Additional information for the ESA Living Planet Symposium 2016 poster ID 2858:

Disturbances in nightglow, induced by atmospheric gravity waves, as observed in S-NPP Day/Night Band imagery

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Related scientific papers:

Miller, S. D., and R. E. Turner, 2009: **A dynamic lunar spectral irradiance dataset for NPOESS/VIIRS Day/Night Band nighttime environmental applications**, IEEE Transactions on Geoscience and Remote Sensing, 47(7), 2316-2329, DOI: 10.1109/TGRS.2009.2012696.

Steven D. Miller, Stephen P. Mills, Christopher D. Elvidge, Daniel T. Lindsey, Thomas F. Lee, and Jeffrey D. Hawkins, 2012: **Suomi satellite brings to light a unique frontier of nighttime environmental sensing capabilities.** PNAS, vol. 109 no. 39, 15706-15711. DOI: 10.1073/pnas.1207034109.

Steven D. Miller, Cynthia L. Combs, Stanley Q. Kidder, Thomas F. Lee, 2012: **Assessing Moonlight Availability for Nighttime Environmental Applications by Low-Light Visible Polar-Orbiting Satellite Sensors.** J. Atmos. Oceanic Technol., 29, 538-557. DOI: 10.1175/JTECH-D-11-00192.1

Steven D. Miller, William Straka, III, Stephen P. Mills, Christopher D. Elvidge, Thomas F. Lee, Jeremy Solbrig, Andi Walther, Andrew K. Heidinger, and Stephanie C. Weiss, 2013: **Illuminating the Capabilities of the Suomi National Polar-Orbiting Partnership (NPP) Visible Infrared Imaging Radiometer Suite (VIIRS) Day/Night Band.** Remote Sens. 2013, 5, 6717-6766. DOI: 10.3390/rs5126717

Yue, J., S. D. Miller, L. Hoffmann, and W. C., Straka, III, 2014: **Stratospheric and Mesospheric concentric gravity waves over Tropical Cyclone Mahasen: joint AIRS and VIIRS satellite observations**. J. Atmos. Solar-Terr. Phys., DOI: 10.1016/j.jastp.2014.07.003.

Steven D. Miller, William C. Straka III, Jia Yue, Steven M. Smith, M. Joan Alexander, Lars Hoffmann, Martin Setvák, and Philip T. Partain, 2015: **Upper atmospheric gravity wave details revealed in nightglow satellite imagery**. PNAS, 2015, E6728-E6735, DOI: 10.1073/pnas.1508084112.

Xu, J., L. Qinzeng, J. Yue, L. Hoffmann, W. C. Straka, C. Wang, M. Liu, W. Yuan, H. Sai, S. D. Miller, L. Sun, X. Liu, and L. Weijun, 2015: **Concentric gravity waves over northern China observed by an airglow imager network and satellites**. J. Geophys. Res., 120(21), 11058-11078, DOI: 10.1002/2015JD023786.

Azeem, S. I., J. Yue, L. Hoffmann, S. D. Miller, W.C. Straka, III, G. Crowley, and A. Reynolds, 2015: **Multi-sensor profiling of a concentric gravity wave event propagating from the troposphere to the ionosphere**. Geophys. Res. Lett., 42(19), 7874-7880, DOI: 10.1002/2015GL065903.

Related presentations:

Martin Setvák and Steven Miller: **Interaction between gravity waves and nightglow as observed by the Suomi-NPP Day/Night Band.** Presentation (in PDF format) given at 26th General Assembly of the IUGG/IAMAS, Praha, Czech Republic, 29 June 2015.

Links to the authors of the nightglow photographs, used in the poster:

Jeff Dai – photography

- http://twanight.org/newTWAN/photographers_about.asp?photographer=Jeff%20Dai
- http://apod.nasa.gov/apod/ap140901.html
- https://www.flickr.com/photos/jeffdai/
- http://www.eumetsat.int/website/home/Images/ImageLibrary/DAT_2529304.html

Miguel Claro – photography

- http://twanight.org/newTWAN/photographers_about.asp?photographer=Miguel%20Claro
- http://apod.nasa.gov/apod/ap160322.html
- http://www.miguelclaro.com/wp/

Yuri Beletsky – photography

- http://twanight.org/newTWAN/photographers_about.asp?photographer=Yuri%20Beletsky
- https://500px.com/ybeletsky
- https://www.facebook.com/yuribeletskyphoto
- https://www.facebook.com/yuribeletskyphoto/photos/a.1567389826811447.1073741828.1567382543478842/1681695072047588/?type=3&theater
- https://www.facebook.com/yuribeletskyphoto/photos/a.1567386573478439.1073741827.1567382543478842/1573068972910199/?type=3&theater
- http://twanight.org/newTWAN/photos.asp?ID=3005168

Information available in Czech / Informace dostupné v češtině:

Martin Setvák: Noční pohledy na Zemi přístrojem Day/Night Band družice Suomi-NPP – světla měst, polární záře, airglow. Prezentace pro Českou meteorologickou společnost, 24. 11. 2015, Praha, (PDF verze).

Jan Bednář, Martin Setvák, 2015: Přirozený svit noční oblohy a vlnové děje v atmosféře. Meteor.zprávy, 68, 108-115. ISSN 0026-1173.

Martin Setvák, 2015: Noční pohledy na Zemi přístrojem Day/Night Band družice Suomi-NPP. Čs. čas. fyz., 65, č. 5-6, 315-319. ISSN 0009-0700.