

# **HVAR SOLAR TELESCOPE**

**Observer logbook**

**2015**

## Notes:

- All observation times are in local time (Hvar)
  - from **29.03.2015** summer time: UTC **+2h**
  - from **25.10.2015** winter time: UTC **+1h**

Final mark consists of Weather conditions (picture quality) and the size / extent (e.g. flare level) of events observed. Marks are between 1 and 5: e.g. **1 bad picture quality and no solar activity** (flares) and **5 best picture quality and high solar activity**.

Date: 26.05.2015			
Obs. start	09:15	Obs. end	15:00
Observed regions		Remarks	
12349 12351/12353		No activity, prominences on the edge	
Weather	High clouds from time to time		
Note			
Final mark	1-2		

Date: 27.05.20015			
Obs. start	09:05	Obs. end	17:00
Observed regions		Remarks	
12354		Few bright spots Small prominences	
Weather	Cumulus clouds in the morning, bora wind		
Note			
Final mark	2		

Date: 28.05.2015			
Obs. start	07:45	Obs. end	13:30
Observed regions		Remarks	
12353		No activity	
Weather	Strong turbulences		
Note	Bad image quality		
Final mark	1		

Date: 29.05.2015			
Obs. start	07:40	Obs. end	14:35
Observed regions		Remarks	
12353		Bigger prominence on the edge – slow movement No activity	
Weather			
Note			
Final mark	2		

Date: 01.06.2015			
Obs. start	07:30	Obs. end	12:45
Observed regions		Remarks	

12358/12356		Movement of small bright spots
Weather		
Note		
Final mark	1-2	

Date: 02.06.2015			
Obs. start	11:45	Obs. end	14:50
Observed regions		Remarks	
12358/12360		Small prominence B7.6 (12360) 12:19 UTC	
Weather			
Note	Excellent image quality		
Final mark	2-3		

Date: 03.06.2015			
Obs. start	07:45	Obs. end	17:10
Observed regions		Remarks	
12358/12360		Movement of filaments Small bright spots	
Weather	Slightly foggy in the afternoon		
Note			
Final mark	2-3		

Date: 05.06.2015			
Obs. start	10:10	Obs. end	16:05
Observed regions		Remarks	
12361/12362		C2.1 (12361) 09:38 UTC Bright spots	
Weather	Turbulences in the morning, cumulus clouds from time to time, hot, bad picture		
Note	Observer: JC		
Final mark	3-4		

Date: 08.06.2015			
Obs. start	07:40	Obs. end	14:38
Observed regions		Remarks	
12361/12362		Small bright spots, small flare, movement of filament	
Weather	Good picture quality		

Note	
Final mark	3

Date: 09.06.2015			
Obs. start	07:30	Obs. end	14:05
Observed regions		Remarks	
12360		Bright spots	
Weather	Turbulences in the morning, cumulus clouds from time to time, bad picture		
Note			
Final mark	2		

Date: 10.06.2015			
Obs. start	10:40	Obs. end	12:40
Observed regions		Remarks	
12366		Few bright spots, evolution of filaments	
Weather	Clouds in the morning, bad picture		
Note			
Final mark	1-2		

Date: 11.06.2015			
Obs. start	07:35	Obs. end	16:15
Observed regions		Remarks	
12360, 12367		C1.3 (12360) 08:20 UTC – clouds C3.8 (12367) 11:32 UTC C4.5 (12367) 12:01 UTC C8.7 (12367) 14:37 UTC C7.0 (12367) 15:19 UTC C1.3 (12367) 15:59 UTC	
Weather	Cumulus clouds in the morning		
Note	Due to computer crash photosphere observations until 15:00h		
Final mark	4		

Date: 12.06.2015			
Obs. start	07:15	Obs. end	14:30
Observed regions		Remarks	
12360 12367		Bright spots, small flares (12360)	

Weather	
Note	
Final mark	2

Date: 15.06.2015			
Obs. start	08:25	Obs. end	13:26
Observed regions		Remarks	
12367		No activity	
Weather	Cumulus clouds during the whole day		
Note			
Final mark	1		

Date: 16.06.2015			
Obs. start	07:20	Obs. end	14:20
Observed regions		Remarks	
12365		Bright spots	
Weather	Clouds from time to time, turbulences		
Note			
Final mark	1-2		

Date: 18.06.2015			
Obs. start	08:55	Obs. end	14:20
Observed regions		Remarks	
12371		C1.1 (12371) 09:44 UTC (Clouds) Bright spots, movement of the filament	
Weather	Clouds in the morning, bora wind		
Note			
Final mark	3		

Date: 19.06.2015			
Obs. start	10:30	Obs. end	14:30
Observed regions		Remarks	
12371		C8.1 09:27 UTC C1.8 10:44 UTC, movement of the filament	
Weather	Clouds in the morning, cumulus clouds from time to time		
Note			

Final mark	3-4
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Date: 01.07.2015			
Obs. start	07:30	Obs. end	14:20
Observed regions		Remarks	
12373/12376		B8.8 (12376) 06:13 UTC Bright spots	
Weather	Turbulences in the morning, bad picture, clouds from time to time		
Note			
Final mark	2-3		

Date: 02.07.2015			
Obs. start	07:20	Obs. end	14:30
Observed regions		Remarks	
12373/12376		C1.4 (12373) 06:18 UTC	
Weather	Turbulences early in the morning, blurry picture in the afternoon		
Note			
Final mark	2-3		

Date: 03.07.2015			
Obs. start	9:10	Obs. end	16:25
Observed regions		Remarks	
12378		C3.4 (12378) 09:19 UTC C1.7 (12378) 11:24 UTC B7.6 (12378) 11:59 UTC M1.5 (12378) 12:51 UTC	
Weather	Turbulences and blurry picture in the afternoon, cumulus clouds occasionally		
Note			
Final mark	4-5		

Date: 06.07.2015			
Obs. start	09:25	Obs. end	16:15
Observed regions		Remarks	
12381		C2.5 (12381) 07:50 UTC M1.0 (12381) 08:44 UTC C1.3 (12381) 10:52 UTC C1.9 (12381) 11:19 UTC C5.7 (12381) 11:42 UTC	
Weather	Turbulences in the morning, blurry picture		

Note	
Final mark	4

Date: 07.07.2015			
Obs. start	07:20	Obs. end	14:35
Observed regions		Remarks	
12381		C2.5(12381) 07:50 UTC C1.3(12381) 10:52 UTC	
Weather	Very hot, high humidity		
Note			
Final mark	4		

Date: 08.07.2015			
Obs. start	07:20	Obs. end	14:10
Observed regions		Remarks	
12381		C1.1 (12381) 08:08 UTC, evolution of filaments	
Weather	Hot, turbulences during the whole day		
Note			
Final mark	3		

Date: 09.07.2015			
Obs. start	07:15	Obs. end	14:30
Observed regions		Remarks	
12381		Bright spots, evolution of filaments	
Weather	Turbulences during the whole day, foggy, clouds from time to in the afternoon		
Note			
Final mark	2		

Date: 10.07.2015			
Obs. start	07:30	Obs. end	14:20
Observed regions		Remarks	
12384		White spots, filament	
Weather	Turbulences and clouds in the morning, bora wind,		
Note			
Final mark	2		



Date: 13.07.2015			
Obs. start	07:20	Obs. end	14:15
Observed regions			Remarks
12381/12385			Small prominences, white spots
Weather	Hot, high humidity, turbulences in the afternoon		
Note			
Final mark	1-2		

Date: 14.07.2015			
Obs. start	14:20	Obs. end	14:25
Observed regions			Remarks
12381/12385			No activity
Weather	Hot,		
Note	Just few pictures of chromosphere		
Final mark	1		

Date: 15.07.2015			
Obs. start	07:30	Obs. end	14:20
Observed regions			Remarks
12386			No activity, small filament
Weather	Very hot		
Note			
Final mark	1-2		

Date: 16.07.2015			
Obs. start	07:20	Obs. end	14:20
Observed regions			Remarks
12384			White spots, filament
Weather	Hot, turbulences		
Note			
Final mark	1-2		

Date: 17.07.2015			
Obs. start	07:15	Obs. end	15:25
Observed regions			Remarks
12386			No activity, smaller filament

Weather	Smaller turbulences and blurry picture in the afternoon		
Note			
Final mark	1-2		

Date: 20.07.2015			
Obs. start	07:30	Obs. end	14:15
Observed regions		Remarks	
12387		White spots	
Weather	Turbulences and blurry picture in the afternoon		
Note			
Final mark	1-2		

Date: 21.07.2015			
Obs. start	07:15	Obs. end	13:10
Observed regions		Remarks	
12386		No activity	
Weather	High humidity, hot, foggy		
Note			
Final mark	1-2		

Date: 22.07.2015			
Obs. start	07:10	Obs. end	14:25
Observed regions		Remarks	
12387		White spots, small eruption	
Weather	Foggy, very hot		
Note			
Final mark	2		

Date: 24.07.2015			
Obs. start	08:50	Obs. end	14:20
Observed regions		Remarks	
12386/12387		No activity	
Weather	Clouds in the morning, turbulences in the afternoon		
Note			
Final mark	1		

Date: 27.07.2015			
Obs. start	07:10	Obs. end	14:25

Observed regions		Remarks
12390		Small eruption (thru the clouds), evolution of filaments
Weather	Clouds from time to time in the morning, hot, strong turbulences	
Note		
Final mark	2-3	

Date: 28.07.2015			
Obs. start	07:10	Obs. end	14:05
Observed regions		Remarks	
12390		White spots	
Weather	Clouds in the morning		
Note			
Final mark	1-2		

Date: 29.07.2015			
Obs. start	07:25	Obs. end	13:50
Observed regions		Remarks	
12390		White spots	
Weather	Clouds from time to time in the morning, strong turbulences		
Note			
Final mark	1-2		

Date: 30.07.2015			
Obs. start	07:10	Obs. end	10:40
Observed regions		Remarks	
12391/12392		White spots (12391)	
Weather	Turbulences, blurry picture,		
Note			
Final mark	1-2		

Date: 31.07.2015			
Obs. start	09:40	Obs. end	13:45
Observed regions		Remarks	
		White spots	
Weather	Clouds from time to time, bora wind, strong turbulences		
Note			
Final mark	1-2		

Date: 03.08.2015			
Obs. start	09:40	Obs. end	14:20
Observed regions		Remarks	
12394		Small eruption	
Weather	Clouds in the morning and occasionally in the afternoon, blurry picture		
Note			
Final mark	1-2		

Date: 04.08.2015			
Obs. start	07:20	Obs. end	14:20
Observed regions		Remarks	
12394		Small eruptions	
Weather	Hot, blurry picture		
Note			
Final mark	2		

Date: 06.08.2015			
Obs. start	07:25	Obs. end	14:15
Observed regions		Remarks	
12396		C1.0 (12396) 09:05 UTC, blurry picture	
Weather	Foggy, turbulences		
Note			
Final mark	2-3		

Date: 07.08.2015			
Obs. start	07:15	Obs. end	14:25
Observed regions		Remarks	
12396		B6.7 (12396) 06:34 UTC C1.1 (12396) 09:08 UTC B8.4 (12396) 10:12 UTC, evolution of filament	
Weather	Turbulences in the afternoon		
Note			
Final mark	3		

Date: 10.08.2015			
Obs. start	08:00	Obs. end	14:25
Observed regions		Remarks	

12396	B7.6 (12396) 09:11 UTC Small flares
Weather	Foggy, smoke from fire
Note	
Final mark	3

Date: 11.08.2015			
Obs. start	07:10	Obs. end	09:10
Observed regions		Remarks	
12396		Small eruptions	
Weather	Clouds		
Note			
Final mark	1-2		

Date: 12.08.2015			
Obs. start	07:10	Obs. end	14:20
Observed regions		Remarks	
12396		Small eruptions	
Weather	Clouds from time to time in the morning, foggy, turbulences in the afternoon		
Note			
Final mark	1-2		

Date: 13.08.2015			
Obs. start	07:20	Obs. end	14:20
Observed regions		Remarks	
12396		White spots	
Weather	Clouds occasionally in the afternoon		
Note			
Final mark	2		

Date: 14.08.2015			
Obs. start	07:20	Obs. end	12:45
Observed regions		Remarks	
12401		B4.4 (12401) 05:38 UTC B5.2 (12401) 07:35 UTC	
Weather	Foggy		
Note			
Final mark	3		

Date: 18.08.2015			
Obs. start	10:50	Obs. end	13:45
Observed regions			Remarks
12401			Small eruption
Weather	Clouds in the morning		
Note			
Final mark	2		

Date: 19.08.2015			
Obs. start	09:30	Obs. end	09:40
Observed regions			Remarks
12401			No activity
Weather	Clouds, bad picture		
Note			
Final mark	1		

Date: 20.08.2015			
Obs. start	08:10	Obs. end	14:00
Observed regions			Remarks
12403			C1.7 (12403) 07:10 UTC (thru the clouds) C1.6 (12403) 08:06 UTC, few smaller eruptions
Weather	Clouds from time to time, bora wind		
Note			
Final mark	3		

Date:21.08.2015			
Obs. start	11:00	Obs. end	13:30
Observed regions			Remarks
12403			M1.4 (12403) 09:48 UTC (thru the clouds)
Weather	Clouds from time to time, bad picture		
Note			
Final mark	3-4		

Date: 24.08.2015			
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Obs. start	08:00	Obs. end	09:40
Observed regions		Remarks	
12403		C3.2 (12403) 06:15 UTC C1.3 (12403) 06:40 UTC C6.7 (12403) 07:12 UTC M5.6 (12403) 07:33 UTC	
Weather	Cloudy, strong turbulences		
Note			
Final mark	4-5		

Date: 26.08.2015			
Obs. start	07:15	Obs. end	09:00
Observed regions		Remarks	
12403		Small eruptions	
Weather	Blurry picture		
Note			
Final mark	2		

Date: 27.08.2015			
Obs. start	07:20	Obs. end	14:20
Observed regions		Remarks	
12403		M2.9 (12403) 05:44 UTC, few small eruptions	
Weather			
Note			
Final mark	4		

Date: 28.08.2015			
Obs. start	07:20	Obs. end	12:20
Observed regions		Remarks	
12403		C4.5 (12403) 06:28 UTC C3.7 (12403) 08:19 UTC C1.3(12403) 09:58 UTC C5.3 (12403) 11:44 UTC	
Weather	Small turbulences, good picture		
Note			
Final mark	4-5		

Date: 31.08.2015			
Obs. start	07:20	Obs. end	14:00
Observed regions		Remarks	
12407		White spots, small filament	
Weather	Hot, foggy		
Note			
Final mark	2		

Date: 01.09.2015			
Obs. start	09:30	Obs. end	11:00
Observed regions		Remarks	
12406		Small eruption	
Weather	Hot		
Note			
Final mark	2		

Date: 02.09.2015			
Obs. start	07:30	Obs. end	14:10
Observed regions		Remarks	
12409		No activity	
Weather	Clouds from time to time, turbulences in the afternoon		
Note			
Final mark	1-2		

Date: 03.09.2015			
Obs. start	07:20	Obs. end	14:25
Observed regions		Remarks	
12406, 12409		No activity	
Weather			
Note			
Final mark	1-2		

Date: 04.09.2015			
Obs. start	07:30	Obs. end	10:30
Observed regions		Remarks	
12409		Small eruption, evolution and eruption of the filament	
Weather	Clouds from time to time, turbulences		
Note			



Final mark	3
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Date: 07.09.2015			
Obs. start	08:40	Obs. end	14:20
Observed regions		Remarks	
12409		No activity	
Weather	Clouds from time to time		
Note			
Final mark	1-2		

Date: 08.09.2015			
Obs. start	08:00	Obs. end	14:45
Observed regions		Remarks	
12412		No activity	
Weather	Blurry picture, turbulences		
Note			
Final mark	1-2		

Date: 11.09.2015			
Obs. start	07:30	Obs. end	13:55
Observed regions		Remarks	
12412/12414		White spots, small filaments	
Weather	Clouds from time to time, bad picture		
Note			
Final mark	1-2		

Date: 18.09.2015			
Obs. start	08:20	Obs. end	13:17
Observed regions		Remarks	
12415		C2.6 (12415) 06:31 UTC Flares, white spots, small filaments	
Weather	South wind, turbulences		
Note			
Final mark	3-4		

Date: 21.09.2015			
Obs. start	12:00	Obs. end	14:40

Observed regions		Remarks
12420		Small eruption
Weather	Bora wind, fuzzy picture	
Note		
Final mark	2	

Date: 22.09.2015			
Obs. start	07:30	Obs. end	14:20
Observed regions		Remarks	
12420		White spots	
Weather	Bora wind, fuzzy picture		
Note			
Final mark	2-3		

Date: 23.09.2015			
Obs. start	07:30	Obs. end	14:15
Observed regions		Remarks	
12420		White spots, moving filaments	
Weather	Turbulences, strong wind		
Note			
Final mark	2		

Date: 30.09.2015			
Obs. start	08:55	Obs. end	14:45
Observed regions		Remarks	
12422		C5.9 (12422) 06:55 UTC (just the end) M1.3 (12422) 10:59 UTC C4.4 (12422) 11:39 UTC	
Weather	Bora wind, turbulences, clouds from time to time		
Note	very big sunspot group		
Final mark	4		

Date: 01.10.2015			
Obs. start	08:05	Obs. end	14:10
Observed regions		Remarks	
12422		C3.5 (12422) 08:35 UTC C7.6 (12422) 09:34 UTC	
Weather	Strong turbulences (bora wind), clouds from time to time, blurry picture		

Note	very big sunspot group
Final mark	3-4

Date: 02.10.2015			
Obs. start	08:45	Obs. end	14:20
Observed regions		Remarks	
12422		C5.8 (12422) 07:00 UTC C4.8 (12422) 07:49 UTC C7.6 (12422) 08:38 UTC C3.0 (12422) 09:17 UTC C3.0 (12422) 11:44 UTC	
Weather	Clouds from time to time, turbulences		
Note			
Final mark	4		

Date: 12.10.2015			
Obs. start	07:44	Obs. end	14:25
Observed regions		Remarks	
12432		Moving filament, no activity	
Weather	Bora wind, clouds from time to time		
Note			
Final mark	1-2		

Date: 13.10.2015			
Obs. start	09:45	Obs. end	13:50
Observed regions		Remarks	
12432		No activity	
Weather	Clouds during whole day, strong SE wind		
Note			
Final mark	1-2		

Date: 16.10.2015			
Obs. start	11:15	Obs. end	14:35
Observed regions		Remarks	
12434		C3.1 (12434) 10:20 UTC (clouds)	
Weather	Clouds occasionally, NE wind (bora)		
Note			
Final mark	3		

Date: 20.10.2015			
Obs. start	10:50	Obs. end	14:40
Observed regions		Remarks	
12436		B7.6 (12436) 12:29 UTC	
Weather	Clouds during the whole day		
Note			
Final mark	3		

Date: 21.10.2015			
Obs. start	08:20	Obs. end	13:50
Observed regions		Remarks	
12436		White spots, small eruptions	
Weather	Strong NE wind, high clouds in the afternoon		
Note			
Final mark	3		

Date: 23.10.2015			
Obs. start	08:30	Obs. end	10:15
Observed regions		Remarks	
12436		White spots	
Weather	Foggy, NE wind, very blurry picture		
Note	bad picture quality		
Final mark	1		

Date: 26.10.2015			
Obs. start	08:30	Obs. end	14:20
Observed regions		Remarks	
12436		Small eruption	
Weather	High clouds, high humidity, blurry picture (clouds)		
Note			
Final mark	2		

Date: 27.10.2015			
Obs. start	08:30	Obs. end	14:20
Observed regions		Remarks	
12436		White spots, moving filaments	
Weather	Clouds in the afternoon		

Note	
Final mark	2

Date: 28.10.2015			
Obs. start	08:30	Obs. end	14:25
Observed regions		Remarks	
12436, 12437		White spots	
Weather	High clouds in the morning, high humidity, clouds occasionally		
Note			
Final mark	2-3		

Date: 30.10.2015			
Obs. start	07:40	Obs. end	14:00
Observed regions		Remarks	
12443		C4.2 (12443) 07:15 UTC C5.5 (12443) 08:41 UTC C4.6 (12443) 10:18 UTC C2.4 (12443) 11:54 UTC	
Weather	NE wind (bura), blurry picture		
Note			
Final mark	4		

Date: 02.11.2015			
Obs. start	07:55	Obs. end	14:30
Observed regions		Remarks	
12445		C7.2 (12445) 10:00 UTC C1.8 (12445) 13:19 UTC	
Weather			
Note	Observed region in fits header 12445, not 12442		
Final mark	3-4		

Date: 03.11.2015			
Obs. start	08:00	Obs. end	14:50
Observed regions		Remarks	
12443		Moving filaments, white spots	
Weather			
Note			
Final mark	3-4		

Date: 04.11.2015			
Obs. start	08:00	Obs. end	15:30
Observed regions		Remarks	
12445, 12443		C4.6 (12445) 09:00 UTC C1.1 (12445) 10:32 UTC M2.5 (12445) 12:01 UTC M3.7 (12443) 13:52 UTC	
Weather			
Note	beginning of flare M3.7 in 12443 not recorded		
Final mark	4-5		

Date: 05.11.2015			
Obs. start	08:00	Obs. end	14:10
Observed regions		Remarks	
12443		Moving filament	
Weather			
Note			
Final mark	2		

Date: 06.11.2015			
Obs. start	07:40	Obs. end	14:15
Observed regions		Remarks	
12448		C1.0 (12448) 09:19 UTC	
Weather	Foggy in the morning, high humidity		
Note	Only 4 picture of photosphere		
Final mark	3		

Date: 25.11.2015			
Obs. start	08:00	Obs. end	14:40
Observed regions		Remarks	
12458/12459, 12454/12455		C1.9 (12454) 08:26 UTC	
Weather	Clouds during the whole day, blurry picture		
Note			
Final mark	2		

Date: 02.12.2015			
Obs. start	08:40	Obs. end	14:20
Observed regions		Remarks	
12458		No activity	

Weather	High humidity, high clouds, blurry picture
Note	
Final mark	1

Date: 03.12.2015			
Obs. start	08:30	Obs. end	14:10
Observed regions		Remarks	
12458		No activity	
Weather	High humidity, blurry picture		
Note			
Final mark	1-2		

Date: 07.12.2015			
Obs. start	09:15	Obs. end	14:00
Observed regions		Remarks	
12465		White spots	
Weather	Clouds occasionally, blurry picture in the morning		
Note			
Final mark	2		

Date: 08.12.2015			
Obs. start	08:15	Obs. end	14:10
Observed regions		Remarks	
12465		Small eruption	
Weather	High humidity, foggy, blurry picture		
Note			
Final mark	2-3		

Date: 09.12.2015			
Obs. start	10:50	Obs. end	14:11
Observed regions		Remarks	
12465, 12466		Filament, prominences on the edge C1.2 (12466) 11:00 UTC C1.2 (12466) 12:12 UTC	
Weather	Clouds in the morning, foggy, clouds occasionally, blurry picture		
Note			
Final mark	3		

Date: 10.12.2015			
Obs. start	08:00	Obs. end	14:10
Observed regions			Remarks
12466, 12468			No activity
Weather	Foggy, blurry picture, NE wind (bura)		
Note	Vary bad picture		
Final mark	1		

Date: 11.12.2015			
Obs. start	08:20	Obs. end	12:30
Observed regions			Remarks
12468			No activity
Weather			
Note			
Final mark	2		

Date: 14.12.2015			
Obs. start	09:00	Obs. end	10:30
Observed regions			Remarks
12470			White spots
Weather	High clouds, high humidity		
Note			
Final mark	2		

Date: 15.12.2015			
Obs. start	09:00	Obs. end	13:10
Observed regions			Remarks
12470			Small white spots
Weather	Occasionally blurry picture		
Note			
Final mark	2-3		

Date: 16.12.2015			
Obs. start	08:00	Obs. end	14:10
Observed regions			Remarks
12470, 12468			Weak activity (12468)
Weather	High humidity, blurry picture		
Note	very bad picture quality in the morning		
Final mark	2		



Date: 17.12.2015			
Obs. start	08:10	Obs. end	14:10
Observed regions			Remarks
12470			C1.7 (12470) 12:35 UTC
Weather	turbulences		
Note	bad picture quality in the morning		
Final mark	2-3		

Date: 18.12.2015			
Obs. start	08:20	Obs. end	14:10
Observed regions			Remarks
12469/12470, 12468			Small eruption (12468)
Weather	Clouds occasionally		
Note			
Final mark	2-3		

Date: 21.12.2015			
Obs. start	08:30	Obs. end	14:15
Observed regions			Remarks
12472			C1.7 (12472) 08:29 UTC C1.0 (12472) 09:04 UTC M1.1 (12472) 10:19 UTC C5.9 (12472) 11:00 UTC
Weather	Clouds occasionally		
Note	Active region on the limb		
Final mark	4-5		

Date: 23.12.2015			
Obs. start	08:40	Obs. end	14:00
Observed regions			Remarks
12473			White spots
Weather	High humidity, blurry picture in the morning		
Note			
Final mark	3		