

Europäisches Zentrum für mittelfristige Wettervorhersage • Centre européen pour les prévisions météorologiques à moyen terme
Europees Centrum voor weervoorspellingen op middellange termijn • Centro europeo per le previsioni meteorologiche a medio termine

DS–3367

25 January 2006

Erik Anderson
ECMWF
Shinfield Park
Reading
Berkshire RG2 9AX
United Kingdom

Dear Erik Anderson,

We are pleased to inform you that the processing of your order DS–3367 for data from the ECMWF archive has now been completed.

Your order is composed of **3** datasets.

On this document you can find the details concerning the organisation of the data on the media.

For your convenience the information below has been organised in 3 sections. (i.e. each of the sections corresponds to one of your requests.)

An Appendix, with the description of the meteorological parameters is also available in the end of the document

Please note: ECMWF data is encoded using FM 92–VIII Ext. GRIB Ed. 1. The latest version of the software to decode this format is available for download at the following web address:

<http://www.ecmwf.int/products/data/software/download/gribex.html>

For any further information or clarification please do not hesitate to contact us.

Your sincerely

ECMWF Data Services

Please address all correspondance to **Data Services**
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Dataset 1: Model levels

Operational archive, Atmospheric model, Forecast, Model levels

Date: 2006–01–10

Time: 00

Parameter: Cloud cover, Cloud ice water content, Cloud liquid water content, Divergence, Logarithm of surface pressure, Ozone mass mixing ratio, Specific humidity, Temperature, U velocity, V velocity, Vertical velocity, Vorticity (relative)

Step: 24

Level: 1 to 91

Content	Media	File name	No. of fields	Volume
Date 2006–01–10	Internet000135	od_oper_fc_ml_20060110	1,092	1.3 Gbytes

Dataset 2: Pressure levels, 1° grid

Operational archive, Atmospheric model, Forecast, Pressure levels

Date: 2006–01–10

Time: 00

Parameter: Divergence, Geopotential, Ozone mass mixing ratio, Potential vorticity, Relative humidity, Specific humidity, Temperature, U velocity, V velocity, Vertical velocity, Vorticity (relative)

Step: 24

Level: 1, 2, 3, 5, 7, 10, 20, 30, 50, 70, 100 to 300 by 50, 400, 500, 700, 850, 925, 1000

Grid: 1° x 1°

Content	Media	File name	No. of fields	Volume
Date 2006–01–10	Internet000135	od_oper_fc_pl_1x1_20060110	231	28.7 Mbytes

Dataset 3: Surface

Operational archive, Atmospheric model, Forecast, Surface

Date: 2006–01–10

Time: 00

Parameter: 10 metre U wind component, 10 metre V wind component, 10 metre wind gust, 2 metre dewpoint temperature, 2 metre temperature, Boundary layer dissipation, Boundary layer height, Budget values, Charnock, Convective available potential energy, Convective precipitation, Downward UV radiation at the surface, East–West surface stress, Evaporation, Forecast albedo, Forecast logarithm of surface roughness for heat, Forecast surface roughness, Gravity wave dissipation, High cloud cover, Ice surface temperature layer 1, Ice surface temperature layer 2, Ice surface temperature layer 3, Ice surface temperature layer 4, Large-scale precipitation fraction, Latitudinal component of gravity wave stress, Low cloud cover, Maximum temperature at 2 metres since previous post-processing, Mean sea level pressure, Medium cloud cover, Meridional component of gravity wave stress, Minimum temperature at 2 metres since previous post-processing, North–South surface stress, Photosynthetically active radiation at the surface, Runoff, Sea surface temperature, Sea–ice cover, Skin reservoir content, Skin temperature, Snow albedo, Snow density, Snow depth, Snow evaporation, Snowfall (convective + stratiform), Snowmelt, Soil temperature level 1, Soil temperature level 2, Soil temperature level 3, Soil temperature level 4, Stratiform precipitation (Large-scale precipitation), Sunshine duration, Surface latent heat flux, Surface net solar radiation, clear sky, Surface net thermal radiation, clear sky, Surface pressure, Surface sensible heat flux, Surface solar radiation, Surface solar radiation downwards, Surface thermal radiation, Surface thermal radiation downwards, Temperature of snow layer, Top net solar radiation, clear sky, Top net thermal radiation, clear sky, Top solar radiation, Top thermal radiation, Total cloud cover, Total column ice water, Total column liquid water, Total column ozone, Total column water, Total column water vapour, Volumetric soil water layer 1, Volumetric soil water layer 2, Volumetric soil water layer 3, Volumetric soil water layer 4

Step: 24

Content	Media	File name	No. of fields	Volume
Date 2006–01–10	Internet000135	od_oper_fc_sfc_20060110	74	119.2 Mbytes

Appendix

Descriptions of parameters

Code	Table	Unit	Name
31	128	(0 – 1)	Sea-ice cover
32	128	(0 – 1)	Snow albedo
33	128	kg m ^{**–3}	Snow density
34	128	K	Sea surface temperature
35	128	K	Ice surface temperature layer 1
36	128	K	Ice surface temperature layer 2
37	128	K	Ice surface temperature layer 3
38	128	K	Ice surface temperature layer 4
39	128	m ^{**3} m ^{**–3}	Volumetric soil water layer 1
40	128	m ^{**3} m ^{**–3}	Volumetric soil water layer 2
41	128	m ^{**3} m ^{**–3}	Volumetric soil water layer 3
42	128	m ^{**3} m ^{**–3}	Volumetric soil water layer 4
44	128	m of water	Snow evaporation
45	128	m of water	Snowmelt
49	128	m s ^{**–1}	10 metre wind gust
50	128	s	Large-scale precipitation fraction
57	128	w m ^{**–2} s	Downward UV radiation at the surface
58	128	w m ^{**–2} s	Photosynthetically active radiation at the surface
59	128	J kg ^{**–1}	Convective available potential energy
60	128	K m ^{**2} kg ^{**–1} s ^{**–1}	Potential vorticity
78	128	kg m ^{**–2}	Total column liquid water
79	128	kg m ^{**–2}	Total column ice water
128	128		Budget values
129	128	m ^{**2} s ^{**–2}	Geopotential
130	128	K	Temperature
131	128	m s ^{**–1}	U velocity
132	128	m s ^{**–1}	V velocity
133	128	kg kg ^{**–1}	Specific humidity
134	128	Pa	Surface pressure
135	128	Pa s ^{**–1}	Vertical velocity
136	128	kg m ^{**–2}	Total column water
137	128	kg m ^{**–2}	Total column water vapour
138	128	s ^{**–1}	Vorticity (relative)
139	128	K	Soil temperature level 1
141	128	m of water equivalent	Snow depth
142	128	m	Stratiform precipitation (Large-scale precipitation)
143	128	m	Convective precipitation
144	128	m of water equivalent	Snowfall (convective + stratiform)
145	128	W m ^{**–2} s	Boundary layer dissipation
146	128	W m ^{**–2} s	Surface sensible heat flux

147	128	$\text{W m}^{**-2} \text{s}$	Surface latent heat flux
148	128		Charnock
151	128	Pa	Mean sea level pressure
152	128		Logarithm of surface pressure
155	128	s^{**-1}	Divergence
157	128	%	Relative humidity
159	128	m	Boundary layer height
164	128	$(0 - 1)$	Total cloud cover
165	128	m s^{**-1}	10 metre U wind component
166	128	m s^{**-1}	10 metre V wind component
167	128	K	2 metre temperature
168	128	K	2 metre dewpoint temperature
169	128	$\text{W m}^{**-2} \text{s}$	Surface solar radiation downwards
170	128	K	Soil temperature level 2
175	128	$\text{W m}^{**-2} \text{s}$	Surface thermal radiation downwards
176	128	$\text{W m}^{**-2} \text{s}$	Surface solar radiation
177	128	$\text{W m}^{**-2} \text{s}$	Surface thermal radiation
178	128	$\text{W m}^{**-2} \text{s}$	Top solar radiation
179	128	$\text{W m}^{**-2} \text{s}$	Top thermal radiation
180	128	$\text{N m}^{**-2} \text{s}$	East–West surface stress
181	128	$\text{N m}^{**-2} \text{s}$	North–South surface stress
182	128	m of water	Evaporation
183	128	K	Soil temperature level 3
186	128	$(0 - 1)$	Low cloud cover
187	128	$(0 - 1)$	Medium cloud cover
188	128	$(0 - 1)$	High cloud cover
189	128	s	Sunshine duration
195	128	$\text{N m}^{**-2} \text{s}$	Latitudinal component of gravity wave stress
196	128	$\text{N m}^{**-2} \text{s}$	Meridional component of gravity wave stress
197	128	$\text{W m}^{**-2} \text{s}$	Gravity wave dissipation
198	128	m of water	Skin reservoir content
201	128	K	Maximum temperature at 2 metres since previous post–processing
202	128	K	Minimum temperature at 2 metres since previous post–processing
203	128	kg kg^{**-1}	Ozone mass mixing ratio
205	128	m	Runoff
206	128	kg m^{**-2}	Total column ozone
208	128	$\text{W m}^{**-2} \text{s}$	Top net solar radiation, clear sky
209	128	$\text{W m}^{**-2} \text{s}$	Top net thermal radiation, clear sky
210	128	$\text{W m}^{**-2} \text{s}$	Surface net solar radiation, clear sky
211	128	$\text{W m}^{**-2} \text{s}$	Surface net thermal radiation, clear sky
235	128	K	Skin temperature
236	128	K	Soil temperature level 4
238	128	K	Temperature of snow layer
243	128	$(0 - 1)$	Forecast albedo
244	128	m	Forecast surface roughness

245	128		Forecast logarithm of surface roughness for heat
246	128	kg kg**-1	Cloud liquid water content
247	128	kg kg**-1	Cloud ice water content
248	128	(0 – 1)	Cloud cover

Please note:

Geopotential is defined in terms of the WMO defined gravity constant of 9.80665 m/s**2 which is constant for all latitudes and all heights
