

SSB : SSB_V3 versus SSB non off

Study variable	SSB_V3
Reference variable	SSB non off
Missions	Envisat (<i>en</i>)
Period	[19126, 22744]

Creation date : 2015/02/13

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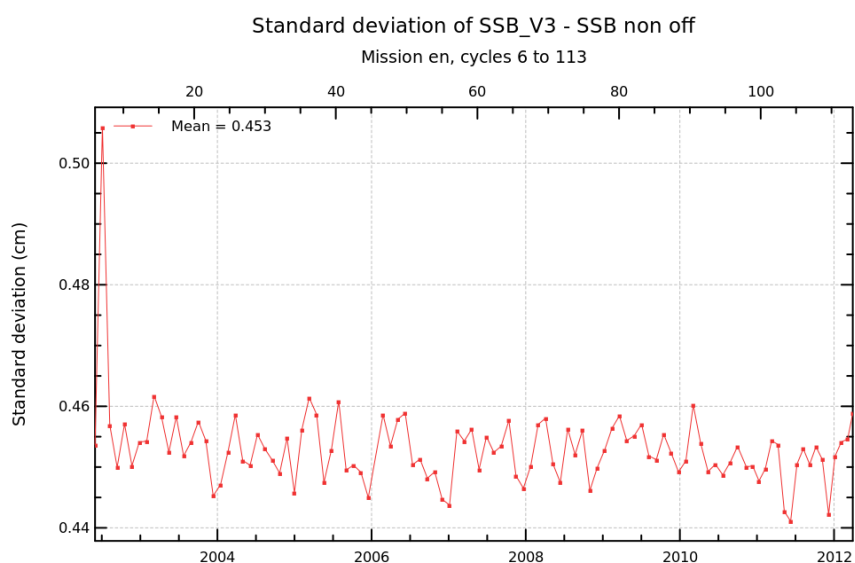
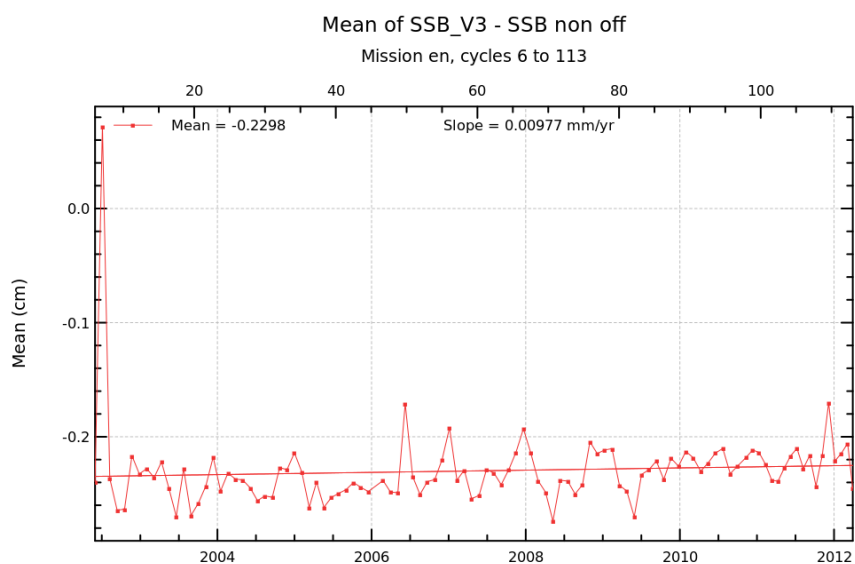
Diagnostic A002 (mission en)

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 type : Mono-mission analyses

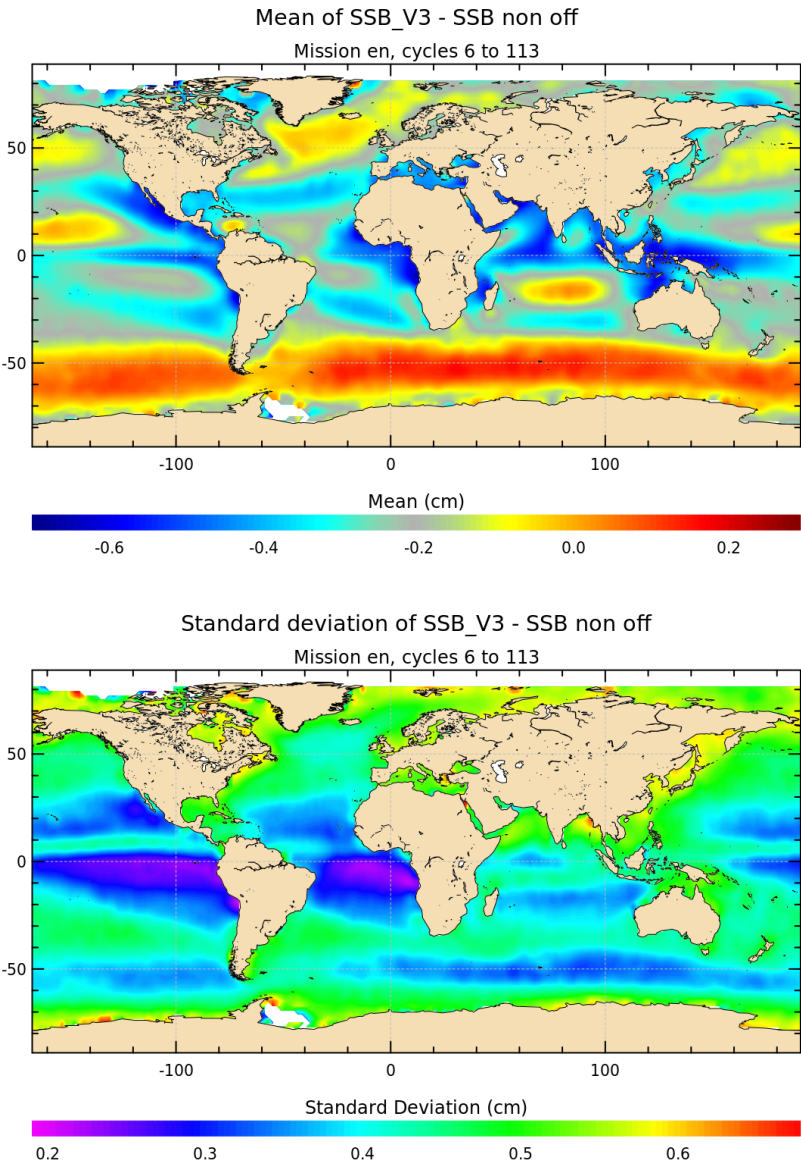


Diagnostic A003 (mission en)

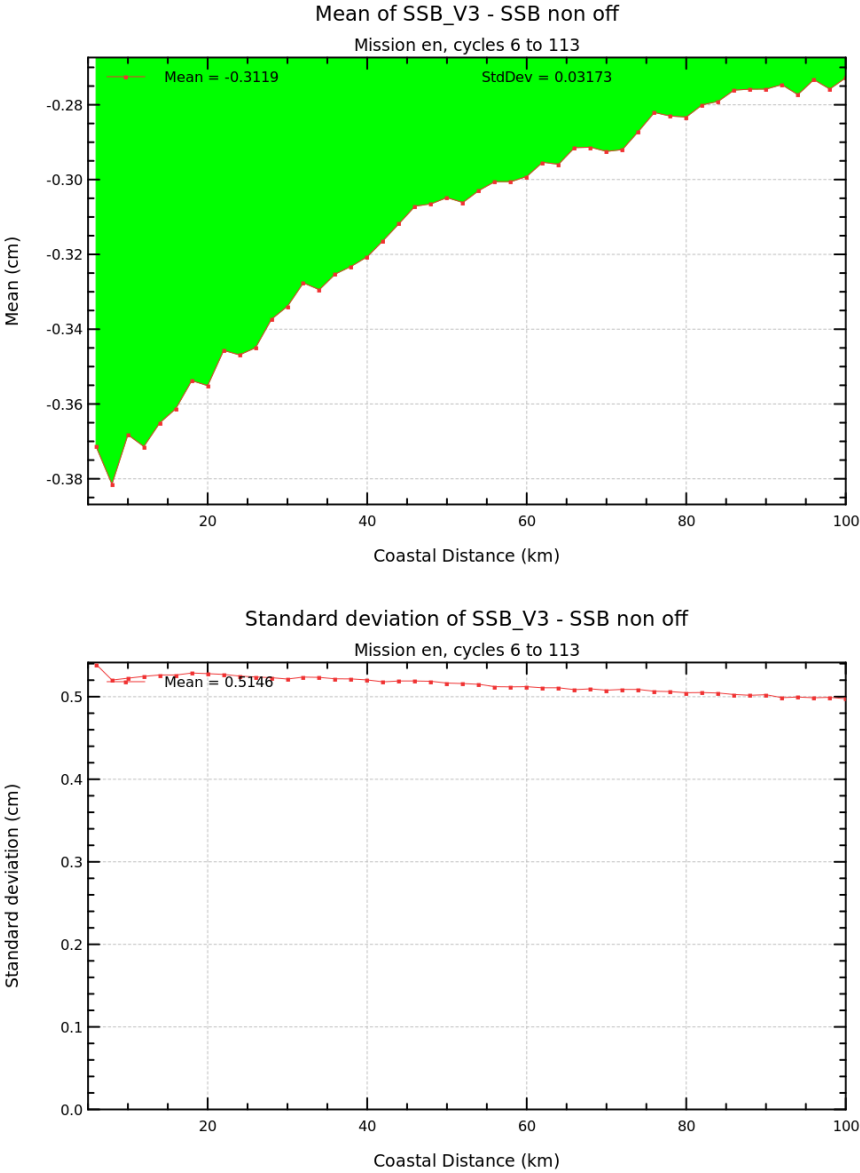
Name : Map of differences between both altimetric components over all the period

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 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.	



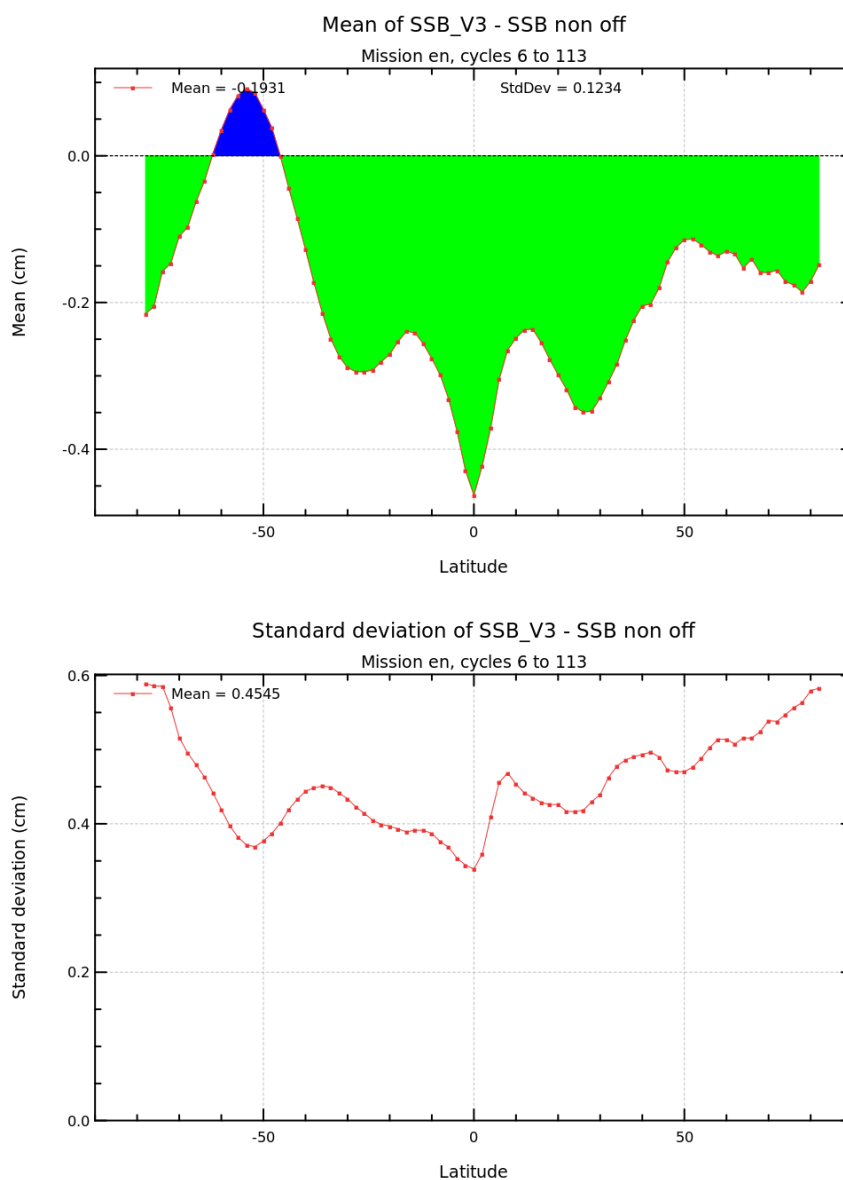
Diagnostic A005 (mission en)

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



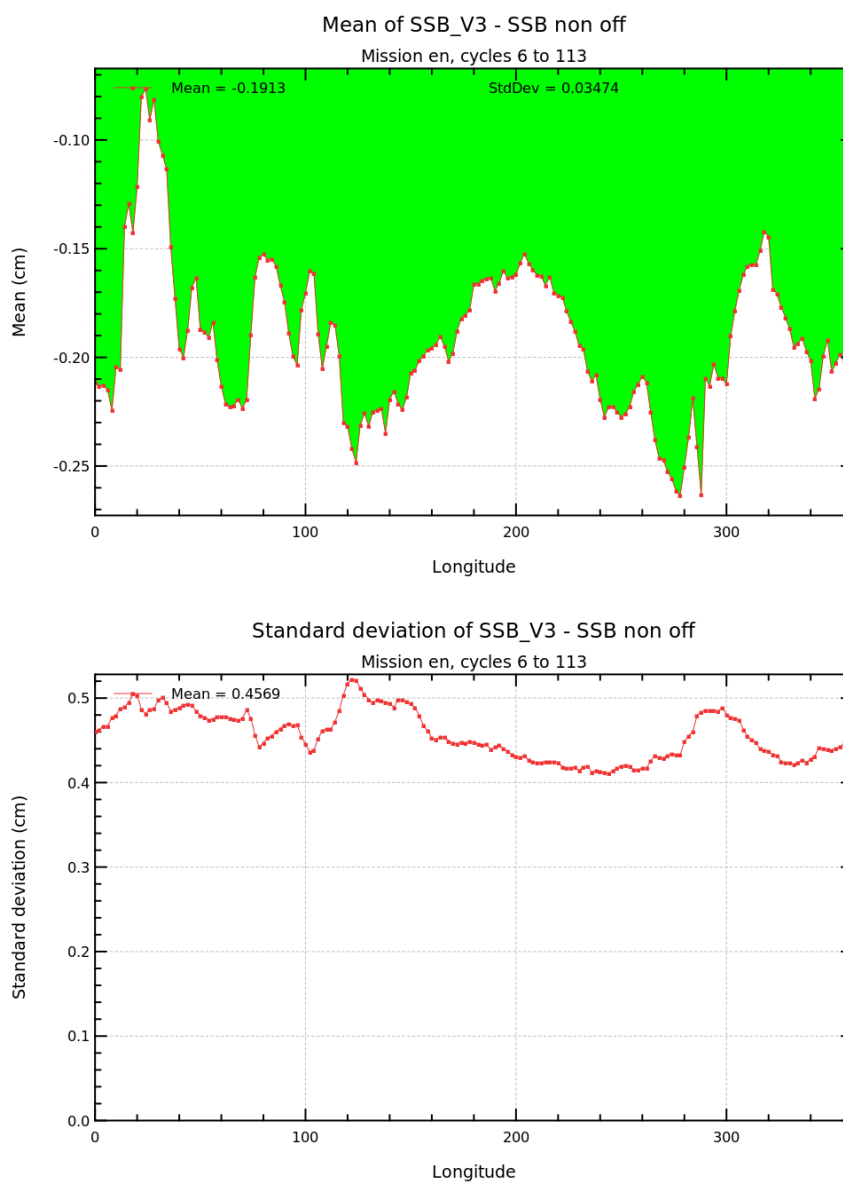
Diagnostic A005 (mission en)

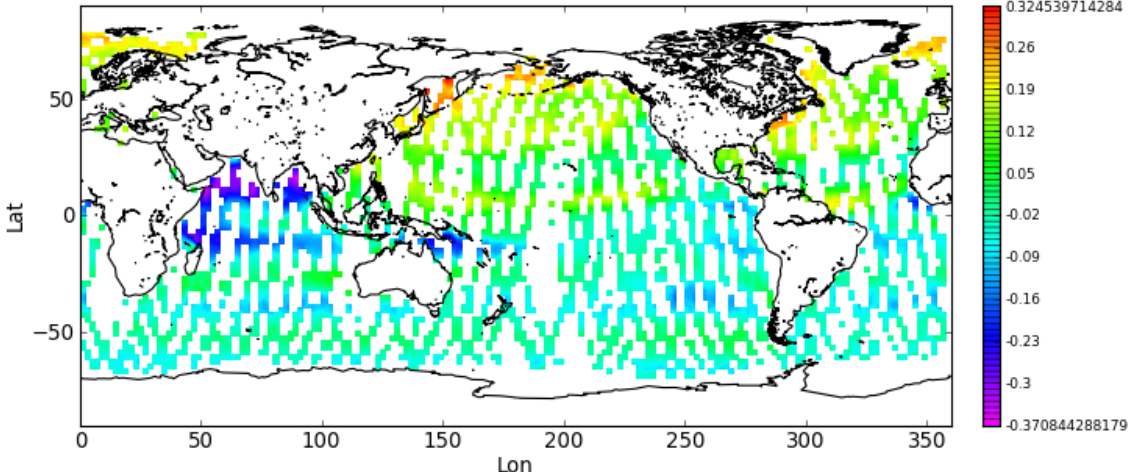
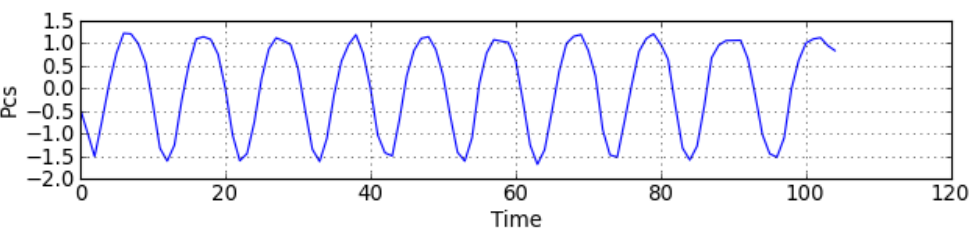
Name : Altimetric component differences versus coastal distances, latitude and longitude

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 type : Mono-mission analyses	Diagnostic A006_a (mission en)	
	Name : EOF Decomposition of Differences	
	Input data : Along track altimetric components	
	<p>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.</p>	
	<p>EOF #1-Mean- Explained Variance=22.0%</p>  	

Diagnostic A006_b (mission en)

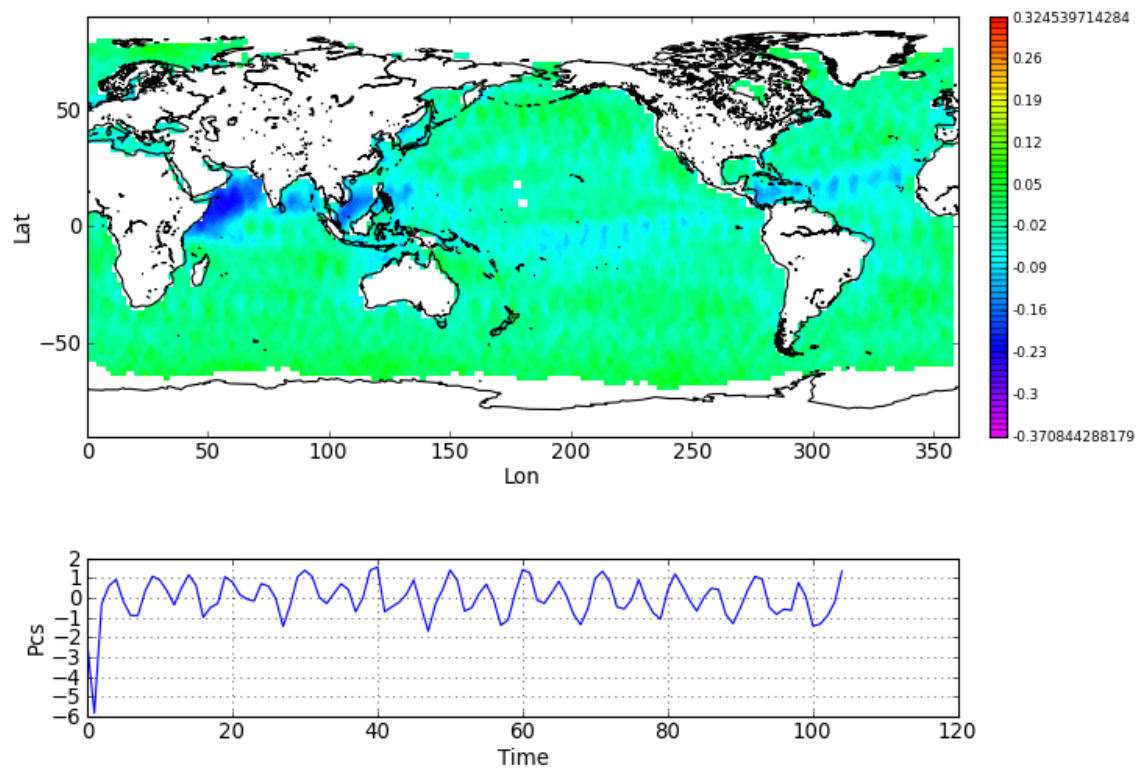
Name : EOF Decomposition of Differences

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=5.0%



Diagnostic A006_c (mission en)

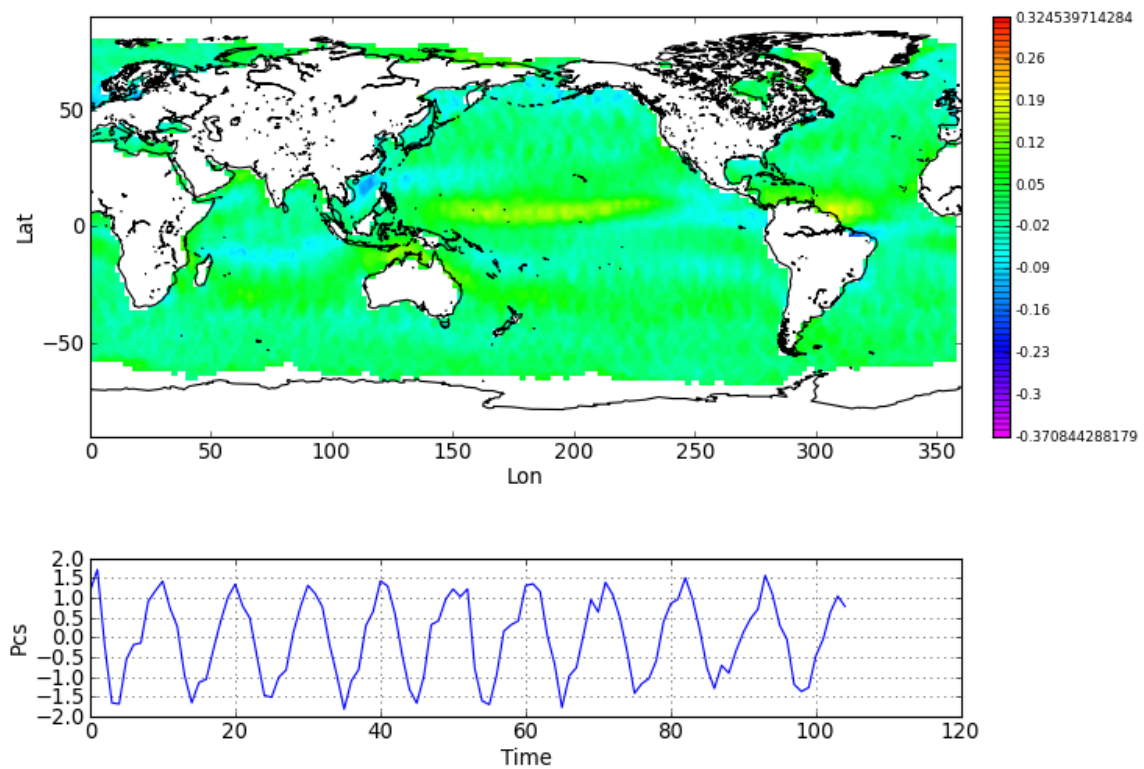
Name : EOF Decomposition of Differences

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=4.0%



Diagnostic A006_d (mission en)

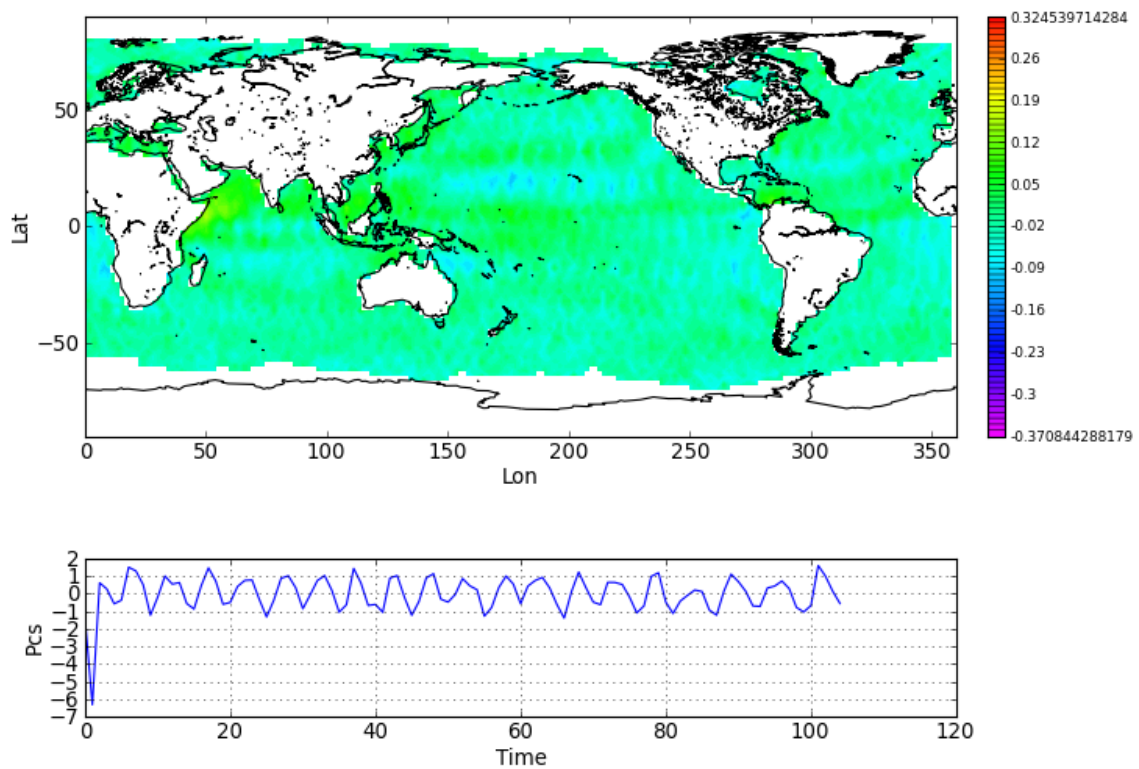
Name : EOF Decomposition of Differences

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=3.0%



Diagnostic A006_e (mission en)

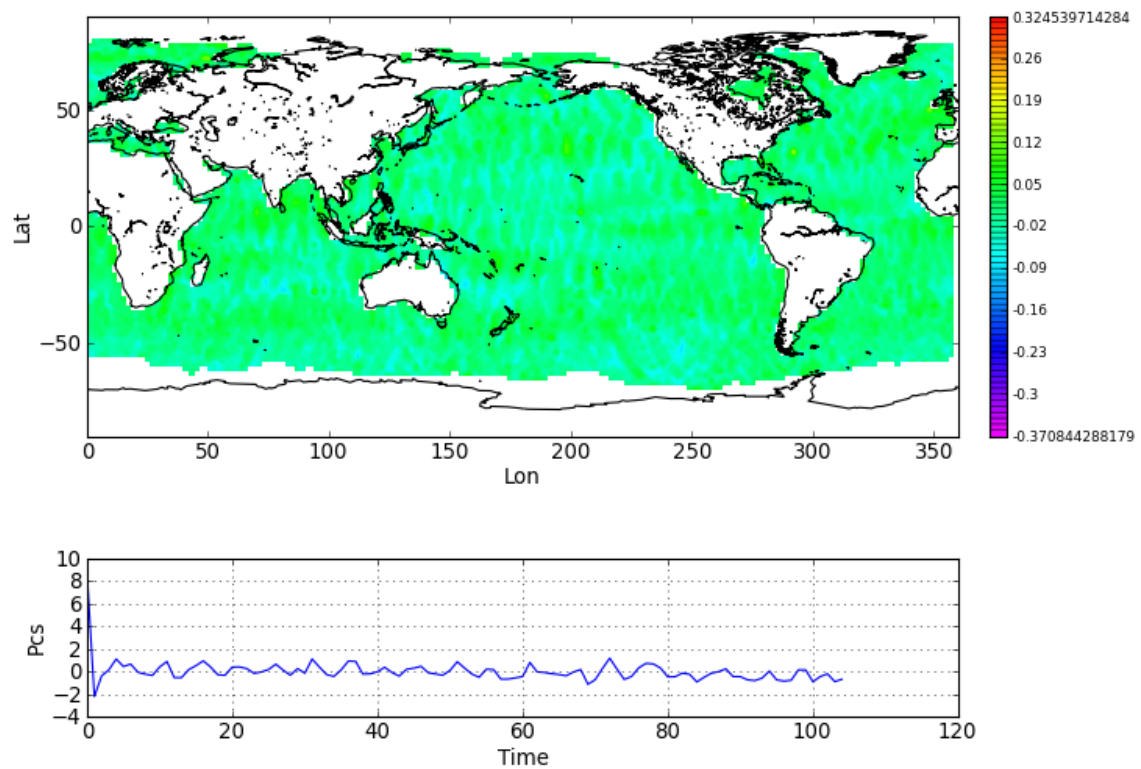
Name : EOF Decomposition of Differences

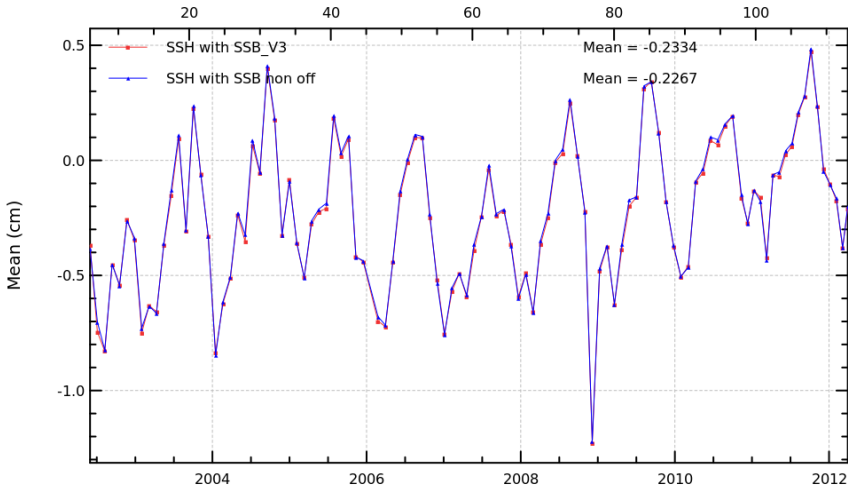
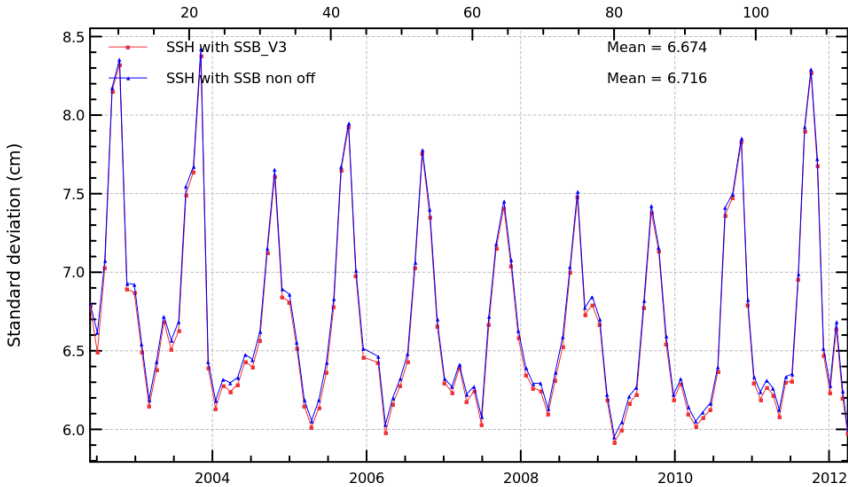
Input data : Along track altimetric components

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 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 6 to 113</div><div></div></div><div><div><div>Standard deviations of SSH crossovers</div><div>Mission en, cycles 6 to 113</div><div></div></div></div></div>	

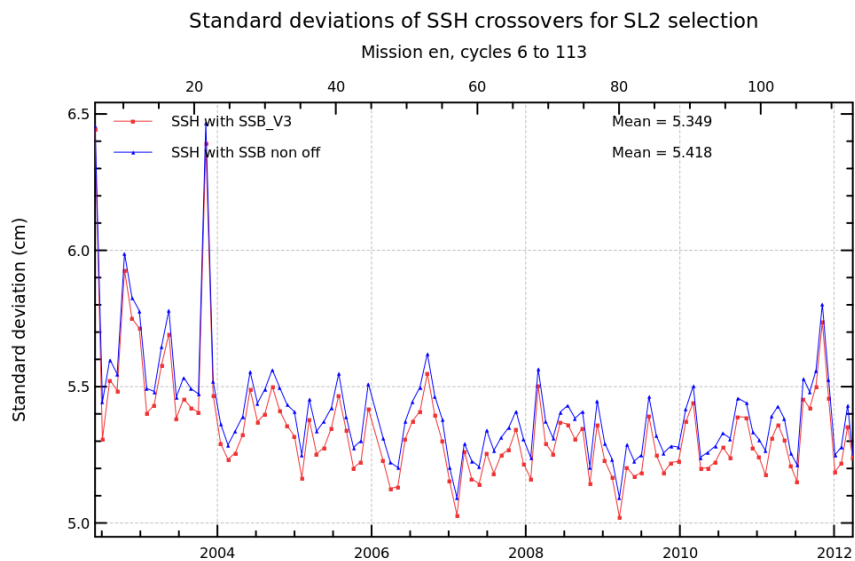
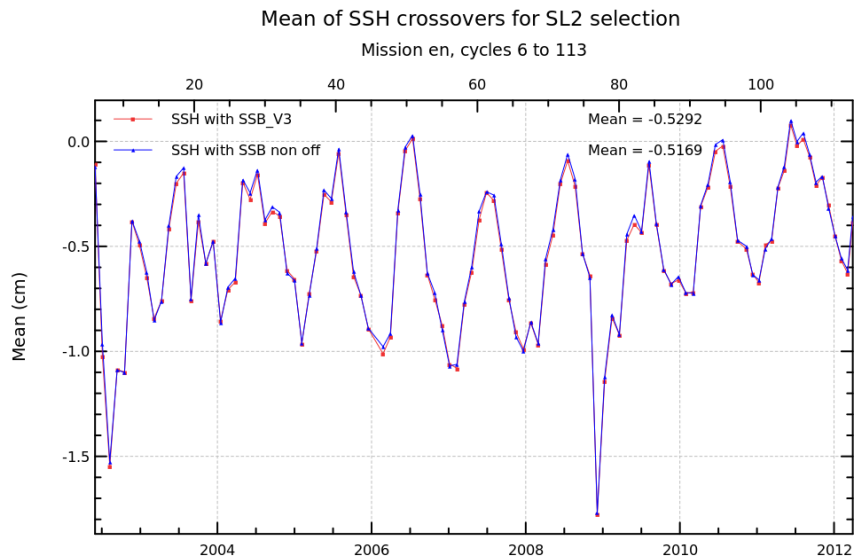
Diagnostic A101_b (mission en)

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



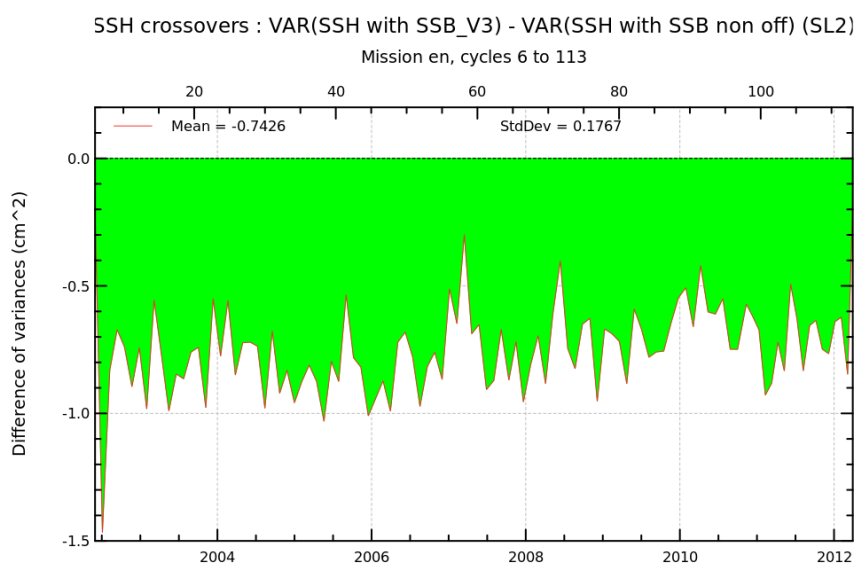
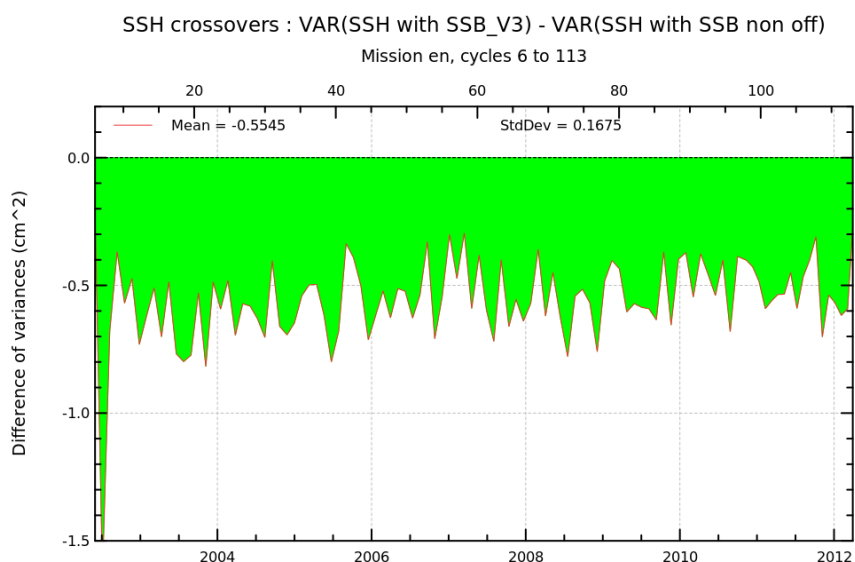
Diagnostic A102 (mission en)

Name : Differences between temporal evolution of SSH crossovers

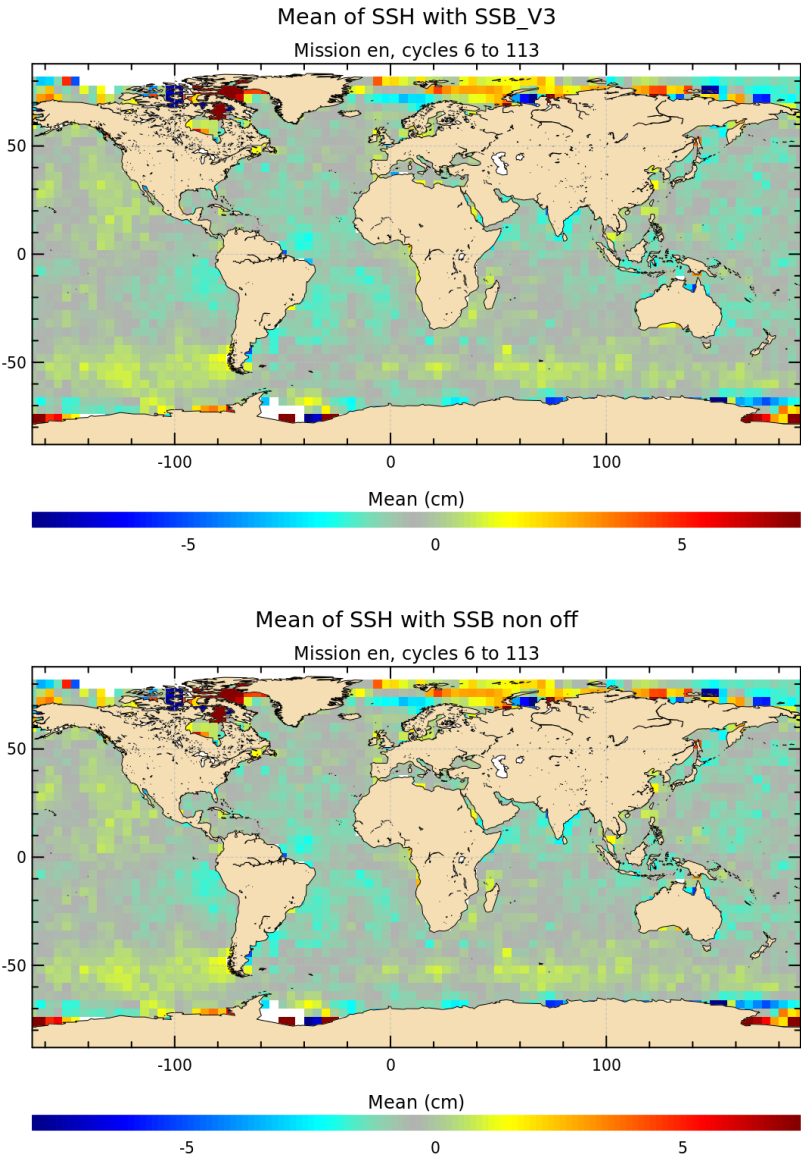
Input data : Sea Surface Height (SSH) crossovers

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 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).



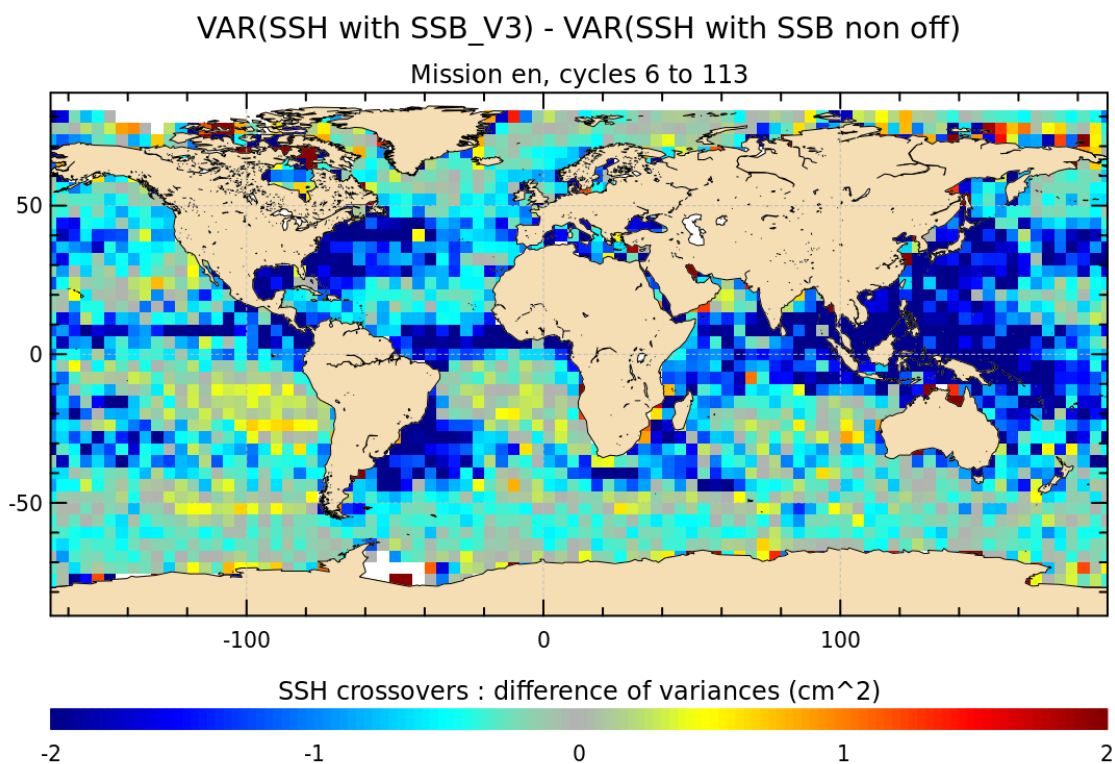
Diagnostic A104 (mission en)

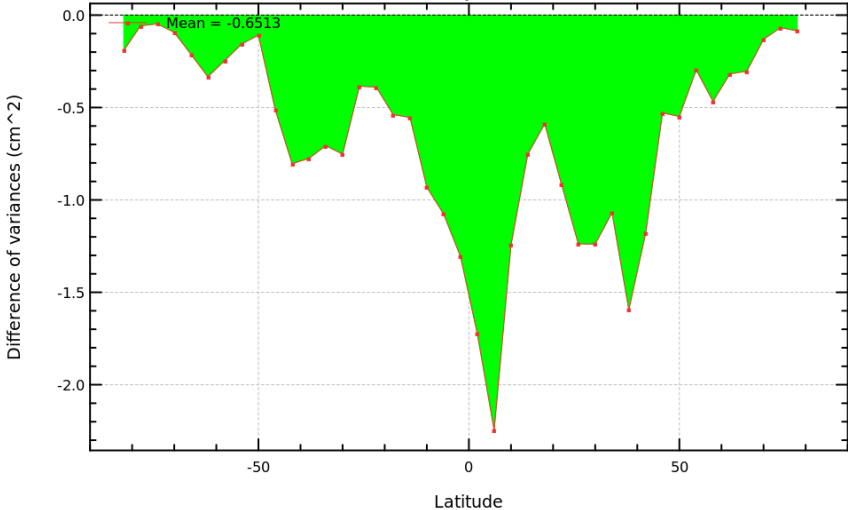
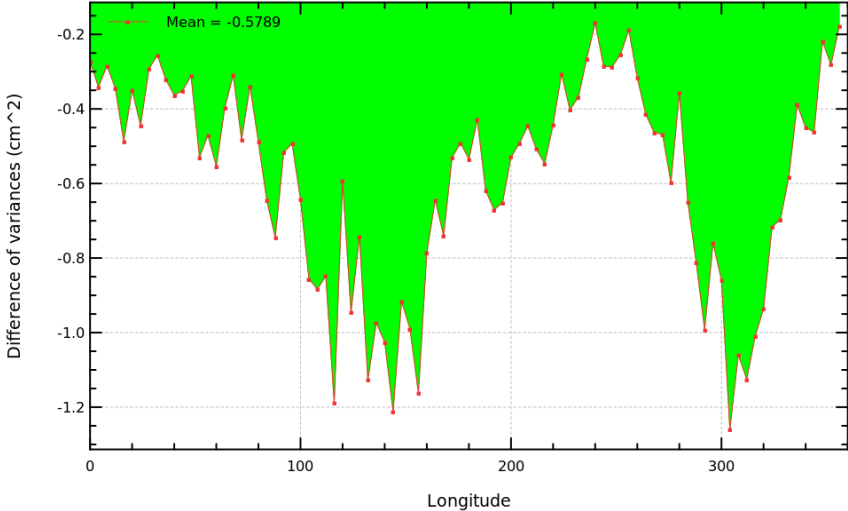
Name : Differences between maps of SSH crossovers

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 type : Mono-mission analyses	Diagnostic A105 (mission en)	
	Name : Differences between SSH crossovers vs coastal distance	
	Input data : Sea Surface Height (SSH) crossovers	
	Description : The differences of SSH variances at crossovers are plotted in function of coastal distance, latitudes and longitudes.	
	<div><div><div>VAR(SSH with SSB_V3) - VAR(SSH with SSB non off)</div><div>Mission en, cycles 6 to 113</div><div>Difference of variances (cm²)</div><div>Latitude</div></div><div><div>VAR(SSH with SSB_V3) - VAR(SSH with SSB non off)</div><div>Mission en, cycles 6 to 113</div><div>Difference of variances (cm²)</div><div>Longitude</div></div></div>	

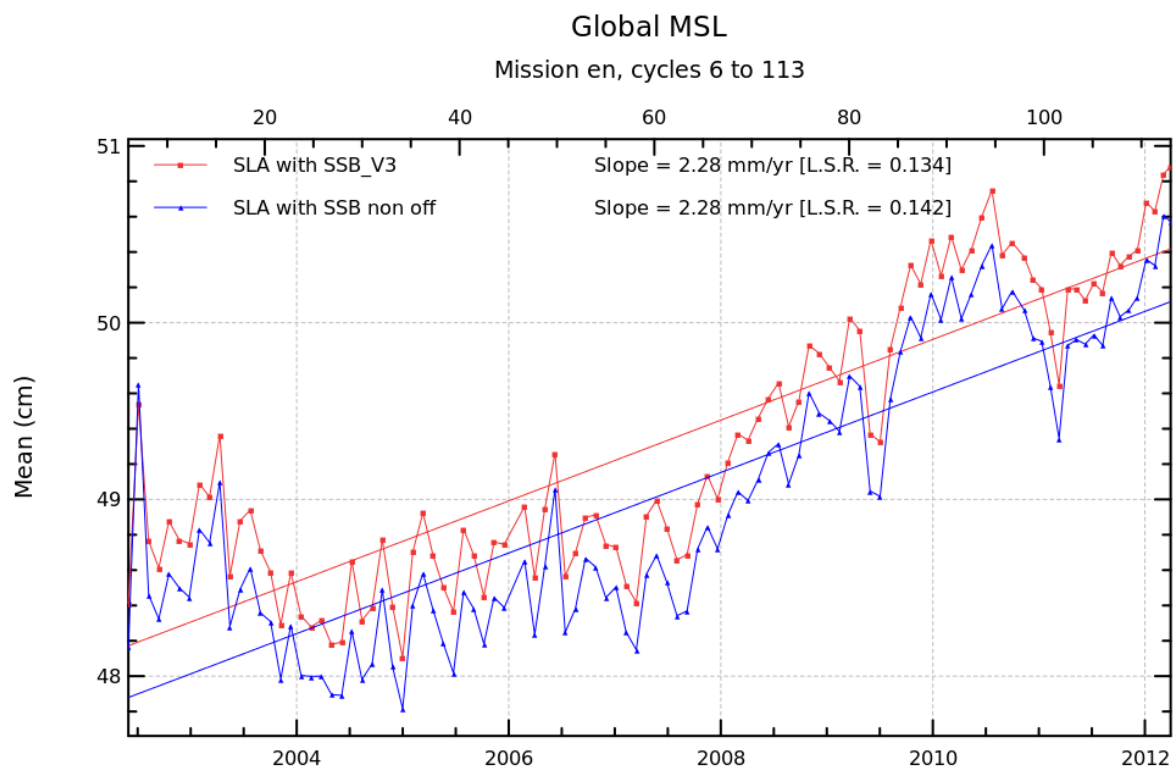
Diagnostic A201 a (mission en)

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 (except for SLA Grids) , or separating North and South hemispheres.

Diagnostic type : Mono-mission analyses



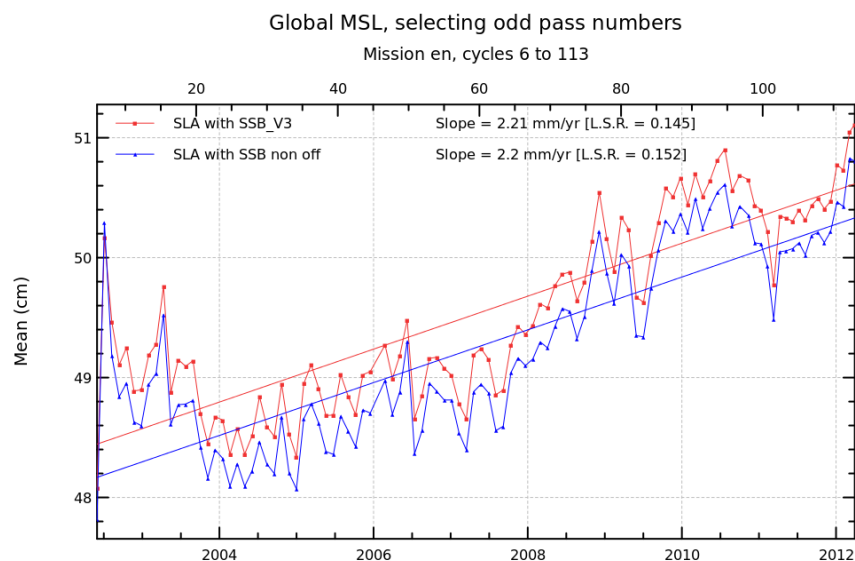
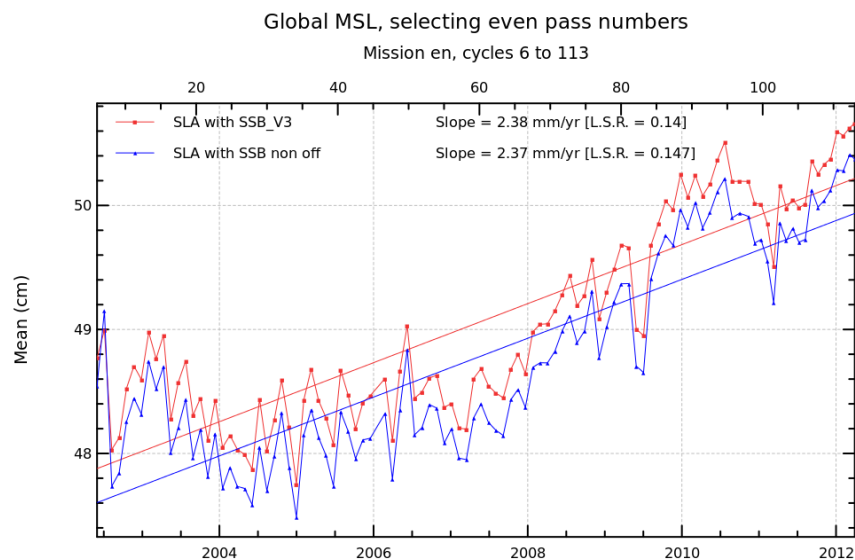
Diagnostic A201_b (mission en)

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 (except for SLA Grids) , or separating North and South hemispheres.

Diagnostic type : Mono-mission analyses



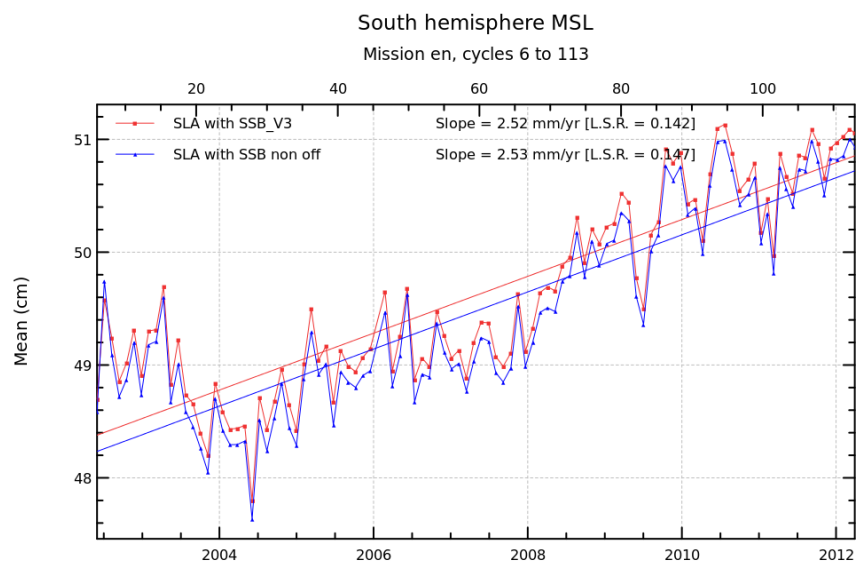
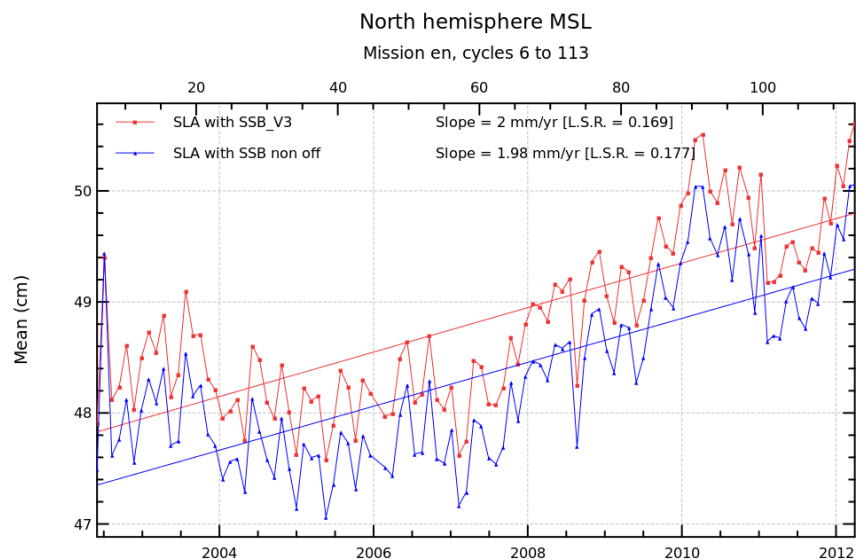
Diagnostic A201_c (mission en)

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 (except for SLA Grids) , or separating North and South hemispheres.

Diagnostic type : Mono-mission analyses



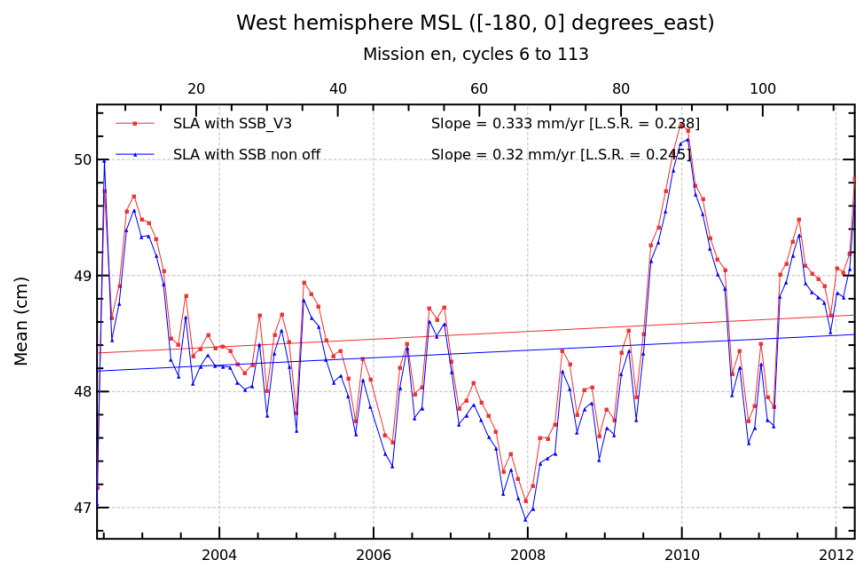
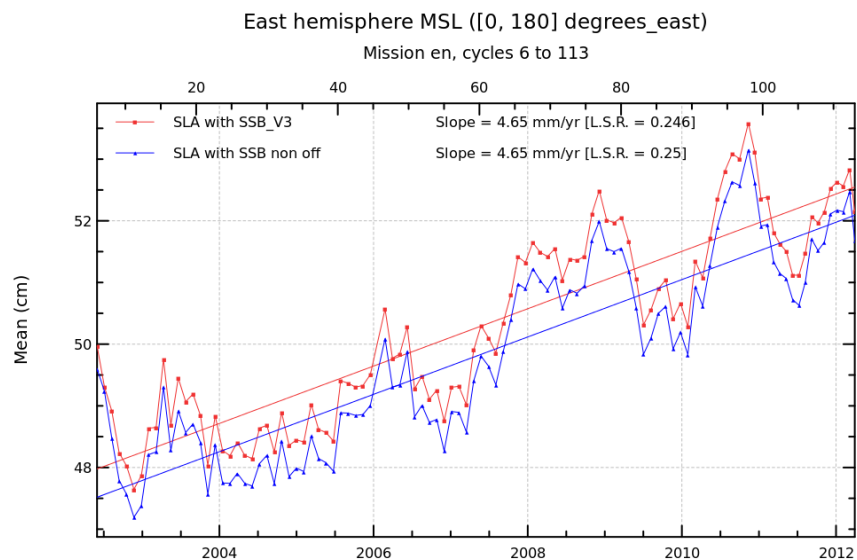
Diagnostic A201_d (mission en)

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 (except for SLA Grids) , or separating North and South hemispheres.

Diagnostic type : Mono-mission analyses



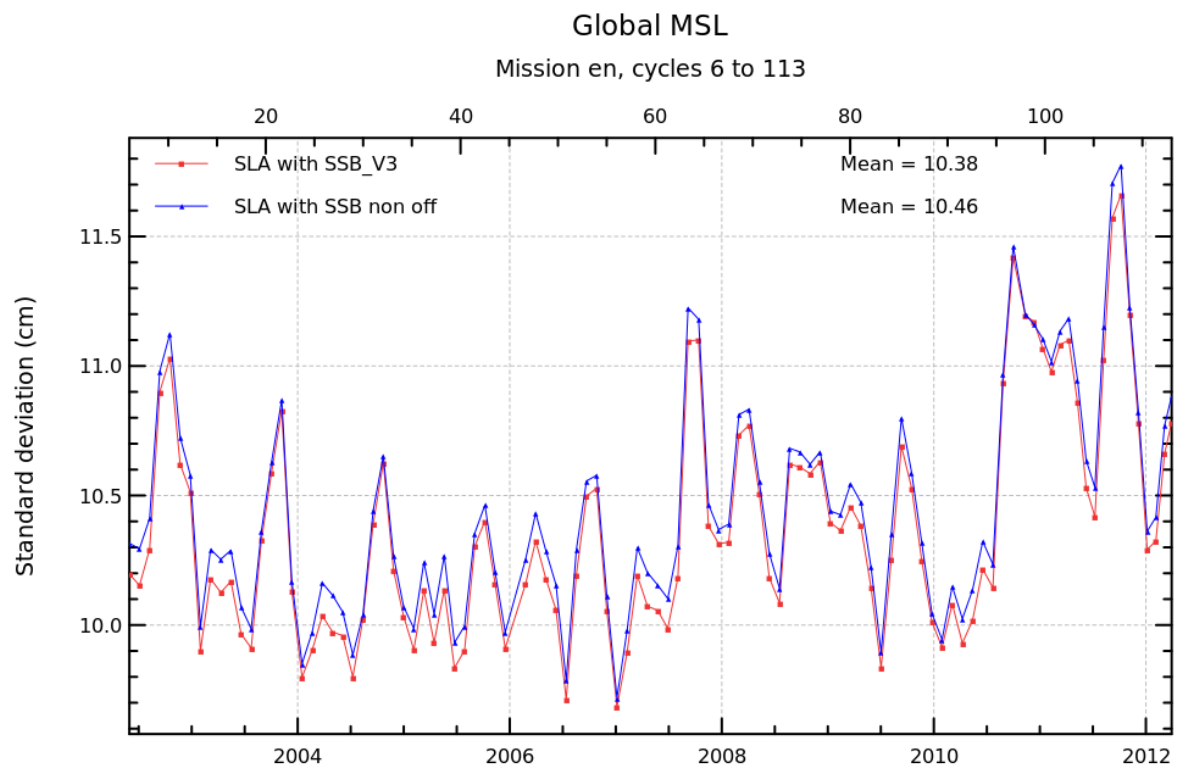
Diagnostic A201_e (mission en)

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 (except for SLA Grids) , or separating North and South hemispheres.

Diagnostic type : Mono-mission analyses



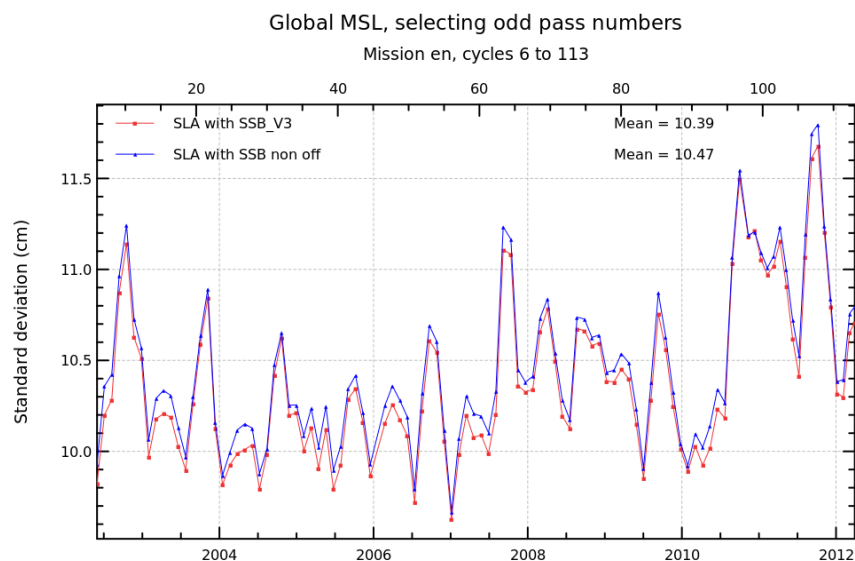
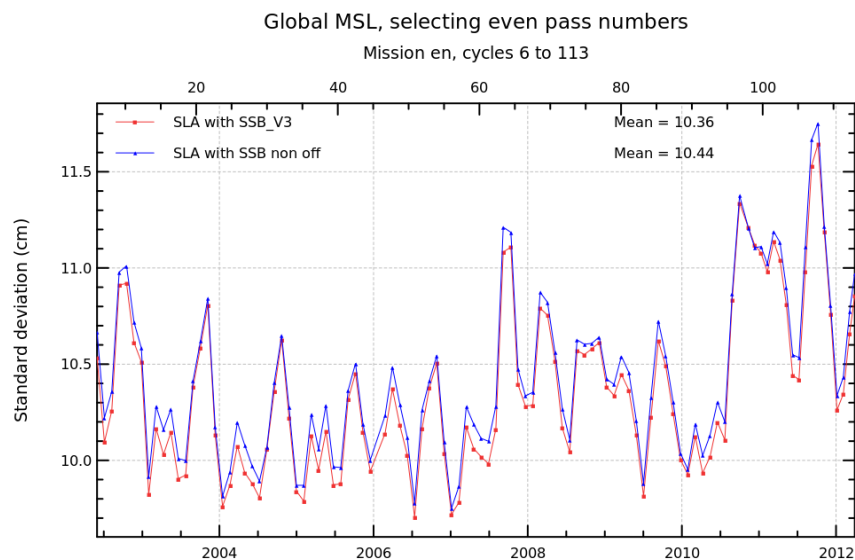
Diagnostic A201_f (mission en)

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 (except for SLA Grids) , or separating North and South hemispheres.

Diagnostic type : Mono-mission analyses



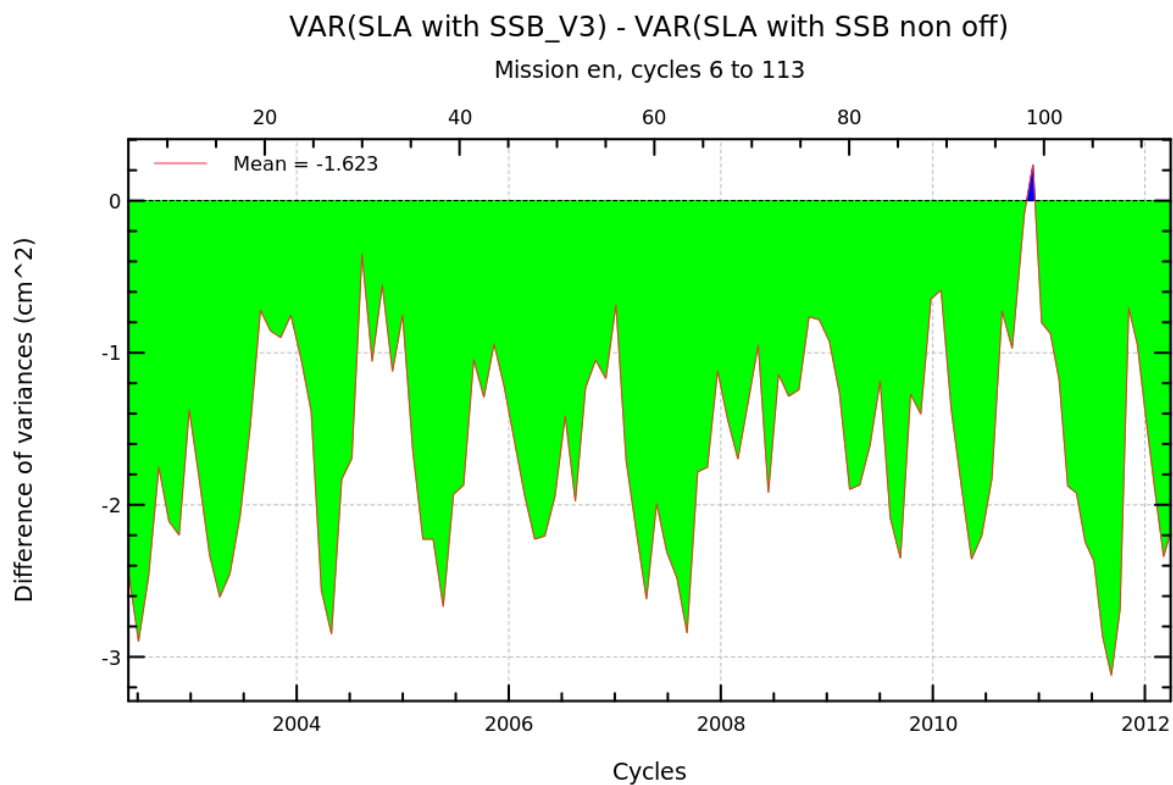
Diagnostic A202_a (mission en)

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 (except for SLA Grids) or separating North and South hemispheres.

Diagnostic type : Mono-mission analyses



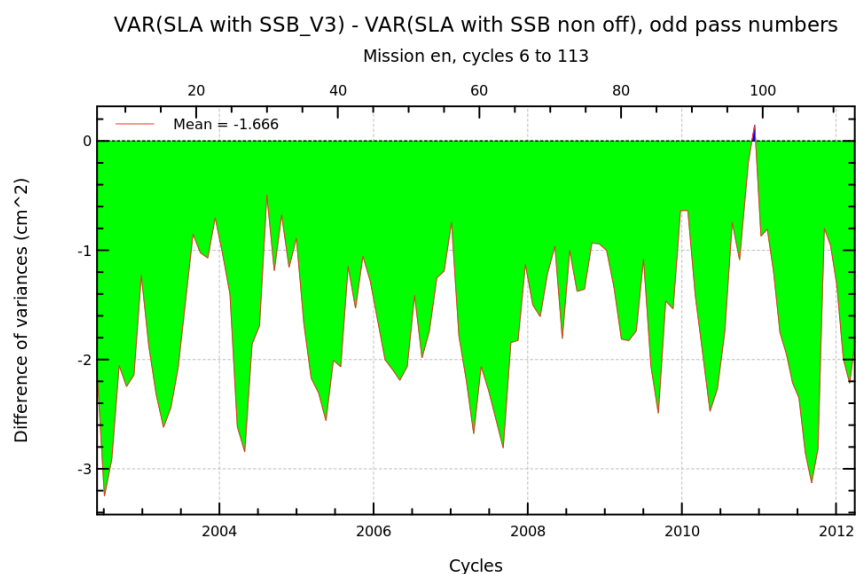
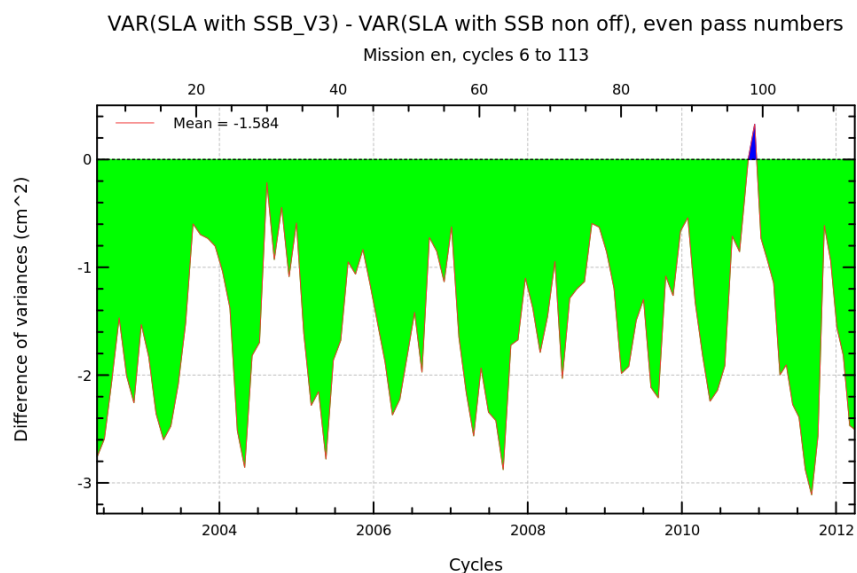
Diagnostic A202_b (mission en)

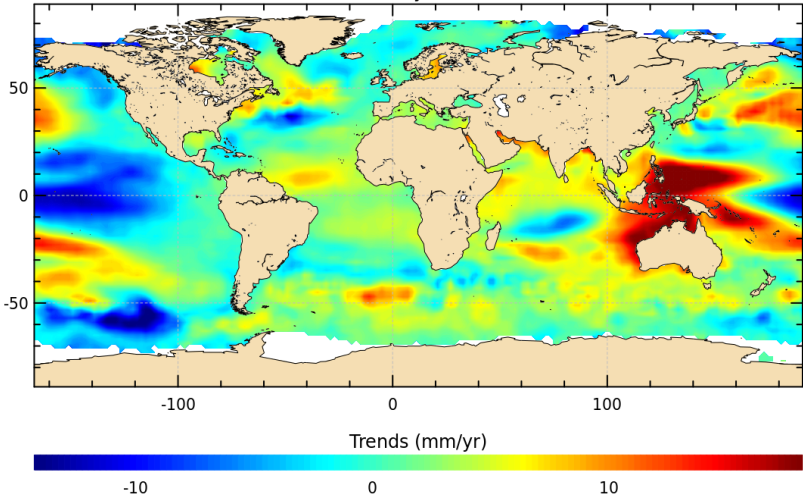
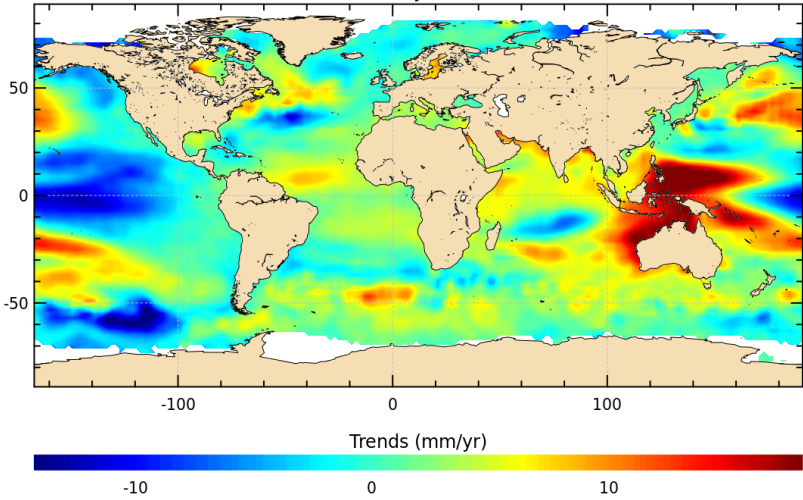
Name : Differences between temporal evolution of Sea Level Anomaly (SLA)

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 (except for SLA Grids) 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 SSB_V3 trends Mission en, cycles 6 to 113</div>  <div>SLA with SSB non off trends Mission en, cycles 6 to 113</div> 	

Diagnostic A203_b (mission en)

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

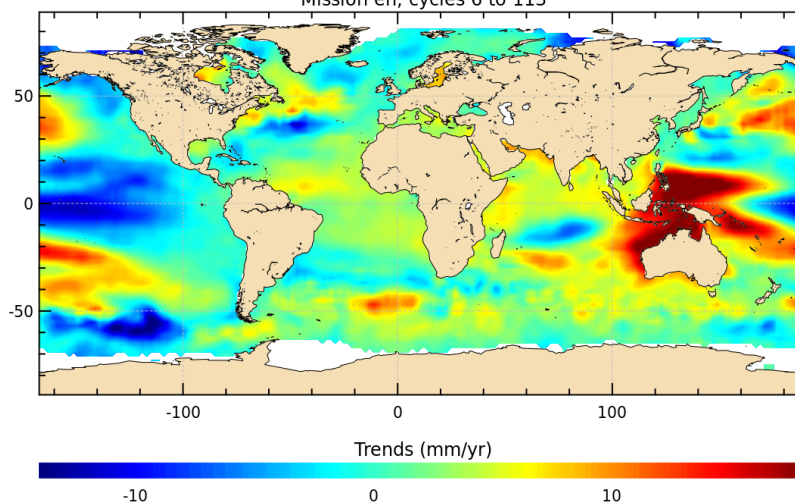
Input data : Along track SLA

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

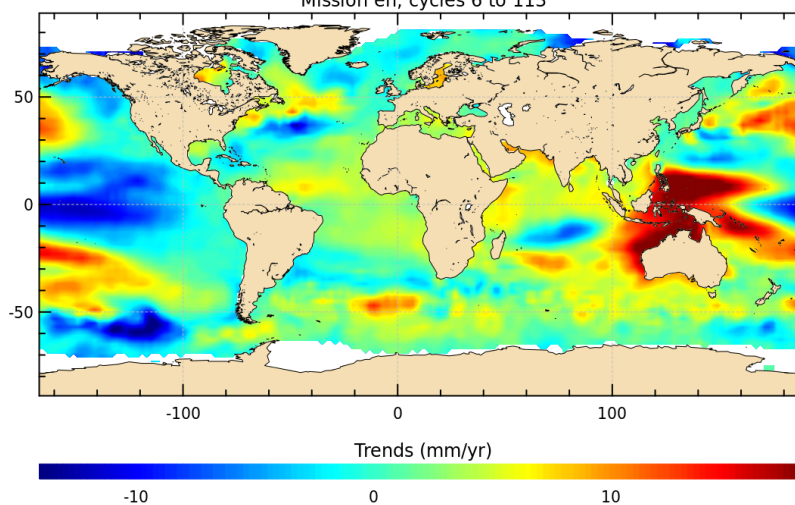
SLA with SSB_V3 trends : even pass numbers

Mission en, cycles 6 to 113



SLA with SSB non off trends : even pass numbers

Mission en, cycles 6 to 113



Diagnostic A203_c (mission en)

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

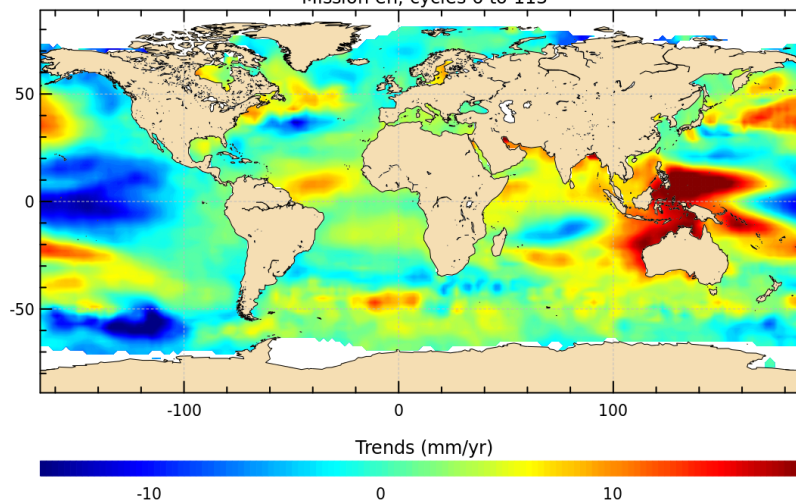
Input data : Along track SLA

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

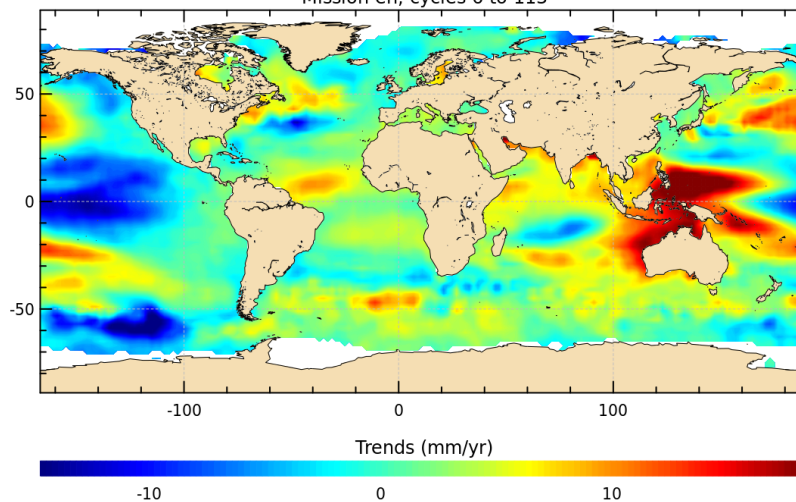
SLA with SSB_V3 trends : odd pass numbers

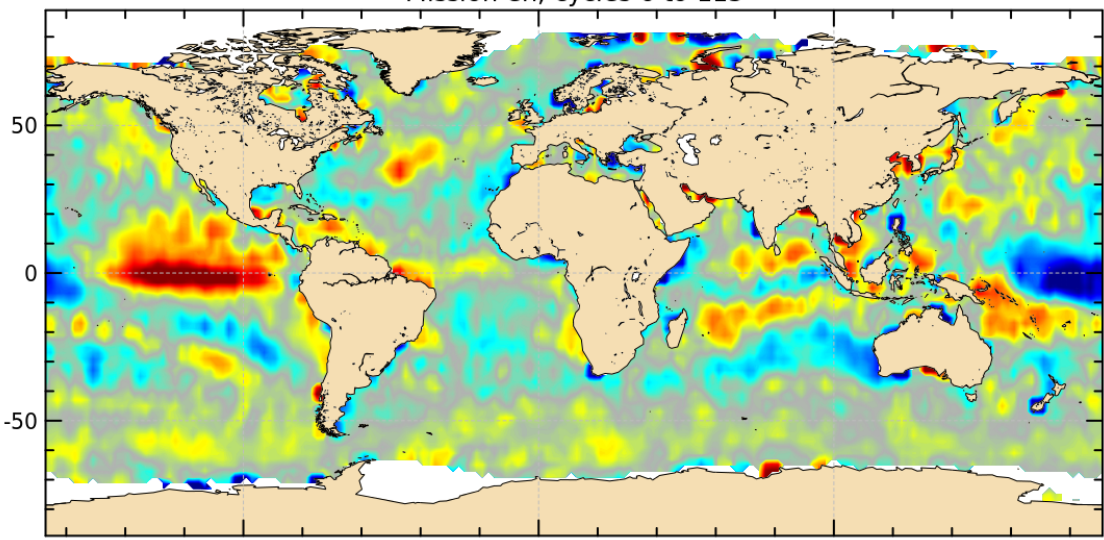
Mission en, cycles 6 to 113



SLA with SSB non off trends : odd pass numbers

Mission en, cycles 6 to 113



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>SLA with SSB_V3 trends - SLA with SSB non off trends</div> <div>Mission en, cycles 6 to 113</div>  <div>Trends (mm/yr)</div> <div>-0.4 -0.2 0.0 0.2 0.4</div>

Diagnostic A204_b (mission en)

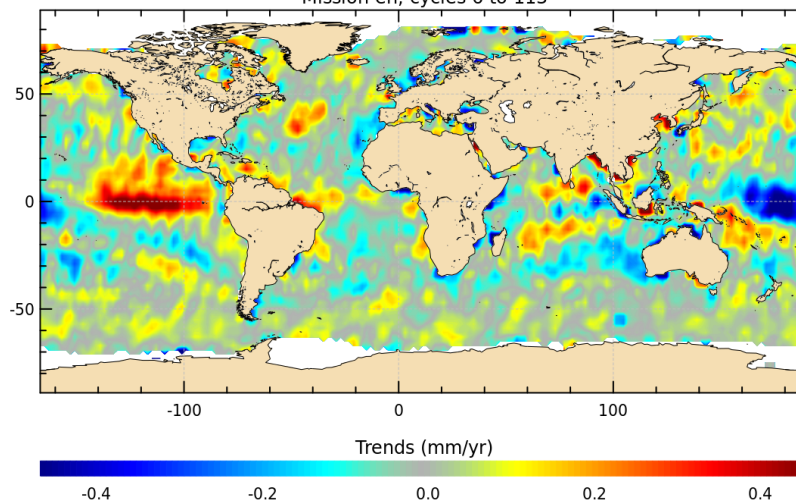
Name : Differences between maps of SLA trends

Input data : Along track SLA

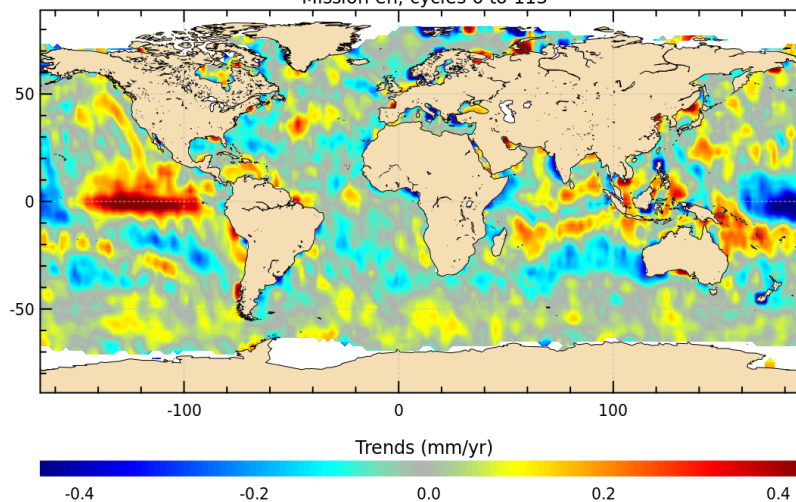
Description : The difference of SLA maps (mean, standard deviation, slope) is calculated from maps derived from diagnostic A203 using successively both altimetric components in the SLA calculation over a given period. This can be done globally, or separating in ascending and descending passes (except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

Diagnostic type : Mono-mission analyses

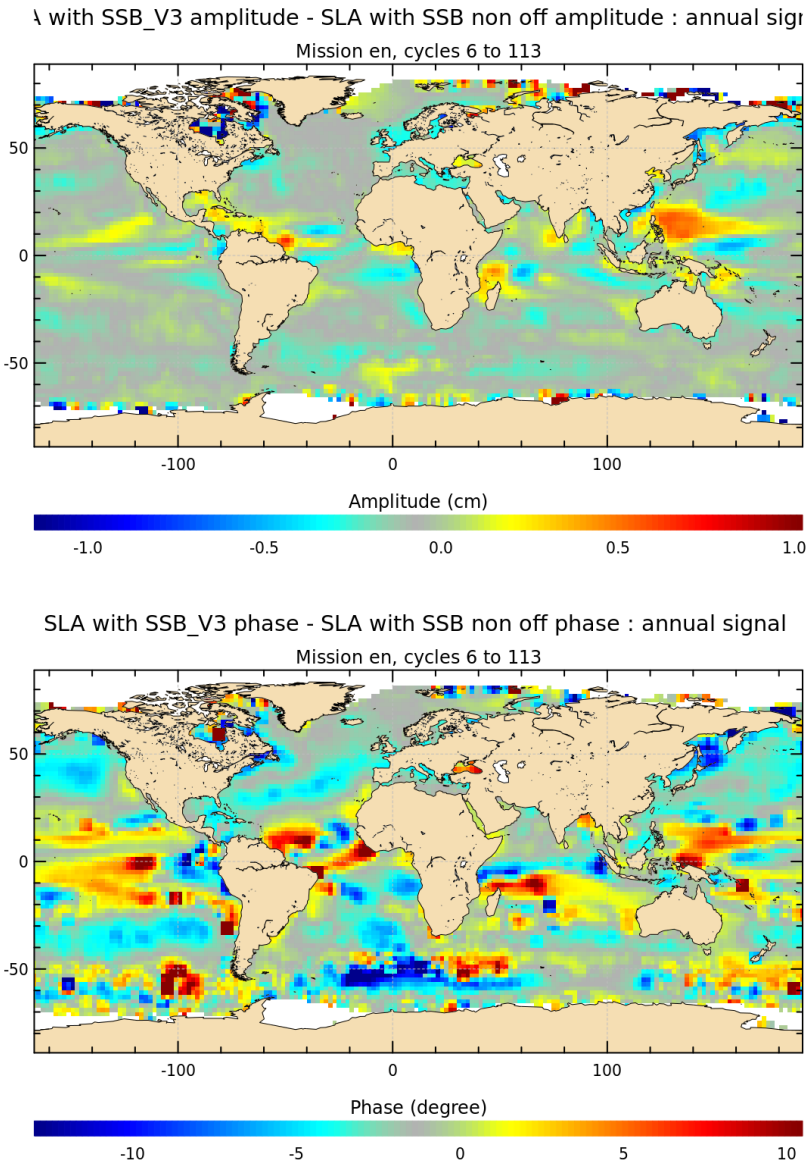
A with SSB_V3 trends - SLA with SSB non off trends : even pass number
Mission en, cycles 6 to 113



LA with SSB_V3 trends - SLA with SSB non off trends : odd pass number
Mission en, cycles 6 to 113



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).	



Diagnostic A205_b (mission en)

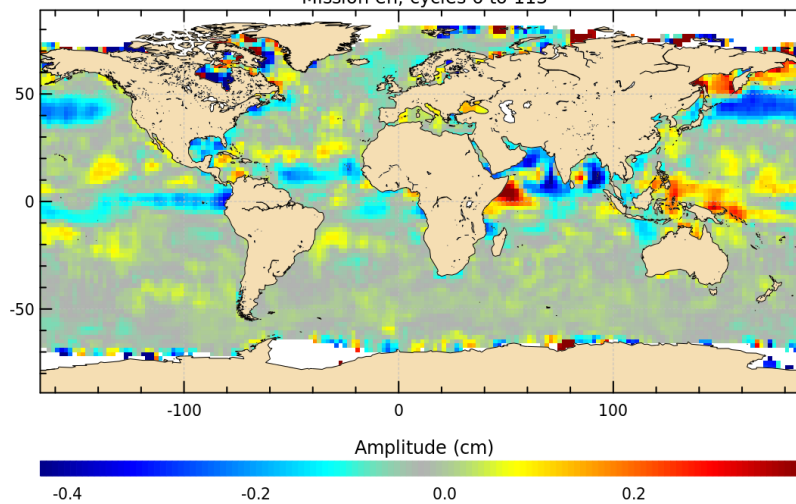
Name : Differences between maps of SLA amplitude and phase

Input data : Along track SLA

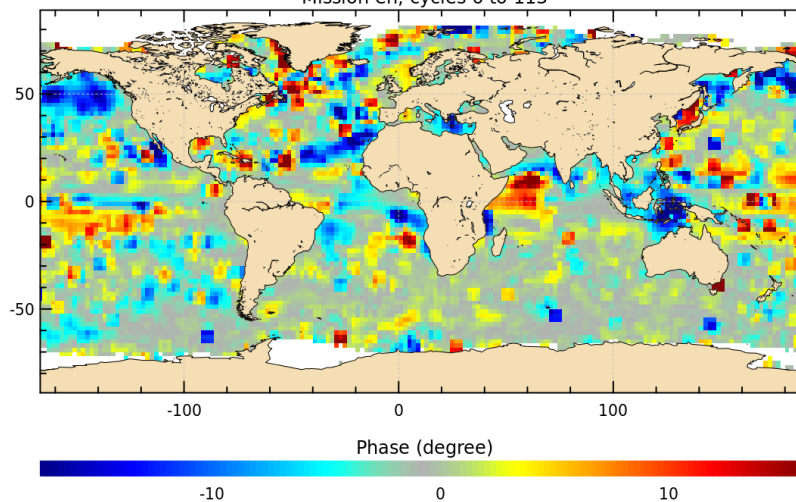
Description : The difference of SLA maps (mean, standard deviation, slope) is calculated from maps derived from diagnostic A203 using successively both altimetric components in the SLA calculation over a given period. This can be done globally, or separating in ascending and descending passes (except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

Diagnostic type : Mono-mission analyses

ith SSB_V3 amplitude - SLA with SSB non off amplitude : semi-annual s
Mission en, cycles 6 to 113



LA with SSB_V3 phase - SLA with SSB non off phase : semi-annual sign.
Mission en, cycles 6 to 113



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.	
	<div><div><div>Global MSL</div><div>Mission en, cycles 6 to 113</div><div><div>SLA with SSB_V3</div><div>SLA with SSB non off</div></div><div><div>Mean = 49.74</div><div>Mean = 48.63</div></div><div><div>StdDev = 1.407</div><div>StdDev = 0.2423</div></div></div><div><div>Mean (cm)</div><div>Coastal Distance (km)</div></div></div> <div><div><div>Global MSL</div><div>Mission en, cycles 6 to 113</div><div><div>SLA with SSB_V3</div><div>SLA with SSB non off</div></div><div><div>Mean = 11.04</div><div>Mean = 11.14</div></div></div><div><div>Standard deviation (cm)</div><div>Coastal Distance (km)</div></div></div>	

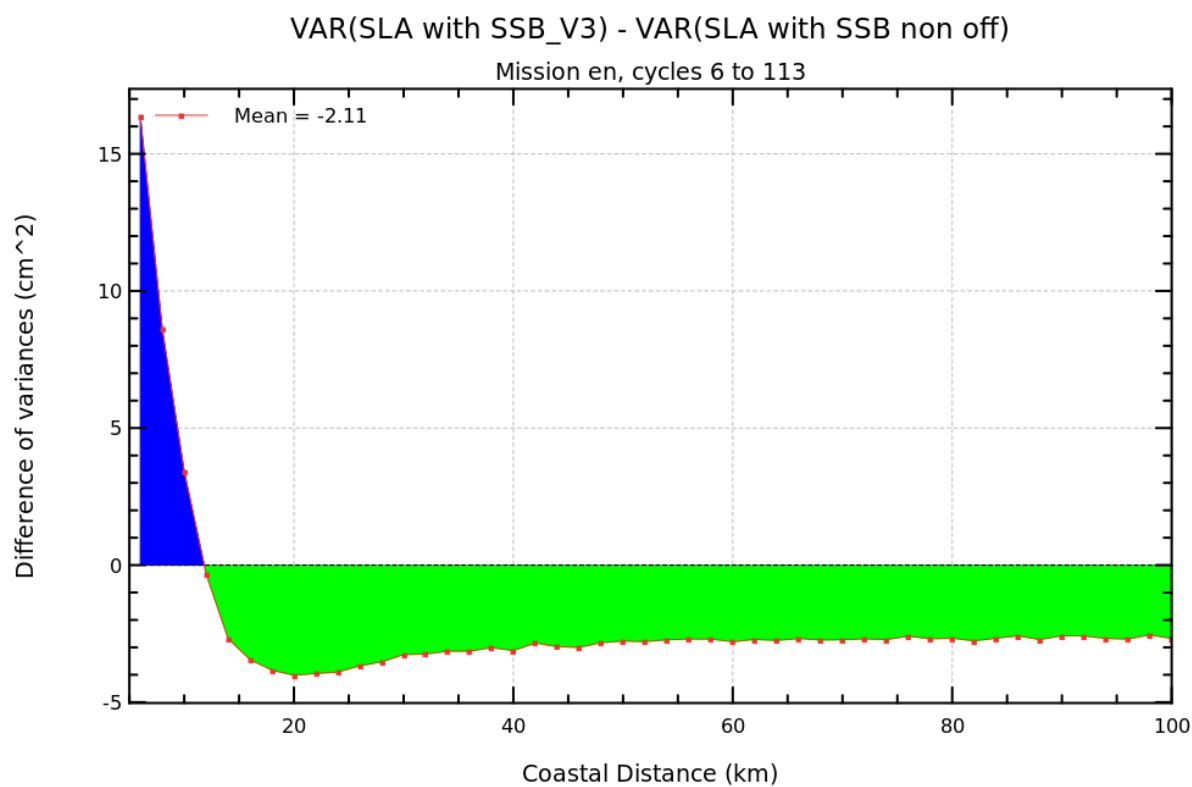
Diagnostic A208 (mission en)

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



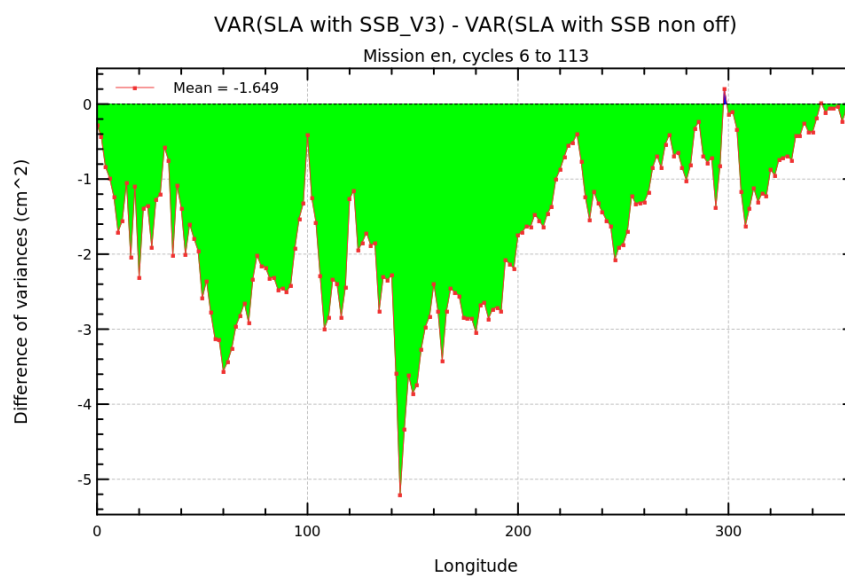
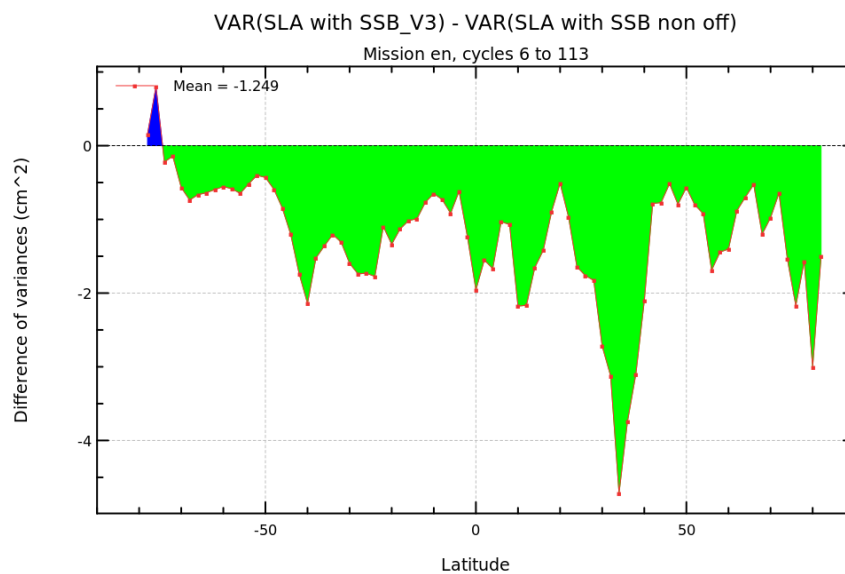
Diagnostic A208 (mission en)

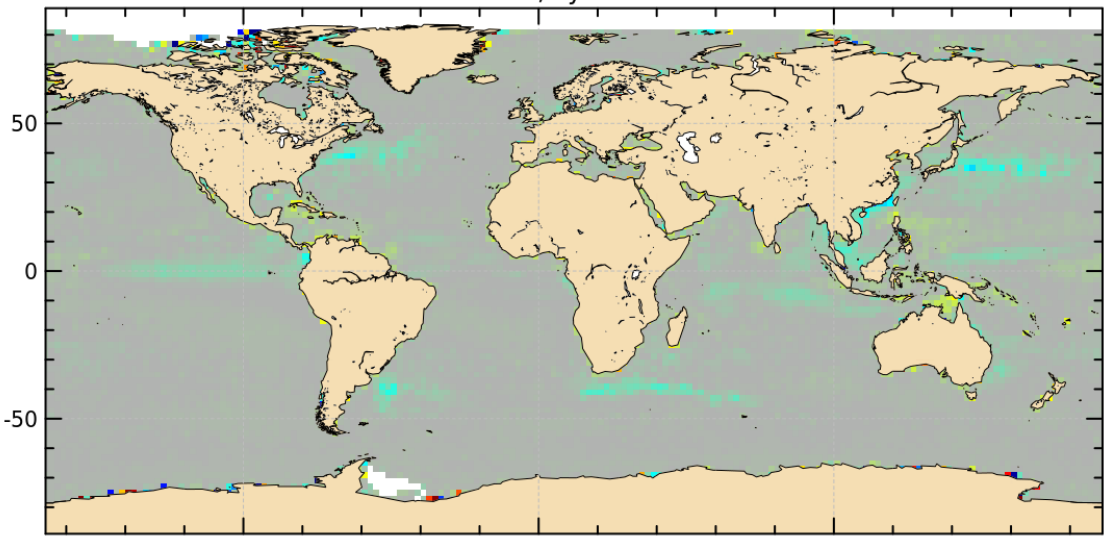
Name : Sea Level Anomaly (SLA) differences versus coastal distance, latitude and longitude

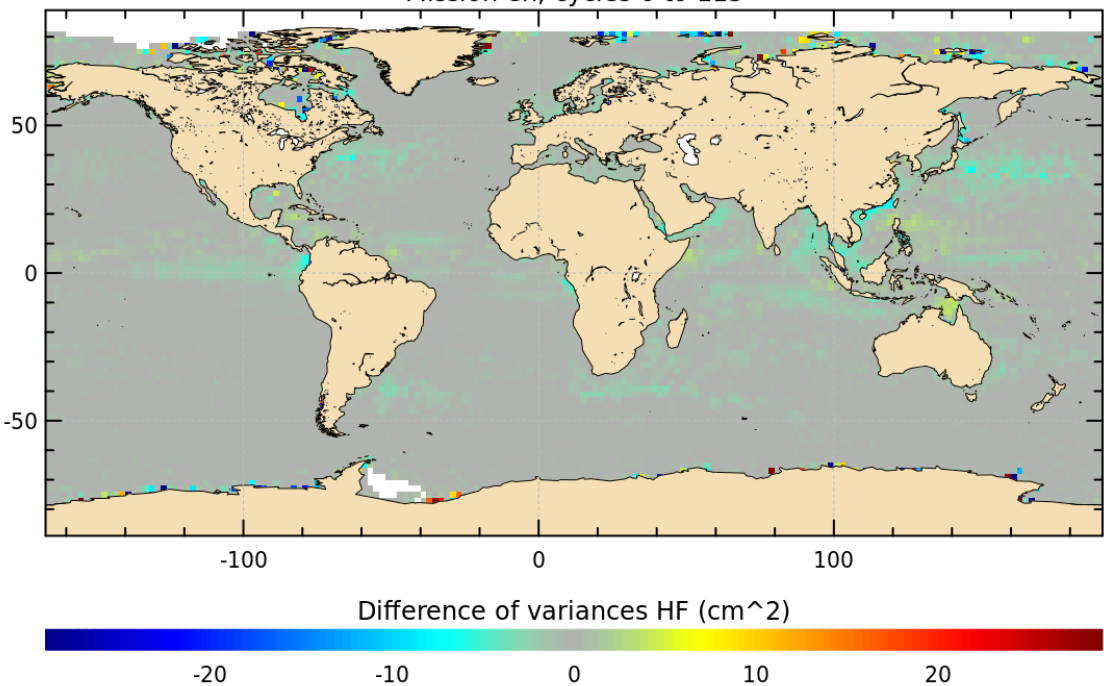
Input data : Along track SLA

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 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 SSB_V3) - VAR(SLA with SSB non off)</div> <div>Mission en, cycles 6 to 113</div>  <div>Difference of variances (cm²)</div> <div><div></div><div>-40</div><div>-20</div><div>0</div><div>20</div><div>40</div></div>	

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><p>VAR(SLA with SSB_V3) - VAR(SLA with SSB non off) for FILTER HF</p><p>Mission en, cycles 6 to 113</p></div>

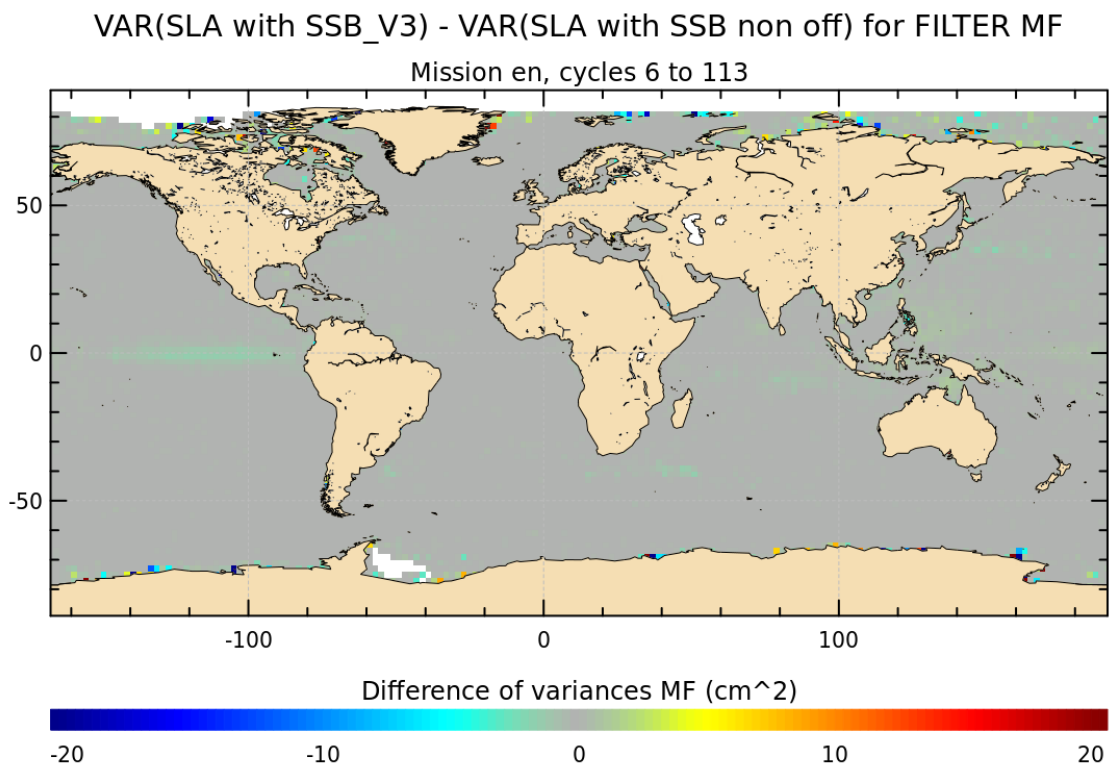
Diagnostic A210_b (mission en)

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



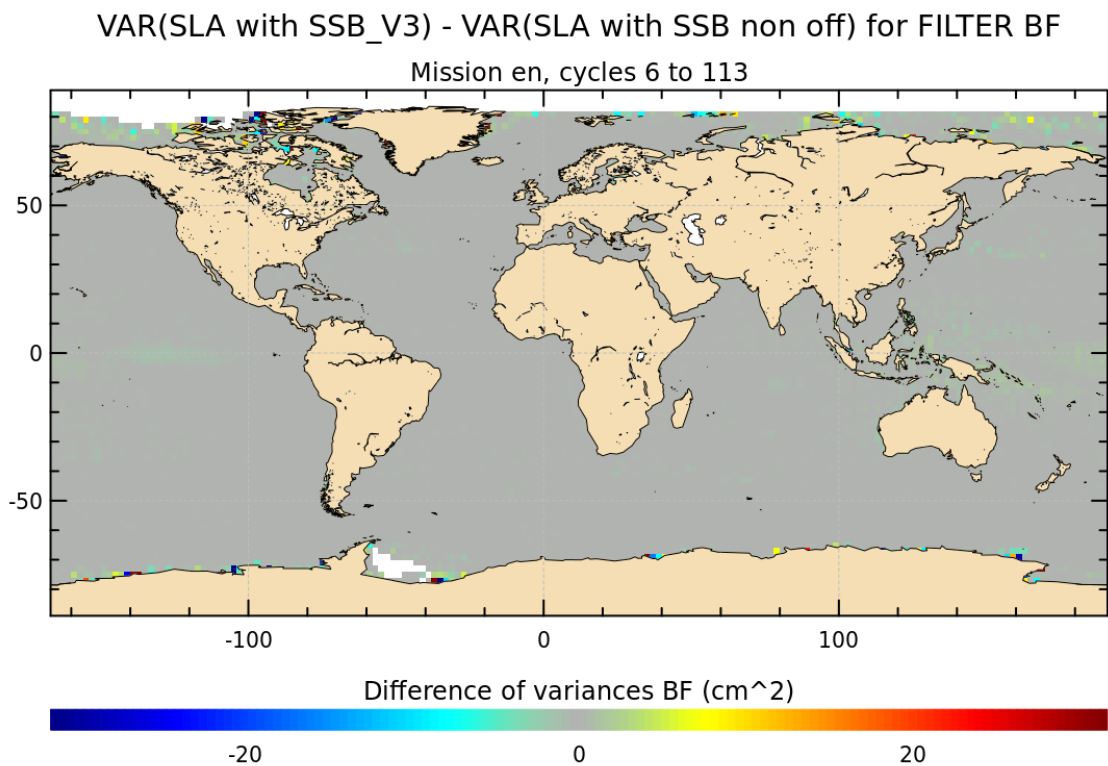
Diagnostic A210_c (mission en)

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 ($1 \text{ yr} < T < 3$ 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

