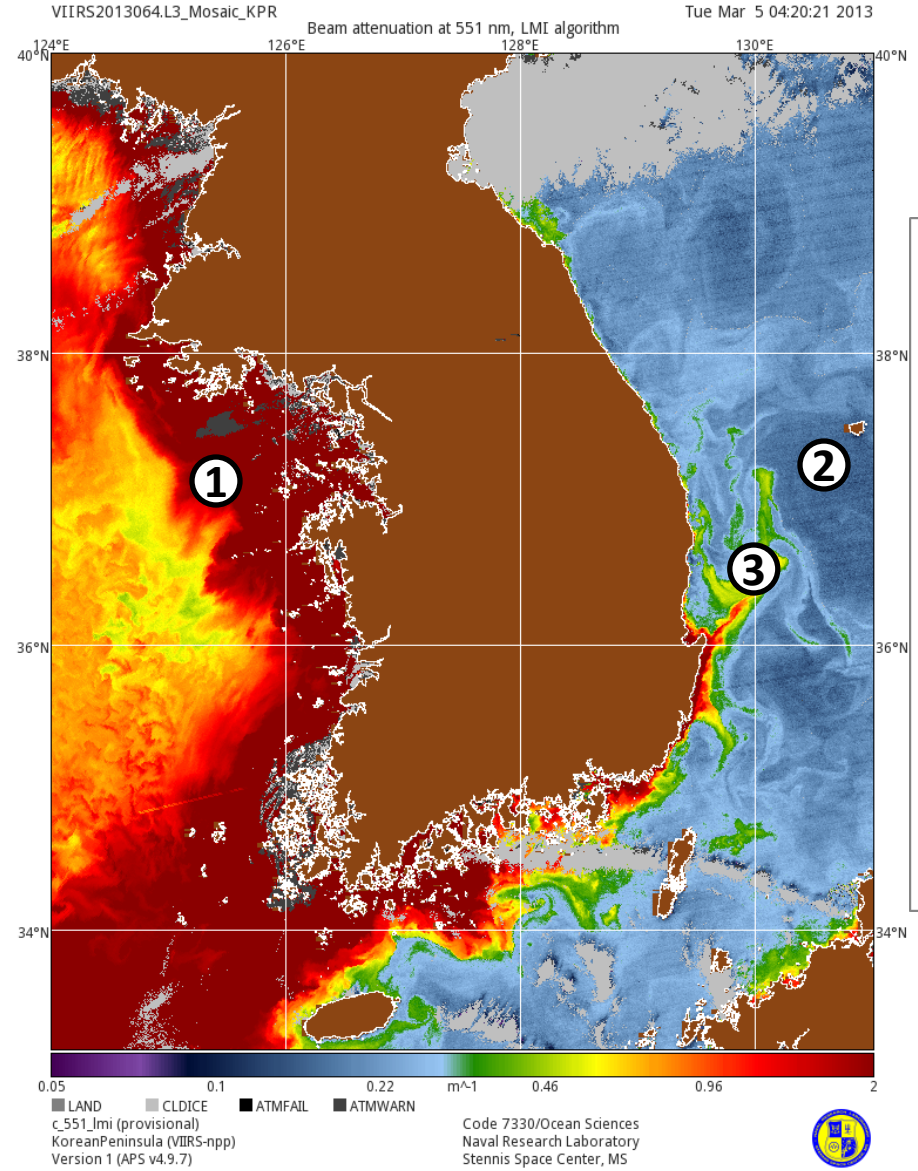
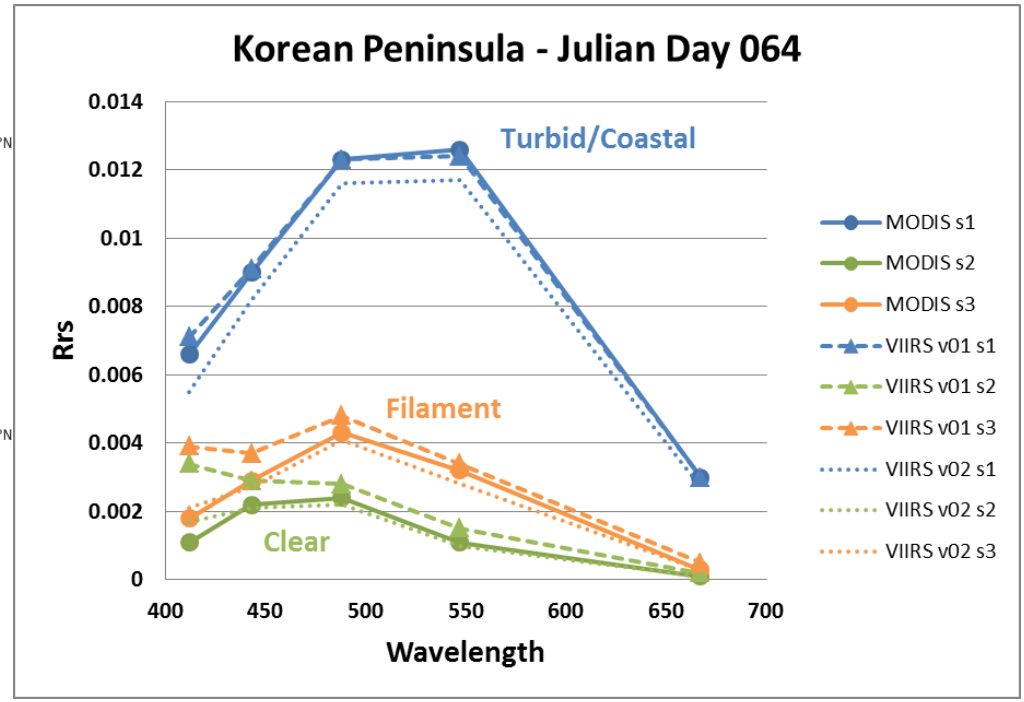
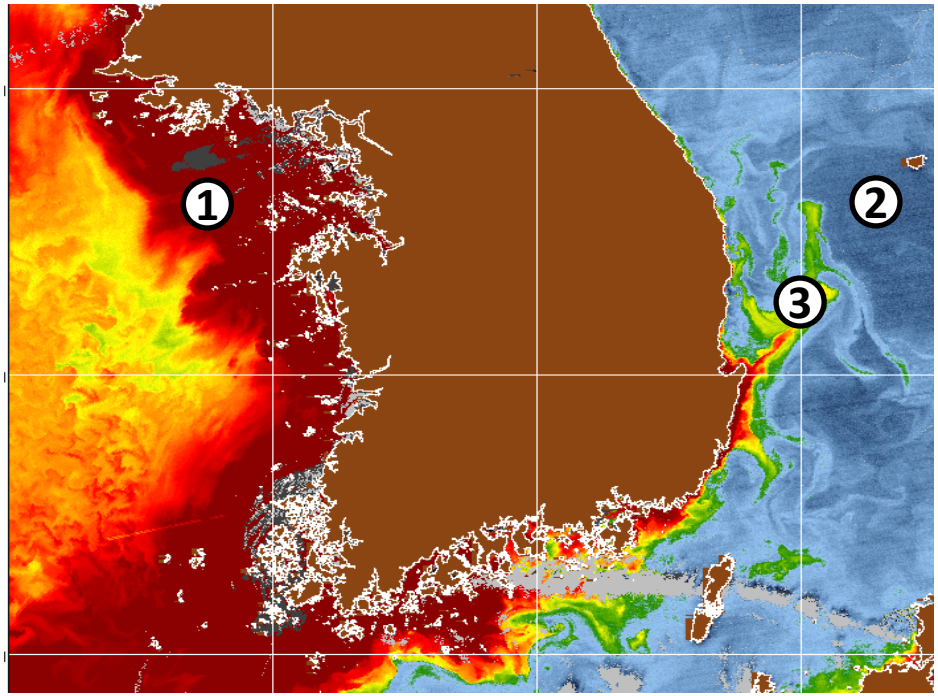
Korean Peninsula – March 5, 2013 – QAA vs LMI – MODIS vs VIIRS
AOPS v4.10



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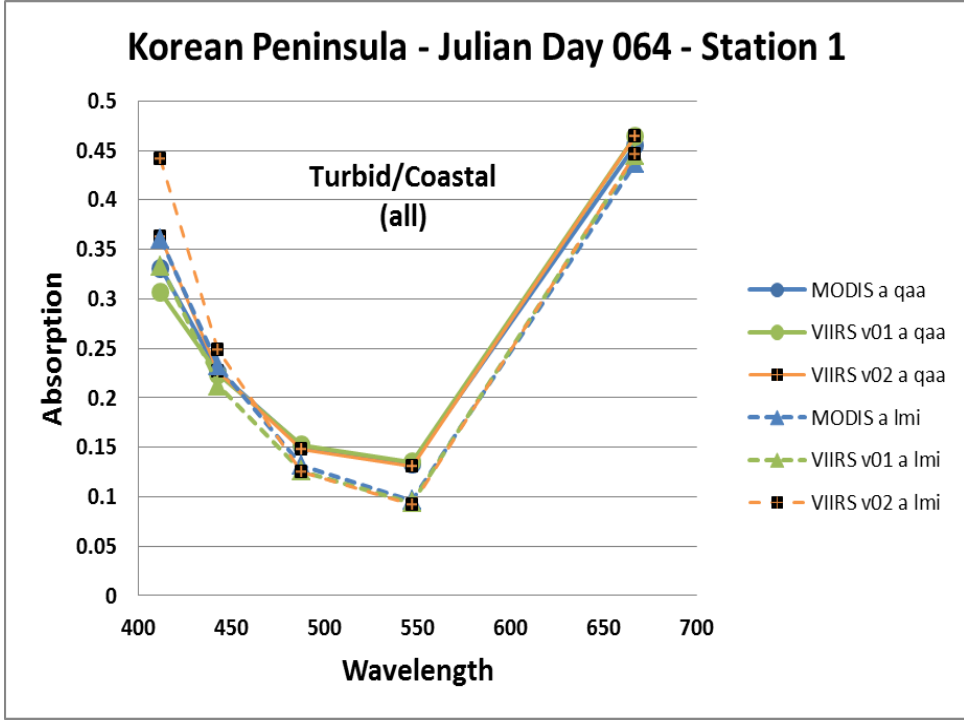
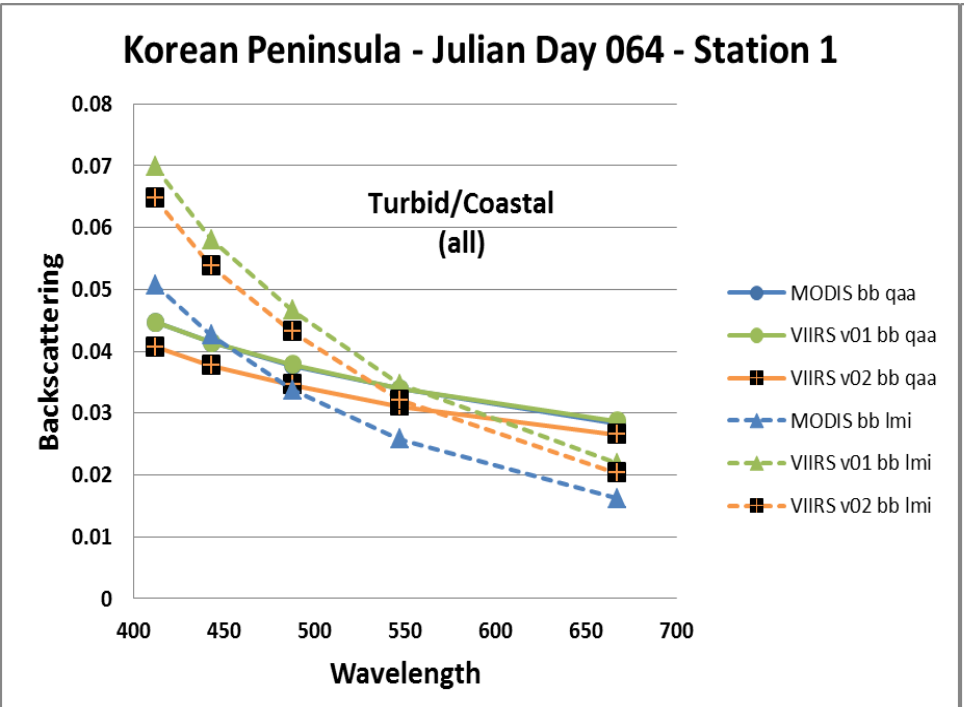
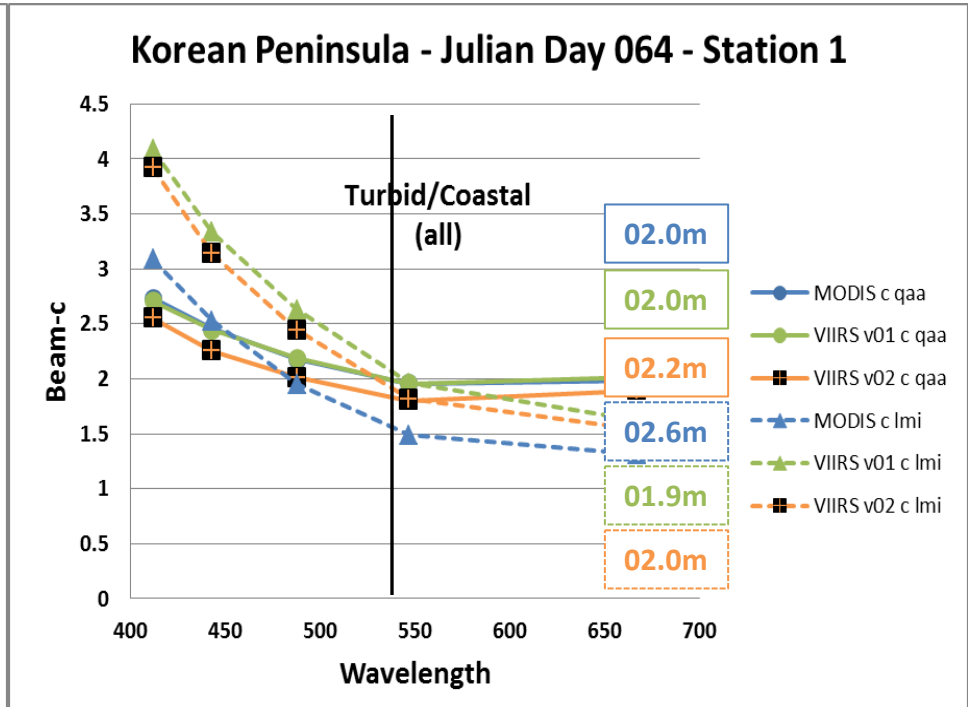
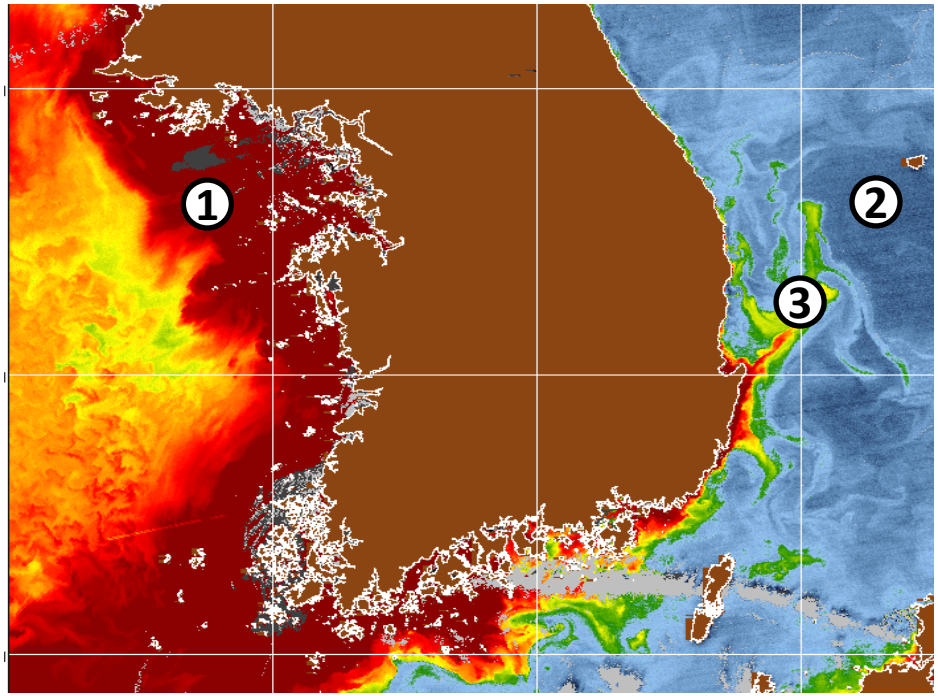

Korean Peninsula - Julian Day 064 - Station 1
Turbid/Coastal
(all)
Absorption
Wavelength
0.5
0.45
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
400
450
500
550
600
650
700
MODIS a qaa
VIIRS v01 a qaa
VIIRS v02 a qaa
MODIS a lmi
VIIRS v01 a lmi
VIIRS v02 a lmi


Korean Peninsula - Julian Day 064 - Station 1
Turbid/Coastal
(all)
Backscattering
Wavelength
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
400
450
500
550
600
650
700
MODIS bb qaa
VIIRS v01 bb qaa
VIIRS v02 bb qaa
MODIS bb lmi
VIIRS v01 bb lmi
VIIRS v02 bb lmi


Korean Peninsula - Julian Day 064 - Station 1
Turbid/Coastal
(all)
Beam-c
Wavelength
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
400
450
500
550
600
650
700
02.0m
02.0m
02.2m
02.6m
01.9m
02.0m
MODIS c qaa
VIIRS v01 c qaa
VIIRS v02 c qaa
MODIS c lmi
VIIRS v01 c lmi
VIIRS v02 c lmi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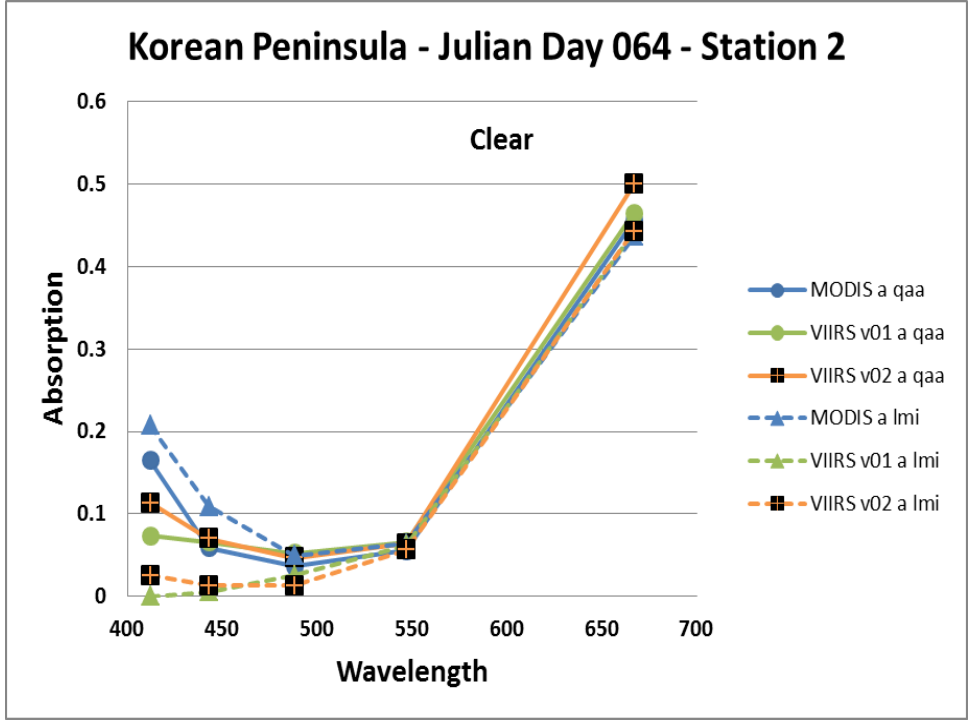
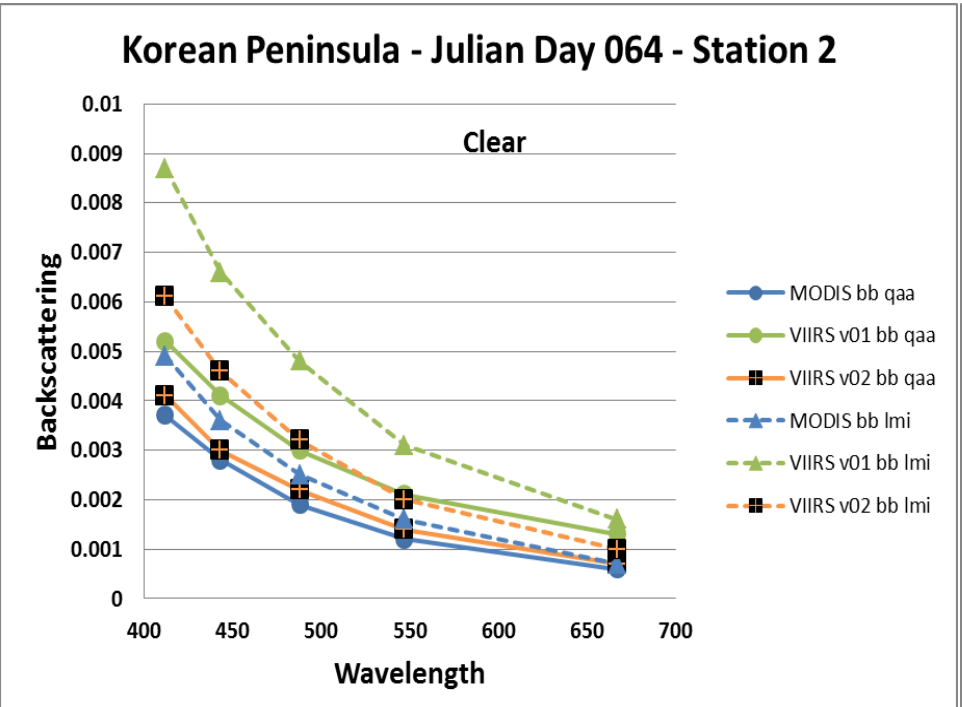
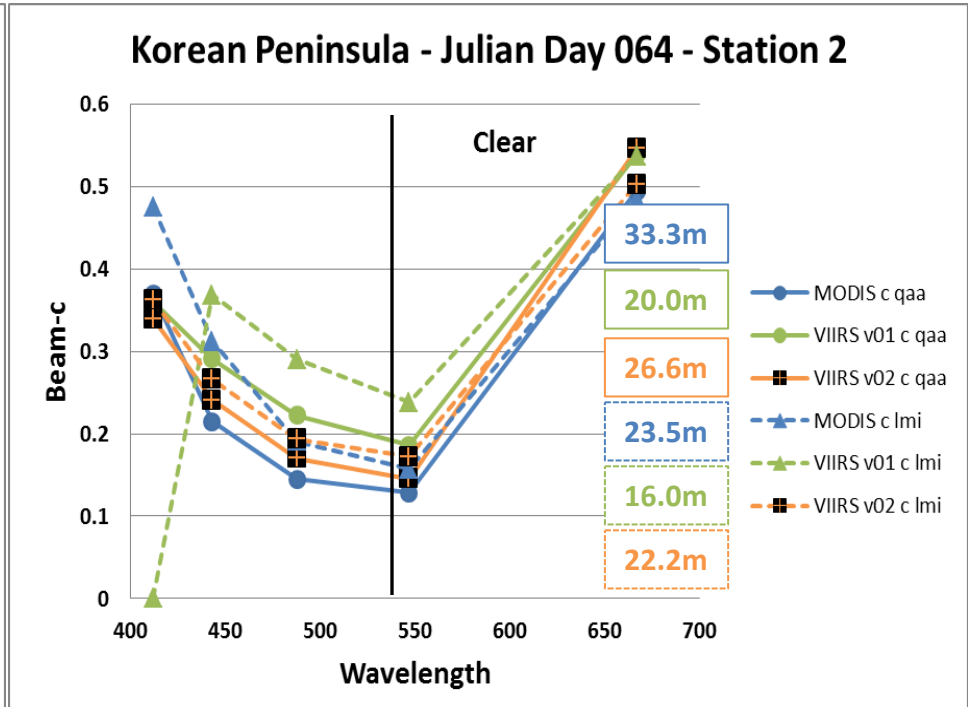
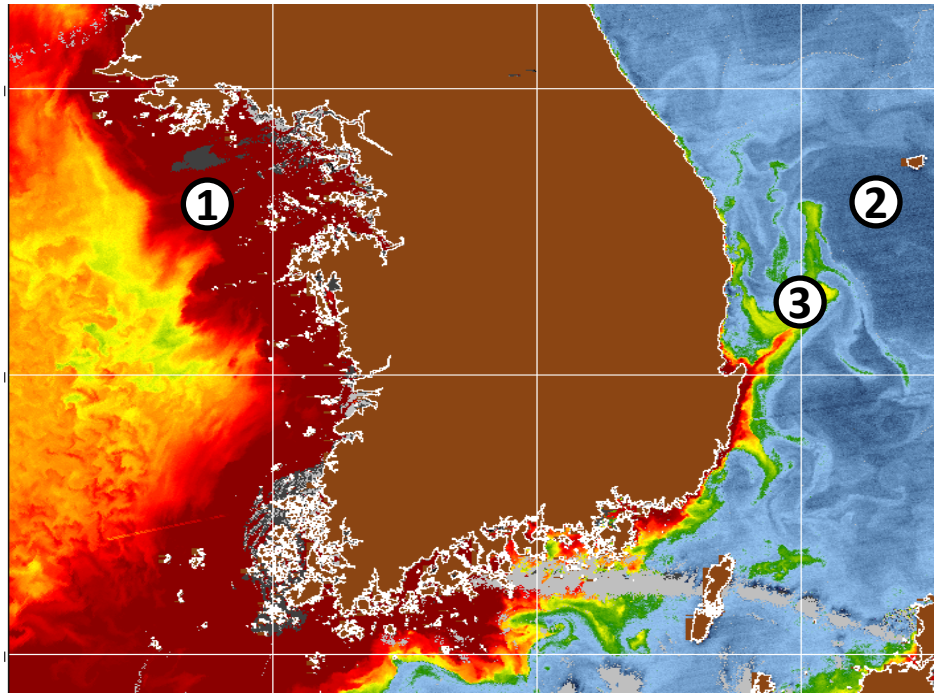
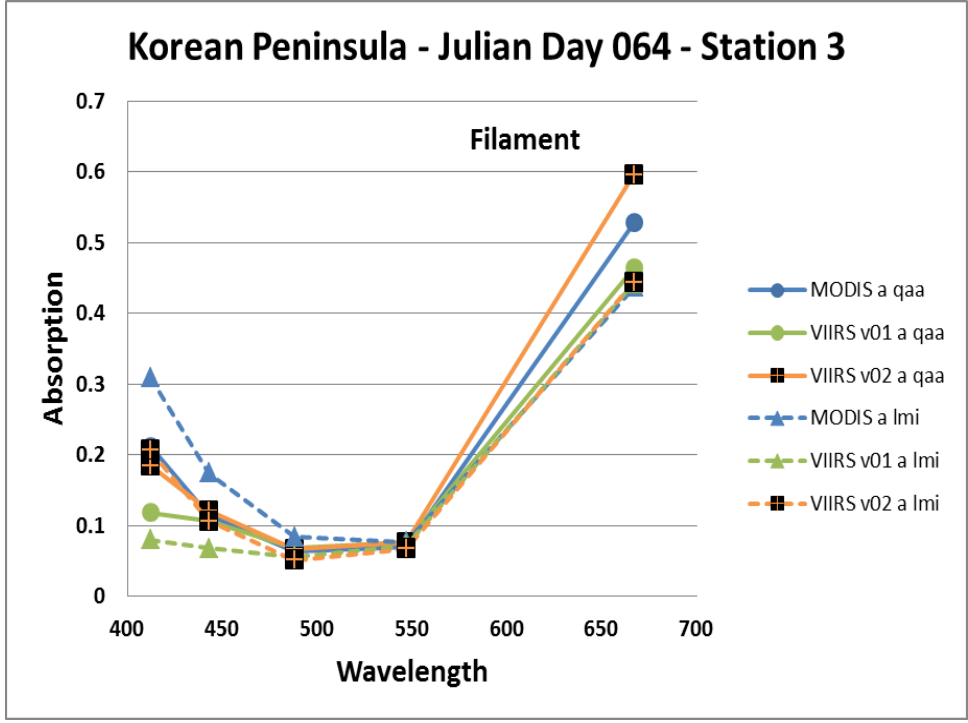
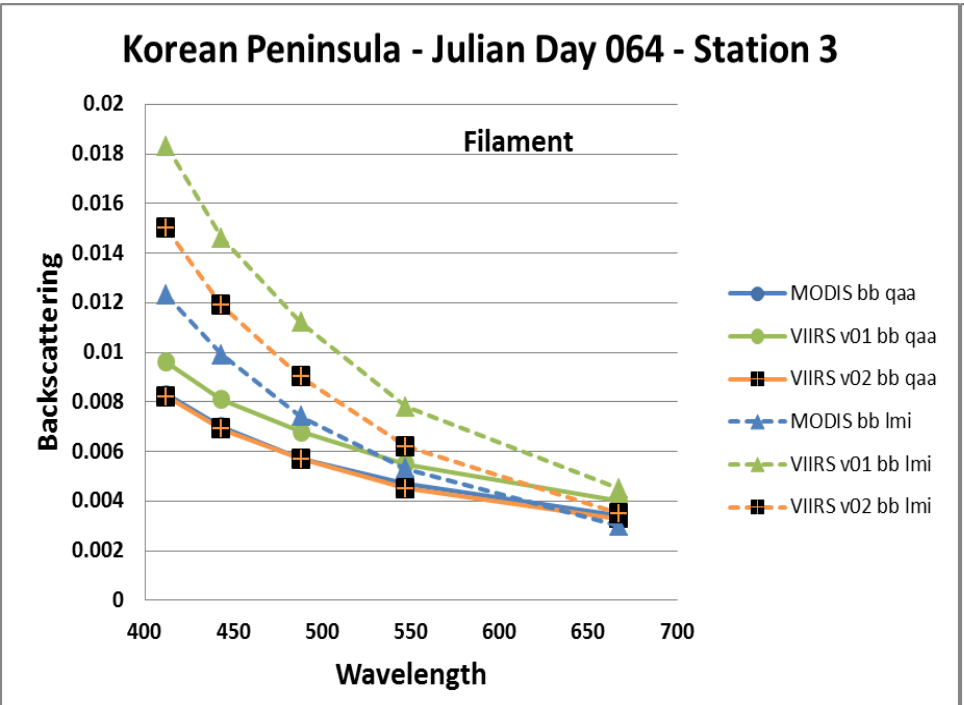

Korean Peninsula - Julian Day 064 - Station 2
Clear
Absorption
Wavelength
0.6
0.5
0.4
0.3
0.2
0.1
0
400
450
500
550
600
650
700
MODIS a qaa
VIIRS v01 a qaa
VIIRS v02 a qaa
MODIS a lmi
VIIRS v01 a lmi
VIIRS v02 a lmi

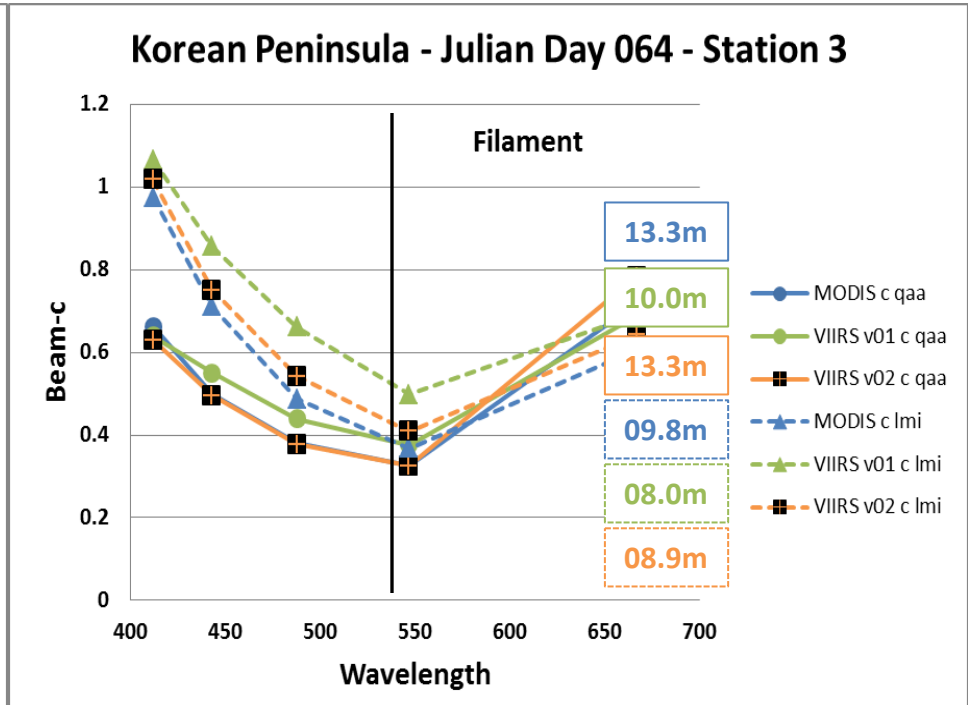

Korean Peninsula - Julian Day 064 - Station 2
Clear
Backscattering
Wavelength
0.01
0.009
0.008
0.007
0.006
0.005
0.004
0.003
0.002
0.001
0
400
450
500
550
600
650
700
MODIS bb qaa
VIIRS v01 bb qaa
VIIRS v02 bb qaa
MODIS bb lmi
VIIRS v01 bb lmi
VIIRS v02 bb lmi


Korean Peninsula - Julian Day 064 - Station 2
Clear
Beam-c
Wavelength
0.6
0.5
0.4
0.3
0.2
0.1
0
400
450
500
550
600
650
700
33.3m
20.0m
26.6m
23.5m
16.0m
22.2m
MODIS c qaa
VIIRS v01 c qaa
VIIRS v02 c qaa
MODIS c lmi
VIIRS v01 c lmi
VIIRS v02 c lmi

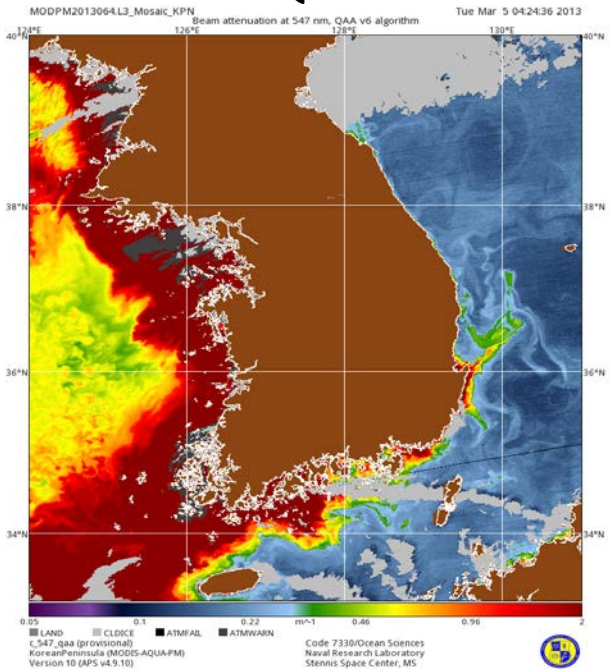

1
2
3


Korean Peninsula - Julian Day 064 - Station 3
Filament
Absorption
Wavelength
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
400
450
500
550
600
650
700
MODIS a qaa
VIIRS v01 a qaa
VIIRS v02 a qaa
MODIS a lmi
VIIRS v01 a lmi
VIIRS v02 a lmi

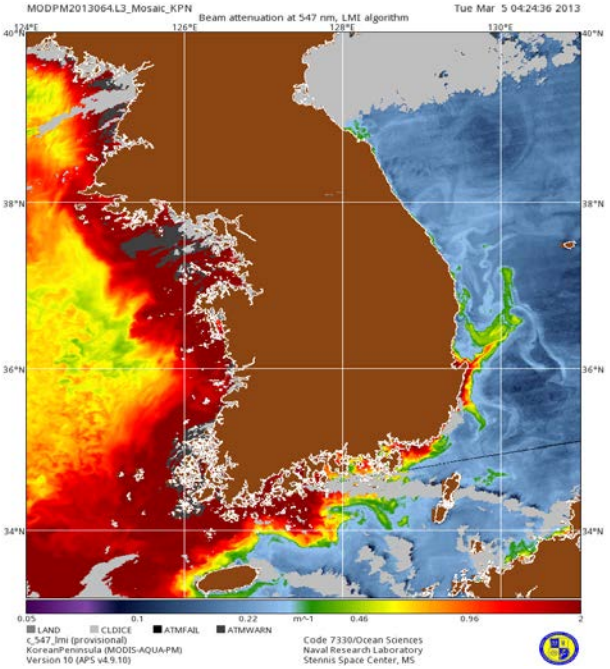

Korean Peninsula - Julian Day 064 - Station 3
Filament
Backscattering
Wavelength
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002
0
400
450
500
550
600
650
700
MODIS bb qaa
VIIRS v01 bb qaa
VIIRS v02 bb qaa
MODIS bb lmi
VIIRS v01 bb lmi
VIIRS v02 bb lmi

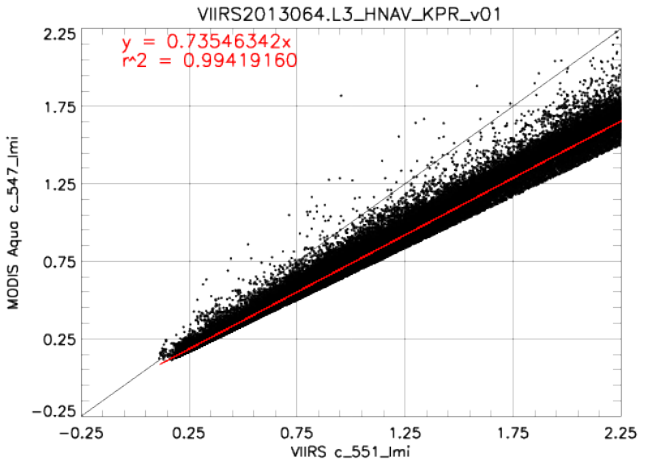

Korean Peninsula - Julian Day 064 - Station 3
Filament
Beam-c
Wavelength
1.2
1
0.8
0.6
0.4
0.2
0
400
450
500
550
600
650
700
13.3m
10.0m
13.3m
09.8m
08.0m
08.9m
MODIS c qaa
VIIRS v01 c qaa
VIIRS v02 c qaa
MODIS c lmi
VIIRS v01 c lmi
VIIRS v02 c lmi

MODIS QAA c547

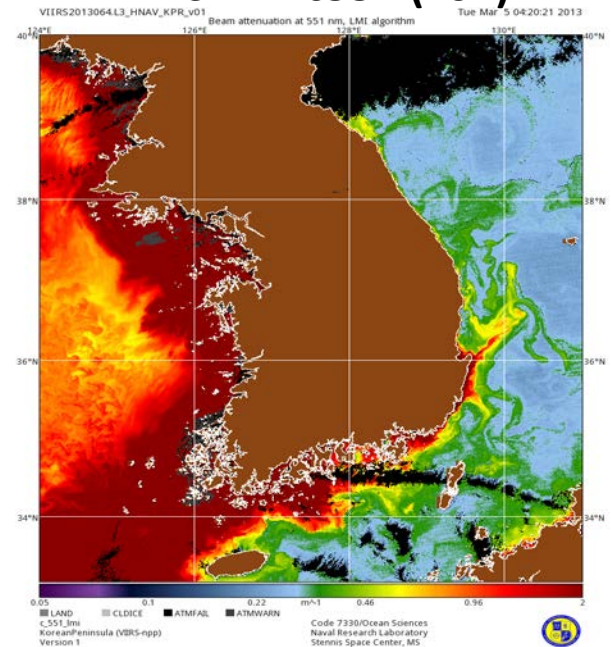


MODIS LMI c547

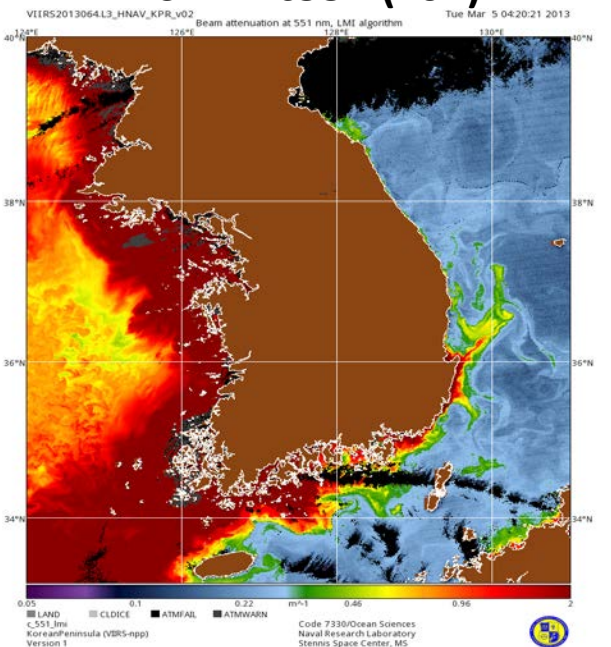


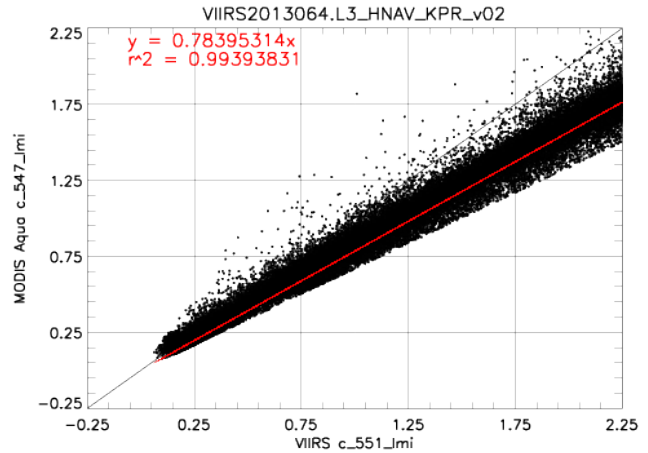


VIIRS LMI c551 (v01)

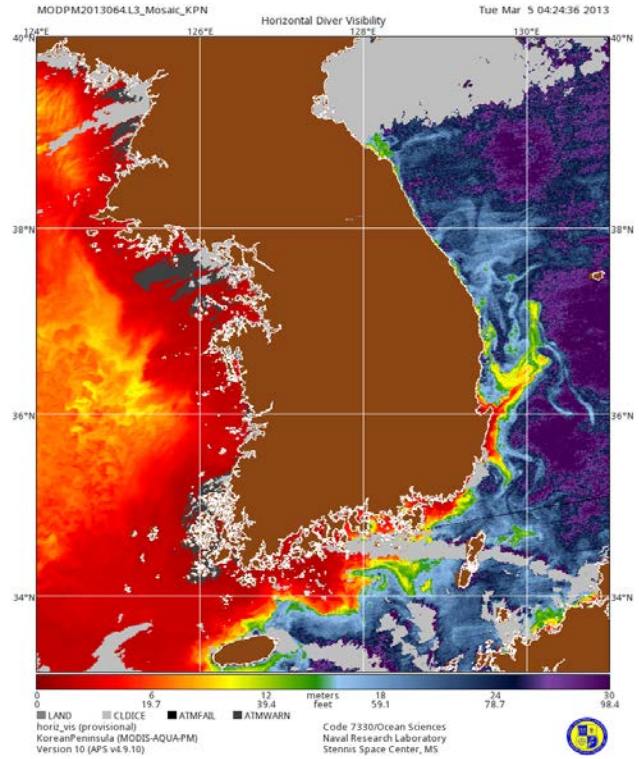


VIIRS LMI c551 (v02)

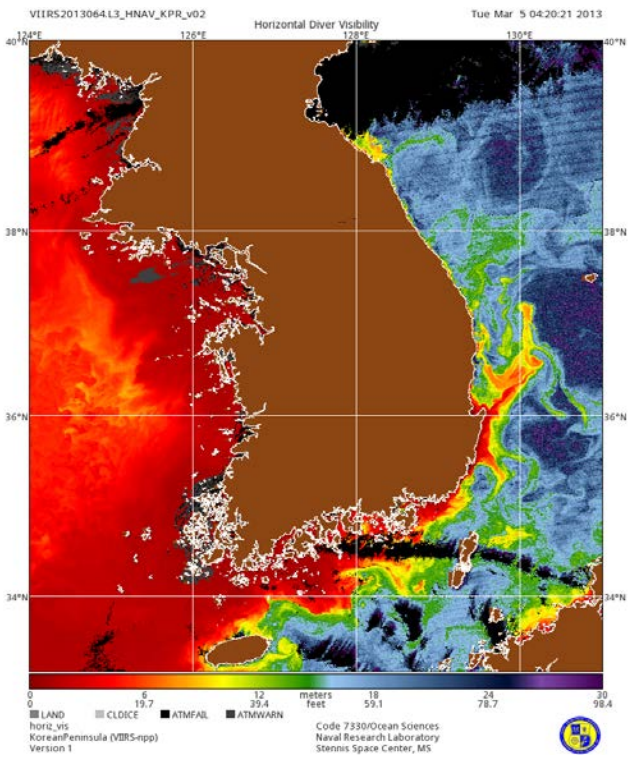




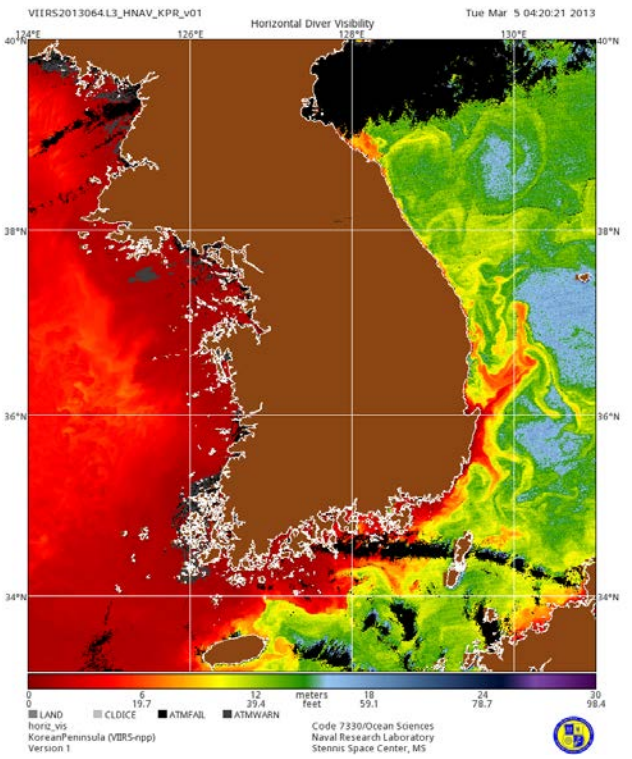
MODIS



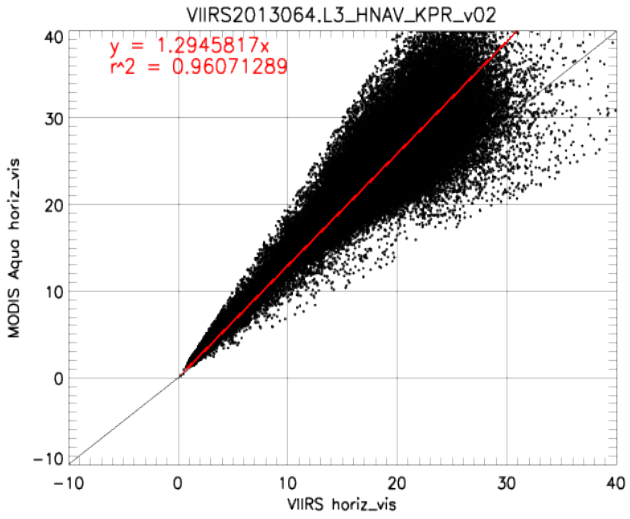
VIIIRS (v02)

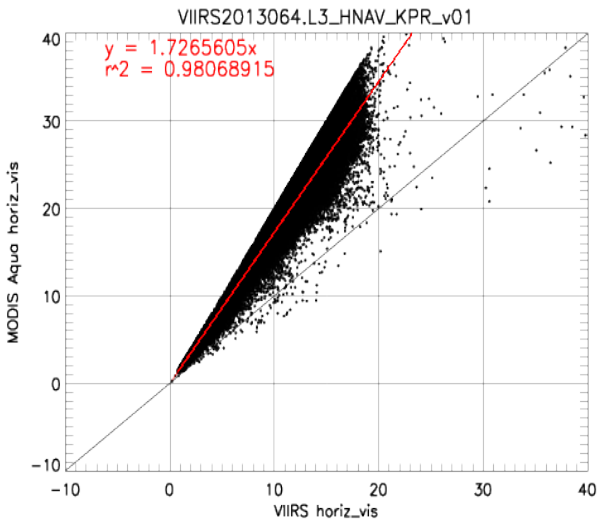


VIIRS (v01)

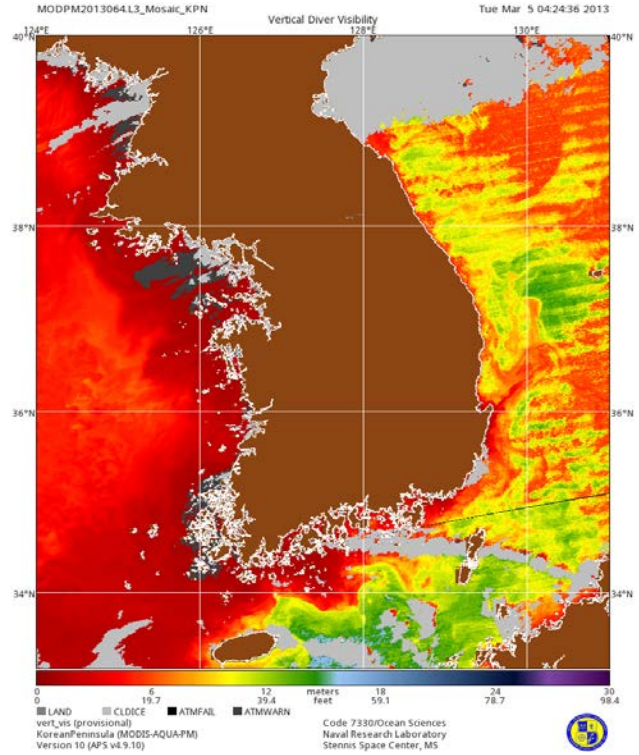


HORIZONTAL VISIBILITY (LMI 531)

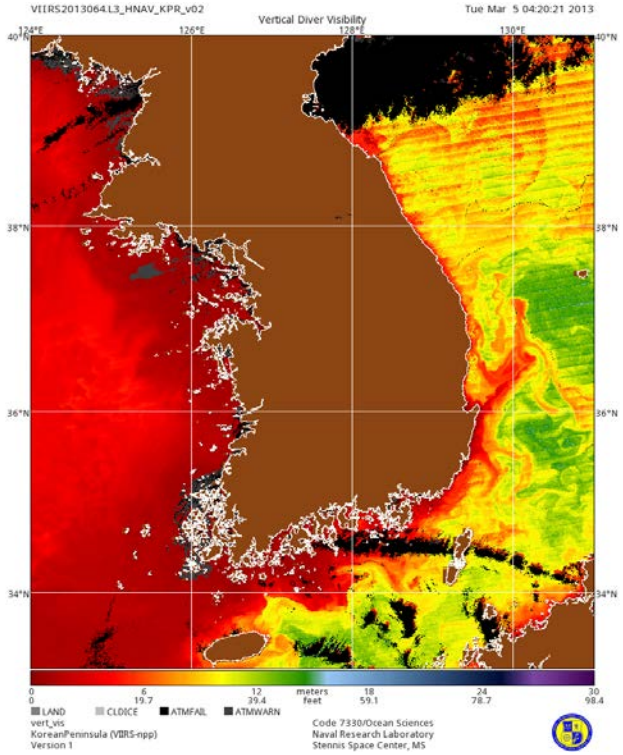




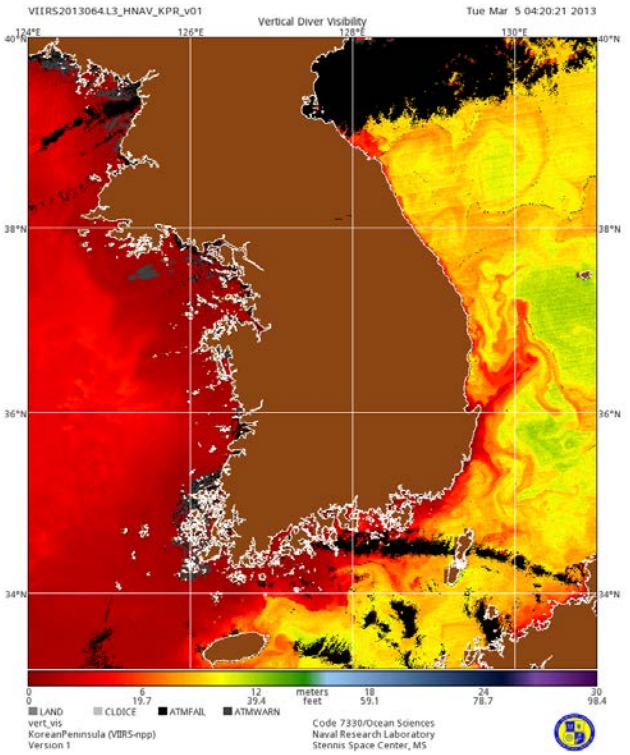
MODIS



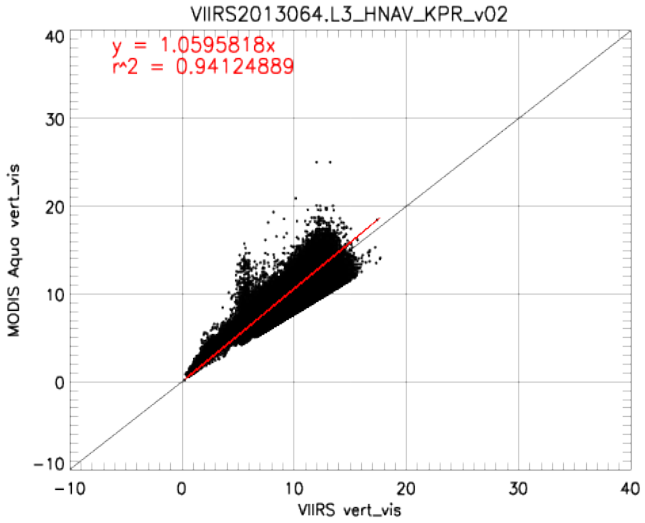
VIIIRS (v02)

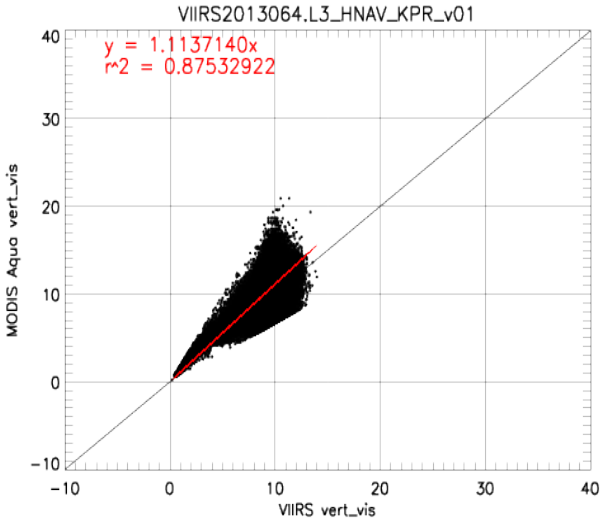


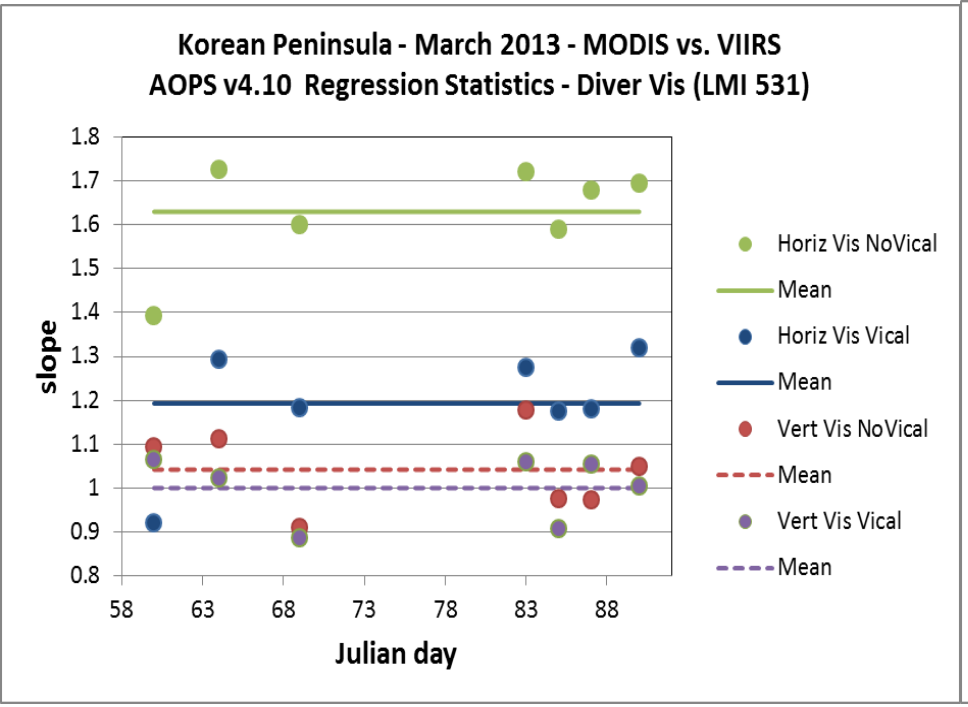
VIIRS (v01)

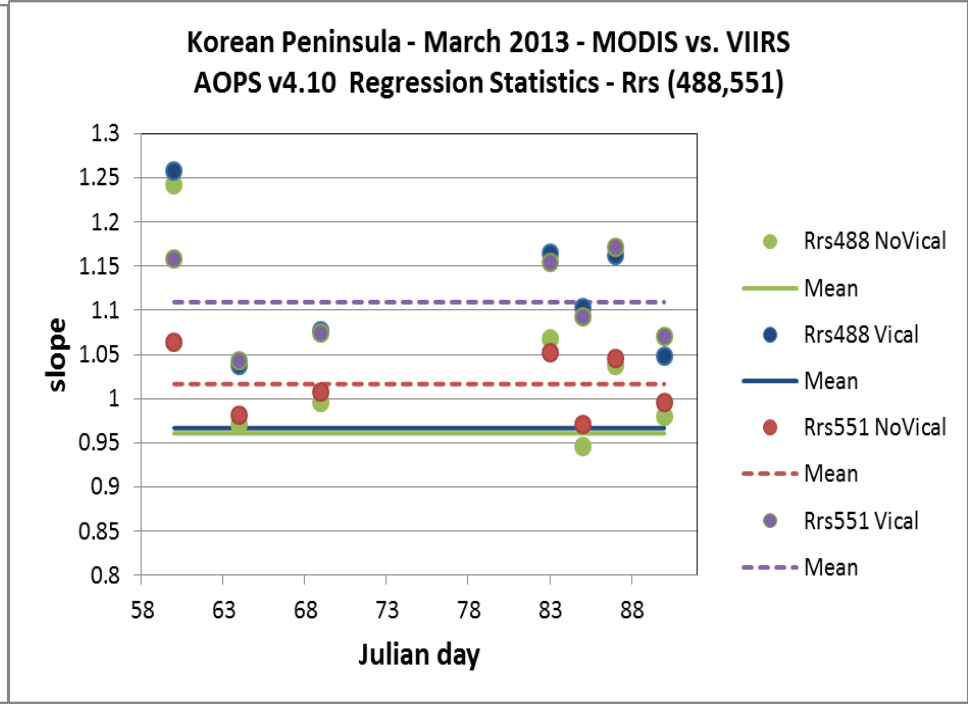


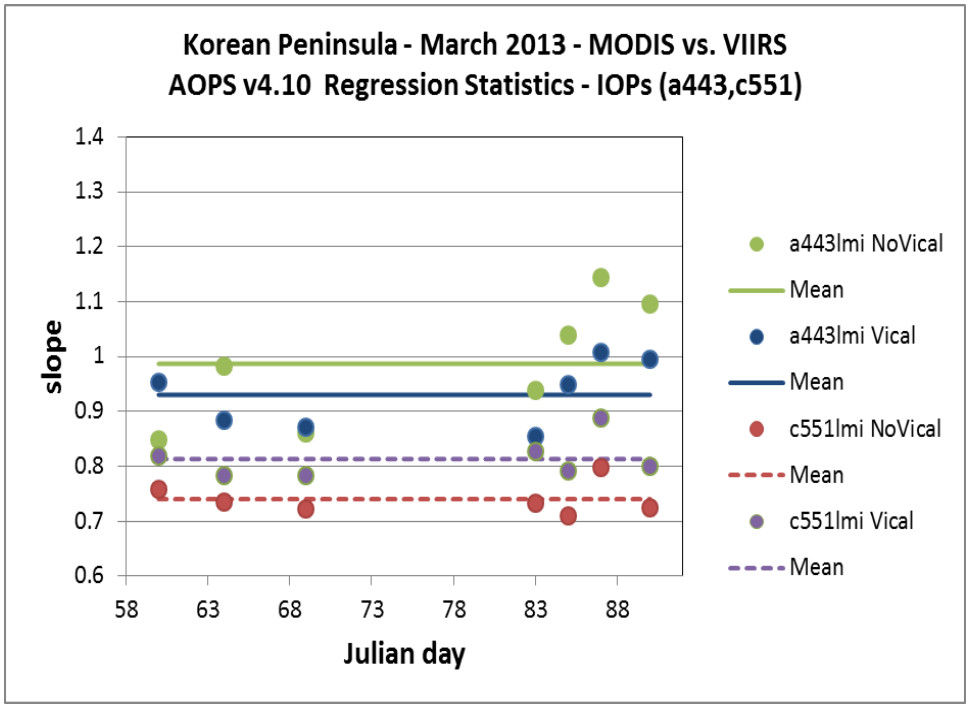
VERTICAL VISIBILITY (LMI 531)



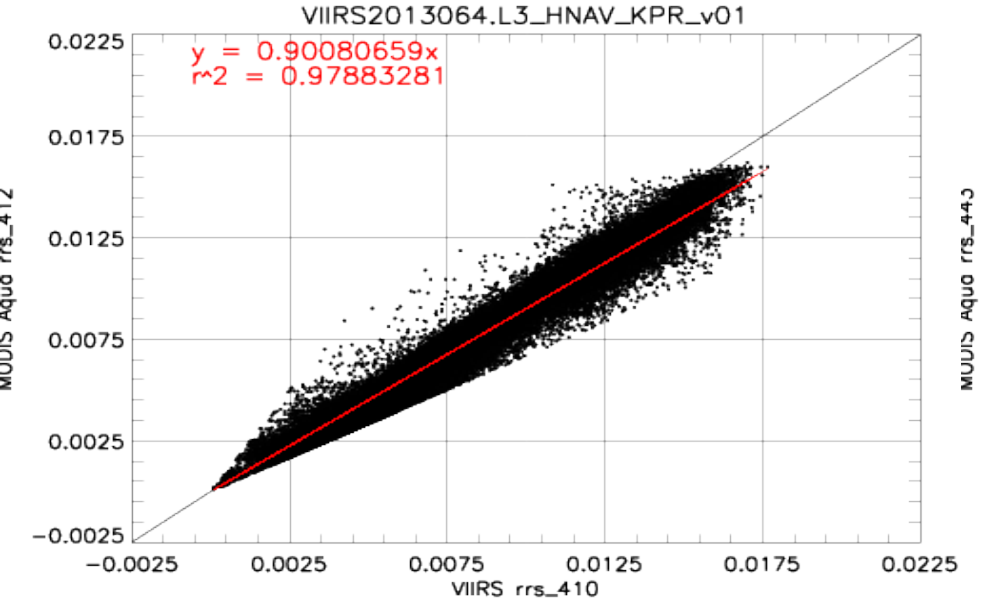


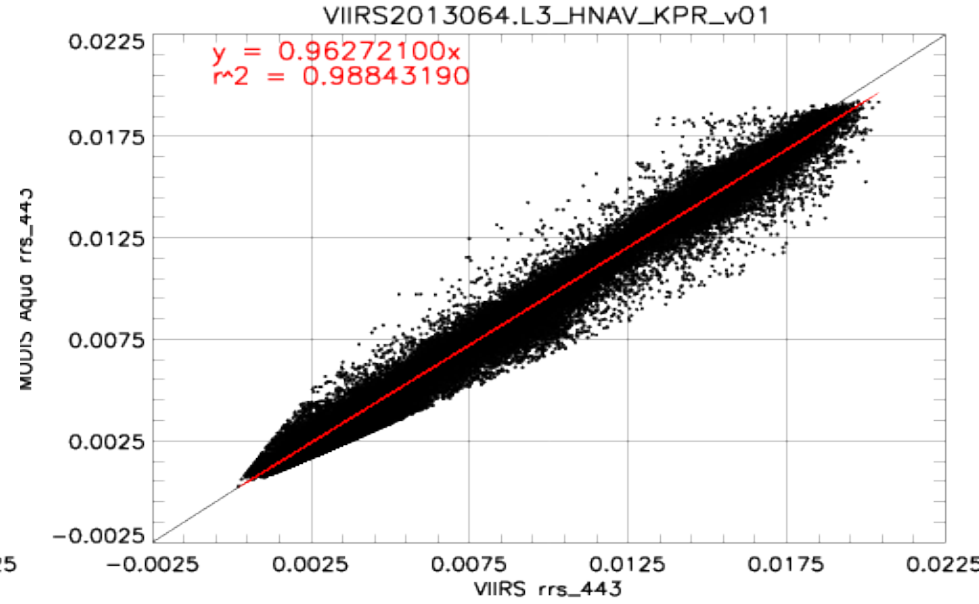

Korean Peninsula - March 2013 - MODIS vs. VIIRS
AOPS v4.10 Regression Statistics - Diver Vis (LMI 531)
slope
Julian day
Horiz Vis NoVical
Mean
Horiz Vis Vical
Mean
Vert Vis NoVical
Mean
Vert Vis Vical
Mean

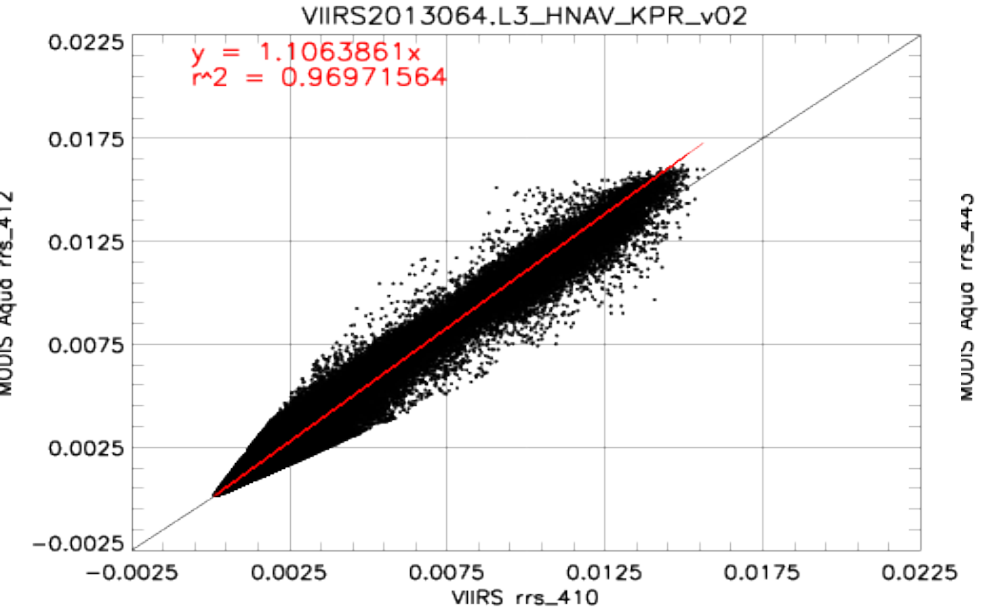

Korean Peninsula - March 2013 - MODIS vs. VIIRS
AOPS v4.10 Regression Statistics - Rrs (488,551)
slope
Julian day
Rrs488 NoVical
Mean
Rrs488 Vical
Mean
Rrs551 NoVical
Mean
Rrs551 Vical
Mean

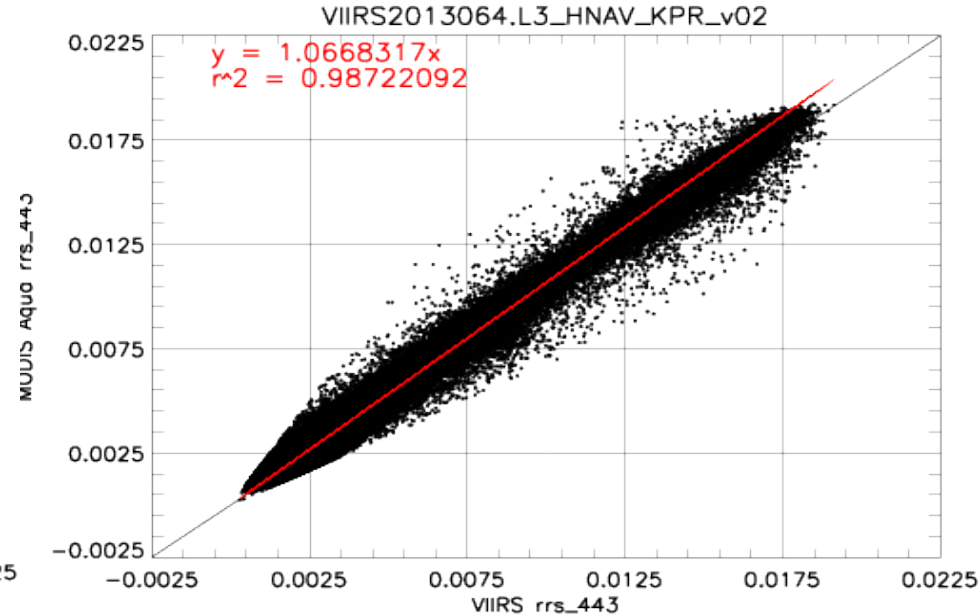

Korean Peninsula - March 2013 - MODIS vs. VIIRS
AOPS v4.10 Regression Statistics - IOPs (a443,c551)
slope
Julian day
a443lmi NoVical
Mean
a443lmi Vical
Mean
c551lmi NoVical
Mean
c551lmi Vical
Mean

Rrs Matchup MODIS vs. VIIRS (412,443)

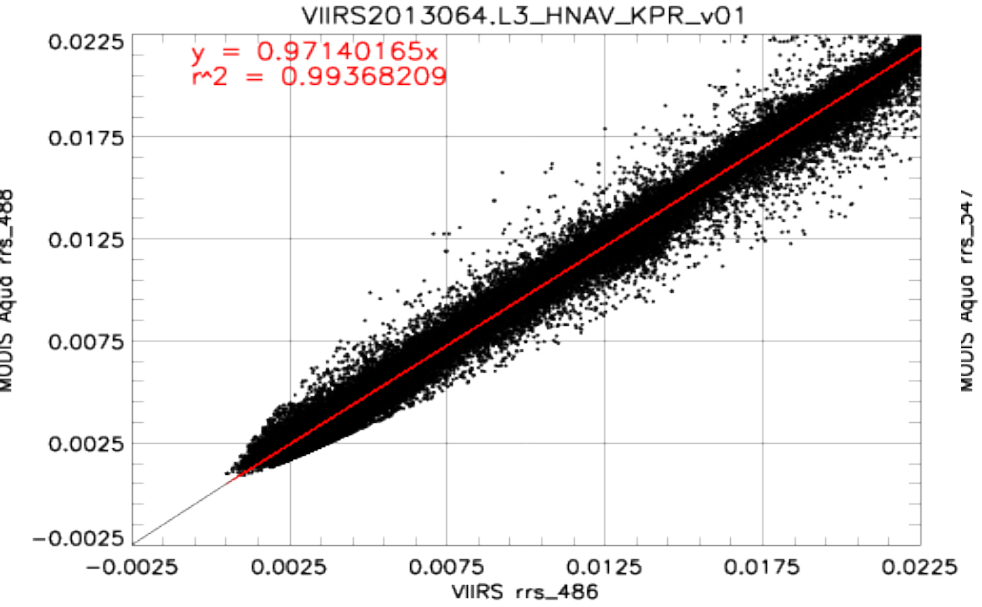


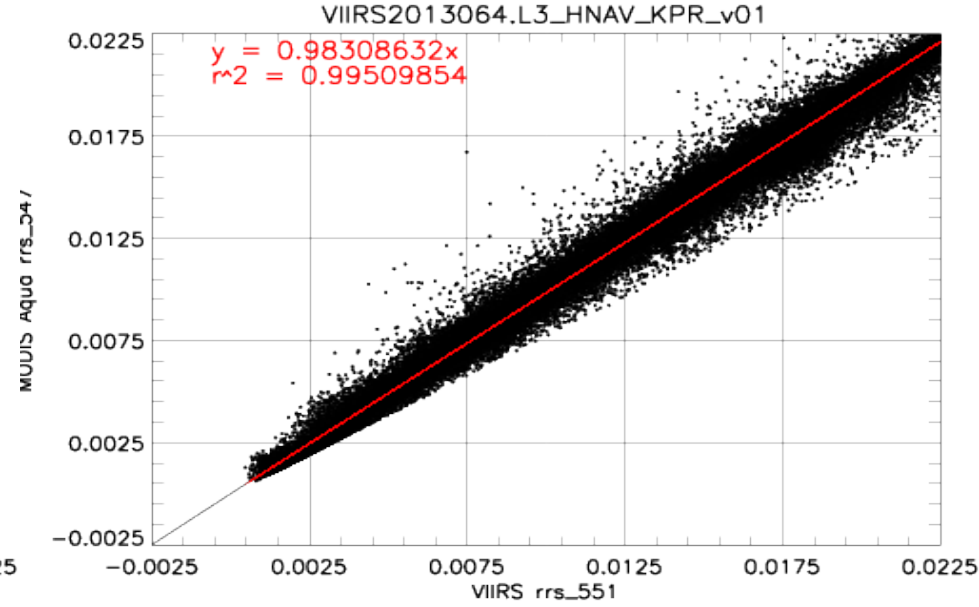


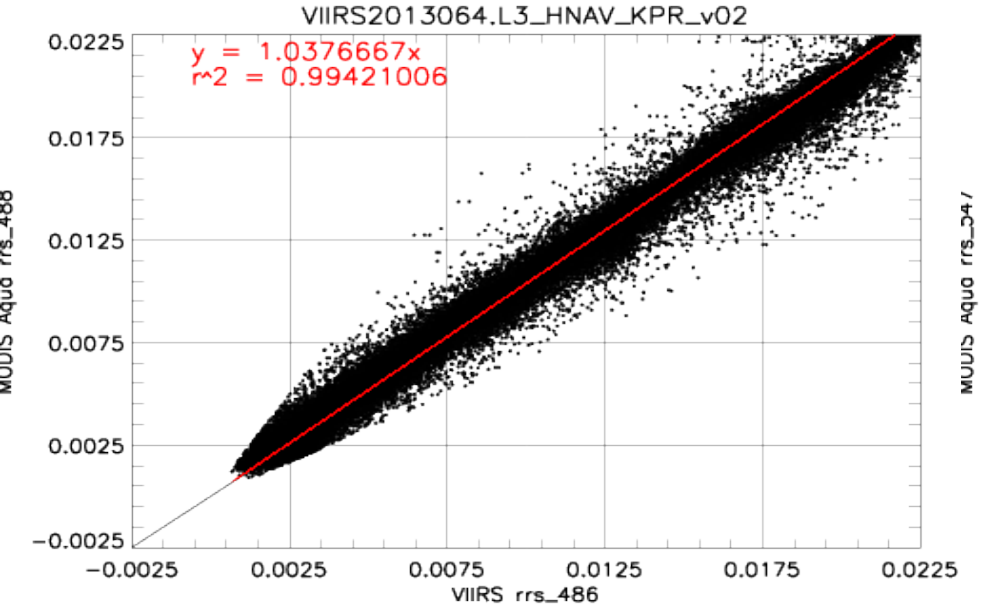


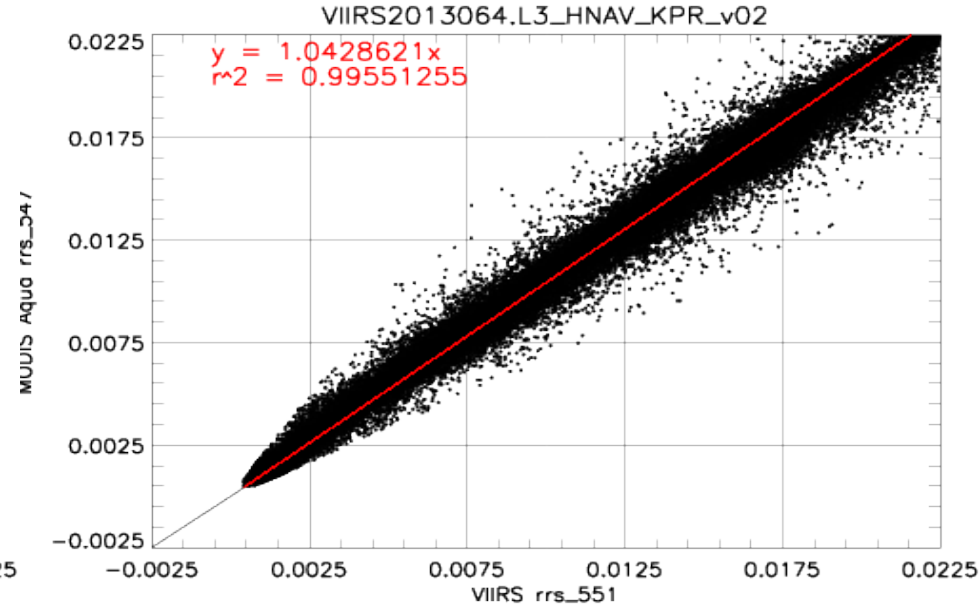


Rrs Matchup MODIS vs. VIIRS (488,451)

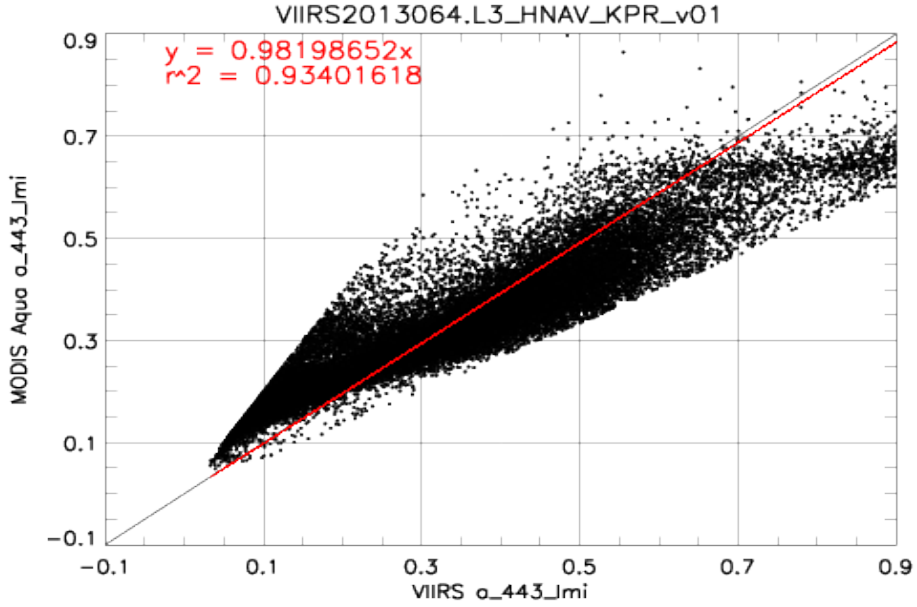


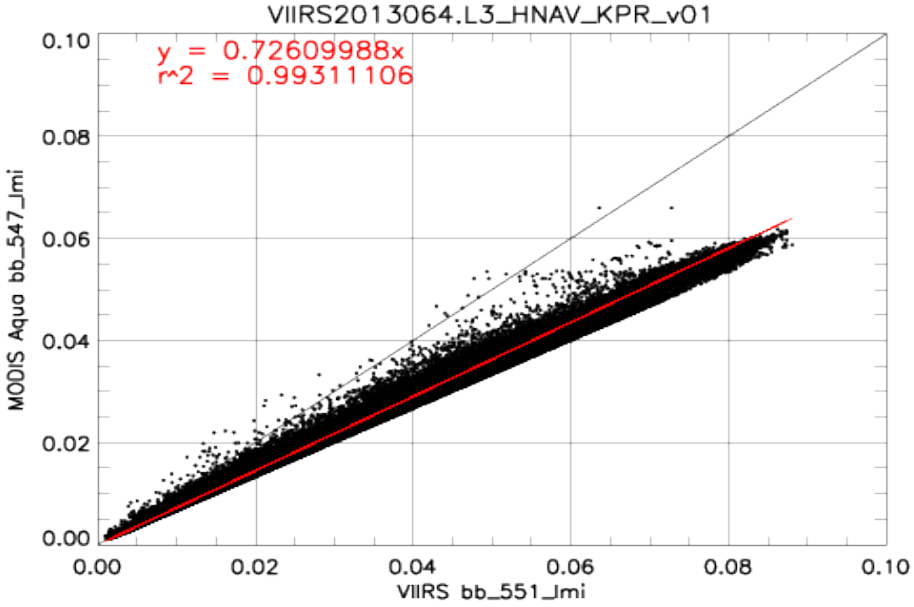


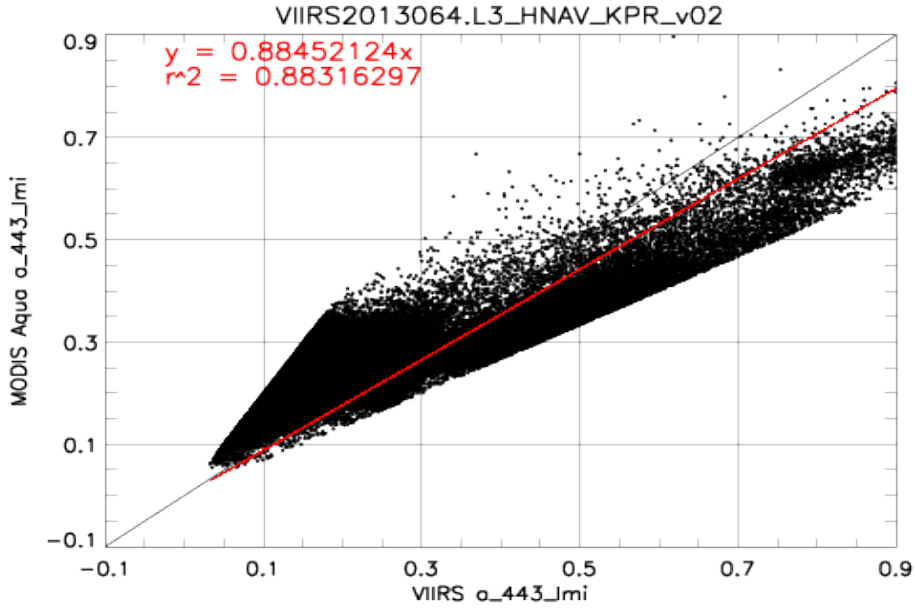


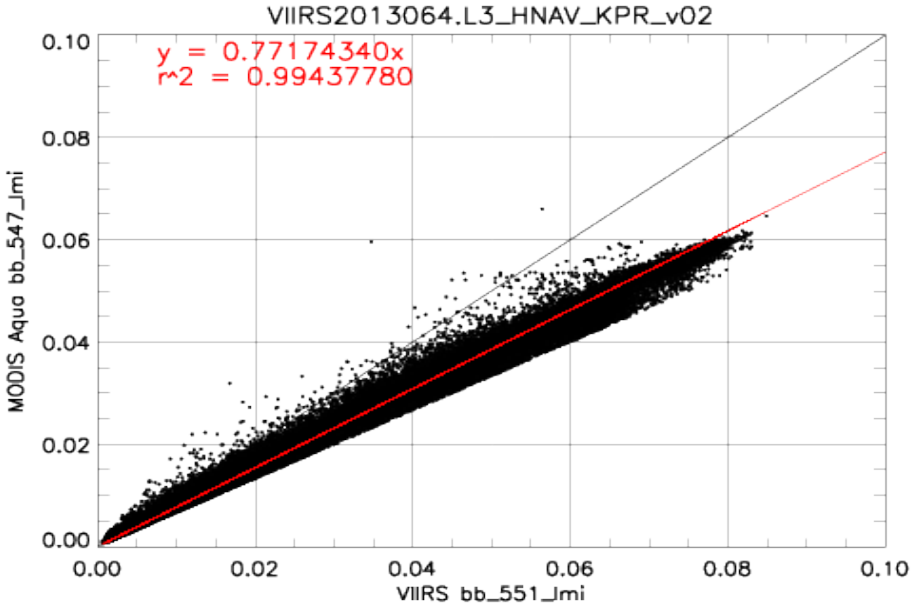


a,bb Matchup MODIS vs. VIIRS

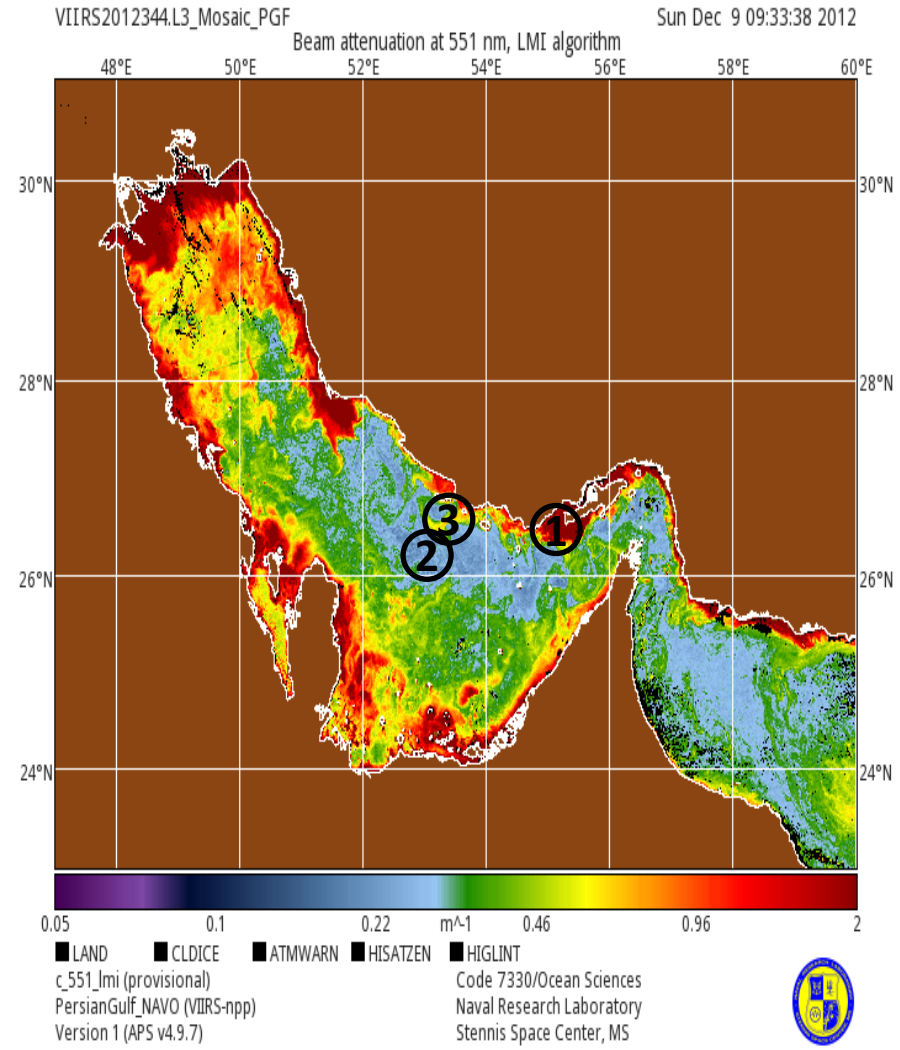


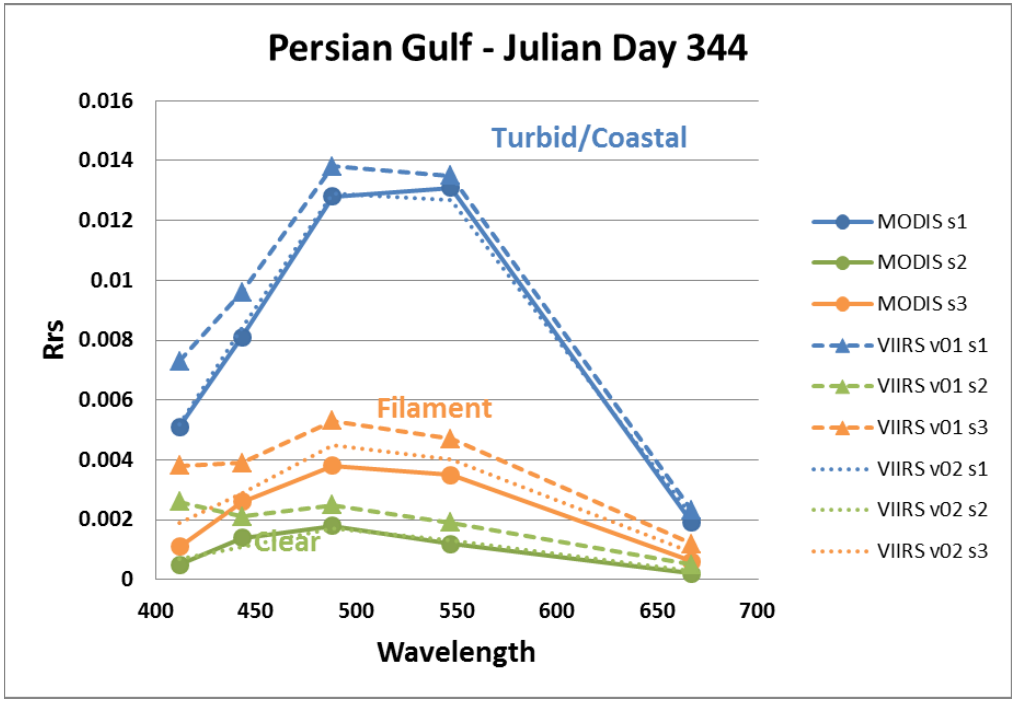


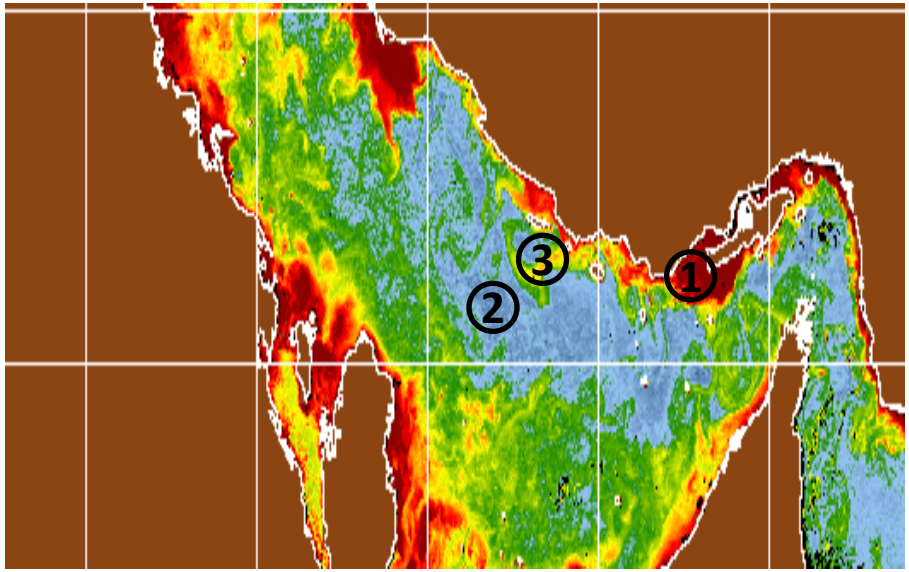


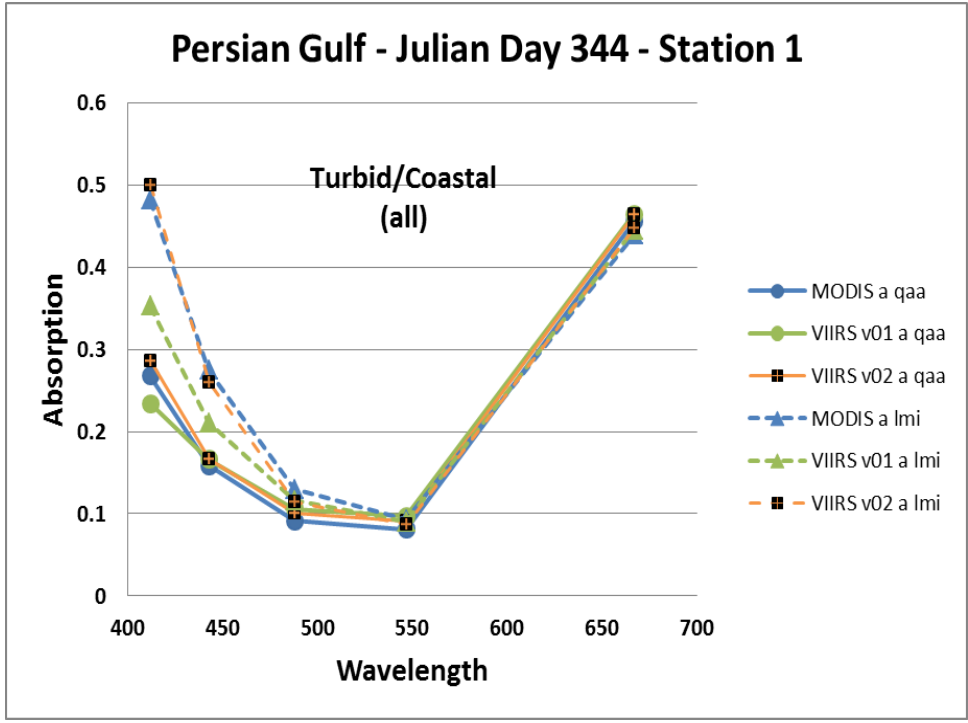


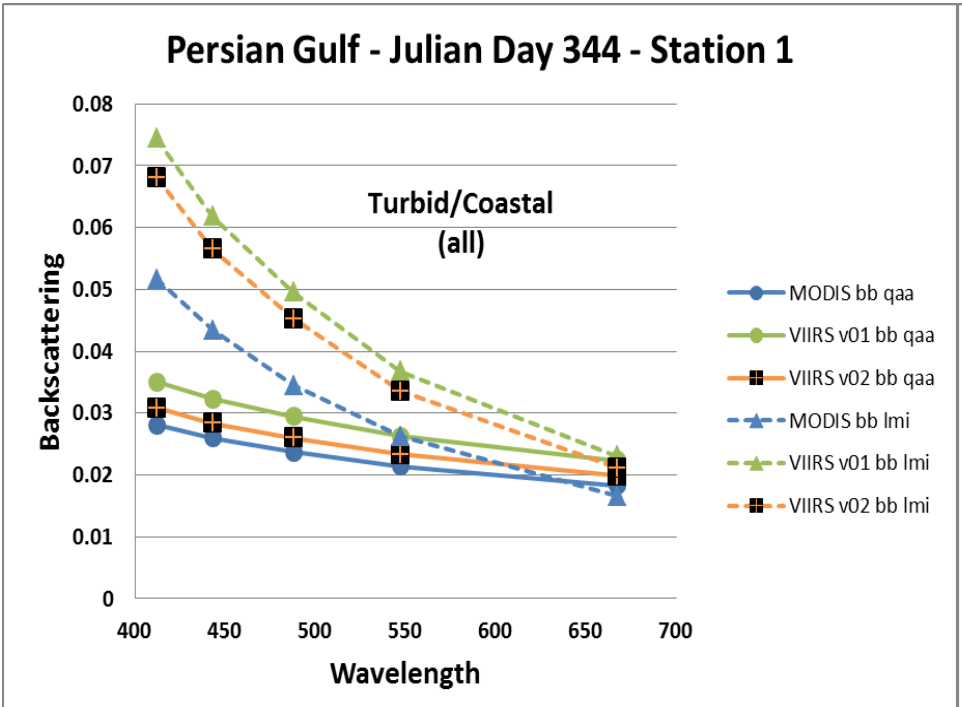
Persian Gulf – December 09, 2012 – QAA vs LMI – MODIS vs VIIRS

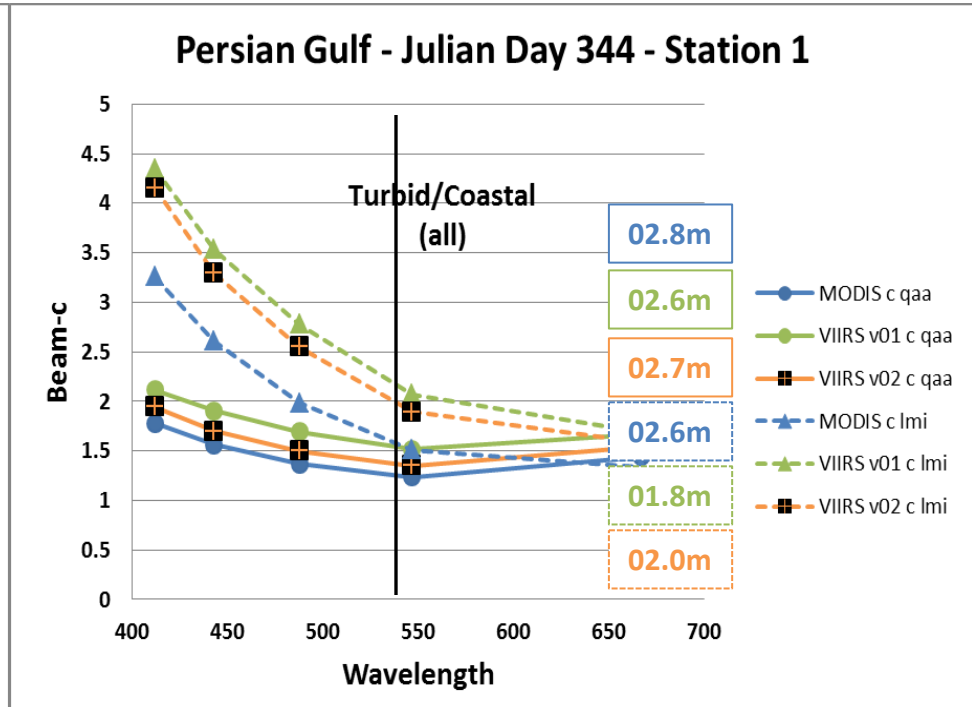


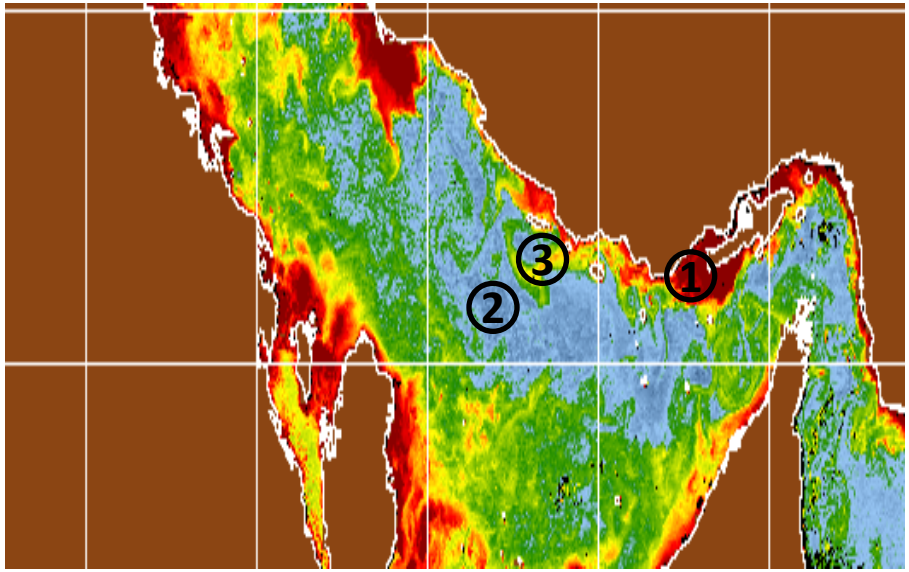


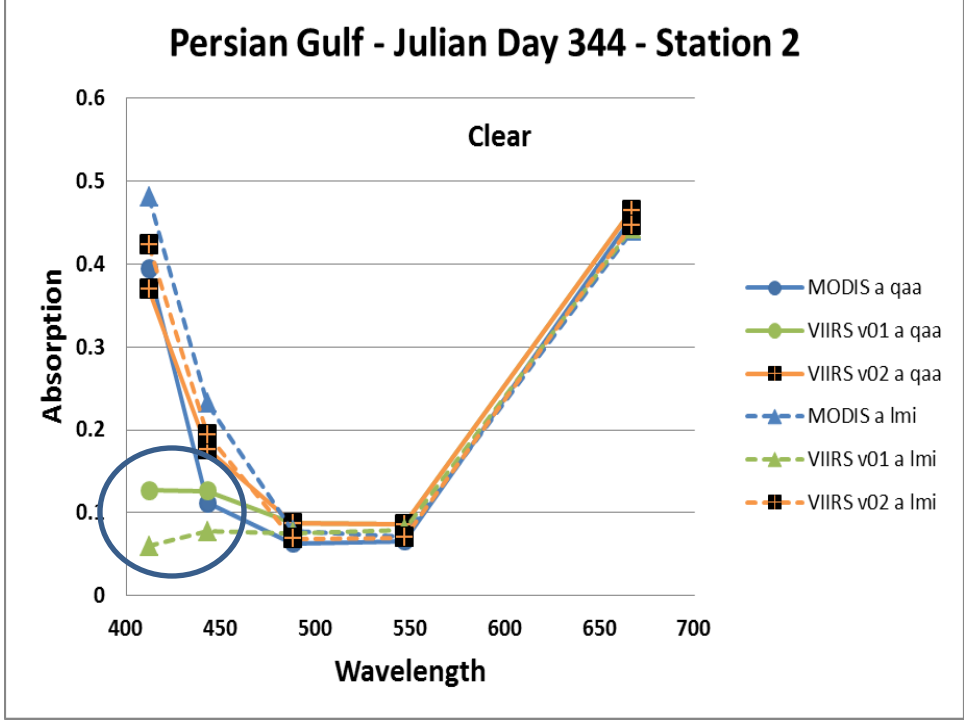

1
2
3

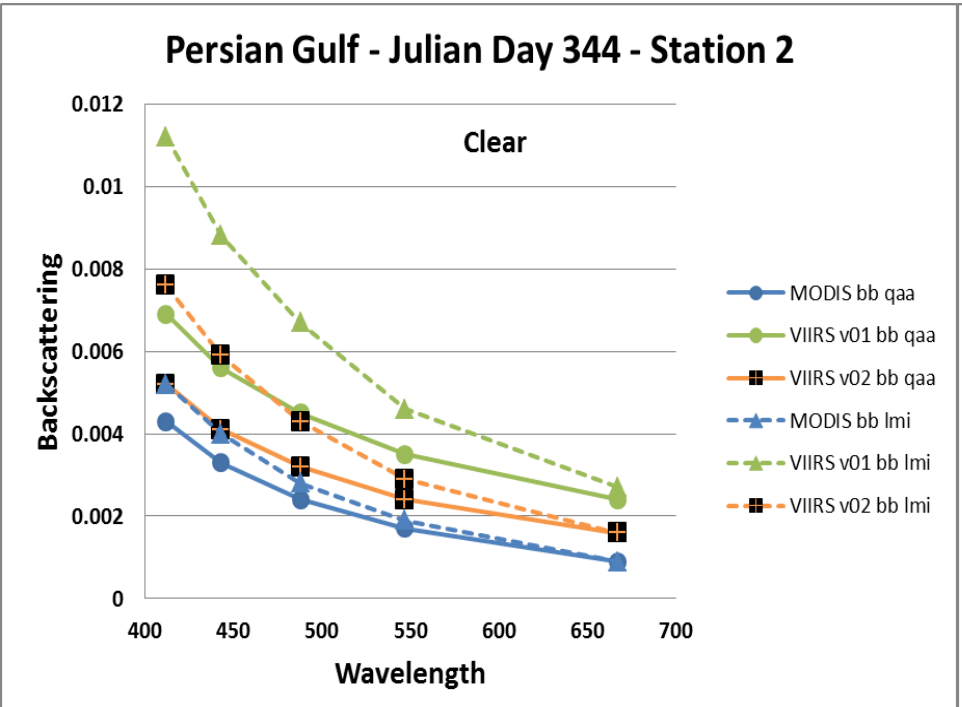

Persian Gulf - Julian Day 344 - Station 1
Turbid/Coastal
(all)
Absorption
Wavelength
0.6
0.5
0.4
0.3
0.2
0.1
0
400
450
500
550
600
650
700
MODIS a qaa
VIIRS v01 a qaa
VIIRS v02 a qaa
MODIS a lmi
VIIRS v01 a lmi
VIIRS v02 a lmi

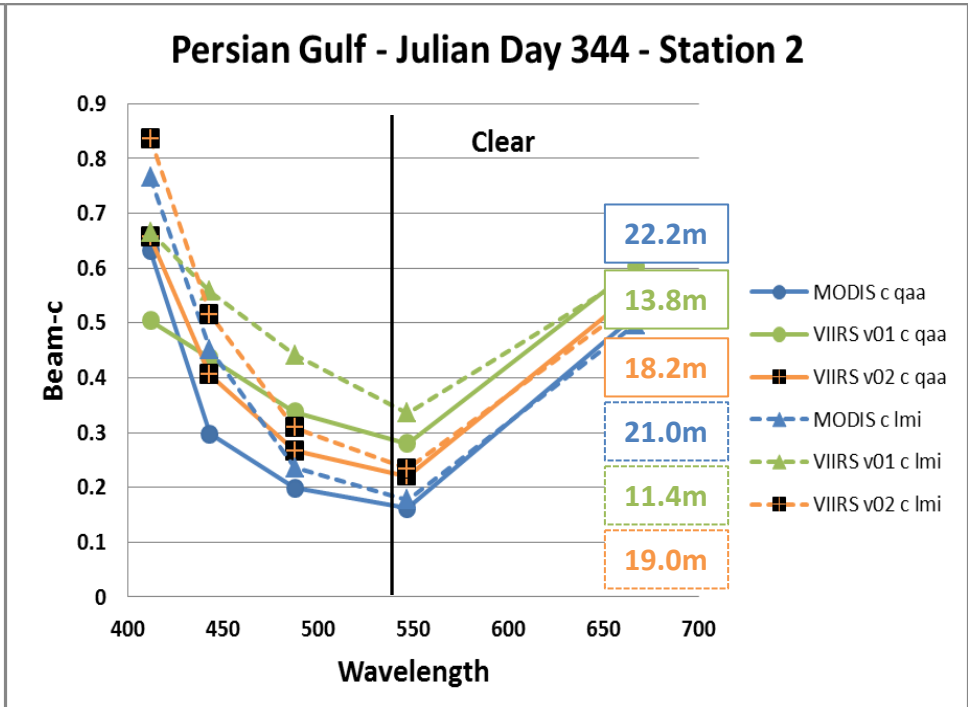

Persian Gulf - Julian Day 344 - Station 1
Turbid/Coastal
(all)
Backscattering
Wavelength
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
400
450
500
550
600
650
700
MODIS bb qaa
VIIRS v01 bb qaa
VIIRS v02 bb qaa
MODIS bb lmi
VIIRS v01 bb lmi
VIIRS v02 bb lmi

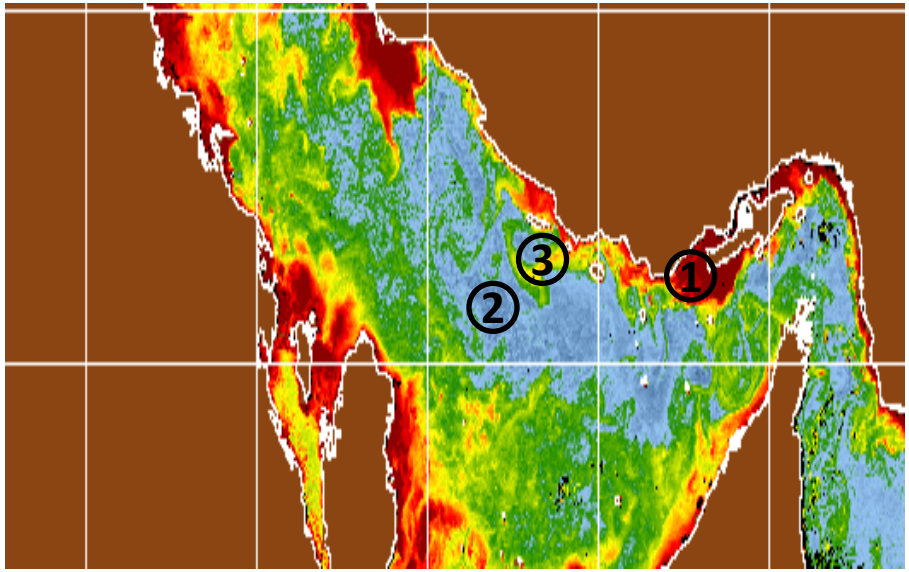

Persian Gulf - Julian Day 344 - Station 1
Turbid/Coastal
(all)
Beam-c
Wavelength
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
400
450
500
550
600
650
700
02.8m
02.6m
02.7m
02.6m
01.8m
02.0m
MODIS c qaa
VIIRS v01 c qaa
VIIRS v02 c qaa
MODIS c lmi
VIIRS v01 c lmi
VIIRS v02 c lmi

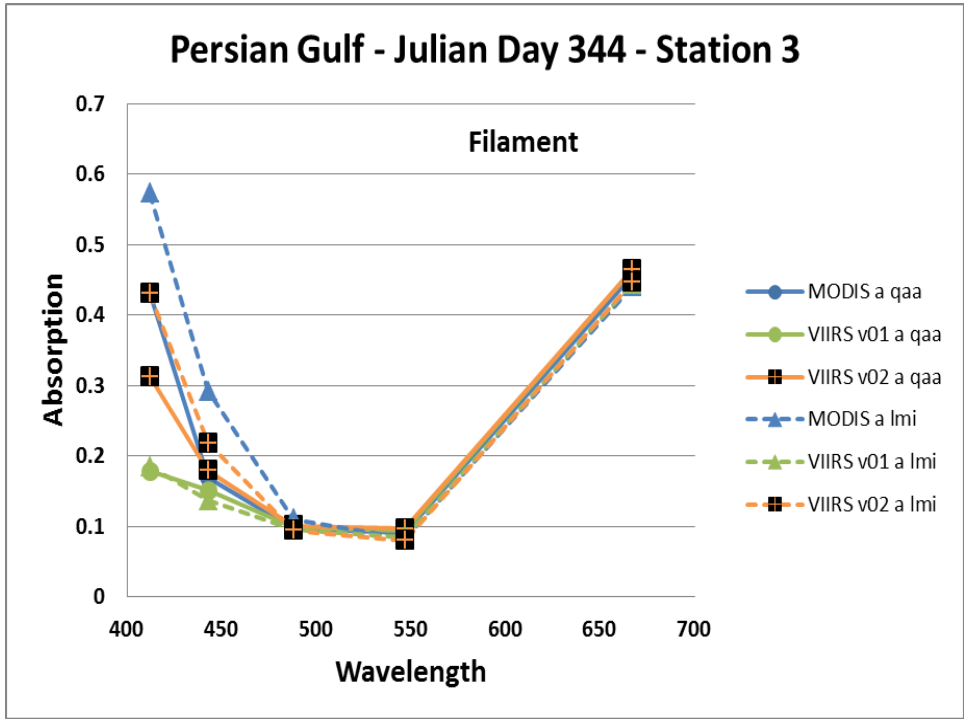

1
2
3

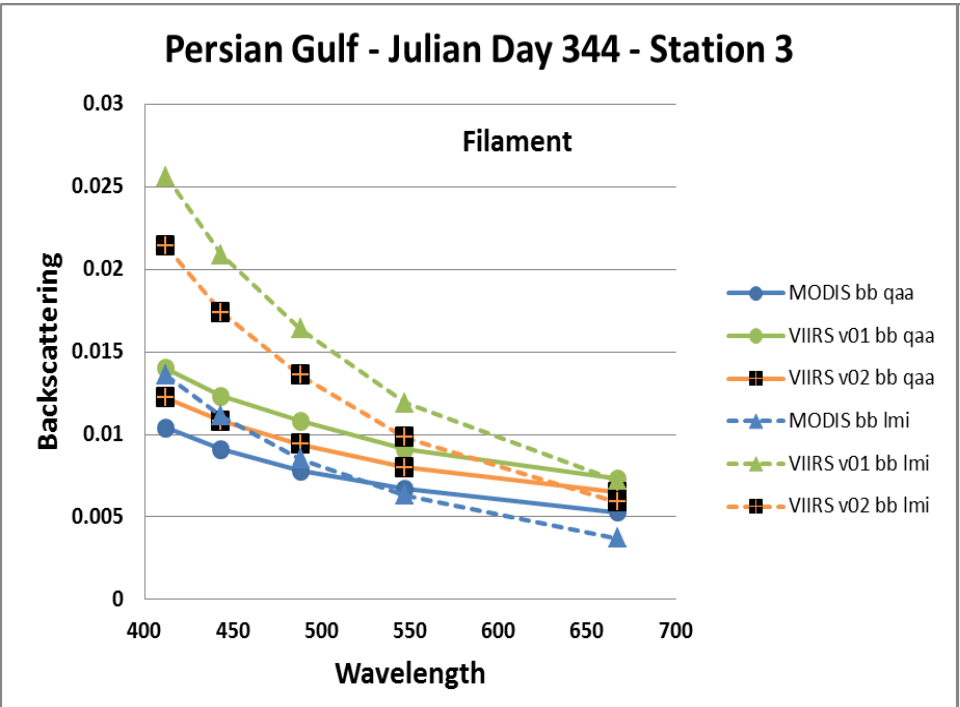

Persian Gulf - Julian Day 344 - Station 2
Clear
Absorption
Wavelength
0.6
0.5
0.4
0.3
0.2
0.1
0
400
450
500
550
600
650
700
MODIS a qaa
VIIRS v01 a qaa
VIIRS v02 a qaa
MODIS a lmi
VIIRS v01 a lmi
VIIRS v02 a lmi

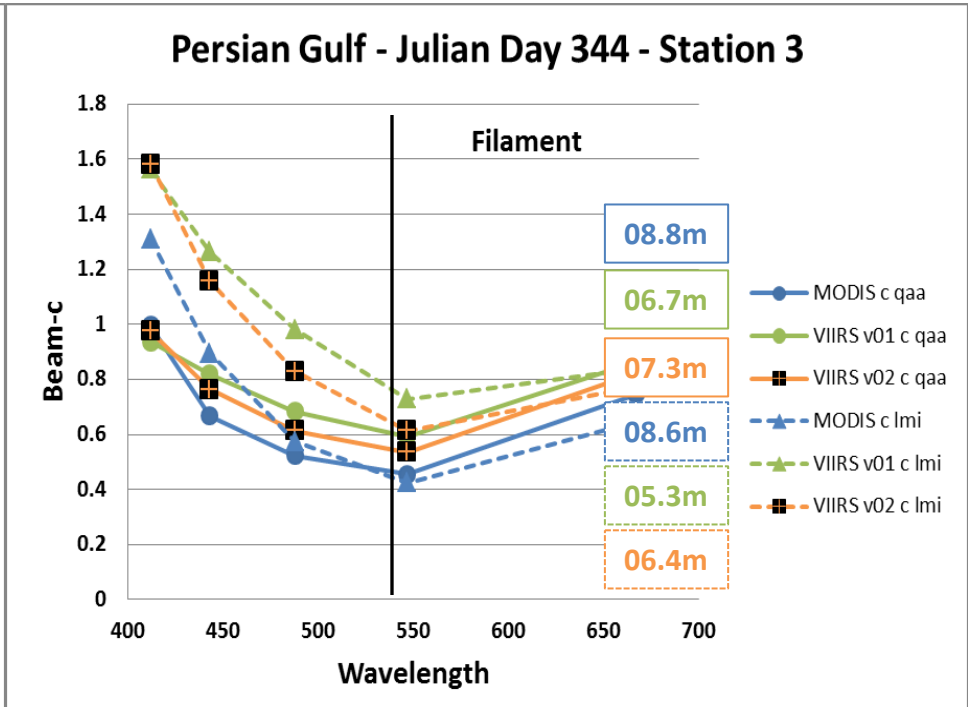

Persian Gulf - Julian Day 344 - Station 2
Clear
Backscattering
Wavelength
0.012
0.01
0.008
0.006
0.004
0.002
0
400
450
500
550
600
650
700
MODIS bb qaa
VIIRS v01 bb qaa
VIIRS v02 bb qaa
MODIS bb lmi
VIIRS v01 bb lmi
VIIRS v02 bb lmi


Persian Gulf - Julian Day 344 - Station 2
Clear
Beam-c
Wavelength
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
400
450
500
550
600
650
700
22.2m
13.8m
18.2m
21.0m
11.4m
19.0m
MODIS c qaa
VIIRS v01 c qaa
VIIRS v02 c qaa
MODIS c lmi
VIIRS v01 c lmi
VIIRS v02 c lmi

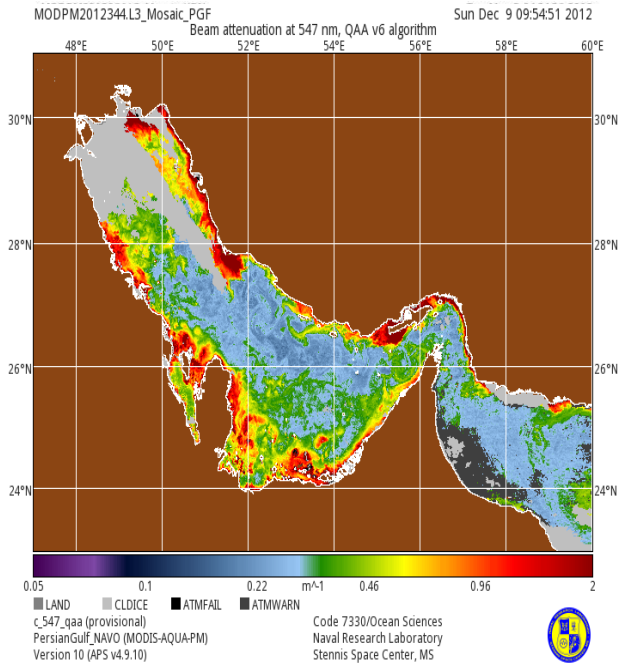

1
2
3


Persian Gulf - Julian Day 344 - Station 3
Filament
Absorption
Wavelength
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
400
450
500
550
600
650
700
MODIS a qaa
VIIRS v01 a qaa
VIIRS v02 a qaa
MODIS a lmi
VIIRS v01 a lmi
VIIRS v02 a lmi

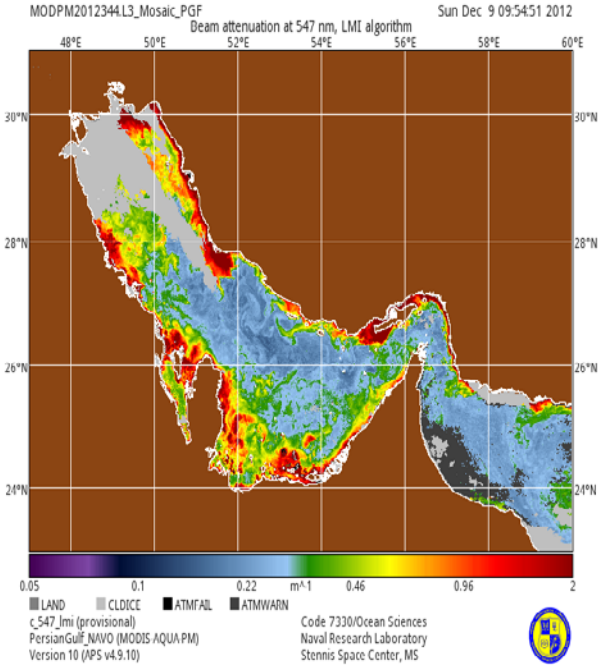

Persian Gulf - Julian Day 344 - Station 3
Filament
Backscattering
Wavelength
0.03
0.025
0.02
0.015
0.01
0.005
0
400
450
500
550
600
650
700
MODIS bb qaa
VIIRS v01 bb qaa
VIIRS v02 bb qaa
MODIS bb lmi
VIIRS v01 bb lmi
VIIRS v02 bb lmi

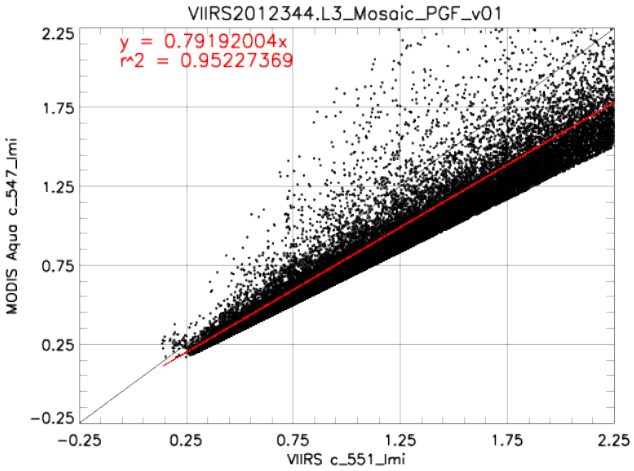

Persian Gulf - Julian Day 344 - Station 3
Filament
Beam-c
Wavelength
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
400
450
500
550
600
650
700
08.8m
06.7m
07.3m
08.6m
05.3m
06.4m
MODIS c qaa
VIIRS v01 c qaa
VIIRS v02 c qaa
MODIS c lmi
VIIRS v01 c lmi
VIIRS v02 c lmi

MODIS QAA c547

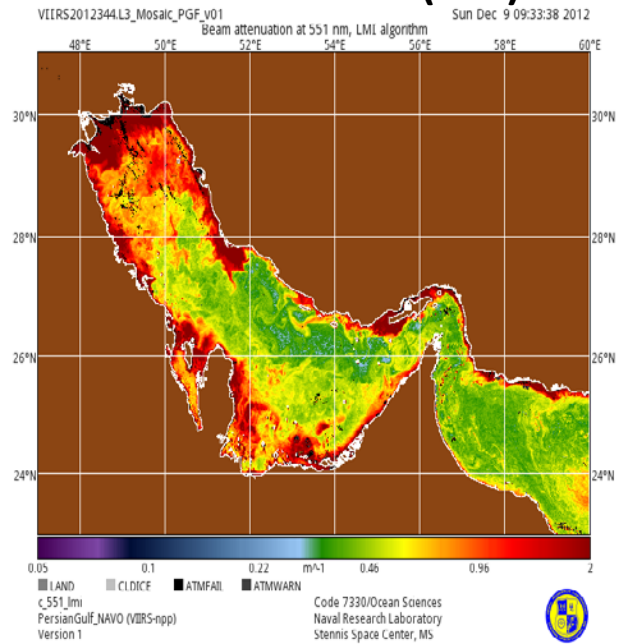


MODIS LMI c547

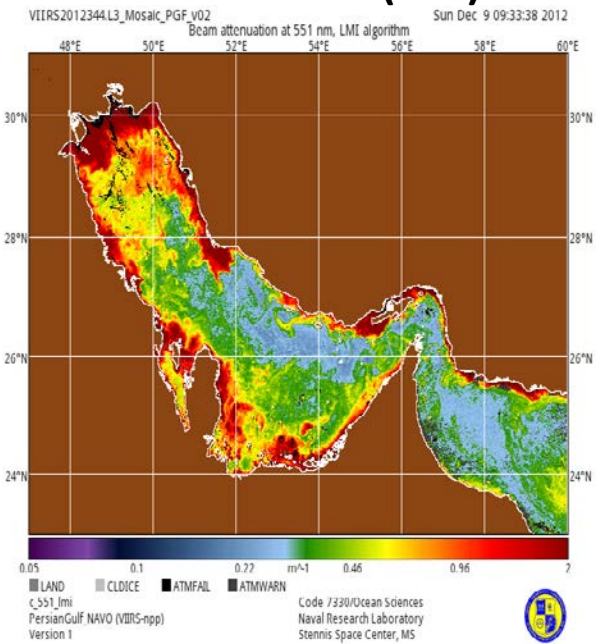


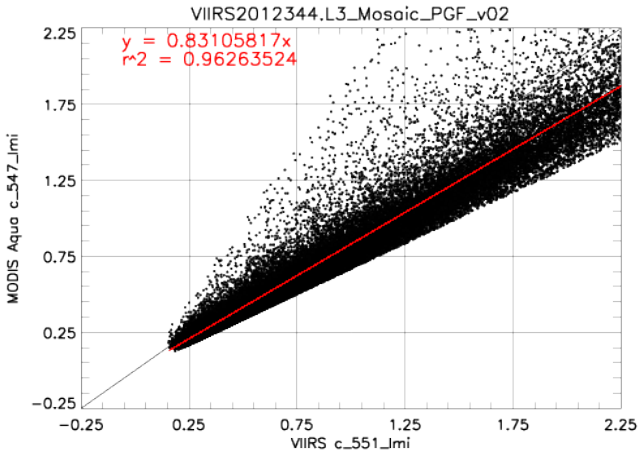


VIIRS LMI c551 (v01)

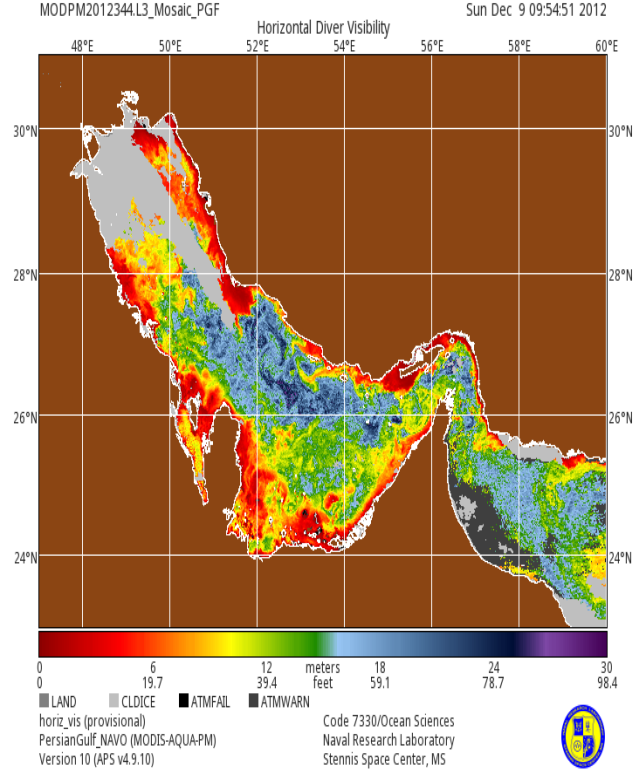


VIIRS LMI c551 (v02)

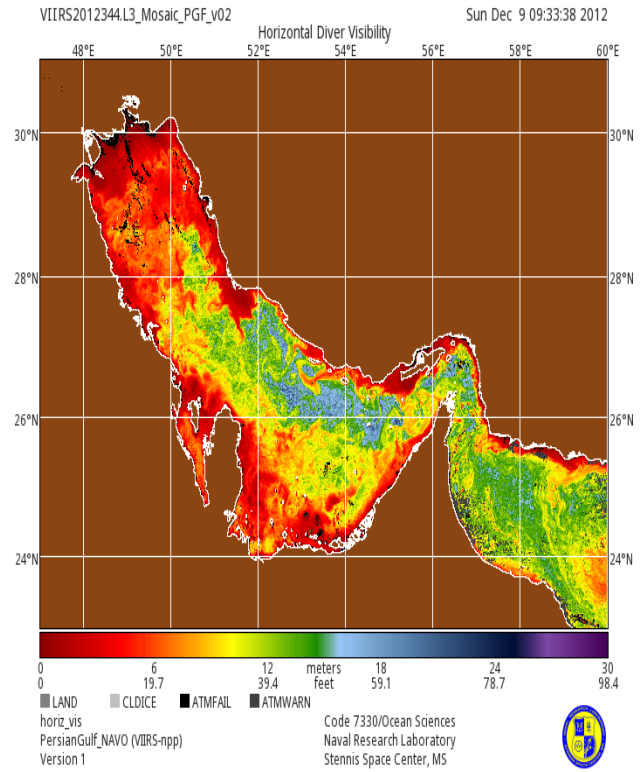




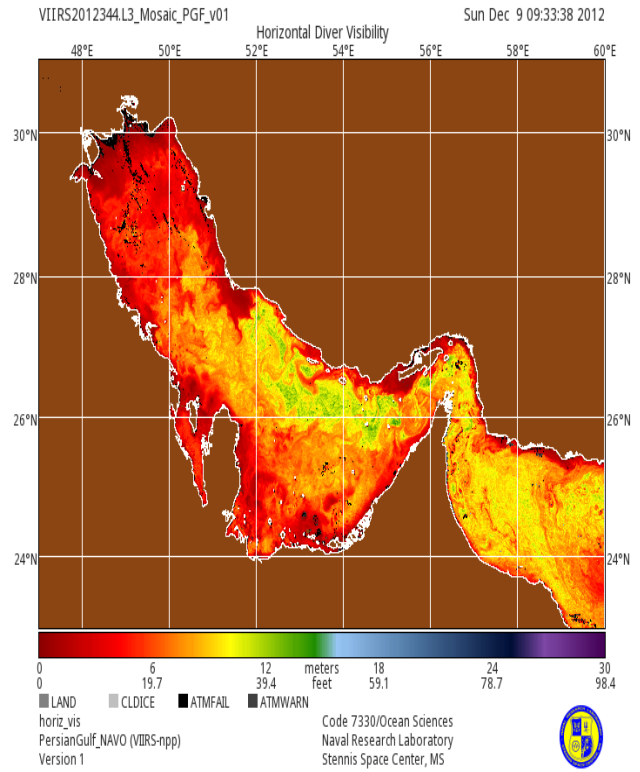
MODIS



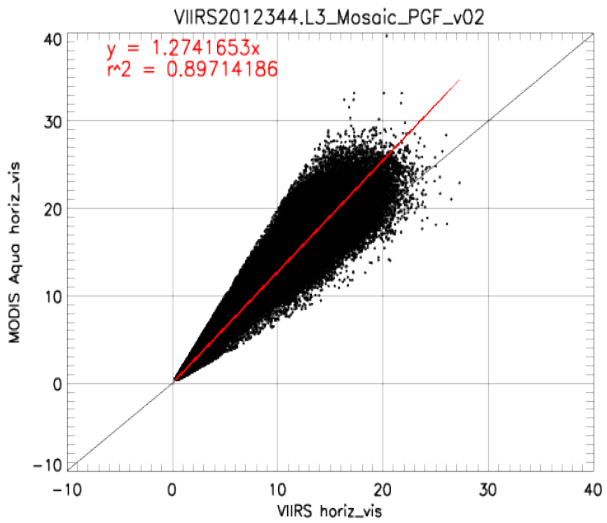
VIIIRS (v02)

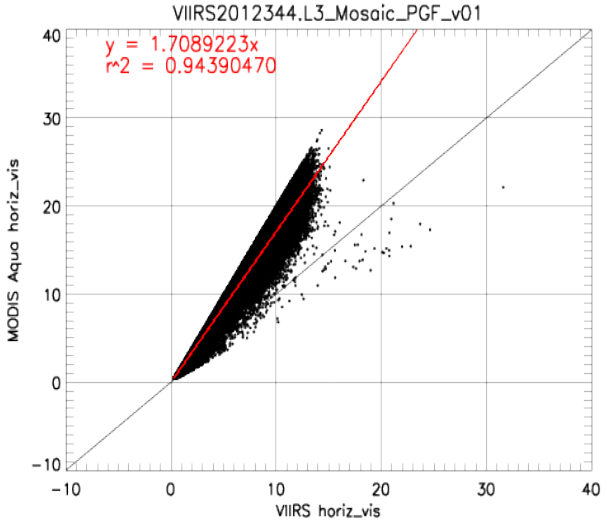


VIIRS (v01)

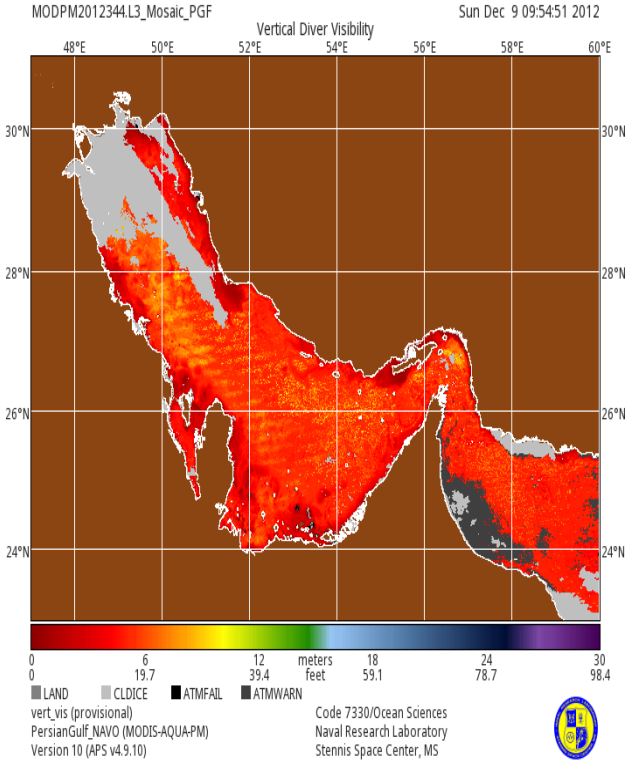


HORIZONTAL VISIBILITY (LMI 531)

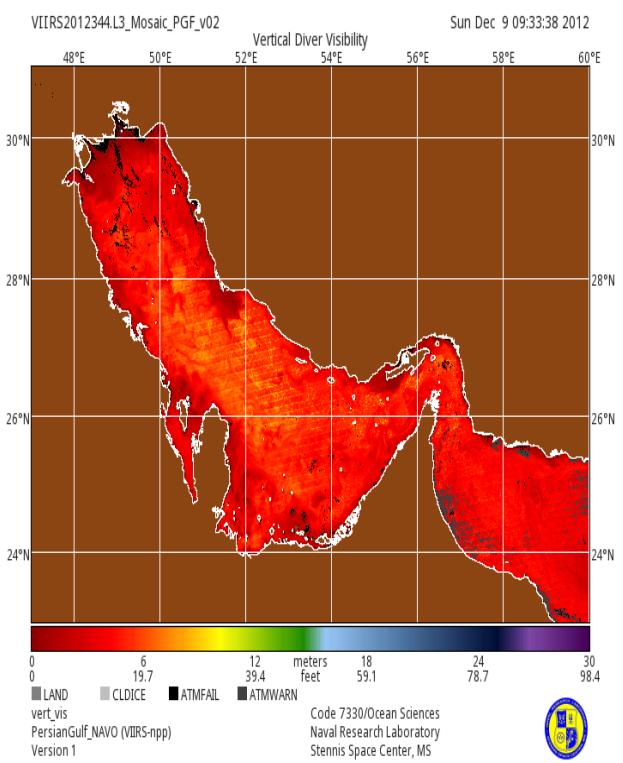




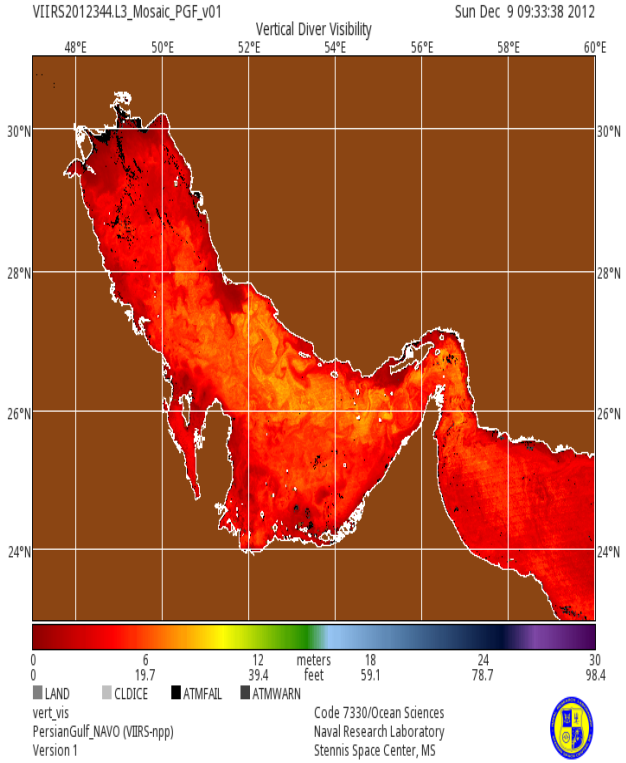
MODIS



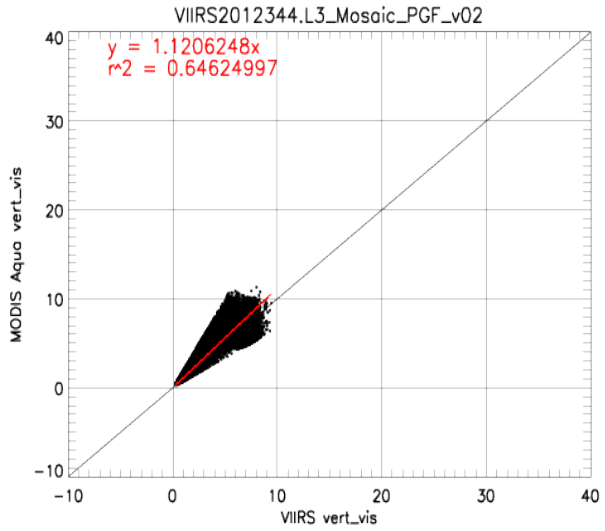
VIIIRS (v02)

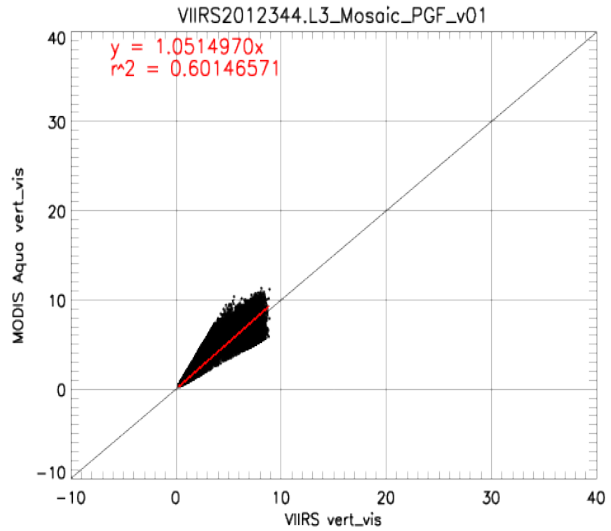


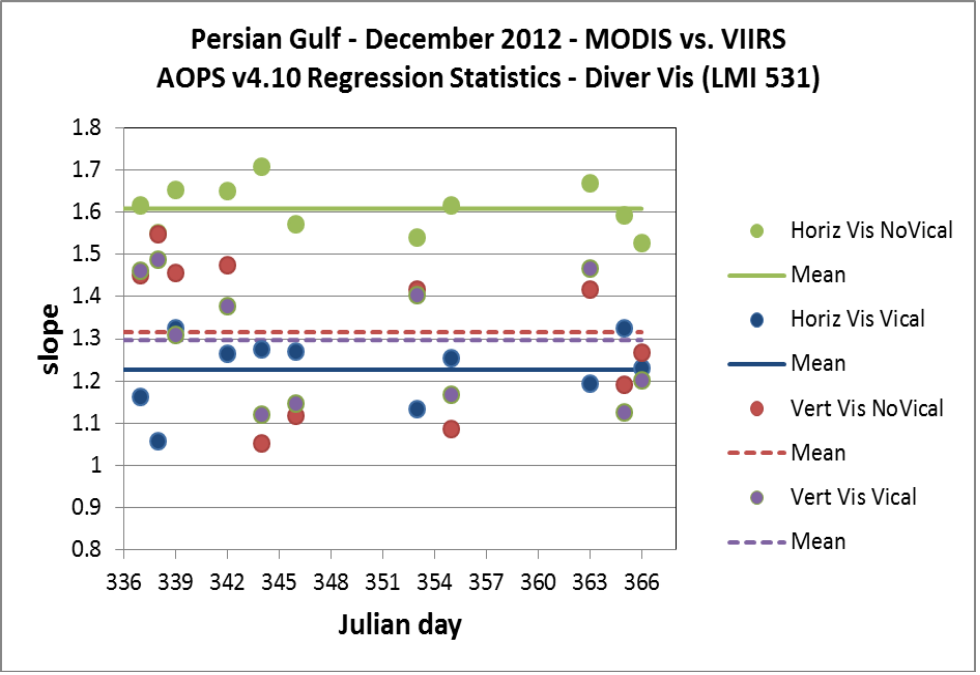
VIIRS (v01)

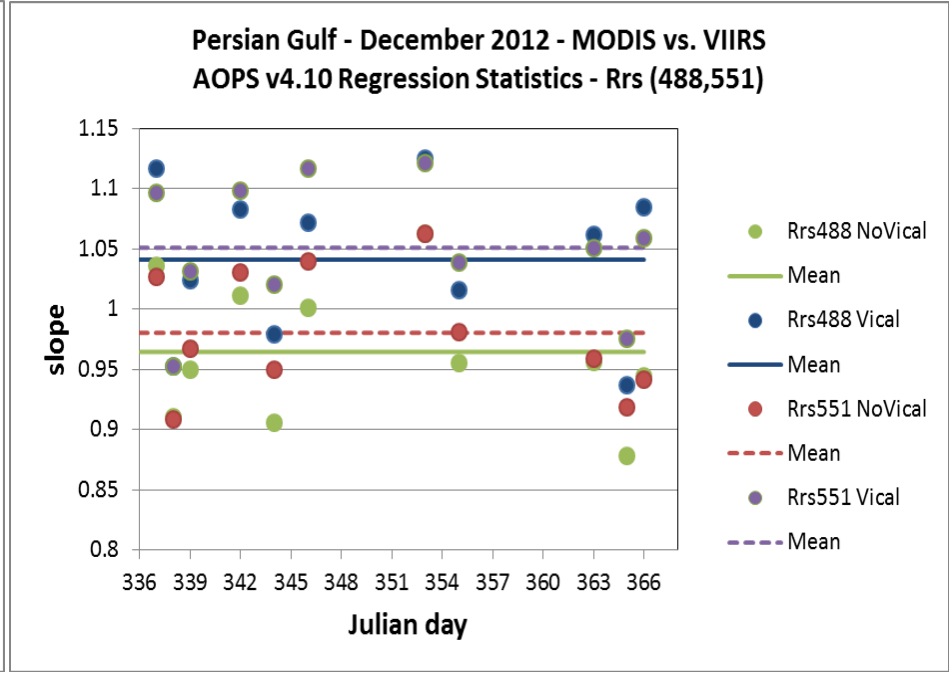


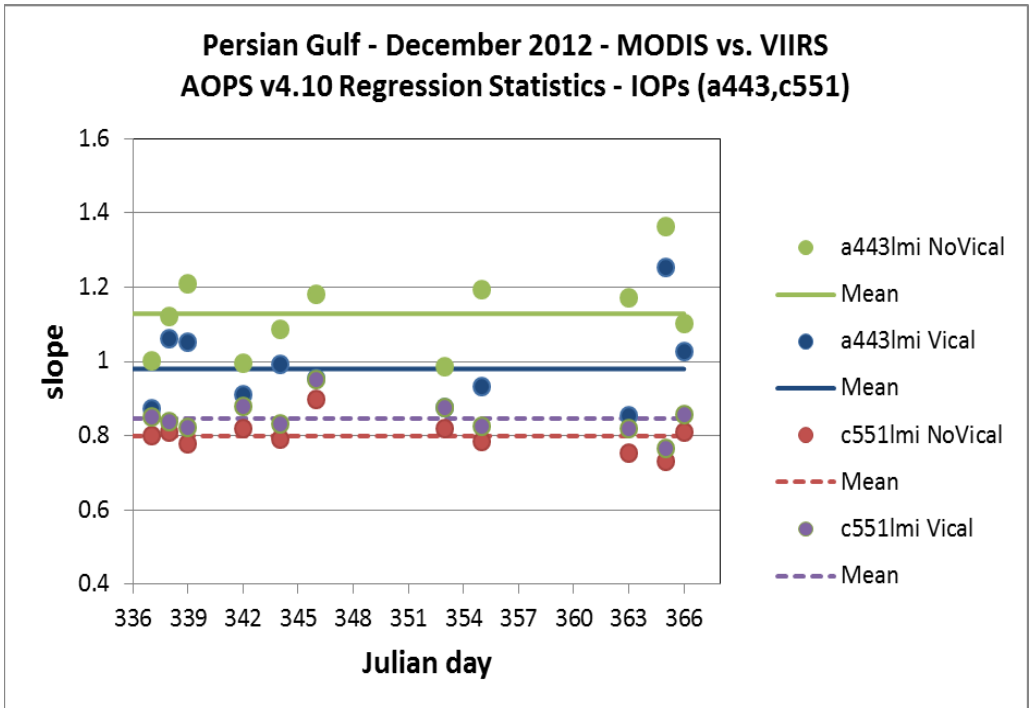
VERTICAL VISIBILITY (LMI 531)



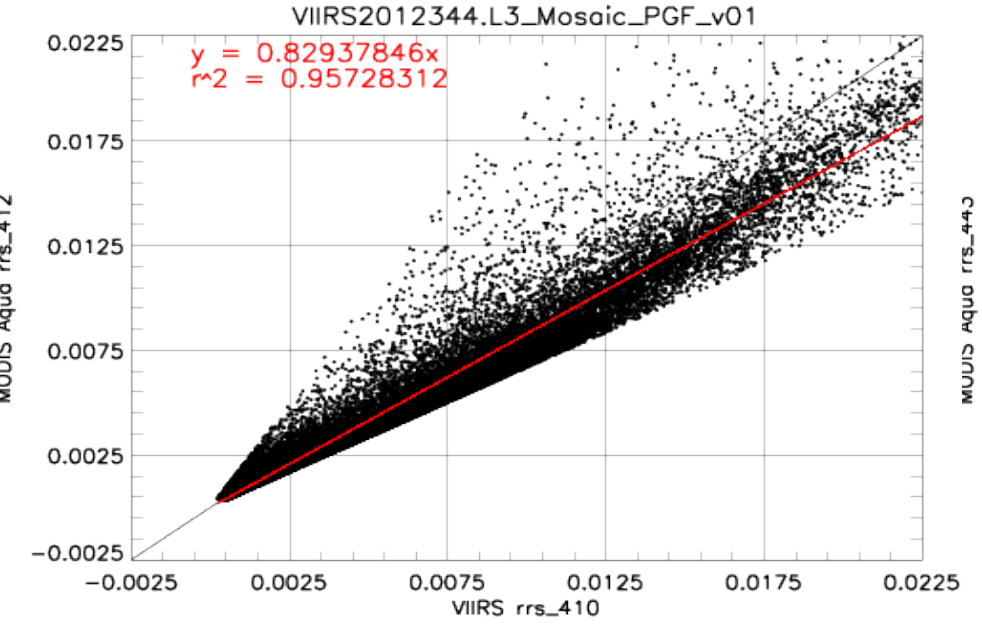


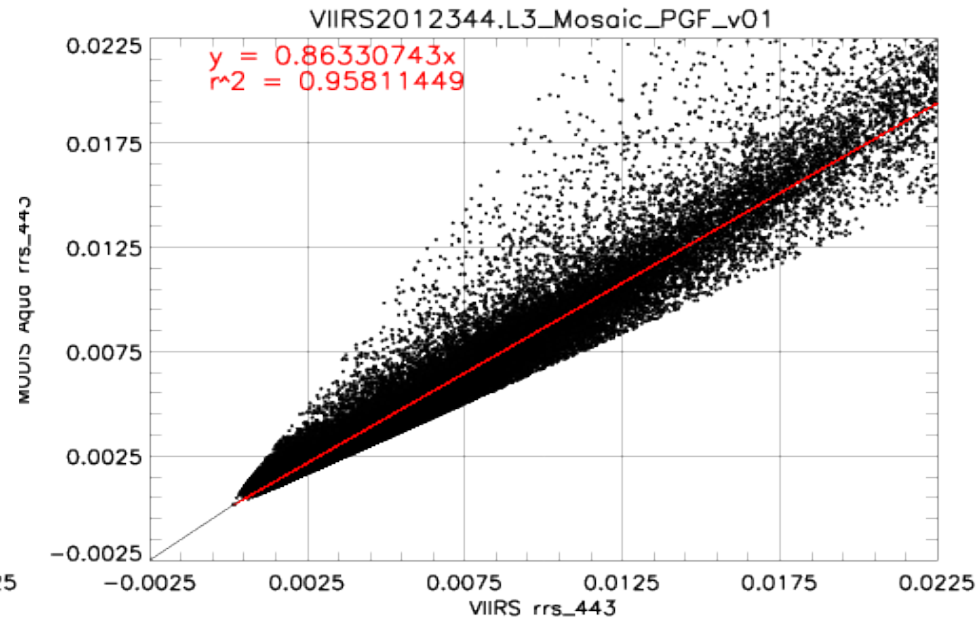

Persian Gulf - December 2012 - MODIS vs. VIIRS
AOPS v4.10 Regression Statistics - Diver Vis (LMI 531)
slope
Julian day
Horiz Vis NoVical
Mean
Horiz Vis Vical
Mean
Vert Vis NoVical
Mean
Vert Vis Vical
Mean

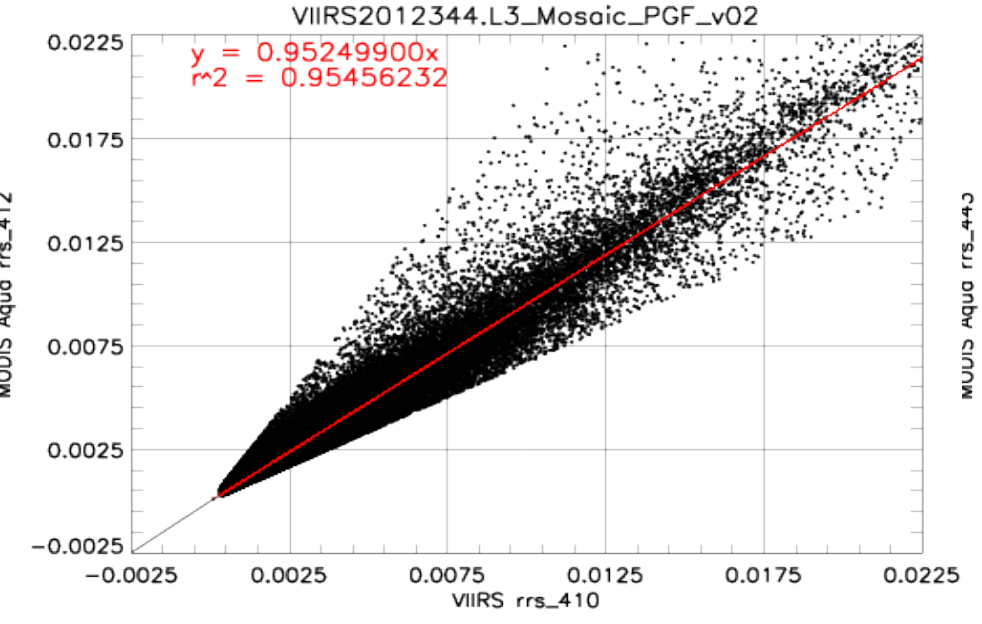

Persian Gulf - December 2012 - MODIS vs. VIIRS
AOPS v4.10 Regression Statistics - Rrs (488,551)
slope
Julian day
Rrs488 NoVical
Mean
Rrs488 Vical
Mean
Rrs551 NoVical
Mean
Rrs551 Vical
Mean

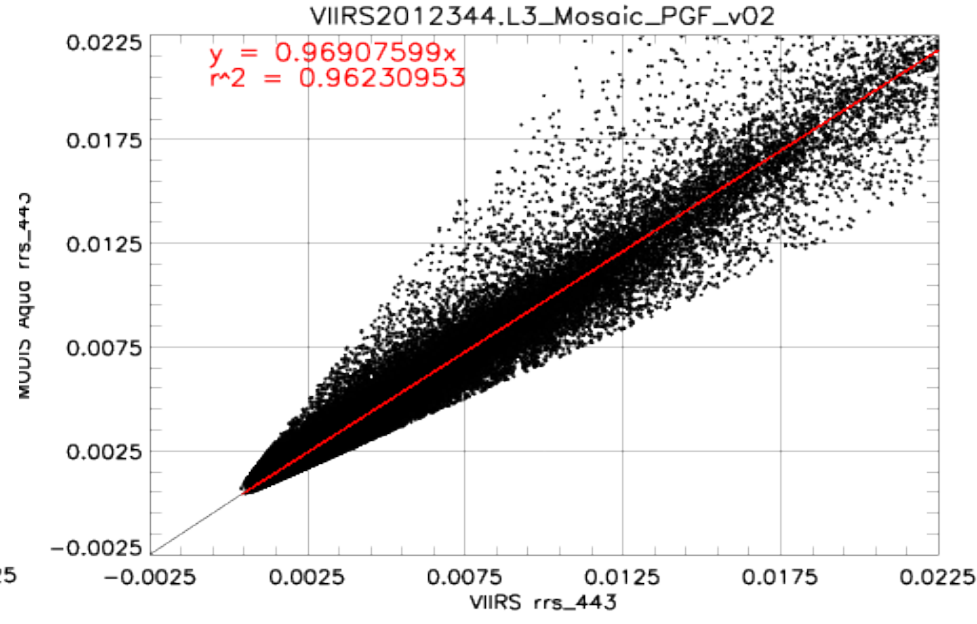

Persian Gulf - December 2012 - MODIS vs. VIIRS
AOPS v4.10 Regression Statistics - IOPs (a443,c551)
slope
Julian day
a443lmi NoVical
Mean
a443lmi Vical
Mean
c551lmi NoVical
Mean
c551lmi Vical
Mean

Rrs Matchup MODIS vs. VIIRS (412,443)

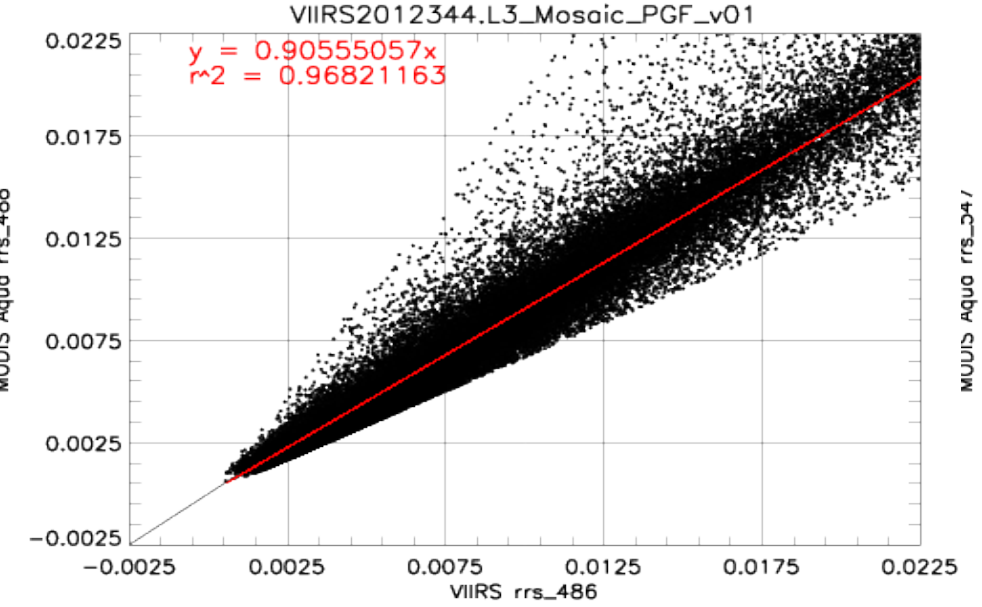


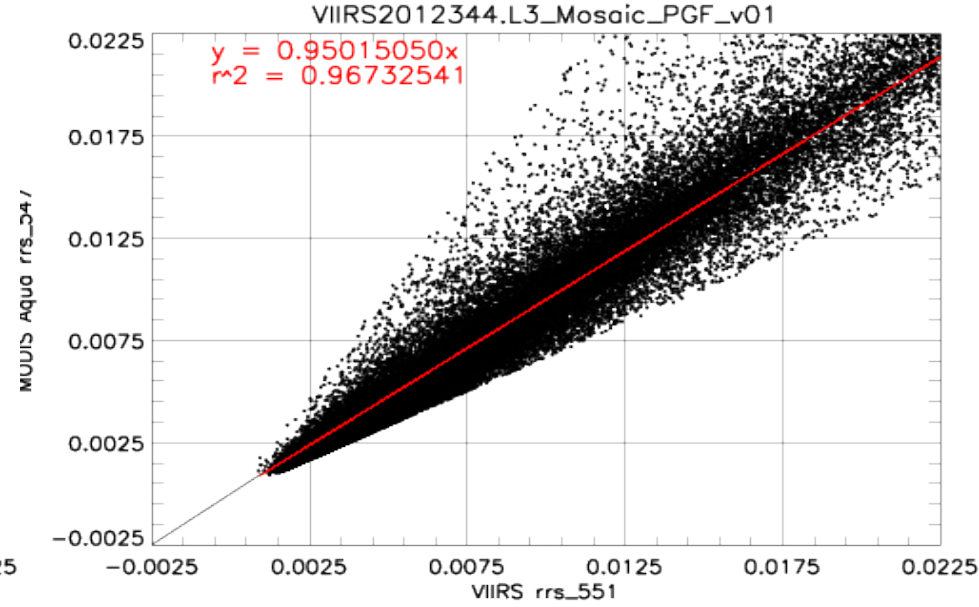


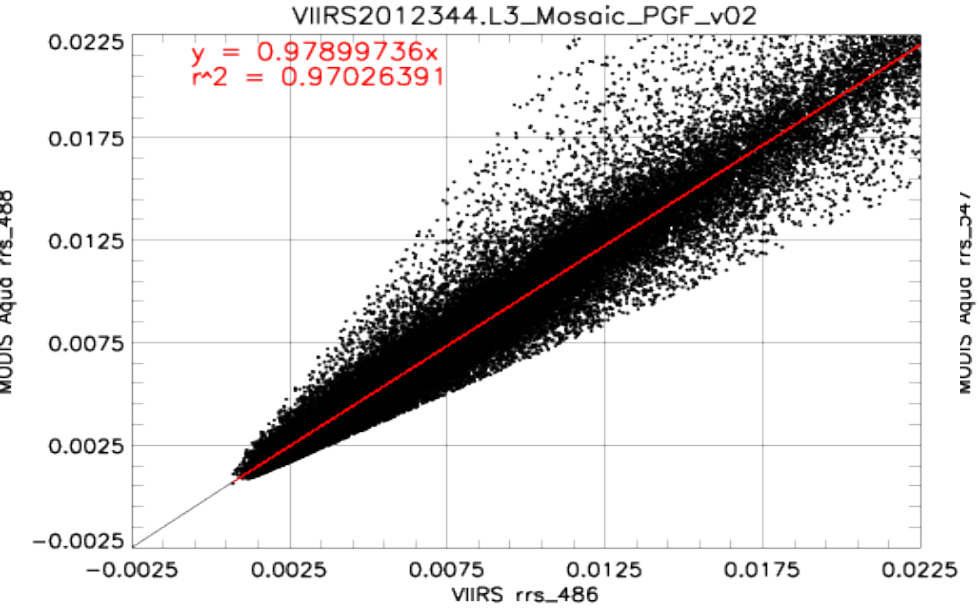


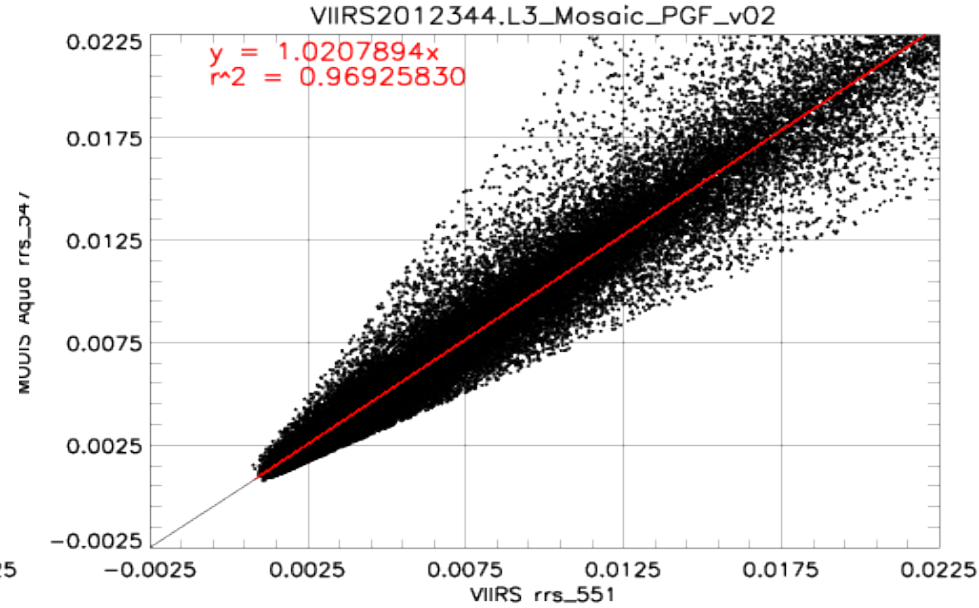
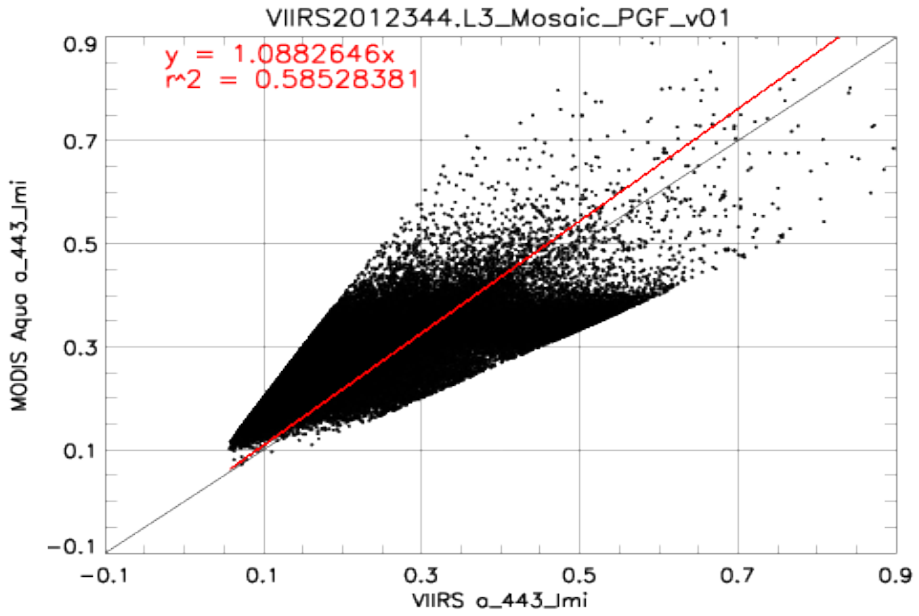
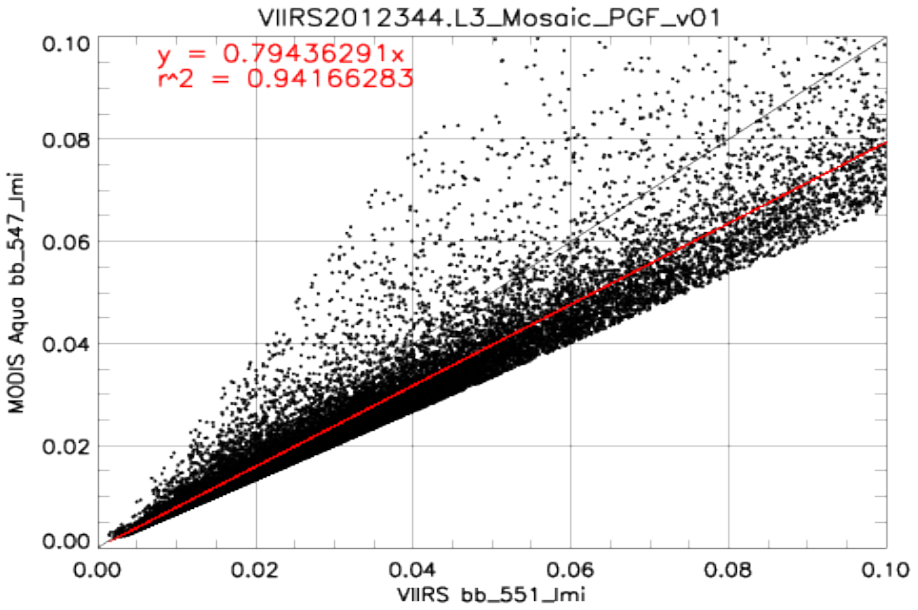
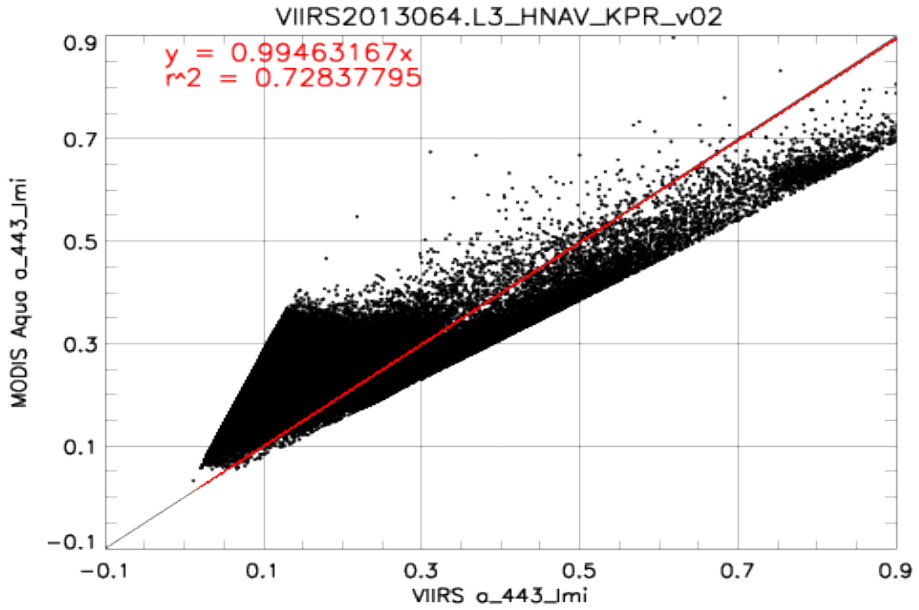
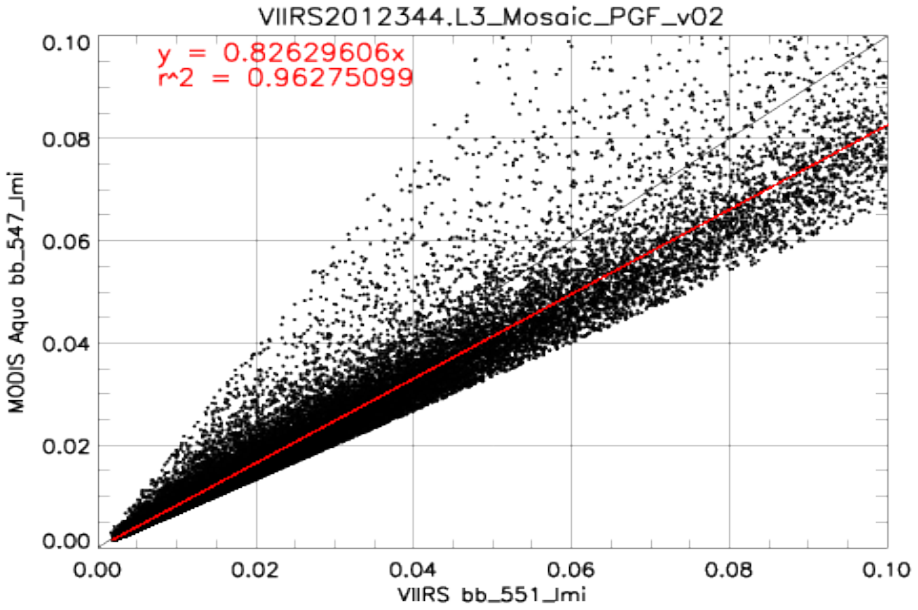


Rrs Matchup MODIS vs. VIIRS (488,451)









a,bb Matchup MODIS vs. VIIRS