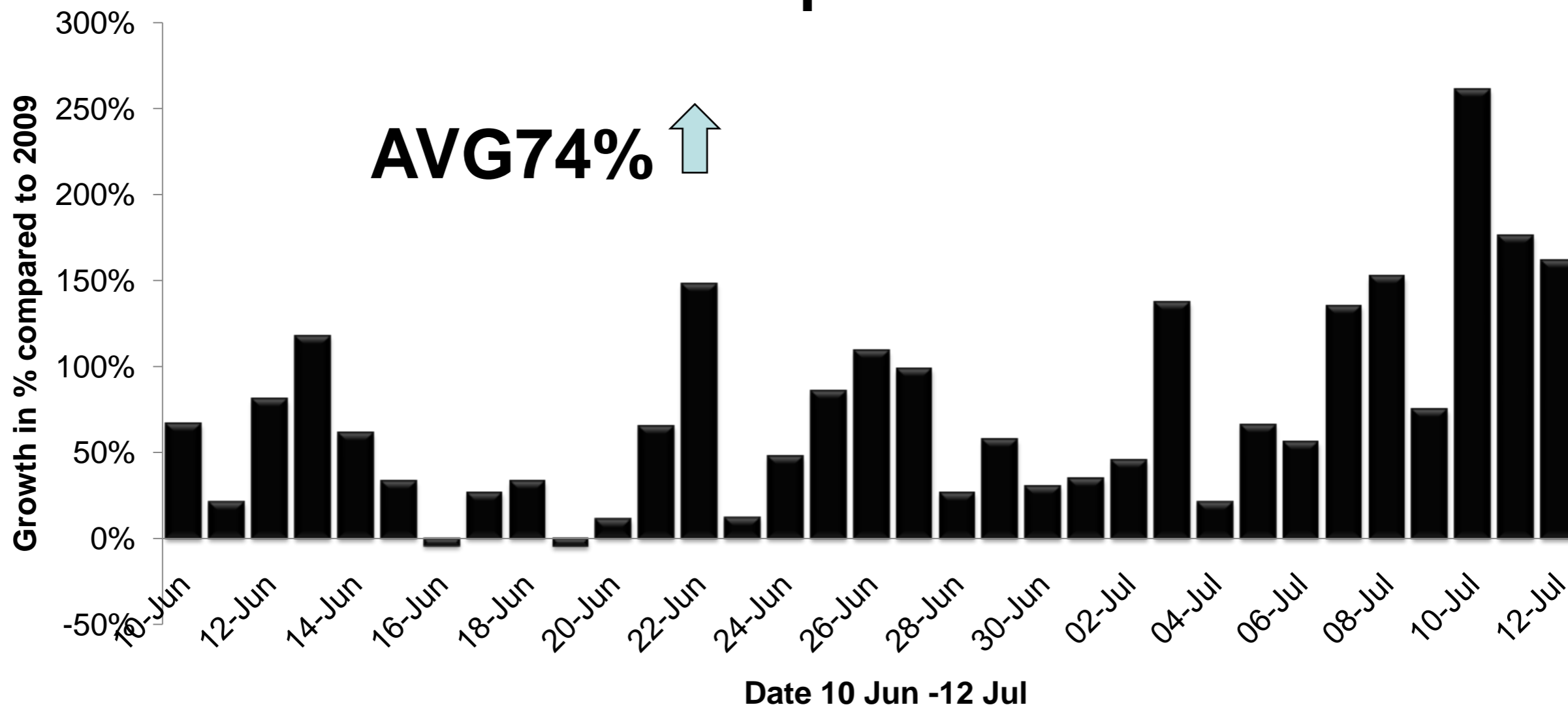
Kruger International Airport - FAKN





Performance: Air Traffic Movements

Lanseria Airport - FALA



Data excl VFR and military flights



Lanseria Airport – Non schedule airport

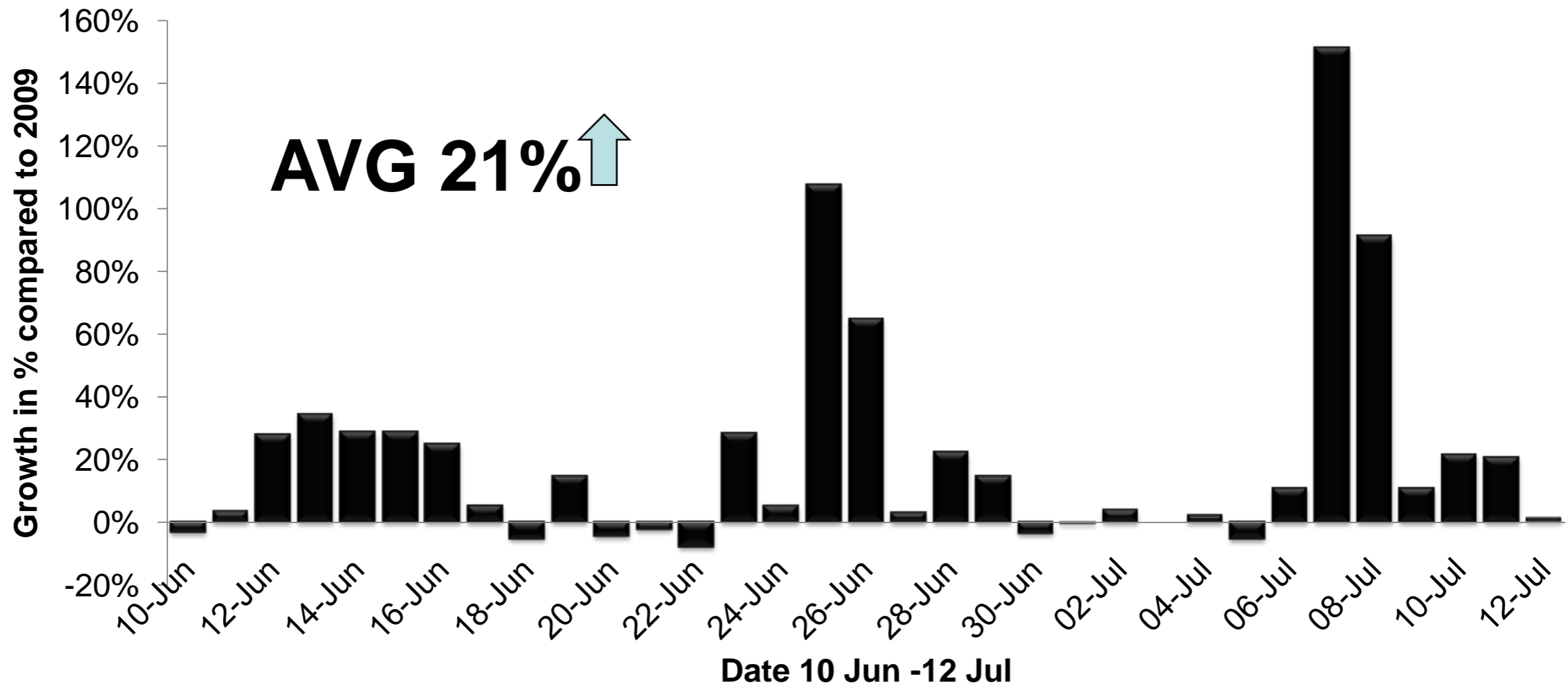




Performance: Air Traffic Movements



King Shaka International Airport

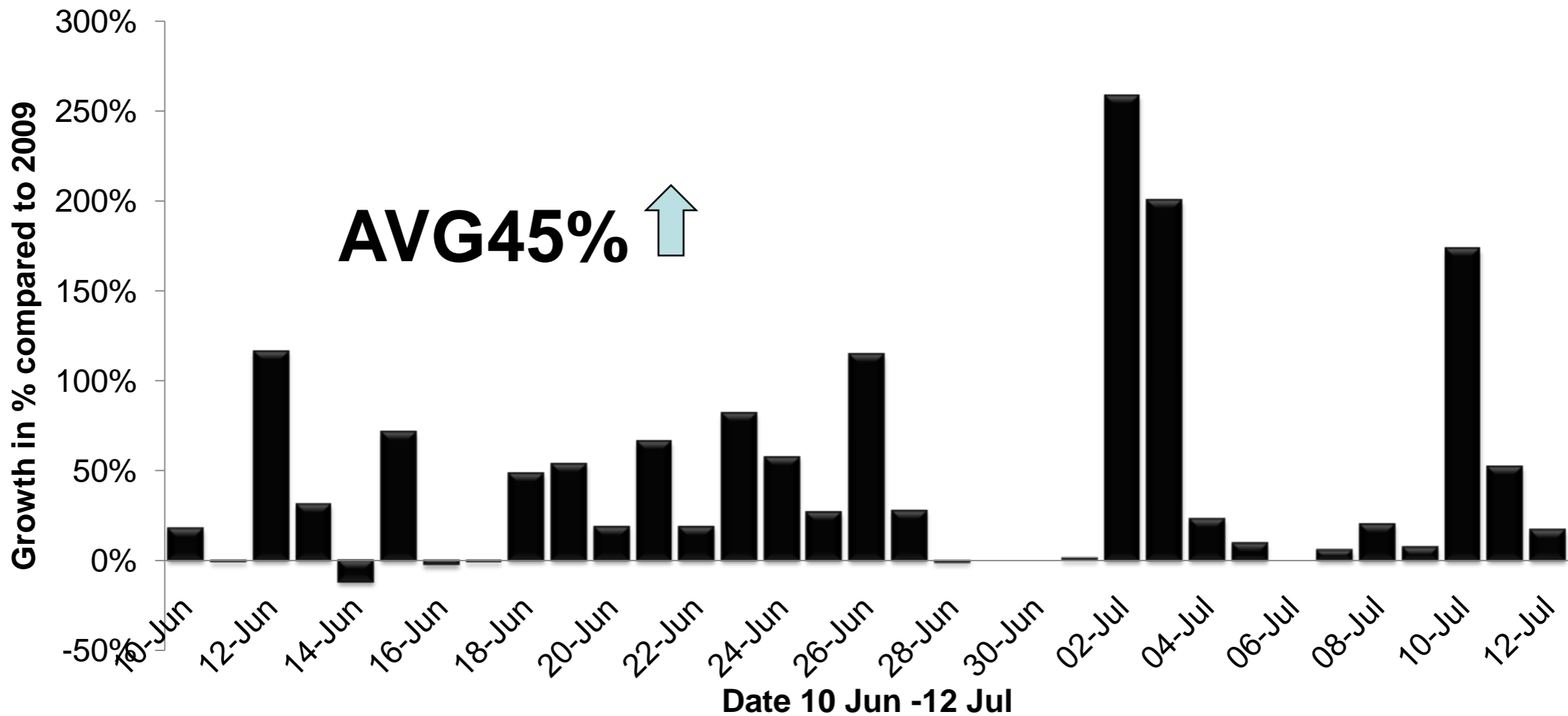


Data excl VFR and military flights



Performance: Air Traffic Movements

Port Elizabeth Airport - FAPE

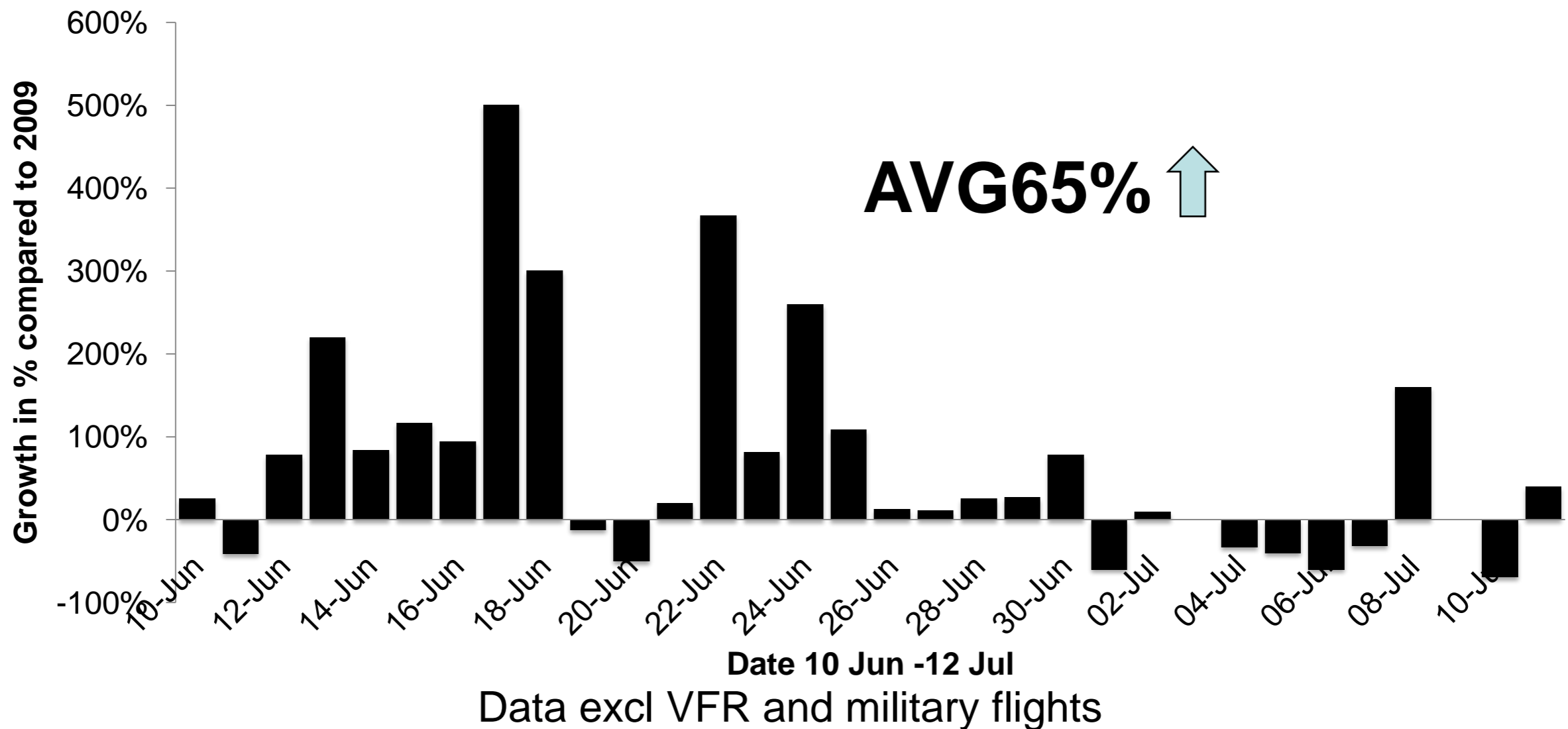


Data excl VFR and military flights



Performance: Air Traffic Movements

Polokwane Airport - FAPP





Performance: Air Traffic Movements

- 35 %* average increase between 10 Jun - 12 Jul 2010 based on 2009 figures excluding VFR and local flights

** FABL, FACT, FAEL, FAGG, FAJS, FAKM, FAKN, FALA,FALE, FAPE, FAPP, FAWB -
SOURCE ATNS*



Communication

- All role players
- Daily Operational Teleconferences
- Established communication channels
- Plasma TV
- Daily traffic predictions
- Traffic Advisories
- SMS
- Emails
- 24/7 Call Centre



Experience from Previous Events

- 2011 United Nations Framework Convention on Climate Change
- **2010 FIFA World Cup**
- 2010 BMX World Championships
- 2009 UCI MTB World Cup
- 2009 ICC Champions Trophy
- 2009 FIFA Confederations Cup
- 2009 Indian Premier League
- 2007 World Twenty20 Championships
- 2006 Paralympics Swimming World Champs





Experience from Previous Events

- 2003 President's Cup
- 2003 Cricket World Cup
- 2002 World Summit on Sustainable Development
- 2002 African Union Summit
- 1998 World Cup of Athletics
- 1998 Non-Aligned Movement Summit
- 1996 World Cup of Golf
- 1996 African Nations Cup
- 1995 Rugby World Cup



Speaker



De Olim, Armando

Air Traffic and Navigation Services Company

Manager: Central Airspace Management Unit

Office phone: +27119286433

Fax: +27119286420

Mobile phone : +27832883010

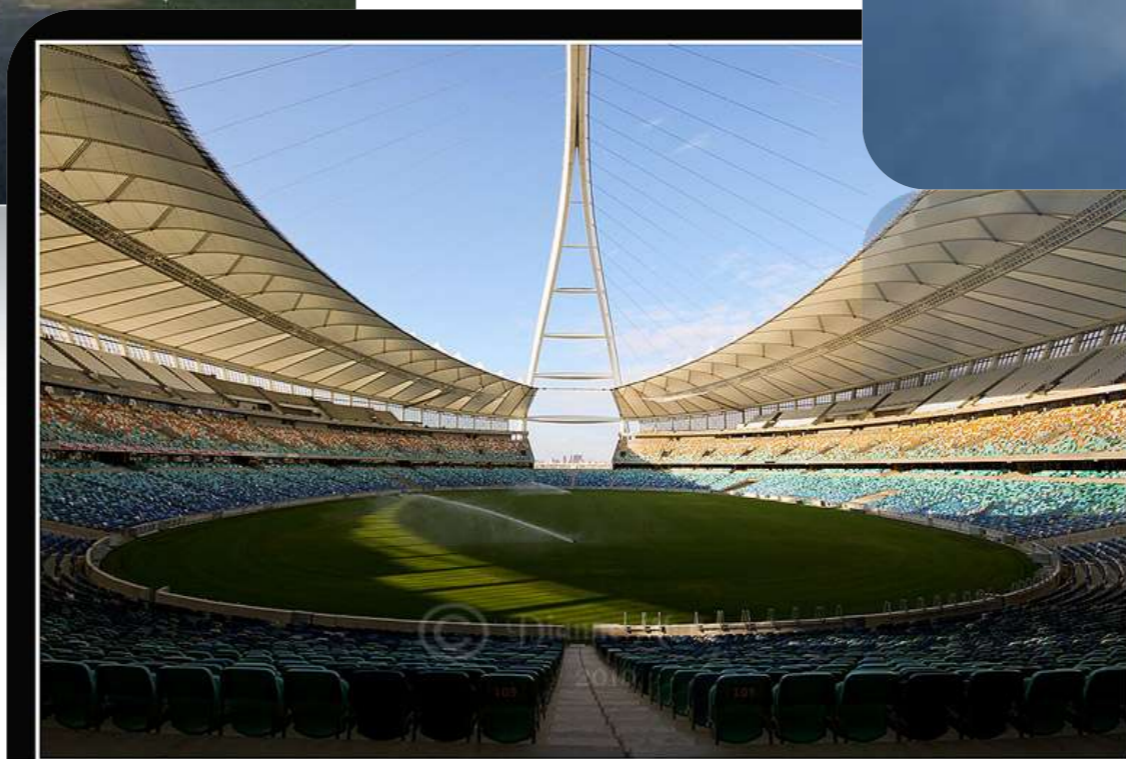
Mail address: ATC Complex, PB X1, Bonaero Park, 1620, RSA

E-Mail: armandod@atns.co.za

Website: www.atns.co.za



Questions



Moses Mabhida Stadium - Durban

Moses Mabhida Stadium - Durban

