

Annex 10A

Description of KNMI method for Flightpath Calculation (for IFR and VFR routes) and Table driven routes

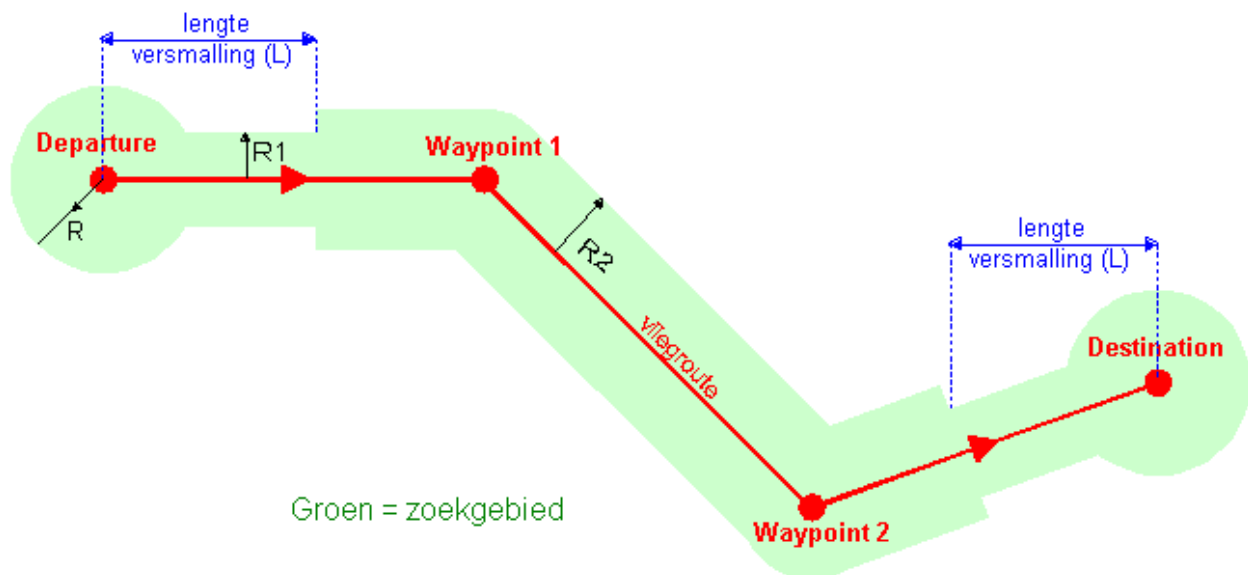
Calculate route for IFR flights more than (>) 3000 km

The principle of airport selection is based on a calculated route between departure and destination using a great circle calculation.

The airports of which meteorological information is supplied are:

- Airports within a range (R) of 300 km of the departure airport and the destination airport
- For the part of the route with a length (L) of 600 km from departure and destination, airports within a range (R1) of 150 km of the great circle. The total band width is therefore 300 km.
- For the remaining of the route the airports within a range (R2) of the great circle route. The range (R2) is a variable of the flight length (10%) and amounts to minimum of 300 and a maximum of 600 km. The maximum band width therefore is 1200 km.

This method is chosen to reduce the number of airports at the beginning and at the end of the flight, and to increase the number of airports during the crossing of an intercontinental flight.



Of the selected airports on a distance up to 3000 km of departure, METARs, short TAFs (FC) and warnings are presented.

Of the selected airports on a distance of more than 3000 km, the long TAFs (FT) and warnings are presented. Waypoint(s)

It may occur that great circle calculation does not correspond with the actual route. In that case it is possible to add one or several waypoints (up to 8) under Waypnt(s). The great circle is then calculated from departure to waypoint 1, and from waypoint 1 to destination. Every station (so not only airports) in the database can be a waypoint.

Additional airports

Information of one or more (up to 8) airports outside the route range can be selected by entering the desired airports under Add. airp(s)

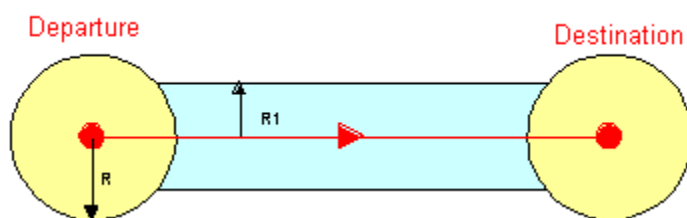
Calculate route for IFR flights less than ($<$) 3000 km

The principle of airport selection is based on a calculated route between departure and destination using a great circle calculation.

The airports of which meteorological information is supplied are:

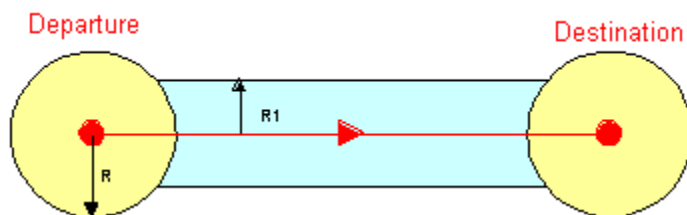
- Airports within a range (R) of 300 km of the departure airport and the destination airport
- Airports within a distance (R1) of 150 km of the great circle route. The total band width is therefore 300 km

Airports of which on regular basis no meteorological information are available, are not presented. If data of an airport are (temporarily) not in the OPMET database, "Not Available" is reflected. Normally the METAR, short TAF (FC) and warnings of selected airports are available.



Waypoint(s)

It may occur that great circle calculation does not correspond with the actual route. In that case it is possible to add one or several waypoints (up to 8) under Waypnt(s). The great circle is then calculated from departure to waypoint 1, and from waypoint 1 to destination. Every station (so not only airports) in the database can be a waypoint.

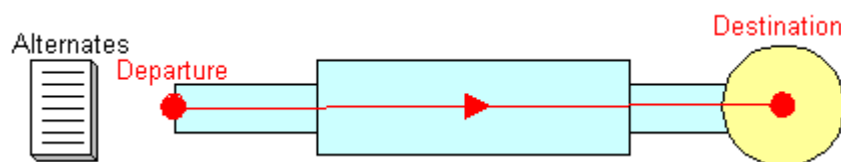


Additional airports

Information of one or more (up to 8) airports outside the route range can be selected by entering the desired airports under Add. airp(s)

Additional information for IFR flight documents

- Only airports with a minimum runway length of 7000 feet are selected.
- Airports of which on regular basis no meteorological information is available, are not presented. If of an airport report is lacking in the database "Not Available" is reflected.
- Flights with departure from, or arrival in the Netherlands will get a fixed selection of alternates presented.



Alternates

Code	Name
EBBR	Brussels National
EDDF	Frankfurt Main
EDDH	Hamburg
EDDL	Dusseldorf
EGKK	London Gatwick
EGLL	London Heathrow

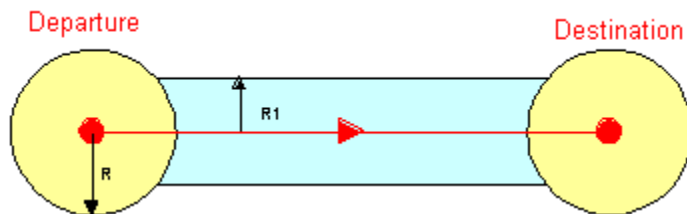
Code	Name
EHAM	Amsterdam Schiphol
EHBK	Maastricht-Aachen
EHRD	Rotterdam
EKCH	Copenhagen Kastrup
LFPG	Paris Charles-De-Gaulle
LFPO	Paris Orly

Calculate route for VFR Flights

The principle of airport selection is based on a calculated route between departure and destination using a great circle calculation.

The airports of which meteorological information is supplied are:

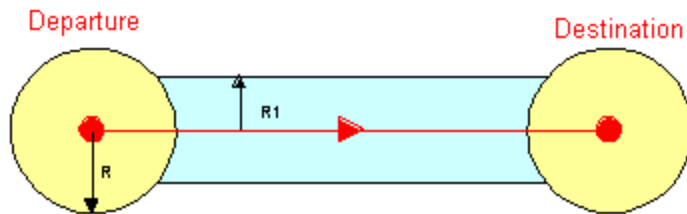
- Airports within a range (R) of 150 km of the departure airport and the destination airport
- Airports within a distance (R1) of 100 km of the great circle route. The total band width is therefore 200 km



Airports of which on regular basis no meteorological information are available, are not presented. If data of an airport are (temporarily) not in the OPMET database, Not Available is reflected. Normally the METAR, short TAF (FC) and warnings of selected airports are available.

Waypoint(s)

It may occur that great circle calculation does not correspond with the actual route. In that case it is possible to add one or more waypoints (up to 8) under Waypnt(s). The great circle is then calculated from departure to waypoint 1, and from waypoint 1 to destination. Every airport in the database can be a waypoint.



Additional airports

Information of one or more (up to 8) airports outside the route range can be selected by entering the desired airports under Add.airp(s)

Flights with a distance of more than 3000 km

If the distance between departure and destination is more than 3000 km, a narrowed search area is applied. In general this is not relevant for VFR-flights. For more information see “Calculate route for IFR flights more than (>) 3000 km”.

OPMET table route for IFR flights

In the table mode the selection of airports along a route is based on fixed tables. The table mode can only be used with departure EHAM. In case of intercontinental flights it is advised to use the table mode.

An overview of all existing table route destinations is available in *Annex 10B: Table-Driven Routes (text file)*. The table shows all the destinations, and per destination a list, in presenting order, of all stations along the route. In the current system a search can be done via a dropdown menu. An overview of all stations (destinations) concerned within a route is available in OPMET Flight when opening the dropdown.