

An aerial photograph of a city, likely in the Netherlands, showing a grid of streets and several tall buildings. In the background, there are rolling hills or mountains under a hazy sky. The image is faded and serves as a background for the text.

VW Cha

By

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VW Cha: constraining the parameters of a T Tauri disc with VLTI-AMBER

- * Classical T Tauri star
- * Primary of a triple system, with a separation of 0.7" between primary and companion binary
- * Disc most likely truncated by companion binary (Brandeker, 2001)
- * Distance of 160 pc

Context:

*inner regions of CS discs around PMS stars not very well understood, models fail to reproduce SED in the near-IR (cf. Natta 1993, Hartmann 1993)

FIG: vw1

Proposal preparation

- * model: point source (Kflux= 0.44) + ring (0.56)
- * AMBER in K broadband on Kec** sorry, VLTI
- * ATs: B1, C1 and D0, located rather close; delay line 104 meters on B1
- * Under average seeing, an integration time of 10 hours gives a satisfying uv coverage and enough accuracy ($< 1\%$) on the visibility to obtain good results

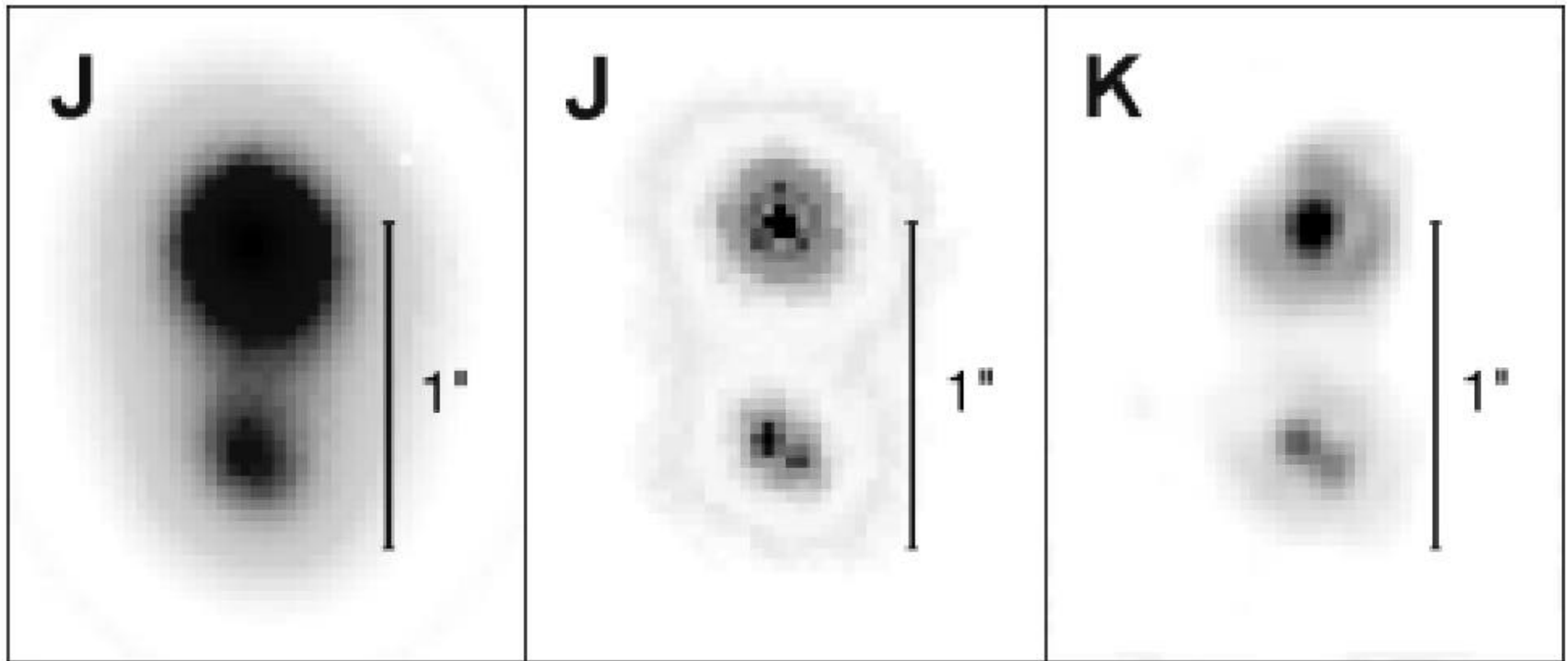
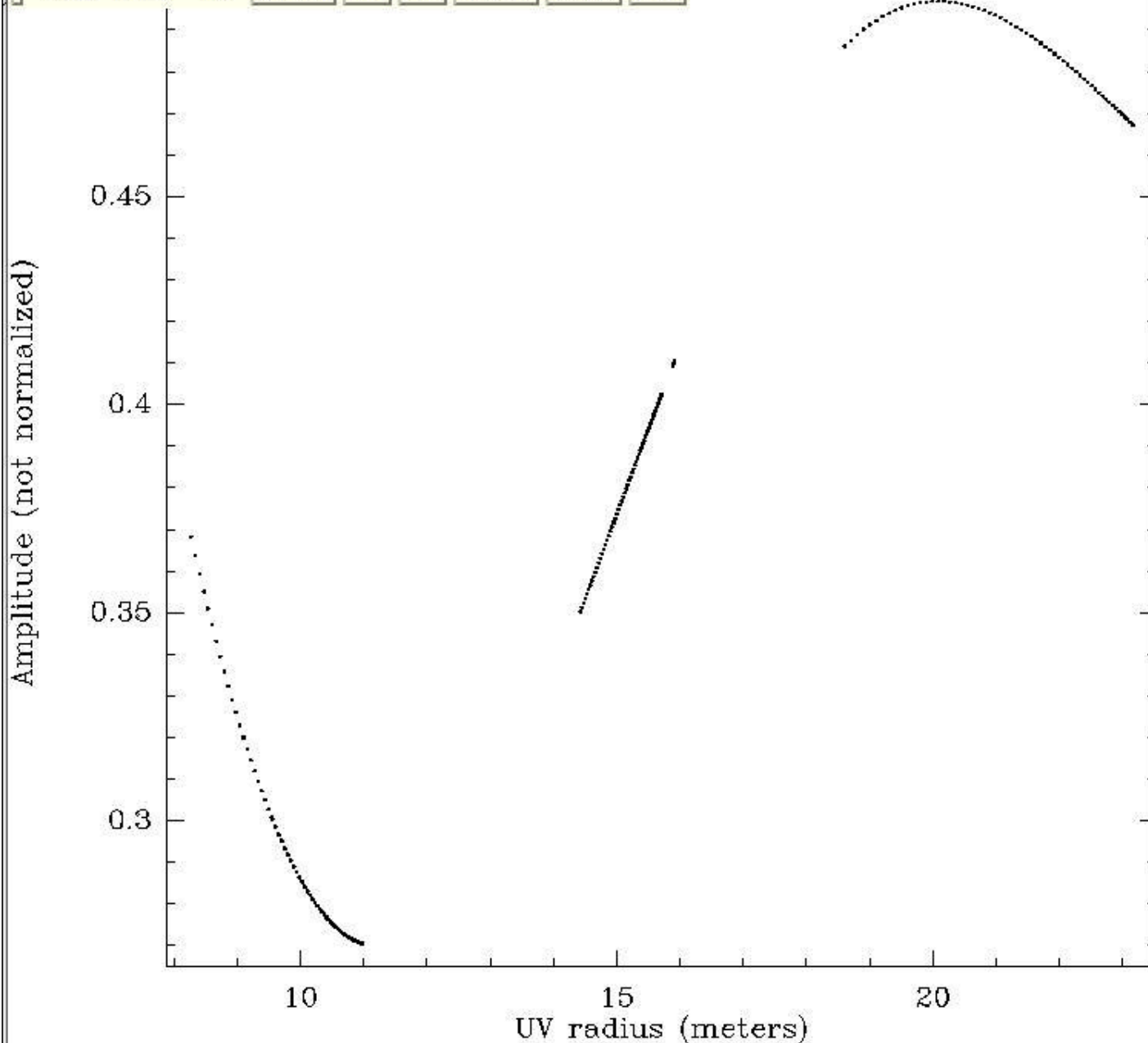


FIG: vw2 vw3

- * Determine the inner radius of the disc in K
- * From phases we can derive whether the disc is symmetric; optimising the settings might even reveal inclination of the system
- * the (far) future is bright: long live the differential amplitude phase closure!! (Brandeker, Verhoelst and Meeus, in preparation)

X <GREG 0

Pencil Marker Luts Hardcopy Draw Zoom Zoom off Refresh Clear



model.tuv

Source:

Line:

$\lambda = 2.2 \mu$

All Channels

AMP vs. RADIUS

Box marking: VELOCITY

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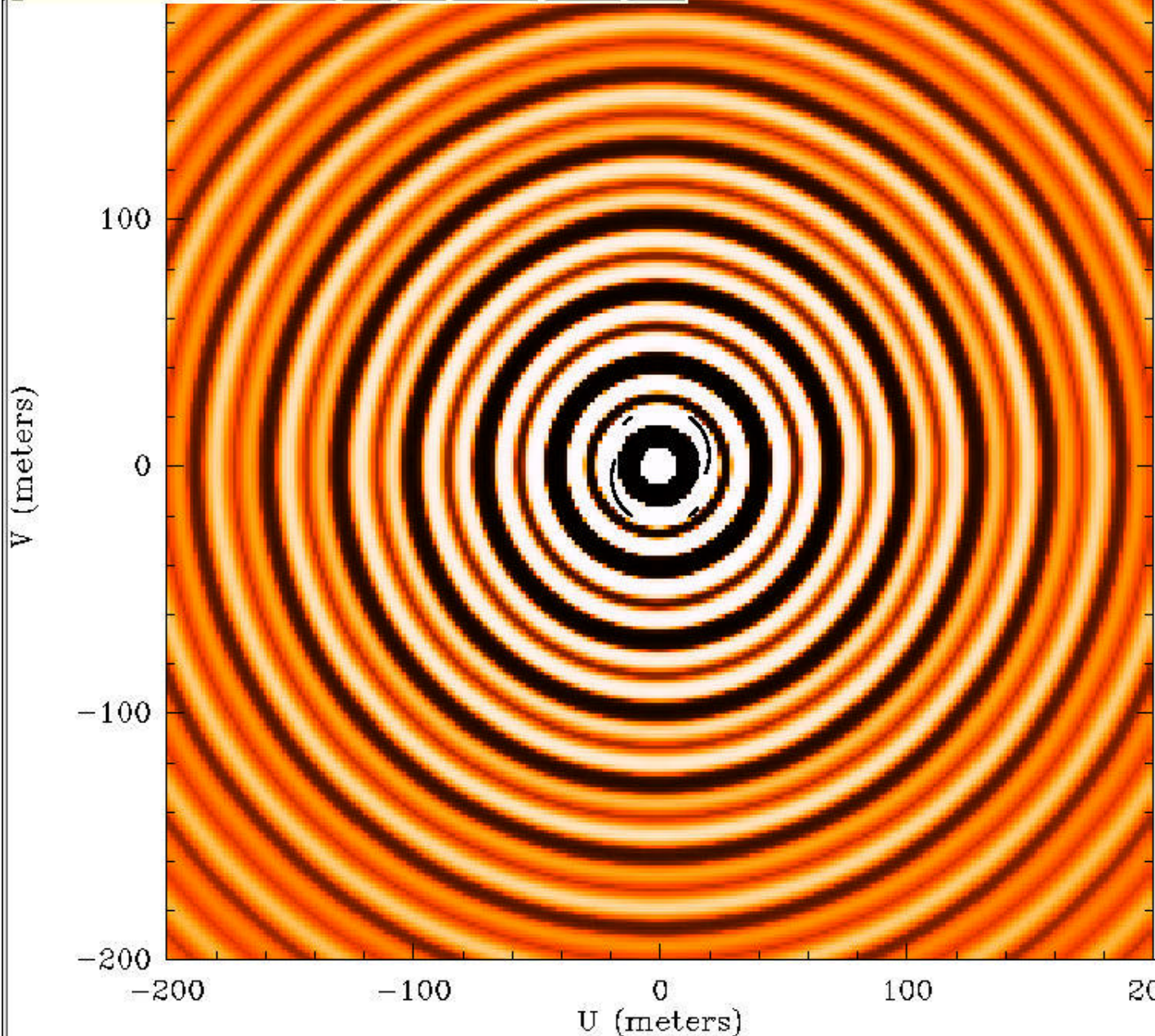
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model.tuv

Source:

Line:

$\lambda = 2.2 \mu$

All Channels

V vs. U

Box marking: VELOCITY

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