

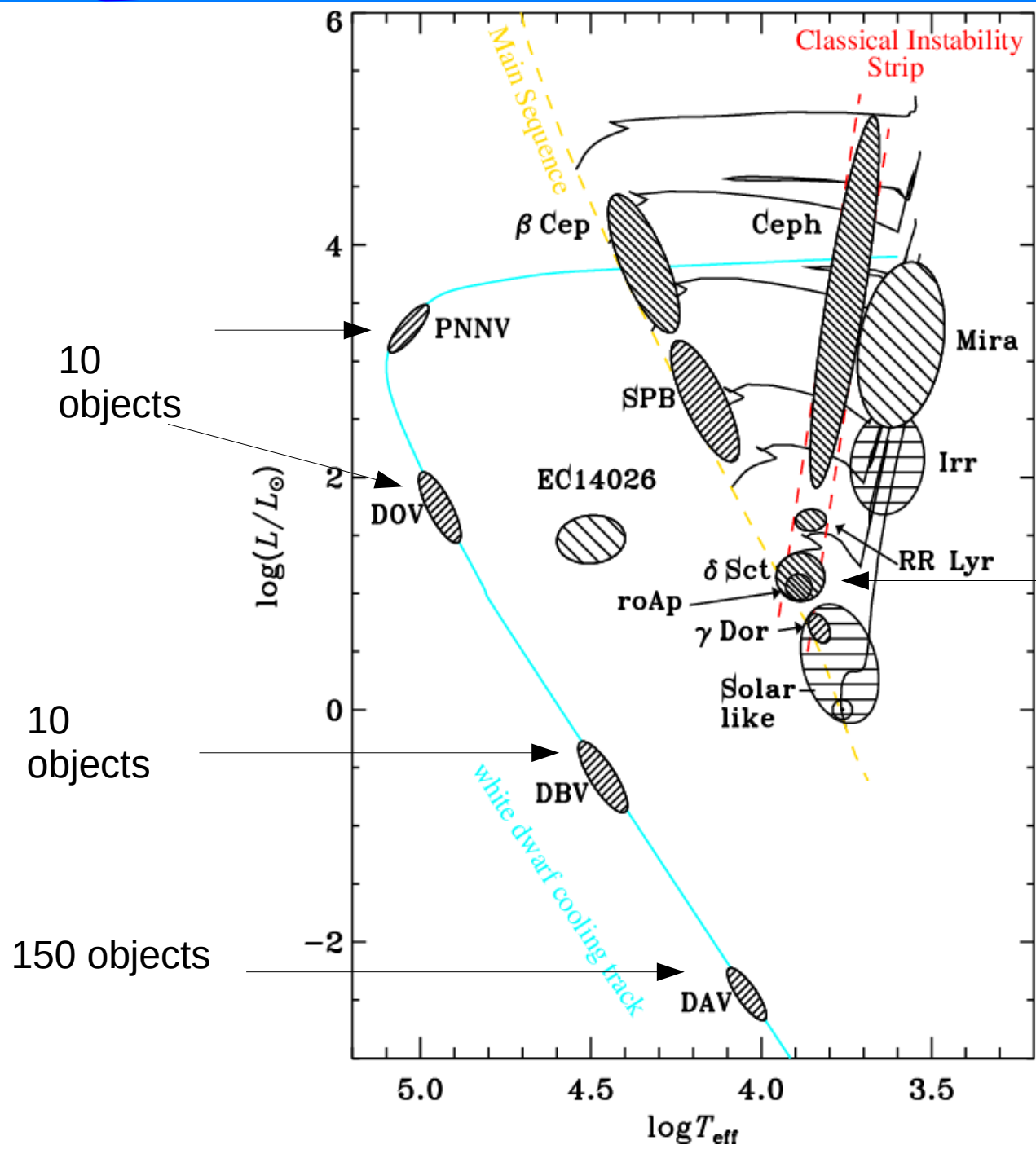
Identificação de Estrelas Variáveis nas Observações Regulares do J-PLUS e S-PLUS

Ou,

COMO TIRAR LEITE DE PEDRA

Everton Botan

Orientador: Antônio Kanaan, Fábio Herpich,
William Schoenell

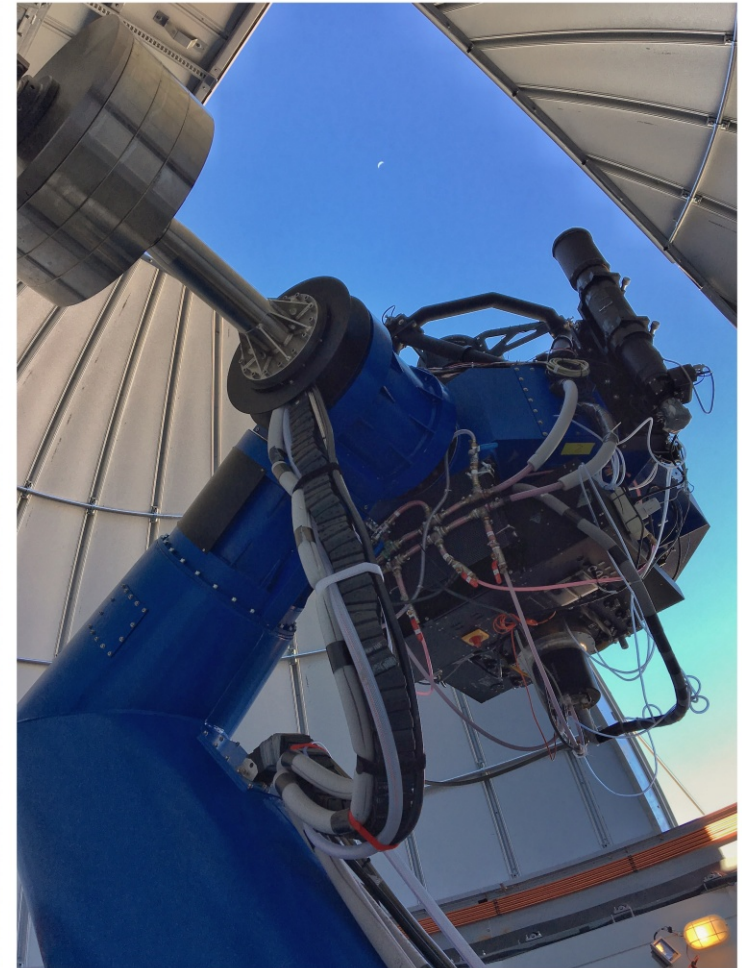
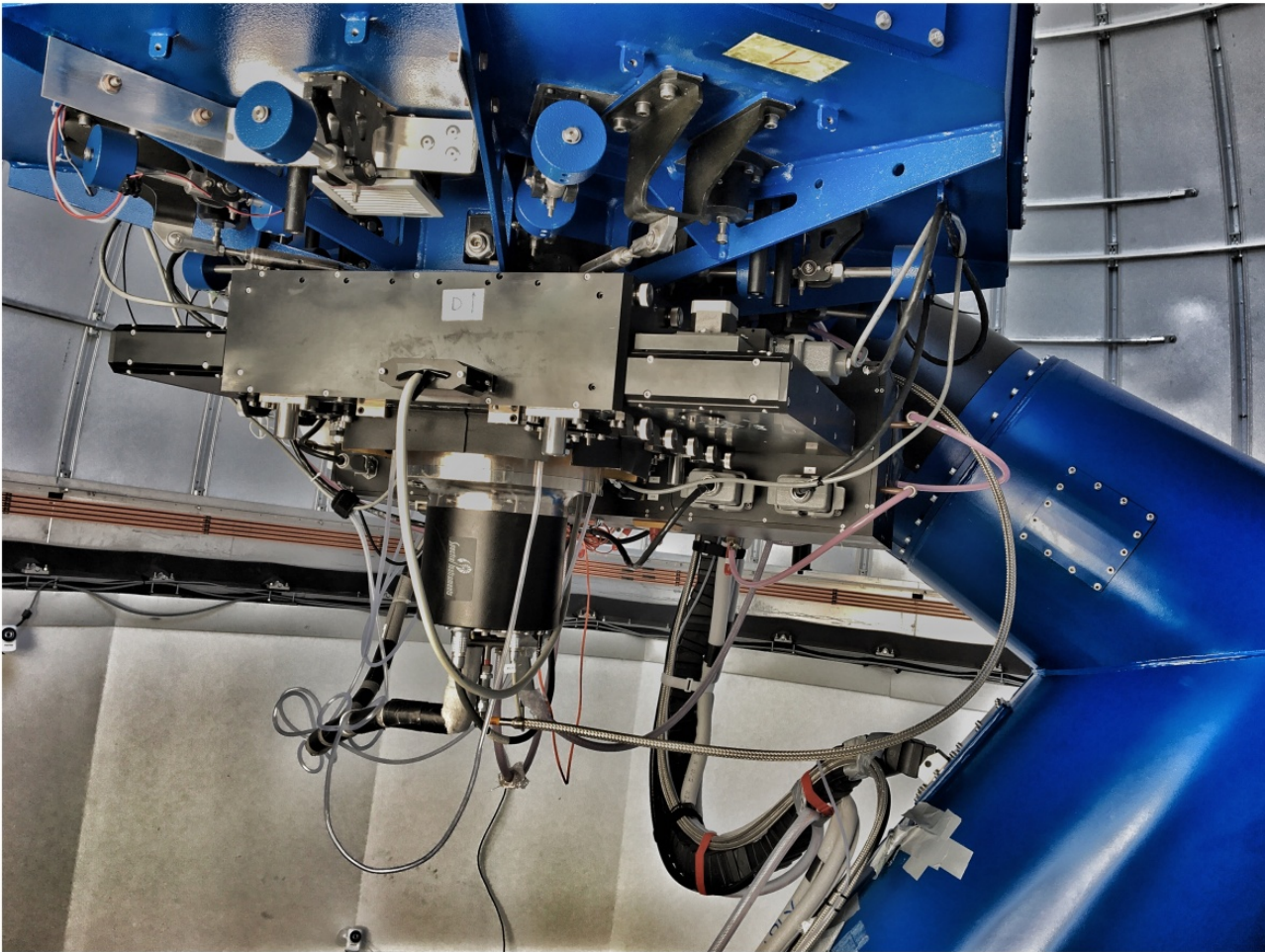


roAp minutes
 del Sct ~hours

Do começo:

J-PLUS: Javalambre Photometric Local Universe Survey

S-PLUS: Southern Photometric Local Universe Survey

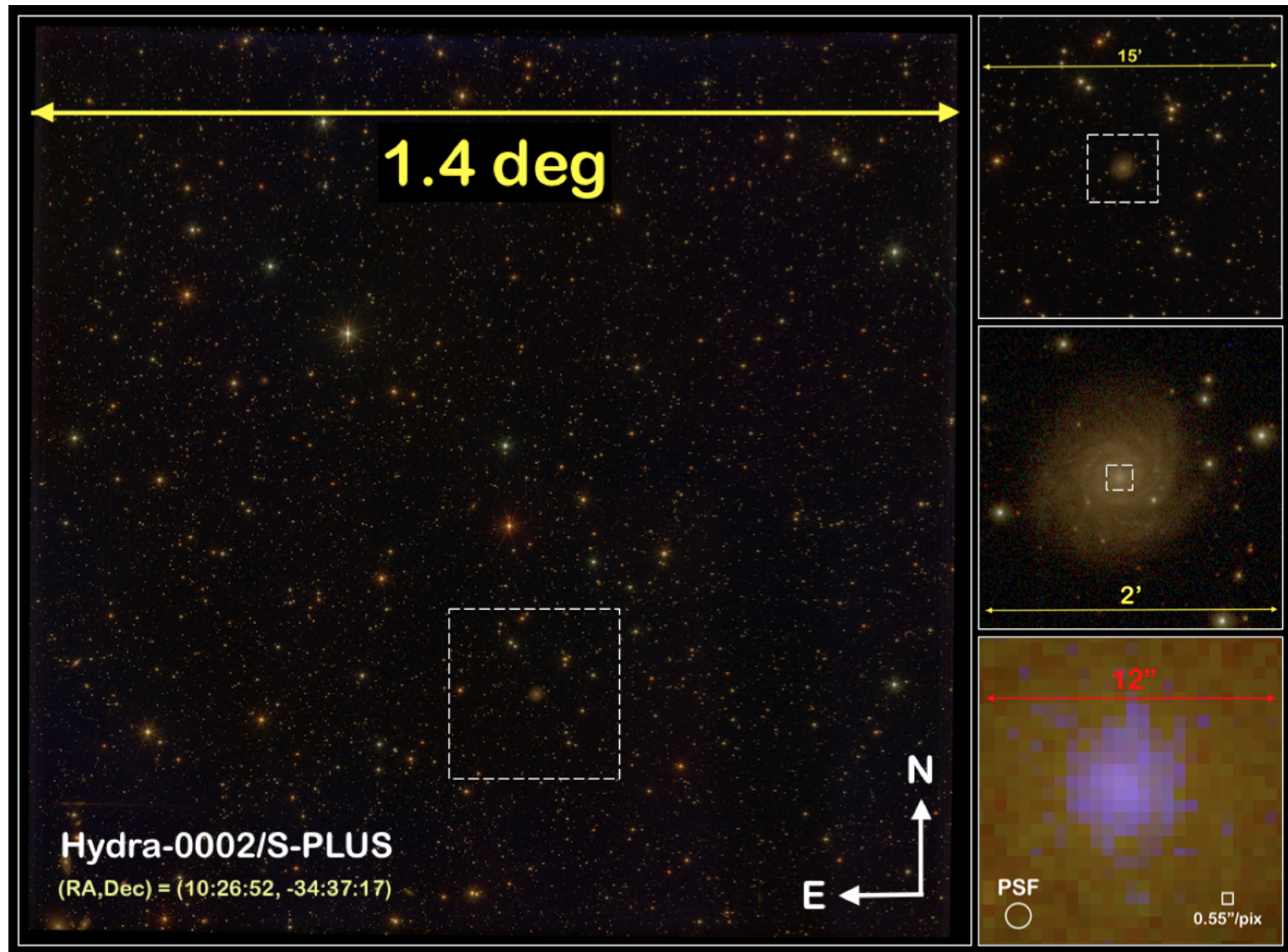


2 telescópios robóticos de 80 cm.

Fonte: <http://www.splus.iag.usp.br/t80s-telescope/>

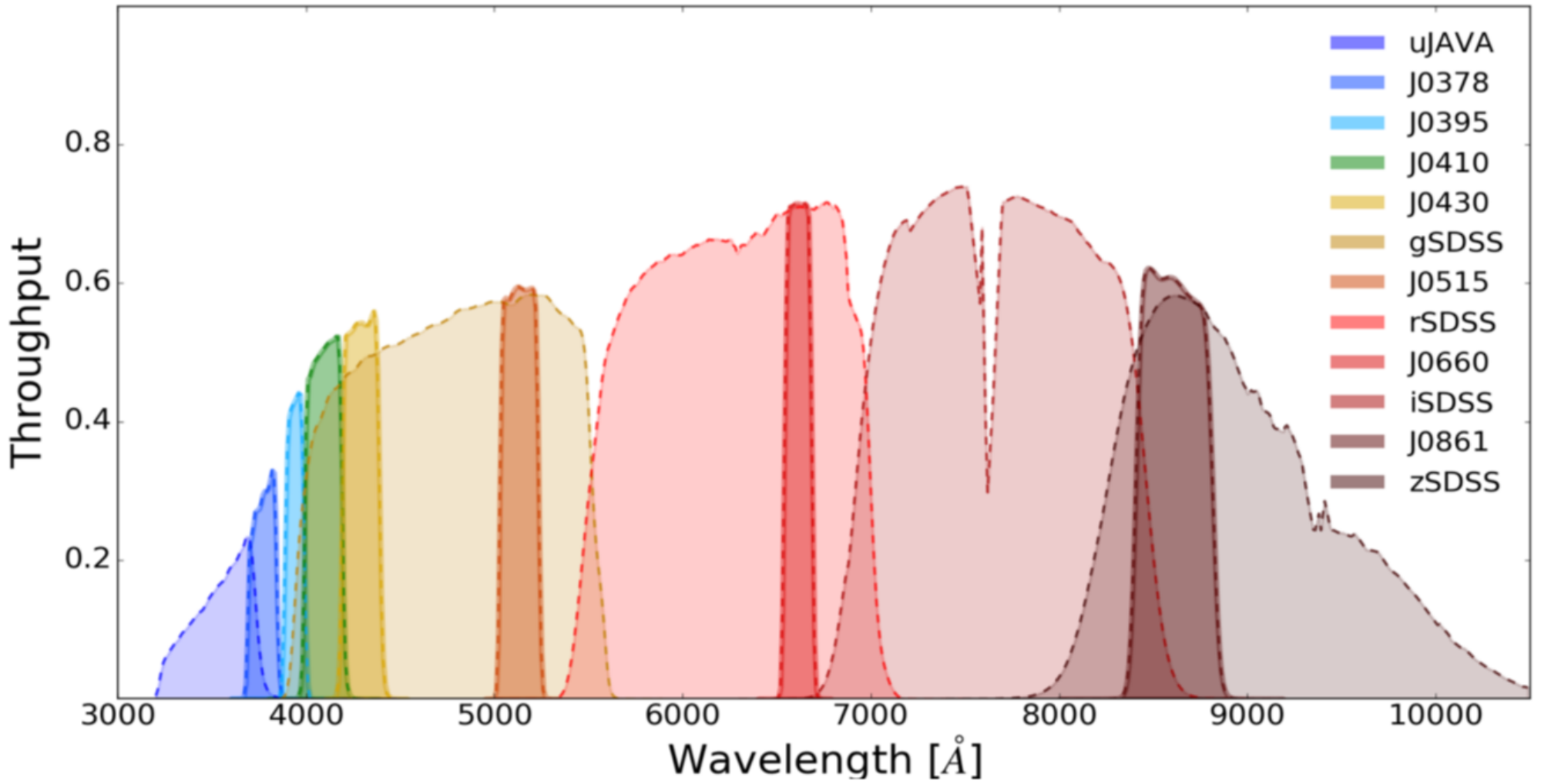
8000 graus quadrados

12 filtros, 3
exposições repetidas
em cada filtro.
A observação total
terá cerca de 1 hora.



Fonte: <http://www.splus.iag.usp.br/#lp-page>

Curvas de Transmissão dos Filtros

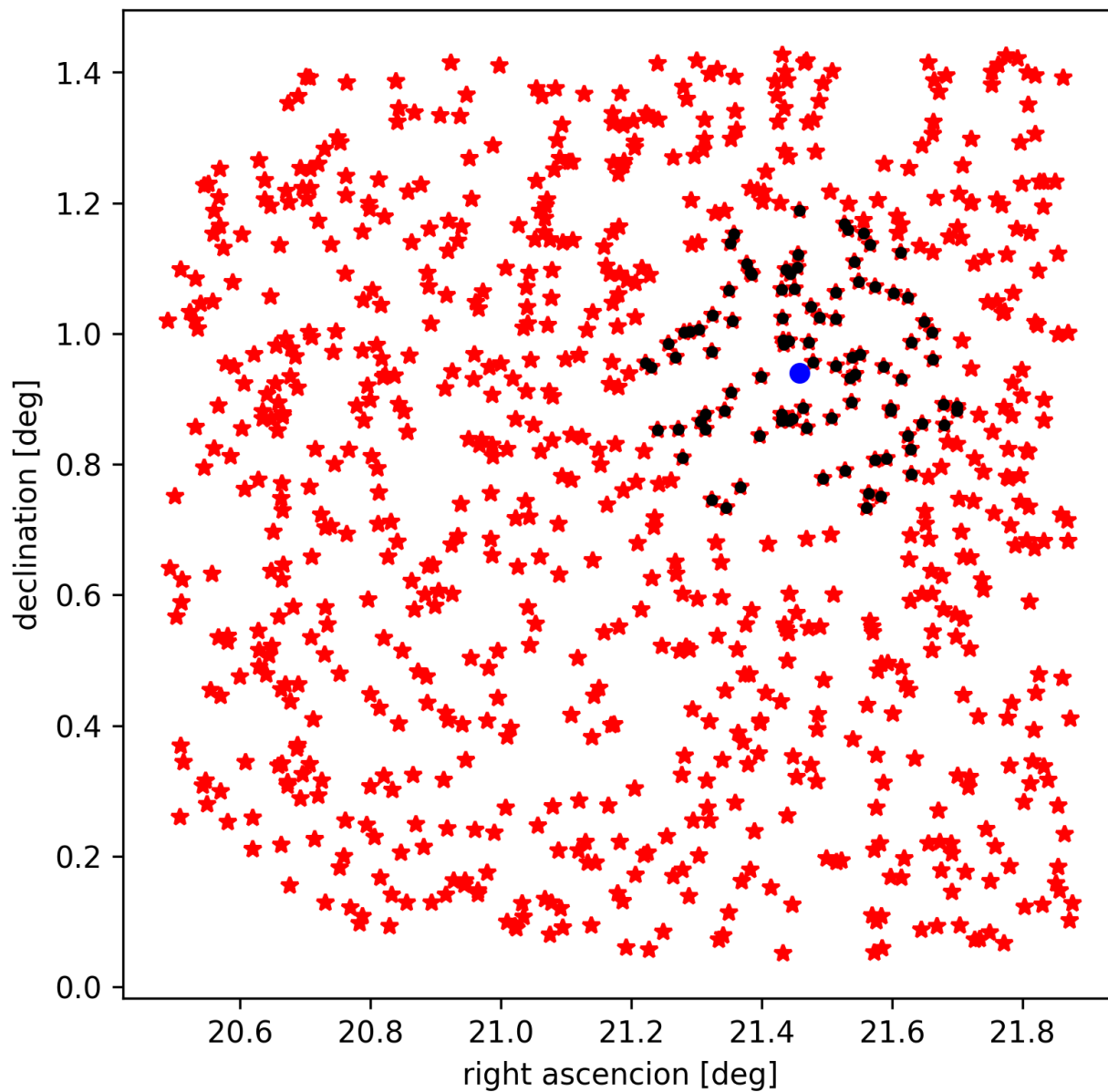


SNR de cada filtro para os tempos de exposição

Nome	Exp. Time (s)	SNR (Mag 18)	SNR (Mag 19)	SNR (Mag 20)
uJAVA	227	57.4	34.4	19.4
J0378	220	42.1	25.0	13.9
J0395	118	28.4	16.4	8.8
J0410	59	30.1	17.4	9.2
J0430	57	29.8	17.2	9.1
gSDSS	33	65.8	39.2	21.9
J0515	61	32.5	18.7	9.8
rSDSS	40	67.5	38.0	19.4
J0660	290	57.1	32.8	17.3
iSDSS	46	59.6	32.0	15.5
J0861	80	29.3	14.1	6.3
zSDSS	56	38.5	18.0	7.8

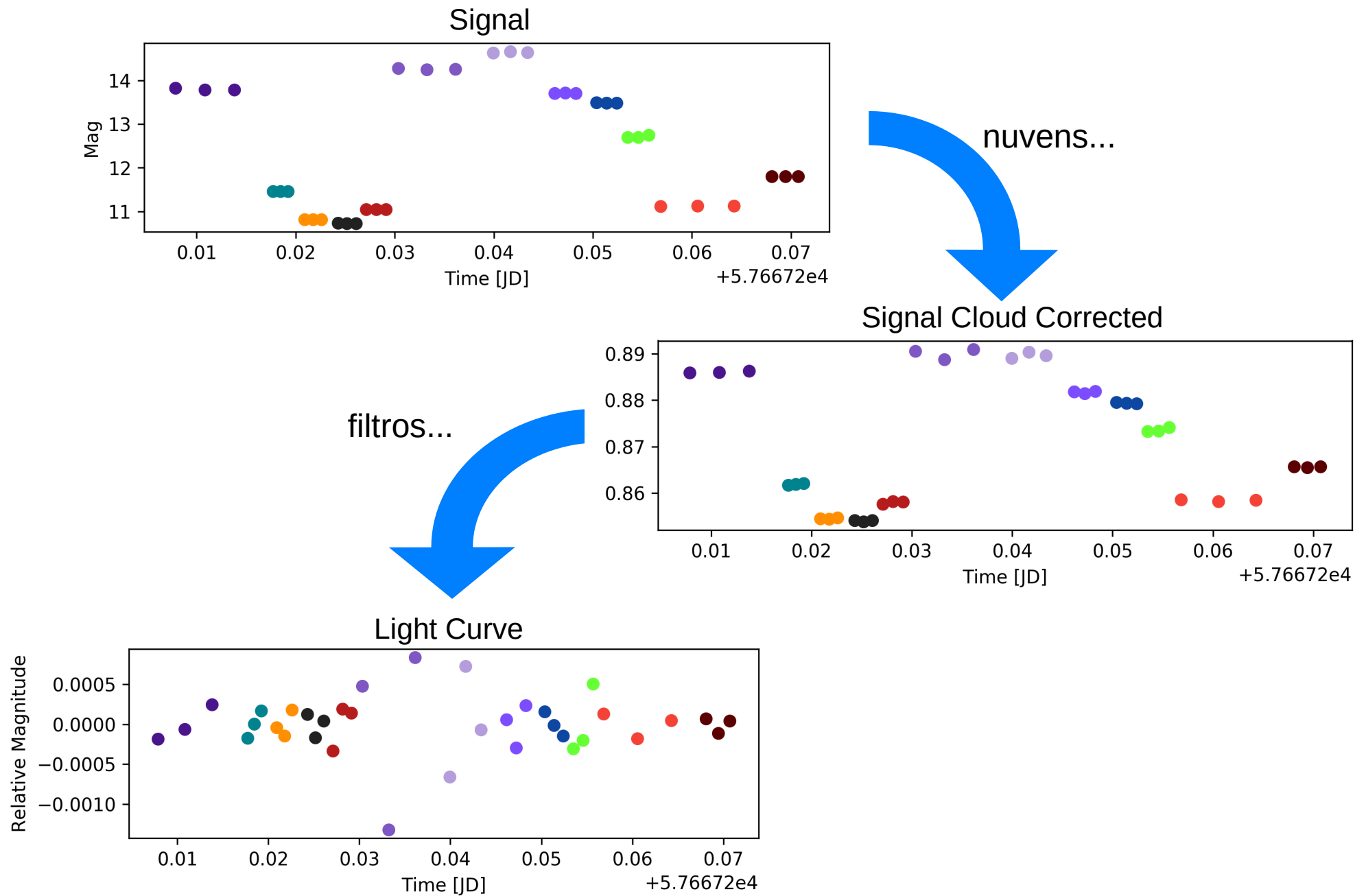
Dados: <http://www.cefca.es/jplusetc/>

Target, its close ones and all stars in the field

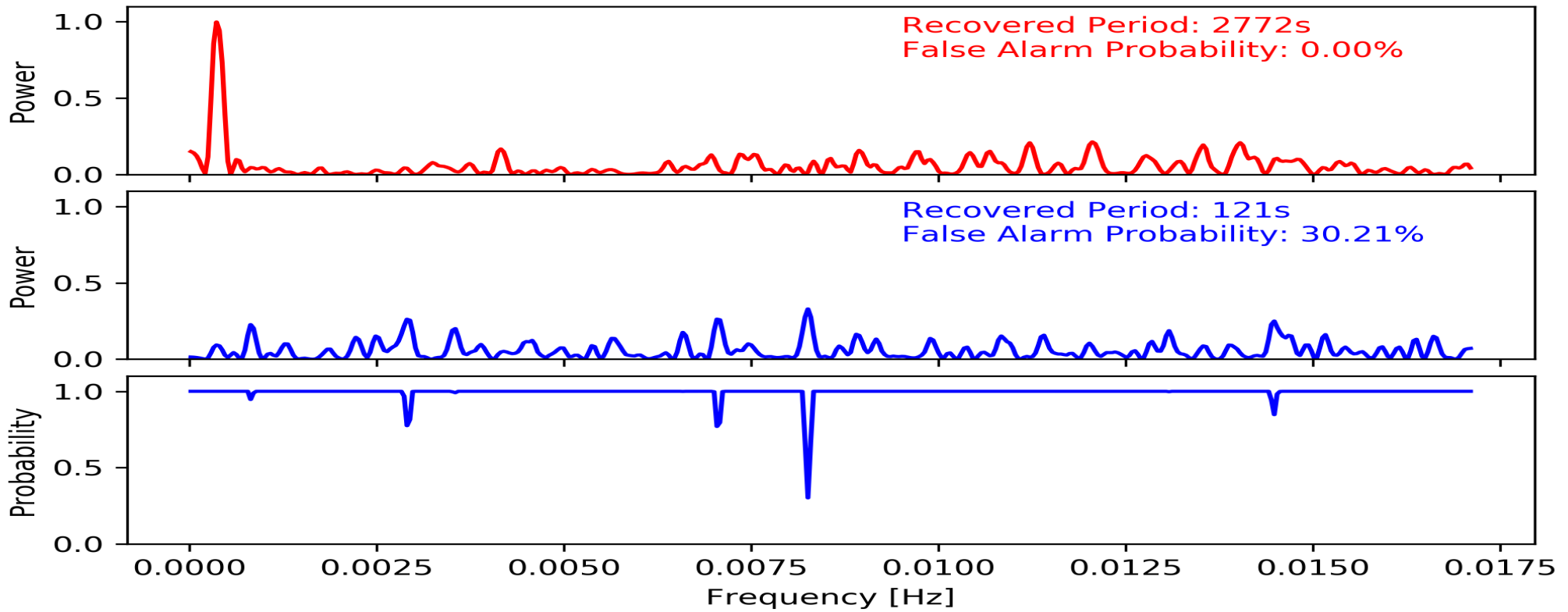
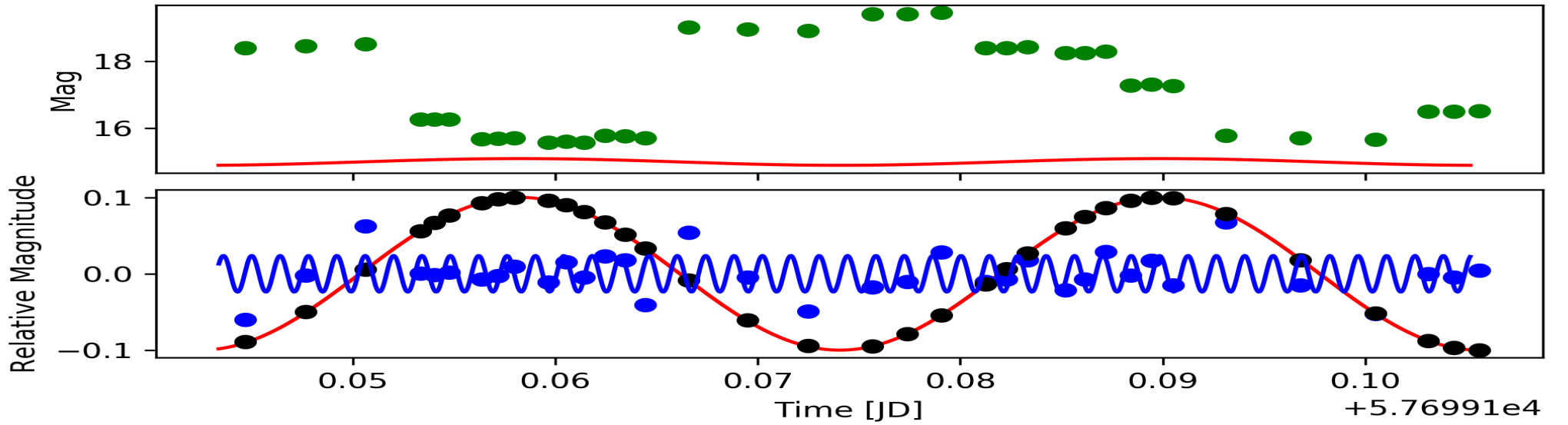


FOV is large,
clouds have
structure at this
scale

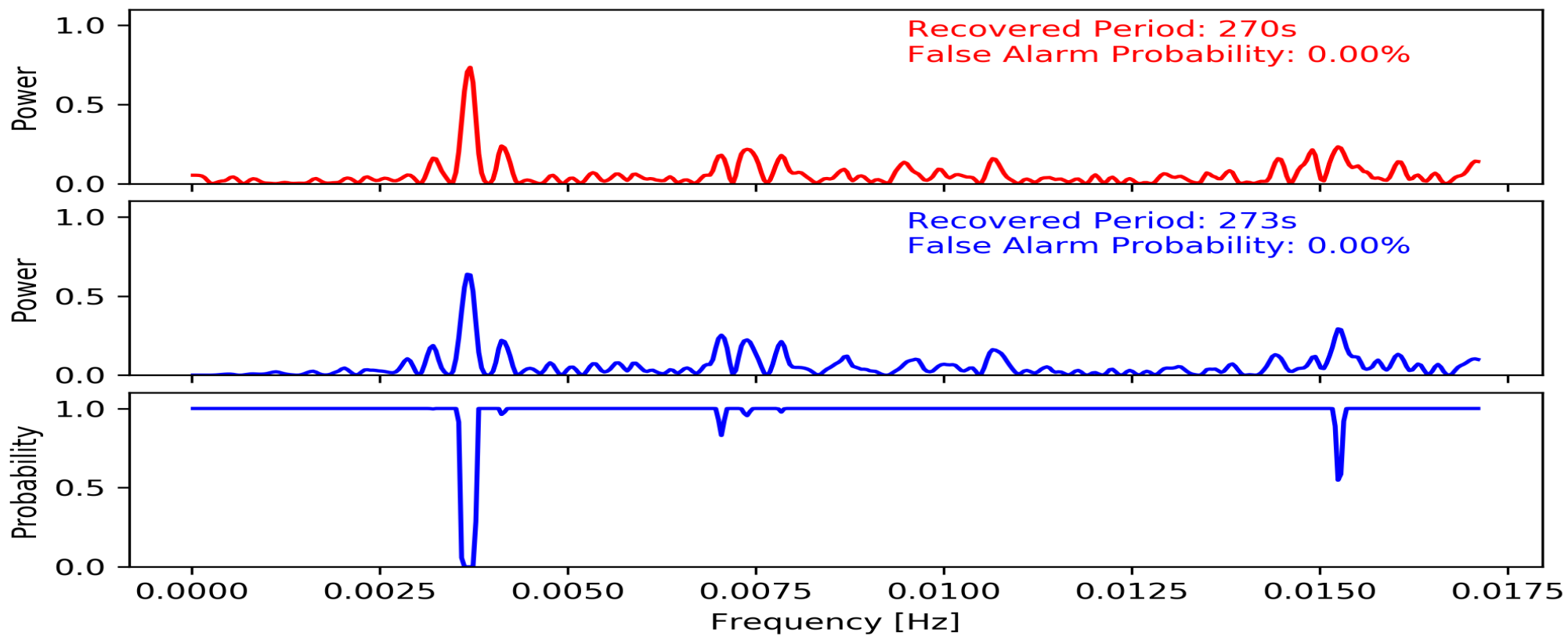
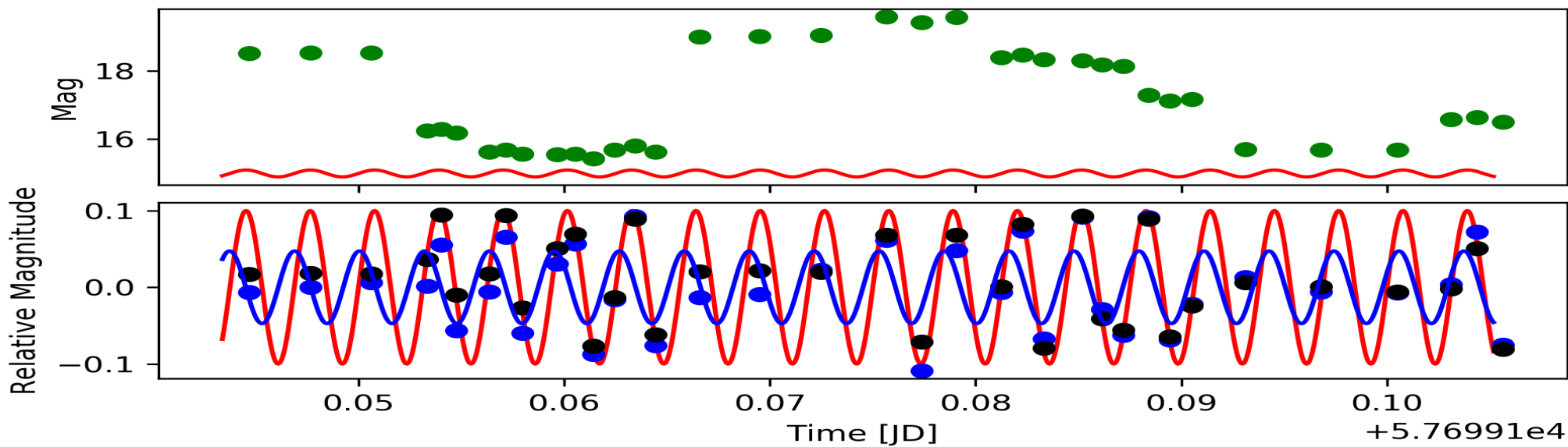
Como são os dados do J-PLUS e S-PLUS?



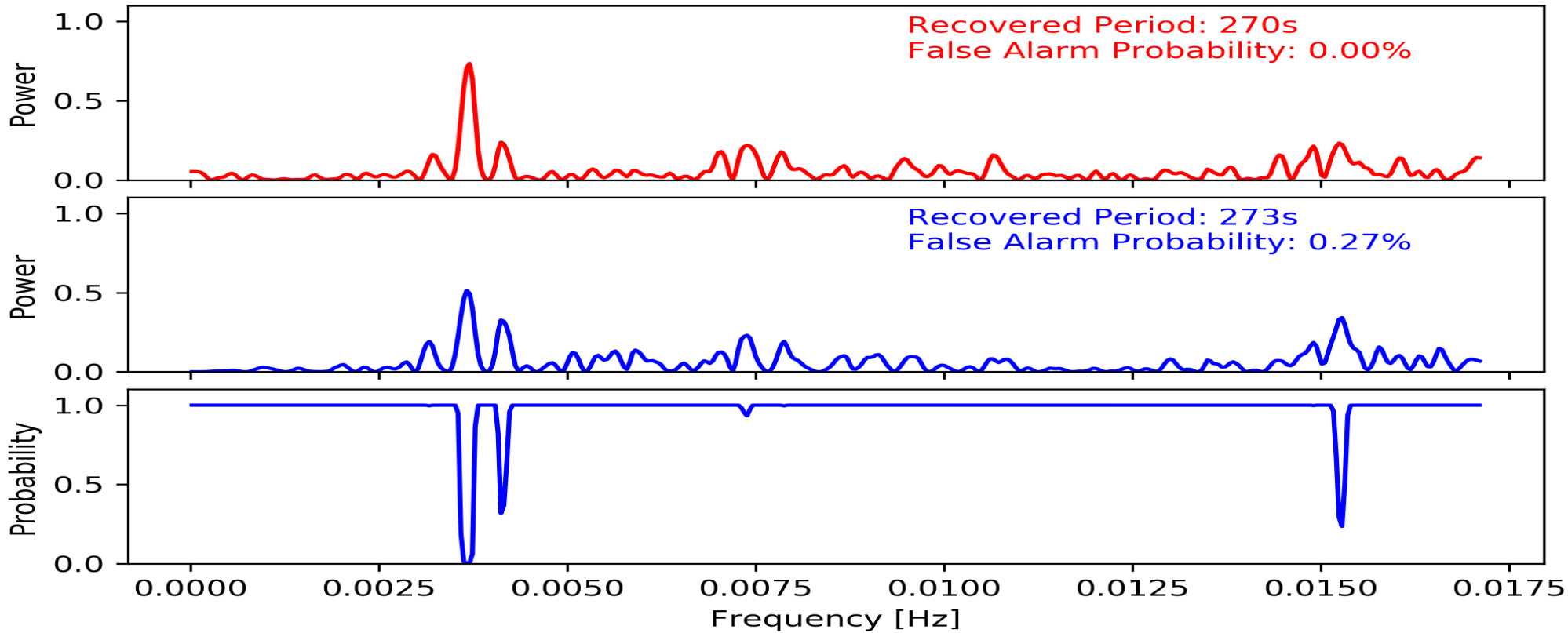
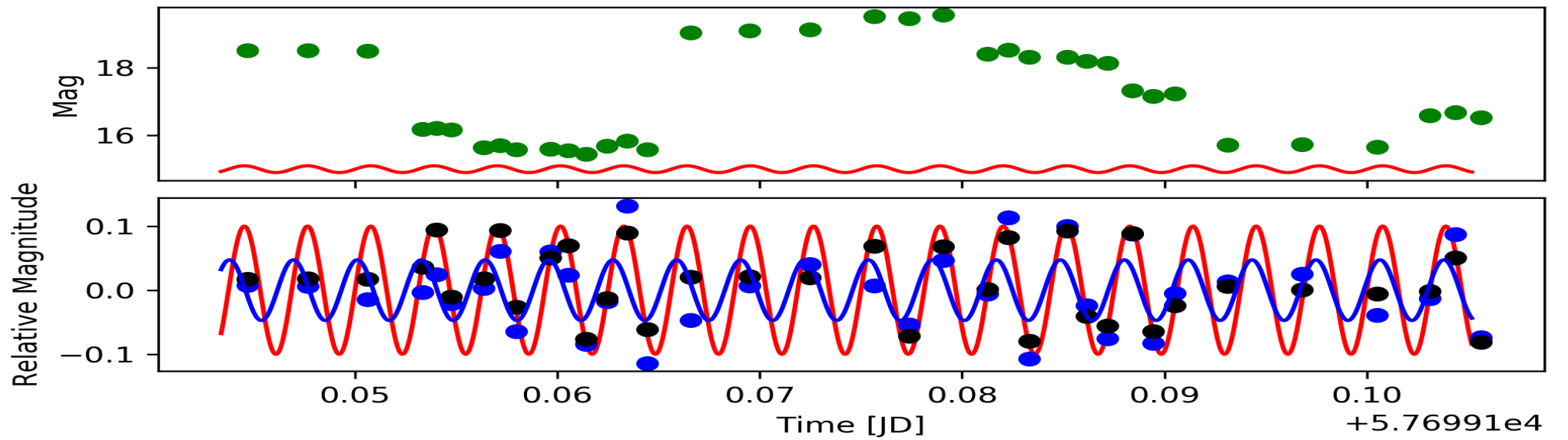
Period: 2730 SNR: 100 Amp: 0.1

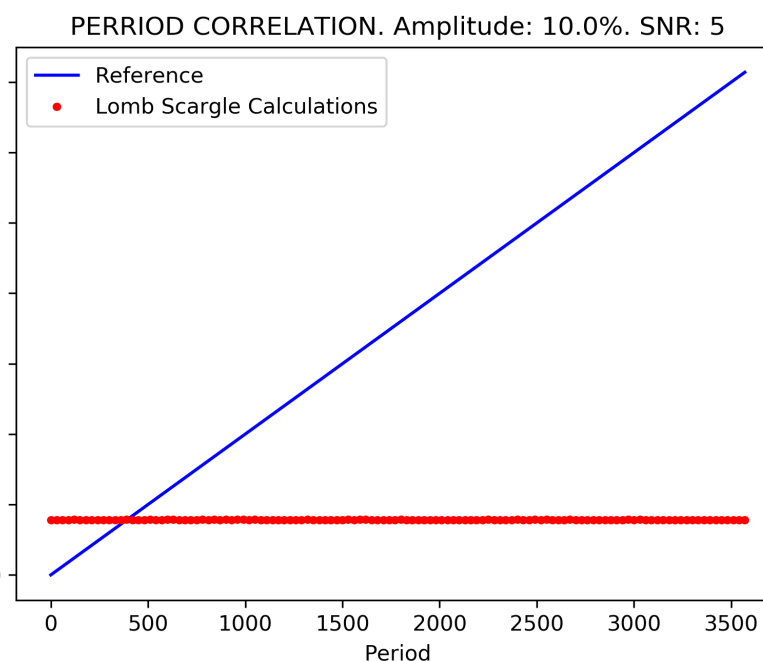
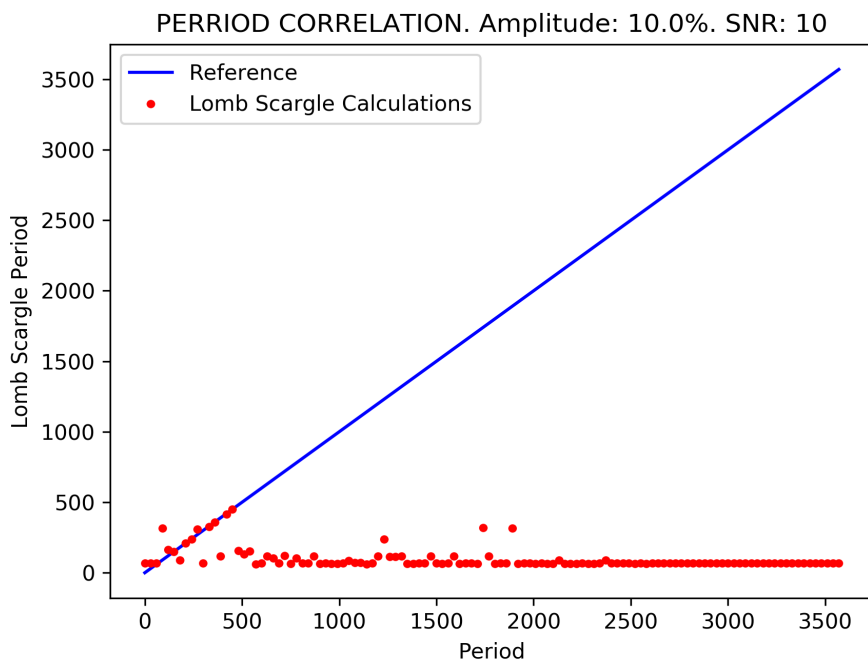
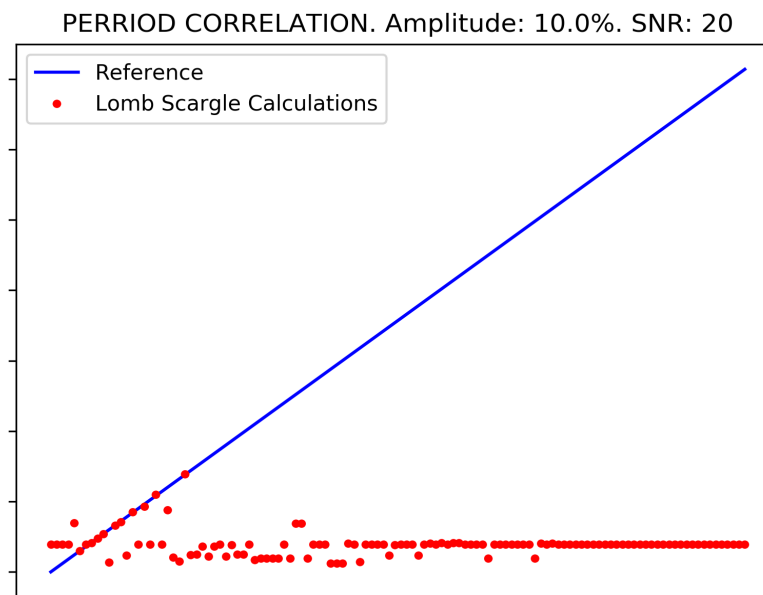
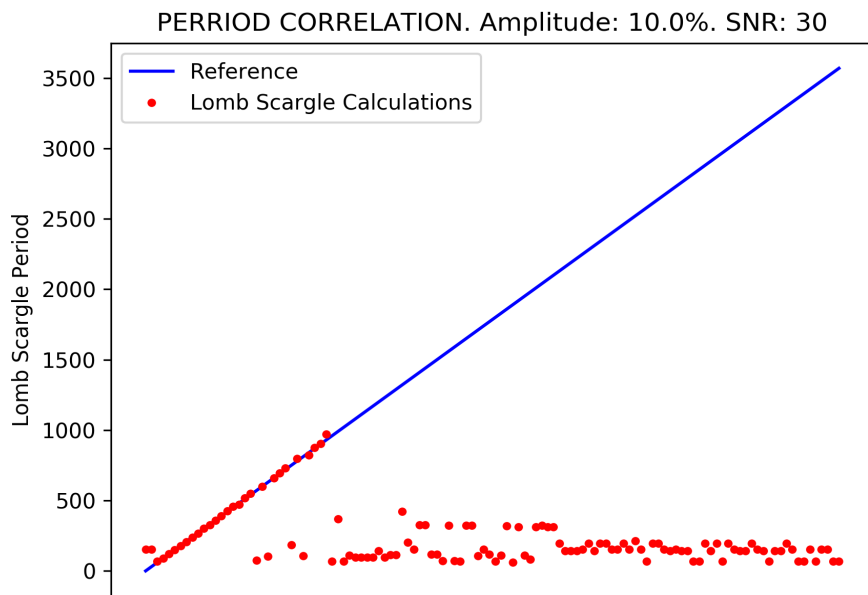


Period: 270 SNR: 100 Amp: 0.1



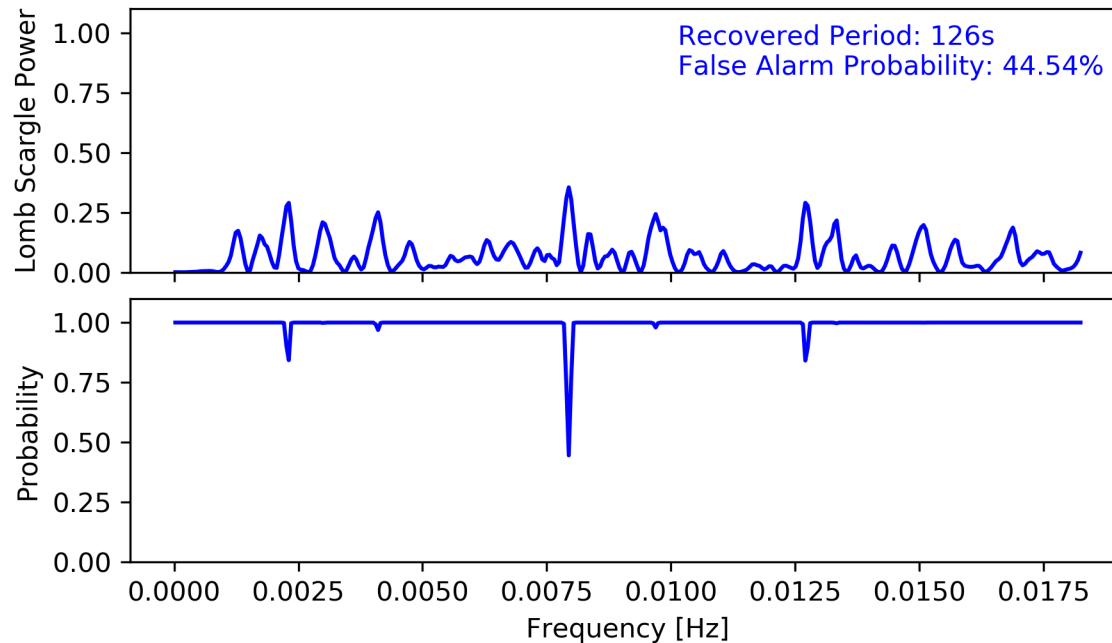
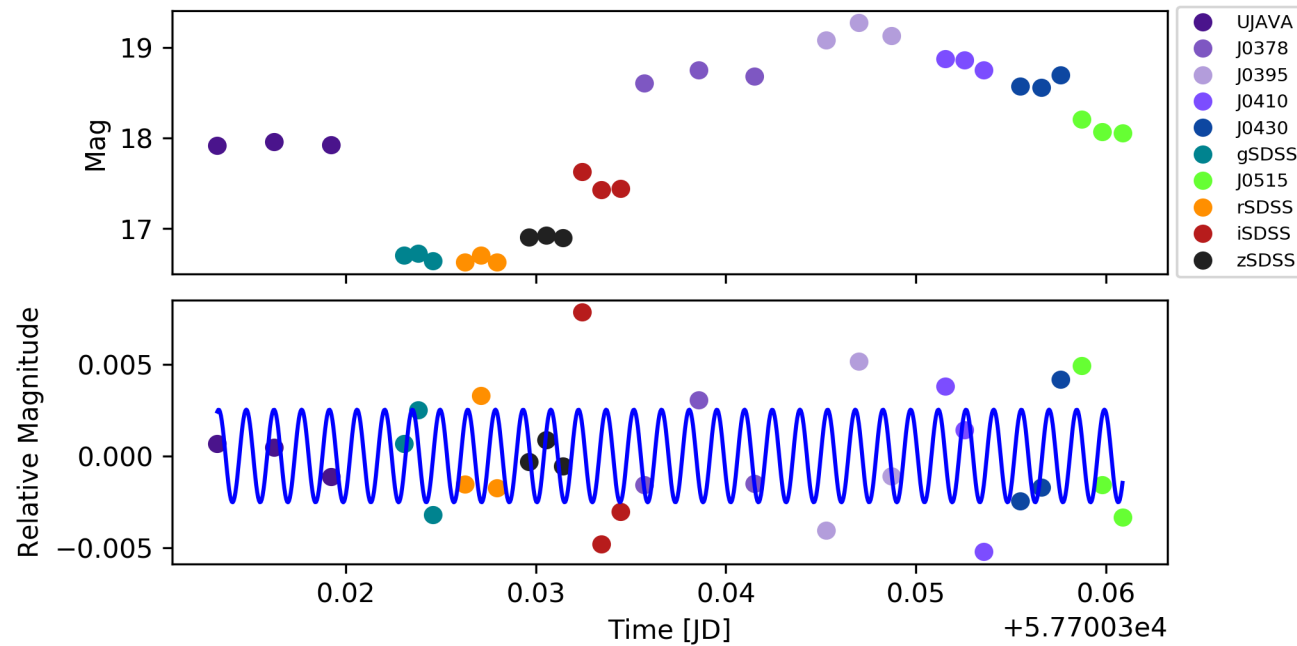
Period: 270 SNR: 30 Amp: 0.1





¿ CADÊ TODO MUNDO ?

star: 353 ra:53.1524 dec:-0.8219



STRIPE_0077

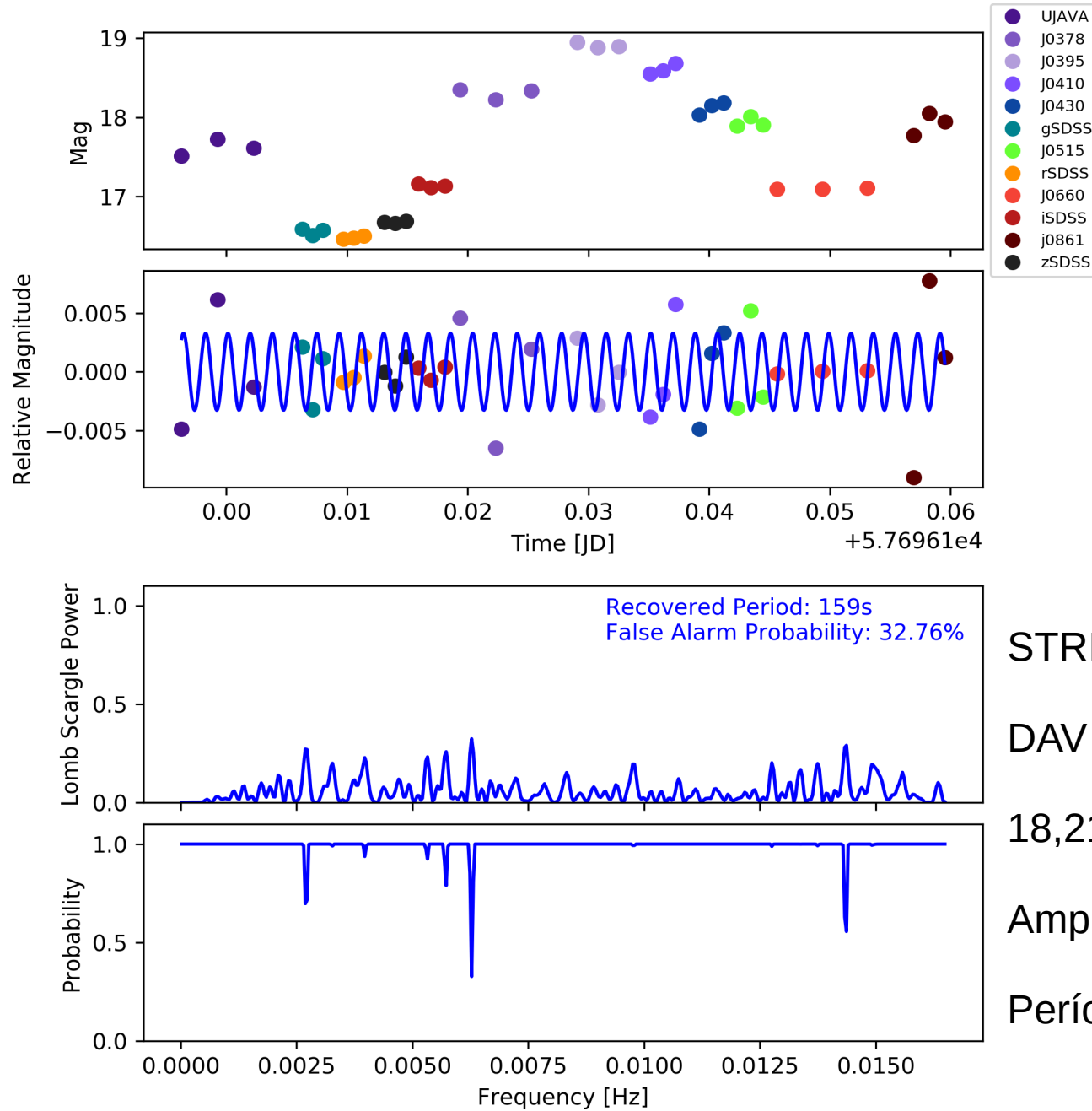
DAV

18,18 Mag

Amplitude: 0,21 Mag

Período: 402 – 1144 s

star: 303 ra:357.6699 dec:-0.9085



STRIPE_0023

DAV

18,21 Mag

Amplitude: 0,28 Mag

Período: 752 - 1043 s

E agora?

Fazer mais testes.

Voltar ao mais simples, coisas como rms x magnitude

Passar ao mais complicado, como “machine learning”

Sugestões da plateia?