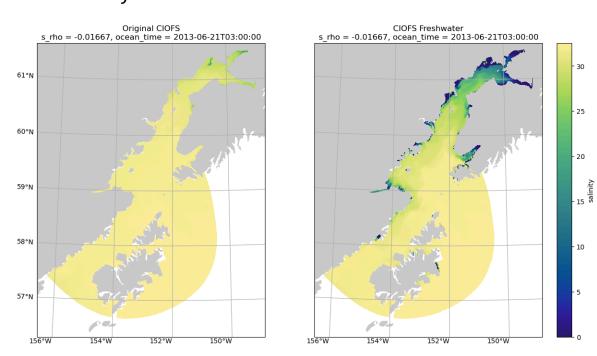
Cook Inlet Circulation Modeling - Freshwater Forcing Experiment and Lagrangian Analysis

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ADCP Model Comparisons

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- Moored ADCP (NOAA): ADCP survey Cook Inlet, multiple years

Final Report to the National Oceanic Atmospheric Administration National Centers for Coastal Ocean Science Kasitsna Bay Lab



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October 11, 2024

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Online report: https://ciofs-fresh.axds.co/

PDFs of parts of report:

- Main content
- Model-data comparison: moorings
- Model-data comparison: CTD transects
- Model-data comparison: CTD profiles
- Model-data comparison: HF Radar
- Model-data comparison: ADCP
- Model-data comparison: drifters

Overview ADCP Data

Comparisons between each model and ADCP datasets are shown below, first in Taylor diagrams, then in maps of skill scores where each marker is colored to indicate the skill score of the comparison.

The two models perform similarly to each other with the exception of increased variance in CIOFS Fresh for subtidal variable comparisons. They both generally perform well for tidal time series and only moderately well for subtidal time series.

77MB zipfile of plots and stats files

Map of Stations

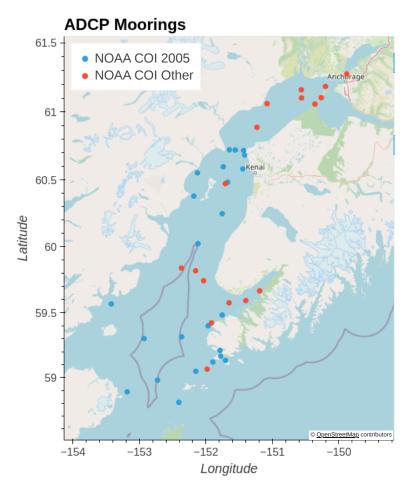


Fig. 1 All ADCP deployments, by project. Click on a legend entry to toggle the transparency. (HTML plot, won't show up correctly in PDF.)

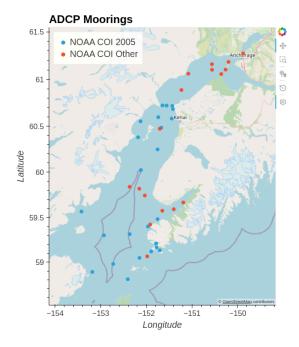


Fig. 2 All ADCP deployments, by project. (PNG screenshot, available for PDF and for saving image.)

Taylor Diagrams

Taylor diagrams summarize the skill of the two models in capturing the ADCP moorings. The data has been grouped by region (Figs. 3, 4, 5) and season (Figs. 6, 7, 8). The results show that CIOFS fresh and CIOFS hindcast perform similarly for tidal results. For the subtidal along-channel velocity component by region, CIOFS Hindcast and CIOFS Fresh have mostly similar correlation coefficients, but CIOFS Fresh has more accurate variance. By season, CIOFS Fresh has more accurate variance again though in the spring both models have too high of variance. For the across-channel subtidal component, the two models again have similar correlation coefficients but CIOFS Fresh has more accurate variance in Upper Cook Inlet; in Kachemak Bay and Central Cook Inlet CIOFS Hindcast is more accurate. When considering subtidal speed, we see that the two models perform similarly to each other. Skill scores are shown in the next plots for each dataset.

ADCP Moored by Region

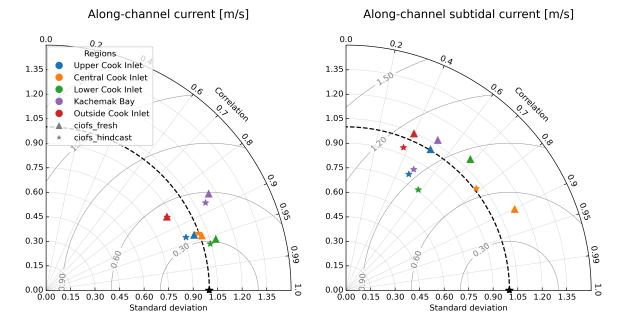


Fig. 3 Taylor Diagram summarizing skill of CIOFS Hindcast (stars) and CIOFS Fresh (triangles) for the along-channel component of velocity with tides (left) and subtidal (right), grouped by region of Cook Inlet, for moored ADCP datasets.

ADCP Moored by Region

Across-channel current [m/s] Across-channel subtidal current [m/s] 0.0 0.0 0.2 Regions Upper Cook Inlet 1.35 1.35 Central Cook Inlet Lower Cook Inlet 1.20 1.20 Kachemak Bay **Outside Cook Inlet** 1.05 1.05 ciofs fresh ciofs_hindcast 0.90 0.90 0.75 0.75 0.60 0.60 0.45 0.45 0.30 0.30 0.15 0.15 0.00 0.15 0.30 0.45 0.60 0.75 0.90 1.05 1.20 1.35 0.15 0.30 0.45 0.60 0.75 0.90 1.05 1.20 1.35 Standard deviation

Fig. 4 Taylor Diagram summarizing skill of CIOFS Hindcast (stars) and CIOFS Fresh (triangles) for the across-channel component of velocity with tides (left) and subtidal (right), grouped by region of Cook Inlet, for moored ADCP datasets.

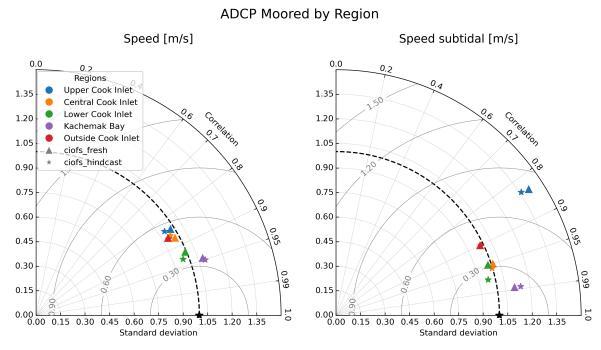


Fig. 5 Taylor Diagram summarizing skill of CIOFS Hindcast (stars) and CIOFS Fresh (triangles) for the magnitude of velocity with tides (left) and subtidal (right), grouped by region of Cook Inlet, for moored ADCP datasets.

ADCP Moored by Season



Along-channel subtidal current [m/s]

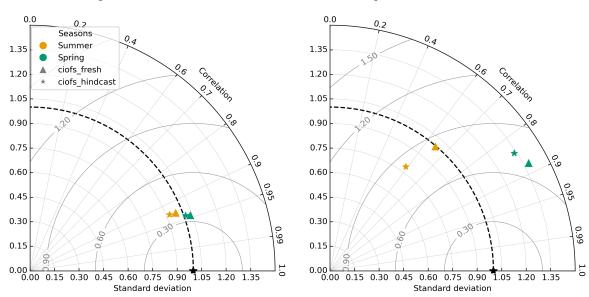


Fig. 6 Taylor Diagram summarizing skill of CIOFS Hindcast (stars) and CIOFS Fresh (triangles) for the along-channel component of velocity with tides (left) and subtidal (right), grouped by season, for moored ADCP datasets.

ADCP Moored by Season

Across-channel current [m/s]

Across-channel subtidal current [m/s]

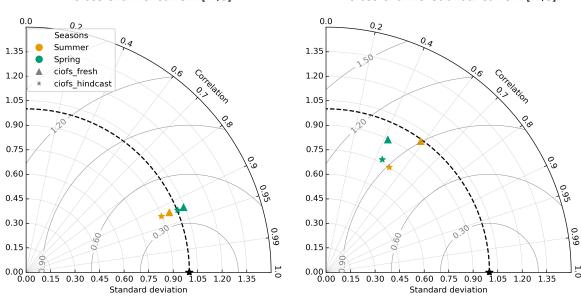


Fig. 7 Taylor Diagram summarizing skill of CIOFS Hindcast (stars) and CIOFS Fresh (triangles) for the across-channel component of velocity with tides (left) and subtidal (right), grouped by season, for moored ADCP datasets.

ADCP Moored by Season

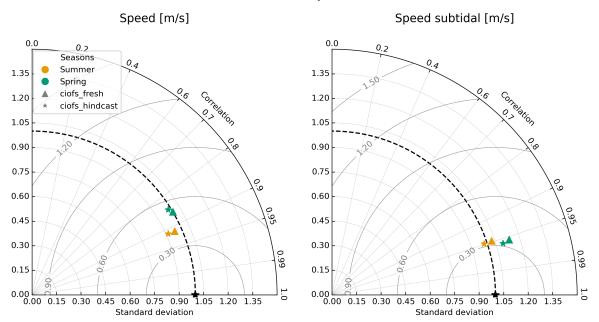


Fig. 8 Taylor Diagram summarizing skill of CIOFS Hindcast (stars) and CIOFS Fresh (triangles) for the magnitude of velocity with tides (left) and subtidal (right), grouped by season, for moored ADCP datasets.

Tidal

Horizontal Speed

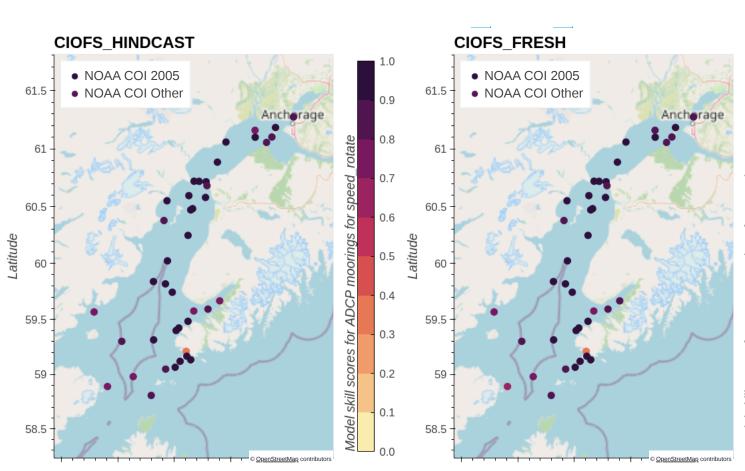




Fig. 9 Skill scores for CIOFS Hindcast (left) and CIOFS Freshwater (right) with ADCP moorings for horizontal speed, by project. Click on a legend entry to toggle the transparency. (HTML plot, won't show up correctly in PDF.)

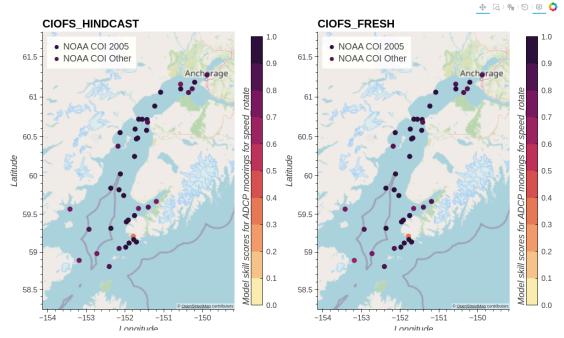


Fig. 10 Skill scores for CIOFS Hindcast (left) and CIOFS Freshwater (right) with ADCP moorings for horizontal speed, by project. (PNG screenshot, available for PDF and for saving image.)

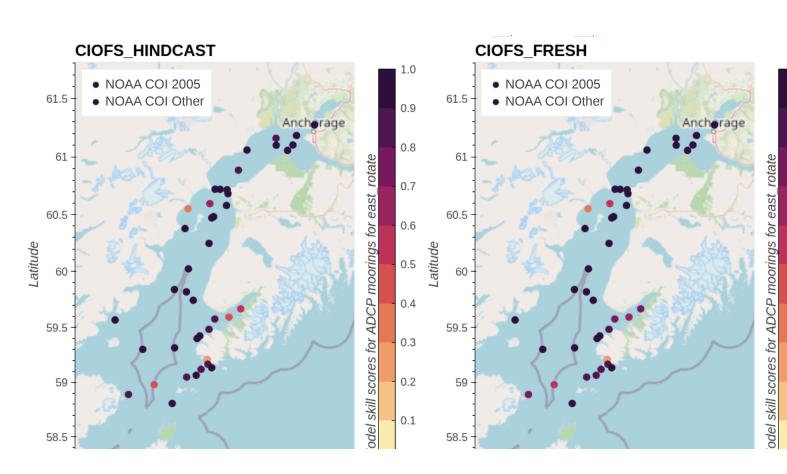




Fig. 11 Skill scores for CIOFS Hindcast (left) and CIOFS Freshwater (right) with ADCP moorings for along-channel velocity, by project. Click on a legend entry to toggle the transparency. (HTML plot, won't show up correctly in PDF.)

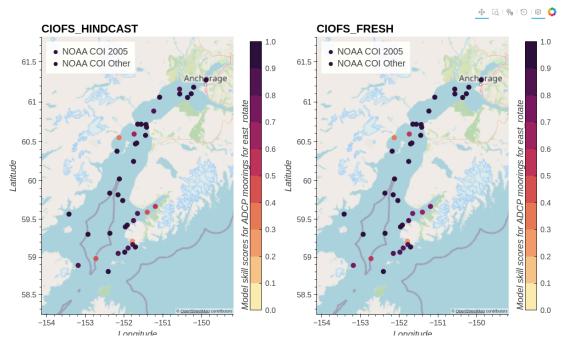
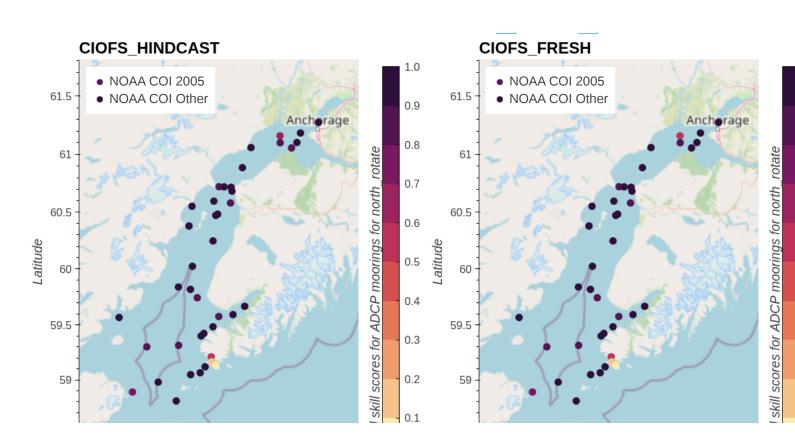
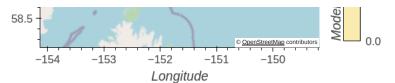


Fig. 12 Skill scores for CIOFS Hindcast (left) and CIOFS Freshwater (right) with ADCP moorings for along-channel velocity, by project. (PNG screenshot, available for PDF and for saving image.)

Across-Channel Velocity





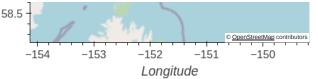


Fig. 13 Skill scores for CIOFS Hindcast (left) and CIOFS Freshwater (right) with ADCP moorings for across-channel velocity, by project. Click on a legend entry to toggle the transparency. (HTML plot, won't show up correctly in PDF.)

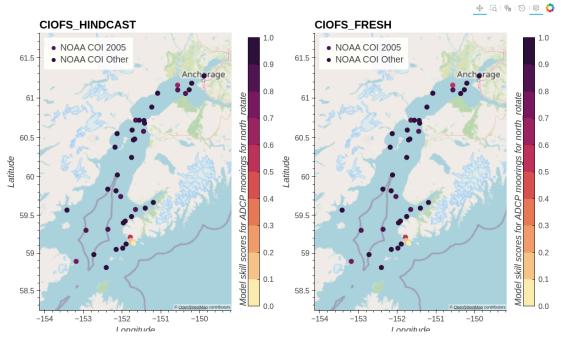


Fig. 14 Skill scores for CIOFS Hindcast (left) and CIOFS Freshwater (right) with ADCP moorings for across-channel velocity, by project. (PNG screenshot, available for PDF and for saving image.)

Subtidal

Horizontal Speed

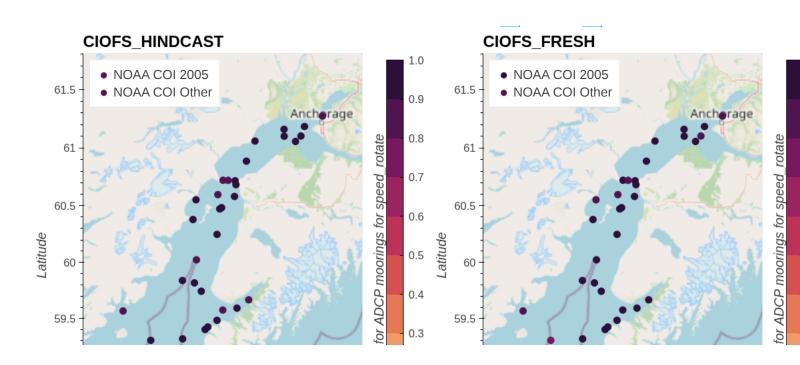


Fig. 15 Skill scores for CIOFS Hindcast (left) and CIOFS Freshwater (right) with ADCP moorings for subtidal horizontal speed, by project. Click on a legend entry to toggle the transparency. (HTML plot, won't show up correctly in PDF.)

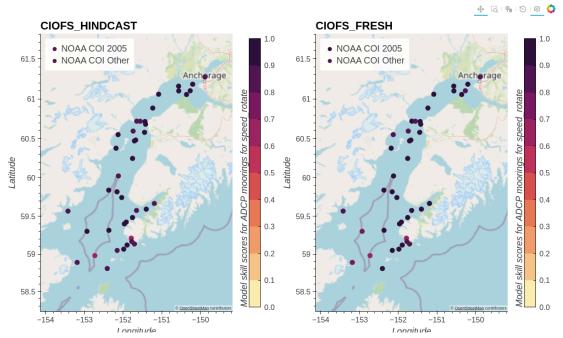


Fig. 16 Skill scores for CIOFS Hindcast (left) and CIOFS Freshwater (right) with ADCP moorings for subtidal horizontal speed, by project. (PNG screenshot, available for PDF and for saving image.)

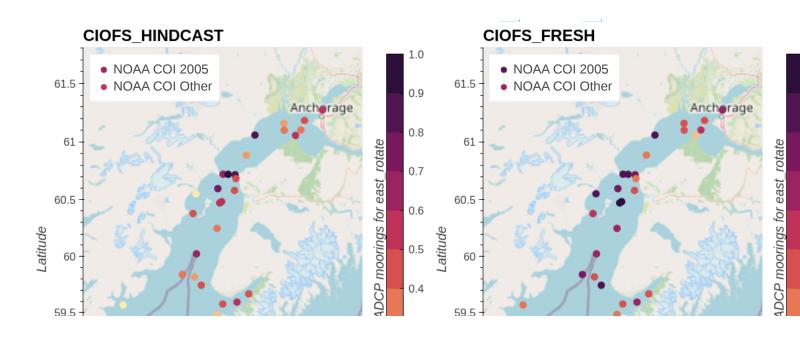


Fig. 17 Skill scores for CIOFS Hindcast (left) and CIOFS Freshwater (right) with ADCP moorings for subtidal along-channel velocity, by project. Click on a legend entry to toggle the transparency. (HTML plot, won't show up correctly in PDF.)

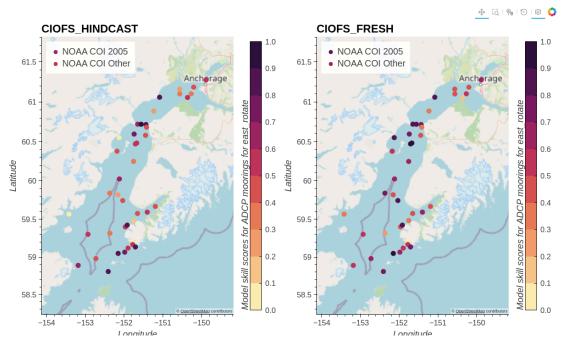
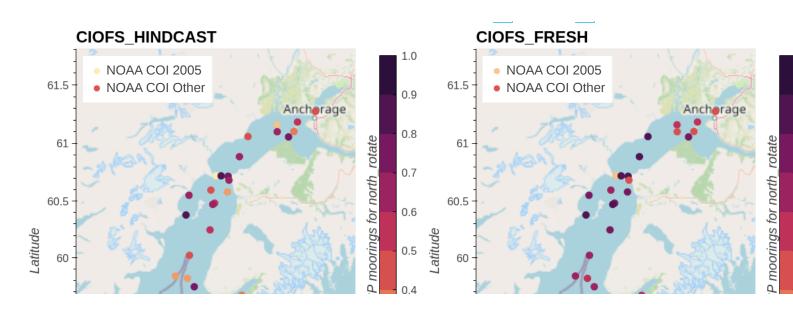


Fig. 18 Skill scores for CIOFS Hindcast (left) and CIOFS Freshwater (right) with ADCP moorings for subtidal along-channel velocity, by project. (PNG screenshot, available for PDF and for saving image.)

Across-Channel Velocity



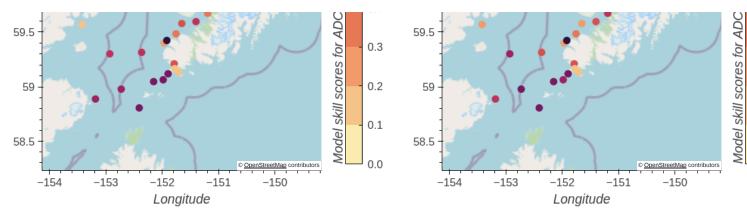


Fig. 19 Skill scores for CIOFS Hindcast (left) and CIOFS Freshwater (right) with ADCP moorings for subtidal across-channel velocity, by project. Click on a legend entry to toggle the transparency. (HTML plot, won't show up correctly in PDF.)

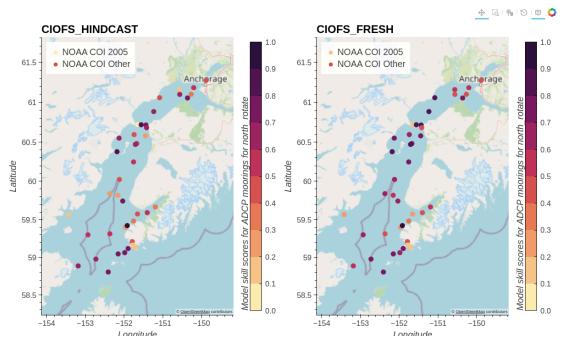


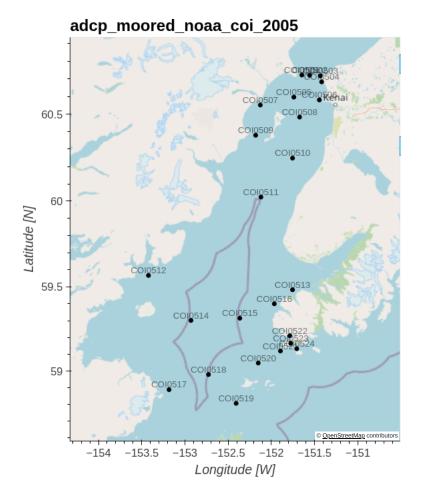
Fig. 20 Skill scores for CIOFS Hindcast (left) and CIOFS Freshwater (right) with ADCP moorings for subtidal across-channel velocity, by project. (PNG screenshot, available for PDF and for saving image.)

Moored ADCP (NOAA): ADCP survey Cook Inlet 2005

• adcp_moored_noaa_coi_2005

See the original full dataset description page in the original report for more information or the new catalog page.

Note that the map shows all datasets from the catalog; it is not limited to the current report time periods.

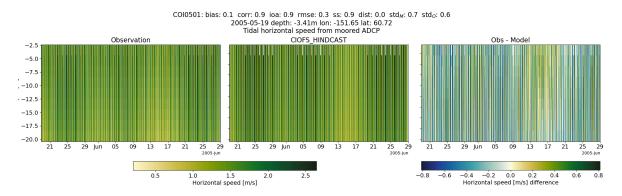


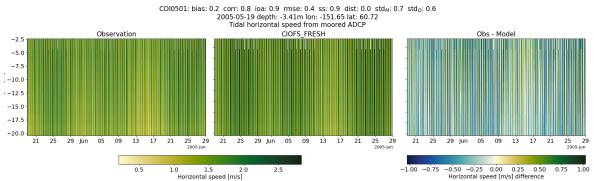
COI0501

Tidal

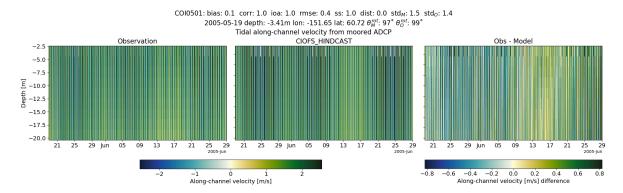
Horizontal speed

CIOFS_HINDCAST

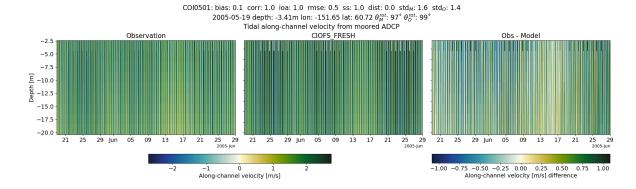




CIOFS_HINDCAST

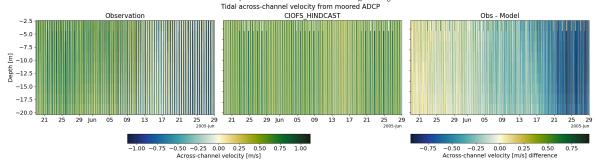


CIOFS_FRESH

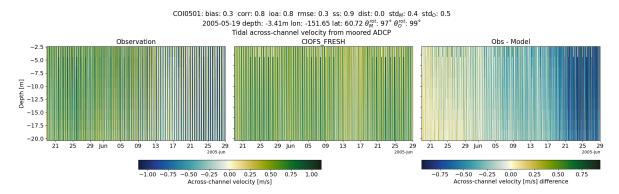


Across-channel velocity

COI0501: bias: 0.2 corr: 0.8 ioa: 0.8 rmse: 0.3 ss; 0.9 dist: 0.0 std_M: 0.4 std_O: 0.5 2005-05-19 depth: -3.41m lon: -151.65 lat: 60.72 θ_M^{rot} : 97° θ_O^{rot} : 99°



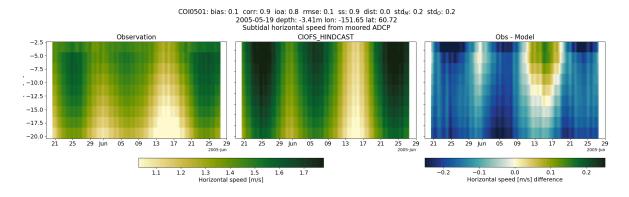
CIOFS_FRESH

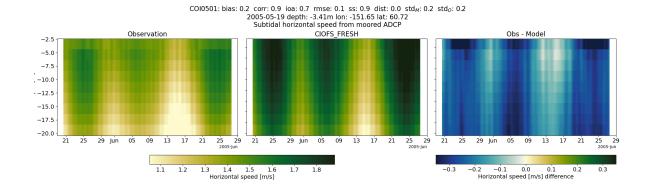


Subtidal

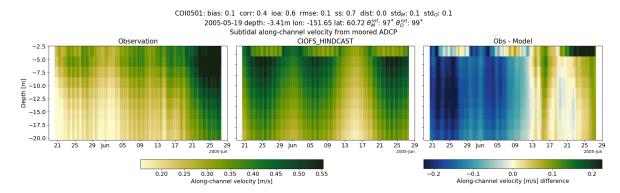
Horizontal speed

CIOFS_HINDCAST

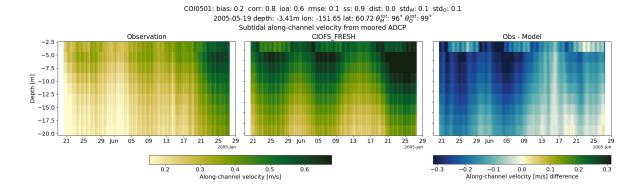




CIOFS_HINDCAST

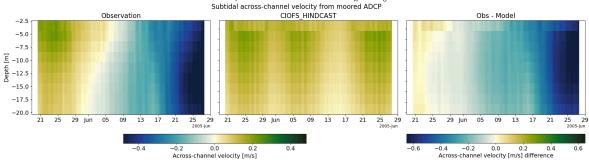


CIOFS_FRESH

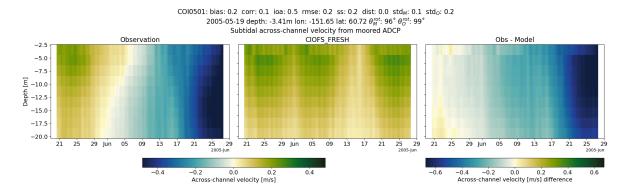


Across-channel velocity

COI0501: bias: 0.2 corr: 0.1 ioa: 0.5 rmse: 0.2 ss: 0.1 dist: 0.0 std $_{M}$: 0.0 std $_{O}$: 0.2 2005-05-19 depth: -3.41m lon: -151.65 lat: 60.72 θ_{M}^{rot} : 97° θ_{O}^{rot} : 99°



CIOFS_FRESH

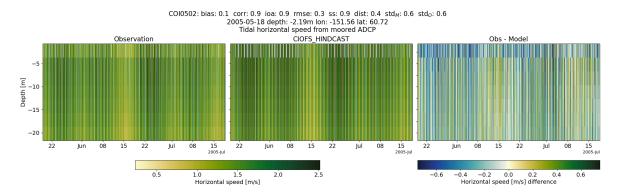


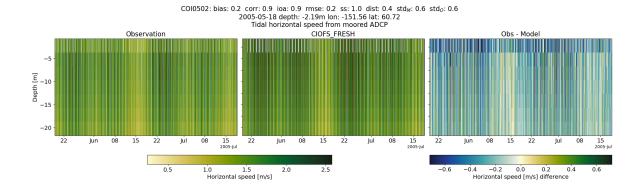
COI0502

Tidal

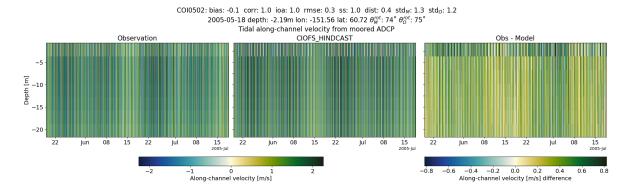
Horizontal speed

CIOFS_HINDCAST

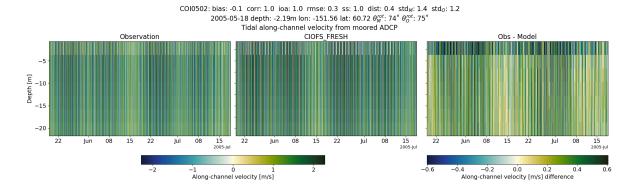




CIOFS_HINDCAST

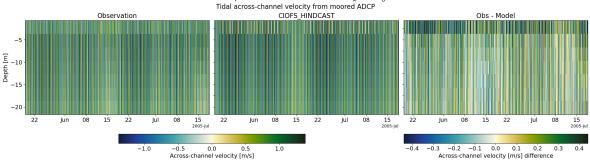


CIOFS_FRESH

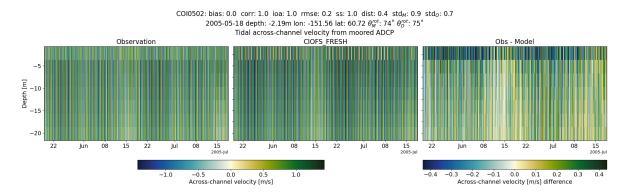


Across-channel velocity

COI0502: bias: 0.0 corr: 1.0 ioa: 1.0 rmse: 0.2 ss: 1.0 dist: 0.4 std_M: 0.8 std_O: 0.7 2005-05-18 depth: -2.19m lon: -151.56 lat: $60.72~\theta_M^{ot}$: $74^\circ~\theta_0^{ot}$: $74^\circ~\theta_0^{ot}$: 75°



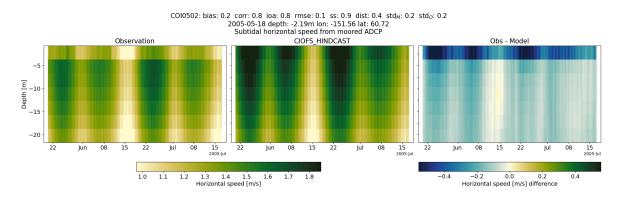
CIOFS_FRESH

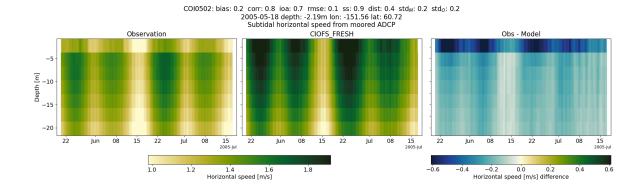


Subtidal

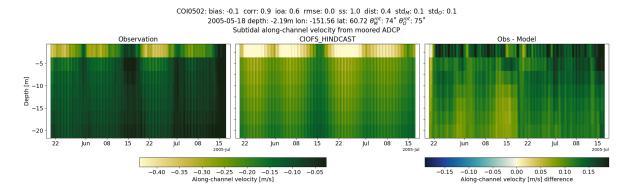
Horizontal speed

CIOFS_HINDCAST

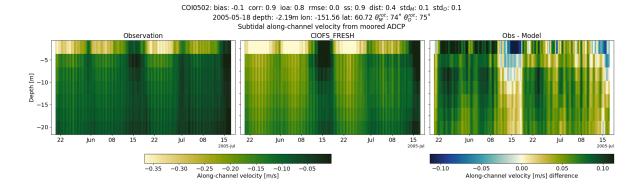




CIOFS_HINDCAST

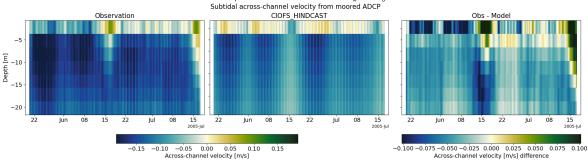


CIOFS_FRESH

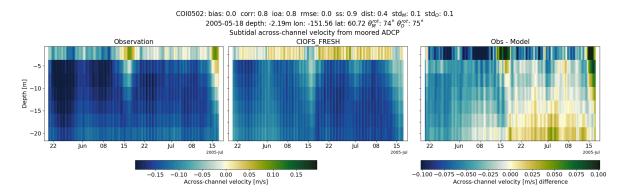


Across-channel velocity

COI0502: bias: 0.0 corr: 0.7 ioa: 0.8 rmse: 0.0 ss: 0.8 dist: 0.4 std_M: 0.0 std_O: 0.1 2005-05-18 depth: -2.19m lon: -151.56 lat: 60.72 θ_M^{rot} : 74° θ_O^{rot} : 75°



CIOFS_FRESH

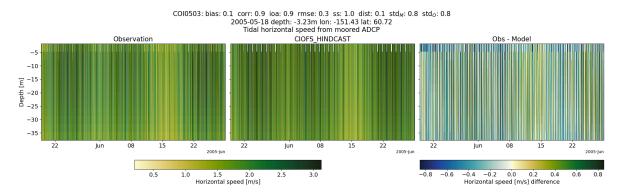


COI0503

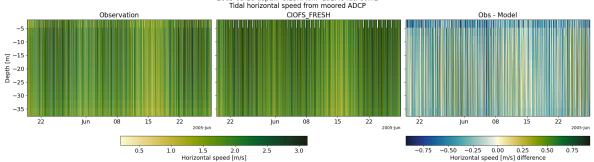
Tidal

Horizontal speed

CIOFS_HINDCAST

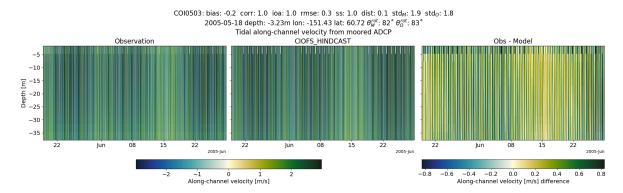


COI0503: bias: 0.2 corr: 0.9 ioa: 0.9 rmse: 0.3 ss: 1.0 dist: 0.1 std $_{\rm M}$: 0.8 std $_{\rm 0}$: 0.8 2005-05-18 depth: -3.23m lon: -151.43 lat: 60.72 Tidal horizontal speed from moored ADCP

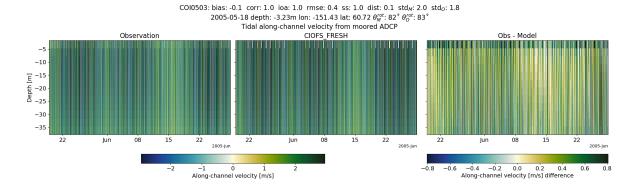


Along-channel velocity

CIOFS_HINDCAST

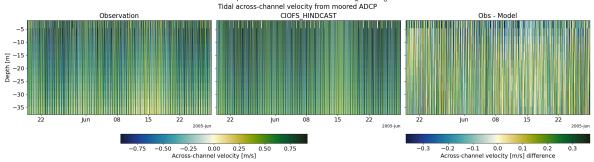


CIOFS_FRESH

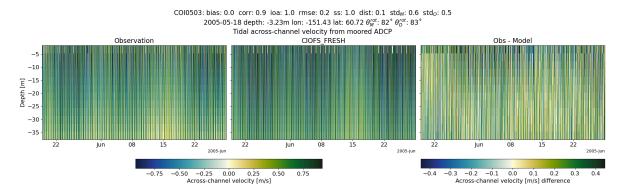


Across-channel velocity

COI0503: bias: 0.0 corr: 1.0 ioa: 1.0 rmse: 0.2 ss: 1.0 dist: 0.1 std_M: 0.6 std_O: 0.5 2005-05-18 depth: -3.23m lon: -151.43 lat: $60.72 \, \theta_M^{rot}$: $82^\circ \, \theta_O^{rot}$: 83°



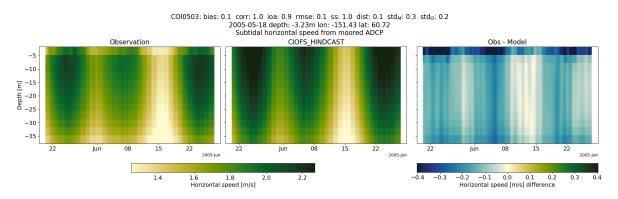
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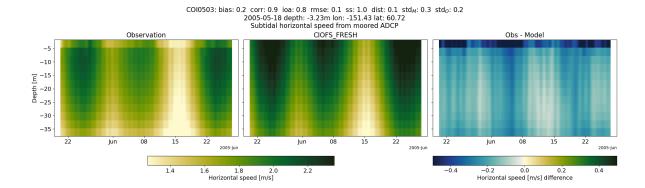


Subtidal

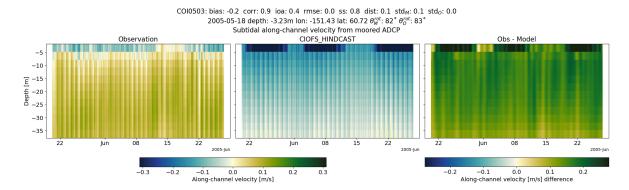
Horizontal speed

CIOFS_HINDCAST

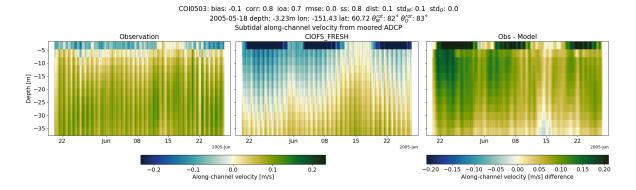




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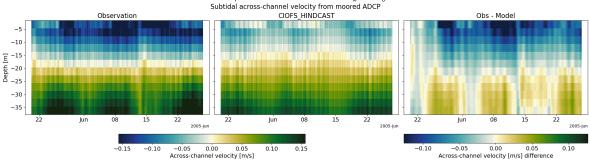


CIOFS_FRESH

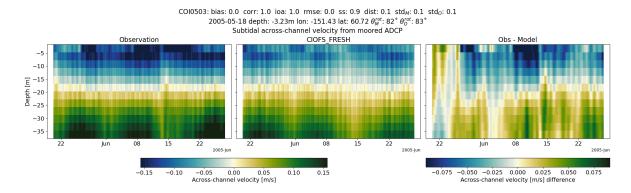


Across-channel velocity

COI0503: bias: 0.0 corr: 1.0 ioa: 0.9 rmse: 0.0 ss: 0.8 dist: 0.1 std_M: 0.1 std_O: 0.1 2005-05-18 depth: -3.23m lon: -151.43 lat: $60.72~\theta_M^{rot}$: $82^\circ~\theta_O^{rot}$: 83°



CIOFS_FRESH

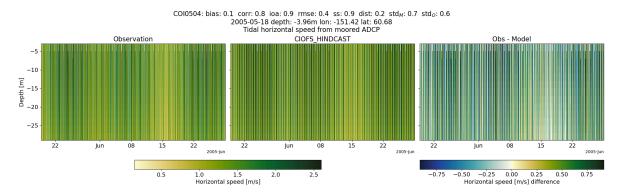


COI0504

Tidal

Horizontal speed

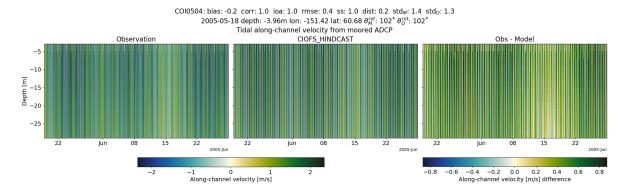
CIOFS_HINDCAST



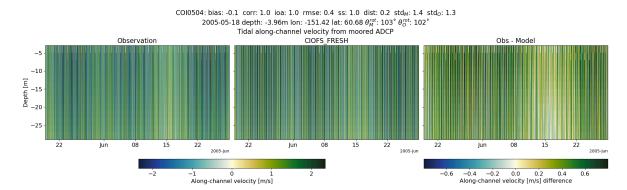
COI0504: bias: 0.1 corr: 0.8 ioa: 0.9 rmse: 0.4 ss: 0.9 dist: 0.2 std $_{\rm M}$: 0.6 std $_{\rm O}$: 0.6 2005-05-18 depth: -3.96m lon: -151.42 lat: 60.68 Tidal horizontal speed from moored ADCP Observation CIOFS FRESH Obs - Model -10 Ξ -15 -15 -Depth -20 -25 22 15 22 22 2005-Jun 2005-Jun 1.0 1.5 Horizontal speed [m/s] -0.50 -0.25 0.00 0.25 0.50 Horizontal speed [m/s] difference

Along-channel velocity

CIOFS_HINDCAST

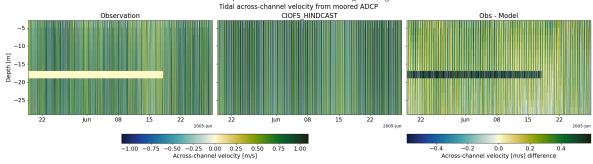


CIOFS_FRESH

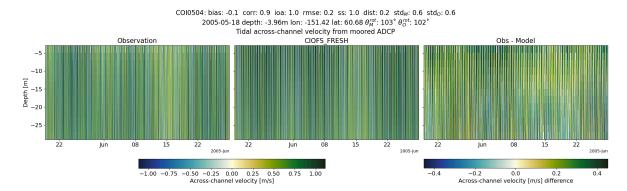


Across-channel velocity

COI0504: bias: -0.1 corr: 0.9 ioa: 0.9 rmse: 0.3 ss: 0.9 dist: 0.2 std_M: 0.6 std_O: 0.5 2005-05-18 depth: -3.96m lon: -151.42 lat: $60.68~\theta_M^{rot}$: $102^\circ~\theta_O^{rot}$: 102°



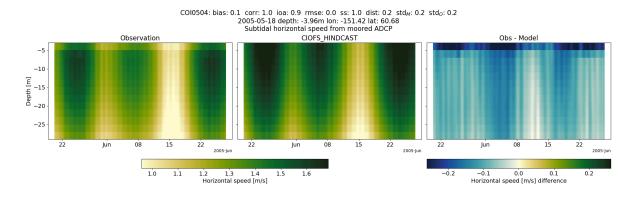
CIOFS_FRESH

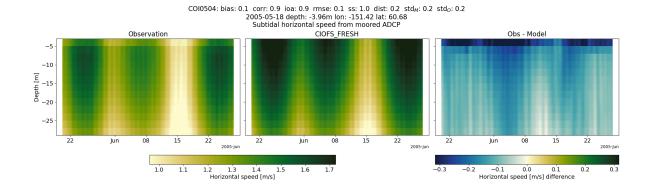


Subtidal

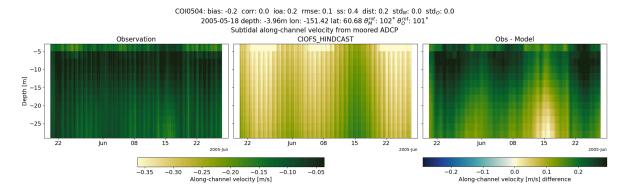
Horizontal speed

CIOFS_HINDCAST

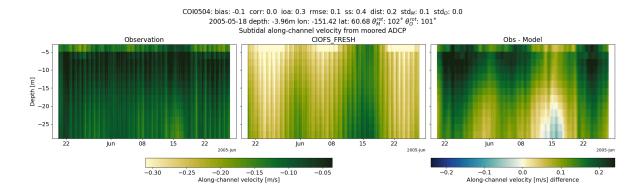




CIOFS_HINDCAST

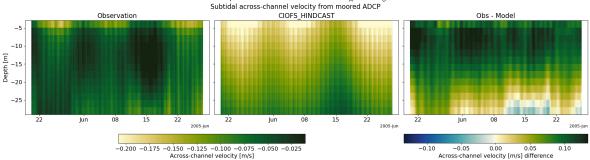


CIOFS_FRESH

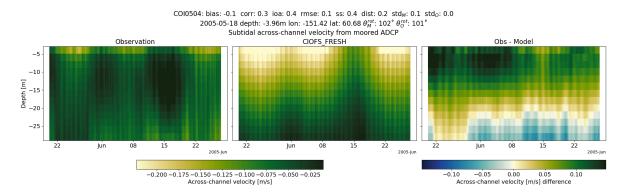


Across-channel velocity

COI0504: bias: -0.1 corr: 0.4 ioa: 0.4 rmse: 0.0 ss: 0.6 dist: 0.2 std_M: 0.0 std_O: 0.0 2005-05-18 depth: -3.96m lon: -151.42 lat: $60.68 \, \theta_M^{rot}$: $102^{\circ} \, \theta_M^{rot}$: 101°



CIOFS_FRESH

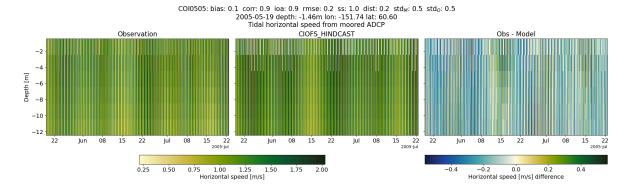


COI0505

Tidal

Horizontal speed

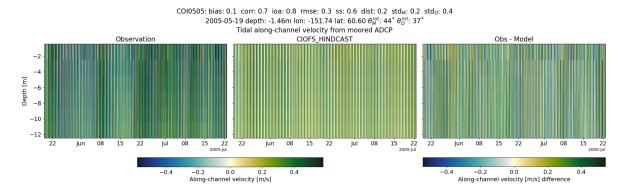
CIOFS_HINDCAST



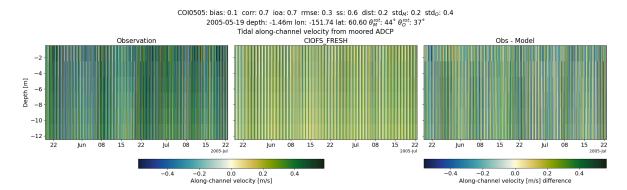
COIO505: bias: 0.2 corr: 0.9 ioa: 0.9 rmse: 0.2 ss; 1.0 dist: 0.2 std₀: 0.5 std₀: 0.5 2005-05-19 depth: -1.46m lon: -151.74 lat: 60.60 Tidal horizontal speed from moored ADCP CIOF5_FRESH Obs- Model CIOF5_FRESH Obs

Along-channel velocity

CIOFS_HINDCAST

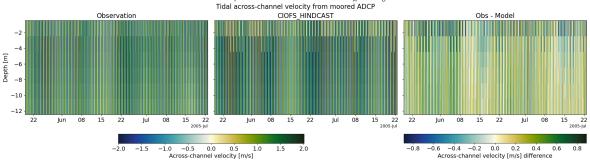


CIOFS_FRESH

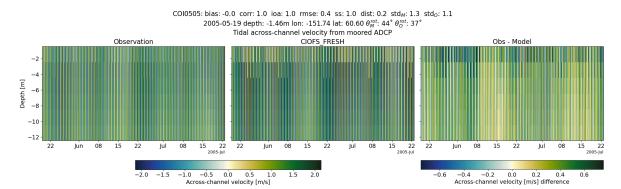


Across-channel velocity

COI0505: bias: 0.0 corr: 1.0 ioa: 1.0 rmse: 0.3 ss: 1.0 dist: 0.2 std_M: 1.2 std_O: 1.1 2005-05-19 depth: -1.46m lon: -151.74 lat: 60.60 θ_M^{mt} : 44° θ_O^{mt} : 37°



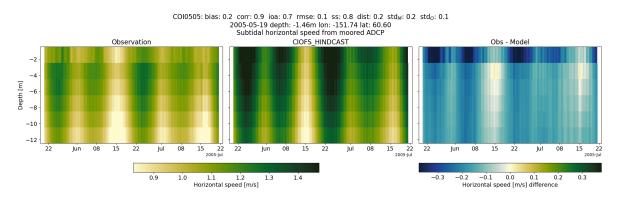
CIOFS_FRESH

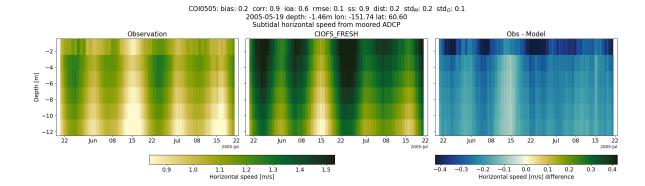


Subtidal

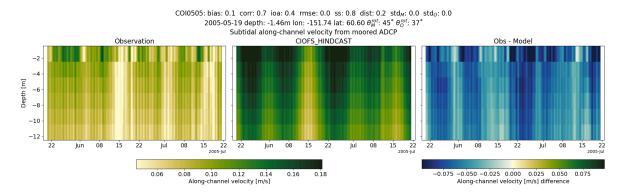
Horizontal speed

CIOFS_HINDCAST

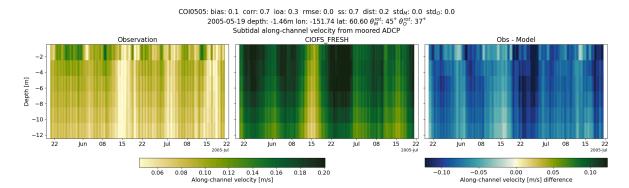




CIOFS_HINDCAST

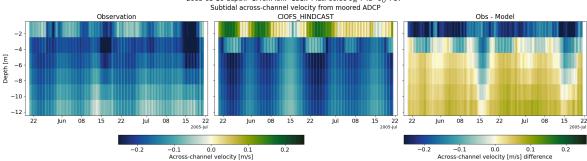


CIOFS_FRESH

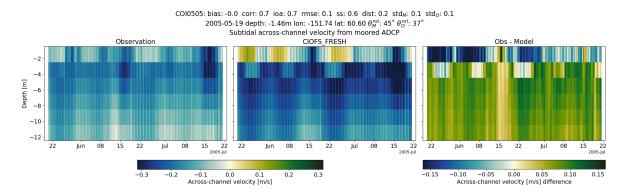


Across-channel velocity

COI0505: bias: 0.0 corr: 0.3 ioa: 0.5 rmse: 0.1 ss: 0.4 dist: 0.2 std_M: 0.1 std_O: 0.1 2005-05-19 depth: -1.46m lon: -151.74 lat: 60.60 θ_M^{rot} : 45° θ_O^{rot} : 37°



CIOFS_FRESH

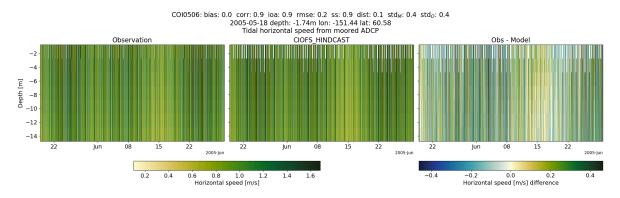


COI0506

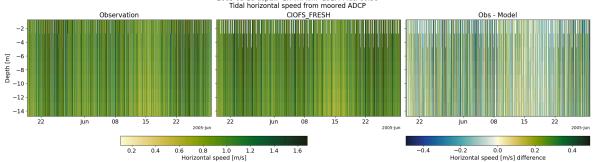
Tidal

Horizontal speed

CIOFS_HINDCAST

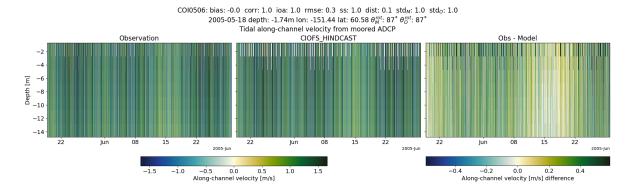


COl0506: bias: 0.0 corr: 0.9 ioa: 0.9 rmse: 0.2 ss: 0.9 dist: 0.1 std $_{\rm M}$: 0.4 std $_{\rm O}$: 0.4 2005-05-18 depth: -1.74m lon: -151.44 lat: 60.58 Tidal horizontal speed from moored ADCP

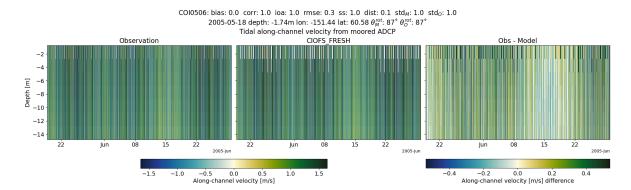


Along-channel velocity

CIOFS_HINDCAST

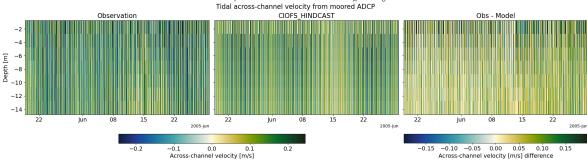


CIOFS_FRESH

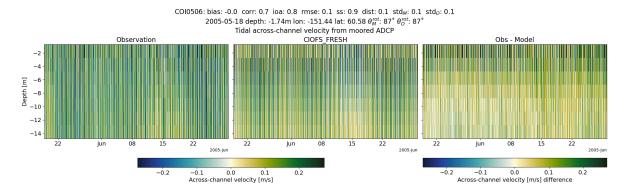


Across-channel velocity

COI0506: bias: -0.0 corr: 0.8 ioa: 0.9 rmse: 0.1 ss: 0.9 dist: 0.1 std_M: 0.1 std_O: 0.1 2005-05-18 depth: -1.74m lon: -151.44 lat: 60.58 θ_M^{rot} : 87° θ_O^{rot} : 87°



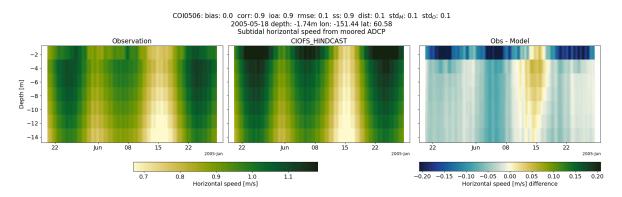
CIOFS_FRESH

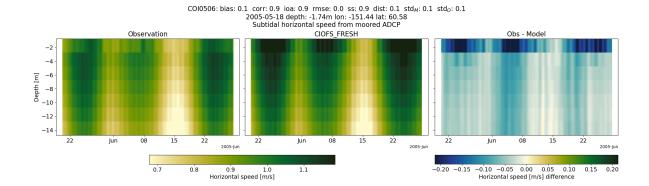


Subtidal

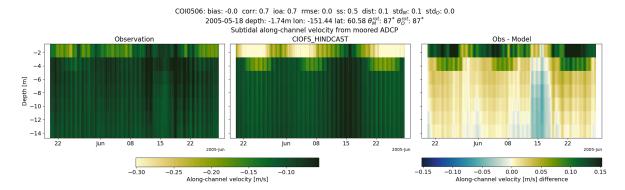
Horizontal speed

CIOFS_HINDCAST

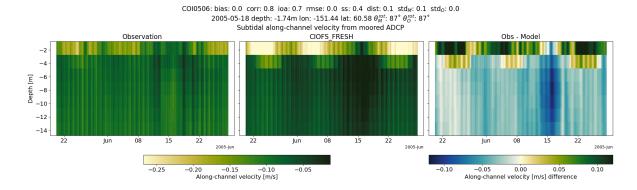




CIOFS_HINDCAST

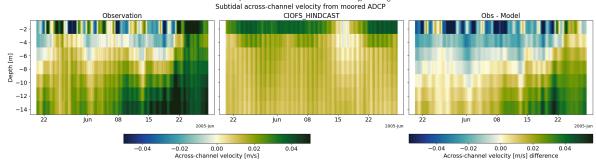


CIOFS_FRESH

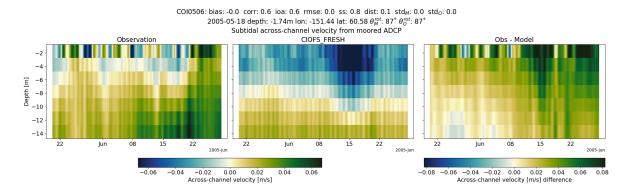


Across-channel velocity

COI0506: bias: -0.0 corr: -0.0 ioa: 0.3 rmse: 0.0 ss: 0.2 dist: 0.1 std_M: 0.0 std_O: 0.0 2005-05-18 depth: -1.74m lon: -151.44 lat: 60.58 θ_M^{nt} : 87° θ_O^{nt} : 87°



CIOFS_FRESH

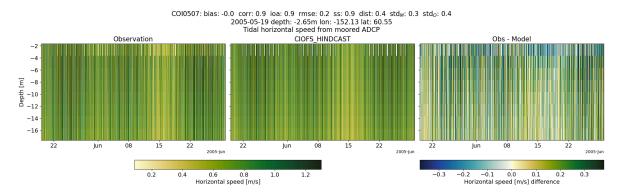


COI0507

Tidal

Horizontal speed

CIOFS_HINDCAST



COI0507: bias: 0.0 corr: 0.8 ioa: 0.9 rmse: 0.2 ss: 0.9 dist: 0.4 std_M: 0.3 std_O: 0.4 2005-05-19 depth: -2.65m lon: -152,13 lat: 60,55 Tidal horizontal speed [mn]s]

Observation

CIOFS_FRESH

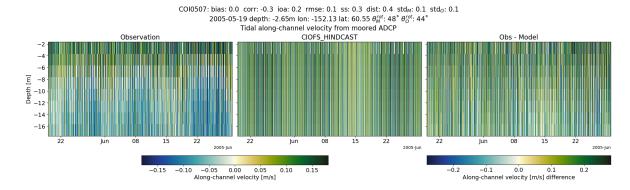
Obs - Model

CIOFS_FRESH

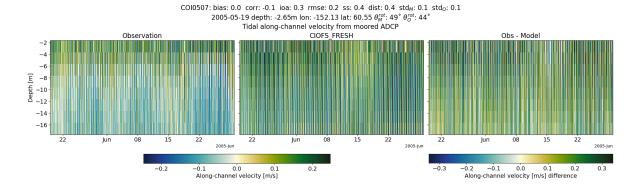
Obs

Along-channel velocity

CIOFS_HINDCAST

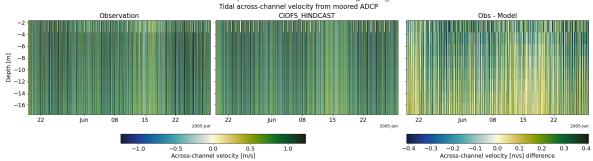


CIOFS_FRESH



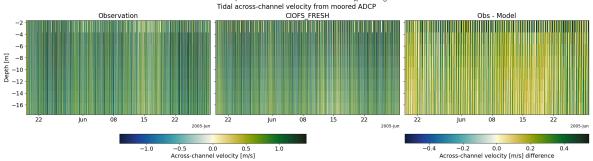
Across-channel velocity

COI0507: bias: -0.0 corr: 1.0 ioa: 1.0 rmse: 0.2 ss: 1.0 dist: 0.4 std_M: 0.7 std_O: 0.8 2005-05-19 depth: -2.65m lon: -152.13 lat: $60.55~\theta_M^{rot}$: $48^\circ~\theta_O^{rot}$: 44°



CIOFS_FRESH

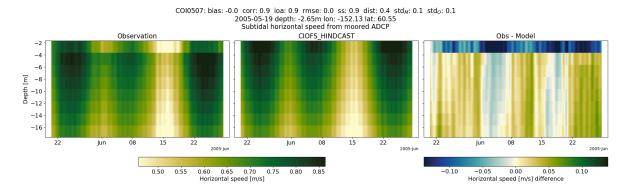
COI0507: bias: -0.1 corr: 1.0 ioa: 1.0 rmse: 0.2 ss; 1.0 dist: 0.4 std $_{M}$: 0.8 std $_{O}$: 0.8 2005-05-19 depth: -2.65m lon: -152.13 lat: 60.55 θ_{M}^{ot} : 44° θ_{O}^{ot} : 44° Tidal across-channel velocity from moored ADCP

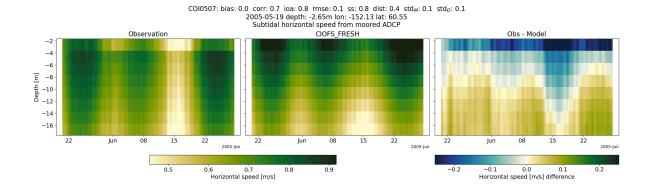


Subtidal

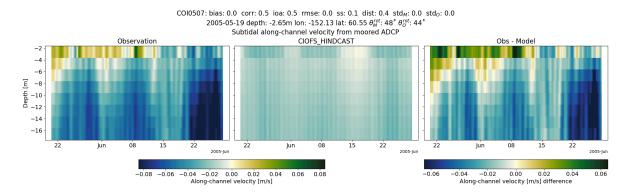
Horizontal speed

CIOFS_HINDCAST

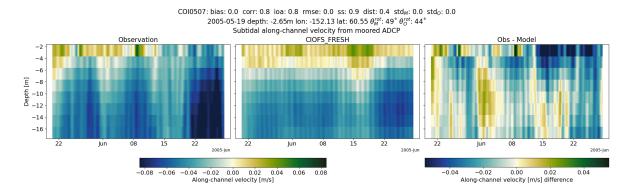




CIOFS_HINDCAST

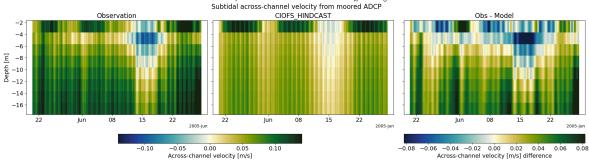


CIOFS_FRESH

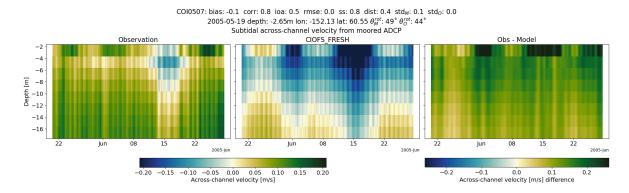


Across-channel velocity

COI0507: bias: -0.0 corr: 0.7 ioa: 0.7 rmse: 0.0 ss: 0.7 dist: 0.4 std_M: 0.0 std_O: 0.0 2005-05-19 depth: -2.65m lon: -152.13 lat: $60.55 \, \theta_M^{\rm rot}$: $48^{\circ} \, \theta_O^{\rm rot}$: 44° Subtidal across-channel velocity from moored ADCP



CIOFS_FRESH

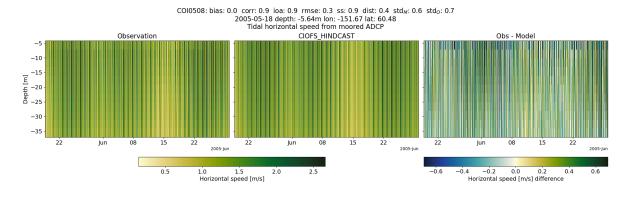


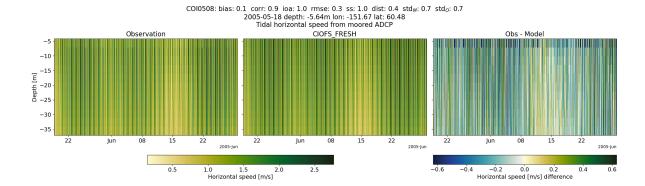
COI0508

Tidal

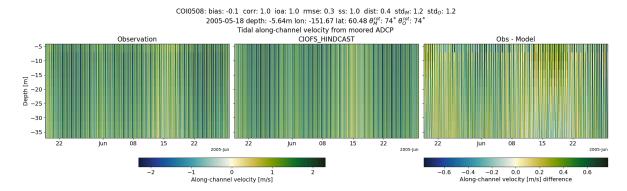
Horizontal speed

CIOFS_HINDCAST

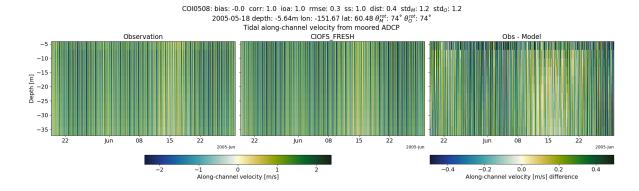




CIOFS_HINDCAST

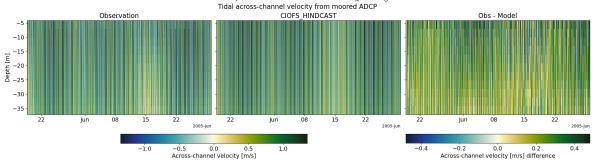


CIOFS_FRESH

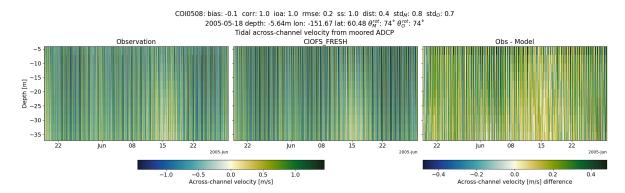


Across-channel velocity

COI0508: bias: -0.1 corr: 1.0 ioa: 1.0 rmse: 0.2 ss: 1.0 dist: 0.4 std_M: 0.7 std_O: 0.7 2005-05-18 depth: -5.64m lon: -151.67 lat: 60.48 θ_M^{rot} : 74° θ_O^{rot} : 74°



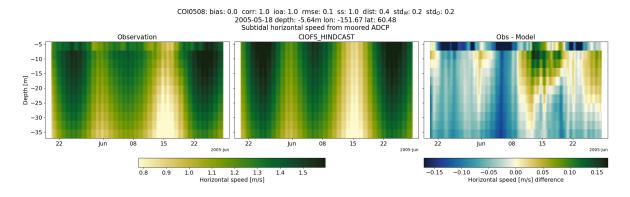
CIOFS_FRESH

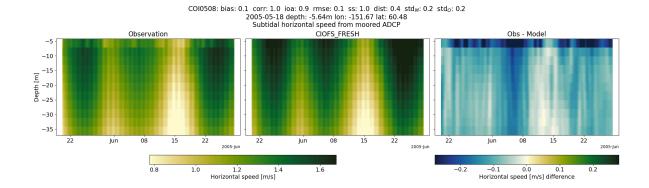


Subtidal

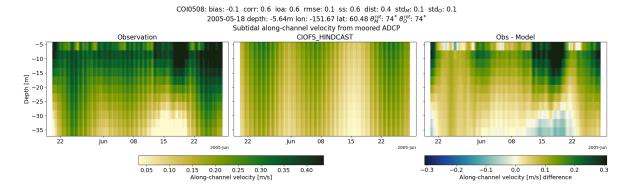
Horizontal speed

CIOFS_HINDCAST

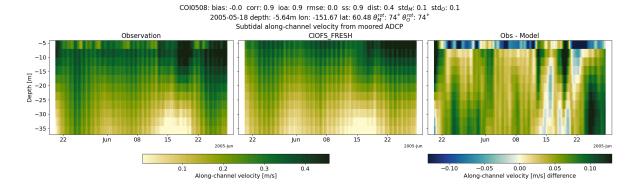




CIOFS_HINDCAST

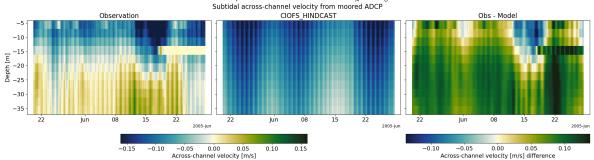


CIOFS_FRESH

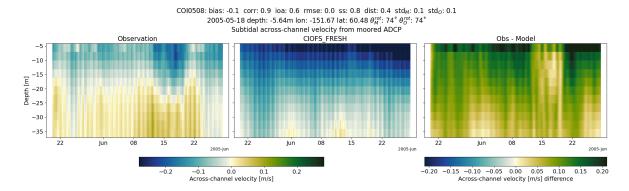


Across-channel velocity

COI0508: bias: -0.1 corr: 0.5 ioa: 0.5 rmse: 0.0 ss: 0.6 dist: 0.4 std_M: 0.0 std_O: 0.1 2005-05-18 depth: -5.64m lon: -151.67 lat: 60.48 $\theta_M^{\rm rot}$: 74° $\theta_O^{\rm rot}$: 74°



CIOFS_FRESH

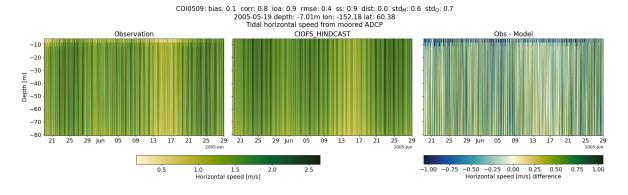


COI0509

Tidal

Horizontal speed

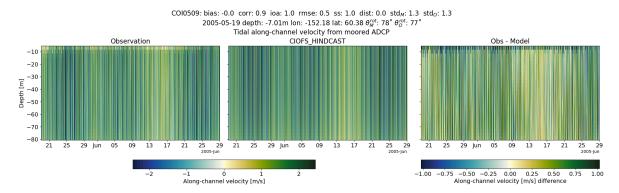
CIOFS_HINDCAST



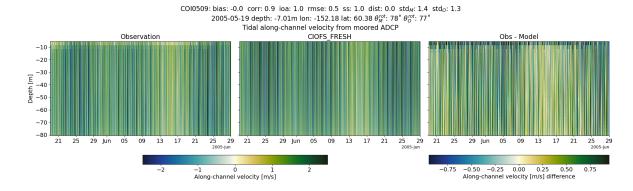
COI0509: bias: 0.1 corr: 0.8 ioa: 0.9 rmse: 0.4 ss: 0.9 dist: 0.0 std_M: 0.7 std₀: 0.7 2005-05-19 depth: -7.01m lon: -152.18 lat: 60.38 Tidal horizontal speed from moored ADCP Observation CIOFS FRESH Obs - Model -10 -20 Ξ -40 Depth [-20 -60 -70 -80 17 21 05 13 17 1.0 1.5 Horizontal speed [m/s] -0.75 -0.50 -0.25 0.00 0.25 0.50 Horizontal speed [m/s] difference

Along-channel velocity

CIOFS_HINDCAST

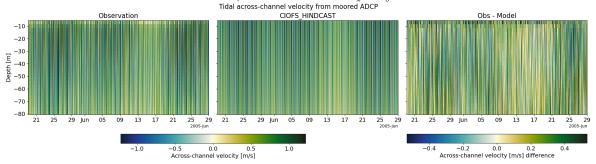


CIOFS_FRESH

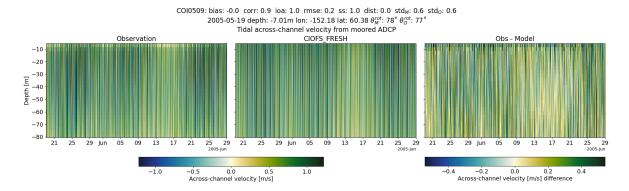


Across-channel velocity

COI0509: bias: -0.0 corr: 0.9 ioa: 1.0 rmse: 0.2 ss: 1.0 dist: 0.0 std_M: 0.6 std_O: 0.6 2005-05-19 depth: -7.01m lon: -152.18 lat: 60.38 θ_M^{rot} : 78° θ_O^{rot} : 77°



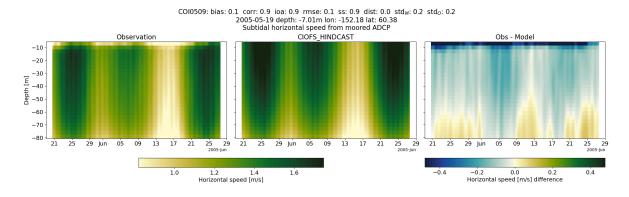
CIOFS_FRESH

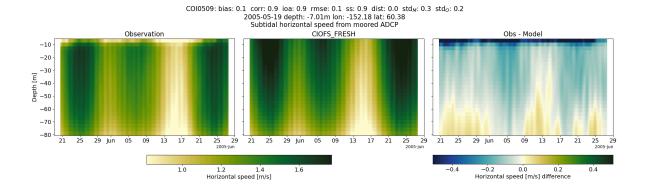


Subtidal

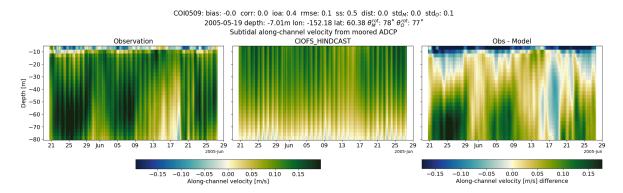
Horizontal speed

CIOFS_HINDCAST

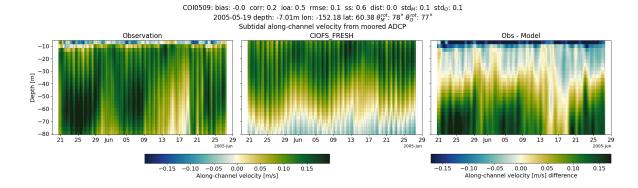




CIOFS_HINDCAST

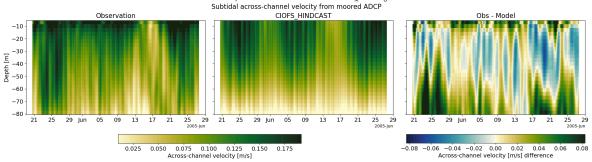


CIOFS_FRESH

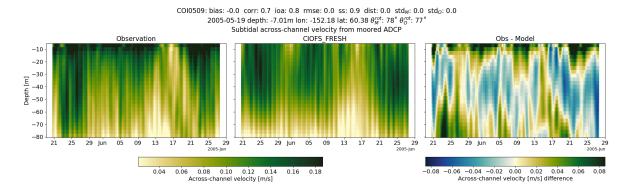


Across-channel velocity

COI0509: bias: -0.0 corr: 0.8 ioa: 0.9 rmse: 0.0 ss: 0.9 dist: 0.0 std_M: 0.0 std_O: 0.0 2005-05-19 depth: -7.01m lon: -152.18 lat: 60.38 θ_M^{rot} : 78° θ_O^{rot} : 77°



CIOFS_FRESH

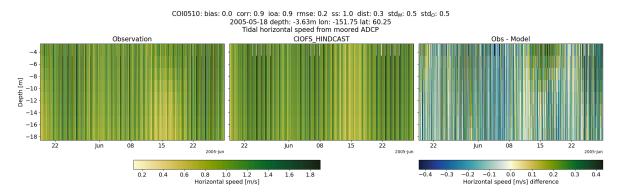


COI0510

Tidal

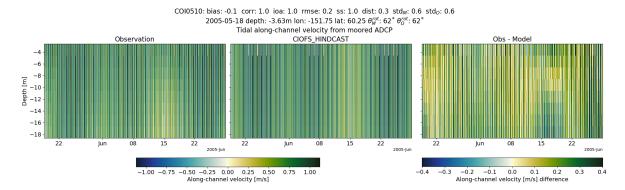
Horizontal speed

CIOFS_HINDCAST

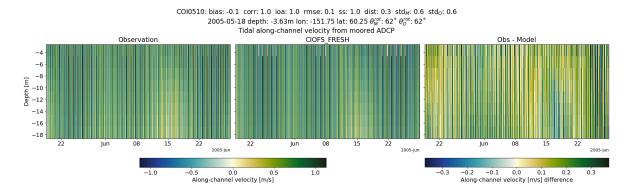


Along-channel velocity

CIOFS_HINDCAST

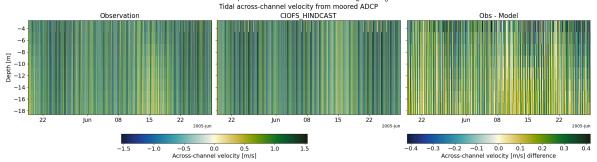


CIOFS_FRESH

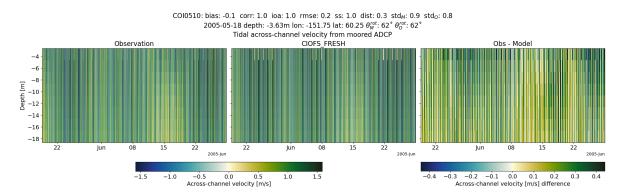


Across-channel velocity

COI0510: bias: -0.1 corr: 1.0 ioa: 1.0 rmse: 0.2 ss: 1.0 dist: 0.3 std_M: 0.9 std_O: 0.8 2005-05-18 depth: -3.63m lon: -151.75 lat: 60.25 θ_M^{rot} : 62° θ_O^{rot} : 62°



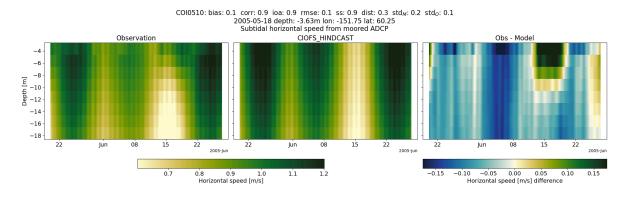
CIOFS_FRESH

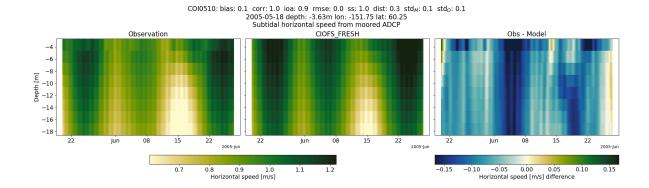


Subtidal

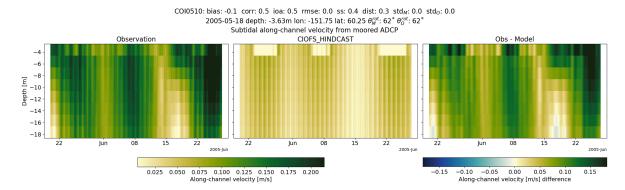
Horizontal speed

CIOFS_HINDCAST

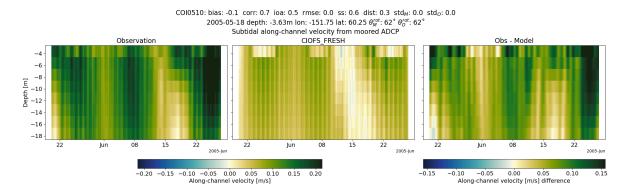




CIOFS_HINDCAST

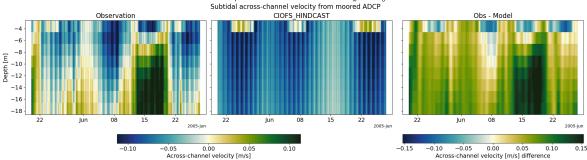


CIOFS_FRESH

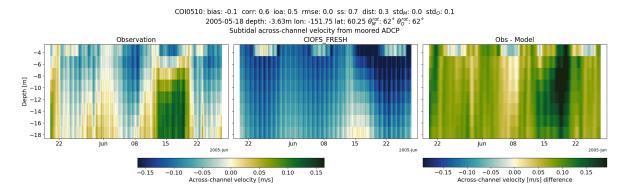


Across-channel velocity

COI0510: bias: -0.1 corr: 0.5 ioa: 0.5 rmse: 0.0 ss: 0.5 dist: 0.3 std_M: 0.0 std_O: 0.1 2005-05-18 depth: -3.63m lon: -151.75 lat: $60.25\,\theta_0^{rot}$: $62^\circ\,\theta_0^{rot}$: 62°



CIOFS_FRESH

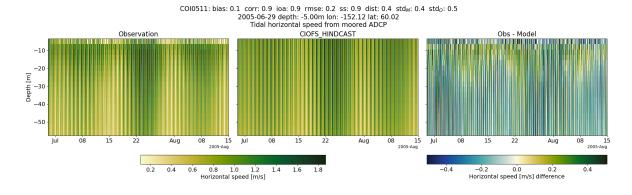


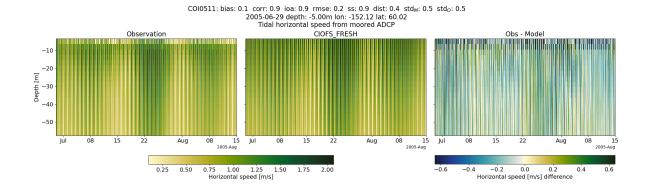
COI0511

Tidal

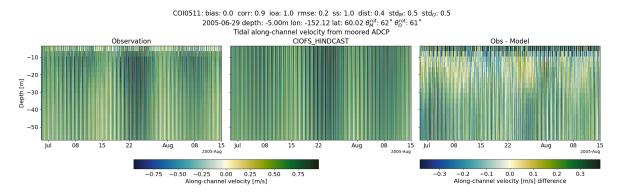
Horizontal speed

CIOFS_HINDCAST

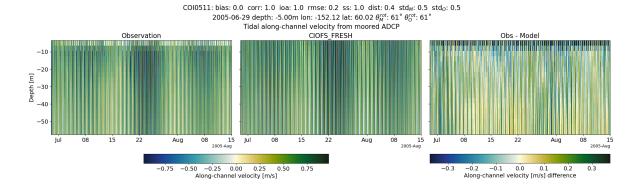




CIOFS_HINDCAST

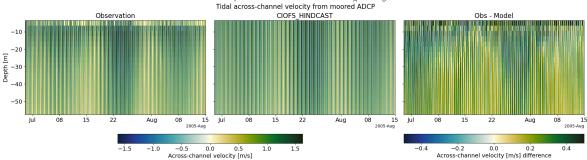


CIOFS_FRESH

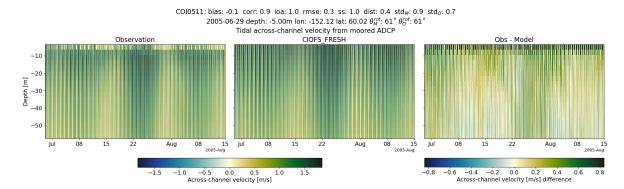


Across-channel velocity

COI0511: bias: -0.1 corr: 1.0 ioa: 1.0 rmse: 0.2 ss: 1.0 dist: 0.4 std_M: 0.8 std_O: 0.7 2005-06-29 depth: -5.00m lon: -152.12 lat: $60.02~\theta_M^{rot}$: $62^\circ~\theta_O^{rot}$: 61°



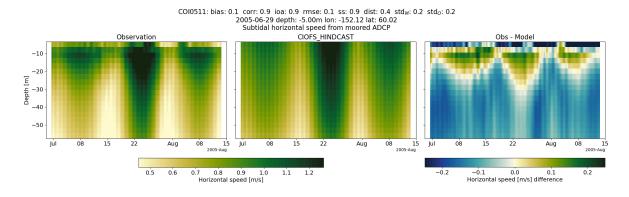
CIOFS_FRESH

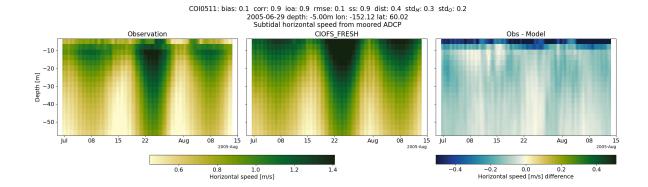


Subtidal

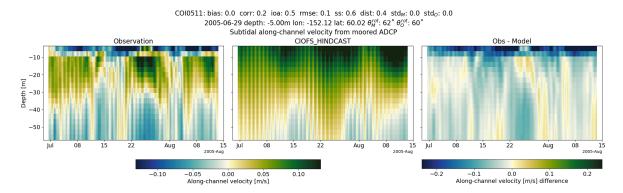
Horizontal speed

CIOFS_HINDCAST

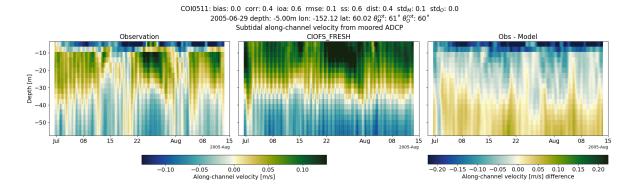




CIOFS_HINDCAST

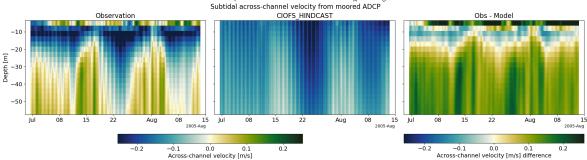


CIOFS_FRESH

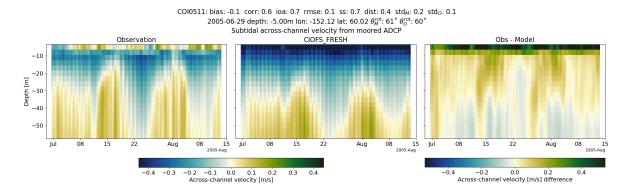


Across-channel velocity

COI0511: bias: -0.1 corr: 0.7 ioa: 0.6 rmse: 0.1 ss: 0.5 dist: 0.4 std_M: 0.0 std_O: 0.1 2005-06-29 depth: -5.00m lon: -152.12 lat: $60.02 \, \theta_{M}^{rot}$: $62^{\circ} \, \theta_{O}^{rot}$: 60°



CIOFS_FRESH

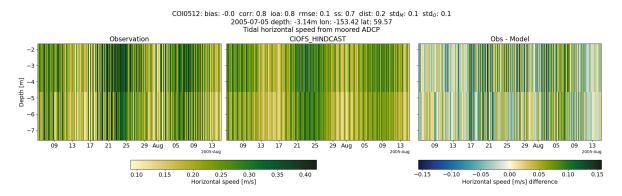


COI0512

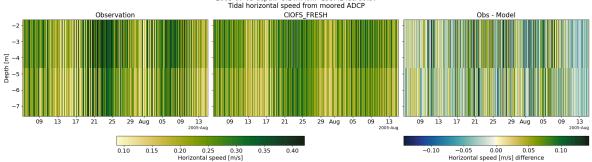
Tidal

Horizontal speed

CIOFS_HINDCAST

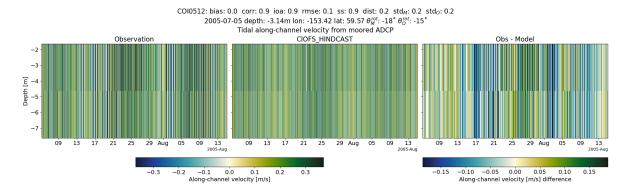


COI0512: bias: -0.0 corr: 0.8 ioa: 0.8 rmse: 0.1 ss: 0.8 dist: 0.2 std_M: 0.1 std_O: 0.1 2005-07-05 depth: -3.14m lon: -153.42 lat: 59.57 Tidal horizontal speed from moored ADCP

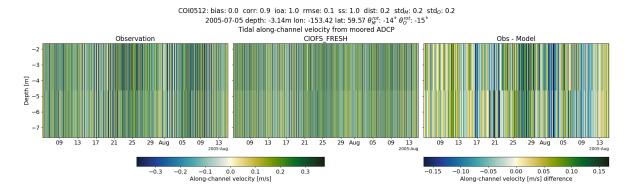


Along-channel velocity

CIOFS_HINDCAST

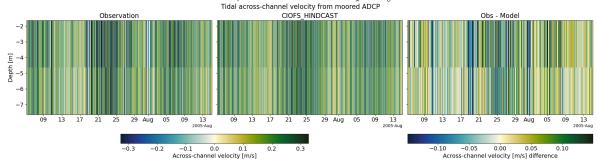


CIOFS_FRESH

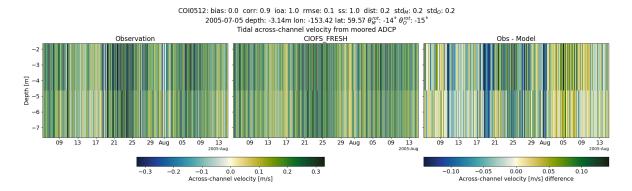


Across-channel velocity

COI0512: bias: 0.0 corr: 0.9 ioa: 1.0 rmse: 0.1 ss: 1.0 dist: 0.2 std_M: 0.2 std_O: 0.2 2005-07-05 depth: -3.14m lon: -153.42 lat: 59.57 θ_M^{ort} : -18° θ_O^{ort} : -15°



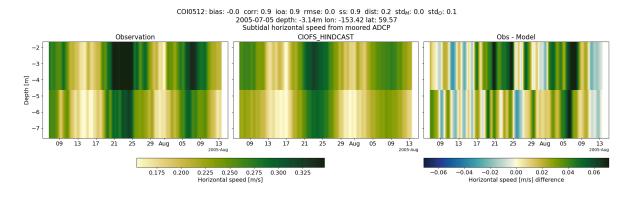
CIOFS_FRESH

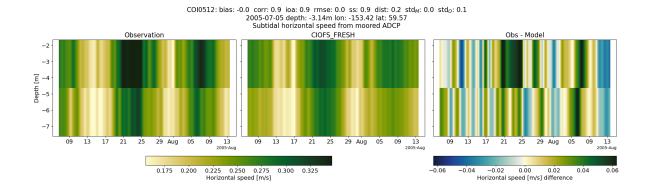


Subtidal

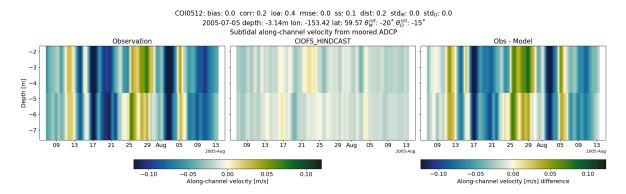
Horizontal speed

CIOFS_HINDCAST

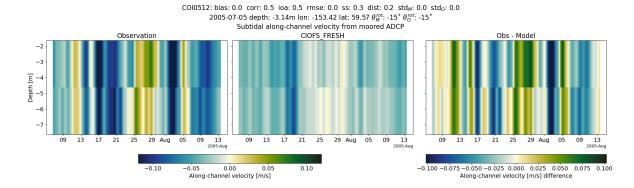




CIOFS_HINDCAST

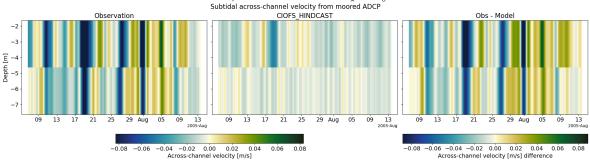


CIOFS_FRESH

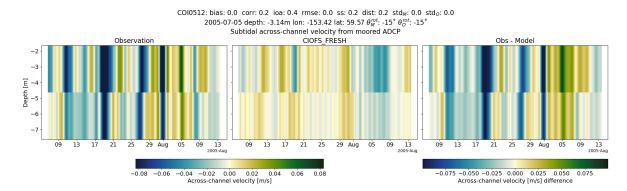


Across-channel velocity

COI0512: bias: 0.0 corr: 0.5 ioa: 0.4 rmse: 0.0 ss: 0.2 dist: 0.2 std_M: 0.0 std_O: 0.0 2005-07-05 depth: -3.14m lon: -153.42 lat: 59.57 $\theta_M^{\rm pt}$: -20° $\theta_O^{\rm pt}$: -15°



CIOFS_FRESH

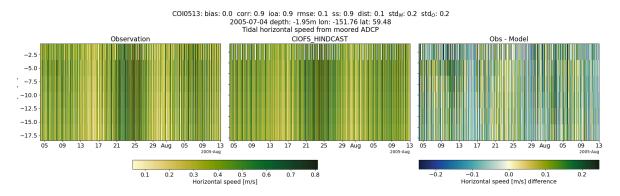


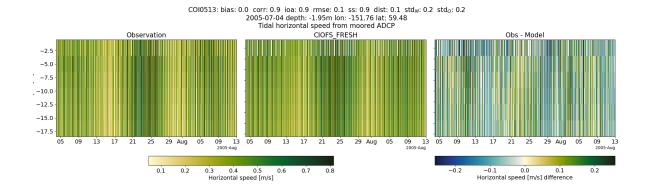
COI0513

Tidal

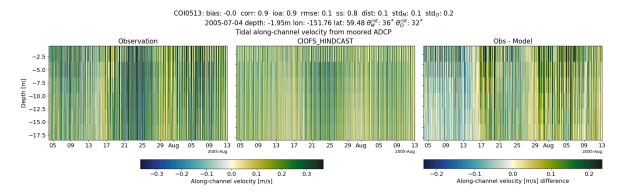
Horizontal speed

CIOFS_HINDCAST

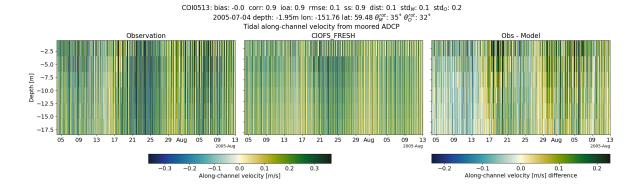




CIOFS_HINDCAST

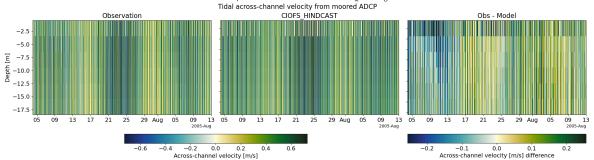


CIOFS_FRESH

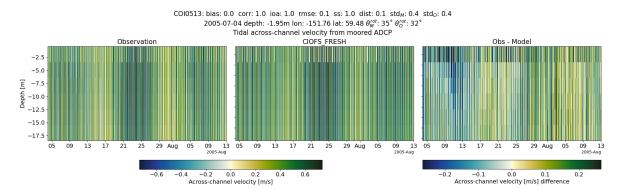


Across-channel velocity

COI0513: bias: 0.0 corr: 1.0 ioa: 1.0 rmse: 0.1 ss: 1.0 dist: 0.1 std_M: 0.4 std_O: 0.4 2005-07-04 depth: -1.95m lon: -151.76 lat: 59.48 θ_M^{rot} : 36° θ_O^{rot} : 32°



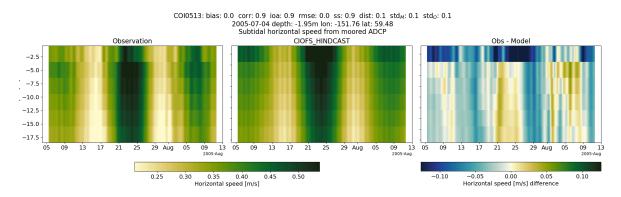
CIOFS_FRESH

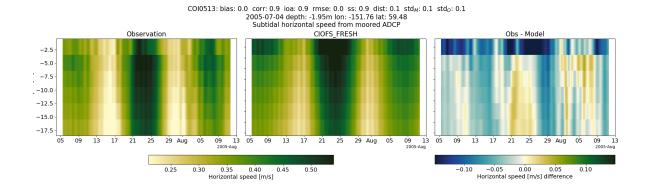


Subtidal

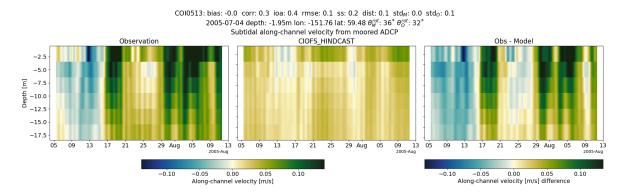
Horizontal speed

CIOFS_HINDCAST

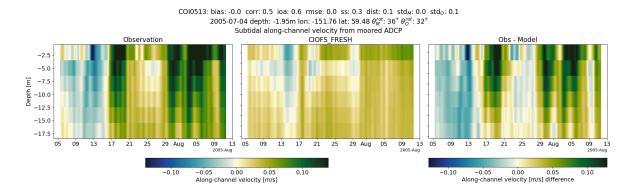




CIOFS_HINDCAST

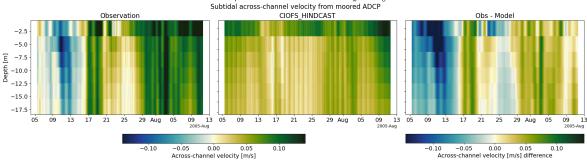


CIOFS_FRESH

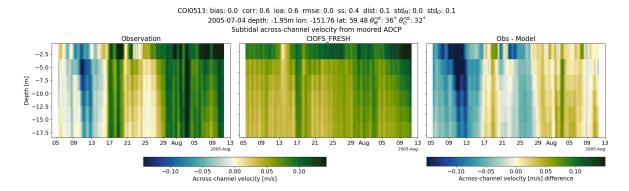


Across-channel velocity

COI0513: bias: 0.0 corr: 0.4 ioa: 0.5 rmse: 0.1 ss: 0.3 dist: 0.1 std $_{\rm M}$: 0.0 std $_{\rm C}$: 0.1 2005-07-04 depth: -1.95m ion: -151.76 lat: 59.48 $\theta_{\rm M}^{\rm ort}$: 36 $\theta_{\rm C}^{\rm ort}$: 32 $\theta_{\rm C}^{\rm ort}$: 30 $\theta_{\rm C}^{\rm ort}$: 31 $\theta_{\rm C}^{\rm ort}$: 32 $\theta_{\rm C}^{\rm ort}$: 31 $\theta_{\rm C}^{\rm ort}$: 32 $\theta_{$



CIOFS_FRESH

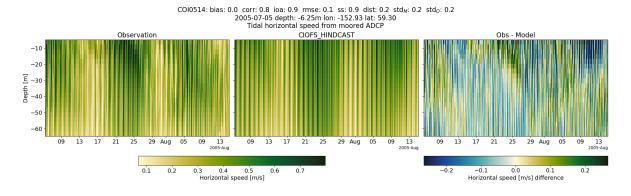


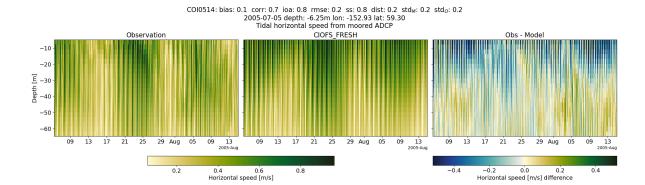
COI0514

Tidal

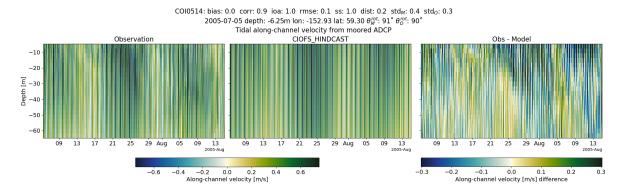
Horizontal speed

CIOFS_HINDCAST

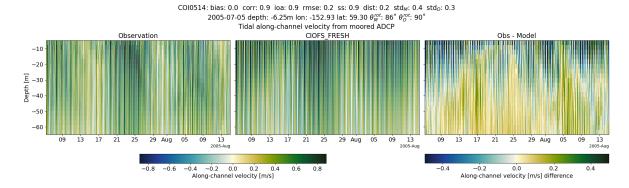




CIOFS_HINDCAST

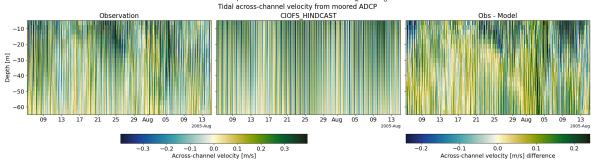


CIOFS_FRESH

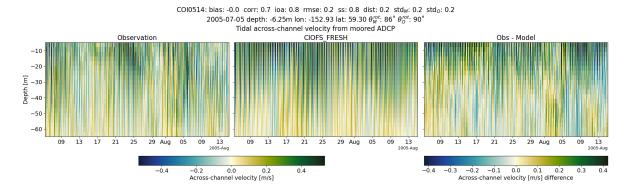


Across-channel velocity

COI0514: bias: -0.0 corr: 0.8 ioa: 0.9 rmse: 0.1 ss: 0.9 dist: 0.2 std $_{M}$: 0.2 std $_{O}$: 0.2 2005-07-05 depth: -6.25m lon: -152.93 lat: 59.30 θ_{M}^{mt} : 91° θ_{O}^{mt} : 90°



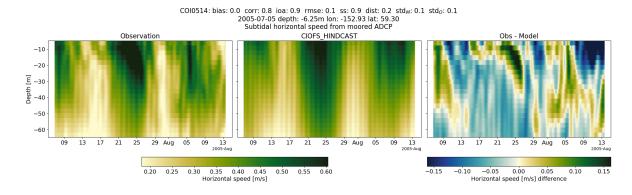
CIOFS_FRESH

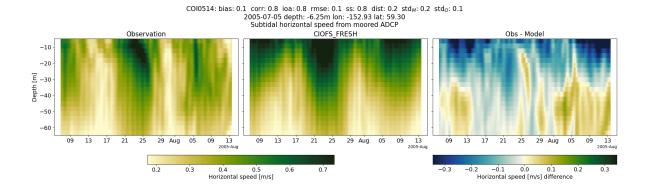


Subtidal

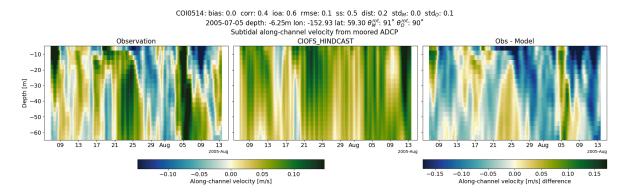
Horizontal speed

CIOFS_HINDCAST

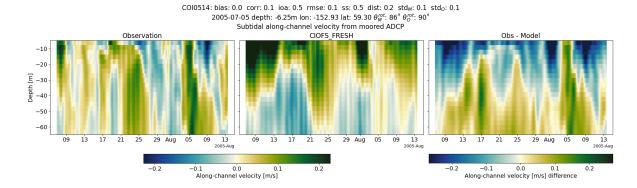




CIOFS_HINDCAST

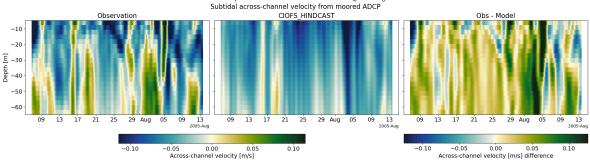


CIOFS_FRESH

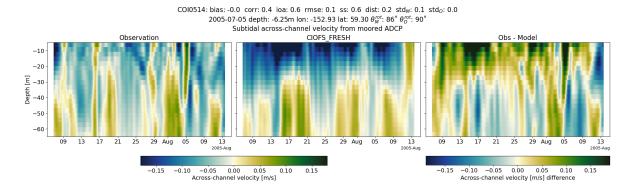


Across-channel velocity

COI0514: bias: -0.0 corr: 0.5 ioa: 0.6 rmse: 0.0 ss: 0.5 dist: 0.2 std_M: 0.0 std_O: 0.0 2005-07-05 depth: -6.25m lon: -152.93 lat: 59.30 θ_M^{rot} : 91° θ_O^{rot} : 90°



CIOFS_FRESH

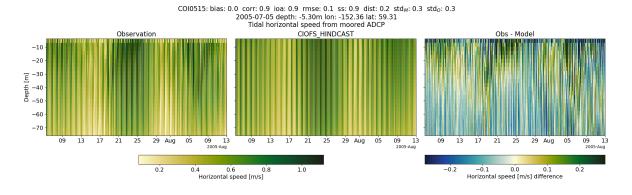


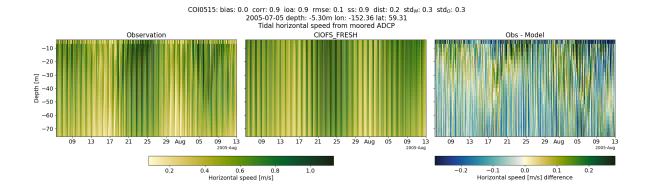
COI0515

Tidal

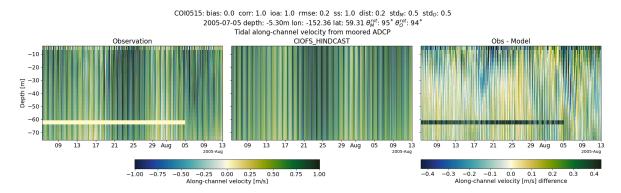
Horizontal speed

CIOFS_HINDCAST

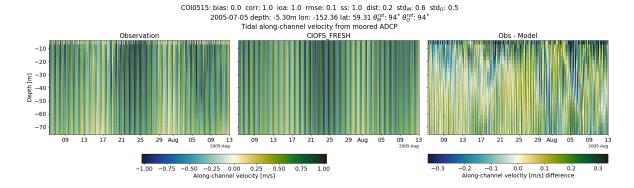




CIOFS_HINDCAST

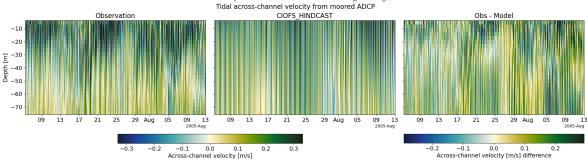


CIOFS_FRESH

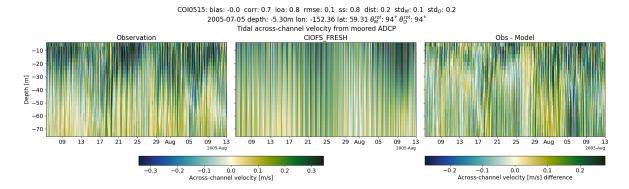


Across-channel velocity

COI0515: bias: -0.0 corr: 0.7 ioa: 0.8 rmse: 0.1 ss: 0.8 dist: 0.2 std_M: 0.1 std_O: 0.2 2005-07-05 depth: -5.30m lon: -152.36 lat: 59.31 θ_M^{rot} : 95° θ_O^{rot} : 94°



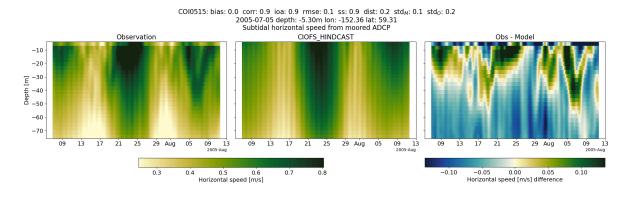
CIOFS_FRESH

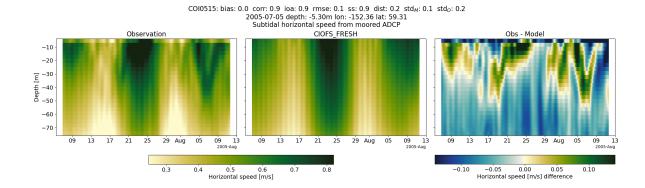


Subtidal

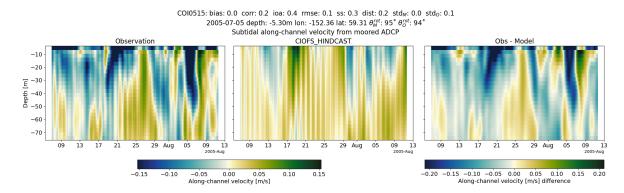
Horizontal speed

CIOFS_HINDCAST

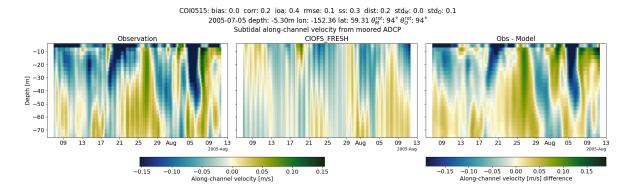




CIOFS_HINDCAST

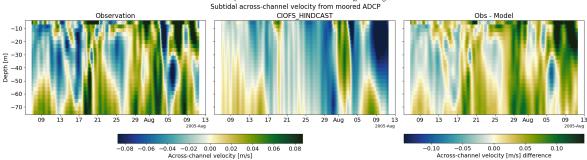


CIOFS_FRESH

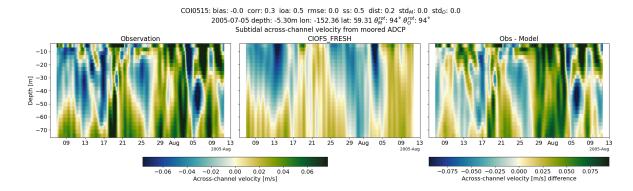


Across-channel velocity

COI0515: bias: -0.0 corr: 0.2 ioa: 0.5 rmse: 0.0 ss: 0.5 dist: 0.2 std_M: 0.0 std_O: 0.0 2005-07-05 depth: -5.30m lon: -152.36 lat: 59.31 θ_M^{rot} : 95° θ_O^{rot} : 94°



CIOFS_FRESH

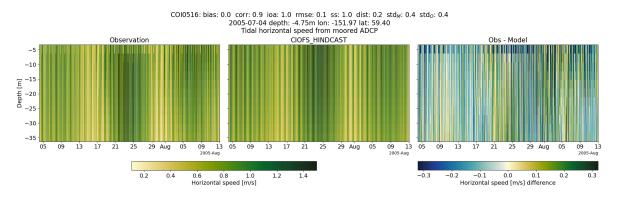


COI0516

Tidal

Horizontal speed

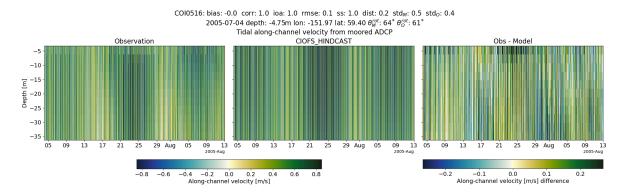
CIOFS_HINDCAST



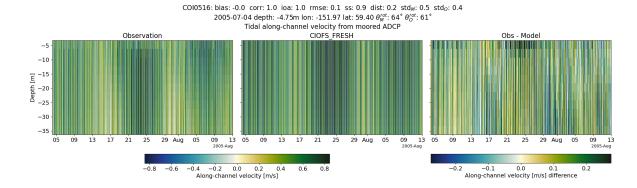
COIO516: bias: 0.0 corr: 0.9 ioa: 1.0 rmse: 0.1 ss: 1.0 dist: 0.2 std_N: 0.4 std_O: 0.5 std_O: 0.1 std_O: 0.1 std_O: 0.4 std_O: 0.4 std_O: 0.4 std_O: 0.5 std_O: 0.1 std_O: 0.1 std_O: 0.4 std_O: 0.4

Along-channel velocity

CIOFS_HINDCAST

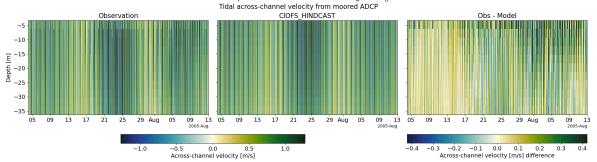


CIOFS_FRESH

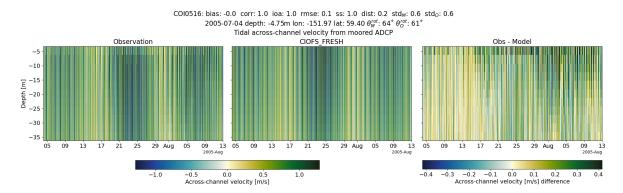


Across-channel velocity

COI0516: bias: -0.0 corr: 1.0 ioa: 1.0 rmse: 0.1 ss: 1.0 dist: 0.2 std_M: 0.6 std_O: 0.6 2005-07-04 depth: -4.75m lon: -151.97 lat: 59.40 $\theta_M^{\rm rot}$: 64° $\theta_O^{\rm rot}$: 61°



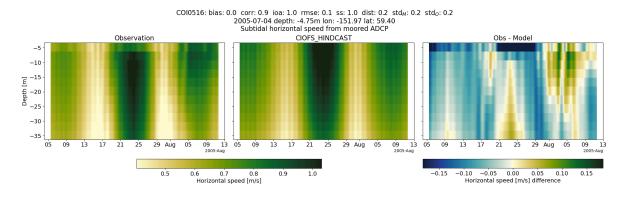
CIOFS_FRESH

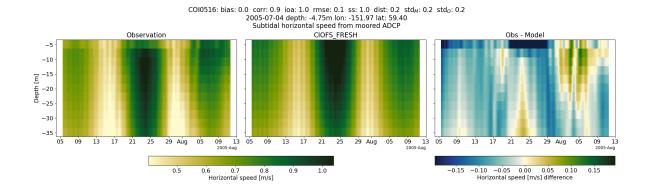


Subtidal

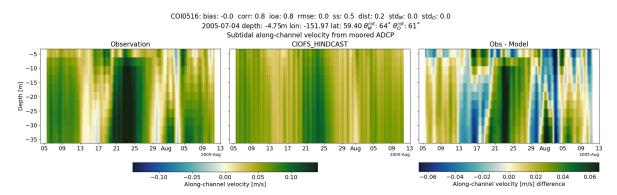
Horizontal speed

CIOFS_HINDCAST

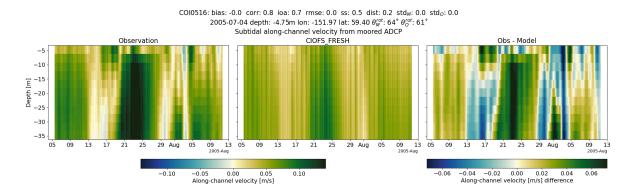




CIOFS_HINDCAST

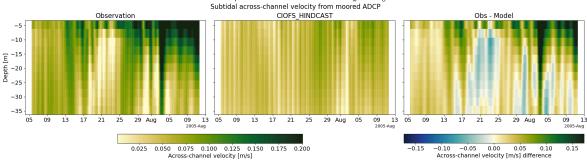


CIOFS_FRESH

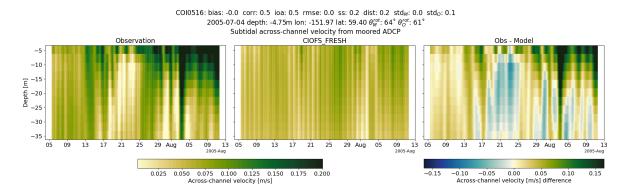


Across-channel velocity

COI0516: bias: -0.0 corr: 0.5 ioa: 0.5 rmse: 0.0 ss: 0.2 dist: 0.2 std_M: 0.0 std_O: 0.1 2005-07-04 depth: -4.75m lon: -151.97 lat: $59.40~\theta_M^{\rm rot}$: $64^{\circ}~\theta_0^{\rm rot}$: 61°



CIOFS_FRESH

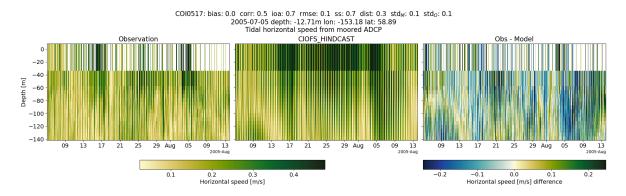


COI0517

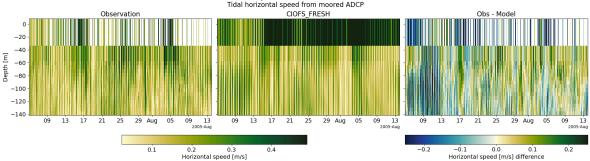
Tidal

Horizontal speed

CIOFS_HINDCAST

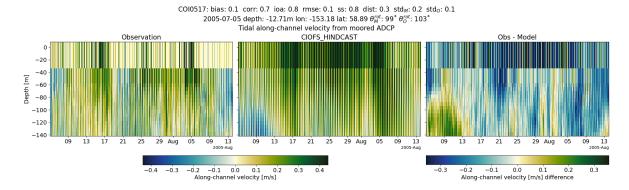


COI0517: bias: 0.0 corr: 0.5 ioa: 0.7 rmse: 0.1 ss: 0.7 dist: 0.3 std $_{\rm M}$: 0.1 std $_{\rm O}$: 0.1 2005-07-05 depth: -12.71m lon: -153.18 lat: 58.89 Tidal horizontal speed from moored ADCP

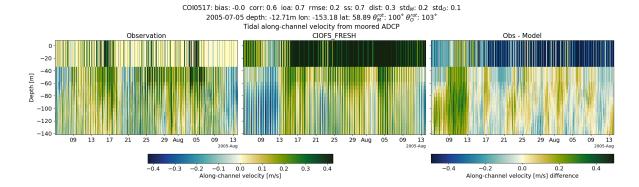


Along-channel velocity

CIOFS_HINDCAST

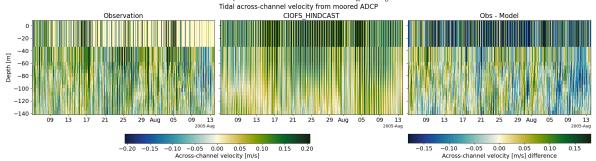


CIOFS_FRESH

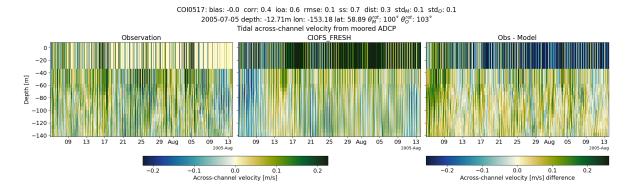


Across-channel velocity

COI0517: bias: 0.0 corr: 0.5 ioa: 0.7 rmse: 0.1 ss: 0.7 dist: 0.3 std_M: 0.1 std_O: 0.1 2005-07-05 depth: -12.71m lon: -153.18 lat: 58.89 θ_M^{rot} : 99° θ_O^{rot} : 103°



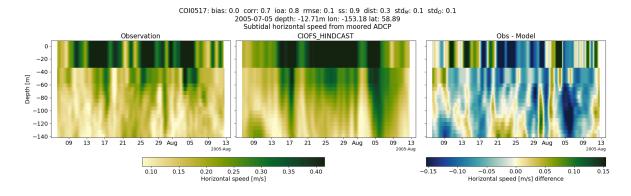
CIOFS_FRESH

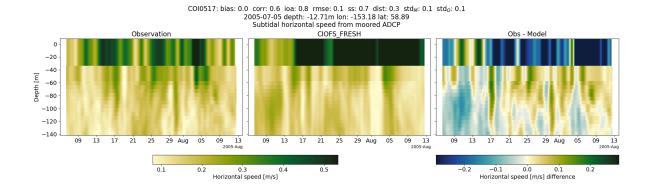


Subtidal

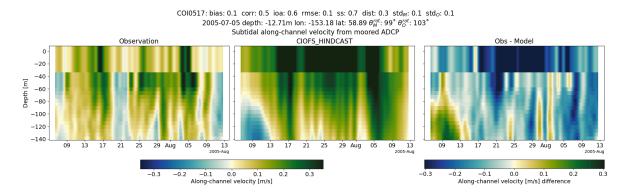
Horizontal speed

CIOFS_HINDCAST

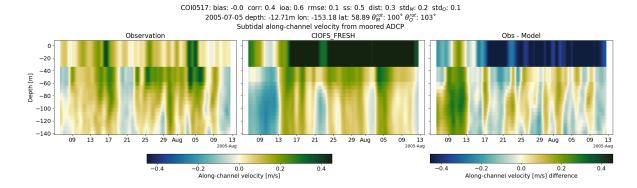




CIOFS_HINDCAST

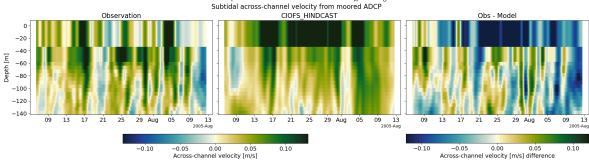


CIOFS_FRESH

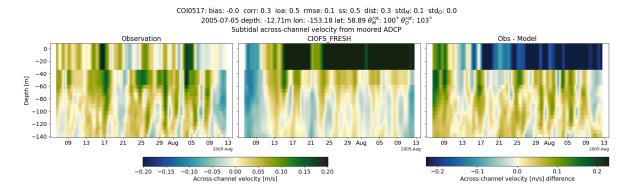


Across-channel velocity

COI0517: bias: 0.0 corr: 0.3 ioa: 0.6 rmse: 0.0 ss: 0.7 dist: 0.3 std_M: 0.0 std_O: 0.0 2005-07-05 depth: -12.71m lon: -153.18 lat: 58.89 θ_M^{rot} : 99° θ_O^{rot} : 103°



CIOFS_FRESH

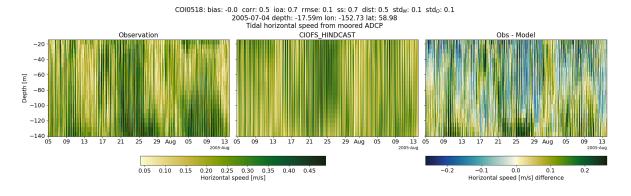


COI0518

Tidal

Horizontal speed

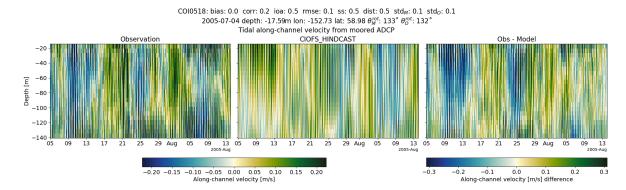
CIOFS_HINDCAST



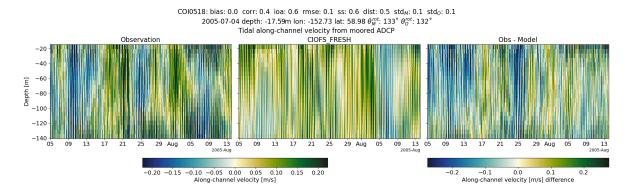
COIO518: bias: -0.0 corr: 0.6 ioa: 0.7 rmse: 0.1 ss: 0.8 dist: 0.5 std_w: 0.1 std_o: 0.1

Along-channel velocity

CIOFS_HINDCAST

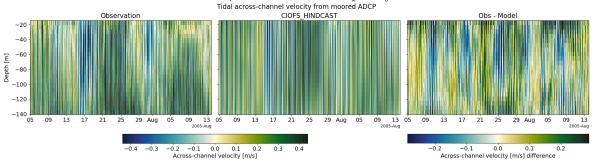


CIOFS_FRESH

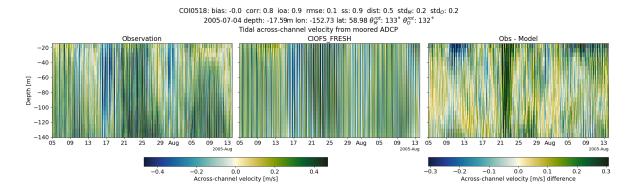


Across-channel velocity

COI0518: bias: 0.0 corr: 0.8 ioa: 0.9 rmse: 0.1 ss: 0.9 dist: 0.5 std_M: 0.2 std_O: 0.2 2005-07-04 depth: -17.59m lon: -152.73 lat: 58.98 θ_M^{rot} : 133° θ_0^{rot} : 132°



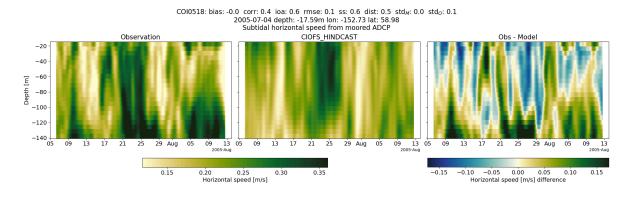
CIOFS_FRESH

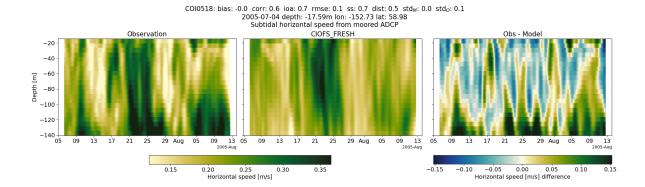


Subtidal

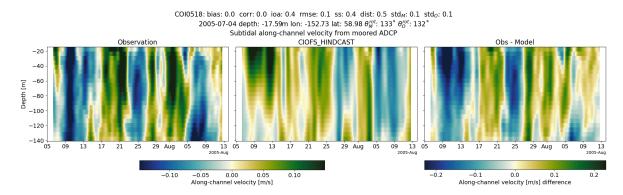
Horizontal speed

CIOFS_HINDCAST

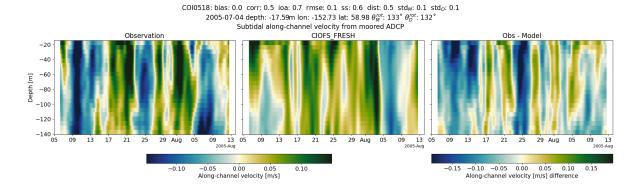




CIOFS_HINDCAST

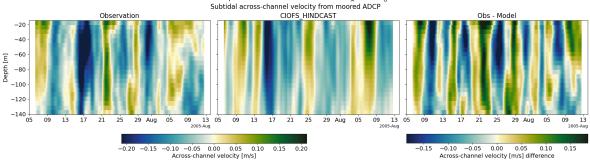


CIOFS_FRESH

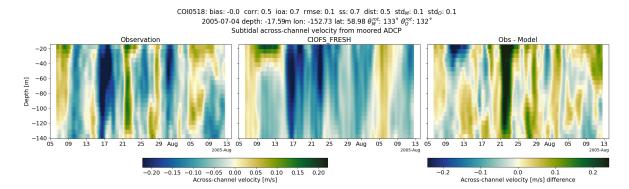


Across-channel velocity

COI0518: bias: 0.0 corr: 0.3 ioa: 0.6 rmse: 0.1 ss: 0.7 dist: 0.5 std_M: 0.1 std_O: 0.1 2005-07-04 depth: -17.59m lon: -152.73 lat: 58.98 θ_M^{rot} : 133° θ_0^{rot} : 132°



CIOFS_FRESH

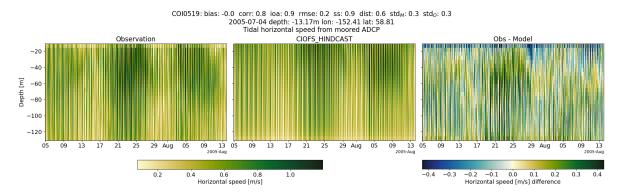


COI0519

Tidal

Horizontal speed

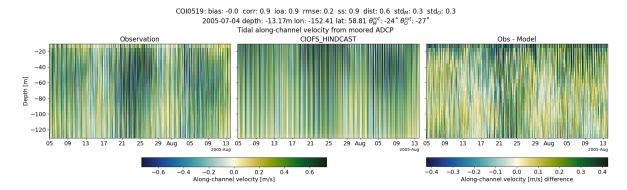
CIOFS_HINDCAST



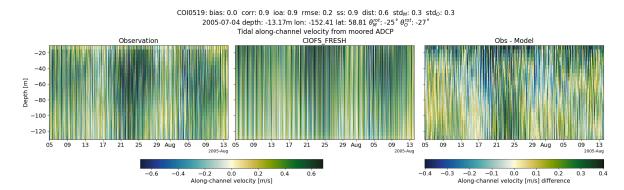
COI0519: bias: -0.0 corr: 0.8 ioa: 0.9 rmse: 0.2 ss: 0.9 dist: 0.6 std_M; 0.3 std_O: 0.3 zo05-07-04 depth: -13.17m lon: -152.41 lat: 58.81 Tidal horizontal speed from moored ADCP Observation CIOFS_FRESH Obs - Model CIOFS_FRESH Obs - Model Obs -

Along-channel velocity

CIOFS_HINDCAST

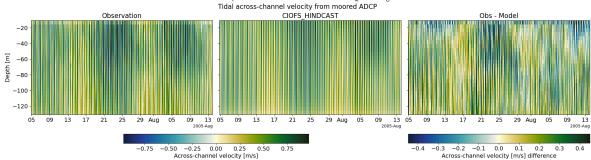


CIOFS_FRESH

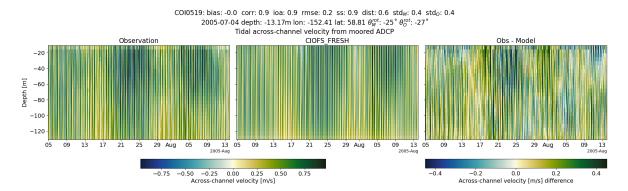


Across-channel velocity

COI0519: bias: -0.0 corr: 0.9 ioa: 0.9 rmse: 0.2 ss: 0.9 dist: 0.6 std $_{\rm M}$: 0.4 std $_{\rm C}$: 0.4 2005-07-04 depth: -13.17m lon: -152.41 lat: 58.81 $\theta_{\rm M}^{\rm MT}$: -24 $^{\circ}$ $\theta_{\rm C}^{\rm rot}$: -27 $^{\circ}$



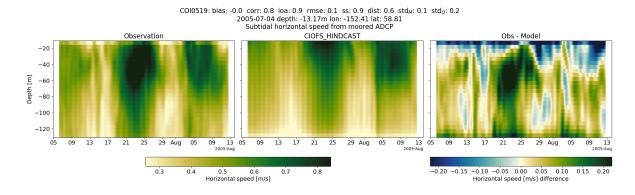
CIOFS_FRESH

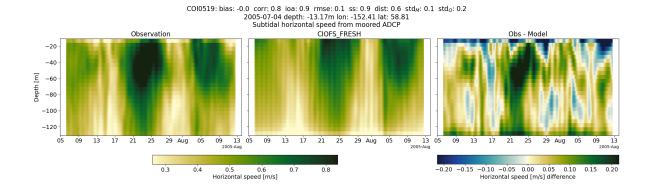


Subtidal

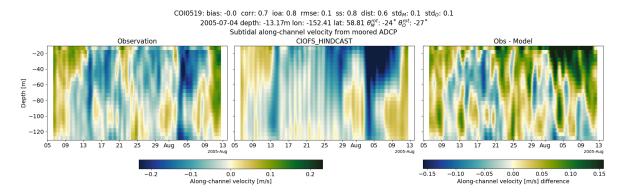
Horizontal speed

CIOFS_HINDCAST

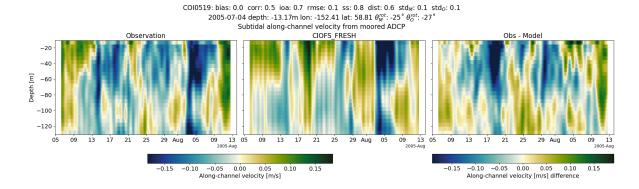




CIOFS_HINDCAST

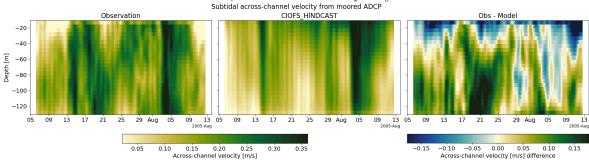


CIOFS_FRESH

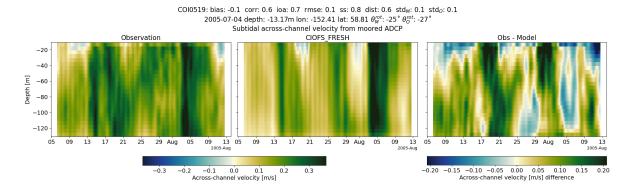


Across-channel velocity

COI0519: bias: -0.0 corr: 0.5 ioa: 0.7 rmse: 0.1 ss: 0.8 dist: 0.6 std_M: 0.1 std_O: 0.1 2005-07-04 depth: -13.17m lon: -152.41 lat: 58.81 θ_{m}^{rot} : -24° θ_{0}^{rot} : -27°



CIOFS_FRESH

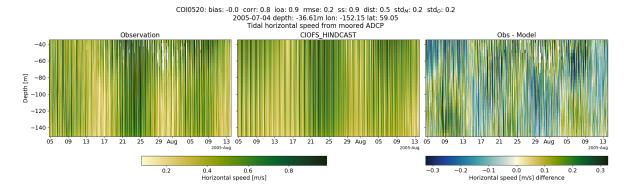


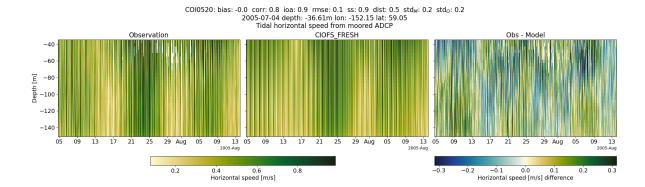
COI0520

Tidal

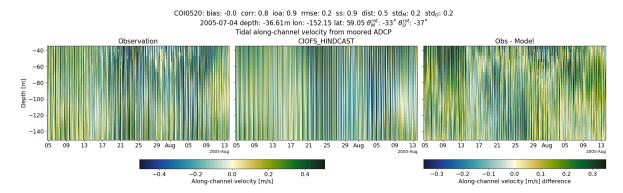
Horizontal speed

CIOFS_HINDCAST

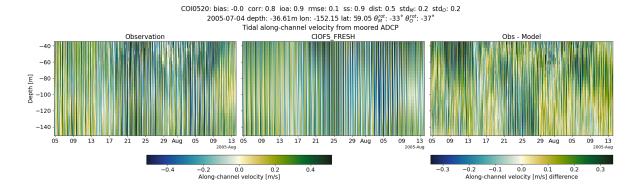




CIOFS_HINDCAST

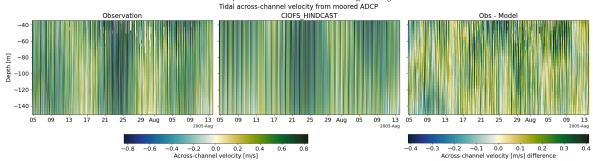


CIOFS_FRESH

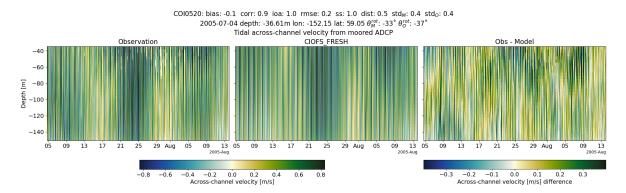


Across-channel velocity

COI0520: bias: -0.1 corr: 0.9 ioa: 1.0 rmse: 0.2 ss: 1.0 dist: 0.5 std_M: 0.4 std_O: 0.4 2005-07-04 depth: -36.61m lon: -152.15 lat: 59.05 θ_M^{rot} : -33° θ_O^{rot} : -37°



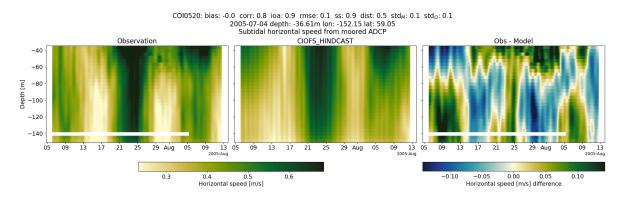
CIOFS_FRESH

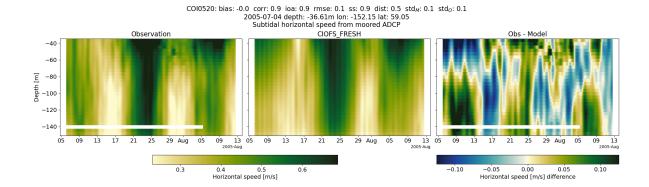


Subtidal

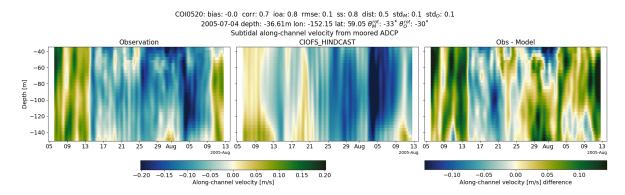
Horizontal speed

CIOFS_HINDCAST

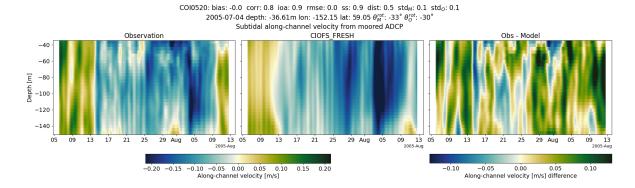




CIOFS_HINDCAST

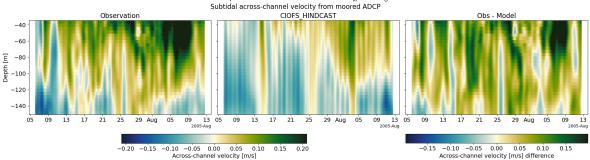


CIOFS_FRESH

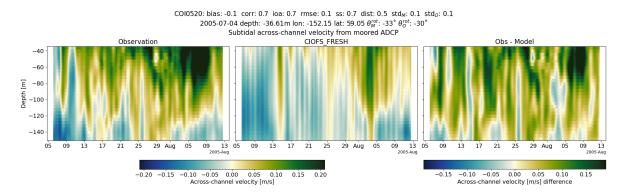


Across-channel velocity

COI0520: bias: -0.1 corr: 0.7 ioa: 0.7 rmse: 0.1 ss: 0.7 dist: 0.5 std_M: 0.1 std_O: 0.1 2005-07-04 depth: -36.61m lon: -152.15 lat: 59.05 θ_M^{rot} : -33° θ_O^{rot} : -30°



CIOFS_FRESH

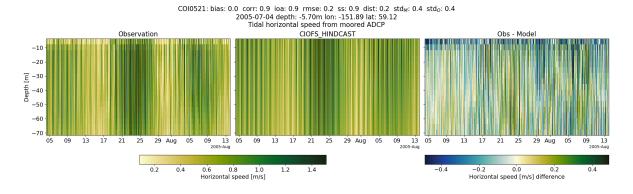


COI0521

Tidal

Horizontal speed

CIOFS_HINDCAST



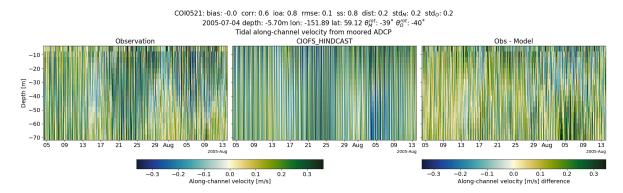
COI0521: bias: 0.0 corr: 0.9 ioa: 0.9 rmse: 0.2 ss: 0.9 dist: 0.2 std_M: 0.4 std_O: 0.4 2005-07-04 depth: -5.70m lon: -151.89 lat: 59.12 Tidal horizontal speed from moored ADCP Observation CIOFS FRESH Obs - Mode -10 -20 ፲ −30 Depth [-50 -60 17 21 29 Aug 09 13 2005-Aug 29 Aug 09 13 2005-Aug 05 09 13

> -0.2 0.0 0.2 Horizontal speed [m/s] difference

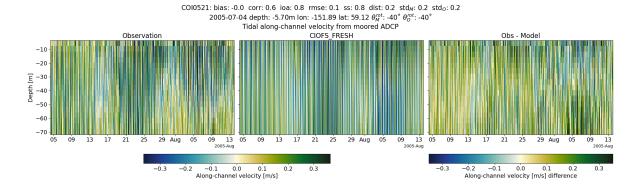
0.6 0.8 1.0 Horizontal speed [m/s]

Along-channel velocity

CIOFS_HINDCAST

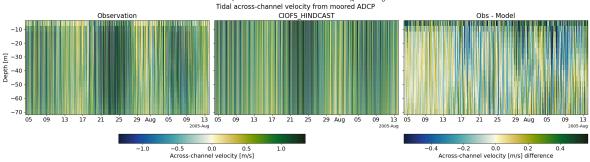


CIOFS_FRESH

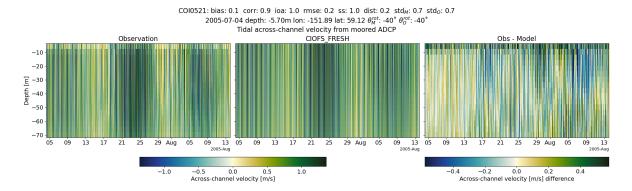


Across-channel velocity

COI0521: bias: 0.1 corr: 1.0 ioa: 1.0 rmse: 0.2 ss: 1.0 dist: 0.2 std $_M$: 0.7 std $_O$: 0.7 2005-07-04 depth: -5.70m lon: -151.89 lat: 59.12 θ_M^{rot} : -39° θ_O^{rot} : -40°



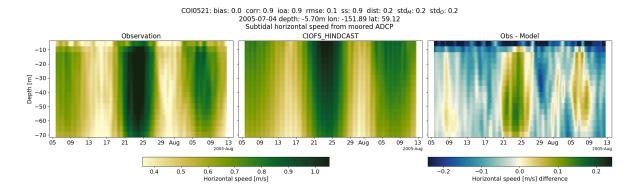
CIOFS_FRESH

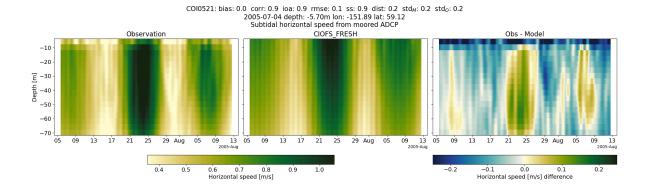


Subtidal

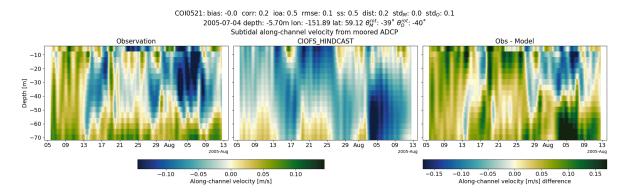
Horizontal speed

CIOFS_HINDCAST

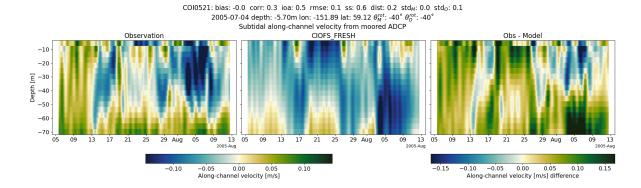




CIOFS_HINDCAST

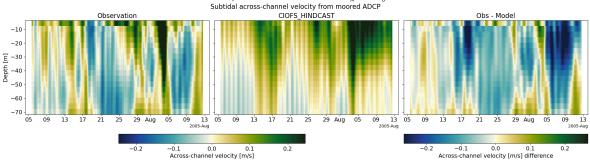


CIOFS_FRESH

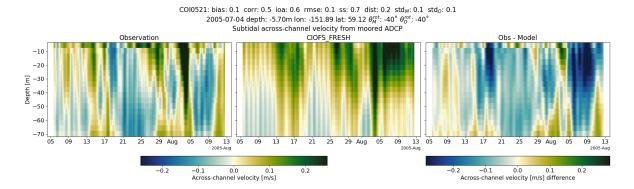


Across-channel velocity

COI0521: bias: 0.1 corr: 0.5 ioa: 0.6 rmse: 0.1 ss: 0.7 dist: 0.2 std_M: 0.1 std_O: 0.1 2005-07-04 depth: -5.70m lon: -151.89 lat: 59.12 θ_M^{ort} : -39° θ_O^{ort} : -40°



CIOFS_FRESH

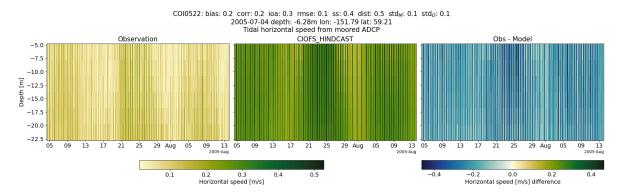


COI0522

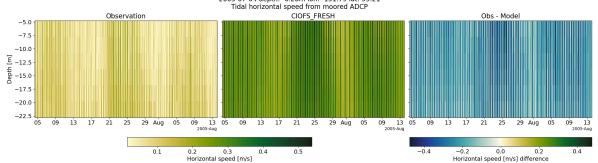
Tidal

Horizontal speed

CIOFS_HINDCAST

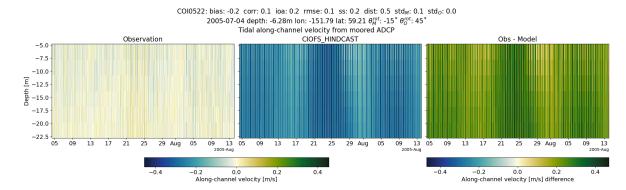


COI0522: bias: 0.2 corr: 0.2 ioa: 0.3 rmse: 0.1 ss: 0.4 dist: 0.5 std $_{\rm M}$: 0.1 std $_{\rm O}$: 0.1 2005-07-04 depth: -6.28m lon: -151.79 lat: 59.21 Tidal horizontal speed from moored ADCP

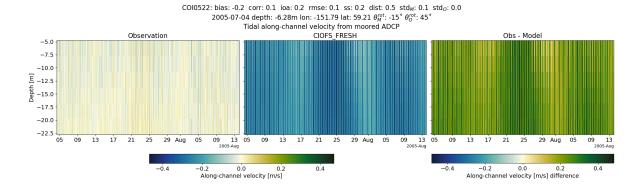


Along-channel velocity

CIOFS_HINDCAST

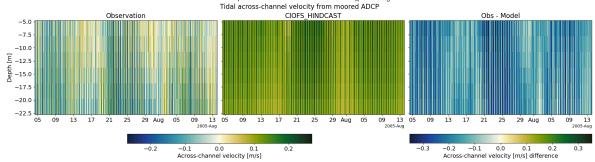


CIOFS_FRESH

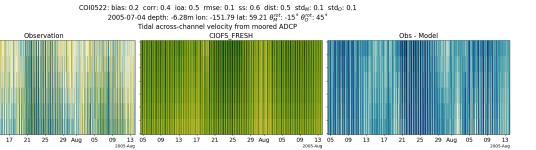


Across-channel velocity

COI0522: bias: 0.2 corr: 0.4 ioa: 0.5 rmse: 0.1 ss: 0.6 dist: 0.5 std_M: 0.1 std_O: 0.1 2005-07-04 depth: -6.28m lon: -151.79 lat: 59.21 θ_M^{ort} : -15° θ_O^{ort} : 45°



CIOFS_FRESH



-0.2 -0.1 0.0 0.1 0.2 Across-channel velocity [m/s] difference 0.3

Subtidal

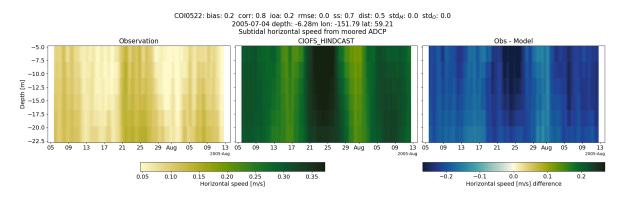
Horizontal speed

09 13

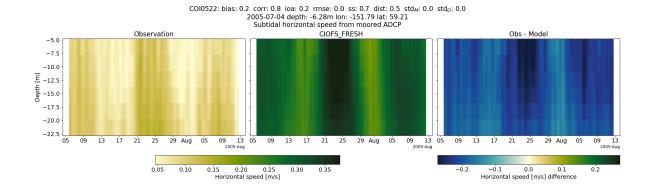
-0.2

-0.1 0.0 0.1 Across-channel velocity [m/s]

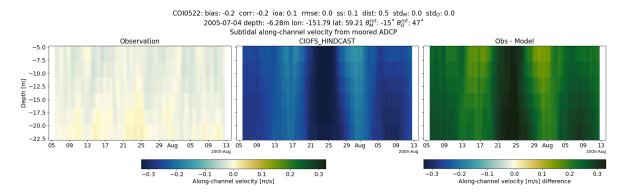
CIOFS_HINDCAST



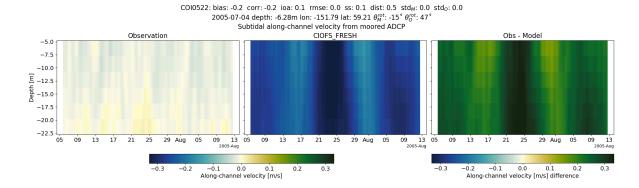
0.2



CIOFS_HINDCAST



CIOFS_FRESH



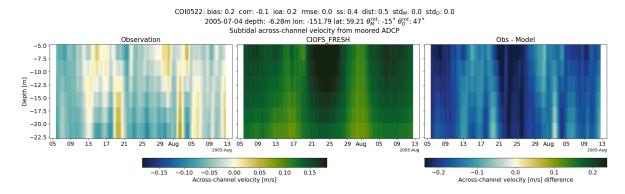
Across-channel velocity

COI0522: bias: 0.2 corr: -0.1 ioa: 0.2 rmse: 0.0 ss: 0.4 dist: 0.5 std_M: 0.0 std_O: 0.0 2005-07-04 depth: -6.28m lon: -151.79 lat: 59.21 θ_M^{rot} : -15 $^{\circ}$ θ_O^{rot} : 47 $^{\circ}$ Subtidal across-channel velocity from moored ADCP
CIOFS_HINDCAST Observation Obs - Model -5.0 -7.5 -10.0 Ē −12.5 Depth -15.0 -17.5-20.0 -22.5 17 21 29 Aug 09 13 2005-Aug 13 17 21 25 29 Aug 05 09 13 05 13 17

> -0.1 0.0 0.1 Across-channel velocity [m/s] difference

-0.15 -0.10 -0.05 0.00 0.05 0.10 Across-channel velocity [m/s]

CIOFS_FRESH

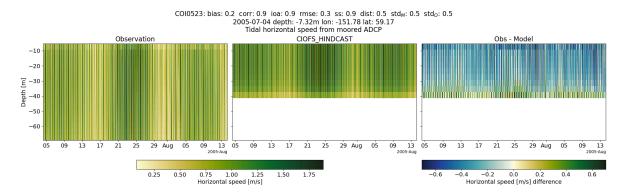


COI0523

Tidal

Horizontal speed

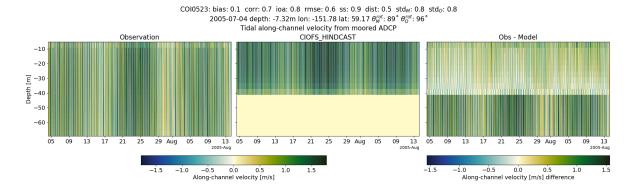
CIOFS_HINDCAST



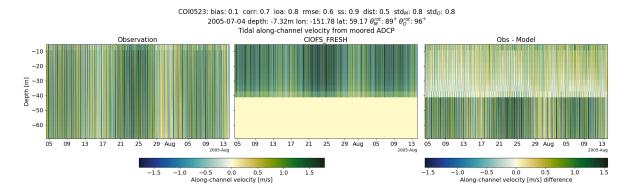
COI0523: bias: 0.2 corr: 0.9 ioa: 0.9 rmse: 0.2 ss: 0.9 dist: 0.5 std_M: 0.5 std_O: 0.5 2005-07-04 depth: -7.32m lon: -151.78 lat: 59.17 Tidal horizontal speed from moored ADCP Observation CIOFS FRESH Obs - Model -10 -20 ፲ −30 -40 -50 -60 17 21 25 09 13 05 2005-Aug 13 17 21 25 29 Aug 05 09 13 05 09 2005-Aug 13 17 21 25 29 Aug 05 0.75 1.00 1.25 Horizontal speed [m/s] -0.4 -0.2 0.0 0.2 0.4 Horizontal speed [m/s] difference

Along-channel velocity

CIOFS_HINDCAST

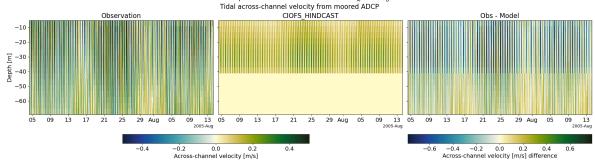


CIOFS_FRESH

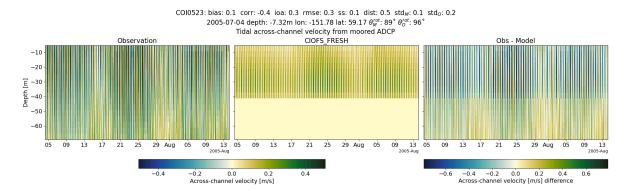


Across-channel velocity

COI0523: bias: 0.1 corr: -0.4 ioa: 0.3 rmse: 0.3 ss: 0.1 dist: 0.5 std_M: 0.1 std_O: 0.2 2005-07-04 depth: -7.32m lon: -151.78 lat: 59.17 θ_N^{rot} : 98° θ_O^{rot} : 96°



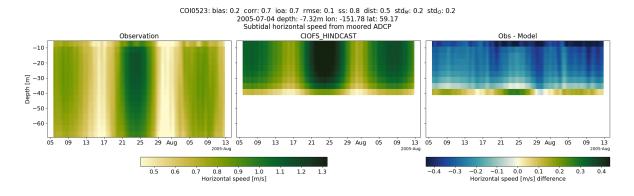
CIOFS_FRESH

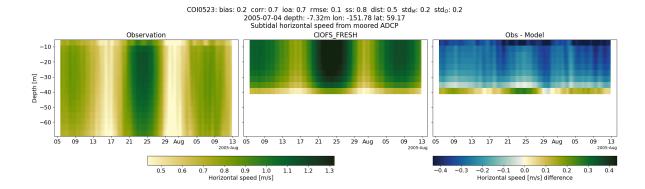


Subtidal

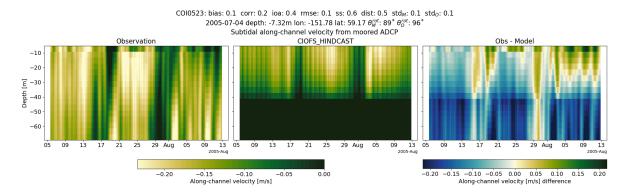
Horizontal speed

CIOFS_HINDCAST

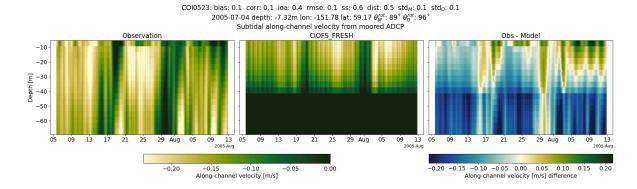




CIOFS_HINDCAST

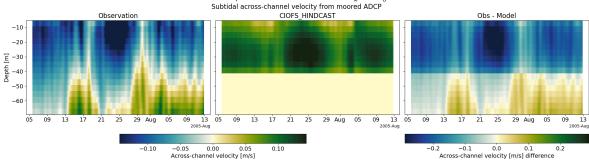


CIOFS_FRESH

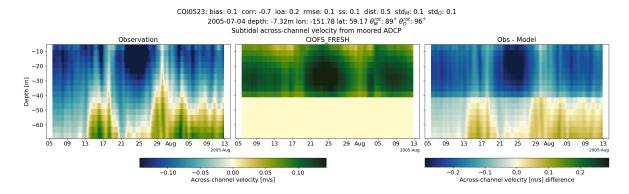


Across-channel velocity

COI0523: bias: 0.1 corr: -0.7 ioa: 0.2 rmse: 0.1 ss: 0.1 dist: 0.5 std $_{M}$: 0.1 std $_{O}$: 0.1 2005-07-04 depth: -7.32m lon: -151.78 lat: 59.17 θ_{M}^{rot} : 88 $^{\circ}$ θ_{C}^{rot} : 96 $^{\circ}$



CIOFS_FRESH

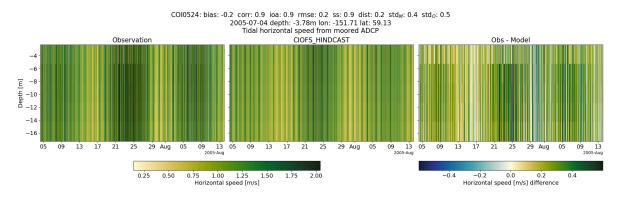


COI0524

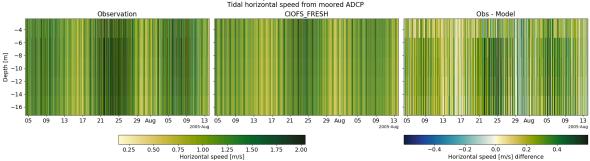
Tidal

Horizontal speed

CIOFS_HINDCAST

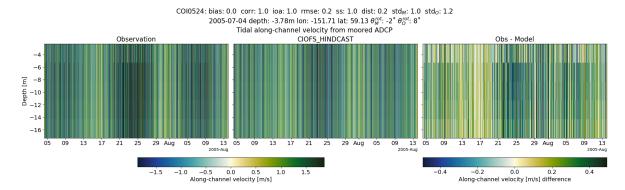


COI0524: bias: -0.2 corr: 0.9 ioa: 0.9 rmse: 0.2 ss: 0.9 dist: 0.2 std_M: 0.4 std_O: 0.5 2005-07-04 depth: -3.78m lon: -151.71 lat: 59.13 Tidal horizontal speed from moored ADCP

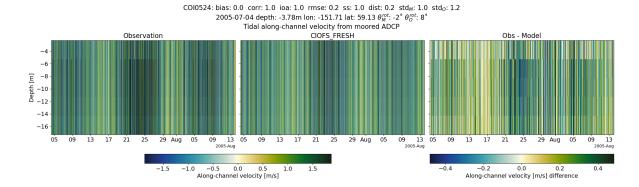


Along-channel velocity

CIOFS_HINDCAST

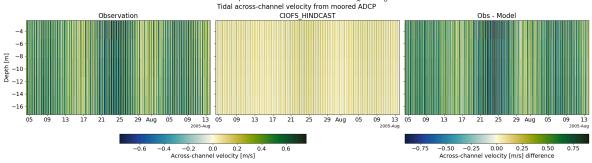


CIOFS_FRESH

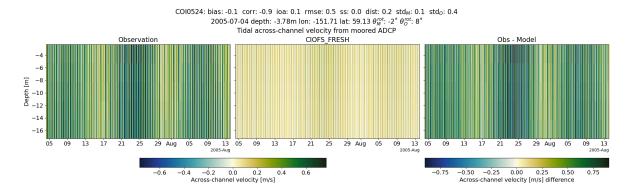


Across-channel velocity

COI0524: bias: -0.1 corr: -0.9 ioa: 0.1 rmse: 0.5 ss: 0.0 dist: 0.2 std_M: 0.1 std_O: 0.4 2005-07-04 depth: -3.78m lon: -151.71 lat: 59.13 $\theta_M^{\rm rot}$: -2° $\theta_O^{\rm rot}$: 8°



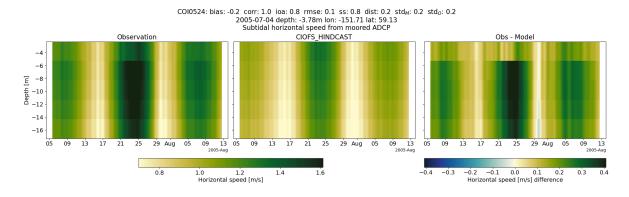
CIOFS_FRESH

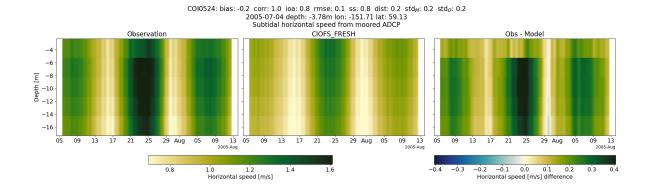


Subtidal

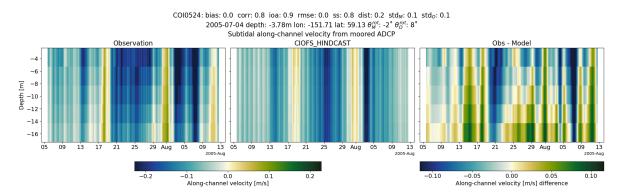
Horizontal speed

CIOFS_HINDCAST

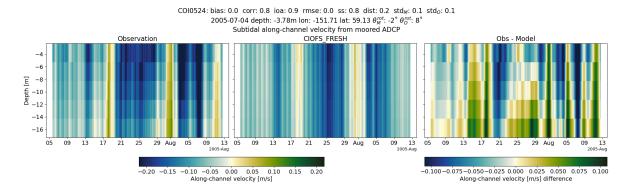




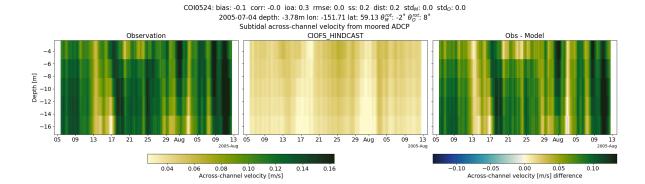
CIOFS_HINDCAST



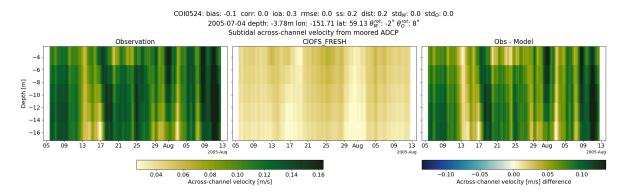
CIOFS_FRESH



Across-channel velocity



CIOFS_FRESH

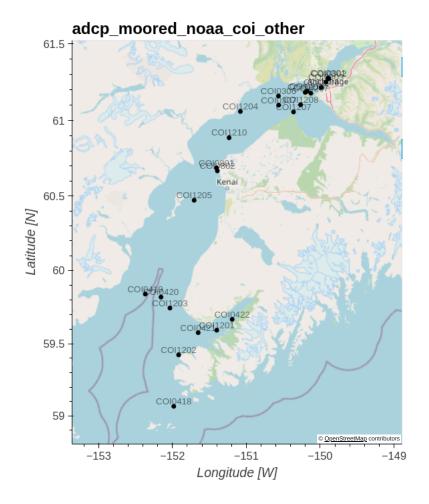


Moored ADCP (NOAA): ADCP survey Cook Inlet, multiple years

• adcp_moored_noaa_coi_other

See the original full dataset description page in the original report for more information or the new catalog page.

Note that the map shows all datasets from the catalog; it is not limited to the current report time periods.

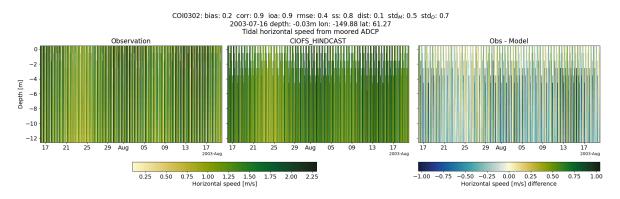


COI0302

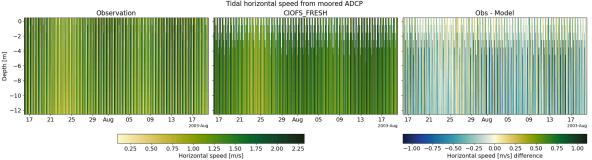
Tidal

Horizontal speed

CIOFS_HINDCAST

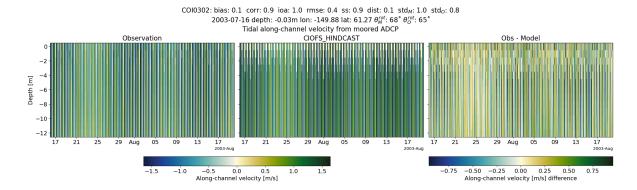


COI0302: bias: 0.2 corr: 0.8 ioa: 0.9 rmse: 0.4 ss: 0.9 dist: 0.1 std_M: 0.5 std_O: 0.7 2003-07-16 depth: -0.03m lon: -149.88 lat: 61.27 Tidal horizontal speed from moored ADCP

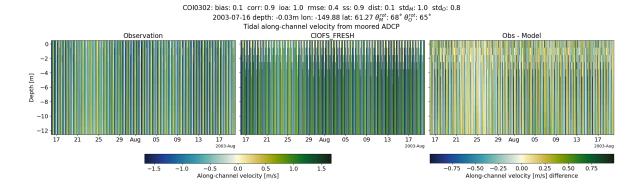


Along-channel velocity

CIOFS_HINDCAST

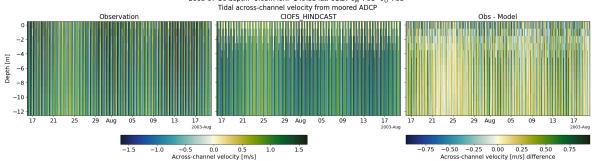


CIOFS_FRESH

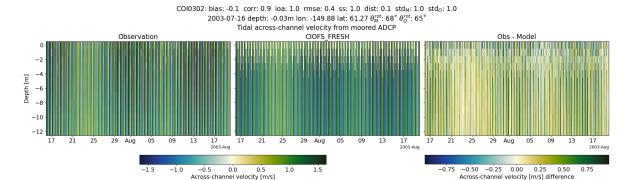


Across-channel velocity

COl0302: bias: -0.1 corr: 0.9 ioa: 1.0 rmse: 0.4 ss: 1.0 dist: 0.1 std_M: 0.9 std_O: 1.0 2003-07-16 depth: -0.03m lon: -149.88 lat: 61.27 $\theta_M^{\rm rot}$: 68° $\theta_O^{\rm rot}$: 65°



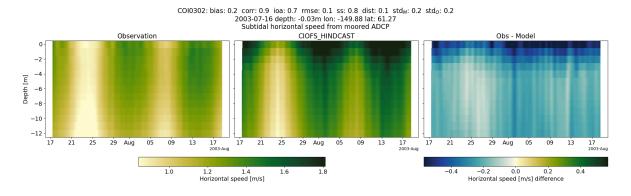
CIOFS_FRESH

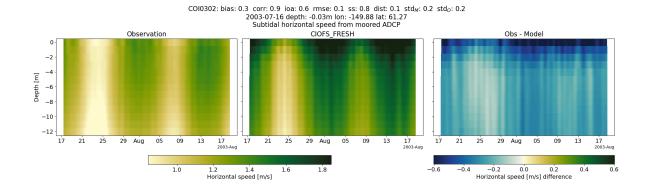


Subtidal

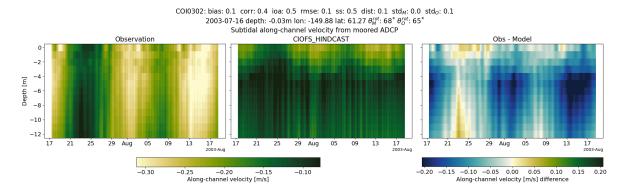
Horizontal speed

CIOFS_HINDCAST

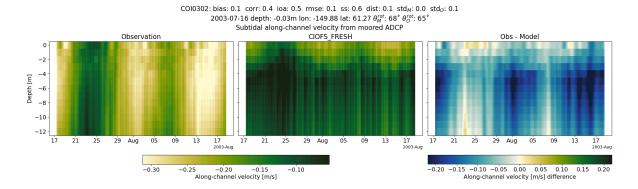




CIOFS_HINDCAST

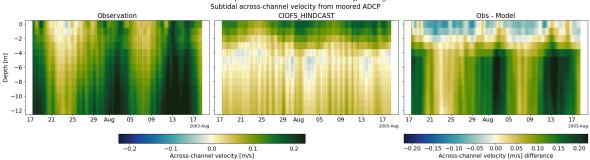


CIOFS_FRESH

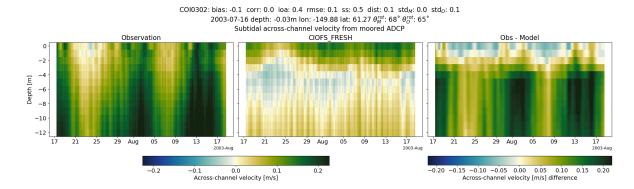


Across-channel velocity

COl0302: bias: -0.1 corr: -0.1 ioa: 0.4 rmse: 0.1 ss: 0.4 dist: 0.1 std_M: 0.0 std_O: 0.1 2003-07-16 depth: -0.03m lon: -149.88 lat: 61.27 θ_M^{rot} : 68° θ_O^{rot} : 65°



CIOFS_FRESH

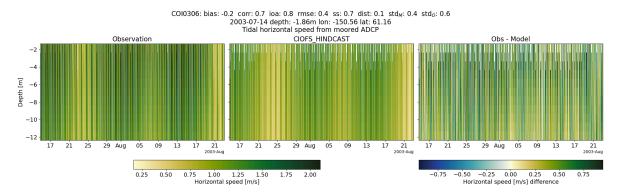


COI0306

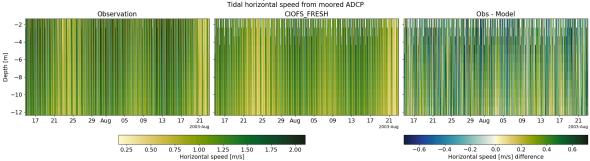
Tidal

Horizontal speed

CIOFS_HINDCAST

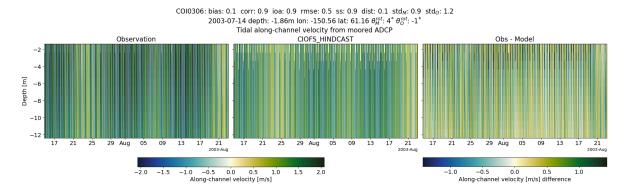


COl0306: bias: -0.1 corr: 0.8 ioa: 0.8 rmse: 0.4 ss: 0.8 dist: 0.1 std_M: 0.4 std₀: 0.6 2003-07-14 depth: -1.86m lon: -150.56 lat: 61.16 Tidal horizontal speed from moored ADCP

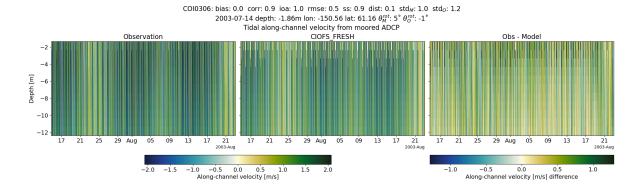


Along-channel velocity

CIOFS_HINDCAST

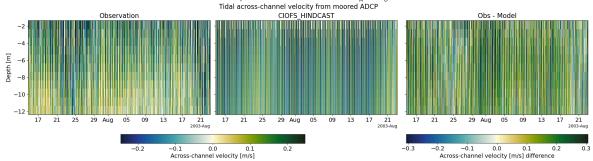


CIOFS_FRESH

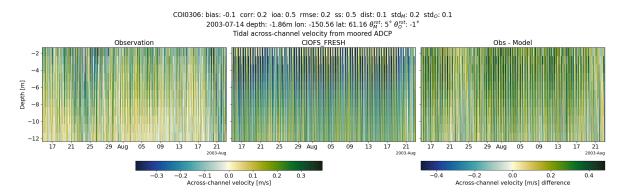


Across-channel velocity

COl0306: bias: -0.0 corr: 0.2 ioa: 0.6 rmse: 0.2 ss: 0.6 dist: 0.1 std_M: 0.1 std_O: 0.1 2003-07-14 depth: -1.86m lon: -150.56 lat: 61.16 θ_M^{rot} : 4° θ_O^{rot} : -1°



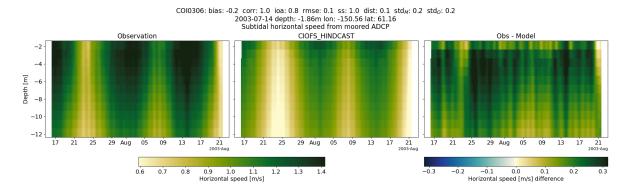
CIOFS_FRESH

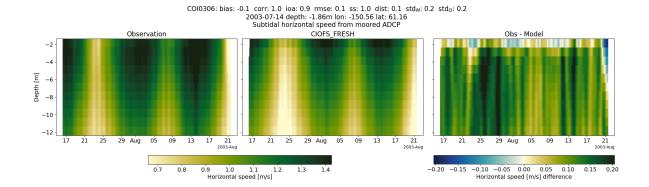


Subtidal

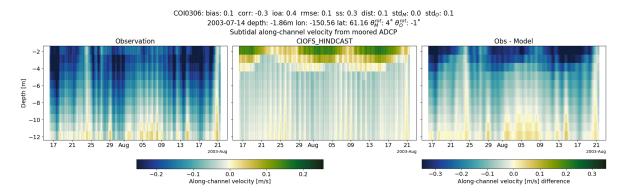
Horizontal speed

CIOFS_HINDCAST

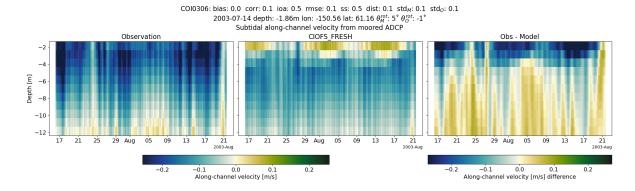




CIOFS_HINDCAST

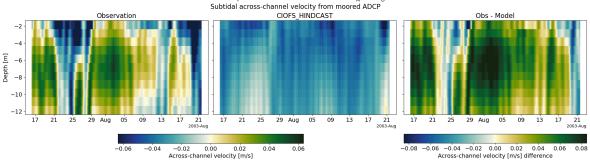


CIOFS_FRESH

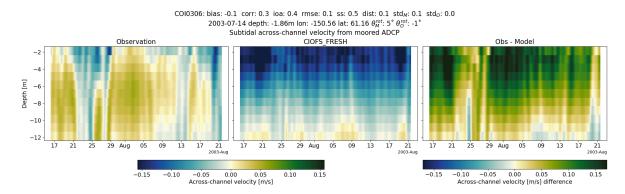


Across-channel velocity

COl0306: bias: -0.0 corr: -0.1 ioa: 0.4 rmse: 0.0 ss: 0.2 dist; 0.1 std_M: 0.0 std_O: 0.0 2003-07-14 depth: -1.86m lon: -150.56 lat: 61.16 θ_{M}^{ort} : 4° θ_{O}^{ort} : -1°



CIOFS_FRESH

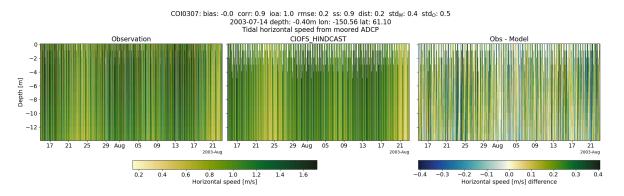


COI0307

Tidal

Horizontal speed

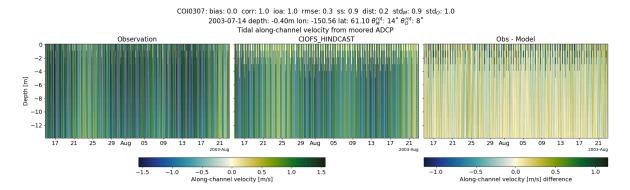
CIOFS_HINDCAST



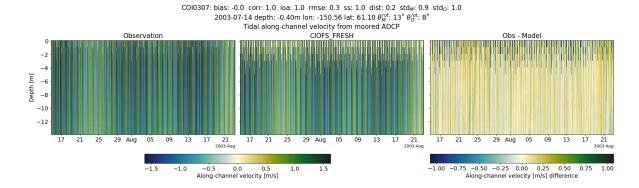
COIO307: bias: 0.0 corr: 0.9 ioa: 1.0 rmse: 0.2 ss: 1.0 dist: 0.2 std_M; 0.4 std_O: 0.5 2003-07-14 depth: -0.40m lon: -150.56 lat: 61.10 Tidal horizontal speed from moored ADCP Observation CIOFS FRESH Obs - Model Observation Obser

Along-channel velocity

CIOFS_HINDCAST

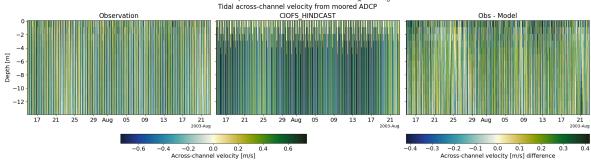


CIOFS_FRESH

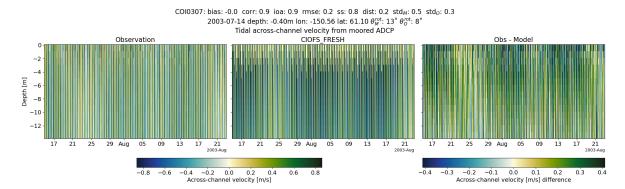


Across-channel velocity

COI0307: bias: 0.0 corr: 0.9 ioa: 0.9 rmse: 0.2 ss: 0.8 dist: 0.2 std_M: 0.5 std_O: 0.3 2003-07-14 depth: -0.40m lon: -150.56 lat: 61.10 θ_M^{rot} : 14° θ_0^{rot} : 8°



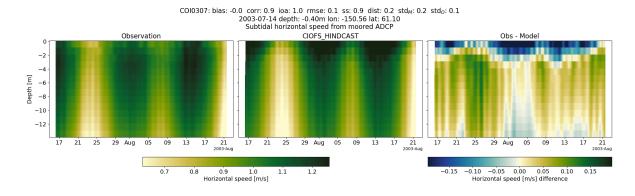
CIOFS_FRESH

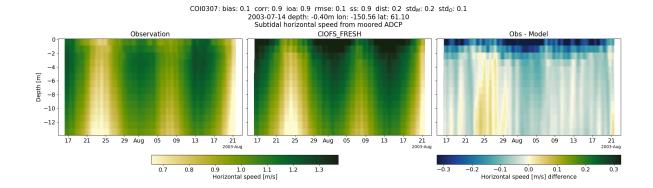


Subtidal

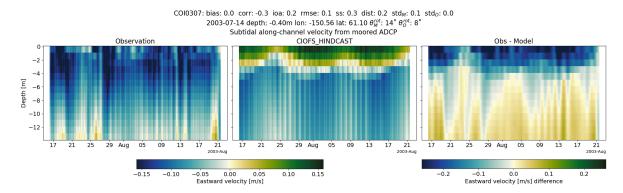
Horizontal speed

CIOFS_HINDCAST

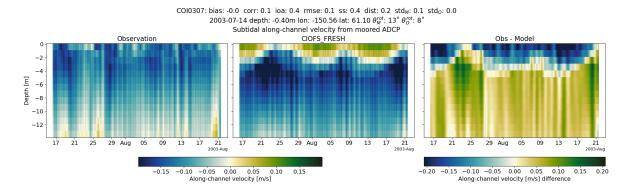




CIOFS_HINDCAST

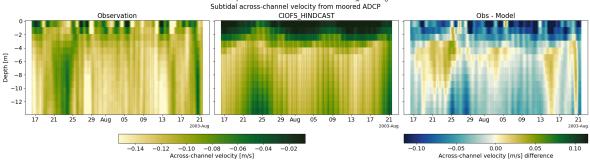


CIOFS_FRESH

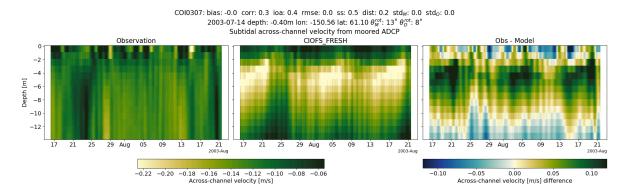


Across-channel velocity

C010307: bias: 0.0 corr: 0.5 ioa: 0.6 rmse: 0.0 ss: 0.7 dist: 0.2 std_M: 0.0 std_O: 0.0 2003-07-14 depth: -0.40m lon: -150.56 lat: 61.10 $\theta_{ss}^{(s)}$: 1.4° $\theta_{ss}^{(s)}$: 8° Subtidal across-channel velocity from monred ADCP.



CIOFS_FRESH

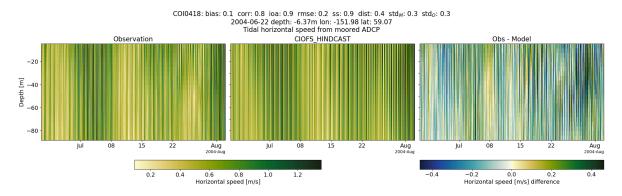


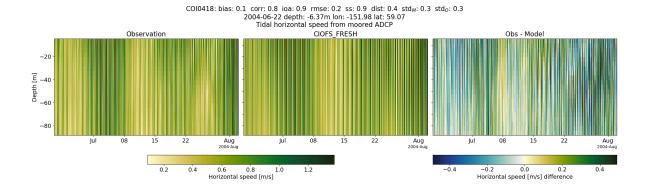
COI0418

Tidal

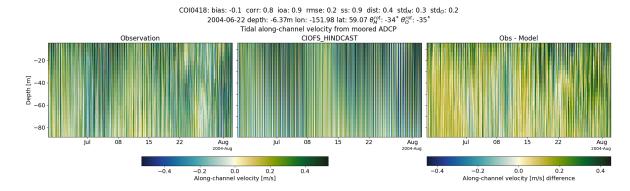
Horizontal speed

CIOFS_HINDCAST

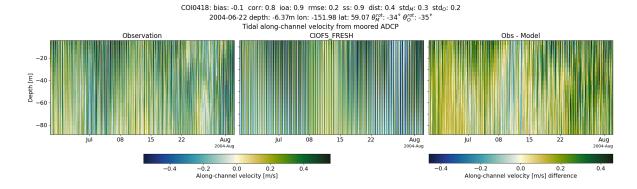




CIOFS_HINDCAST

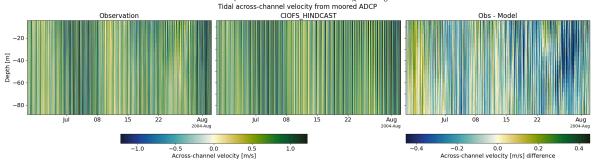


CIOFS_FRESH

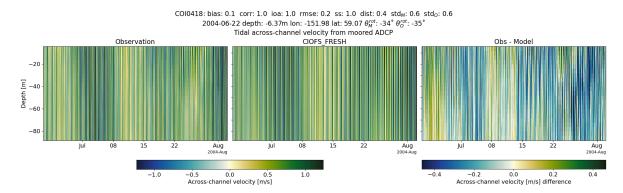


Across-channel velocity

COI0418: bias: 0.1 corr: 1.0 ioa: 1.0 rmse: 0.2 ss: 1.0 dist: 0.4 std_M: 0.6 std_O: 0.6 2004-06-22 depth: -6.37m lon: -151.98 lat: 59.07 $\theta_M^{\rm cot}$: -34° $\theta_O^{\rm cot}$: -35°



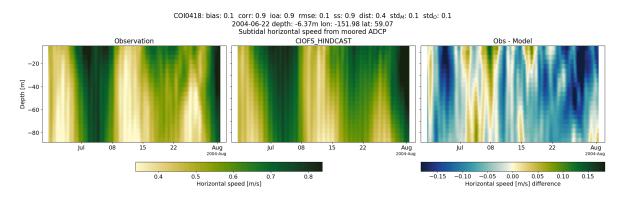
CIOFS_FRESH

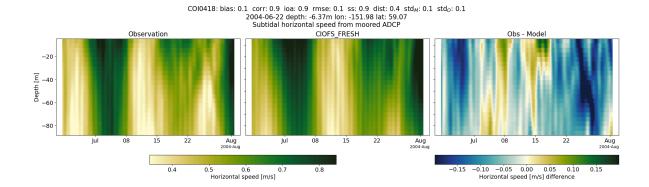


Subtidal

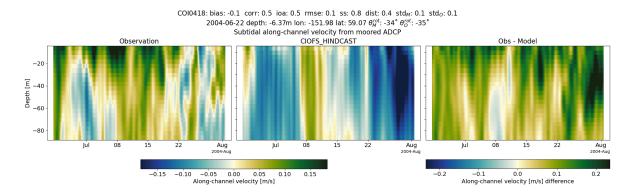
Horizontal speed

CIOFS_HINDCAST

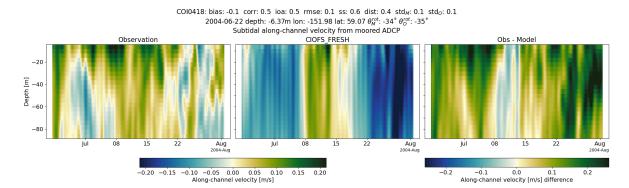




CIOFS_HINDCAST

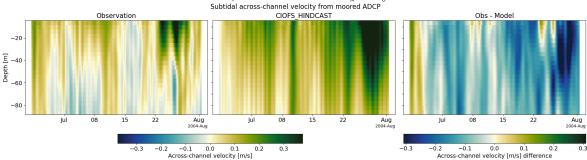


CIOFS_FRESH

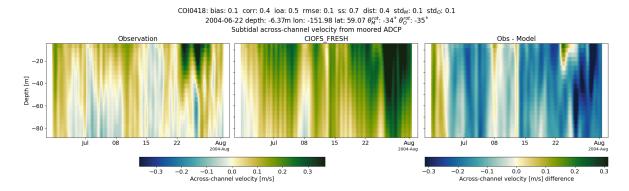


Across-channel velocity

COI0418: bias: 0.1 corr: 0.5 ioa: 0.6 rmse: 0.1 ss: 0.7 dist: 0.4 std_M: 0.1 std_O: 0.1 2004-06-22 depth: -6.37m lon: -151.98 lat: 59.07 $\theta_M^{\rm cot}$: -34° $\theta_O^{\rm cot}$: -35°



CIOFS_FRESH

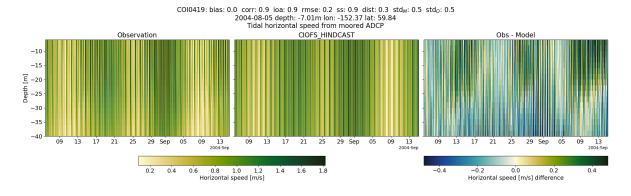


COI0419

Tidal

Horizontal speed

CIOFS_HINDCAST



COl0419: bias: 0.1 corr: 0.9 ioa: 0.9 rmse: 0.2 ss: 0.9 dist: 0.3 std₀; 0.5 std₀: 0.5 2004-08-05 depth: -7.01m lon: -1.52.37 lat: 59.84

Tidal horizontal speed from moored ADCP

Observation

CIOFS_FRESH

Obs - Model

-10 - -15 - -

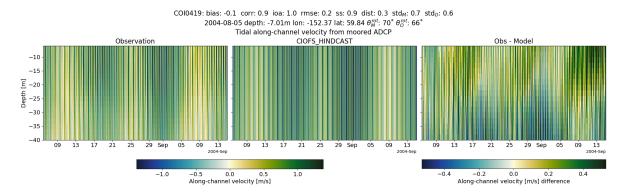
-0.4 -0.2 0.0 0.2 0.4 Horizontal speed [m/s] difference

0.75 1.00 1.25 Horizontal speed [m/s] 1.50

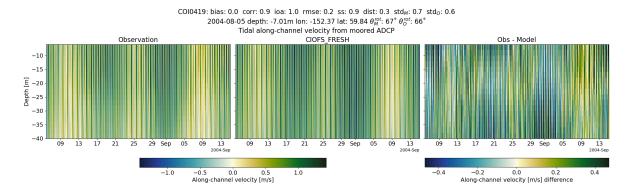
0.50

Along-channel velocity

CIOFS_HINDCAST

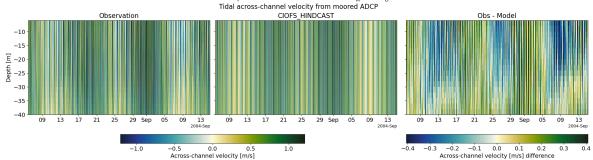


CIOFS_FRESH

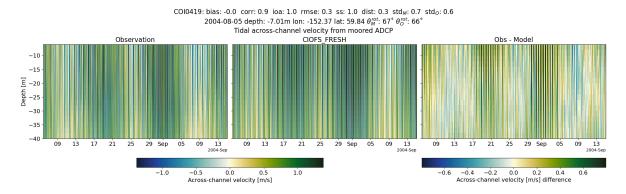


Across-channel velocity

COI0419: bias: 0.0 corr: 1.0 ioa: 1.0 rmse: 0.2 ss: 1.0 dist: 0.3 std_M: 0.6 std_O: 0.6 2004-08-05 depth: -7.01m lon: -152.37 lat: 59.84 θ_{m}^{mt} : 70° θ_{O}^{ot} : 66°



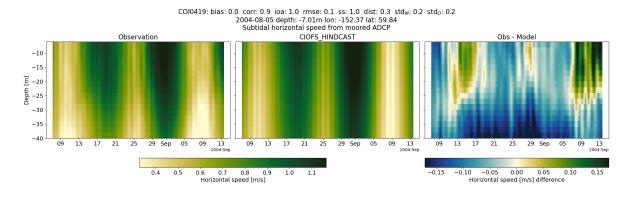
CIOFS_FRESH

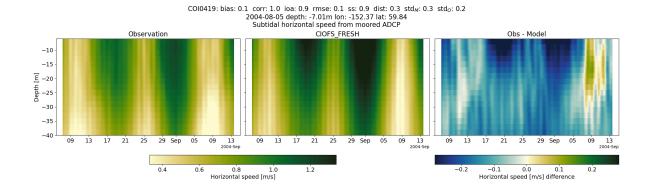


Subtidal

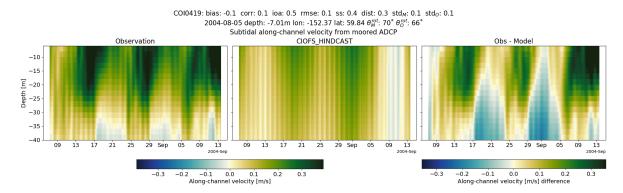
Horizontal speed

CIOFS_HINDCAST

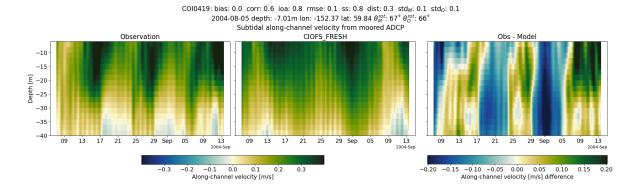




CIOFS_HINDCAST

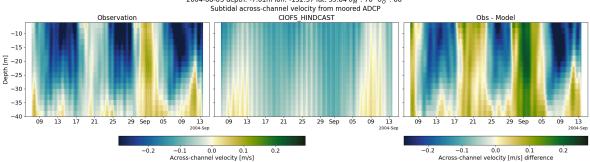


CIOFS_FRESH

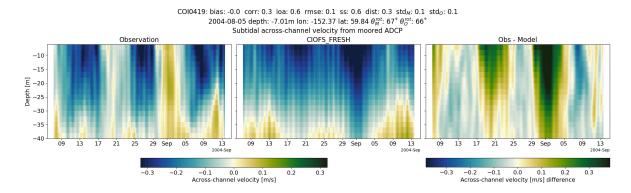


Across-channel velocity

COI0419: bias: 0.0 corr: -0.1 ioa: 0.3 rmse: 0.1 ss: 0.2 dist: 0.3 std_M: 0.0 std_O: 0.1 2004-08-05 depth: -7.01m lon: -152.37 lat: 59.84 θ_M^{mt} : 70° θ_O^{mt} : 66°



CIOFS_FRESH

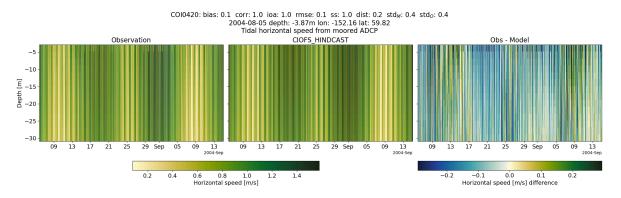


COI0420

Tidal

Horizontal speed

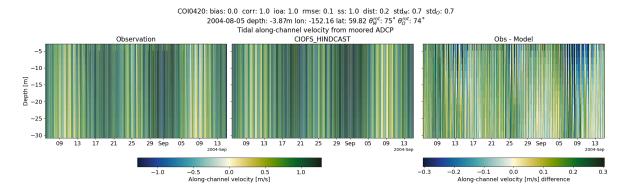
CIOFS_HINDCAST



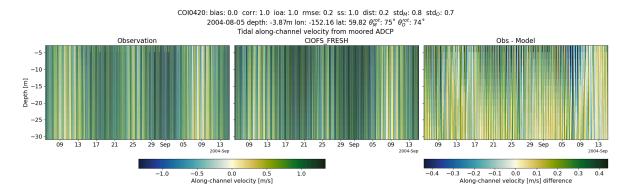
COI0420: bias: 0.1 corr: 1.0 ioa: 1.0 rmse: 0.1 ss: 1.0 dist: 0.2 std $_{\rm M}$: 0.4 std $_{\rm O}$: 0.4 2004-08-05 depth: -3.87m lon: -152.16 lat: 59.82 Tidal horizontal speed from moored ADCP Observation CIOFS FRESH Obs - Model -10 ₤ -15 Depth -25 -30 05 21 29 Sep 05 13 17 0.6 0.8 1.0 1.2 Horizontal speed [m/s] -0.2 -0.1 0.0 0.1 0.2 Horizontal speed [m/s] difference

Along-channel velocity

CIOFS_HINDCAST

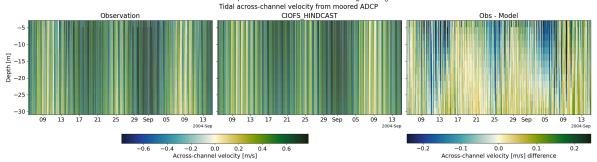


CIOFS_FRESH

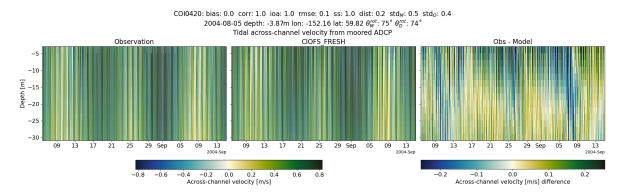


Across-channel velocity

COI0420: bias: 0.0 corr: 1.0 ioa: 1.0 rmse: 0.1 ss: 1.0 dist: 0.2 std_M: 0.4 std_O: 0.4 2004-08-05 depth: -3.87m lon: -152.16 lat: 59.82 θ_{M}^{rot} : 75° θ_{O}^{rot} : 74°



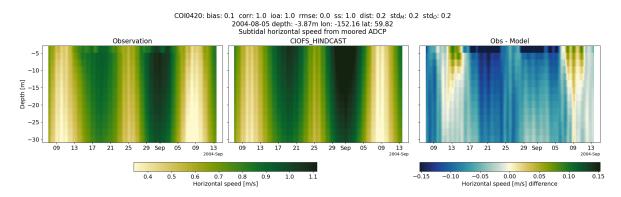
CIOFS_FRESH

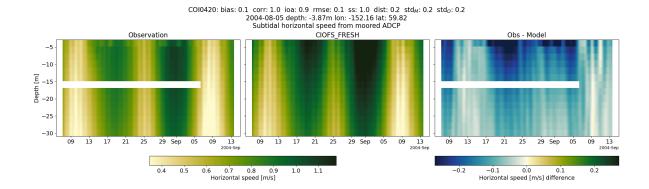


Subtidal

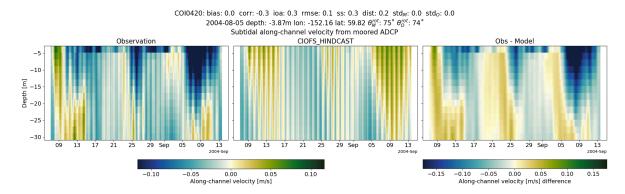
Horizontal speed

CIOFS_HINDCAST

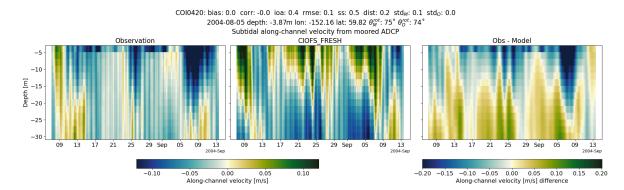




CIOFS_HINDCAST

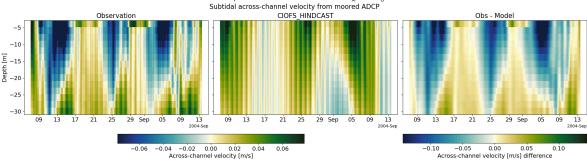


CIOFS_FRESH

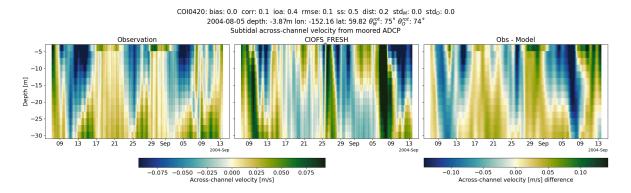


Across-channel velocity

COI0420: bias: 0.0 corr: -0.3 ioa: 0.3 rmse: 0.0 ss: 0.3 dist: 0.2 std_M: 0.0 std_O: 0.0 2004-08-05 depth: -3.87m lon: -152.16 lat: 59.82 θ_M^{rot} : 75° θ_O^{rot} : 74°



CIOFS_FRESH

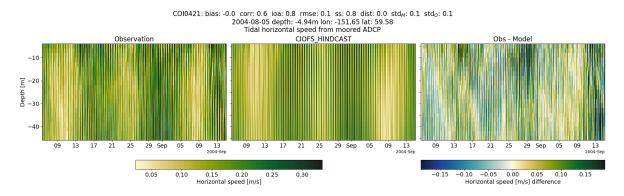


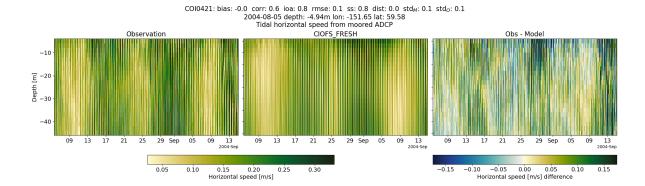
COI0421

Tidal

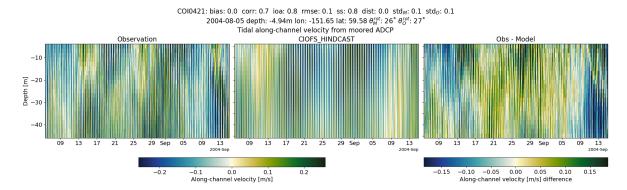
Horizontal speed

CIOFS_HINDCAST

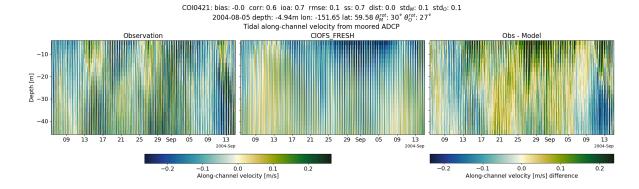




CIOFS_HINDCAST

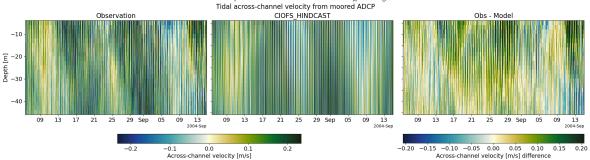


CIOFS_FRESH

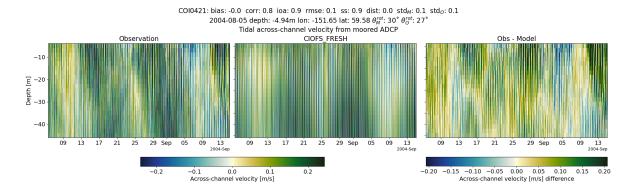


Across-channel velocity

COI0421: bias: -0.0 corr: 0.8 ioa: 0.9 rmse: 0.1 ss: 0.9 dist: 0.0 std_M: 0.1 std_O: 0.1 2004-08-05 depth: -4.94m lon: -151.65 lat: 59.58 θ_M^{rot} : 26° θ_O^{rot} : 27°



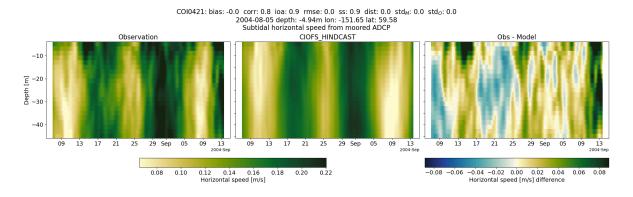
CIOFS_FRESH

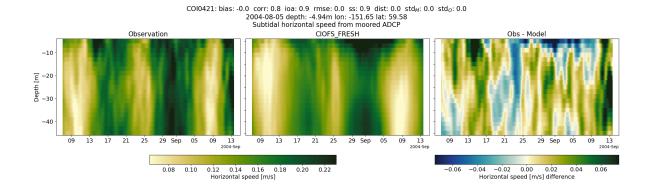


Subtidal

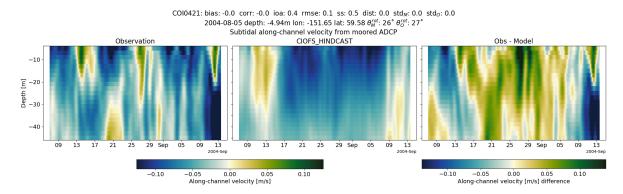
Horizontal speed

CIOFS_HINDCAST

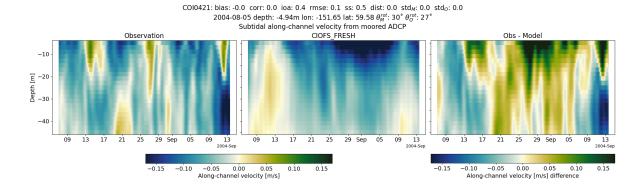




CIOFS_HINDCAST

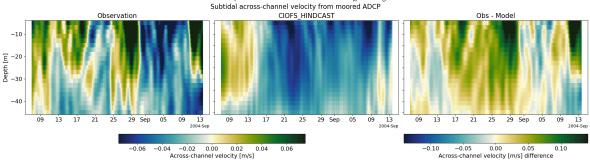


CIOFS_FRESH

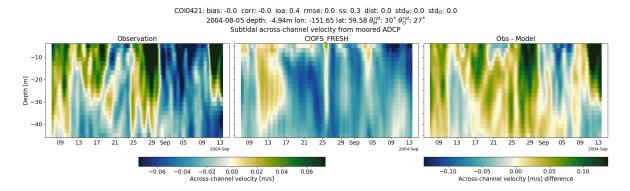


Across-channel velocity

COI0421: bias: -0.0 corr: 0.2 ioa: 0.5 rmse: 0.0 ss: 0.5 dist: 0.0 std_M: 0.0 std_O: 0.0 2004-08-05 depth: -4.94m lon: -151.65 lat: 59.58 θ_{N}^{rot} : 26° θ_{O}^{rot} : 27°



CIOFS_FRESH

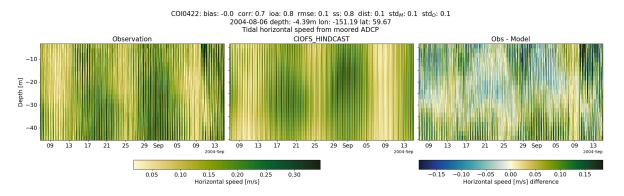


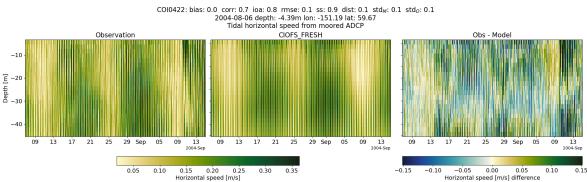
COI0422

Tidal

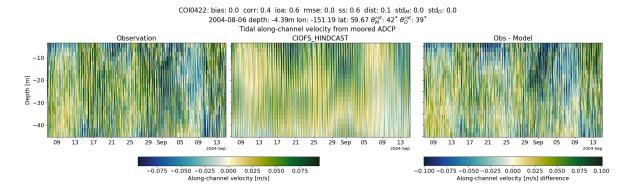
Horizontal speed

CIOFS_HINDCAST

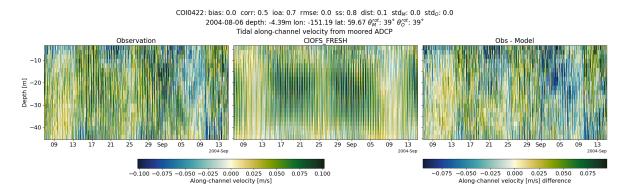




CIOFS_HINDCAST

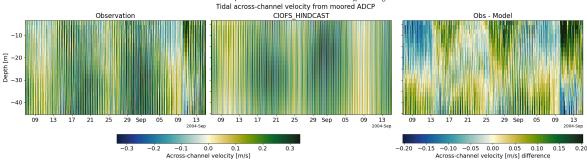


CIOFS_FRESH

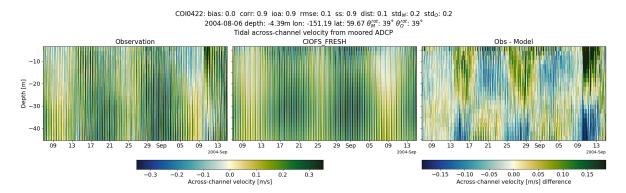


Across-channel velocity

COI0422: bias: -0.0 corr: 0.9 ioa: 0.9 rmse: 0.1 ss: 0.9 dist: 0.1 std_M: 0.1 std_O: 0.2 2004-08-06 depth: -4.39m lon: -151.19 lat: 59.67 θ_M^{rot} : 42° θ_O^{rot} : 39°



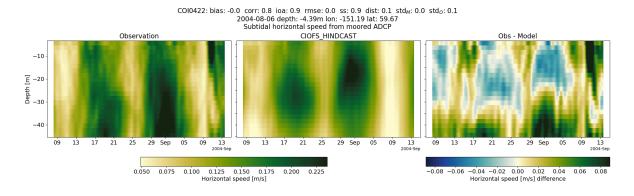
CIOFS_FRESH

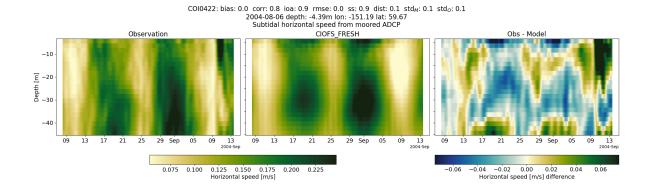


Subtidal

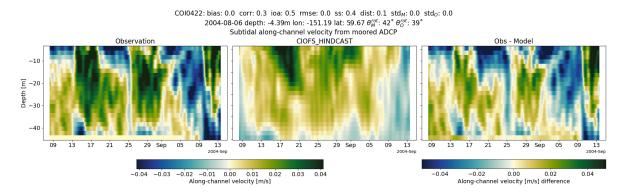
Horizontal speed

CIOFS_HINDCAST

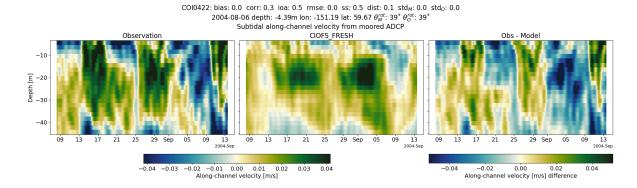




CIOFS_HINDCAST

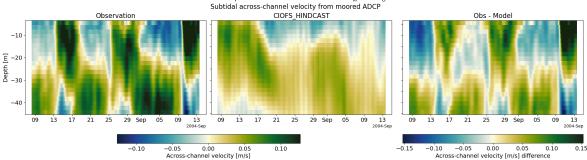


CIOFS_FRESH

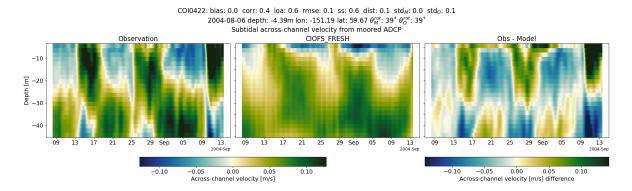


Across-channel velocity

COI0422: bias: -0.0 corr: 0.2 ioa: 0.5 rmse: 0.1 ss: 0.4 dist: 0.1 std_M: 0.0 std_O: 0.1 2004-08-06 depth: -4.39m lon: -151.19 lat: 59.67 θ_M^{rot} : 42° θ_O^{rot} : 39°



CIOFS_FRESH

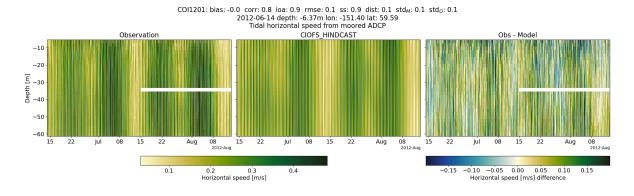


COI1201

Tidal

Horizontal speed

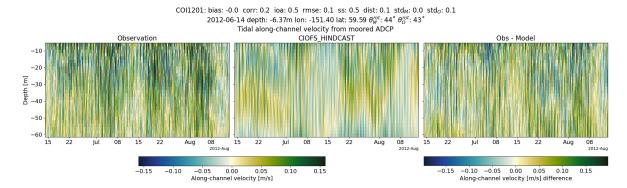
CIOFS_HINDCAST



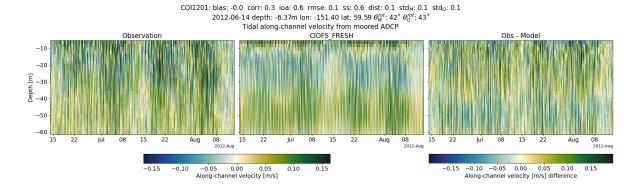
COl1201: bias: -0.0 corr: 0.8 ioa: 0.9 rmse; 0.1 ss; 0.9 dist: 0.1 std₀; 0.1

Along-channel velocity

CIOFS_HINDCAST

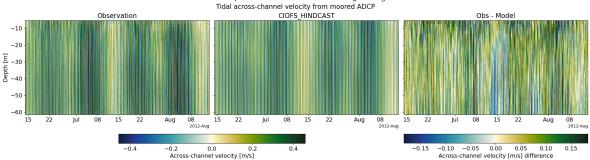


CIOFS_FRESH

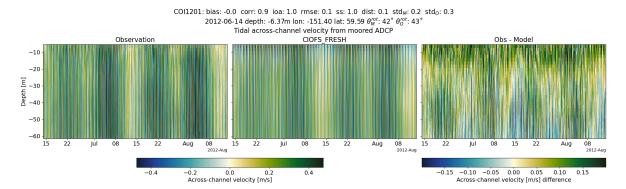


Across-channel velocity

COI1201: bias: -0.0 corr: 0.9 ioa: 1.0 rmse: 0.1 ss: 1.0 dist: 0.1 std_M: 0.2 std_O: 0.3 2012-06-14 depth: -6.37m lon: -151.40 lat: 59.59 $\theta_M^{\rm rot}$: 44° $\theta_O^{\rm rot}$: 43°



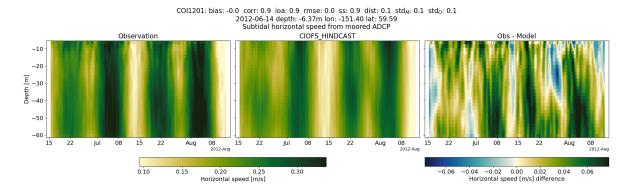
CIOFS_FRESH

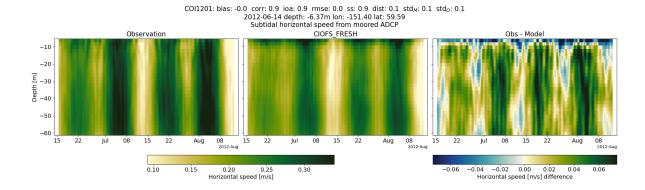


Subtidal

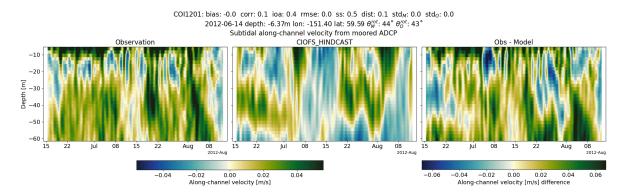
Horizontal speed

CIOFS_HINDCAST

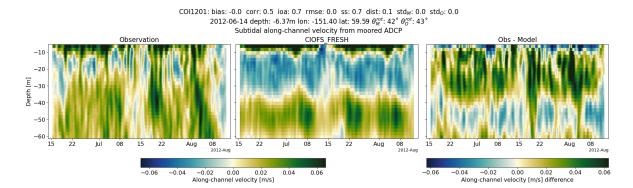




CIOFS_HINDCAST

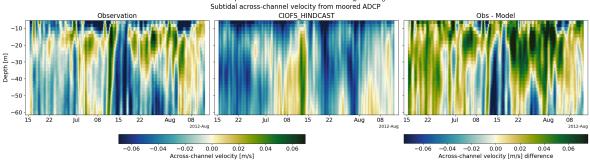


CIOFS_FRESH

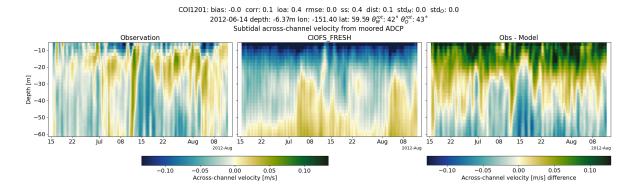


Across-channel velocity

COI1201: bias: -0.0 corr: 0.2 ioa: 0.5 rmse: 0.0 ss: 0.6 dist: 0.1 std_M: 0.0 std_O: 0.0 2012-06-14 depth: -6.37m lon: -151.40 lat: 59.59 θ_M^{rot} : 44° θ_O^{rot} : 43°



CIOFS_FRESH

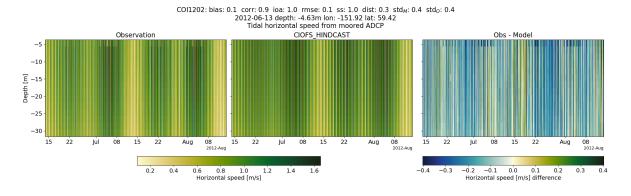


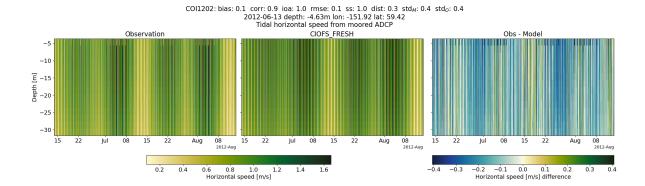
COI1202

Tidal

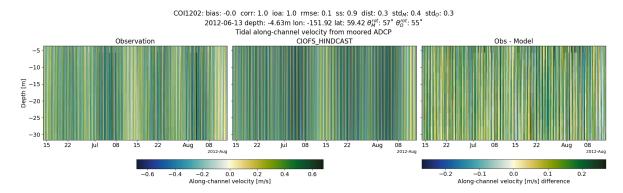
Horizontal speed

CIOFS_HINDCAST

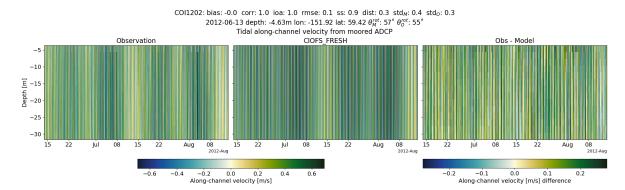




CIOFS_HINDCAST

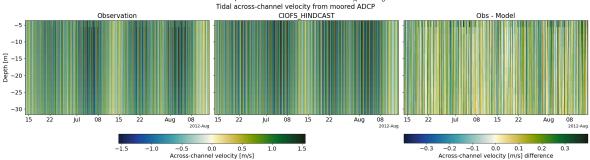


CIOFS_FRESH

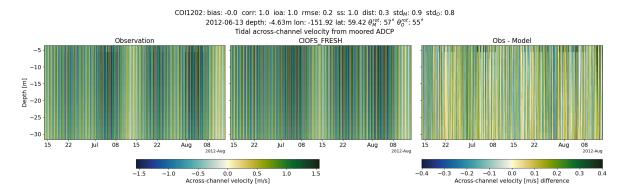


Across-channel velocity

COI1202: bias: -0.0 corr: 1.0 ioa: 1.0 rmse: 0.2 ss: 1.0 dist: 0.3 std_M: 0.9 std_O: 0.8 2012-06-13 depth: -4.63m lon: -151.92 lat: 59.42 θ_M^{rot} : 57° θ_O^{rot} : 55°



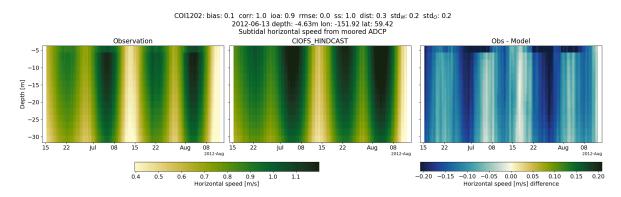
CIOFS_FRESH

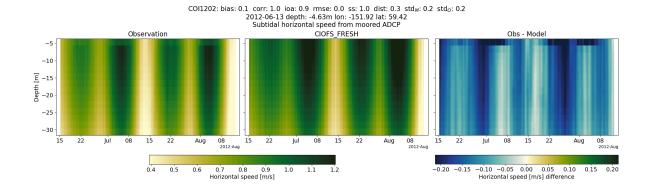


Subtidal

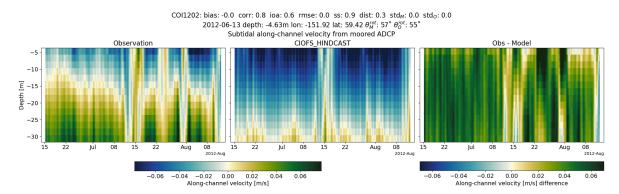
Horizontal speed

CIOFS_HINDCAST

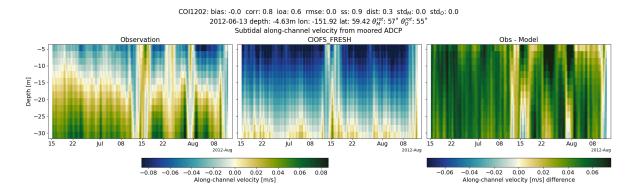




CIOFS_HINDCAST

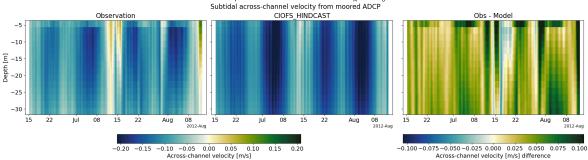


CIOFS_FRESH

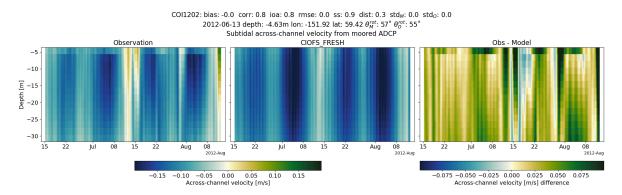


Across-channel velocity

COI1202: bias: -0.0 corr: 0.8 ioa: 0.8 rmse: 0.0 ss: 0.9 dist: 0.3 std_M: 0.0 std_O: 0.0 2012-06-13 depth: -4.63m lon: -151.92 lat: 59.42 θ_M^{rot} : 57° θ_O^{rot} : 55°



CIOFS_FRESH

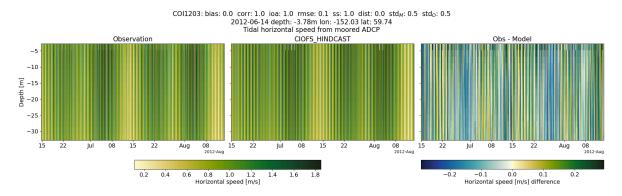


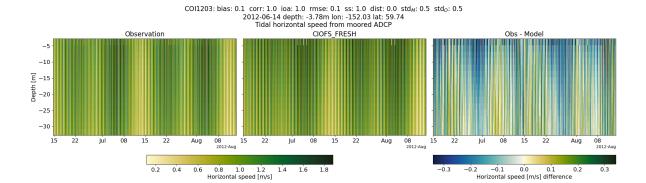
COI1203

Tidal

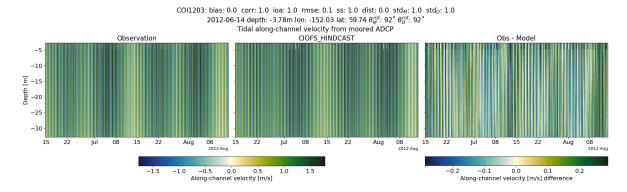
Horizontal speed

CIOFS_HINDCAST

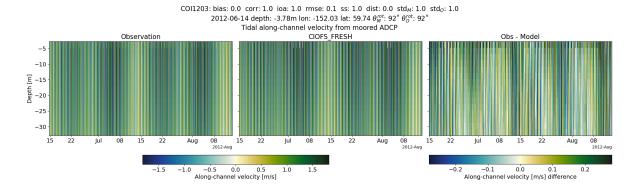




CIOFS_HINDCAST

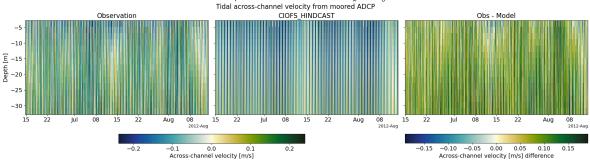


CIOFS_FRESH

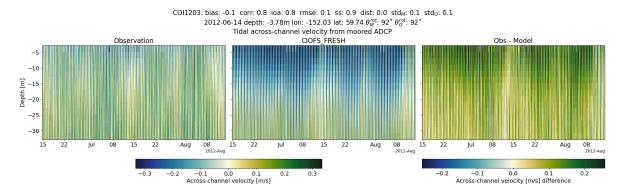


Across-channel velocity

COI1203: bias: -0.1 corr: 0.8 ioa: 0.8 rmse: 0.1 ss: 0.8 dist: 0.0 std_M: 0.1 std_O: 0.1 2012-06-14 depth: -3.78m lon: -152.03 lat: $59.74~\theta_M^{rot}$: $92^\circ~\theta_O^{rot}$: 92°



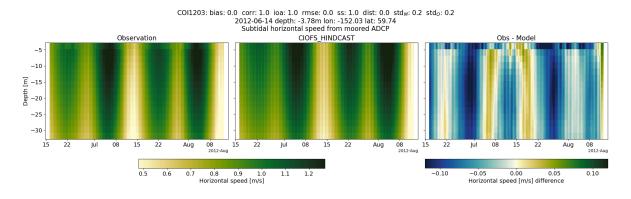
CIOFS_FRESH

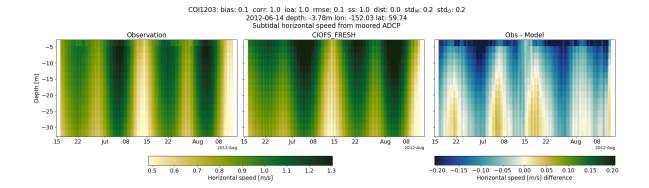


Subtidal

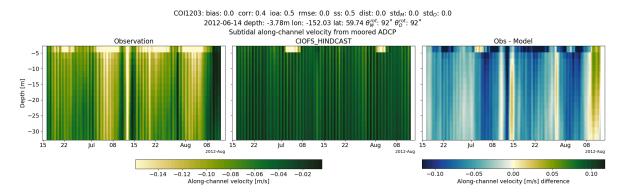
Horizontal speed

CIOFS_HINDCAST

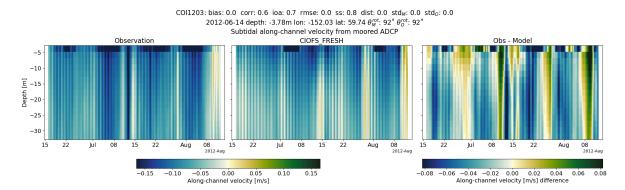




CIOFS_HINDCAST

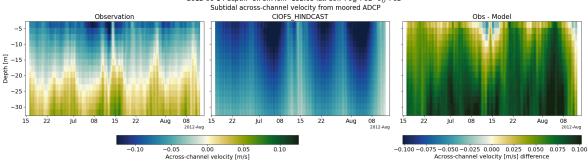


CIOFS_FRESH

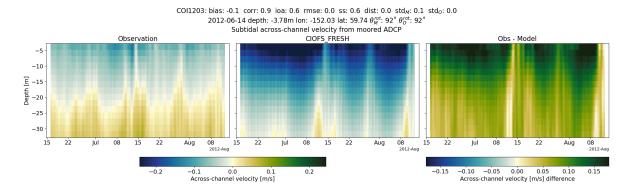


Across-channel velocity

COI1203: bias: -0.1 corr: 0.7 ioa: 0.6 rmse: 0.0 ss: 0.8 dist: 0.0 std_M: 0.0 std_O: 0.0 2012-06-14 depth: -3.78m lon: -152.03 lat: 59.74 $\theta_M^{\eta C}$: 92° $\theta_O^{\eta C}$: 92°



CIOFS_FRESH

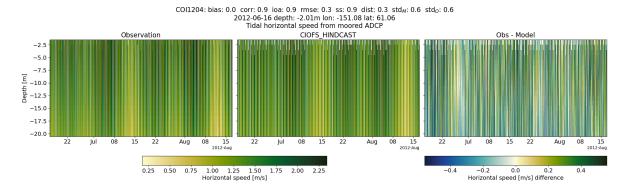


COI1204

Tidal

Horizontal speed

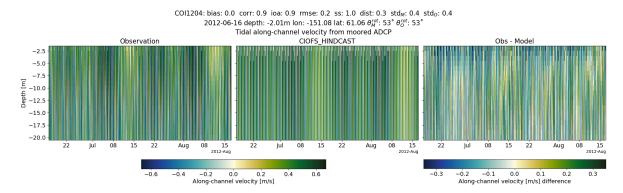
CIOFS_HINDCAST



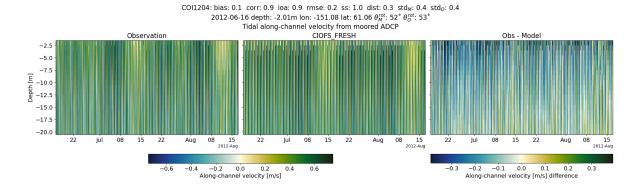
COI1204: bias: 0.1 corr: 0.9 ioa: 1.0 rmse: 0.2 ss: 1.0 dist: 0.3 std $_{\rm M}$: 0.6 std $_{\rm O}$: 0.6 2012-06-16 depth: -2.01m lon: -151.08 lat: 61.06 Tidal horizontal speed from moored ADCP Observation CIOFS FRESH Obs - Model -2.5 -5.0 -7.5 Ē −10.0 H −12.5 -15.0 -20.0 15 08 15 2012-Aug 15 08 15 2012-Aug 08 15 2012-Aug -0.2 0.0 0.2 Horizontal speed [m/s] difference 1.0 1.5 Horizontal speed [m/s]

Along-channel velocity

CIOFS_HINDCAST

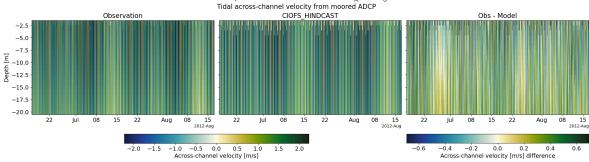


CIOFS_FRESH

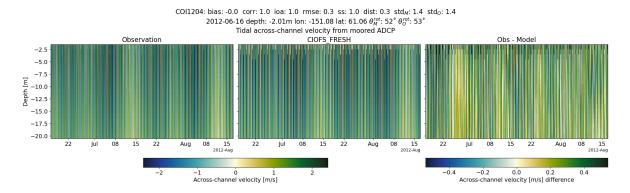


Across-channel velocity

COI1204: bias: 0.1 corr: 1.0 ioa: 1.0 rmse: 0.3 ss: 1.0 dist: 0.3 std_M: 1.3 std_O: 1.4 2012-06-16 depth: -2.01m lon: -151.08 lat: $61.06 \, \theta_M^{rot}$: $53^\circ \, \theta_O^{rot}$: 53°



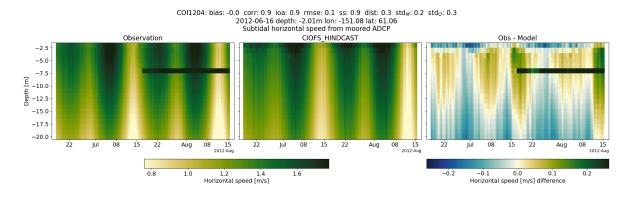
CIOFS_FRESH

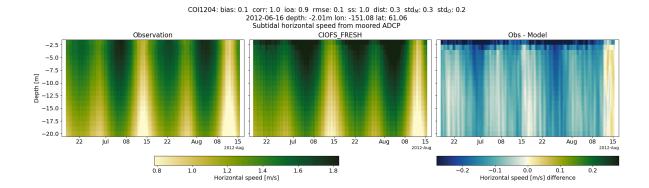


Subtidal

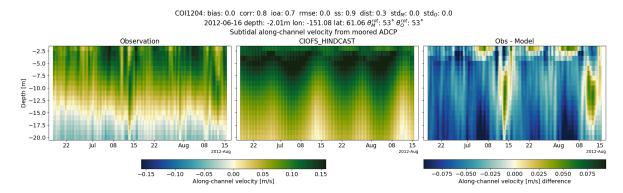
Horizontal speed

CIOFS_HINDCAST

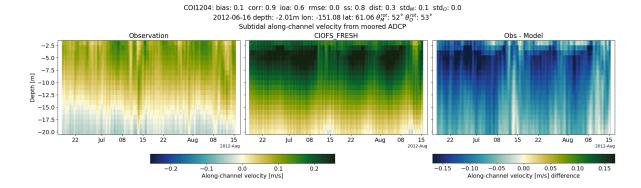




CIOFS_HINDCAST

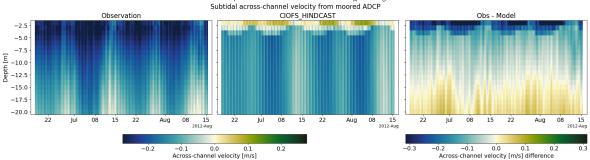


CIOFS_FRESH

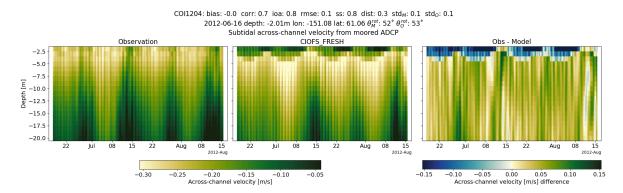


Across-channel velocity

COI1204: bias: 0.1 corr: 0.0 ioa: 0.4 rmse: 0.1 ss: 0.5 dist: 0.3 std $_M$: 0.1 std $_O$: 0.1 2012-06-16 depth: -2.01m lon: -151.08 lat: 61.06 θ_M^{oc} : 53° θ_0^{oc} : 53°



CIOFS_FRESH

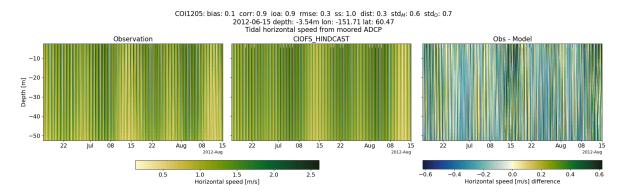


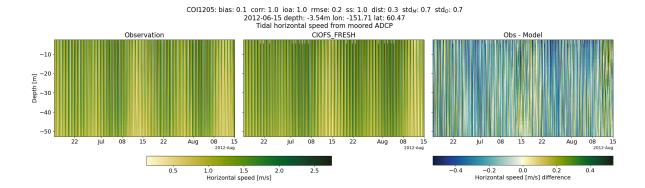
COI1205

Tidal

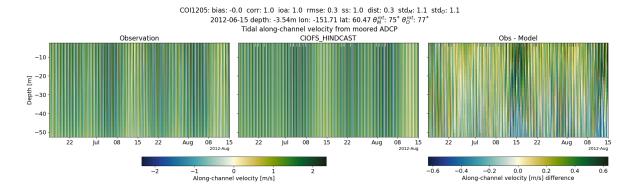
Horizontal speed

CIOFS_HINDCAST

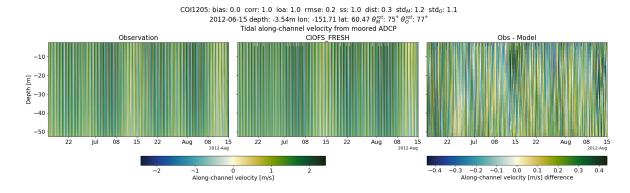




CIOFS_HINDCAST

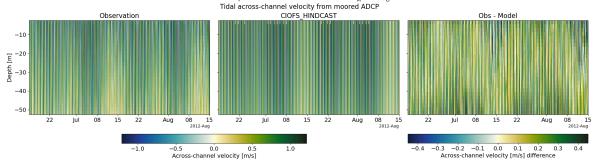


CIOFS_FRESH

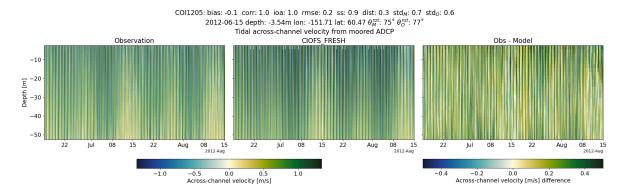


Across-channel velocity

COI1205: bias: -0.1 corr: 1.0 ioa: 1.0 rmse: 0.2 ss: 1.0 dist: 0.3 std_M: 0.6 std_O: 0.6 2012-06-15 depth: -3.54m lon: -151.71 lat: 60.47 θ_M^{rot} : 75° θ_Q^{rot} : 77°



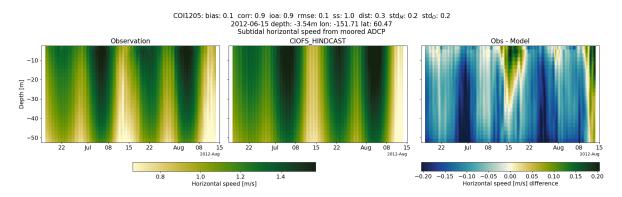
CIOFS_FRESH

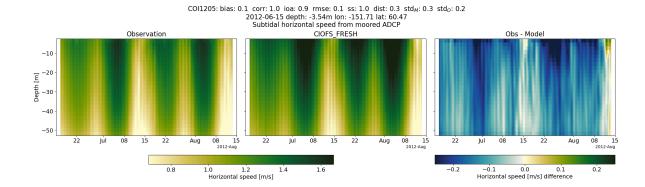


Subtidal

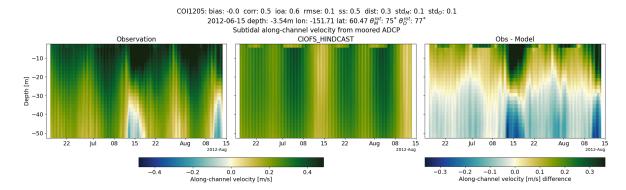
Horizontal speed

CIOFS_HINDCAST

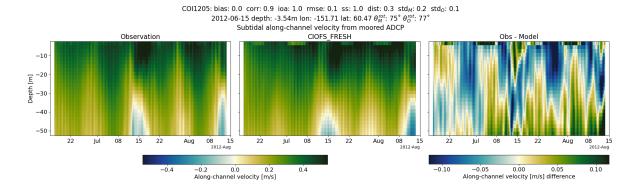




CIOFS_HINDCAST

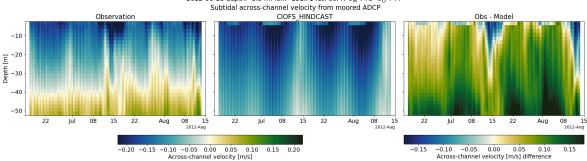


CIOFS_FRESH

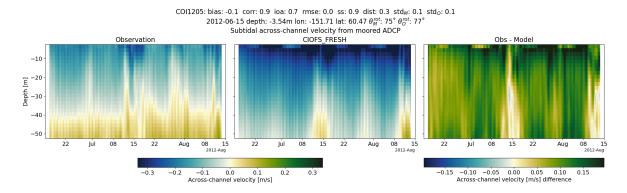


Across-channel velocity

COI1205: bias: -0.1 corr: 0.6 ioa: 0.6 rmse: 0.1 ss: 0.7 dist: 0.3 std_M: 0.0 std_O: 0.1 2012-06-15 depth: -3.54m lon: -151.71 lat: 60.47 θ_M^{ncl} : 75° θ_O^{ncl} : 77°



CIOFS_FRESH

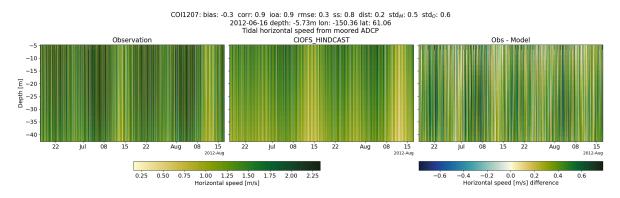


COI1207

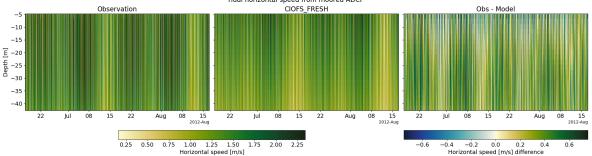
Tidal

Horizontal speed

CIOFS_HINDCAST

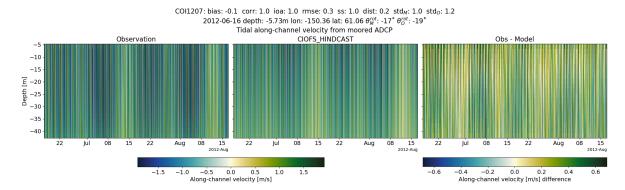


COI1207: bias: -0.2 corr: 0.9 ioa: 0.9 rmse: 0.3 ss: 0.9 dist: 0.2 std_M: 0.5 std_O: 0.6 2012-06-16 depth: -5.73m lon: -150.36 lat: 61.06 Tidal horizontal speed from moored ADCP CIOFS_FRESH

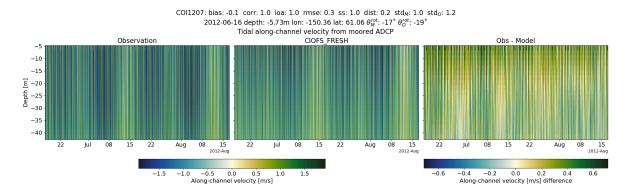


Along-channel velocity

CIOFS_HINDCAST

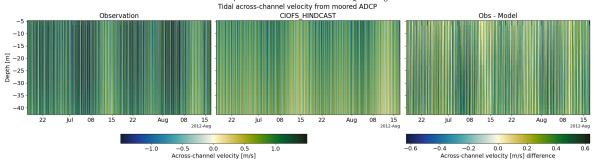


CIOFS_FRESH

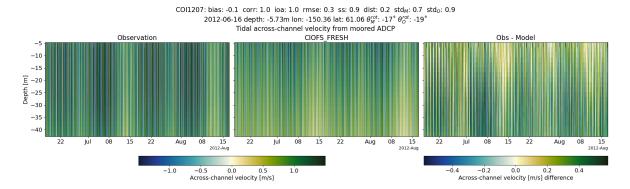


Across-channel velocity

COI1207: bias: -0.1 corr: 1.0 ioa: 1.0 rmse: 0.3 ss: 0.9 dist: 0.2 std_M: 0.7 std_O: 0.9 2012-06-16 depth: -5.73m lon: -150.36 lat: $61.06~\theta_M^{\rm rot}$: $-17^\circ~\theta_O^{\rm rot}$: -19°



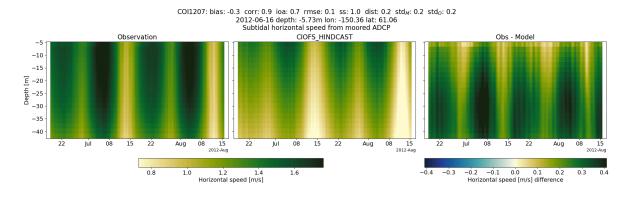
CIOFS_FRESH

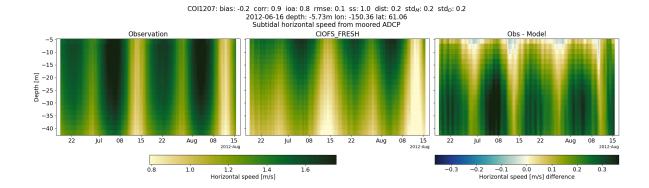


Subtidal

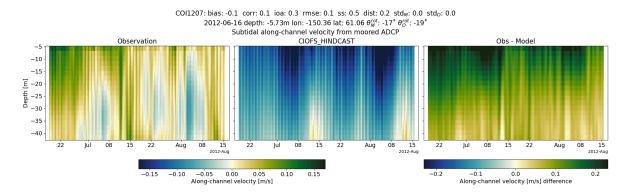
Horizontal speed

CIOFS_HINDCAST

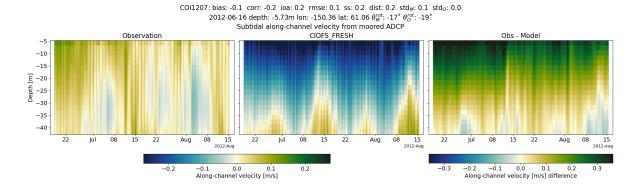




CIOFS_HINDCAST

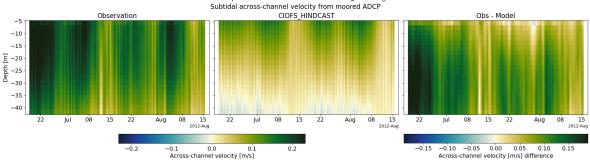


CIOFS_FRESH

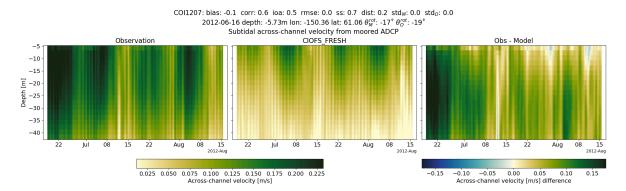


Across-channel velocity

COI1207: bias: -0.1 corr: 0.6 ioa: 0.5 rmse: 0.0 ss: 0.8 dist: 0.2 std_M: 0.0 std_O: 0.0 2012-06-16 depth: -5.73m lon: -150.36 lat: 61.06 θ_{N}^{rot} : -17° θ_{O}^{rot} : -17° θ_{O}^{rot} : -10°



CIOFS_FRESH

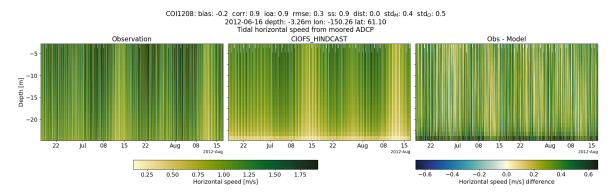


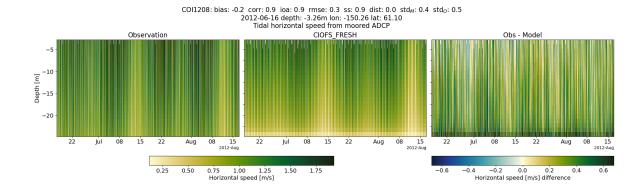
COI1208

Tidal

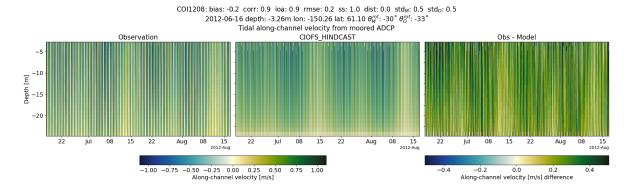
Horizontal speed

CIOFS_HINDCAST

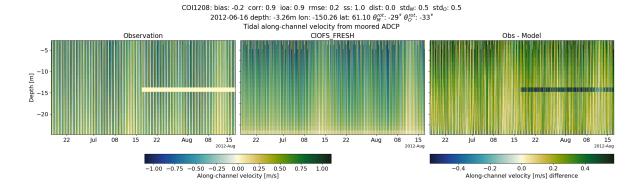




CIOFS_HINDCAST

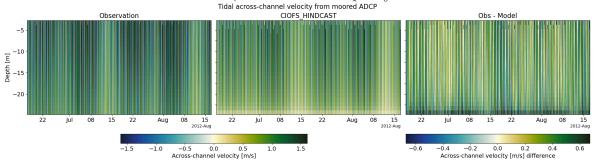


CIOFS_FRESH

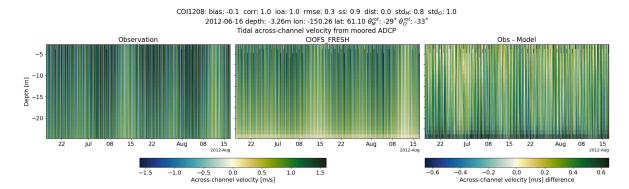


Across-channel velocity

COI1208: bias: -0.1 corr: 1.0 ioa: 1.0 rmse: 0.3 ss: 0.9 dist: 0.0 std_M: 0.8 std_O: 1.0 2012-06-16 depth: -3.26m lon: -150.26 lat: $61.10~\theta_M^{\rm pt}$: -30° $\theta_O^{\rm pot}$: -33°



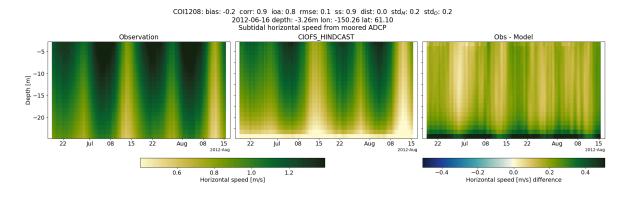
CIOFS_FRESH

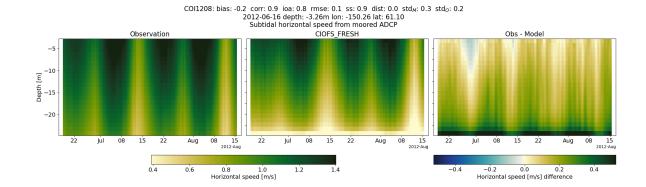


Subtidal

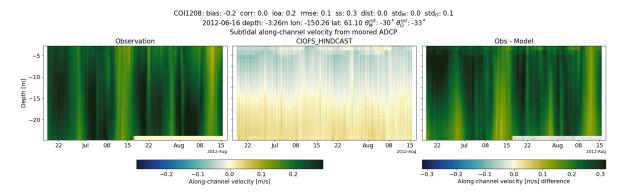
Horizontal speed

CIOFS_HINDCAST

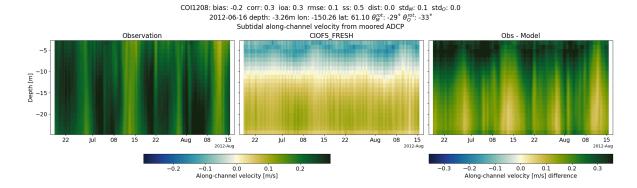




CIOFS_HINDCAST

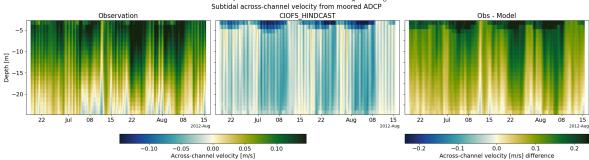


CIOFS_FRESH

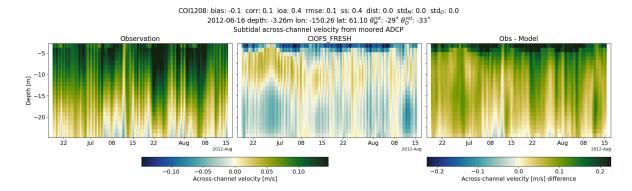


Across-channel velocity

COI1208: bias: -0.1 corr: -0.2 ioa: 0.4 rmse: 0.1 ss: 0.3 dist: 0.0 std_M: 0.0 std_O: 0.0 2012-06-16 depth: -3.26m lon: -150.26 lat: $61.10~\theta_M^{\rm pt}$: -30° $\theta_O^{\rm pt}$: -33°



CIOFS_FRESH

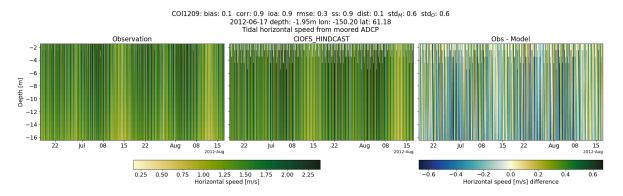


COI1209

Tidal

Horizontal speed

CIOFS_HINDCAST



COI1209: bias: 0.2 corr: 0.9 ioa: 0.9 rmse: 0.3 ss: 0.9 dist: 0.1 std_M: 0.6 std_O: 0.6

2012-06-17 depth: -1.95m lor: -1.95m lore -1.95.20 lat: 61.18

Tidal horizontal speed from moored ADCP

Observation

CIOFS FRESH

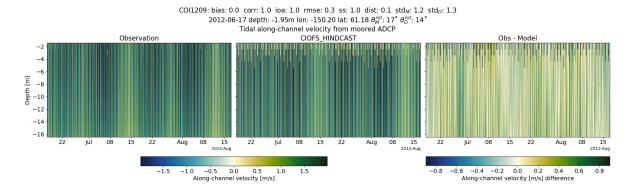
Obs - Model

CIOFS FRESH

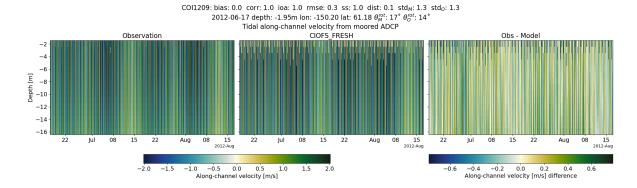
Obs -

Along-channel velocity

CIOFS_HINDCAST

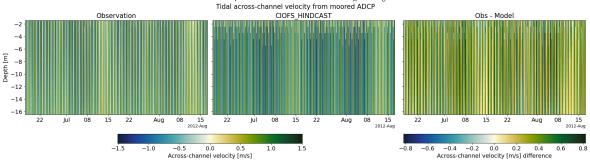


CIOFS_FRESH

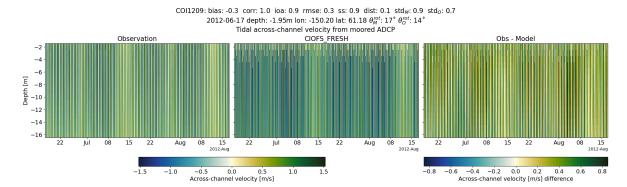


Across-channel velocity

COI1209: bias: -0.3 corr: 0.9 ioa: 0.9 rmse: 0.3 ss: 0.9 dist: 0.1 std $_{M}$: 0.8 std $_{O}$: 0.7 2012-06-17 depth: -1.95m lon: -150.20 lat: 61.18 θ_{M}^{rot} : 17° θ_{O}^{rot} : 14°



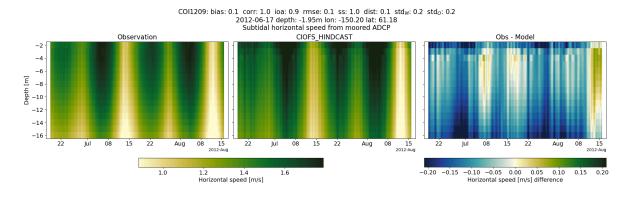
CIOFS_FRESH

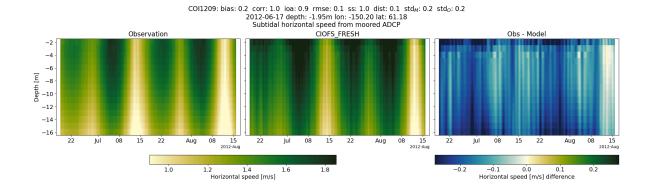


Subtidal

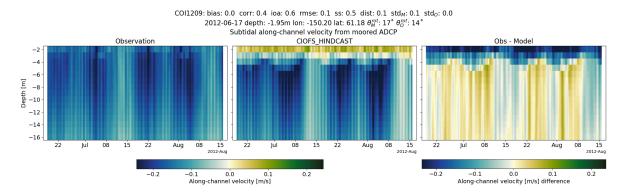
Horizontal speed

CIOFS_HINDCAST

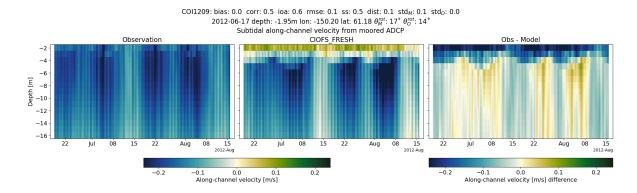




CIOFS_HINDCAST

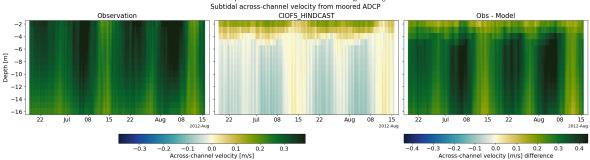


CIOFS_FRESH

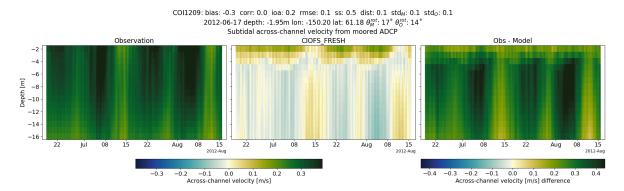


Across-channel velocity

COI1209: bias: -0.3 corr: 0.1 ioa: 0.2 rmse: 0.1 ss: 0.6 dist: 0.1 std_M: 0.1 std_O: 0.1 2012-06-17 depth: -1.95m lon: -150.20 lat: 61.18 θ_M^{ml} : 17° θ_O^{ml} : 14°



CIOFS_FRESH

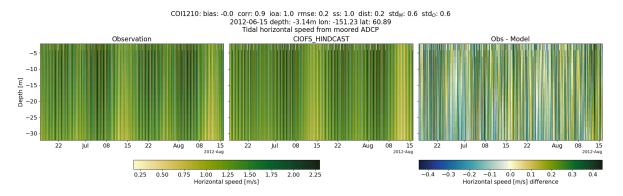


COI1210

Tidal

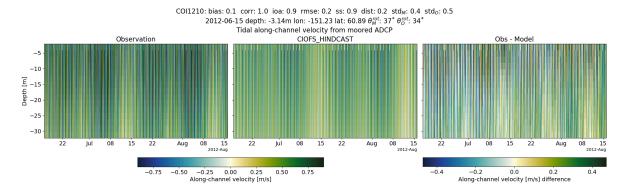
Horizontal speed

CIOFS_HINDCAST

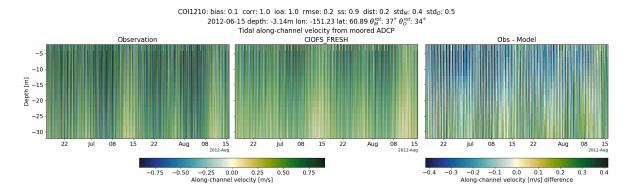


Along-channel velocity

CIOFS_HINDCAST

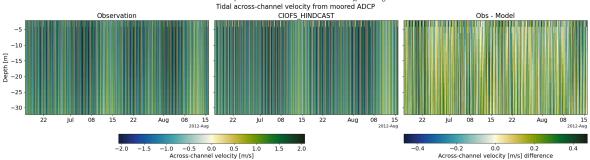


CIOFS_FRESH

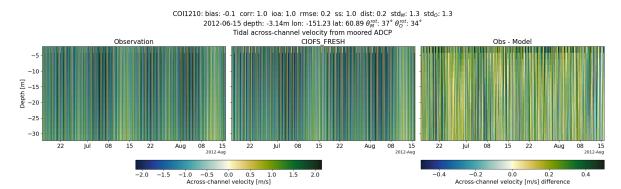


Across-channel velocity

COI1210: bias: -0.1 corr: 1.0 ioa: 1.0 rmse: 0.2 ss: 1.0 dist: 0.2 std_M: 1.3 std_O: 1.3 2012-06-15 depth: -3.14m lon: -151.23 lat: 60.89 θ_M^{rot} : 37° θ_O^{rot} : 34°



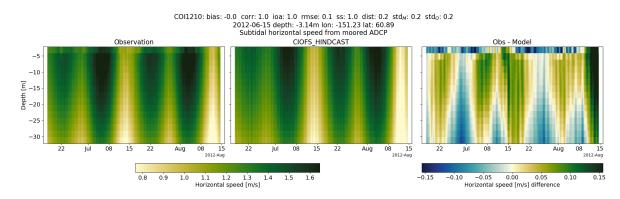
CIOFS_FRESH

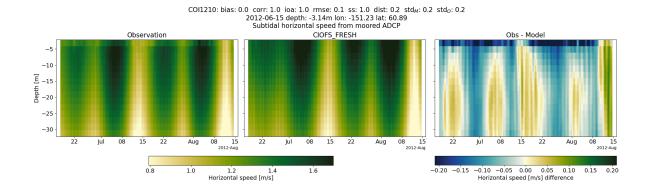


Subtidal

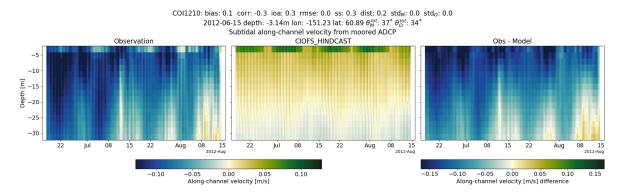
Horizontal speed

CIOFS_HINDCAST

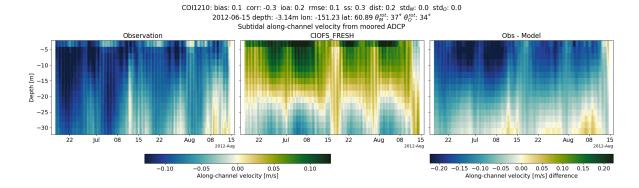




CIOFS_HINDCAST



CIOFS_FRESH



Across-channel velocity

