

Pole Tide models comparison : [Desai 2015] versus [Wahr 1985]

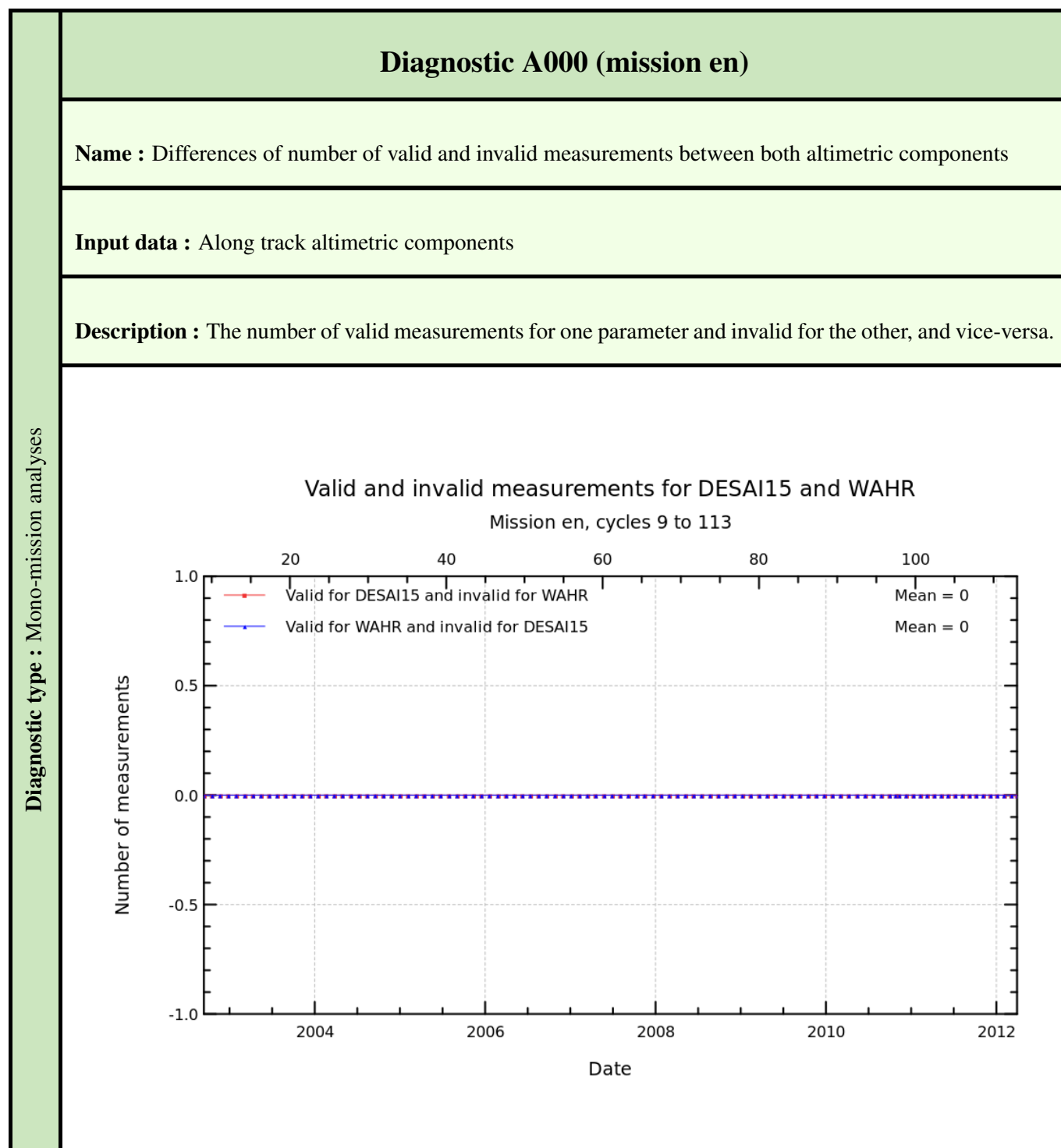
Study variable	DESAI15
Reference variable	WAHR
Missions	Envisat (<i>en</i>), Jason-1 (<i>j1</i>)
Period	[19007, 23807]

Creation date : 2015/11/16

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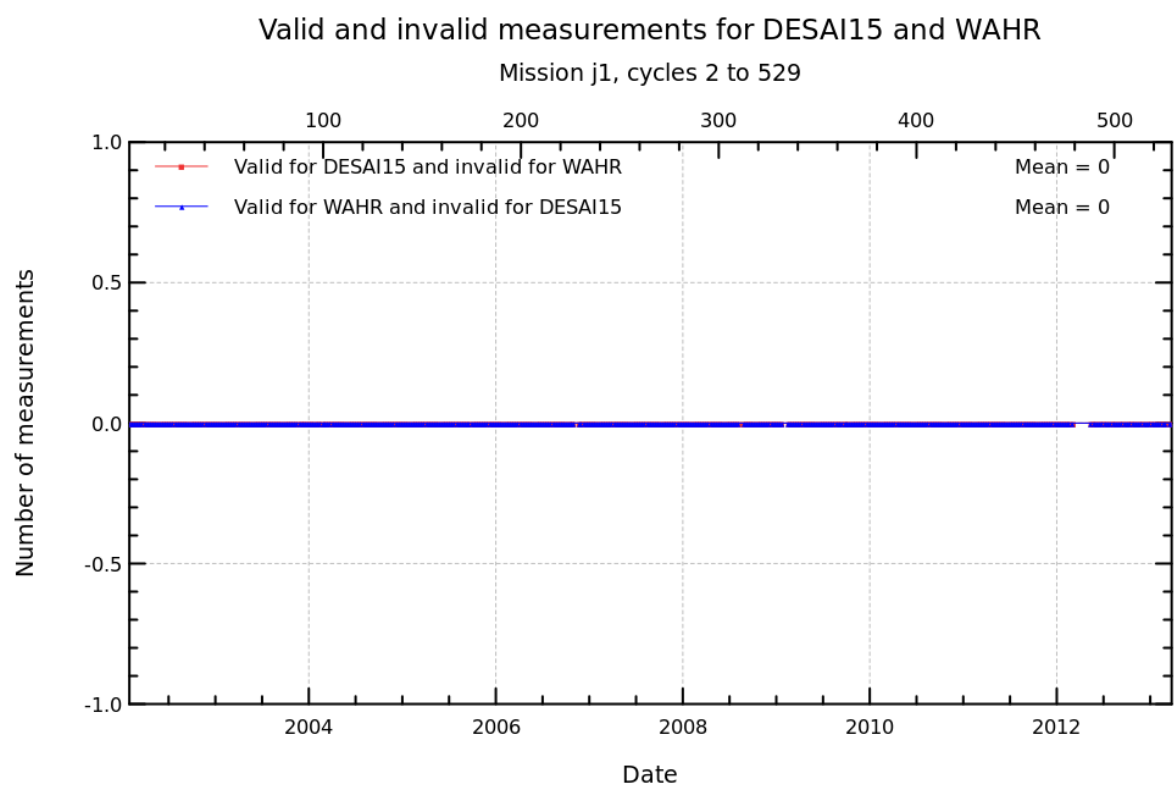
Diagnostic A000 (mission j1)

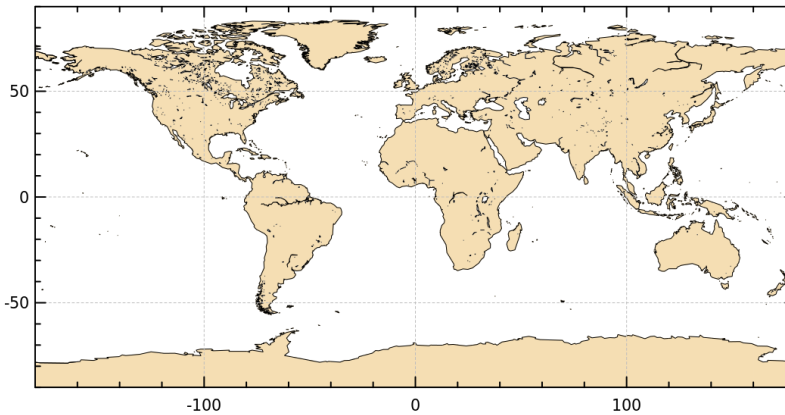
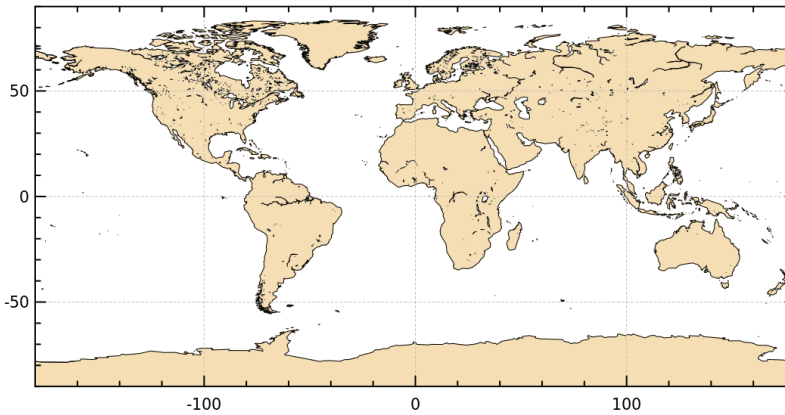
Name : Differences of number of valid and invalid measurements between both altimetric components

Input data : Along track altimetric components

Description : The number of valid measurements for one parameter and invalid for the other, and vice-versa.

Diagnostic type : Mono-mission analyses



Diagnostic type : Mono-mission analyses	Diagnostic A001 (mission en)	
	Name : Maps of differences of valid and invalid measurements between both altimetric components	
	Input data : Along track altimetric components	
	Description : The first map represents the valid measurements for one parameter and invalid for the other, and vice-versa for the second map.	
	<div><p>Measurements valid for DESAI15 and invalid for WAHR</p><p>Measurements valid for WAHR and invalid for DESAI15</p></div>	

Diagnostic A001 (mission j1)

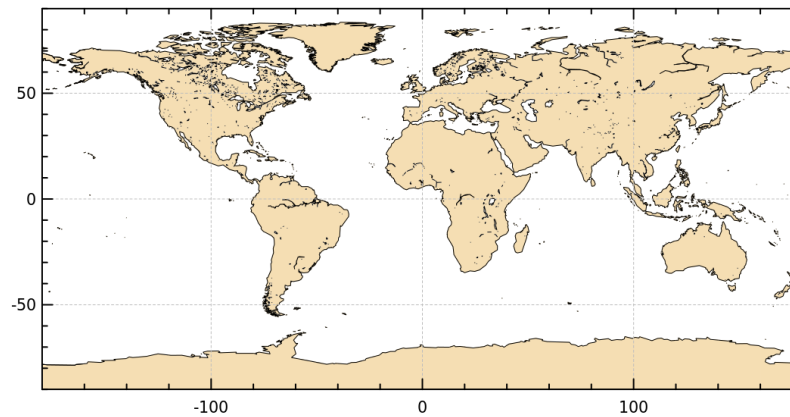
Name : Maps of differences of valid and invalid measurements between both altimetric components

Input data : Along track altimetric components

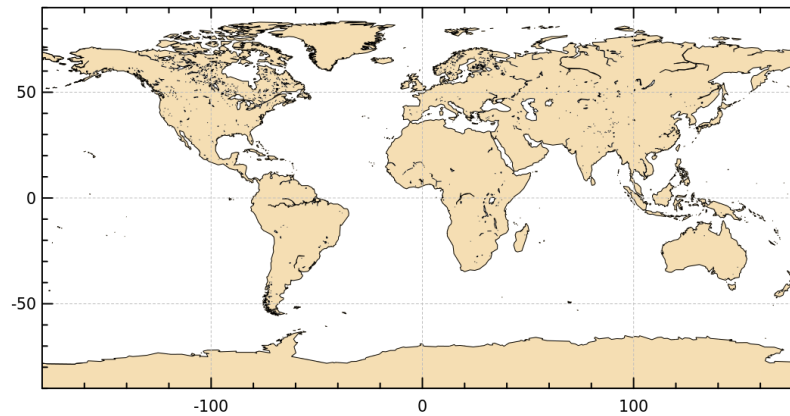
Description : The first map represents the valid measurements for one parameter and invalid for the other, and vice-versa for the second map.

Diagnostic type : Mono-mission analyses

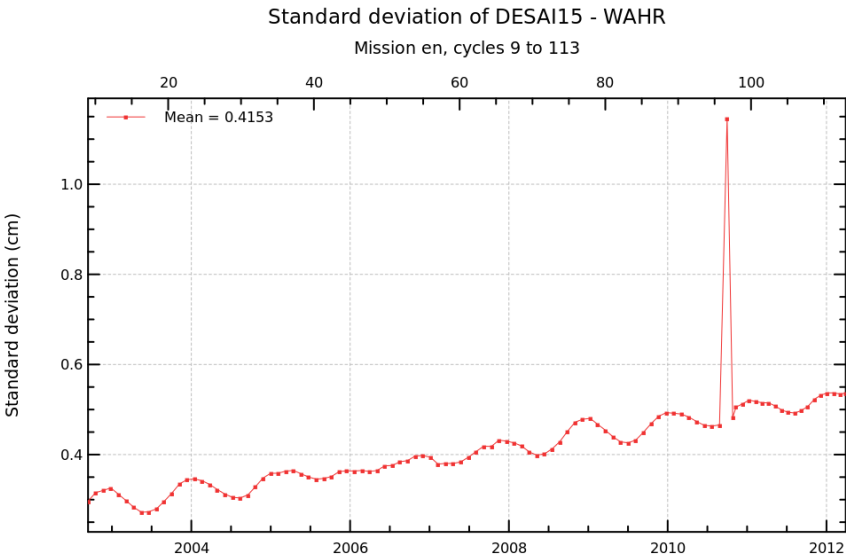
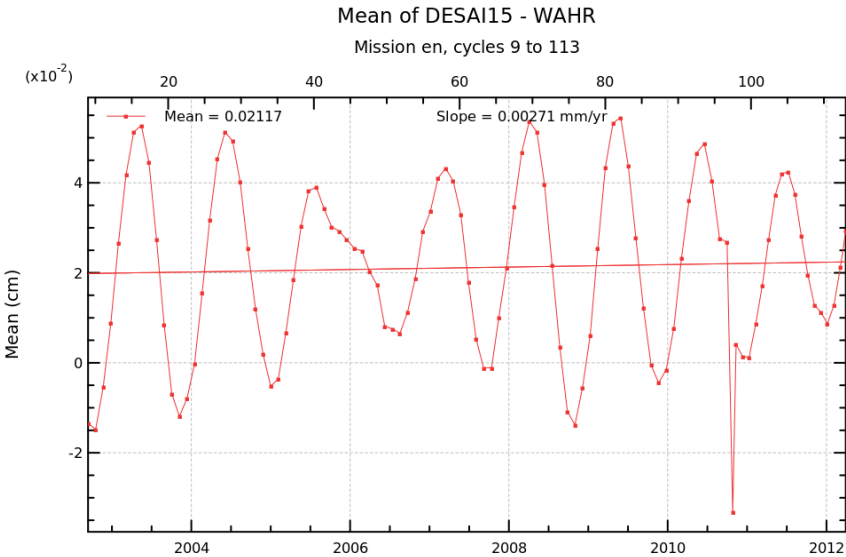
Measurements valid for DESAI15 and invalid for WAHR



Measurements valid for WAHR and invalid for DESAI15



Diagnostic A002 (mission en)	
Name : Temporal evolution of differences between both altimetric components	
Input data : Along track altimetric components	
Description : The temporal evolution of global statistics (mean, variance, slope) of differences between 2 different standards of a same altimetric component (sea surface height correction, altimeter parameter, orbit) are calculated from a cyclic way (altimeter repetivity, daily, weekly, monthly) . These statistics are calculated from 1 Hz altimetric measurements after removing spurious sea level measurements.	



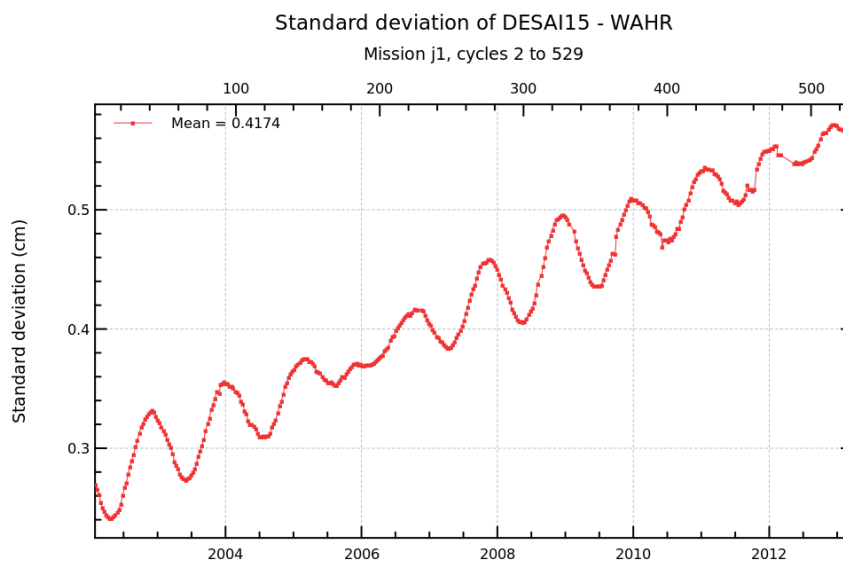
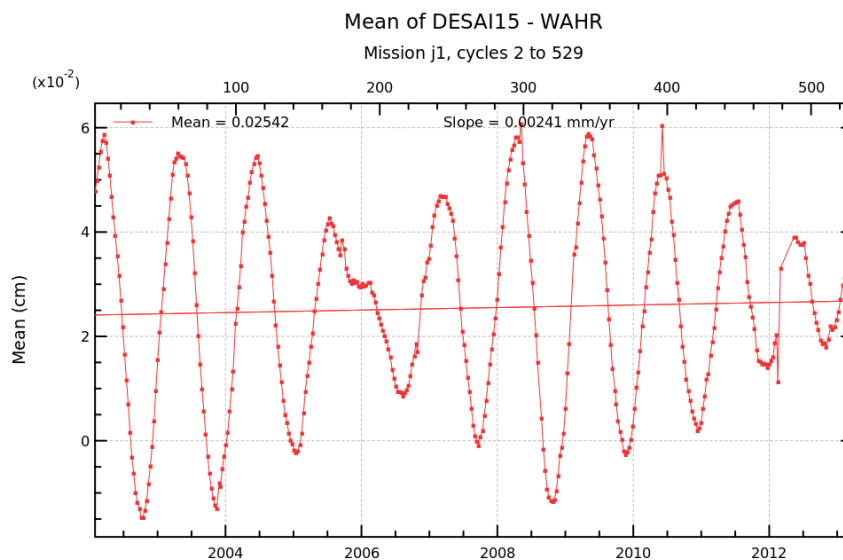
Diagnostic A002 (mission j1)

Name : Temporal evolution of differences between both altimetric components

Input data : Along track altimetric components

Description : The temporal evolution of global statistics (mean, variance, slope) of differences between 2 different standards of a same altimetric component (sea surface height correction, altimeter parameter, orbit) are calculated from a cyclic way (altimeter repetivity, daily, weekly, monthly) . These statistics are calculated from 1 Hz altimetric measurements after removing spurious sea level measurements.

Diagnostic type : Mono-mission analyses

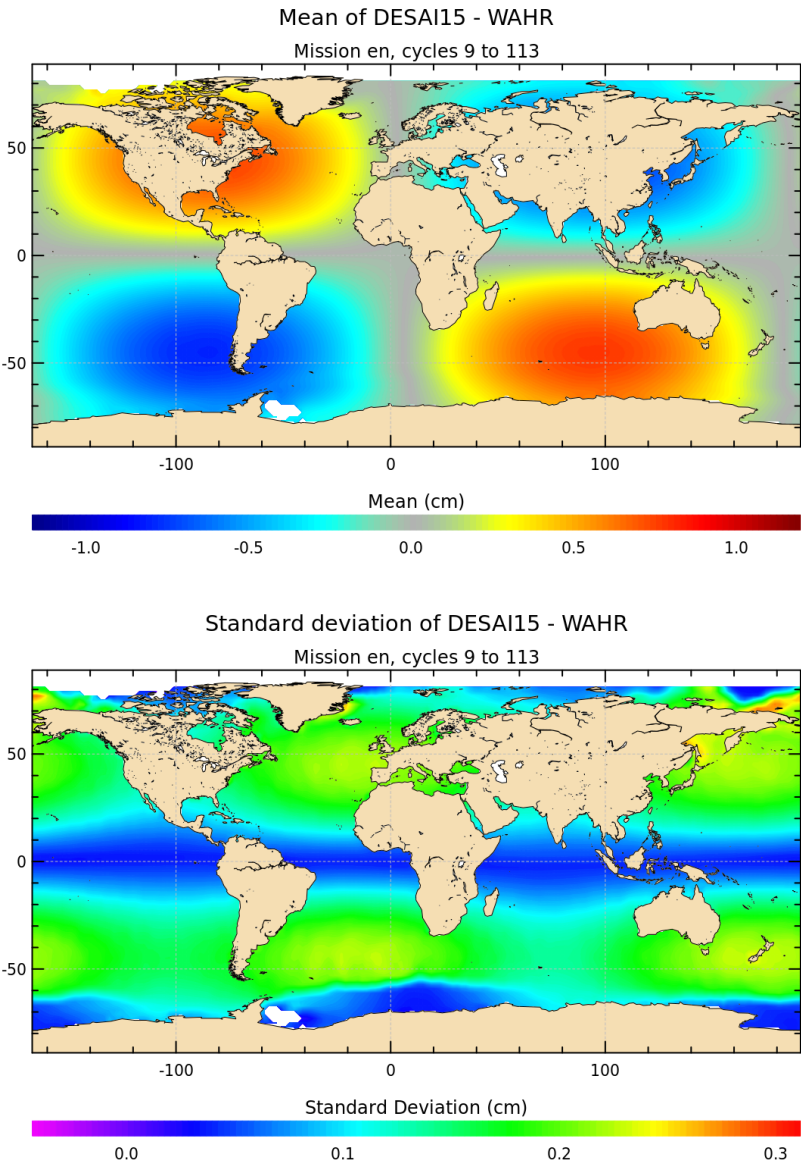


Diagnostic A003 (mission en)

Name : Map of differences between both altimetric components over all the period

Input data : Along track altimetric components

Description : The map of global statistics (mean, standard deviation) of differences between 2 different standards of a same altimetric component (sea surface height correction, altimeter parameter, orbit) are calculated over a given period which is the longer as possible to have obtain reliable statically results. These statistics are calculated from 1 Hz altimetric measurements after removing spurious sea level measurements.



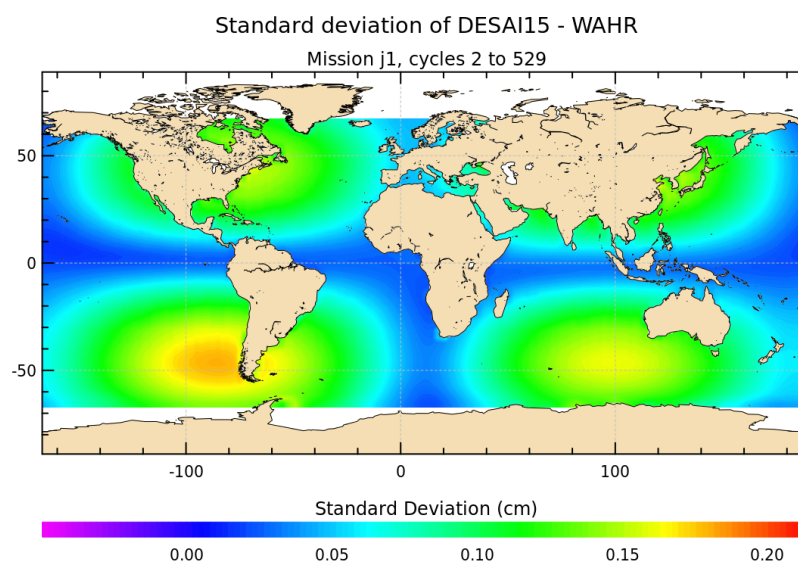
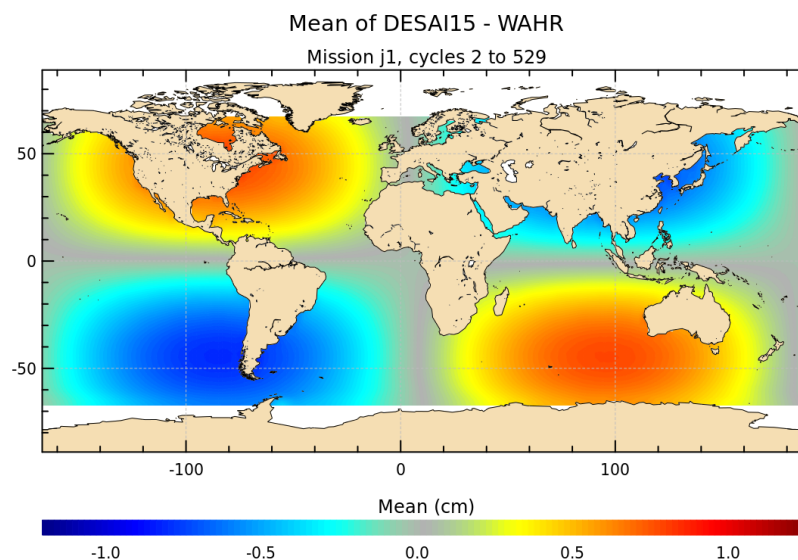
Diagnostic A003 (mission j1)

Name : Map of differences between both altimetric components over all the period

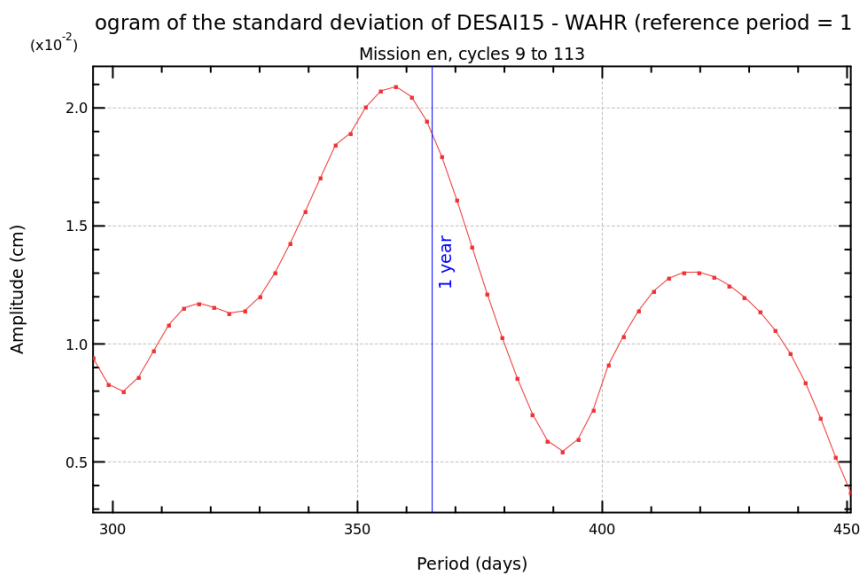
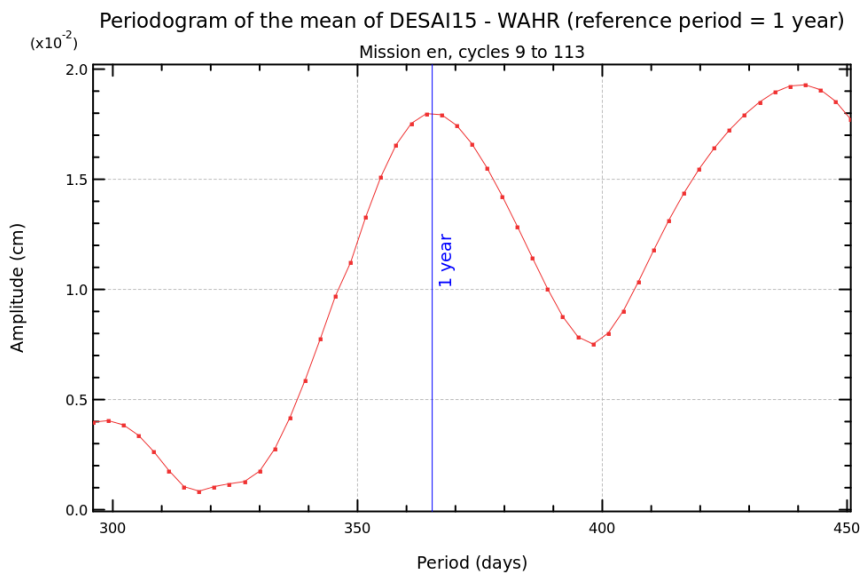
Input data : Along track altimetric components

Description : The map of global statistics (mean, standard deviation) of differences between 2 different standards of a same altimetric component (sea surface height correction, altimeter parameter, orbit) are calculated over a given period which is the longer as possible to have obtain reliable statically results. These statistics are calculated from 1 Hz altimetric measurements after removing spurious sea level measurements.

Diagnostic type : Mono-mission analyses



Diagnostic A004_a (mission en)
Name : Periodogram derived from temporal evolution of altimetric component differences
Input data : Along track altimetric components
Description : The periodogram derived from temporal and global altimetric component differences is calculated from cycle by cycle monitoring of altimetric component differences (derived from diagnostic A001). It is calculated from the mean or the variance differences. The Periodogram can be calculated for all the periods, but it can be focused on a dedicated period.



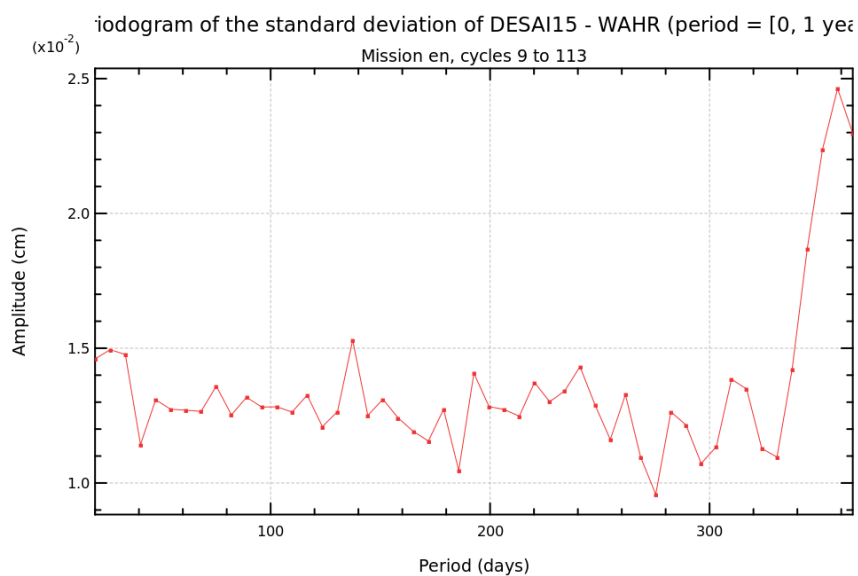
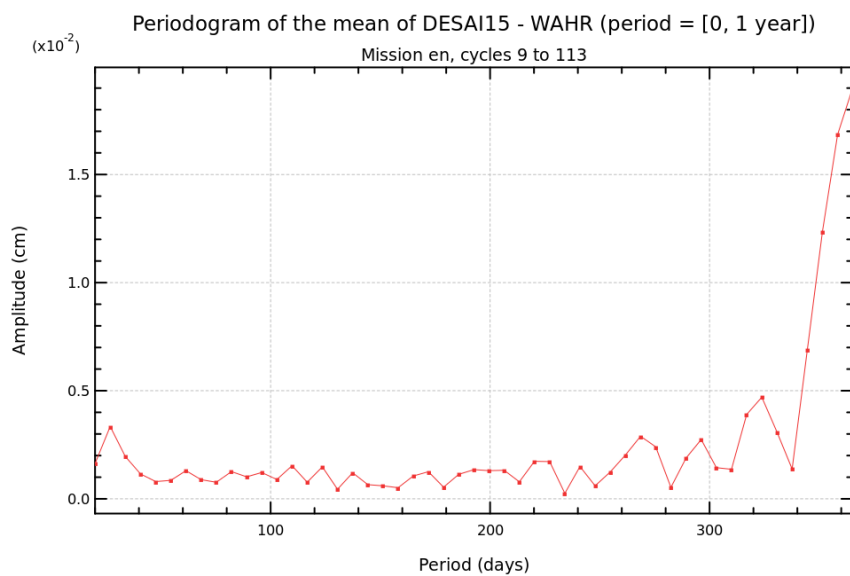
Diagnostic A004_b (mission en)

Name : Periodogram derived from temporal evolution of altimetric component differences

Input data : Along track altimetric components

Description : The periodogram derived from temporal and global altimetric component differences is calculated from cycle by cycle monitoring of altimetric component differences (derived from diagnostic A001). It is calculated from the mean or the variance differences. The Periodogram can be calculated for all the periods, but it can be focused on a dedicated period.

Diagnostic type : Mono-mission analyses



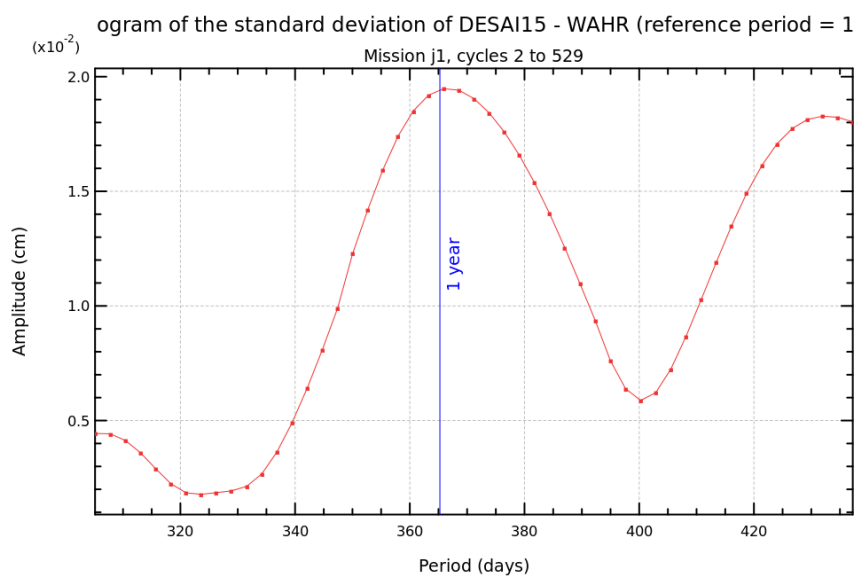
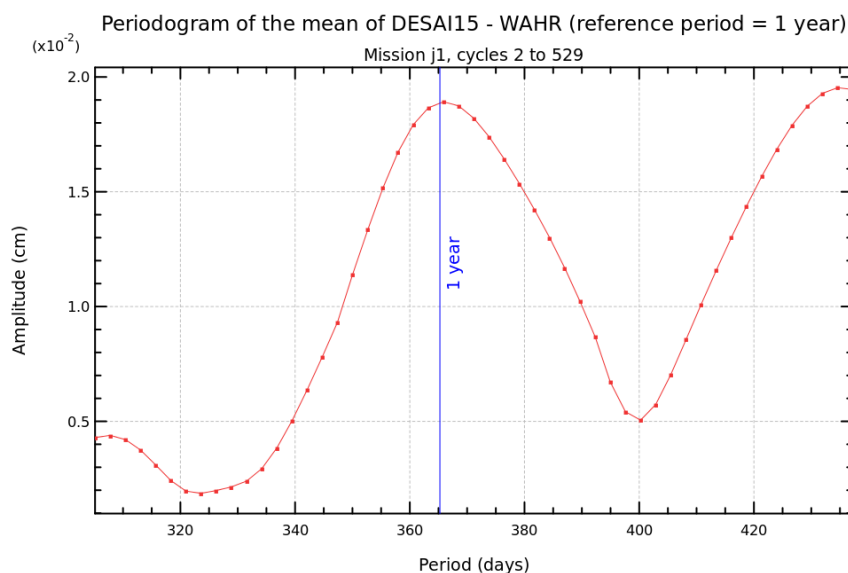
Diagnostic A004_a (mission j1)

Name : Periodogram derived from temporal evolution of altimetric component differences

Input data : Along track altimetric components

Description : The periodogram derived from temporal and global altimetric component differences is calculated from cycle by cycle monitoring of altimetric component differences (derived from diagnostic A001). It is calculated from the mean or the variance differences. The Periodogram can be calculated for all the periods, but it can be focused on a dedicated period.

Diagnostic type : Mono-mission analyses



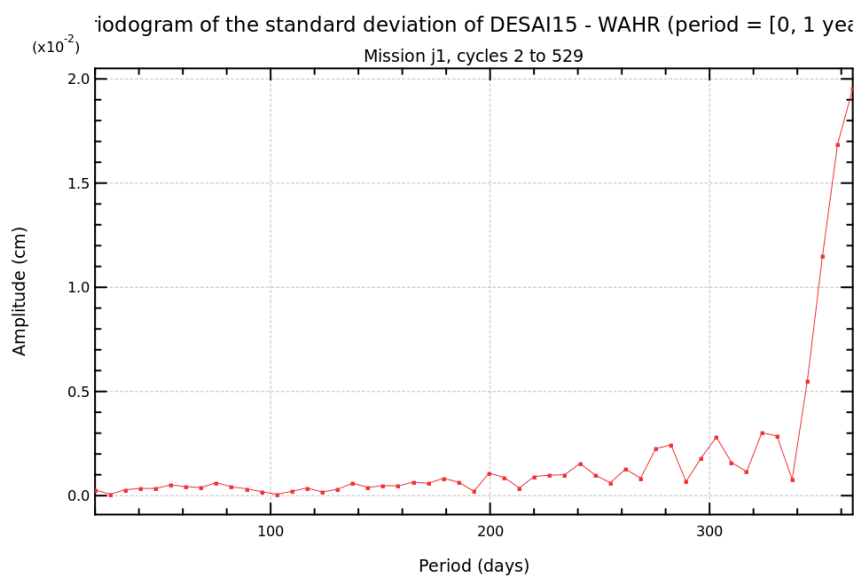
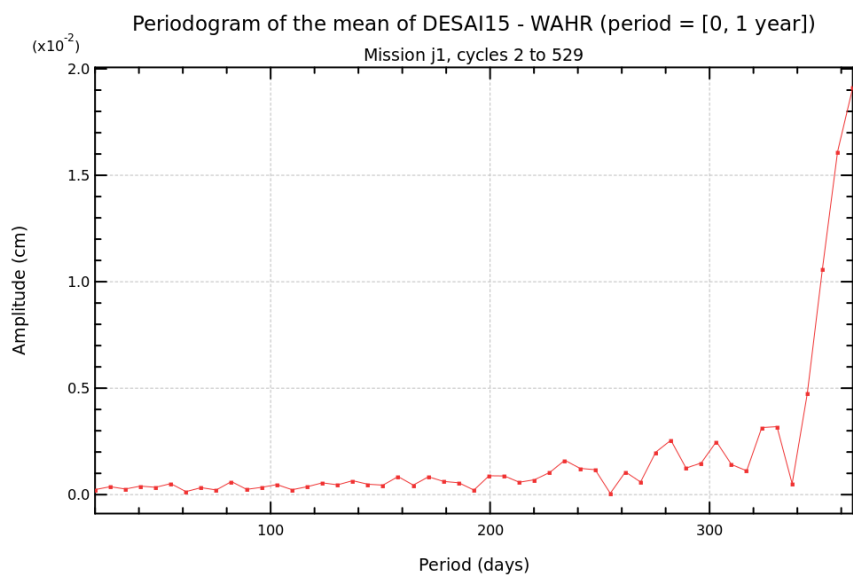
Diagnostic A004_b (mission j1)

Name : Periodogram derived from temporal evolution of altimetric component differences

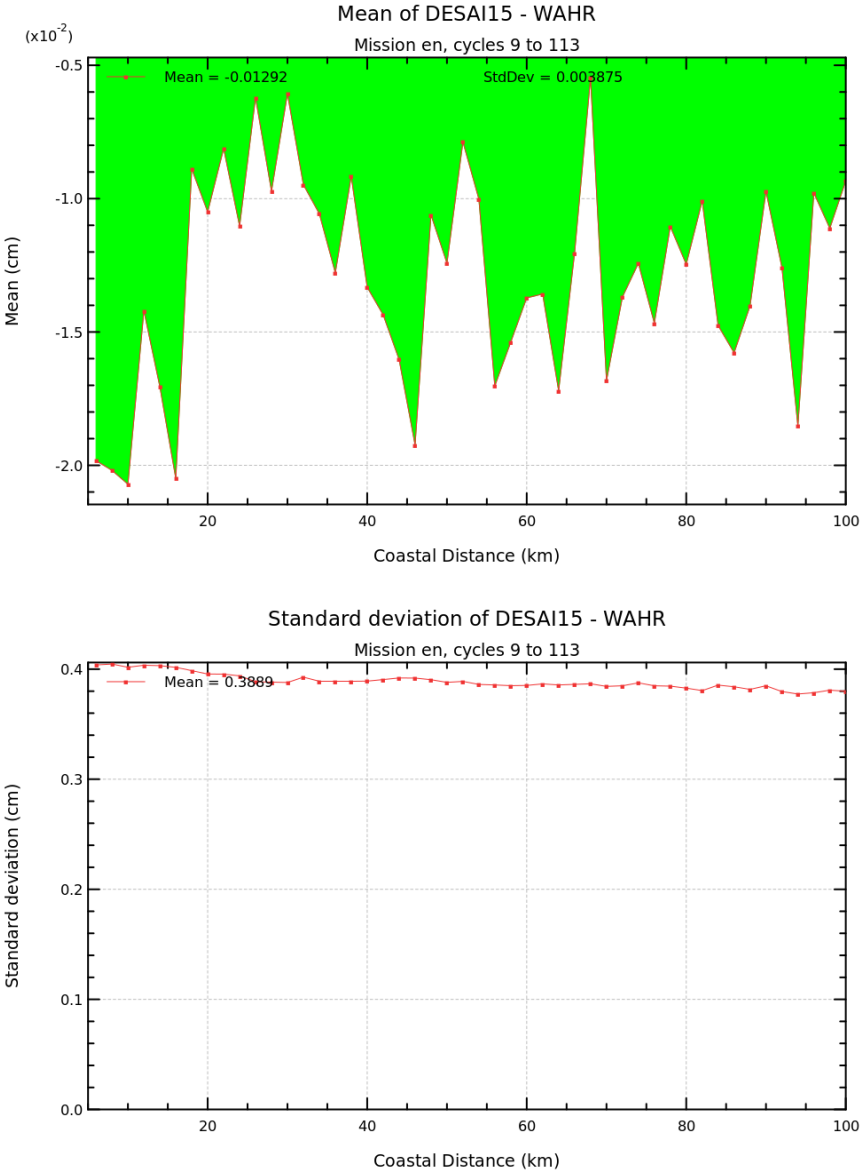
Input data : Along track altimetric components

Description : The periodogram derived from temporal and global altimetric component differences is calculated from cycle by cycle monitoring of altimetric component differences (derived from diagnostic A001). It is calculated from the mean or the variance differences. The Periodogram can be calculated for all the periods, but it can be focused on a dedicated period.

Diagnostic type : Mono-mission analyses



Diagnostic A005 (mission en)
Name : Altimetric component differences versus coastal distances, latitude and longitude
Input data : Along track altimetric components
Description : Mean and standard deviation of the differences between 2 different standards of a same altimetric component (sea surface height correction, altimeter parameter, orbit) are computed and plotted in function of coastal distances between 0 and 100 km, in function of latitudes and in function of longitudes.



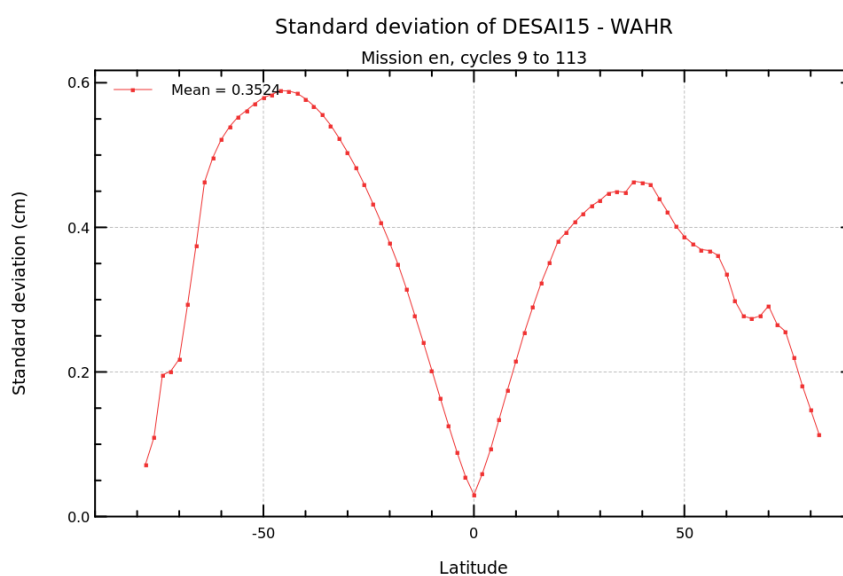
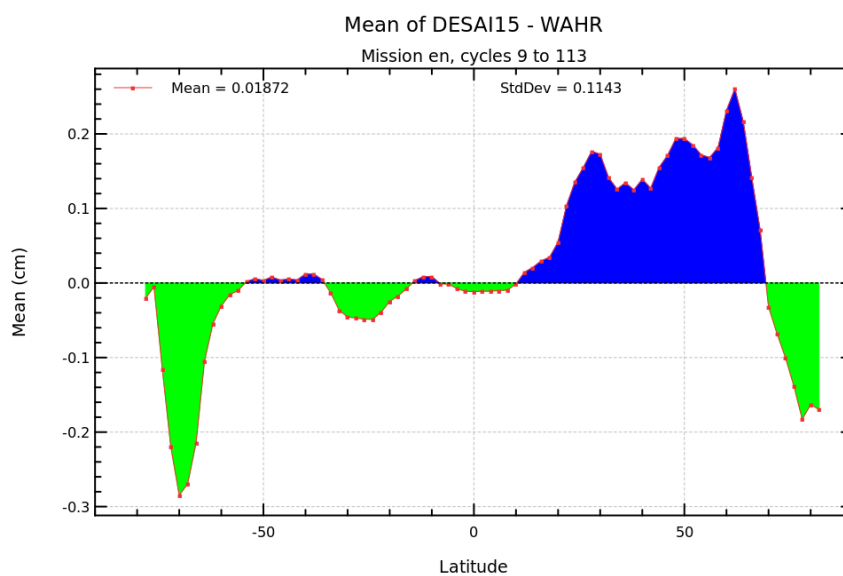
Diagnostic A005 (mission en)

Name : Altimetric component differences versus coastal distances, latitude and longitude

Input data : Along track altimetric components

Description : Mean and standard deviation of the differences between 2 different standards of a same altimetric component (sea surface height correction, altimeter parameter, orbit) are computed and plotted in function of coastal distances between 0 and 100 km, in function of latitudes and in function of longitudes.

Diagnostic type : Mono-mission analyses



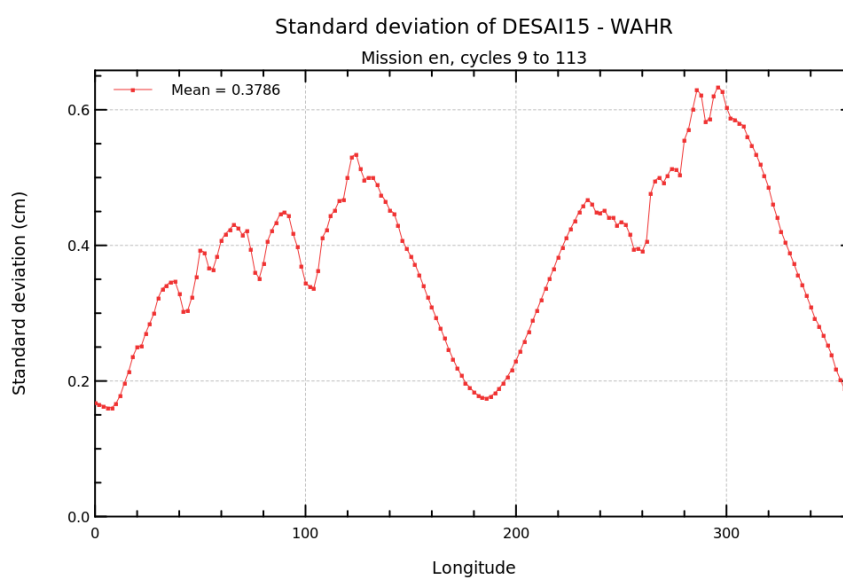
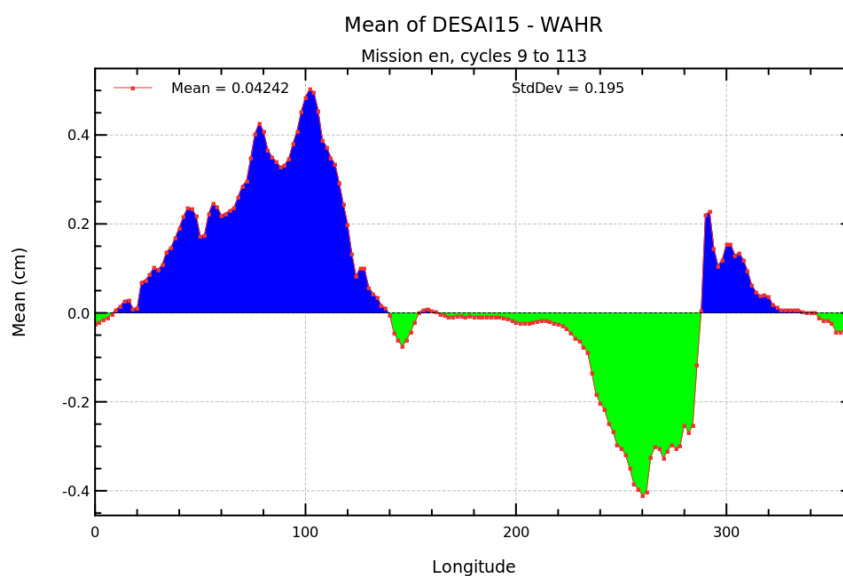
Diagnostic A005 (mission en)

Name : Altimetric component differences versus coastal distances, latitude and longitude

Input data : Along track altimetric components

Description : Mean and standard deviation of the differences between 2 different standards of a same altimetric component (sea surface height correction, altimeter parameter, orbit) are computed and plotted in function of coastal distances between 0 and 100 km, in function of latitudes and in function of longitudes.

Diagnostic type : Mono-mission analyses



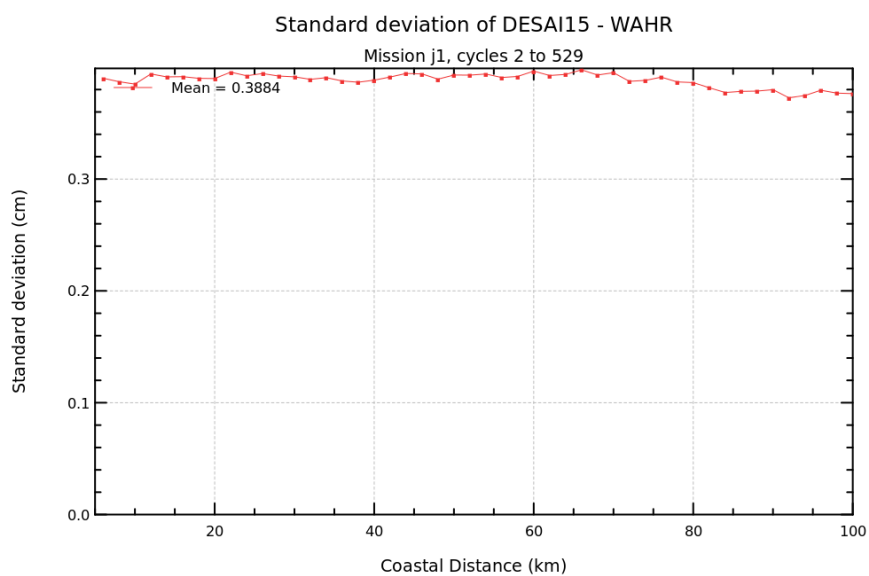
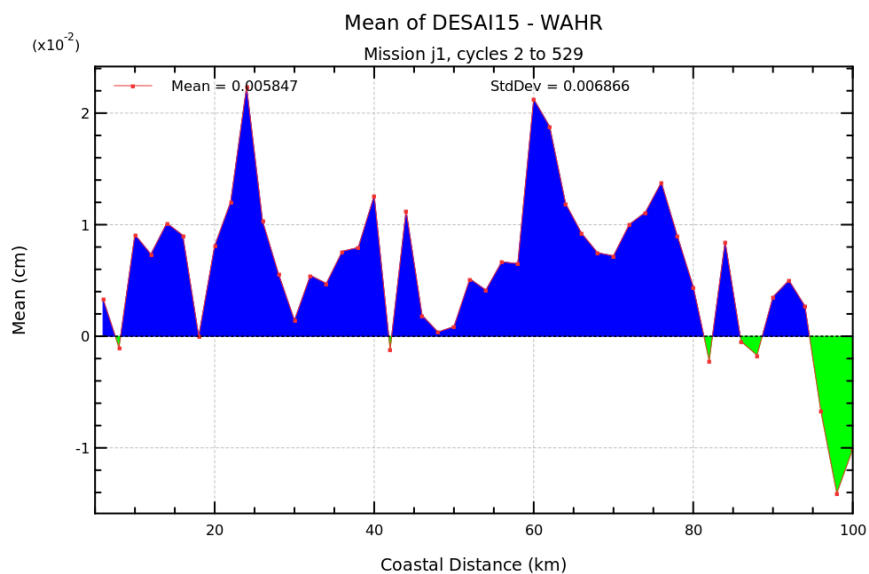
Diagnostic A005 (mission j1)

Name : Altimetric component differences versus coastal distances, latitude and longitude

Input data : Along track altimetric components

Description : Mean and standard deviation of the differences between 2 different standards of a same altimetric component (sea surface height correction, altimeter parameter, orbit) are computed and plotted in function of coastal distances between 0 and 100 km, in function of latitudes and in function of longitudes.

Diagnostic type : Mono-mission analyses



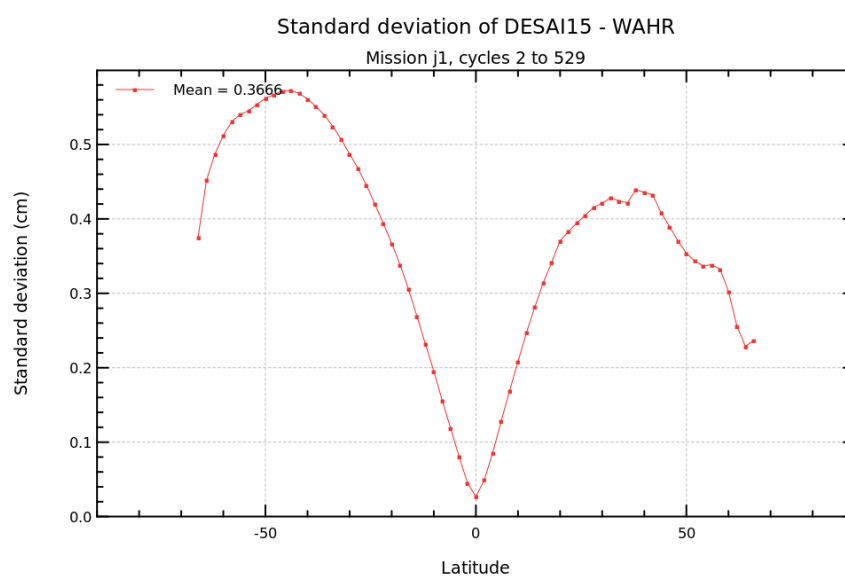
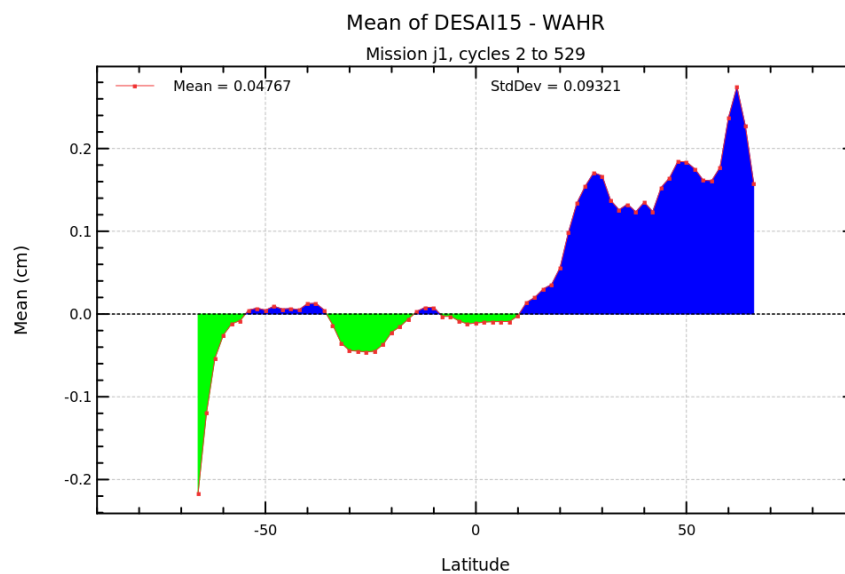
Diagnostic A005 (mission j1)

Name : Altimetric component differences versus coastal distances, latitude and longitude

Input data : Along track altimetric components

Description : Mean and standard deviation of the differences between 2 different standards of a same altimetric component (sea surface height correction, altimeter parameter, orbit) are computed and plotted in function of coastal distances between 0 and 100 km, in function of latitudes and in function of longitudes.

Diagnostic type : Mono-mission analyses



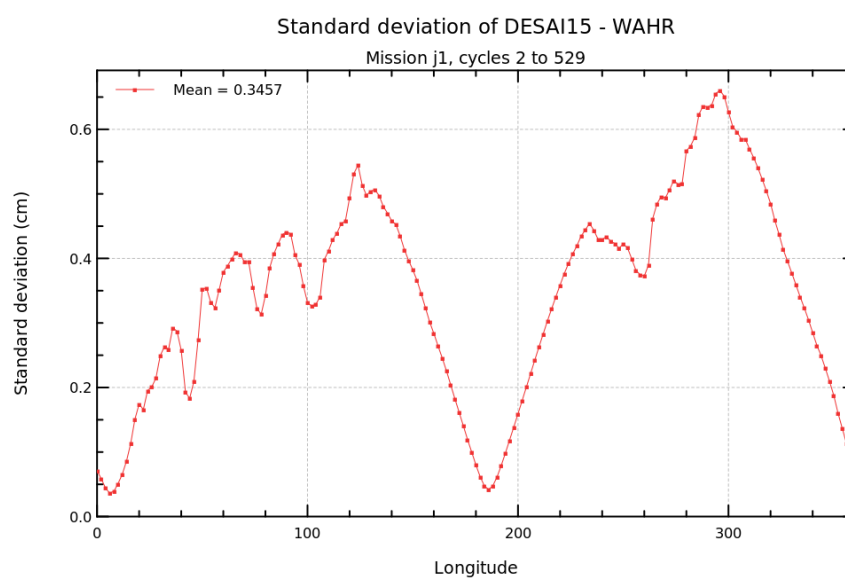
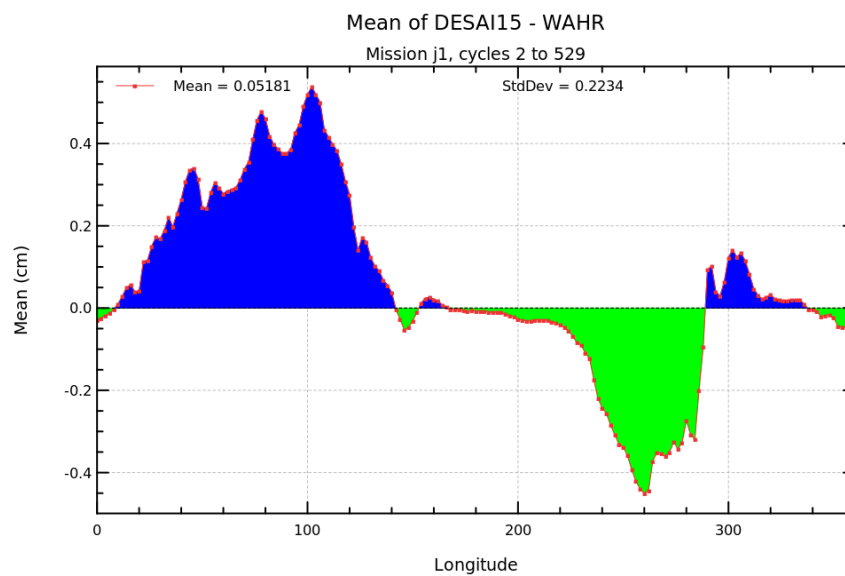
Diagnostic A005 (mission j1)

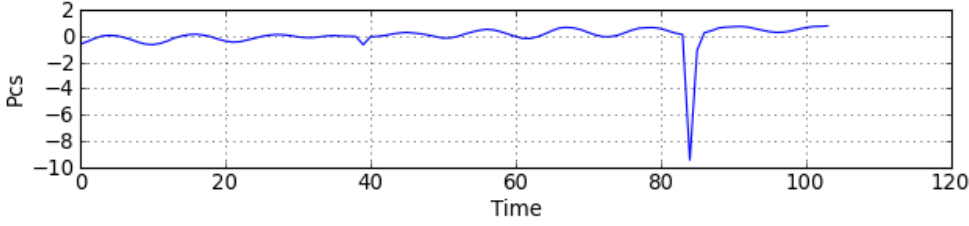
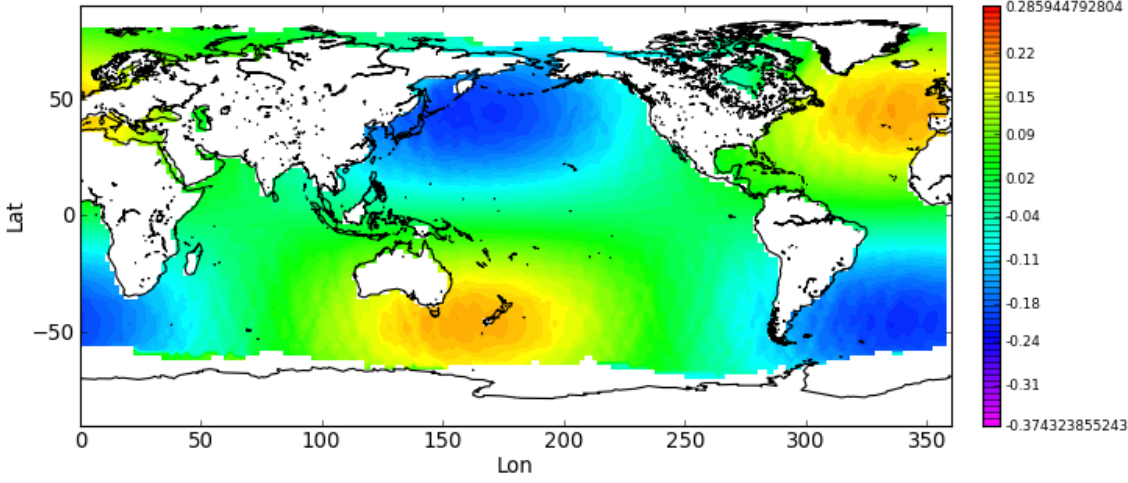
Name : Altimetric component differences versus coastal distances, latitude and longitude

Input data : Along track altimetric components

Description : Mean and standard deviation of the differences between 2 different standards of a same altimetric component (sea surface height correction, altimeter parameter, orbit) are computed and plotted in function of coastal distances between 0 and 100 km, in function of latitudes and in function of longitudes.

Diagnostic type : Mono-mission analyses



Diagnostic type : Mono-mission analyses	Diagnostic A006_a (mission en)	
	Name : EOF Decomposition of Differences	
	Input data : Along track altimetric components	
	Description : The differences between map of SLA (mean) are calculated from the mean SLA maps (per cycle) using successively both altimetric components in the SLA calculation. The maps of the differences are analyzed through an Empirical Orthogonal Functions (EOF) decomposition.	
	<div>EOF #1-Mean- Explained Variance=53.0%</div> <div></div>	

Diagnostic A006.b (mission en)

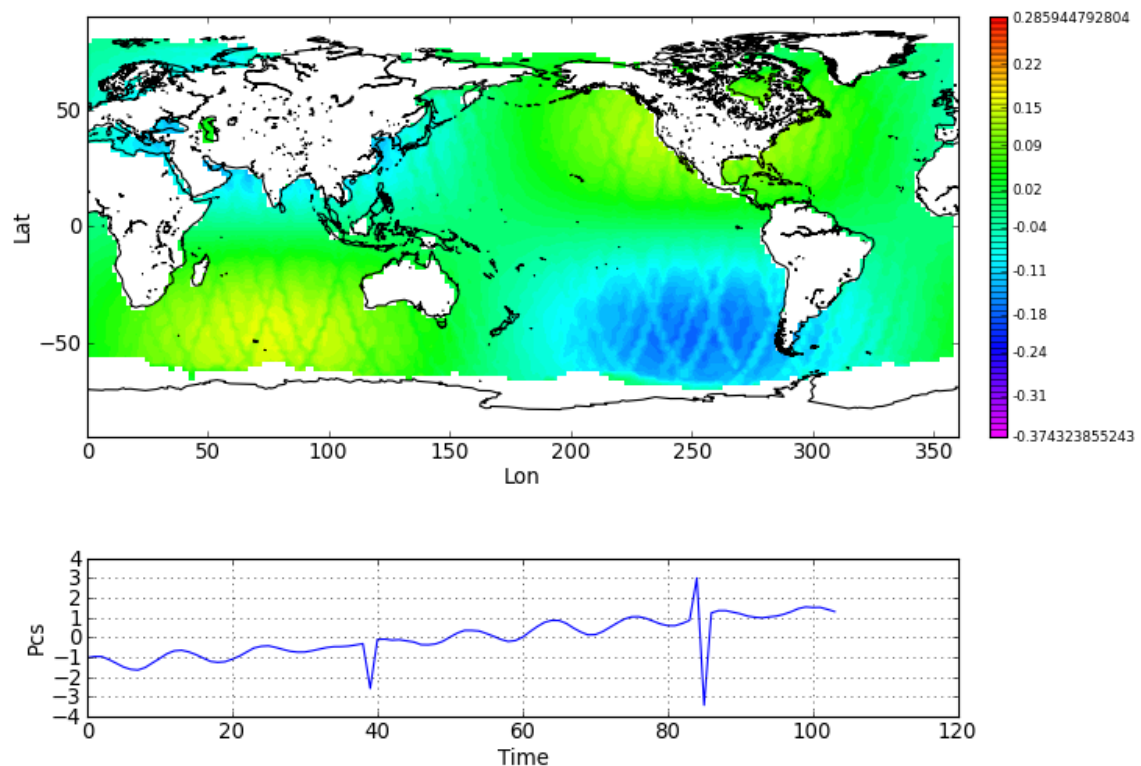
Name : EOF Decomposition of Differences

Input data : Along track altimetric components

Description : The differences between map of SLA (mean) are calculated from the mean SLA maps (per cycle) using successively both altimetric components in the SLA calculation. The maps of the differences are analyzed through an Empirical Orthogonal Functions (EOF) decomposition.

Diagnostic type : Mono-mission analyses

EOF #2-Mean- Explained Variance=22.0%



Diagnostic A006_c (mission en)

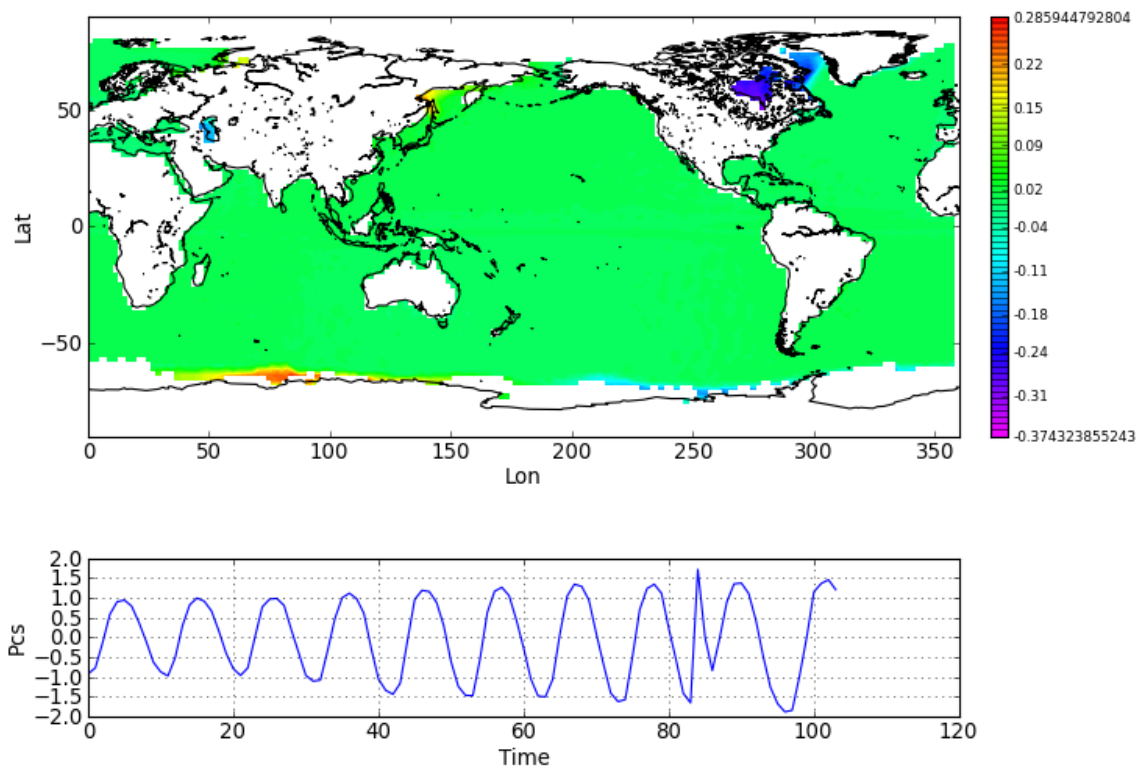
Name : EOF Decomposition of Differences

Input data : Along track altimetric components

Description : The differences between map of SLA (mean) are calculated from the mean SLA maps (per cycle) using successively both altimetric components in the SLA calculation. The maps of the differences are analyzed through an Empirical Orthogonal Functions (EOF) decomposition.

Diagnostic type : Mono-mission analyses

EOF #3-Mean- Explained Variance=10.0%



Diagnostic A006_d (mission en)

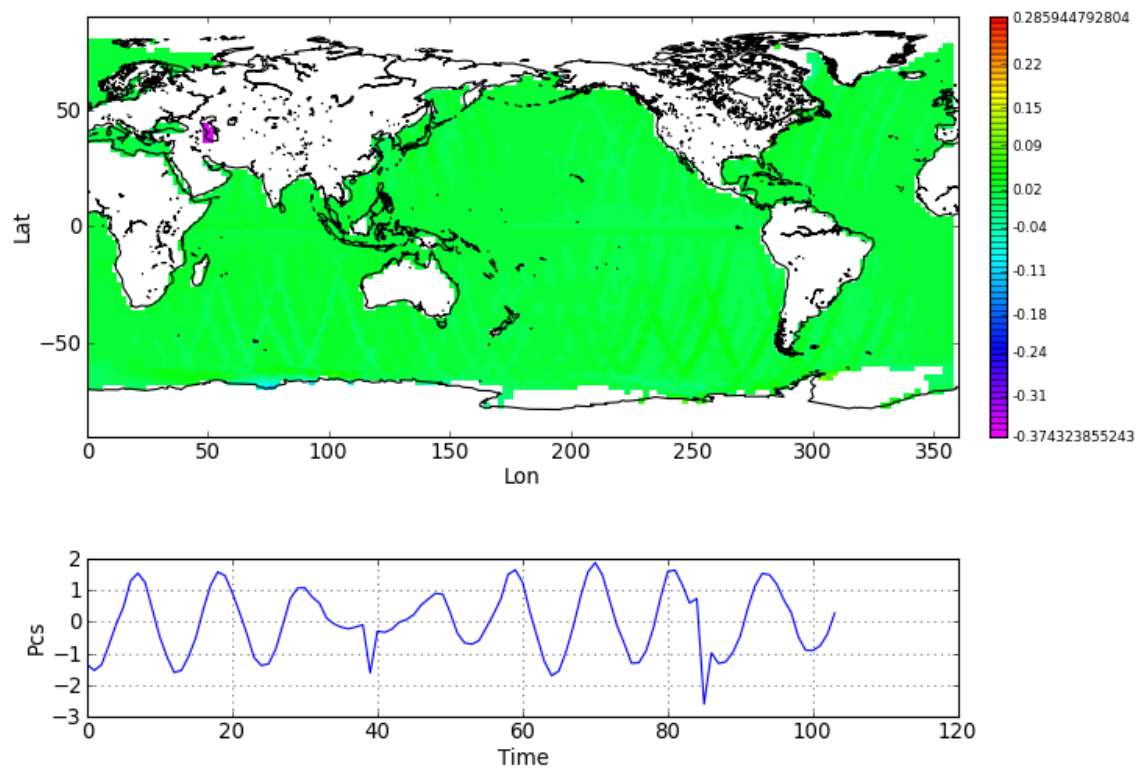
Name : EOF Decomposition of Differences

Input data : Along track altimetric components

Description : The differences between map of SLA (mean) are calculated from the mean SLA maps (per cycle) using successively both altimetric components in the SLA calculation. The maps of the differences are analyzed through an Empirical Orthogonal Functions (EOF) decomposition.

Diagnostic type : Mono-mission analyses

EOF #4-Mean- Explained Variance=4.0%



Diagnostic A006_e (mission en)

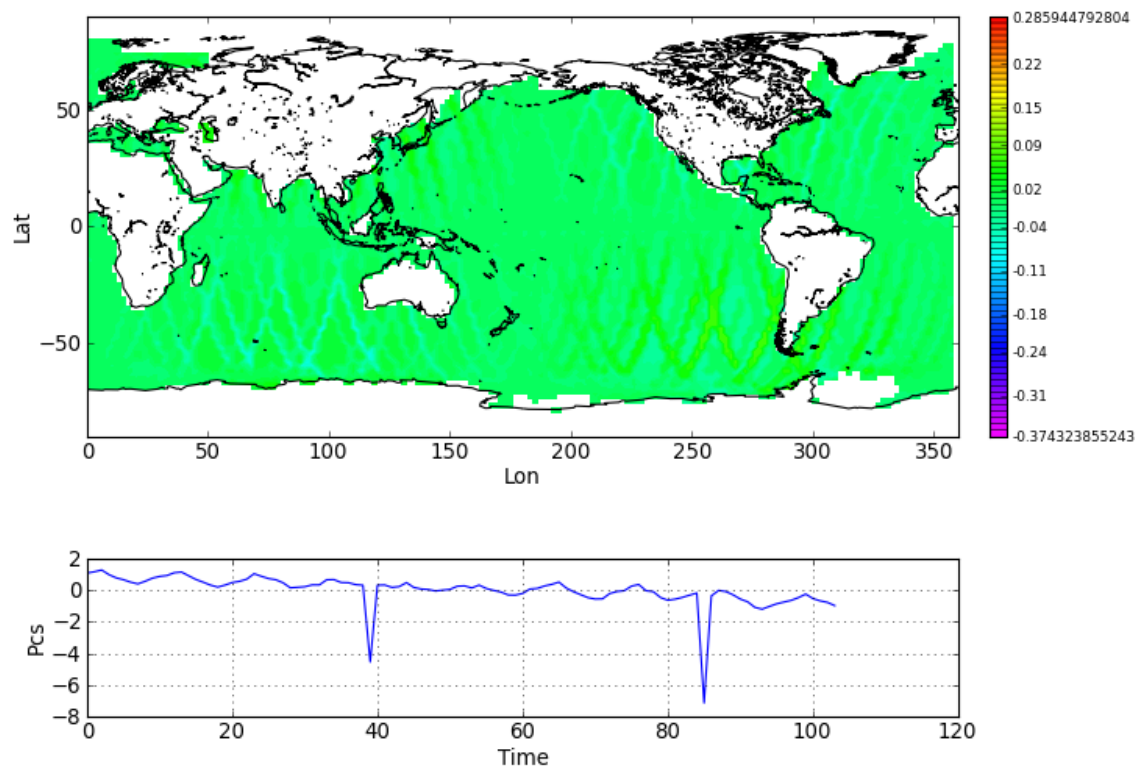
Name : EOF Decomposition of Differences

Input data : Along track altimetric components

Description : The differences between map of SLA (mean) are calculated from the mean SLA maps (per cycle) using successively both altimetric components in the SLA calculation. The maps of the differences are analyzed through an Empirical Orthogonal Functions (EOF) decomposition.

Diagnostic type : Mono-mission analyses

EOF #5-Mean- Explained Variance=2.0%



Diagnostic A006_a (mission j1)

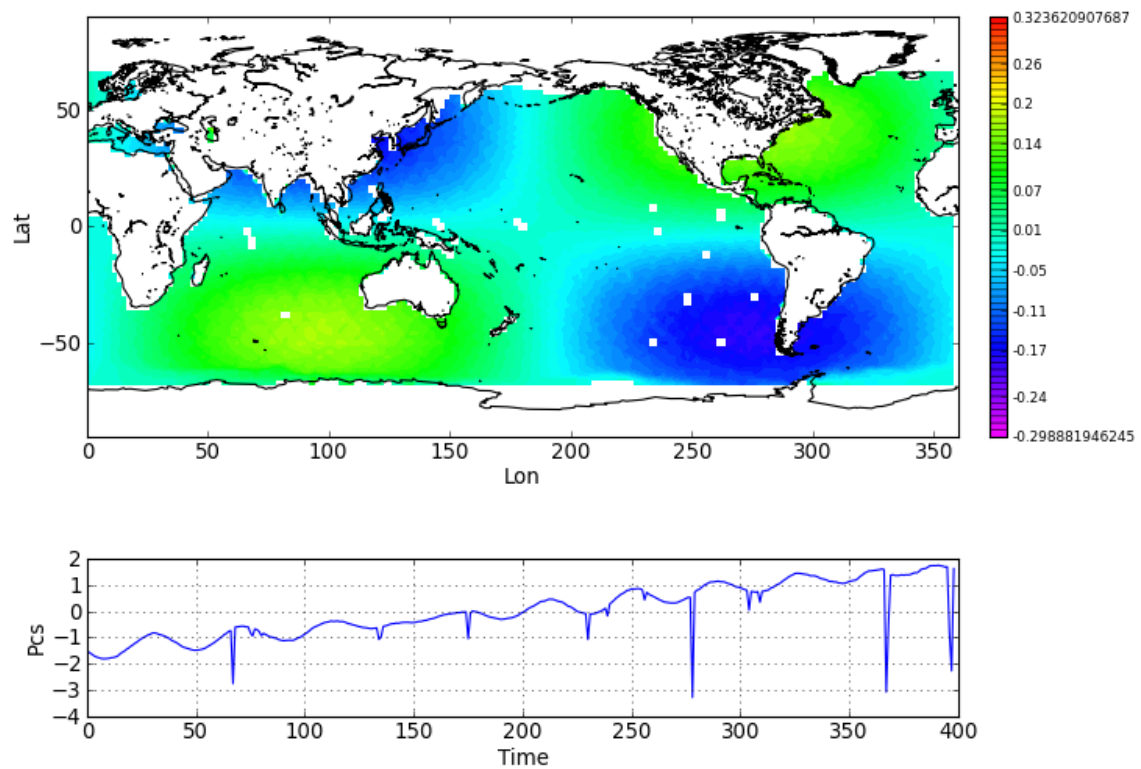
Name : EOF Decomposition of Differences

Input data : Along track altimetric components

Description : The differences between map of SLA (mean) are calculated from the mean SLA maps (per cycle) using successively both altimetric components in the SLA calculation. The maps of the differences are analyzed through an Empirical Orthogonal Functions (EOF) decomposition.

Diagnostic type : Mono-mission analyses

EOF #1-Mean- Explained Variance=56.0%



Diagnostic A006_b (mission j1)

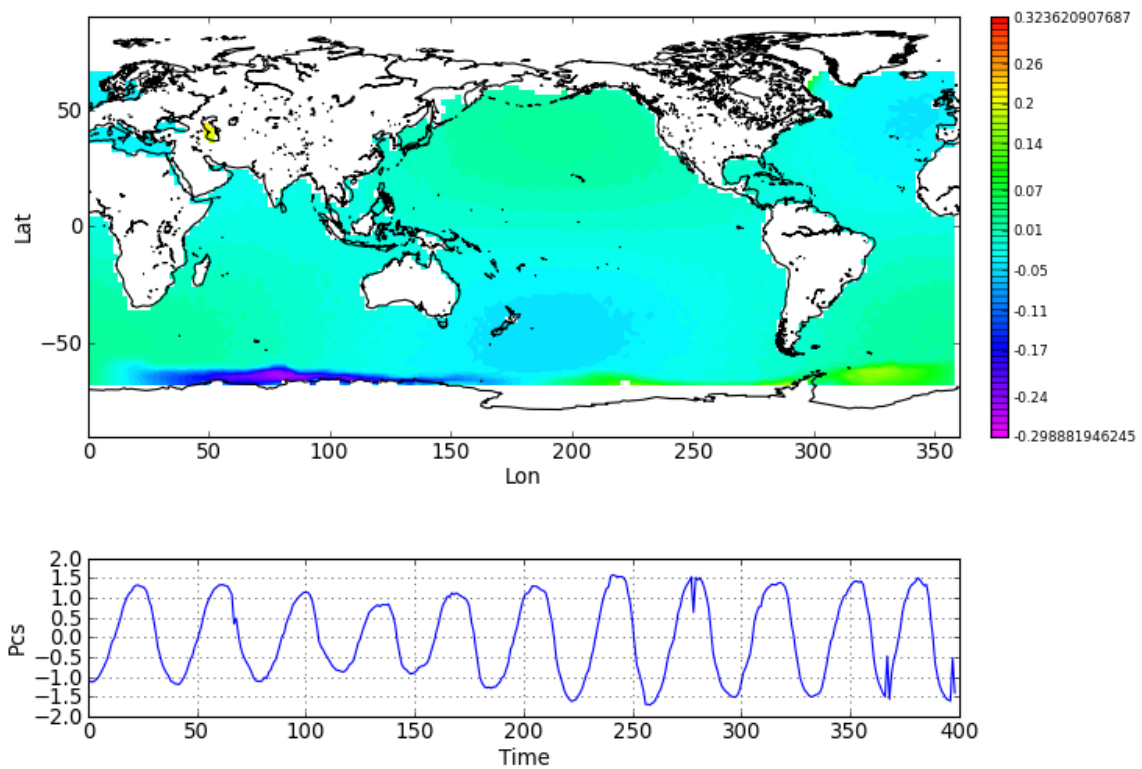
Name : EOF Decomposition of Differences

Input data : Along track altimetric components

Description : The differences between map of SLA (mean) are calculated from the mean SLA maps (per cycle) using successively both altimetric components in the SLA calculation. The maps of the differences are analyzed through an Empirical Orthogonal Functions (EOF) decomposition.

Diagnostic type : Mono-mission analyses

EOF #2-Mean- Explained Variance=15.0%



Diagnostic A006_c (mission j1)

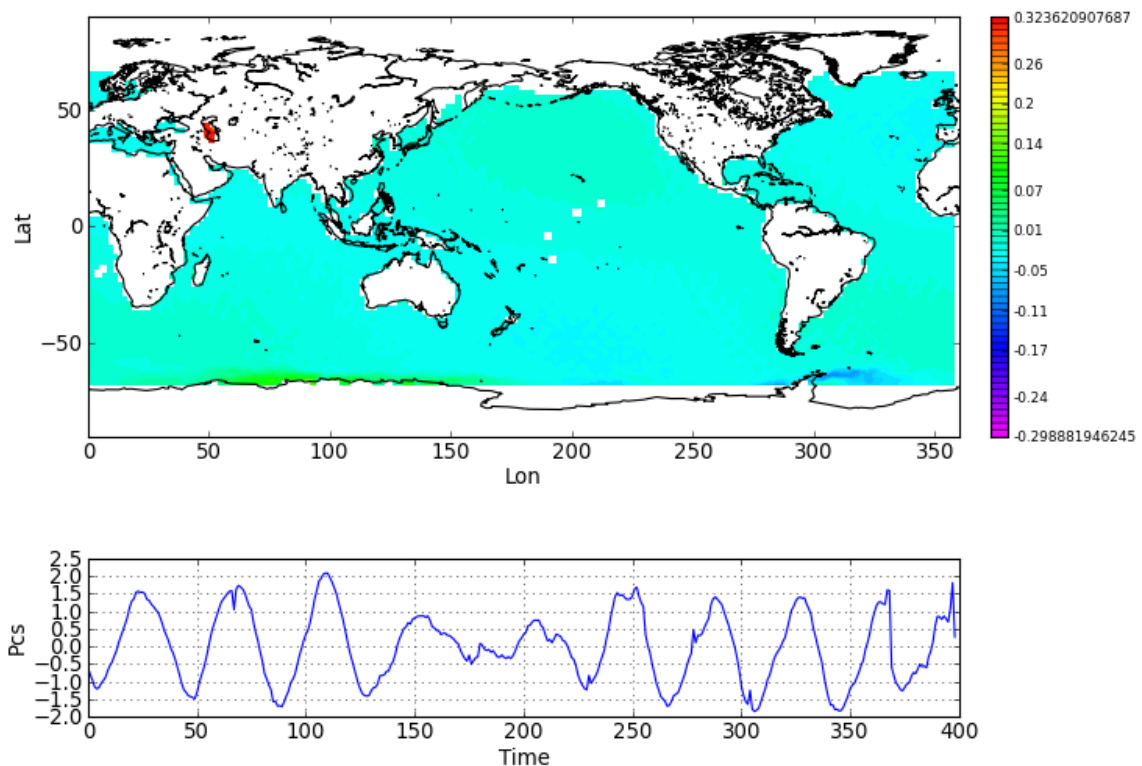
Name : EOF Decomposition of Differences

Input data : Along track altimetric components

Description : The differences between map of SLA (mean) are calculated from the mean SLA maps (per cycle) using successively both altimetric components in the SLA calculation. The maps of the differences are analyzed through an Empirical Orthogonal Functions (EOF) decomposition.

Diagnostic type : Mono-mission analyses

EOF #3-Mean- Explained Variance=5.0%



Diagnostic A006_d (mission j1)

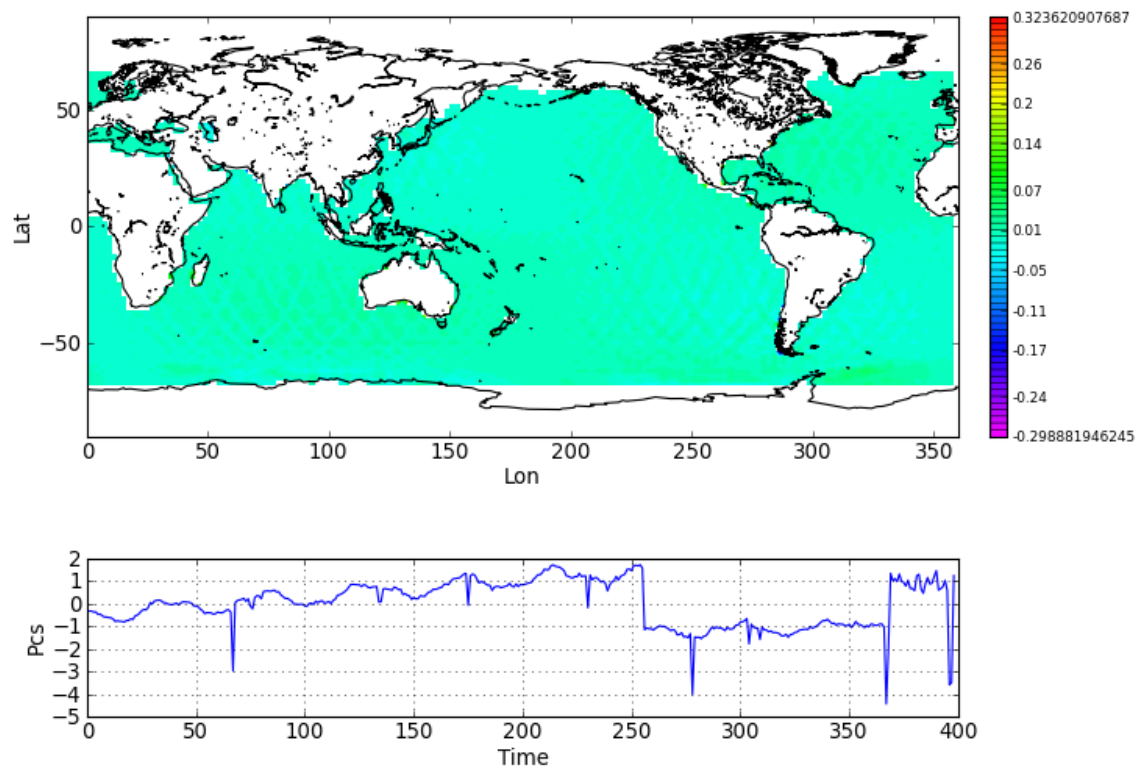
Name : EOF Decomposition of Differences

Input data : Along track altimetric components

Description : The differences between map of SLA (mean) are calculated from the mean SLA maps (per cycle) using successively both altimetric components in the SLA calculation. The maps of the differences are analyzed through an Empirical Orthogonal Functions (EOF) decomposition.

Diagnostic type : Mono-mission analyses

EOF #4-Mean- Explained Variance=3.0%



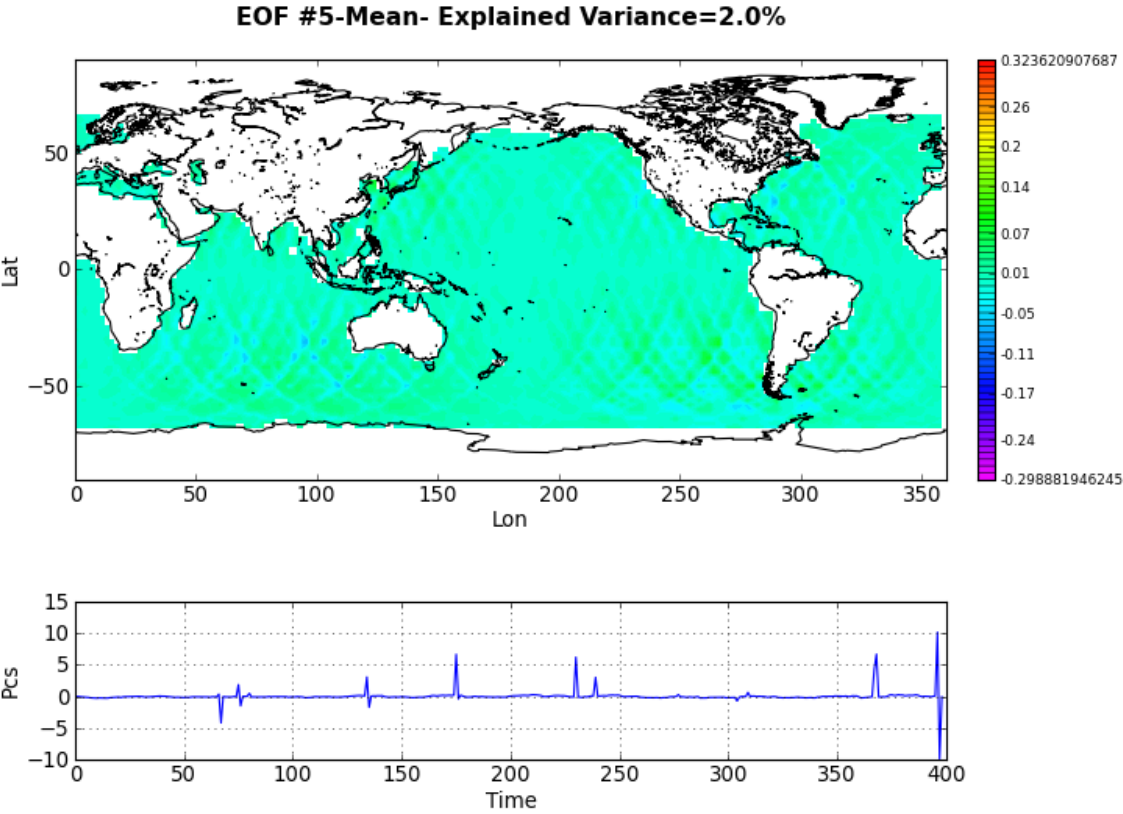
Diagnostic A006_e (mission j1)

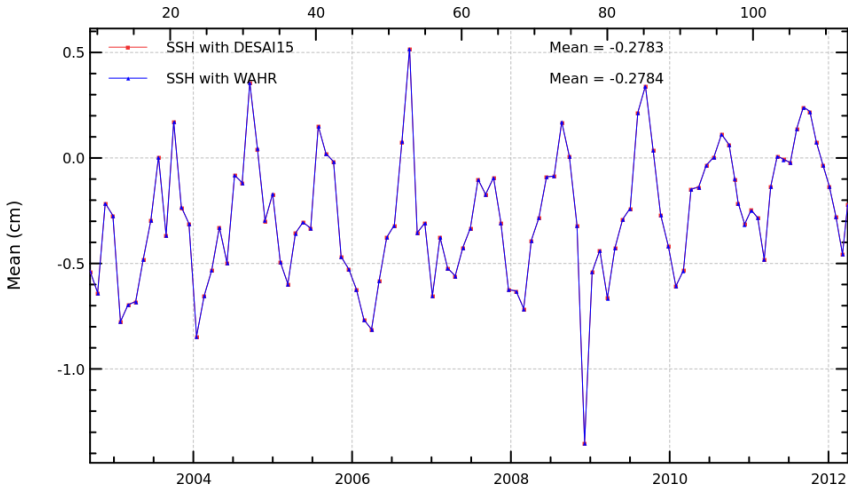
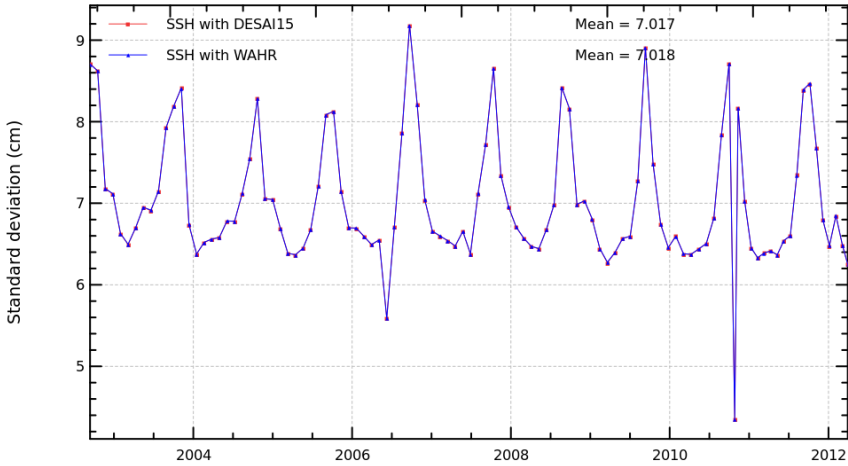
Name : EOF Decomposition of Differences

Input data : Along track altimetric components

Description : The differences between map of SLA (mean) are calculated from the mean SLA maps (per cycle) using successively both altimetric components in the SLA calculation. The maps of the differences are analyzed through an Empirical Orthogonal Functions (EOF) decomposition.

Diagnostic type : Mono-mission analyses



Diagnostic A101 a (mission en)	
Name : Temporal evolution of SSH crossovers	
Input data : Sea Surface Height (SSH) crossovers	
<p>Description : The temporal evolution of global statistics (mean, standard deviation) of SSH differences are calculated from a cyclic way (altimeter repetivity, daily, weekly, monthly) using successively both altimetric components in the SSH calculation. SSH crossovers are the differences between ascending and descending passes for time differences between both passes lower than 10 days (in order to reduce the effect of the oceanic variability).</p>	
<div><div><div>Mean of SSH crossovers</div><div>Mission en, cycles 9 to 113</div></div><div><div>Standard deviations of SSH crossovers</div><div>Mission en, cycles 9 to 113</div></div></div>	

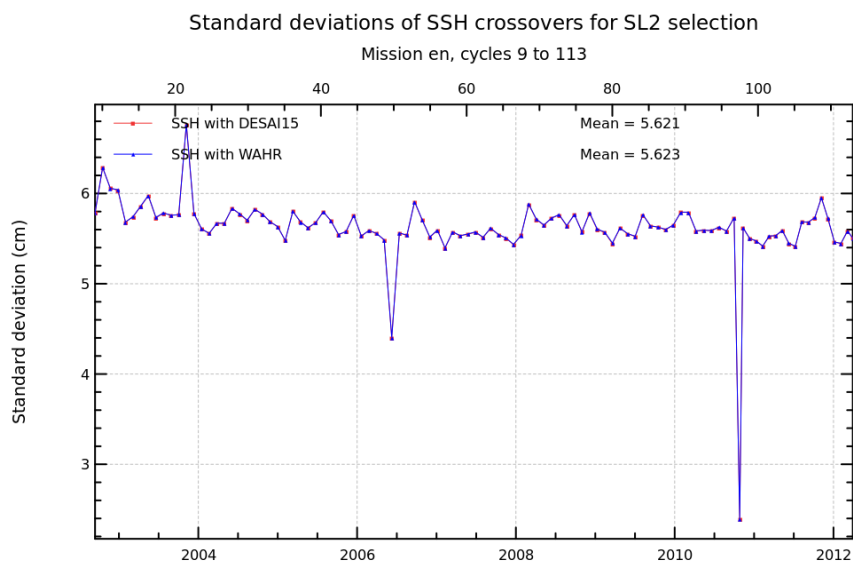
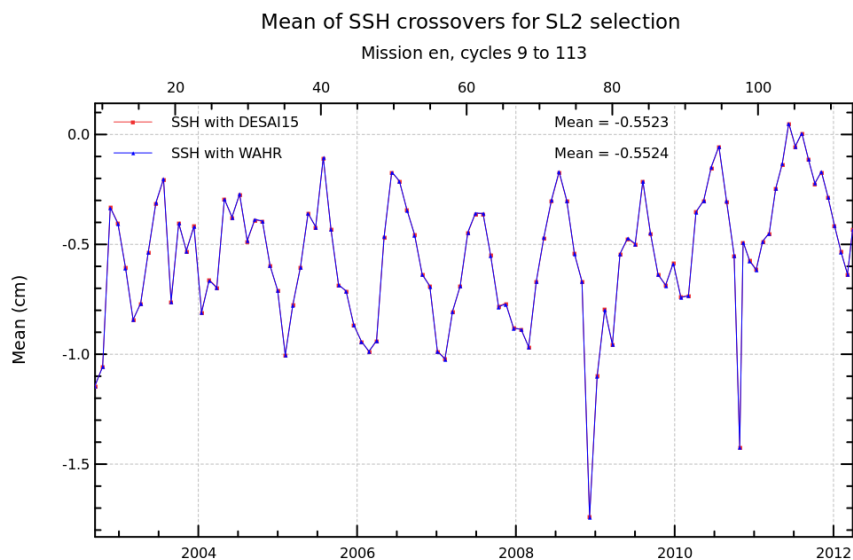
Diagnostic A101_b (mission en)

Name : Temporal evolution of SSH crossovers

Input data : Sea Surface Height (SSH) crossovers

Description : The temporal evolution of global statistics (mean, standard deviation) of SSH differences are calculated from a cyclic way (altimeter repetivity, daily, weekly, monthly) using successively both altimetric components in the SSH calculation. SSH crossovers are the differences between ascending and descending passes for time differences between both passes lower than 10 days (in order to reduce the effect of the oceanic variability).

Diagnostic type : Mono-mission analyses



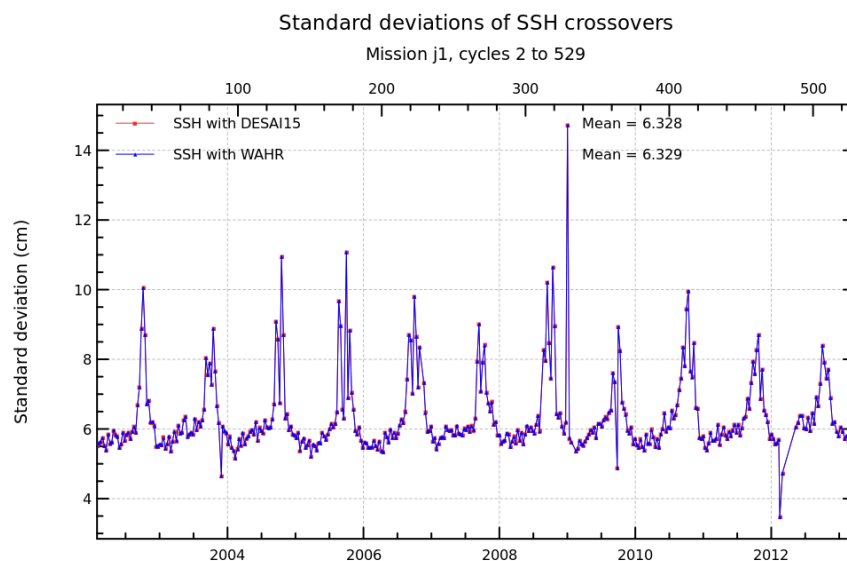
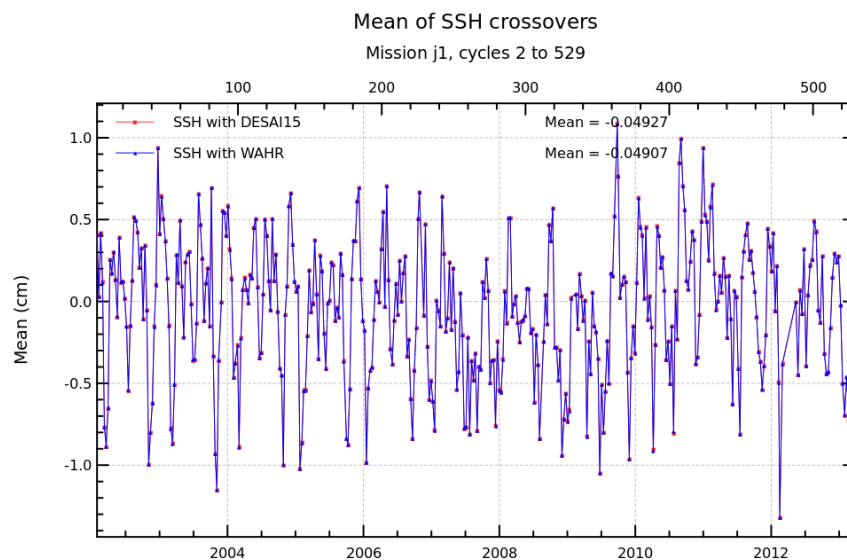
Diagnostic A101_a (mission j1)

Name : Temporal evolution of SSH crossovers

Input data : Sea Surface Height (SSH) crossovers

Description : The temporal evolution of global statistics (mean, standard deviation) of SSH differences are calculated from a cyclic way (altimeter repetivity, daily, weekly, monthly) using successively both altimetric components in the SSH calculation. SSH crossovers are the differences between ascending and descending passes for time differences between both passes lower than 10 days (in order to reduce the effect of the oceanic variability).

Diagnostic type : Mono-mission analyses



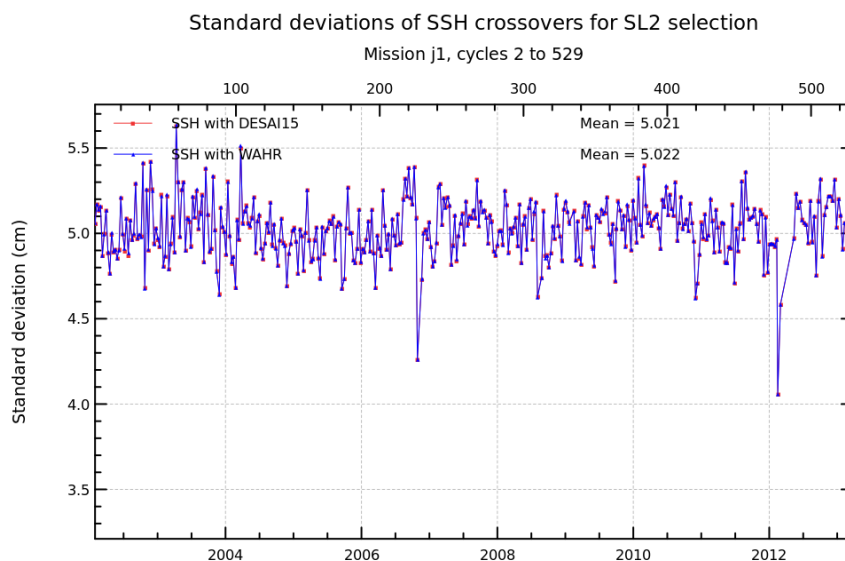
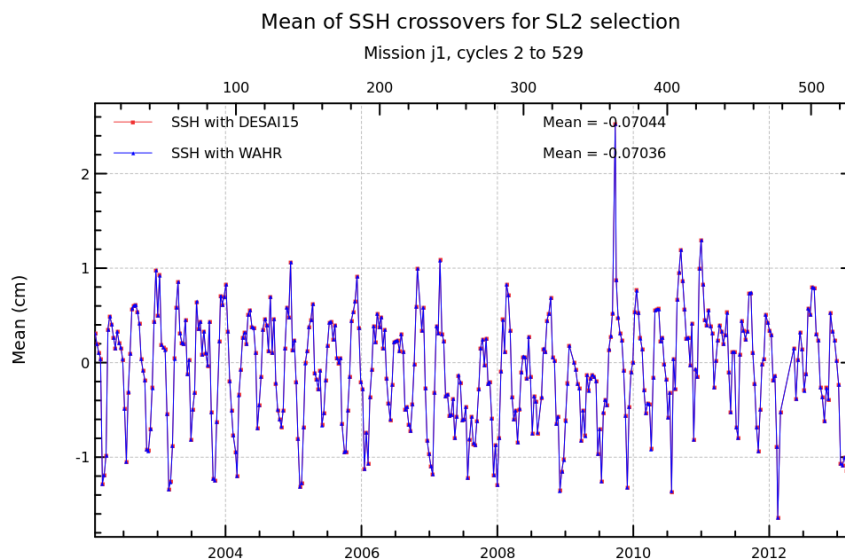
Diagnostic A101_b (mission j1)

Name : Temporal evolution of SSH crossovers

Input data : Sea Surface Height (SSH) crossovers

Description : The temporal evolution of global statistics (mean, standard deviation) of SSH differences are calculated from a cyclic way (altimeter repetivity, daily, weekly, monthly) using successively both altimetric components in the SSH calculation. SSH crossovers are the differences between ascending and descending passes for time differences between both passes lower than 10 days (in order to reduce the effect of the oceanic variability).

Diagnostic type : Mono-mission analyses



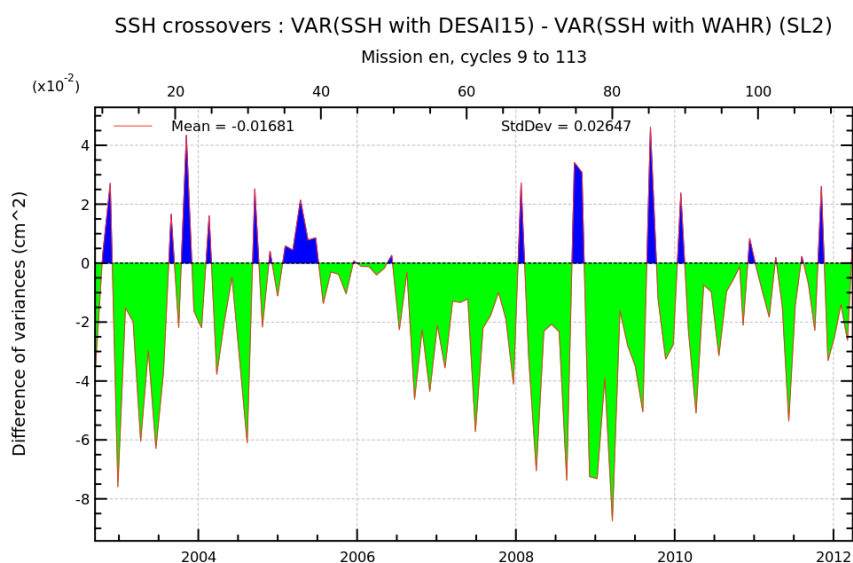
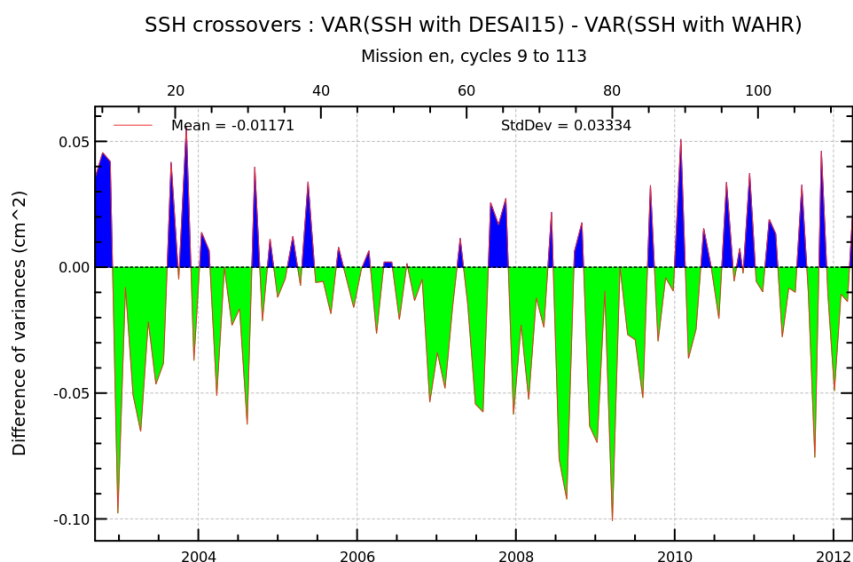
Diagnostic A102 (mission en)

Name : Differences between temporal evolution of SSH crossovers

Input data : Sea Surface Height (SSH) crossovers

Description : The difference of temporal evolution between the global statistics (mean, standard deviation) of SSH differences are calculated using successively both altimetric components in the SSH calculation. SSH crossovers are the differences between ascending and descending passes for time differences between both passes lower than 10 days (in order to reduce the effect of the oceanic variability).

Diagnostic type : Mono-mission analyses



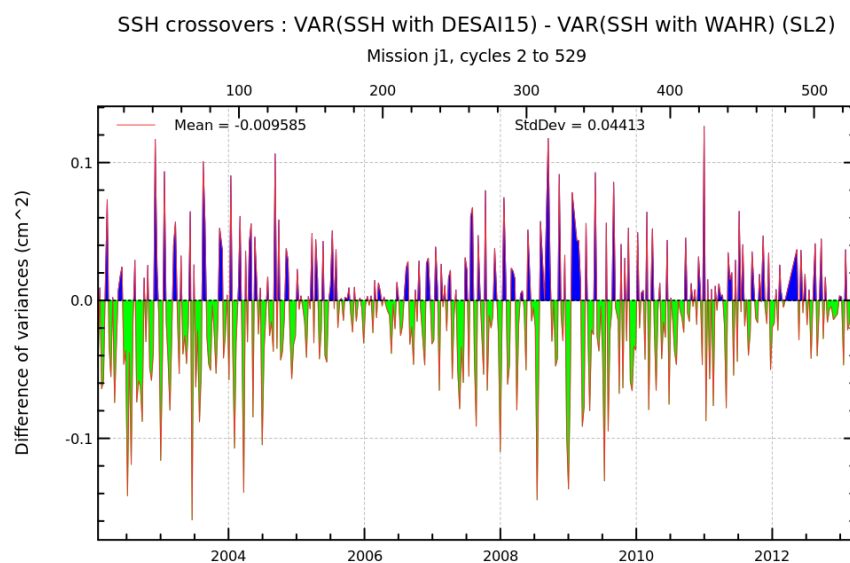
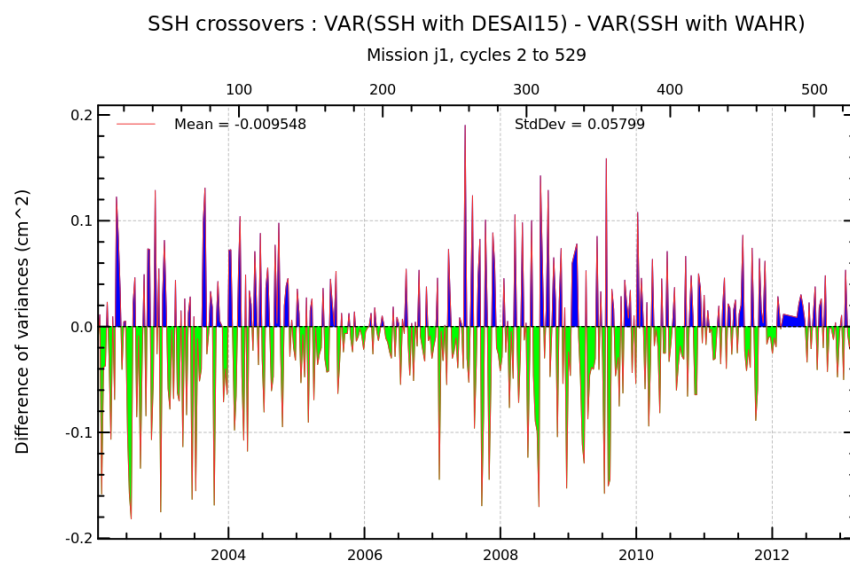
Diagnostic A102 (mission j1)

Name : Differences between temporal evolution of SSH crossovers

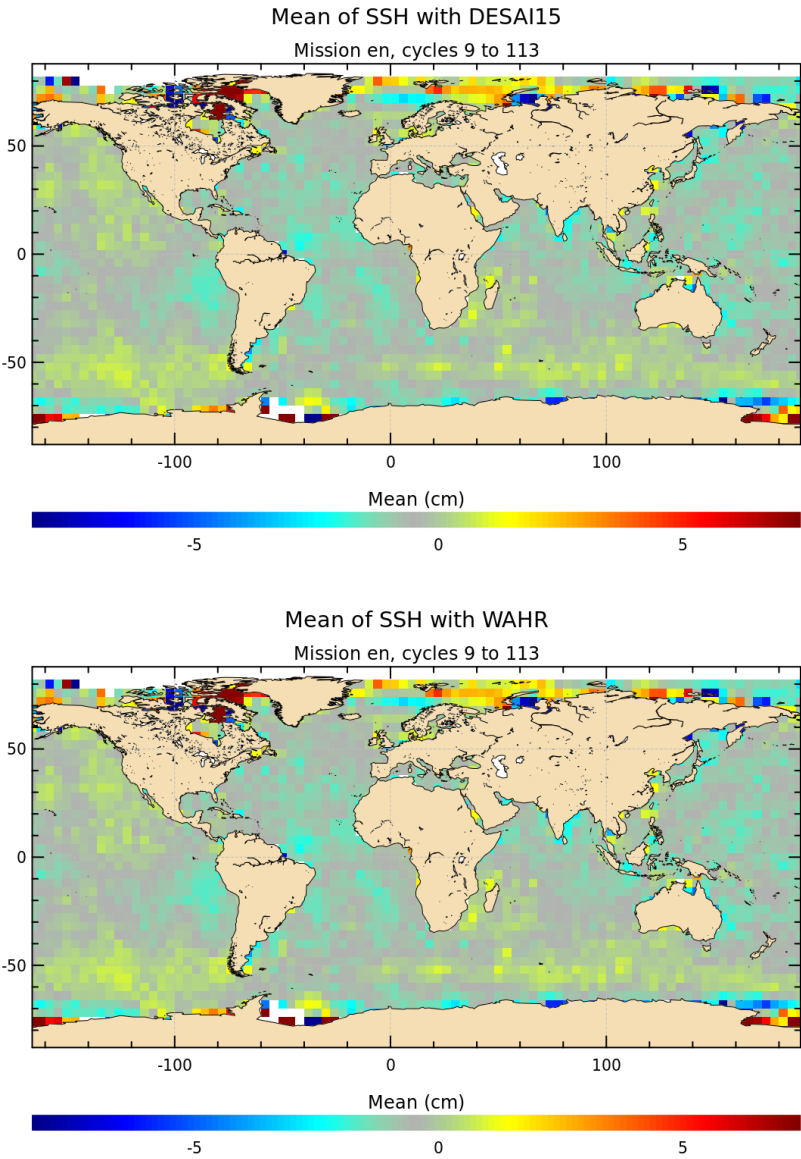
Input data : Sea Surface Height (SSH) crossovers

Description : The difference of temporal evolution between the global statistics (mean, standard deviation) of SSH differences are calculated using successively both altimetric components in the SSH calculation. SSH crossovers are the differences between ascending and descending passes for time differences between both passes lower than 10 days (in order to reduce the effect of the oceanic variability).

Diagnostic type : Mono-mission analyses



Diagnostic A103 (mission en)	
Name : Map of SSH crossovers	
Input data : Sea Surface Height (SSH) crossovers	
Description : The differences between maps of SSH crossovers differences (mean, variance) are calculated using successively both altimetric components in the SSH calculation. SSH crossovers are the differences between ascending and descending passes for time differences between both passes lower than 10 days (in order to reduce the effect of the oceanic variability).	



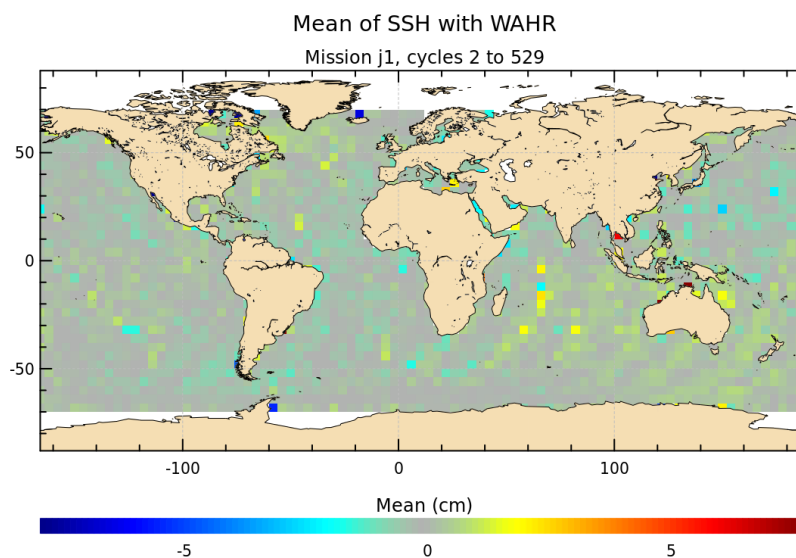
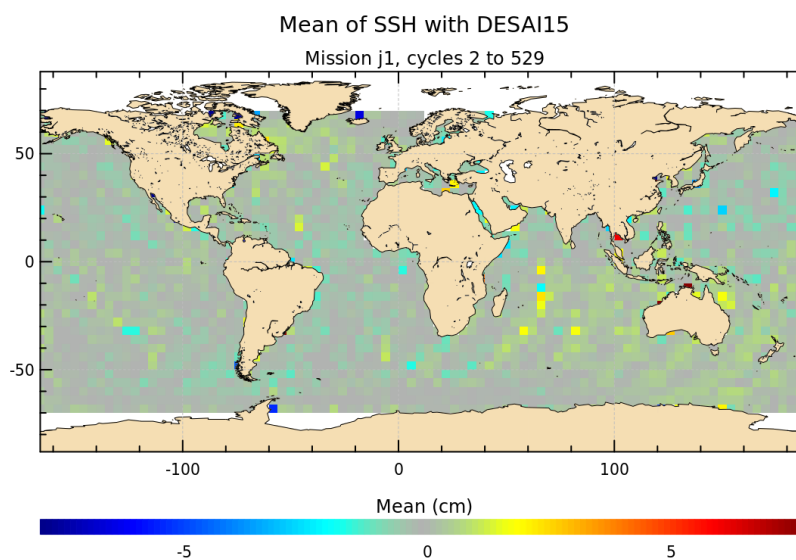
Diagnostic A103 (mission j1)

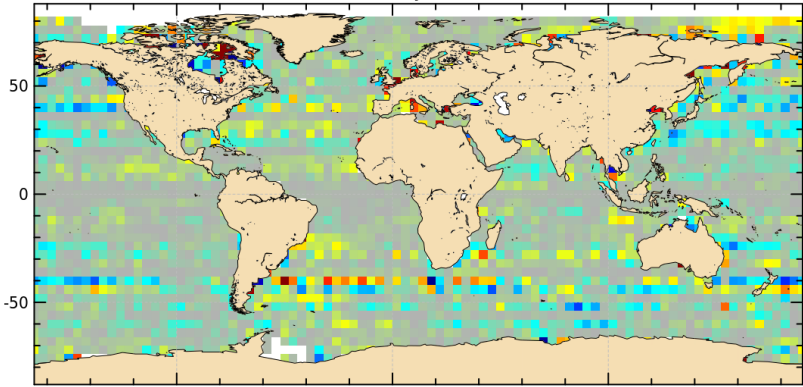
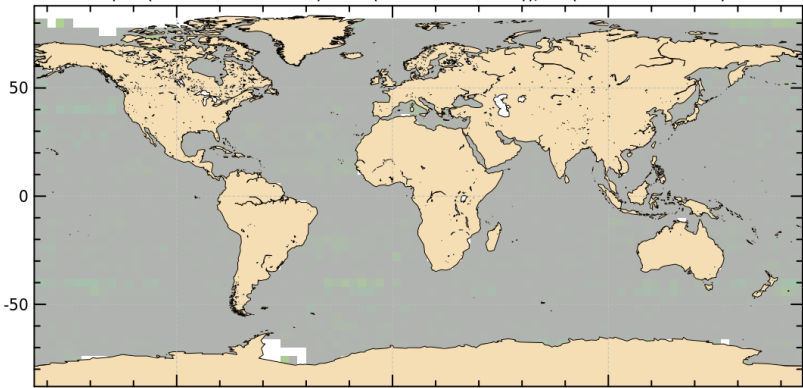
Name : Map of SSH crossovers

Input data : Sea Surface Height (SSH) crossovers

Description : The differences between maps of SSH crossovers differences (mean, variance) are calculated using successively both altimetric components in the SSH calculation. SSH crossovers are the differences between ascending and descending passes for time differences between both passes lower than 10 days (in order to reduce the effect of the oceanic variability).

Diagnostic type : Mono-mission analyses



Diagnostic type : Mono-mission analyses	<div>Diagnostic A104 (mission en)</div>
	<div>Name : Differences between maps of SSH crossovers</div>
	<div>Input data : Sea Surface Height (SSH) crossovers</div>
	<div>Description : The differences between maps of SSH crossovers (derived from diagnostic A103) are calculated from the SSH crossover differences (mean, standard deviation) using successively both altimetric components in the SSH calculation. SSH crossovers are the differences between ascending and descending passes for time differences between both passes lower than 10 days (in order to reduce the effect of the oceanic variability).</div>
	<div><div><div>VAR(SSH with DESAI15) - VAR(SSH with WAHR)</div><div>Mission en, cycles 9 to 113</div><div>SSH crossovers : difference of variances (cm^2)</div><div>-0.6 -0.4 -0.2 0.0 0.2 0.4 0.6</div></div><div><div>Percentage of X_SSH error reduction</div><div>(Var(SSH with DESAI15) - Var(SSH with WAHR))/Var(SSH with WAHR)</div><div>Reduction/Increase of variance of X_SSH - ln %</div><div>-20 0 20</div></div></div>

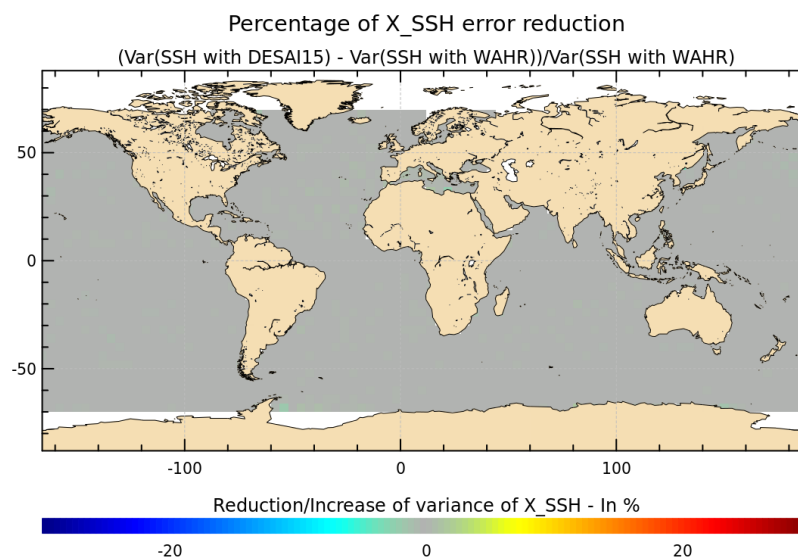
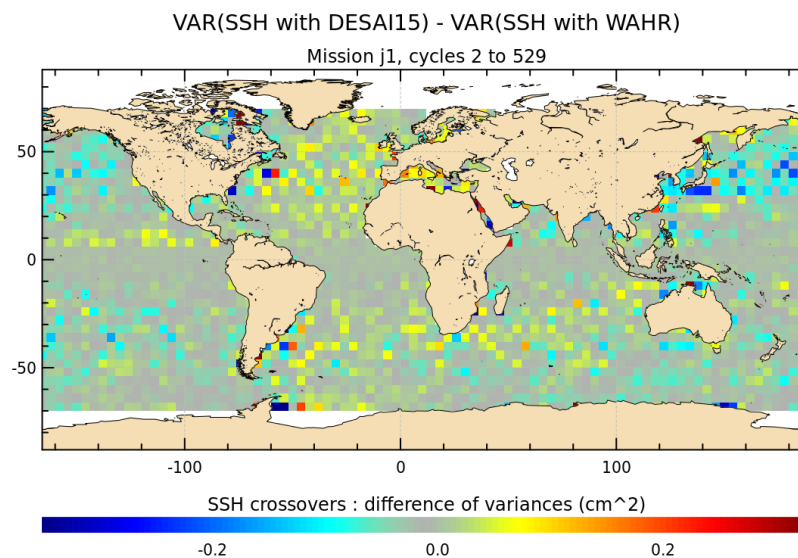
Diagnostic A104 (mission j1)

Name : Differences between maps of SSH crossovers

Input data : Sea Surface Height (SSH) crossovers

Description : The differences between maps of SSH crossovers (derived from diagnostic A103) are calculated from the SSH crossover differences (mean, standard deviation) using successively both altimetric components in the SSH calculation. SSH crossovers are the differences between ascending and descending passes for time differences between both passes lower than 10 days (in order to reduce the effect of the oceanic variability).

Diagnostic type : Mono-mission analyses



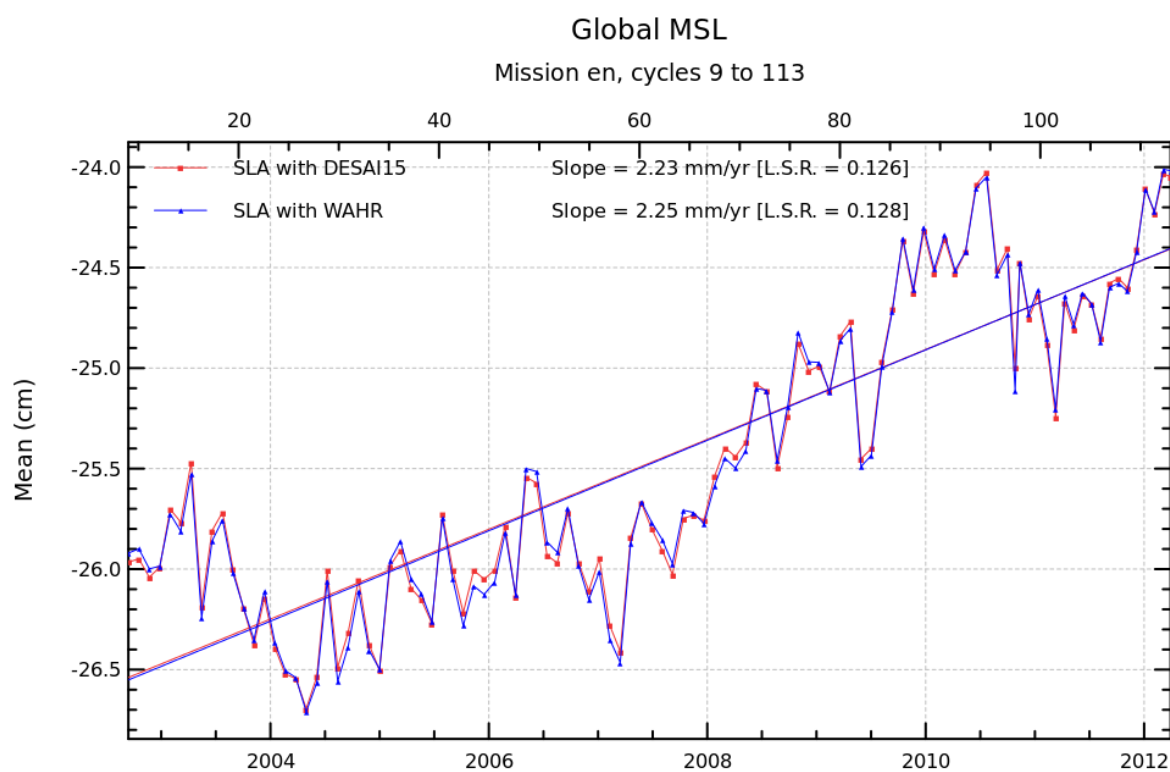
Diagnostic A201 a (mission en)

Name : Temporal evolution of Sea Level Anomaly (SLA)

Input data : Along track SLA

Description : The temporal evolution of SLA statistics (mean, standard deviation) are calculated from a cyclic way (altimeter repetivity, daily, weekly, monthly) using successively both altimetric components in the SLA calculation. These statistics are calculated from 1 Hz altimetric measurements after removing spurious sea level measurements. They are calculated globally, but also separating ascending and descending passes, or separating North and South hemispheres.

Diagnostic type : Mono-mission analyses



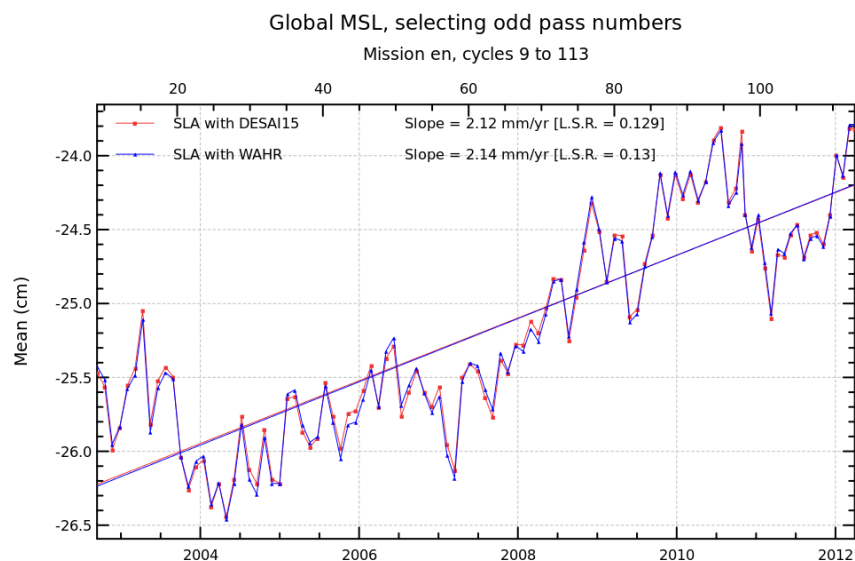
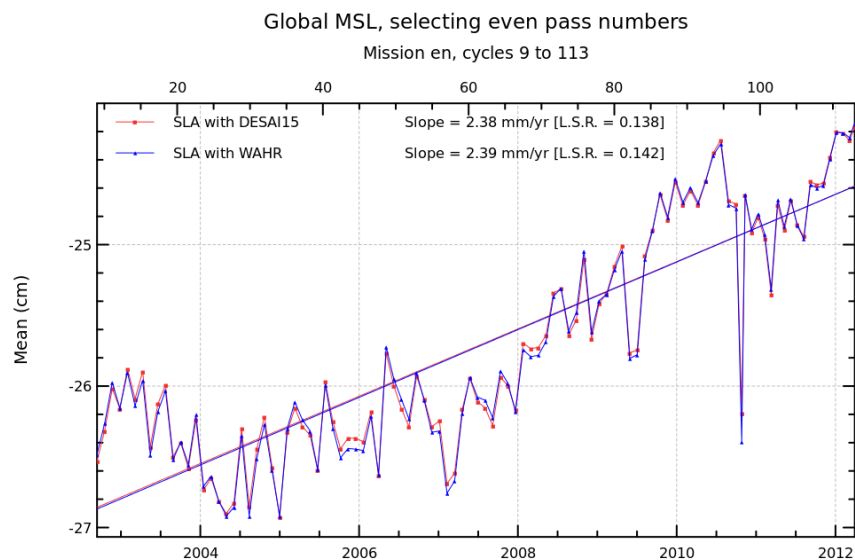
Diagnostic A201_b (mission en)

Name : Temporal evolution of Sea Level Anomaly (SLA)

Input data : Along track SLA

Description : The temporal evolution of SLA statistics (mean, standard deviation) are calculated from a cyclic way (altimeter repetivity, daily, weekly, monthly) using successively both altimetric components in the SLA calculation. These statistics are calculated from 1 Hz altimetric measurements after removing spurious sea level measurements. They are calculated globally, but also separating ascending and descending passes, or separating North and South hemispheres.

Diagnostic type : Mono-mission analyses



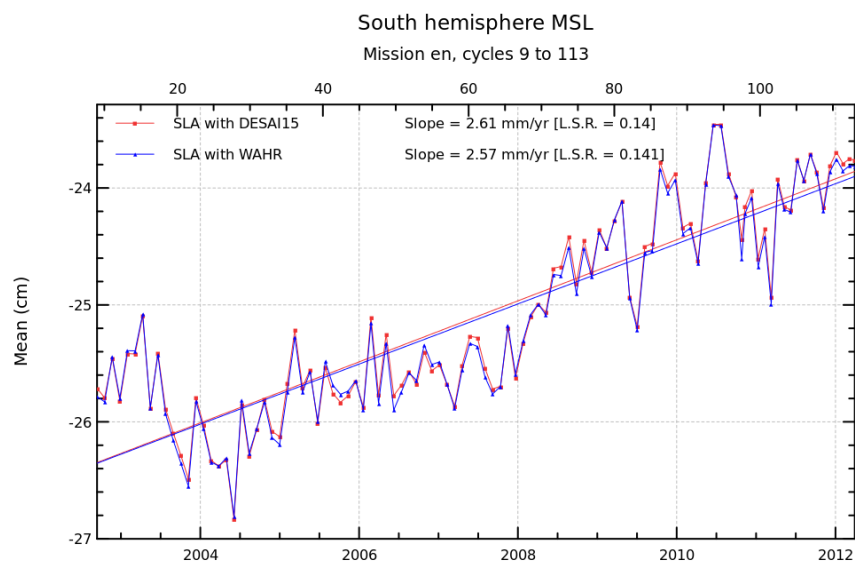
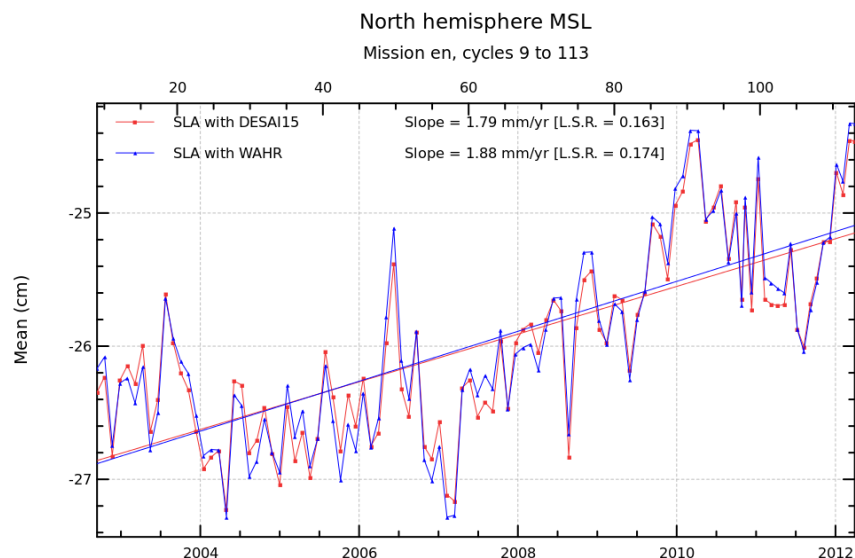
Diagnostic A201_c (mission en)

Name : Temporal evolution of Sea Level Anomaly (SLA)

Input data : Along track SLA

Description : The temporal evolution of SLA statistics (mean, standard deviation) are calculated from a cyclic way (altimeter repetivity, daily, weekly, monthly) using successively both altimetric components in the SLA calculation. These statistics are calculated from 1 Hz altimetric measurements after removing spurious sea level measurements. They are calculated globally, but also separating ascending and descending passes, or separating North and South hemispheres.

Diagnostic type : Mono-mission analyses



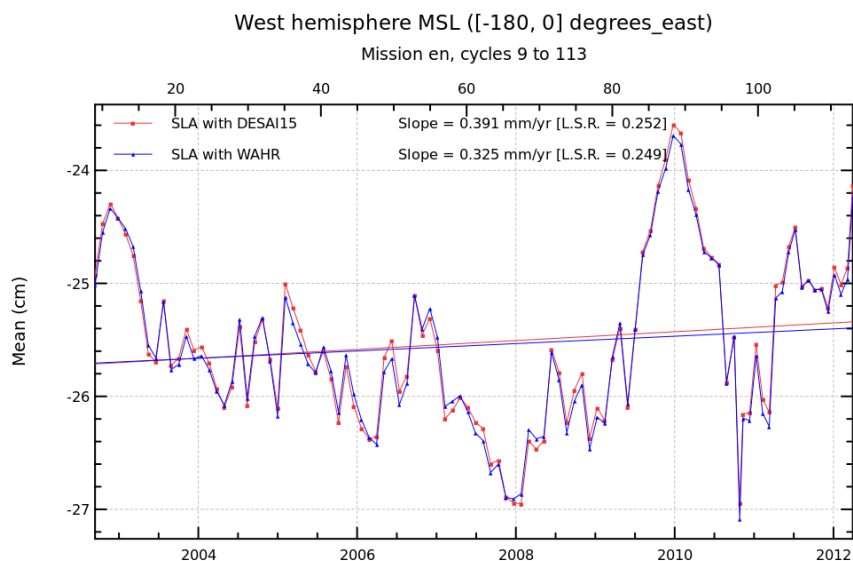
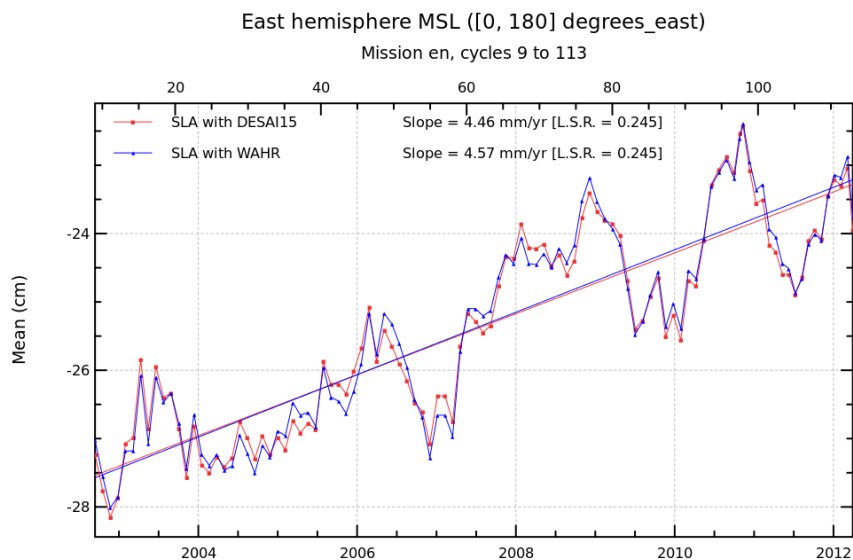
Diagnostic A201_d (mission en)

Name : Temporal evolution of Sea Level Anomaly (SLA)

Input data : Along track SLA

Description : The temporal evolution of SLA statistics (mean, standard deviation) are calculated from a cyclic way (altimeter repetivity, daily, weekly, monthly) using successively both altimetric components in the SLA calculation. These statistics are calculated from 1 Hz altimetric measurements after removing spurious sea level measurements. They are calculated globally, but also separating ascending and descending passes, or separating North and South hemispheres.

Diagnostic type : Mono-mission analyses



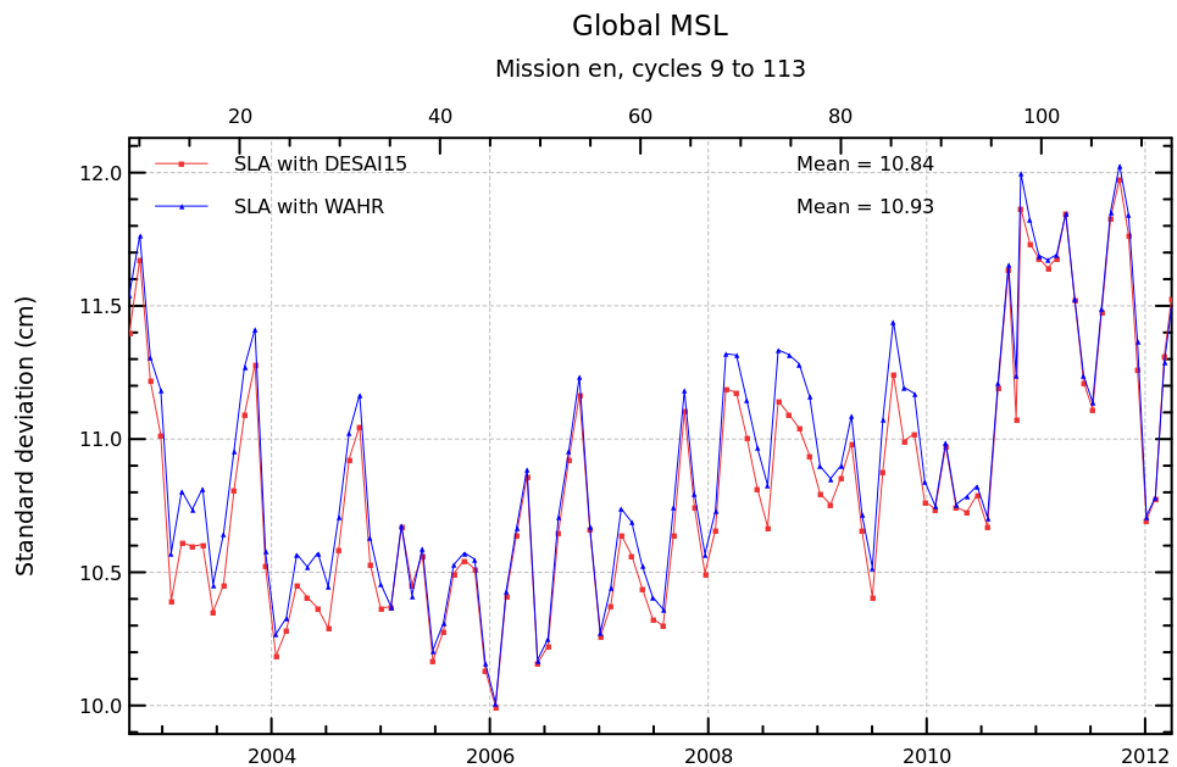
Diagnostic A201_e (mission en)

Name : Temporal evolution of Sea Level Anomaly (SLA)

Input data : Along track SLA

Description : The temporal evolution of SLA statistics (mean, standard deviation) are calculated from a cyclic way (altimeter repetivity, daily, weekly, monthly) using successively both altimetric components in the SLA calculation. These statistics are calculated from 1 Hz altimetric measurements after removing spurious sea level measurements. They are calculated globally, but also separating ascending and descending passes, or separating North and South hemispheres.

Diagnostic type : Mono-mission analyses



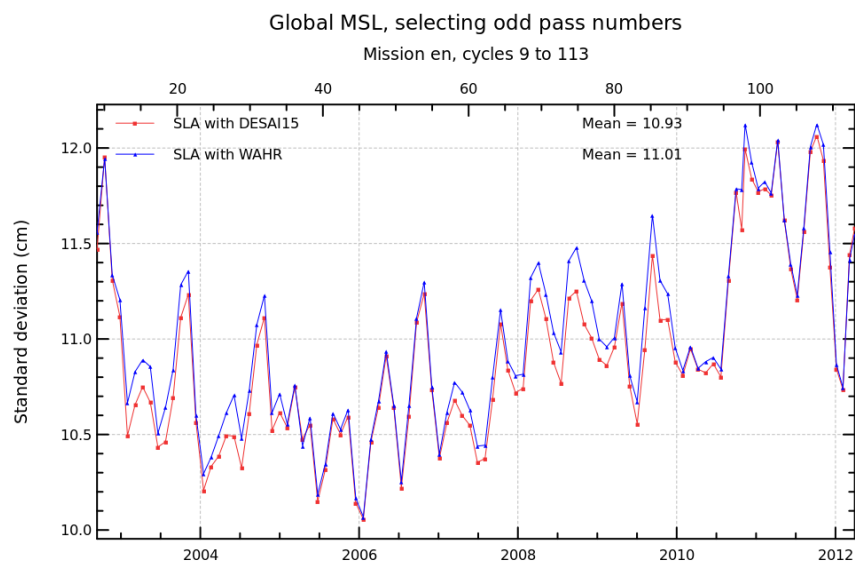
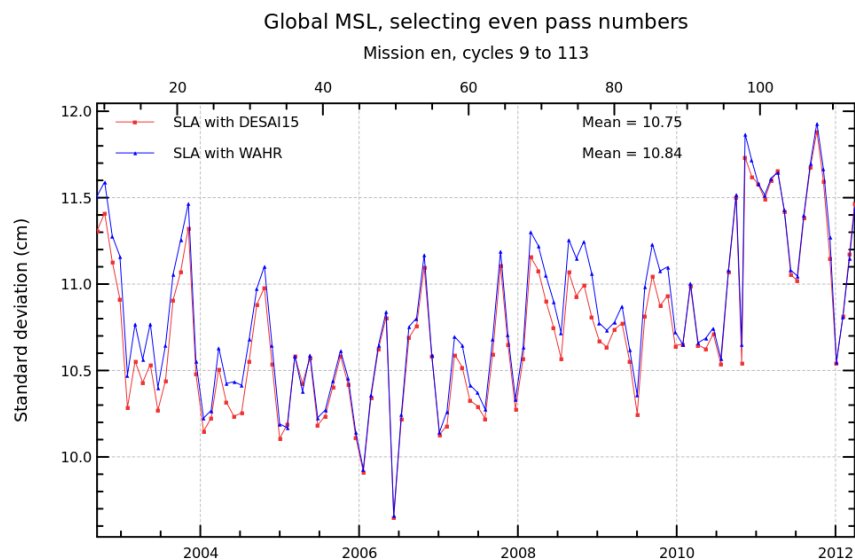
Diagnostic A201_f (mission en)

Name : Temporal evolution of Sea Level Anomaly (SLA)

Input data : Along track SLA

Description : The temporal evolution of SLA statistics (mean, standard deviation) are calculated from a cyclic way (altimeter repetivity, daily, weekly, monthly) using successively both altimetric components in the SLA calculation. These statistics are calculated from 1 Hz altimetric measurements after removing spurious sea level measurements. They are calculated globally, but also separating ascending and descending passes, or separating North and South hemispheres.

Diagnostic type : Mono-mission analyses



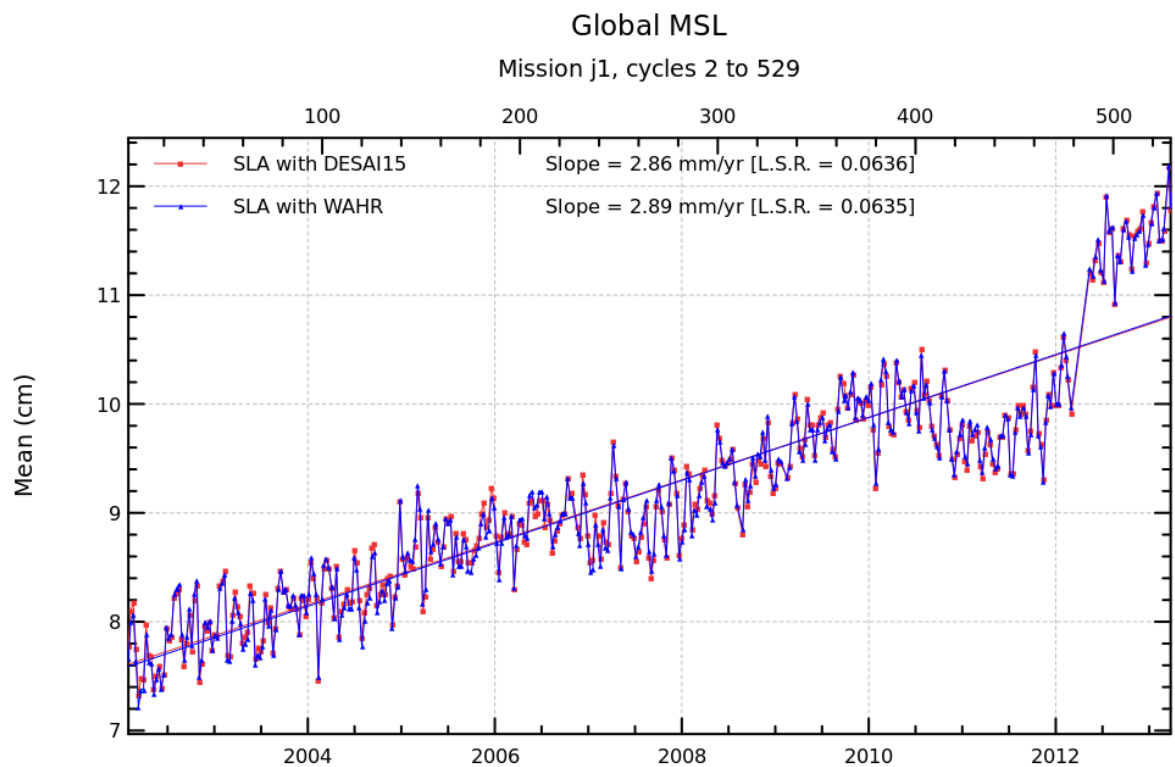
Diagnostic A201_a (mission j1)

Name : Temporal evolution of Sea Level Anomaly (SLA)

Input data : Along track SLA

Description : The temporal evolution of SLA statistics (mean, standard deviation) are calculated from a cyclic way (altimeter repetivity, daily, weekly, monthly) using successively both altimetric components in the SLA calculation. These statistics are calculated from 1 Hz altimetric measurements after removing spurious sea level measurements. They are calculated globally, but also separating ascending and descending passes, or separating North and South hemispheres.

Diagnostic type : Mono-mission analyses



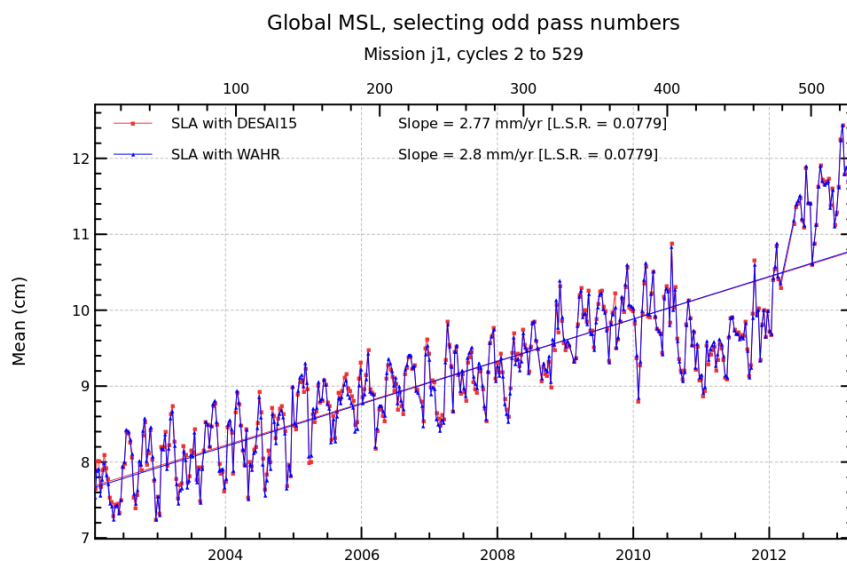
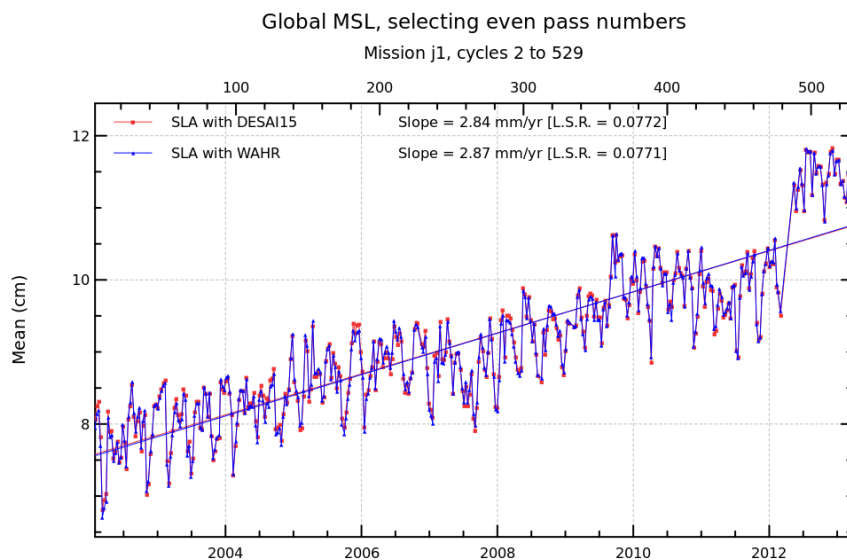
Diagnostic A201_b (mission j1)

Name : Temporal evolution of Sea Level Anomaly (SLA)

Input data : Along track SLA

Description : The temporal evolution of SLA statistics (mean, standard deviation) are calculated from a cyclic way (altimeter repetivity, daily, weekly, monthly) using successively both altimetric components in the SLA calculation. These statistics are calculated from 1 Hz altimetric measurements after removing spurious sea level measurements. They are calculated globally, but also separating ascending and descending passes, or separating North and South hemispheres.

Diagnostic type : Mono-mission analyses



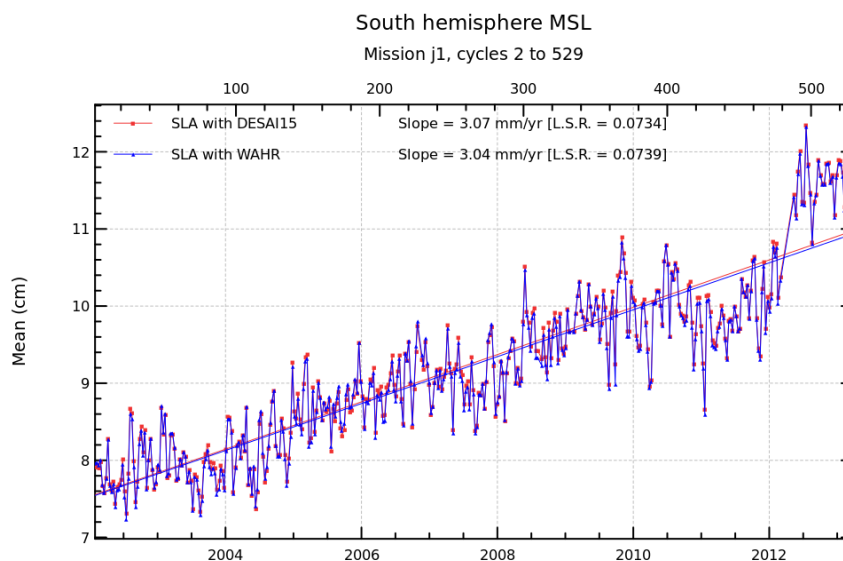
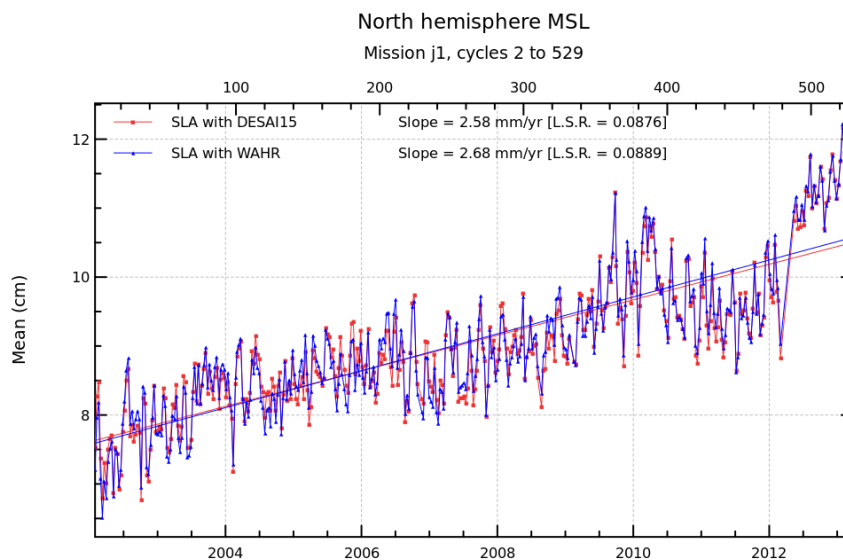
Diagnostic A201_c (mission j1)

Name : Temporal evolution of Sea Level Anomaly (SLA)

Input data : Along track SLA

Description : The temporal evolution of SLA statistics (mean, standard deviation) are calculated from a cyclic way (altimeter repetitivity, daily, weekly, monthly) using successively both altimetric components in the SLA calculation. These statistics are calculated from 1 Hz altimetric measurements after removing spurious sea level measurements. They are calculated globally, but also separating ascending and descending passes, or separating North and South hemispheres.

Diagnostic type : Mono-mission analyses



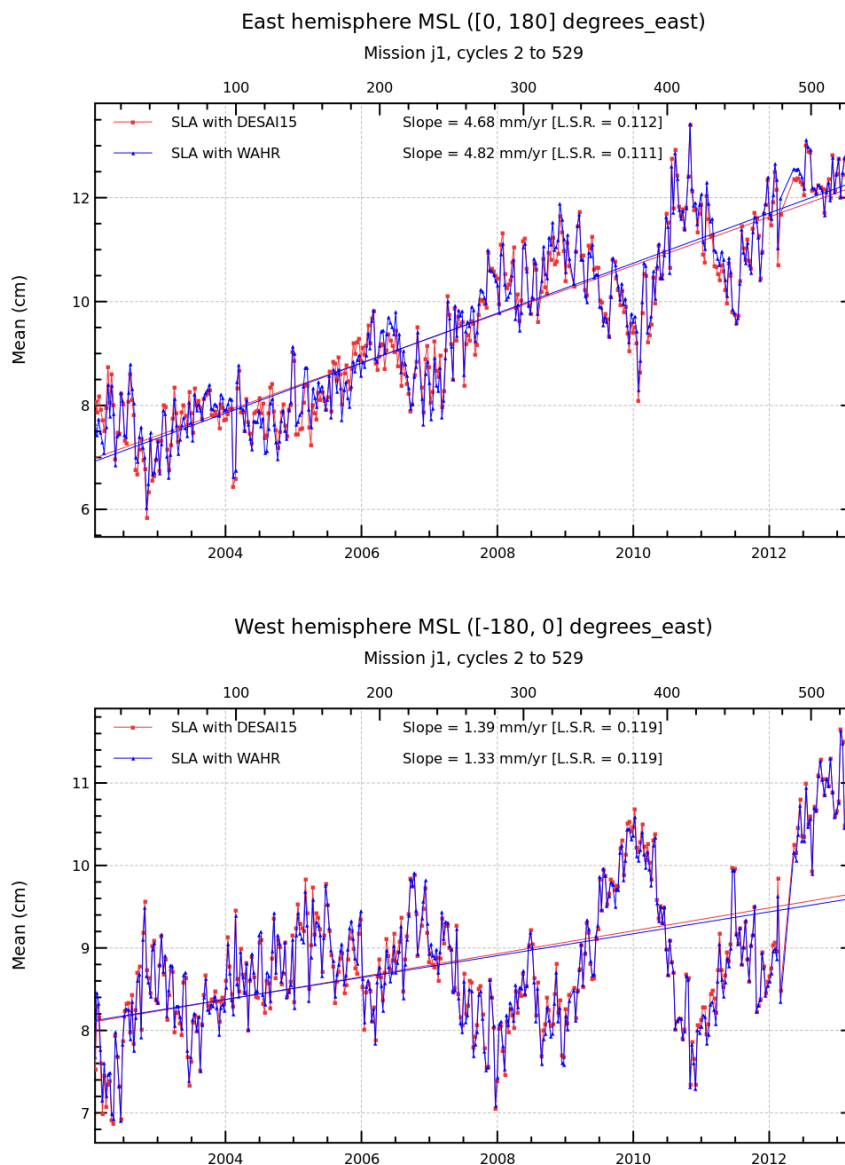
Diagnostic A201_d (mission j1)

Name : Temporal evolution of Sea Level Anomaly (SLA)

Input data : Along track SLA

Description : The temporal evolution of SLA statistics (mean, standard deviation) are calculated from a cyclic way (altimeter repetivity, daily, weekly, monthly) using successively both altimetric components in the SLA calculation. These statistics are calculated from 1 Hz altimetric measurements after removing spurious sea level measurements. They are calculated globally, but also separating ascending and descending passes, or separating North and South hemispheres.

Diagnostic type : Mono-mission analyses



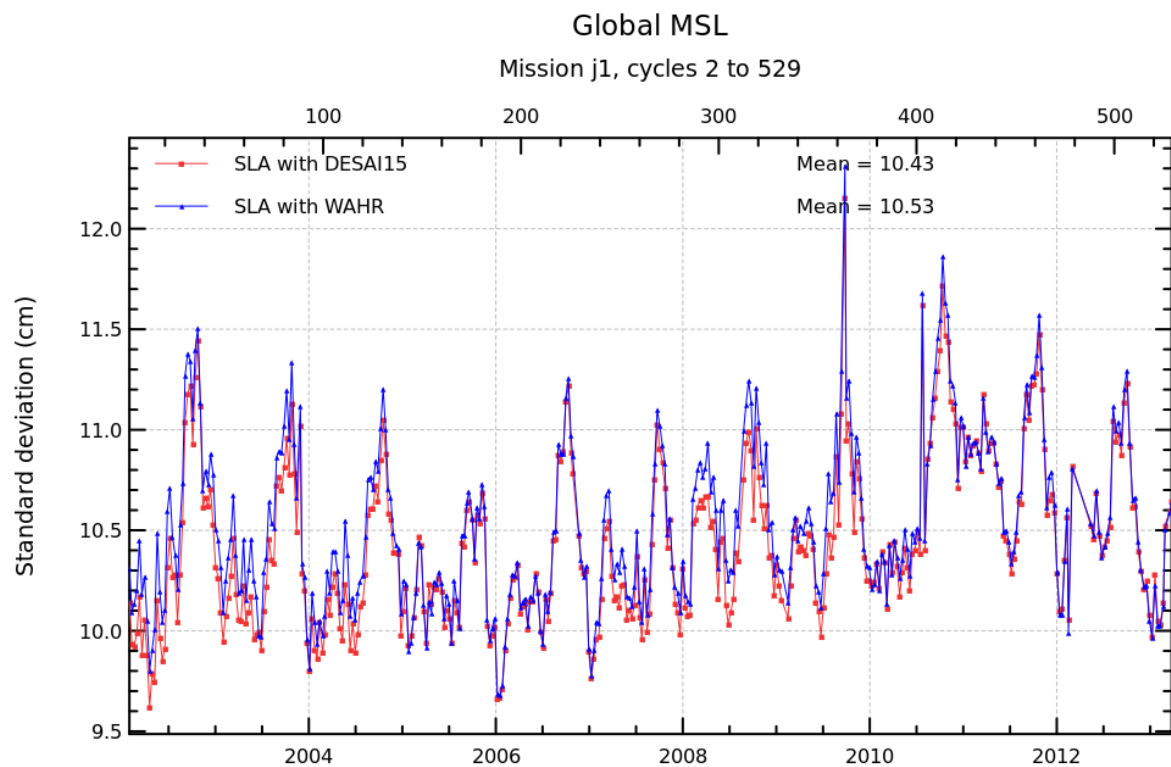
Diagnostic A201_e (mission j1)

Name : Temporal evolution of Sea Level Anomaly (SLA)

Input data : Along track SLA

Description : The temporal evolution of SLA statistics (mean, standard deviation) are calculated from a cyclic way (altimeter repetivity, daily, weekly, monthly) using successively both altimetric components in the SLA calculation. These statistics are calculated from 1 Hz altimetric measurements after removing spurious sea level measurements. They are calculated globally, but also separating ascending and descending passes, or separating North and South hemispheres.

Diagnostic type : Mono-mission analyses



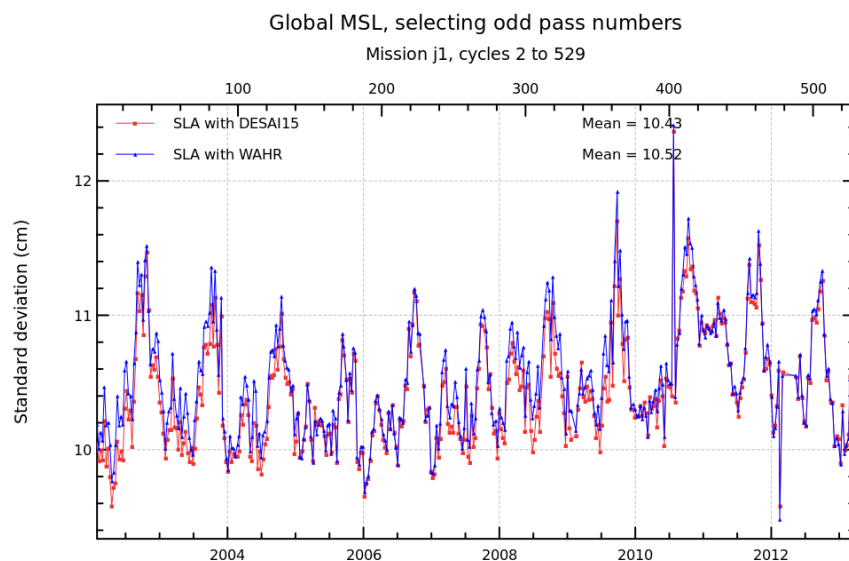
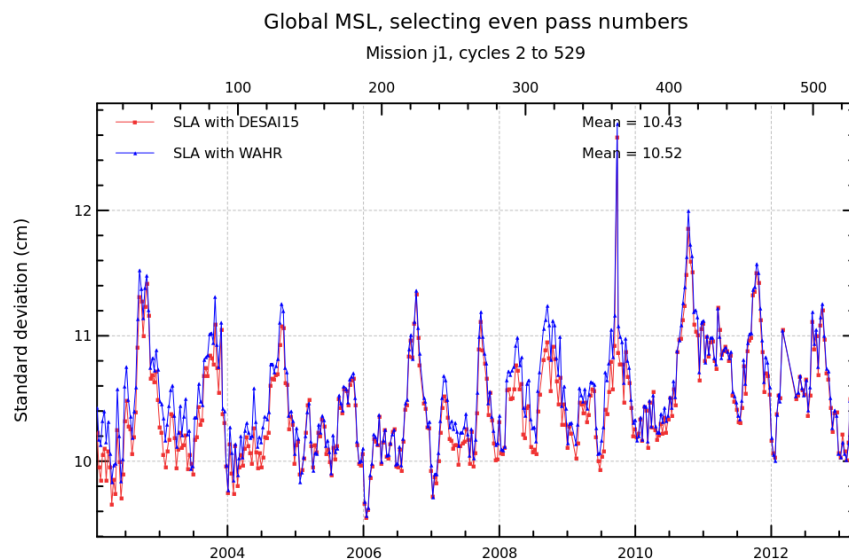
Diagnostic A201_f (mission j1)

Name : Temporal evolution of Sea Level Anomaly (SLA)

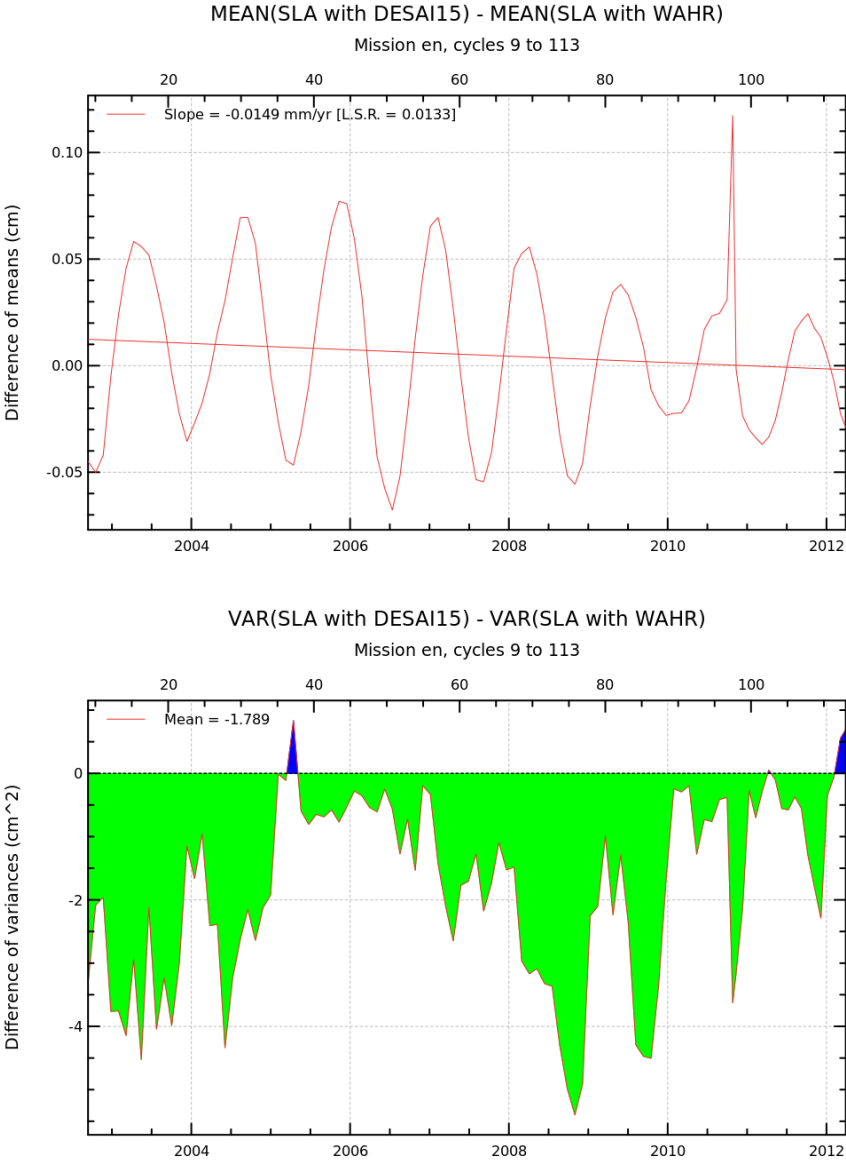
Input data : Along track SLA

Description : The temporal evolution of SLA statistics (mean, standard deviation) are calculated from a cyclic way (altimeter repetivity, daily, weekly, monthly) using successively both altimetric components in the SLA calculation. These statistics are calculated from 1 Hz altimetric measurements after removing spurious sea level measurements. They are calculated globally, but also separating ascending and descending passes, or separating North and South hemispheres.

Diagnostic type : Mono-mission analyses



Diagnostic A202_a (mission en)	
Name : Differences between temporal evolution of Sea Level Anomaly (SLA)	
Input data : Along track SLA	
Description : The differences between temporal evolution of SLA are calculated from statistics derived from diagnostic A201 (mean, variance) using 2 different components in the SLA calculation. They are calculated globally, but also separating ascending and descending passes or separating North and South hemispheres.	



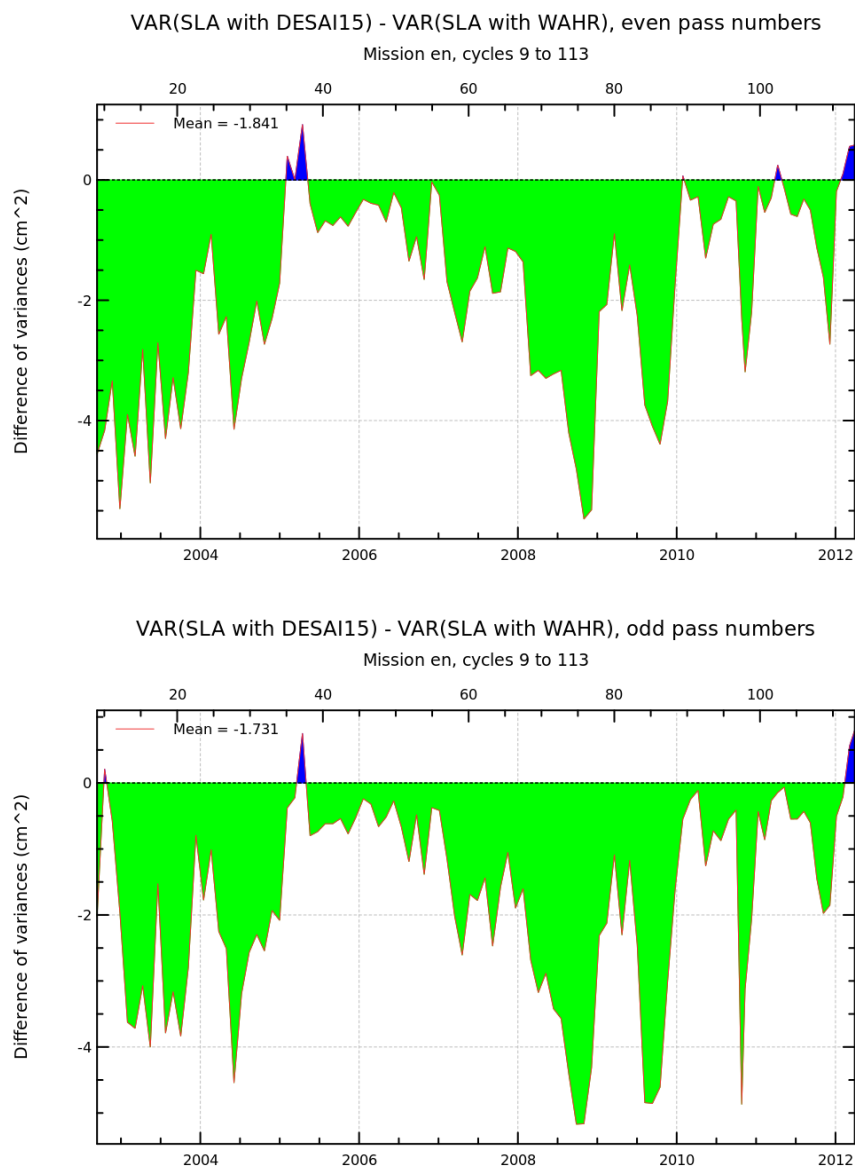
Diagnostic A202_b (mission en)

Name : Differences between temporal evolution of Sea Level Anomaly (SLA)

Input data : Along track SLA

Description : The differences between temporal evolution of SLA are calculated from statistics derived from diagnostic A201 (mean, variance) using 2 different components in the SLA calculation. They are calculated globally, but also separating ascending and descending passes or separating North and South hemispheres.

Diagnostic type : Mono-mission analyses



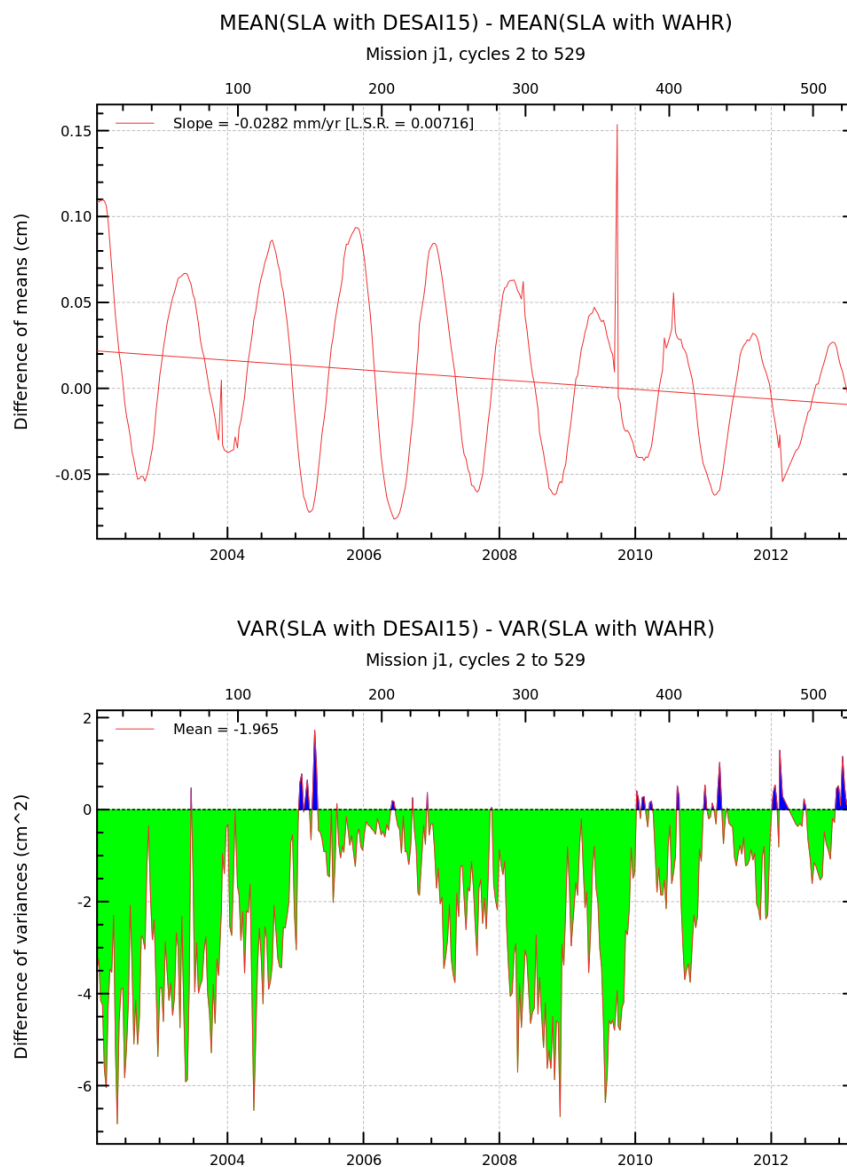
Diagnostic A202_a (mission j1)

Name : Differences between temporal evolution of Sea Level Anomaly (SLA)

Input data : Along track SLA

Description : The differences between temporal evolution of SLA are calculated from statistics derived from diagnostic A201 (mean, variance) using 2 different components in the SLA calculation. They are calculated globally, but also separating ascending and descending passes or separating North and South hemispheres.

Diagnostic type : Mono-mission analyses



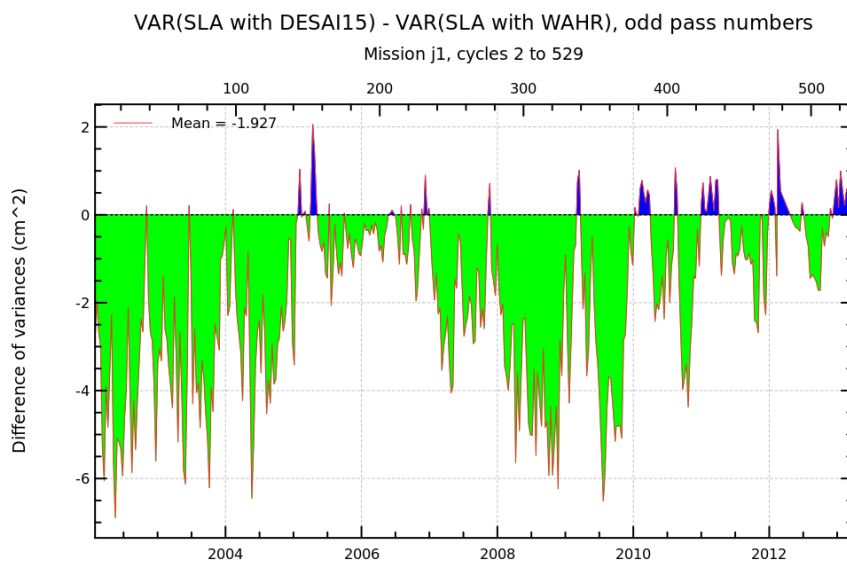
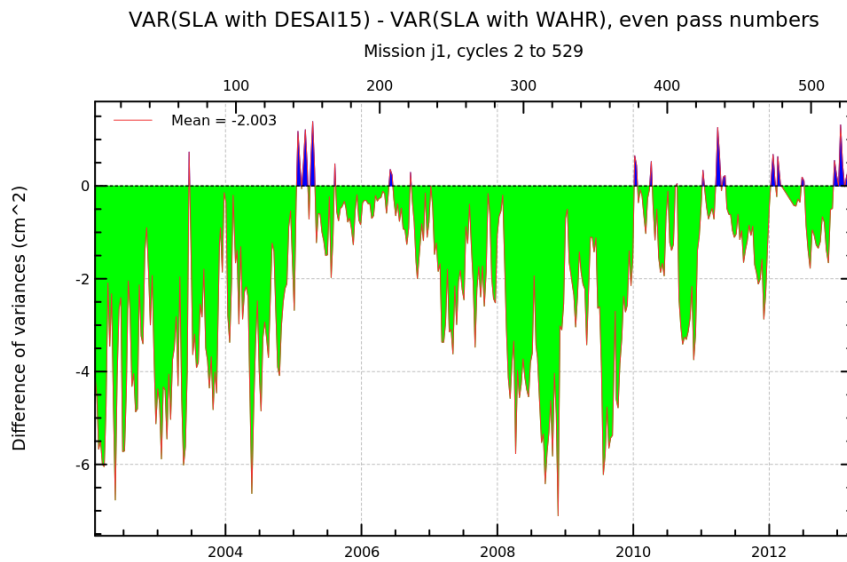
Diagnostic A202_b (mission j1)

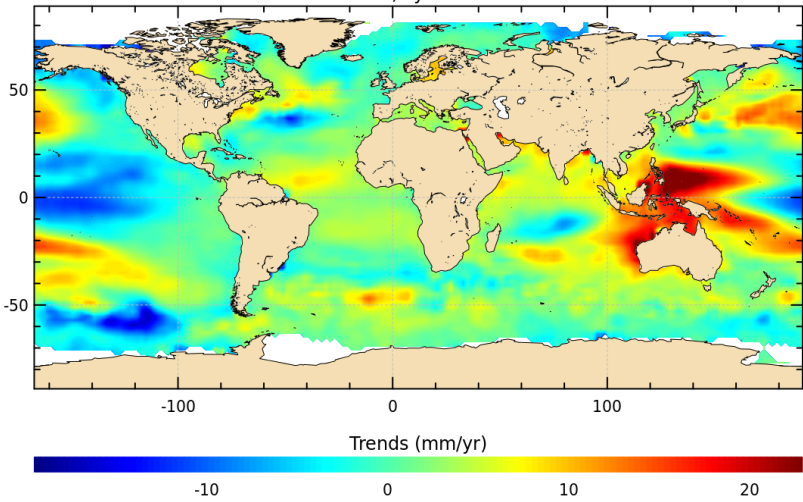
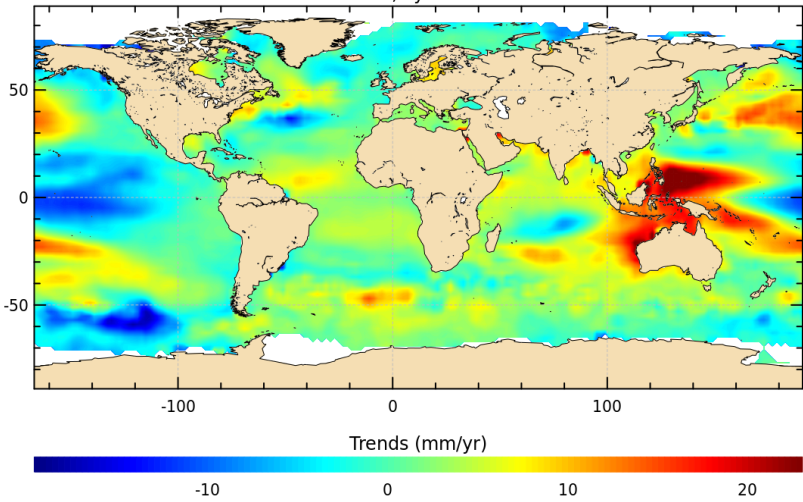
Name : Differences between temporal evolution of Sea Level Anomaly (SLA)

Input data : Along track SLA

Description : The differences between temporal evolution of SLA are calculated from statistics derived from diagnostic A201 (mean, variance) using 2 different components in the SLA calculation. They are calculated globally, but also separating ascending and descending passes or separating North and South hemispheres.

Diagnostic type : Mono-mission analyses



Diagnostic type : Mono-mission analyses	Diagnostic A203_a (mission en)	
	Name : Map of Sea Level Anomaly (SLA) over all the period	
	Input data : Along track SLA	
	Description : The map of global statistics (mean, standard deviation) of SLA are calculated using successively both altimetric components in the SLA calculation over a large period. These statistics are calculated from 1 Hz altimetric measurements after removing spurious sea level measurements.	
	<div>SLA with DESAI15 trends Mission en, cycles 9 to 113</div>  <div>SLA with WAHR trends Mission en, cycles 9 to 113</div> 	

Diagnostic A203_b (mission en)

Name : Map of Sea Level Anomaly (SLA) over all the period

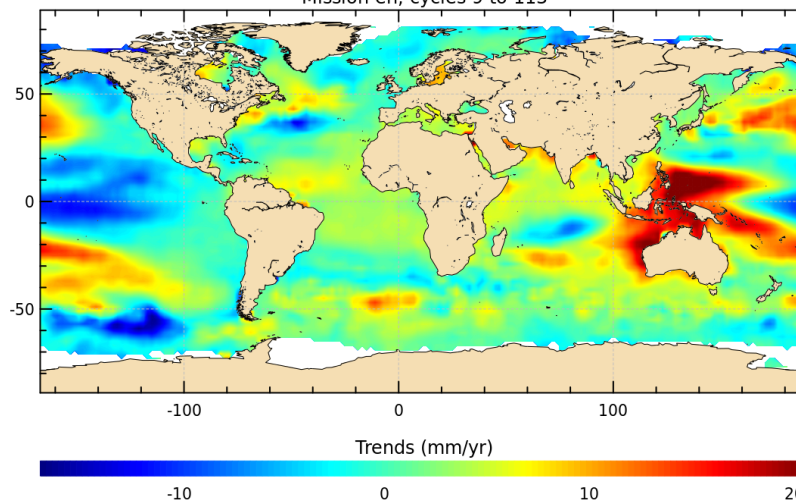
Input data : Along track SLA

Description : The map of global statistics (mean, standard deviation) of SLA are calculated using successively both altimetric components in the SLA calculation over a large period. These statistics are calculated from 1 Hz altimetric measurements after removing spurious sea level measurements.

Diagnostic type : Mono-mission analyses

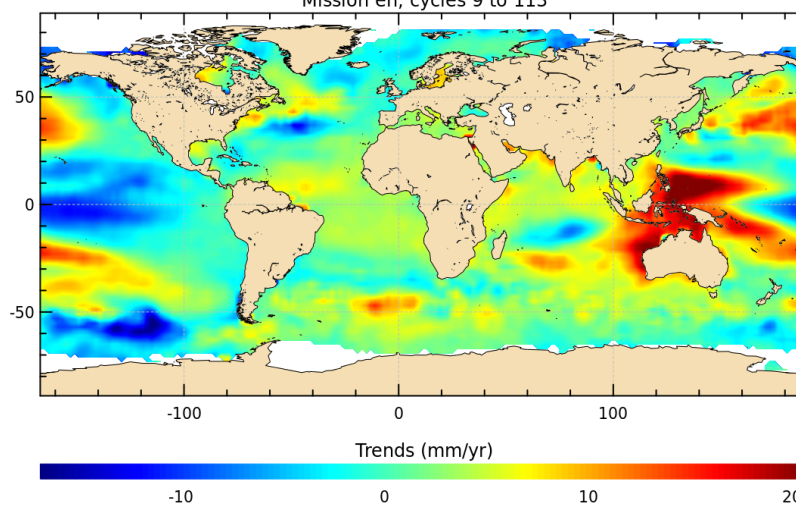
SLA with DESAI15 trends : even pass numbers

Mission en, cycles 9 to 113



SLA with WAHR trends : even pass numbers

Mission en, cycles 9 to 113



Diagnostic A203_c (mission en)

Name : Map of Sea Level Anomaly (SLA) over all the period

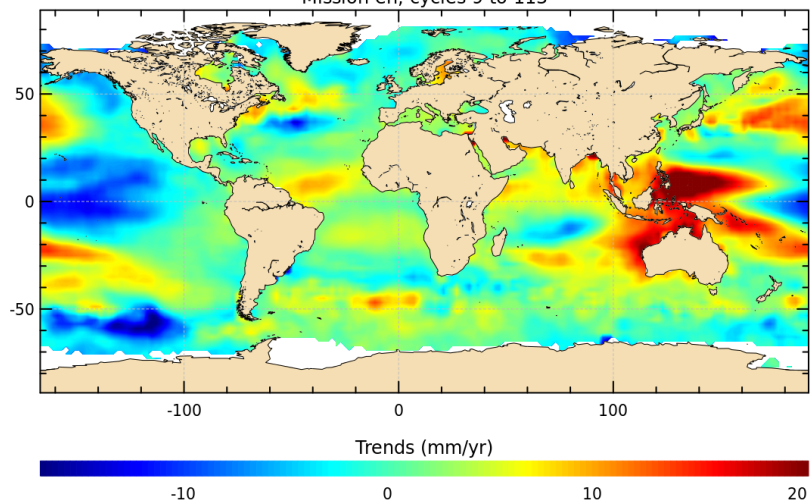
Input data : Along track SLA

Description : The map of global statistics (mean, standard deviation) of SLA are calculated using successively both altimetric components in the SLA calculation over a large period. These statistics are calculated from 1 Hz altimetric measurements after removing spurious sea level measurements.

Diagnostic type : Mono-mission analyses

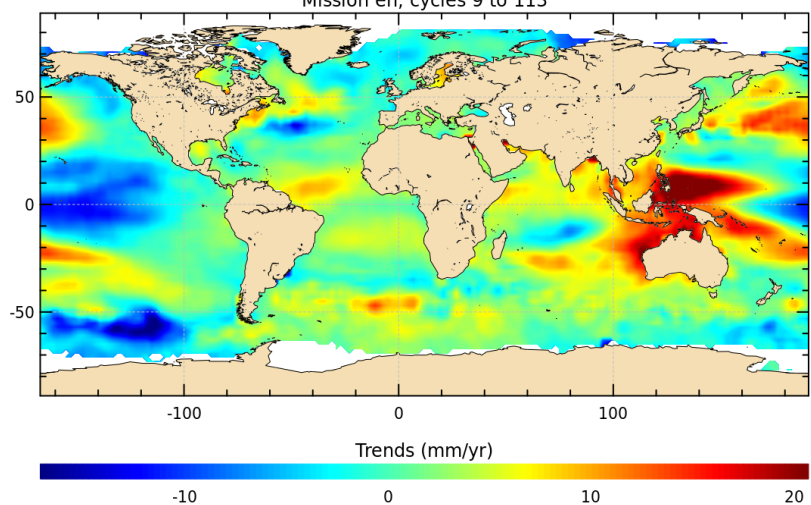
SLA with DESAI15 trends : odd pass numbers

Mission en, cycles 9 to 113



SLA with WAHR trends : odd pass numbers

Mission en, cycles 9 to 113



Diagnostic A203_a (mission j1)

Name : Map of Sea Level Anomaly (SLA) over all the period

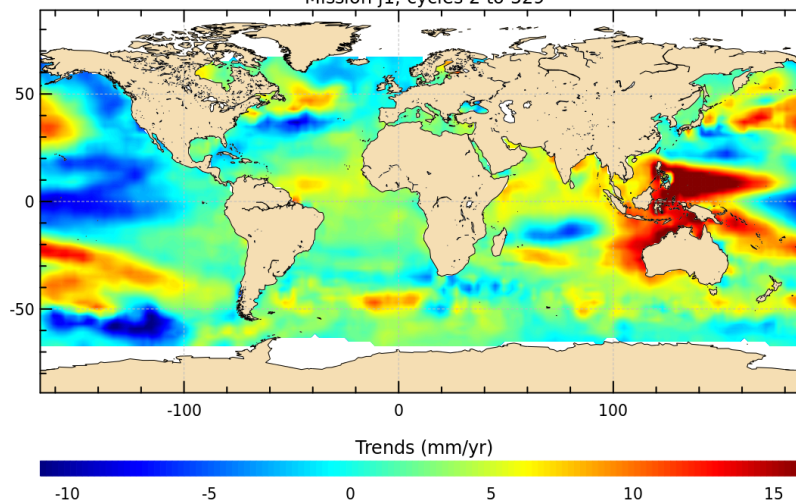
Input data : Along track SLA

Description : The map of global statistics (mean, standard deviation) of SLA are calculated using successively both altimetric components in the SLA calculation over a large period. These statistics are calculated from 1 Hz altimetric measurements after removing spurious sea level measurements.

Diagnostic type : Mono-mission analyses

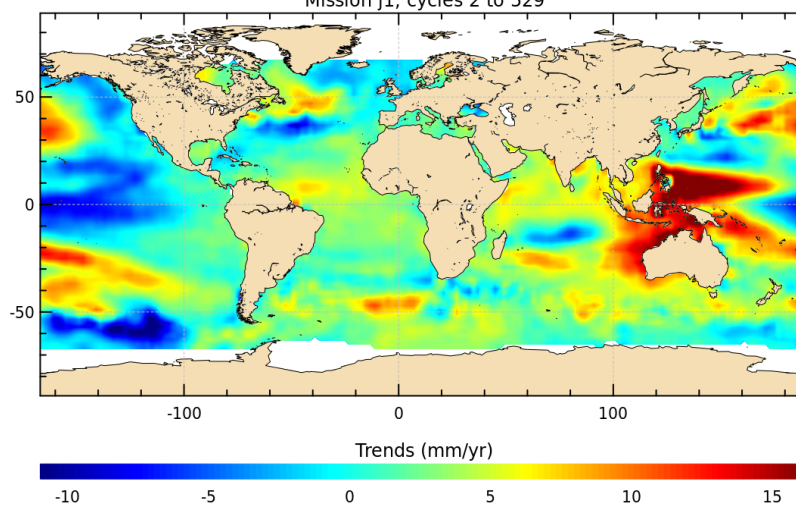
SLA with DESAI15 trends

Mission j1, cycles 2 to 529



SLA with WAHR trends

Mission j1, cycles 2 to 529



Diagnostic A203_b (mission j1)

Name : Map of Sea Level Anomaly (SLA) over all the period

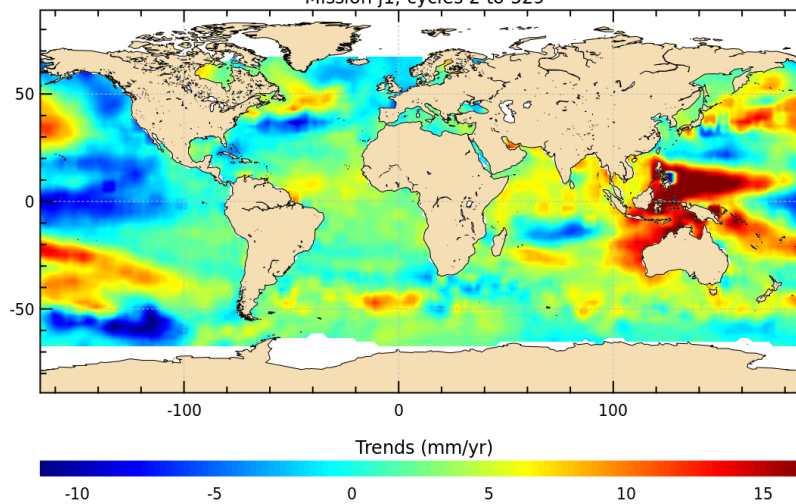
Input data : Along track SLA

Description : The map of global statistics (mean, standard deviation) of SLA are calculated using successively both altimetric components in the SLA calculation over a large period. These statistics are calculated from 1 Hz altimetric measurements after removing spurious sea level measurements.

Diagnostic type : Mono-mission analyses

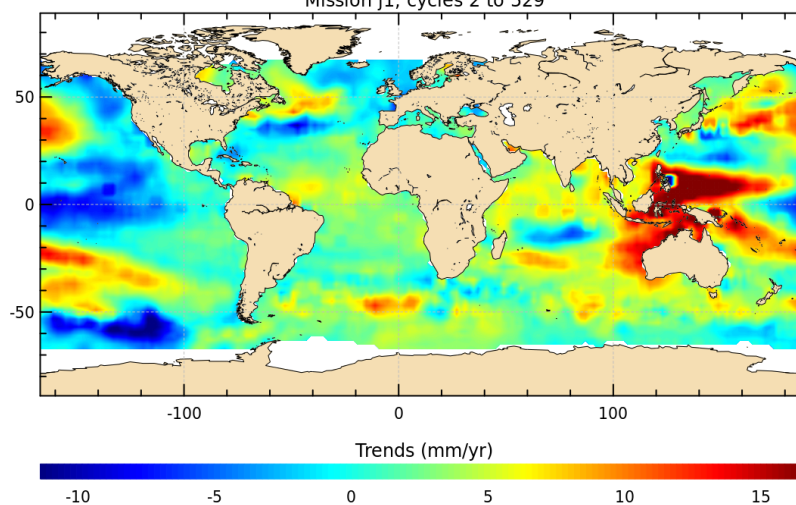
SLA with DESAI15 trends : even pass numbers

Mission j1, cycles 2 to 529



SLA with WAHR trends : even pass numbers

Mission j1, cycles 2 to 529



Diagnostic A203_c (mission j1)

Name : Map of Sea Level Anomaly (SLA) over all the period

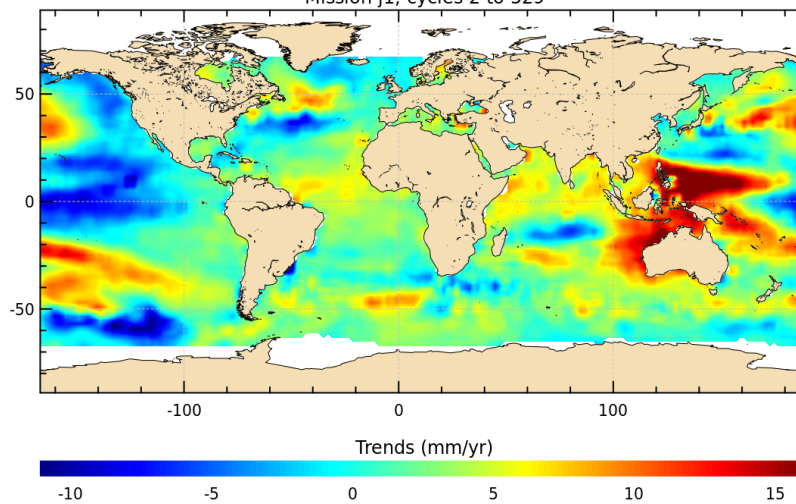
Input data : Along track SLA

Description : The map of global statistics (mean, standard deviation) of SLA are calculated using successively both altimetric components in the SLA calculation over a large period. These statistics are calculated from 1 Hz altimetric measurements after removing spurious sea level measurements.

Diagnostic type : Mono-mission analyses

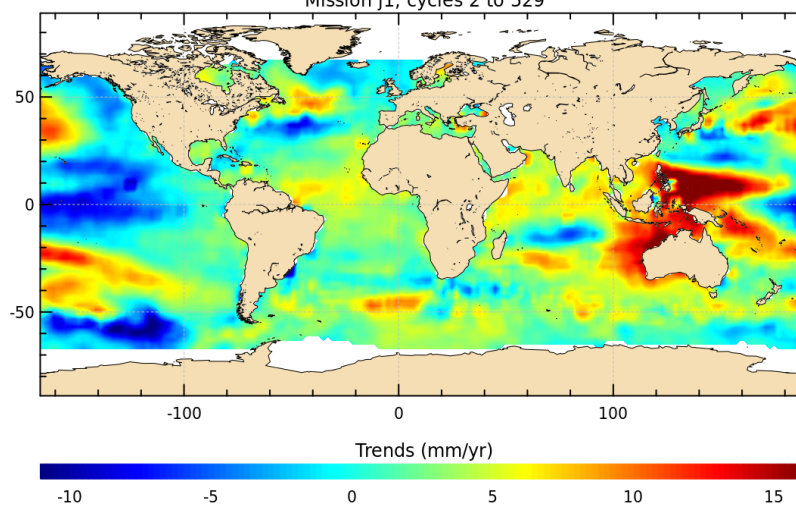
SLA with DESAI15 trends : odd pass numbers

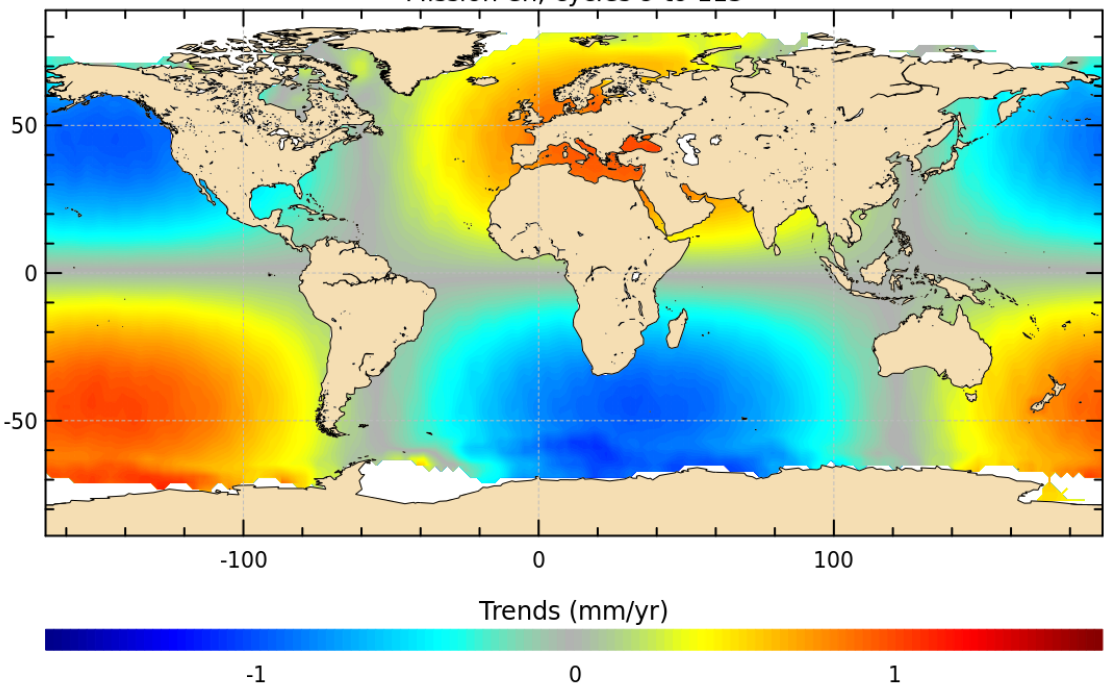
Mission j1, cycles 2 to 529



SLA with WAHR trends : odd pass numbers

Mission j1, cycles 2 to 529



Diagnostic type : Mono-mission analyses	Diagnostic A204 a (mission en)
	Name : Differences between maps of SLA trends
	Input data : Along track SLA
	Description : The difference of SLA maps (mean, standard deviation, slope) is calculated from maps derived from diagnostic A203 using successively both altimetric components in the SLA calculation over a given period. This can be done globally, or separating in ascending and descending passes (except for SLA Grids).
	<div><p>SLA with DESAI15 trends - SLA with WAHR trends</p><p>Mission en, cycles 9 to 113</p></div>

Diagnostic A204.b (mission en)

Name : Differences between maps of SLA trends

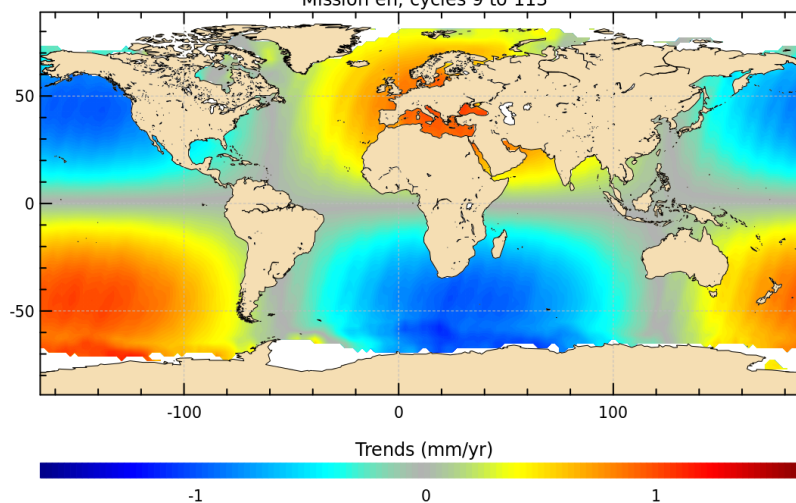
Input data : Along track SLA

Description : The difference of SLA maps (mean, standard deviation, slope) is calculated from maps derived from diagnostic A203 using successively both altimetric components in the SLA calculation over a given period. This can be done globally, or separating in ascending and descending passes (except for SLA Grids).

Diagnostic type : Mono-mission analyses

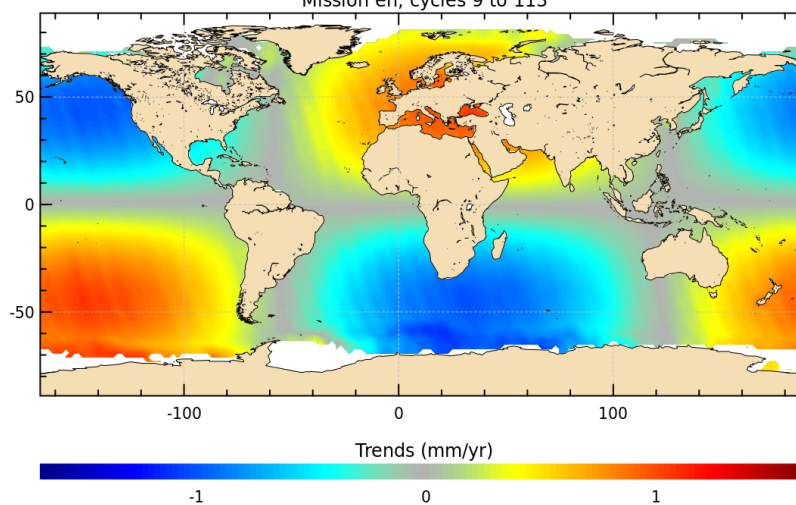
SLA with DESAI15 trends - SLA with WAHR trends : even pass numbers

Mission en, cycles 9 to 113



SLA with DESAI15 trends - SLA with WAHR trends : odd pass numbers

Mission en, cycles 9 to 113



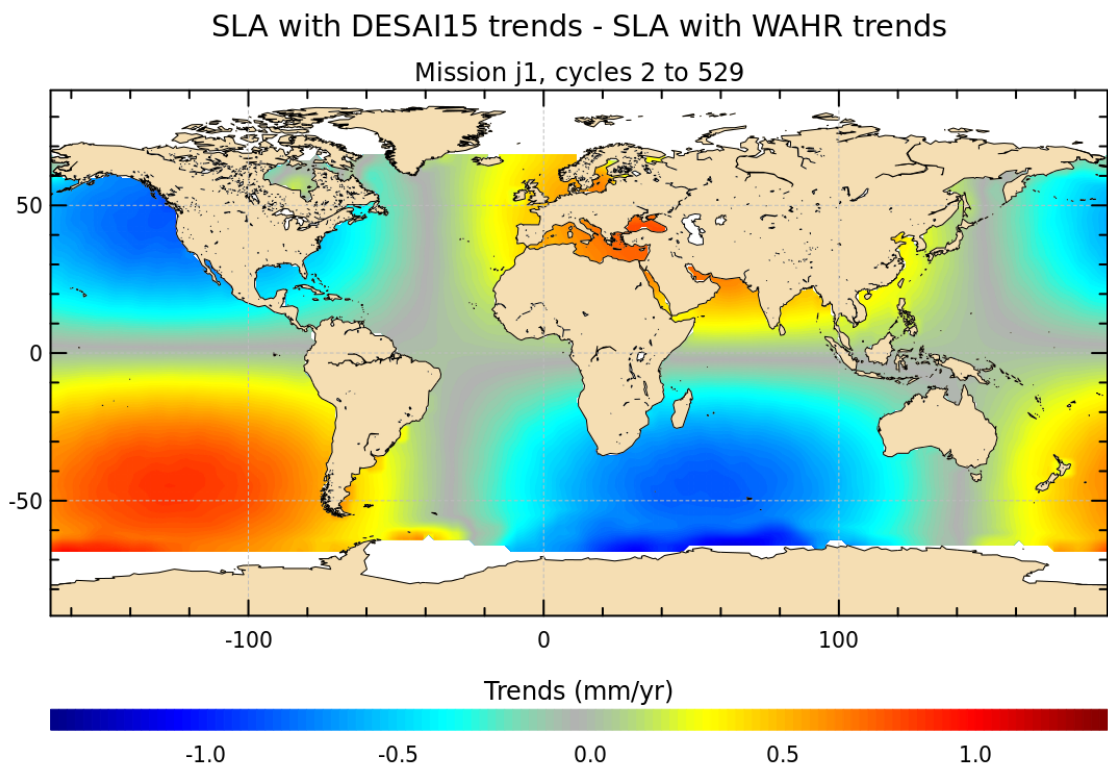
Diagnostic A204_a (mission j1)

Name : Differences between maps of SLA trends

Input data : Along track SLA

Description : The difference of SLA maps (mean, standard deviation, slope) is calculated from maps derived from diagnostic A203 using successively both altimetric components in the SLA calculation over a given period. This can be done globally, or separating in ascending and descending passes (except for SLA Grids).

Diagnostic type : Mono-mission analyses



Diagnostic A204_b (mission j1)

Name : Differences between maps of SLA trends

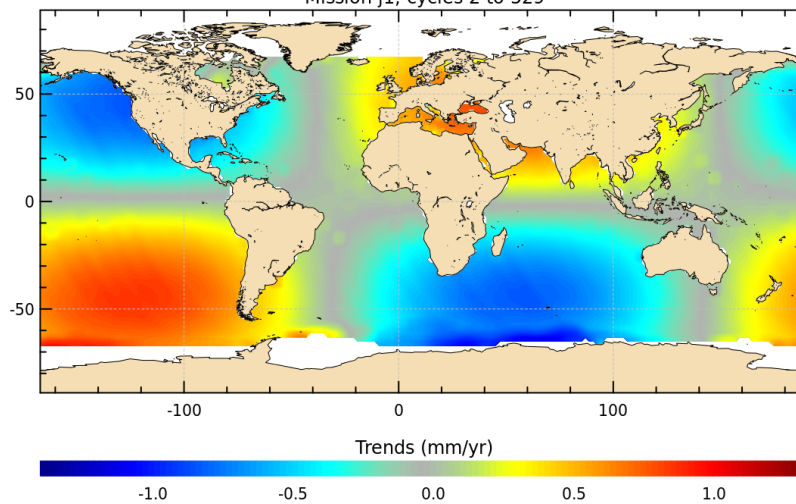
Input data : Along track SLA

Description : The difference of SLA maps (mean, standard deviation, slope) is calculated from maps derived from diagnostic A203 using successively both altimetric components in the SLA calculation over a given period. This can be done globally, or separating in ascending and descending passes (except for SLA Grids).

Diagnostic type : Mono-mission analyses

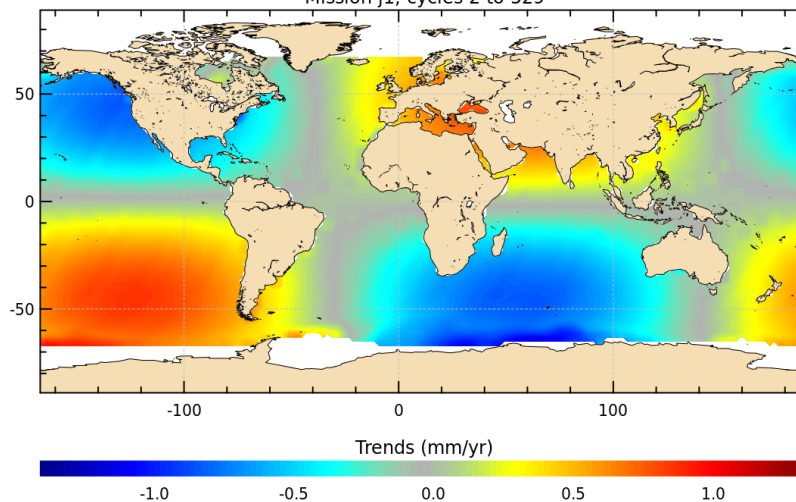
SLA with DESAI15 trends - SLA with WAHR trends : even pass numbers

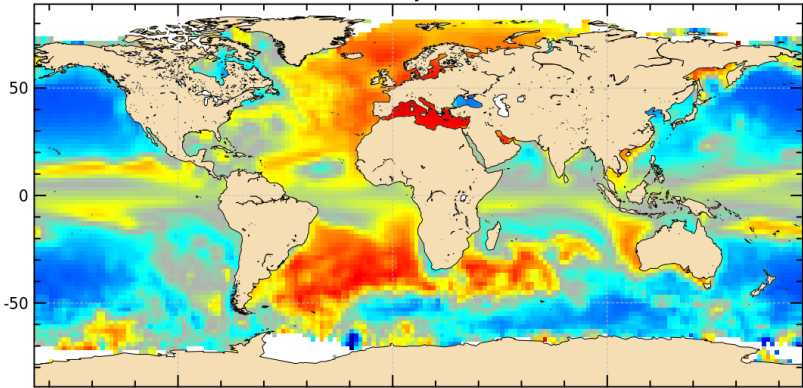
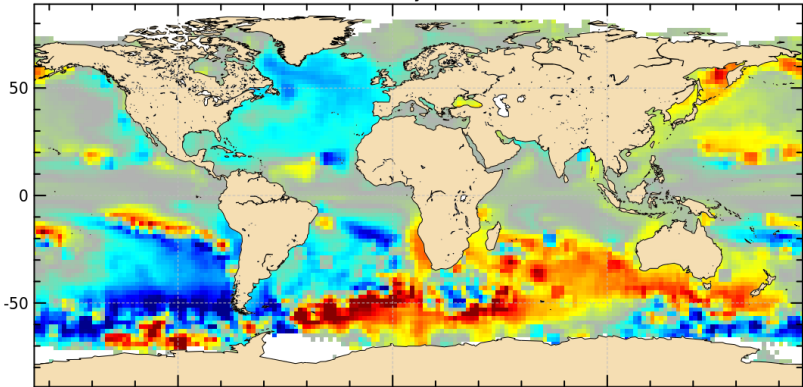
Mission j1, cycles 2 to 529



SLA with DESAI15 trends - SLA with WAHR trends : odd pass numbers

Mission j1, cycles 2 to 529



Diagnostic type : Mono-mission analyses	Diagnostic A205_a (mission en)	
	Name : Differences between maps of SLA amplitude and phase	
	Input data : Along track SLA	
	Description : The difference of SLA maps (mean, standard deviation, slope) is calculated from maps derived from diagnostic A203 using successively both altimetric components in the SLA calculation over a given period. This can be done globally, or separating in ascending and descending passes (except for SLA Grids).	
	<div>SLA with DESAI15 amplitude - SLA with WAHR amplitude : annual signal Mission en, cycles 9 to 113</div>  <div>Amplitude (cm)</div> <div>-2-1012</div> <div>SLA with DESAI15 phase - SLA with WAHR phase : annual signal Mission en, cycles 9 to 113</div>  <div>Phase (degree)</div> <div>-40-2002040</div>	

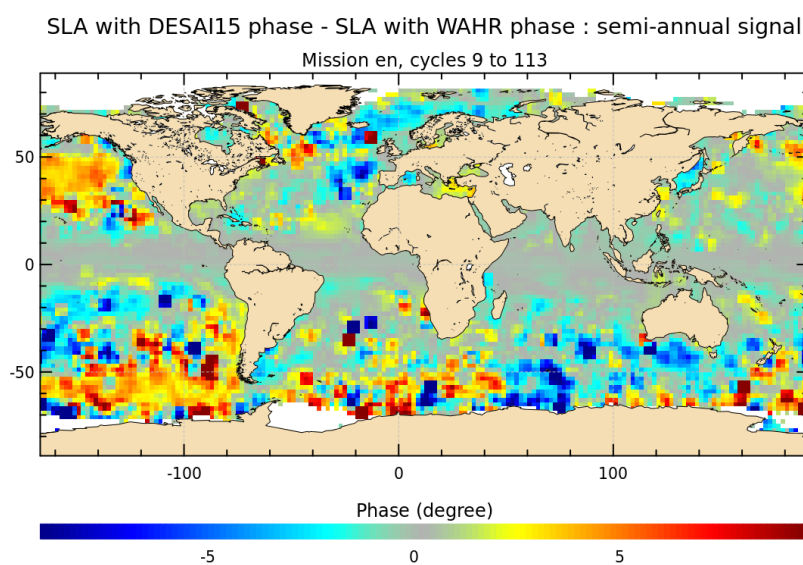
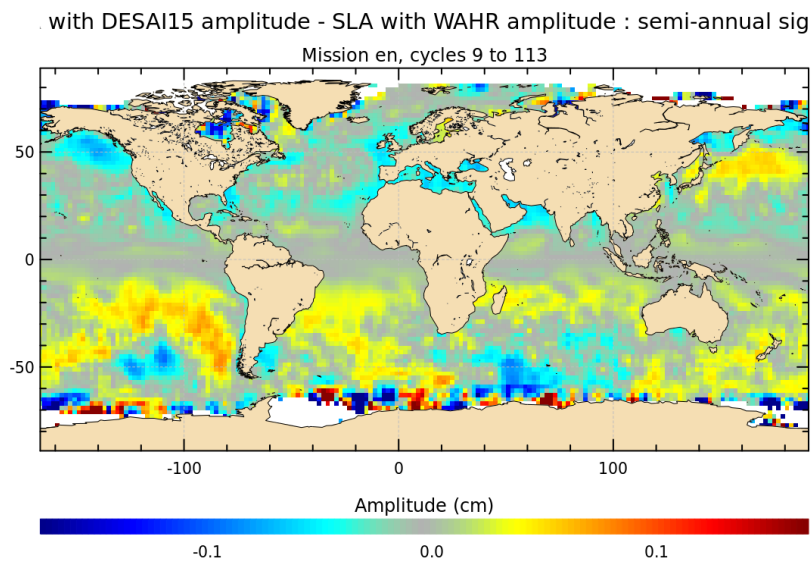
Diagnostic A205_b (mission en)

Name : Differences between maps of SLA amplitude and phase

Input data : Along track SLA

Description : The difference of SLA maps (mean, standard deviation, slope) is calculated from maps derived from diagnostic A203 using successively both altimetric components in the SLA calculation over a given period. This can be done globally, or separating in ascending and descending passes (except for SLA Grids).

Diagnostic type : Mono-mission analyses



Diagnostic A205_a (mission j1)

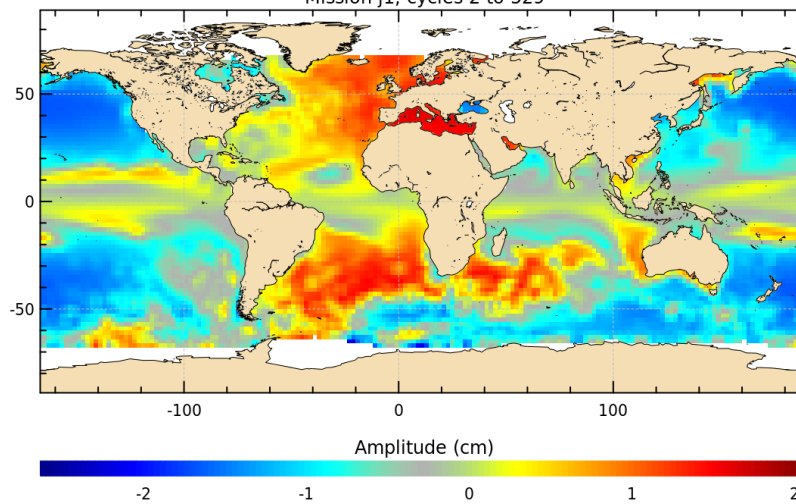
Name : Differences between maps of SLA amplitude and phase

Input data : Along track SLA

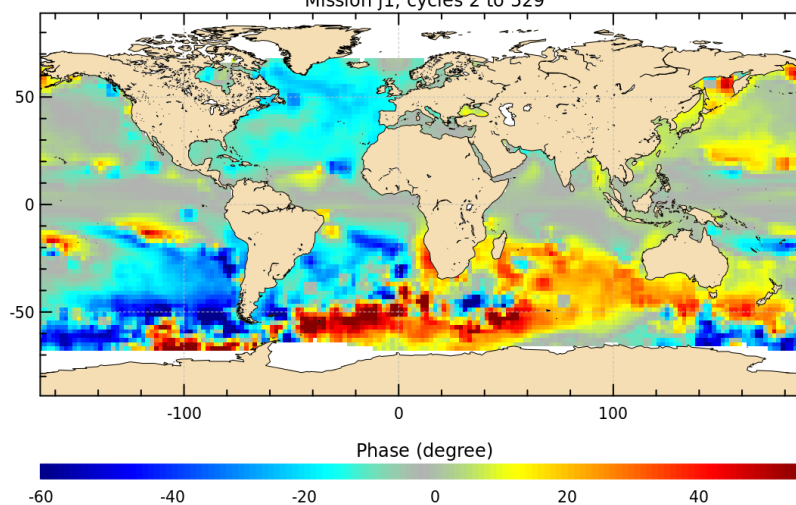
Description : The difference of SLA maps (mean, standard deviation, slope) is calculated from maps derived from diagnostic A203 using successively both altimetric components in the SLA calculation over a given period. This can be done globally, or separating in ascending and descending passes (except for SLA Grids).

Diagnostic type : Mono-mission analyses

SLA with DESAI15 amplitude - SLA with WAHR amplitude : annual signal
Mission j1, cycles 2 to 529



SLA with DESAI15 phase - SLA with WAHR phase : annual signal
Mission j1, cycles 2 to 529



Diagnostic A205_b (mission j1)

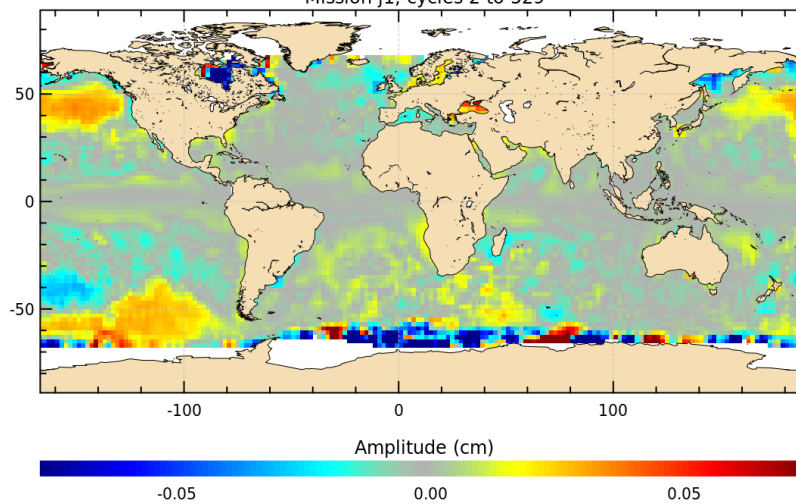
Name : Differences between maps of SLA amplitude and phase

Input data : Along track SLA

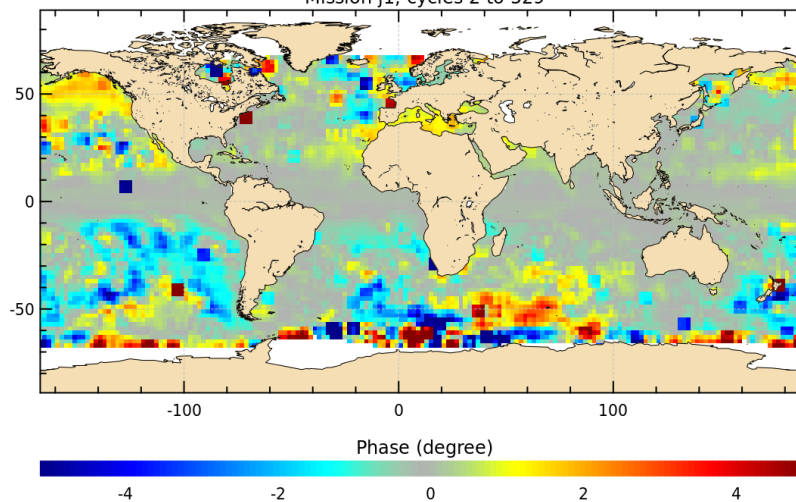
Description : The difference of SLA maps (mean, standard deviation, slope) is calculated from maps derived from diagnostic A203 using successively both altimetric components in the SLA calculation over a given period. This can be done globally, or separating in ascending and descending passes (except for SLA Grids).

Diagnostic type : Mono-mission analyses

with DESAI15 amplitude - SLA with WAHR amplitude : semi-annual sig
Mission j1, cycles 2 to 529



SLA with DESAI15 phase - SLA with WAHR phase : semi-annual signal
Mission j1, cycles 2 to 529



Diagnostic A206_a (mission en)	
Name : Periodogram derived from temporal evolution of Sea Level Anomaly (SLA)	
Input data : Along track SLA	
Description : The periodogram derived from temporal evolution of SLA (global, northern or southern hemisphere) can be done over all periods or focusing on particular periods, such as annual, semi annual or 60 day signal. Therefore mean of SLA differences are computed (every day or cycle), and time data series are plotted as a periodogram.	
<div>Periodogram of SLA (reference period = 1 year)</div> <div>Mission en, cycles 9 to 113</div> <p>This plot shows the amplitude of SLA in centimeters versus the period in days. The x-axis ranges from 300 to 450 days, and the y-axis ranges from 0.0 to 0.8 cm. Two data series are shown: 'SLA with DESAI15' (red line with square markers) and 'SLA with WAHR' (blue line with triangle markers). Both series show a prominent peak at approximately 365 days, which is marked by a vertical green line labeled '1 year'. The amplitude at this peak is approximately 0.75 cm. There are smaller peaks at shorter and longer periods.</p> <div>Periodogram of SLA (period = [0, 1 year])</div> <div>Mission en, cycles 9 to 113</div> <p>This plot shows the amplitude of SLA in centimeters versus the period in days for the range [0, 1 year]. The x-axis ranges from 0 to 350 days, and the y-axis ranges from 0.0 to 0.8 cm. The same two data series are shown: 'SLA with DESAI15' (red line with square markers) and 'SLA with WAHR' (blue line with triangle markers). The plot shows several smaller peaks, with the most significant ones occurring at periods around 100, 150, 200, and 300 days. The amplitude generally increases as the period approaches 350 days.</p>	

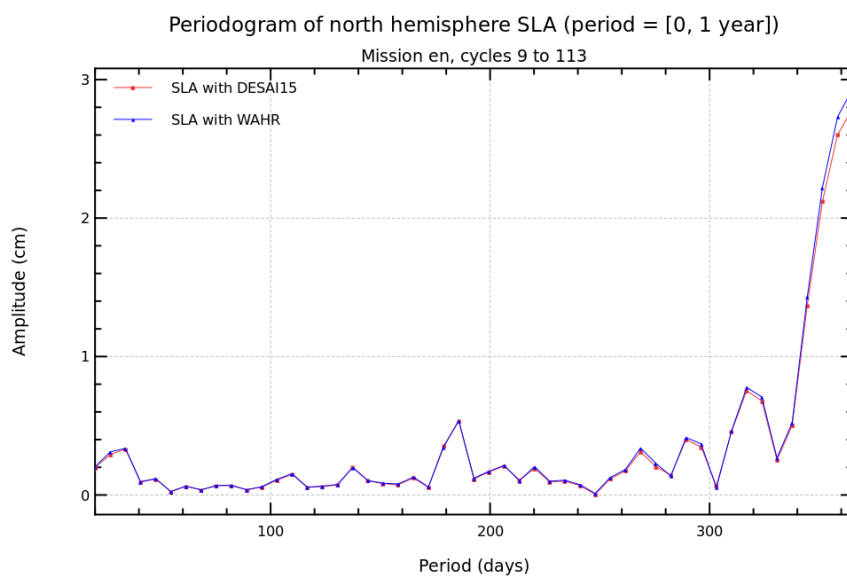
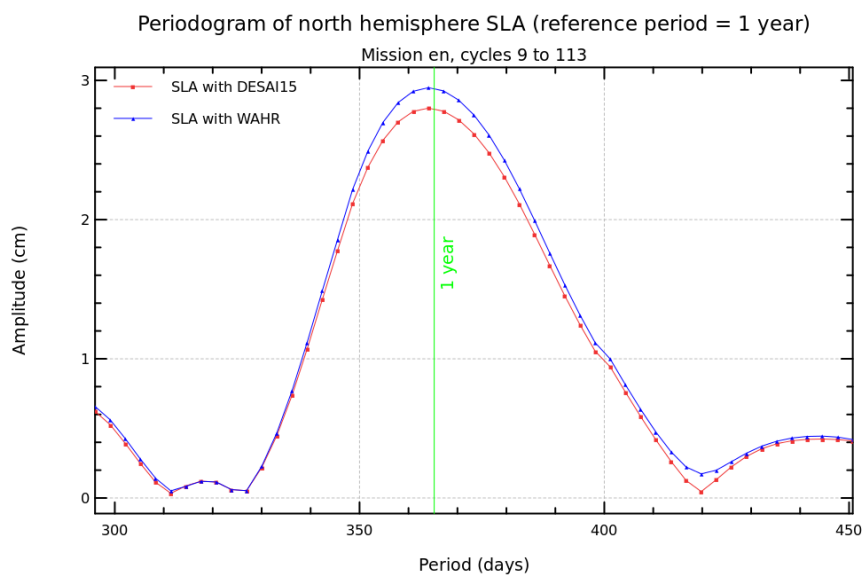
Diagnostic A206_b (mission en)

Name : Periodogram derived from temporal evolution of Sea Level Anomaly (SLA)

Input data : Along track SLA

Description : The periodogram derived from temporal evolution of SLA (global, northern or southern hemisphere) can be done over all periods or focusing on particular periods, such as annual, semi annual or 60 day signal. Therefore mean of SLA differences are computed (every day or cycle), and time data series are plotted as a periodogram.

Diagnostic type : Mono-mission analyses



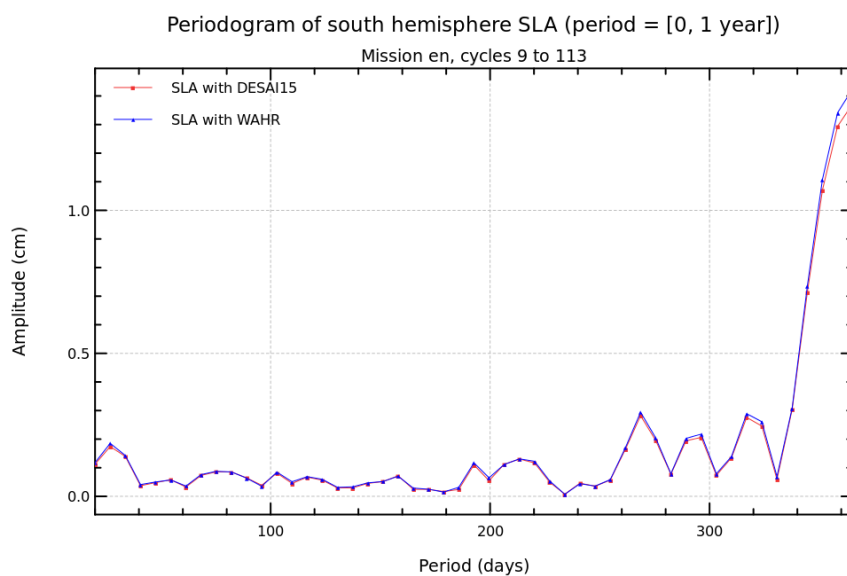
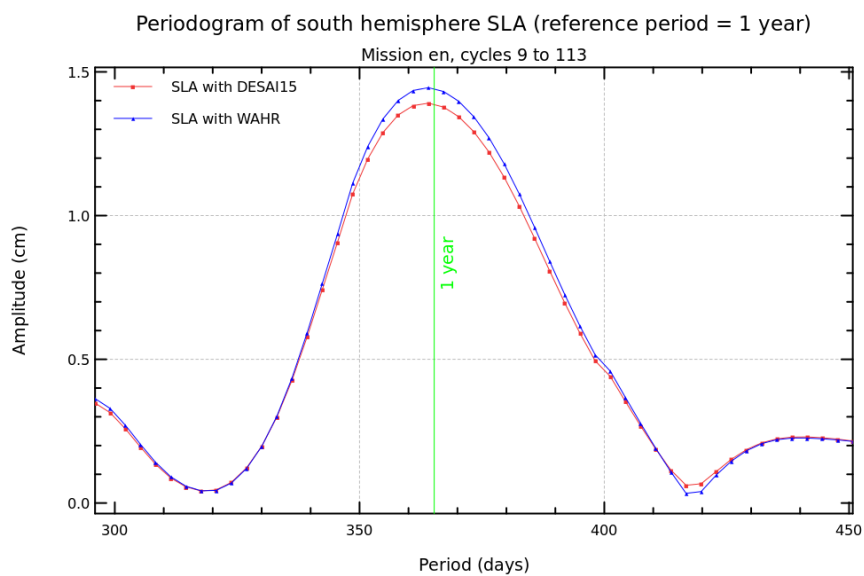
Diagnostic A206_c (mission en)

Name : Periodogram derived from temporal evolution of Sea Level Anomaly (SLA)

Input data : Along track SLA

Description : The periodogram derived from temporal evolution of SLA (global, northern or southern hemisphere) can be done over all periods or focusing on particular periods, such as annual, semi annual or 60 day signal. Therefore mean of SLA differences are computed (every day or cycle), and time data series are plotted as a periodogram.

Diagnostic type : Mono-mission analyses



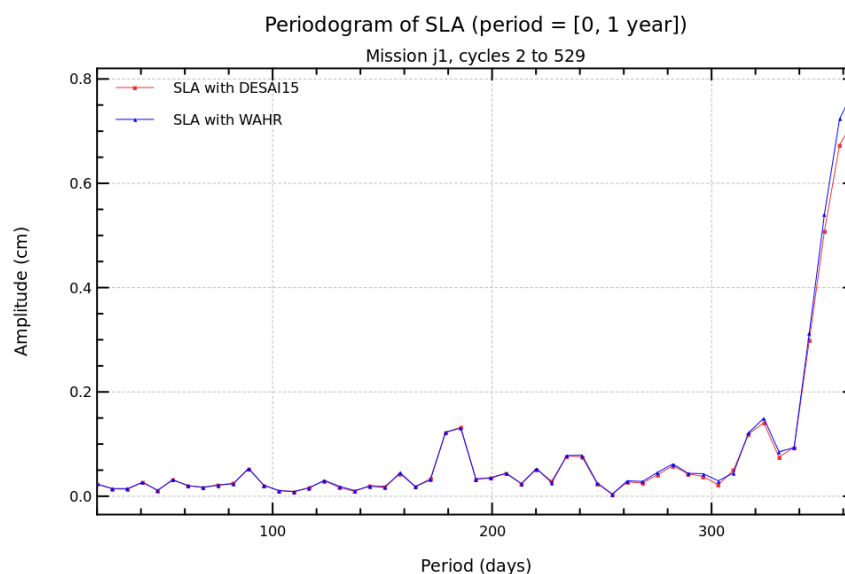
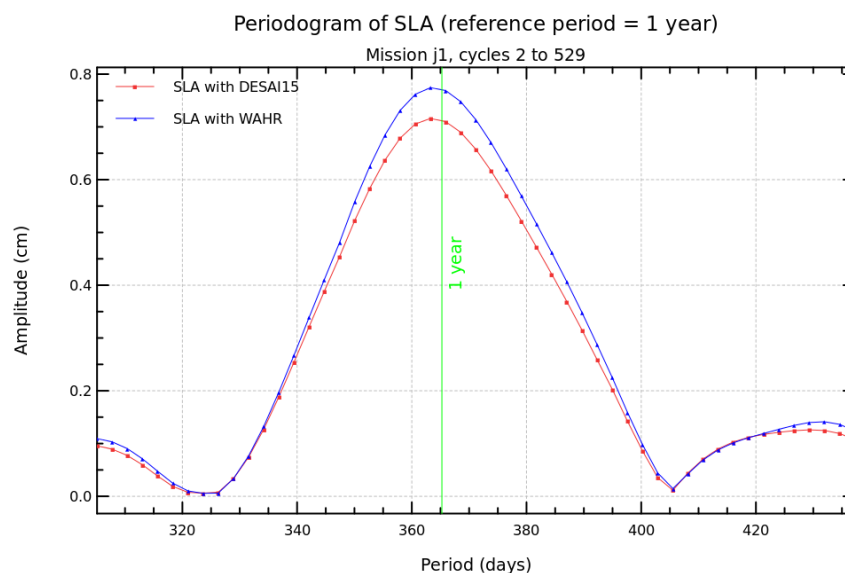
Diagnostic A206_a (mission j1)

Name : Periodogram derived from temporal evolution of Sea Level Anomaly (SLA)

Input data : Along track SLA

Description : The periodogram derived from temporal evolution of SLA (global, northern or southern hemisphere) can be done over all periods or focusing on particular periods, such as annual, semi annual or 60 day signal. Therefore mean of SLA differences are computed (every day or cycle), and time data series are plotted as a periodogram.

Diagnostic type : Mono-mission analyses



Diagnostic A206_b (mission j1)

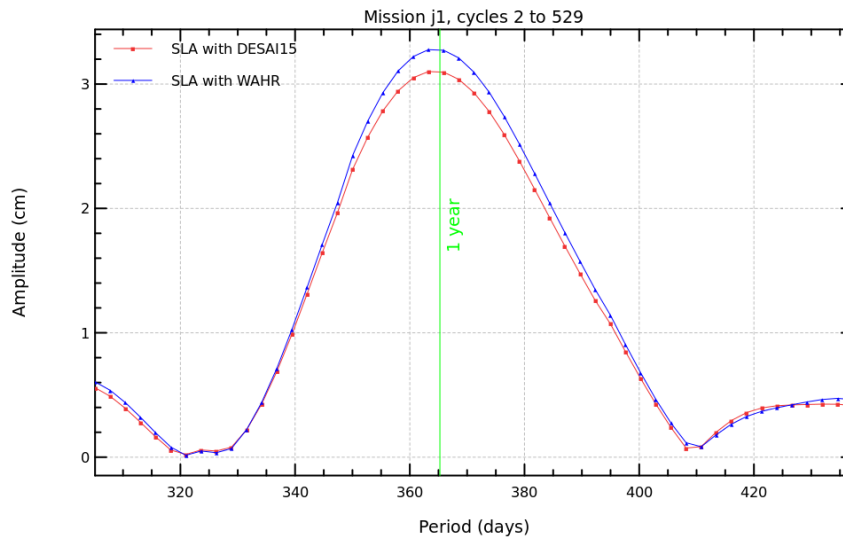
Name : Periodogram derived from temporal evolution of Sea Level Anomaly (SLA)

Input data : Along track SLA

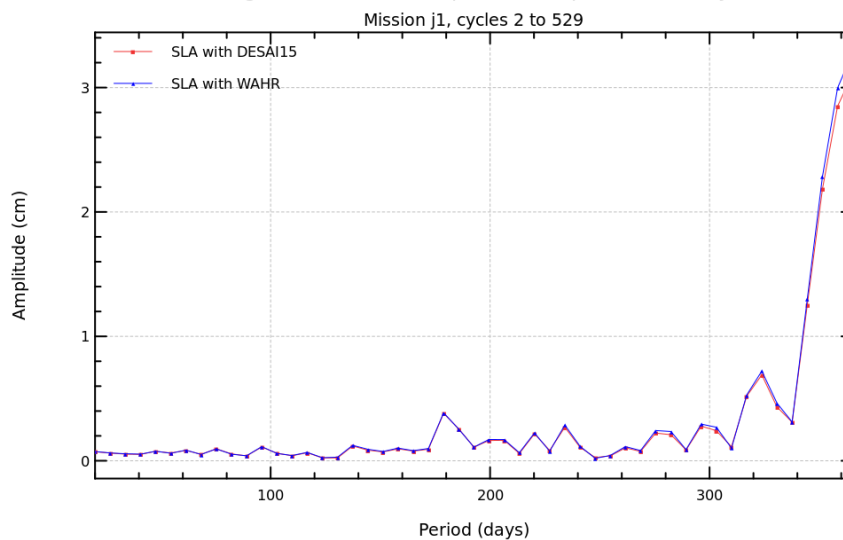
Description : The periodogram derived from temporal evolution of SLA (global, northern or southern hemisphere) can be done over all periods or focusing on particular periods, such as annual, semi annual or 60 day signal. Therefore mean of SLA differences are computed (every day or cycle), and time data series are plotted as a periodogram.

Diagnostic type : Mono-mission analyses

Periodogram of north hemisphere SLA (reference period = 1 year)



Periodogram of north hemisphere SLA (period = [0, 1 year])



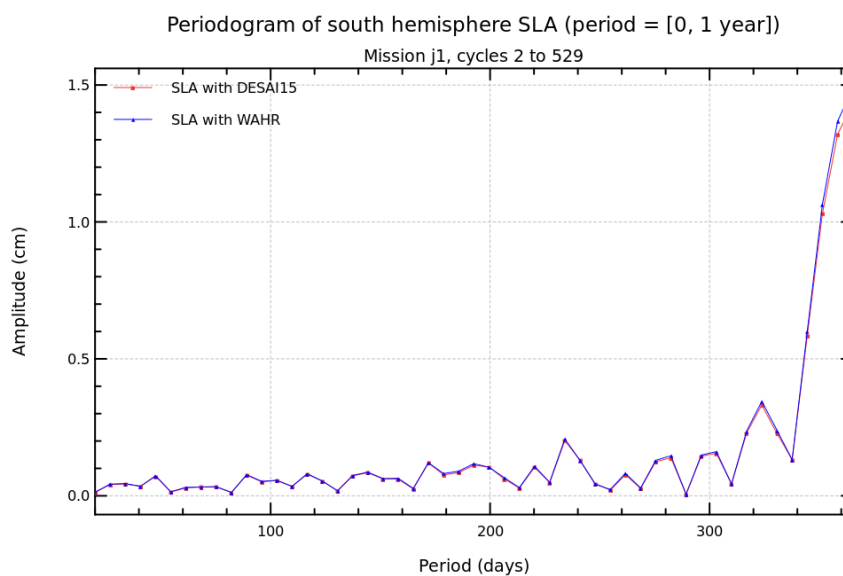
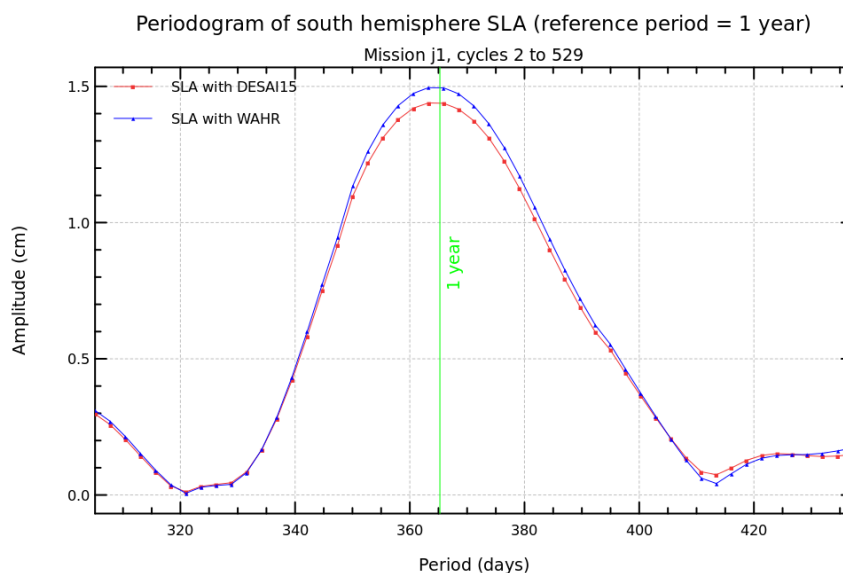
Diagnostic A206_c (mission j1)

Name : Periodogram derived from temporal evolution of Sea Level Anomaly (SLA)

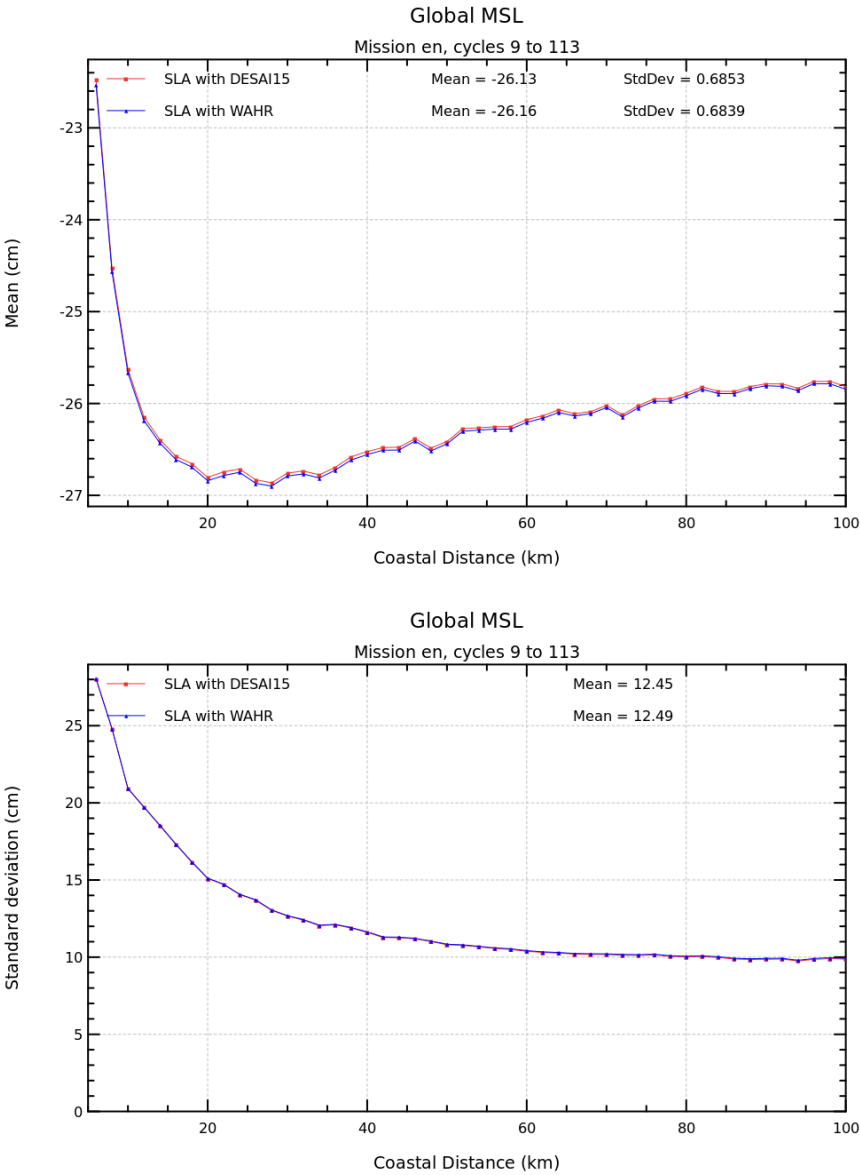
Input data : Along track SLA

Description : The periodogram derived from temporal evolution of SLA (global, northern or southern hemisphere) can be done over all periods or focusing on particular periods, such as annual, semi annual or 60 day signal. Therefore mean of SLA differences are computed (every day or cycle), and time data series are plotted as a periodogram.

Diagnostic type : Mono-mission analyses



Diagnostic A207 (mission en)	
Name : Sea Level Anomaly (SLA) versus coastal distance	
Input data : Along track SLA	
Description : Mean and standard deviation of SLA - computed by using successively both altimetric components - are plotted in function of coastal distances between 0 and 100 km.	



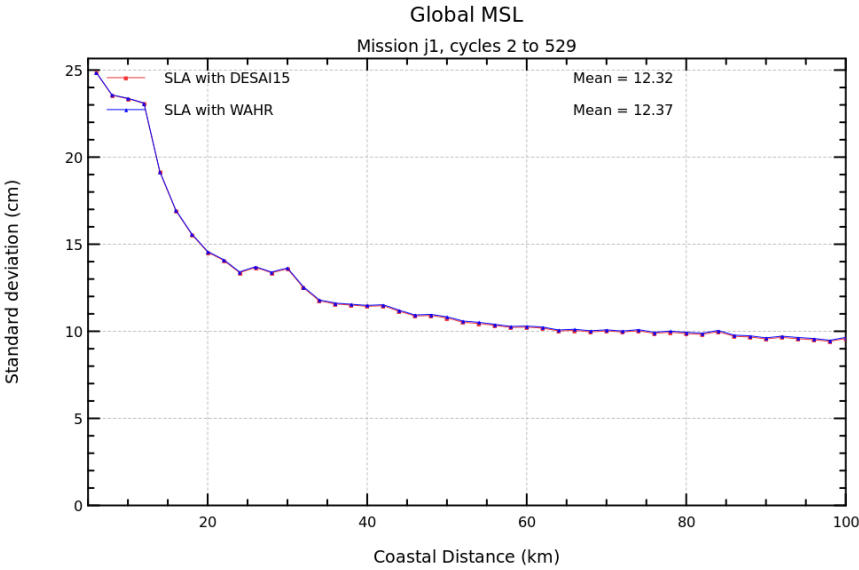
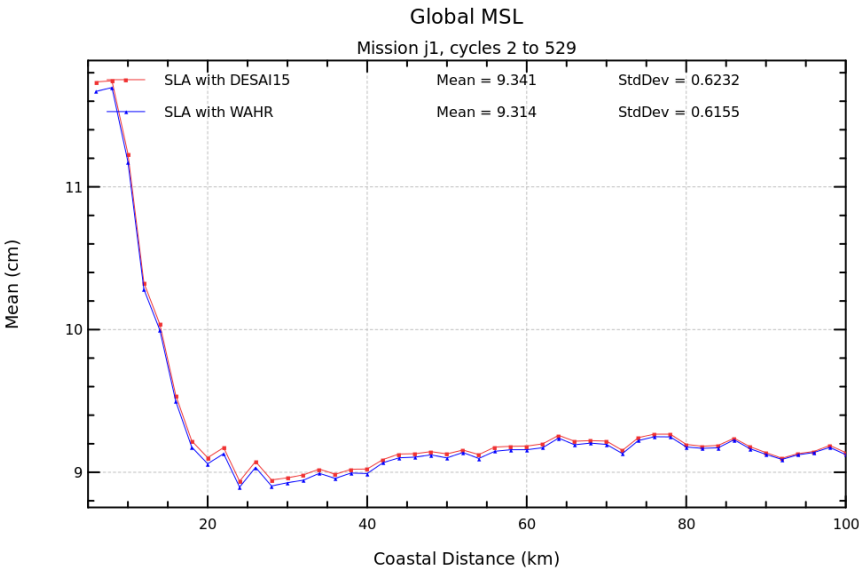
Diagnostic A207 (mission j1)

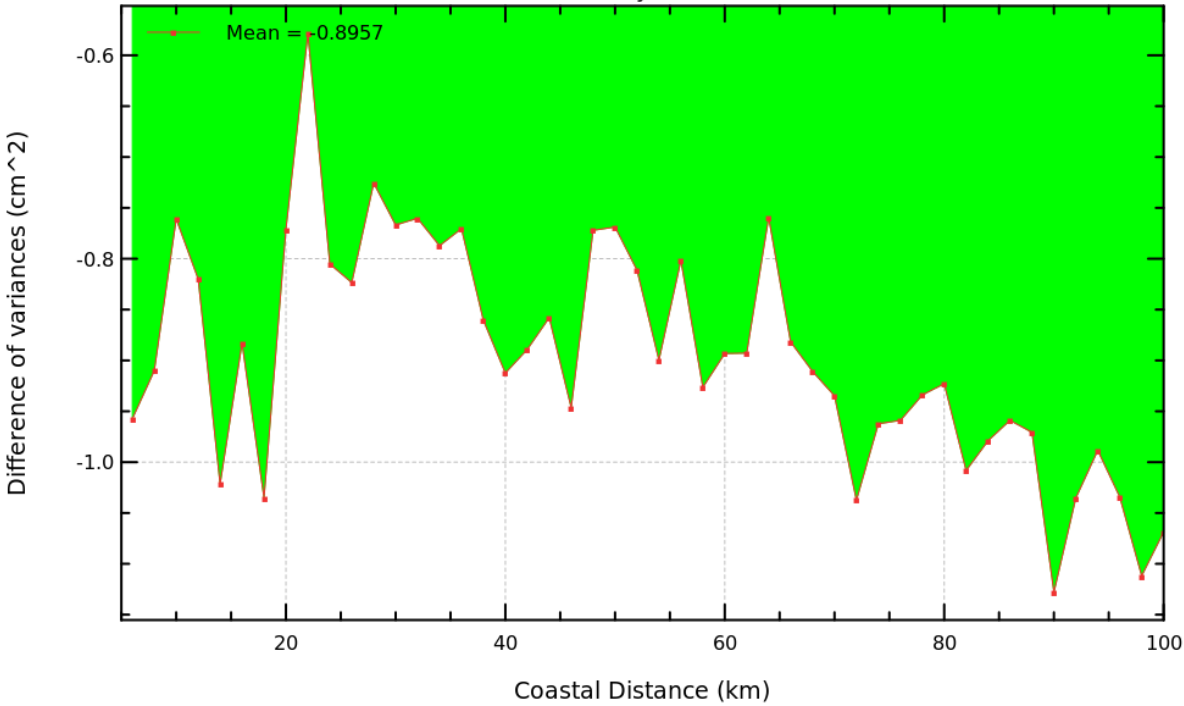
Name : Sea Level Anomaly (SLA) versus coastal distance

Input data : Along track SLA

Description : Mean and standard deviation of SLA - computed by using successively both altimetric components - are plotted in function of coastal distances between 0 and 100 km.

Diagnostic type : Mono-mission analyses



Diagnostic type : Mono-mission analyses	Diagnostic A208 (mission en)
	Name : Sea Level Anomaly (SLA) differences versus coastal distance, latitude and longitude
	Input data : Along track SLA
	Description : The differences of SLA variances - computed by using successively both altimetric components - are plotted in function of coastal distances between 0 and 100 km, in function of latitudes and in function of longitudes.
	<div>VAR(SLA with DESAI15) - VAR(SLA with WAHR) Mission en, cycles 9 to 113</div> 

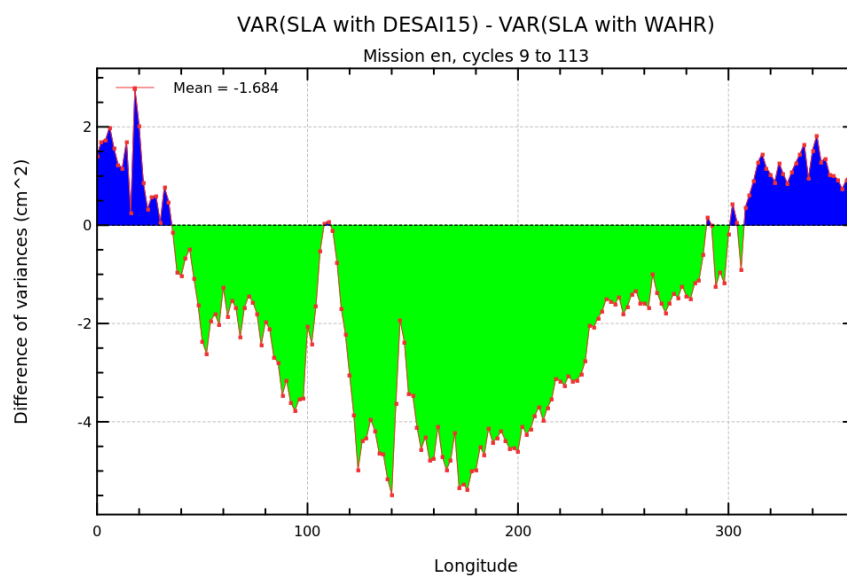
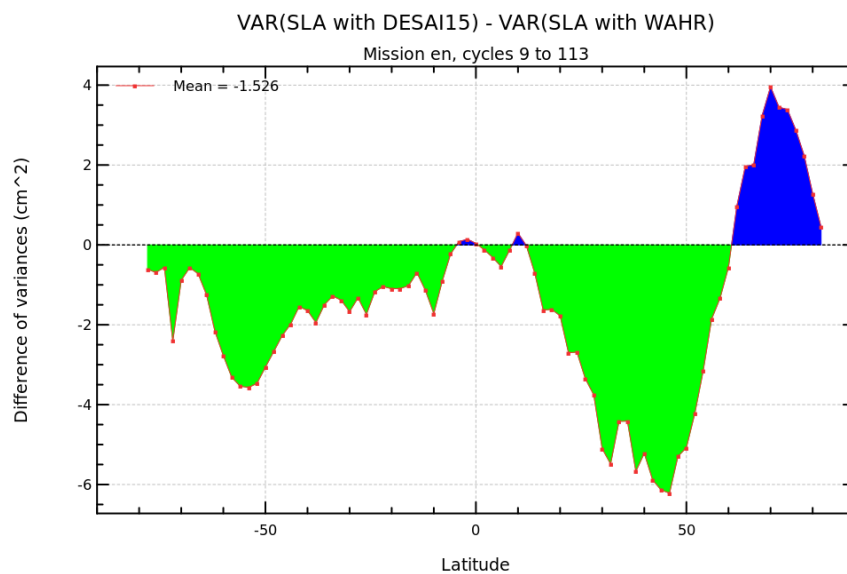
Diagnostic A208 (mission en)

Name : Sea Level Anomaly (SLA) differences versus coastal distance, latitude and longitude

Input data : Along track SLA

Description : The differences of SLA variances - computed by using successively both altimetric components - are plotted in function of coastal distances between 0 and 100 km, in function of latitudes and in function of longitudes.

Diagnostic type : Mono-mission analyses



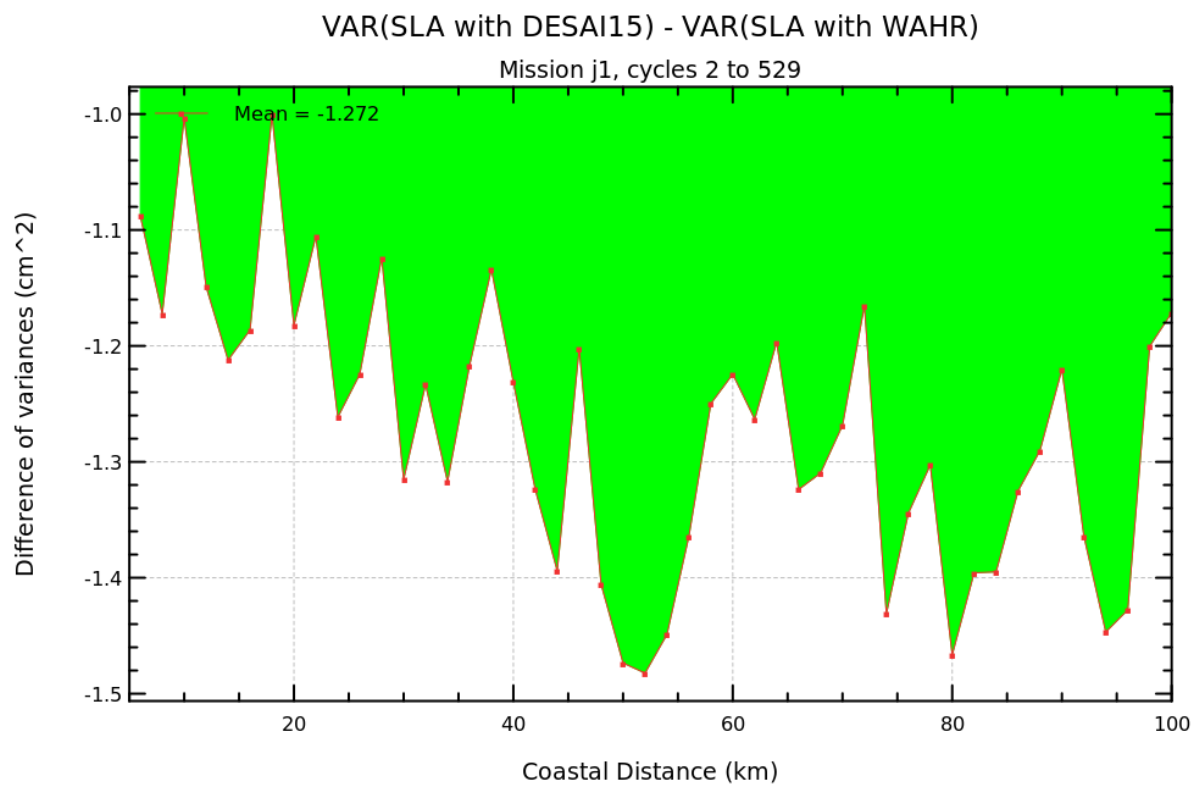
Diagnostic A208 (mission j1)

Name : Sea Level Anomaly (SLA) differences versus coastal distance, latitude and longitude

Input data : Along track SLA

Description : The differences of SLA variances - computed by using successively both altimetric components - are plotted in function of coastal distances between 0 and 100 km, in function of latitudes and in function of longitudes.

Diagnostic type : Mono-mission analyses



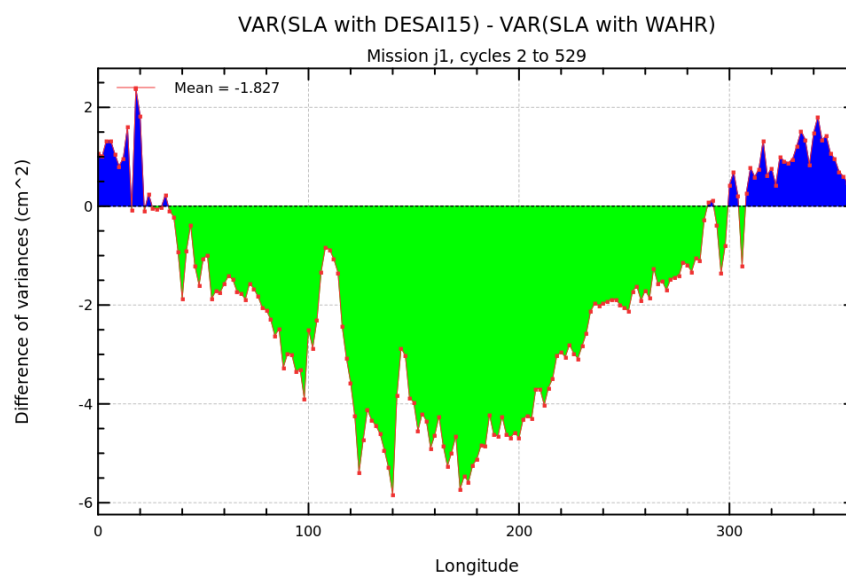
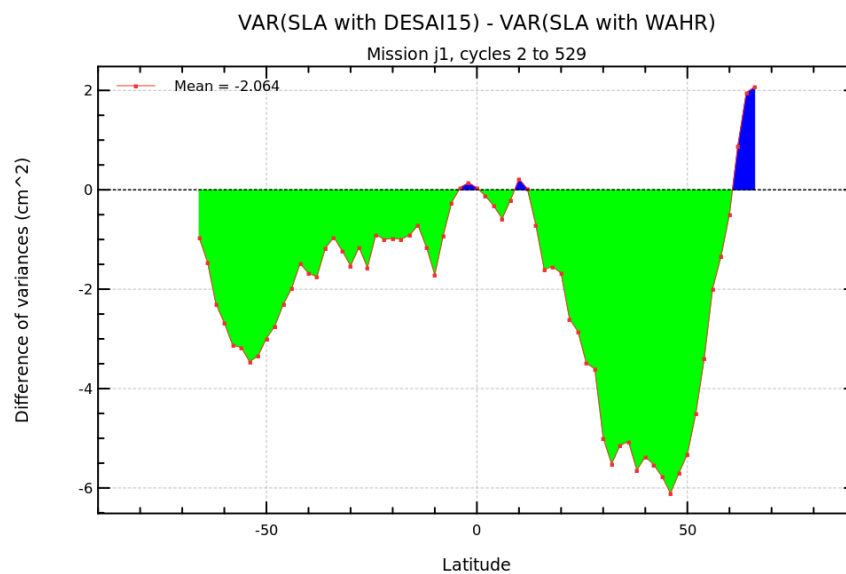
Diagnostic A208 (mission j1)

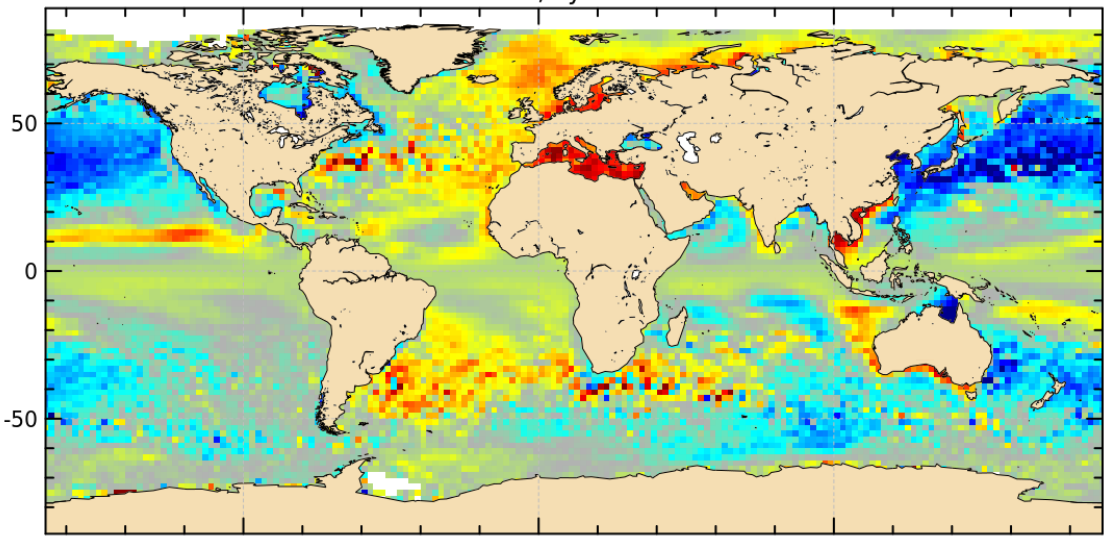
Name : Sea Level Anomaly (SLA) differences versus coastal distance, latitude and longitude

Input data : Along track SLA

Description : The differences of SLA variances - computed by using successively both altimetric components - are plotted in function of coastal distances between 0 and 100 km, in function of latitudes and in function of longitudes.

Diagnostic type : Mono-mission analyses



Diagnostic type : Mono-mission analyses	Diagnostic A209 (mission en)	
	Name : Differences between maps of SLA variance	
	Input data : Along track SLA	
	Description : The differences between maps of SLA are calculated from the SLA differences (mean, standard deviation) using successively both altimetric components in the SLA calculation.	
	<div>VAR(SLA with DESAI15) - VAR(SLA with WAHR)</div> <div>Mission en, cycles 9 to 113</div>  <div>Difference of variances (cm²)</div> <div>-100 0 100</div> <div>-10 0 10</div>	

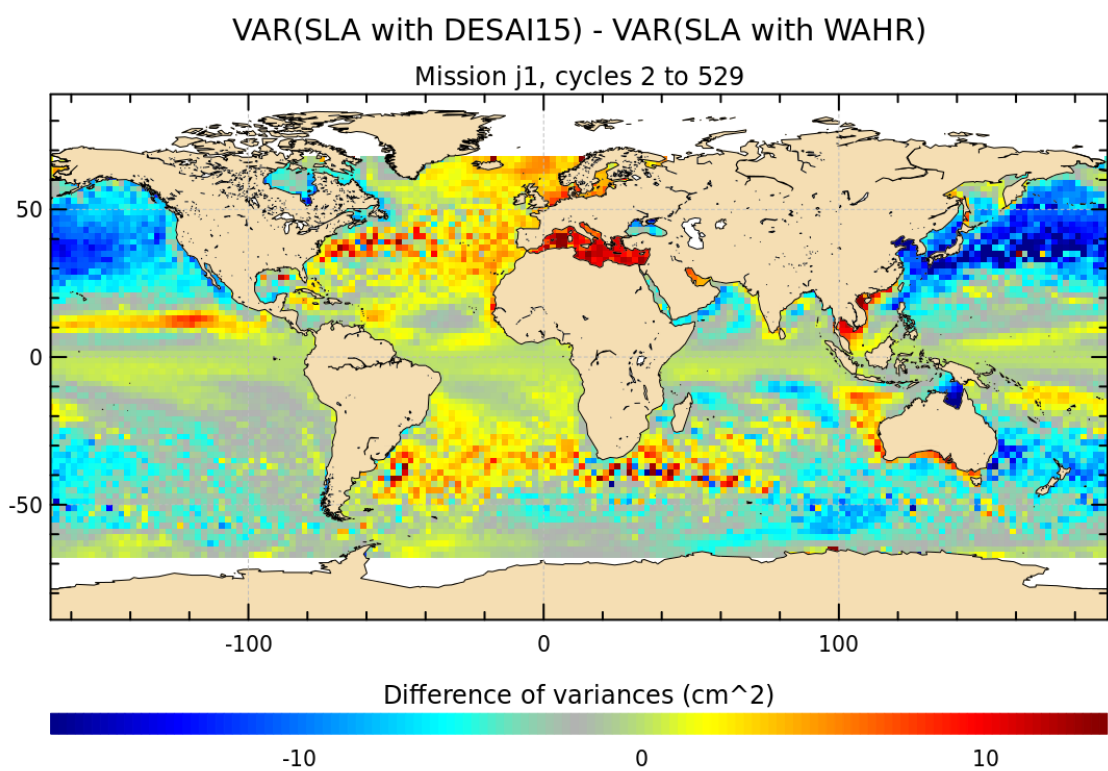
Diagnostic A209 (mission j1)

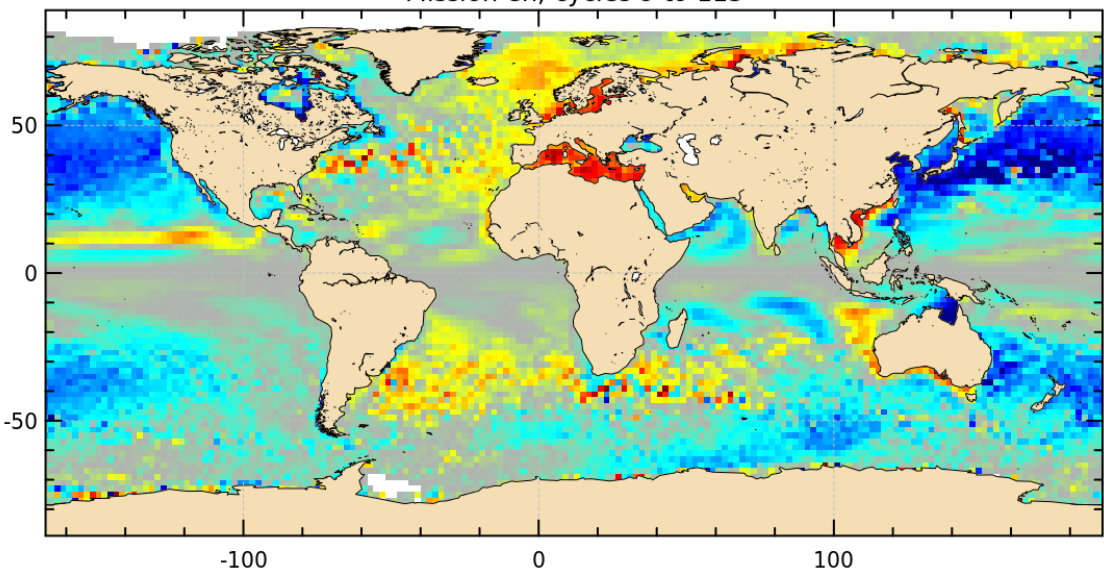
Name : Differences between maps of SLA variance

Input data : Along track SLA

Description : The differences between maps of SLA are calculated from the SLA differences (mean, standard deviation) using successively both altimetric components in the SLA calculation.

Diagnostic type : Mono-mission analyses



Diagnostic type : Mono-mission analyses	Diagnostic A210_a (mission en)	
	Name : Differences between maps of SLA variance for different frequency bands	
	Input data : Along track SLA	
	Description : The differences between maps of SLA (variance) are calculated from the mean SLA maps using successively both altimetric components in the SLA calculation filtered to separate high-frequency ($T < 1$ yr), mid-frequency ($1 \text{ yr} < T < 3$ yrs) and low-frequency ($T > 3$ yrs) signals.	
	<div>VAR(SLA with DESAI15) - VAR(SLA with WAHR) for FILTER HF</div> <div>Mission en, cycles 9 to 113</div>  <div>Difference of variances HF (cm^2)</div> <div>-505</div>	

Diagnostic A210_b (mission en)

Name : Differences between maps of SLA variance for different frequency bands

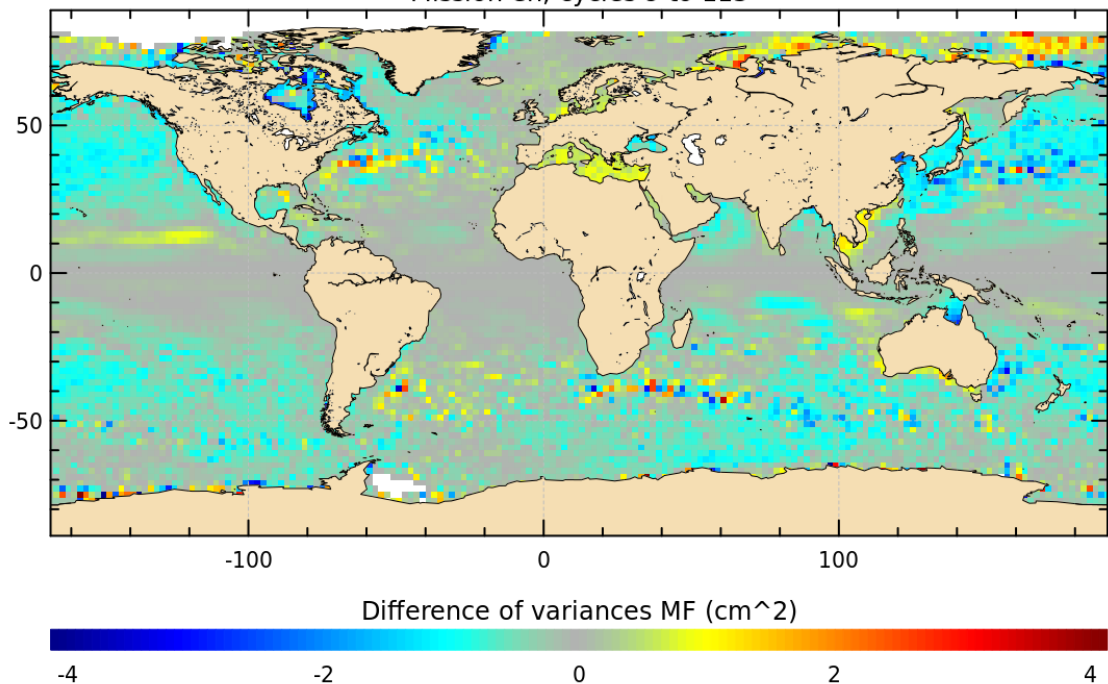
Input data : Along track SLA

Description : The differences between maps of SLA (variance) are calculated from the mean SLA maps using successively both altimetric components in the SLA calculation filtered to separate high-frequency ($T < 1$ yr), mid-frequency ($1 \text{ yr} < T < 3$ yrs) and low-frequency ($T > 3$ yrs) signals.

Diagnostic type : Mono-mission analyses

VAR(SLA with DESAI15) - VAR(SLA with WAHR) for FILTER MF

Mission en, cycles 9 to 113



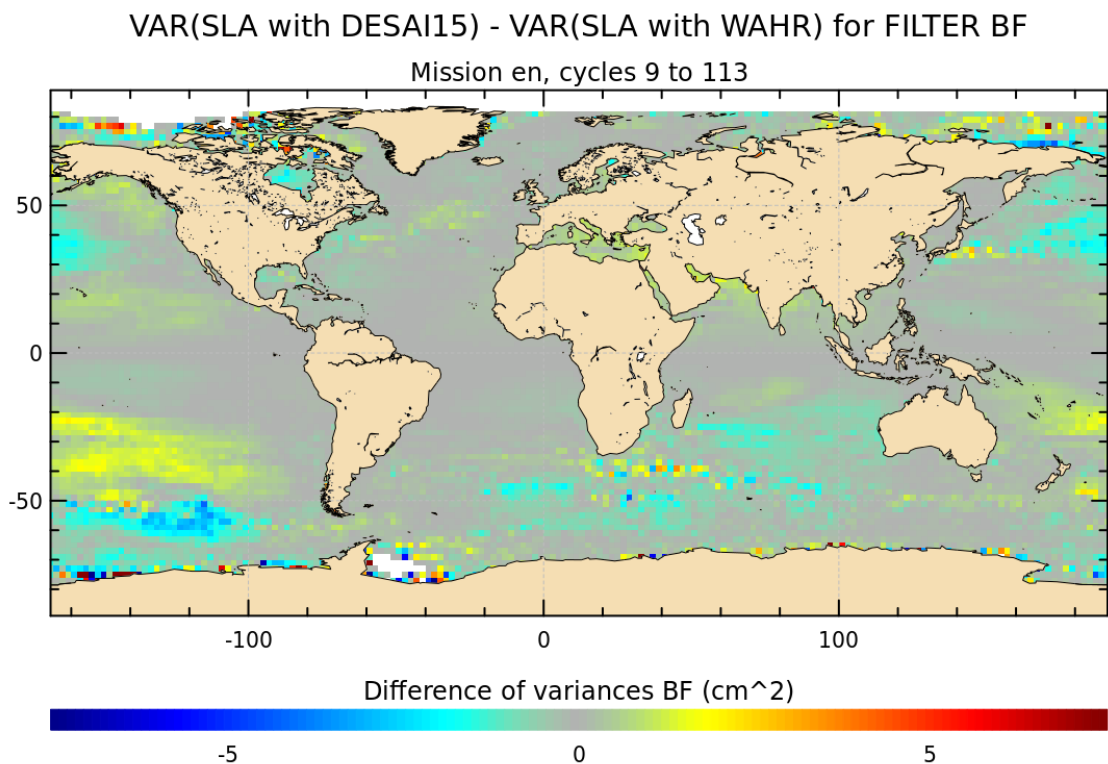
Diagnostic A210_c (mission en)

Name : Differences between maps of SLA variance for different frequency bands

Input data : Along track SLA

Description : The differences between maps of SLA (variance) are calculated from the mean SLA maps using successively both altimetric components in the SLA calculation filtered to separate high-frequency ($T < 1$ yr), mid-frequency ($1 \text{ yr} < T < 3 \text{ yrs}$) and low-frequency ($T > 3 \text{ yrs}$) signals.

Diagnostic type : Mono-mission analyses



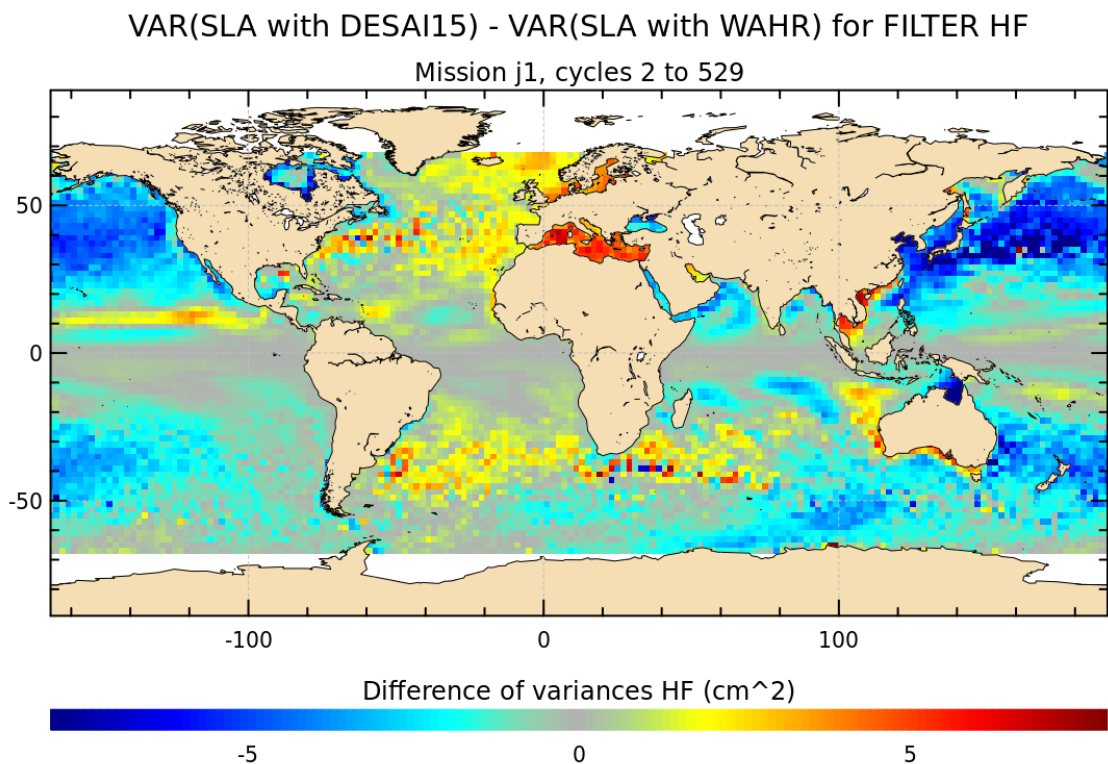
Diagnostic A210_a (mission j1)

Name : Differences between maps of SLA variance for different frequency bands

Input data : Along track SLA

Description : The differences between maps of SLA (variance) are calculated from the mean SLA maps using successively both altimetric components in the SLA calculation filtered to separate high-frequency ($T < 1$ yr), mid-frequency ($1 \text{ yr} < T < 3$ yrs) and low-frequency ($T > 3$ yrs) signals.

Diagnostic type : Mono-mission analyses



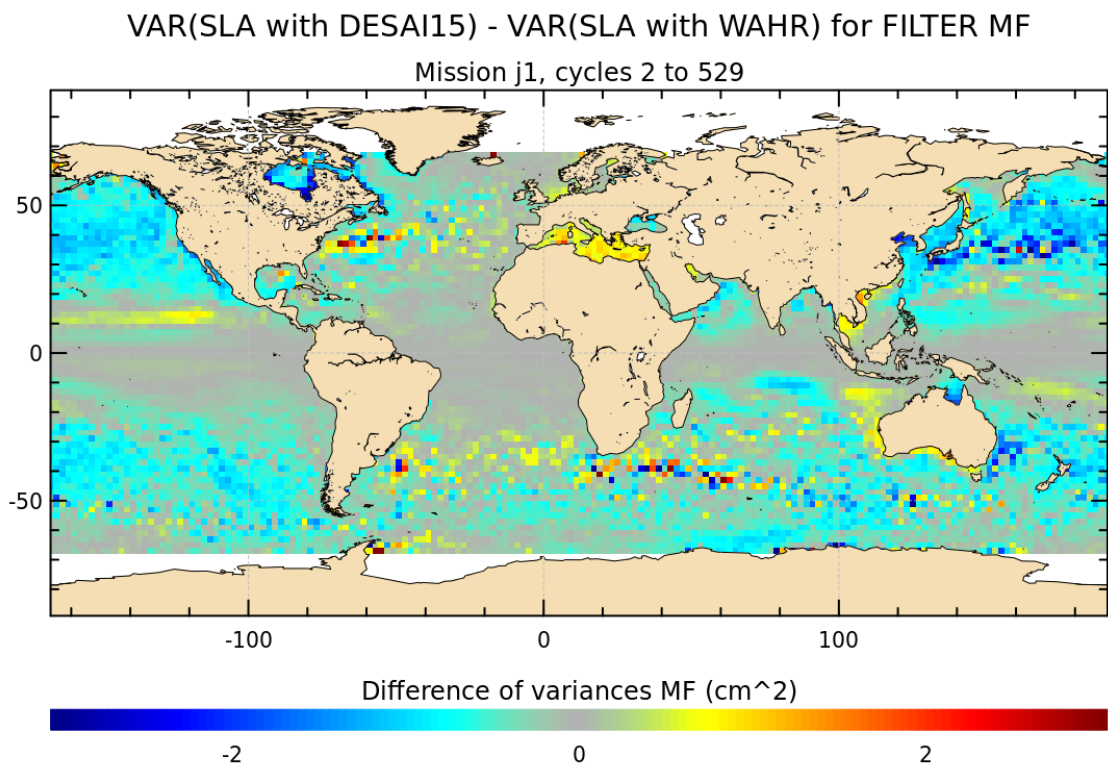
Diagnostic A210_b (mission j1)

Name : Differences between maps of SLA variance for different frequency bands

Input data : Along track SLA

Description : The differences between maps of SLA (variance) are calculated from the mean SLA maps using successively both altimetric components in the SLA calculation filtered to separate high-frequency ($T < 1$ yr), mid-frequency ($1 \text{ yr} < T < 3$ yrs) and low-frequency ($T > 3$ yrs) signals.

Diagnostic type : Mono-mission analyses



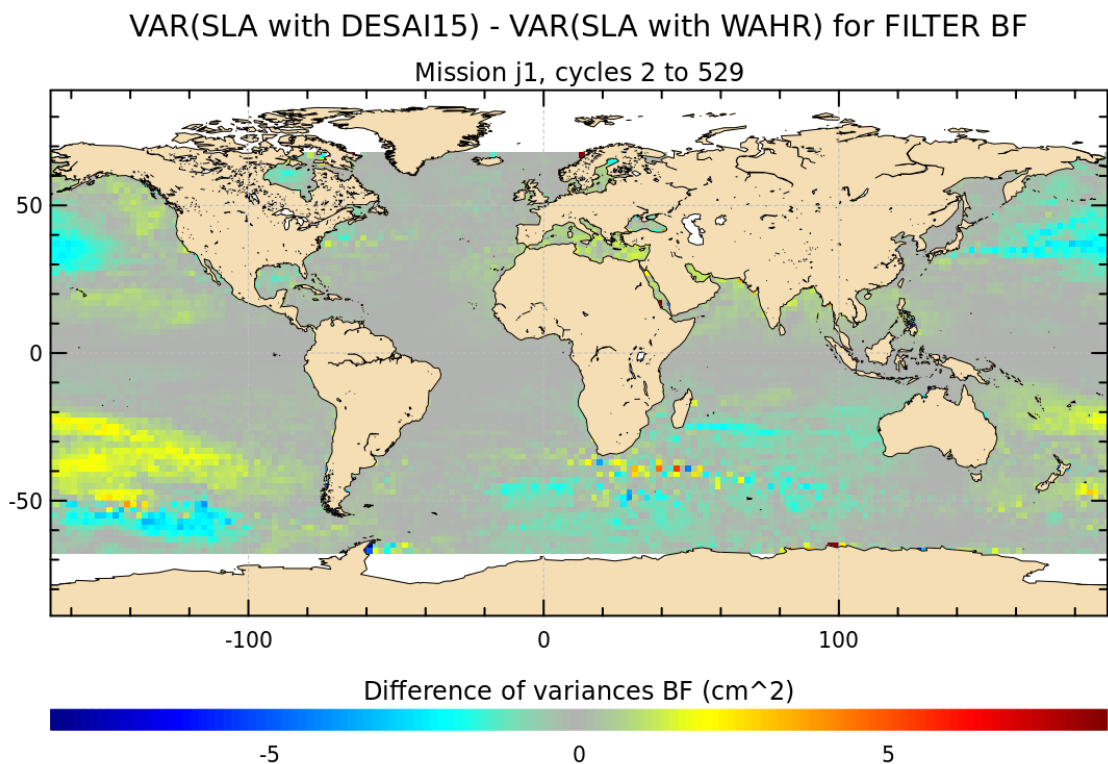
Diagnostic A210_c (mission j1)

Name : Differences between maps of SLA variance for different frequency bands

Input data : Along track SLA

Description : The differences between maps of SLA (variance) are calculated from the mean SLA maps using successively both altimetric components in the SLA calculation filtered to separate high-frequency ($T < 1$ yr), mid-frequency ($1 \text{ yr} < T < 3$ yrs) and low-frequency ($T > 3$ yrs) signals.

Diagnostic type : Mono-mission analyses

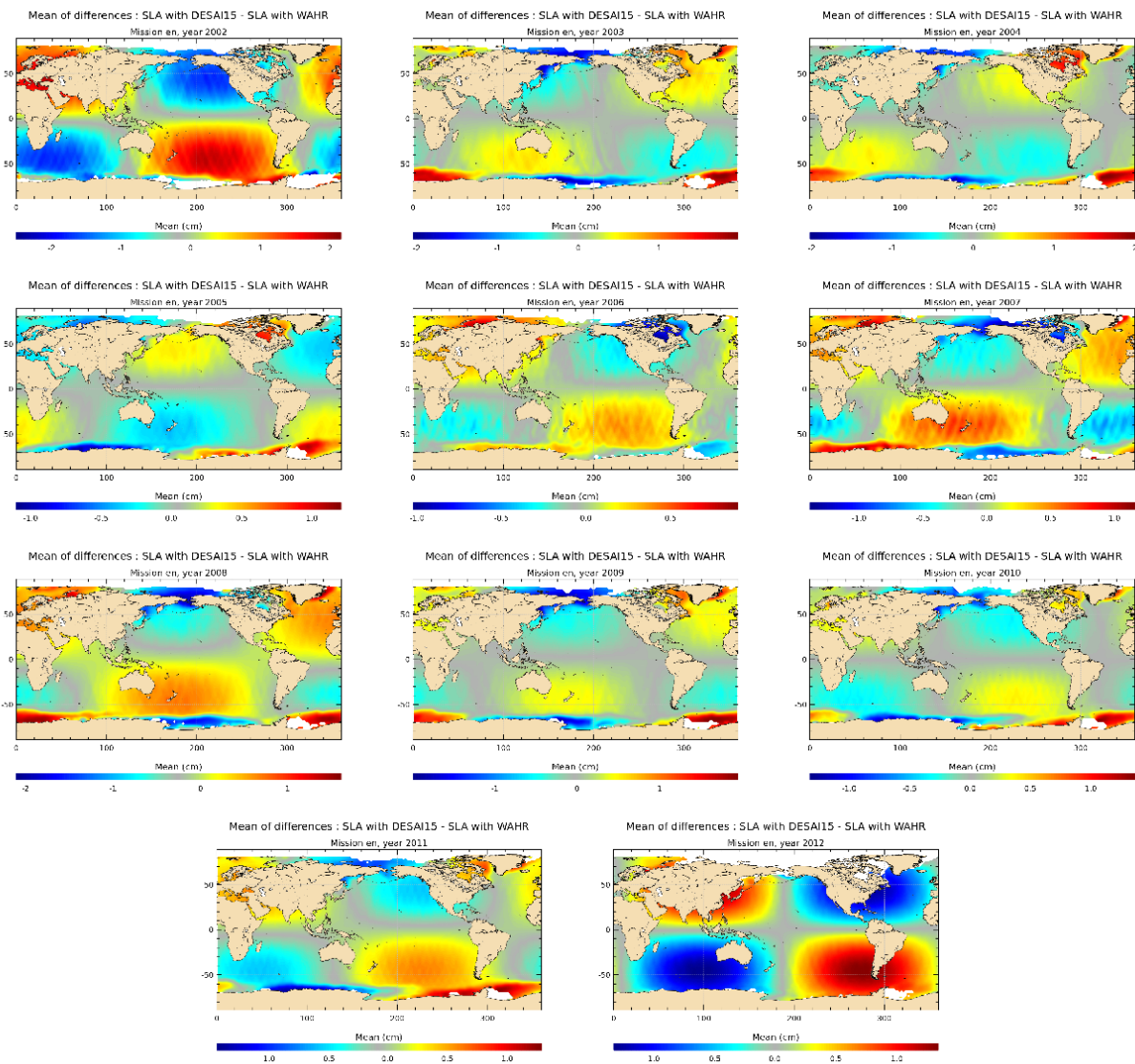


Diagnostic A211 (mission en)

Name : Differences between maps of SLA per year

Input data : Along track SLA

Description : The differences between map of SLA (mean) are calculated for each year using successively both altimetric components in the SLA calculation



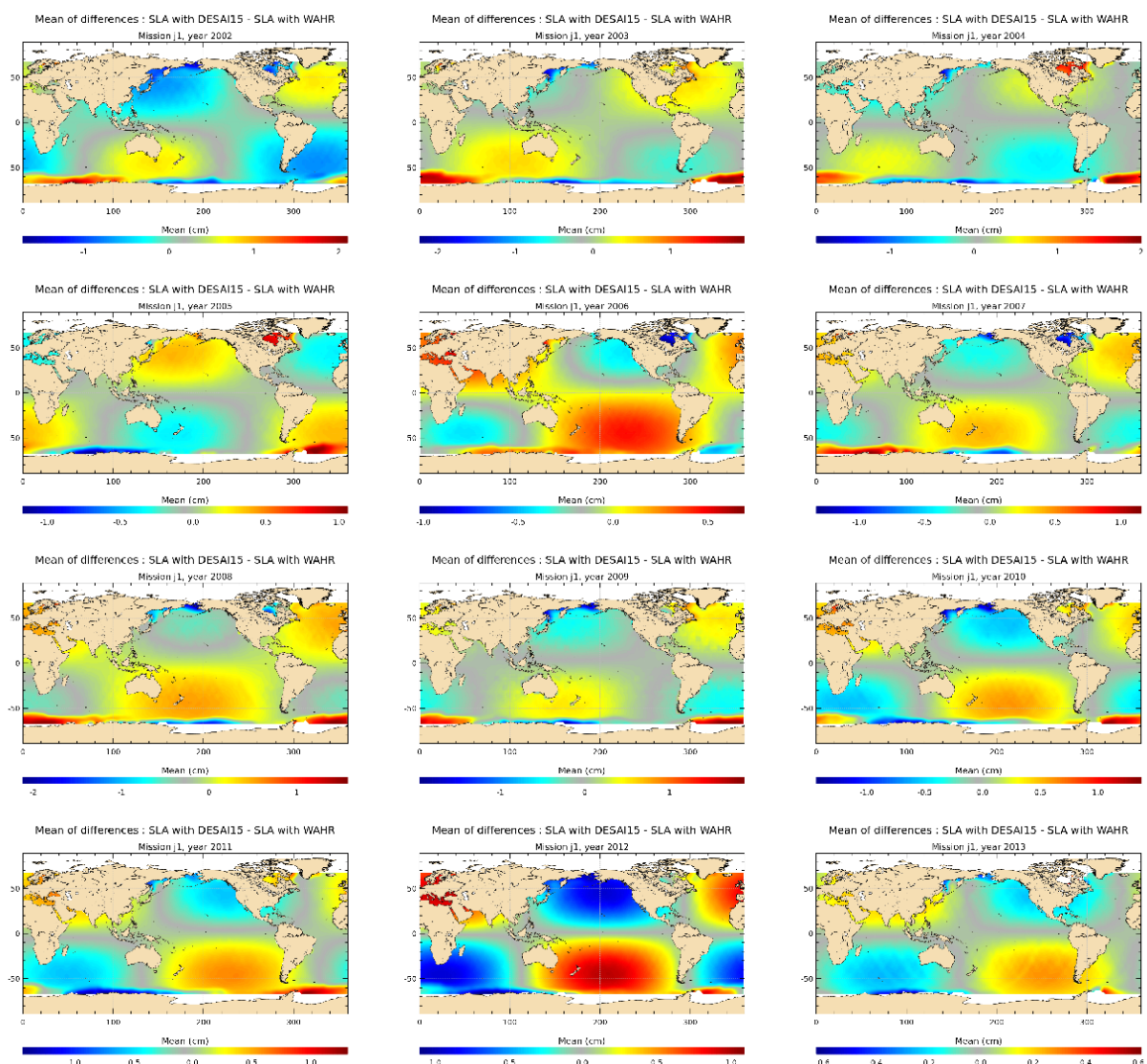
Diagnostic A211 (mission j1)

Name : Differences between maps of SLA per year

Input data : Along track SLA

Description : The differences between map of SLA (mean) are calculated for each year using successively both altimetric components in the SLA calculation

Diagnostic type : Mono-mission analyses

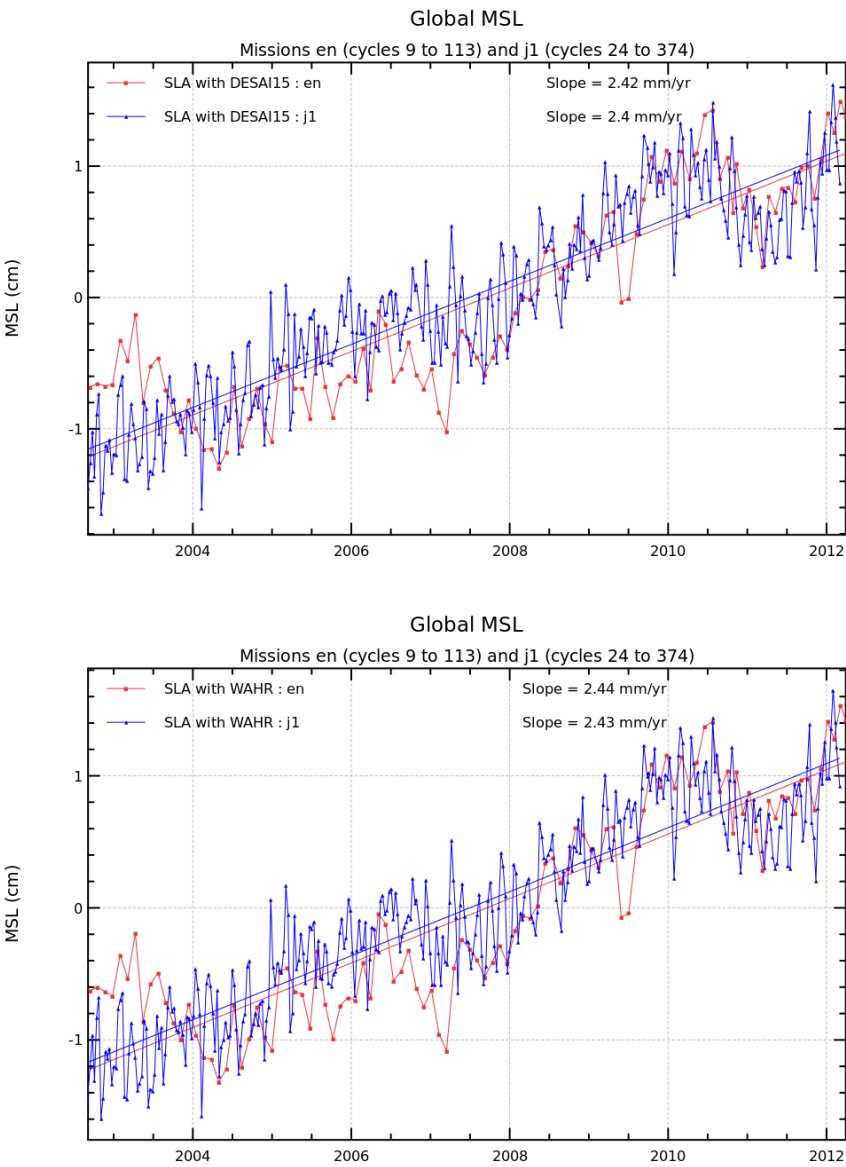


Diagnostic B201_a

Name : Temporal evolution of Sea level Anomaly (SLA) for 2 missions over the same period

Input data : Along track SLA

Description : Temporal evolution of SLA statistics (mean, standard deviation) of 2 or more missions are computed over the same period as longest as possible using successively both components in the SLA calculation. This can be done globally, or separating in ascending and descending or in northern and southern hemisphere. In order to assure comparability, statistics are computed using sea level standard calculation (mean per box of 2x2 and weighted by cosine of latitude for the global mean) limited to 66 latitude.



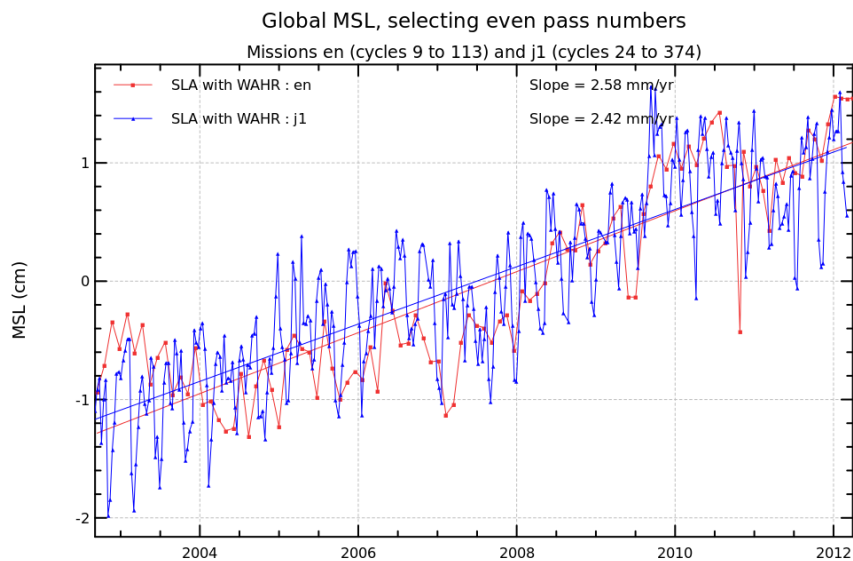
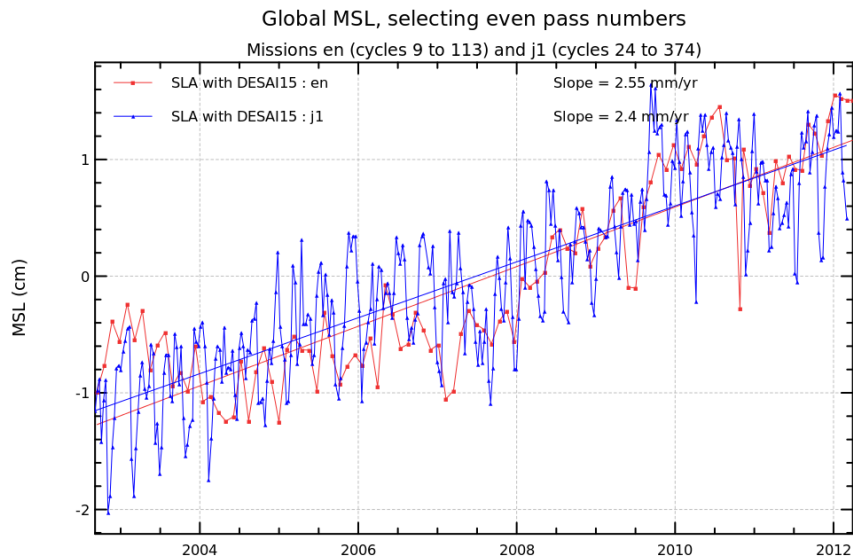
Diagnostic B201_b

Name : Temporal evolution of Sea level Anomaly (SLA) for 2 missions over the same period

Input data : Along track SLA

Description : Temporal evolution of SLA statistics (mean, standard deviation) of 2 or more missions are computed over the same period as longest as possible using successively both components in the SLA calculation. This can be done globally, or separating in ascending and descending or in northern and southern hemisphere. In order to assure comparability, statistics are computed using sea level standard calculation (mean per box of 2x2 and weighted by cosine of latitude for the global mean) limited to 66 latitude.

Diagnostic type : Multi-mission comparisons



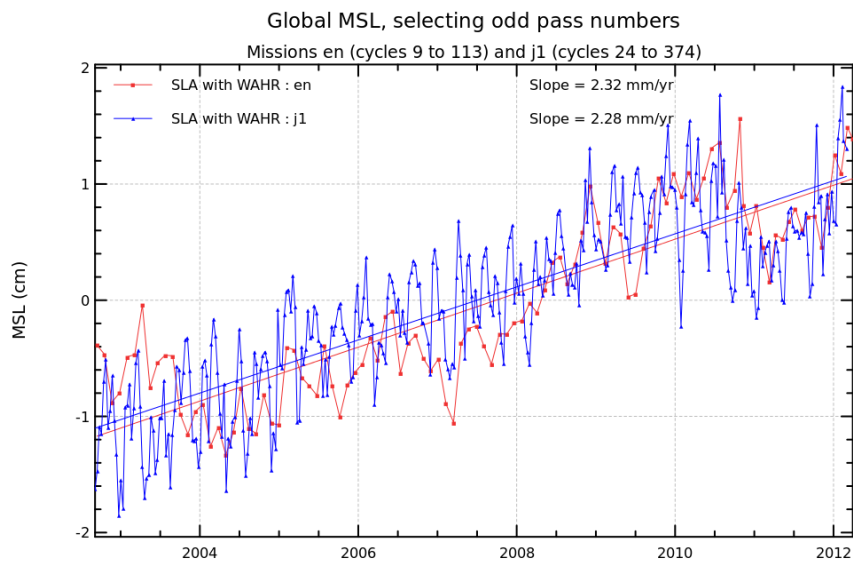
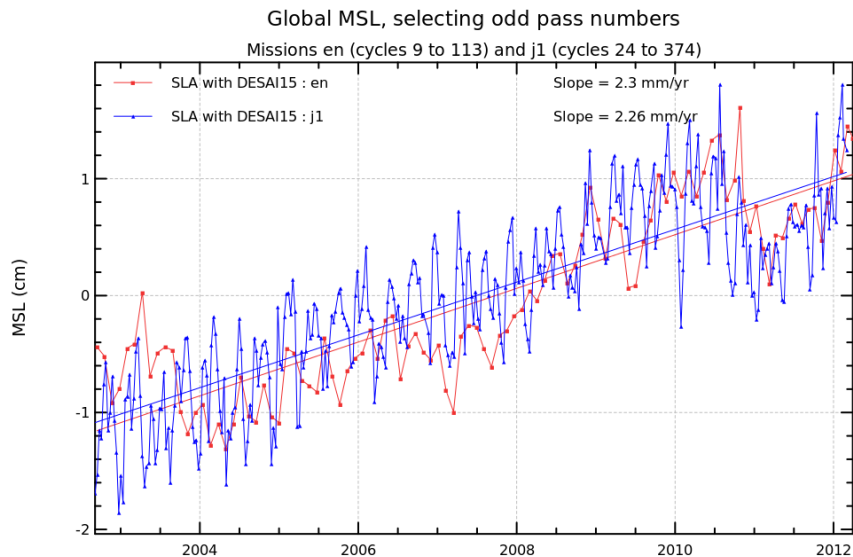
Diagnostic B201_c

Name : Temporal evolution of Sea level Anomaly (SLA) for 2 missions over the same period

Input data : Along track SLA

Description : Temporal evolution of SLA statistics (mean, standard deviation) of 2 or more missions are computed over the same period as longest as possible using successively both components in the SLA calculation. This can be done globally, or separating in ascending and descending or in northern and southern hemisphere. In order to assure comparability, statistics are computed using sea level standard calculation (mean per box of 2×2 and weighted by cosine of latitude for the global mean) limited to 66 latitude.

Diagnostic type : Multi-mission comparisons



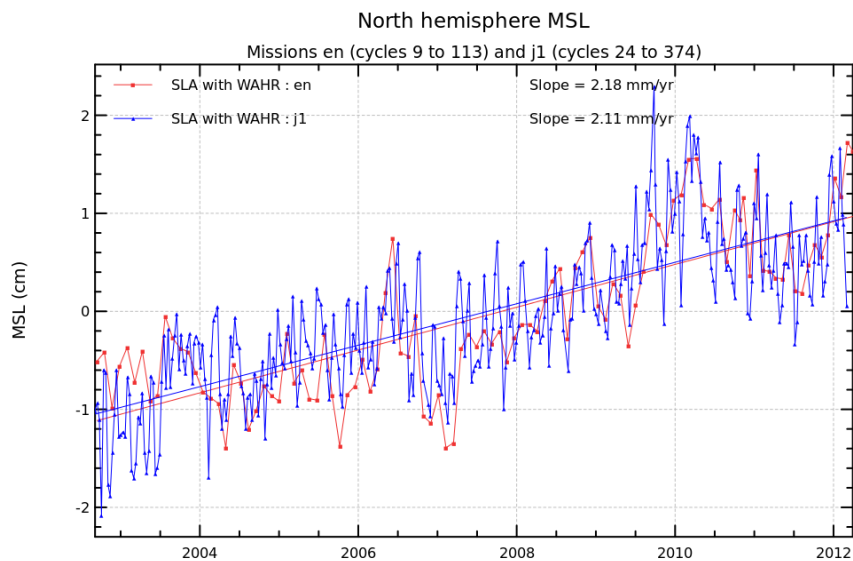
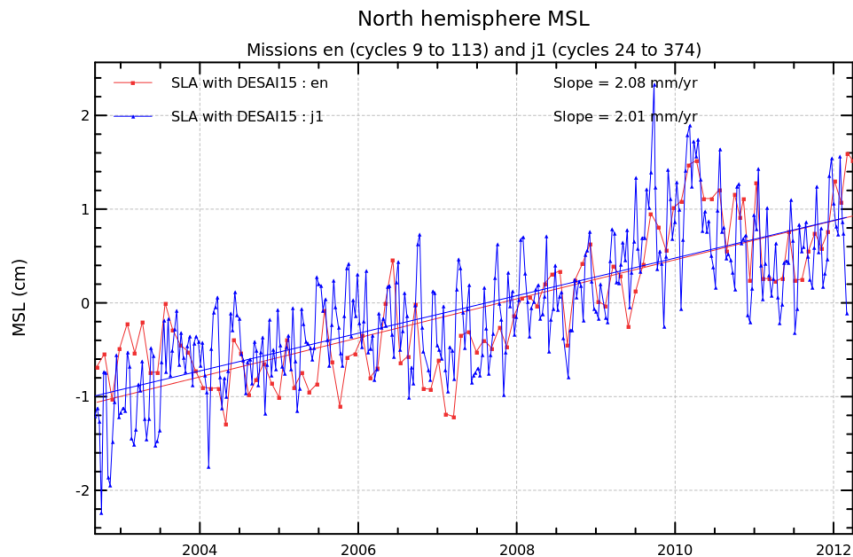
Diagnostic B201_d

Name : Temporal evolution of Sea level Anomaly (SLA) for 2 missions over the same period

Input data : Along track SLA

Description : Temporal evolution of SLA statistics (mean, standard deviation) of 2 or more missions are computed over the same period as longest as possible using successively both components in the SLA calculation. This can be done globally, or separating in ascending and descending or in northern and southern hemisphere. In order to assure comparability, statistics are computed using sea level standard calculation (mean per box of 2x2 and weighted by cosine of latitude for the global mean) limited to 66 latitude.

Diagnostic type : Multi-mission comparisons



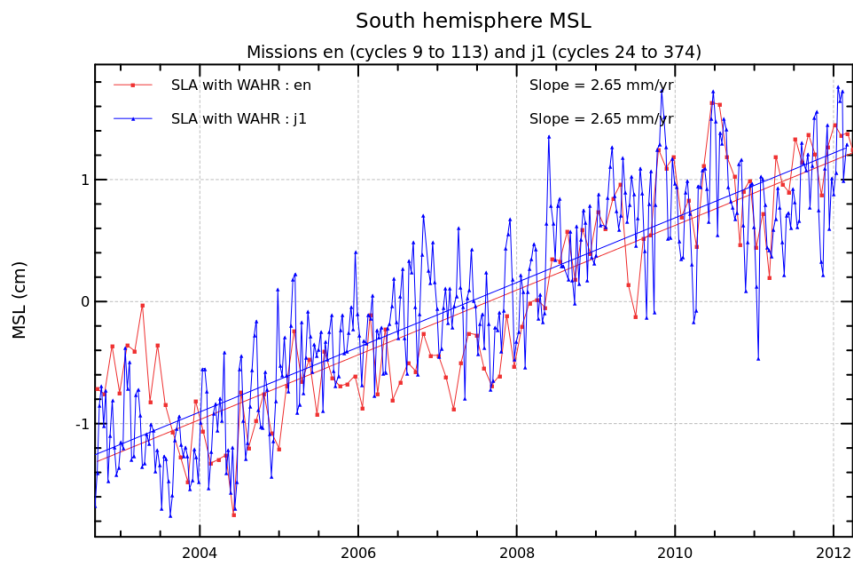
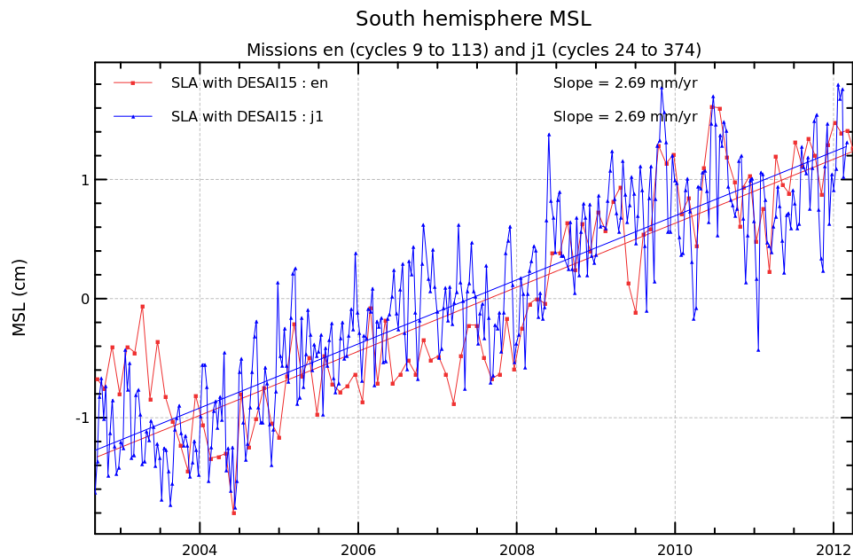
Diagnostic B201_e

Name : Temporal evolution of Sea level Anomaly (SLA) for 2 missions over the same period

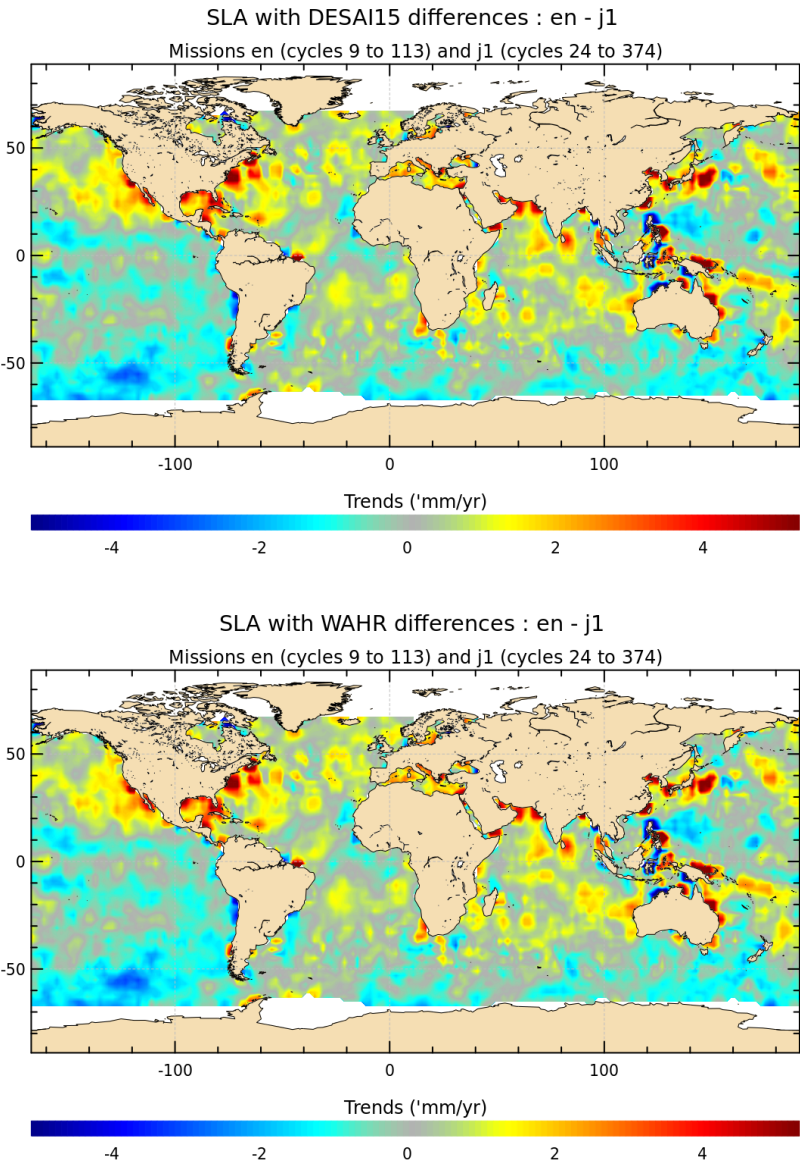
Input data : Along track SLA

Description : Temporal evolution of SLA statistics (mean, standard deviation) of 2 or more missions are computed over the same period as longest as possible using successively both components in the SLA calculation. This can be done globally, or separating in ascending and descending or in northern and southern hemisphere. In order to assure comparability, statistics are computed using sea level standard calculation (mean per box of 2x2 and weighted by cosine of latitude for the global mean) limited to 66 latitude.

Diagnostic type : Multi-mission comparisons



Diagnostic B202_a	
Name : Differences between maps of Sea Level Anomaly (SLA) for 2 missions over the same period	
Input data : Along track SLA	
Description : The differences between maps of SLA (mean, variance or slope) derived from 2 altimetric missions are computed over the same period (as long as possible) using successively both altimetric components in the SLA calculation. Maps are calculated globally, they can be also calculated separating ascending and descending passes.	



Diagnostic B202_b

Name : Differences between maps of Sea Level Anomaly (SLA) for 2 missions over the same period

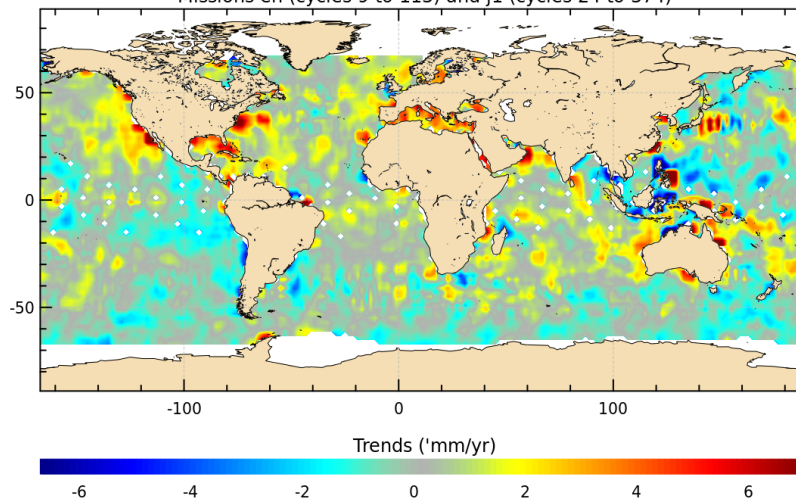
Input data : Along track SLA

Description : The differences between maps of SLA (mean, variance or slope) derived from 2 altimetric missions are computed over the same period (as long as possible) using successively both altimetric components in the SLA calculation. Maps are calculated globally, they can be also calculated separating ascending and descending passes.

Diagnostic type : Multi-mission comparisons

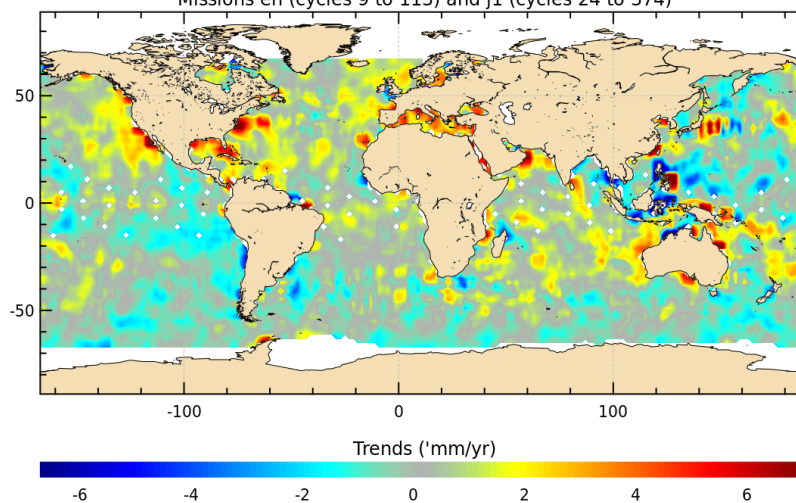
SLA with DESAI15 differences : en - j1, even pass numbers

Missions en (cycles 9 to 113) and j1 (cycles 24 to 374)



SLA with WAHR differences : en - j1, even pass numbers

Missions en (cycles 9 to 113) and j1 (cycles 24 to 374)



Diagnostic B202_c

Name : Differences between maps of Sea Level Anomaly (SLA) for 2 missions over the same period

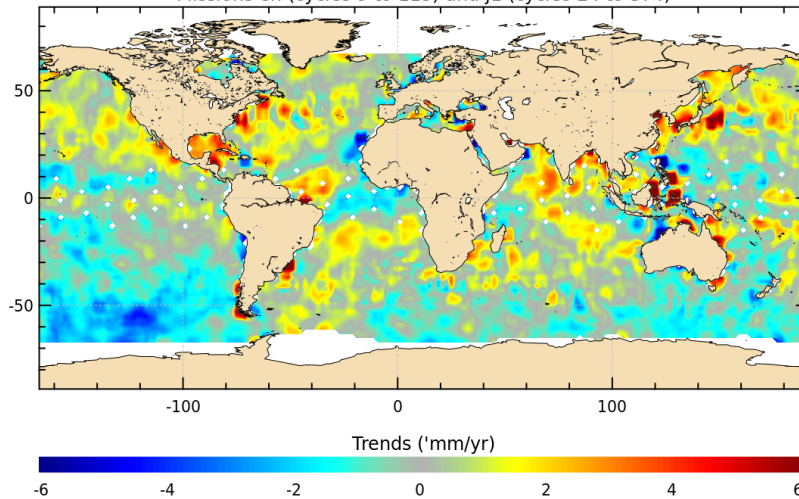
Input data : Along track SLA

Description : The differences between maps of SLA (mean, variance or slope) derived from 2 altimetric missions are computed over the same period (as long as possible) using successively both altimetric components in the SLA calculation. Maps are calculated globally, they can be also calculated separating ascending and descending passes.

Diagnostic type : Multi-mission comparisons

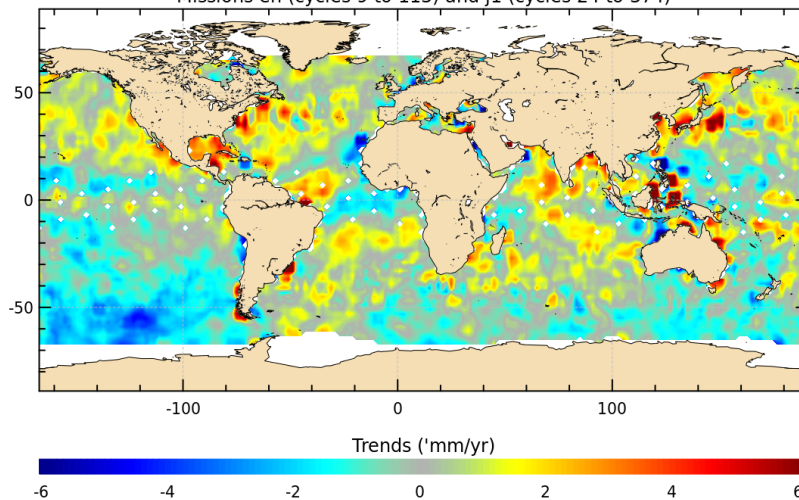
SLA with DESAI15 differences : en - j1, odd pass numbers

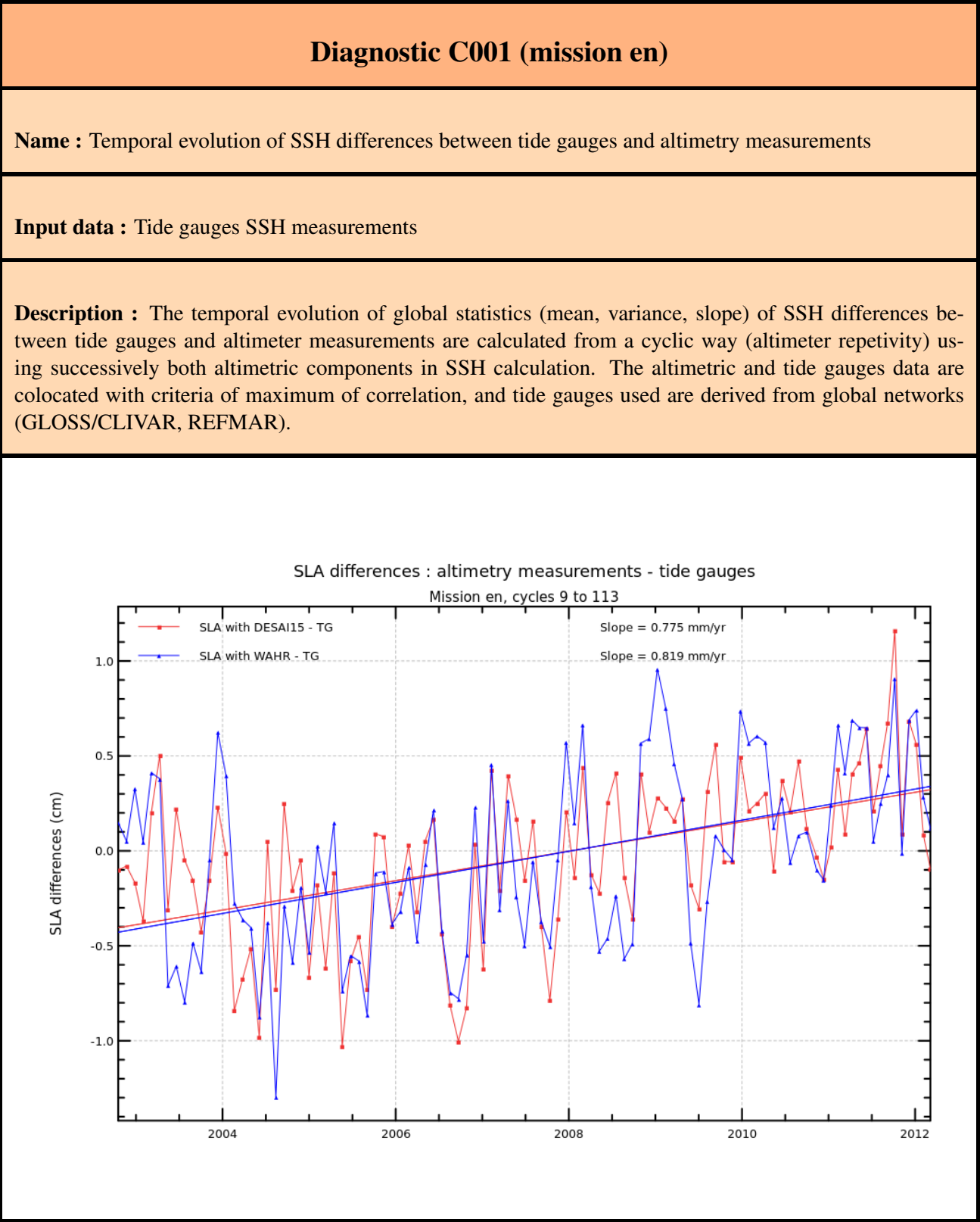
Missions en (cycles 9 to 113) and j1 (cycles 24 to 374)



SLA with WAHR differences : en - j1, odd pass numbers

Missions en (cycles 9 to 113) and j1 (cycles 24 to 374)





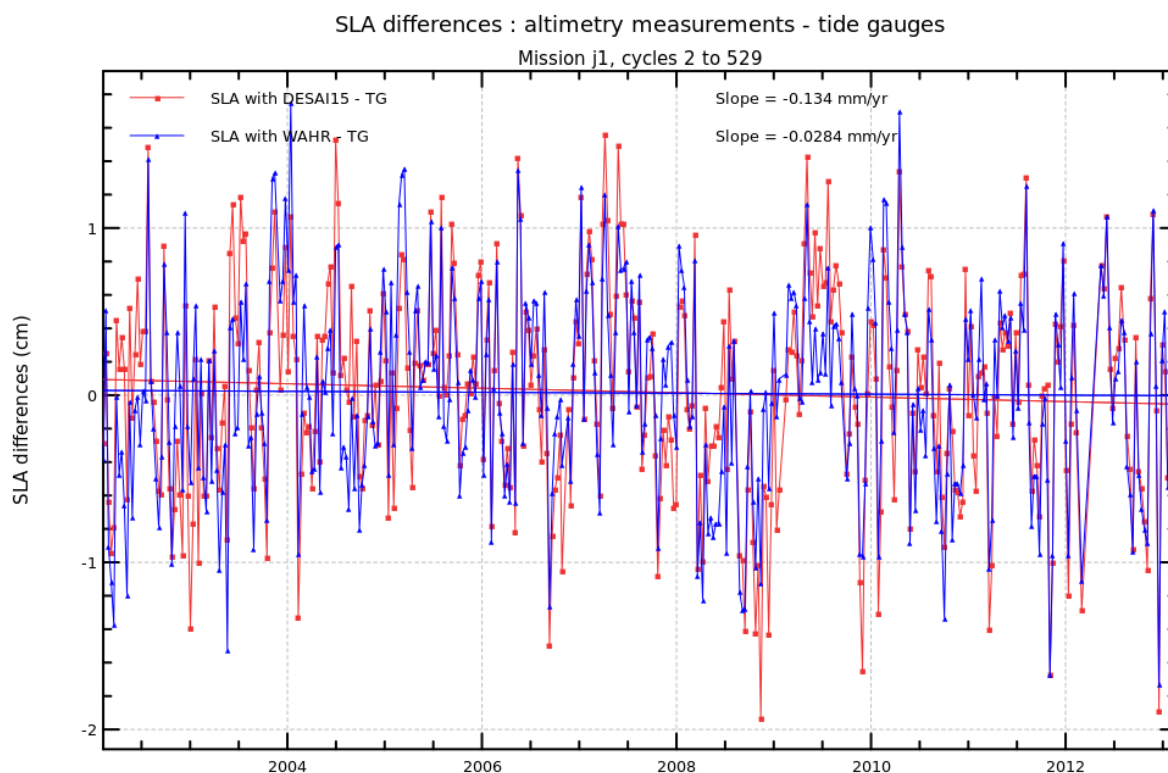
Diagnostic C001 (mission j1)

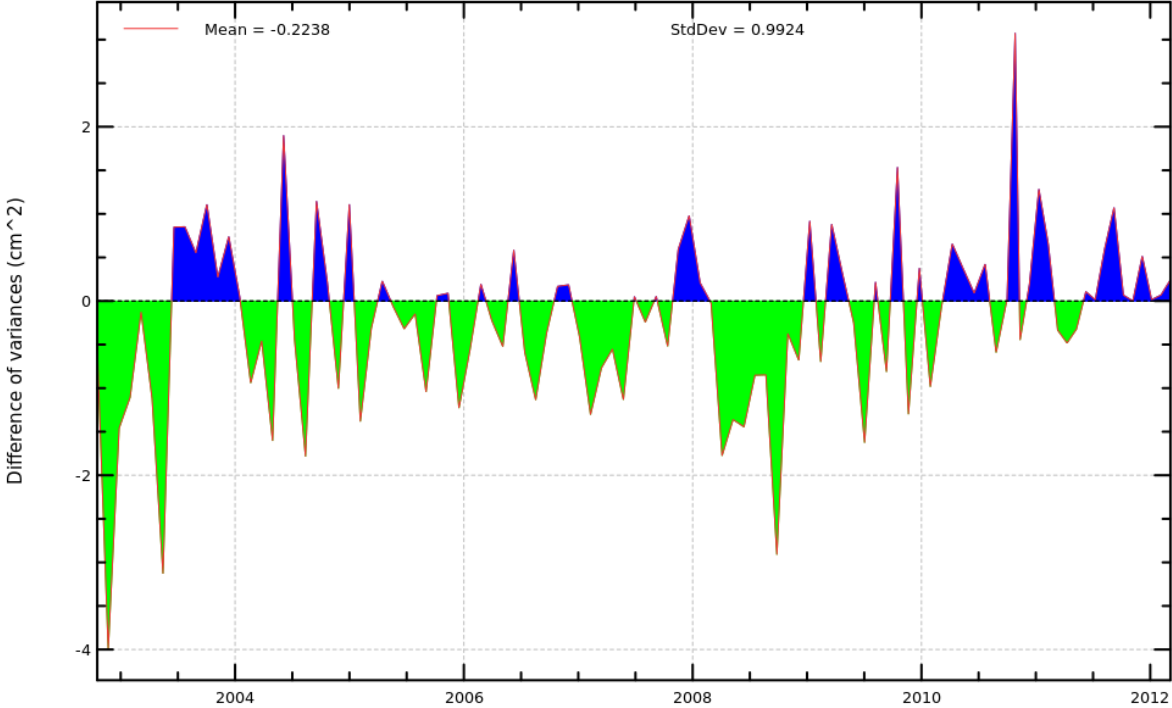
Name : Temporal evolution of SSH differences between tide gauges and altimetry measurements

Input data : Tide gauges SSH measurements

Description : The temporal evolution of global statistics (mean, variance, slope) of SSH differences between tide gauges and altimeter measurements are calculated from a cyclic way (altimeter repetitivity) using successively both altimetric components in SSH calculation. The altimetric and tide gauges data are colocated with criteria of maximum of correlation, and tide gauges used are derived from global networks (GLOSS/CLIVAR, REFMAR).

Diagnostic type : Altimetry and in-situ data comparison



Diagnostic C002 (mission en)	
Name : Differences of temporal evolution of SSH differences between tide gauges and altimetry measurements	
Input data : Tide gauges SSH measurements	
Description : The difference between temporal evolution of global statistics of differences between tide gauge and altimeter data differences are calculated from a cyclic way (altimeter repetivity, daily, weekly, monthly) using successively both altimetric components in altimetric SSH calculation. The altimetric and tide gauges data are collocated with criteria of maximum of correlation, and tide gauges used are derived from global networks as GLOSS/CLIVAR.	
<div><p>Difference of variances : VAR(SLA with DESAI15 - TG) - VAR(SLA with WAHR - TG)</p><p>Mission en, cycles 9 to 113</p><p>Mean = -0.2238 StdDev = 0.9924</p></div>	

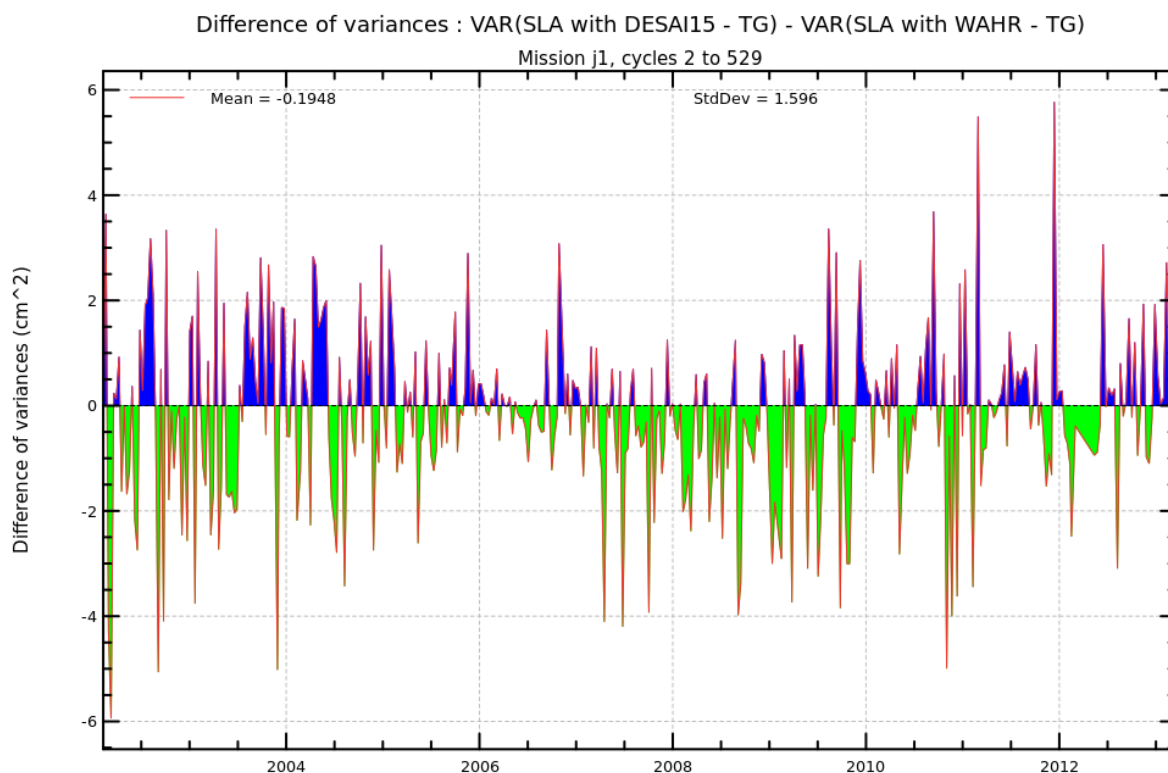
Diagnostic C002 (mission j1)

Name : Differences of temporal evolution of SSH differences between tide gauges and altimetry measurements

Input data : Tide gauges SSH measurements

Description : The difference between temporal evolution of global statistics of differences between tide gauge and altimeter data differences are calculated from a cyclic way (altimeter repetivity, daily, weekly, monthly) using successively both altimetric components in altimetric SSH calculation. The altimetric and tide gauges data are collocated with criteria of maximum of correlation, and tide gauges used are derived from global networks as GLOSS/CLIVAR.

Diagnostic type : Altimetry and in-situ data comparison

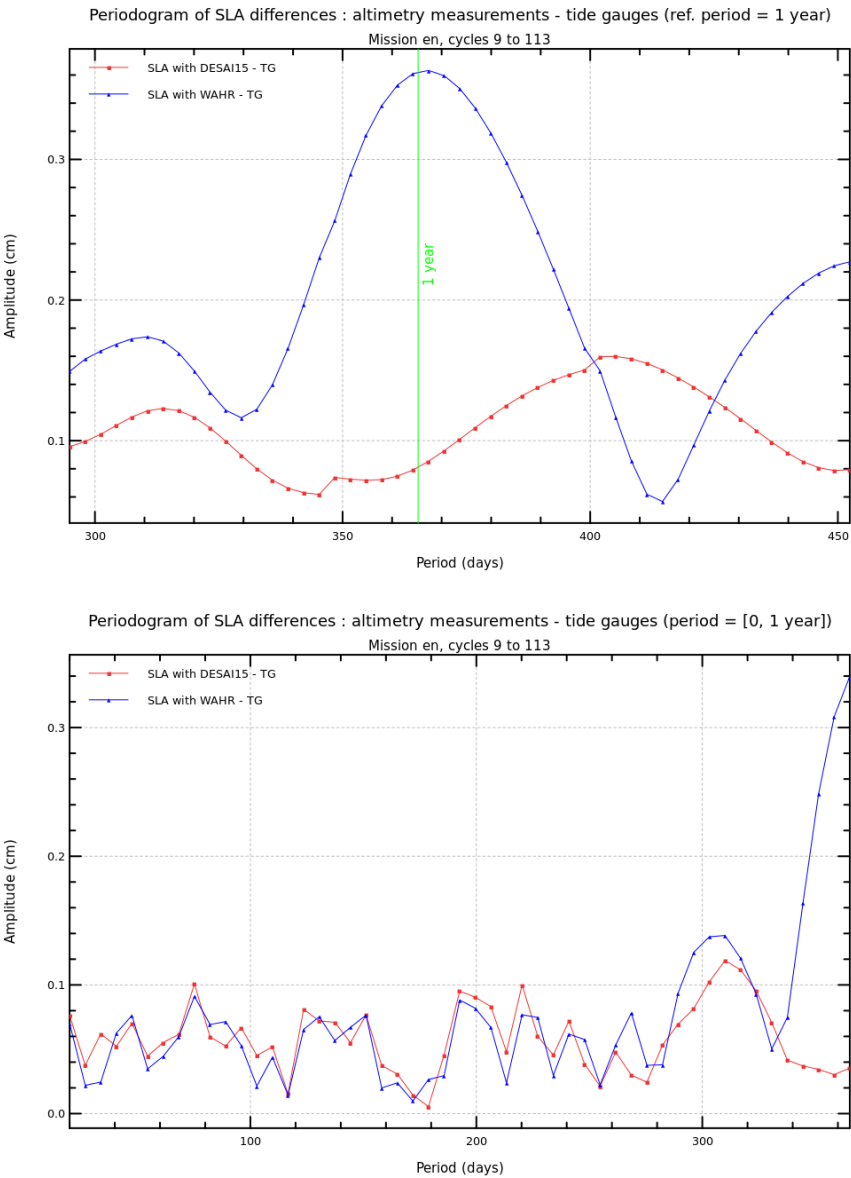


Diagnostic C003 (mission en)

Name : Periodogram derived from temporal evolution of SSH differences between tide gauges and altimetry

Input data : Tide gauges SSH measurements

Description : The periodogram derived from temporal evolution of altimetric and tide gauges SSH differences is calculated using successively both altimetric components in the altimetric SSH. The periodogram is calculated from the mean or variance statistics and it can be displayed for all the whole time period or a dedicated one



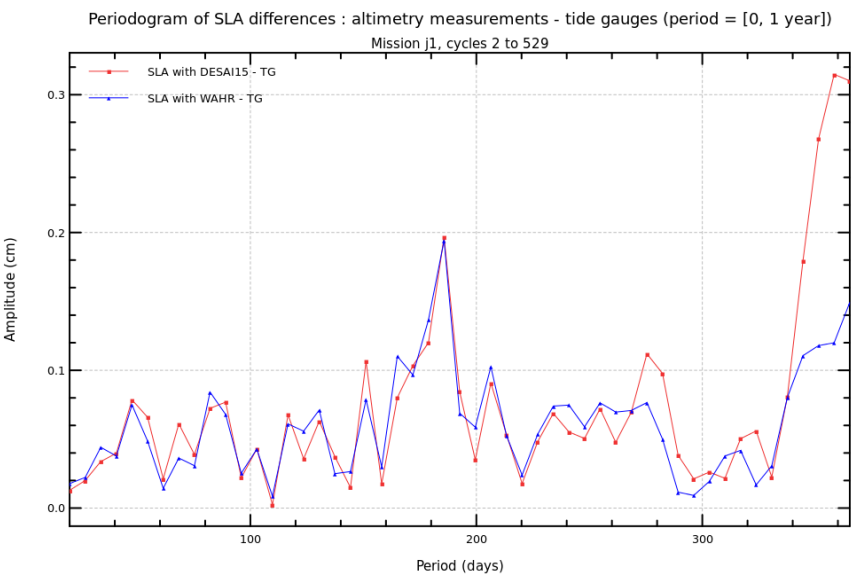
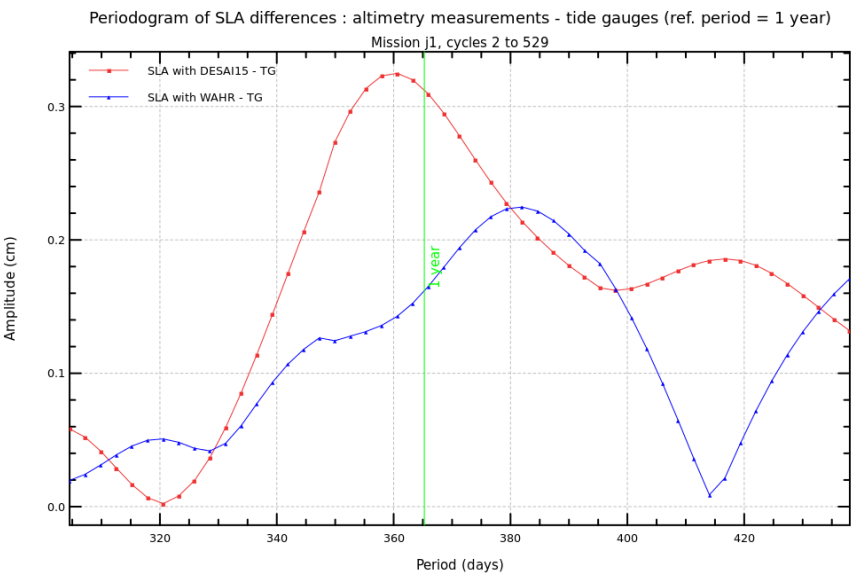
Diagnostic C003 (mission j1)

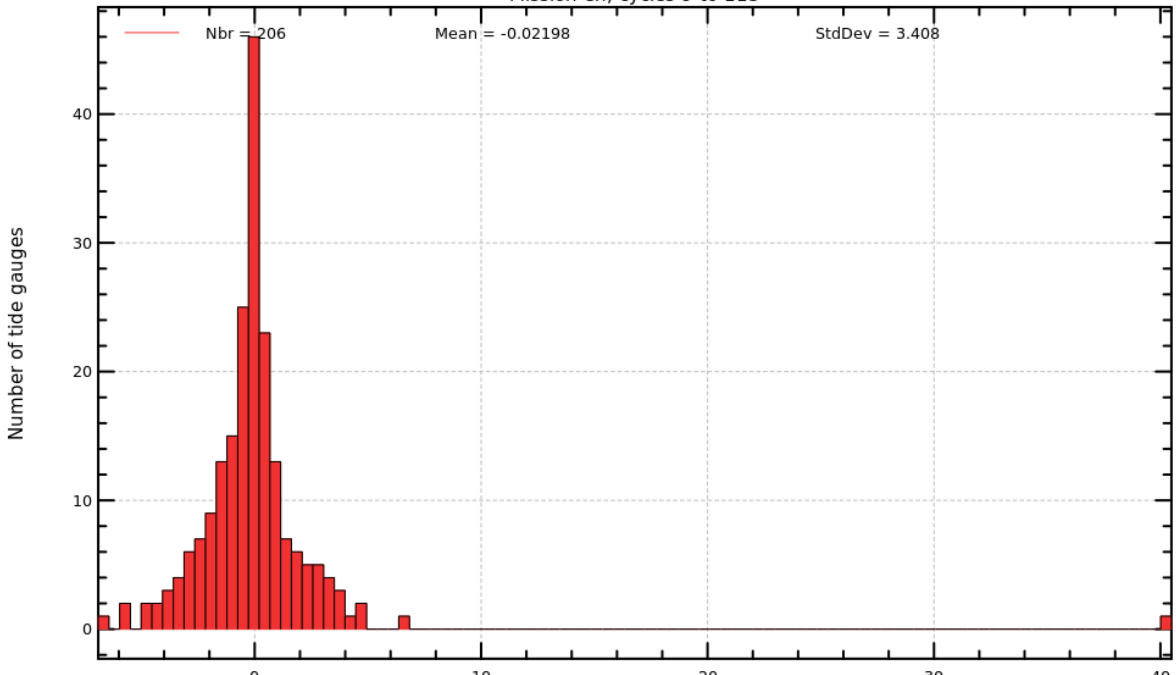
Name : Periodogram derived from temporal evolution of SSH differences between tide gauges and altimetry

Input data : Tide gauges SSH measurements

Description : The periodogram derived from temporal evolution of altimetric and tide gauges SSH differences is calculated using successively both altimetric components in the altimetric SSH. The periodogram is calculated from the mean or variance statistics and it can be displayed for all the whole time period or a dedicated one

Diagnostic type : Altimetry and in-situ data comparison



Diagnostic type : Altimetry and in-situ data comparison	Diagnostic C004 (mission en)	
	Name : Histograms of differences between tide gauges and altimeter SSH differences	
	Input data : Tide gauges SSH measurements	
	Description : The difference of histograms between altimeter and tide gauge SSH differences is computed from the elementary statistics at each tide gauge using successively both altimetric components in the altimetry SSH.	
	<div><div>Histogram of the difference of variances</div><div>Mission en, cycles 9 to 113</div><div><div>Nbr = 206</div><div>Mean = -0.02198</div><div>StdDev = 3.408</div></div><div><div>Number of tide gauges</div><div></div><div>Differences of variances : VAR(SLA with DESAI15 - T. G.) - VAR(SLA with WAHR - T. G.) (cm^2)</div></div></div>	

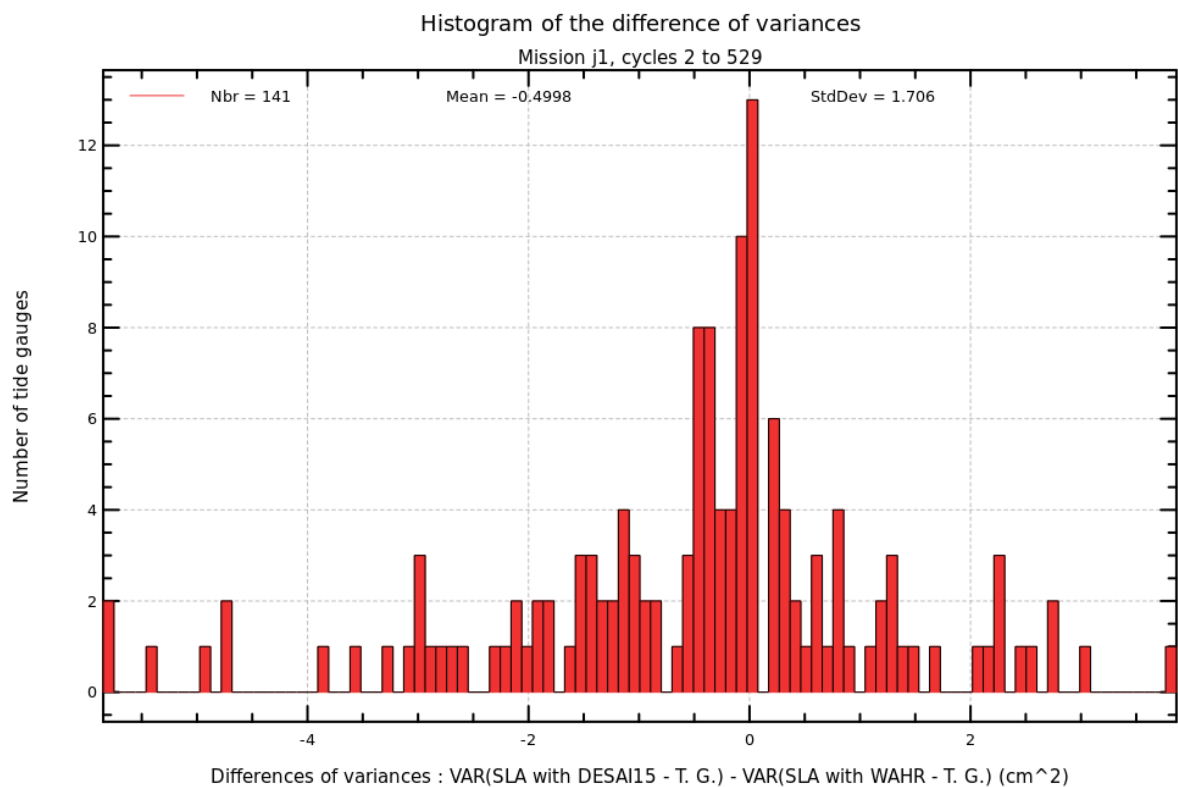
Diagnostic C004 (mission j1)

Name : Histograms of differences between tide gauges and altimeter SSH differences

Input data : Tide gauges SSH measurements

Description : The difference of histograms between altimeter and tide gauge SSH differences is computed from the elementary statistics at each tide gauge using successively both altimetric components in the altimetry SSH.

Diagnostic type : Altimetry and in-situ data comparison



Diagnostic C005 (mission en)

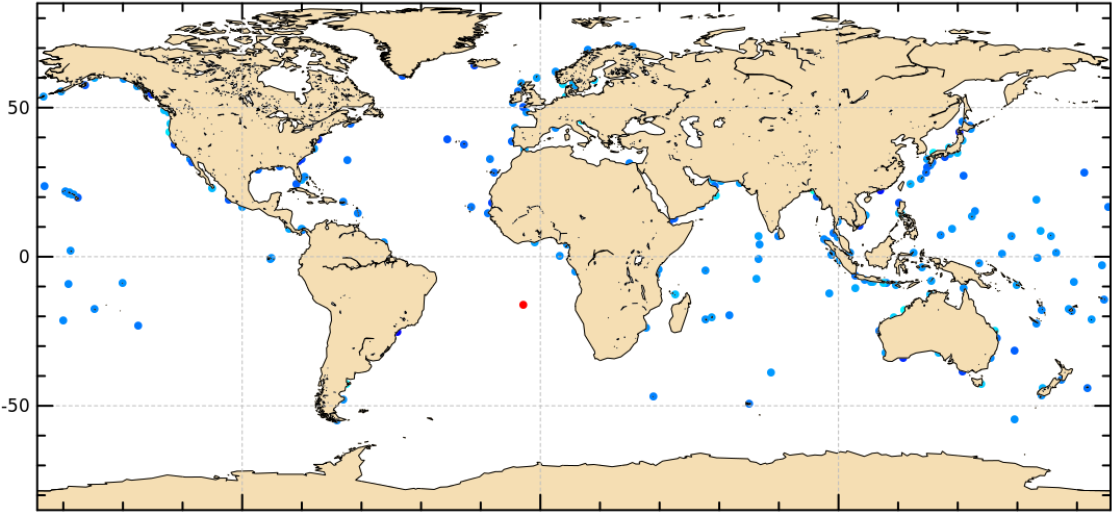
Name : Map of differences between tide gauges and altimeter SSH differences

Input data : Tide gauges SSH measurements

Description : The map of global statistics of differences between altimeter and tide gauge SSH differences is computed from the statistics at each tide gauge location using successively both altimetric components in the altimetry SSH

Difference of variances : VAR(SLA with DESAI15 - TG) - VAR(SLA with WAHR - TG)

Mission en, cycles 9 to 113



Difference of variances with regard to tide gauges (cm^2)

010203040

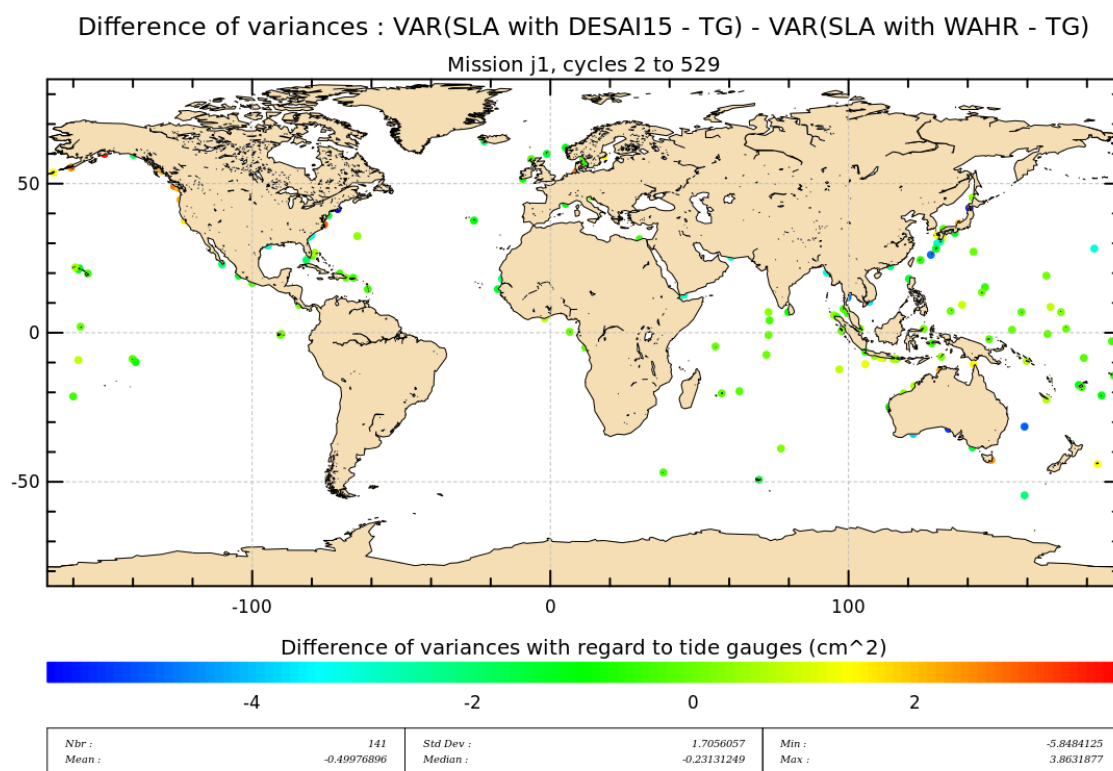
Nbr :	206	Std Dev :	3.4084878	Min :	-6.909087
Mean :	-0.02197906	Median :	-0.053492983	Max :	40.485182

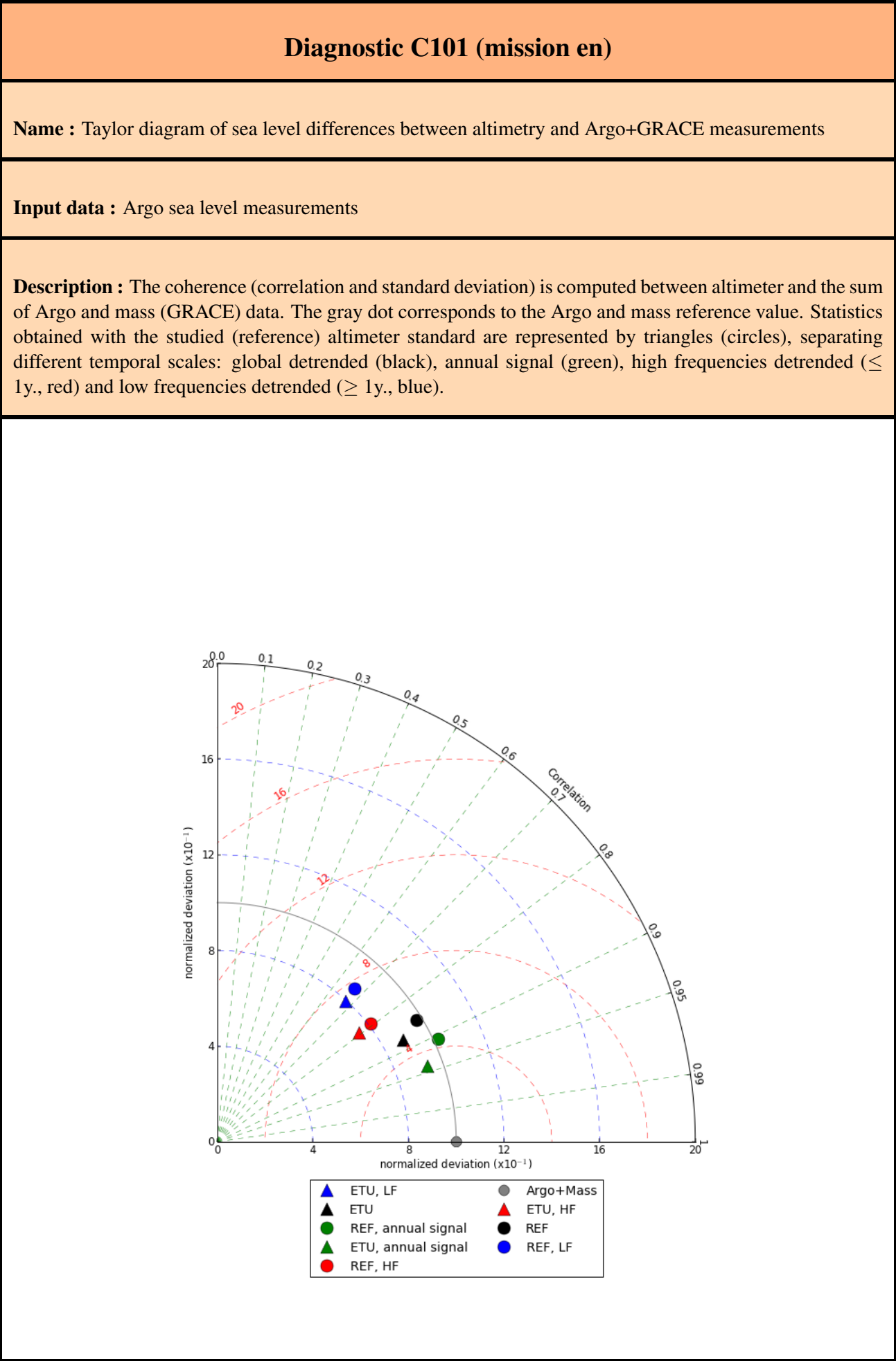
Diagnostic C005 (mission j1)

Name : Map of differences between tide gauges and altimeter SSH differences

Input data : Tide gauges SSH measurements

Description : The map of global statistics of differences between altimeter and tide gauge SSH differences is computed from the statistics at each tide gauge location using successively both altimetric components in the altimetry SSH



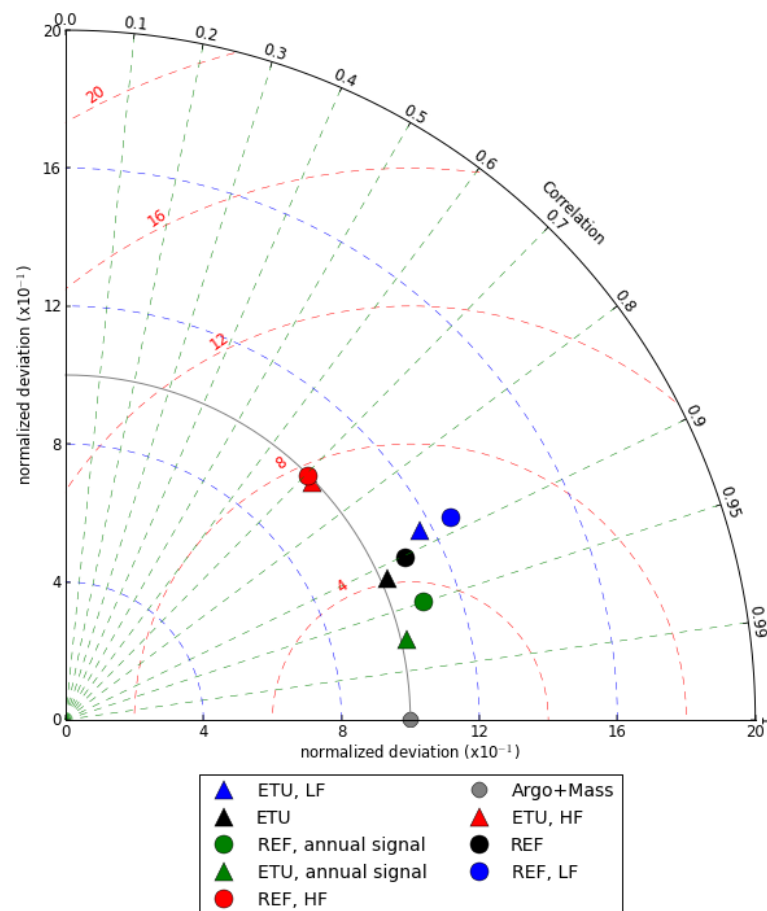


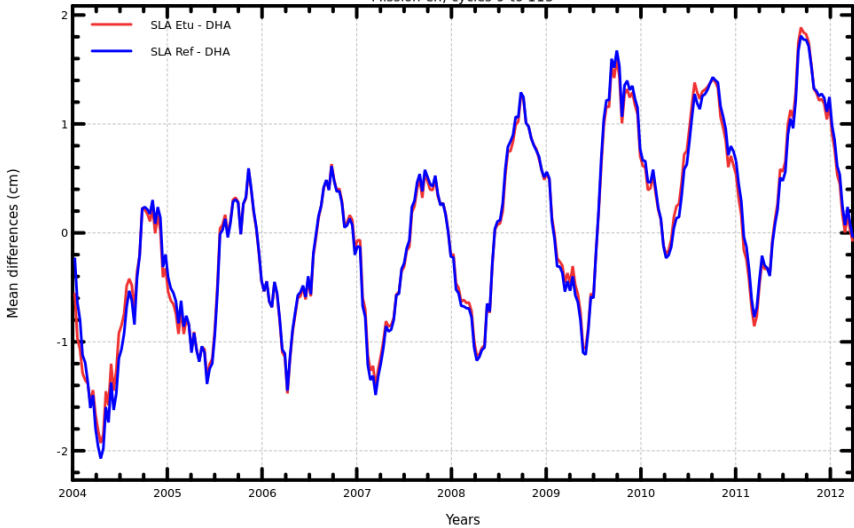
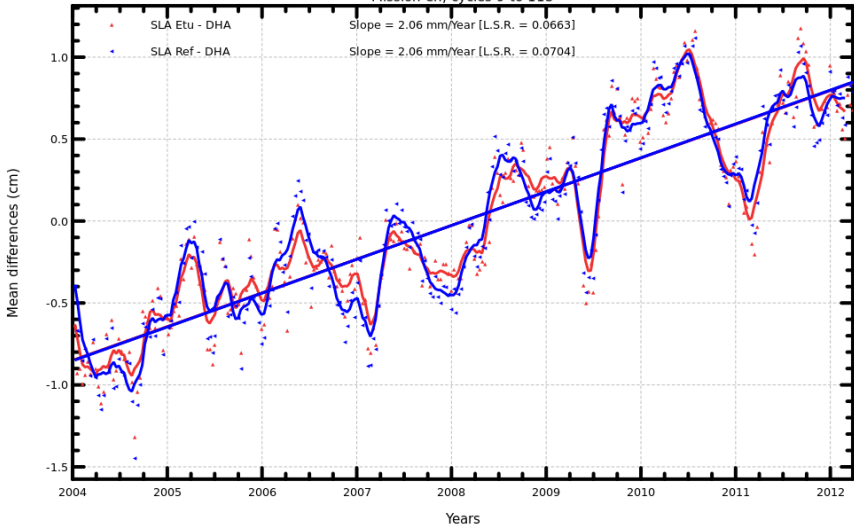
Diagnostic C101 (mission j1)

Name : Taylor diagram of sea level differences between altimetry and Argo+GRACE measurements

Input data : Argo sea level measurements

Description : The coherence (correlation and standard deviation) is computed between altimeter and the sum of Argo and mass (GRACE) data. The gray dot corresponds to the Argo and mass reference value. Statistics obtained with the studied (reference) altimeter standard are represented by triangles (circles), separating different temporal scales: global detrended (black), annual signal (green), high frequencies detrended (≤ 1 y., red) and low frequencies detrended (≥ 1 y., blue).



Diagnostic C102_a (mission en)	
Name : Temporal evolution of sea level differences between altimetry and Argo measurements	
Input data : Argo sea level measurements	
Description : The temporal evolution of the differences between altimetry and Argo measurements are computed by collocating altimeter data at the position and date of each Argo profiles. This is computed with both altimeter standards with and without the annual and semi-annual signals, for the North/South and East/West hemispheres.	
<div><div><div>Global valid mean differences</div><div>Mission en, cycles 9 to 113</div></div><div><div>Global valid mean differences without annual and semi-annual signals</div><div>Mission en, cycles 9 to 113</div><div><div>Slope = 2.06 mm/year [L.S.R. = 0.0663]</div><div>Slope = 2.06 mm/year [L.S.R. = 0.0704]</div></div></div></div>	

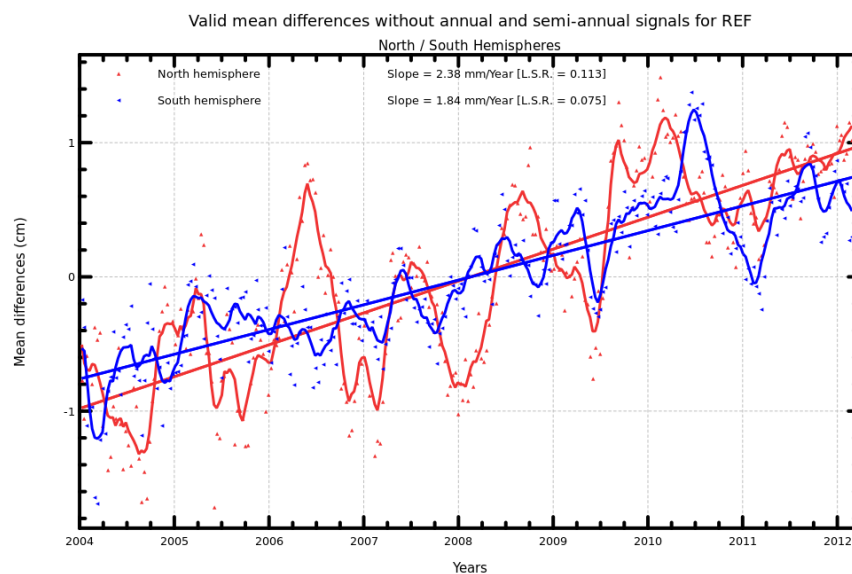
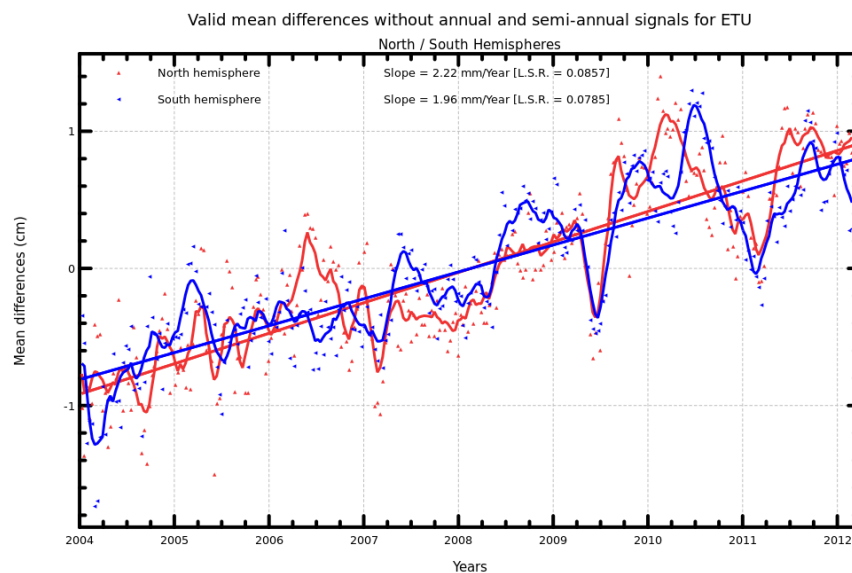
Diagnostic C102_b (mission en)

Name : Temporal evolution of sea level differences between altimetry and Argo measurements

Input data : Argo sea level measurements

Description : The temporal evolution of the differences between altimetry and Argo measurements are computed by collocating altimeter data at the position and date of each Argo profiles. This is computed with both altimeter standards with and without the annual and semi-annual signals, for the North/South and East/West hemispheres.

Diagnostic type : Altimetry and in-situ data comparison



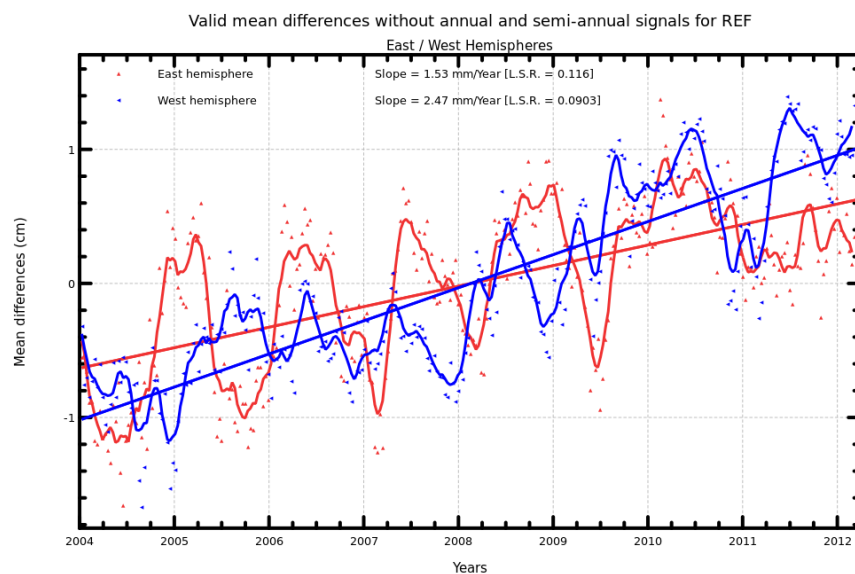
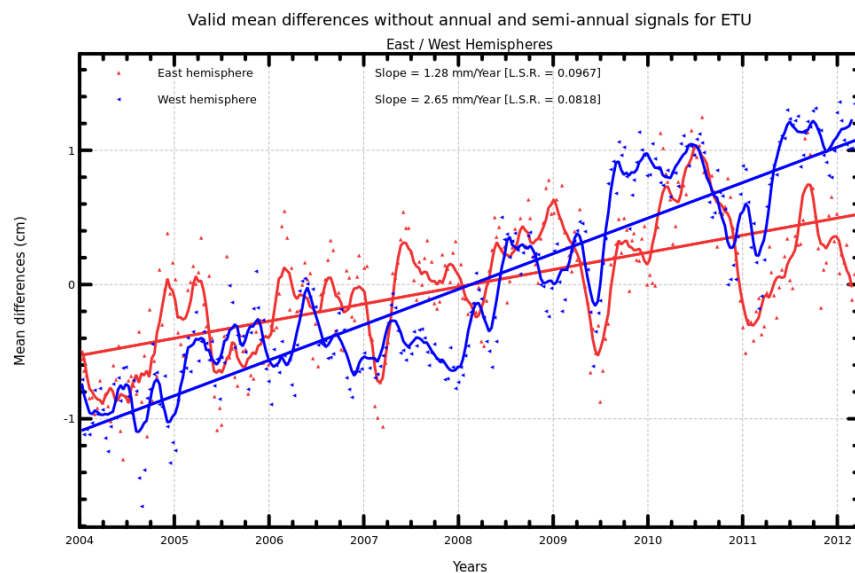
Diagnostic C102_c (mission en)

Name : Temporal evolution of sea level differences between altimetry and Argo measurements

Input data : Argo sea level measurements

Description : The temporal evolution of the differences between altimetry and Argo measurements are computed by collocating altimeter data at the position and date of each Argo profiles. This is computed with both altimeter standards with and without the annual and semi-annual signals, for the North/South and East/West hemispheres.

Diagnostic type : Altimetry and in-situ data comparison

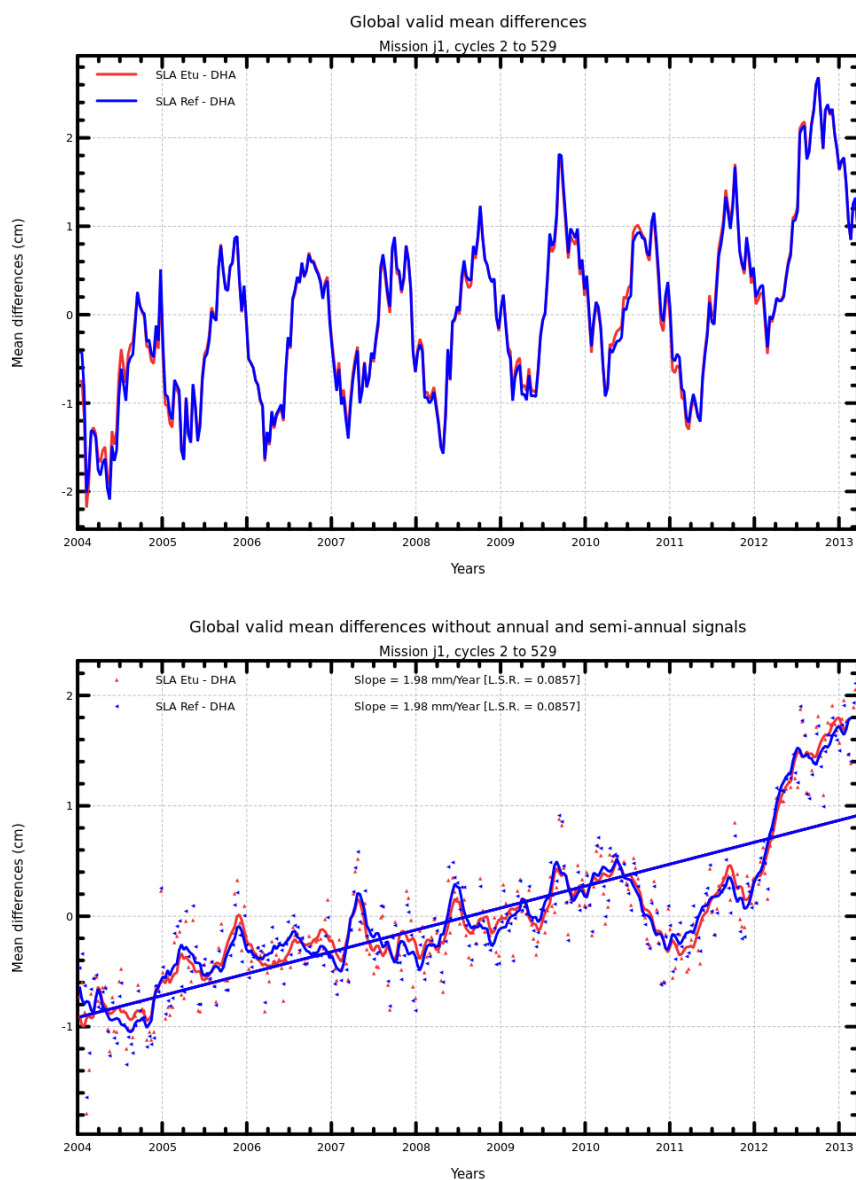


Diagnostic C102_a (mission j1)

Name : Temporal evolution of sea level differences between altimetry and Argo measurements

Input data : Argo sea level measurements

Description : The temporal evolution of the differences between altimetry and Argo measurements are computed by collocating altimeter data at the position and date of each Argo profiles. This is computed with both altimeter standards with and without the annual and semi-annual signals, for the North/South and East/West hemispheres.



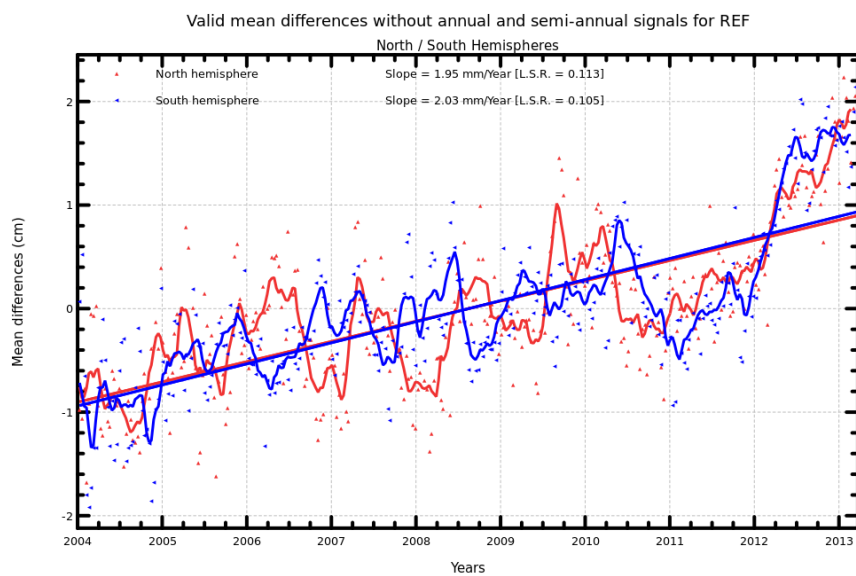
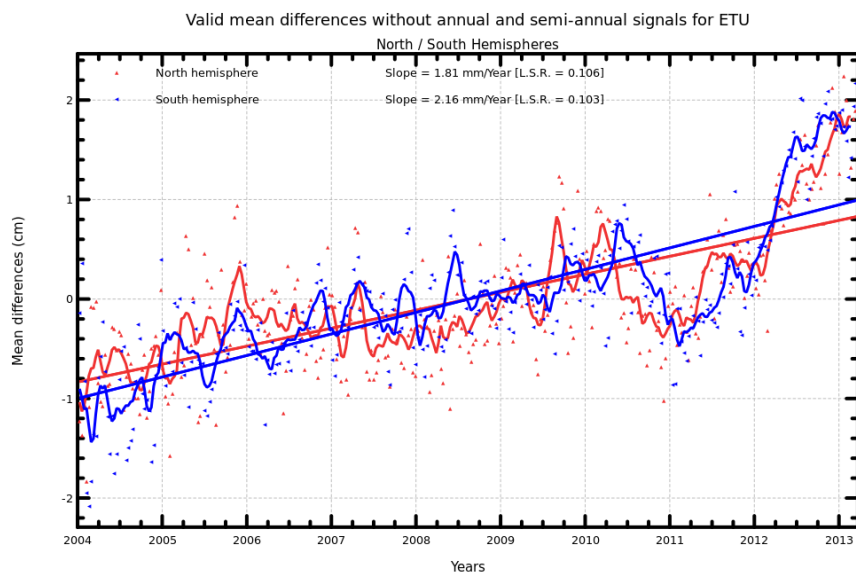
Diagnostic C102_b (mission j1)

Name : Temporal evolution of sea level differences between altimetry and Argo measurements

Input data : Argo sea level measurements

Description : The temporal evolution of the differences between altimetry and Argo measurements are computed by collocating altimeter data at the position and date of each Argo profiles. This is computed with both altimeter standards with and without the annual and semi-annual signals, for the North/South and East/West hemispheres.

Diagnostic type : Altimetry and in-situ data comparison



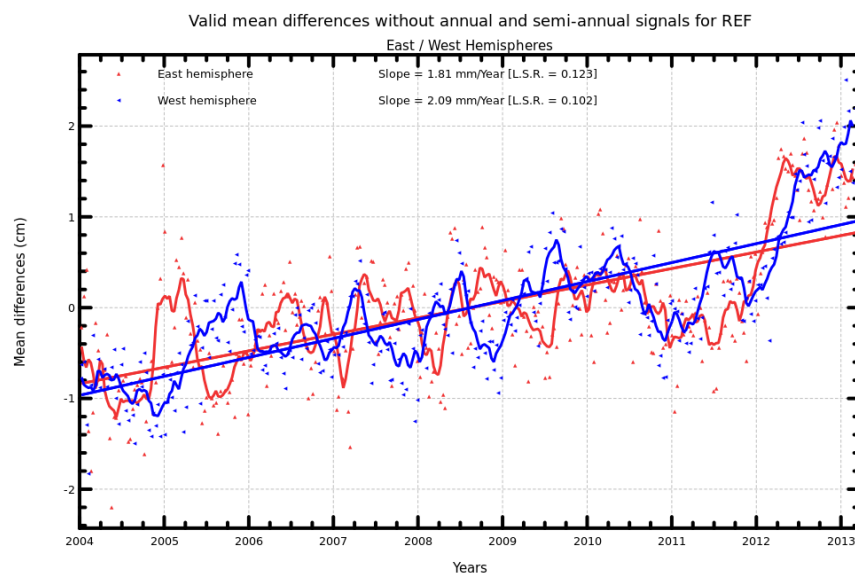
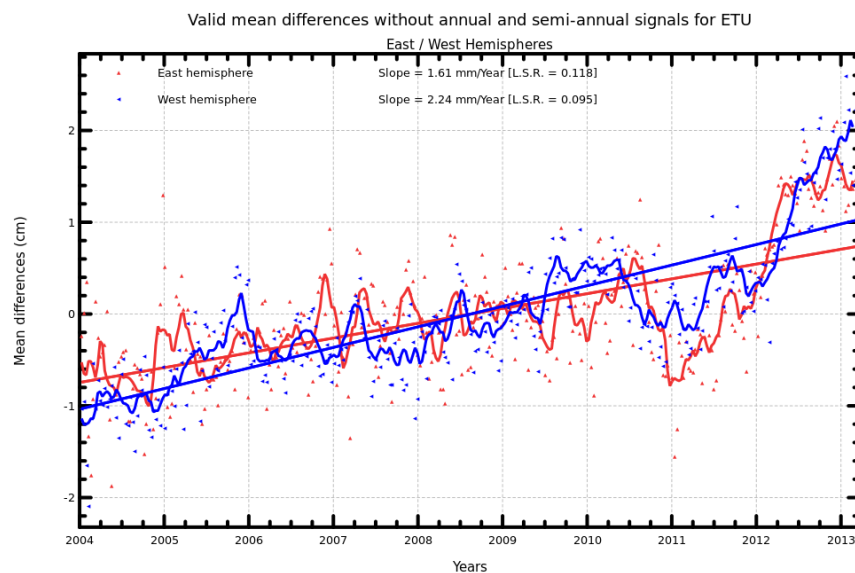
Diagnostic C102_c (mission j1)

Name : Temporal evolution of sea level differences between altimetry and Argo measurements

Input data : Argo sea level measurements

Description : The temporal evolution of the differences between altimetry and Argo measurements are computed by collocating altimeter data at the position and date of each Argo profiles. This is computed with both altimeter standards with and without the annual and semi-annual signals, for the North/South and East/West hemispheres.

Diagnostic type : Altimetry and in-situ data comparison



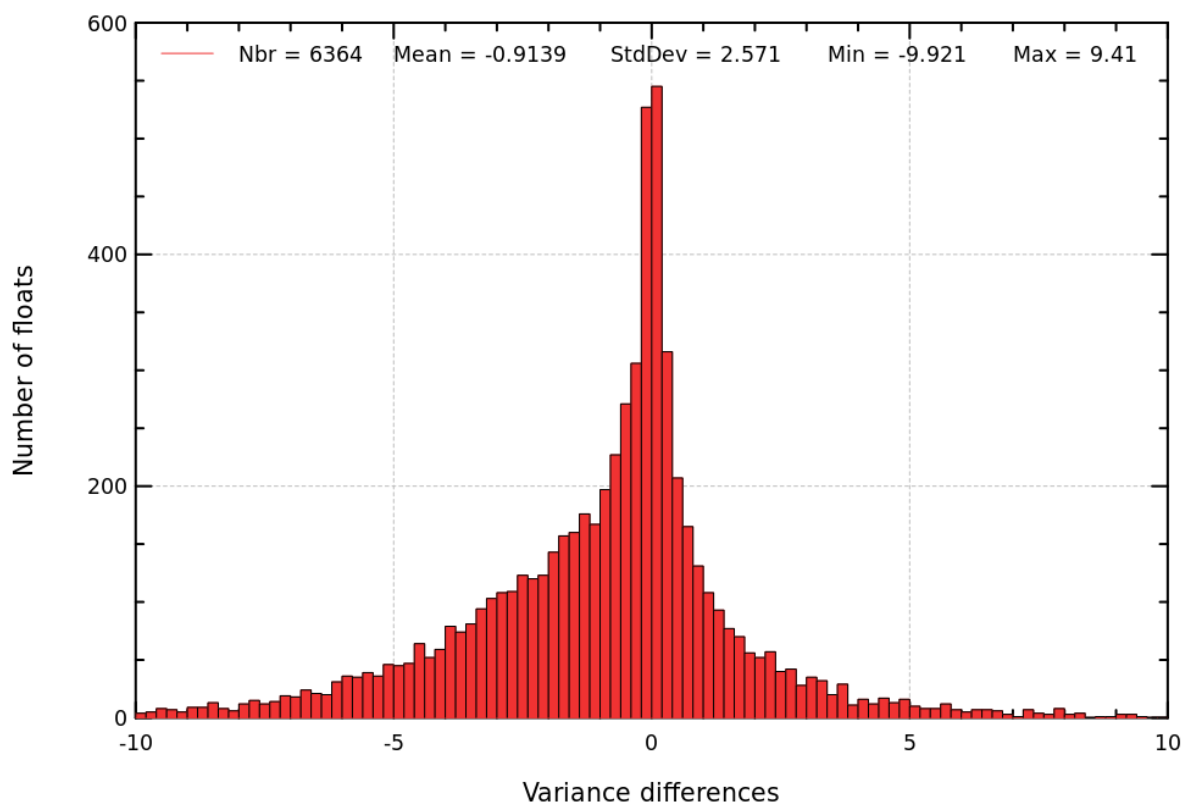
Diagnostic C103 (mission en)

Name : Histogram of the differences of the variances of altimetry - Argo differences

Input data : Argo sea level measurements

Description : The histogram of the difference of variances of sea level differences is computed from statistics derived from the timeseries of each Argo profiling floats using successively both altimeter standards in the SLA calculation. Negative (positive) values indicate that altimetry is more coherent with Argo with the studied (reference) correction.

Diagnostic type : Altimetry and in-situ data comparison



Diagnostic C103 (mission j1)

Name : Histogram of the differences of the variances of altimetry - Argo differences

Input data : Argo sea level measurements

Description : The histogram of the difference of variances of sea level differences is computed from statistics derived from the timeseries of each Argo profiling floats using successively both altimeter standards in the SLA calculation. Negative (positive) values indicate that altimetry is more coherent with Argo with the studied (reference) correction.

