



# Be Prepared! Changing of Seasons





**AERO**  
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# PANELISTS



**Lauren Smith**

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Mayday-SA  
Representative



Aviation Risk Specialist,  
Claims and Accident  
Investigator





# Andre Roos

AVIATION RISK SPECIALIST, CLAIMS  
AND ACCIDENT INVESTIGATOR



# The Next Hour

**(After Impact)**

A brave and selfless pilot pulled four people alive from the burning wreckage of a mangled aircraft in Mpumalanga, South Africa, in a heroic rescue that was to cost him his own life, it has been revealed in an official air accident report that has just been released.

The report into the 2018 crash reveals for the first time, in incredible detail, how the pilot – David Goodwin (59) – sacrificed himself to save his stricken passengers when their light aircraft crashed into a remote mountain forest in Elandshoek Valley, after getting disorientated in thick cloud and flying into the steep valley during zero visibility.



**Report Reveals Pilot Sacrificed His Own Life to Rescue 4 from Burning Plane in South Africa**

**The 'golden hour' is a concept that critically injured patients are required to receive definitive care within 60 min from the occurrence of injuries, after which mortality significantly increased.**

## **The Golden Hour**



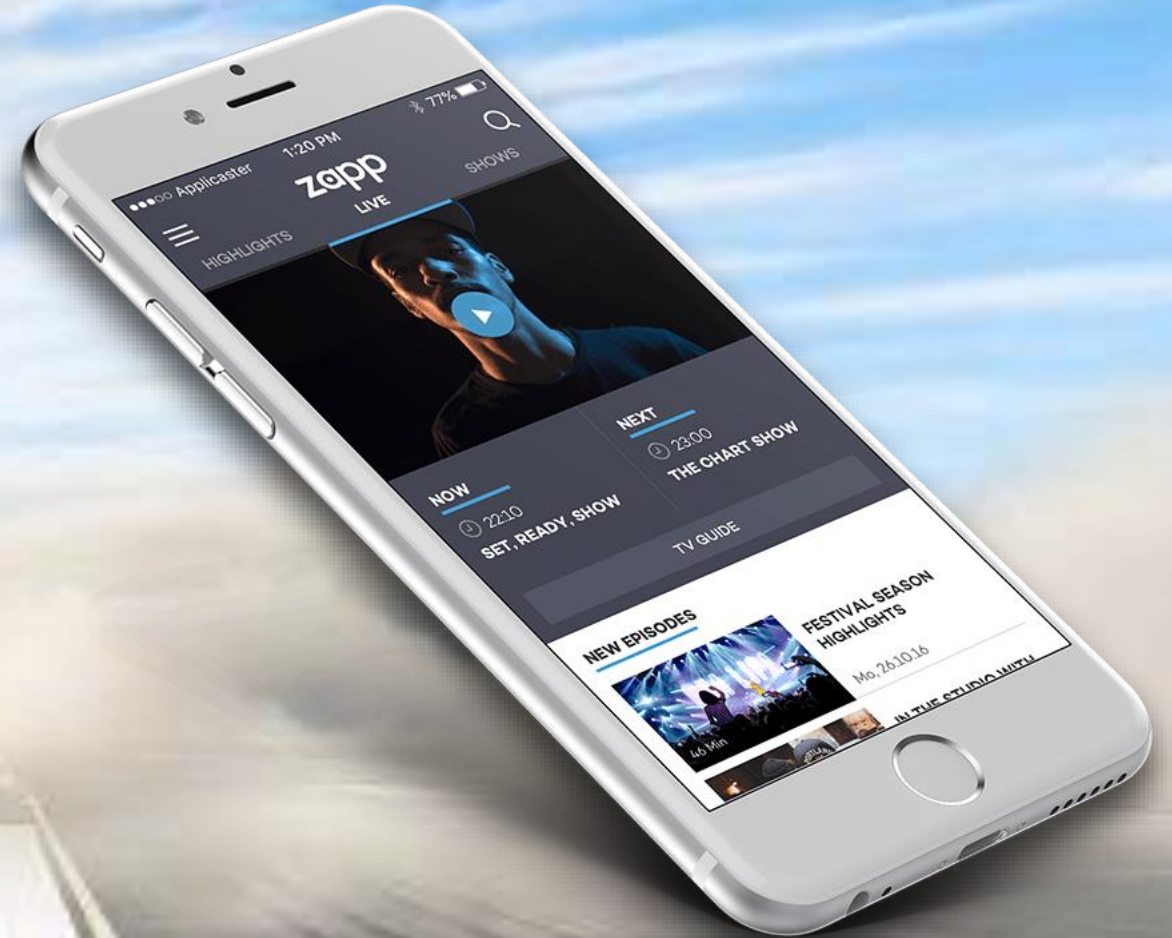
The time following a traumatic injury when prompt medical treatment has the highest likelihood to prevent death



# Mobile Phone

## Why it is not to be relied upon

- Requires Cell Reception
- Relatively Short Battery Life (1 day)
- Very Low Impact Resistance
- The screen requires clean and dry hands to operate



# Burner Phone

## Better alternative to smart phone











- Longer battery life
  - Higher impact resistance
  - No touch-sensitive screen
  - Low in weight
- 
- The drawback is they still require cell reception





# Satellite Communicators

The best solution for communication

|  |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|
|  |  |  |  |  |  |  |  |  |  |
| inReach Mini 2   | Garmin<br>GPSMAP 66i<br>Handheld a...   | inReach Mini 2<br>BLACK   | InReach Mini<br>2 - Flame Red   | Spot X<br>Satellite GPS<br>Tracker & 2...   | Spot Gen3<br>Satellite GPS<br>Messenger ...   | SPOT X<br>Bluetooth 2-<br>Way GPS...  | Netgear Orbi<br>WiFi6 Satellite<br>AX6000 Add...                                    | Garmin<br>Gpsmap 66i<br>241G -...   | Spot Trace<br>Satellite<br>Tracking...  |
| R 6 799,00<br>Skyhound   | R 11 199,00<br>Cape Union ...   | R 6 799,00<br>Skyhound  | R 7 999,00<br>4x4 Mega W...   | R 4 500,00<br>Tactical Dist...  | R 2 995,00<br>Mantality   | R 5 499,00<br>Mantality   | R 12 029,00<br>Makro  | R 9 799,00<br>Skyhound  | R 2 300,00<br>4x4 Mega W...   |

Long Battery Life, Accurate Co-ordinates, Emergency SOS Support

High Impact Resistance, Water Proof, Two-Way communication, Weather Reports

*Negatives: Costly and normally requires a monthly subscription*



# Lauren Smith

FORECASTER – SA WEATHER SERVICE





# SAFETY FIRST AVIATOR CAMPAIGN 2022



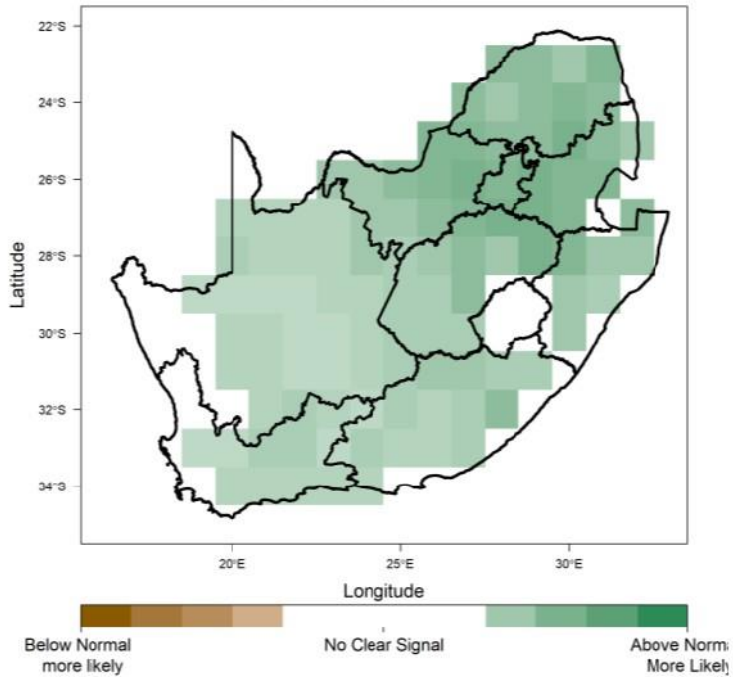
**The Next Hour**



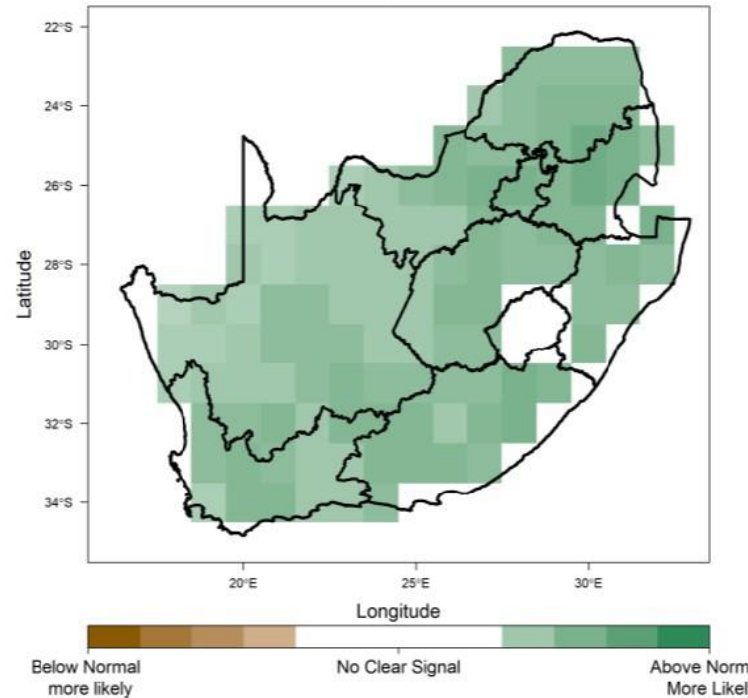
# Seasonal Weather Outlook

The El Niño–Southern Oscillation (ENSO) is currently in a La Niña state  
Expected to continue  
Strongest impact on rainfall during the mid–summer months

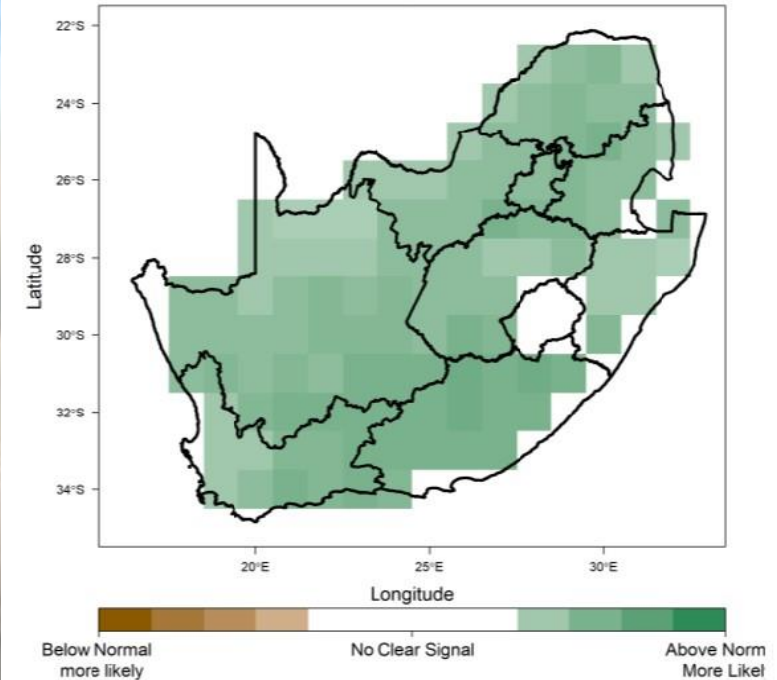
**Expected Precipitation Conditions for OND 2022**  
Issued: Sep 2022



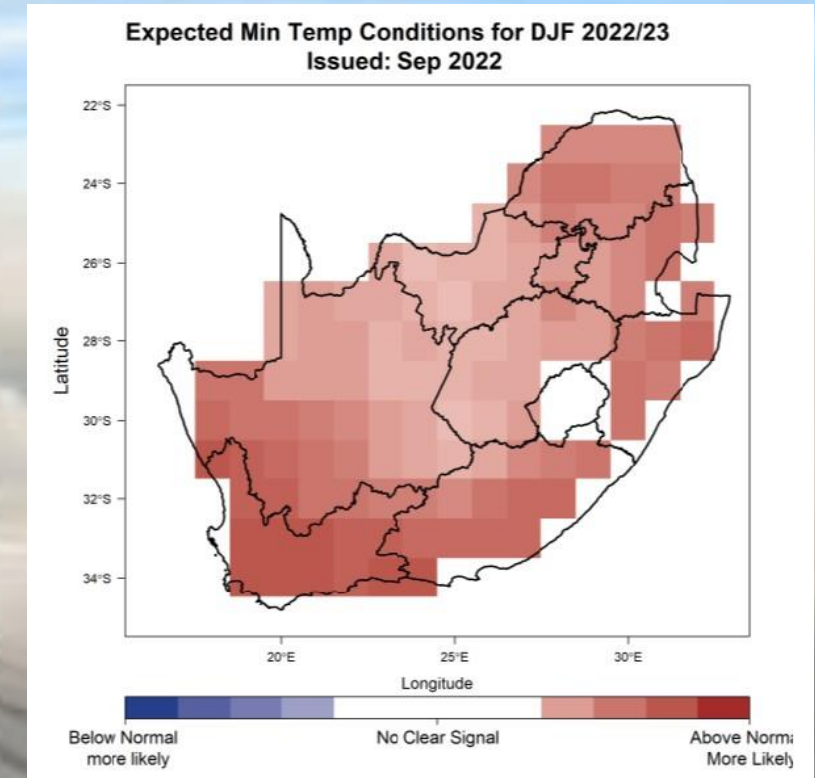
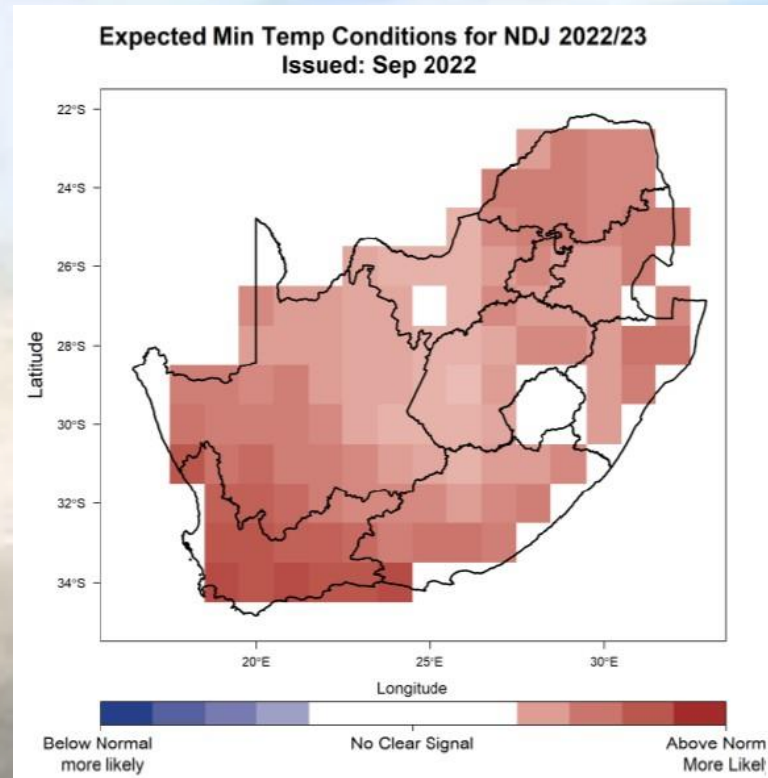
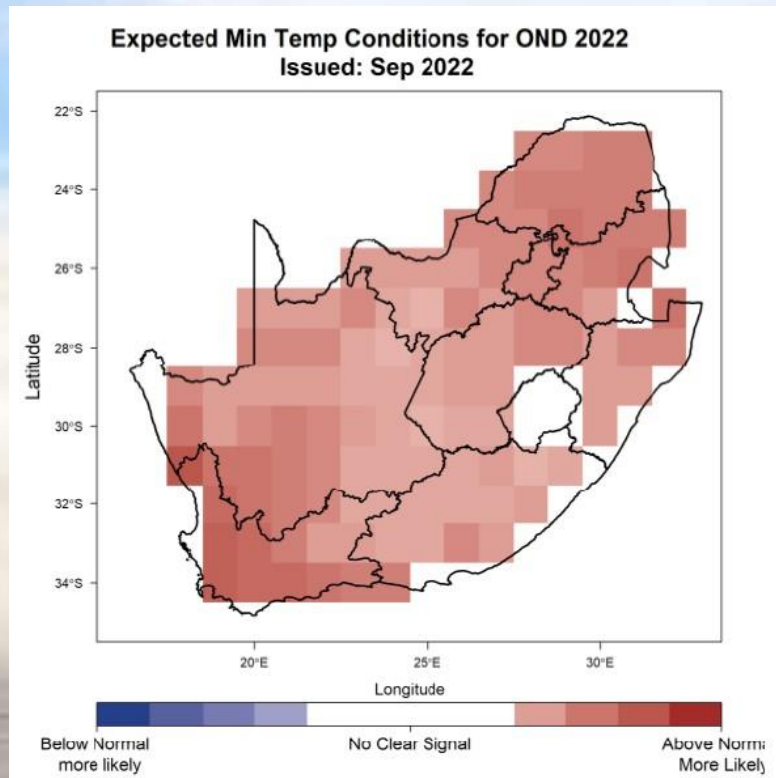
**Expected Precipitation Conditions for NDJ 2022/23**  
Issued: Sep 2022



**Expected Precipitation Conditions for DJF 2022/23**  
Issued: Sep 2022



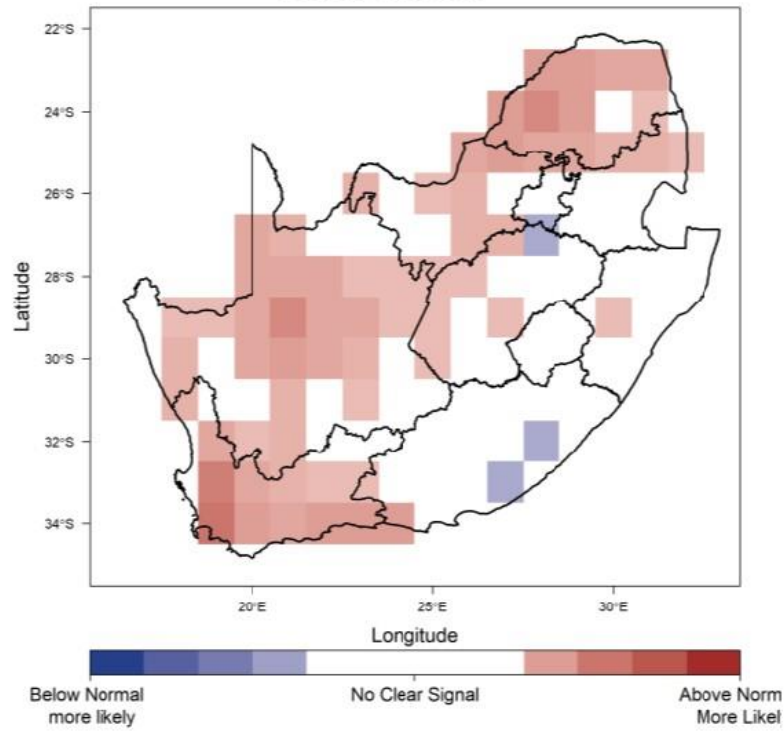
Minimum temperatures are still expected to be above normal countrywide



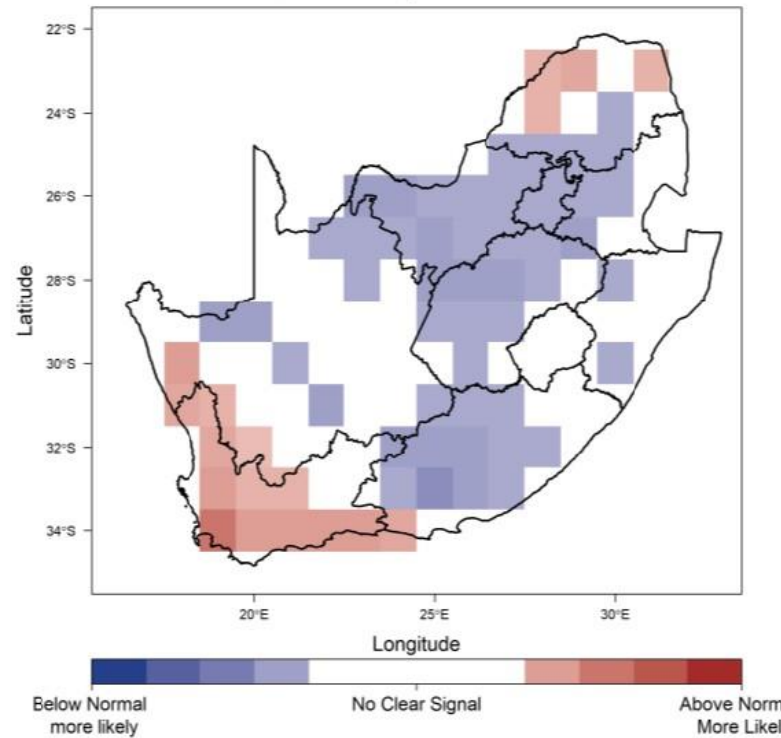


Maximum temperatures are expected to be below normal over large parts of the country

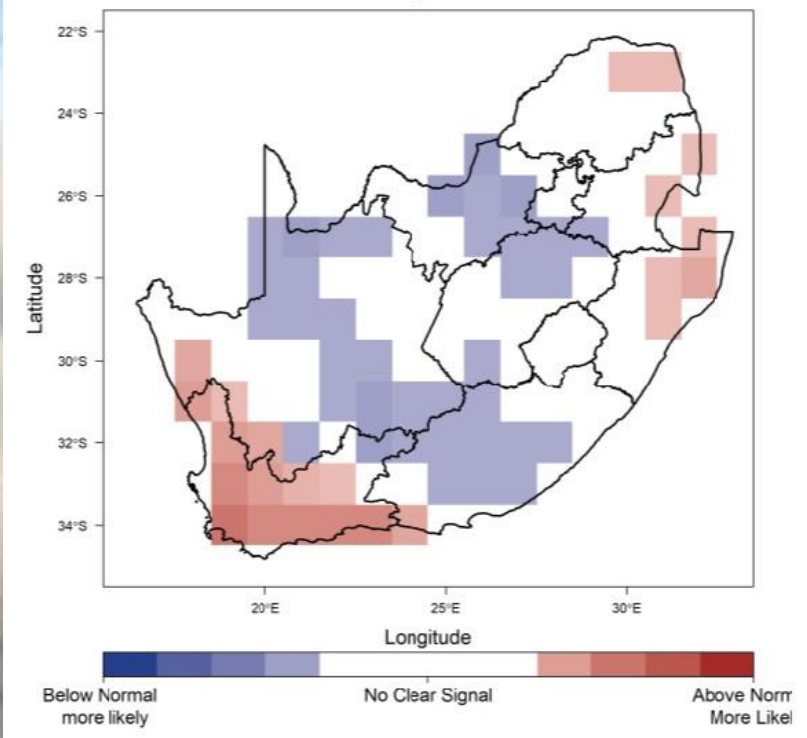
**Expected Max Temp Conditions for OND 2022**  
Issued: Sep 2022



**Expected Max Temp Conditions for NDJ 2022/23**  
Issued: Sep 2022



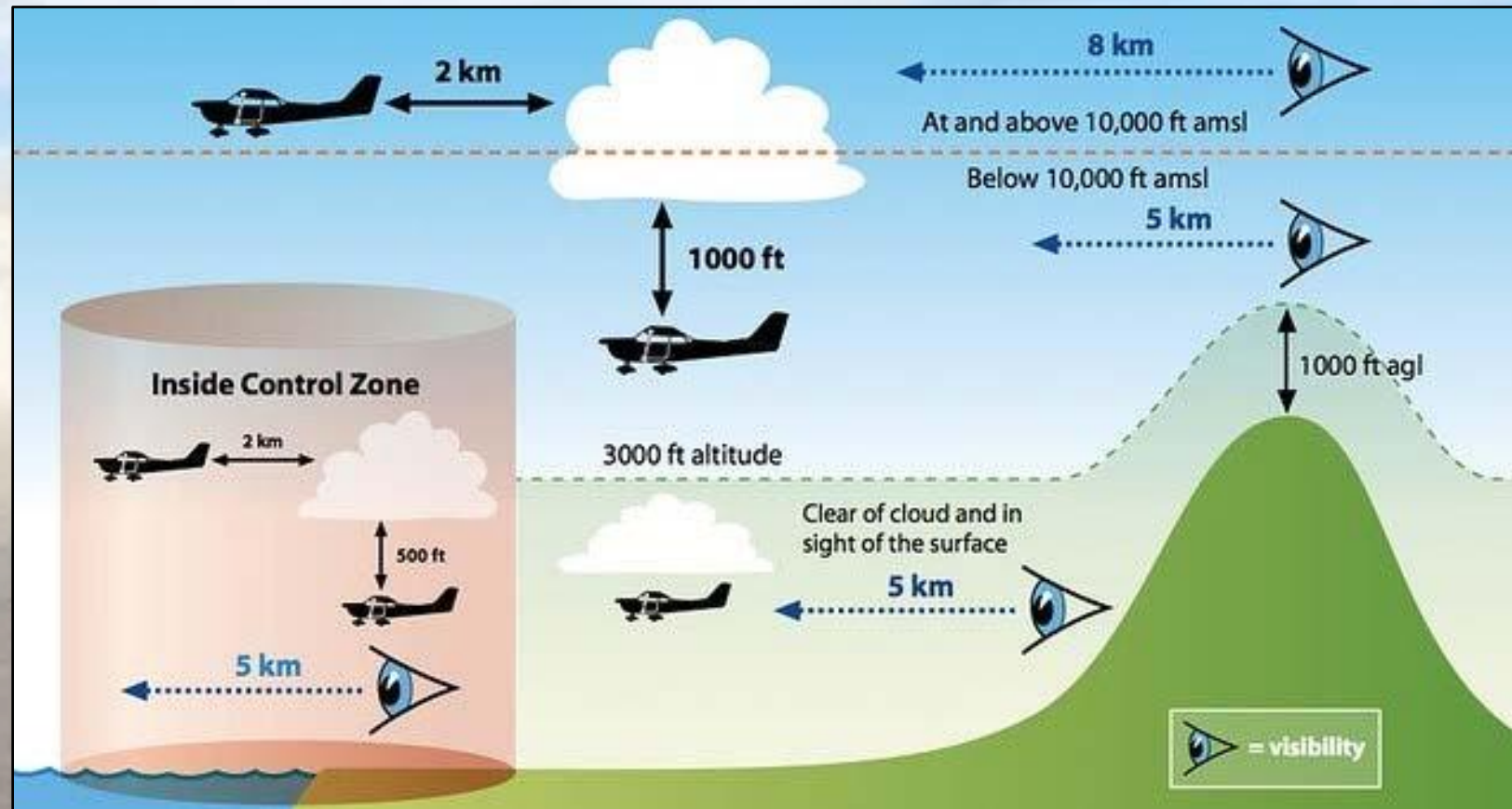
**Expected Max Temp Conditions for DJF 2022/23**  
Issued: Sep 2022





# IMC to VMC

Instrument meteorological conditions (IMC) are Met conditions expressed in terms of visibility, distance from cloud, and ceiling, **LESS** than the minima specified for visual meteorological conditions (VMC). (ICAO Annex 2 Rules of the Air, Chapter 4: Visual Flight Rules)



# Local special reports and SPECI



## Criteria:

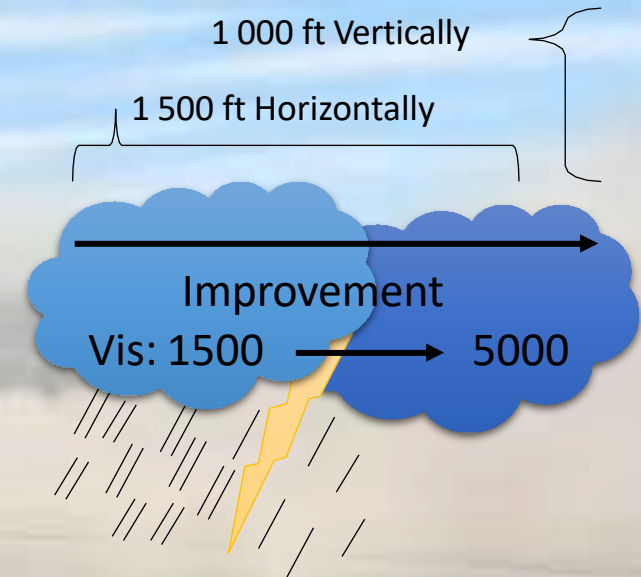
\*) when the amount of a cloud layer below 450 m (1 500 ft) changes:

- 1) from SCT or less to BKN or OVC; or
- 2) from BKN or OVC to SCT or less.

\*) When the height of base of the lowest cloud layer of BKN or OVC is lifting and goes to or through, or when the extent is lowering and passes through one or more of the following values:

- 1) 30, 60, 150 or 300 m (100, 200, 500 or 1 000 ft); and
- 2) 450 m (1 500 ft), in cases where significant numbers of flights are operated in VFR

\*) when the sky is obscured and the vertical visibility is improving and goes to or through or when the vertical visibility is deteriorating and passes through one or more of the following values:  
30, 60, 150 or 300 m (100, 200, 500 or 1 000 ft)





\*) There requires a change in RUNWAY(s) in use; due to significant wind changes  
And indicate that the runway tailwind and crosswind components have changed

\*) when the RUNWAY(s) visibility is improving and changes to or passes through one or more of the following values, or when the

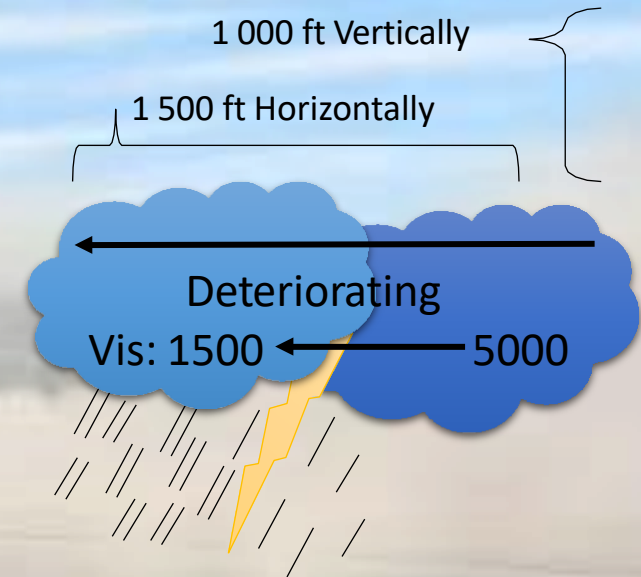
visibility is deteriorating and passes through one or more of the following values:

1) 50, 175, 300, 550, 800, 1 500 or 3 000 m; and

2) 5 000 m, in cases where significant numbers of flights are operated in VFR

```
TAF FAOR 231000Z 2312/2418 VRB03KT 9999 BKN030
TX22/2313Z TN14/2404Z
PROB30 TEMPO 2313/2321 -TSRA FEW030CB
BECMG 2322/2324 CAVOK
PROB30 TEMPO 2400/2406 4000 BR BKN005
BECMG 2408/2410 34008KT BKN015
PROB30 TEMPO 2413/2418 -TSRA FEW030CB=
```


```
FAOR 231400Z 34009KT 300V020 9999 SCT030 21/13 Q1026 NOSIG=
FALA 231400Z 33005KT 310V010 9999 SCT035 23/13 Q1025 NOSIG=
FAIR 231400Z 32004KT 9999 SCT030 22/14 Q1025=
FAWB 231300Z 21005KT 9999 SCT025 24/14 Q1022=
```





# Aviation Website: <https://aviation.weathersa.co.za>





Designated Aeronautical Meteorological Authority

HOME FORECAST **OBSERVATION** DOMESTIC

AEROSPORT ABOUT

Colour Coded METAR

METAR

Recent METARs

Recent METAR/TAFs

Metar History

Radar

Satellite

SPECI

Weather Map

Web Cams

## Gauteng


FAOR 091430Z 17008KT 130V210 CAVOK 25/M02 Q1027 NOSIG=  
FALA 091400Z 18007KT 120V200 CAVOK 27/01 Q1026 NOSIG=  
No data for FAJB  
FAIR 091400Z 22004KT CAVOK 27/01 Q1026=  
FAWB 091400Z VRB02KT CAVOK 28/05 Q1024=  
FAWK 091400Z AUTO 19006G17KT /// / /// / 27/02 Q1027=  
FAGC 091400Z 22005KT CAVOK 26/M01 Q1027=  
FAGM 091400Z 20010KT CAVOK 24/M04 Q1028=  
FASI 091200Z AUTO 24003KT /// / /// / 25/02 Q1031=  
FAVV 091200Z AUTO 16003KT /// / /// / 25/01 Q1030=

## Webcams

Available webcams with direction the camera is facing in brackets:

|   |  |
|---|--|
| <a href="#">George</a> (North)                | <a href="#">Cape Point</a> (DEA&DP - North North-east) |
| <a href="#">Kruger Mpumalanga</a> (East)      | <a href="#">Richards Bay</a> (South)                   |
| <a href="#">Pietermaritzburg</a> (North-west) | <a href="#">Skukuza</a> (South)                        |
| <a href="#">King Shaka</a> (North-east)       | <a href="#">Tzaneen</a> (North-west)                   |
| <a href="#">King Shaka</a> (South-east)       | <a href="#">Constantiaberg</a> (North-east)            |

\* - webcam not available  
Note: Use Ctrl+F5 to ensure the most recent image is downloaded.



## Radar Images

### Individual Images

|      |      |      |      |      |      |
|------|------|------|------|------|------|
| FABL | FABM | FACT | FADN | FADY | FAEO |
| FAEL | FAGG | FAIR | FAPP | FAPE | FAUT |
| FASZ | OTD  |      |      |      |      |

### Individual 50km Images

|      |      |      |      |      |      |
|------|------|------|------|------|------|
| FABL | FABM | FACT | FADN | FADY | FAEO |
| FAEL | FAGG | FAIR | FAPP | FAPE | FAUT |
| FASZ | OTD  |      |      |      |      |

### Individual 75km Images

|      |      |      |
|------|------|------|
| FABL | FAIR | FAUT |
|------|------|------|

### Composite Images

Aviation General Radar/Satellite Merge

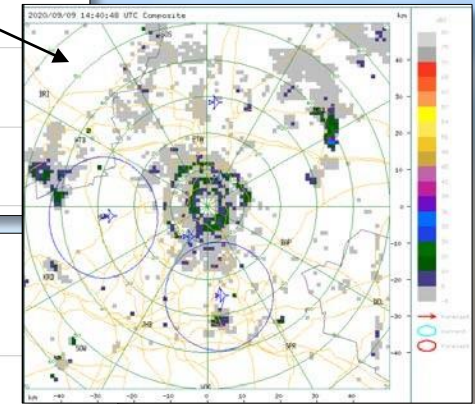
## Radar/Satellite Merge with forecast Model Winds

|       |       |       |       |      |      |
|-------|-------|-------|-------|------|------|
| FL020 | FL040 | FL060 | FL080 | L100 | L130 |
| L150  | L180  | L200  | L220  | L250 | L270 |
| L290  | L310  | L330  | L350  | L390 | L430 |

## Radar Images

### RSA Central

| FACT      | FADN | FAEL | FAGG | FAOR            | FAPE |
|-----------|------|------|------|-----------------|------|
| AIR       | AIR  | AIR  | AIR  | AIR             | AIR  |
| FIS       |      |      |      |                 |      |
| SIR(East) |      |      |      | SIR(East)       |      |
| SIR(West) |      |      |      | SIR(West)       |      |
|           |      |      |      | FULL            |      |
|           |      |      |      | FIS(North)      |      |
|           |      |      |      | FIS(South)      |      |
|           |      |      |      | SIR(North)      |      |
|           |      |      |      | SIR(North East) |      |
|           |      |      |      | SIR(South East) |      |
|           |      |      |      | SIR(South West) |      |
|           |      |      |      | SIR(Central)    |      |





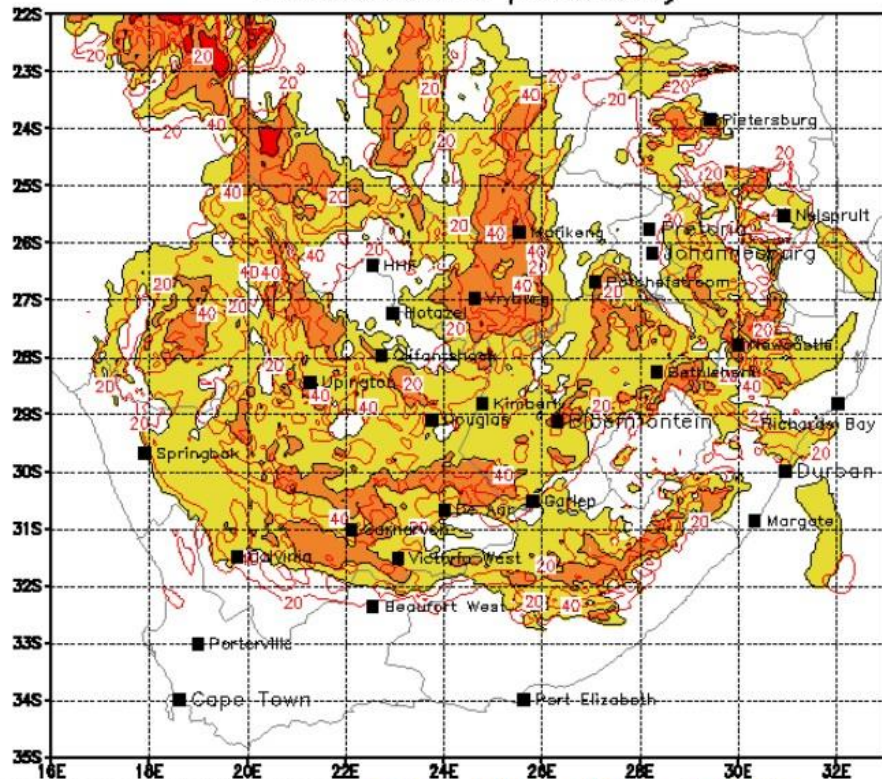
Analysis:00Z 18 OCT 2022

Valid:15Z 18 OCT 2022 SA4

[Next day>>](#)



## Thunderstorm probability



Thunderstorm distribution: 20%; 40%; 60%; >80%;

Shaded area=TS prob at 14:00 redlines show 17:00

## SAWS Satellite

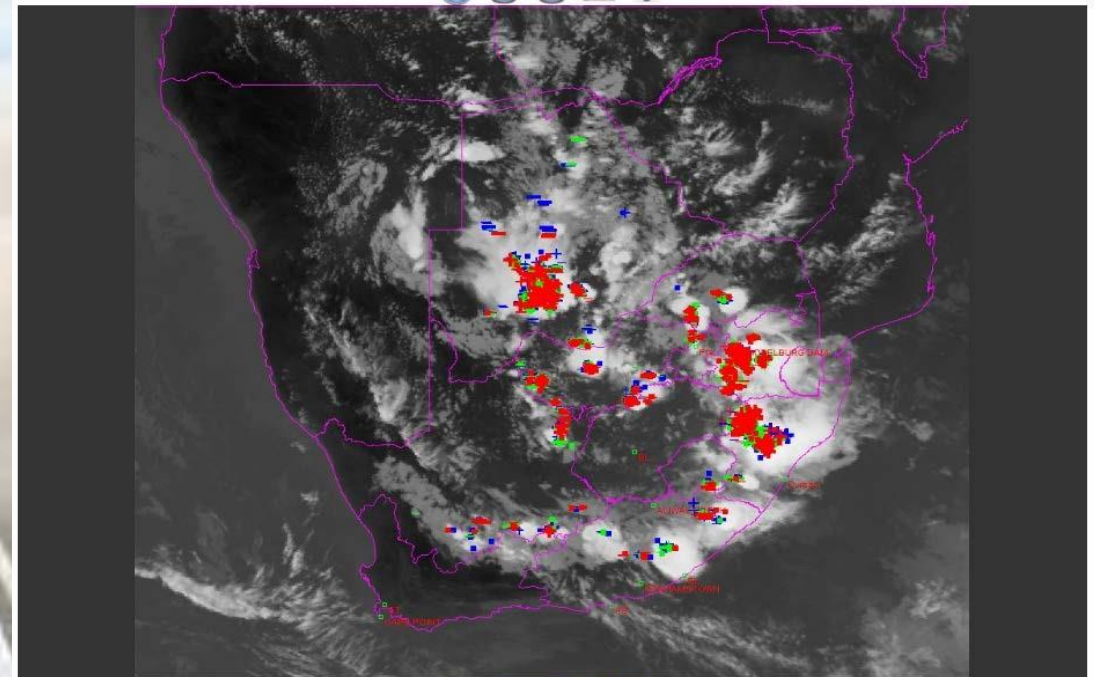


Select a product:

IR108\_RSA

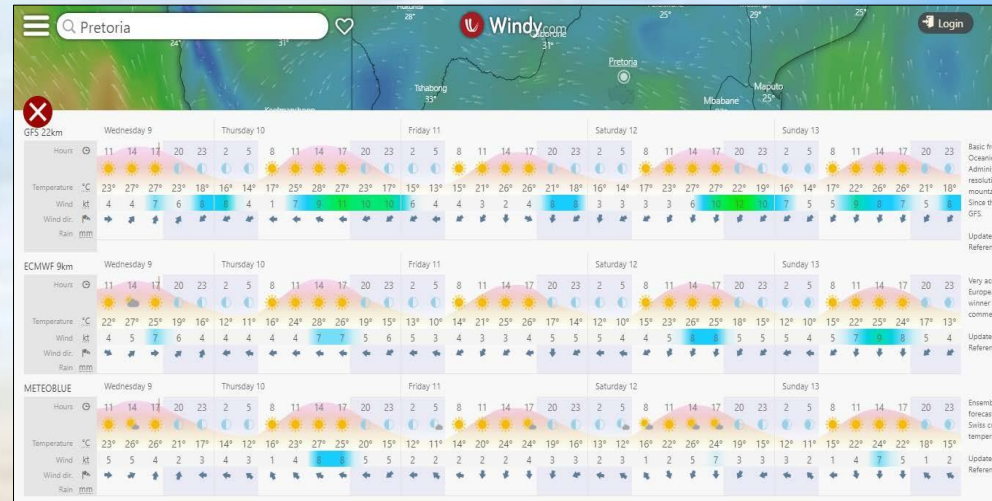
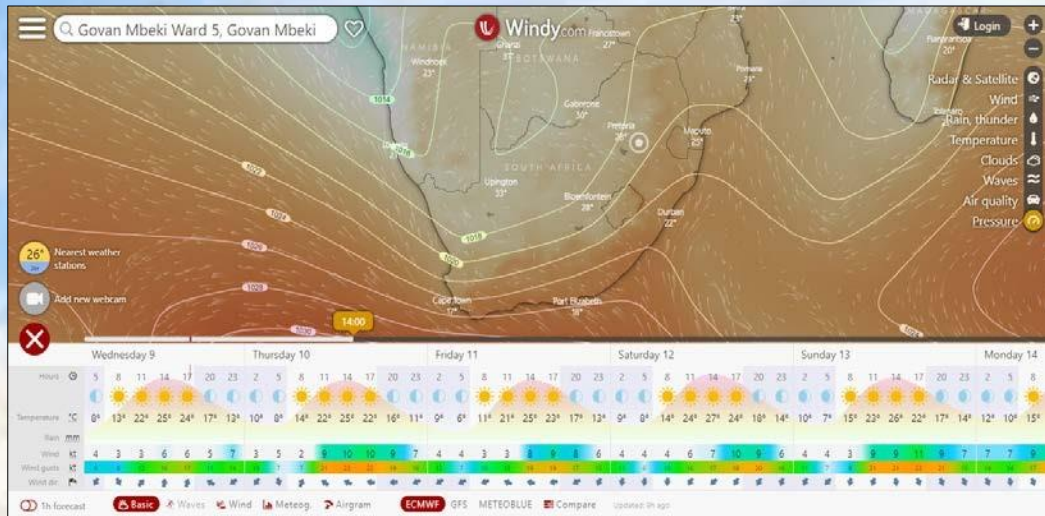
Current frame:

2022-10-18 15:15





# WindyTV.com





# Aviation Website & Contact details

- Aviation Website -  
<https://aviation.weathersa.co.za/#home>
- FACT: 064 798 6994
- FAPE: 066 186 4870
- FALE: 032 436 3818
- FABL: 063 095 5103
- DRR: 012 367 6025

**THANK YOU  
FOR YOUR  
TIME**



Presented by: Lauren Smith  
[lauren.smith@weathersa.co.za](mailto:lauren.smith@weathersa.co.za)

## The Next Hour





# Ari Levien

**MAYDAY-SA REPRESENTATIVE**



# Safety First Aviators

## MAYDAY-SA Chronic Fatigue

20 October 2022  
Presented by Ari Levien





# *PLEASE - SAVE and SHARE*

- Phone: **012 333 6000** (ask for MAYDAY)
- Website: [www.mayday-sa.org.za](http://www.mayday-sa.org.za)
- Follow us on FaceBook: Mayday-SA
- Email: [maydaysouthafrica@gmail.com](mailto:maydaysouthafrica@gmail.com) /  
[support@mayday-sa.org.za](mailto:support@mayday-sa.org.za)

# WHAT?

- Definition: *“Fatigue is a condition characterized by increased discomfort with lessened capacity for work, reduced efficiency of accomplishment, loss of power or capacity to respond to stimulation, and is usually accompanied by a feeling of weariness and tiredness.”*





# TYPES

- ACUTE
- CHRONIC



# *CAUSES OF CHRONIC FATIGUE*

- Extended periods of high stress
- Lack of rest for extended periods
- No “down-time”
- Medical





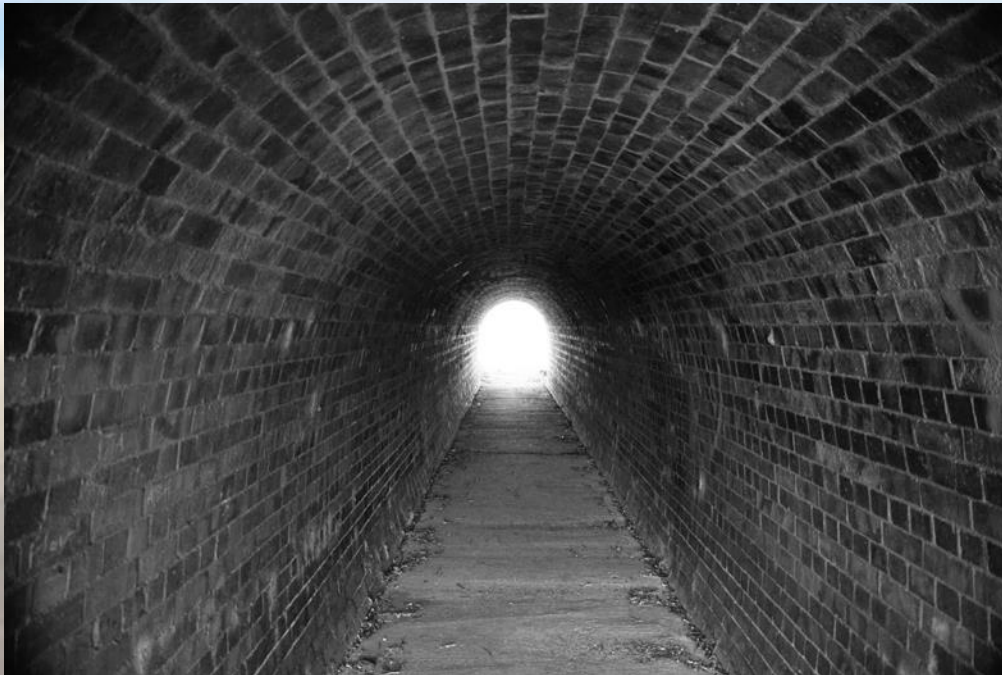
# *SYMPTOMS OF CHRONIC FATIGUE*

- Tiredness (not cured by a good night's sleep)
- Inability to concentrate
- Memory fog
- Increased reaction time
- Difficulty following instructions
- Headaches
- Heart palpitations
- Irritability
- Breathlessness
- Digestive problems
- Depression



# *SKILL FATIGUE*

- Timing disruption
- Disruption of perceptual field (“Tunnel vision”)





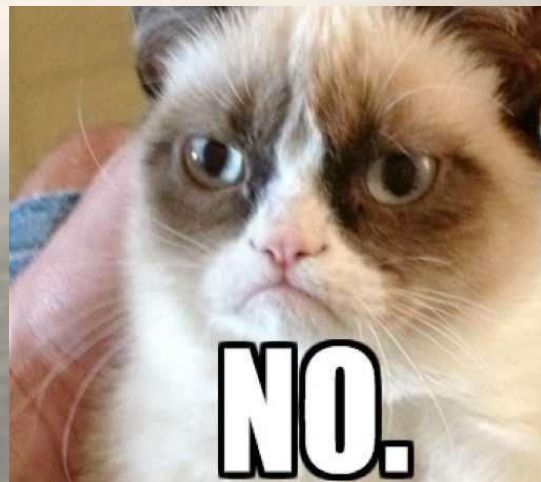
## *ANTIDOTE*

- **SLEEP**
- Stress reduction/elimination



# *DON'T*

- Lie awake if unable to sleep – rather get up
- Consume caffeine or alcohol for 3-4 hours before bed
- Eat a large meal before bed
- Take work to bed
- Exercise within 2-3 hours of bedtime
- Use medication to sleep (unless prescribed by AME)





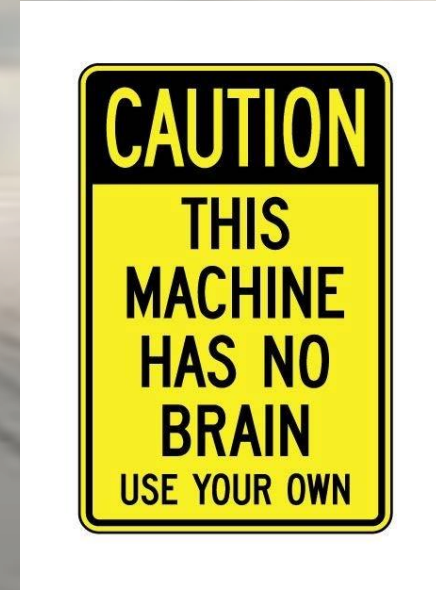
# DO

- Be mindful of medication side effects!
- Consult your AME if medical conditions cause sleep issues
- Exercise
- Form good sleep habits (7-8 hours per night, consistent bedtime)
- Ensure sleep environment is comfortable
- Nap (limit to 30 mins!)
- Be honest with yourself!



# TAKE AWAYS

- Stress contributes significantly to chronic fatigue
- Good sleep is vitally important
- Fatigue is a killer
- Be realistic about your degree of fatigue
- Down time, rest, sleep





# *PLEASE - SAVE and SHARE*

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[support@mayday-sa.org.za](mailto:support@mayday-sa.org.za)



**AERO**  
SOUTH AFRICA

**Q&A**



**Be Prepared!**  
**Changing of Seasons**