

Report IDSR Westhavelland 2016/2017

Oct. 1, 2016 - Sept. 30, 2017



General

Administration

Director: Ilona Langgemach, www.westhavelland-naturpark.de

Star park manager: Thomas Becker, for 16 h/week, Thomas.Becker@LfU.Brandenburg.de

nonprofit support association: **Förderverein Sternenpark Westhavelland** sternenpark-westhavelland.de: This website has been completely renovated

www.facebook.com/sternenparkwesthavelland

Förderverein Sternenpark Westhavelland, Am Neubau 4 OT Gülpe, 14715 Havelaue

At the administrative center posts for telescopes with mounting have been installed (called "**Sternenblick Parey**") and public observations have been offer. Of special interest is an old refractor from Zeiss that has been used by the famous German astronomy popularizer Bruno H. Bürgel.





The telescopes at the Sternenblick Parey (fotos: A. Hänel)



(fotos: Thomas Becker)

To support a darker sky near the observatory, a neighbor had changed his lighting to red.

More public **observing places** within the Nature Park have been designated so that the total number now is 10. They are described on the website and also in a new edition of the information leaflet.

Visitors

It is difficult to estimate the total number of visitors to the IDSReserve. Participants to activities see below. One provider of accommodation says that about 80% of his visitors know about the dark skies in the region, though they do not come especially for the sky, but it is an additional motivation.

Another provider has specialized to astrotourism and offers several telescopes for rent. Many amateur astronomers are his guests.

Lighting

Due to 2 strong storms during the last months, that destroyed a lot of infrastructure in the region, we have only partial information about replacements and new installations:

As the financial resources are limited, only few new installations or replacements of luminaires were done. Instead, just the lamps are exchanged with 3000 K LED. In the case of mercury vapor lamps it is a progress (from 4200 K to 3000 K) while for the replacement of sodium lamps it could be a way back in having more blue content in the light. Unfortunately this development was not foreseen in the lighting guidelines and most think that the replacement is according to the guidelines. In future the aim must be to use either lower cct LED lamps (eg. 2200 K which are available) and/or to reduce the luminous flux (eg. to 50%, which would give the feeling of the same brightness as derived from the S/P ratio).

In Milower Land more than 400 mercury vapor lamps have been changed to 3000 K LED. In Rathenow also replacements to 3000 K LED have been done, as can be seen in the picture:



Fig. This example shows that the LED replacement in the foreground is much weaker than the old sodium high pressure illumination in the background in the city of Rathenow. (foto: T. Becker)

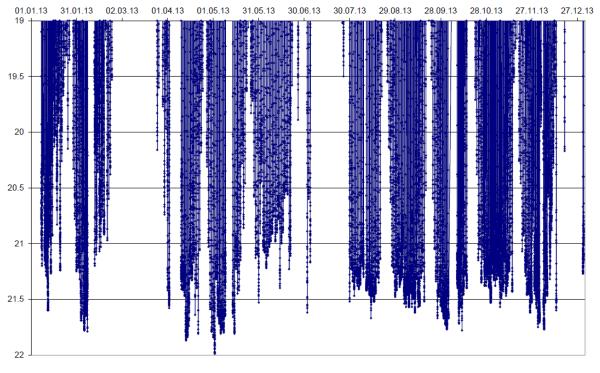
The city of Nennhausen will start to install pc amber LED lighting and others will test the acceptance by the citizens.

In some villages people complain that the replaced lighting is too bright while others say it is too bright and glaring. The reason seems to be that the contrasts of the replacements are too large, perhaps due to large pole spacing.

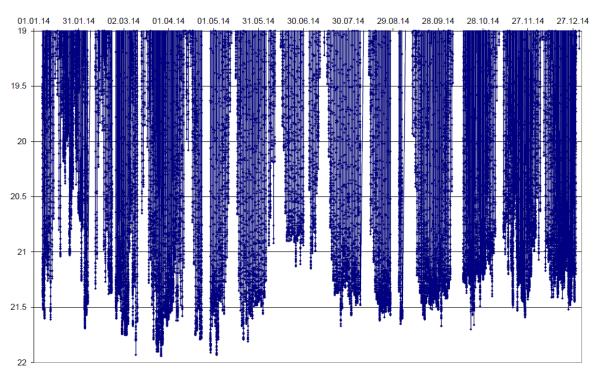
Also a lot of the changes are done without any luxmeter measurements on the roads. Therefore it is necessary to educate the administration and the electricians who are responsible for the replacements. The Nature park will do illuminance measurements in the future.

Sky Quality

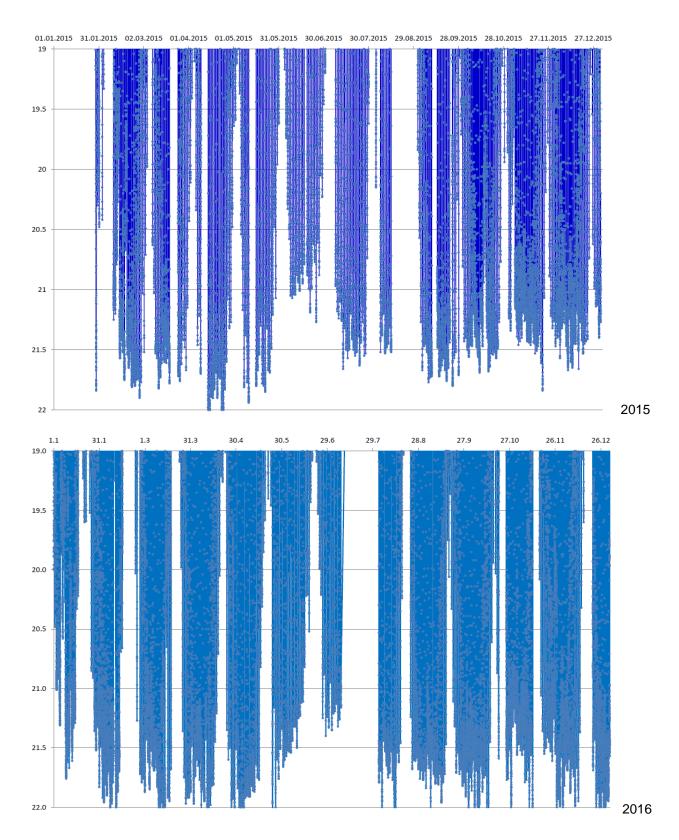
Continuous measurements at the nature park administration Parey

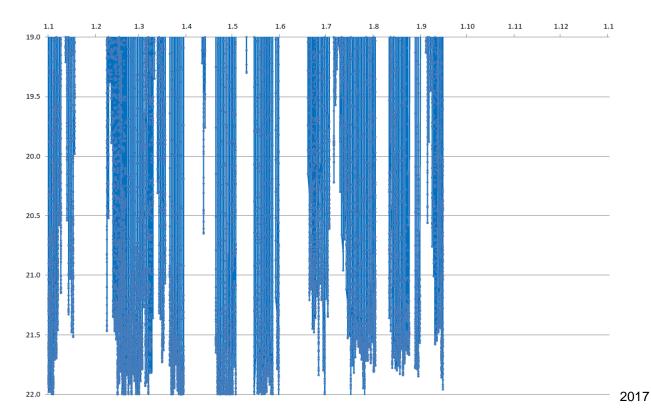


2013



2014





The continuous measurements with the SQM-LE at the Nature Park administration in Parey show that during the last year more darker values than before have been measured. It cannot be assumed that the sky brightness has deceased so much. It could be assumed that the window transmitted less light due to dirt or the detector is a bit inclined in the housing. But this has been checked and was not like this. Therefore it must be assumed that the sensitivity of SQM (detector, electronics) has aged.

Measurements with handheld SQM-Ls mainly during the star parties Westhavelländer Astronomietreffen WHAT (always in August/September) also did not show significant changes.

2011-08-28, 01:00: 21.30 2012-09-20, 21:00: 21.30 2013-09-07, 21:10: 21.35 2014-08-30, 23:00: 21.35 2015-09-12, 01:00: 21.32 2016-08-31, 23:30: 21.45 2017-09-16, 23:30: 21.35, hazy

Conservation and Research

Meanwhile more results of the "Verlust der Nacht" test field near Lochow have been published and the lamps have been changed to 4000 K LED to study their influence more detailed.

Manfrin, A. u.a.: Artificial Light at Night Affects Organism Flux across Ecosystem Boundaries and Drives Community Structure in the Recipient Ecosystem, Front. Environ. Sci., 20 October 2017

Funding / Donation

One EQ6 mounting and some attachment was funded by the Land Brandenburg.

The company "B&G Rathenow" donated 2 concrete columns for the "Sternenblick Parey".

A large donation from Planetarium Potsdam: 80/1200-Zeiss refractor, 150-Zeiss Maksutov reflektor, three mountings, two tripods, many attachments, one 150 mm Zeiss lens, one lunar globe.

Donation of a citizen: One 80/1200-Zeiss refractor with mounting, tripod and some attachments.

Arts and Culture

The association Förderverein Sternenpark Westhavelland had initiated another photo competition. They also plan to install a planet walk between Parey and Gülpe.

Outreach

Marion Werner, Martin Miethke and Detlef Zemlin offered with about 200 visitors

Special events:

Sternenblick Parey: 13 events with 210 people

Public observations at the Nature Park Center Milow: 8 events with 35 participants

7th WHAT 2017

The star party on Sept. 15-17, 2017, again attracted about 60 amateur astronomers staying on the sports filed in Gülpe and on Saturday about 150 visitors were attracted by the event though the weather was not too favorable for observations – in the evening it even rained.



Impression from the WHAT 2017 (A. Hänel)

Community and Media Relations

The press resonance became meanwhile more normal as the designation is 2 years over, but the media interest in the star park is still very large. During the WHAT at least 4 reporters attended the star party.





Der Weltraum zum Greifen nah

Sternenpark Westhavelland: Bester Blick auf die Milchstraße



Print: mainly regional press

20161018_MAZ_Öffentliche Beobachtung des Sternenhimmels

20161026_BRAWO_Naturfreunde entdecken den Sternenpark

20161105_MAZ_Sternenhimmel über Milow

20161113_BRAWO_Supermond angekündigt

20161116_BRAWO_ISO runter Belichtungszeit rauf

20170103_MAZ_Im Zeichen des Wintersechsecks

20170103_MAZ_Naturschönheiten

20170105_Berliner Zeitung_Unter einem guten Stern

20170110_MAZ_Astronomischer Vortrag und Stern-Beobachtung

20170110_MAZ_Im Dimmerlicht durch die Straßen von Rhinow

20170111_MAZ_Die Sterne im Westhavelland leuchten heller und heller

20170111_MAZ_Sternenblick Parey wird zur Station für Himmelsgucker 20170116_MAZ_Vortrag zum Sternenhimmel 20170125_MAZ_Der Himmel über dem Westhavelland

20170207_MAZ_Mit offenen Augen zu Sonne, Mond und Sternen

20170316_MAZ_Blick zu den Sternen

20170319_BRAWO_Eröffnung des Sternenblicks

20170320_MAZ_Parey wird Mitglied im Sternenpark

20170322_Brawo_Vortrag im Sternenblick

20170322_MAZ_Sternenpark

20170327_MAZ_Sternenblick Parey, neue Möglichkeit um den Nachthimmel zu genießen

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20170425_MAZ_Blick ins All und auf den Mond
20170517_MAZ_Beeindruckender Blick zu den Sternen
20170519 MAZ Blick ins Universum von Parey aus
20170528_BRAWO_Mondscheinfieber in Parey
20170531_BRAWO_Veranstaltung 02.06-Blick in den Sternenhimmel
20170611_BRAWO_Vortrag-Vielfalt im Universum
20170628_MAZ_Vortrag im Fintelmannhaus
20170630_Festzeitung Sommerfest der Landesregierung Potsdam_Der Weltraum zum Greifen nah
20170713_MAZ_Ausstellung zum Sternenpark Fintelmannhaus
20170717_MAZ_Ausstellung zum Sternenpark
20170723_BRAWO_Vortrag Werkzeuge der Astronomen
20170729 MAZ Die Nächte der Perseiden
20170731 MAZ Ausstellung zum Sternenpark
20170802_BRAWO_Mondscheinfieber-Erdtrabant im Fokus
20170806_BRAWO_Sternschnuppen über Strodehne
20170809 BRAWO Sternschnuppen am Wochenende
20170812_MAZ_Mondfinsternis von Parey aus betrachtet
20170815_MAZ_Finanzministerbesuch
20170817_BRAWO_Görkes Tagebuch-Besuch in Parey
20170817_BRAWO_WHAT 2018 Schirmherr schon gefunden_Görke
20170817_MAZ_Finanzminister_Weg mit der Lichtglocke
20170817_MAZ_Mehr Platz für Sternengucker
20170817-MAZ-WHAT-Vorträge und ein Blick zum Himmel
20170819_PREUSSENSPIEGEL_Besuch Finanzminister_Sternenpark eine Chance für den Tourismus
20170819_PREUSSENSPIEGEL_Teil 2_Finanzminister im Sternenpark
20170820_BRAWO_Besuch Finanzminister-Sehen ob es wirklich so dunkel ist
20170903_BRAWO_WHAT_In die Sterne schauen
20170909_MAZ_Vortrag Polarlicht und Sterneschauen
20170910 BRAWO Vortrag Faszination Polarlicht
20170910_BRAWO_WHAT_In die Sterne blicken
20170915 National Geografic Traveller Heft 03 2017 Wo der Nachthimmel am prachtvollsten ist
20171018 BRAWO Vortrag: Reise durch das Sonnensystem
2017_NuL Naturschutz und Landschaftsplanung_ Erster Workshop von Sternenpark-Initiativen in Fulda
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20170423_BRAWO_Von Parey ins Universum

TV:

20170520_RBB_Heimatjournal – Rund um den Gülper See mit einem Beitrag zum Sternenblick Parey 20171003_RBB_Die 30 schönsten Naturwunder in Berlin und Brandenburg. RBB report about the 30 most attractive places in Brandenburg, the star park Westhavelland was on place 10.

Radio:

20170115_Radio Live Interview zum Thema Umrüstung in den Kommunen auf sternenparkkonforme Beleuchtung (Radio eins - I. Langgemach)

20170216_Radio Live Aufnahme mit dem RBB Radio, Sender Kultur (Der Sternenhimmel, ein Natur- und Kulturgut im Westhavelland- I. Langgemach)

20170331_DPA Reisedienst zum Thema der Sternenpark Westhavelland (Interview- I. Langgemach) 20170807_TV ARD live Aufnahme in Lochow zum Thema Verlust der Nacht und Perseiden (I. Langgemach, D. Zemlin -Förderverein)

20171024_Radio Live Interview mit RS2 zum Thema Sternenpark Westhavelland (I. Langgemach)

This report has been put together by Ilona Langgemach, Andreas Hänel, Thomas Becker in Oct. 2017