NOMEK 2009

11-15 May, Reykjavík, Iceland

Report to the

Directors of the Nordic Meteorological Services and EUMETSAT

From the NOMEK planning group:

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June 2009

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The NOMEK course in Reykjavík , 11-15 May 2009

General

The NOMEK 2009 course was held at IMO in Reykjavík, Iceland. In the same way as for the previous courses, emphasis was put on Satellite Image, Interpretation, Dynamics, Numerical Weather Prediction, Now-casting and interpretation of Radar Imagery.

The course was kept within a Monday to Friday working week with quite short days, due to participants comments on previous courses, and both initiatives were well received by students.

The content of media awareness and global warming were included and also a lectures on aviation, avalanches and forecast errors.

The course administration was taken care of by Kristín Hermannsdóttir and Sigþrúður Ármannsdóttir, IMO including hotel reservation for all participants and teachers, tickets for sponsored participants and teachers, making budget and maintaining contact with EUMETSAT. At EUMETSAT the course was facilitated by cooperation with Regina Hoefenmayer.

Vesa Nietosvaara, FMI is to a large extent the one to thank for the very satisfying evaluations.

EUMETSAT generously accepted a budget limit to EUR 27.000, but the final budget of NOMEK was only EUR 20.802. Cost was kept down by booking as cheap flight as possible and well in advance and getting a good deal with a local hotel. Also the cost of renting computers was lower than expected and the cost of social events was little over estimated.

In addition to this IMO covered the expenses for the course administration, course leadership, software, setup and facilities.

The overall evaluation of the course by the students was very good. The complete evaluation is attached as appendix 1.

The NOMEK Memorandum of Understanding has been followed for the past three years and formalises the principles which are used arranging the course. The courses have now run over more than 10 years and over the years small changes to the principles of how the course is run and funded have been introduced by the changing host. This formal description of the principles for the NOMEK has been useful. The MoU is attached as appendix 2.

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Minor changes to the course

Previously a permanent remark from participants has been that the days have been too long but generally thought it was about right with lessons between 0900 and 1600. We kept last year's format with a Monday morning start and ending at lunchtime on Friday.

At the Teachers' meeting on 27.-28 January we arranged for an external consultant to lead a presentations and discussion about how to activate course participants. As a result, teachers were encouraged to ask questions or include tasks in their presentations, and also in the beginning of the first day by pairing the participants and they were supposed to present each other to the rest of the group. This proved to be a very successful way of getting participants to interact with each other right from the start and in general the group was not a shy. At the icebreaker on Monday we also played a "bingo" and learned more about each other, both teachers and participants, as the consultant taught us.

The structure of the course had worked out well last year in Norrkoping so it was kept approximately the same. In addition a new lecture about forecast errors, analysis and observations was added to the schedule.

In order to provide experience from the avalanche field at IMO a geophysicist and specialist in snow avalanches was included as one of the teachers giving an interesting presentation on avalanches.

Participants

It was agreed that participants would be accepted to the course as follows:

Iceland	4
Sweden	5
Finland	5
Denmark	4
Norway	4
Estonia	1
Latvia	1
Lithuania	1

No inquiries from other countries were received.

The nominations remained the responsibility of the national representatives in the NOMEK Planning Group.

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Teachers

The teachers were selected based on the topics that were wanted by the planning group and the teachers' commitment to participate. It is a principle of the NOMEK course, that each year, all participating countries should make at least one teacher available for the course in such a way that every national institute contributes with its fair and equal share of the lessons. The host institute IMO provided more teachers since they were available without incurring any travel cost.

This year we did not need to use teachers from outside the Nordic countries but were very glad that EUMETSAT again provided a teacher for the satellite lessons. We also invited a meteorologist from Institute for Meteorological Research in Reykjavík to lecture the Orographic flow lesson in Dynamics session.

At the 2009 course, lectures were given by the following teachers:

IMO:

Halldór Björnsson (Climate Change)

Kristín Hermannsdóttir (Media)

Sveinn Brynjólfsson (Avalanche)

Theodor Freyr Hervarsson (Aviation)

Guðrún Nína Petersen (Forecast errors)

SMHI:

Andreas Carlsson (Dynamics/NWP)

Anna Eronn (Satellite)

met.no:

Bjørn Røsting (Dynamics)

FMI:

Vesa Nietosvaara (Online sessions and website)

Elena Saltikoff (Radar-distans teaching)

DMI:

Claus Petersen (Slippery Roads)

EUMETSAT:

Jochen Kerkmann (Satellite)

External:

Hálfdán Ágústsson (Orographic flow/Dynamics)

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Local organizing committee

Kristín Hermannsdóttir acted as course leader concerning the meteorological content of the course and the coordination of the teaching resources. The practical matters related to the course were arranged by Ms Sigþrúður Ármannsdóttir and Hilmar Ævar Hilmarsson and Baldur Ragnarsson took responsibility for ensuring that all IT equipment functioned smoothly.

A course website was set up by Vesa Nieatosvaara who was invaluable as always. The website is a part of Eumetcal and will be permanent, being used again in future years. See http://www.eumetcal.org/courses/course/view.php?id=134

Course material

The course material was made available for the students on the web before/ and during the course and is still available.

Schedule:

Time	Mon 11 May	Tue 12 May	Wed 13 May	Thu 14 May	Fri 15 May
8.30-8.45	8:30 Welcome & introduction to the course (KH) 10'	Weather forecast (Kristín?)	Weather forecast (Anna)	Weather forecast (Bjorn)	Weather forecast (Vesa)
08:45-9.30	Interactivity (KH) 40' The medium range weather forecast for NOMEK (TFH) 10'	MSG RGB products – fog (JK) 45'	Theory and use of EPS (AC) 45'	Kalman filtering and how to use it (AC) 35' COFFEE (10')	Climate Change and the Meteorologist (HB) 45'
9:30-09.45	COFFEE (15')	COFFEE (15')	COFFEE (15')	Orographic flow (HÅ) 30'	COFFEE (15')
09:45-10:30 (45')	Satellite introduction (AE) 45'	Polar satellite cloud products (AE) 45'	Avalanche (SB) 45'	Orographic flow (HÅ) 30'	Forecast errors, analysis and observations (GNP) 45'
10:45-11:30 (45')	Road forecasting (CP) 45'	Analysis of a warm front using weather radar (ES) 45'	The use of potential vorticity in forecasting (BR) 45'	Severe turbulence cases (TFH) 45'	Presenting weather in the media (KH)
11:30-12:30	LUNCH+ evaluation	LUNCH+ evaluation	LUNCH+ evaluation	LUNCH+ evaluation	LUNCH
13:00-13:45 (45')	IMO Weather Room Guided tours	Identification of non-meteorological echoes in radar images (ES)	The use of potential vorticity in forecasting (BR)	Introduction to conceptual models (VN)	Final evaluation & discussion
14:00-14:45 (45')	Introduction to MSG RGB products (JK)	MSG products- airmass (JK)	Today satellite pictures (JK) 15' EPS exercise (AC) 30'	14.00 SATREP ONLINE (JS)	
14:45-15:00	COFFEE	COFFEE		COFFEE	
15:00-16:00 (60')	Slippery roads exercise (CP)	Basic satellite interpretation exercise – or some other name of an exercise? (AE)	15.00-17.00 Guided tour of Reykjavík	Model monitoring (VN) 60'	
After lessons programme	16.30- 19:00 Ice-breaker IMO		17:30 Bus to Blåa Lónið for bathing and dinner at Fjörukráin in Hafnarfjörður Return at Hotel at 23:59		
Time	Mon 11 May	Tue 12 May	Wed 13 May	Thu 14 May	Fri 15 May

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The social events are important part of the course and in particular everybody enjoyed the guided tour of Reykjavík, the trip to the Blue Lagoon and the dinner in a small Viking restaurant. There we could spend a relaxing afternoon and evening talking, eating and having a good time together.

Evaluation of the course

Evaluation of the course took place every day. On a scale from 1=Useless to 5=Excellent the participants rated the overall course to **4,2** which shows that we did a good job. The complete evaluation is attached as appendix 1.

No comments were received about the days being too long or the total duration of the course. This indicates that the changes to have the course Monday to Friday with shorter days were successful.

As usual the more pure meteorology and practical the lectures, the more highly appreciated by the students. This time a positive remarks were given to theoretical lectures in appreciation of the brush up they gave, which is also the intent with these lectures from the planning group.

In particular the practical exercise were appreciated as also Guðrún Nína Petersen's lectures on Forecast Errors, Vesa Nieatosvaara's lecture on Conceptual Models, Halldór Björnsson's lecture on Climate Change, Jochen Kerkmann's lecture on MSG and the guest lecture on Dynamic by Hálfdán Ágústsson´s. However, all teachers received positive remarks and good evaluation results.

The overall evaluation is shown below:

The overall value of this training course for your work now or in the future?	**4,5**
Course topics	**4,2**
Course format (disposition, lectures, exercise/volume)	**3,9**
Standard of teachers	**4,0**
Documentation and hands-outs	**4,3**
Organisation	**4,7**
How large was the new value for you?	**3,8**
To what extent did the course fulfil your expectations?	**4,3**

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Next course and outlook for the future

At the planning meeting in Reykjavík in November 2008 it was decided that the next NOMEK courses should be arranged by and in:

Norway 2010

Finland 2011

It is the hope that EUMETSAT will continue to sponsor the course. Over this year's work no indicator has been received that they will not.

The chairmanship of the NOMEK Planning Group has now been handed over to Mrs Vibeke Kristensen, Met.no, Norway.

I would like to thank everybody involved in the NOMKE work for their dedicated participation, including the NOMEK administrators, all the teachers, Sigþrúður Ármannsdóttir and other people at IMO, who made this year's course possible and a valuable experience for the participants.

Kristín Hermannsdóttir

Chairman, NOMEK Planning Group

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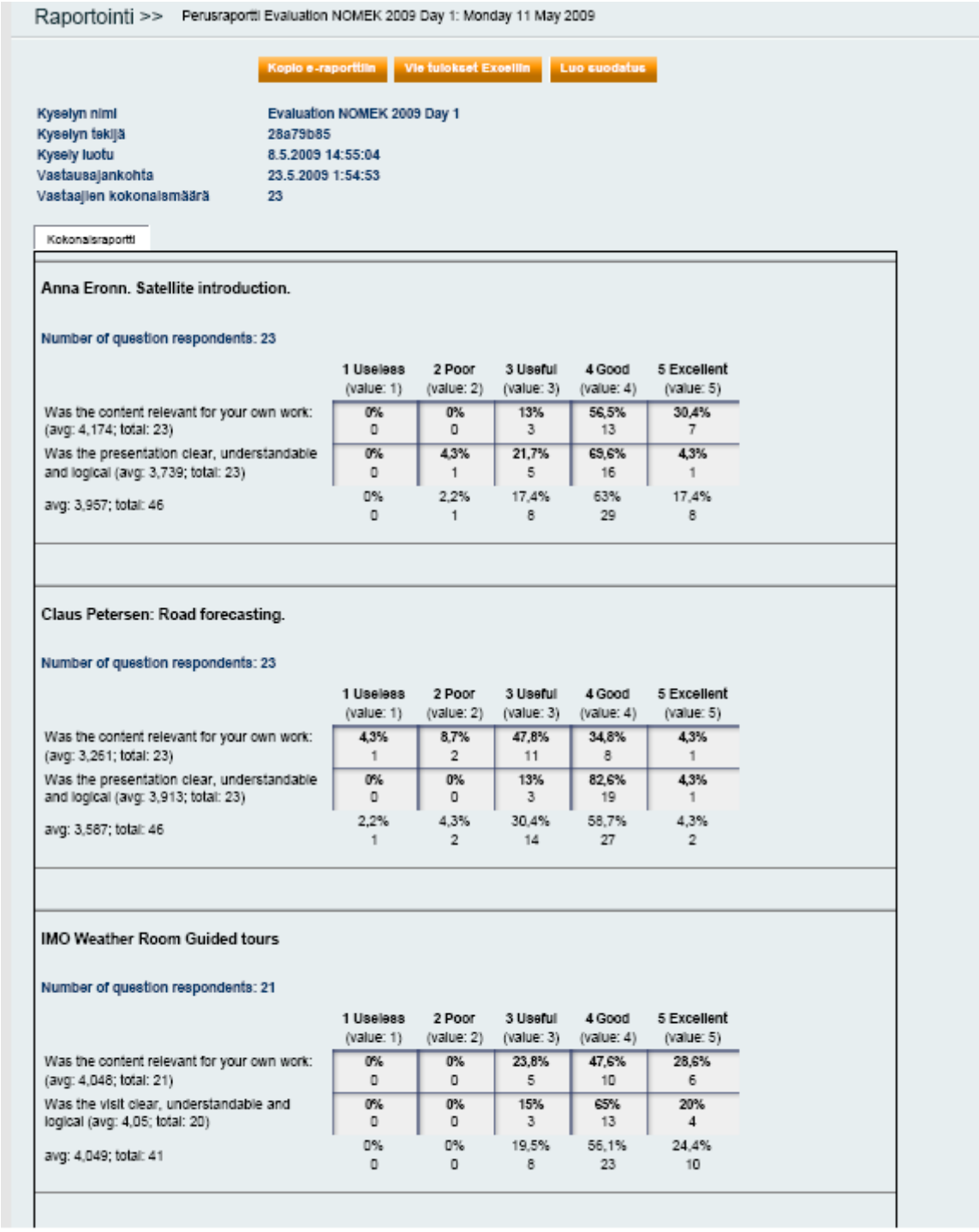
Appendix 1



Raportointi >> Perusraportti Evaluation NOMEK 2009 Day 1: Monday 11 May 2009

Kopio e-raporttiin | Vie tulokset Exceliin | Luo suodatus

Kyselyn nimi	Evaluation NOMEK 2009 Day 1
Kyselyn tekijä	28a79b85
Kysely luotu	8.5.2009 14:55:04
Vastausajankohta	23.5.2009 1:54:53
Vastaajien kokonaismäärä	23

Kokonaisraportti

Anna Eronn. Satellite introduction.

Number of question respondents: 23

	1 Useless (value: 1)	2 Poor (value: 2)	3 Useful (value: 3)	4 Good (value: 4)	5 Excellent (value: 5)
Was the content relevant for your own work: (avg: 4,174; total: 23)	0% 0	0% 0	13% 3	56,5% 13	30,4% 7
Was the presentation clear, understandable and logical (avg: 3,739; total: 23)	0% 0	4,3% 1	21,7% 5	69,6% 16	4,3% 1
avg: 3,957; total: 46	0% 0	2,2% 1	17,4% 8	63% 29	17,4% 8

Claus Petersen: Road forecasting.

Number of question respondents: 23

	1 Useless (value: 1)	2 Poor (value: 2)	3 Useful (value: 3)	4 Good (value: 4)	5 Excellent (value: 5)
Was the content relevant for your own work: (avg: 3,261; total: 23)	4,3% 1	8,7% 2	47,8% 11	34,8% 8	4,3% 1
Was the presentation clear, understandable and logical (avg: 3,913; total: 23)	0% 0	0% 0	13% 3	82,6% 19	4,3% 1
avg: 3,587; total: 46	2,2% 1	4,3% 2	30,4% 14	58,7% 27	4,3% 2

IMO Weather Room Guided tours

Number of question respondents: 21

	1 Useless (value: 1)	2 Poor (value: 2)	3 Useful (value: 3)	4 Good (value: 4)	5 Excellent (value: 5)
Was the content relevant for your own work: (avg: 4,048; total: 21)	0% 0	0% 0	23,8% 5	47,6% 10	28,6% 6
Was the visit clear, understandable and logical (avg: 4,05; total: 20)	0% 0	0% 0	15% 3	65% 13	20% 4
avg: 4,049; total: 41	0% 0	0% 0	19,5% 8	56,1% 23	24,4% 10

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Jochen Kerkmann: Introduction to MSG RGB products

Number of question respondents: 23

	1 Useless (value: 1)	2 Poor (value: 2)	3 Useful (value: 3)	4 Good (value: 4)	5 Excellent (value: 5)
Was the content relevant for your own work: (avg: 4,391; total: 23)	0% 0	0% 0	13% 3	34,8% 8	52,2% 12
Was the presentation clear, understandable and logical (avg: 4,217; total: 23)	0% 0	0% 0	13% 3	52,2% 12	34,8% 8
avg: 4,304; total: 46	0% 0	0% 0	13% 6	43,5% 20	43,5% 20

Claus Petersen: Slippery roads exercise.

Number of question respondents: 23

	1 Useless (value: 1)	2 Poor (value: 2)	3 Useful (value: 3)	4 Good (value: 4)	5 Excellent (value: 5)
Was the content relevant for your own work: (avg: 3,435; total: 23)	4,3% 1	8,7% 2	43,5% 10	26,1% 6	17,4% 4
Was the exercise clear, understandable and logical (avg: 3,783; total: 23)	0% 0	0% 0	34,8% 8	52,2% 12	13% 3
avg: 3,609; total: 46	2,2% 1	4,3% 2	39,1% 18	39,1% 18	15,2% 7

What did you enjoy most and why?

1. The RGB-product presentation because it is very useful for the operational forecast and a lot of examples were included in the talk. The icebreaker-Party was nice, especial the Bingo.
2. Visit the forecasters
3. the information about RGB satellite pictures.
4. It was a joy listening to Jochen Kerkmann. He is very enthusiastic!!
5. rgb products
6. MSG RGB products and satellite introduction because simply told rather complicated themes and there are technical possibilities to put to use this information in own work.
7. Introduction tp MSG RGB products Exercise Slippery roads Useful in my daily work
8. Jochen Kerkmann: Introduction to MSG RGB products Gave a clear picture of what information can be extracted from satellite images.

Do you have suggestions for improving today's organisation or presentations?

1. A lunchmenu in the classroom would be nice but not necessary
2. No not really. It was a good day.
3. Anna will get better as she repeats the lecture. She good but could prepare better what she is going to say. Her voice was clear and understandable. 2. Anna and Jochen are like student and teacher and some comments from Jochen sounded like a teacher chiding a student. Not good.
4. More time for exercises. Exercises should be more related to everyday tasks of the operational forecaster.

Write here if you have some additional questions in your mind regarding today's topics!

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Raportointi >> Perusraportti Evaluation NOMEK 2009 Day 2: Tuesday 12 May 2009

Kopio e-raporttiin | Vie tulokset Exceliin | Luo suodatus

Kyselyn nimi	**Evaluation NOMEK 2009 Day 2**
Kyselyn tekijä	**28a79b85**
Kysely luotu	**8.5.2009 14:55:04**
Vastausajankohta	**24.5.2009 19:25:23**
Vastaajien kokonaismäärä	**20**

Kokonaisraportti

Jochen Kerkmann: MSG RGB products – fog

Number of question respondents: 20

	1 Useless (value: 1)	2 Poor (value: 2)	3 Useful (value: 3)	4 Good (value: 4)	5 Excellent (value: 5)
Was the content relevant for your own work: (avg: 4,35; total: 20)	0% 0	0% 0	15% 3	35% 7	50% 10
Was the presentation clear, understandable and logical (avg: 4,3; total: 20)	0% 0	0% 0	10% 2	50% 10	40% 8
avg: 4,325; total: 40	0% 0	0% 0	12,5% 5	42,5% 17	45% 18

Anna Eronn: Polar satellite cloud products

Number of question respondents: 20

	1 Useless (value: 1)	2 Poor (value: 2)	3 Useful (value: 3)	4 Good (value: 4)	5 Excellent (value: 5)
Was the content relevant for your own work: (avg: 4,35; total: 20)	0% 0	0% 0	5% 1	55% 11	40% 8
Was the presentation clear, understandable and logical (avg: 4; total: 20)	0% 0	0% 0	5% 1	90% 18	5% 1
avg: 4,175; total: 40	0% 0	0% 0	5% 2	72,5% 29	22,5% 9

Elena Saltikoff: Analysis of a warm front using weather radar

Number of question respondents: 20

	1 Useless (value: 1)	2 Poor (value: 2)	3 Useful (value: 3)	4 Good (value: 4)	5 Excellent (value: 5)
Was the content relevant for your own work: (avg: 3,7; total: 20)	0% 0	5% 1	30% 6	55% 11	10% 2
Was the online presentation clear, understandable and logical (avg: 2,9; total: 20)	0% 0	40% 8	30% 6	30% 6	0% 0
avg: 3,3; total: 40	0% 0	22,5% 9	30% 12	42,5% 17	5% 2

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Elena Saltikoff: Identification of non-meteorological echoes in radar images

Number of question respondents: 20

	1 Useless (value: 1)	2 Poor (value: 2)	3 Useful (value: 3)	4 Good (value: 4)	5 Excellent (value: 5)
Was the content relevant for your own work: (avg: 3,684; total: 19)	**0%** 0	**10,5%** 2	**26,3%** 5	**47,4%** 9	**15,8%** 3
Was the online presentation clear, understandable and logical (avg: 3; total: 20)	**0%** 0	**25%** 5	**50%** 10	**25%** 5	**0%** 0
avg: 3,333; total: 39	0% 0	17,9% 7	38,5% 15	35,9% 14	7,7% 3

Jochen Kerkmann: MSG products - airmass

Number of question respondents: 20

	1 Useless (value: 1)	2 Poor (value: 2)	3 Useful (value: 3)	4 Good (value: 4)	5 Excellent (value: 5)
Was the content relevant for your own work: (avg: 4,25; total: 20)	**0%** 0	**0%** 0	**15%** 3	**45%** 9	**40%** 8
Was the presentation clear, understandable and logical (avg: 4,211; total: 19)	**0%** 0	**0%** 0	**10,5%** 2	**57,9%** 11	**31,6%** 6
avg: 4,231; total: 39	0% 0	0% 0	12,8% 5	51,3% 20	35,9% 14

Anna Eronn: Basic satellite interpretation exercise

Number of question respondents: 20

	1 Useless (value: 1)	2 Poor (value: 2)	3 Useful (value: 3)	4 Good (value: 4)	5 Excellent (value: 5)
Was the content relevant for your own work: (avg: 4,05; total: 20)	**0%** 0	**0%** 0	**20%** 4	**55%** 11	**25%** 5
Was the exercise clear, understandable and logical (avg: 3,9; total: 20)	**0%** 0	**0%** 0	**25%** 5	**60%** 12	**15%** 3
avg: 3,975; total: 40	0% 0	0% 0	22,5% 9	57,5% 23	20% 8

What did you enjoy most and why?

1. MSG RGB products for fog detection, because weather stations can not give enough information about real situation in larger area (especially when fog is creeping from seaside).
2. Most of the information was things I already know, but alway useful to repeat.
3. MSG RGB Products Useful parts and the resentation as good.
4. Satellite interpret. exercise. Good in explaining the basic features and use of RGB
5. sattelites
6.

Do you have suggestions for improving today's organisation or presentations?

1. There should be also water available during the coffee break.
2. Take the online presentation by phone instead of internet. You can still present the pictuers by internet, but the sound is better by phone.
3. Bad connection with the online lecturer
4. If we are doing some distance teaching it is important that all the tecnical parts is working.
5. Parts of Elena's presentation was spoiled due to technincal problems (audio, pointing device).
6. Top microphone and pre-testing necessary for tele-teaching

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Write here if you have some additional questions in your mind regarding today's topics!

1. Bad sound on Elenas lesson. During the second lesson it got better when she changed studio. Soundcheck before is necessary.

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Raportointi >> Perusraportti Evaluation NOMEK 2009 Day 3: Wednesday 13 May 2009

Kopio e-raporttiin | Vie tulokset Exceliin | Luo suodatus

Kyselyn nimi	Evaluation NOMEK 2009 Day 3
Kyselyn tekijä	28a79b85
Kysely luotu	8.5.2009 14:55:05
Vastausajankohta	24.5.2009 19:42:29
Vastaajien kokonaismäärä	21

Kokonaisraportti

Andreas Carlsson: Theory and use of EPS

Number of question respondents: 21

	1 Useless (value: 1)	2 Poor (value: 2)	3 Useful (value: 3)	4 Good (value: 4)	5 Excellent (value: 5)
Was the content relevant for your own work: (avg: 3,952; total: 21)	0% 0	0% 0	28,6% 6	47,6% 10	23,8% 5
Was the presentation clear, understandable and logical (avg: 3,905; total: 21)	0% 0	0% 0	23,8% 5	61,9% 13	14,3% 3
avg: 3,929; total: 42	0% 0	0% 0	26,2% 11	54,8% 23	19% 8

Sveinn Brynjólfsson: Avalanche

Number of question respondents: 21

	1 Useless (value: 1)	2 Poor (value: 2)	3 Useful (value: 3)	4 Good (value: 4)	5 Excellent (value: 5)
Was the content relevant for your own work: (avg: 3,19; total: 21)	14,3% 3	19% 4	19% 4	28,6% 6	19% 4
Was the presentation clear, understandable and logical (avg: 4,048; total: 21)	0% 0	0% 0	23,8% 5	47,6% 10	28,6% 6
avg: 3,619; total: 42	7,1% 3	9,5% 4	21,4% 9	38,1% 16	23,8% 10

Björn Rösting: The use of potential vorticity in forecasting

Number of question respondents: 21

	1 Useless (value: 1)	2 Poor (value: 2)	3 Useful (value: 3)	4 Good (value: 4)	5 Excellent (value: 5)
Was the content relevant for your own work: (avg: 3,476; total: 21)	0% 0	19% 4	28,6% 6	38,1% 8	14,3% 3
Was the presentation clear, understandable and logical (avg: 3,571; total: 21)	0% 0	9,5% 2	38,1% 8	38,1% 8	14,3% 3
avg: 3,524; total: 42	0% 0	14,3% 6	33,3% 14	38,1% 16	14,3% 6

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Jochen Kerkmann: Today satellite pictures

Number of question respondents: 20

	1 Useless (value: 1)	2 Poor (value: 2)	3 Useful (value: 3)	4 Good (value: 4)	5 Excellent (value: 5)
Was the content relevant for your own work: (avg: 4,05; total: 20)	0% 0	0% 0	20% 4	55% 11	25% 5
Was the presentation clear, understandable and logical (avg: 4,105; total: 19)	0% 0	0% 0	10,5% 2	68,4% 13	21,1% 4
avg: 4,077; total: 39	0% 0	0% 0	15,4% 6	61,5% 24	23,1% 9

Andreas Carlsson: EPS exercise

Number of question respondents: 21

	1 Useless (value: 1)	2 Poor (value: 2)	3 Useful (value: 3)	4 Good (value: 4)	5 Excellent (value: 5)
Was the content relevant for your own work: (avg: 3,762; total: 21)	0% 0	4,8% 1	23,8% 5	61,9% 13	9,5% 2
Was the exercise clear, understandable and logical (avg: 3,714; total: 21)	0% 0	4,8% 1	28,6% 6	57,1% 12	9,5% 2
avg: 3,738; total: 42	0% 0	4,8% 2	26,2% 11	59,5% 25	9,5% 4

Guided tour of Reykjavik

Number of question respondents: 21

	1 Useless (value: 1)	2 Poor (value: 2)	3 Useful (value: 3)	4 Good (value: 4)	5 Excellent (value: 5)
Was the content relevant for your own work: (avg: 3,35; total: 20)	20% 4	10% 2	10% 2	35% 7	25% 5
Was the excursion clear, understandable and logical (avg: 4,55; total: 20)	0% 0	0% 0	10% 2	25% 5	65% 13
avg: 3,95; total: 40	10% 4	5% 2	10% 4	30% 12	45% 18

Bláa Lónið and dinner

Number of question respondents: 21

	1 Useless (value: 1)	2 Poor (value: 2)	3 Useful (value: 3)	4 Good (value: 4)	5 Excellent (value: 5)
Was the content relevant for your own work: (avg: 4,143; total: 21)	9,5% 2	9,5% 2	4,8% 1	9,5% 2	66,7% 14
Was the excursion clear, understandable and logical (avg: 4,81; total: 21)	0% 0	0% 0	4,8% 1	9,5% 2	85,7% 18
avg: 4,476; total: 42	4,8% 2	4,8% 2	4,8% 2	9,5% 4	76,2% 32

What did you enjoy most and why?

1. Guided tour and Blue Lagoon was nice
2. The guided tour with bath and dinner!!! Exellent!!!!
3. the tours
4. Jochen
5. blue lagoon and dinner

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Do you have suggestions for improving today's organisation or presentations?

1. More of example how to use the PV practical. The EPS exercise should have more time.
2. Its hard listening to formulas, maybe its possible to focus on other things in the subject
3. longer gouide tours and more social arrangements
4. Exercises too ambitious with regard to available time.
5. I had problems with seeing the cursor on several presentations. Maybe it is an idea to go back to using a pointing stick?
6. Björn should frame his lecture by having as a second slide a two pictures of him. One with him teaching and another with him as a forecaster. That would frame him as one of us. The slides should be much better marked with explanations. We old forecasters have even forgotten what the symbols stand for!. So just point to the symbol for streamfunction and write streamfunction. Also mark the red lines and the blue line for what they are so nobody will spend time to try to recollect what they represent and thereby lose track of the lecture. Also Björn, you love talking about PV, and you think it is important to forecasting, so try project your enthusiasm out to the audience.

Write here if you have some additional questions in your mind regarding today's topics!

NOMEK 2009

11-15 May, Reykjavík, Iceland

Raportointi >> Perusraportti Evaluation NOMEK 2009 Day 4: Thursday 14 May 2009

Kopio e-raporttiin | Vie tulokset Exceliin | Luo suodatus

Kyselyn nimi	Evaluation NOMEK 2009 Day 4
Kyselyn tekijä	28a79b85
Kysely luotu	8.5.2009 14:55:05
Vastausajankohta	24.5.2009 19:56:48
Vastaajien kokonaismäärä	18

Kokonaisraportti

Andreas Carlsson: Kalman filtering and how to use it

Number of question respondents: 18

	1 Useless (value: 1)	2 Poor (value: 2)	3 Useful (value: 3)	4 Good (value: 4)	5 Excellent (value: 5)
Was the content relevant for your own work: (avg: 3,833; total: 18)	0% 0	11,1% 2	11,1% 2	61,1% 11	16,7% 3
Was the presentation clear, understandable and logical (avg: 3,944; total: 18)	0% 0	0% 0	22,2% 4	61,1% 11	16,7% 3
avg: 3,889; total: 36	0% 0	5,6% 2	16,7% 6	61,1% 22	16,7% 6

Hálfdán Ágústsson: Orographic flow

Number of question respondents: 18

	1 Useless (value: 1)	2 Poor (value: 2)	3 Useful (value: 3)	4 Good (value: 4)	5 Excellent (value: 5)
Was the content relevant for your own work: (avg: 4,167; total: 18)	0% 0	11,1% 2	5,6% 1	38,9% 7	44,4% 8
Was the presentation clear, understandable and logical (avg: 4,118; total: 17)	0% 0	0% 0	11,8% 2	64,7% 11	23,5% 4
avg: 4,143; total: 35	0% 0	5,7% 2	8,6% 3	51,4% 18	34,3% 12

Theodor Freyr Hervarsson: Severe turbulence cases

Number of question respondents: 18

	1 Useless (value: 1)	2 Poor (value: 2)	3 Useful (value: 3)	4 Good (value: 4)	5 Excellent (value: 5)
Was the content relevant for your own work: (avg: 3,944; total: 18)	5,6% 1	16,7% 3	0% 0	33,3% 6	44,4% 8
Was the presentation clear, understandable and logical (avg: 4,056; total: 18)	0% 0	0% 0	16,7% 3	61,1% 11	22,2% 4
avg: 4; total: 36	2,8% 1	8,3% 3	8,3% 3	47,2% 17	33,3% 12

NOMEK 2009

11-15 May, Reykjavík, Iceland

Vesa Nietosvaara: Introduction to conceptual models

Number of question respondents: 17

	1 Useless (value: 1)	2 Poor (value: 2)	3 Useful (value: 3)	4 Good (value: 4)	5 Excellent (value: 5)
Was the content relevant for your own work: (avg: 4,471; total: 17)	**0%** 0	**0%** 0	**11,8%** 2	**29,4%** 5	**58,8%** 10
Was the presentation clear, understandable and logical (avg: 4,412; total: 17)	**0%** 0	**0%** 0	**5,9%** 1	**47,1%** 8	**47,1%** 8
avg: 4,441; total: 34	0% 0	0% 0	8,8% 3	38,2% 13	52,9% 18

Vesa Nietosvaara: SATREP ONLINE

Number of question respondents: 17

	1 Useless (value: 1)	2 Poor (value: 2)	3 Useful (value: 3)	4 Good (value: 4)	5 Excellent (value: 5)
Was the content relevant for your own work: (avg: 4,235; total: 17)	**0%** 0	**0%** 0	**17,6%** 3	**41,2%** 7	**41,2%** 7
Was the online briefing clear, understandable and logical (avg: 4,118; total: 17)	**0%** 0	**0%** 0	**17,6%** 3	**52,9%** 9	**29,4%** 5
avg: 4,176; total: 34	0% 0	0% 0	17,6% 6	47,1% 16	35,3% 12

Vesa Nietosvaara: Model monitoring

Number of question respondents: 17

	1 Useless (value: 1)	2 Poor (value: 2)	3 Useful (value: 3)	4 Good (value: 4)	5 Excellent (value: 5)
Was the content relevant for your own work: (avg: 4,118; total: 17)	**0%** 0	**0%** 0	**23,5%** 4	**41,2%** 7	**35,3%** 6
Was the exercise clear, understandable and logical (avg: 3,706; total: 17)	**0%** 0	**5,9%** 1	**35,3%** 6	**41,2%** 7	**17,6%** 3
avg: 3,912; total: 34	0% 0	2,9% 1	29,4% 10	41,2% 14	26,5% 9

What did you enjoy most and why?

1. Interesting with turbulens, I don't use it in my work, but it was nice to know
2. Conceptual models-Important to work with if you do not want to forgotten the meteorology.

Do you have suggestions for improving today's organisation or presentations?

1. The afternoon was to much listening without doing something.

Write here if you have some additional questions in your mind regarding today's topics!

NOMEK 2009

11-15 May, Reykjavík, Iceland

Raportointi >> Perusraportti Evaluation NOMEK 2009 Day 5: Friday 15 May 2009

Kopio e-raporttiin | Vie tulokset Exceliin | Luo suodatus

Kyselyn nimi	**Evaluation NOMEK 2008 Day 5**
Kyselyn tekijä	**28a79b85**
Kysely luotu	**8.5.2009 14:55:06**
Vastausajankohta	**24.5.2009 19:57:32**
Vastaajien kokonaismäärä	**17**

Kokonaisraportti

Halldór Björnsson: Climate Change and the Meteorologist

Number of question respondents: 17

	1 Useless (value: 1)	2 Poor (value: 2)	3 Useful (value: 3)	4 Good (value: 4)	5 Excellent (value: 5)
Was the content relevant for your own work: (avg: 4,294; total: 17)	**0%** 0	**0%** 0	**11,8%** 2	**47,1%** 8	**41,2%** 7
Was the presentation clear, understandable and logical (avg: 4,471; total: 17)	**0%** 0	**0%** 0	**0%** 0	**52,9%** 9	**47,1%** 8
avg: 4,382; total: 34	0% 0	0% 0	5,9% 2	50% 17	44,1% 15

Guðrún Nína Petersen: Forecast errors, analysis and observations

Number of question respondents: 17

	1 Useless (value: 1)	2 Poor (value: 2)	3 Useful (value: 3)	4 Good (value: 4)	5 Excellent (value: 5)
Was the content relevant for your own work: (avg: 4,529; total: 17)	**0%** 0	**0%** 0	**0%** 0	**47,1%** 8	**52,9%** 9
Was the presentation clear, understandable and logical (avg: 4,625; total: 16)	**0%** 0	**0%** 0	**0%** 0	**37,5%** 6	**62,5%** 10
avg: 4,576; total: 33	0% 0	0% 0	0% 0	42,4% 14	57,6% 19

Kristín Hermannsdóttir: Presenting weather in the media

Number of question respondents: 17

	1 Useless (value: 1)	2 Poor (value: 2)	3 Useful (value: 3)	4 Good (value: 4)	5 Excellent (value: 5)
Was the content relevant for your own work: (avg: 3,941; total: 17)	**0%** 0	**0%** 0	**23,5%** 4	**58,8%** 10	**17,6%** 3
Was the presentation clear, understandable and logical (avg: 4,529; total: 17)	**0%** 0	**0%** 0	**0%** 0	**47,1%** 8	**52,9%** 9
avg: 4,235; total: 34	0% 0	0% 0	11,8% 4	52,9% 18	35,3% 12

What did you enjoy most and why?

1. climate change- always hot topic
2. climate changes ... concerns everyone, though i may not agree, but haldor also let some quistions open

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Do you have suggestions for improving today's organisation or presentations?
Write here if you have some additional questions in your mind regarding today's topics!

NOMEK 2009

11-15 May, Reykjavík, Iceland

Appendix 2

Memorandum of Understanding (MoU)

This document contains the common Memorandum of Understanding for the NOMEK-EUMETSAT course. It describes the activities of Nomek which have been performed during the period 1995-2009.

The following aspects are addressed in this document:

- The background of the NOMEK course;
- Composition and task of the administrative working group;
- Composition and task of the trainers and experts;
- Selection of participants;
- Finances

The background of the NOMEK course

The NOMEK course (**NO**rdisk **ME**teorologisk **K**ompetensutveckling = Nordic Meteorological Competency Training) has been developed jointly by the Education and Training Managers of FMI, Met. no, SMHI, DMI and IMI). The Programme started in 1995 and the pilot course was sponsored by the Nordic Council of Ministers. Since 1996 the courses have been sponsored by EUMETSAT.

The length of the course is normally one week. The teachers for the course should always represent the participating countries. EUMETSAT is assumed to bring in satellite experts and the planning group has also been open to bringing in other experts outside the Nordic countries. Although most instructors and participants are from the Nordic countries the working language on the course is English.

The objective of the course is to develop and deliver a training programme that brings the new developments in meteorology and in forecasting tools to the forecasters and to promote networking among forecasters and experts from the participating countries. The core topics at the course are: Satellite Image Interpretation, Radar Image Interpretation and Numerical Weather Prediction.

Composition and task of the administrative working group

The activities of the NOMEK programme have been managed by the Nordic National Meteorological Service which is responsible for the course in the following year. The

administrative group meets twice annually, once in the autumn when the chairmanship is handled over to the next hosting NMS and once in spring in connection with the course. The course is usually given once a year in one of the Nordic countries. The Administrative group defines the time and the theme of the courses as well as the course leader. The chairman of the administrative group delivers the report to the Directors of the NMSs and EUMETSAT. The report should be available for the Nordic directors at their annual meeting.

Composition and task of the trainers and experts

The course leader usually comes from the host country. The course leader is responsible for the teachers and their tasks. The teachers are experts from each participating country. The aim is that at least one expert comes from each Nordic country. EUMETSAT is delivering satellite experts to the course.

Selection of participants

The participants come mainly from the Nordic National Meteorological Services. The host country may send up to 10 participants, the other Nordic countries 3 each. If the host country does not send 10 participants, the other Nordic countries have a waiting list to fill up the empty places. EUMETSAT is sending 3-5 participants representing the Baltic countries or other member states. The number of students at the course is 20-25.

Finances

The host country is responsible for the finances and reports to EUMETSAT and its own Economy department.

There is no course fee.

The host country covers the cost for its own participants and teachers. The host country also covers the management cost of the course including facilities. The sponsorship of EUMETSAT usually covers the travel costs, accommodation and per diem for the teachers from the other Nordic countries, the travel costs and accommodation for two participants from each Nordic country and the social event and course dinner. All the costs (travel, accommodation and per diem) for the Baltic participants and/or other participants from member states are covered by EUMETSAT.

The NOMEK courses so far:

1. Oslo 1995
2. Helsinki 1996
3. Copenhagen 1997
4. Norrköping 1998
5. Tromsö 1999
6. Helsinki 2000
7. Vilnius 2001
8. Copenhagen 2002

9. Norrköping 2003
10. Reykjavik 2004
11. Oslo 2005
12. Helsinki 2006
13. Denmark 2007
14. Sweden 2008
15. Iceland 2009

It has been decided that the following courses will take place if the sponsorship of EUMETSAT will continue

16. Norway 2010
17. Finland 2011