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Title	VizieR Online Data Catalog: SN 2011dh. The first two years (Ergon+, 2015)
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J/A+A/580/A142 SN 2011dh. The first two years (Ergon+, 2015)

The Type IIb SN 2011dh.

Two years of observations and modelling of the lightcurves.

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[=2015A&A...580A.142E](#)

ADC_Keywords: Supernovae ; Photometry, UBVRI ; Photometry, ugriz ; Photometry, infrared

Keywords: supernovae: individual: SN 2008ax - supernovae: individual: SN 2011dh - galaxies: individual: M 51 - supernovae: general - supernovae: individual: SN 1993J

Abstract:

We present optical and near-infrared (NIR) photometry and spectroscopy as well as modelling of the lightcurves of the Type IIb supernova (SN) 2011dh. Our extensive dataset, for which we present the observations obtained after day 100, spans two years, and complemented with Spitzer mid-infrared (MIR) data, we use it to build an optical-to-MIR bolometric lightcurve between days 3 and 732.

Description:

All data for the first 100 days (from Paper I, Ergon et al., [2014A&A...562A..17E](#)) and JC UBVRI, SDSS ugriz and 2MASS JHK magnitudes after day 100 and pseudo-bolometric UV-MIR bolometric luminosity before day 400 for SN 2011dh.

Objects:

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RA      (2000)  DE      Designation(s)
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13 30 05.12 +47 10 11.55 SN 2011dh = SN 2011dh
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File Summary:

FileName	Lrecl	Records	Explanations
ReadMe	80	.	This file
tablec4.dat	114	157	*Johnson-Cousins UBVRI magnitudes for SN 2011dh
tablec5.dat	114	70	*SDSS ugriz magnitudes for SN 2011dh
tablec6.dat	82	33	*2MASS JHK magnitudes for SN 2011dh
tablec9.dat	48	214	*Bolometric luminosity for SN 2011dh

Note on table*.dat: Compiled data for all the tables. Data of paper I (Ergon et al., 2014, Cat. [J/A+A/562/A17](#) for data of the first 100 days) plus this paper data (after day 100).

See also:

[J/A+A/562/A17](#) : SN 2011dh - The first 100 days (Ergon+, 2014)

Byte-by-byte Description of file: [tablec4.dat](#)

Bytes	Format	Units	Label	Explanations
1-	8	F8.2	d	Epoch Epoch (JD-2400000)
11-	16	F6.2	d	Phase [3/733] Days since explosion
19-	24	F6.3	mag	? Johnson-Cousins U magnitude (1)
27-	32	F6.3	mag	? Johnson-Cousins U magnitude error
35-	40	F6.3	mag	? Johnson-Cousins B magnitude (1)
43-	48	F6.3	mag	? Johnson-Cousins B magnitude error
51-	56	F6.3	mag	? Johnson-Cousins V magnitude (1)
59-	64	F6.3	mag	? Johnson-Cousins V magnitude error
67-	72	F6.3	mag	? Johnson-Cousins R magnitude (1)
75-	80	F6.3	mag	? Johnson-Cousins R magnitude error
83-	88	F6.3	mag	? Johnson-Cousins I magnitude (1)
91-	96	F6.3	mag	? Johnson-Cousins I magnitude error
99-114	A16	---	Tel	Telescope/Instrument (G1)

Note (1): Colour-corrected U and S-corrected BVRI Johnson-Cousins magnitudes.

Byte-by-byte Description of file: [tablec5.dat](#)

Bytes	Format	Units	Label	Explanations
1- 8	F8.2	d	Epoch	Epoch (JD-2400000)
11- 16	F6.2	d	Phase	[3/716] Days since explosion
19- 24	F6.3	mag	umag	? SDSS u magnitude (2).
27- 32	F6.3	mag	e_umag	? SDSS u magnitude error
35- 40	F6.3	mag	gmag	? SDSS g magnitude (2).
43- 48	F6.3	mag	e_gmag	? SDSS g magnitude error
51- 56	F6.3	mag	rmag	? SDSS r magnitude (2).
59- 64	F6.3	mag	e_rmag	? SDSS r magnitude error
67- 72	F6.3	mag	imag	? SDSS i magnitude (2).
75- 80	F6.3	mag	e_imag	? SDSS i magnitude error
83- 88	F6.3	mag	zmag	? SDSS z magnitude (2).
91- 96	F6.3	mag	e_zmag	? SDSS z magnitude error
99-114	A16	---	Tel	Telescope/Instrument (G1).

Note (2): Colour-corrected u and S-corrected ugriz (unprimed) SDSS magnitudes.

Byte-by-byte Description of file: [tablec6.dat](#)

Bytes	Format	Units	Label	Explanations
1- 8	F8.2	d	Epoch	Epoch (JD-2400000)
11- 16	F6.2	d	Phase	[3/381] Days since explosion
19- 24	F6.3	mag	Jmag	? 2MASS J magnitude (3).
27- 32	F6.3	mag	e_Jmag	? 2MASS J magnitude error
35- 40	F6.3	mag	Hmag	2MASS H magnitude (3).
43- 48	F6.3	mag	e_Hmag	2MASS H magnitude error
51- 56	F6.3	mag	Kmag	? 2MASS K magnitude (3).
59- 64	F6.3	mag	e_Kmag	? 2MASS K magnitude error
67- 82	A16	---	Tel	Telescope/Instrument (G1).

Note (3): S-corrected JHK 2MASS magnitudes.

Byte-by-byte Description of file: [tablec9.dat](#)

Bytes	Format	Units	Label	Explanations
1- 8	F8.2	d	Epoch	Epoch (JD-2400000)
11- 16	F6.2	d	Phase	[4/400] Days since explosion
19- 24	F6.3	10+34W	Lbol	Luminosity (4).
27- 32	F6.3	10+34W	e_Lbol	Luminosity error
35- 40	F6.3	10+34W	s_Lbol	Systematic error (Low value) (5).
43- 48	F6.3	10+34W	E_Lbol	Systemetic error (High value) (5).

Note (4): Pseudo-bolometric UV-MIR (0.19-5 μ m) luminosity, in 10^{41} erg/s

Note (5): Systematic error arising from the distance and extinction.

Global Notes:

Note (G1): the telescopes used for the photometry are:

AS-1.82m/AFOSC = Asiago Copernico 1.82m telescope
AS-Schmidt/SBIG = Asiago 67*92cm Schmidt telescope
AT/ANDOR = Albanova 1.0m telescope (Stockholm University)
CA-2.2m/CAFOS = Calar Alto 2.2m telscope
CA-3.5m/O2000 = Calar Alto 3.5m telscope
CANTAB/BIGST8 = Cantabria amateur observations
FTN/FS02 = Faulkes Telescope North
LBT/LUCIFER = Large Binocular Telescope
LT/RATCam = Liverpool Telescope
MONTCAB/BIGST8 = Montcabrer amateur observations
NOT/ALFOSC = Nordic Optical Telescope
NOT/NOTCAM = Nordic Optical Telescope
TCS/CAIN = Telescopio Carlos Sanchez
TJO/MEIA = Telescopi Joan Oro
TNG/LRS = Telescopie Nazionale Galileo
TNG/NICS = Telescopie Nazionale Galileo
UKIRT/WFCAM = United Kingdom InfraRed Telescope (Hawaii)
WHT/LIRIS = William Herschel Telescope

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(End) Mattias Ergon [Stockholm University], Patricia Vannier [CDS] 09-Jul-2015

The document above follows the rules of the [Standard Description for Astronomical Catalogues](#): from this documentation it is possible to generate *f77* program to load files [into arrays](#) or [line by line](#)

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