

## UVIS Rings Spectroscopy Atlas

The UVIS FUV and EUV channels have 64 X 1024 pixels spatial and spectral pixels each, respectively. For this document a “pixel” refers to the projection of a single pixel onto the ring plane. Due to the motion of the spacecraft during an integration period the projection of the pixel onto the ring plane may vary in location both radially and azimuthally, resulting in a “smeared” projected pixel. An observation typically consists of multiple integration periods, where each set of 64 X 1024 pixels of data constitute a single data record. For example an observation with 10 data records consists of 64 X 1024 X 10 pixels of data. Some observations were designed where the spectra were binned. For example spectral binning equal to 2 with 10 data records results in 64 X 512 X 10 separate pixels of data. The figures containing an axis or axes in units of Rs are in units of the dynamical radius of Saturn, which is 60330 km.

Incidence, emission, and phase angles range from 0°-180°, with 0° normal to the ring plane in the Saturn North Pole direction.

Top left: Projection of each smeared pixel for all data records in ring plane looking down on Saturn North pole with Sun to the left. The color code is rainbow from IDL color palette 13 and is normalized with violet and red corresponding to the lowest and highest count rates, respectively.

Top center: Example of the movement of a single projected pixel from start to finish of the integration period.

Middle left: Distance of the spacecraft from the ring plane for each projected pixel for all data records plotted against the radial location of the center of the projected pixel at the middle of the integration period.

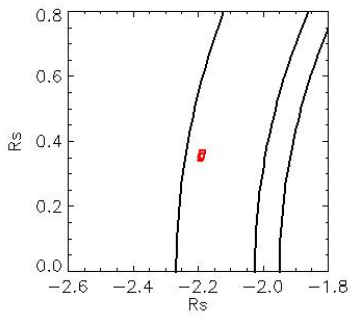
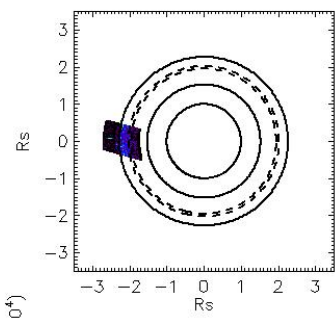
Middle center: Maximum projected smeared pixel size for all data records plotted against the radial location of the projected pixel at the middle of the integration period.

Middle right: Phase, incidence, and emission angles for each pixel for all data records at the middle of the integration period.

Bottom left: Total raw counts from 175.2 – 189.8 nm for each pixel for all data records.

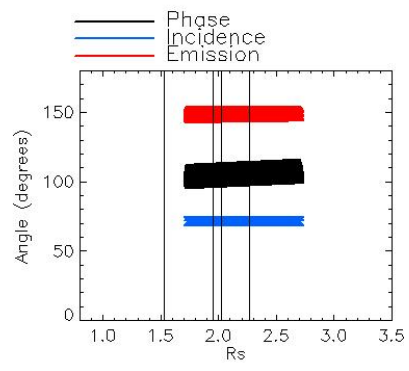
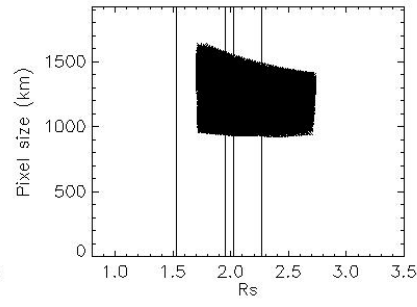
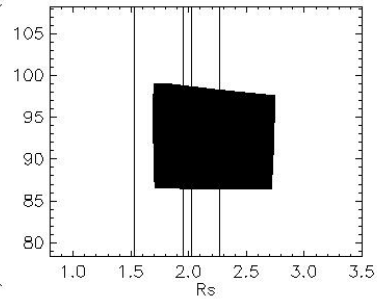
Bottom center: Location of spacecraft throughout an observation looking down on Saturn North Pole with the Sun to the left.

Bottom right: Location of spacecraft throughout an observation looking in the equatorial plane with the Sun to the left.

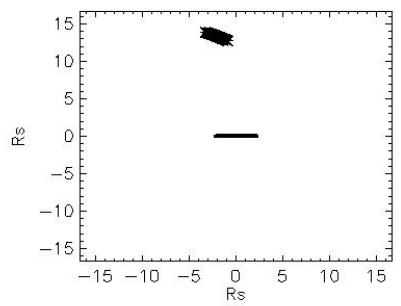
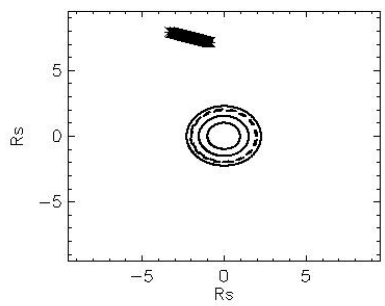
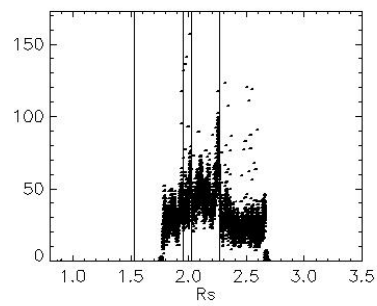


Observation Name:  
 UVS\_186RLENCKEMOV001\_ISS  
 Observation Date:  
 2013\_100\_14\_40\_03  
 Observation Duration:  
 30300 S  
 Integration time = 300 S

S/C—Observation Point Distance ( $10^4$ )



Total raw counts

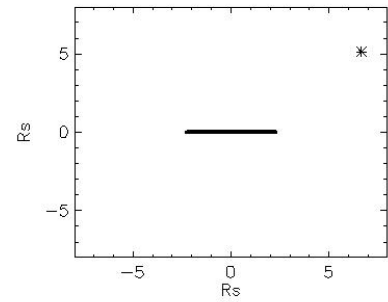
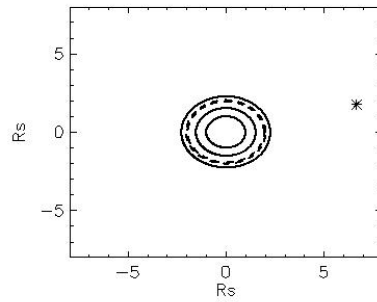
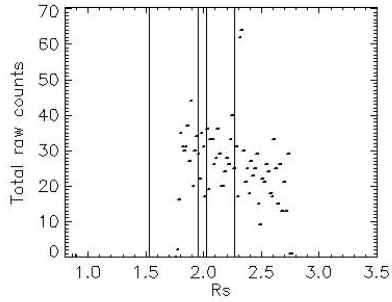
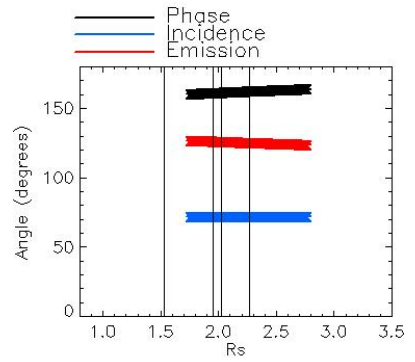
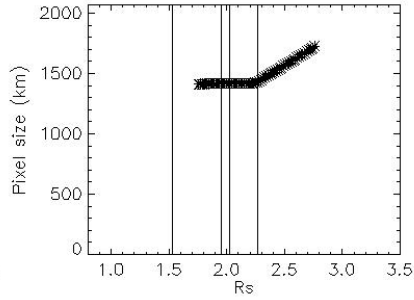
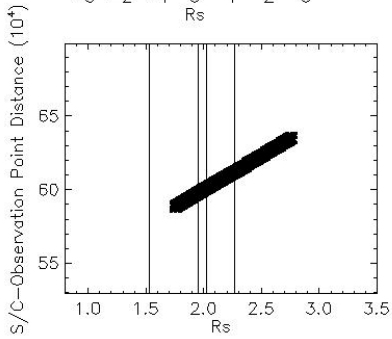
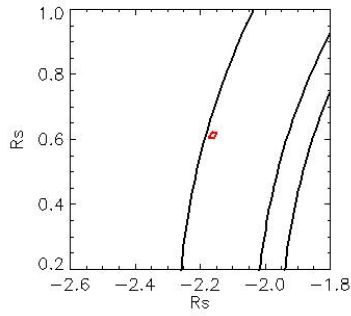
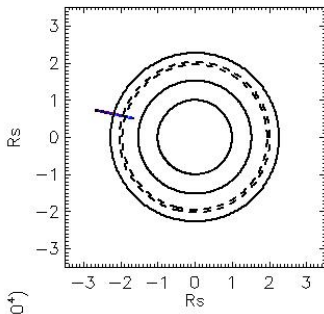


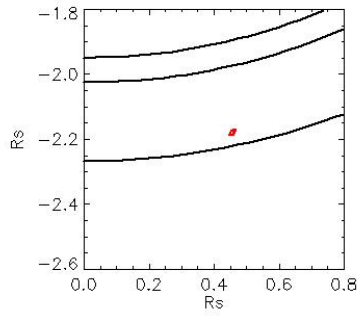
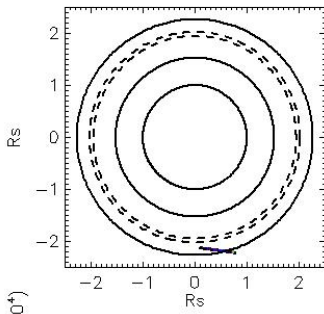
Observation Name:  
UMS\_186RLPROPRETRG001\_ISS

Observation Date:  
2013\_101\_22\_49\_01

Observation Duration:  
300 S

Integration time = 300 S



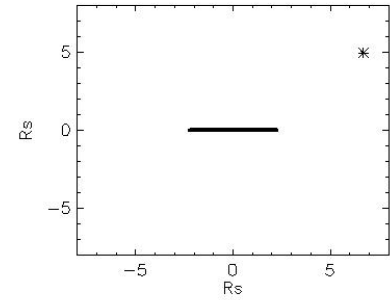
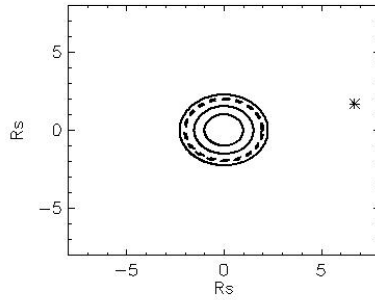
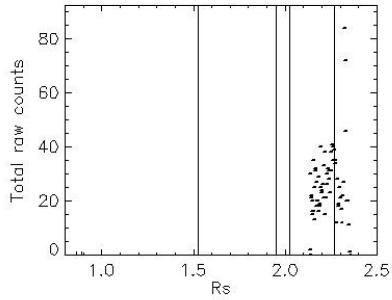
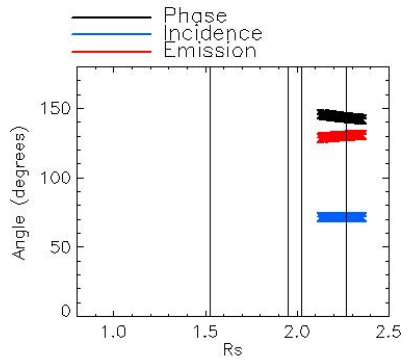
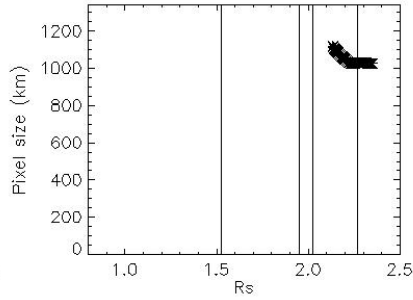
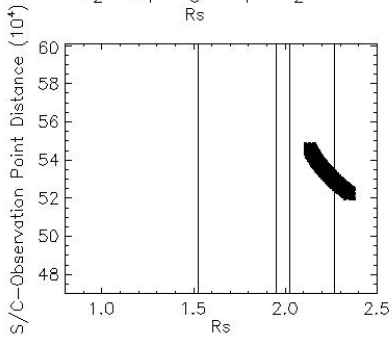


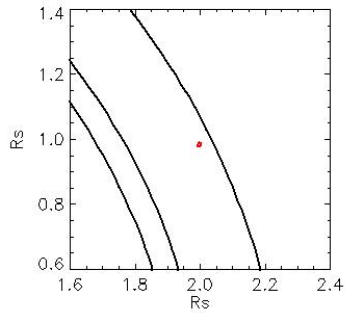
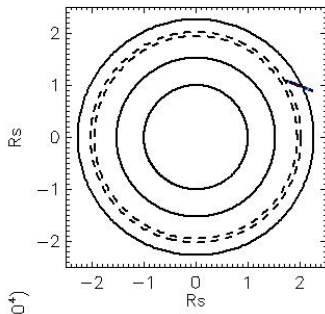
Observation Name:  
UMS\_186RLPROPRETRG001\_ISS

Observation Date:  
2013\_101\_23\_06\_00

Observation Duration:  
300 S

Integration time = 300 S



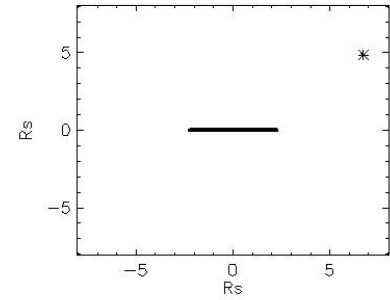
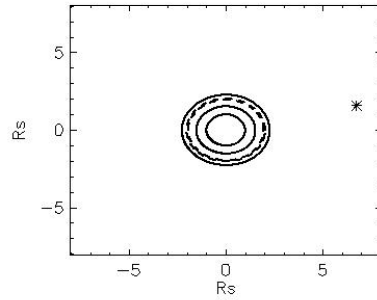
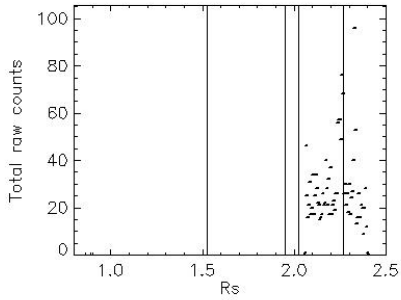
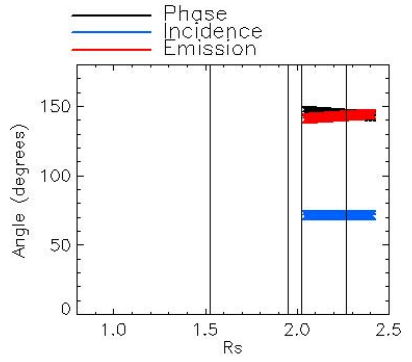
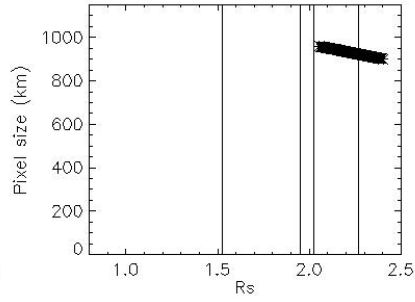
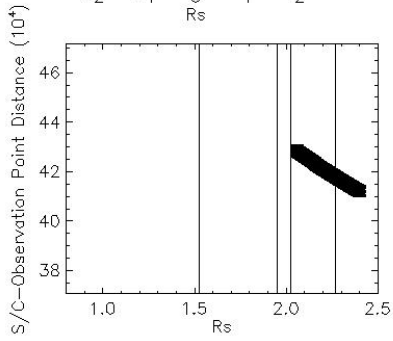


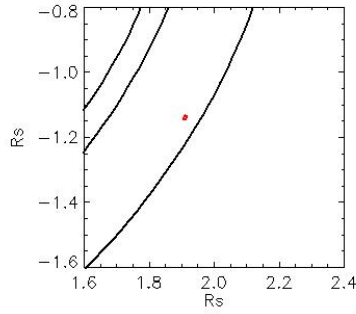
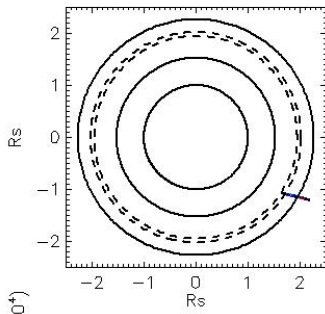
Observation Name:  
UMS\_186RLPROPRETRG001\_ISS

Observation Date:  
2013\_101\_23\_21\_00

Observation Duration:  
300 S

Integration time = 300 S



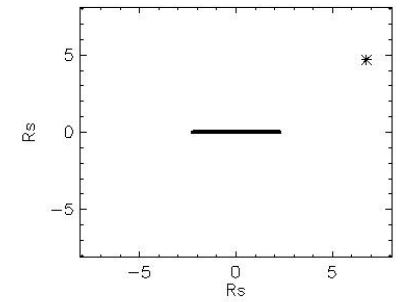
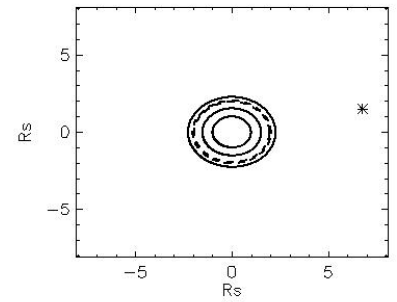
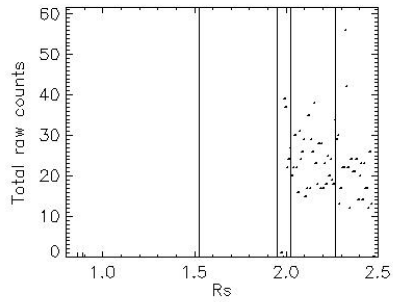
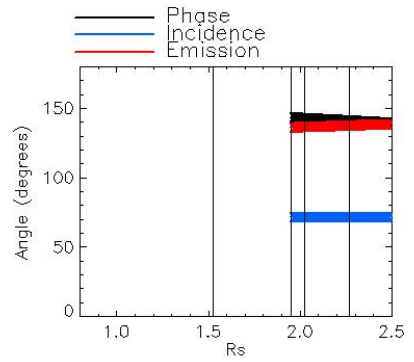
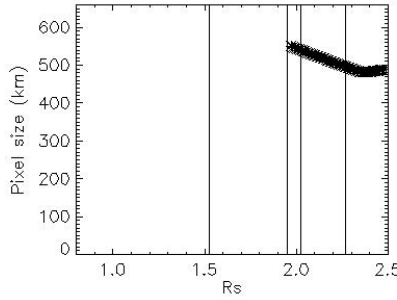
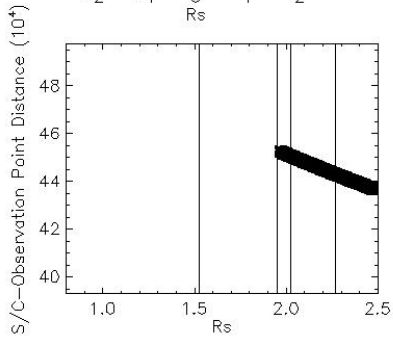


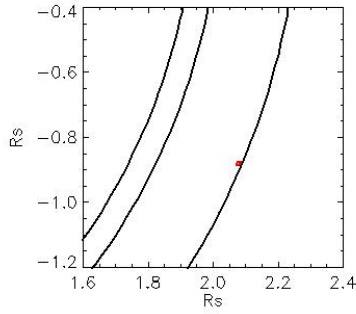
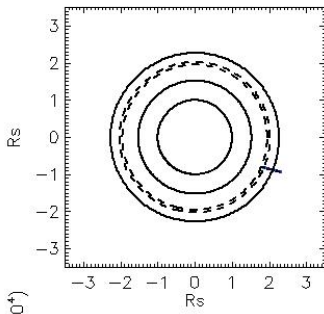
Observation Name:  
UMS\_186RLPROPRETRG001\_ISS

Observation Date:  
2013\_101\_23\_36\_00

Observation Duration:  
300 S

Integration time = 300 S



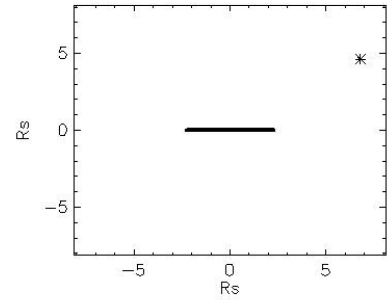
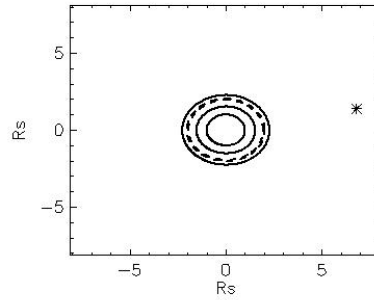
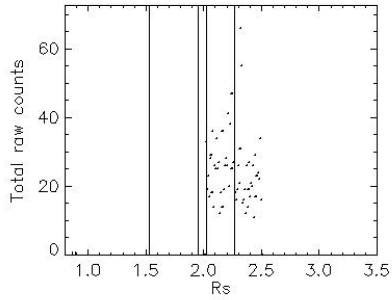
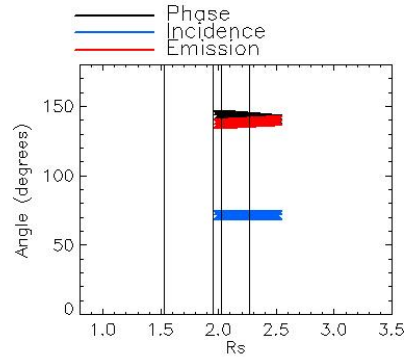
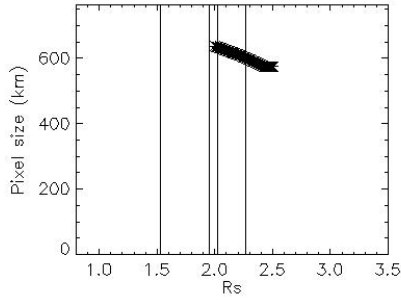
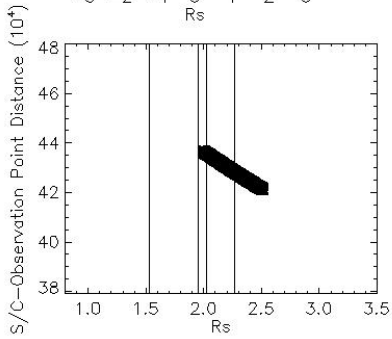


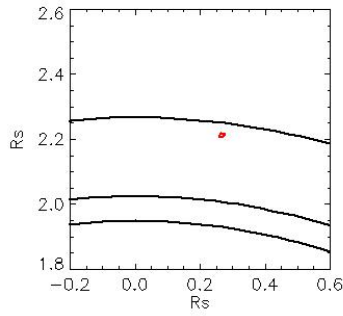
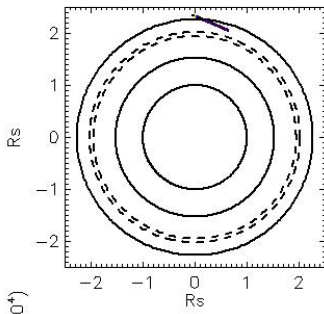
Observation Name:  
UMS\_186RLPROPRETRG001\_ISS

Observation Date:  
2013\_101\_23\_48\_00

Observation Duration:  
300 S

Integration time = 300 S



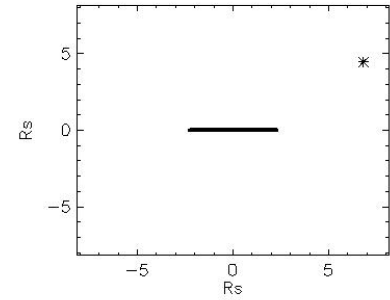
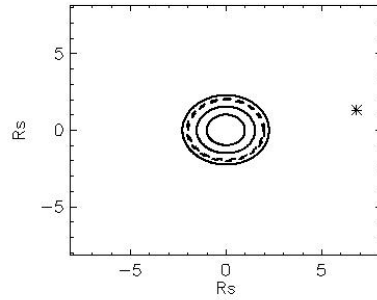
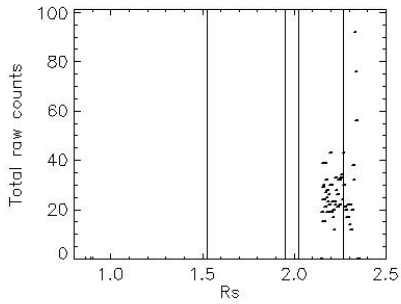
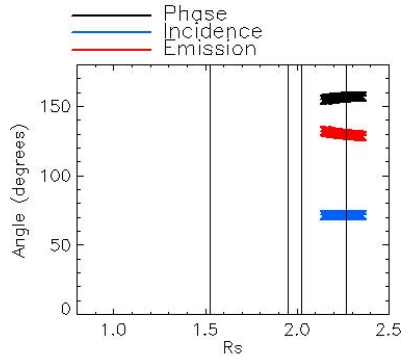
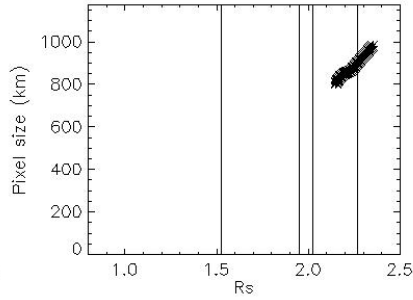
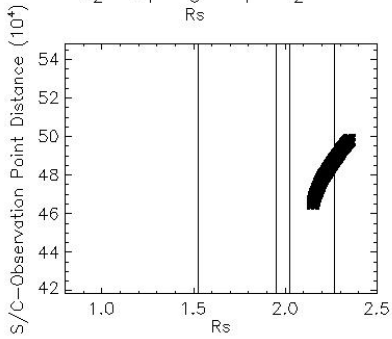


Observation Name:  
UMS\_186RLPROPRETRG001\_ISS

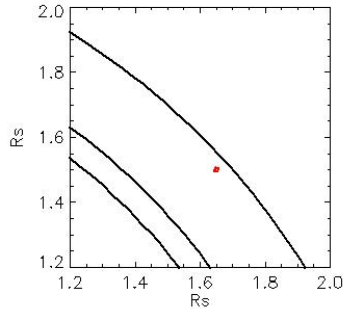
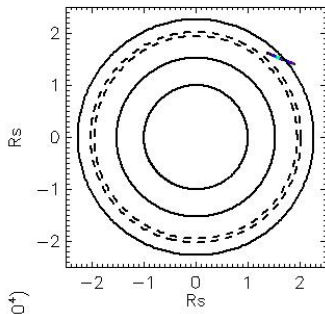
Observation Date:  
2013\_102\_00\_05\_30

Observation Duration:  
300 S

Integration time = 300 S





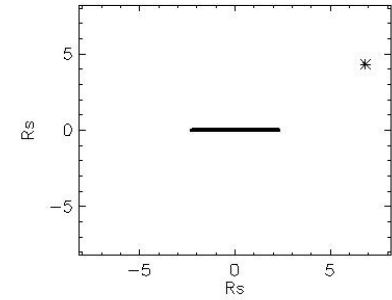
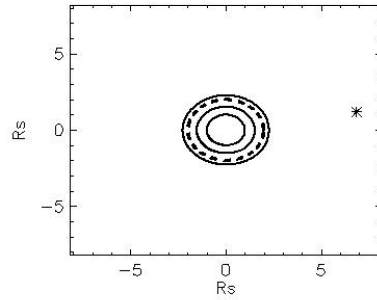
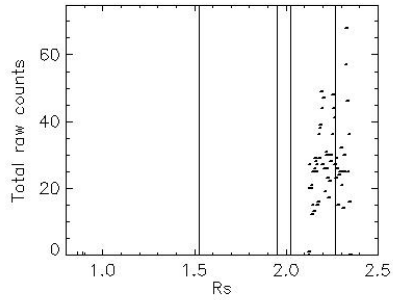
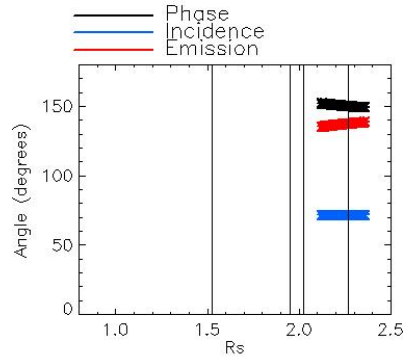
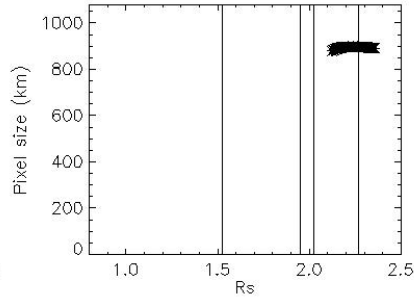
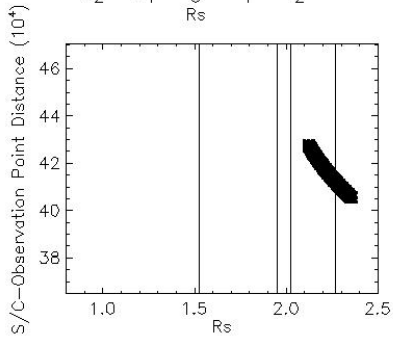


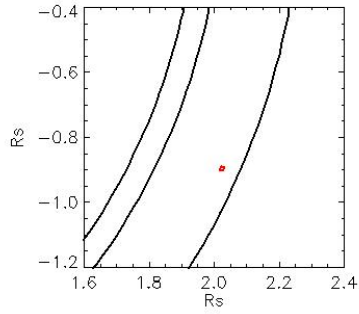
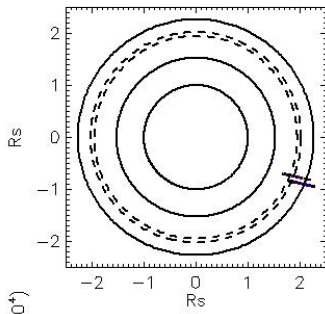
Observation Name:  
UMS\_186RLPROPREG001\_ISS

Observation Date:  
2013\_102\_00\_20\_30

Observation Duration:  
300 S

Integration time = 300 S



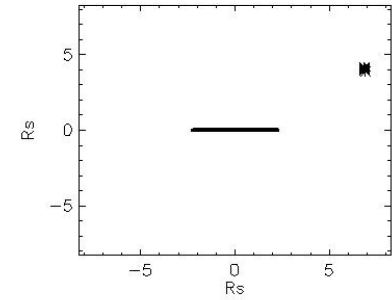
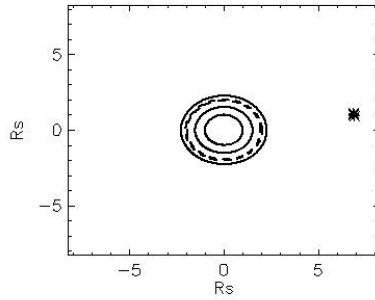
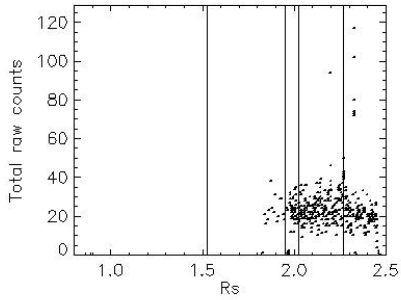
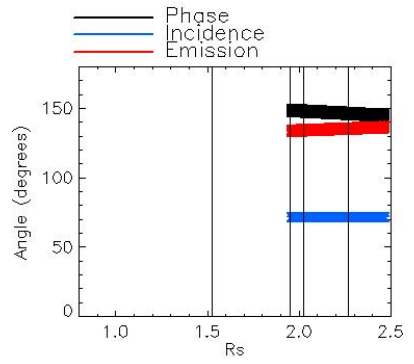
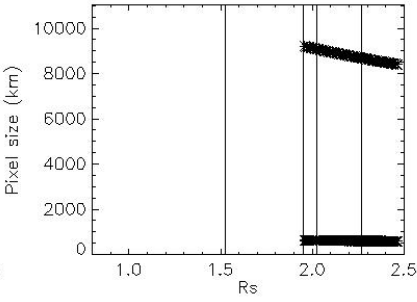
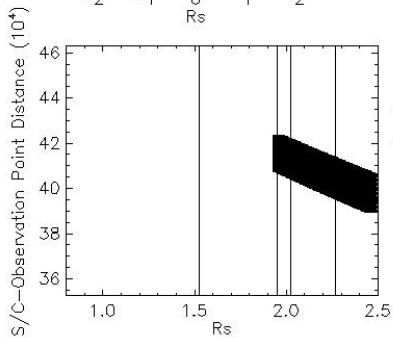


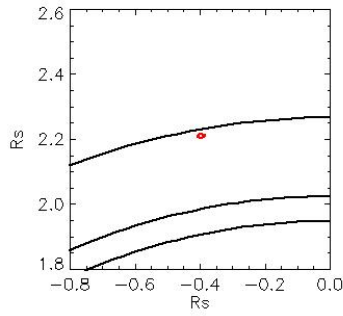
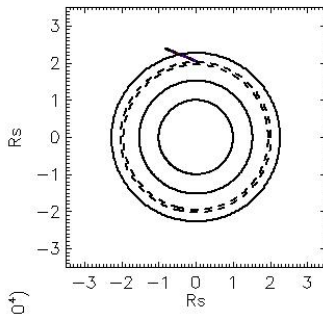
Observation Name:  
UMS\_186RLPROPREG001\_ISS

Observation Date:  
2013\_102\_00\_36\_30

Observation Duration:  
2100 S

Integration time = 300 S



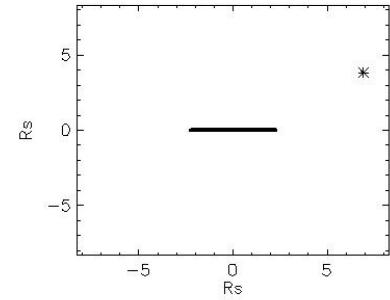
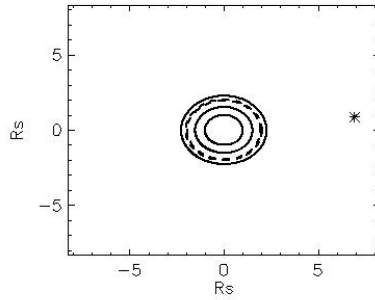
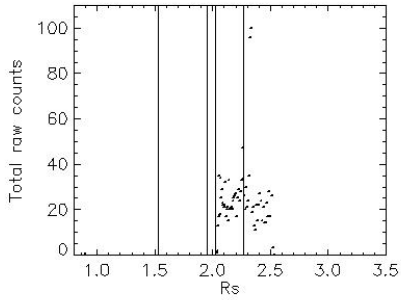
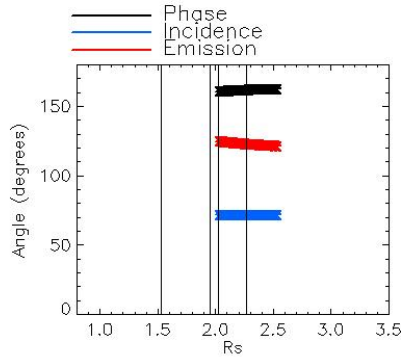
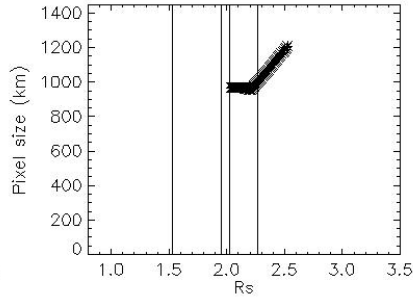
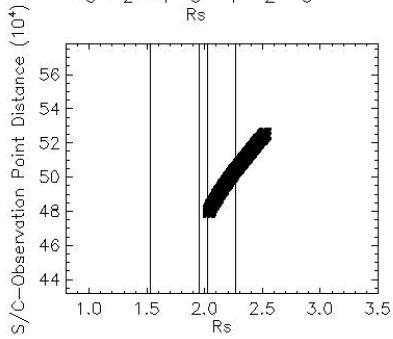


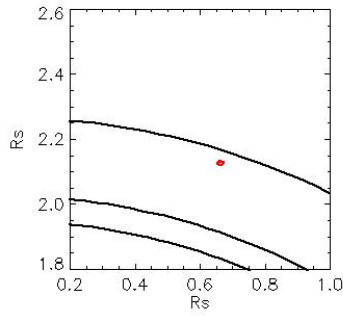
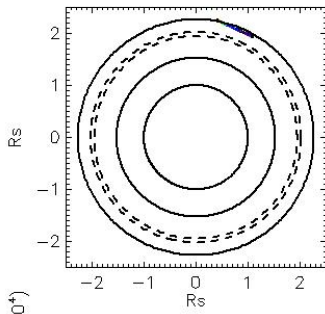
Observation Name:  
UMS\_186RLPROPREG001\_ISS

Observation Date:  
2013\_102\_01\_19\_01

Observation Duration:  
300 S

Integration time = 300 S



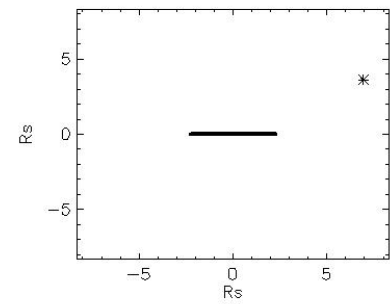
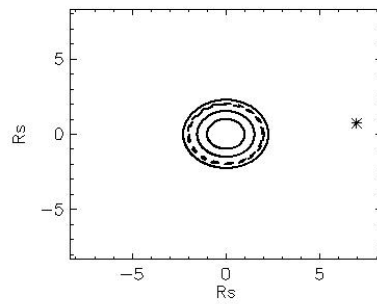
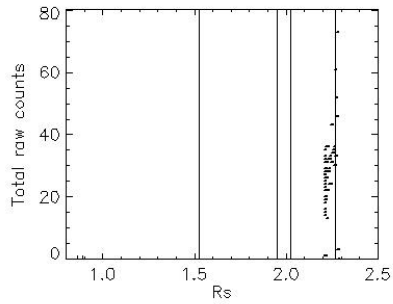
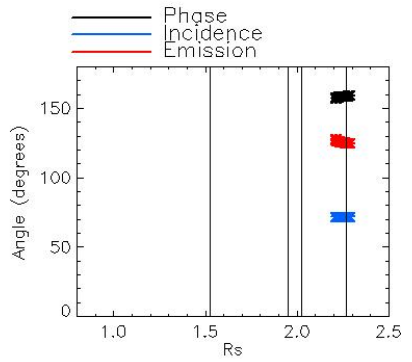
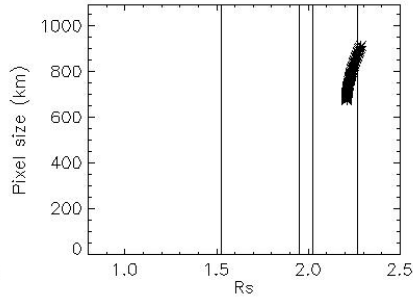
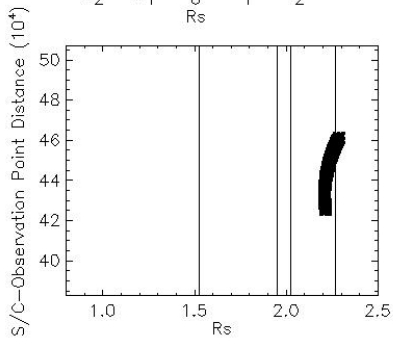


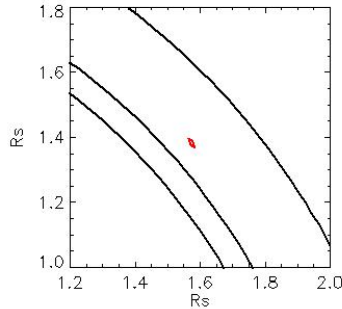
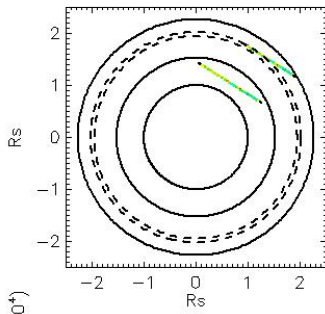
Observation Name:  
UMS\_186RLPROPRETRG001\_ISS

Observation Date:  
2013\_102\_01\_39\_01

Observation Duration:  
300 S

Integration time = 300 S



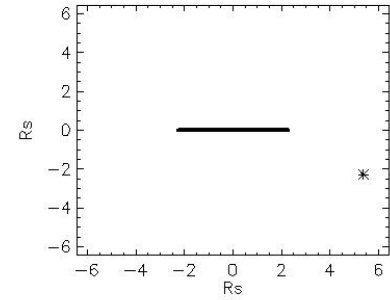
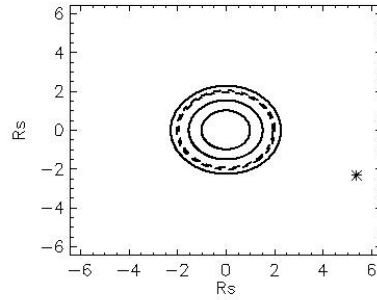
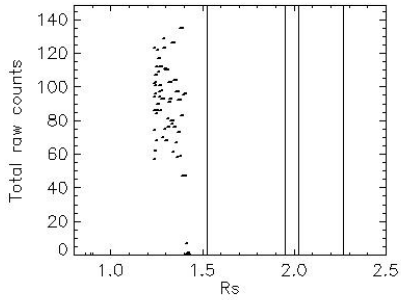
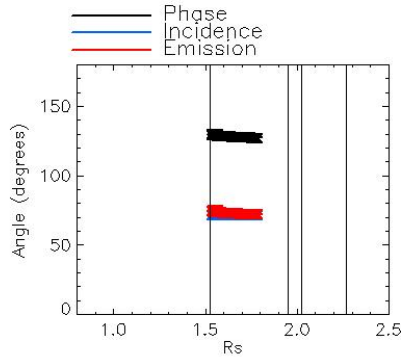
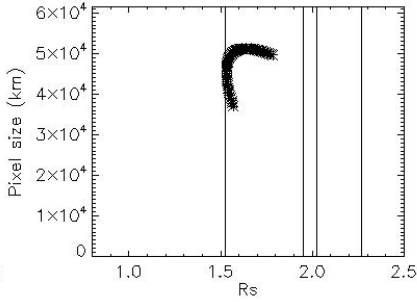
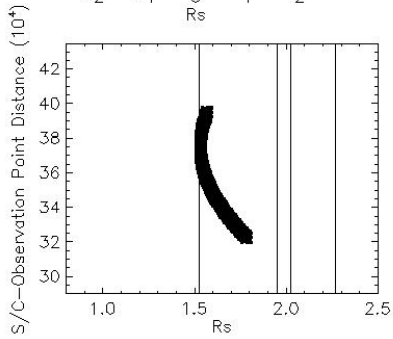


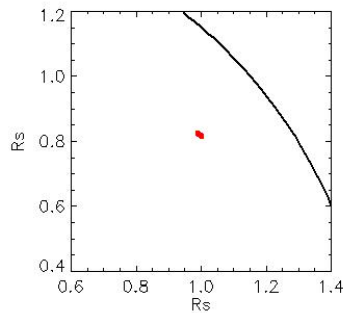
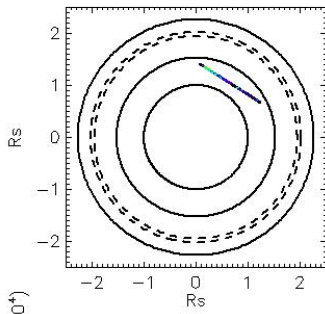
Observation Name:  
UMS\_186RLCOMPLIT001\_VIMS

Observation Date:  
2013\_102\_11\_30\_22

Observation Duration:  
300 S

Integration time = 300 S



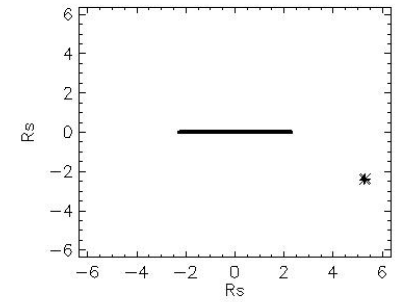
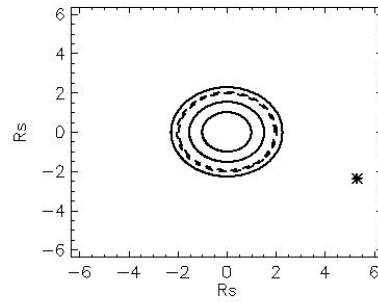
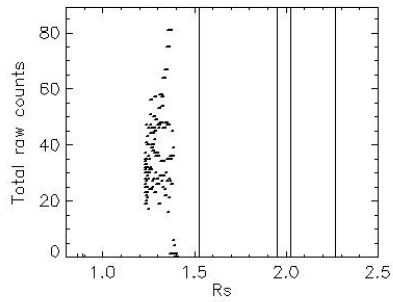
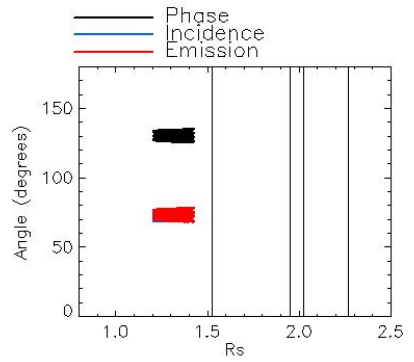
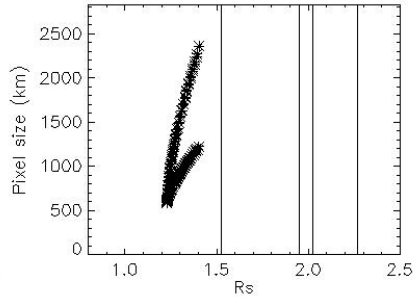
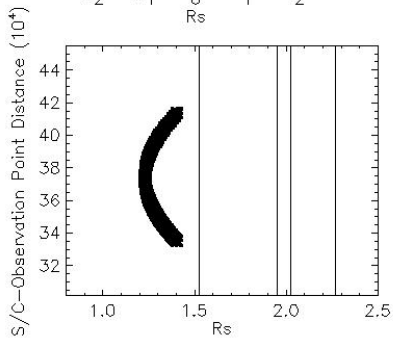


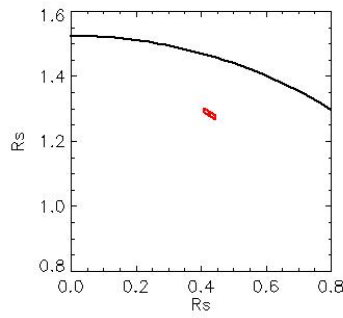
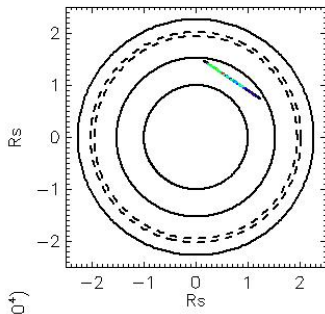
Observation Name:  
UMS\_186RLCOMPLIT001\_VIMS

Observation Date:  
2013\_102\_11\_39\_12

Observation Duration:  
600 S

Integration time = 300 S



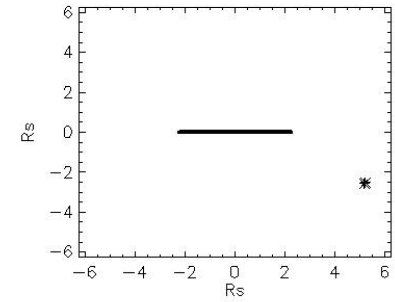
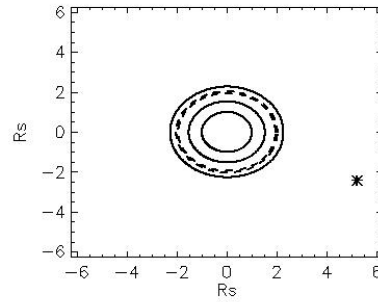
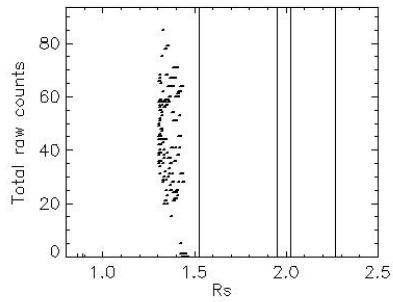
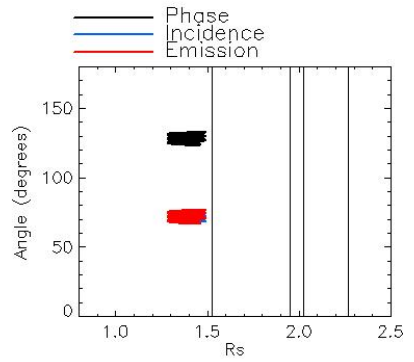
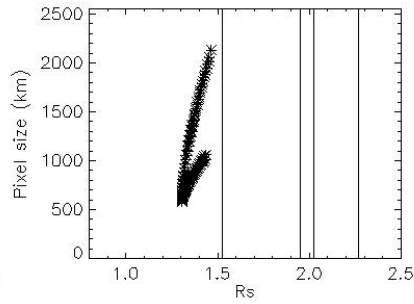
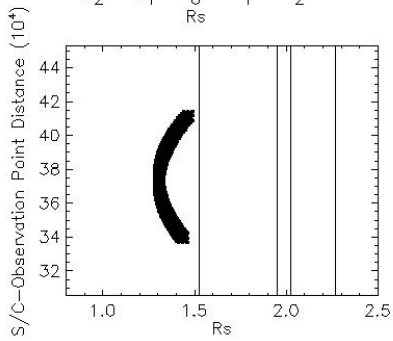


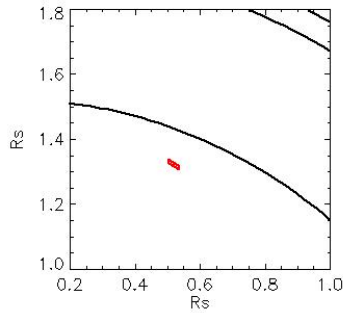
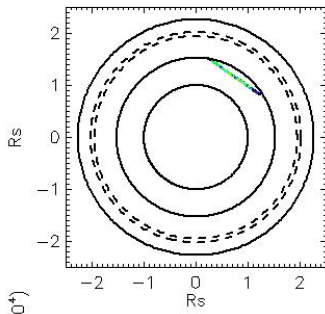
Observation Name:  
UMS\_186RLCOMPLIT001\_VIMS

Observation Date:  
2013\_102\_11\_53\_07

Observation Duration:  
600 S

Integration time = 300 S



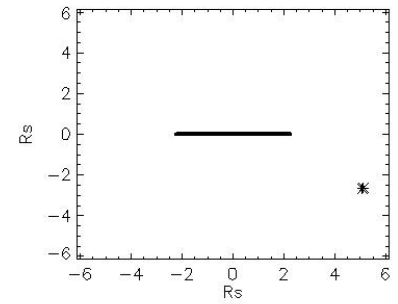
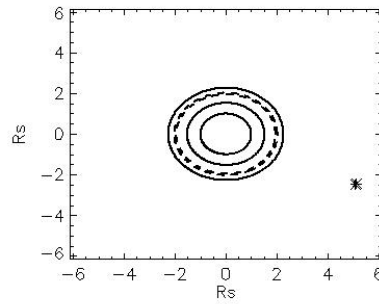
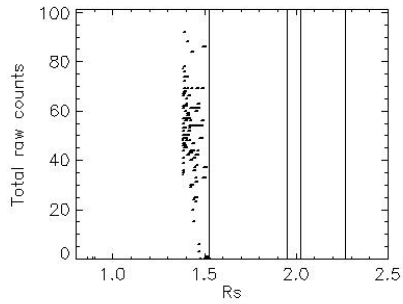
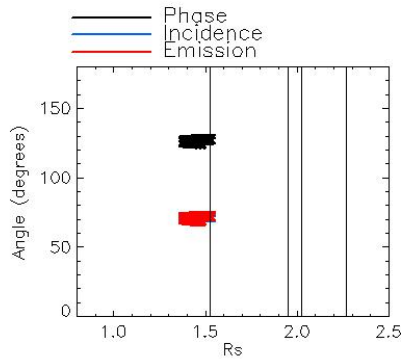
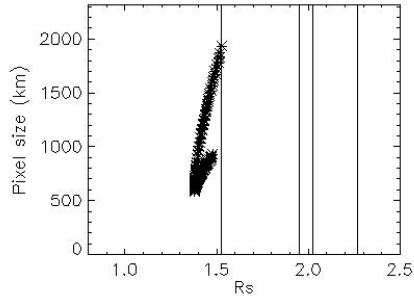
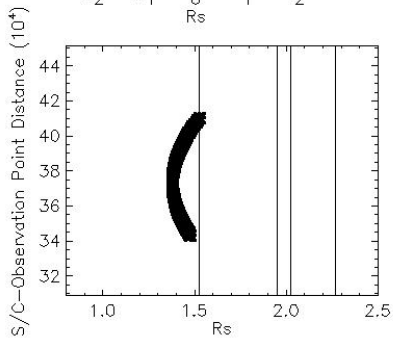


Observation Name:  
UVS\_186RLCOMPLIT001\_VIMS

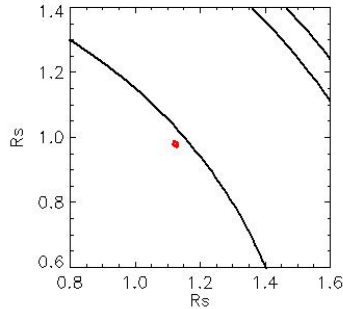
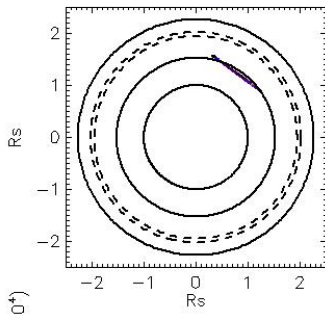
Observation Date:  
2013\_102\_12\_07\_01

Observation Duration:  
600 S

Integration time = 300 S





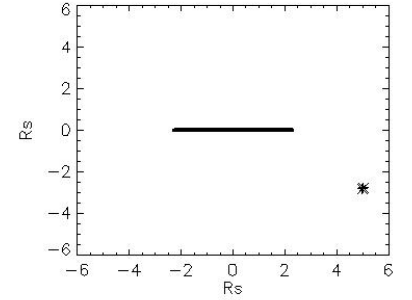
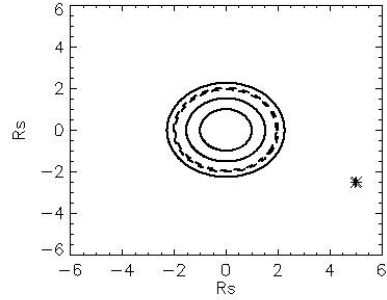
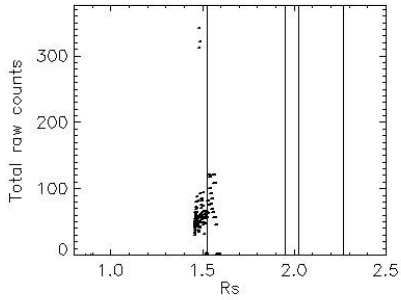
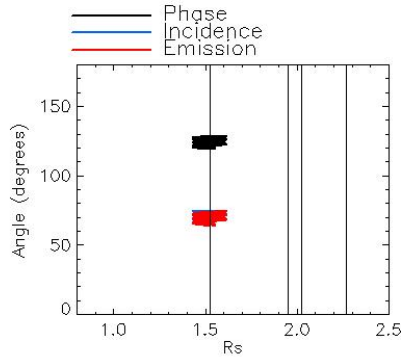
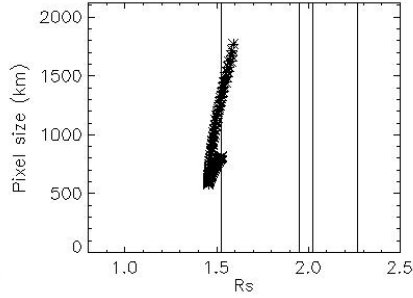
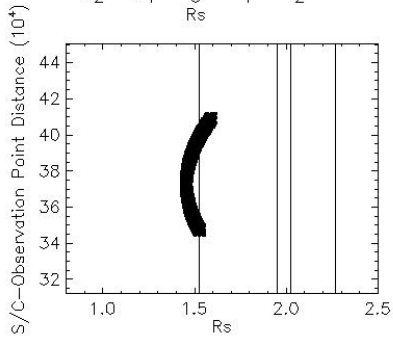


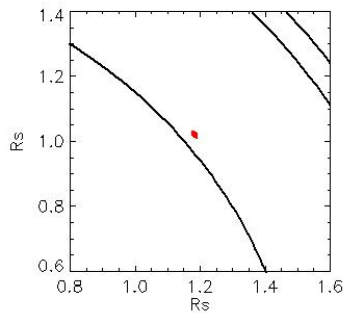
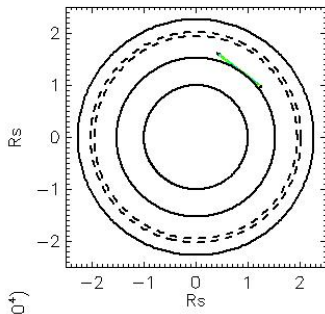
Observation Name:  
UMS\_186RLCOMPLIT001\_VIMS

Observation Date:  
2013\_102\_12\_20\_55

Observation Duration:  
600 S

Integration time = 300 S



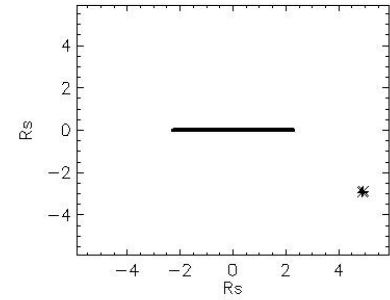
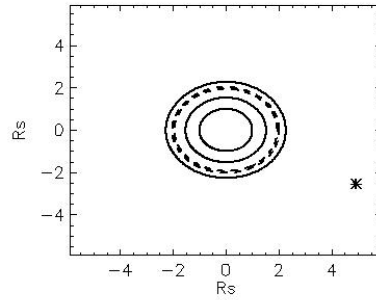
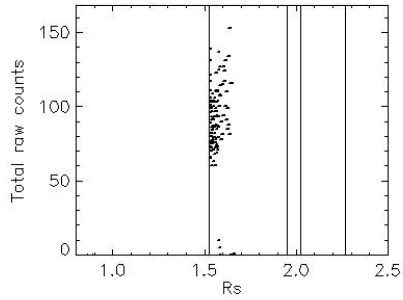
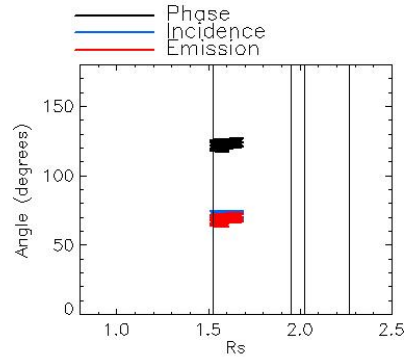
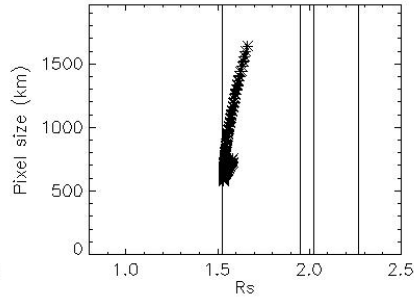
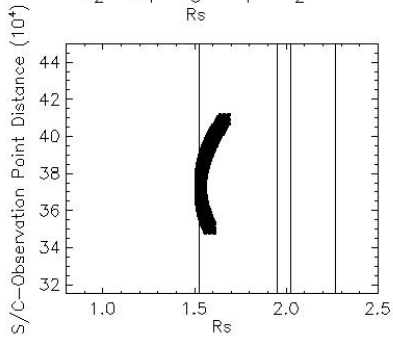


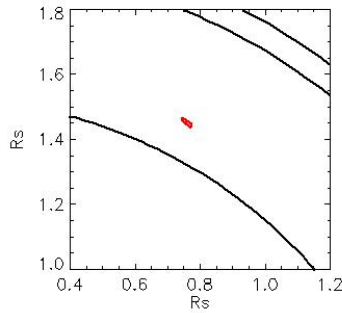
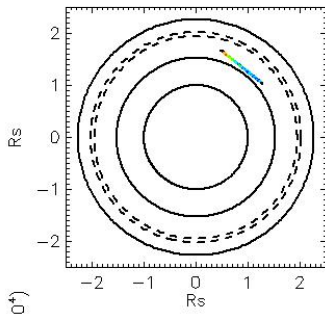
Observation Name:  
UMS\_186RLCOMPLIT001\_VIMS

Observation Date:  
2013\_102\_12\_34\_49

Observation Duration:  
600 S

Integration time = 300 S



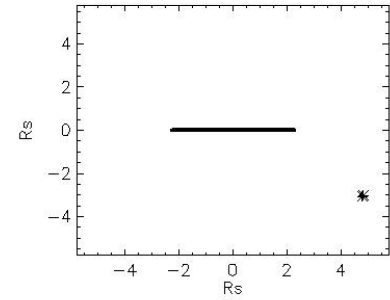
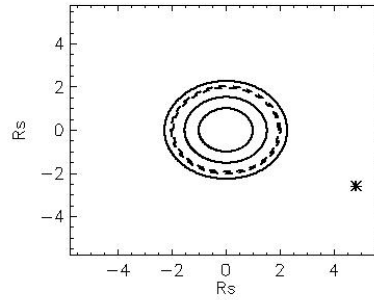
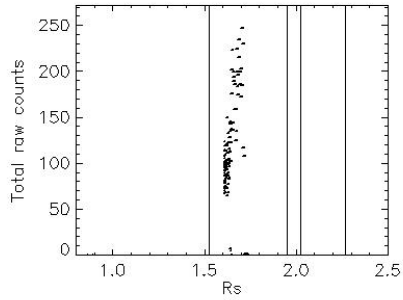
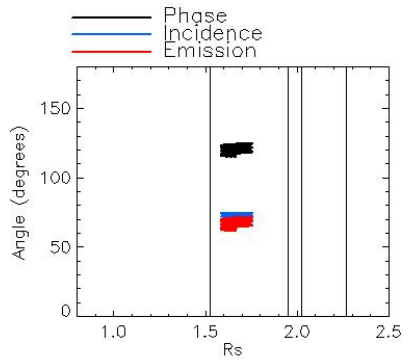
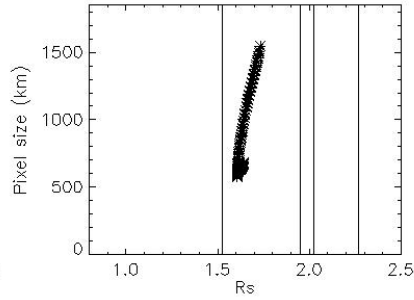
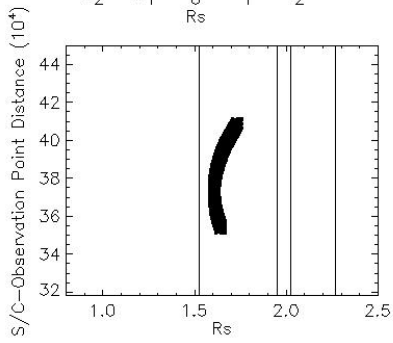


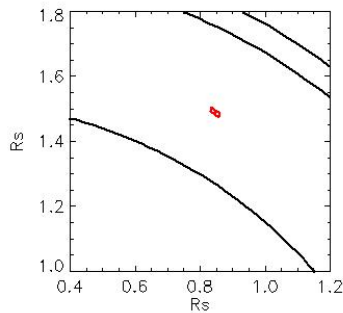
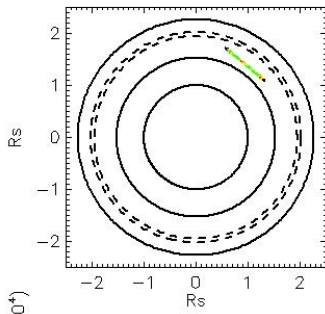
Observation Name:  
UMS\_186RLCOMPLIT001\_VIMS

Observation Date:  
2013\_102\_12\_48\_43

Observation Duration:  
600 S

Integration time = 300 S



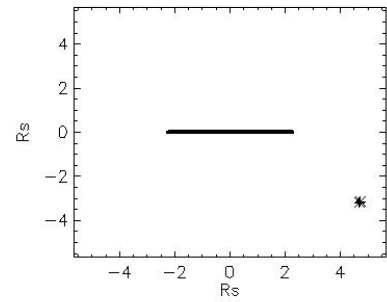
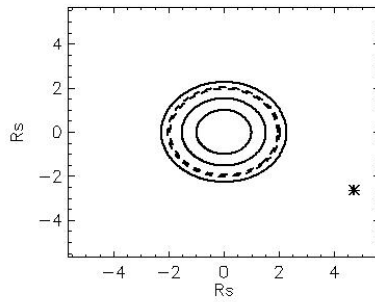
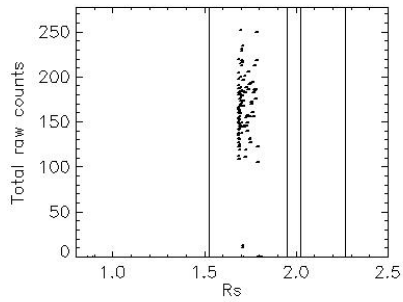
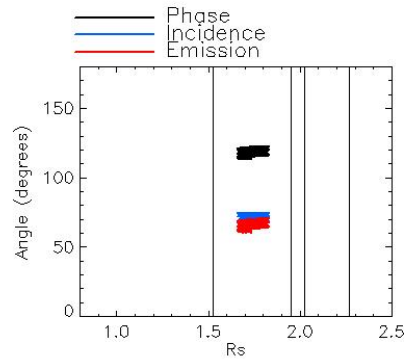
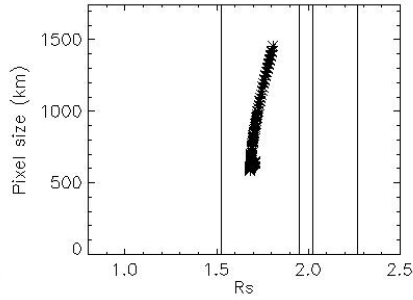
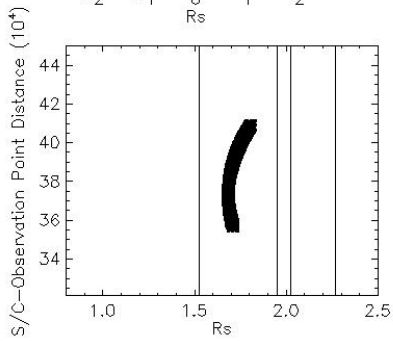


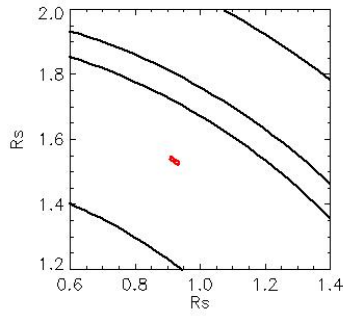
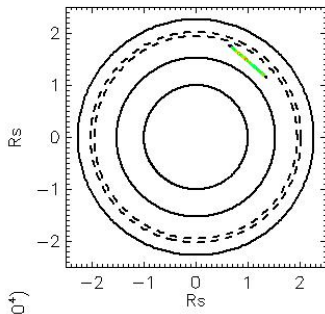
Observation Name:  
UMS\_186RLCOMPLIT001\_VIMS

Observation Date:  
2013\_102\_13\_02\_37

Observation Duration:  
600 S

Integration time = 300 S



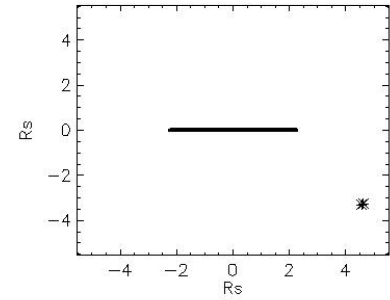
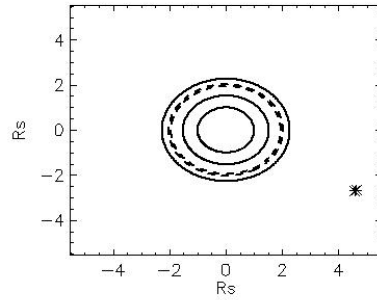
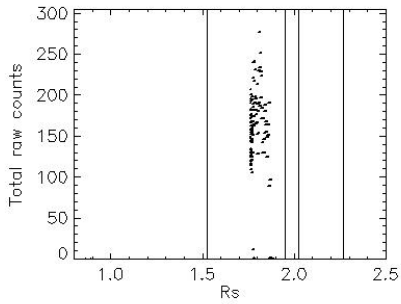
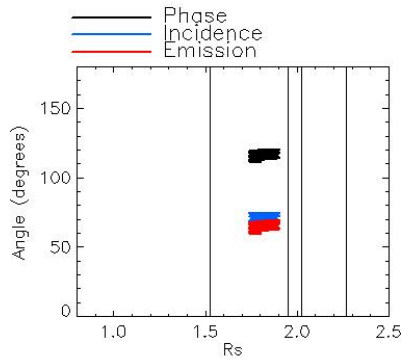
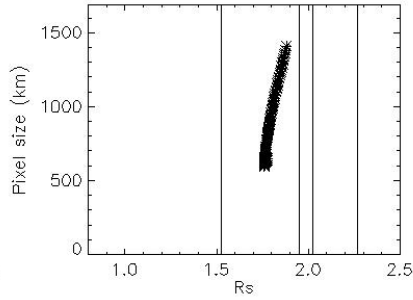
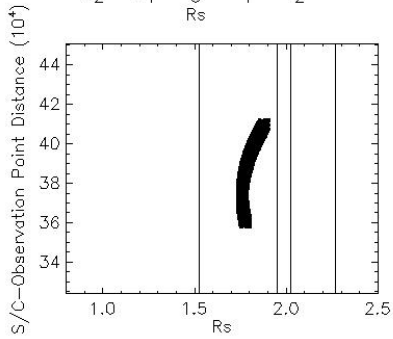


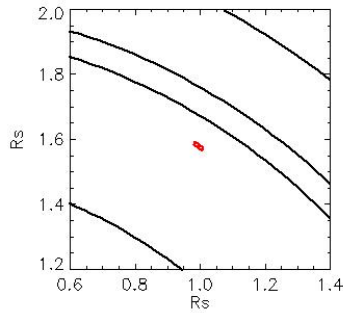
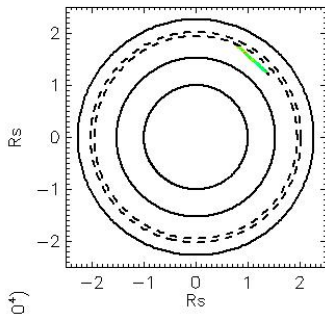
Observation Name:  
UMS\_186RLCOMPLIT001\_VIMS

Observation Date:  
2013\_102\_13\_16\_31

Observation Duration:  
600 S

Integration time = 300 S



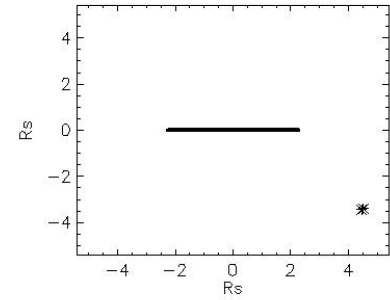
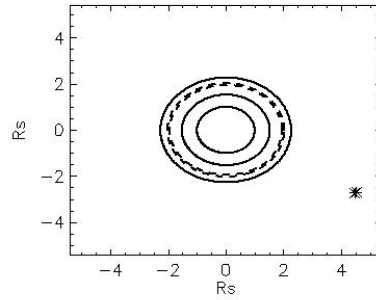
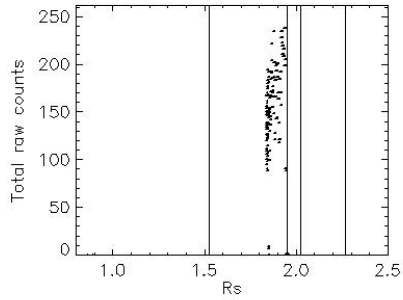
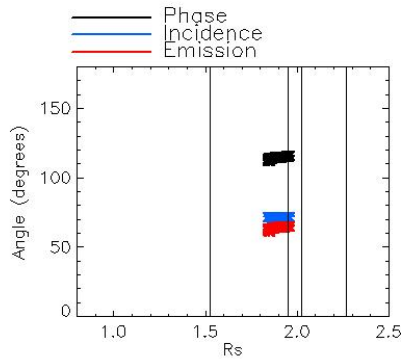
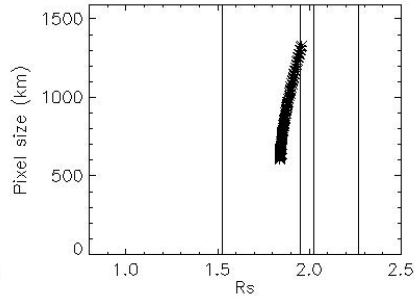
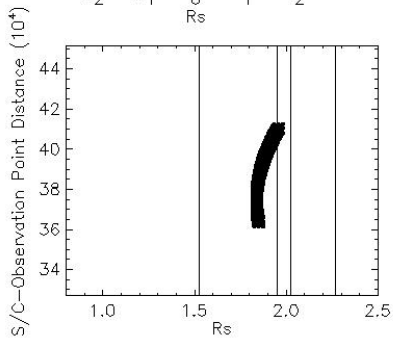


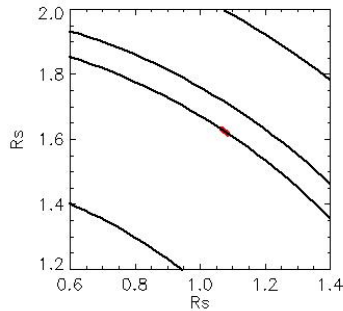
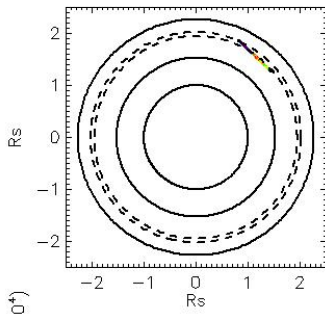
Observation Name:  
UMS\_186RLCOMPLIT001\_VIMS

Observation Date:  
2013\_102\_13\_30\_25

Observation Duration:  
600 S

Integration time = 300 S



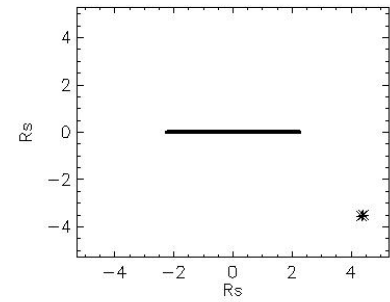
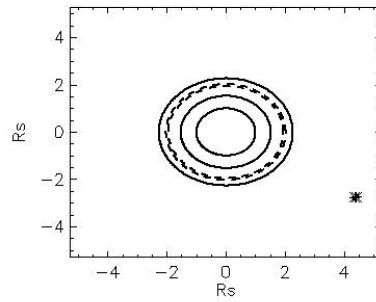
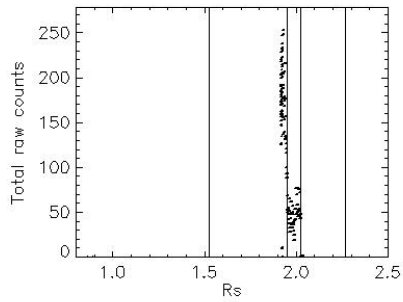
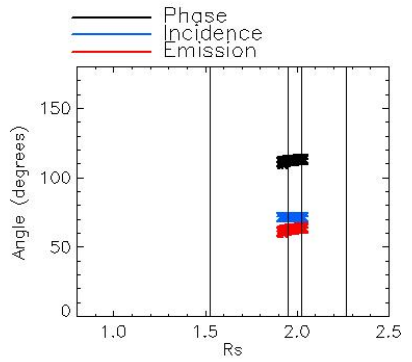
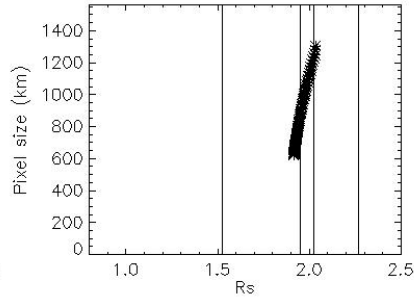
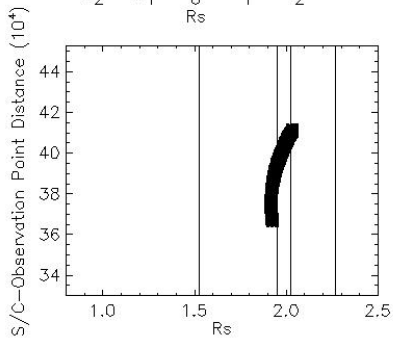


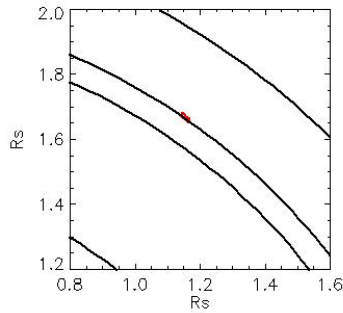
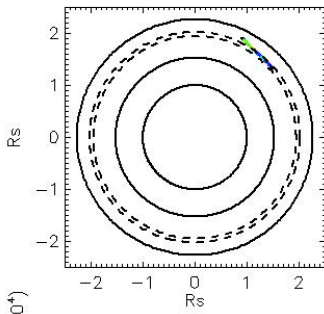
Observation Name:  
UMS\_186RLCOMPLIT001\_VIMS

Observation Date:  
2013\_102\_13\_44\_19

Observation Duration:  
600 S

Integration time = 300 S



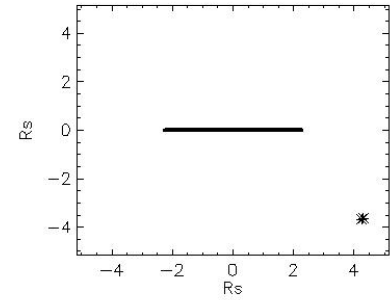
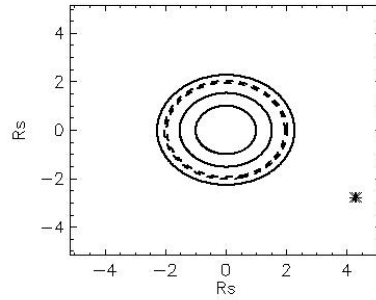
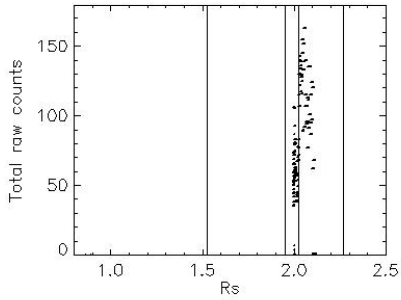
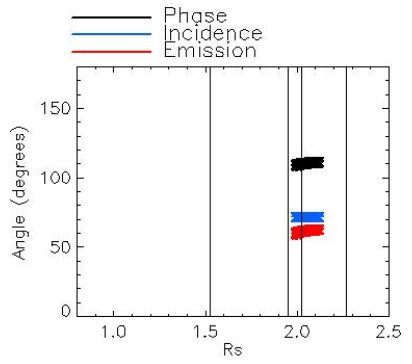
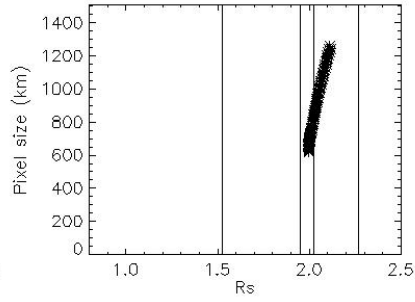
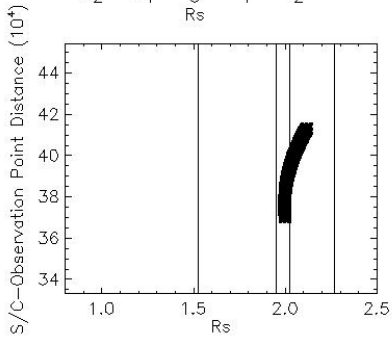


Observation Name:  
UMS\_186RLCOMPLIT001\_VIMS

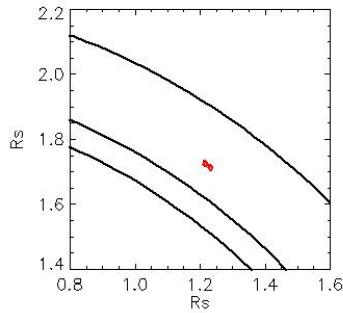
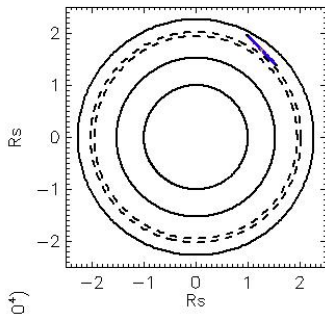
Observation Date:  
2013\_102\_13\_58\_13

Observation Duration:  
600 S

Integration time = 300 S





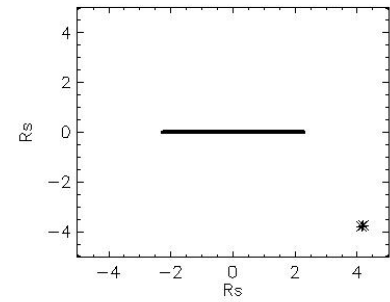
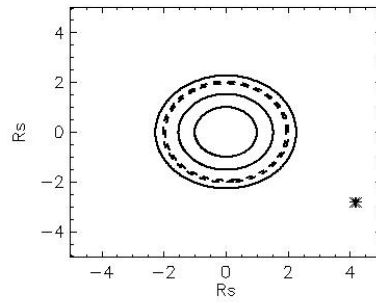
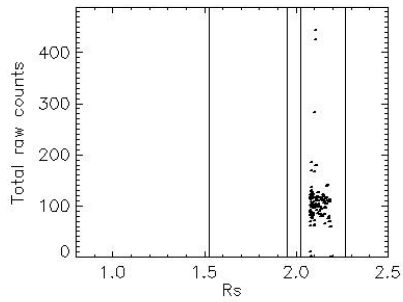
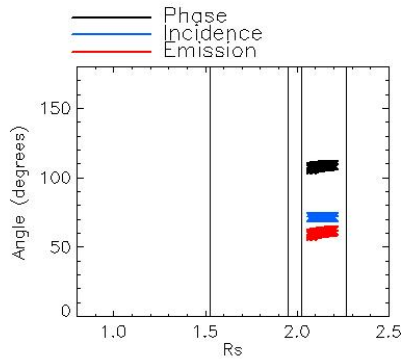
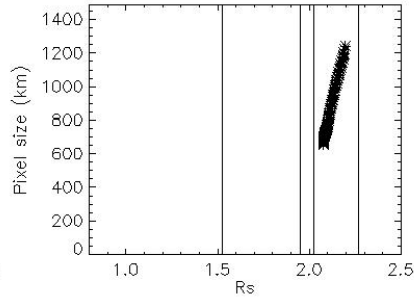
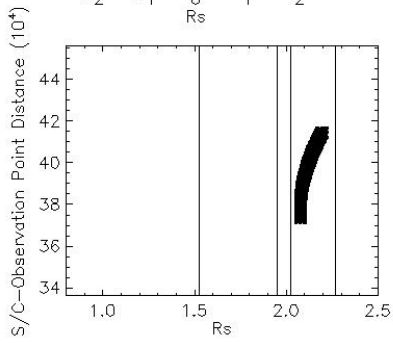


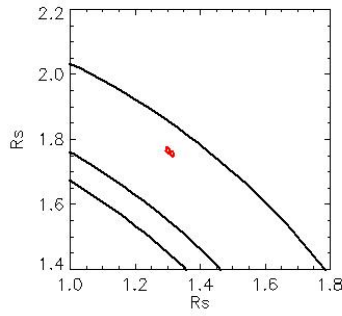
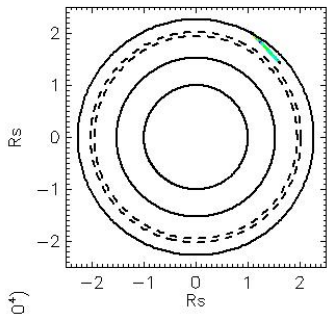
Observation Name:  
UMS\_186RLCOMPLIT001\_VIMS

Observation Date:  
2013\_102\_14\_12\_07

Observation Duration:  
600 S

Integration time = 300 S



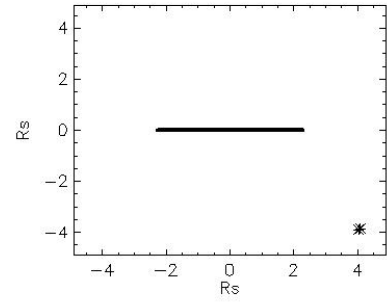
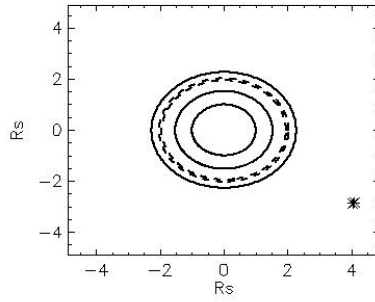
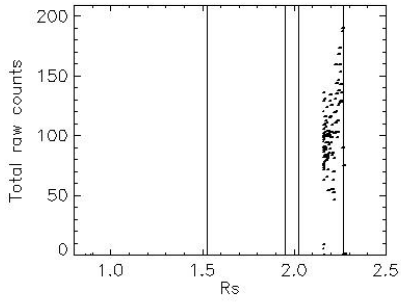
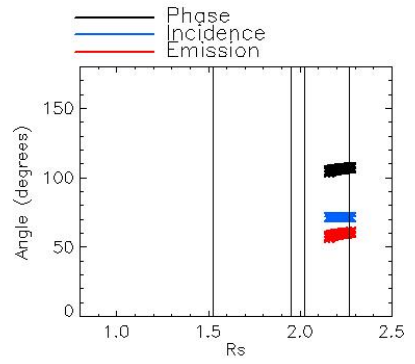
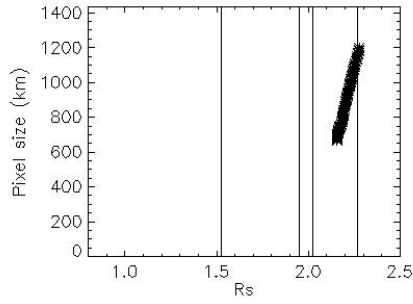
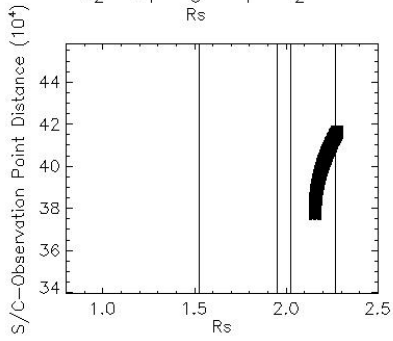


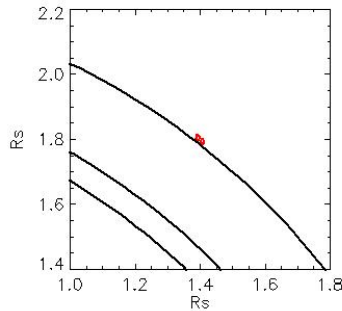
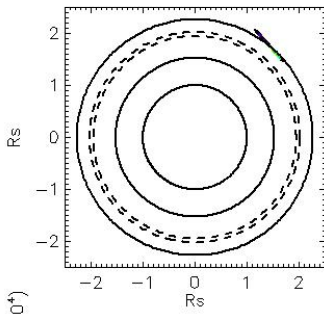
Observation Name:  
UMS\_186RLCOMPLIT001\_VIMS

Observation Date:  
2013\_102\_14\_26\_01

Observation Duration:  
600 S

Integration time = 300 S



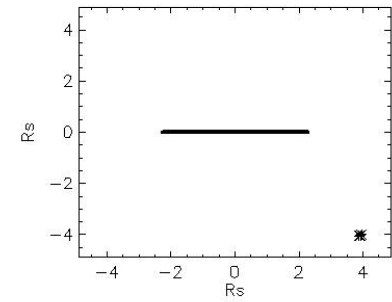
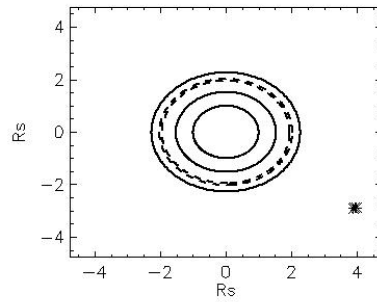
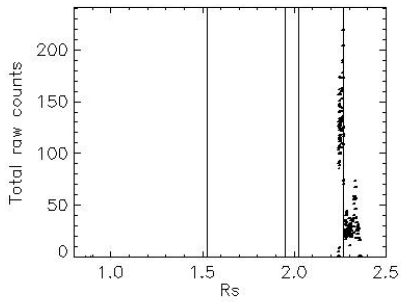
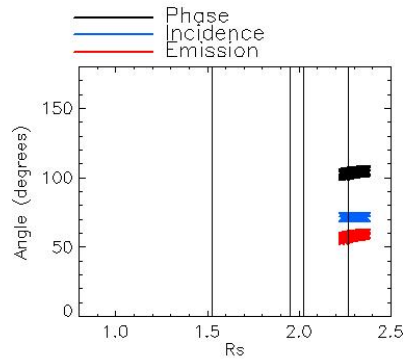
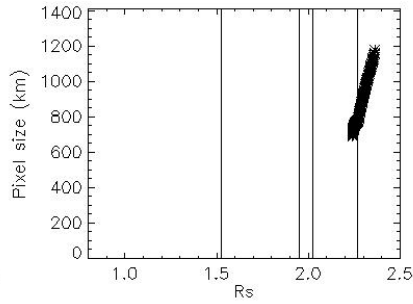
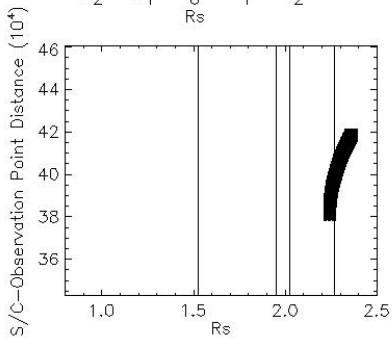


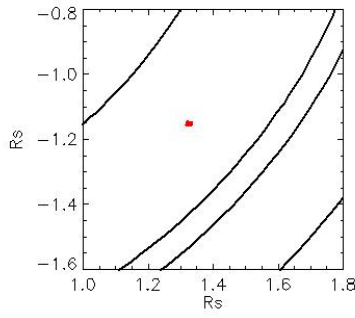
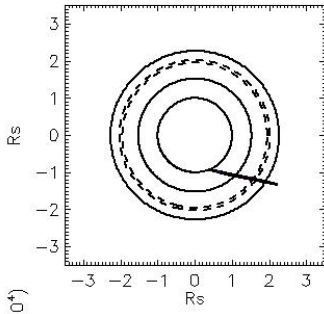
Observation Name:  
UMS\_186RLCOMPLIT001\_VIMS

Observation Date:  
2013\_102\_14\_39\_55

Observation Duration:  
900 S

Integration time = 300 S



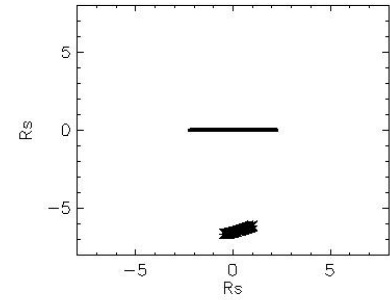
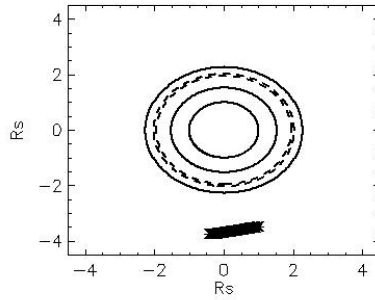
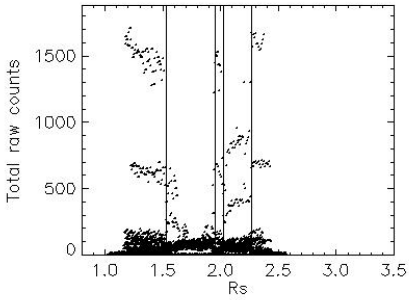
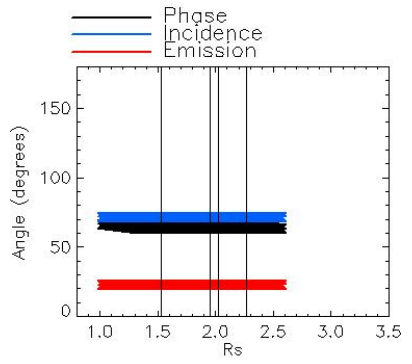
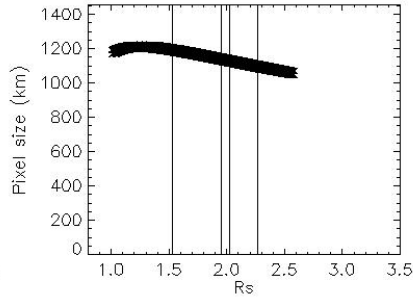
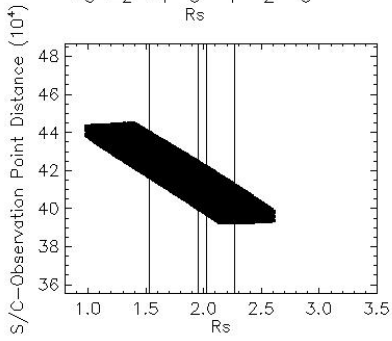


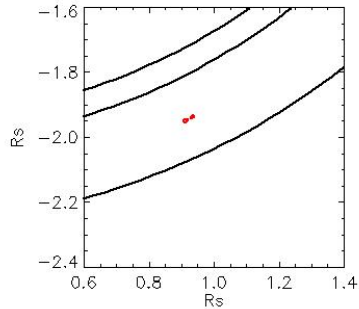
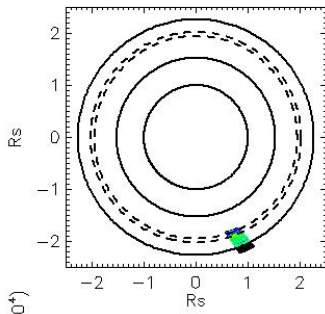
Observation Name:  
UMS\_186RLTDIFNORTH001\_CIRS

Observation Date:  
2013\_102\_20\_22\_49

Observation Duration:  
8880 S

Integration time = 60 S



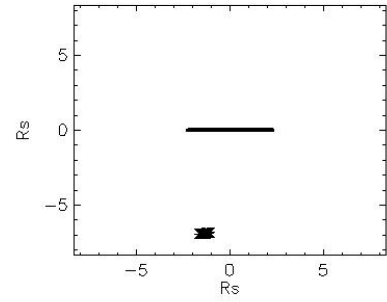
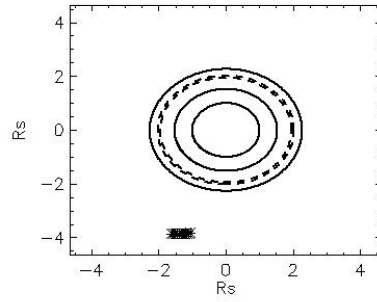
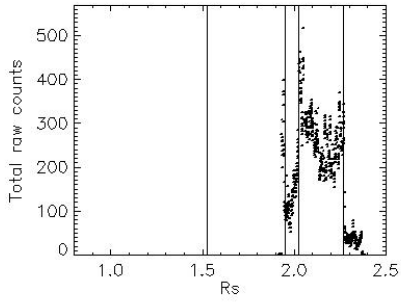
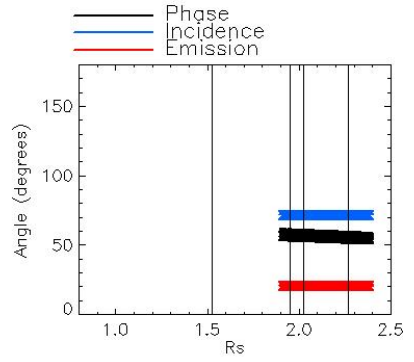
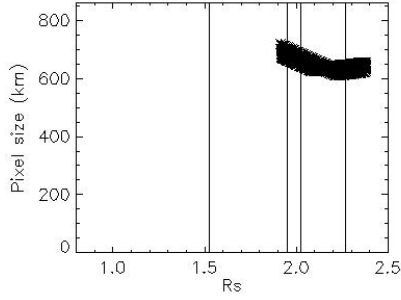
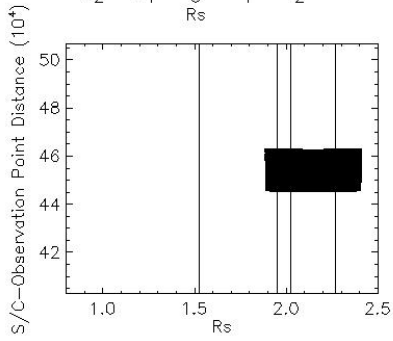


Observation Name:  
UVS\_186RLRINGMAP001\_PRIME

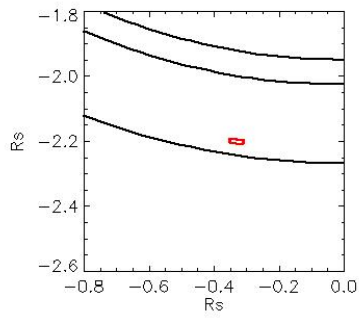
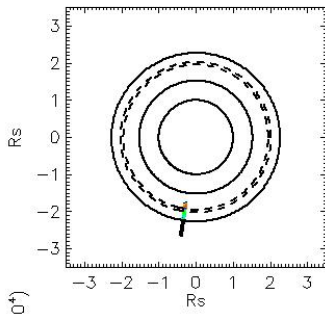
Observation Date:  
2013\_102\_23\_49\_32

Observation Duration:  
3300 S

Integration time = 300 S



— Phase  
— Incidence  
— Emission

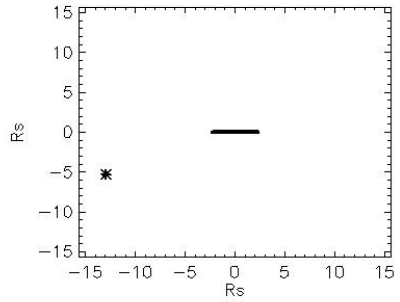
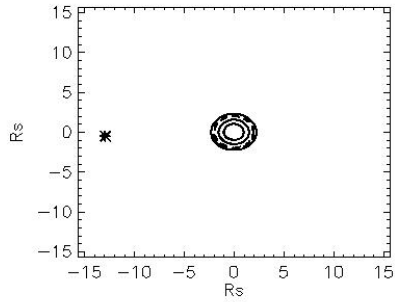
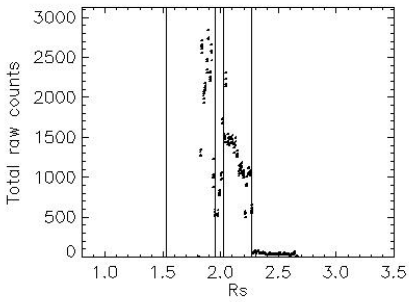
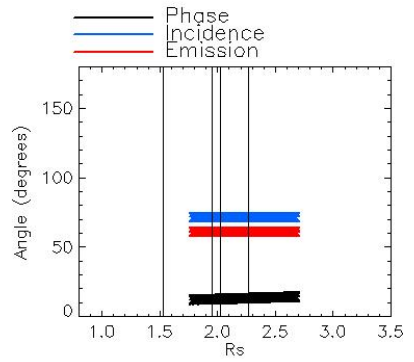
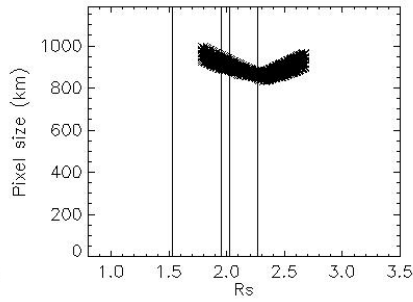
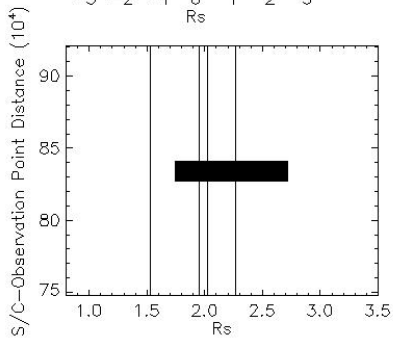


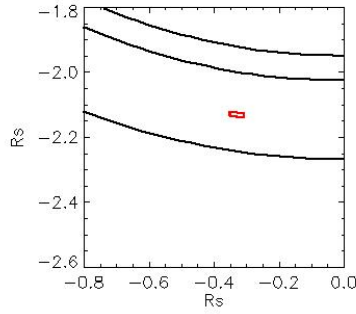
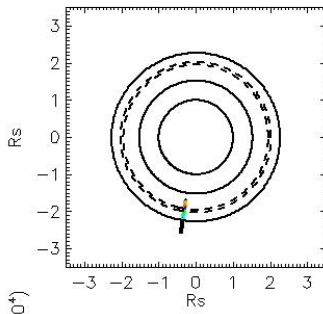
Observation Name:  
UMS\_186RLRDCOLSCNH001\_ISS

Observation Date:  
2013\_103\_23\_21\_03

Observation Duration:  
1800 S

Integration time = 300 S



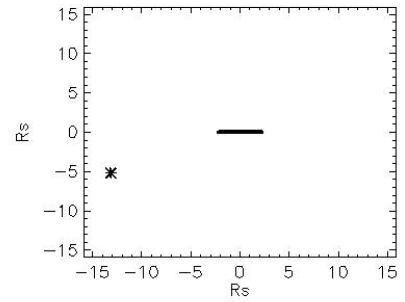
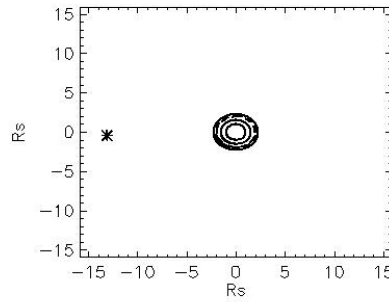
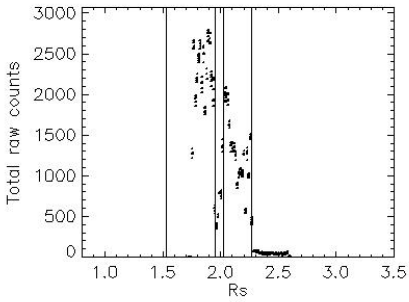
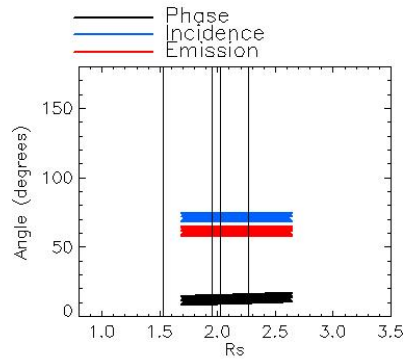
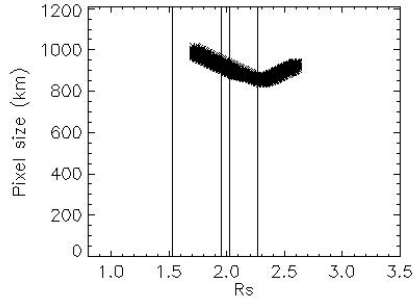
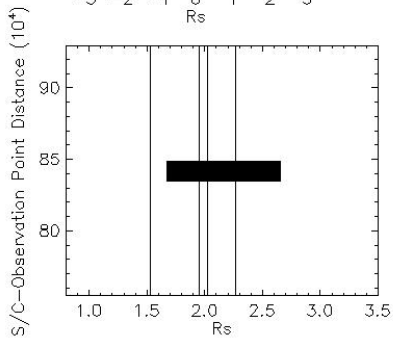


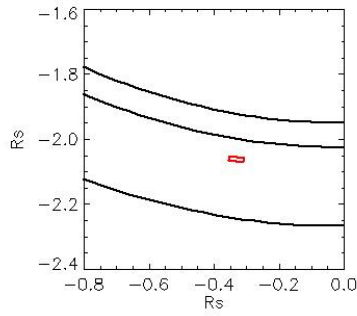
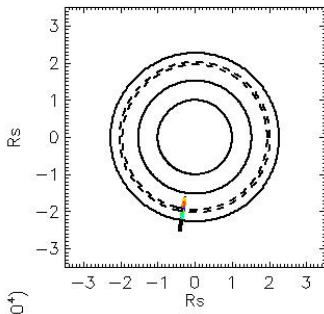
Observation Name:  
UMS\_186RLRDCOLSCNH001\_ISS

Observation Date:  
2013\_103\_23\_53\_51

Observation Duration:  
1800 S

Integration time = 300 S



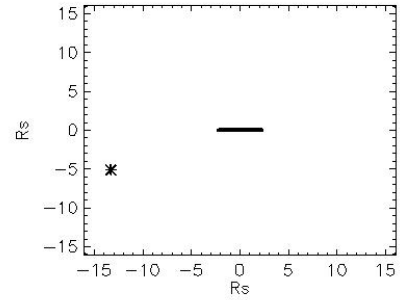
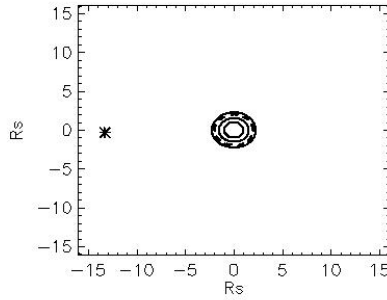
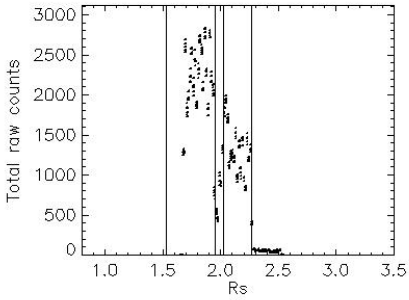
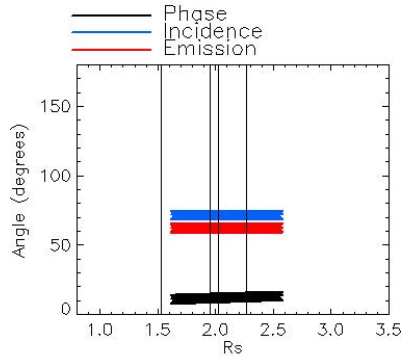
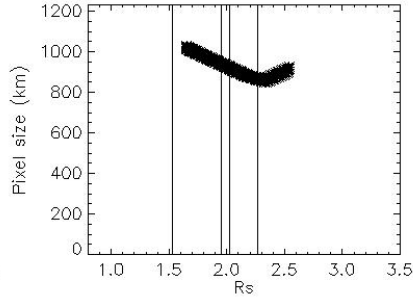
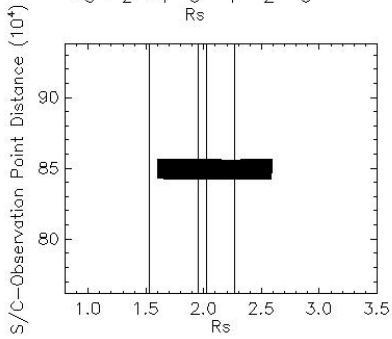


Observation Name:  
UMS\_186RLRDCOLSCNH001\_ISS

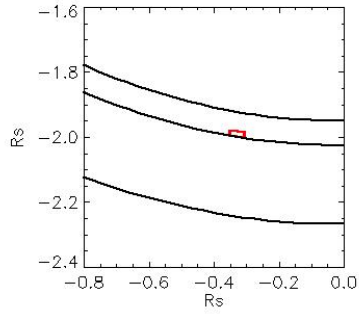
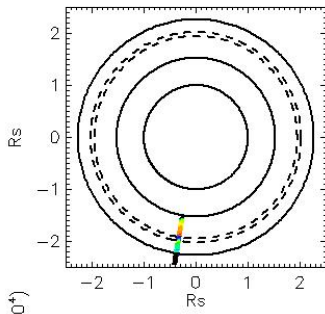
Observation Date:  
2013\_104\_00\_26\_38

Observation Duration:  
1800 S

Integration time = 300 S





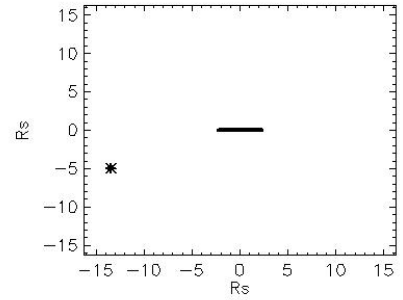
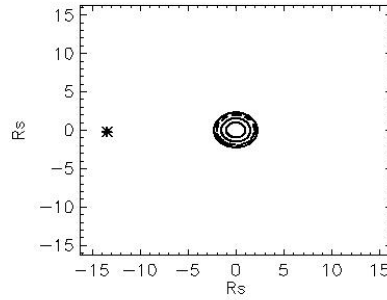
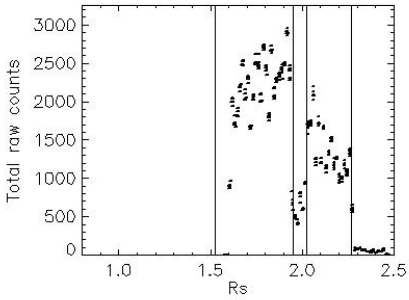
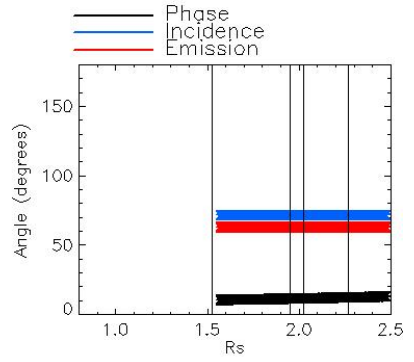
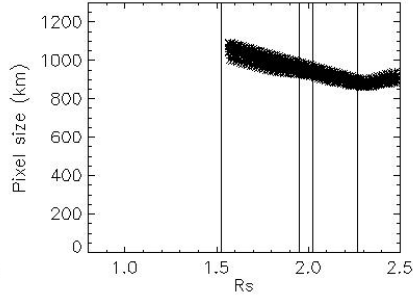
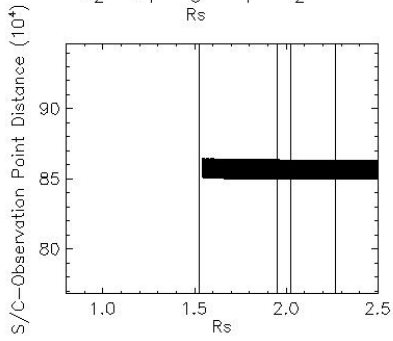


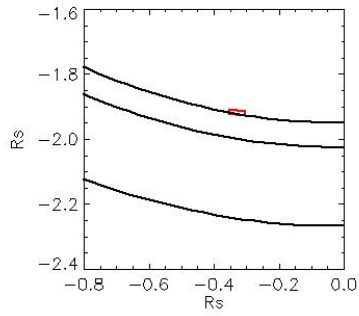
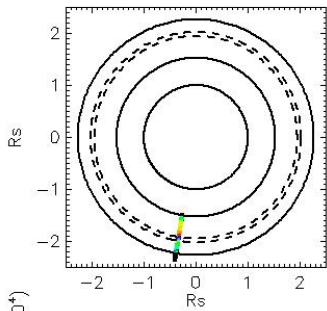
Observation Name:  
UMS\_186RLRDCOLSCNH001\_ISS

Observation Date:  
2013\_104\_00\_59\_25

Observation Duration:  
1800 S

Integration time = 300 S



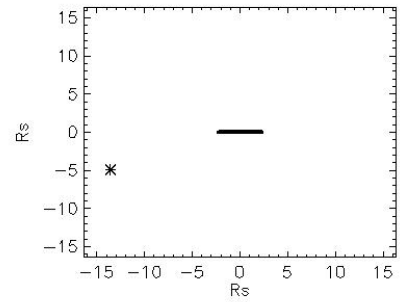
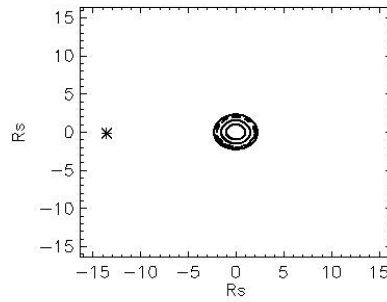
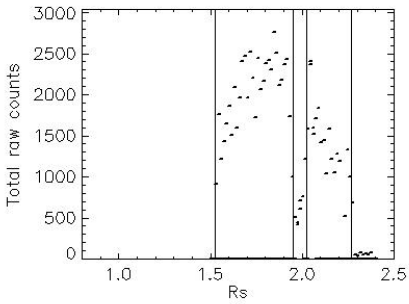
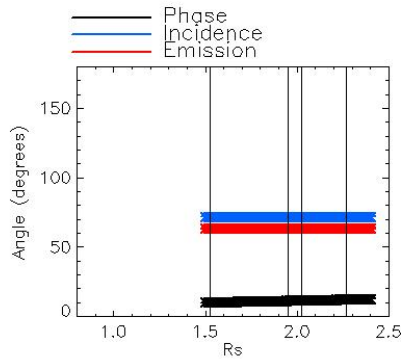
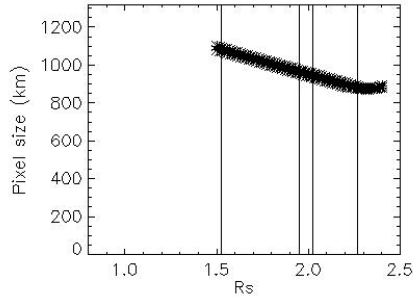
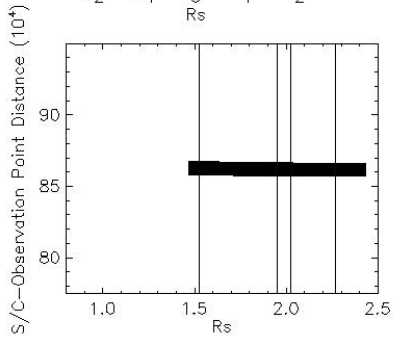


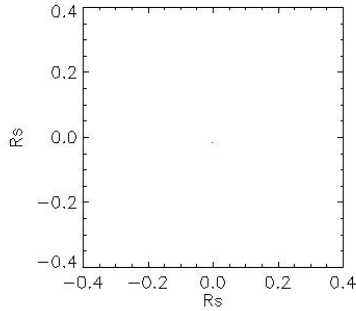
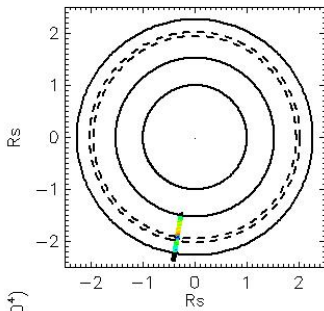
Observation Name:  
UMS\_186RLRDCOLSCNH001\_ISS

Observation Date:  
2013\_104\_01\_32\_12

Observation Duration:  
600 S

Integration time = 300 S



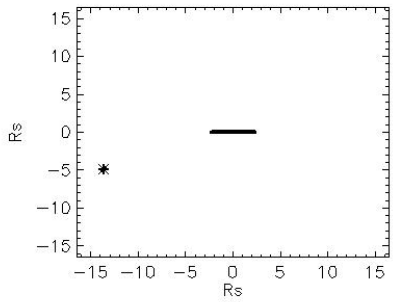
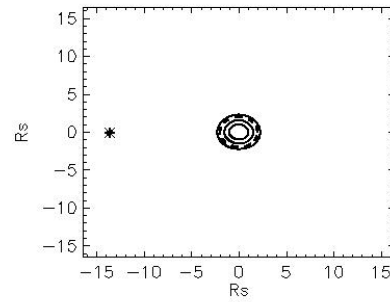
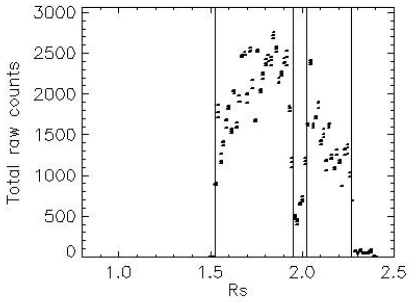
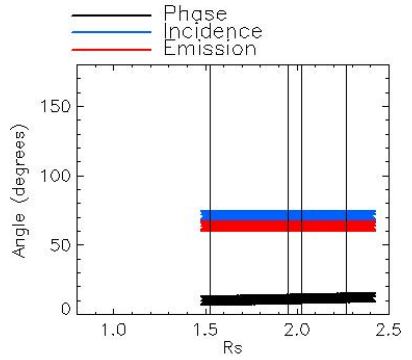
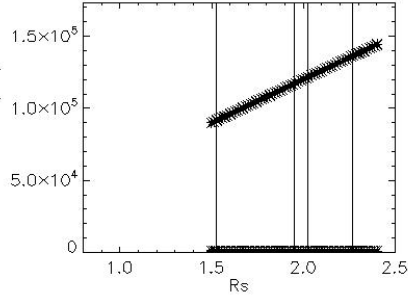
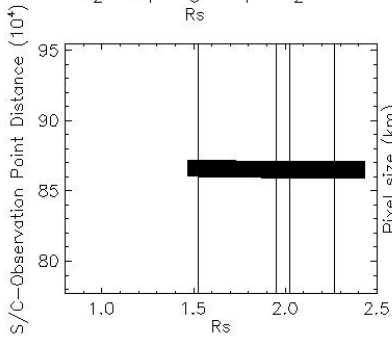


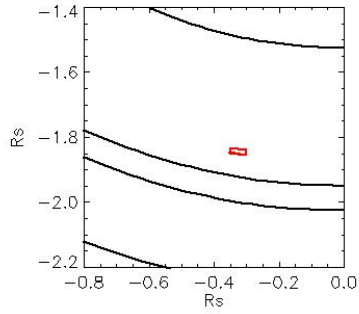
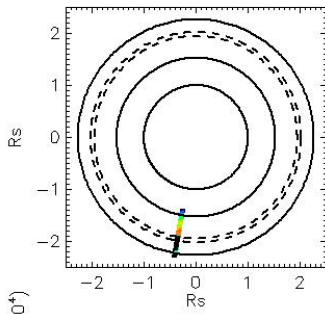
Observation Name:  
UMS\_186RLRDCOLSCNH001\_ISS

Observation Date:  
2013\_104\_01\_42\_12

Observation Duration:  
1200 S

Integration time = 300 S



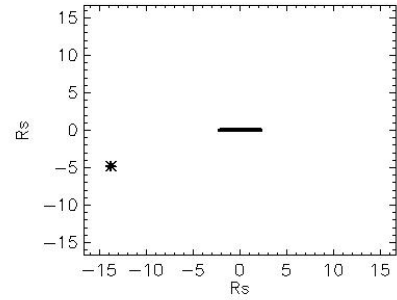
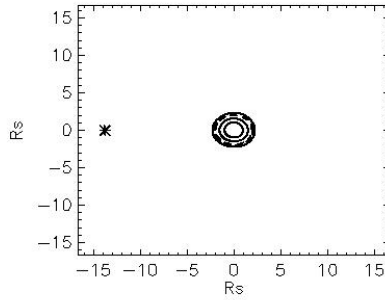
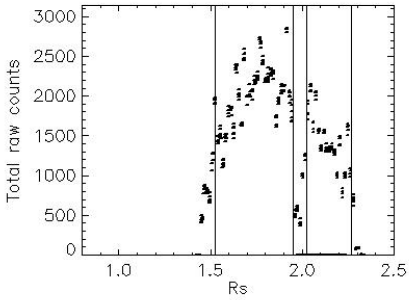
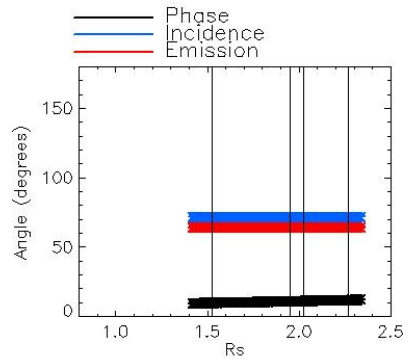
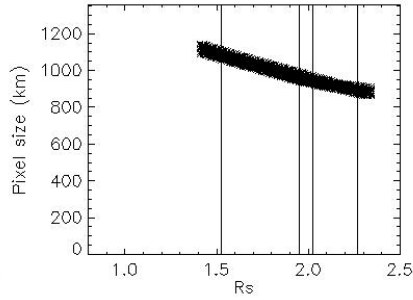
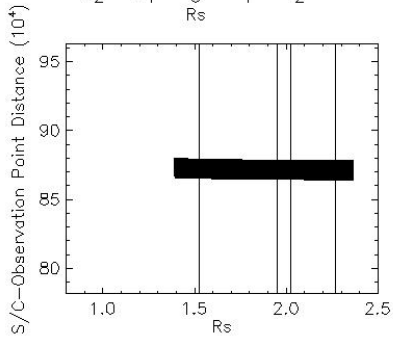


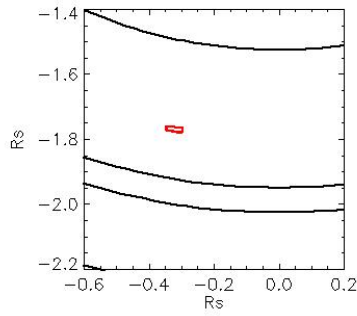
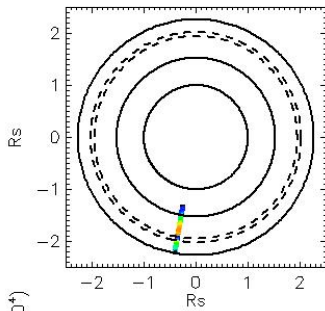
Observation Name:  
UMS\_186RLRDCOLSCNH001\_ISS

Observation Date:  
2013\_104\_02\_04\_59

Observation Duration:  
1800 S

Integration time = 300 S



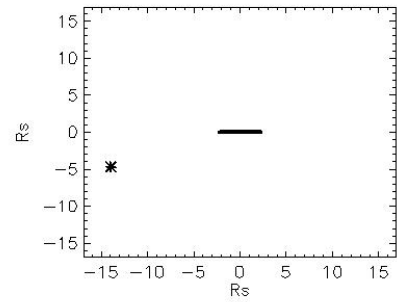
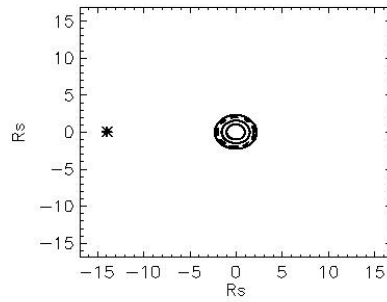
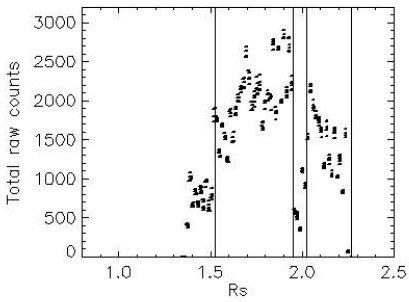
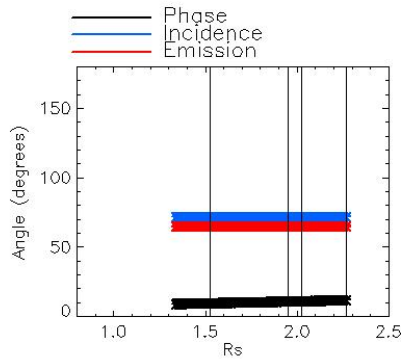
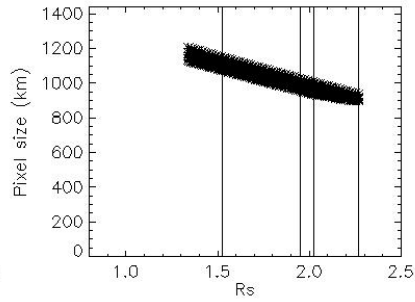
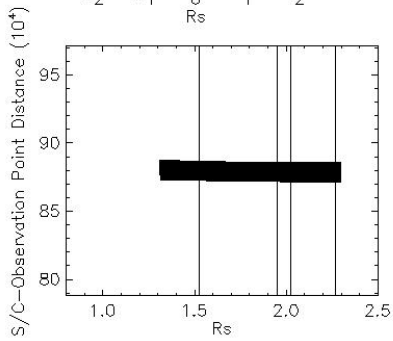


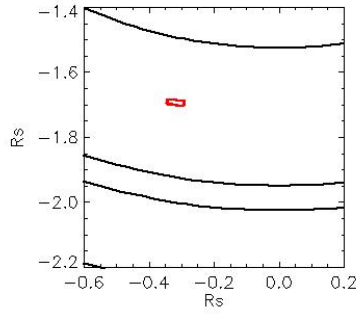
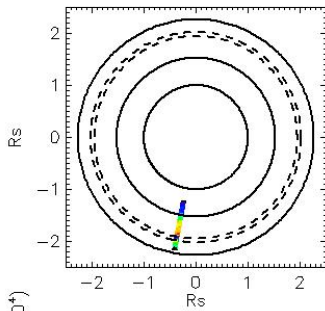
Observation Name:  
UMS\_186RLRDCOLSCNH001\_ISS

Observation Date:  
2013\_104\_02\_37\_46

Observation Duration:  
1800 S

Integration time = 300 S



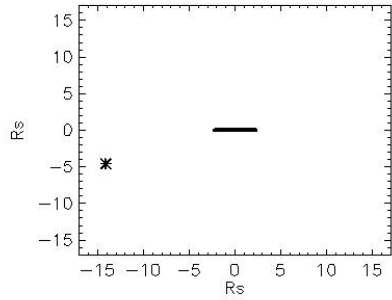
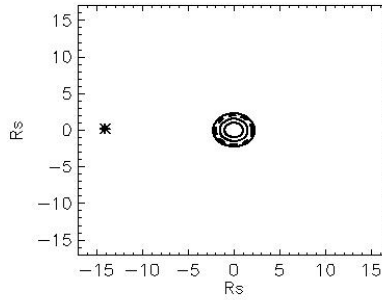
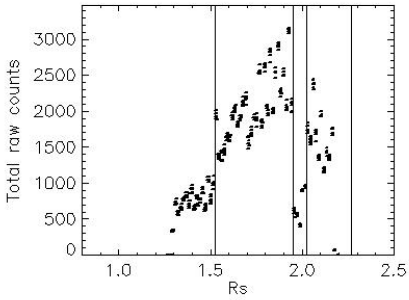
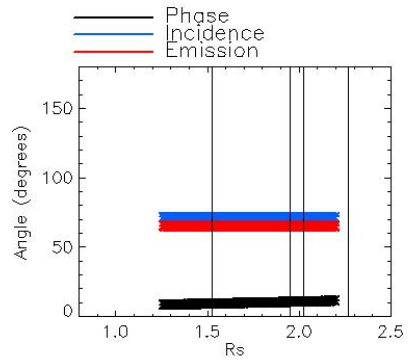
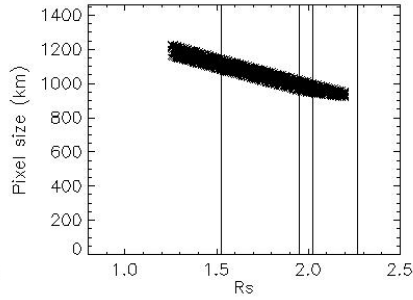
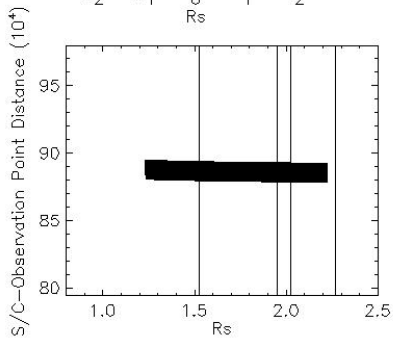


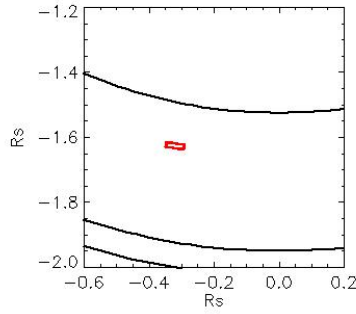
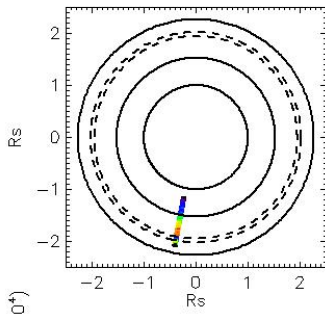
Observation Name:  
UMS\_186RLRDCOLSCNH001\_ISS

Observation Date:  
2013\_104\_03\_10\_33

Observation Duration:  
1800 S

Integration time = 300 S



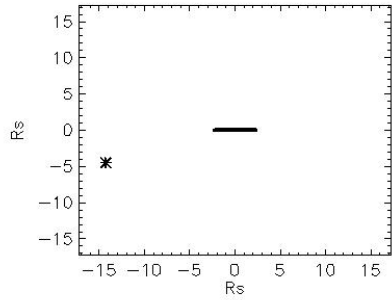
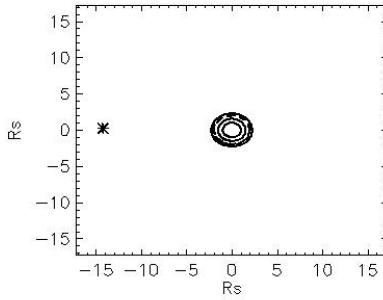
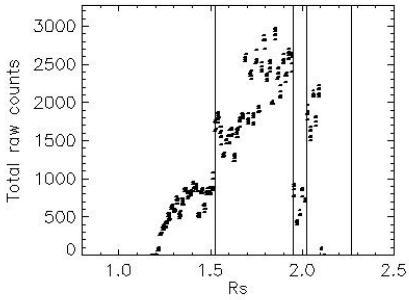
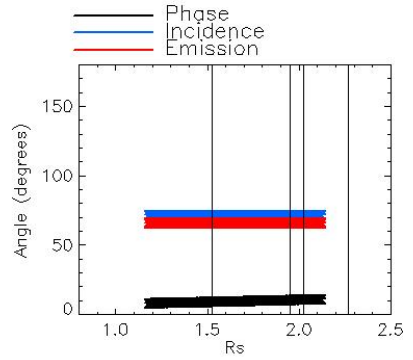
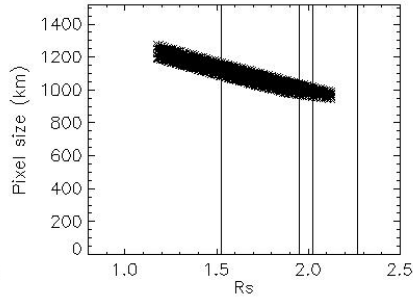
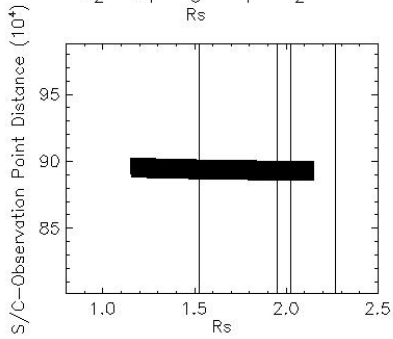


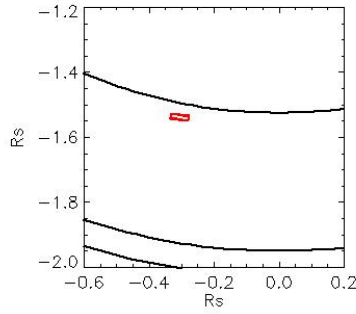
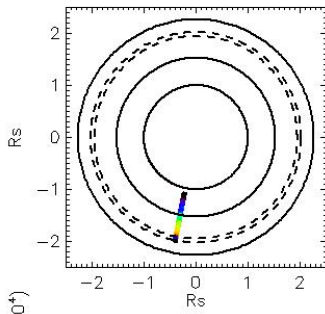
Observation Name:  
UMS\_186RLRDCOLSCNH001\_IJS

Observation Date:  
2013\_104\_03\_43\_20

Observation Duration:  
1800 S

Integration time = 300 S



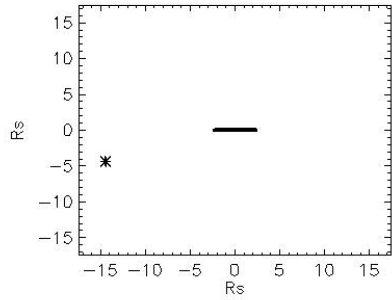
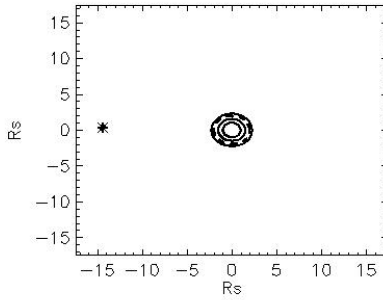
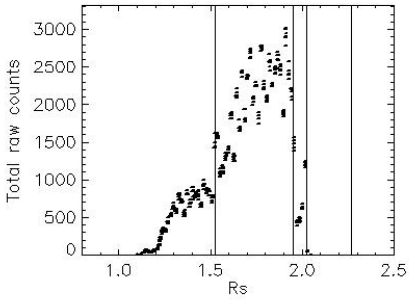
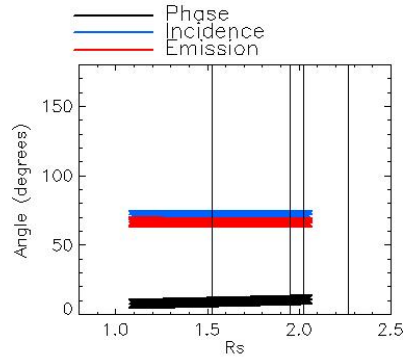
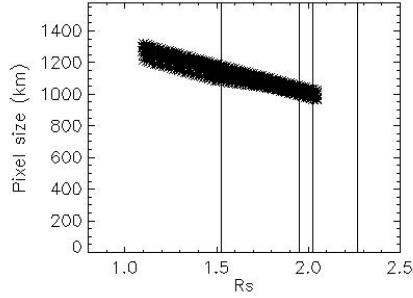
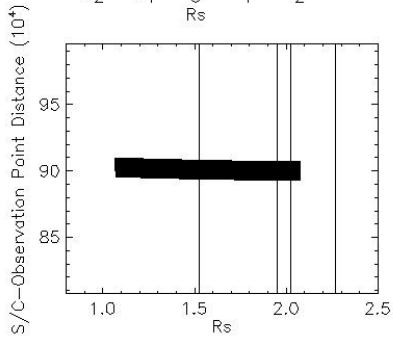


Observation Name:  
UMS\_186RLRDCOLSCNH001\_ISS

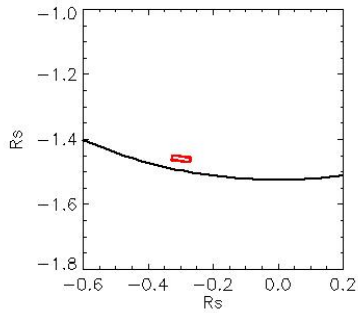
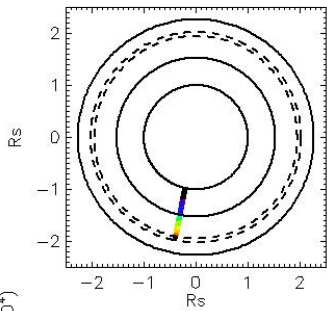
Observation Date:  
2013\_104\_04\_16\_06

Observation Duration:  
1800 S

Integration time = 300 S





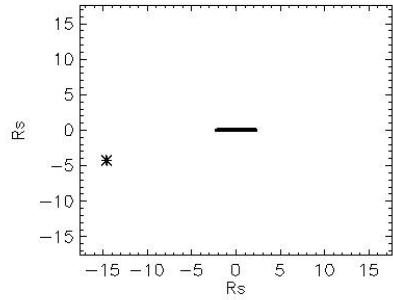
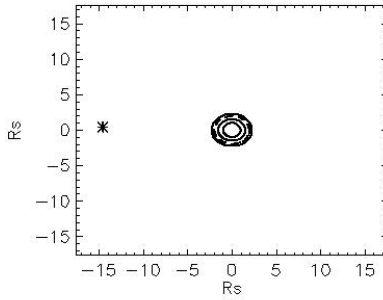
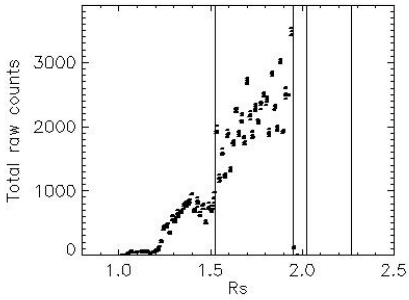
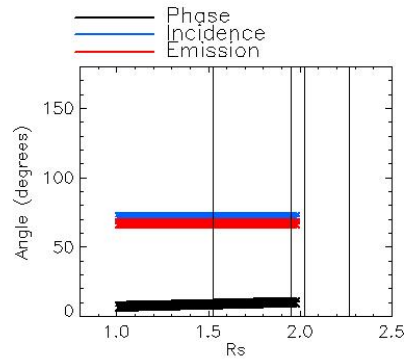
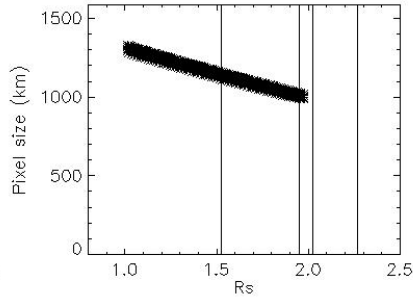
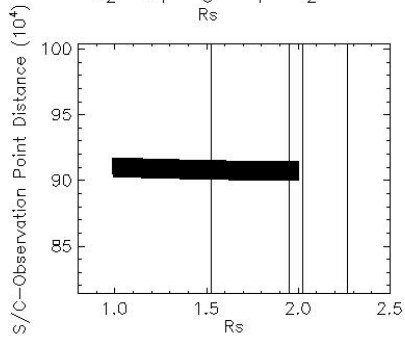


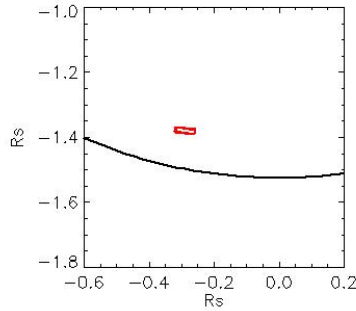
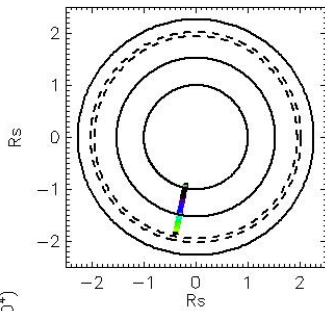
Observation Name:  
UMS\_186RLRDCOLSCNH001\_IJS

Observation Date:  
2013\_104\_04\_48\_53

Observation Duration:  
1800 S

Integration time = 300 S





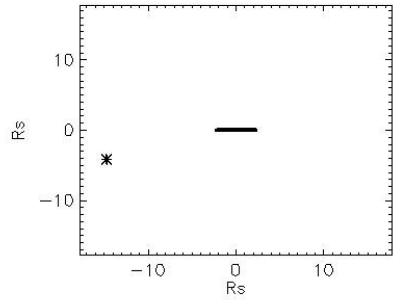
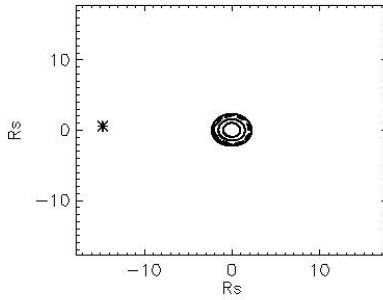
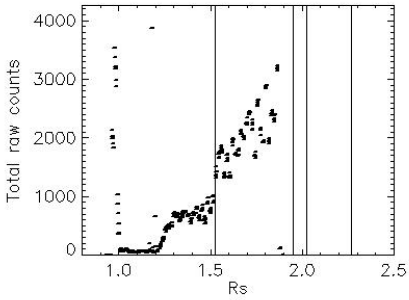
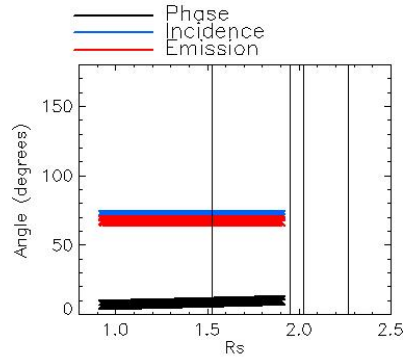
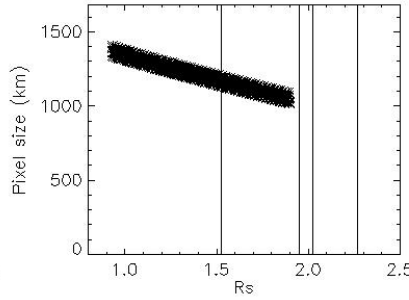
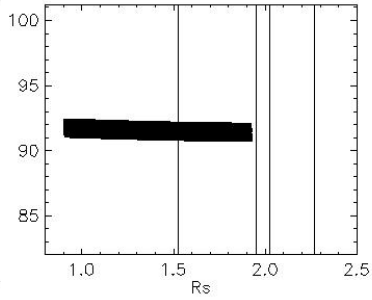
Observation Name:  
UMS\_186RLRDCOLSCNH001\_IJS

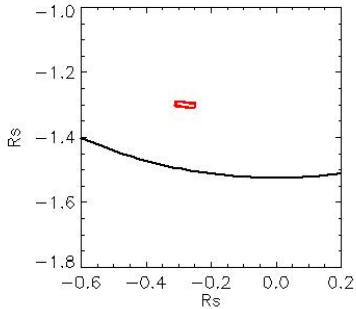
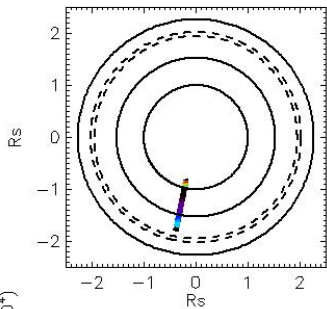
Observation Date:  
2013\_104\_05\_21\_40

Observation Duration:  
1800 S

Integration time = 300 S

S/C—Observation Point Distance ( $10^4$ )





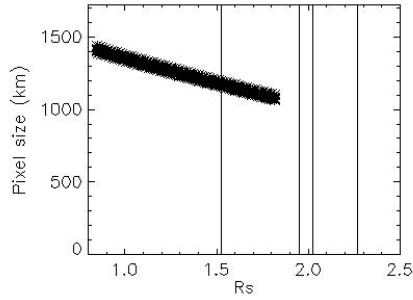
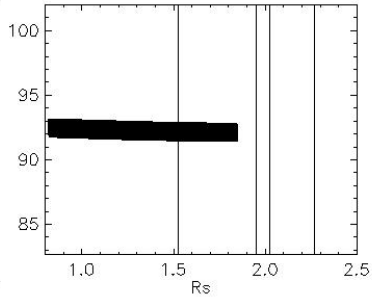
Observation Name:  
UMS\_186RLRDCOLSCNH001\_ISS

Observation Date:  
2013\_104\_05\_54\_27

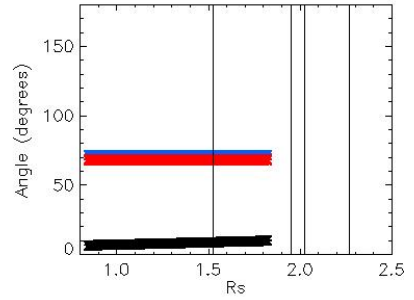
Observation Duration:  
1800 S

Integration time = 300 S

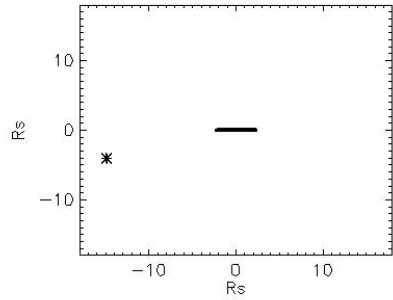
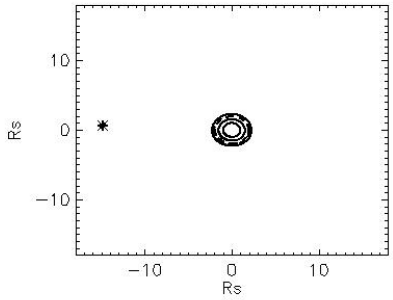
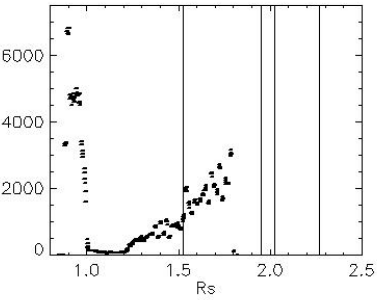
S/C—Observation Point Distance ( $10^4$ )

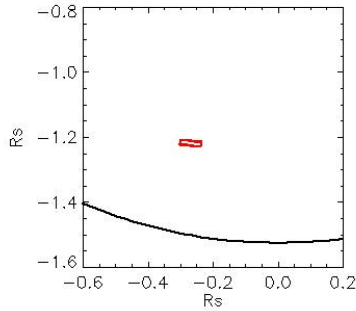
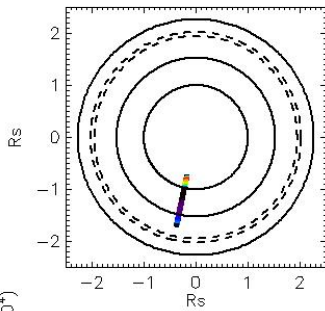


— Phase  
— Incidence  
— Emission



Total raw counts





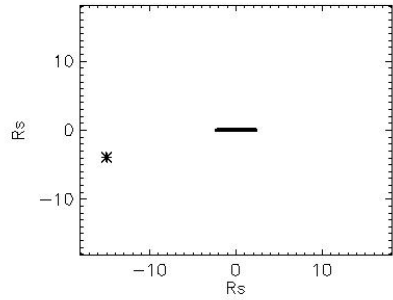
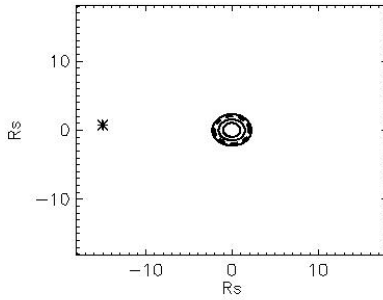
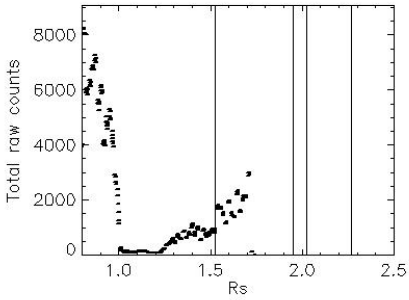
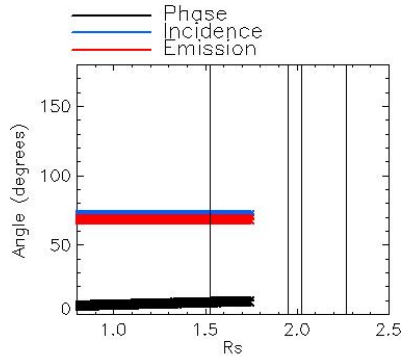
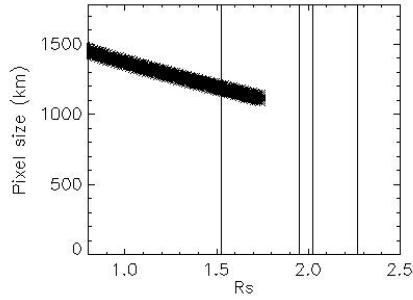
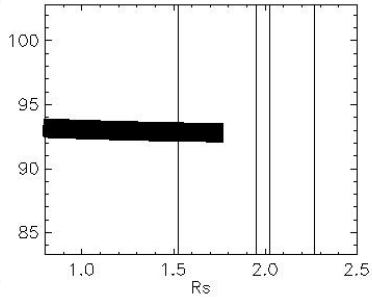
Observation Name:  
UMS\_186RLRDCOLSCNH001\_IJS

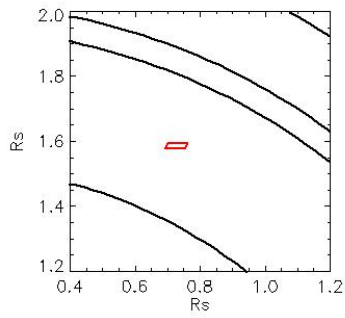
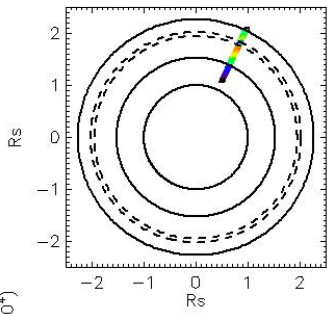
Observation Date:  
2013\_104\_06\_27\_14

Observation Duration:  
1800 S

Integration time = 300 S

S/C—Observation Point Distance ( $10^4$ )





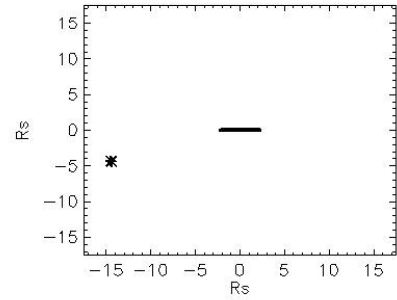
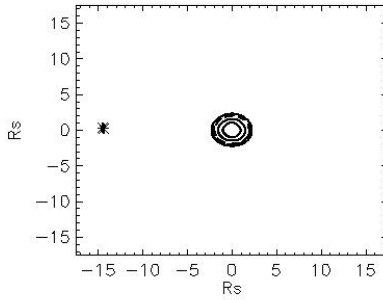
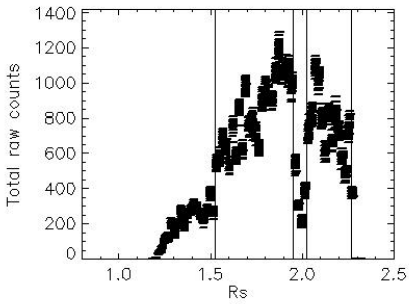
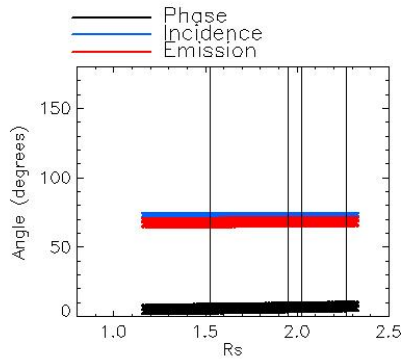
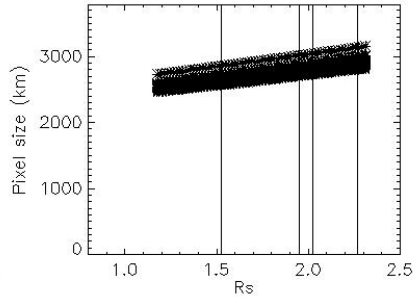
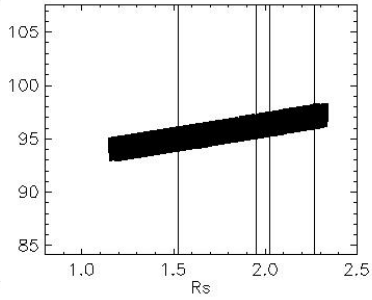
Observation Name:  
UVS\_187RLRINGMAP001\_PRIME

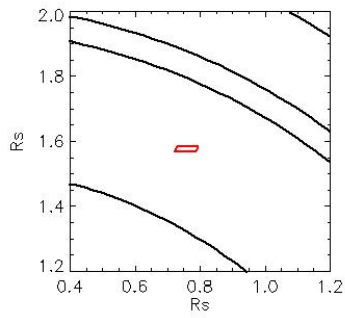
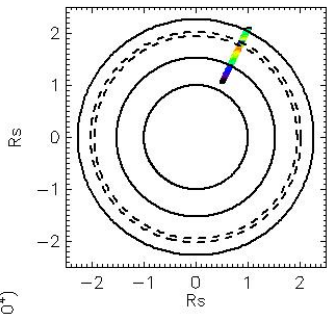
Observation Date:  
2013\_113\_17\_49\_42

Observation Duration:  
3100 S

Integration time = 100 S

S/C—Observation Point Distance ( $10^4$ )





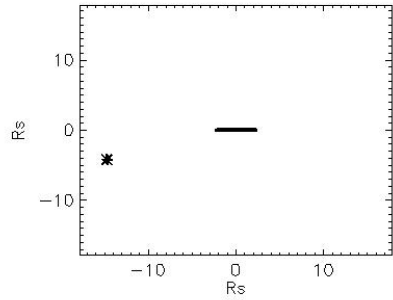
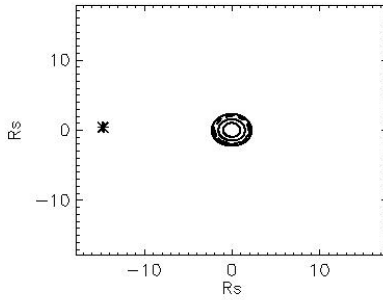
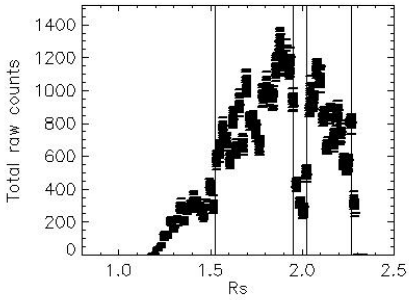
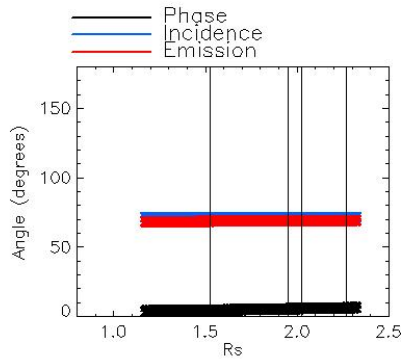
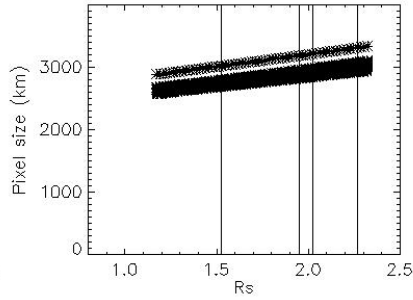
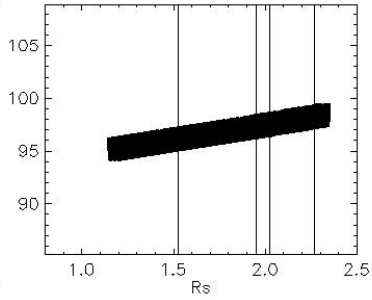
Observation Name:  
UVS\_187RLRINGMAP001\_PRIME

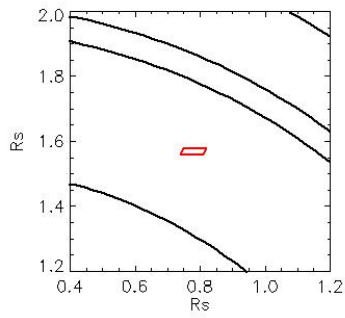
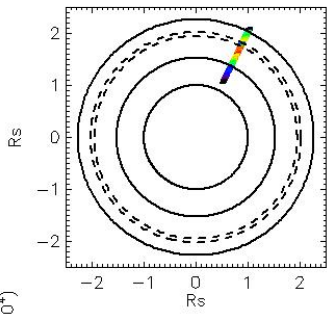
Observation Date:  
2013\_113\_18\_42\_37

Observation Duration:  
3100 S

Integration time = 100 S

S/C—Observation Point Distance ( $10^4$ )



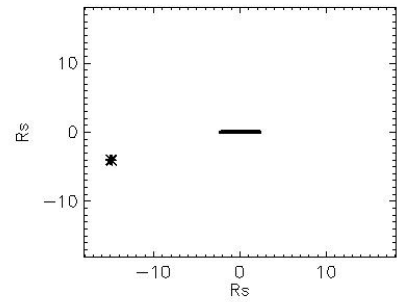
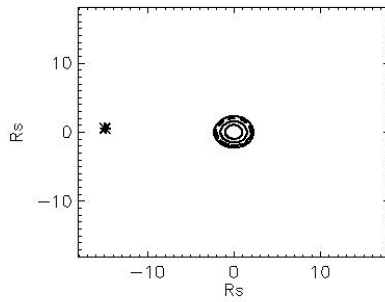
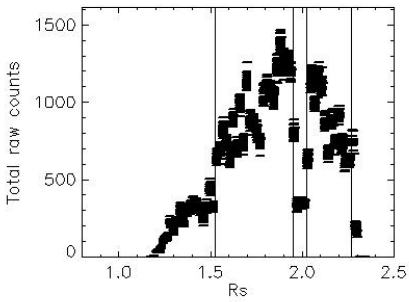
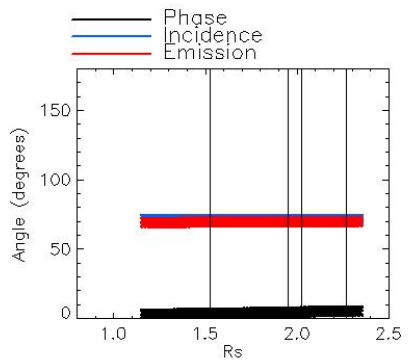
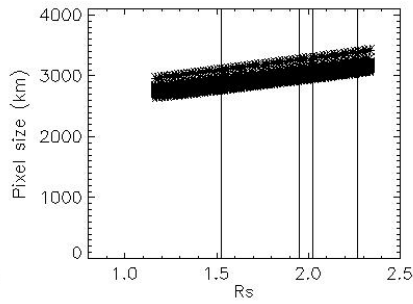
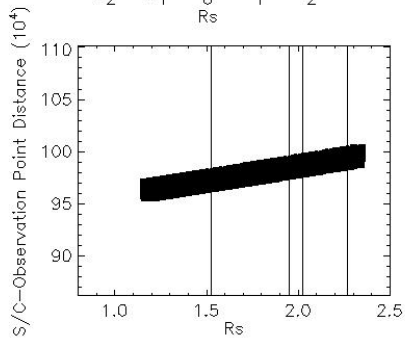


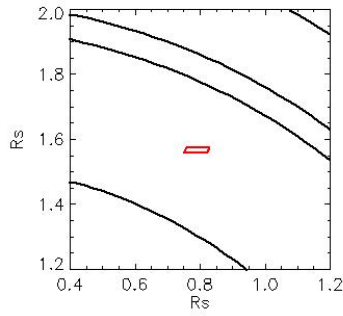
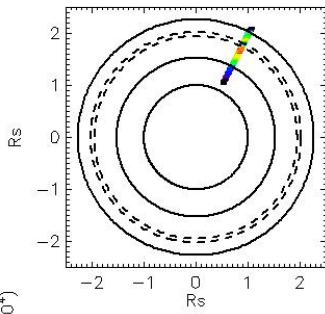
Observation Name:  
UVS\_187RLRINGMAP001\_PRIME

Observation Date:  
2013\_113\_19\_35\_32

Observation Duration:  
3100 S

Integration time = 100 S



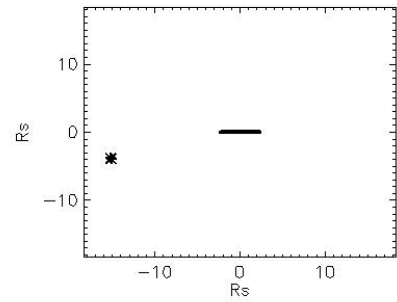
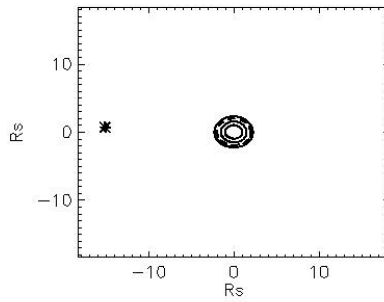
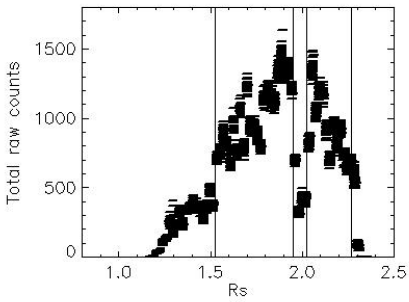
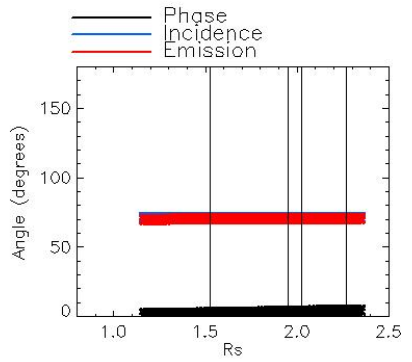
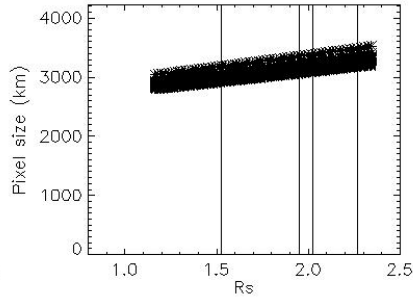
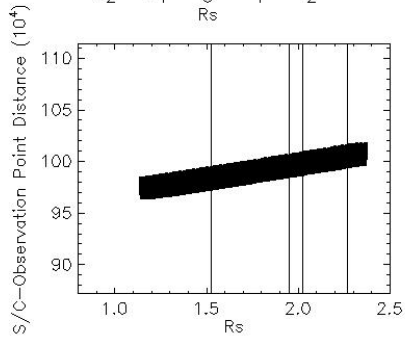


Observation Name:  
UVS\_187RLRINGMAP001\_PRIME

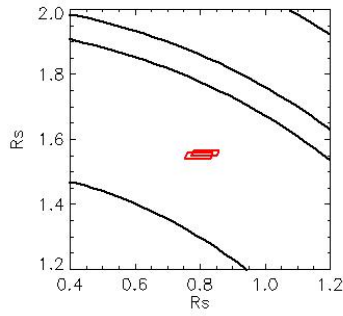
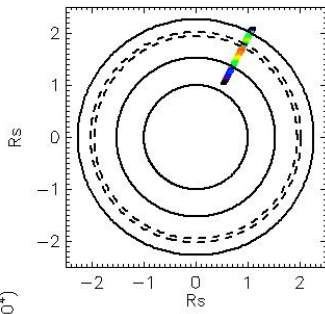
Observation Date:  
2013\_113\_20\_28\_27

Observation Duration:  
3100 S

Integration time = 100 S





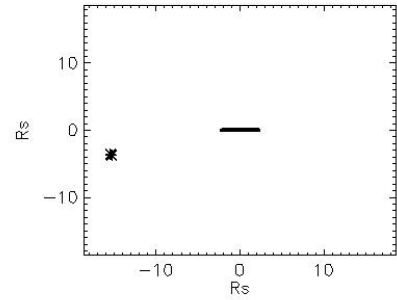
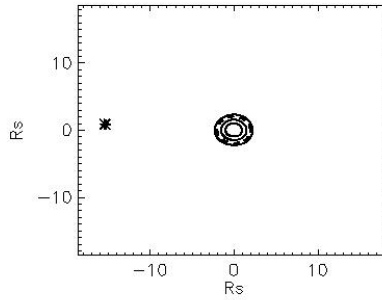
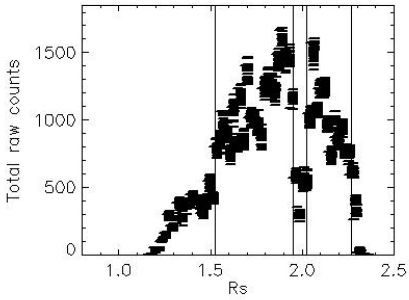
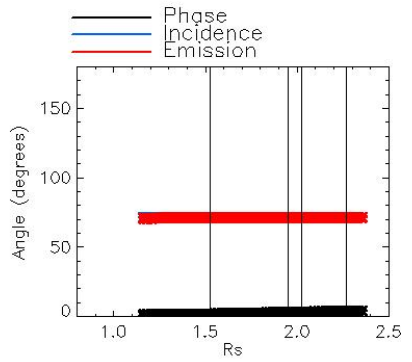
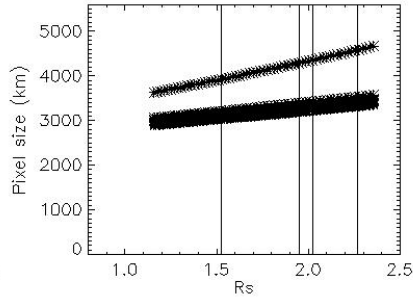
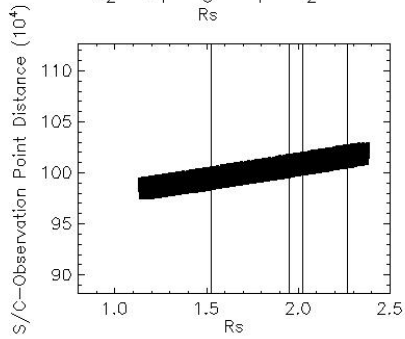


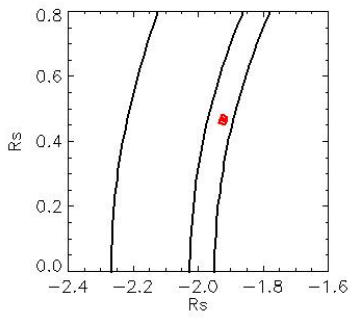
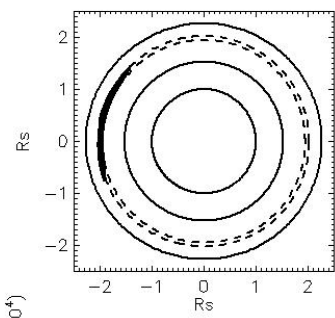
Observation Name:  
UVS\_187RLRINGMAP001\_PRIME

Observation Date:  
2013\_113\_21\_21\_22

Observation Duration:  
3100 S

Integration time = 100 S



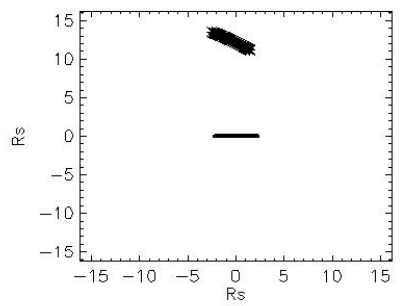
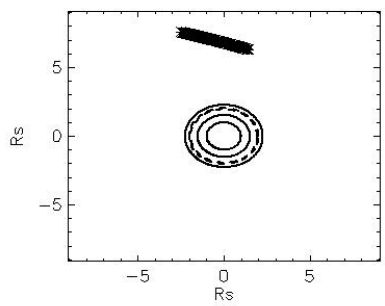
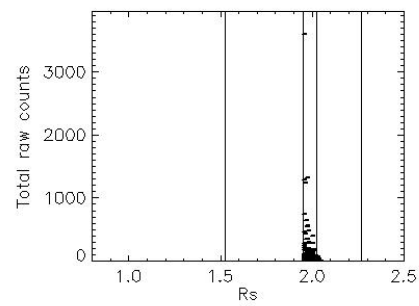
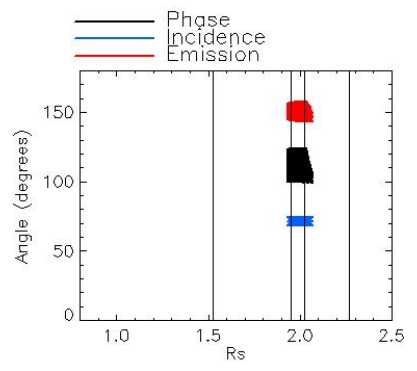
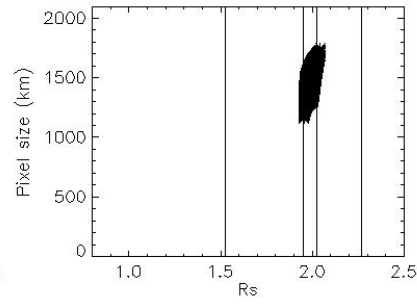
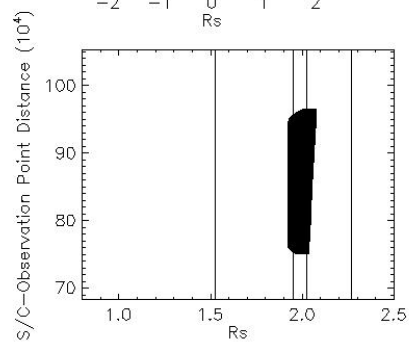


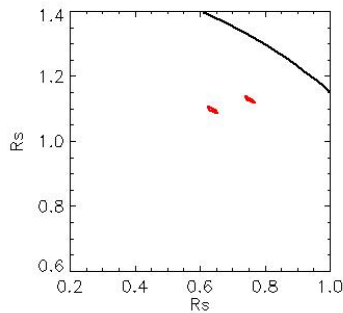
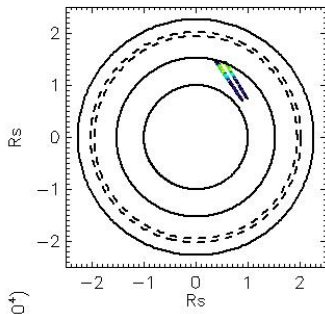
Observation Name:  
UVS\_189RLBMOVIE001\_JSS

Observation Date:  
2013\_129\_11\_02\_01

Observation Duration:  
44400 S

Integration time = 300 S



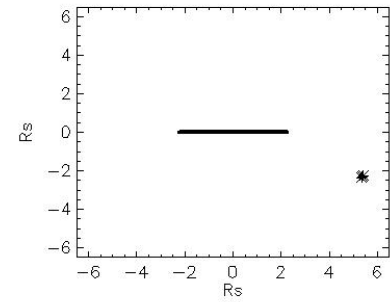
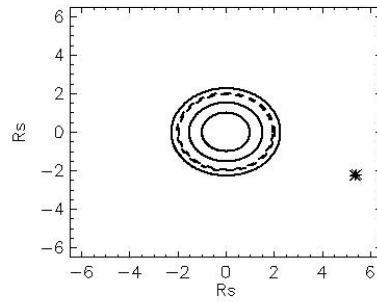
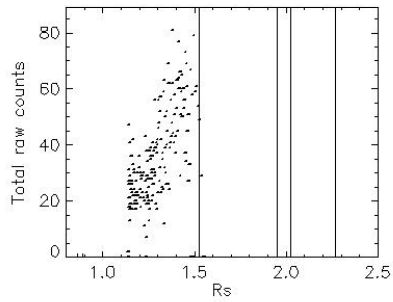
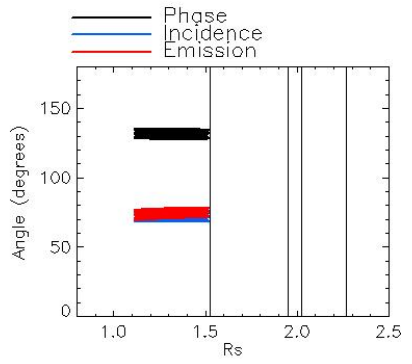
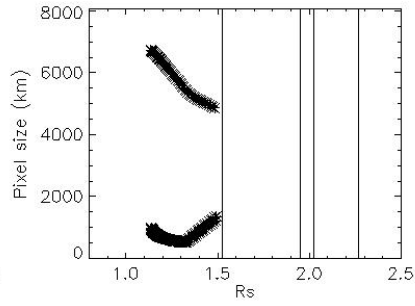
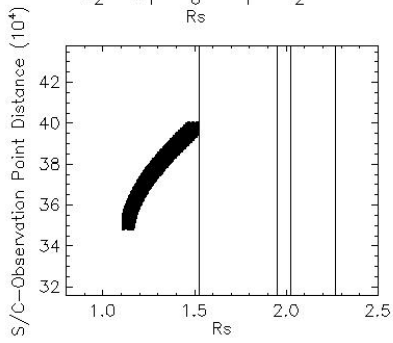


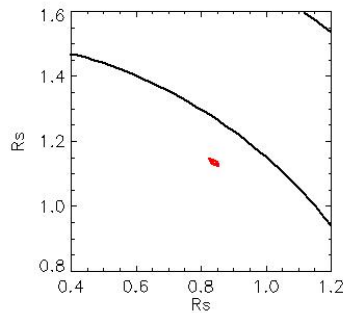
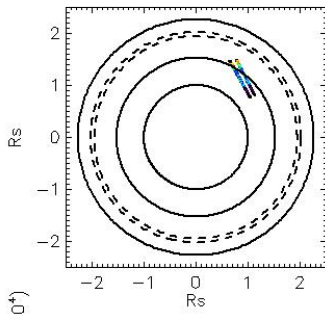
Observation Name:  
UMS\_189RLCOMPLIT001\_VIMS

Observation Date:  
2013\_131\_04\_31\_04

Observation Duration:  
900 S

Integration time = 300 S



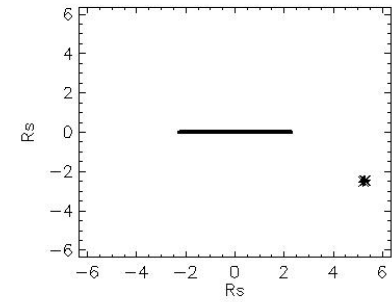
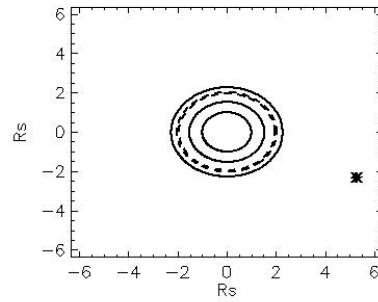
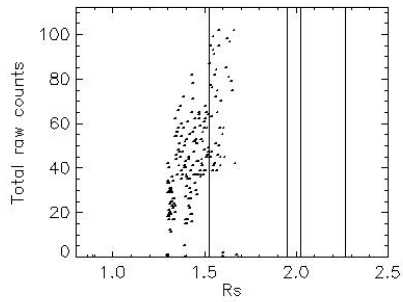
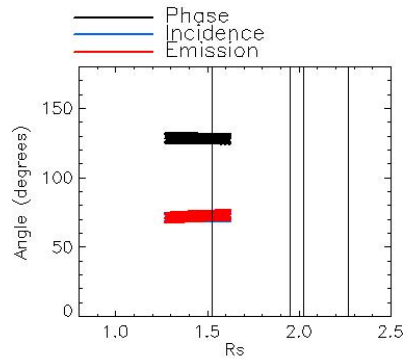
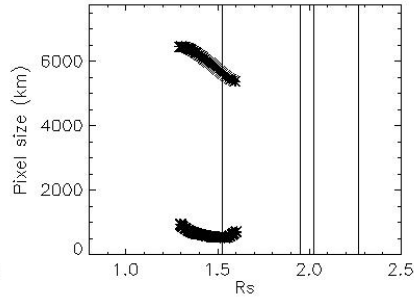
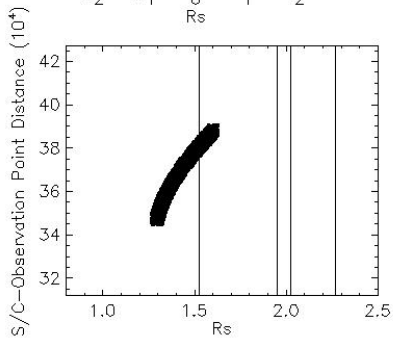


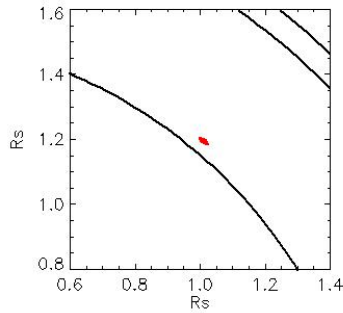
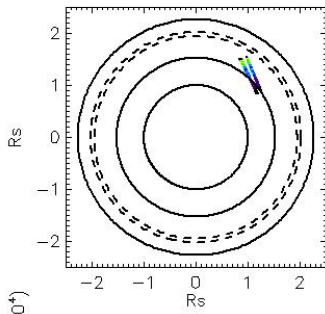
Observation Name:  
UMS\_189RLCOMPLIT001\_VIMS

Observation Date:  
2013\_131\_04\_48\_55

Observation Duration:  
900 S

Integration time = 300 S



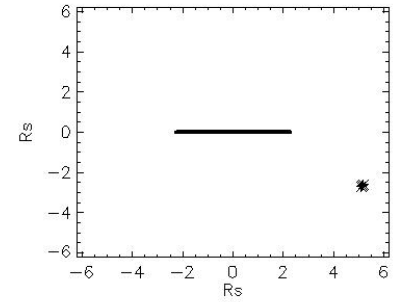
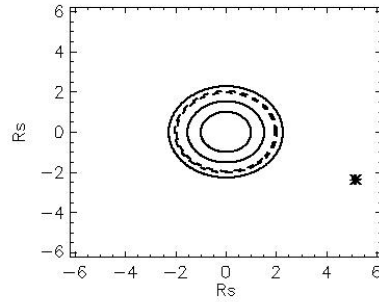
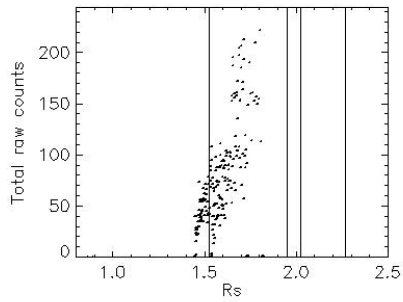
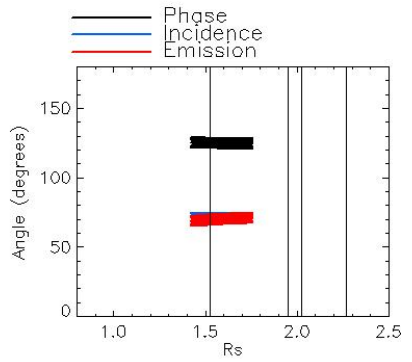
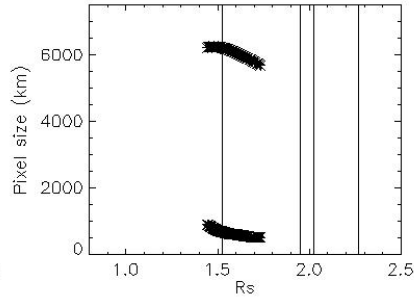
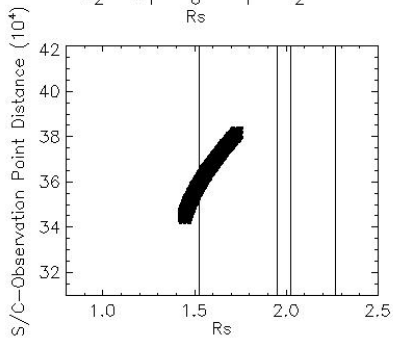


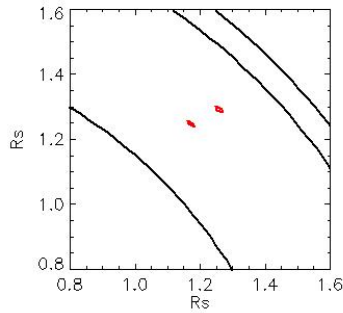
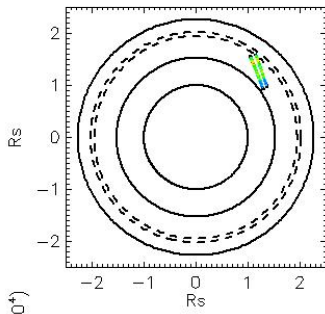
Observation Name:  
UMS\_189RLCOMPLIT001\_VIMS

Observation Date:  
2013\_131\_05\_06\_46

Observation Duration:  
900 S

Integration time = 300 S



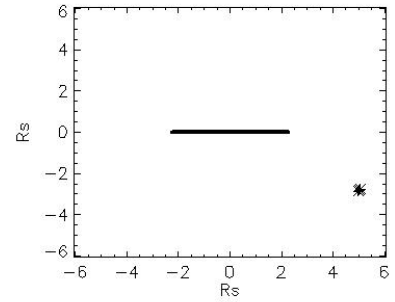
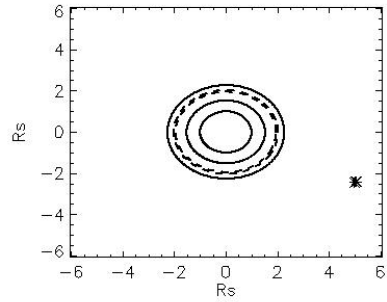
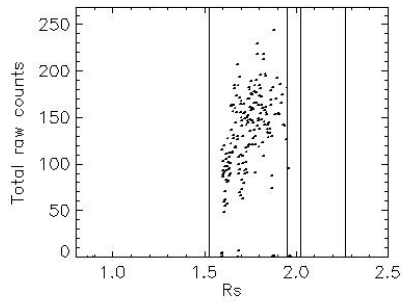
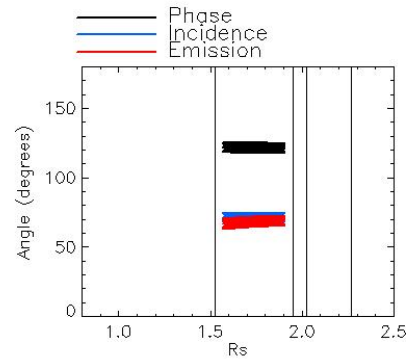
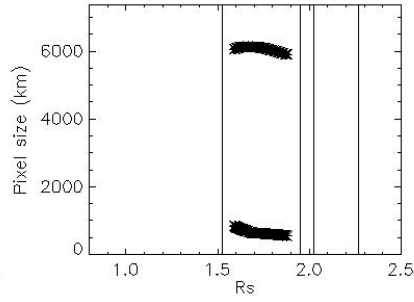
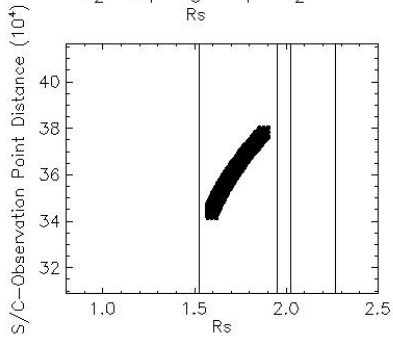


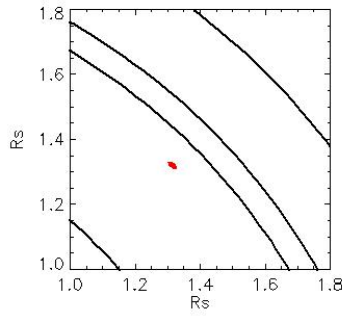
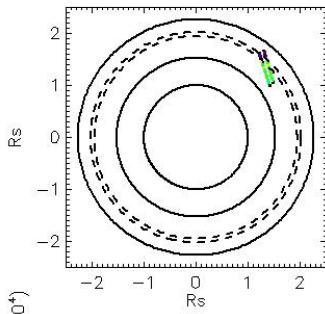
Observation Name:  
UMS\_189RLCOMPLIT001\_VIMS

Observation Date:  
2013\_131\_05\_24\_37

Observation Duration:  
900 S

Integration time = 300 S



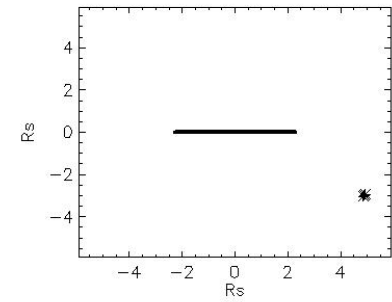
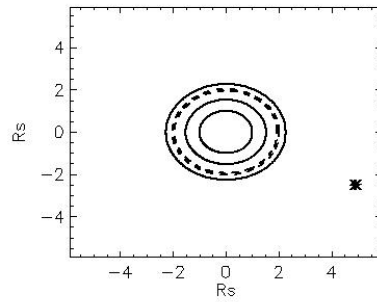
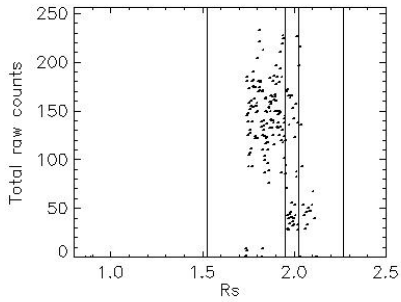
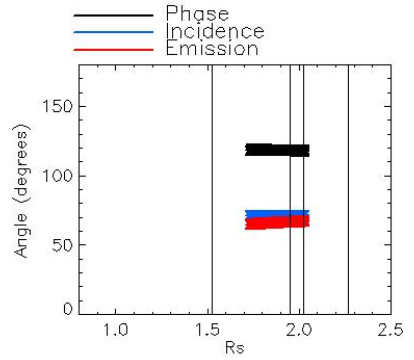
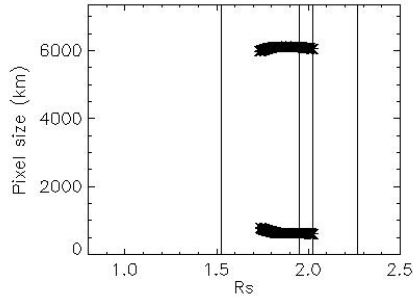
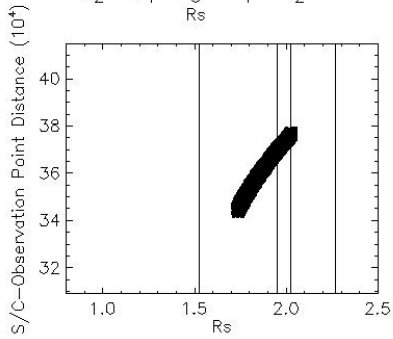


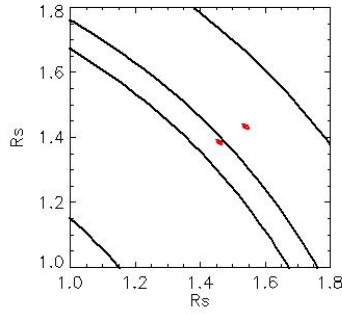
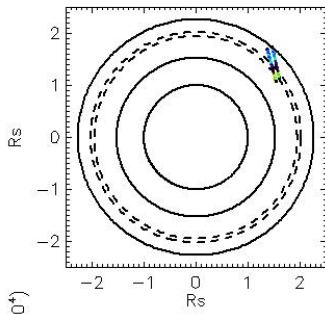
Observation Name:  
UMS\_189RLCOMPLIT001\_VIMS

Observation Date:  
2013\_131\_05\_42\_28

Observation Duration:  
900 S

Integration time = 300 S



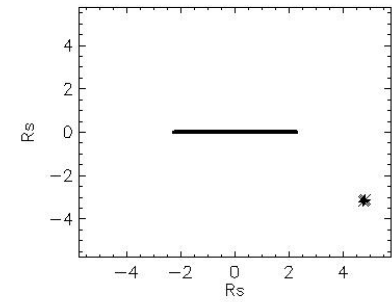
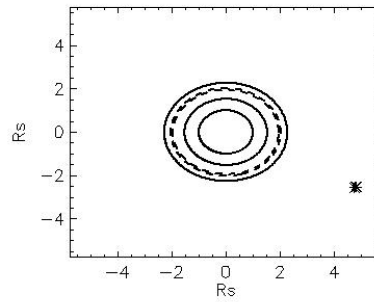
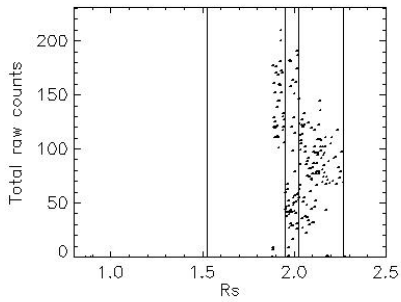
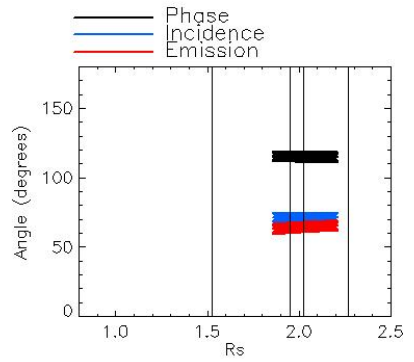
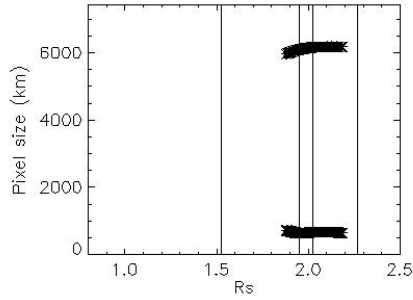
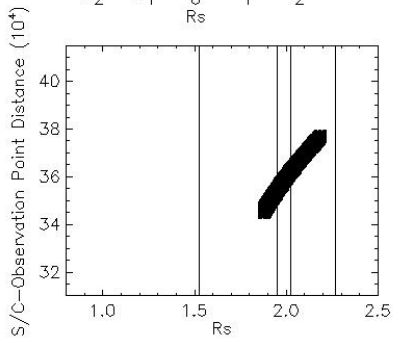


Observation Name:  
UMS\_189RLCOMPLIT001\_VIMS

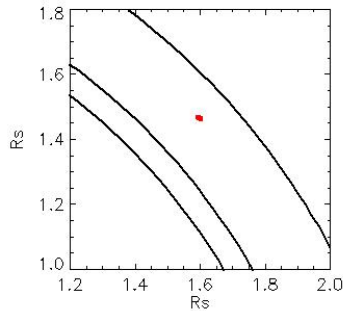
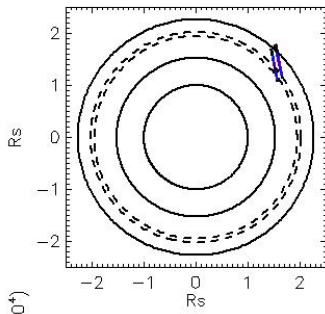
Observation Date:  
2013\_131\_06\_00\_19

Observation Duration:  
900 S

Integration time = 300 S





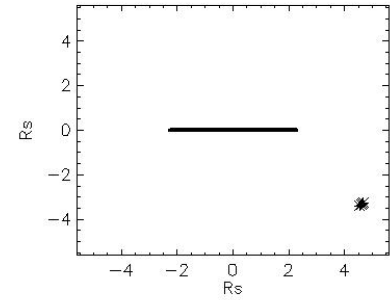
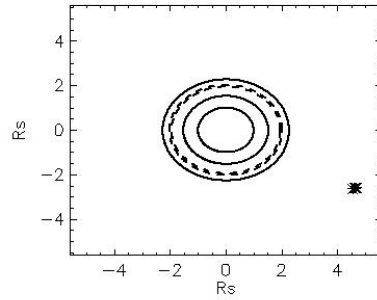
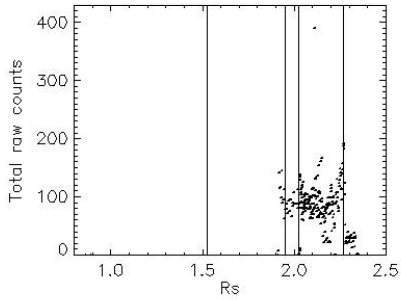
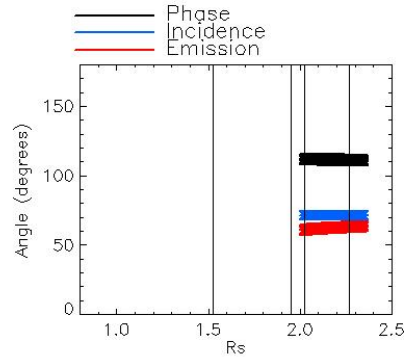
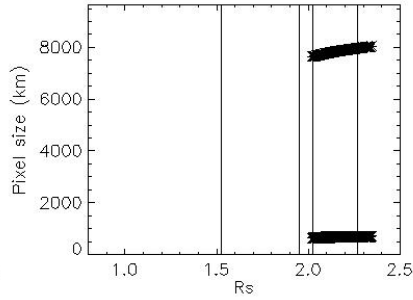
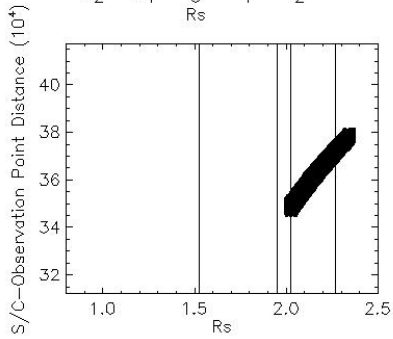


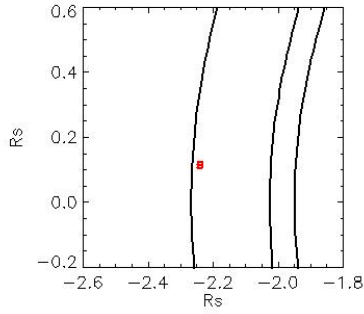
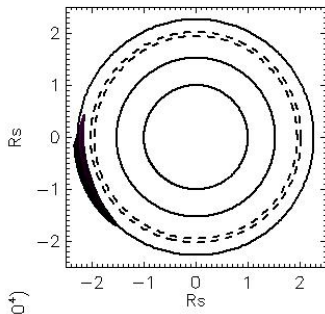
Observation Name:  
UMS\_189RLCOMPLIT001\_VIMS

Observation Date:  
2013\_131\_06\_18\_10

Observation Duration:  
1200 S

Integration time = 300 S



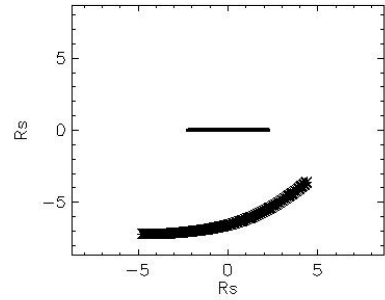
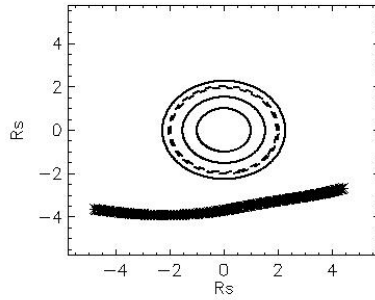
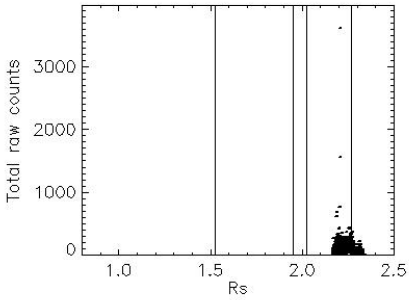
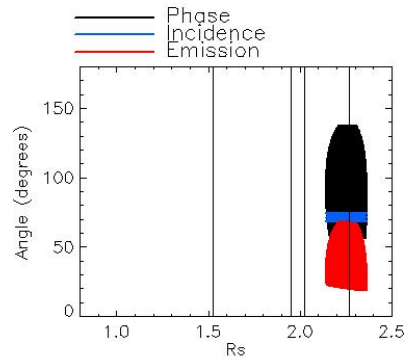
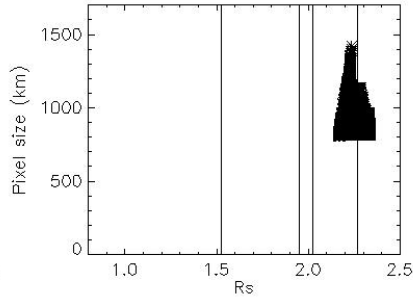
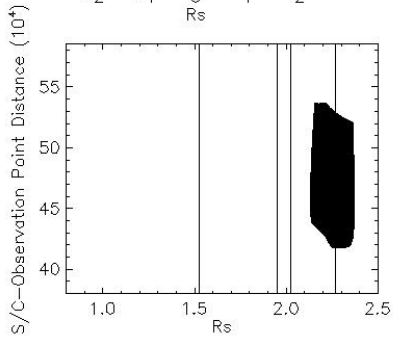


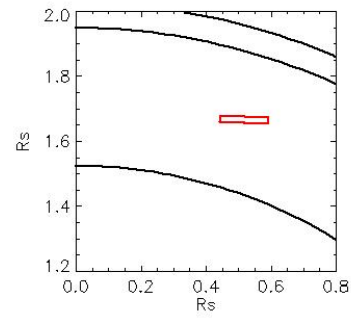
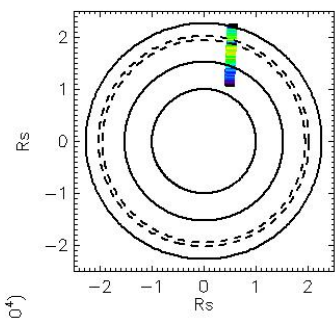
Observation Name:  
UMS\_189RLPROPSURVY001\_JSS

Observation Date:  
2013\_131\_06\_56\_01

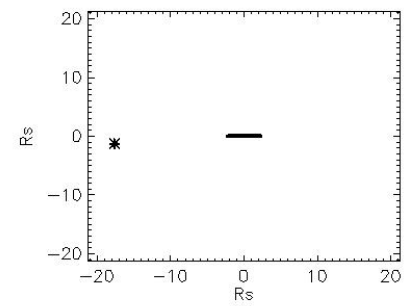
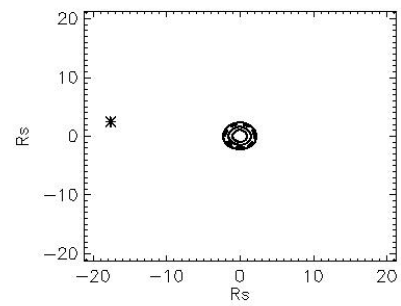
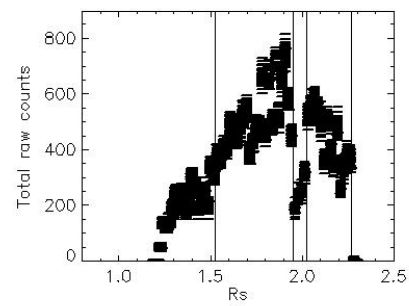
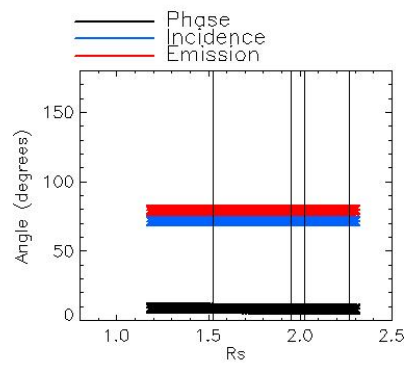
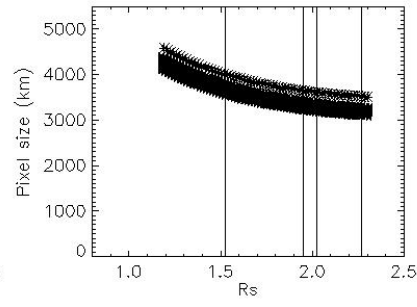
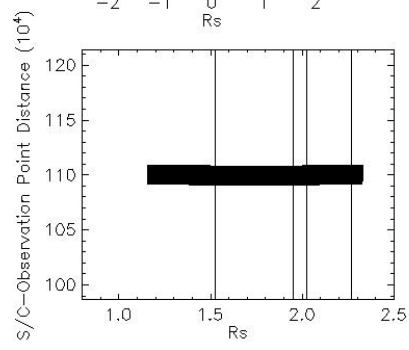
Observation Duration:  
56700 S

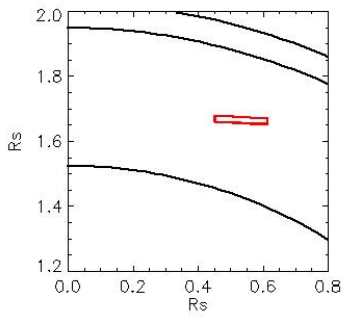
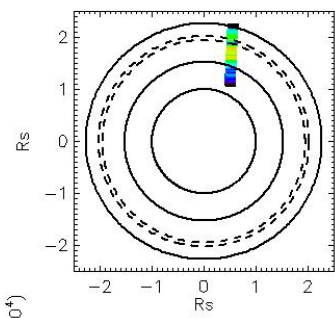
Integration time = 300 S





Observation Name:  
 UVS\_189RLRINGMAP001\_PRIME  
 Observation Date:  
 2013\_133\_11\_54\_52  
 Observation Duration:  
 2400 S  
 Integration time = 50 S



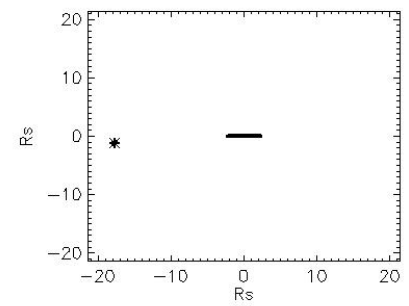
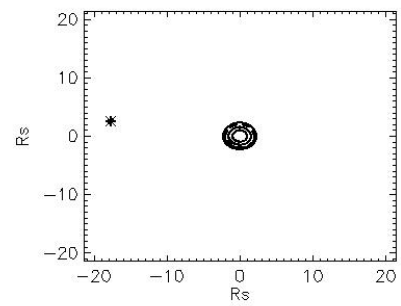
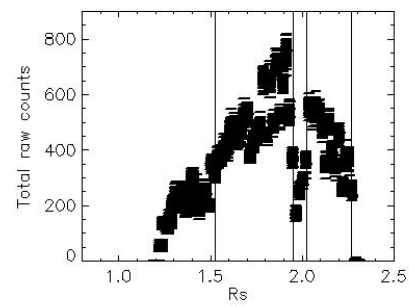
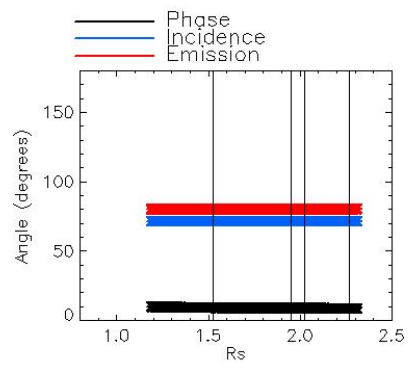
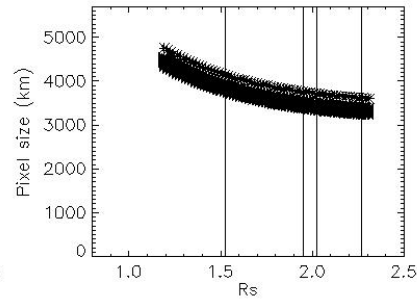
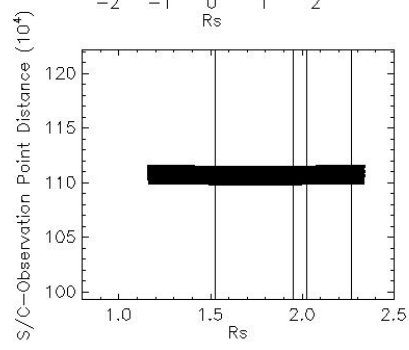


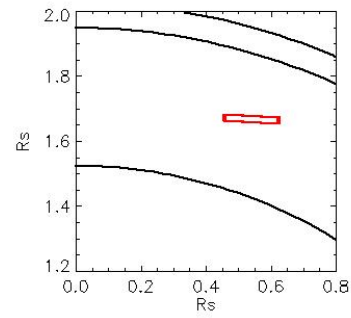
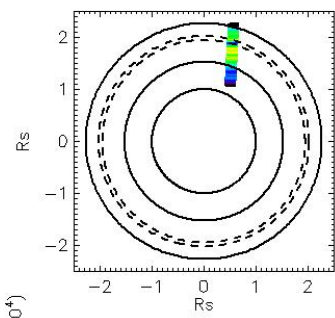
Observation Name:  
UWS\_189RLRINGMAP001\_PRIME

Observation Date:  
2013\_133\_12\_36\_02

Observation Duration:  
2400 S

Integration time = 50 S



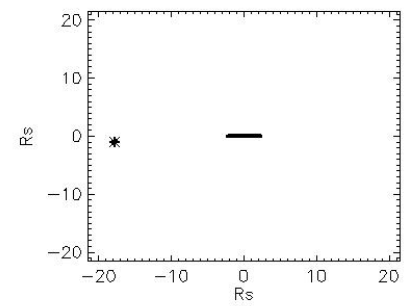
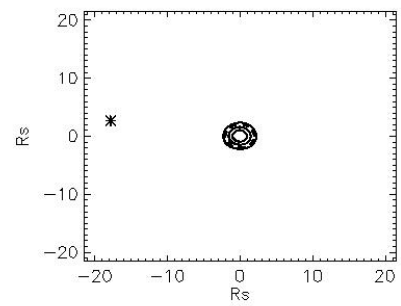
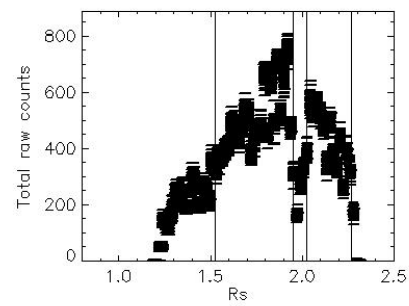
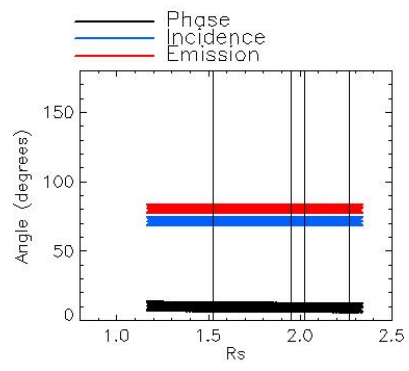
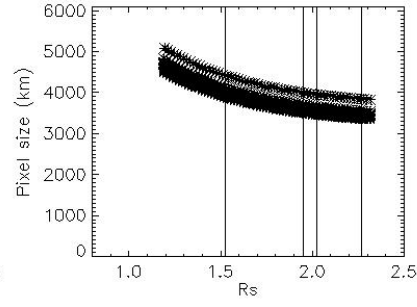
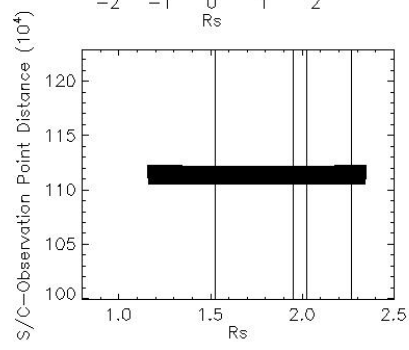


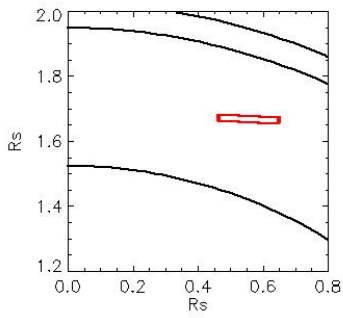
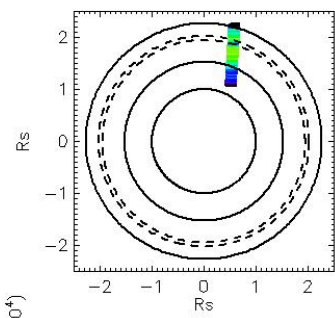
Observation Name:  
UMS\_189RLRINGMAP001\_PRIME

Observation Date:  
2013\_133\_13\_17\_12

Observation Duration:  
2400 S

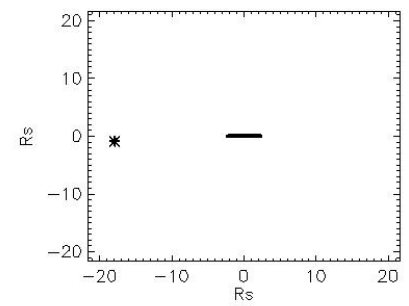
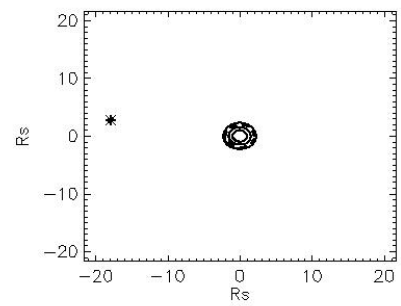
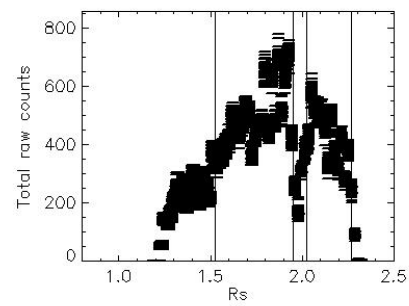
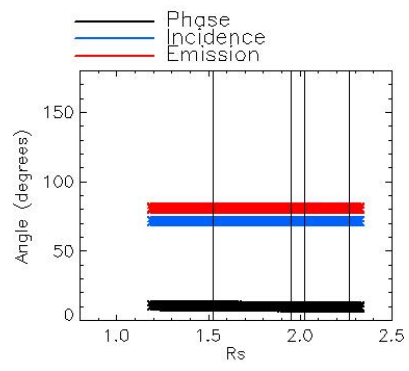
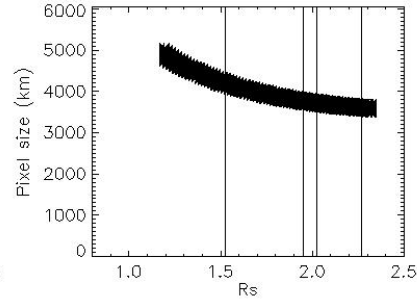
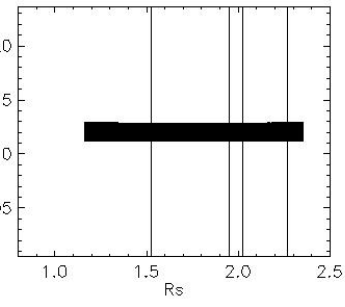
Integration time = 50 S

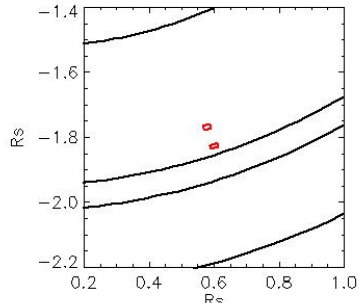
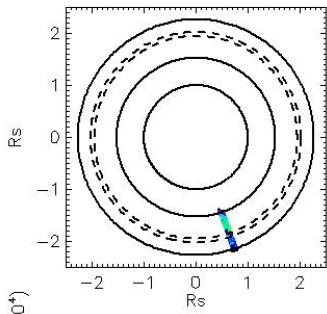




Observation Name:  
 UVS\_189RLRINGMAP001\_PRIME  
 Observation Date:  
 2013\_133\_13\_58\_22  
 Observation Duration:  
 2400 S  
 Integration time = 50 S

S/C—Observation Point Distance ( $10^4$ )



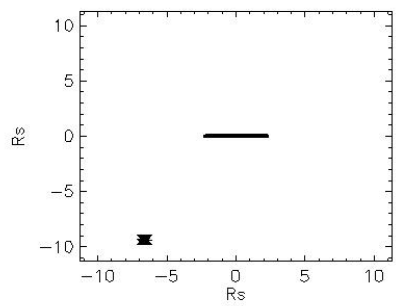
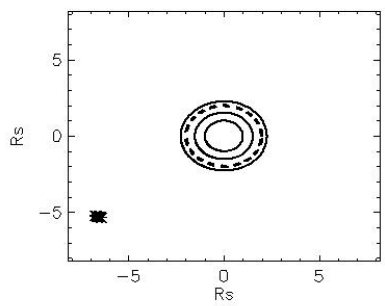
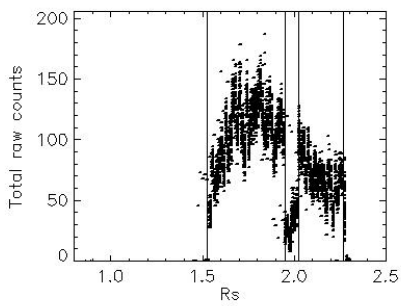
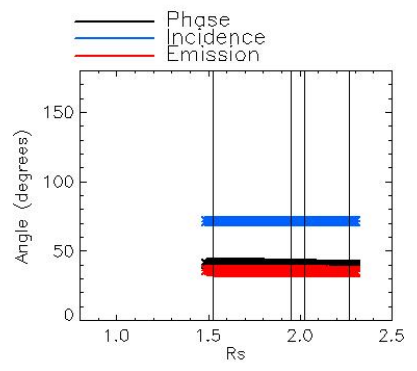
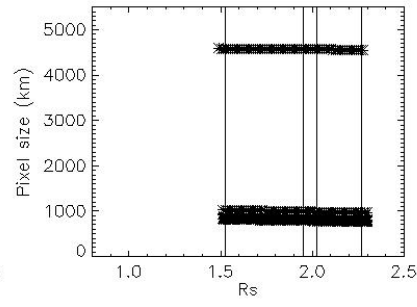
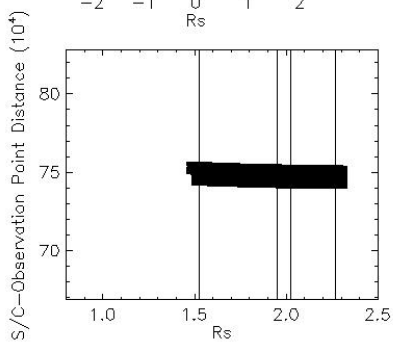


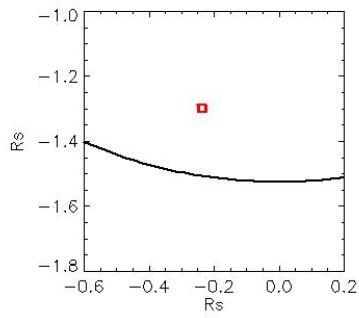
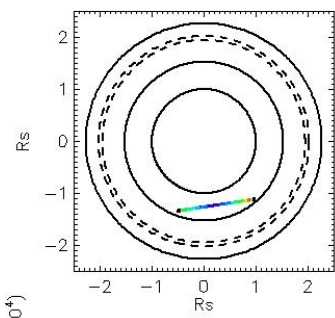
Observation Name:  
UVS\_191RLRINGMAP001\_PRIME

Observation Date:  
2013\_153\_09\_27\_53

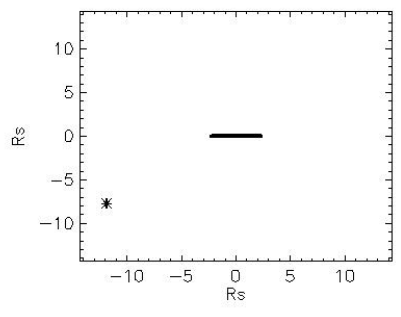
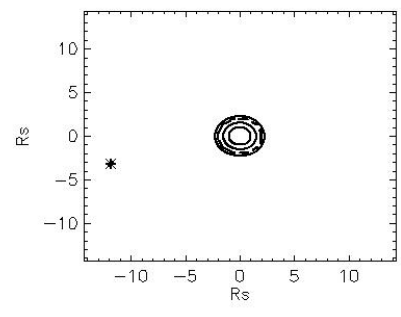
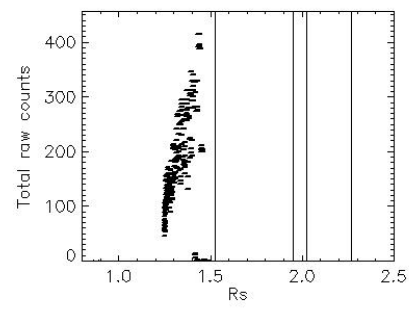
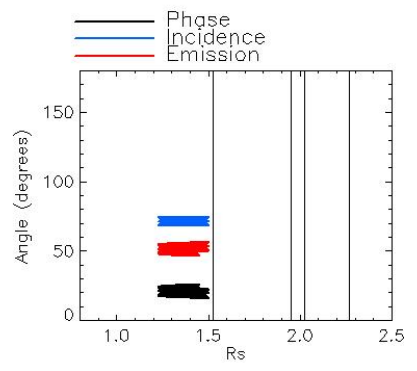
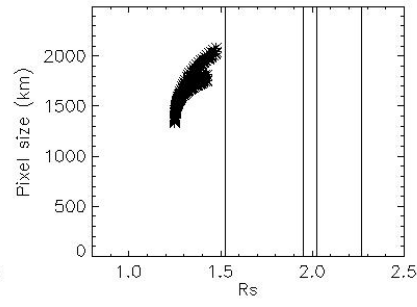
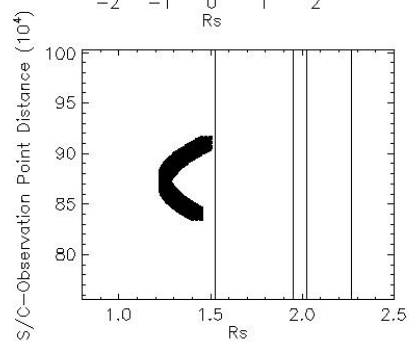
Observation Duration:  
3050 S

Integration time = 50 S

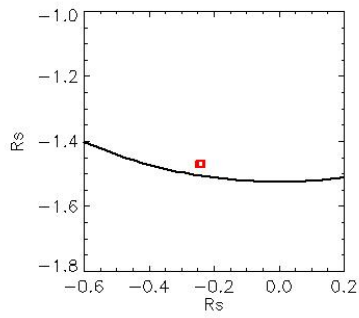
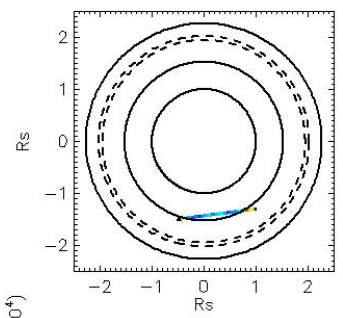




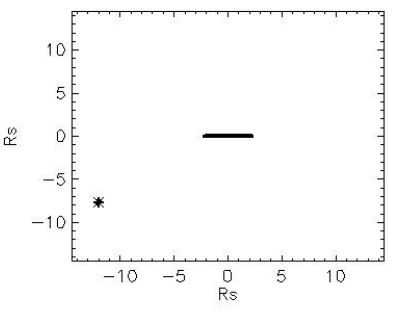
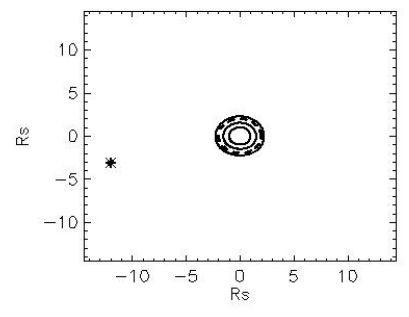
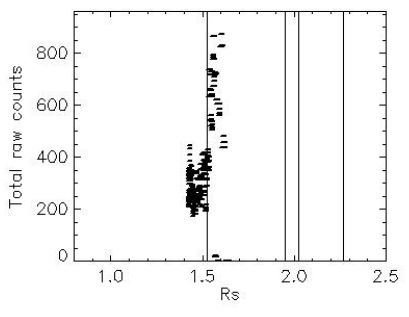
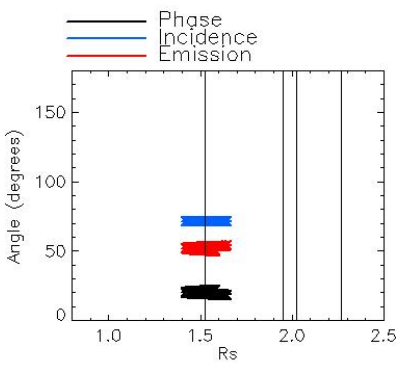
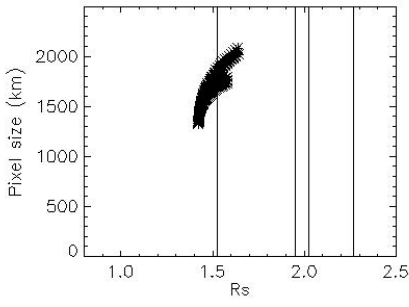
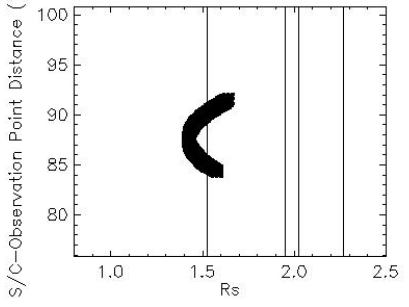
Observation Name:  
 UVS\_191RLSHADSCANL001\_VIMS  
 Observation Date:  
 2013\_153\_22\_12\_11  
 Observation Duration:  
 1200 S  
 Integration time = 300 S

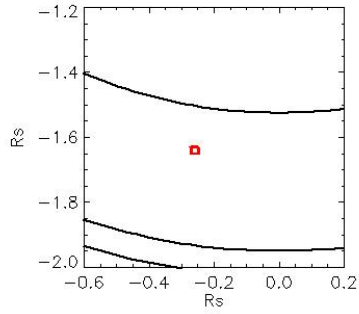
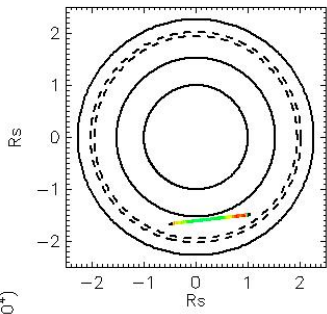






Observation Name:  
 UVS\_191RLSHADSCANL001\_VIMS  
 Observation Date:  
 2013\_153\_22\_37\_25  
 Observation Duration:  
 1200 S  
 Integration time = 300 S



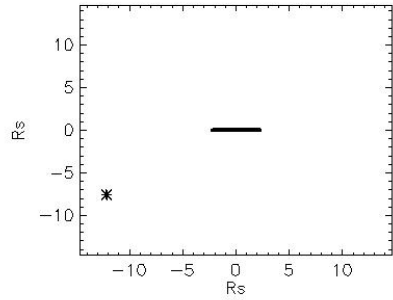
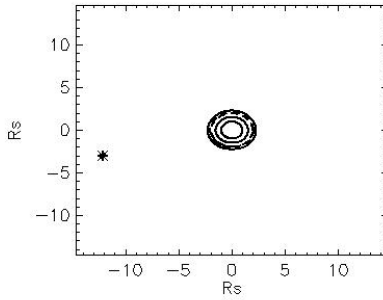
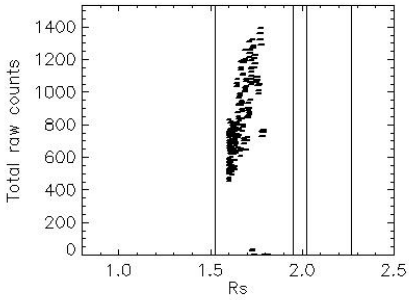
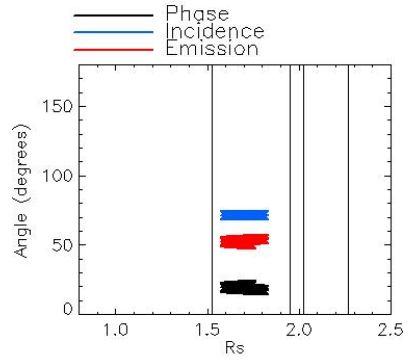
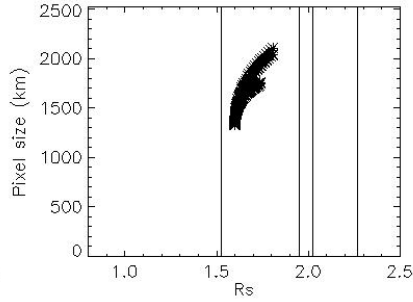
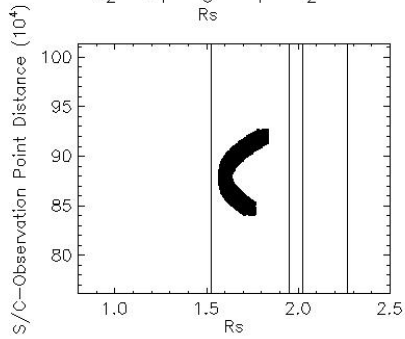


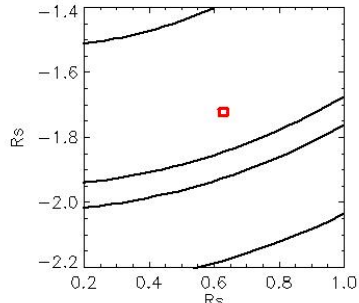
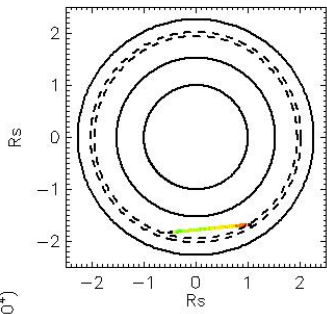
Observation Name:  
UVS\_191RLSHADSCANL001\_VIMS

Observation Date:  
2013\_153\_23\_02\_39

Observation Duration:  
1200 S

Integration time = 300 S



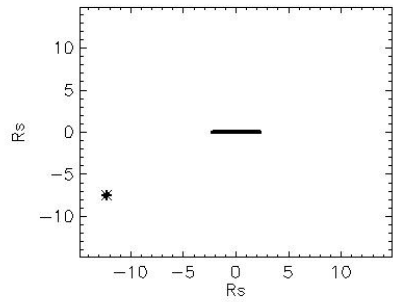
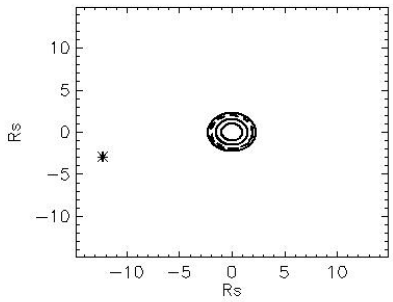
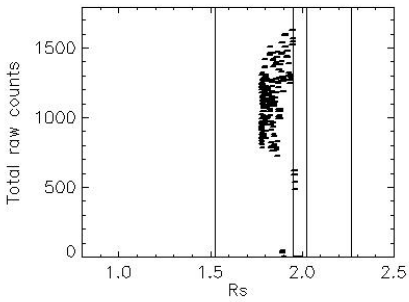
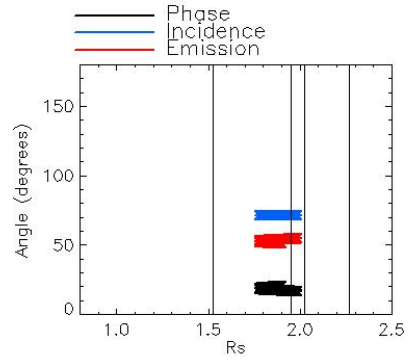
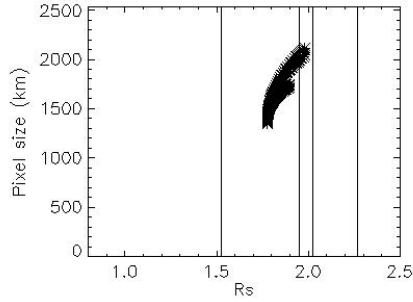
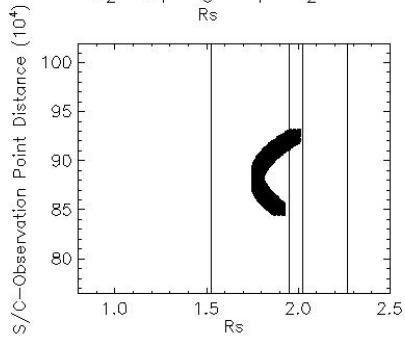


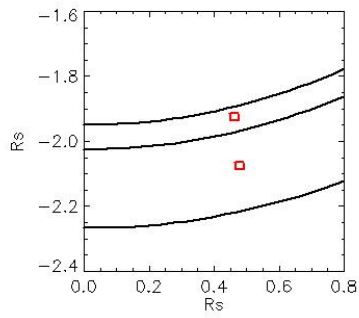
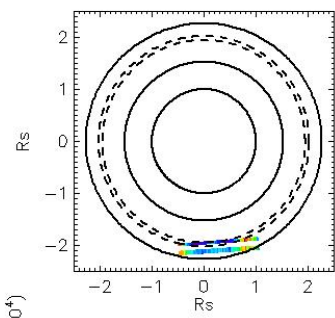
Observation Name:  
UVIS\_191RLSHADSCANL001\_VIMS

Observation Date:  
2013\_153\_23\_27\_53

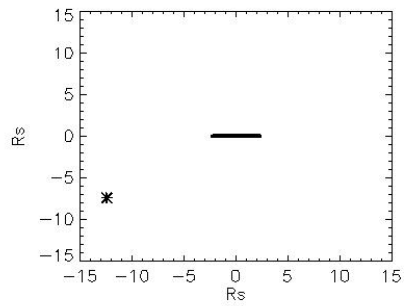
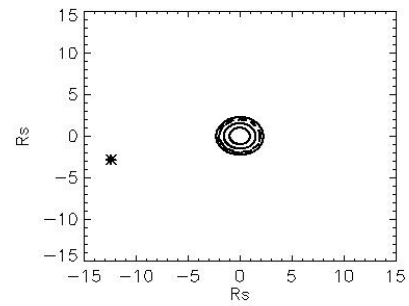
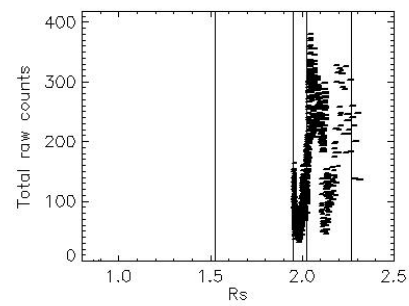
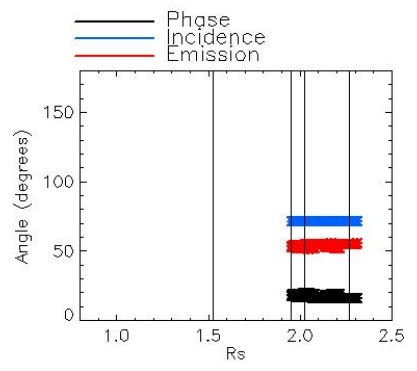
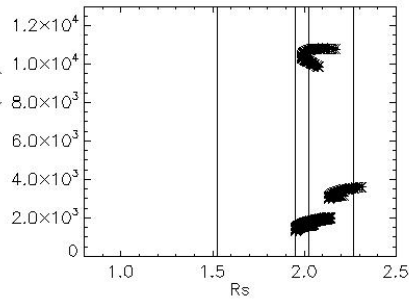
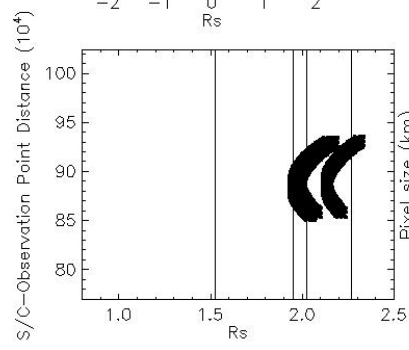
Observation Duration:  
1200 S

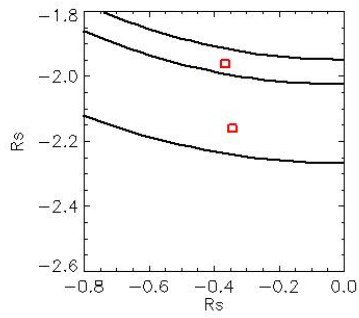
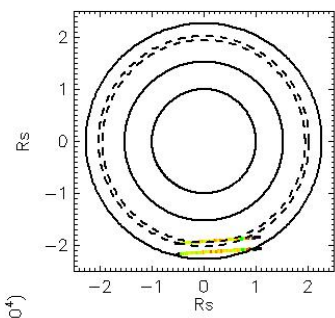
Integration time = 300 S



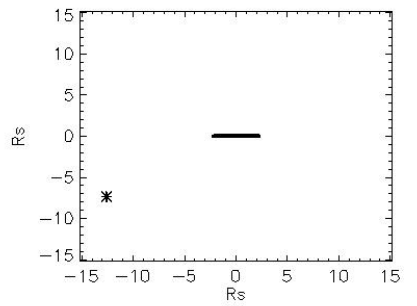
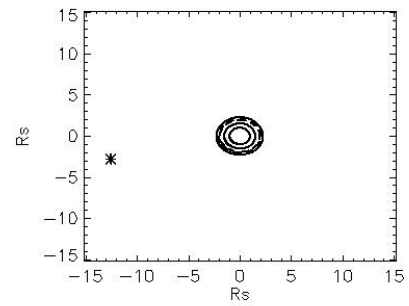
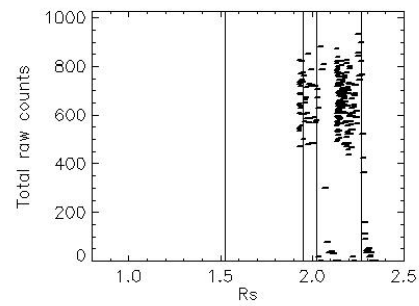
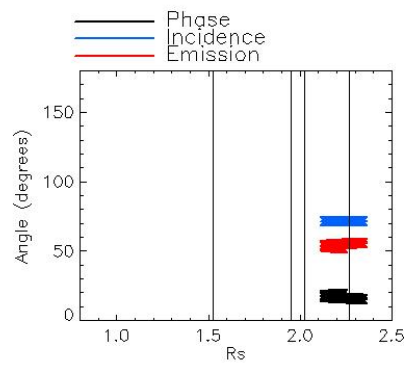
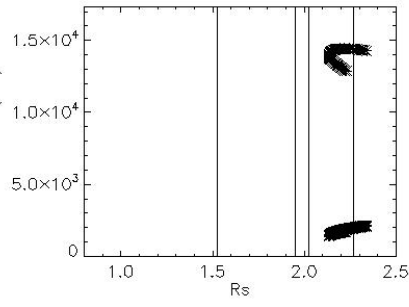
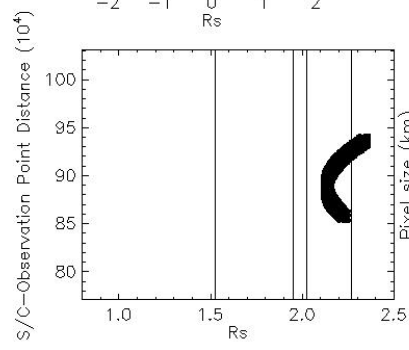


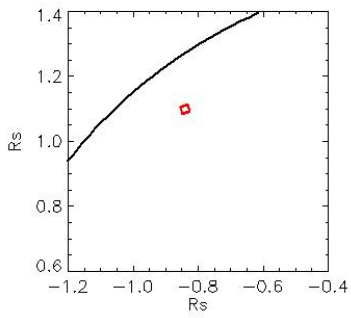
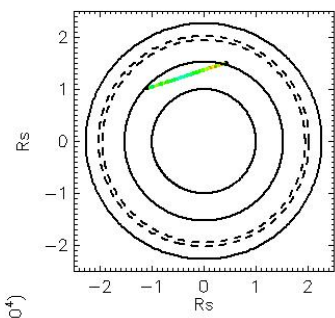
Observation Name:  
 UVS\_191RLSHADSCANL001\_VIMS  
 Observation Date:  
 2013\_153\_23\_49\_09  
 Observation Duration:  
 1440 S  
 Integration time = 60 S





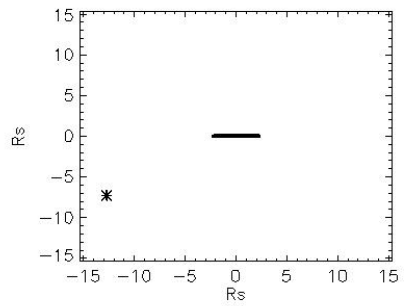
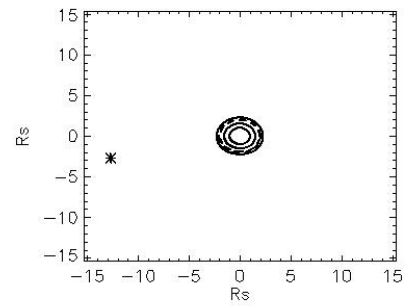
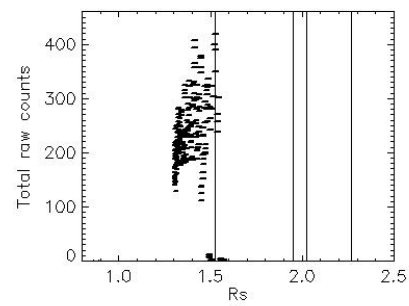
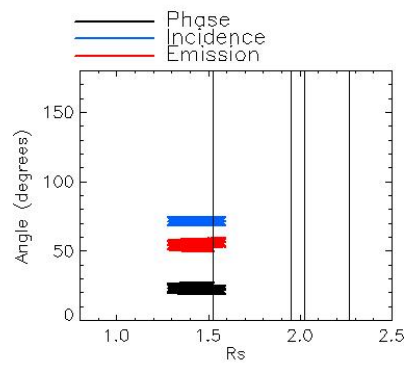
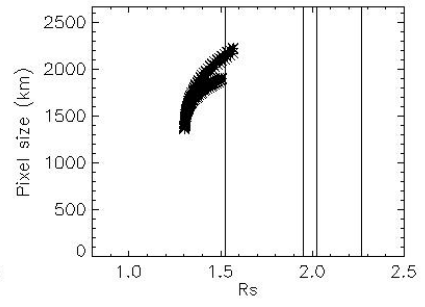
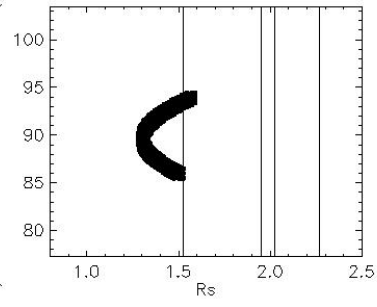
Observation Name:  
UVS\_191RLSHADSCANL001\_VIMS  
Observation Date:  
2013\_154\_00\_18\_22  
Observation Duration:  
1200 S  
Integration time = 300 S

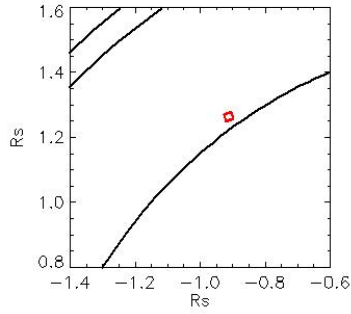
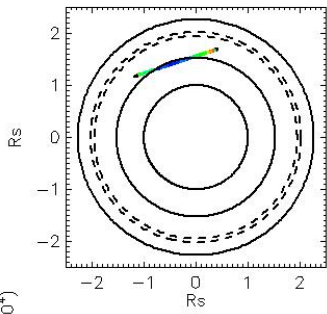




Observation Name:  
UVIS\_191RLSHADSCANL001\_VIMS  
Observation Date:  
2013\_154\_00\_43\_55  
Observation Duration:  
1200 S  
Integration time = 300 S

S/C—Observation Point Distance ( $10^4$ )





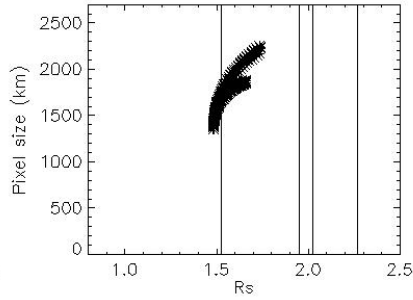
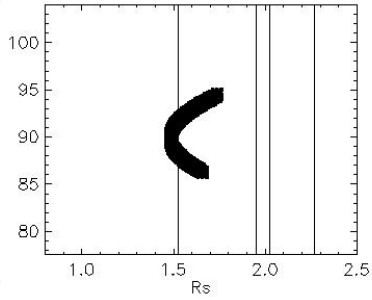
Observation Name:  
UVIS\_191RLSHADSCANL001\_VIMS

Observation Date:  
2013\_154\_01\_09\_10

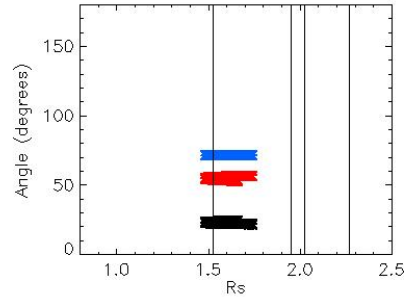
Observation Duration:  
1200 S

Integration time = 300 S

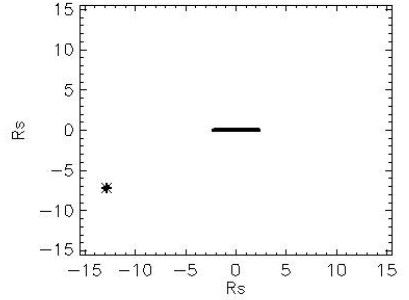
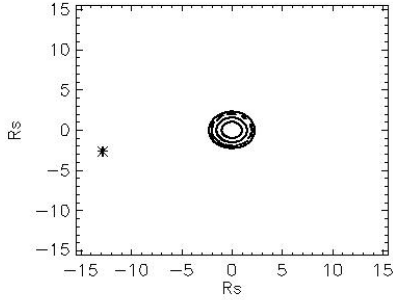
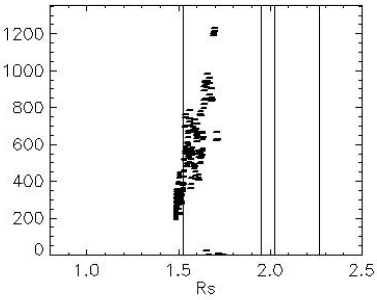
S/C—Observation Point Distance ( $10^4$ )

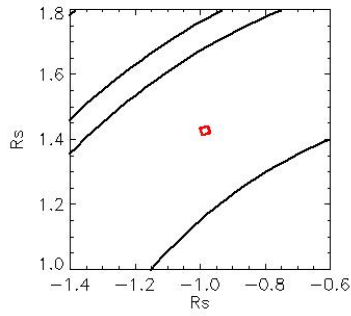
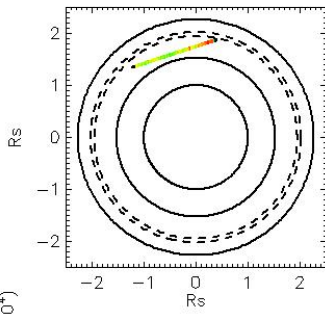


— Phase  
— Incidence  
— Emission



Total raw counts



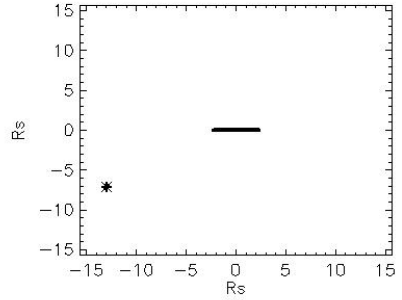
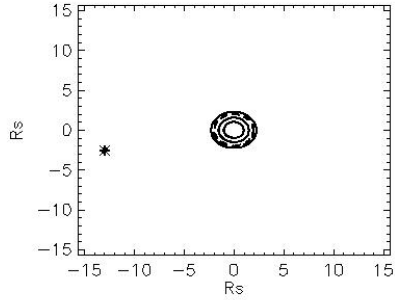
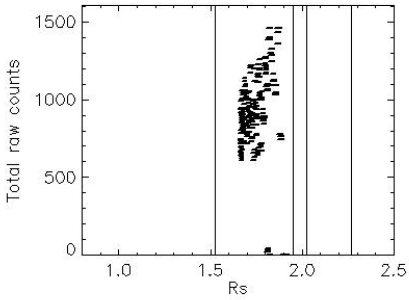
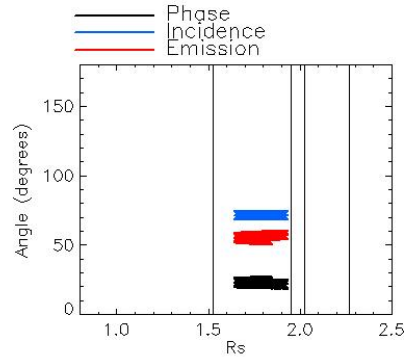
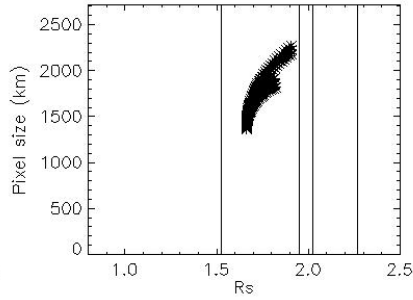
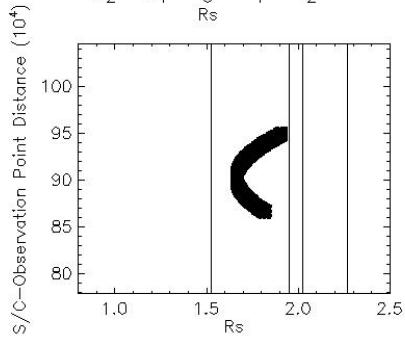


Observation Name:  
UVIS\_191RLSHADSCANL001\_VIMS

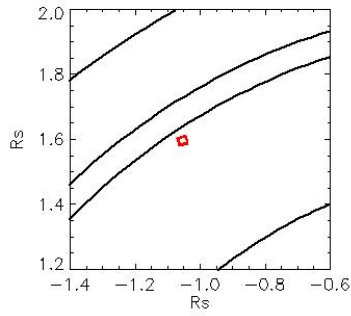
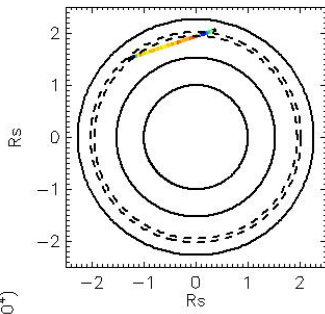
Observation Date:  
2013\_154\_01\_34\_24

Observation Duration:  
1200 S

Integration time = 300 S





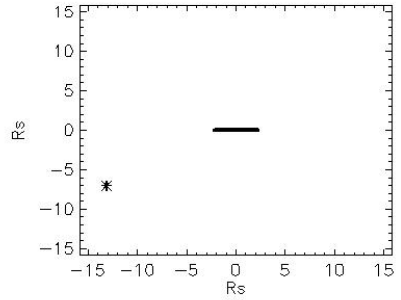
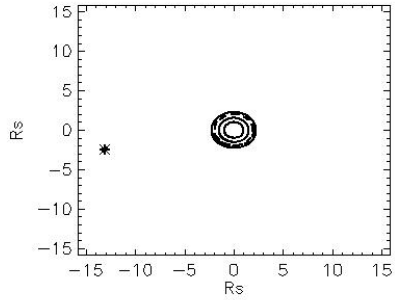
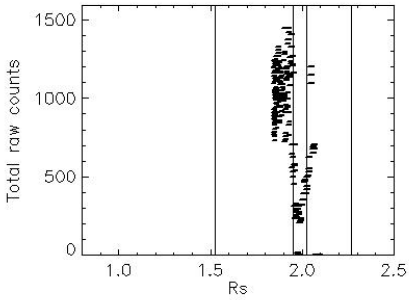
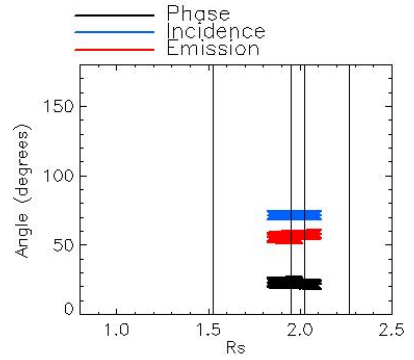
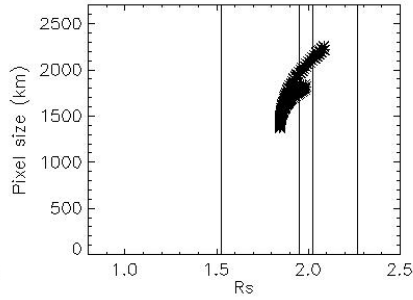
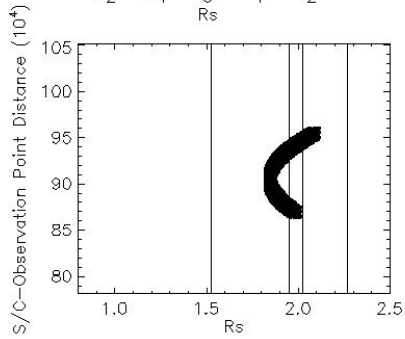


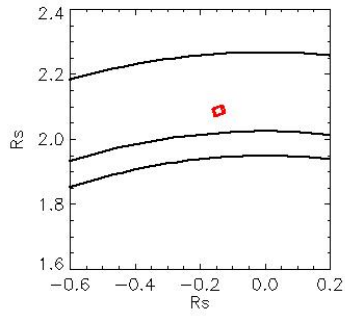
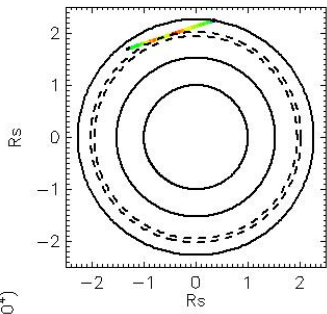
Observation Name:  
UVIS\_191RLSHADSCANL001\_VIMS

Observation Date:  
2013\_154\_01\_59\_38

Observation Duration:  
1200 S

Integration time = 300 S



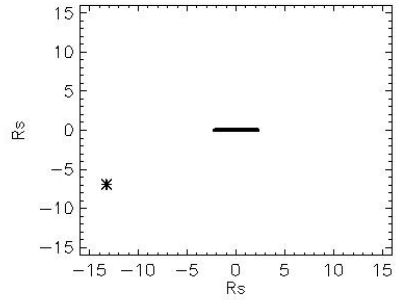
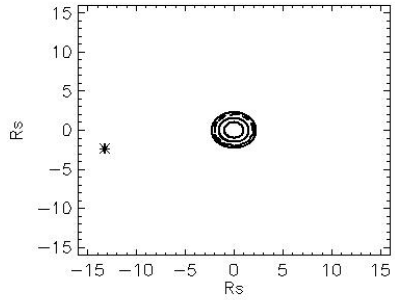
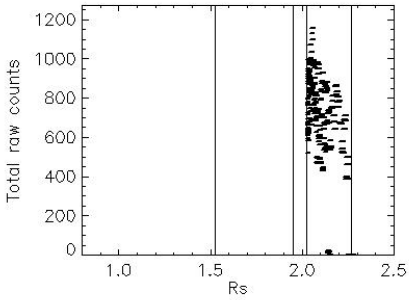
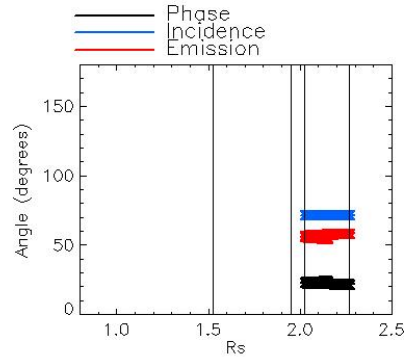
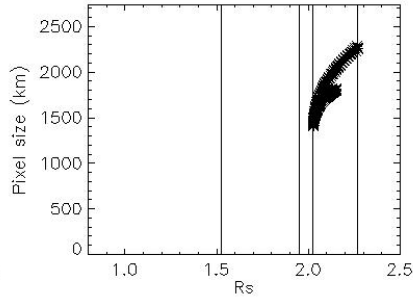
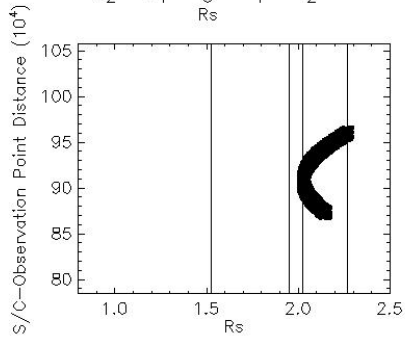


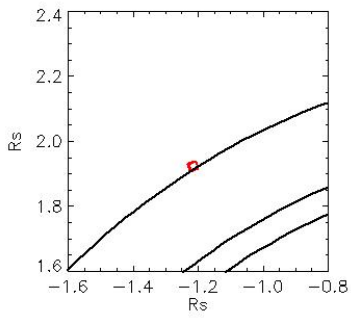
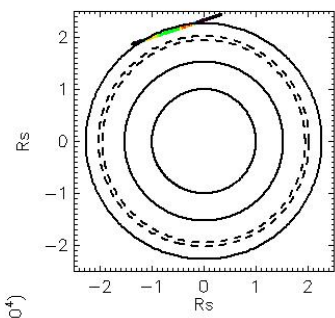
Observation Name:  
UVS\_191RLSHADSCANL001\_VIMS

Observation Date:  
2013\_154\_02\_24\_52

Observation Duration:  
1200 S

Integration time = 300 S





Observation Name:  
UVIS\_191RLSHADSCANL001\_VIMS  
Observation Date:  
2013\_154\_02\_50\_06  
Observation Duration:  
1200 S  
Integration time = 300 S

