

Lihtsaid programme NORDLIS välguandmete ja Ilmateenistuse tasuta andmevoogude analüüsiks

Sven-Erik Enno

Tartu Ülikooli Geograafia osakond

Teemad

- Endast geograafi ja programmeerijana
- NORDLIS välguandmed ja nende analüüsi ning visualiseerimise võimalused
- Ilmateenistuse tasuta andmevoogude visualiseerimine
- Radari- ja satelliidiandmed

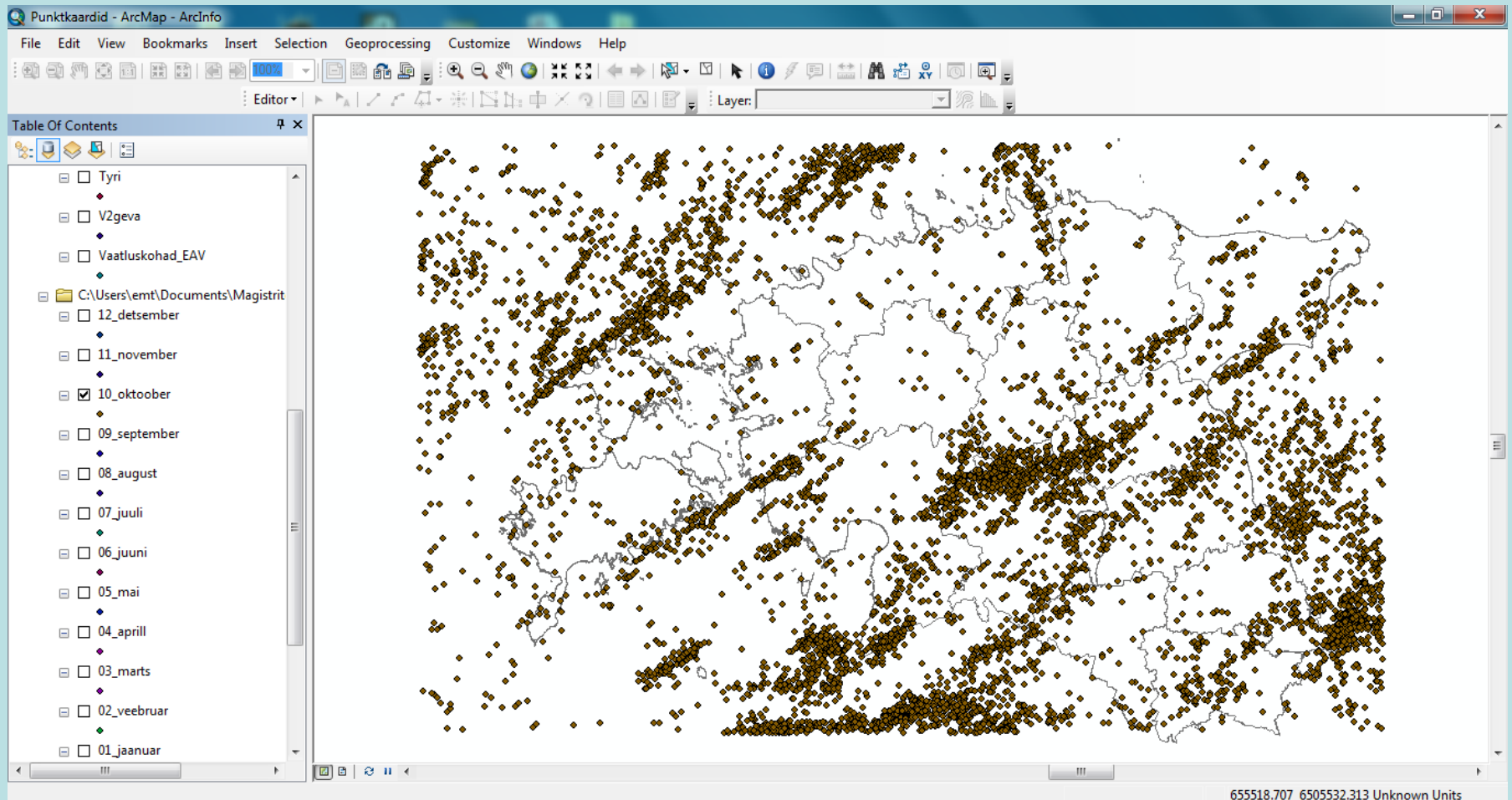
NORDLIS andmed

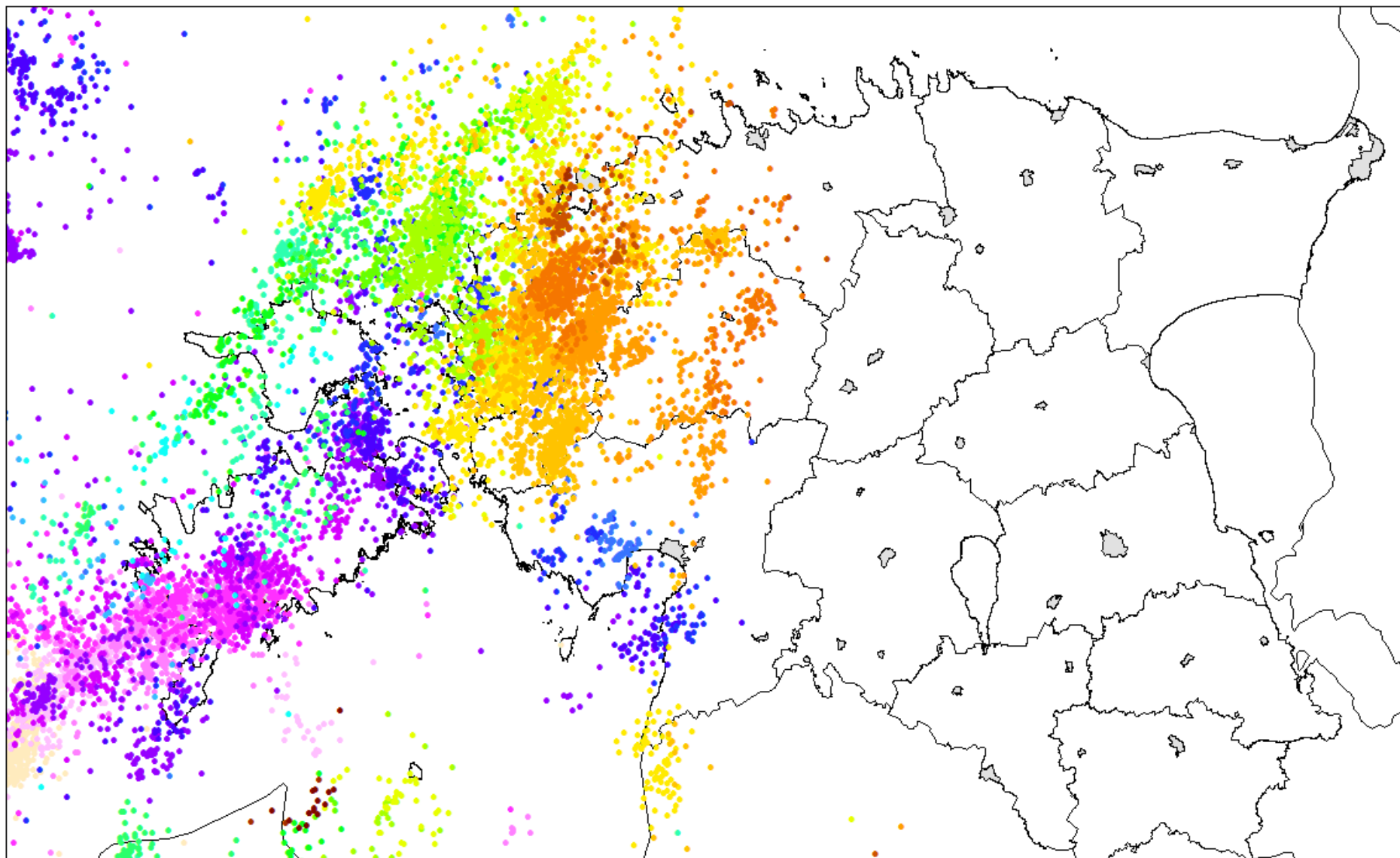
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28.0388 +18.6 1 13.5	4	G2006-02-09 00:34:31.993	59.5242	26.9970	-6.7	1	9.0	3	G2006-02-09						
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1 16.6 4 G2006-03-12	18:11:47.006	57.7700	23.6562	+19.1	1	17.3	4	G2006-03-13 07:52:43.412	57						
58.0941 26.6799	-18.4	1	2.3	2	G2006-03-23 19:49:45.757	57.5110	20.8474	-12.2	1	1.3	3	G2			
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28.3147 +40.6 1 2.0	6	C2006-04-19 00:03:46.898	58.5431	22.4923	-13.3	1	6.7	4	G2006-04-19						
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57.7925 24.2330	+11.4	1	21.7	4	G2006-05-08 12:40:40.095	58.0914	23.7580	+13.2	1	13.6	5	G2			
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1 5.0 4 G2006-05-12	14:20:40.585	57.3406	22.9342	-13.3	1	1.1	3	G2006-05-12 14:20:40.727	57						
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1 6.2 4 G2006-05-14	08:18:44.659	56.6512	29.8088	+0.0	1	5.9	3	C2006-05-14 10:43:27.075	60						
60.1713 24.1770	+62.7	1	0.9	10	G2006-05-14 11:01:29.840	60.4441	25.2699	+142.9	1	0.8	10	G2			
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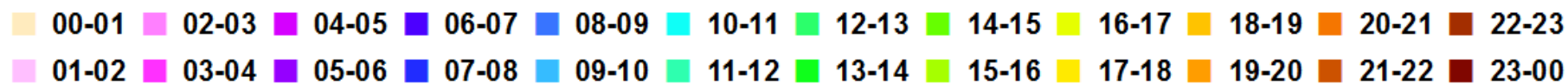
Visualiseerimine - ArcGIS

- Kallis litsents
- Aja- ja ressursimahukas



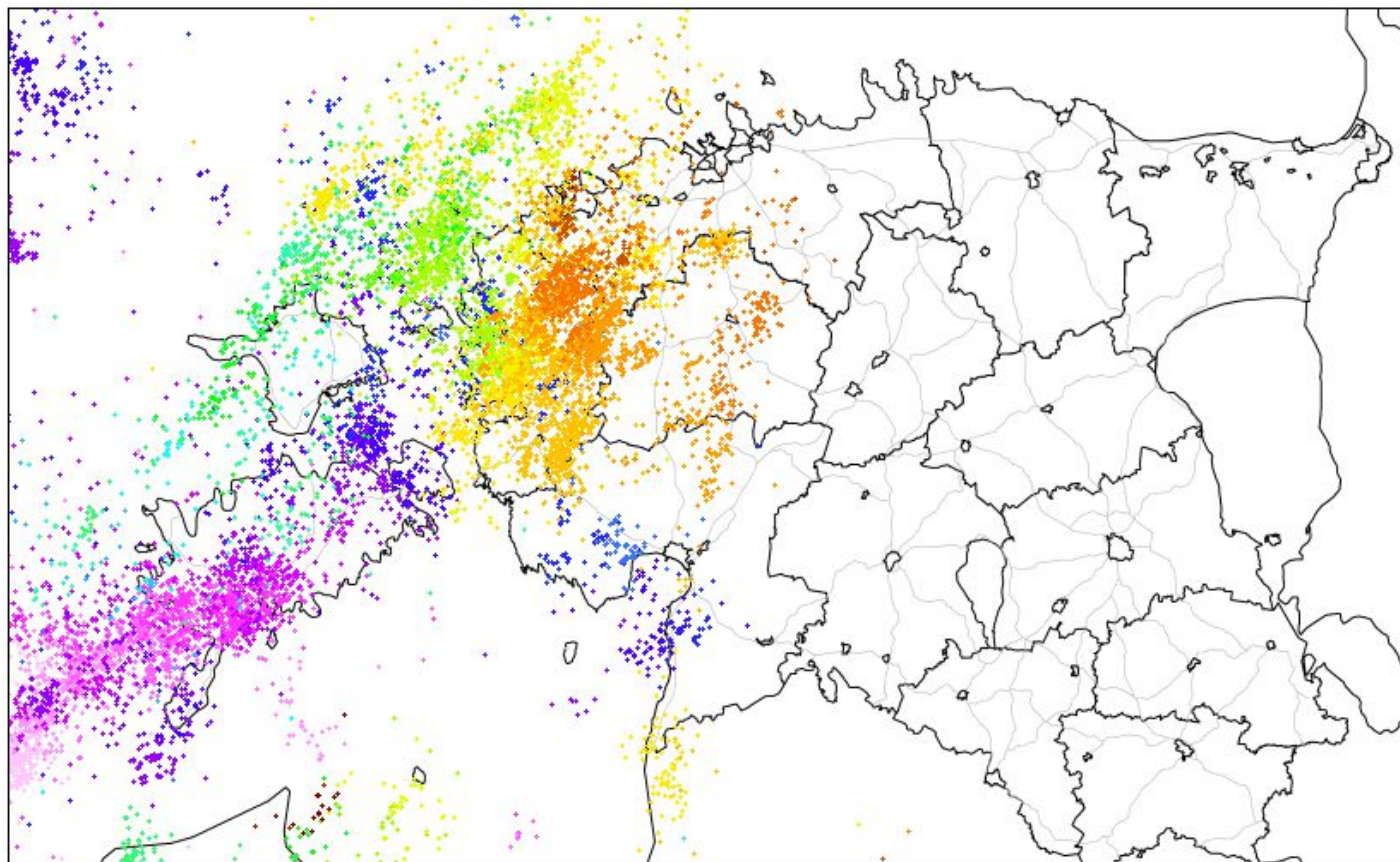


Kellaaeg UTC+03



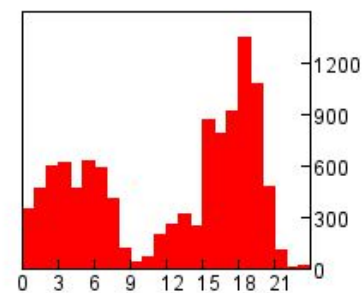
Alternatiiv – Python, Java

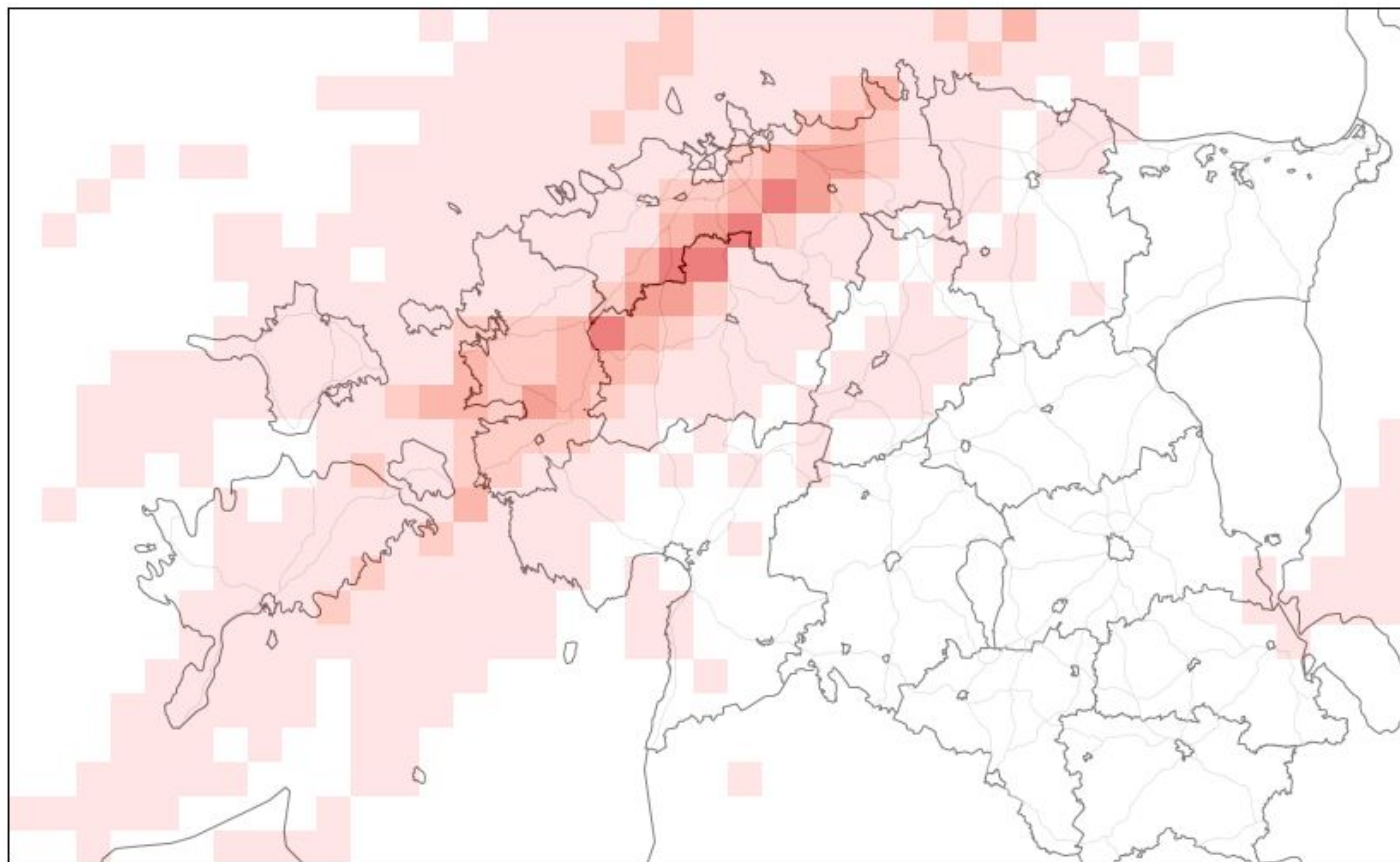
- Geograafilised koordinaadid => ristkoordinaadid
- Ristkoordinaadid=>arvuti ekraani suurus
- Aja- ja ruumipäring
- Aluskaart
- Kiiresti huvipakkuva päeva välgukaart
- Interaktiivsed võimalused
- Näited



Kuupäev 2012-07-07
Kokku 10946 PM välgulööki

Kellaaeg	
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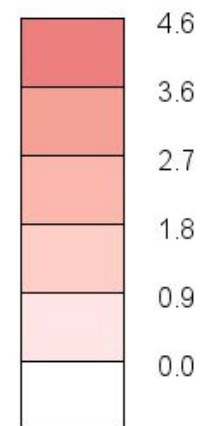


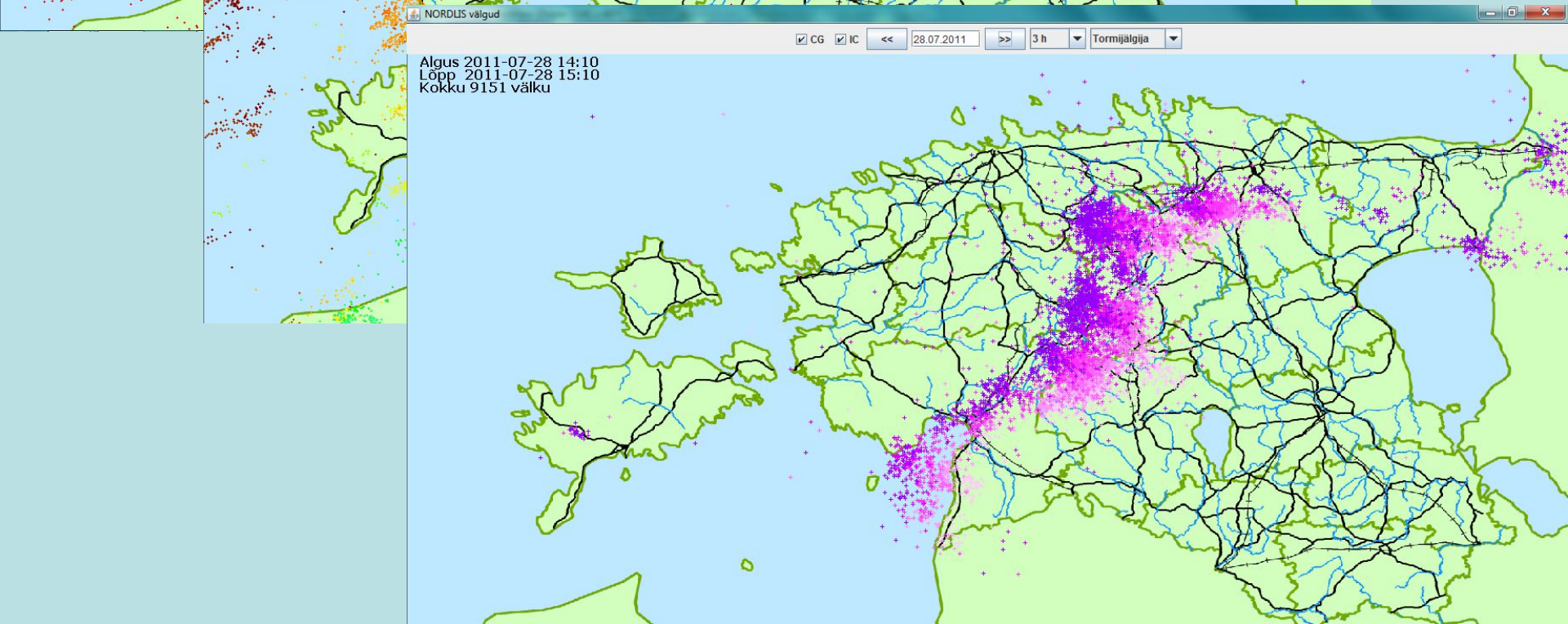
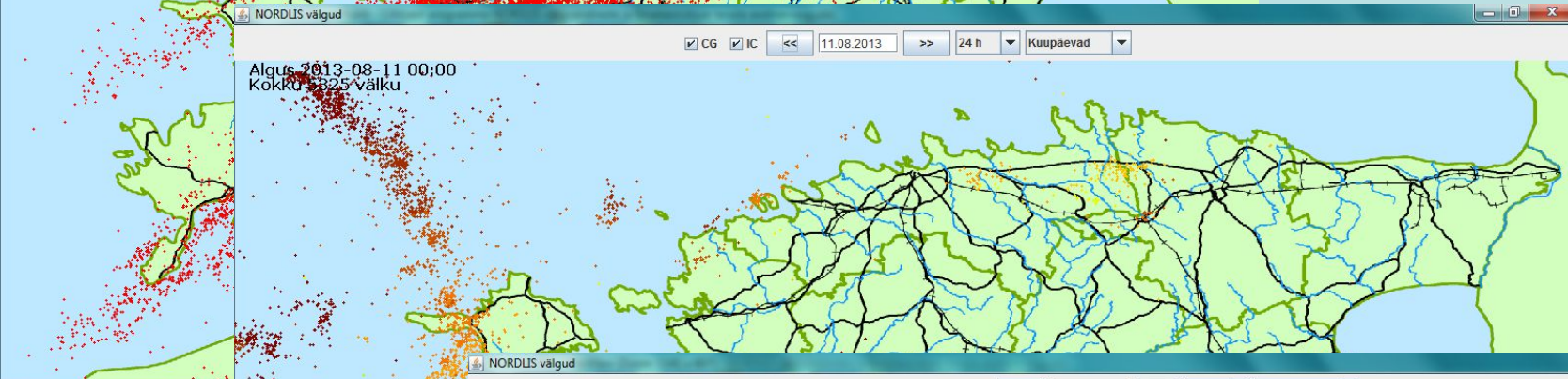
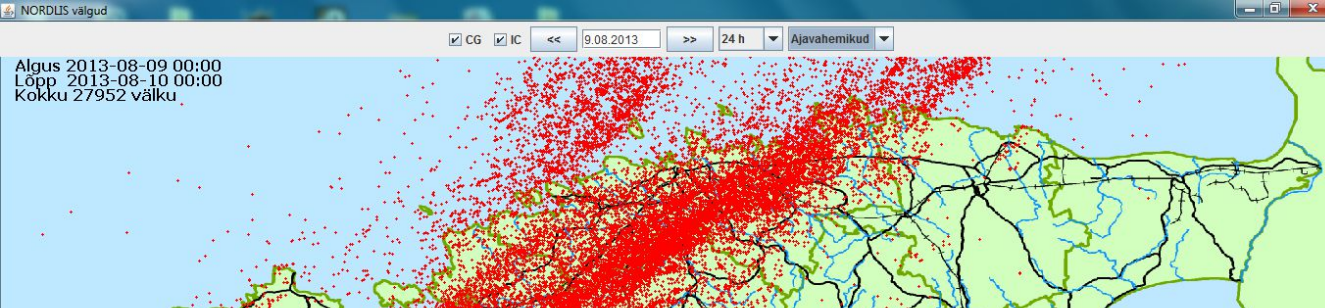


Algus: 2013-08-09 00:00:00

Lõpp: 2013-08-10 00:00:00

Kokku 19739 PM vālku





<< 12.03.2014 >> Jõgeva Õhutemperatuur 1 päev

Kes

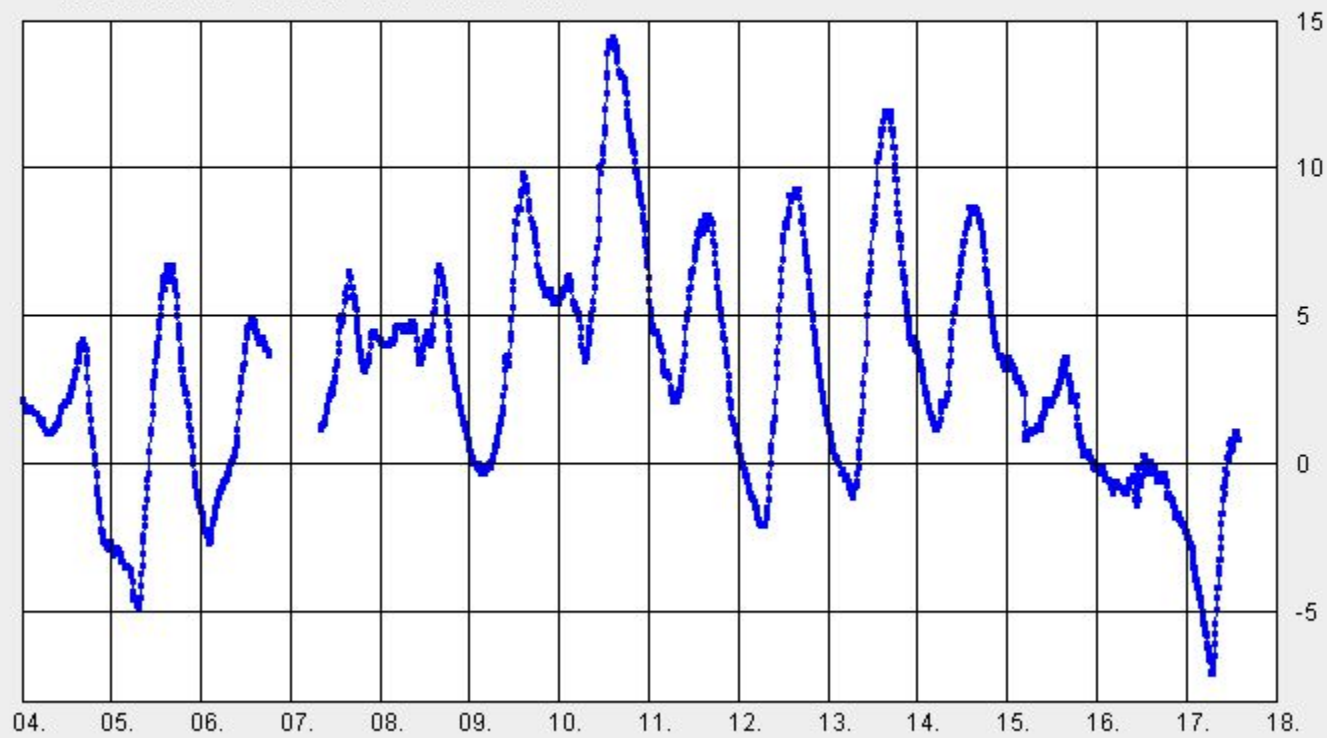
EMHI andmed

<< 15.03.2014 >> Tartu (Tõravere) Tuule suund 1 päev

EMHI andmed

<< 04.03.2014 >> Võru Õhutemperatuur 2 nädalat

Keskmine: 2.7 C maks: 14.4 C miin: -7.1 C



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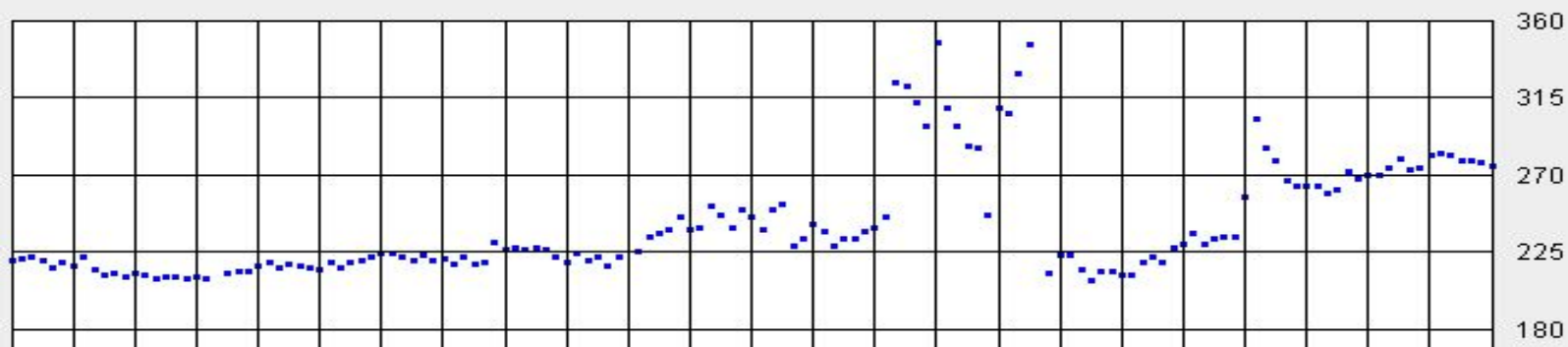
10.03.2014

>>

Kunda

Tuule suund

1 päev



<<

10.03.2014

>>

Kunda

Õhutamperatuur

1 päev

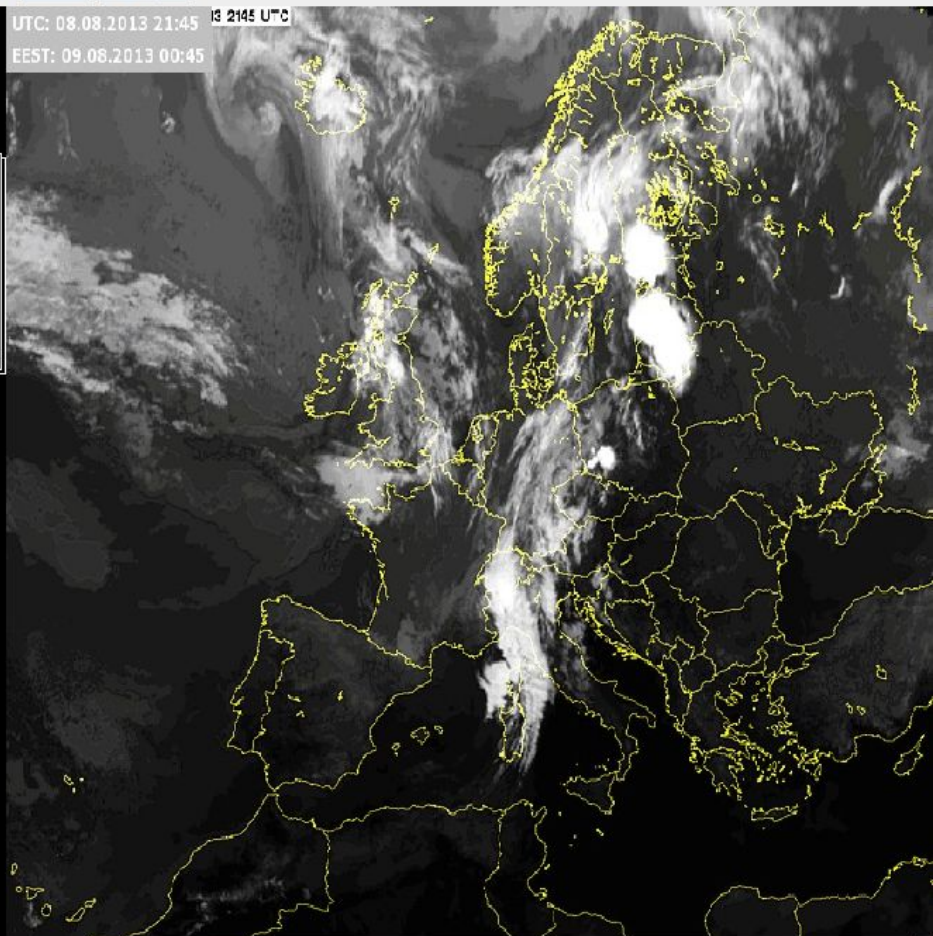
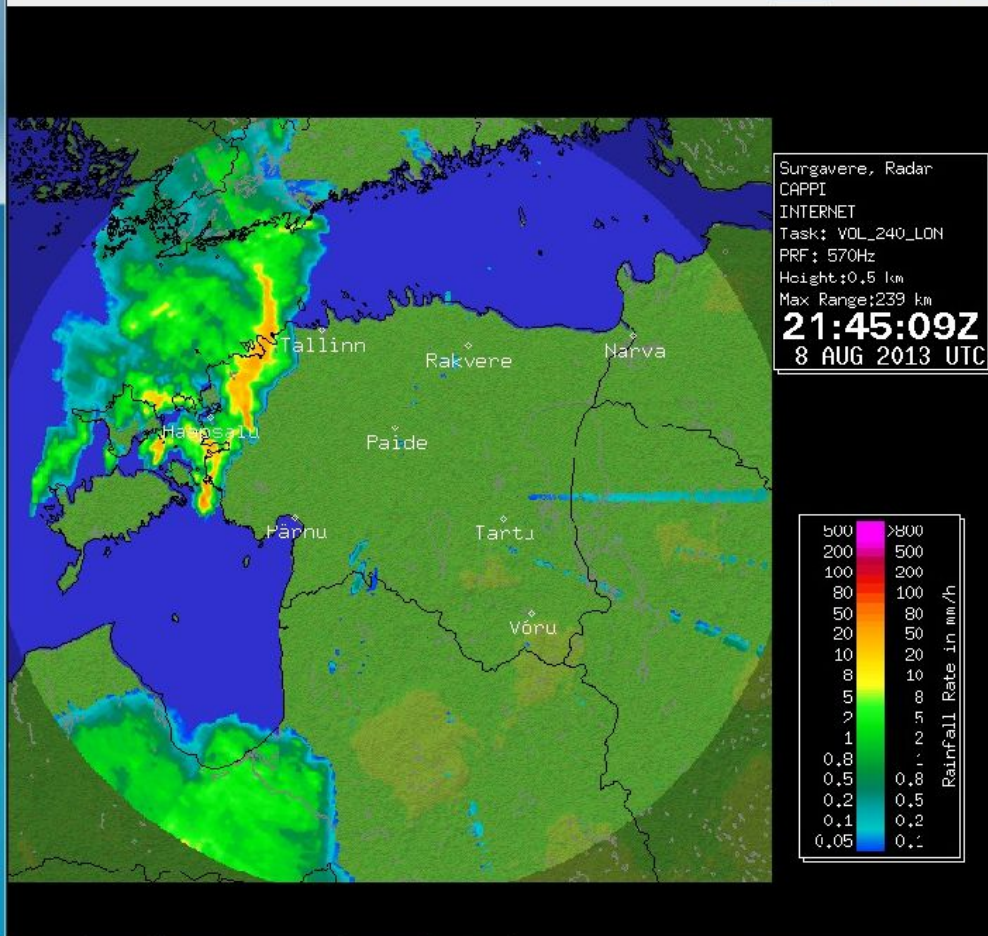
Keskmine: 5.9 C maks: 11.5 C miin: 3.6 C



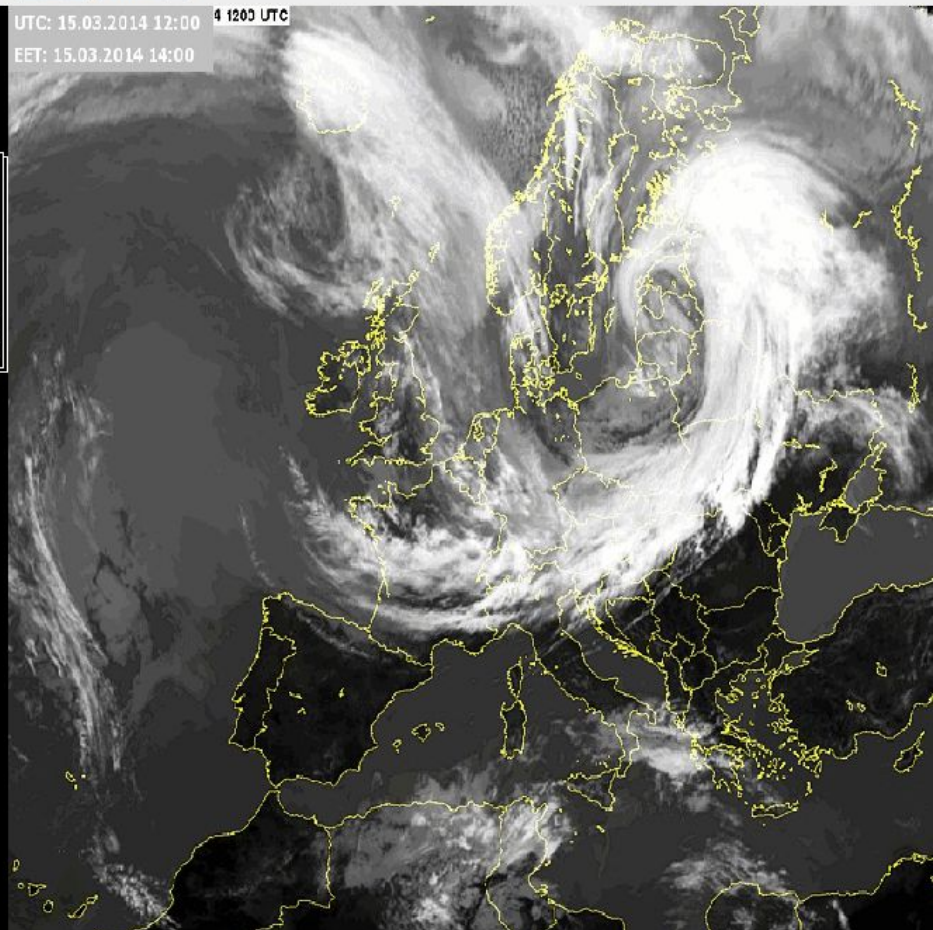
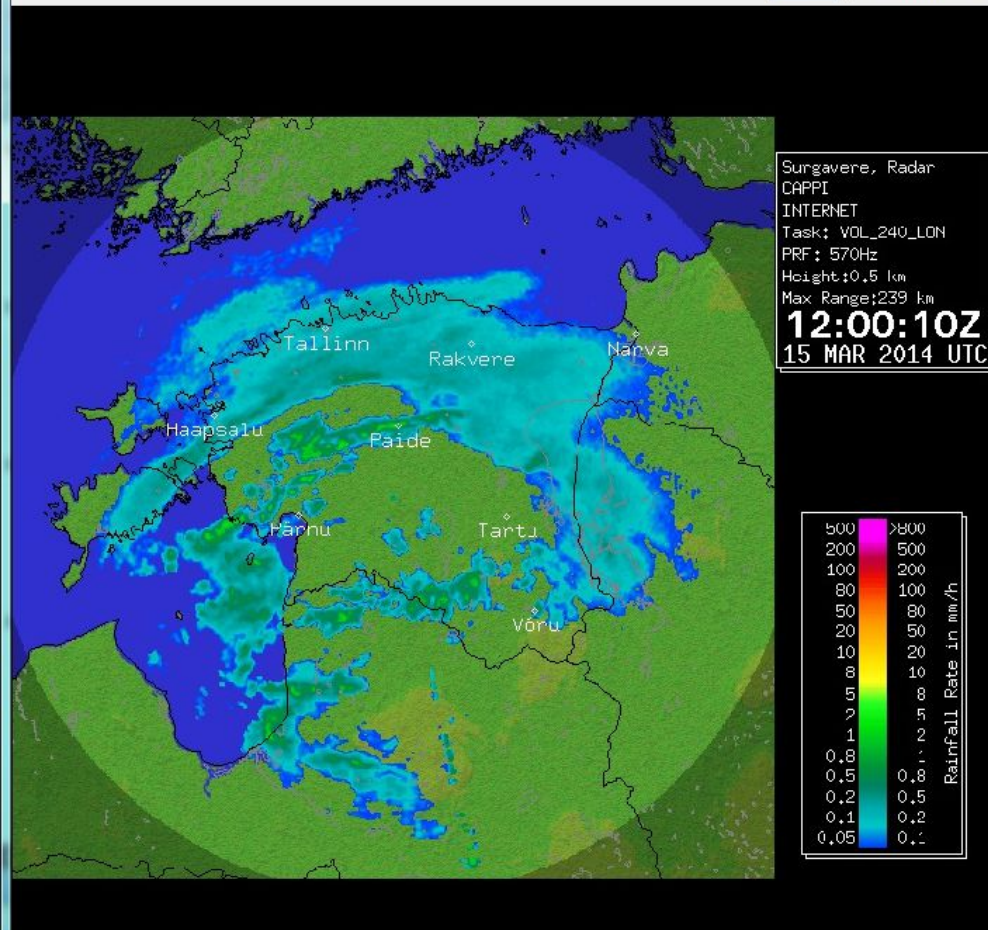
Radari- ja satelliidiandmed

- 2010. aastast mõningad andmed arhiivi kujul ilm.ee-s
- Paralleelsel vaatamisel eriti informatiivsed
- Kaustades liiga palju faile, pole tavalise veebilehitsejaga kättesaadavad
- Vaatamiseks eraldi programm

<< 09.08.2013 00:45 >> 15 min ▾



15.03.2014 14:00 15 min



Kokkuvõte

- Välguandmete kiirem ja paindlikum visualiseerimine ja analüüs võrreldes geoinformaatika tarkvaraga
- Tasuta andmevoogude paindlik ja atraktiivne esitus
- Radari- ja satelliidiandmete võrdlus
- Sobivad programmid meteoroloogia valdkonna populariseerimiseks