

SDWQ -SBO Plume Time Series

Plume from
November 2020
to January 2021

Created by Ocean Imaging
for the City of San Diego



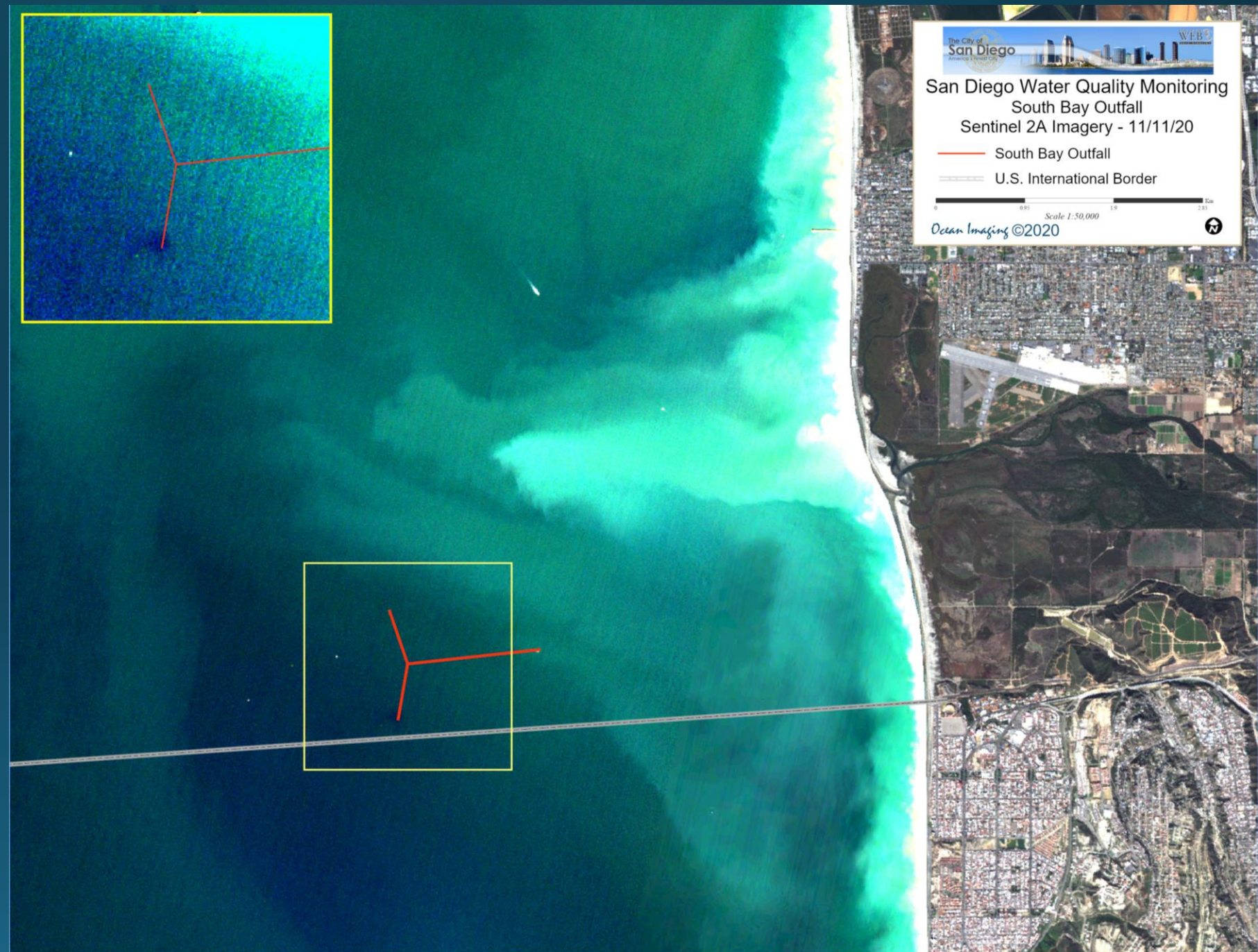
November 2020 SBO Signatures

Sentinel 2A

November 11, 2020

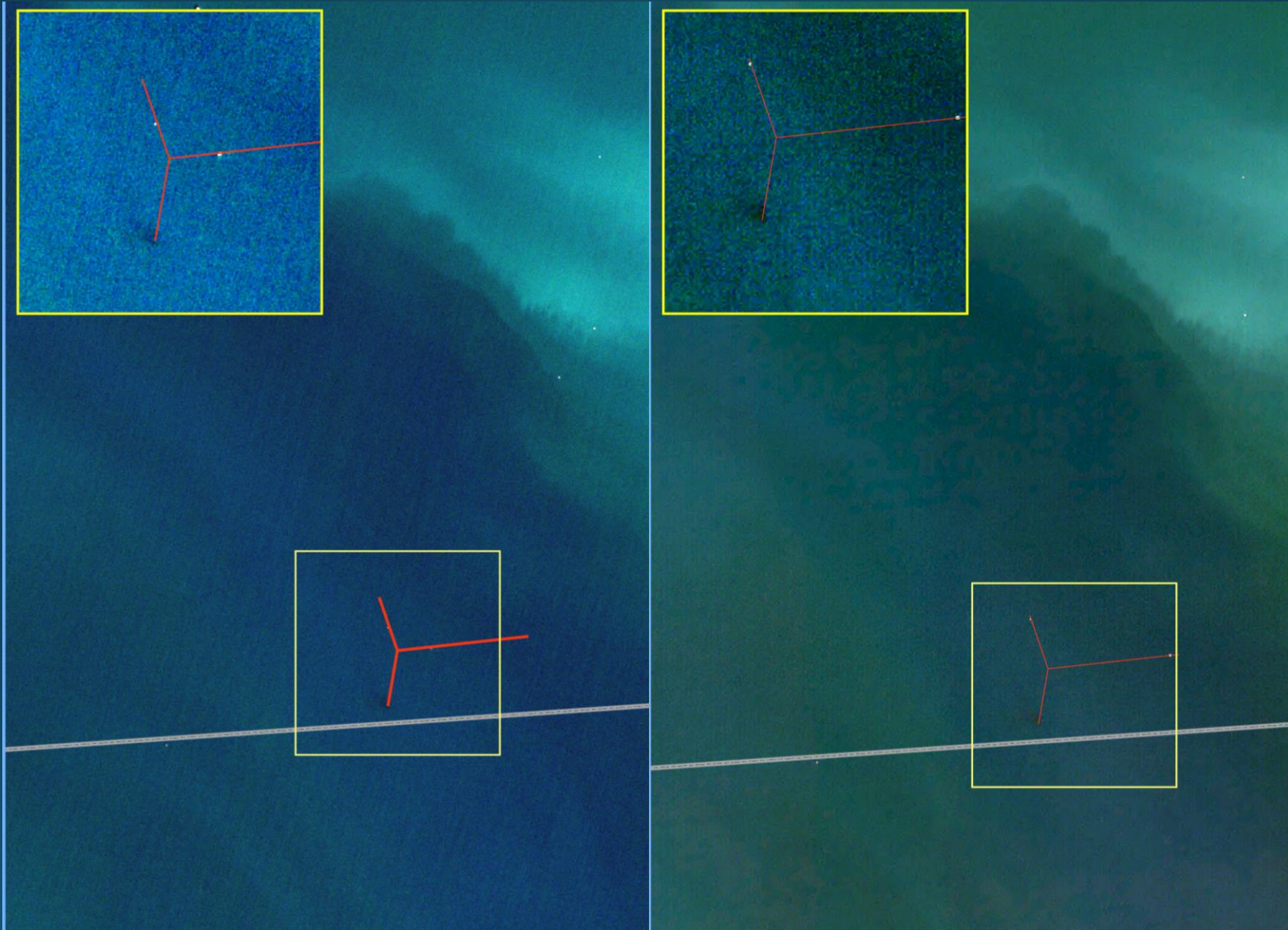
The first sighting for this time series, a signature was detected in the Sentinel 2A image coming from the South Bay Outfall wye.

Acquisition time: 10:26:21 AM PST



November 29, 2020

Sentinel 2B and SPOT 6/7 detected the SBO signature on 11/29/2020, both images were collected within 20 minutes of each other.

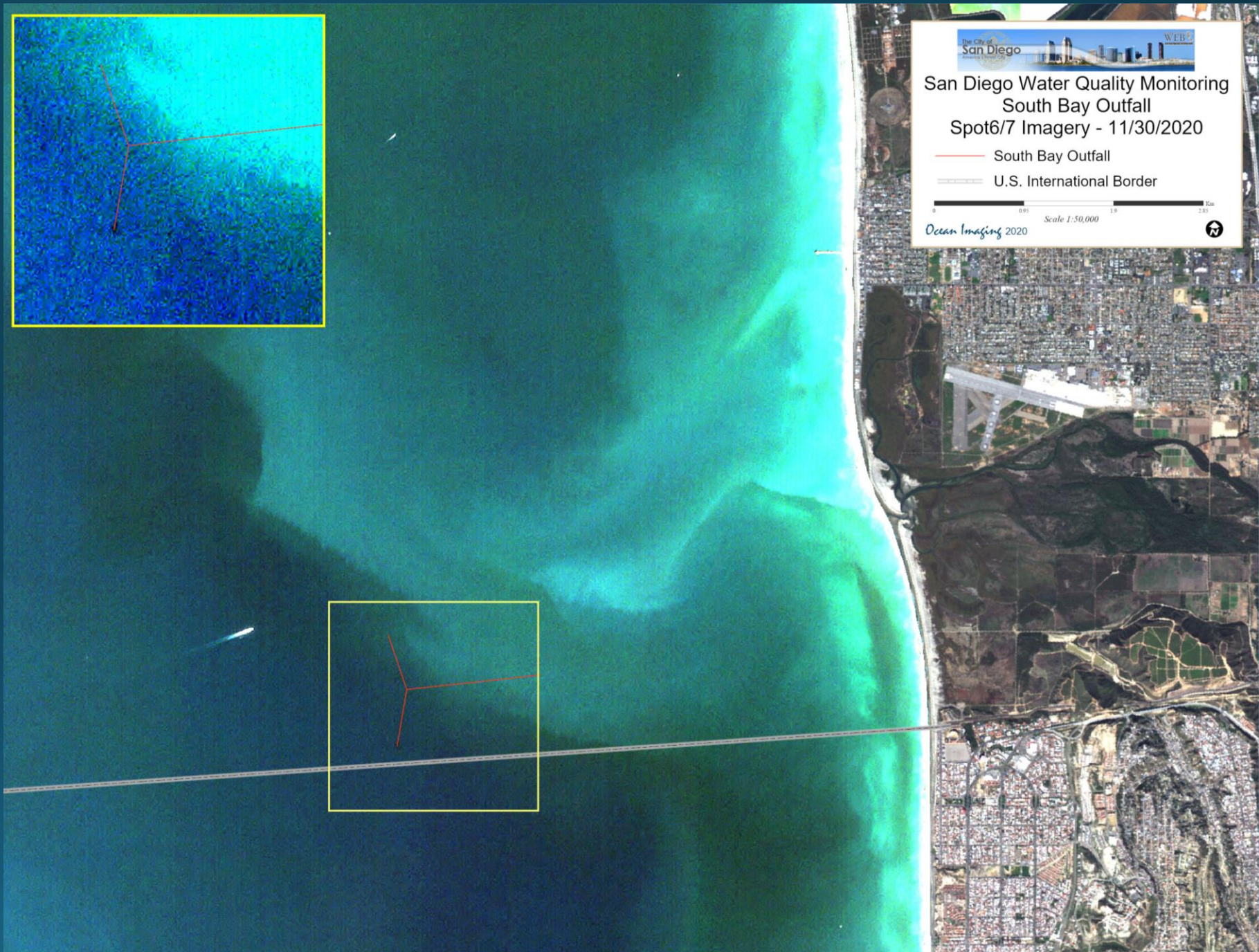


Sentinel 2B acquired at 10:37:59 AM PST

SPOT 6/7 acquired at 10:19:30 AM PST

SPOT 6/7 November 30, 2020

Acquisition time: 10:13:08 AM PST



December 2020 SBO Signatures

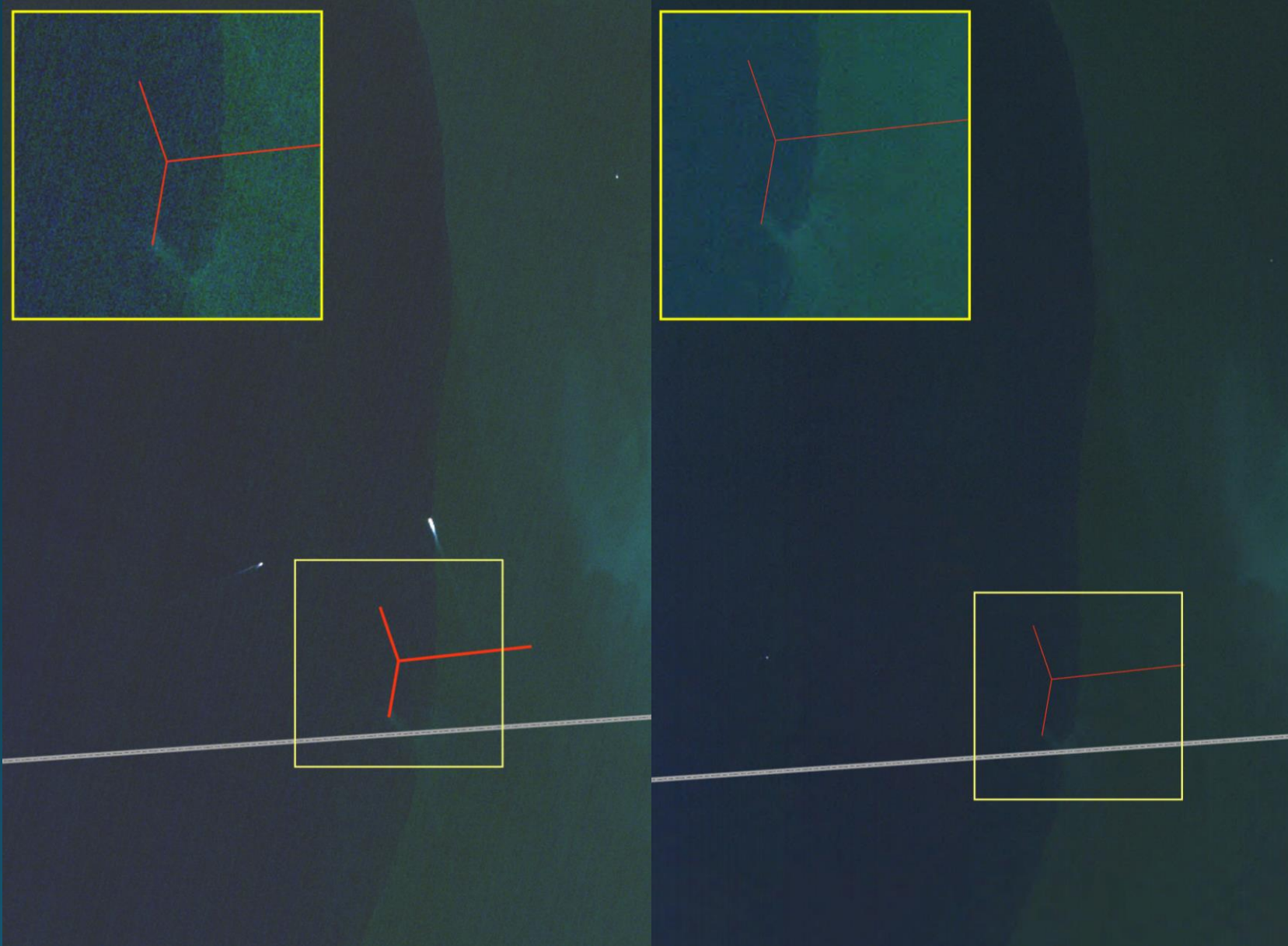
Sentinel 2A December 1, 2020

Acquisition time: 10:27:31 AM PST



December 4, 2020

Sentinel 2A and Spot 6/7 detected the same signature from the SBO on 12/4/2020, both images were collected within 10 minutes of each other.

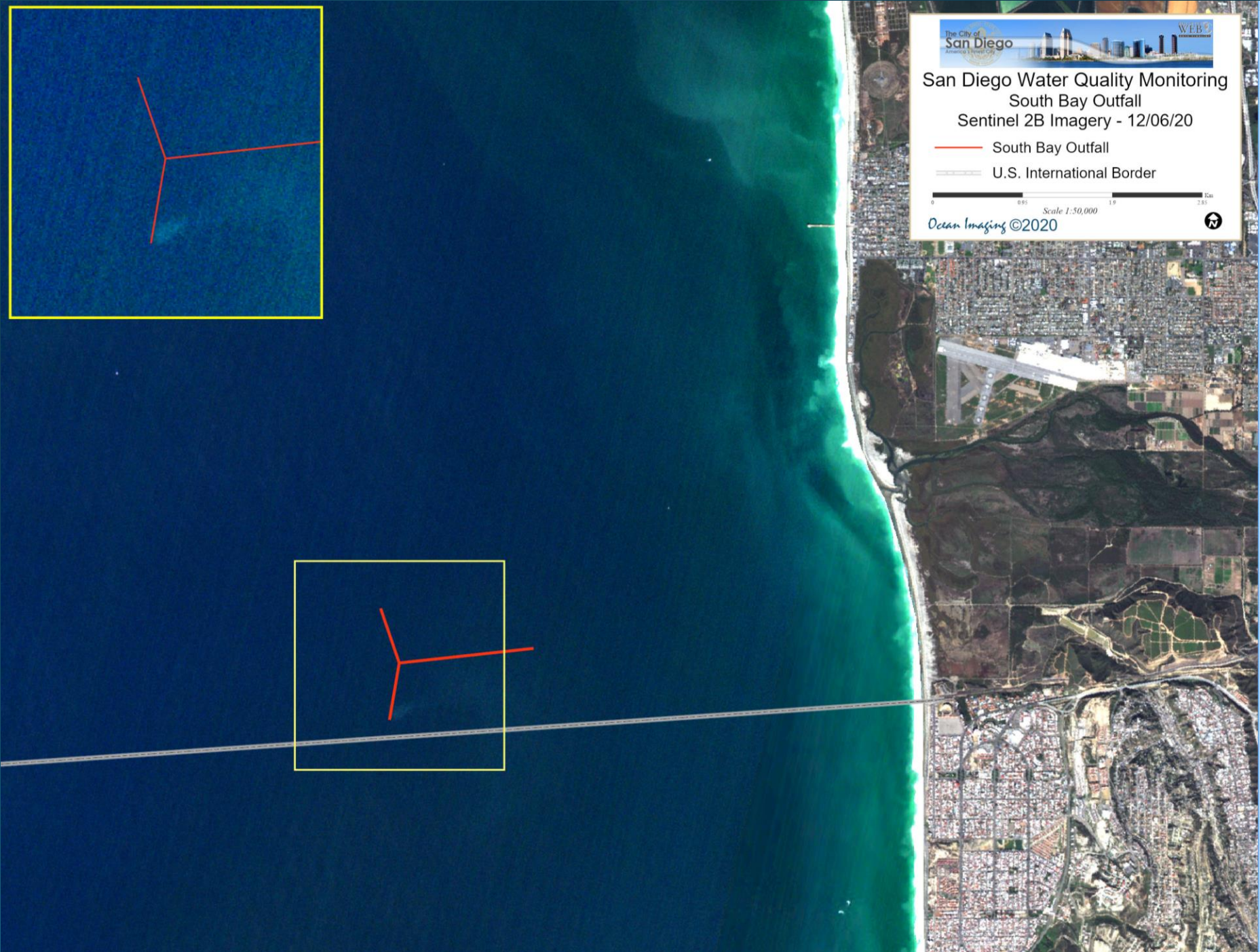


Sentinel 2B acquired at 10:37:41 AM PST

SPOT 6/7 acquired at 10:30:20 AM PST

Sentinel 2A December 6, 2020

Acquisition time: 10:27:20 AM PST

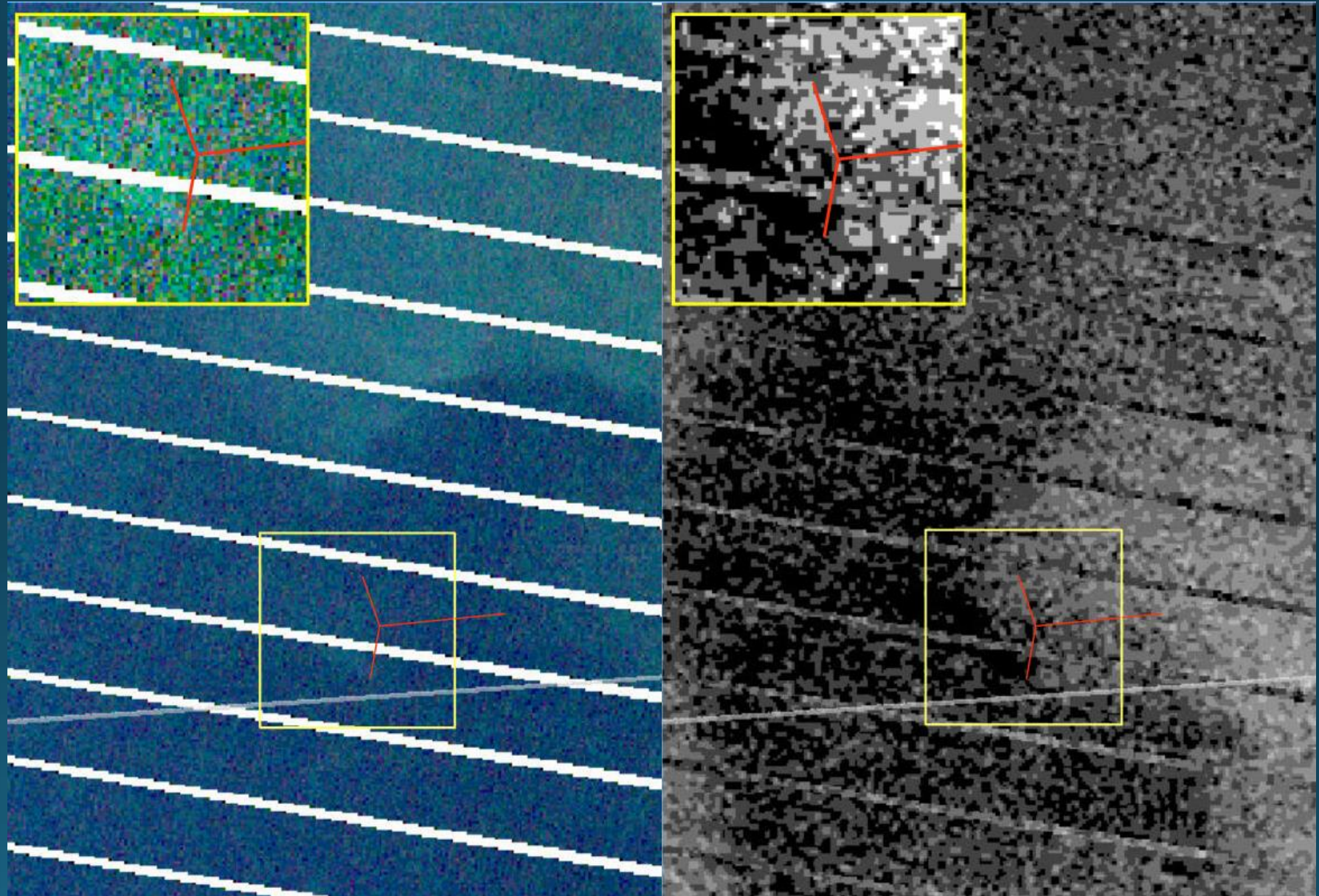


December 11, 2020

Sentinel 2A, SPOT 6/7 and Landsat 7 TM detected the same SBO Signature, images were collected within an hour of each other.

Landsat 7 Signature

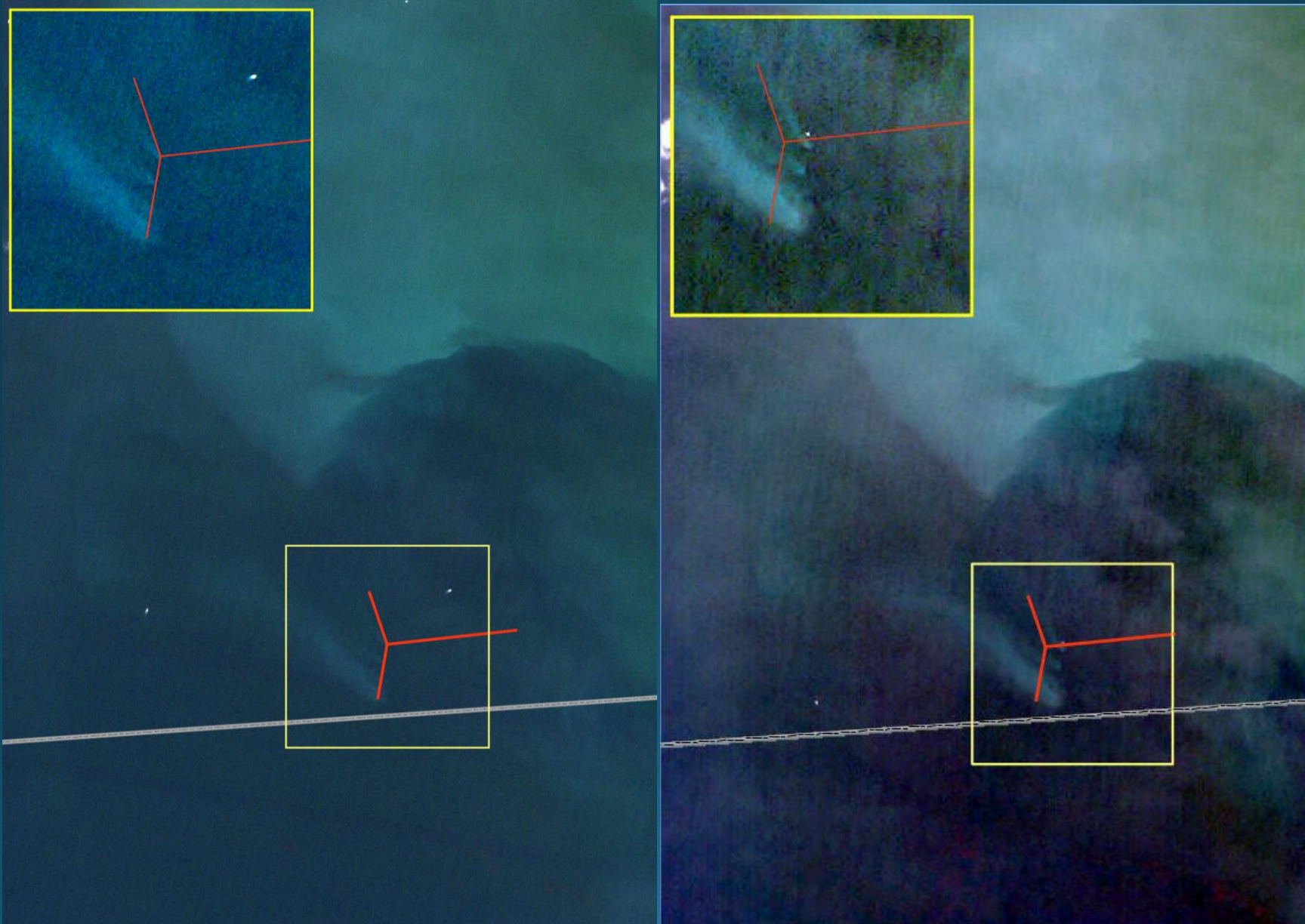
Landsat 7 TM acquired at 09:42:17 AM PST



A comparison of Landsat 7's true color composite image and the thermal image for 12/11/2020.

December 11, 2020 Continued

Sentinel 2A and SPOT 6/7 Signature

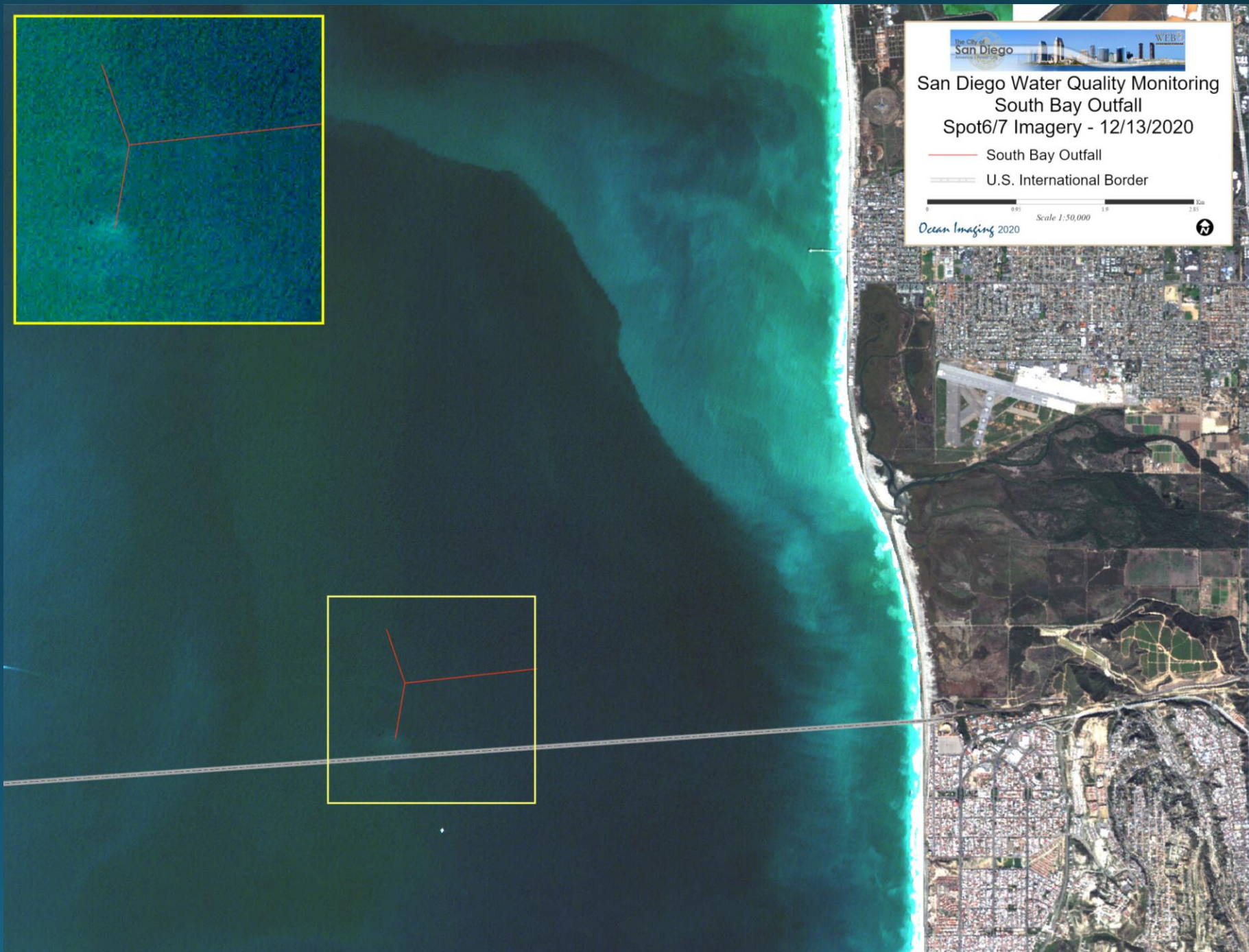


Sentinel 2B acquired at 10:27:51 AM PST

SPOT 6/7 acquired at 10:26:40 AM PST

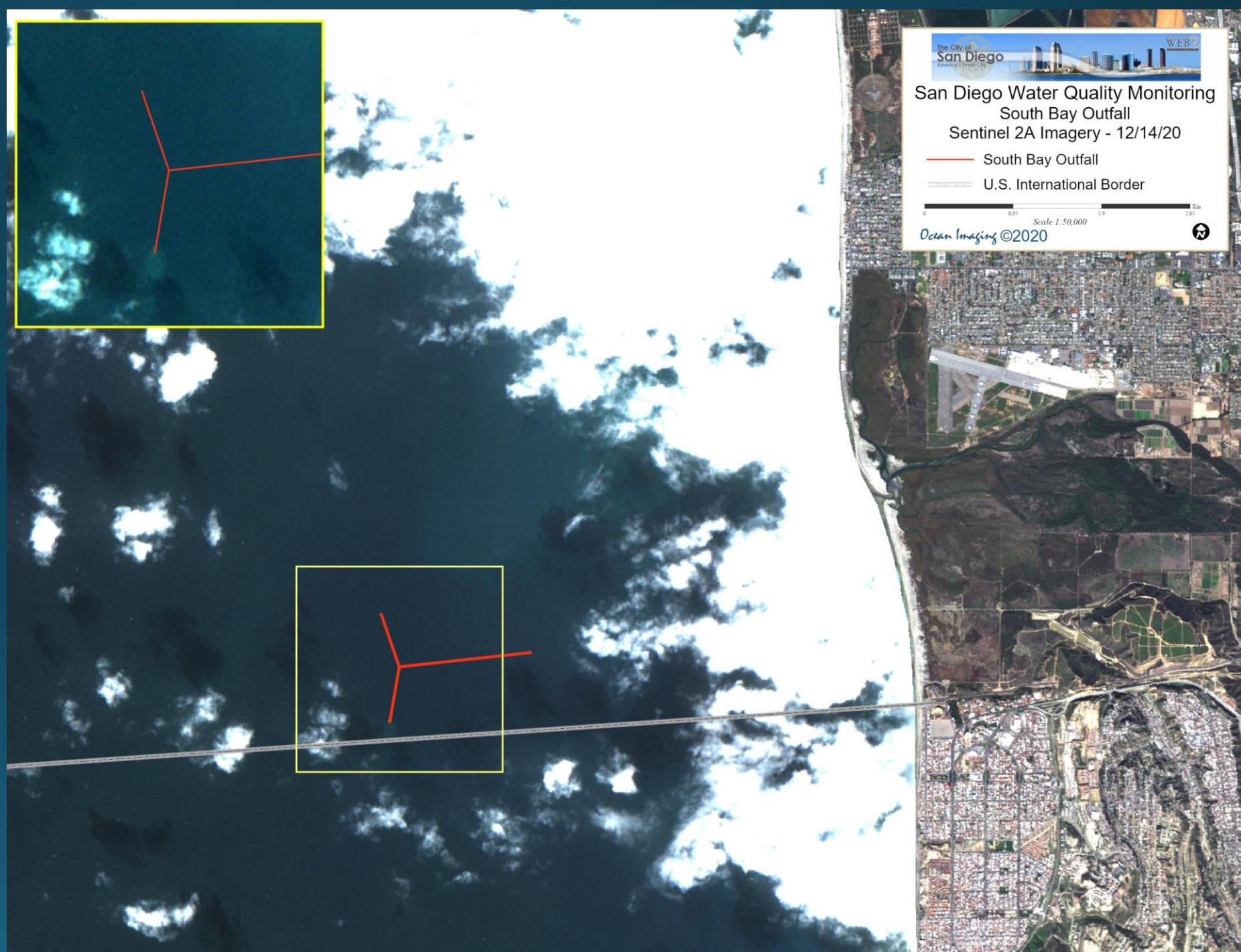
SPOT6/7 December 13, 2020

Acquisition time: 10:11:34 AM PST



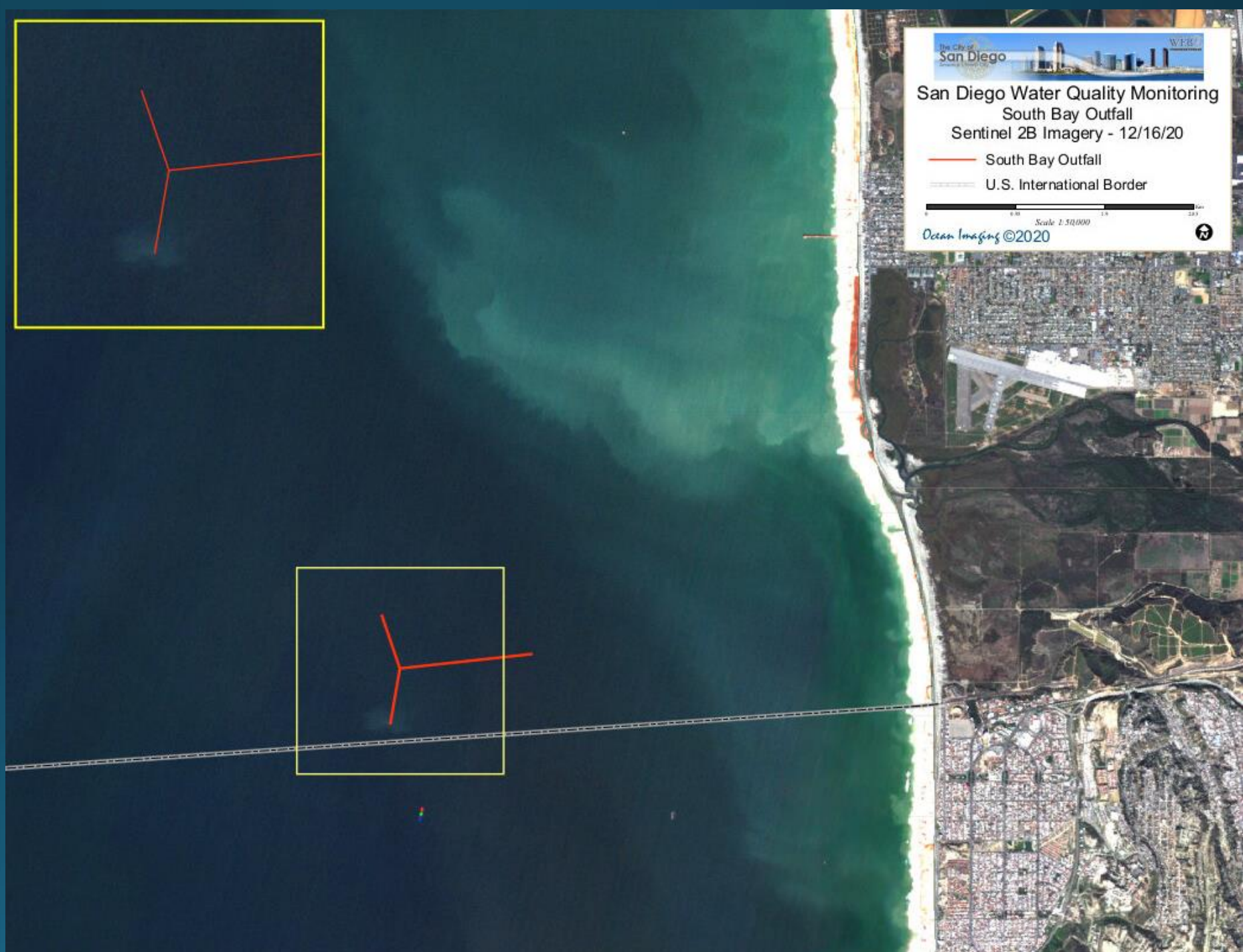
Sentinel 2A - December 14, 2020

Acquisition time: 10:37:51 AM PST



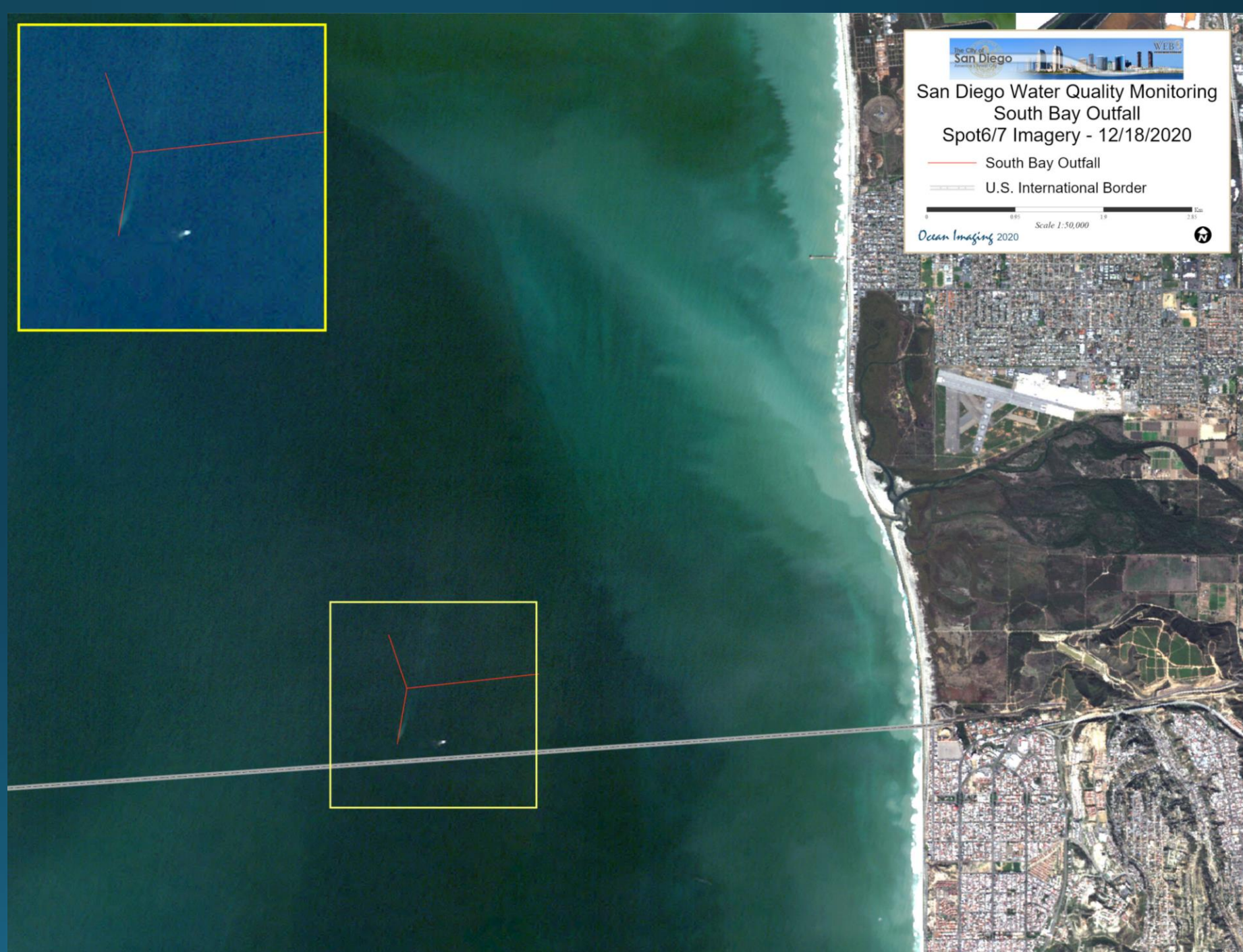
Sentinel 2B - December 16, 2020

Acquisition time: 10:27:51 AM PST



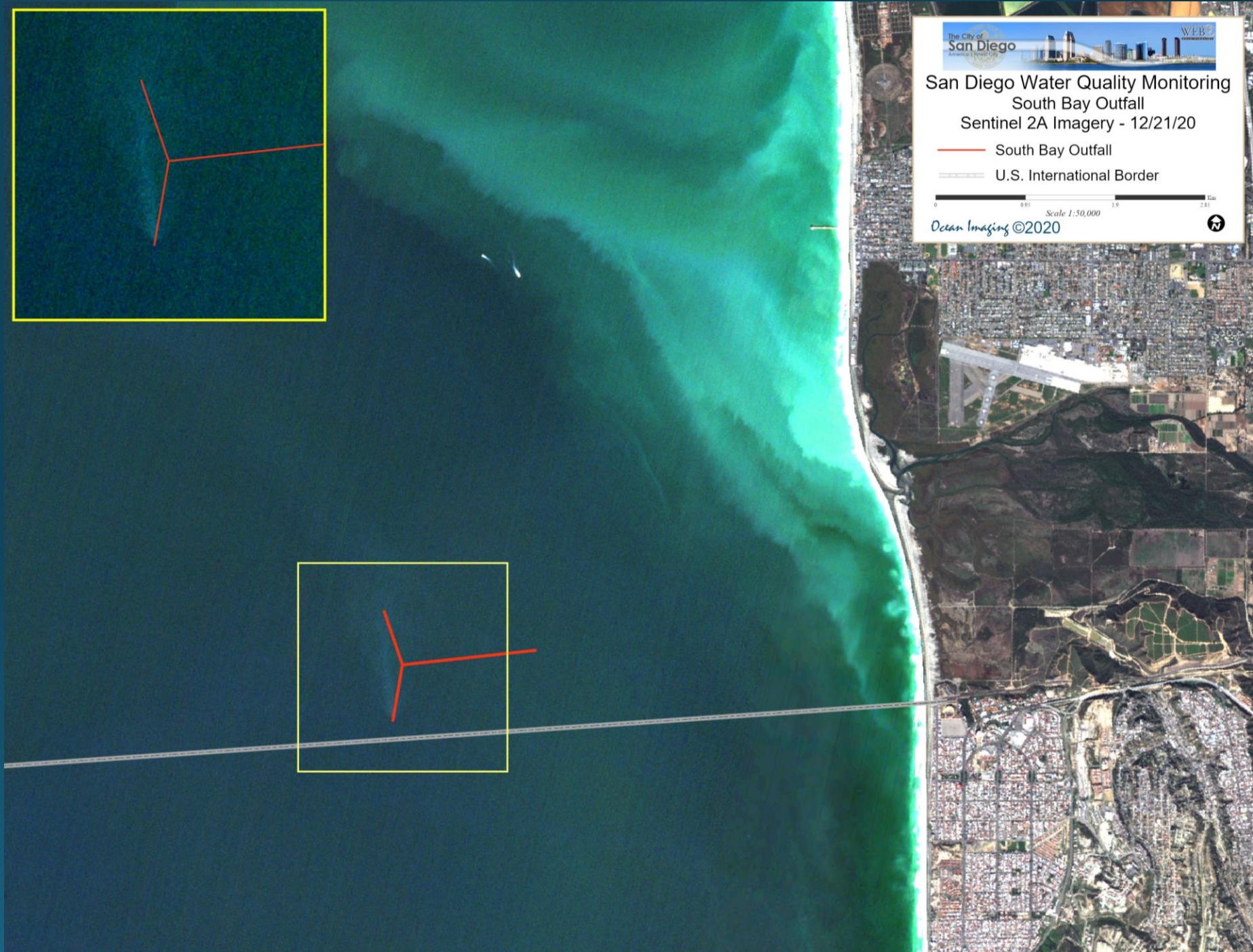
SPOT 6/7 December 18, 2020

Acquisition time: 10:23:19 AM PST



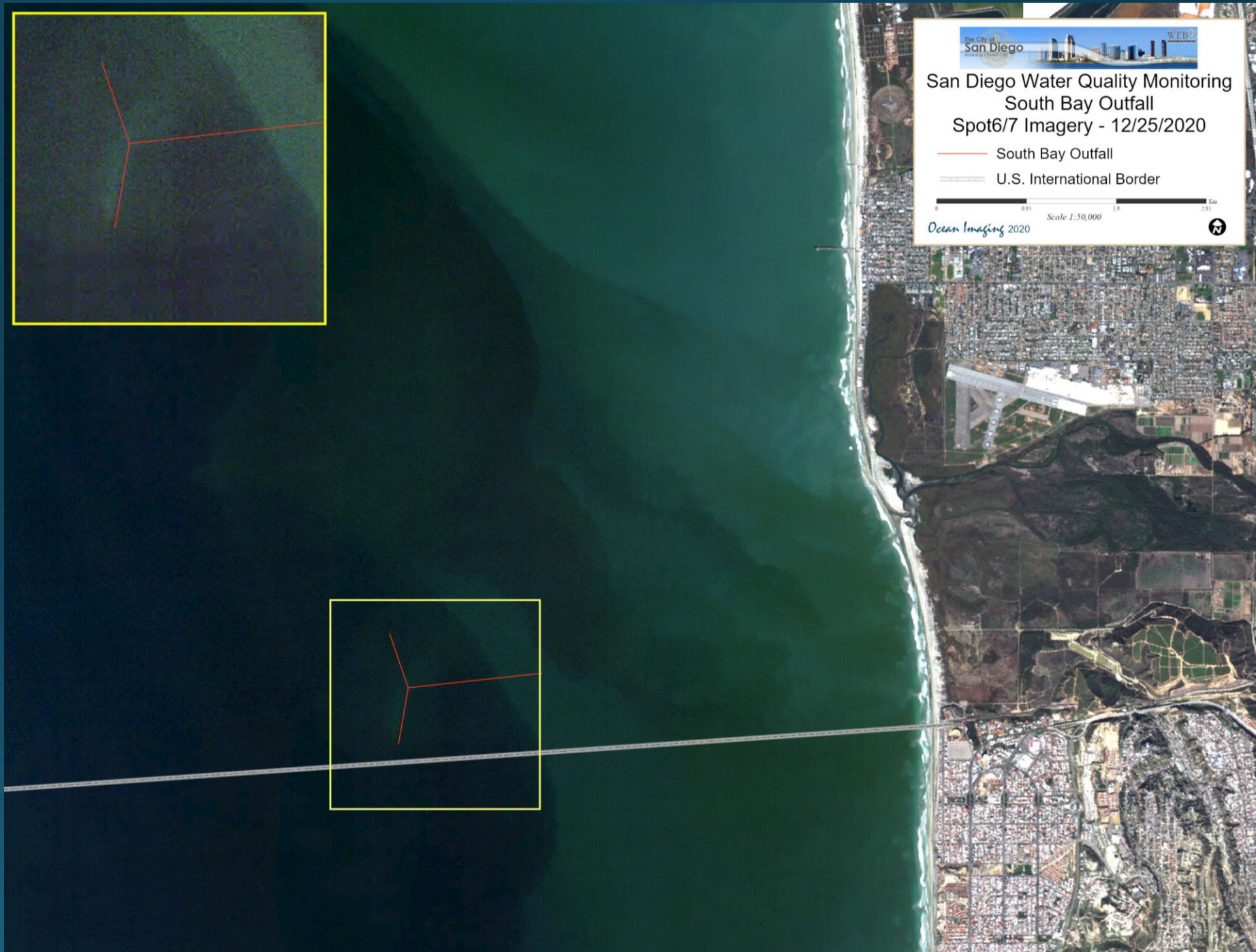
Sentinel 2A December 21, 2020

Acquisition time: 10:28:01 AM PST



SPOT 6/7 December 25, 2020

Acquisition time: 10:19:39 AM PST



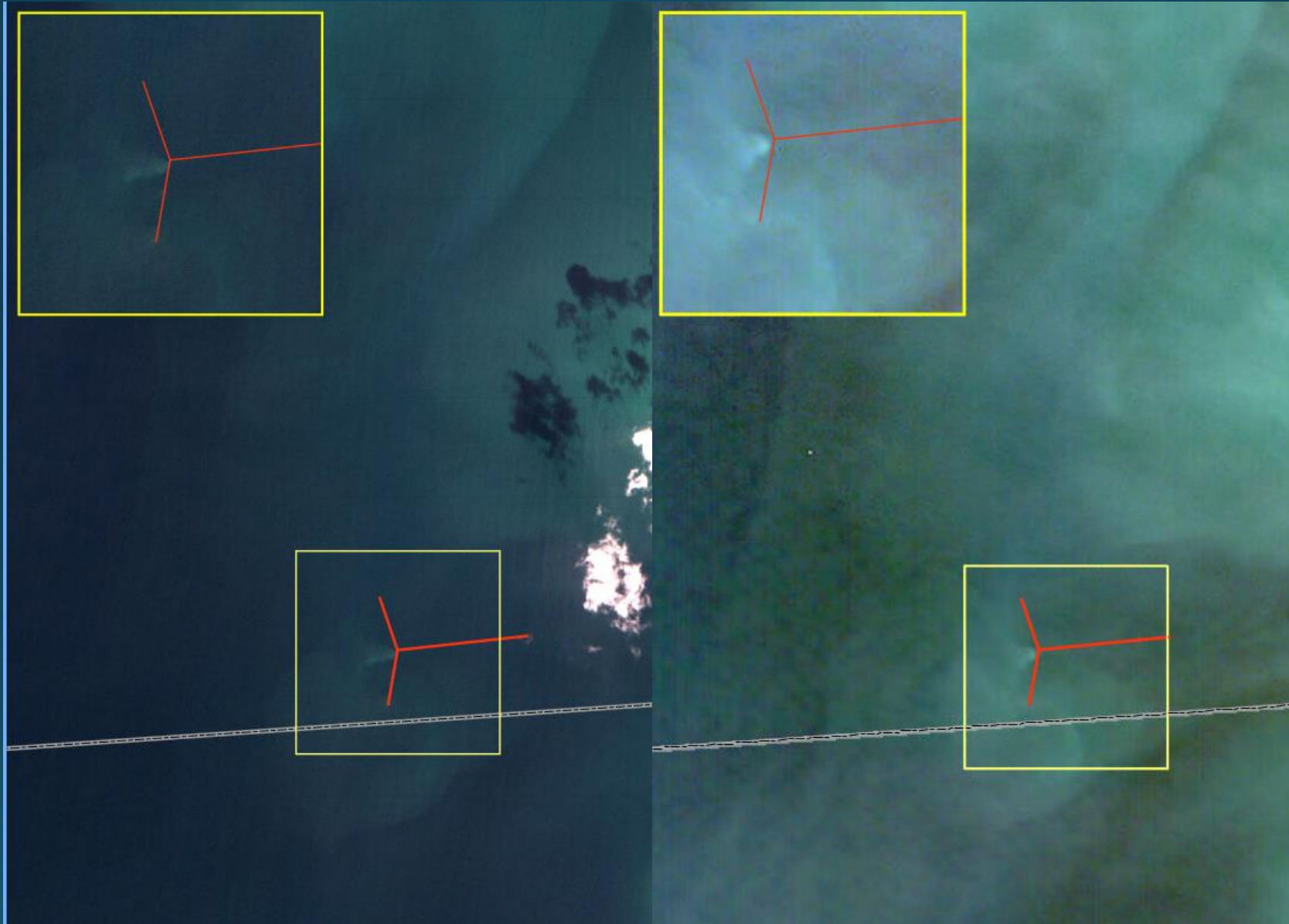
Sentinel 2B December 26, 2020

Acquisition time: 10:27:59 AM PST



December 29, 2020

Sentinel 2A and Spot 6/7 detected the same signature from the SBO within an hour of each other.



Sentinel 2B acquired at 10:37:59 AM PST

SPOT 6/7 acquired at 9:49:46 AM PST

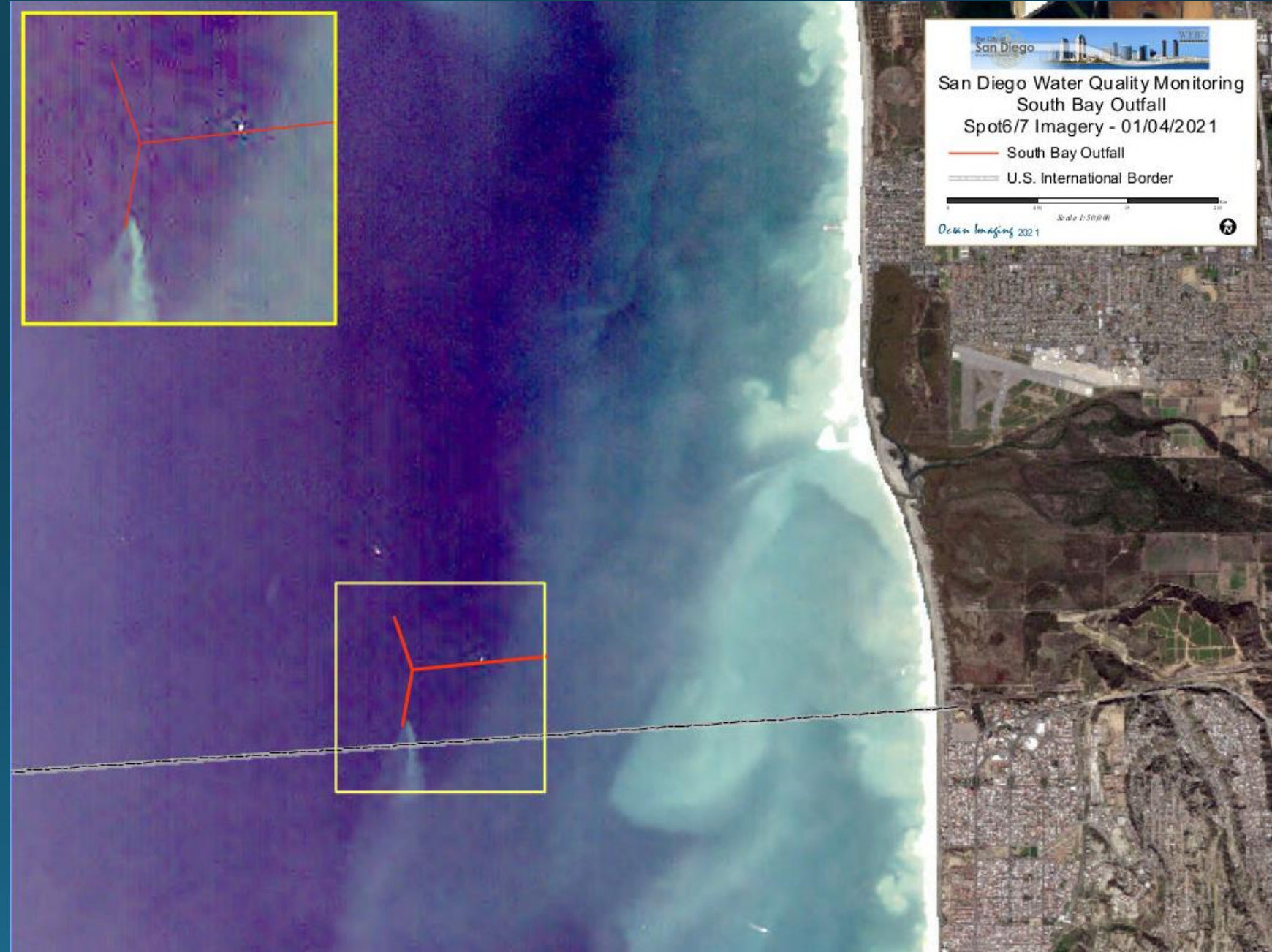
January 2021 SBO Signatures

January 4, 2021

On January 4, 2021 SBO signature was detected by both SPOT 6/7 and Landsat 8 satellites.

SPOT 6/7 Signature

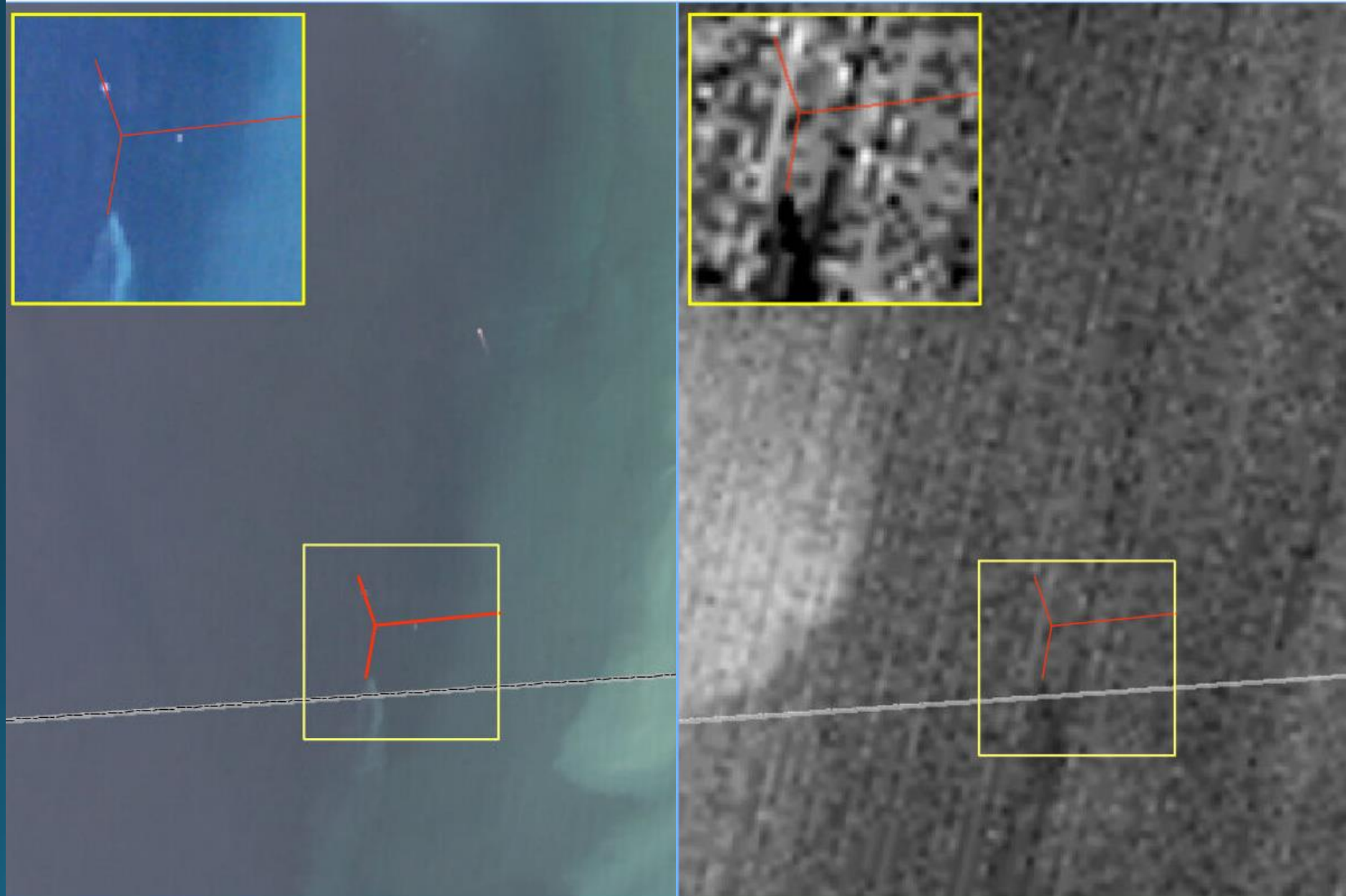
Acquisition time: 09:54:11 AM PST



January 4, 2021 Continued

Landsat 8

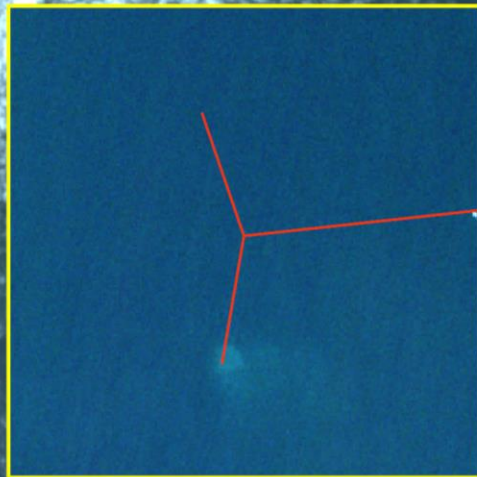
Acquired at: 10:22:32 AM PST



A comparison of Landsat 8's true color composite image and the thermal image for 1/4/2020.

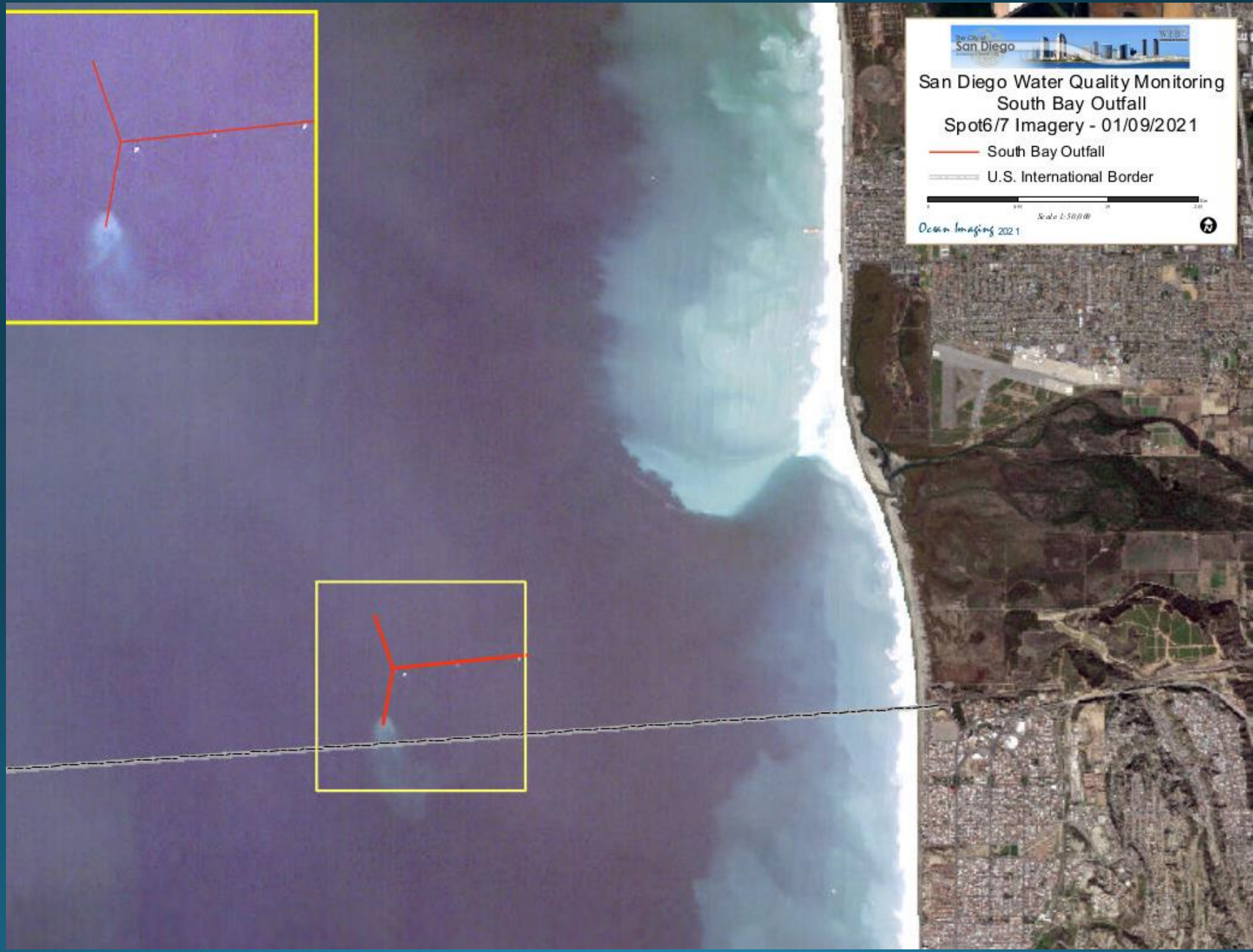
Sentinel 2B January 8, 2021

Acquisition time: 10:37:39 AM PST



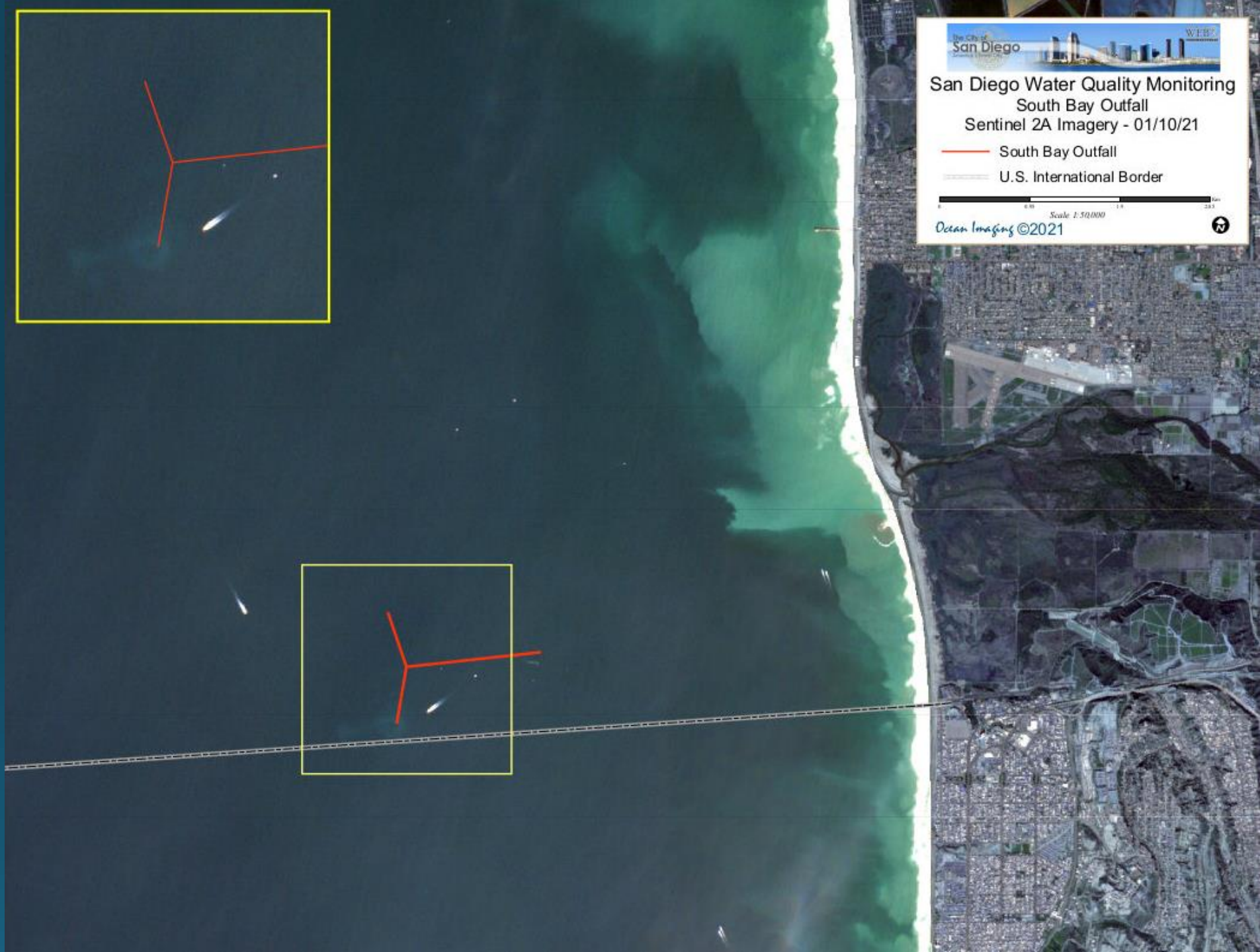
SPOT 6/7 January 9, 2021

Acquisition time: 10:05:20 AM PST



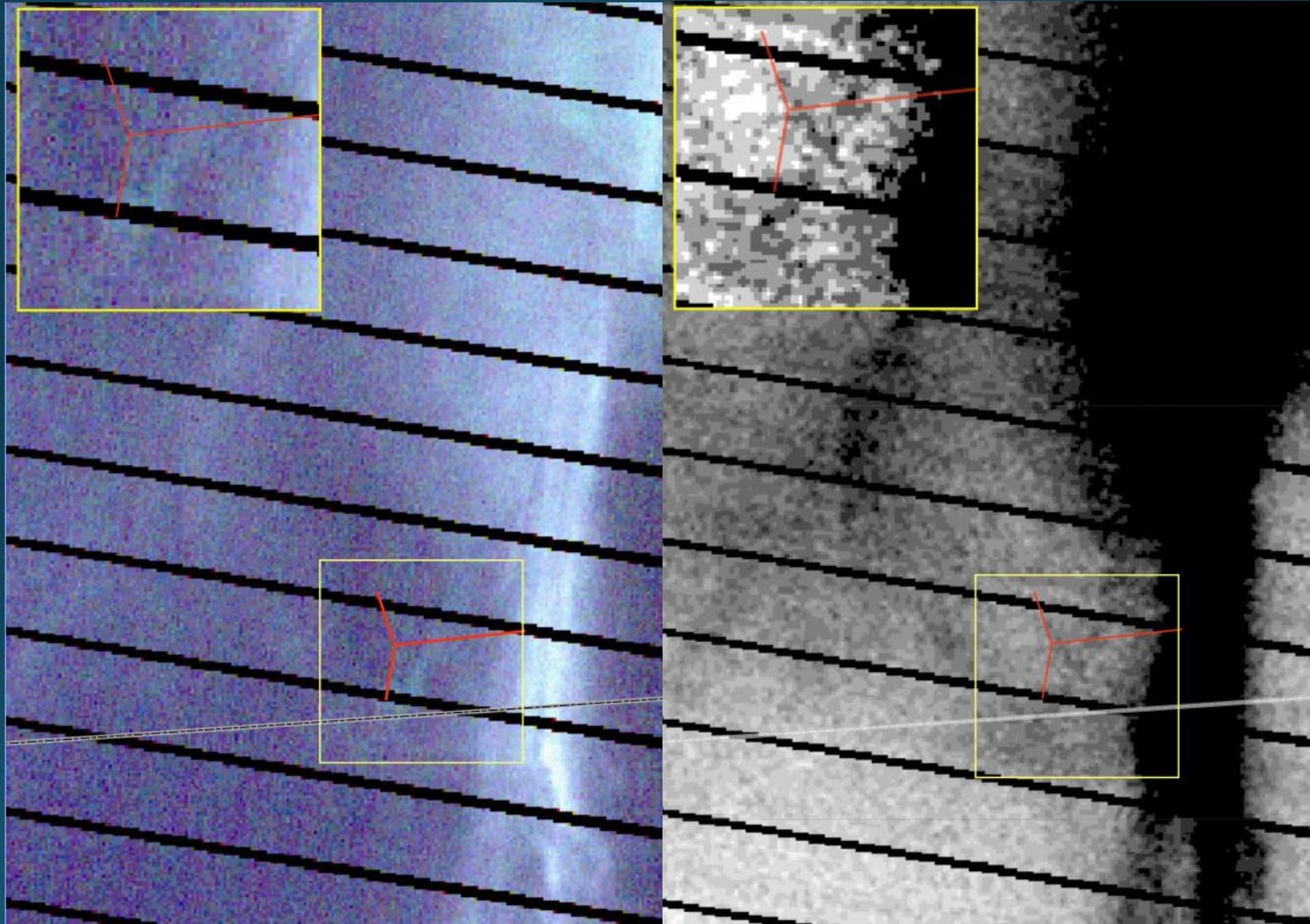
Sentinel 2A January 10, 2021

Acquisition time: 10:27:31 AM PST



January 12, 2021

Landsat 7 TM detected a SBO signature. The comparison below is of true color and thermal imagery. The signature is better seen in the true color image.



True color image (right) and thermal image (left). Acquisition time: 9:39:59 AM PST

January 13, 2021

Sentinel 2A and SPOT 6/7 detected the same signature, both images were collected within 15 minutes of each other.

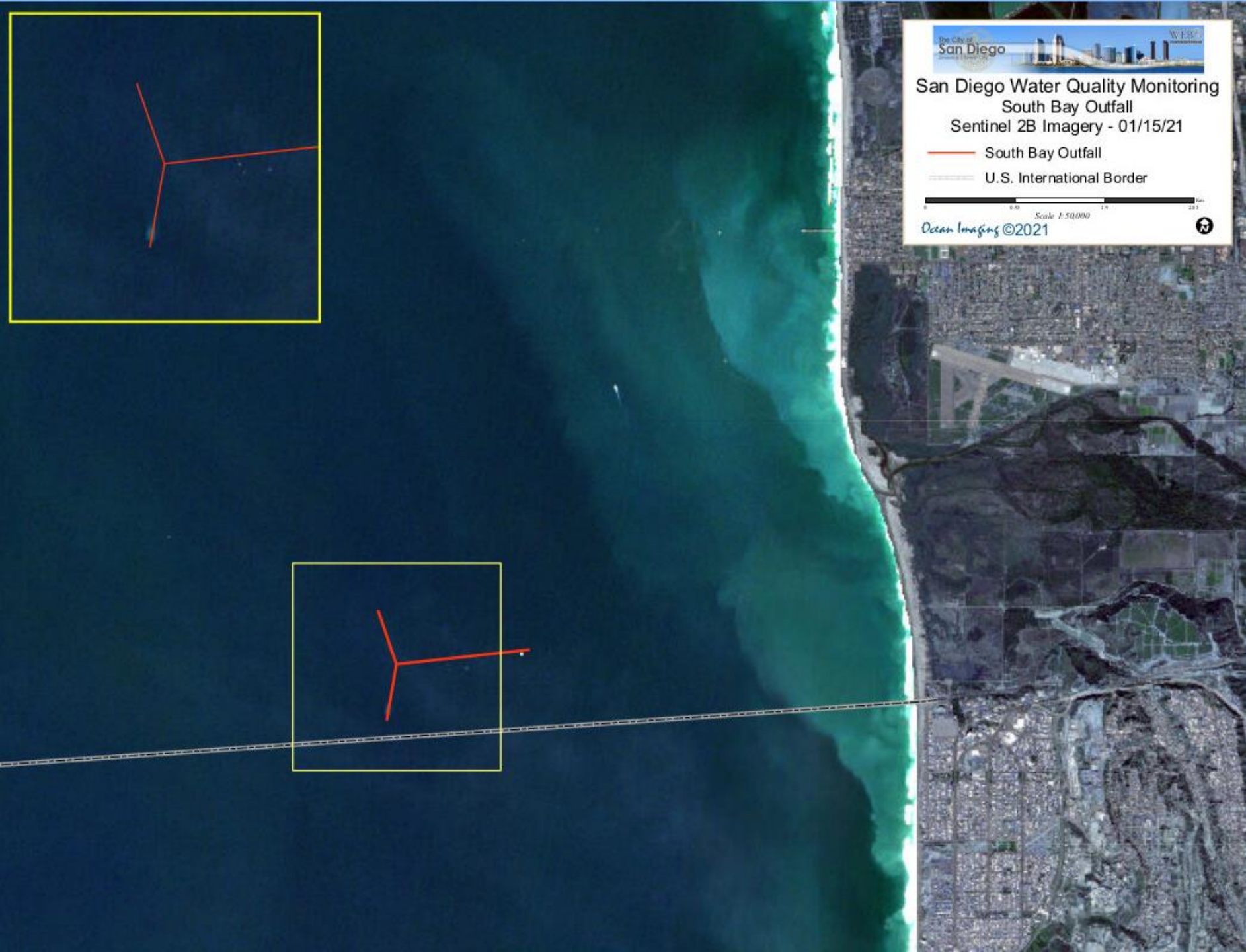


Sentinel 2 acquisition time: 10:37:31 AM PST

SPOT 6/7 acquisition time: 10:23:43 AM PST

Sentinel 2A January 15, 2021

Acquisition time: 10:27:19 AM PST



SPOT 6/7 January 17, 2021

Acquisition time: 9:53:57 AM PST



San Diego Water Quality Monitoring
South Bay Outfall
Spot 6/7 Imagery - 01/17/2021

— South Bay Outfall
--- U.S. International Border

Scale 1:50,000
Ocean Imaging 2021

