## StormGeo Web Portal Guide

## Logging In

## URL customers.stormgeo.com

The nominated service administrator for each airport has been sent a registration e-mail which allows them to create a login password. Their user name is their e-mail address.

The administrator can then manage user access to the web portal, grant administrator privileges to other users and manage the e-mail forecast distribution lists.

← → C	C cms.stormgeo.com/portal/login			
			StormGeo	
The HI Admini with ac	AL Airport nominated Service istrator(s) will provide users ccess to the web portal	Userid Password	Admin e-mail address Airport password	
			Login	
			Login assistance	

The following pages describe the content of the web portal for the exclusive use of HIAL.

## <u>Maps</u>

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Maps 24 Hour × 5Day Outlook × Precasts × Observations × 1245 and Metar Daily Video Brief	CHLANIN LONOT
The tabs on the top banner on each page provide access to all forecast pages in the portal. These will be described in the following pages.	

The following administrator/help tabs can be found on the top right-hand side:

- Contact details
- A glossary of met. terms
- A portal admin function (allows the Airport nominated administrator(s) to manage user access to the web portal)
- This user-guide

The Maps page also displays the following information:

- 1. Synoptic Situation general forecast covering the region for the next 5 days, highlighting any relevant weather and their impact.
- 2. Contact Details including 24/7 telephone number for access to duty forecaster



## 3. Map Displays

By using the menu display on the right-hand side of the home page map, the map displays can be configured by each user to suit their own preferences. Users can overlay maps.

Background – Offers a choice of background map displays

Assets - Allows the user to hide/display forecast location(s)



Lightning - Real-time lightning strikes (presented within 3 seconds of occurrence)

RADAR

- Real rime European RADAR colour coded by rainfall intensity
- Real-time Precipitation type RADAR colour coded by type of precipitation
- European Nowcast short forecast in 5 minute timesteps for the next hour ahead colour coded by
  precipitation intensity

In the example below, the map displays the 10 metre wind forecast chart, with overlays of real-time lightning strikes and rainfall RADAR. Lighting strikes appear as dots on the map within 3 seconds of occurrence and are automatically refreshed on the page. Strikes are colour coded by time of occurrence, with the red dots occurring within the last 20 minutes. The latest strike being represented by the largest dot.

An automated lightning proximity alert will be sent to the airport nominated recipients by e-mail (or if SMS if desired) when observed lighting breaches the agreed range rings. When there have been no strikes within the the last 30 minutes, an automated all clear message is issued.





## **Satellite**

- Satellite image presented in cloud top temperature colour coding.
- Infrared satellite image colour coded in grey scale by cloud top temperatures.

#### **ECMWF**

A selection of forecast maps available from the European forecast model including: Wind, Low cloud, precipitation type forecasts(3hrly accumulations – will increase to 1-hrly resolution soon) Pressure, Synoptic charts, Thunder Probability, 3hrly Precipitation Accumulations (will increase to 1-hrly resolution soon), Visibility

<u>High Res</u> – High resolution forecasts of wind, rainfall (1hrly resolution) pressure, significant wave height, temperature

Note - The forecaster has access to both European model and UKMO model forecast data, as well as other forecast model deta.

#### Wind Barbs decode:

Wind barbs point in the direction "from" which the wind is blowing. Wind speed can be decoded from fig. 1. The example in fig. 2 below represents a **South-easterly 20KT** wind.



Flight Level - Winds and Temperature as standard flight levels

## **Travel Status**

- Flight Delays real-time display of flight delays due to all causes
- Risk of Weather Delays real-time display of flight delays (weather only). This uses the latest METAR and a prte-defined set of thresholds. The threshold values can be changed to suit HIAL's operaitonal limits.

## <u>Offshore</u>

• Significant wave height forecast from ECMWF model .



## Landing Page - 24 Hour (weather hazards)

Weather Hazards Dashboards provide the user with a quick 'heads up' on potential operational restrictions at **your airport**. From the drop-down menu, the forecast hazards at the other 4 trial HIAL airports can be viewed.



The alerts are highlighted in traffic light format and may include one or a combination of weather parameters. The forecast is highlighted GREEN (below limits), AMBER (near limits) or RED (exceeds limits). The thresholds are agreed between StormGeo and the Airport at commencement of service, but can be easily changed during service provision. Intervention is required by StormGeo to make changes in this hazards page. The detailed 5-day tabular forecasts (for the airport) can also be accessed from this hazards page by clicking on a coloured traffic light box.





There are 3 forecaster commentaries that accompany this Weather Risk Dashboard and these consist of the following:

Issues at Two 001115 0216 UTC WEATHER H424R05 INVERIESS WULD HERT 4424R05.	James Flatcher	Issued at Tise 00111/18 02:15 UTC SYNOPTIC SITUATION MONDAY 18 UTC Northern Scotland:	James Fletcher 🧕	Issued at Tue 0011/18 02:20 UTC SURFACE CONDITIONS - NEXT 24 HOURS SE-EI'y winds remain light to moderate through Tuesday, Peri	James Fletcher
1014.0100		Low prescale to the score gives moderate, concentration of the th SEBy we region, expectably overright Monday into Tuesday. The new low tracks to on Thunsday and giving SEBy tech to strong winds.	nd. There is a nick of mit and two cloud across the weards loaland during Tuesday, remaining to the W	amund 100t unti 0000 Tuesday. Air and surface temperature	s look to remain between PS 05-12 deg C.
Issued at Tue 06/11/18 02-18 UTC WEATHER HAZARDS - INVERNESS VALID NEXT 24 HOURS. LOW CLOUD		James Fletcher 🕢	A summar for the Ne Hazards.	ry of the Hazards ext 24 hours. See	at the Airport page 3 for list of
Issued at Tue 08/11/18 02:15 UTC SYNOPTIC SITUATION MONDAY 18 UTC Northern Scotland: Low pressure to the south gives moderate, occasionally fresh region, especially overnight Monday into Tuesday. The new lo on Thursday and giving SEly fresh to strong winds.	S-SEly winds. T	James Fletcher in the set of mist and low cloud across the soleand during Tuesday, remaining to the W	An overvie mentionin relevant a	ew for the next 5 Ig any potential dverse weather	days,
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## 5 Day Outlook (weather hazards)



This dashboard presents the risk of hazards at the airport during the next 5 days. Note that the accompanying forecaster commentary is more broad brush and covers all the trial airports. Like the 24hr dashboard, if the user clicks on the hazards box, this will take them to the detailed 5-day table forecast for the airport.

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## 5-day Forecasts (detail)

The user can access the detailed 5-day forecasts for the Airport by clicking on the drop-down 'Forecasts' tab. The user can choose to view either in table or graph format. There is also an option to view the 15-day probability forecast for winds and temperature.



## **Table Forecast**

#### Definitions

The user can hover over the abbreviations on the table to display the definitions of each parameter.

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23/01 09	•	228	8	8	8	9	0.7	1.2	2.8	7.2
23/01 10	•	227	6	8	8	10	0.7	1.2	2.8	6.1
23/01 11	•	227	7	9	8	10	0.7	1.2	2.8	4.9



#### Parameters included in the Airport forecast

The Airport forecast currently contains the following information: but can be refined to suit HIAL's requirements.

- A 5-day synoptic summary highlighting noteworthy periods of weather
- A tabular forecast of:

Winds and gusts at 10 metres
Temperature and dew point
Mean Sea Level pressure
Precipitation amounts
Cloud Base
Visibility
Lightning Risk
Forecast Confidence (colour coded: Green - High confidence, Yellow - Medium Confidence, Red - Low confidence). This can be changed to text, if required.

## Other functions



- User can retrieve, view and print archive forecasts. (1).
- Forecast can be downloaded in CSV file format (2).
- PDF versions of the forecast tables can also be printed. Click on PDF icon on top right-hand side of page (3).

## **Graph Forecast**



The user can choose what type of graph they want to view (wind or weather – *see 1*). Graphs are interactive. The user can choose to click on or off parameters (2 – greyed out when off) and display either 1 day (*short*), 3 days (*medium*) or 7 days (*long*) (3). If additional parameters are required, we can provide. These individual user settings will be saved for the next time the user logs in. PDF versions of the forecast graphs can also be printed.

## **Observations**



From the observations vs forecast tab, the user clicks the drop-down menu to select either 'Forecast vs Observations' or 'StormGeo Live'.

## **Forecast vs Observations**

Currently graphs of forecast vs observation <u>mean wind speed</u> and <u>air temperature</u> is displayed on the web portal. The observational data is currently fed from the METAR.



Example Forecast vs Observation data feed (below)



#### StormGeo Live

StormGeo Live is a forecast created on demand. It takes its initial conditions from the observations (METAR in this case), with some further adjustments made to the forecast based on the observations.

Example of a StormGeo Live graph. To the left of the red vertical line is the observational data and to the right the corrected forecast.



## **Daily Video Brief**

The daily video brief is recorded each morning by the duty forecaster and uploaded onto the portal. This briefing highlights any expected adverse weather across northern Scotland, specifically for airport operations. If there are no expected hazards, the brief will be kept to a minimum.

To start the video brief, click the arrow at the bottom left hand side of the page. Initially, the screen may appear blank (apart from the arrow). When the arrow is clicked the video will appear.



## **Contact Details:**

- 24/7 Duty Forecaster is available on **01224 766590** (or by e-mail <u>offshore@stormgeo.com</u>) for discussion/clarification on forecasts or for any other operational enquiries.
- Contact for any non-operational enquiries Maria Pedrosa 07885 978366