Environment and Climate Change Canada | Environnement et Changement climatique Canada

Canada

Canadian Meteorological Center
report to GHRSST

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GHRSST
Group for High Resolution Sea Surface Temperature

CMC Environnement Canada
CMC Environment Canada

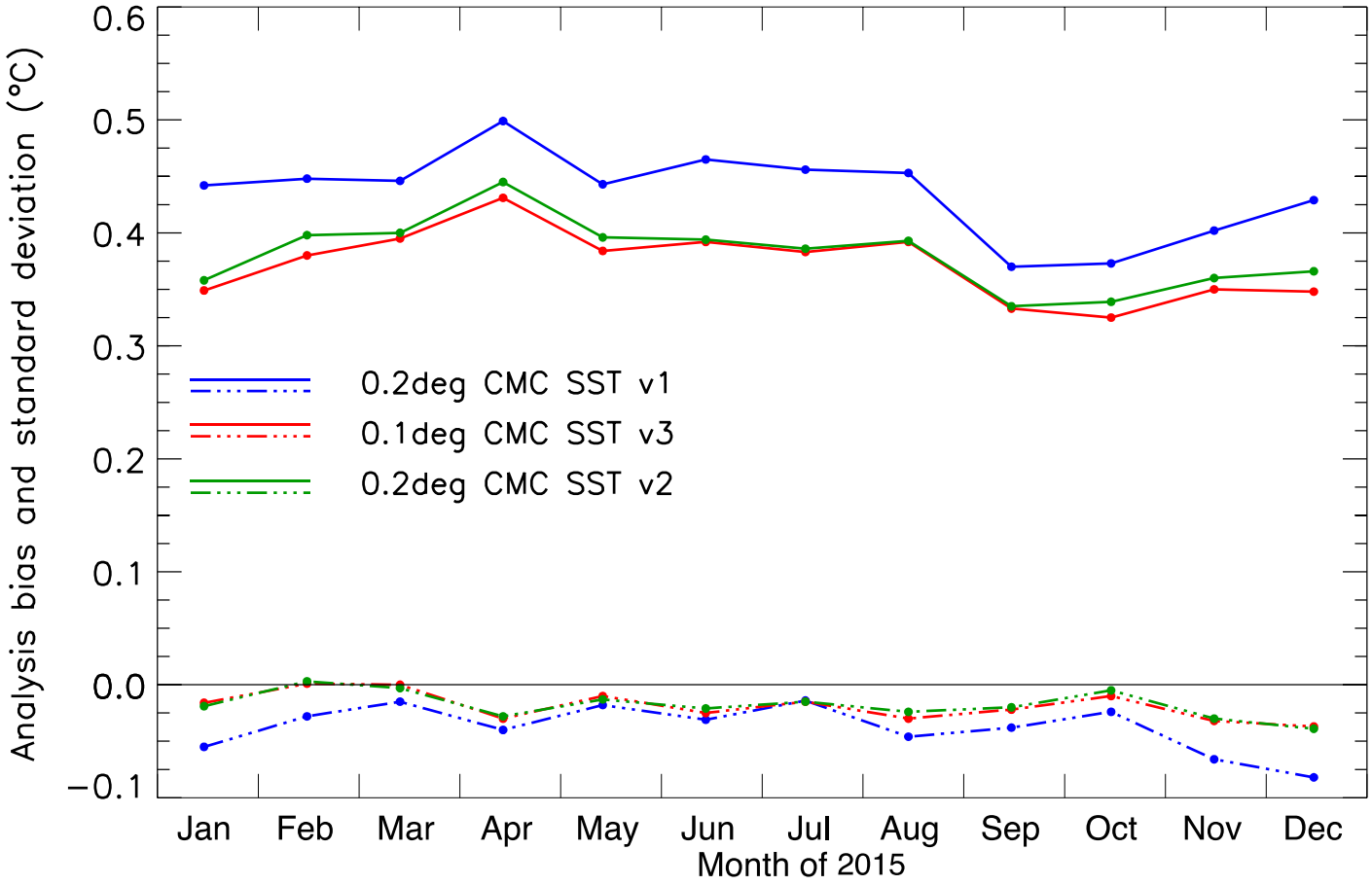
SST analyses at CMC

- **L4 0.2˚ CMC SST v1.0** (operational analysis)
  - Global 0.2º resolution, latitude/longitude grid
  - NOAA18, NOAA19, MetOp-A, MetOp-B, in situ data, ice information
- **L4 0.2˚ CMC SST v2.0**
  - Global0.2º resolution, latitude/longitude grid
  - NOAA18, NOAA19, MetOp-A, AMSR2, VIIRS, in situ data, ice information
  - Reanalysis dataset (Sept. 1991 – to day)
  - Data access - PO.DAAC, GDS2 format
- **L4 0.1˚ CMC SST v3.0** (experimental analysis – since sept 2015)
  - Global 0.1º resolution, latitude/longitude grid
  - NOAA18, NOAA19, MetOp-A, MetOp-B, AMSR2, VIIRS, in situ data, ice information
  - Period available - since January 1, 2016
  - Data access – PO.DAAC, GDS2 format

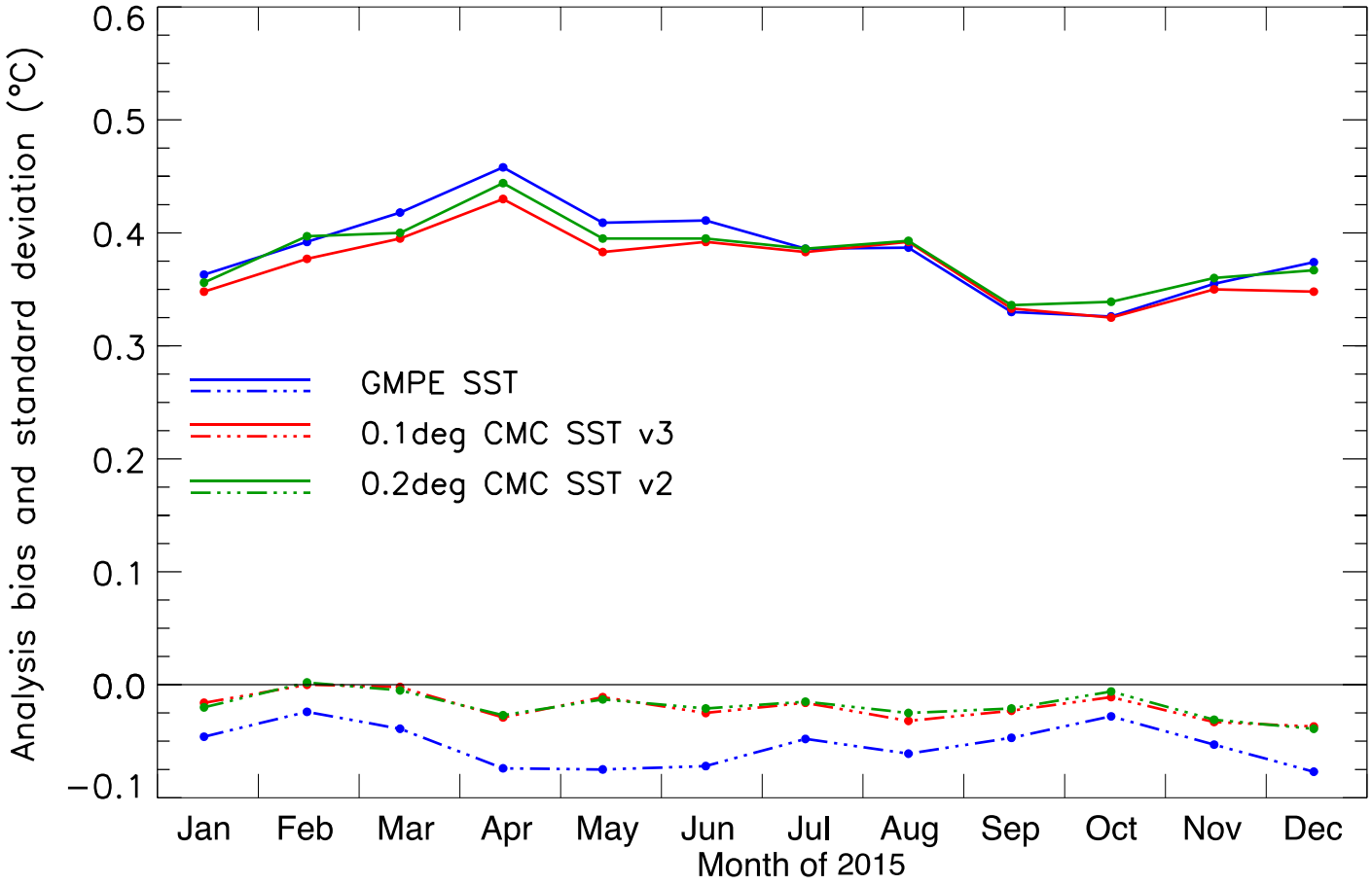
Data input

Data set	Data type	Source
NOAA18 AVHRR	L2P	NAVOCEANO / PO.DAAC
NOAA19 AVHRR	L2P	NAVOCEANO / PO.DAAC
Metop A AVHRR	L2P	NAVOCEANO / PO.DAAC
Metop B AVHRR	L2P	NAVOCEANO / PO.DAAC
AMSR2	L3	RSS
VIIRS-NPP	L2P	NOAA/NESDIS/OSPO / PO.DAAC
In situ	TAC / BUFR	GTS
Sea-ice concentration	L4	CMC ice analysis

Performance of CMC SST



Performance of CMC SST



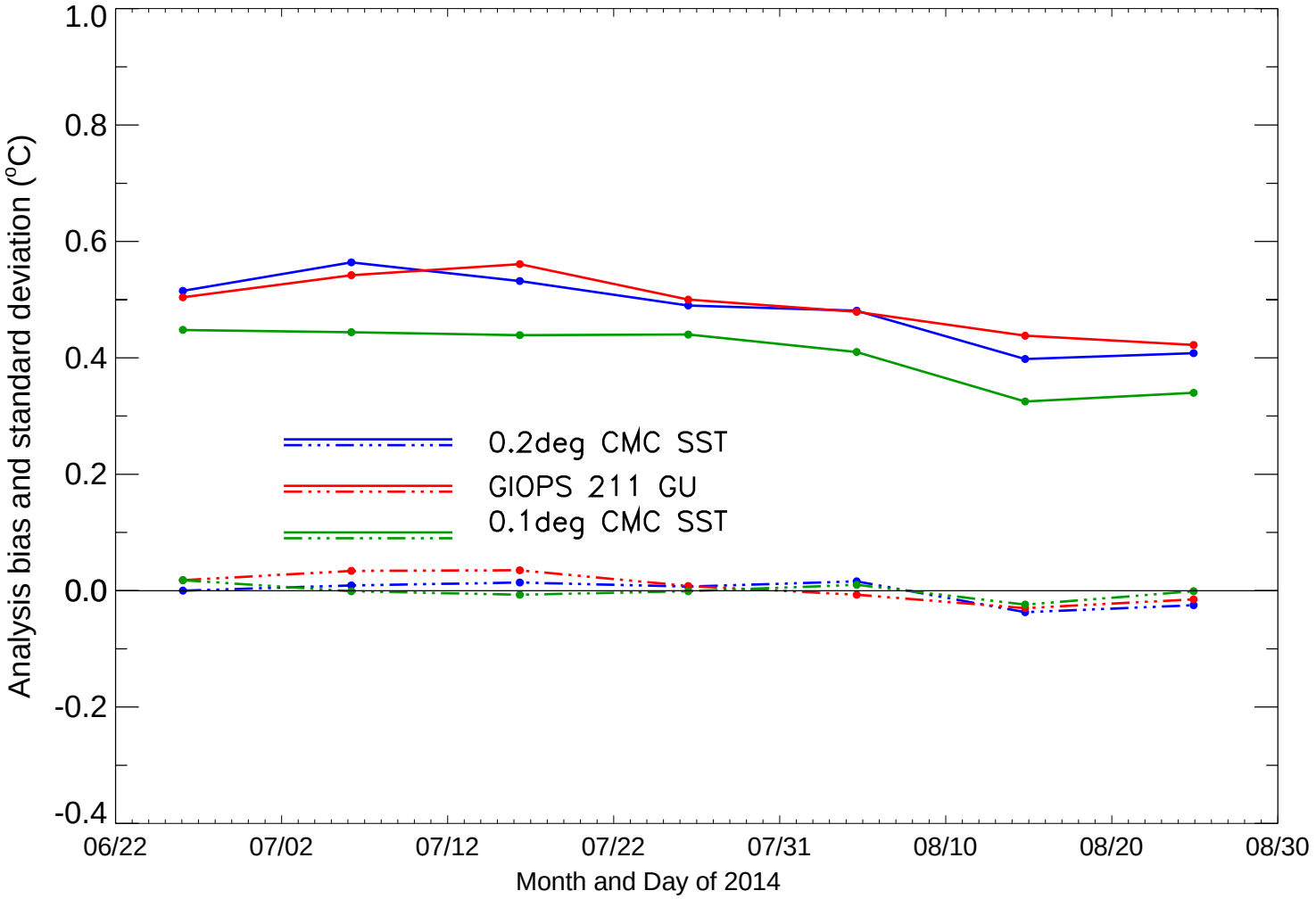
Systems using CMC SST analysis

- ***NWP systems***
- ***The Global Ice Ocean Prediction System (GIOPS)***

  - produces analysis and 10 days forecasts
  - operational systems since 2014
  - update of the data assimilation system (parallel run) in June 2016

- ***The Global Coupled Prediction System***
  - Coupling between GIOPS and GDPS
  - Proposition for experimental implementation next week

GIOPS daily analysis



Future plans

- Stop CMC SST v2 – this summer
- Change status for CMC SST v3 from “experimental” to “operational”.

Thank you !