



ASTERICS Technology Forum 2018/04/16



## Time series - next steps

April 2018

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April 2018





Comparison using the same data produced good results.

90% similar      10% differences

<FIELD .... utype="xxxx" >	<FIELD .... utype="xxxx" >
<FIELD .... utype="abcd" >	<FIELD .... utype="jklm" >
<FIELD .... utype="xxxx" >	<FIELD .... utype="xxxx" >
<FIELD .... >	<FIELD .... >
<FIELD .... >	<FIELD .... >

(I think) it made it easier to see where the differences are.





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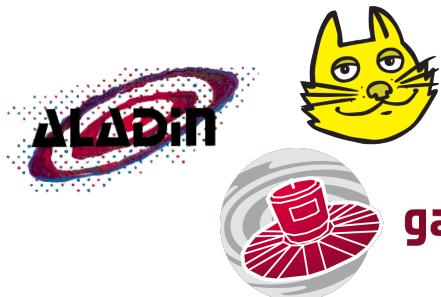


Eventually .. for a standard, we need two independent implementations.

Time-series is so diverse

Time-series of ..      points                          light-curves  
                              lines      images                          spectra

Unlikely that the reference implementations will cover all the areas in the same detail.



Each implementation will concentrate on their particular specialty.

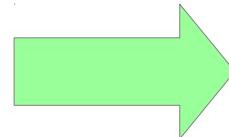


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## Web-form application #1

Collects details of  
the time series data

Generates VOTable  
header

```
<FIELD .... utype="xxxx" >  
<FIELD .... utype="abcd" >  
<FIELD .... utype="xxxx" >  
<FIELD .... >  
<FIELD .... >
```

Generate

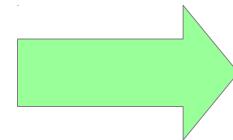




## Web-form application #2

Upload VOTable header

```
<FIELD .... utype="xxxx" >  
<FIELD .... utype="abcd" >  
<FIELD .... utype="xxxx" >  
<FIELD .... >  
<FIELD .... >
```



Generates text description  
of the data fields

xfgdggsdfg

100

1 ... 10

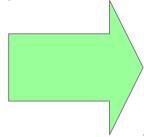
Upload



## Round trip comparison

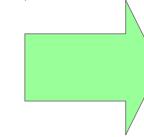
### Web form input

xfgdggsdfg
100
1 ... 10



### VOTable header

```
<FIELD .... utype="xxxx" >  
<FIELD .... utype="abcd" >  
<FIELD .... utype="xxxx" >  
<FIELD .... >  
<FIELD .... >
```



### Text description

xfgdggsdfg
100
1 ... 10

Different developers

Different languages

Interaction between the components is defined by the data model.

Two independent inter-operable implementations, validating the data model, covering all the use-cases equally.



## Standard templates for key use cases

I just want :

Simple light curve 

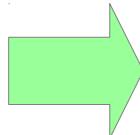
Simple xxxx 

Simple xxxx 

Simple xxxx 

Web form input

xfgdggsdfg	
100	
1 ... 10	

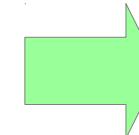


VOTable header

```
<FIELD .... utype="xxxx" >
<FIELD .... utype="abcd" >
<FIELD .... utype="xxxx" >
<FIELD .... >
<FIELD .... >
```

Text description

xfgdggsdfg
100
1 ... 10



Reference implementation for each use case