



Easy  
Plan

# Easy Weather



Aviation  
Direct



South African  
Weather Service  
ISO 9001 Certified Organisation



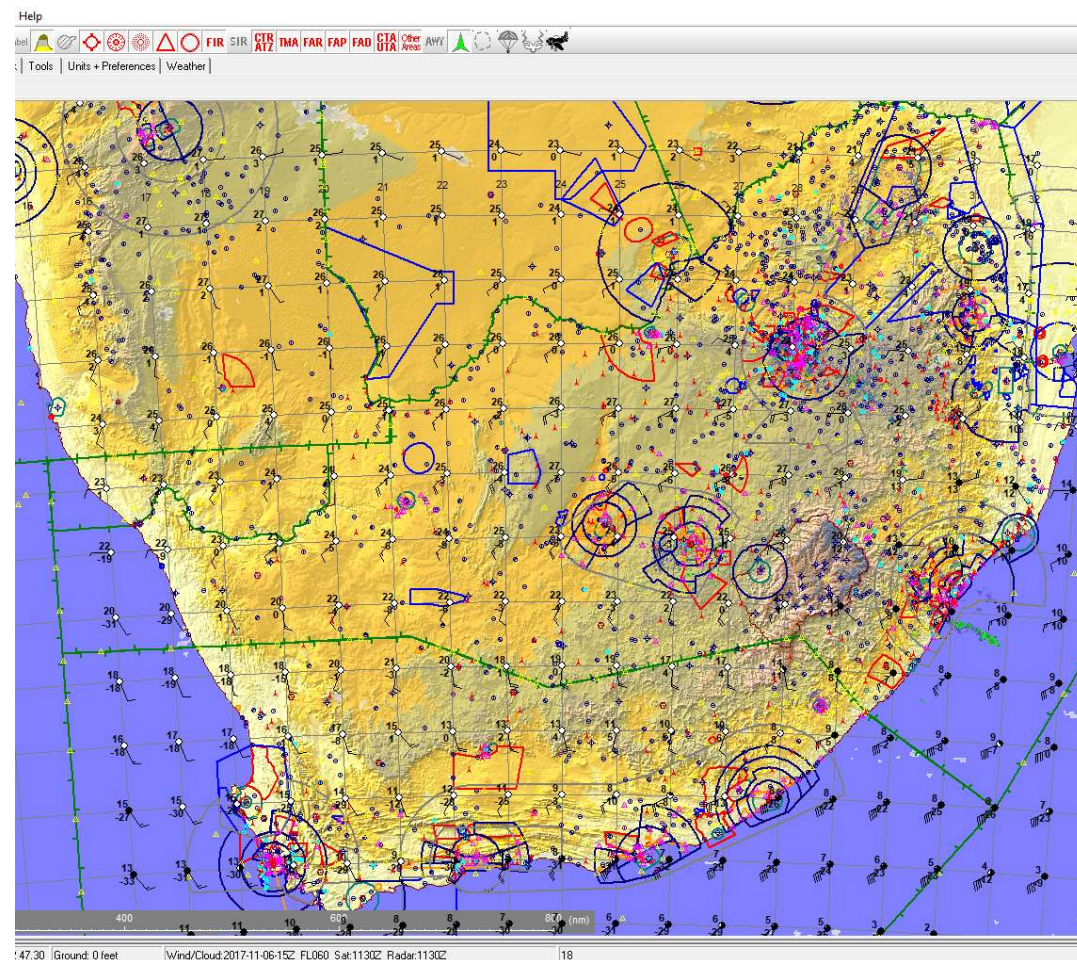
EasyWeather provides a direct weather interface from SA Weather Services to EasyPlan as overlays on your EasyPlan map. This service is available in South Africa only, at this stage. By using your internet connection, real-time weather can be accessed before flight. The weather data is shown in easy-to-understand graphic images and provides a good overall picture of the weather situation.

At a glance you can view **Forecast weather data** covering South Africa which is available for different flight levels. Weather symbols showing the wind direction, wind speed and cloud cover are displayed and by tapping on the symbol, more detailed forecast data for that grid point can be viewed.

**METARs and TAFs** are shown in coded and decoded text format under the Airfield information where weather data is available.

**Satellite** images provide a general overview of weather conditions in South Africa, they are infra-red and update every 15 - 30 minutes.

**Radar** - overlay radar images are displayed to show precipitation whereby e.g. thunderstorm activities are easily visible on the map. Radar images update every 15 - 30 minutes.





If you are subscribed to this product, under the **Weather Tab**, select your preferences to view the weather.

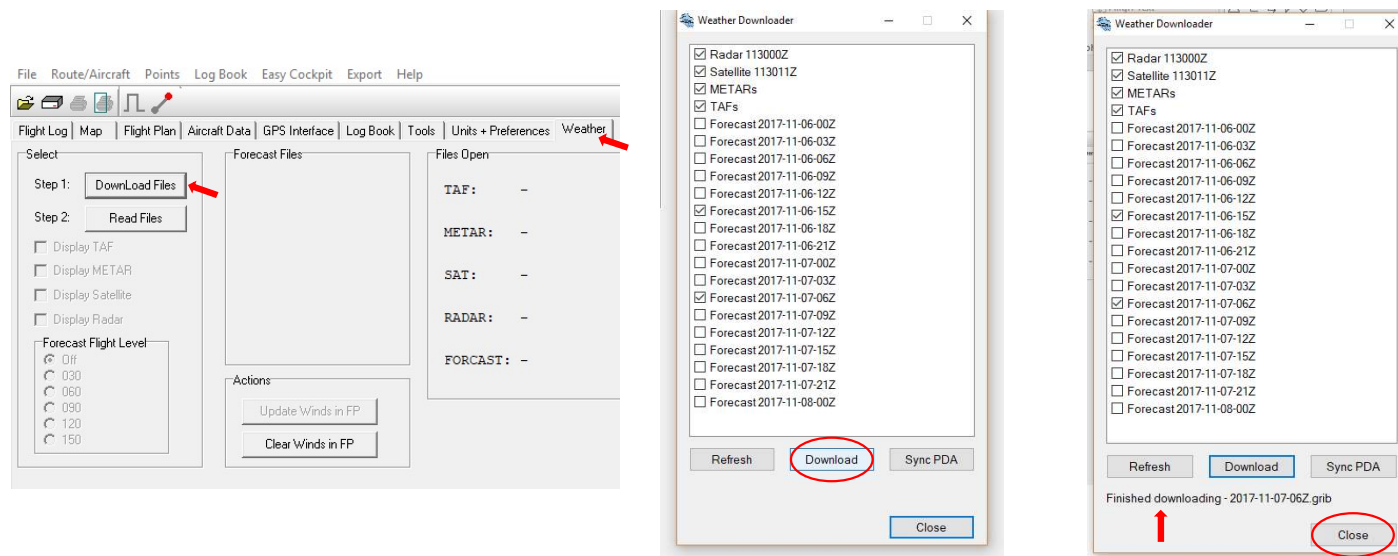
## STEP 1 :

Select Step 1: **Download Files**

The **Weather Downloader** window will open for your selection –

- ☐ Radar
  - ☐ Satellite
  - ☐ METAR's
  - ☐ TAF's
  - ☐ Forecast file (date/time)
- Tap on Download

Close the Weather Downloader once "Finished Downloading"

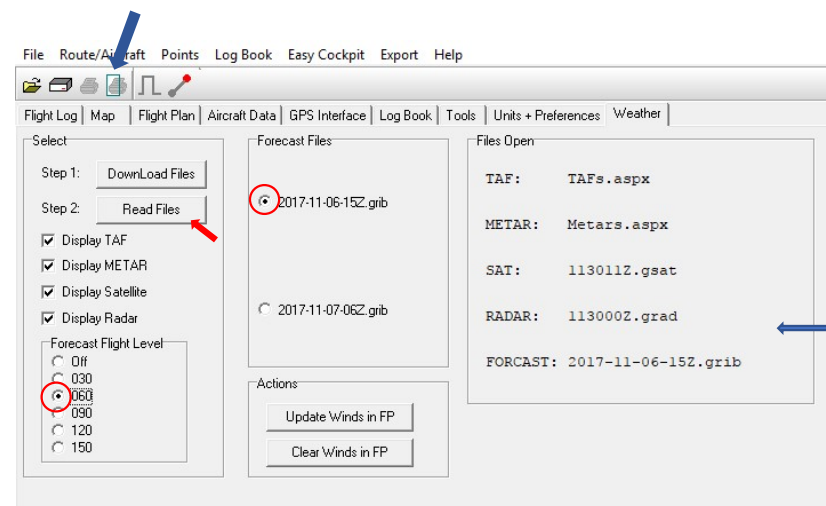


## STEP 2 :

Select Step 2 : **Read Files**

Tick the options you would like displayed on your EasyPlan Map, including :

- ☐ TAF
- ☐ METARs
- ☐ Satellite
- ☐ Radar
- Select **Forecast Flight Level** (060 = 6000ft, etc)
- Select **Forecast Files** (select one of them if you have downloaded more than one)
- You can now view the downloads in the **Map View**. ⚡
- Select **Update Winds to FP**, if you have a flight log open.

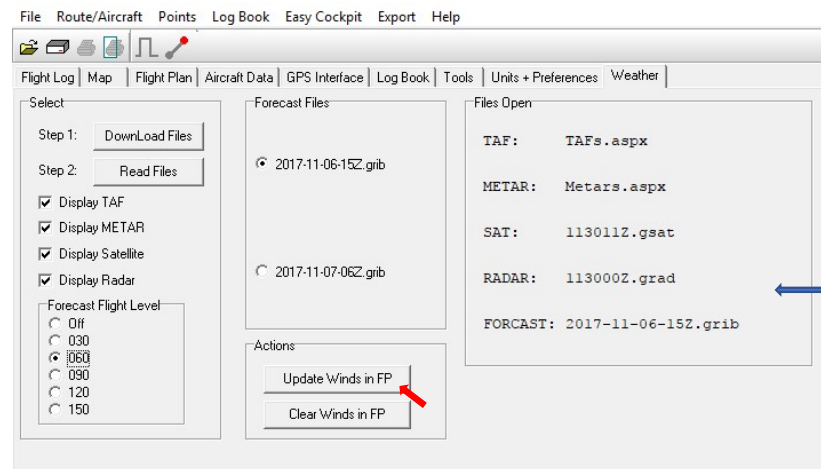


NOTE : All downloaded files are listed on right of the screen

### STEP 3 :

If you have a Flight Log open and would like the winds to be incorporated into this for planning purposes,

#### **Update Winds in FP**



NOTE : All downloaded files are listed on right of the screen

Your Flight Log will not have any Wind details taken into account unless the "Update Winds in FP" is ticked for this activation.

Once this is activate, the winds are taken into account on the Flight Log including your Wind Direction & Wind Speed. This will update your Headings, Speed and Time accordingly.

**NOTE :** For your Flight Log Calculations - the imported wind data will be for the Altitude/FL you have indicated in your Flight Log and not for the Forecast Flight Level you may have selected. The Forecast Flight Level data is available on the Map View only.

EasyPlan 3.115.01 :-

File Route/Aircraft Points Log Book Easy Cockpit Export Help

Flight Log Map Flight Plan Aircraft Data GPS Interface Log Book Tools Units + Preferences Weather

Log Notes

| Name       | Identifier | In FP | Freq.  | Ground Elev. (feet) | Magnetic Variation (deg W) | True AirSpeed (knots) | Wind Direction (deg) | Wind Speed (knots) | True From (deg) | True To (deg) | Magnetic From (deg) | Magnetic To (deg) | True Heading (deg) | Magnetic Heading (deg) | Compass Heading (deg) | Altitude/ FL | Ground Speed (knots) | Leg Distance (nm) | Leg Time |
|------------|------------|-------|--------|---------------------|----------------------------|-----------------------|----------------------|--------------------|-----------------|---------------|---------------------|-------------------|--------------------|------------------------|-----------------------|--------------|----------------------|-------------------|----------|
| Gariap Dam | FAHV       | X     | 124.80 | 4176                | 23                         |                       |                      |                    |                 |               |                     |                   |                    |                        |                       |              |                      |                   |          |
| Mossel Bay | FAMO       | X     | 124.20 | 526                 | 26                         | 70                    | 0                    | 0                  | 40              | 218           | 66                  | 242               | 219                | 244                    | 244                   | 6000FT       | 70                   | 278               | 04:00    |

EasyPlan 3.115.01 :-

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Log Notes

| Name       | Identifier | In FP | Freq.  | Ground Elev. (feet) | Magnetic Variation (deg W) | True AirSpeed (knots) | Wind Direction (deg) | Wind Speed (knots) | True From (deg) | True To (deg) | Magnetic From (deg) | Magnetic To (deg) | True Heading (deg) | Magnetic Heading (deg) | Compass Heading (deg) | Altitude/ FL | Ground Speed (knots) | Leg Distance (nm) | Leg Time |
|------------|------------|-------|--------|---------------------|----------------------------|-----------------------|----------------------|--------------------|-----------------|---------------|---------------------|-------------------|--------------------|------------------------|-----------------------|--------------|----------------------|-------------------|----------|
| Gariap Dam | FAHV       | X     | 124.80 | 4176                | 23                         |                       |                      |                    |                 |               |                     |                   |                    |                        |                       |              |                      |                   |          |
| Mossel Bay | FAMO       | X     | 124.20 | 526                 | 26                         | 85                    | 91                   | 17                 | 40              | 218           | 66                  | 242               | 210                | 235                    | 235                   | 6000FT       | 94                   | 278               | 02:56    |

## READING & UNDERSTANDING WEATHER SYMBOLS

All Weather Forecasts can now be viewed in the Map View. Ensure that the “Display Weather” icon is activated. This can be confirmed visually by it turning from grey to lime green.

As a quick reference, in EasyPlan, the Weather/Wind Forecast Circles can be selected by placing your mouse over the Circle. A drop down window will show the relevant information for that point on the SA Weather grid.

### FORECAST DATA

- Forecast files are updated every 24 hours for the successive (following) 48 hour period. These are located on a grid as per data supplied by SA Weather Grid
- Tap on the Weather Barb you would like to view and the Forecast data will be displayed, including:

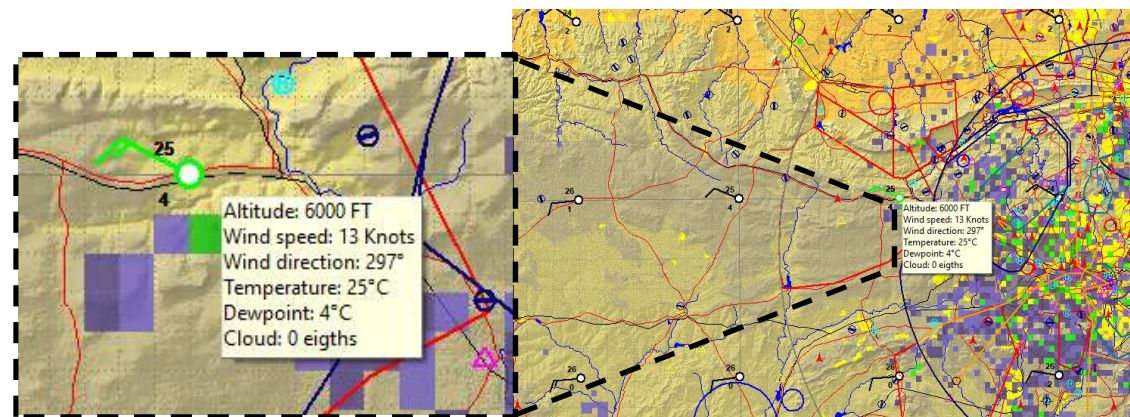
Altitude  
Wind Speed  
Wind Direction  
Temperature  
Dewpoint  
Cloud cover

### WEATHER SYMBOLS

The weather/wind forecast Circles are showing on the map grid and can be selected at different Forecast Levels in EasyPlan.

These symbols, have three parts:

- a Circle, visually indicating cloud cover but also showing additional information when hovering over
- Wind Barbs show Feathers or Flags indicating the wind speed (eg. 18 Knots)  
The Wind speed is indicated by feathers at the top of the vane.  
These feathers show wind speed adjusted to the nearest 5 or 10 **Knot**.
- A 50 knot wind is depicted by a Flag or Pennant.
- the Staff indicates the wind direction is **INTO** the Circle **FROM** the end of the weather barb (eg. 313°). Wind direction is shown as a compass degree.



#### Cloud Cover

| Symbol | Scale in oktas (eighths) |                         |
|--------|--------------------------|-------------------------|
|        | 0 eights                 | Sky completely clear    |
|        | 1 eights                 |                         |
|        | 2 eights                 |                         |
|        | 3 eights                 |                         |
|        | 4 eights                 | Sky half cloudy         |
|        | 5 eights                 |                         |
|        | 6 eights                 |                         |
|        | 7 eights                 |                         |
|        | 8 eights                 | Sky Completely overcast |



|  |           |
|--|-----------|
|  | Calm wind |
|  | 5 knots   |
|  | 15 knots  |
|  | 20 knots  |
|  | 25 knots  |
|  | 55 knots  |



## SATELLITE & RADAR

**Satellite** images provide a general overview of weather conditions in South Africa. This focusses on cloud cover views from space but does not give cloud base.

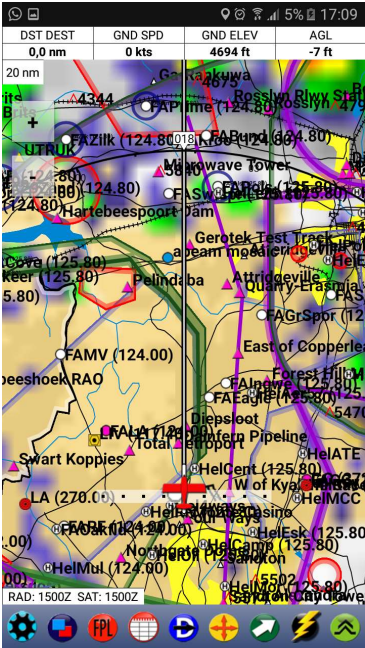
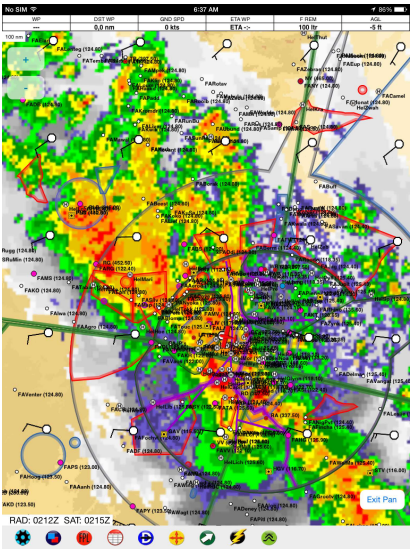
Overlay **radar** images are displayed to show precipitation in the clouds. This will provide you with a good overview of e.g. thunderstorm activities.

Please take note that various atmospheric and environmental conditions can negatively affect radar data and caution should be exercised when interpreting the information.

Some of these effects include:

- Returns from mountains and other non-meteorological targets
- Attenuation of the radar signal when viewing weather echoes through areas of intense precipitation (with C-band radars)
- Temperature inversions in the lower layers of the atmosphere which bend the radar beam in such a way that ground clutter is observed where normally not expected
- The “bright band” which is a layer of enhanced reflectivity caused by the melting of ice particles as they fall through the OC level in the atmosphere, and which can result in over-estimation of rainfall.

EasyWeather was developed by Aviation.Direct (Pty) Ltd, in conjunction with South African Weather Services. Downloads are subject to subscriptions. A valid EasyPlan or EasyCockpit subscription is required before the weather module can be used.



EasyWeather uses the following Radar colour coding to indicate the strength of the return:

| Colour | Radar Reflectivity | Rain Rate | mm/hr | Comments                                                |
|--------|--------------------|-----------|-------|---------------------------------------------------------|
| Pink   | 65 dBZ             | 60        | ~ 200 | Extremely heavy rain, severe thunderstorms, hail likely |
| Red    | 55 dBZ             | 50        | ~ 50  | Heavy rain, thunderstorms, some hail possible           |
| Orange | 45 dBZ             | 40        | ~ 10  | Moderate Rain, showers                                  |
| Yellow | 35 dBZ             | 30        | ~ 3   | Light rain                                              |
| Green  | 25 dBZ             | 20        | ~ 1   | Drizzle, very light rain                                |
| Blue   | 15 dBZ             | 10        | ~ 0.2 | Significant but mostly non-precipitating clouds         |

## METARs & TAFs

Where Weather data is available for Airfields, these can be viewed if downloaded from EasyWeather as follows :

- Right click on the Airfield (eg FALA in the diagram)
- Select View
- Scroll down to the Weather, where this is available
- Note : METARs and TAFs are only available for airfields that have Weather Stations, once you have downloaded EasyWeather.

The screenshot shows a map of Mossel Bay (FAMO) with a right-click context menu open. The menu options are: Add Mossel Bay (FAMO), View, Edit, Go To Mossel Bay (FAMO), Details To Notes, Copy Co-ords for Google Earth, and View In Google Maps. The 'View' option is highlighted. A red arrow points to the 'Details' window, which displays the following information:

**Details**

AIRFIELD AND PILOTS ARE REQUIRED TO REMAIN WITHIN CONTROLLED AIRSPACE (TO OBTAIN KNOWN TFC INFO). IFR TFC LEAVING CONTROLLED AIRSPACE REQUIRED TO BCST INTENTIONS AND LISTEN OUT ON 125.8 FOR THE DURATION THEY ARE IN CONTROLLED AIRSPACE. IFR TFC ARE WARNED OF THE RELATIVE HIGH VOLUME OF TFC ON THE VFR BLUE ROUTE AND ALONG THE CTR AND TMA BOUNDARIES.

**TAF**

FALA 061000Z 0612/0712 30010KT CAVOKPROB30 TEMPO 0613/0618 -TSRA FEW040CBCECMG 0618/0620 35007KT BECMG 0702/0704 02006KTBECEMG 0708/0710 32010KTTX33/0613Z TN15/0703Z

ICAO: FALA Date: 6th at 10:00 UTC Validity period: 12 hundred on the 6th UTC to 12 hundred on the 7th UTC Wind direction: 300 deg at 10 knots Significant Changes: TEMPO from 13:00 on the 06th to 18:00 on the 06th, wind 350 deg at 07 knots, Slight Thunderstorm rain, cloud few cumulonimbus at 4000 feet BECMG from 02:00 on the 07th to 04:00 on the 07th Unmatched: CAVOKPROB30 0618/0620 02006KTBECEMG 0708/0710 32010KTTX33/0613Z TN15/0703Z

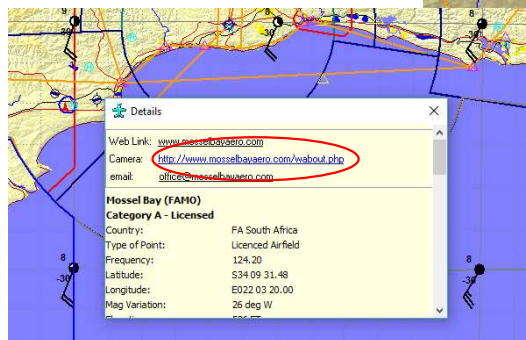
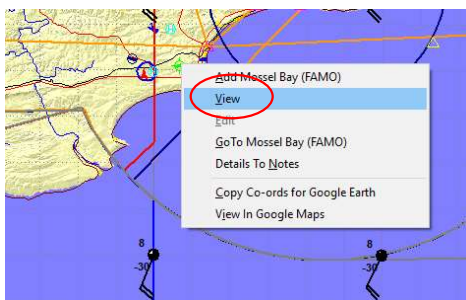
**METAR**

FALA 061100Z 32012KT 260V020 CAVOK 32/08 Q1018 NOSIG

ICAO: FALA 6th at 11:00 UTC WIND: wind direction 320 degrees at 12 knots variable from 260 to 020 degrees CAVOK: clear and unlimited visibility TEMP AND DEW: 32/08 PRESSURE: Q1018 TREND: NOSIG

Where Airfields have webcams, this additional info can be accessed as follows :

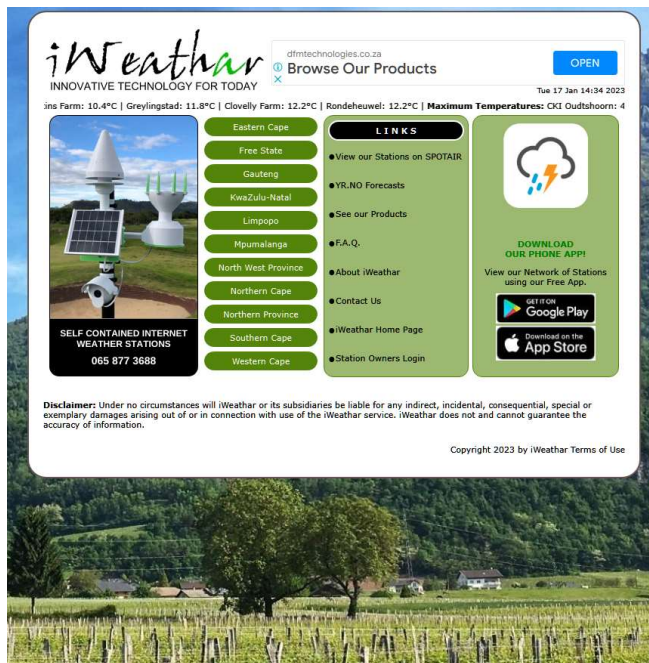
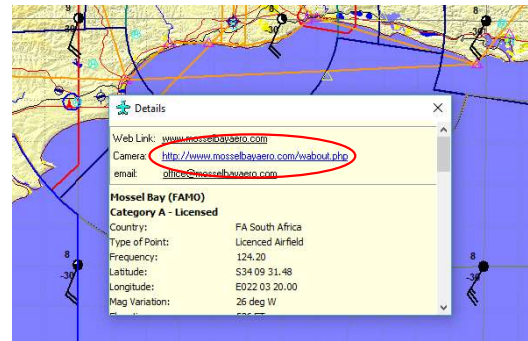
- Right click on the Airfield (eg FAMO in the diagram)
- Select View
- Camera : will be followed by the relevant link





## OTHER RESOURCES : WEBCAMS & iWEATHAR

Where Airfields webcams are available, pilots can access these for a live view of the current situation. [www.aviationwebcams.co.za](http://www.aviationwebcams.co.za)



Other resources include [www.iWeather.co.za](http://www.iWeather.co.za) which offers access to all public locations registered with them.

**We welcome any additional information available at Airfields that can be accessed for weather information.**