

getData and SSA Postprocessing

(case study on Ondřejov spectra)

Petr Škoda

Astronomical Institute Academy of Sciences Ondřejov
Czech Republic

Tomáš Peterka

Faculty of Informatics, Czech Technical University, Prague

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CZECH TECHNICAL UNIVERSITY IN PRAGUE
FACULTY OF INFORMATION TECHNOLOGY
DEPARTMENT OF SOFTWARE ENGINEERING



Bachelor's thesis

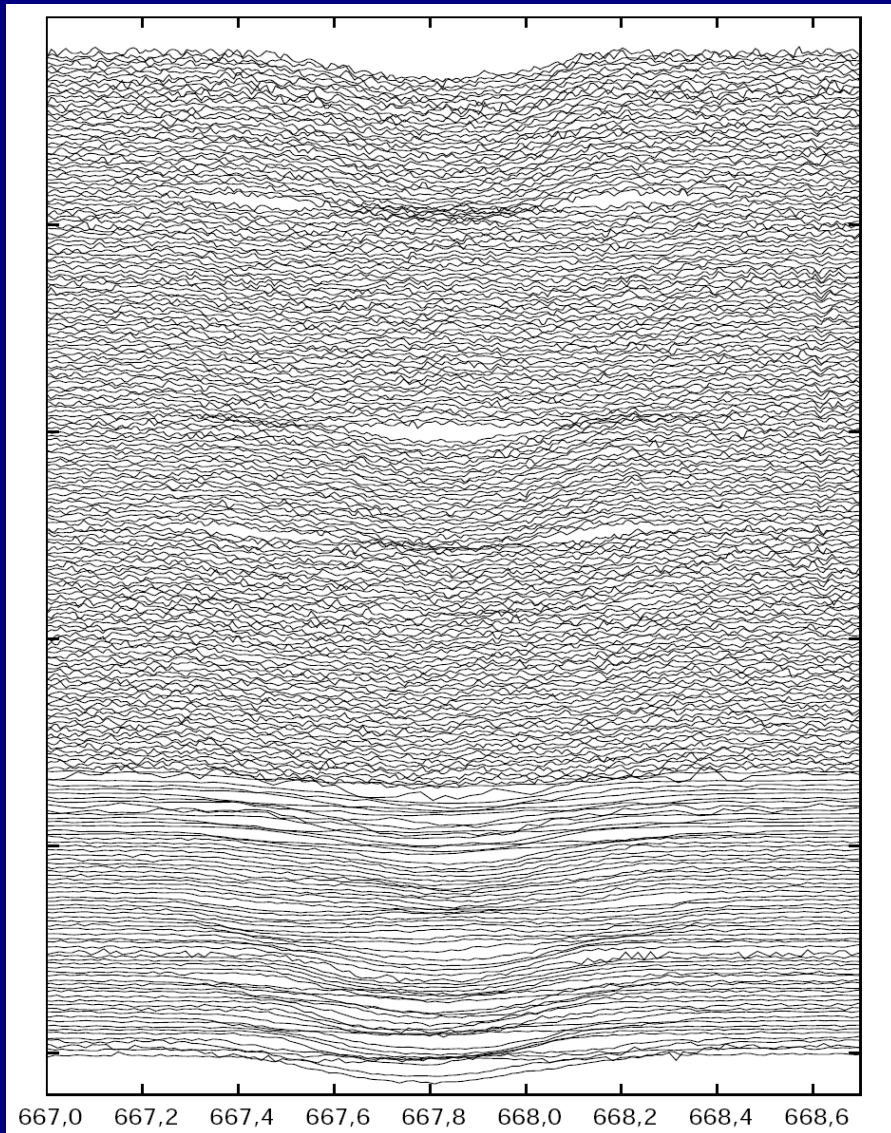
**VO-compatible post-processing proxy server
of stellar spectra**

Tomáš Peterka

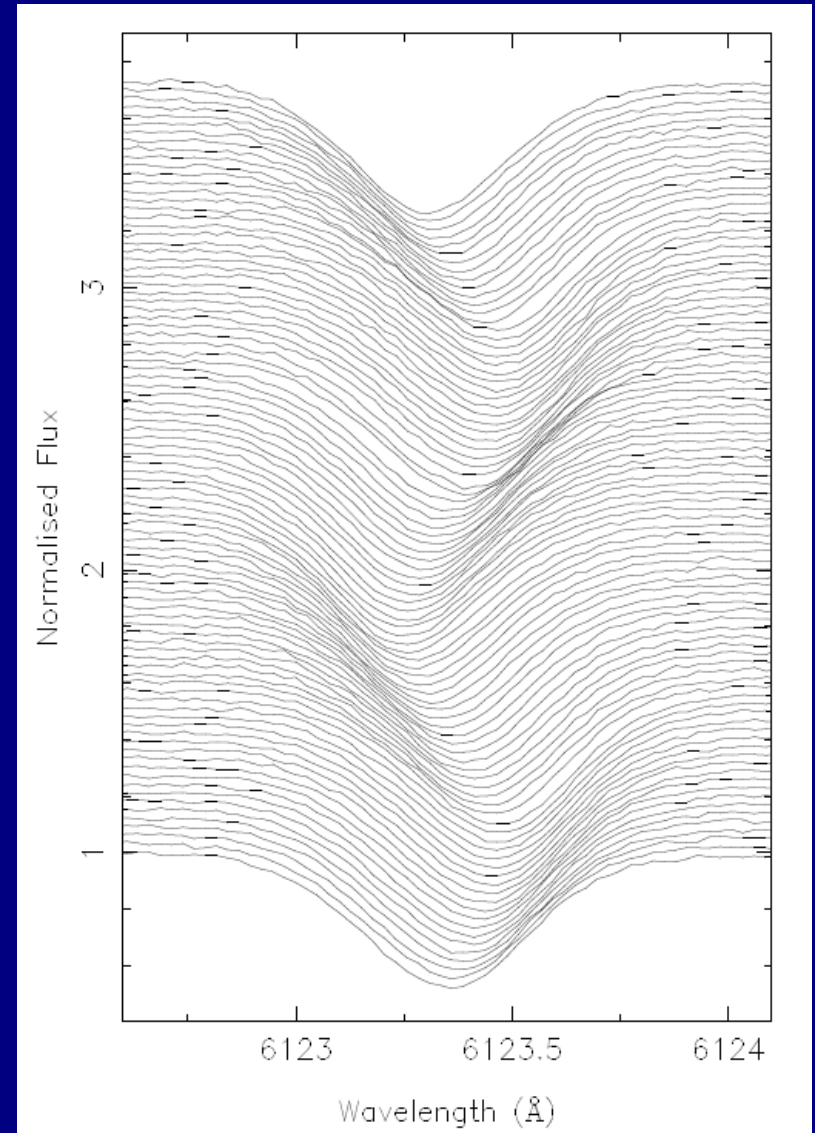
Supervisor: Dr. P. Škoda PhD.

21st May 2012

Motivation - LPV



V436 Per Janík 2003

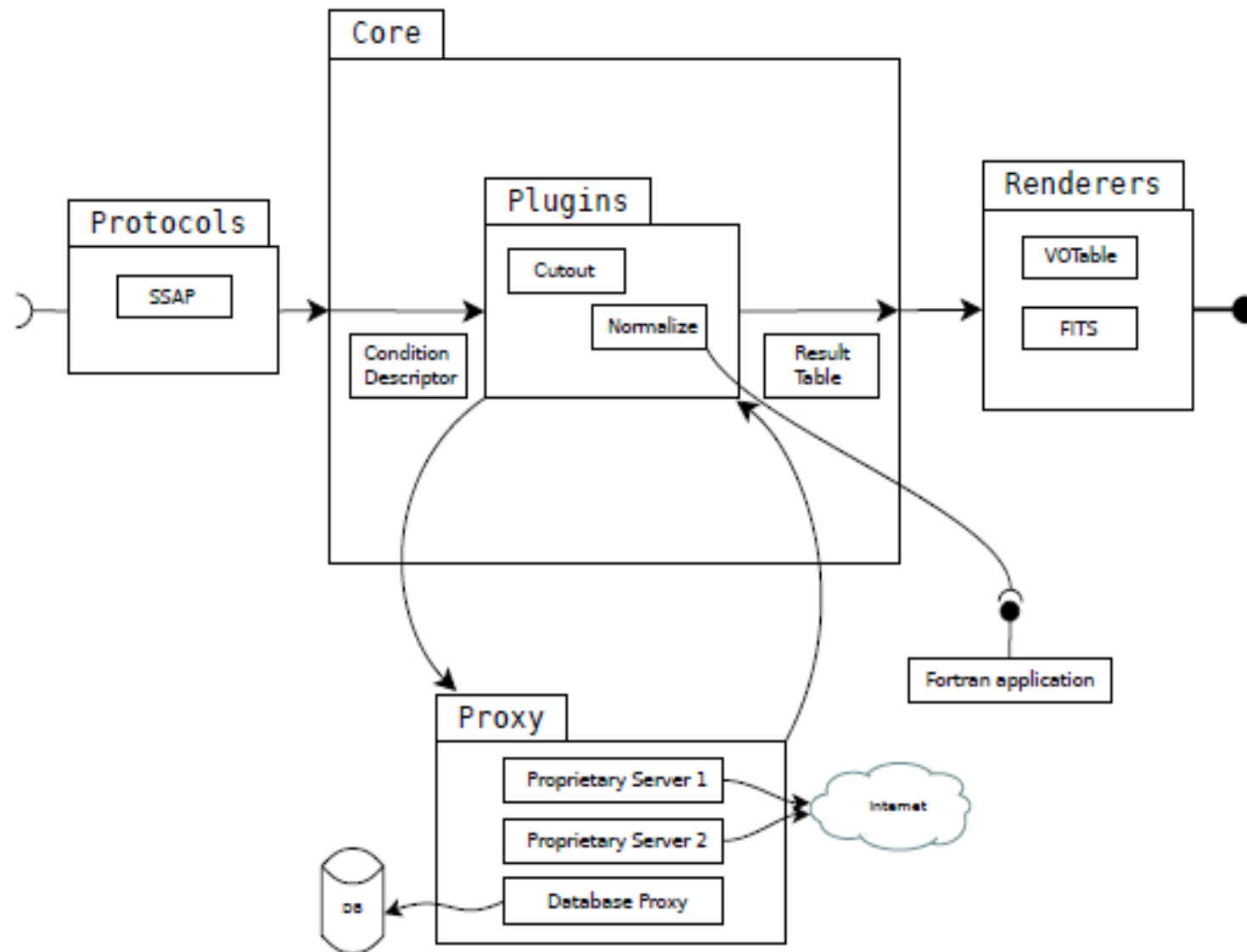


Rho Pup, Aerts et al.

SSA Postprocessing (DaCHS)

- Virtual generation of data (SSAP)
- Cutouts BAND=6550e-10/6580e-10
- Rescaling / continuum normalization (modus)
 - FLUXCALIB=normalize
- Convolution – resolution change SPECGRP=3000
- FORMAT on the fly (multiple instances of query result)
 - SDM FITS generation – FORMAT=fits
 - SDM VOTable – FORMAT=votable
 - Original 1D FITS (for IRAF) - FORMAT=native

SSA Proxy



Select or Process ?

GetData should help

<http://ssaproxy.asu.cas.cz/heros/q/ssa/ssap.xml>

<http://ssaproxy.asu.cas.cz/heros/q/pssa/ssap.xml>

FLUXCALIB=normalized - separate files NORMxxxx.fit
cutouts applied for pssa

<http://ssaproxy.asu.cas.cz/ccd700/q/ssa/ssap.xml>

<http://ssaproxy.asu.cas.cz/ccd700/q/pssa/ssap.xml>

FLUXCALIB=normalized – calls division by (modus) – rescale
AND cutouts on pssa

SSA Postprocessing (DaCHS)

The accref of file has parameters for postproc

REPLACE getproduct with getData and filename PUBID

[http://ssaproxy.asu.cas.cz/getproduct/ccd700/data/4her/6255-6767/mh050025.fits?
BAND=6540e-10%2F6580e-10&FLUXCALIB=normalized](http://ssaproxy.asu.cas.cz/getproduct/ccd700/data/4her/6255-6767/mh050025.fits?BAND=6540e-10%2F6580e-10&FLUXCALIB=normalized)

Target names troubles (DaCHS)

Why to specify object with TARGETNAMES ?

Coordinates change – planets

Coords secret (KEPLER15)

Coords not precise (HR1847B)

Special survey not in resolver (GALEX)

guess name – WILDTARGET (+WILDTARGETCASE)

get list of all – REQUEST=getTargetNames (MAXREC)

DEMO in SPLAT-VO