FIRST COMPLETE BVRI LIGHT CURVES
OF THE SHORT-PERIOD ALGOL-TYPE BINARY DF Pup

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Name of the object:
DF Pup

Equatorial coordinates:	Equinox:
R.A.= $07^\mathrm{h}53^\mathrm{m}50^\mathrm{s}$ **DEC.**= $-19°41'00''$	2000

Observatory and telescope:
South African Astronomical Observatory Sutherland Station, 1.0-m Cassegrain telescope

Detector:	CCD camera, liquid nitrogen cooled at 180.5 K, 1024 × 1024 imaging pixels binned to 512 × 512, $5.'3 \times 5.'3$ FOV.

Filter(s):	*BVRI*

Date(s) of the observation(s):
2006.01.10, 2006.01.14, 2006.01.15, 2006.01.19, 2006.01.23

Comparison star(s):	Uncatalogued star 208″ SW to the variable

Transformed to a standard system:	No

Availability of the data:
Available at the IBVS website, after 2007.03.27

Type of variability:	EA

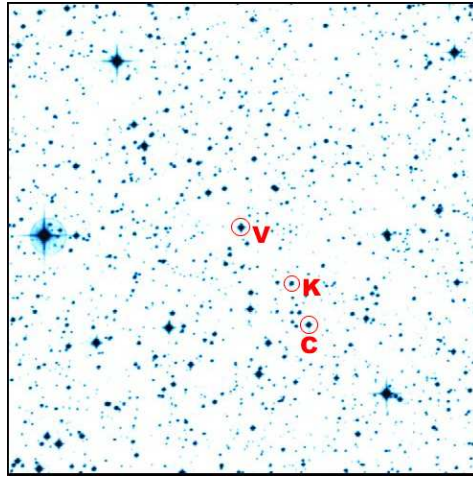| Remarks: |
| --- |
| The period of the system is 0.7714568 days. The heights of the two maxima are equal within the observational error in all bands. The secondary minimum is shallow and deepens considerably at longer wavelengths; this fact indicates a large temperature difference between the components. DF Pup is known to have a spectral type of A7+[G5IV]. |

Figure 1. $14' \times 14'$ finding chart with the comparison (C) and check (K) stars marked; DF Pup is marked with a V
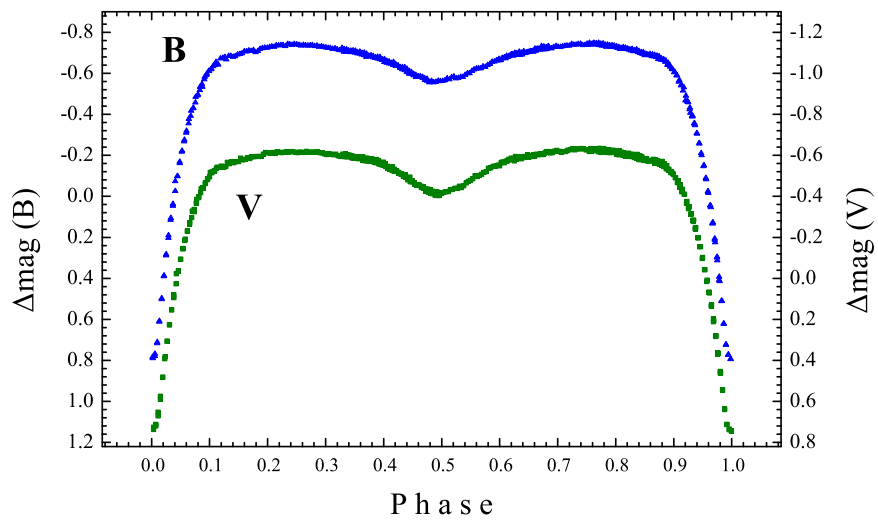
Figure 2. The complete B (upper) and V (lower) light curves of DF Pup
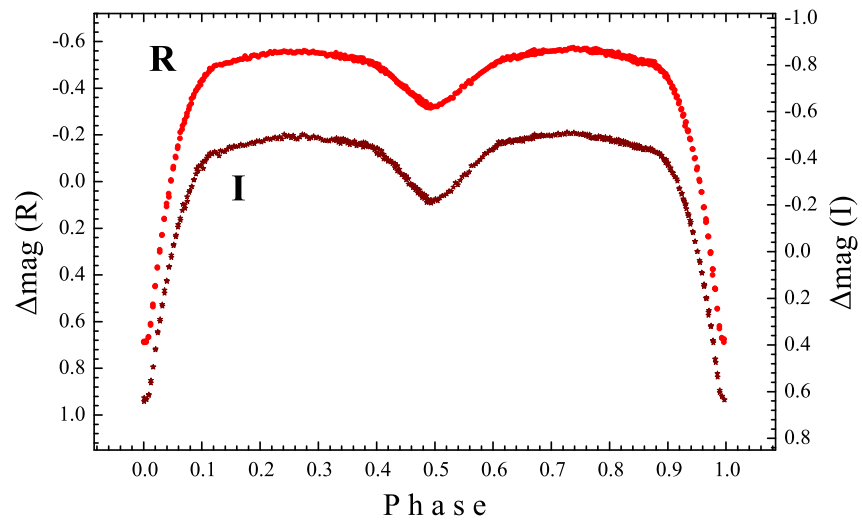
Figure 3. The complete R (upper) and I (lower) light curves of DF Pup

Reference:

Budding, E., Erdem, A., Çiçek, C., Bulut, I., Soydugan, F., Soydugan, E., Bakış, V., Demircan, O., 2004, $A\&A$, **417**, 263