# High Cadence Observations of Transits of Extrasolar Planets

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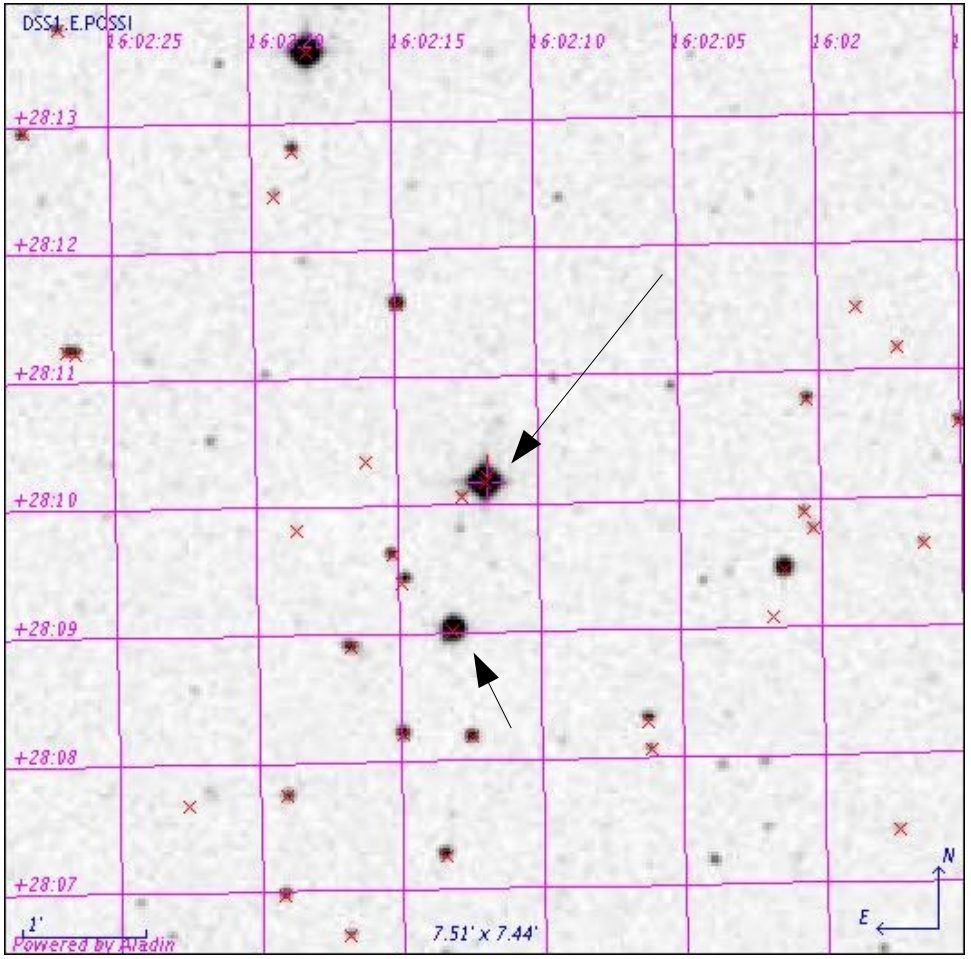
# Transiting stars

XO-1b (McCullough et al. 2006)

$R_S = 0.93\ R_\odot$
$M_S = 1\ M_\odot$
$K = 9.5$
$J = 9.9$

$P = 3.941534\ d$
$a = 0.048\ AU$
$M_P = 0.9\ M_J$
$R_P = 1.184\ R_J$
$i = 89.31\ deg$

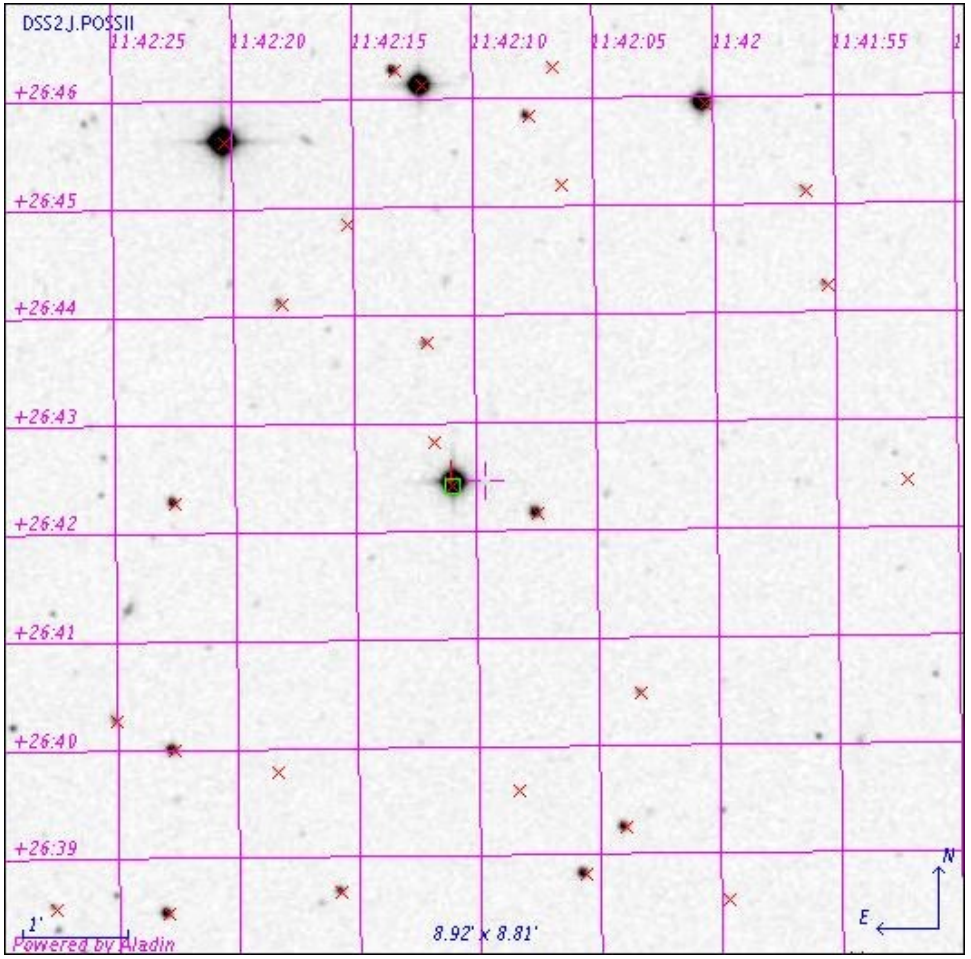


# Transiting stars

GJ-436b (Gillon et al. 2007)

$R_S = 0.463\ R_\odot$
$M_S = 0.44\ M_\odot$
$K = 6.0$
$J = 6.9$

$P = 2.64385\ d$
$a = 0.048\ AU$
$M_P = 0.072\ M_J$
$R_P = 4.19\ R_\oplus$
$i = 85.90\ deg$



# Observations

XO-1b

ISAAC Observations:

| | | DIT | Band |
|---|---|---|---|
| 1 night lost: | 27-04-2007 | -- | --- |
| 2 nights finished: | 01-05-2007 | 0.17 s | $K_S$ |
| | 05-05-2007 | 0.08 s | J |

Window size: 64x544

NDIT: 1900  (253 MB)

# Observations

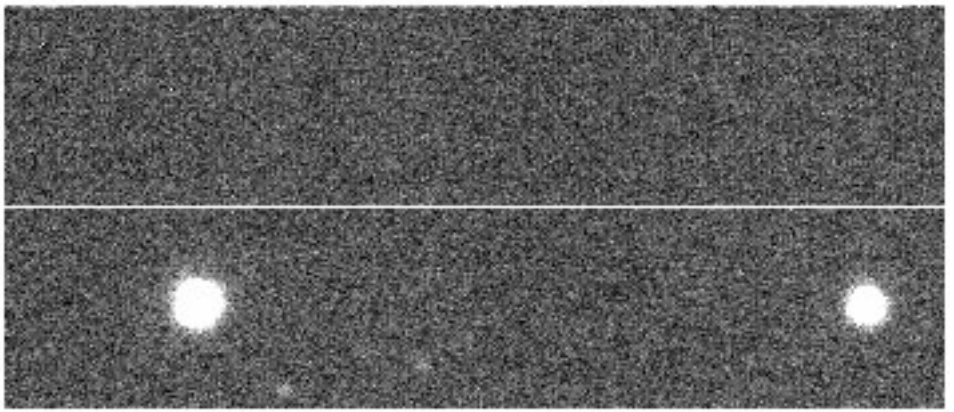
XO-1b

SofI Observations:

| | | DIT | Band |
|---|---|---|---|
| 1 night lost: | 05-05-2007 | --- | --- |
| 2 nights finished: | 01-05-2007 | 0.8 s | J |
| | 27-04-2007 | 0.8 s | J |

Window size: 352x152
892x180

NDIT: 900



# Observations

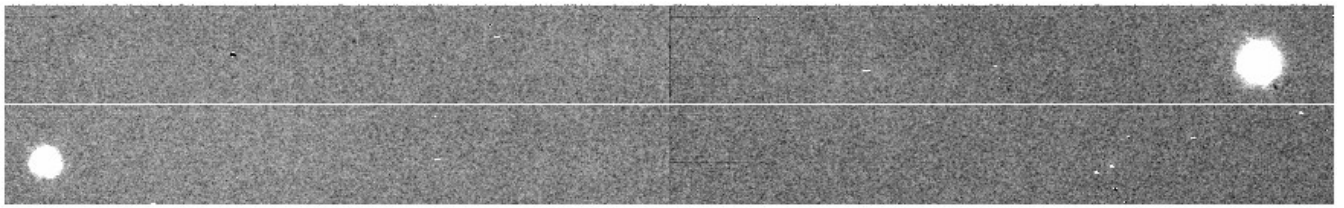
GJ-436b

SofI
DDT programe -> 17-05-2007

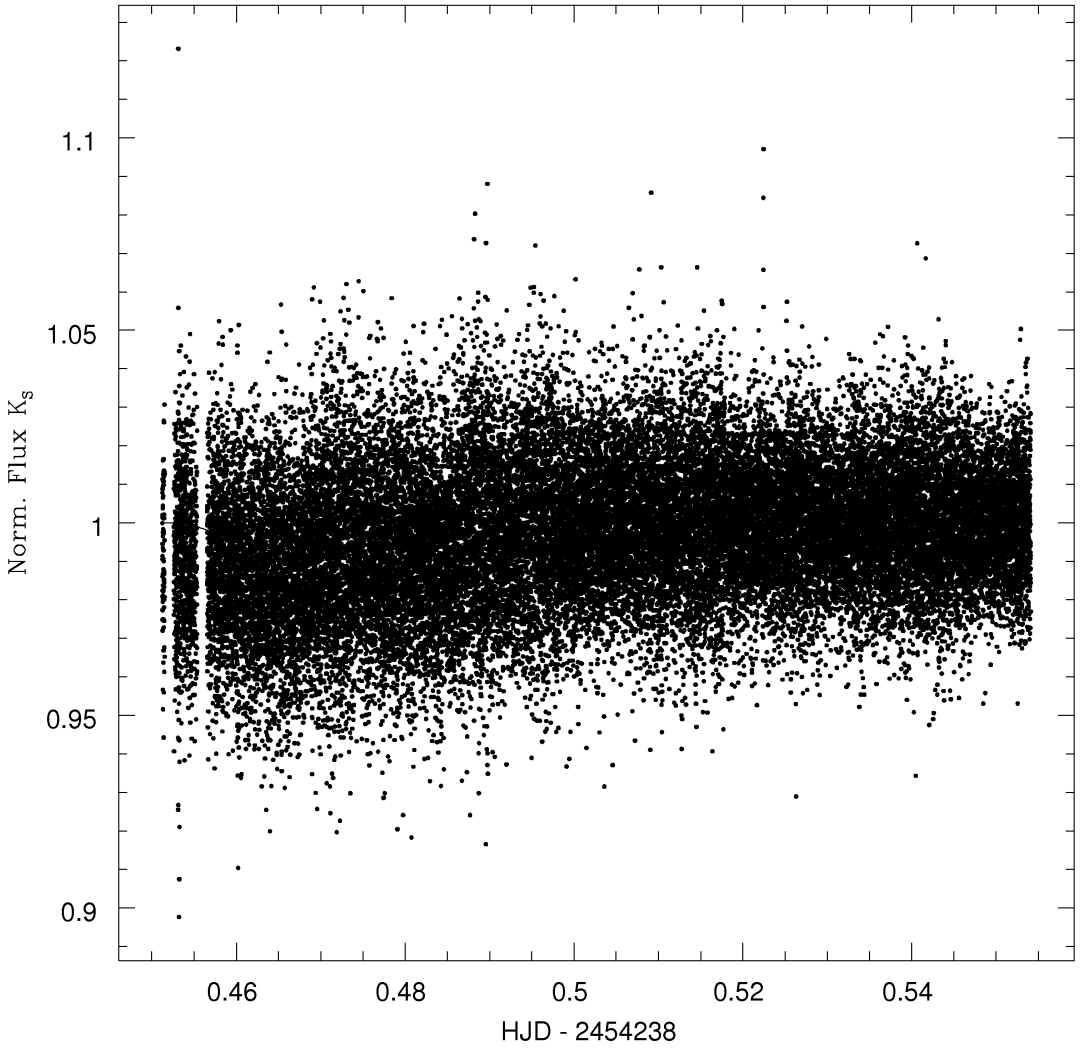
DIT: 0.23 s
Filter: $K_S$

Window size:  872x132

NDIT: 1000



# Results

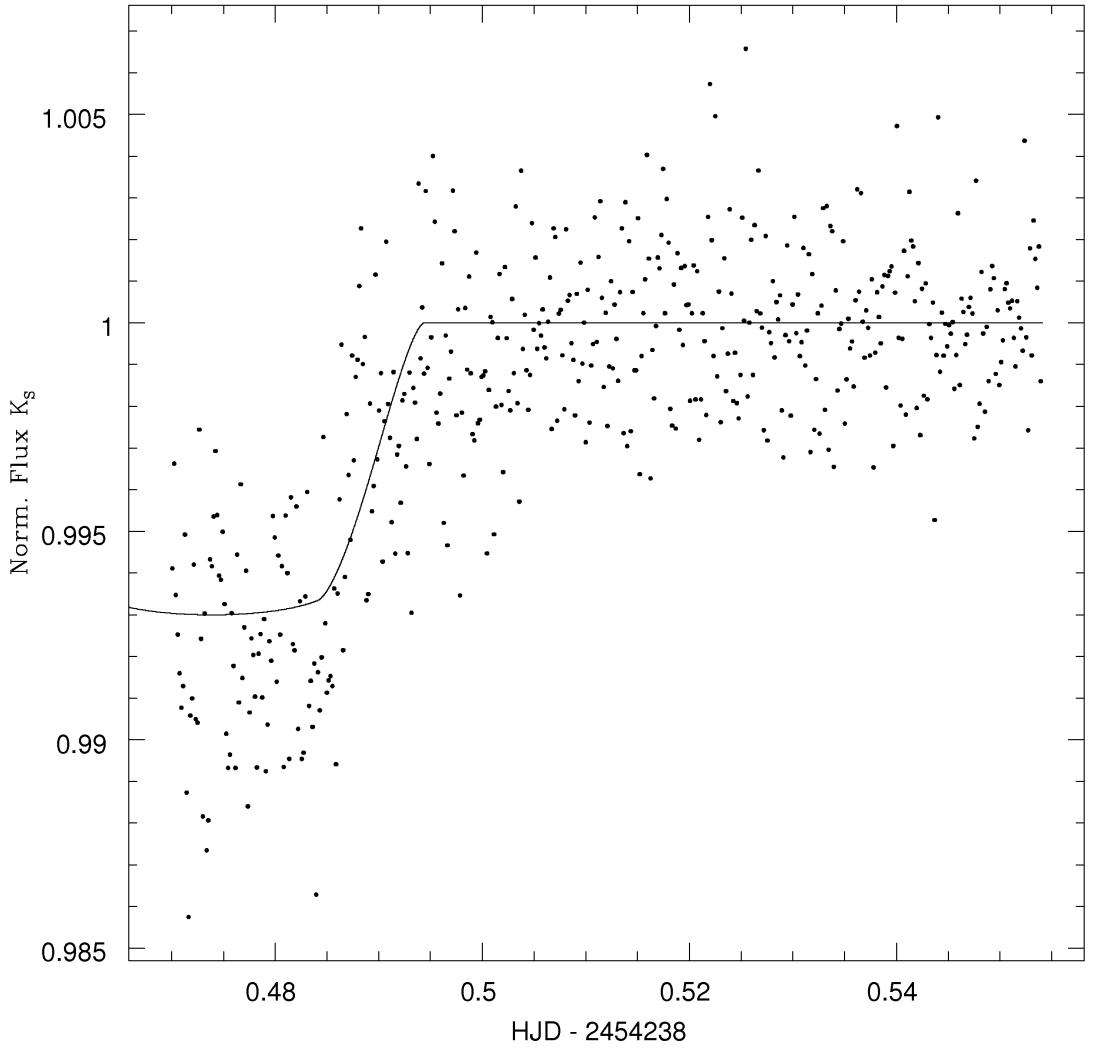



GJ-436b

Defocused telescope

35407 points after omiting pixel values above 20000 ADU.

# Results

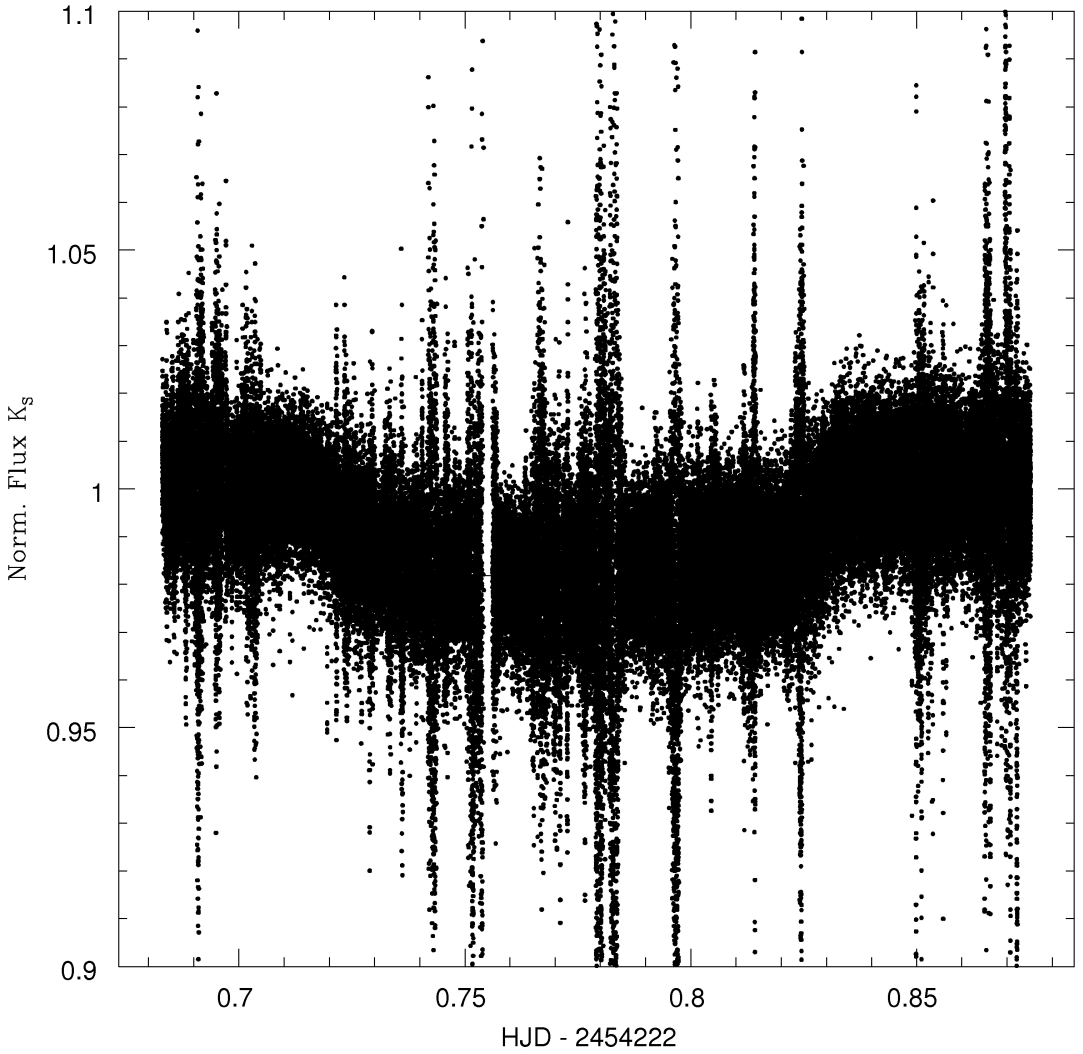



GJ-436b

Defocused telescope

35407 points after omiting pixel values above 20000 ADU.

# Results

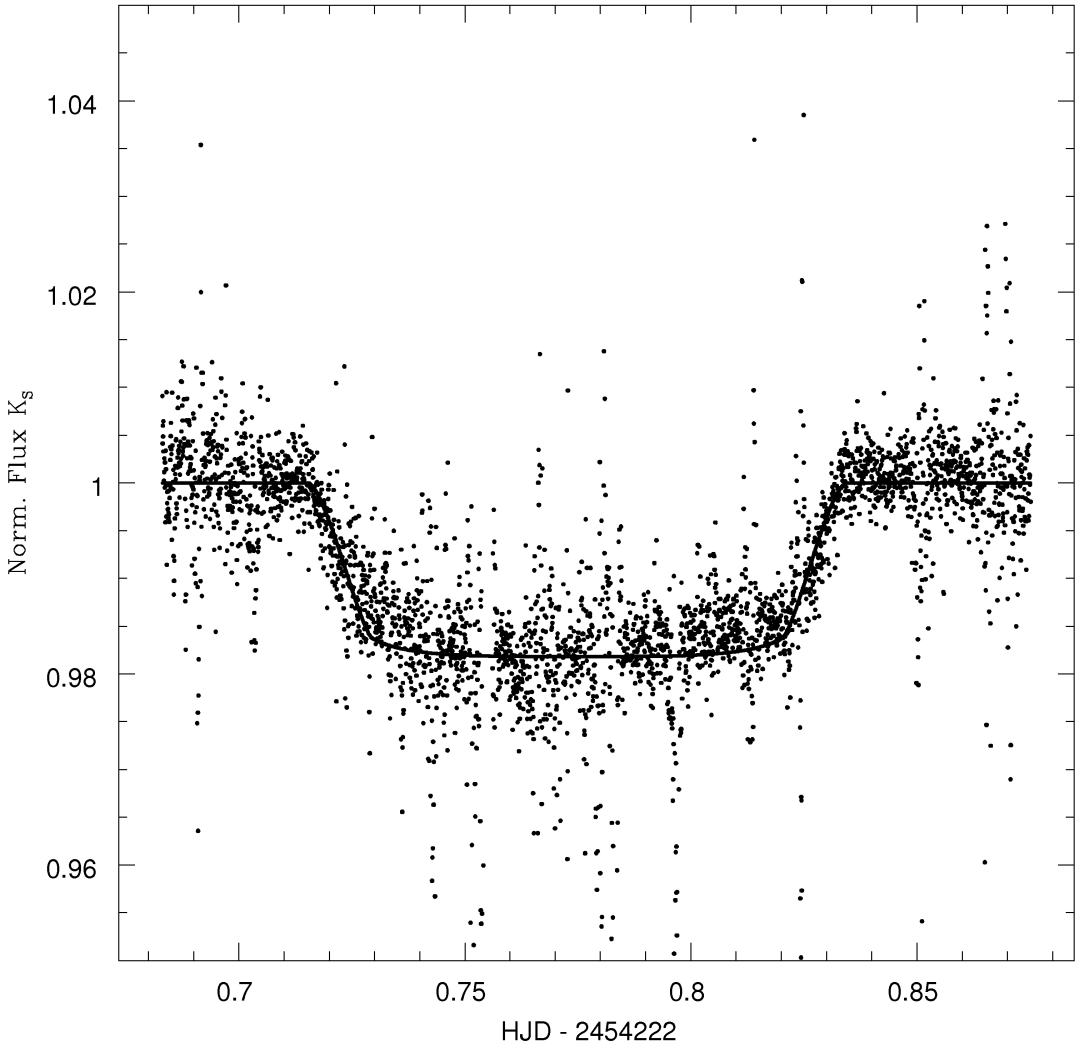



XO-1b

01-05-2007

110161 points

# Results

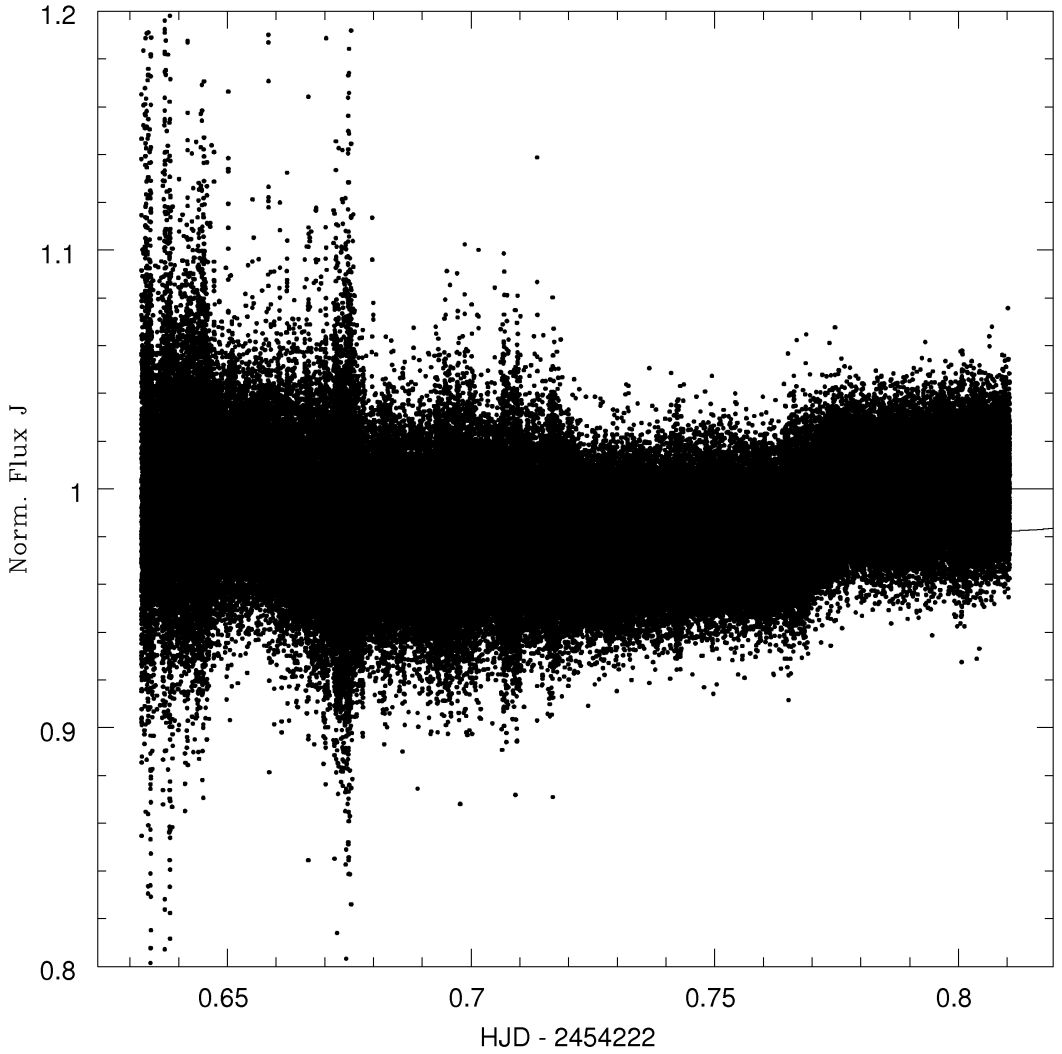



XO-1b

01-05-2007

110161 points

# Results

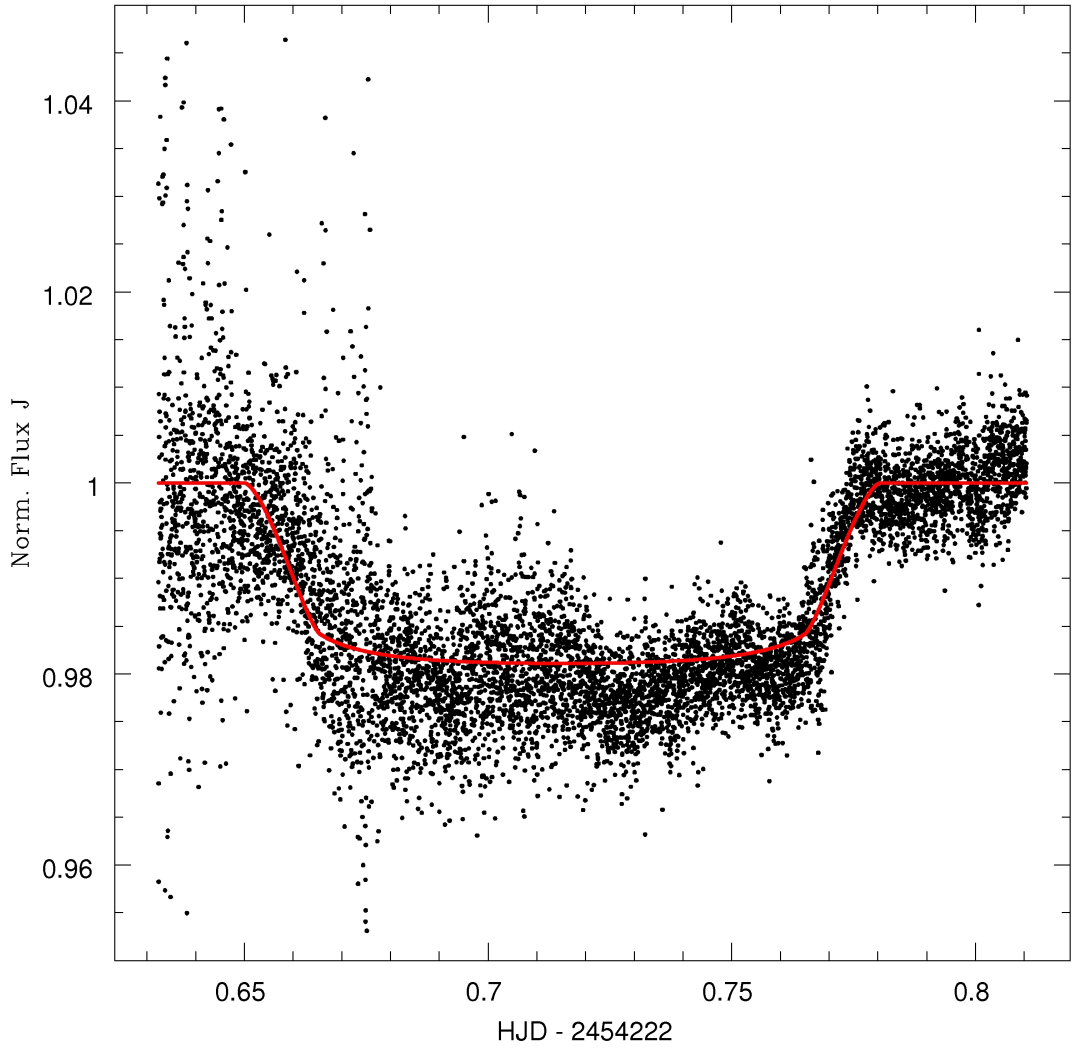



XO-1b

05-05-2007

186095 points

# Results

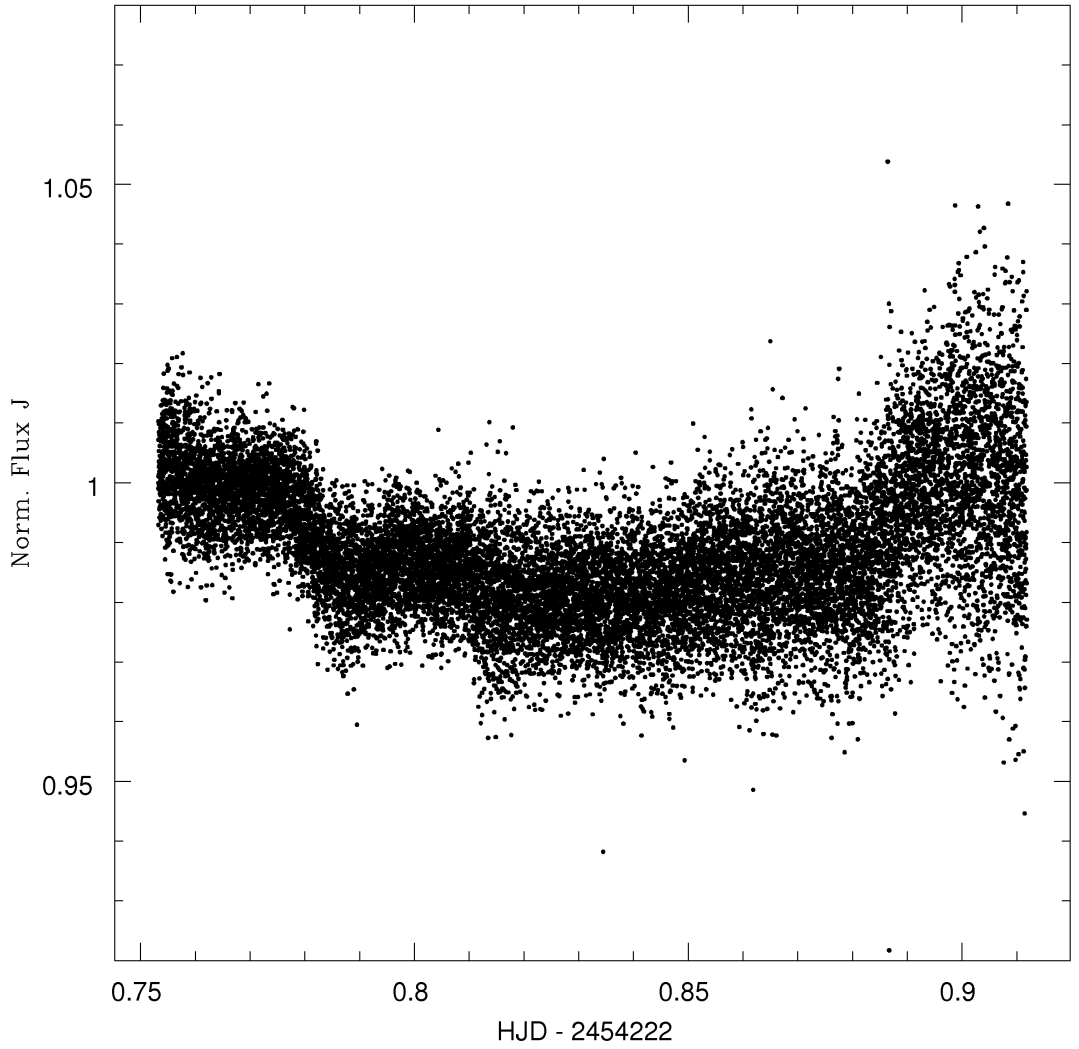



XO-1b

05-05-2007

186095 points

# Results

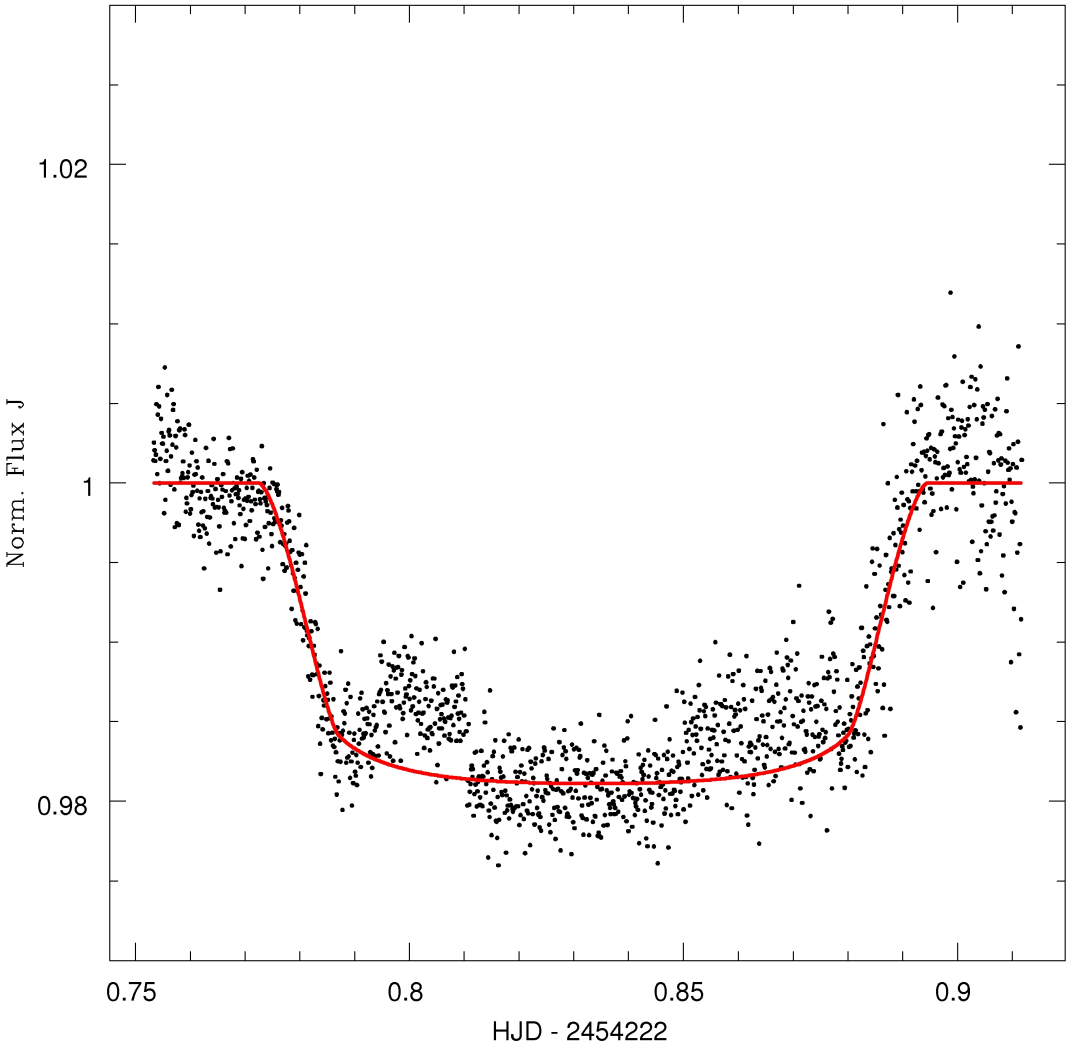



XO-1b

27-04-2007

17066 points

# Results

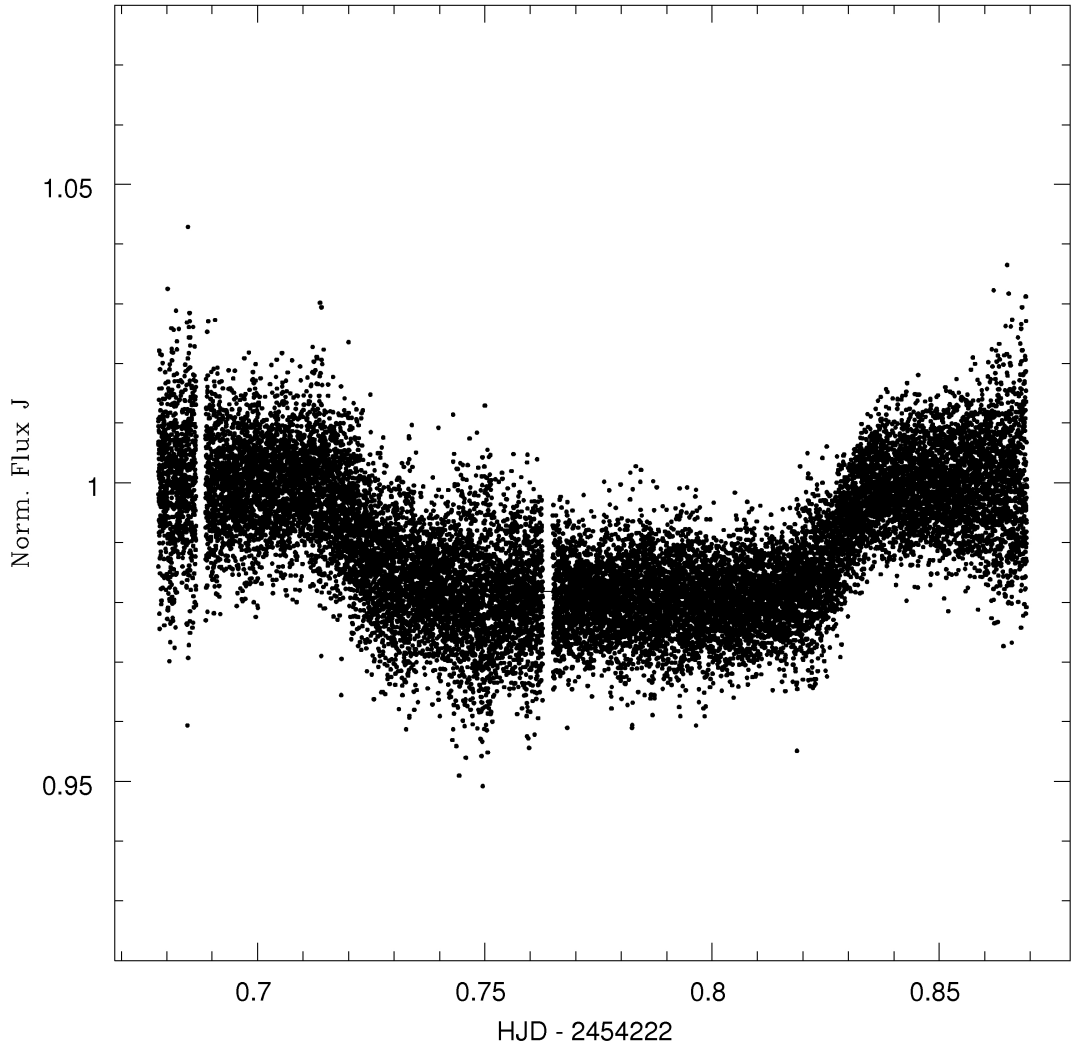



XO-1b

27-04-2007

17066 points

# Results

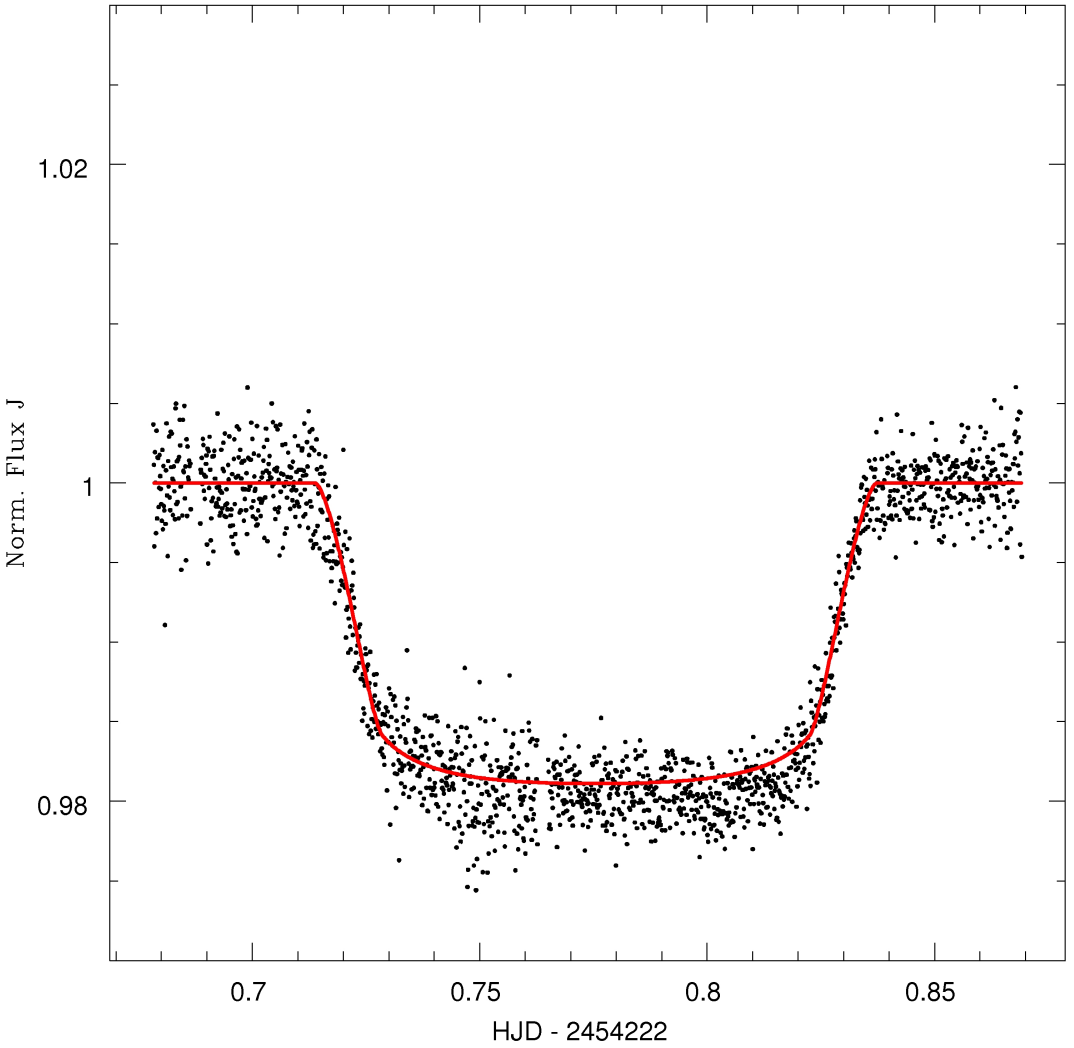



XO-1b

01-05-2007

20100 points

# Results




XO-1b

01-05-2007

20100 points