

Sebességmérés - fxcor

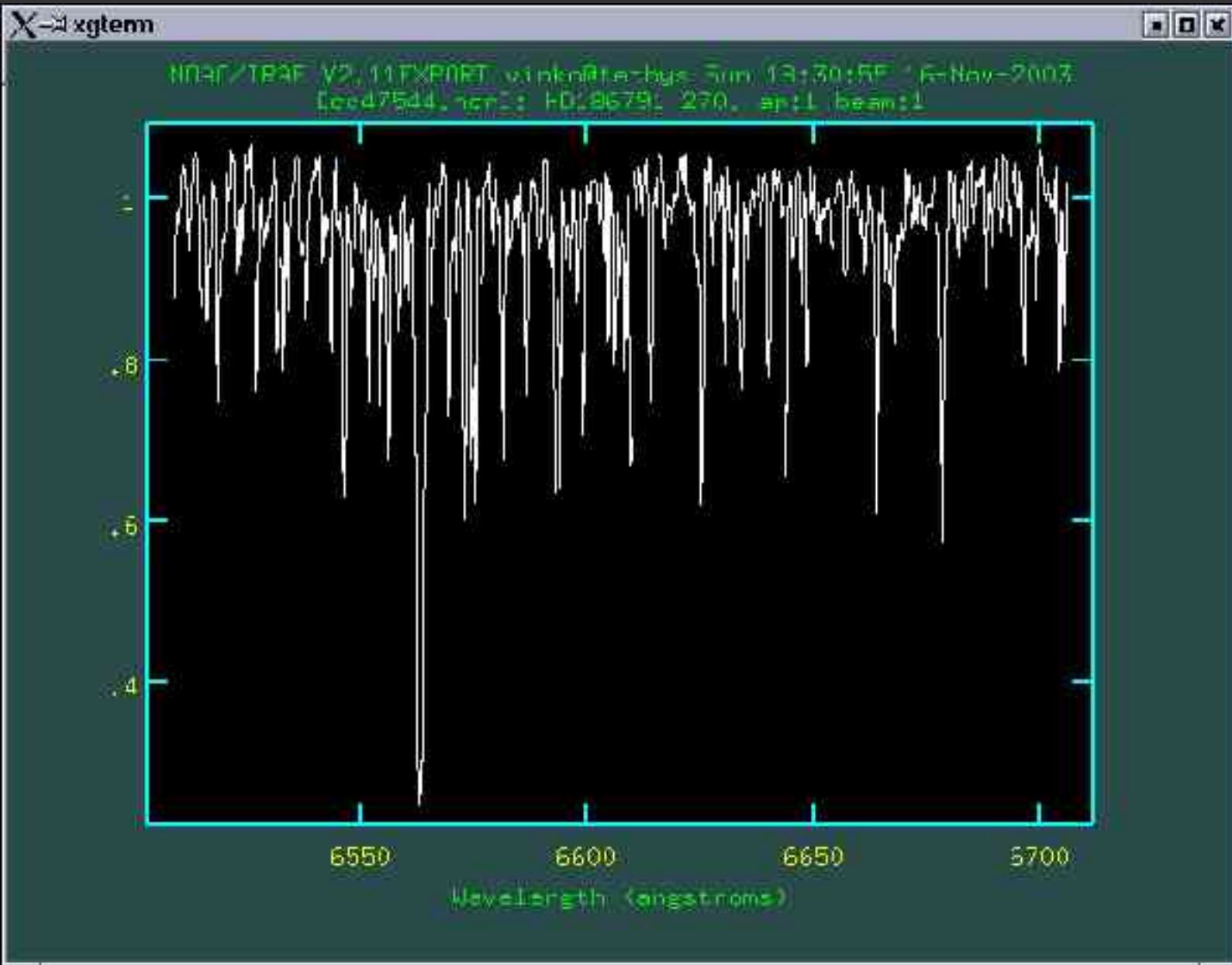
Keresztkorrelációs-függvény

$$c_{fg}(y) = \int_{-\infty}^{\infty} f(x) \cdot g(x-y) dx$$

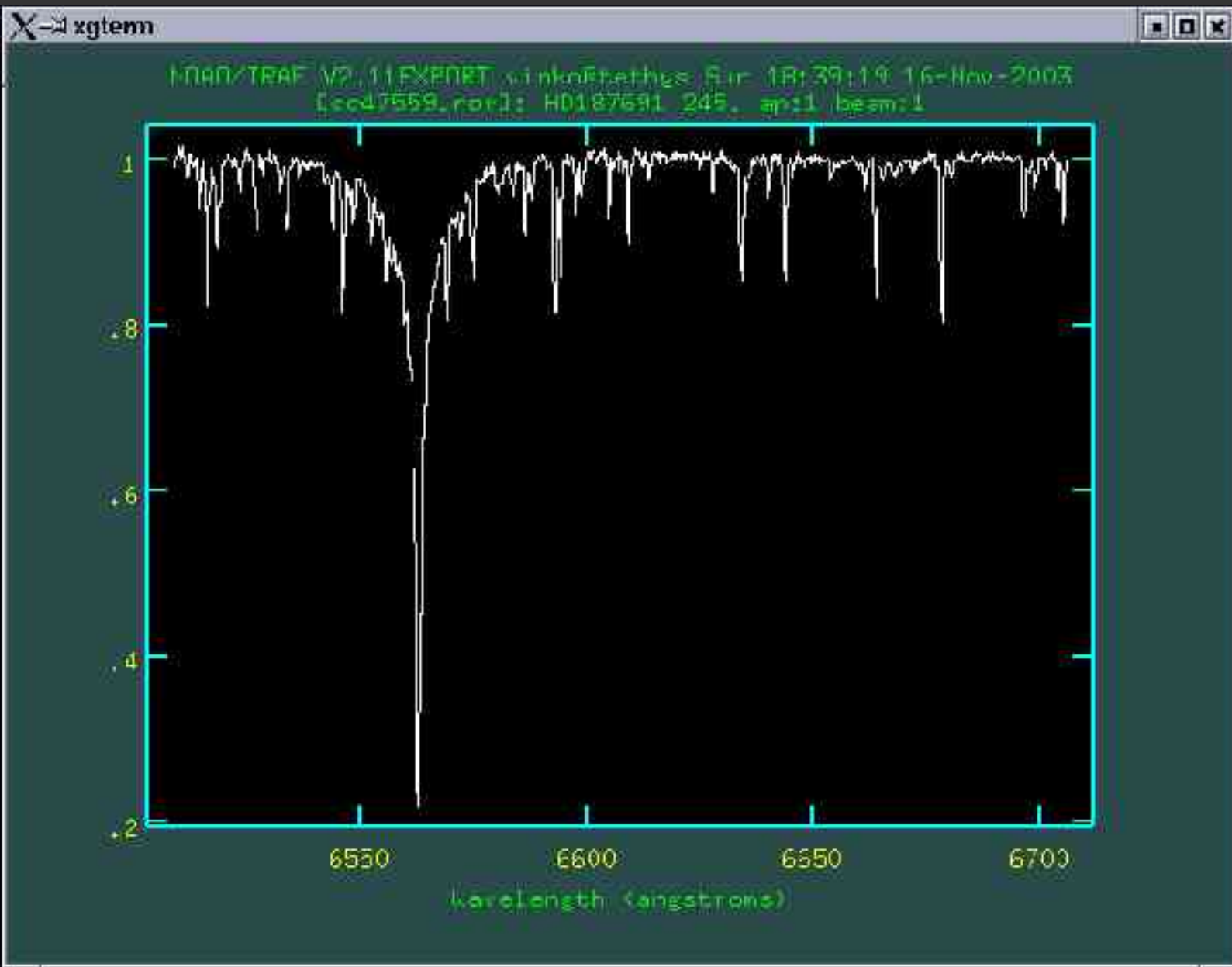
Fourier-transzformálttal:

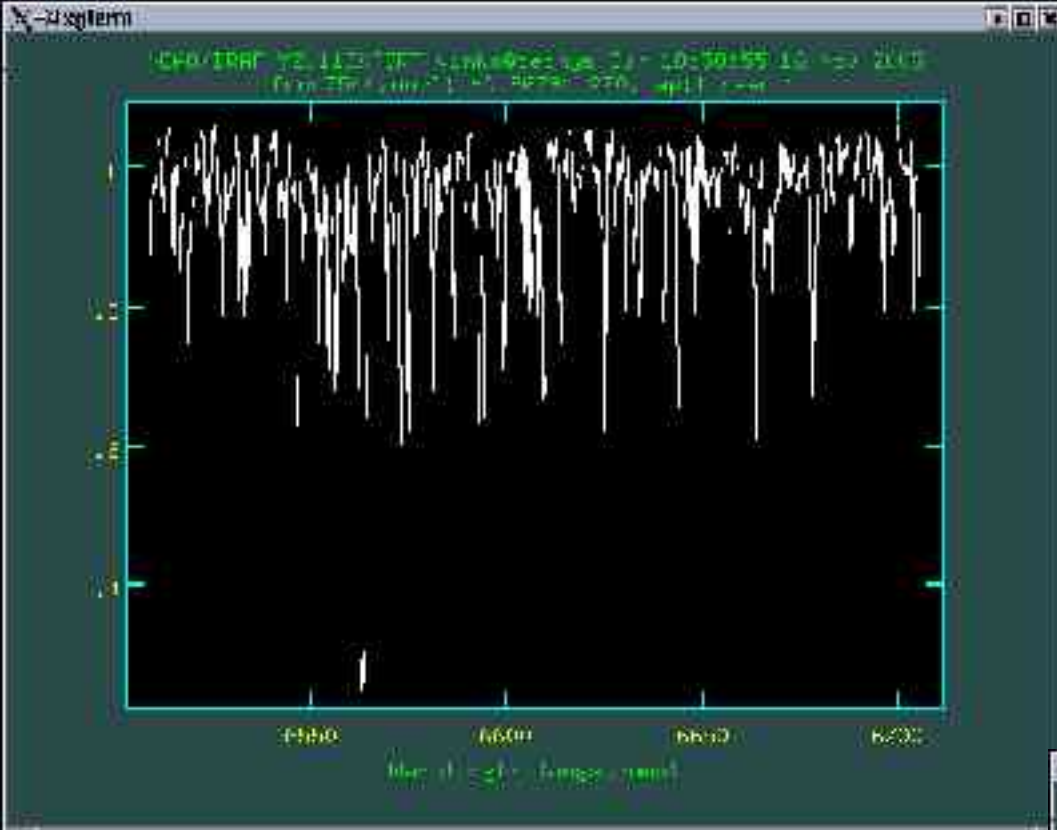
$$C_{fg}(\omega) = F(\omega) \cdot G^{\wedge}(\omega)$$

Spektrum - ismeretlen sebesség?

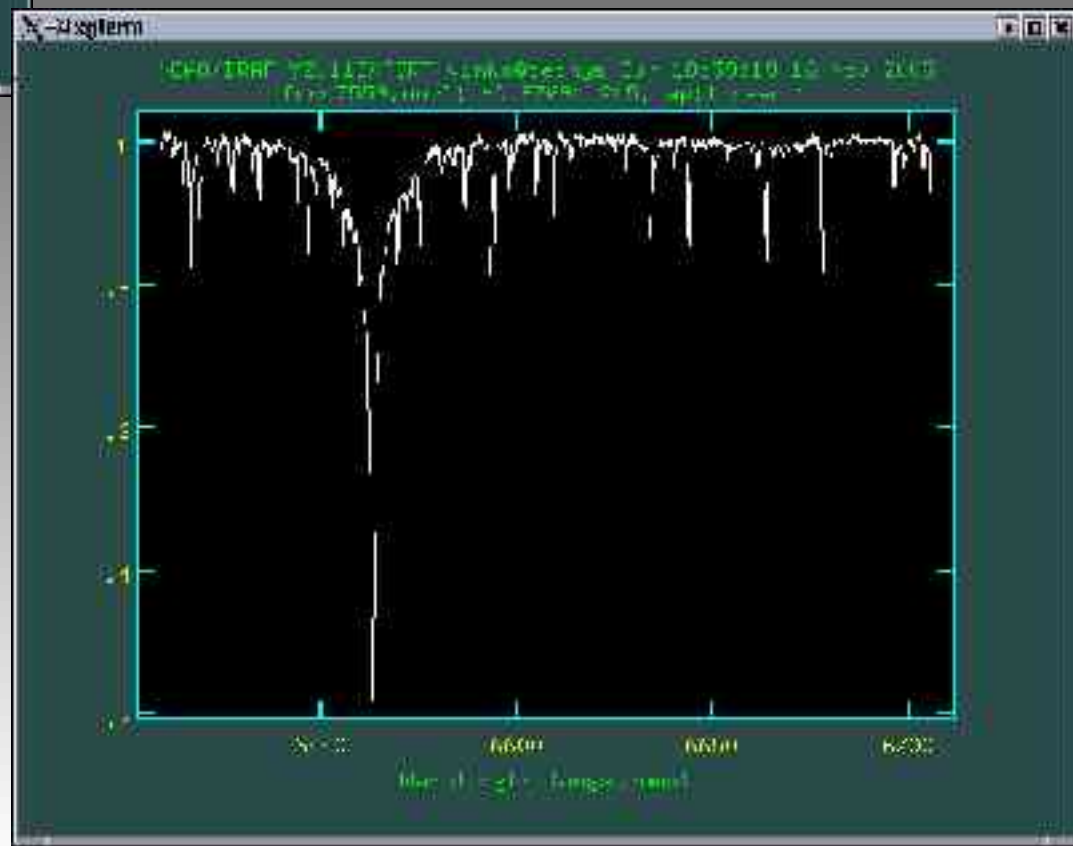


Spektrum - sebesség standard





A két azonos
régiójú spektrum



Kulcsszavak beállítása

Noao => rv => *keywpars*

```
vinko@tethys:~ <2>
  I R A F
  Image Reduction and Analysis Facility

PACKAGE = rv
  TASK = keywpars

(ra      =          RA) Right Ascension keyword
(dec     =          DEC) Declination keyword
(ut      =          TIME-OBS) UT of observation keyword
(utmiddl=          UTMIDDLE) UT of mid-point of observation keyword
(exptime=          EXPTIME) Exposure time keyword
(epoch   =          EPOCH) Epoch of observation keyword
(date_ob=          DATE-OBS) Date of observation keyword

(hjd     =          HJD) Heliocentric Julian date keyword
(mjd_obs=          MJD) Modified Julian Date of observation keyword
(vobs    =          VOBS) Observed velocity keyword
(vrel    =          VREL) Relative velocity keyword
(vhelio  =          VHELIO) Heliocentric velocity keyword
(vlsr    =          VLSR) LSR velocity keyword
(vsun    =          VSUN) Epoch of solar motion keyword
(mode    =          ql)

ESC-? for HELP
```

Sebesség kimérése => fxcor

Noao => rv =>

```
fxcor@vinko@tethys:~ <2>
IRAF
Image Reduction and Analysis Facility
PACKAGE = rv
TASK = fxcor
objects = █ cc47544.nor List of object spectra
template= cc47559.nor List of template spectra
(apertur= *) Apertures to be used
(cursor = ) Graphics input cursor
(continu= both) Continuum subtract spectra?
(filter = none) Fourier filter the spectra?
(rebin = smallest) Rebin to which dispersion?
(pixcorr= no) Do a pixel-only correlation?
(osample= *) Object regions to be correlated ('*' => all)
(rsample= *) Template regions to be correlated
(apodize= 0.2) Apodize end percentage
(function= center1d) Function to fit correlation
(width = INDEF) Width of fitting region in pixels
(height = 0.) Starting height of fit
(peak = no) Is height relative to ccf peak?
More
ESC-? for HELP
```

=> a vizsgált spektrum
=> a "standard" spektrum

=> kontinuum normált-e a spektrum

=> terület a vizsgált spektrumon
=> terület a standard spektrumon

Sebesség kimérése => fxcor

Noao => rv =>

```
fvinko@tethys:~ <2>
IRAF
Image Reduction and Analysis Facility
PACKAGE = rv
TASK = fxcor
More
(minwidth=          3.) Minimum width for fit
(maxwidth=         31.) Maximum width for fit
(weights=           1.) Power defining fitting weights
(backgro=           0.) Background level for fit
(window =          INDEF) Size of window in the correlation plot
(wincent=          INDEF) Center of peak search window

(output =           vel) Root spool filename for output
(verbose=          ) Verbose output to spool file?
(imupdat=          no) Update the image header?
(graphic=          stdgraph) Graphics output device

(interac=          yes) Interactive graphics?
(autowri=          yes) Automatically record results?
(autodra=          yes) Automatically redraw fit results?
(ccftype=          image) Output type of ccf
More
ESC-? for HELP
```


Sebesség kimérése => fxcor

Noao => rv =>

```
X-trinko@tethys:~ <2>
IRAF
Image Reduction and Analysis Facility

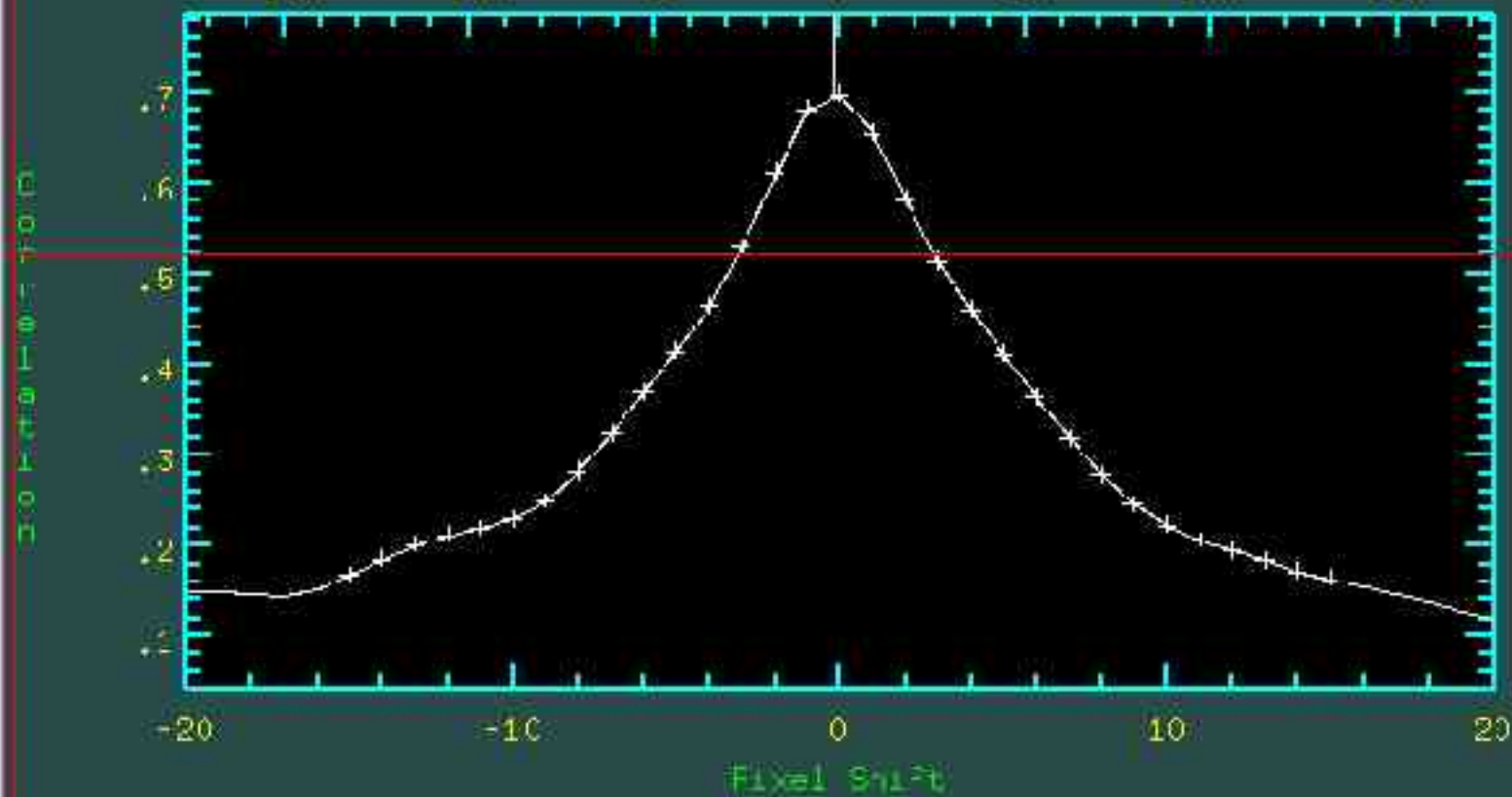
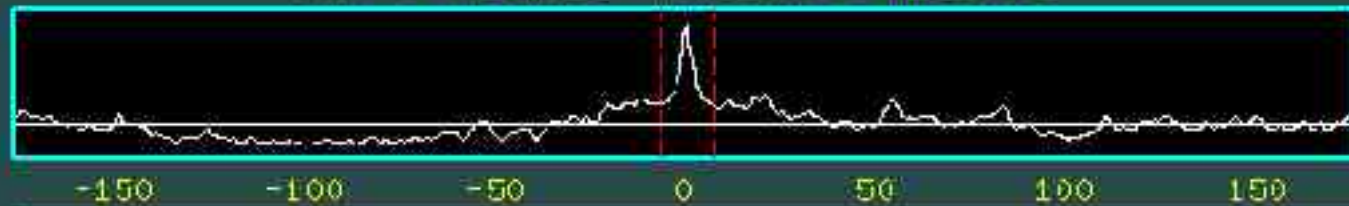
PACKAGE = rv
TASK = fxcor
More
(observa= █          ddo) Observation location database
(continp=           ) Continuum processing parameters
(filtpar=           ) Filter parameters pset
(keywpar=           ) Header keyword translation pset

(mode =             ql)

ESC-? for HELP
```

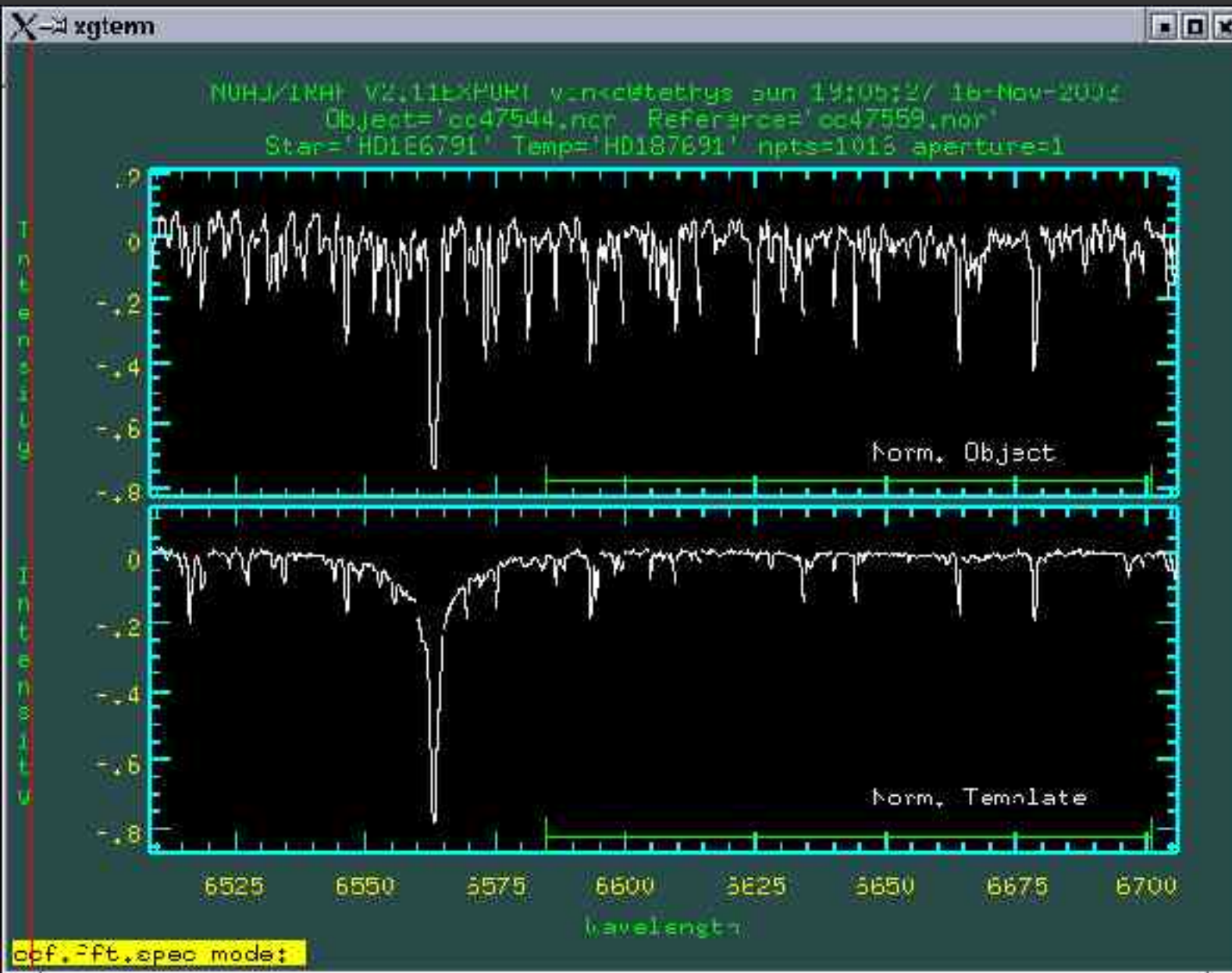
xgtem

N0A0/IRAF V2.11EXPORT vlnkc@tethys Sun 19:04:53 16-Nov-2003
Object='cc47544.nor' Temp='cc47559.nor' npts=1024 aperture=1
Star = 'HD186791' Template = 'HD187691'



HJD= 672.5951 FWHM=INDEF Vr=-1.720 Vo=6.029 Vh=-2.076 +/- INDEF

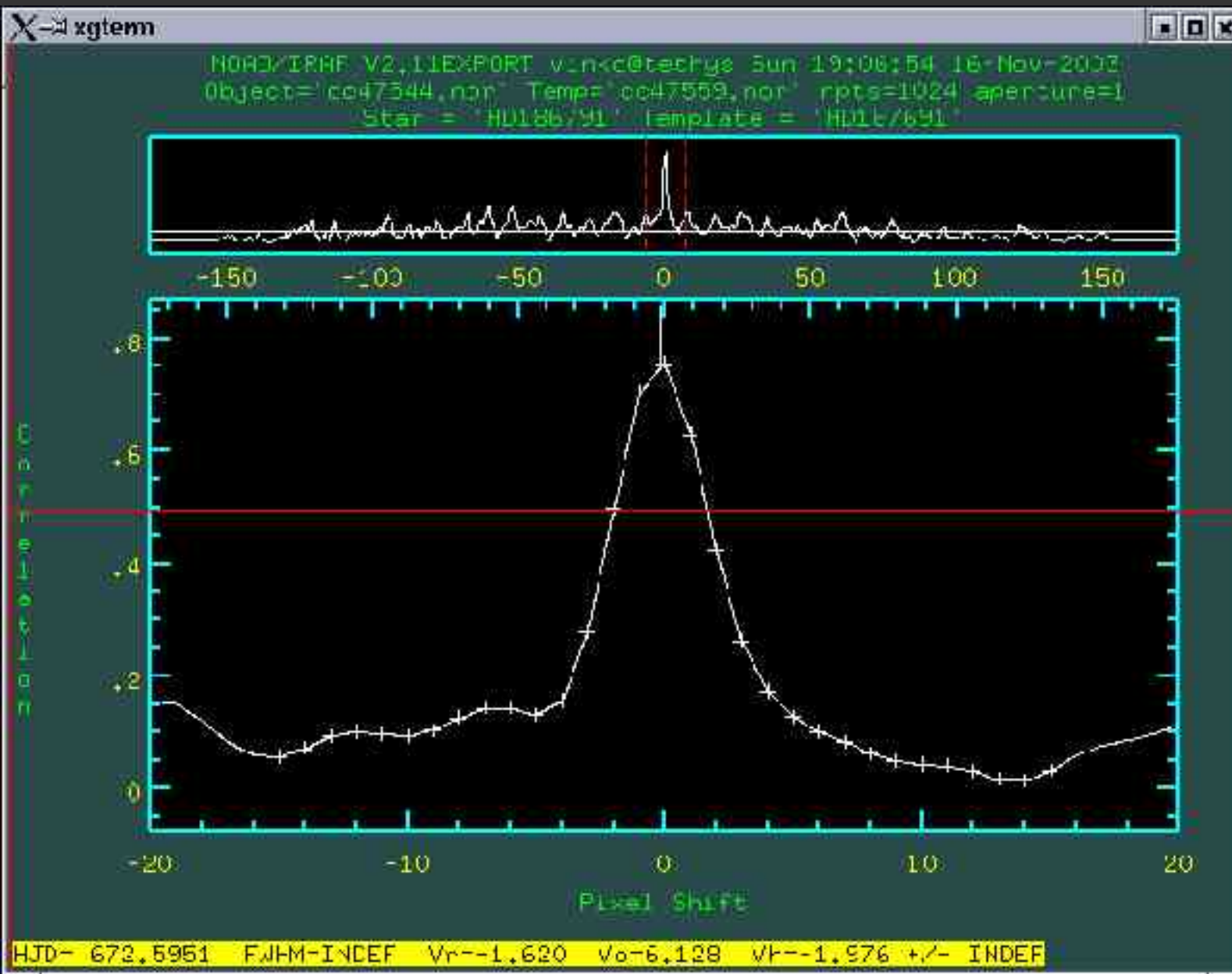
" Spektrum mód "



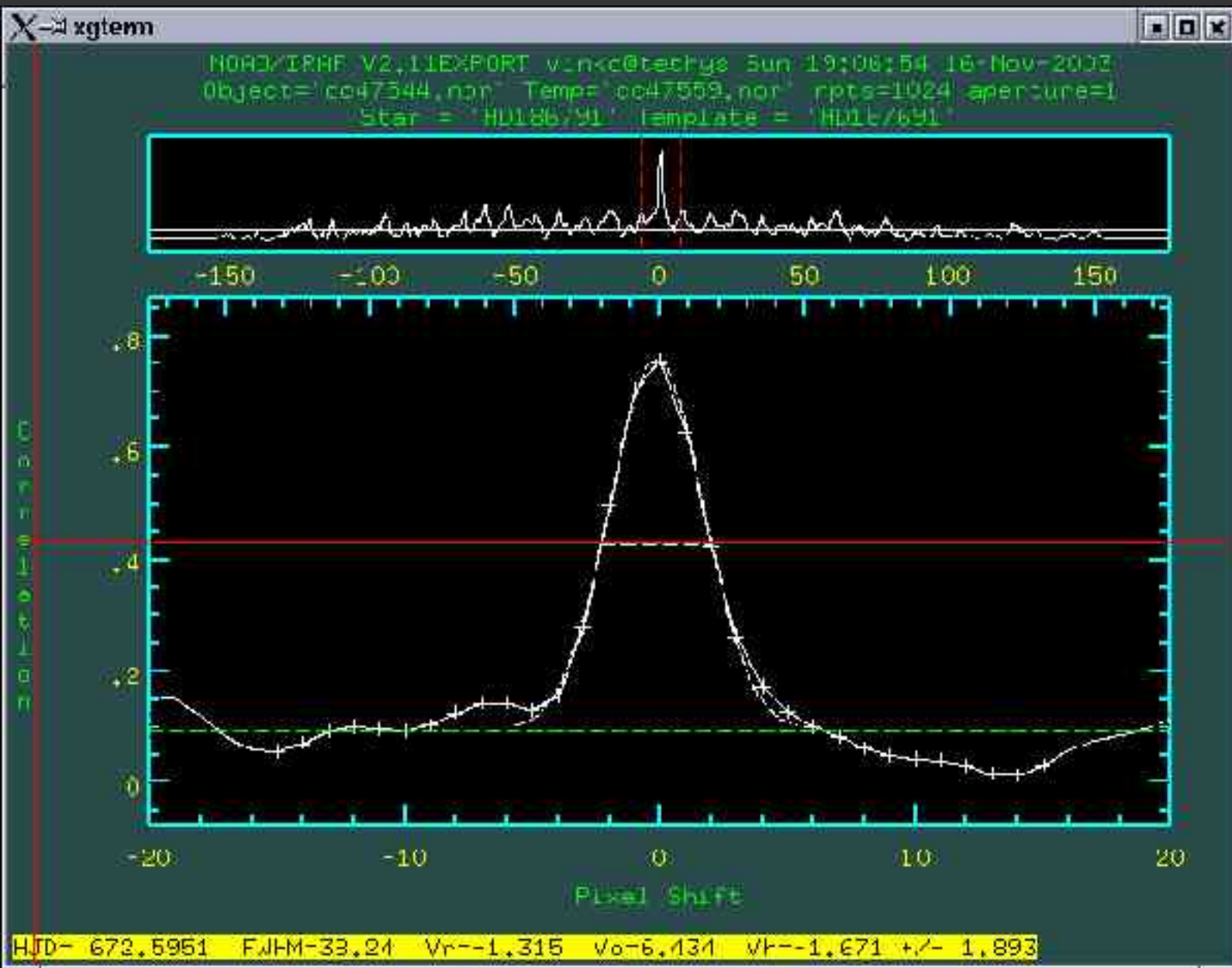
2 x b : szakasz
kijelölése

x : visszatérés az
előz? ablakhoz

Új illesztés



Függvény változtatása



Függvény változtatása

