RWI SITREP 020 — Morning pickup — interpreted changes and news comparison · REVISION 2

Observation windows: 2026-10-29T18:52:32+00:00 to 2026-10-30T18:52:32+00:00. Source: retained satellite pickup manifests and actual imagery quicklooks. Evidence-bearing technical revision — analyst visual confirmation outstanding. Produced automatically; no unverified sighting is reported as an incident.

REPORTER LEADS — things in our data that no public reporting explains yet. Leads, not findings: each needs a reporter to confirm or kill it.

No NEW optical imagery lead survived paired-scene visual and news review in this sampled set. Existing unresolved leads from earlier SITREPs remain active and must be carried separately.

1. Bottom line and acquisition status

218 site entries; 70 satellite acquisition records, 38 marked usable by the collection pipeline; 55 sites with verified local quicklook pixels and 55 retained raw GeoTIFF crops.

Data quality: 0 per-site collection errors; 4 FIRMS source-feed errors. A feed error is NOT a negative thermal observation.

Thermal: 0 attributed FIRMS pixels in the stored manifests; overlaps may count the same source more than once. These counts are not verified fires, strikes, or military events.

Interpretation: Image-change scores are unreviewed algorithmic candidates. These figures show real retrieved pixels but do not establish an operational change.

Full site-by-site collection table: **COVERAGE.csv**; every source, hash and limitation: **EVIDENCE-INDEX.json**.

2. Image interpretation and news correlation

The pipeline compares original co-clear red/NIR pixels across matched Sentinel-2 captures, separates broad radiometric and snow change from localized coherent clusters, then consults dated public reporting. Reported context is not automatically a confirmed explanation.

Al Udeid Air Base (US-Qatari) — NO DEFENSIBLE STRUCTURAL CHANGE. 25 Oct and 30 Oct panels show substantially matching runway, taxiway, apron and facility outlines. Marked difference in bare-ground tone and fine texture, without a confidently identifiable new structure, aircraft count change or damaged feature at 10 m. Independent contrast stretching and broad scene radiometry can produce large apparent difference; inspect raw reflectance before treating the 0.5355 score as physical change. Raw change 0.5448; median-adjusted 0.1432; snow fraction delta 0.0. Assessment: not_a_lead.

News assessment: February imagery reporting and October regional posture reporting are context, not a match to a verified 30 October feature.
Visual confidence: moderate for dismissing the numeric score as a structural event; low for individual vehicle changes. **Recommended action:** No new imagery lead; check exact-coregistered pixels and a follow-on pass only if independent corroboration appears
Reporting: Reuters, 2026-02-10: US used mobile launchers for missiles at Qatar base as Iran tensions rose, satellite pictures show. historical_context. Earlier aircraft/air defence disposition reported; not contemporaneous proof of October 30 imagery change.
https://www.reuters.com/business/media-telecom/us-used-mobile-launchers-missiles-qatar-base-iran-tensions-rose-satellite-2026-02-10/
Reporting: Independent OSINT digest citing other reporting, 2026-10-29: Middle East base hardening and changes in regional military posture. contemporaneous_context. Relevance to the base; does not establish which pixels changed or why.
https://icbrief.org/a/digest/2026-10-29-0012/

Ramstein Air Base — NO DEFENSIBLE STRUCTURAL CHANGE. 5 Oct and 30 Oct panels show broadly similar runway, apron and built footprint. A bright localized cloud is visible to the northwest in the newer scene; no confidently attributable new building, aircraft relocation or exercise-specific feature is discernible at displayed scale. Small cloud, shadow, seasonal vegetation and lighting differences may produce localized reflectance clusters. Raw change 0.0381; median-adjusted 0.0356; snow fraction delta -0.0. Assessment: not_a_lead.

News assessment: Stars and Stripes reported a scheduled emergency-readiness exercise during the week, but the imagery does not corroborate or refute specific exercise activity.

Visual confidence: moderate for no obvious large change; low for individual aircraft. **Recommended action:** No new reporter lead from image alone; documented exercise is contextual and not an anomaly
Reporting: Stars and Stripes, 2026-10-26: Airmen to train for emergencies at Kaiserslautern-area bases. contemporaneous_context. Exercise is documented for week of observation; cannot explain a specific visible change without spatial match.
https://www.stripes.com/branches/air_force/2026-10-26/air-force-emergency-drills-ramstein-23265698.html

Ras Laffan LNG — CLOUD SHADOW ARTIFACT. 25 Oct reference is comparatively clear. The 30 Oct scene shows multiple bright white cumulus/cloud patches above the industrial complex, accompanied by dark shadows. Apparent localized clusters may be dominated by clouds and shadows rather than a change in fixed structures. Transient cloud/shadow contamination; scene matching and cloud masking must be improved. Raw change 0.0292; median-adjusted 0.0288; snow fraction delta 0.0. Assessment: not_a_lead.

News assessment: 29 Oct Reuters reporting confirms continuing LNG disruption and repair implications from earlier damage, not a newly verified 30 Oct visual change.
Visual confidence: high that bright patches are cloud and shadows; low for fine plant details beneath them. **Recommended action:** Reject as new imagery lead; re-collect a cloud-free matched scene before assessing repair or damage
Reporting: Reuters, 2026-10-29: QatarEnergy buys US, other LNG to hedge future Hormuz disruptions. contemporaneous_context. Reports sustained damage/repair implications and production disruption; does not independently verify a new event in October 30 image.
https://www.reuters.com/business/energy/qatarenergy-buys-us-other-lng-hedge-future-hormuz-disruptions-2026-10-29/

Zawiya — refinery, port and city — CLOUD SHADOW ARTIFACT. 23 Oct and 30 Oct coastal/city scenes show differing cloud positions and shadow patches. No clear new large fire scar or facility destruction is resolved in the comparison. Offshore points are too small to identify as particular vessels at this scale. Cloud relocation, seasonal land contrast, coastline/water tonal difference. Raw change 0.014; median-adjusted 0.0141; snow fraction delta 0.0. Assessment: not_a_lead.

News assessment: Reuters August refinery attacks are historical context and cannot establish a new 30 Oct incident.
Visual confidence: moderate for identifying cloud/shadow differences; low for fine facility change. **Recommended action:** No 30 Oct strike lead from these optical images; use FIRMS and radar only when those feeds have valid observations
Reporting: Reuters, 2026-08-11: Libya's NOC says Zawiya refinery may halt operations after attacks. historical_context. August attacks constitute history, not evidence of a new October 30 strike.
https://theprint.in/world/libyas-noc-says-zawiya-refinery-may-halt-operations-after-attacks/3011799/

Engels-2 Air Base — NO DEFENSIBLE STRUCTURAL CHANGE. 28 Oct and 30 Oct images show no obvious large disruption of runway geometry, shelters, taxiways or aprons. Small bright features may differ but cannot be assigned to specific aircraft or damage at the display resolution. Minor radiometry/lighting/vegetation change and ordinary movable objects; requires higher-resolution or matched sensor corroboration. Raw change 0.0121; median-adjusted 0.0121; snow fraction delta 0.0. Assessment: not_a_lead.

News assessment: August Ukrainian service claims regarding damage are not contemporaneous evidence for the 30 Oct difference.
Visual confidence: moderate against a major visible new change; low for individual aircraft. **Recommended action:** Do not elevate the 0.0126 score to an incident lead without matching high-resolution frames and event evidence
Reporting: Security Service of Ukraine, 2026-08-28: SSU claims a Tu-95MS hit at Engels airfield. historical_claim. Party claim from August; no independent connection to October 30 pixels.
https://ssu.gov.ua/en/novyny/sbu-urazyla-cherhovyi-stratehichnyi-bombarduvalnyk-tu95ms-na-viiskovomu-aerodromi-enhels

Abqaiq oil processing — NO MATERIAL VISIBLE CHANGE. 28 Oct and 30 Oct images display the same broad industrial configuration and surrounding surface patterns. No material visual anomaly established. Minor difference in contrast, viewing or lighting conditions. Raw change 0.0014; median-adjusted 0.0002; snow fraction delta 0.0. Assessment: not_a_lead.

News assessment: No site-specific same-window source examined that changes this assessment.
Visual confidence: moderate. **Recommended action:** No new image lead
No manually reviewed contemporaneous article was linked in this audit. This is not proof of no news coverage.

Al-Watiya (Uqba bin Nafi) Air Base — VISUAL REVIEW MISSING. Not included in side-by-side reviewer set; algorithmic localized classification alone is insufficient. Unresolved Raw change 0.0103; median-adjusted 0.01; snow fraction delta 0.0. Assessment: collection_task.

News assessment: No same-window image-linked source validated.
Visual confidence: not assessed. **Recommended action:** Review matched raw frames before suggesting a lead
No manually reviewed contemporaneous article was linked in this audit. This is not proof of no news coverage.

Natanz enrichment site — VISUAL REVIEW MISSING. No side-by-side visual review; algorithm reports near-zero material change, but small features cannot be excluded. Not assessed Raw change 0.0001; median-adjusted 0.0001; snow fraction delta 0.0. Assessment: not_a_lead.

News assessment: Not independently correlated in this pass.
Visual confidence: low. **Recommended action:** No lead from near-zero score; follow regular watch
No manually reviewed contemporaneous article was linked in this audit. This is not proof of no news coverage.

Full candidate measurements, classification and source links: **INTERPRETATION.json**. No news headline alone confirms a satellite feature.

2. Live questions and verification tasks

Which apparent pixel differences persist in independently matched acquisitions? Which are attributable to snow, cloud, tide, seasonal lighting or image-registration issues? Were FIRMS feeds available during every required window? Do any candidate sites warrant follow-up collection? None is answered by one image alone.

3. Ranked unverified image-change candidates

Site	Score	Pass UTC	Status
Al Udeid Air Base (US-Qatari)	0.535	2026-10-30T07:22	PARTIAL / needs visual check
Ramstein Air Base	0.040	2026-10-30T10:37	PARTIAL / needs visual check
Ras Laffan LNG	0.033	2026-10-30T07:22	PARTIAL / needs visual check
Zawiya — refinery, port and city	0.020	2026-10-30T10:01	PARTIAL / needs visual check
Engels-2 Air Base	0.013	2026-10-30T08:15	PARTIAL / needs visual check
Engels-2 Air Base	0.012	2026-10-30T08:05	PARTIAL / needs visual check
Abqaiq oil processing	0.012	2026-10-30T07:22	PARTIAL / needs visual check

4. Provenance and uncertainty

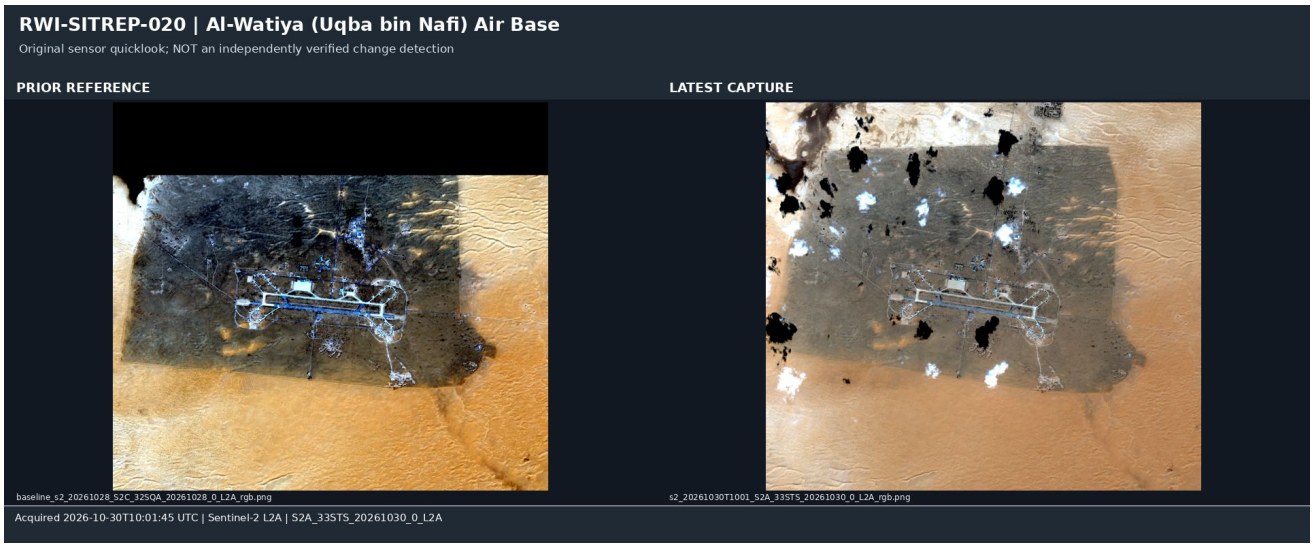
Captured manifest windows: 2026-10-29T18:52:32+00:00–2026-10-30T18:52:32+00:00. Acquisition IDs, original URLs recoverable through the cited sensor catalogues, exact per-site asset files and SHA-256 are listed in EVIDENCE-INDEX.json. Raw TIFFs locally retained for 55 selected passes; other original products are NOT retained and must be reobtained using source scene IDs.
Upstream sources: Sentinel-2 L2A (Element84 Earth Search STAC), Sentinel-1 RTC and Landsat (Microsoft Planetary Computer STAC), NASA FIRMS. The source status and sensor name for each pass are copied from the actual collection record, not presumed.

FIRMS feed errors

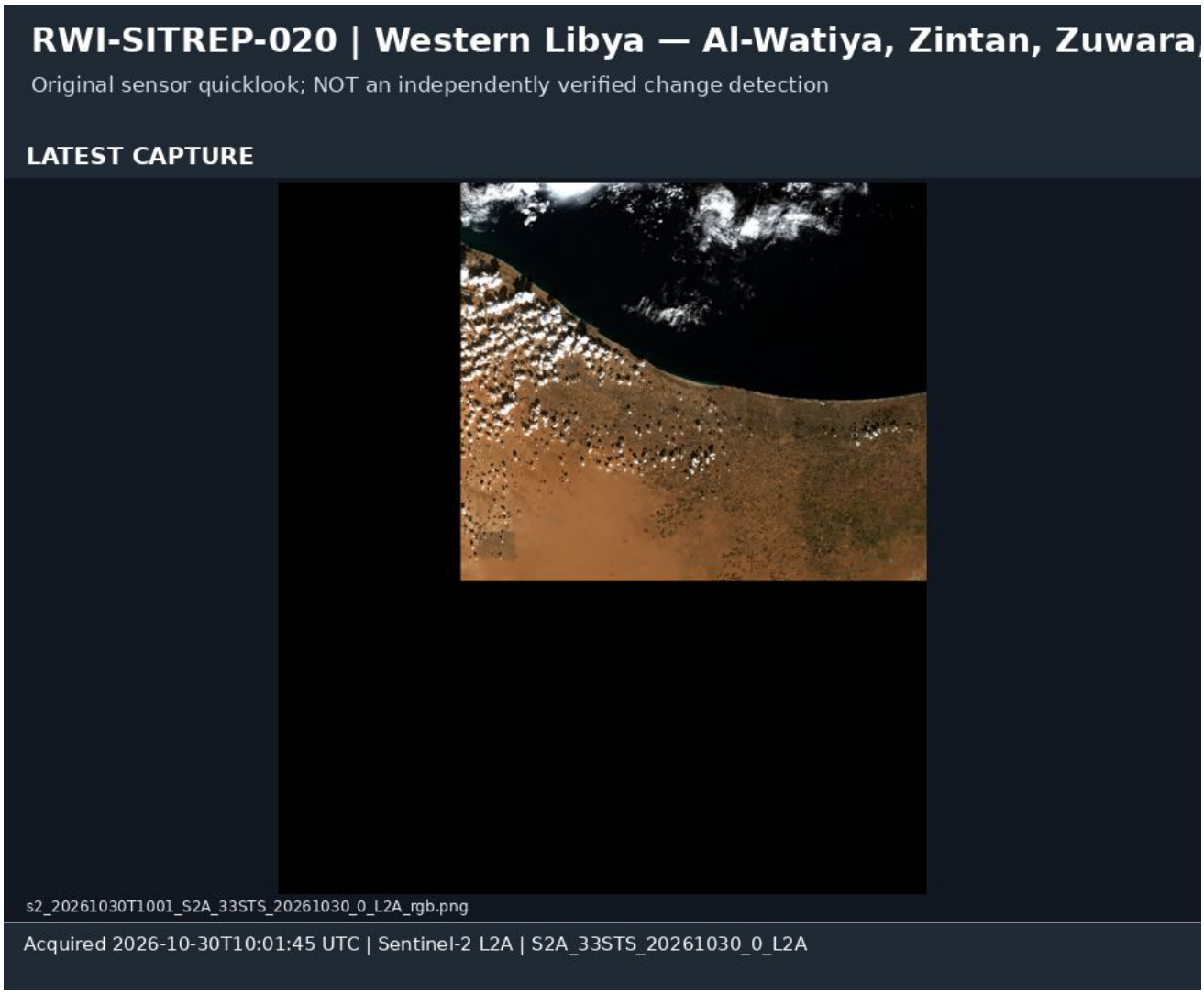
viirs_snpp: error: HTTPSConnectionPool(host='firms.modaps.eosdis.nasa.gov', port=443): Max retries exceeded with url: /data/active_fire/suomi-npp-viirs-c2/csv/SUOMI_VIIRS_C2_Global_24h.csv (Caused by NewConnectionError("HTTPSConnection(host='firms.modaps.eosdis.nasa.gov', port=443): Failed to establish a new connection: [Errno 101] Network is unreachable"))
viirs_noaa20: error: HTTPSConnectionPool(host='firms.modaps.eosdis.nasa.gov', port=443): Max retries exceeded with url: /data/active_fire/noaa-20-viirs-c2/csv/J1_VIIRS_C2_Global_24h.csv (Caused by NewConnectionError("HTTPSConnection(host='firms.modaps.eosdis.nasa.gov', port=443): Failed to establish a new connection: [Errno 101] Network is unreachable"))
viirs_noaa21: error: HTTPSConnectionPool(host='firms.modaps.eosdis.nasa.gov', port=443): Max retries exceeded with url: /data/active_fire/noaa-21-viirs-c2/csv/J2_VIIRS_C2_Global_24h.csv (Caused by NewConnectionError("HTTPSConnection(host='firms.modaps.eosdis.nasa.gov', port=443): Failed to establish a new connection: [Errno 101] Network is unreachable"))
modis: error: HTTPSConnectionPool(host='firms.modaps.eosdis.nasa.gov', port=443): Max retries exceeded with url: /data/active_fire/modis-c6.1/csv/MODIS_C6_1_Global_24h.csv (Caused by NewConnectionError("HTTPSConnection(host='firms.modaps.eosdis.nasa.gov', port=443): Failed to establish a new connection: [Errno 101] Network is unreachable"))

5. Annotated image plate annex

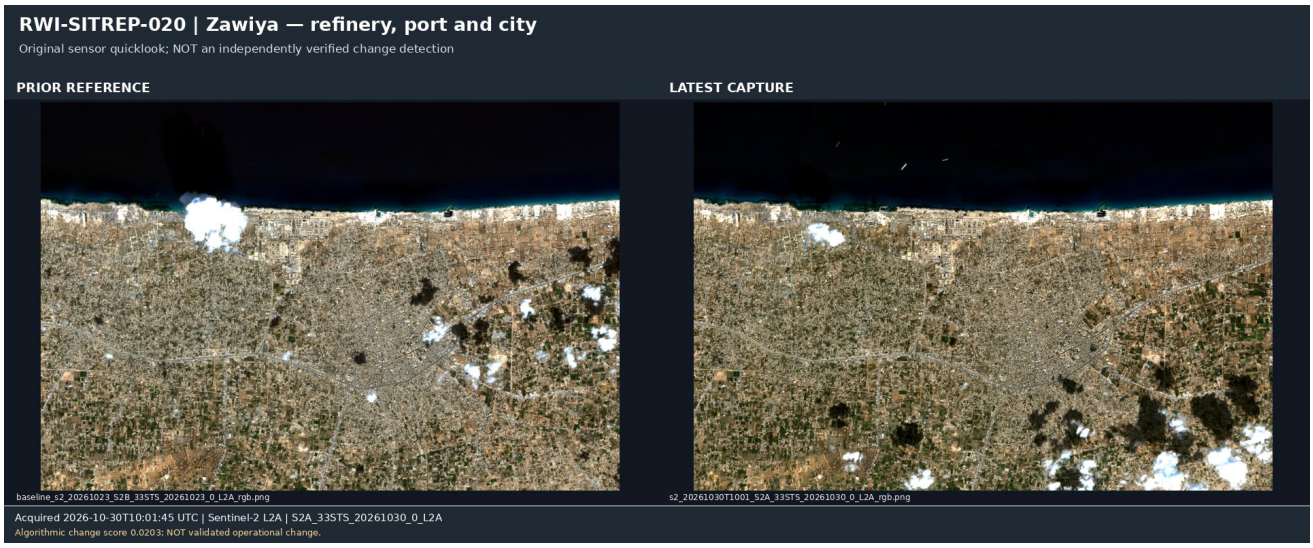
Each plate below contains actual acquisition quicklook pixels, optional prior-reference panel, acquisition label and scene ID. Annotations identify what was captured; none labels activity that was not independently established.



P001: Al-Watiya (Uqba bin Nafi) Air Base — Source S2A_33STS_20261030_0_L2A; most recent available selected by quality. No visual event finding asserted.



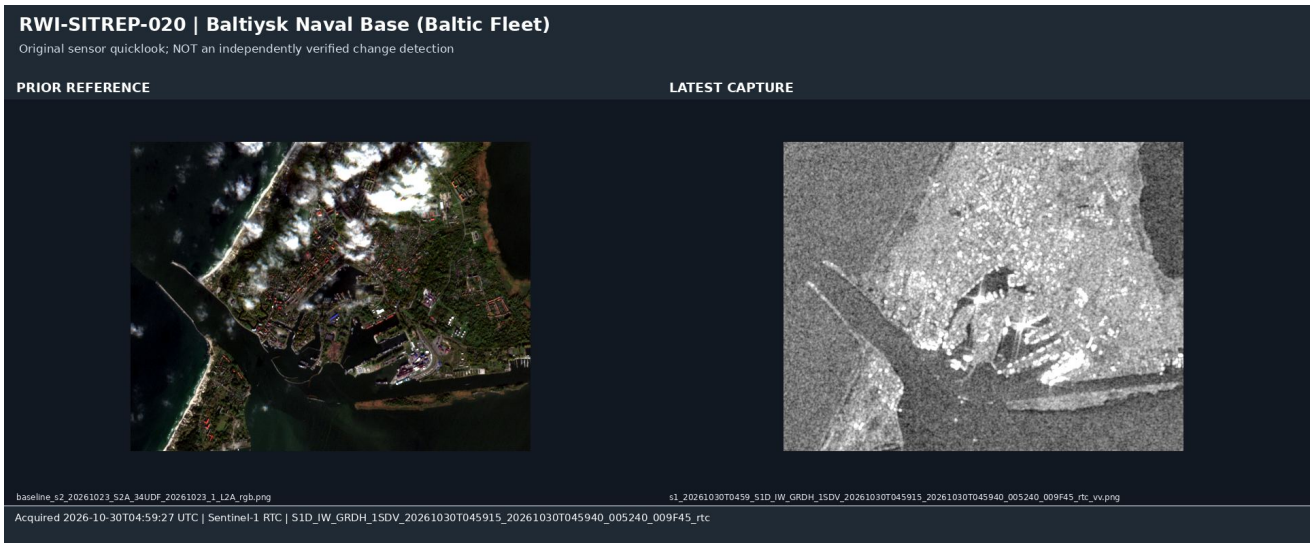
P002: Western Libya — Al-Watiya, Zintan, Zuwara, Sabratha, Zawiya, Ras Ajdir — Source S2A_33STS_20261030_0_L2A; most recent available selected by quality. No visual event finding asserted.



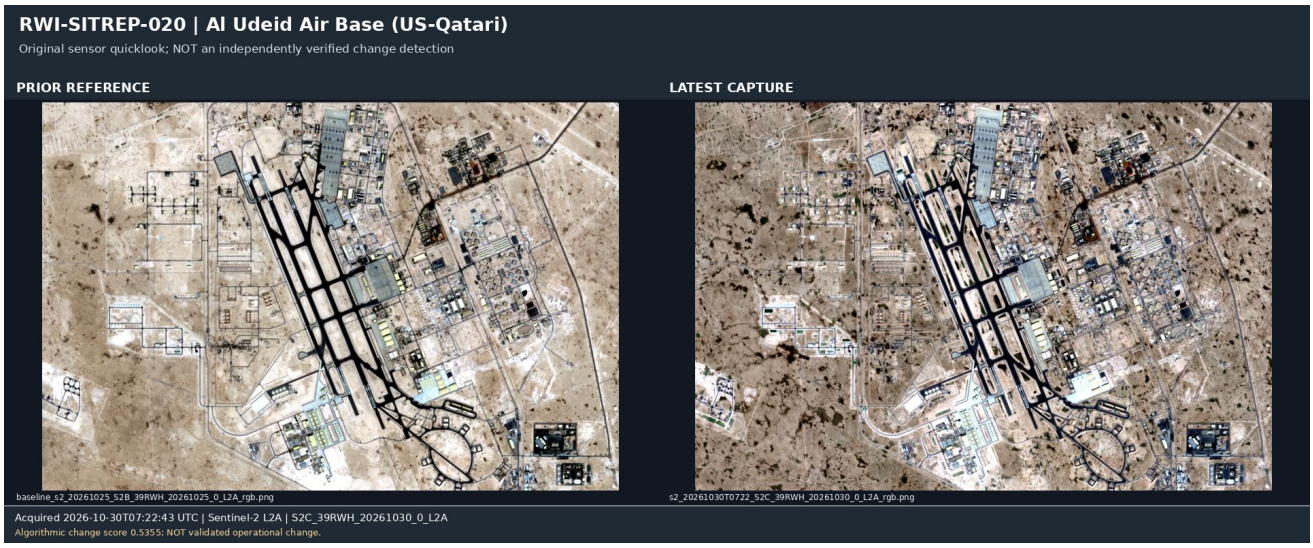
P003: Zawiya — refinery, port and city — Source S2A_33STS_20261030_0_L2A; most recent available selected by quality. No visual event finding asserted.



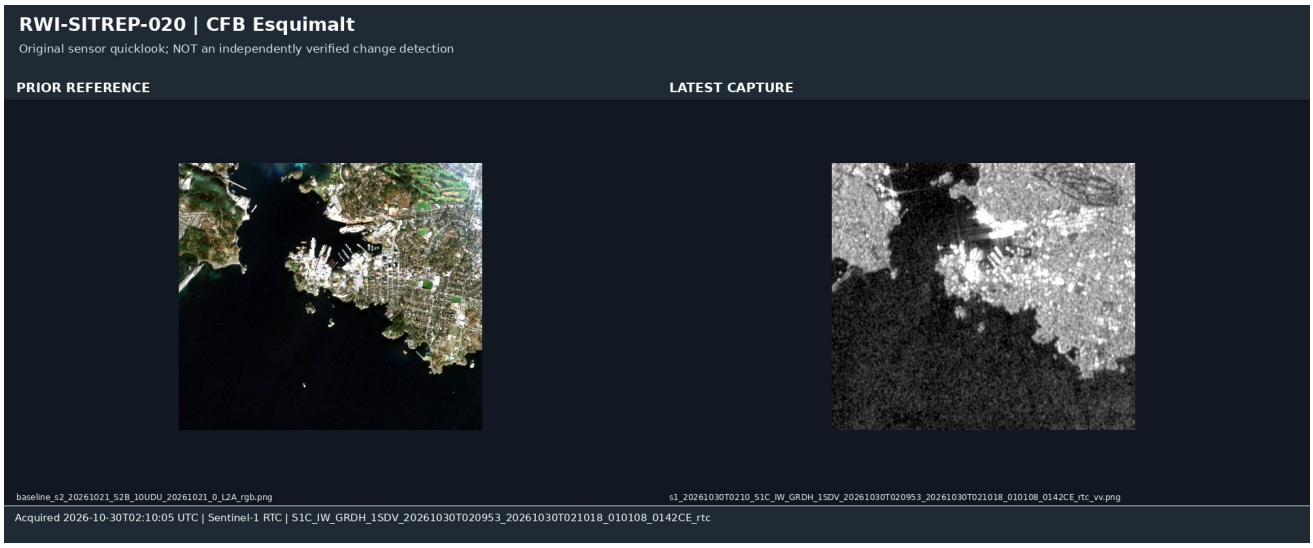
P004: Engels-2 Air Base — Source S2A_38UNC_20261030_1_L2A; most recent available selected by quality. No visual event finding asserted.



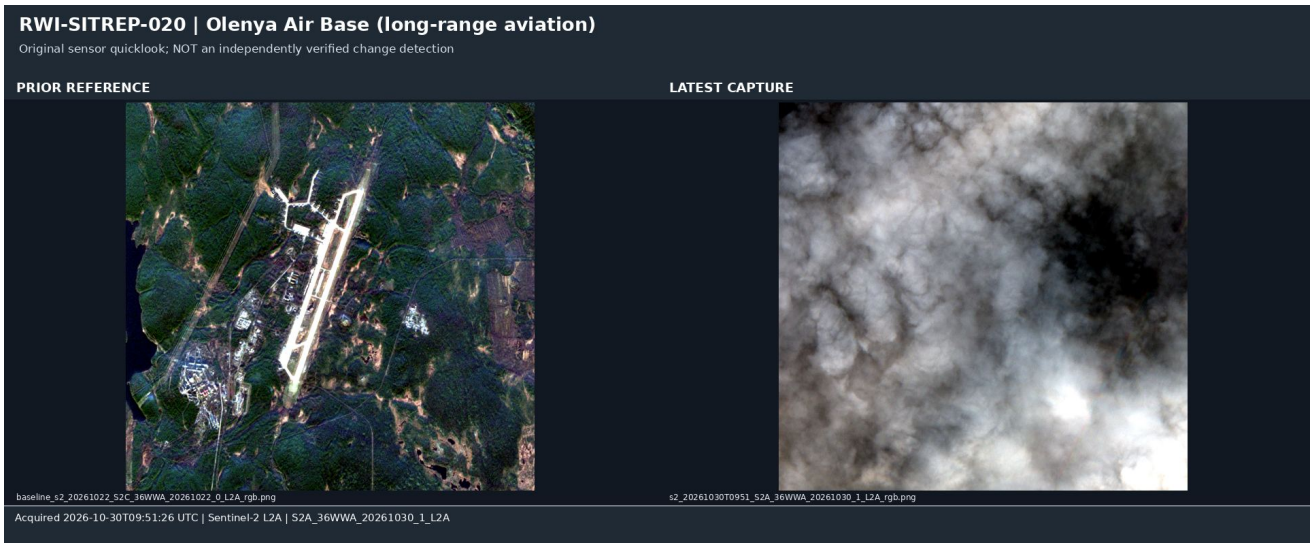
P005: Baltiysk Naval Base (Baltic Fleet) — Source S1D_IW_GRDH_1SDV_20261030T045915_20261030T045940_005240_009F45_rtc; most recent available selected by quality. No visual event finding asserted.



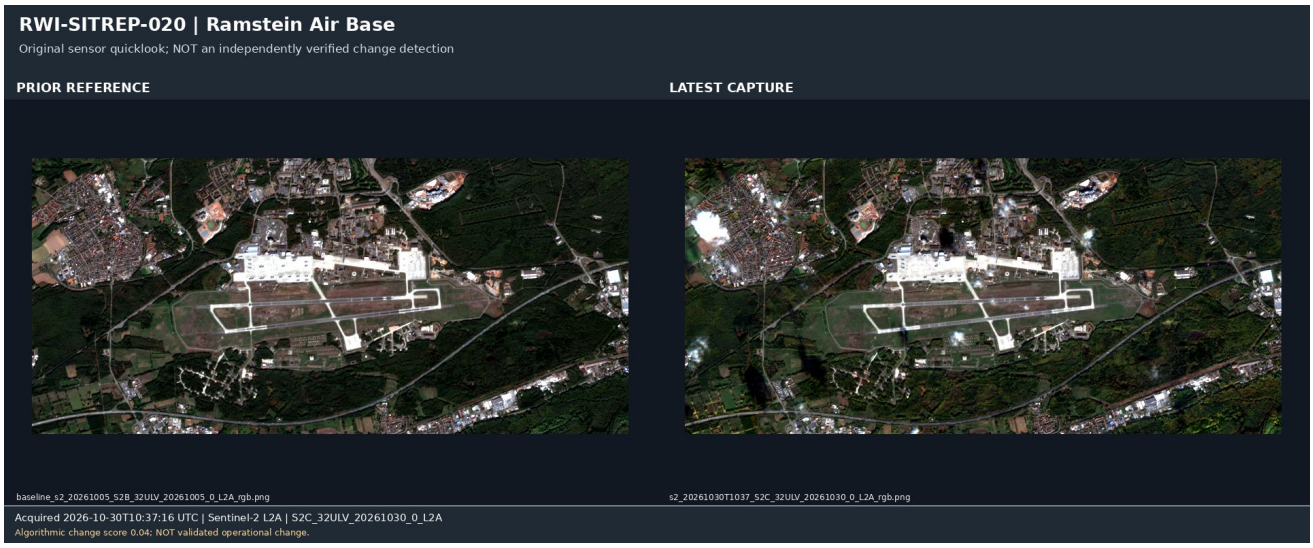
P006: Al Udeid Air Base (US-Qatari) — Source S2C_39RWH_20261030_0_L2A; most recent available selected by quality. No visual event finding asserted.



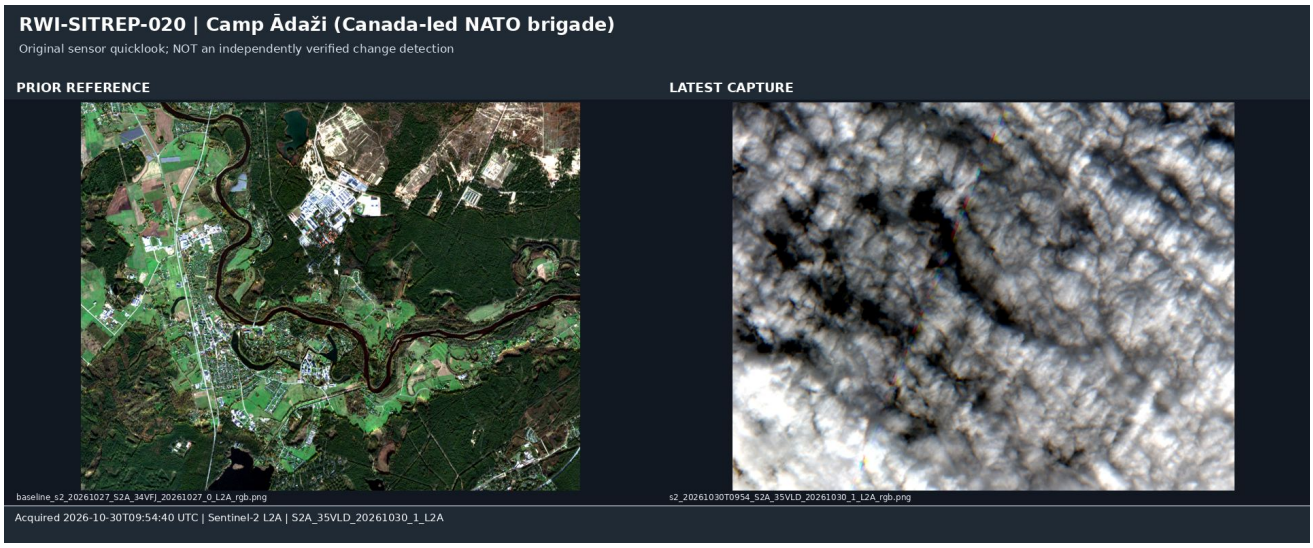
P007: CFB Esquimalt — Source S1C_IW_GRDH_1SDV_20261030T020953_20261030T021018_010108_0142CE_rtc; most recent available selected by quality. No visual event finding asserted.



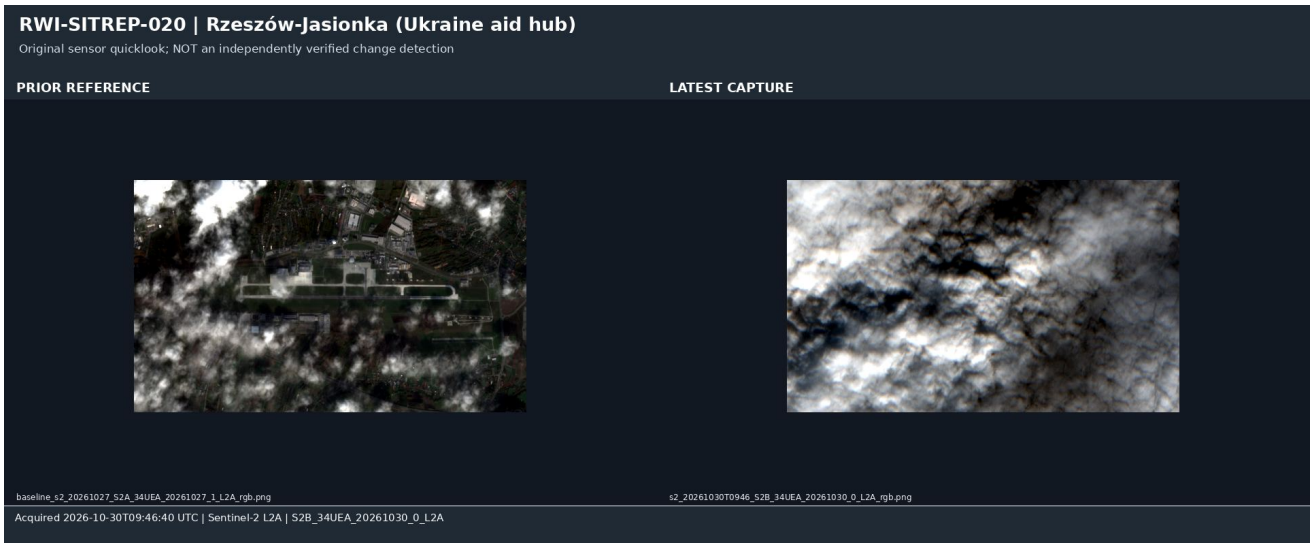
P008: Olenya Air Base (long-range aviation) — Source S2A_36WWA_20261030_1_L2A; most recent available selected by quality. No visual event finding asserted.



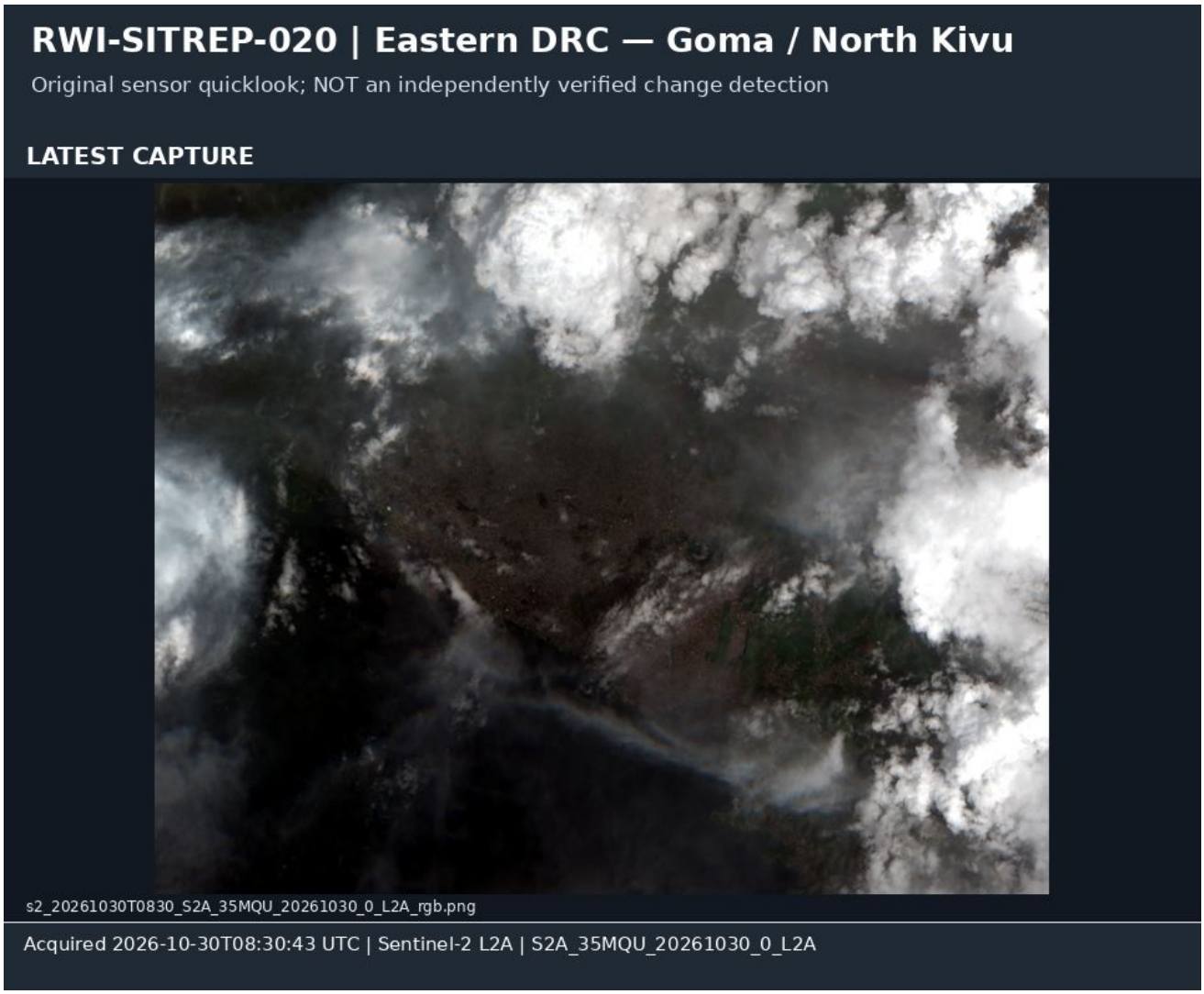
P009: Ramstein Air Base — Source S2C_32ULV_20261030_0_L2A; most recent available selected by quality. No visual event finding asserted.



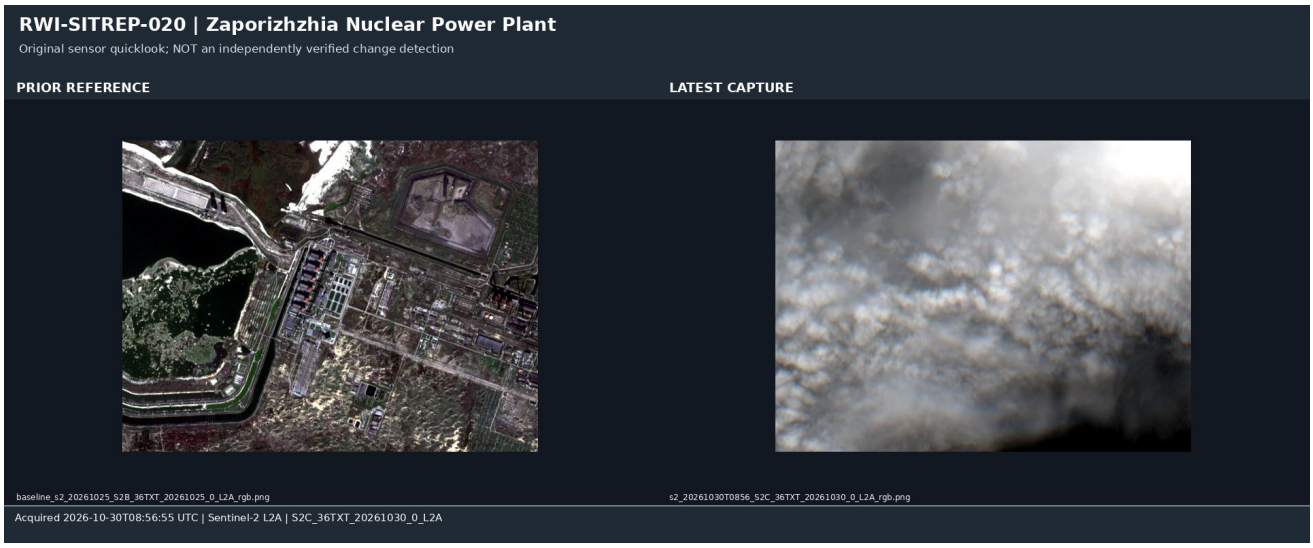
P010: Camp Ādaži (Canada-led NATO brigade) — Source S2A_35VLD_20261030_1_L2A; most recent available selected by quality. No visual event finding asserted.



P011: Rzeszów-Jasionka (Ukraine aid hub) — Source S2B_34UEA_20261030_0_L2A; most recent available selected by quality. No visual event finding asserted.



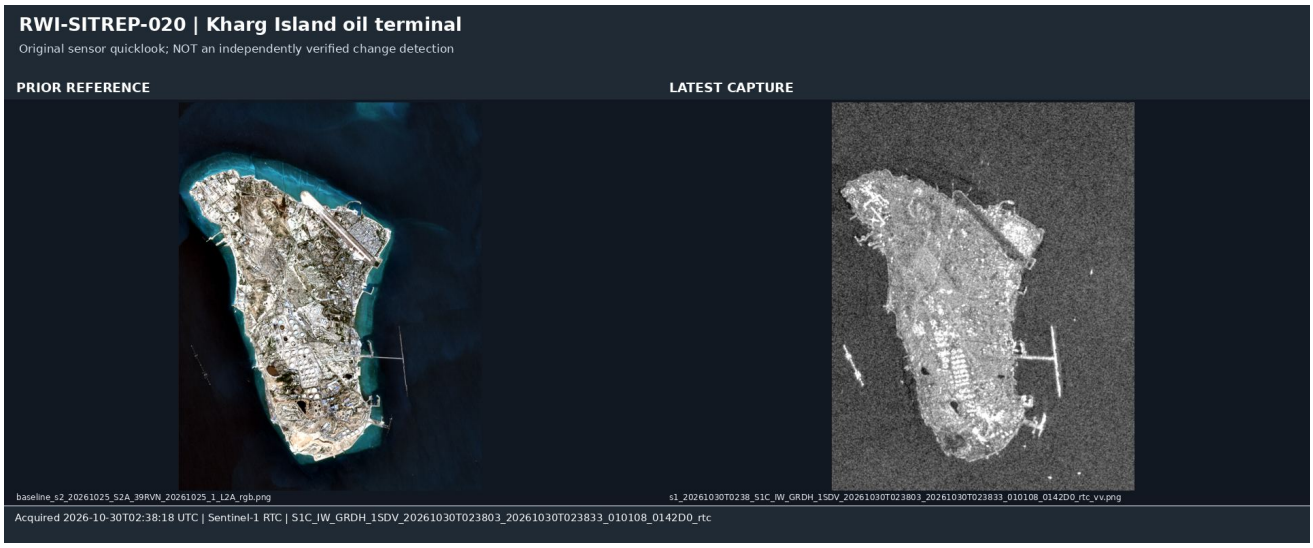
P012: Eastern DRC — Goma / North Kivu — Source S2A_35MQU_20261030_0_L2A; most recent available selected by quality. No visual event finding asserted.



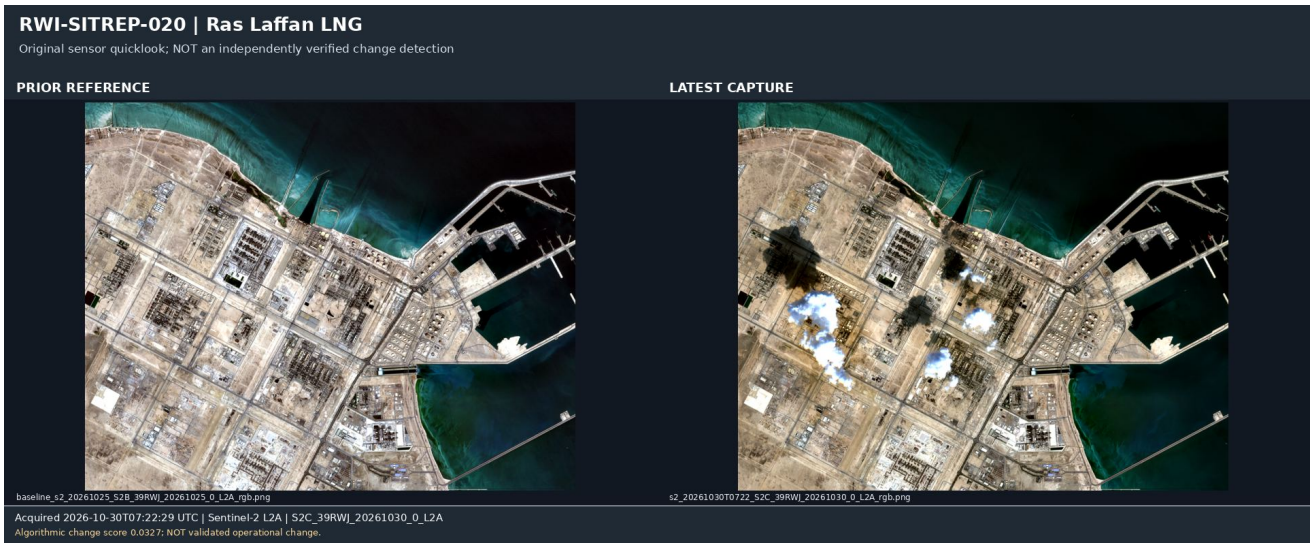
P013: Zaporizhzhia Nuclear Power Plant — Source S2C_36TXT_20261030_0_L2A; most recent available selected by quality. No visual event finding asserted.



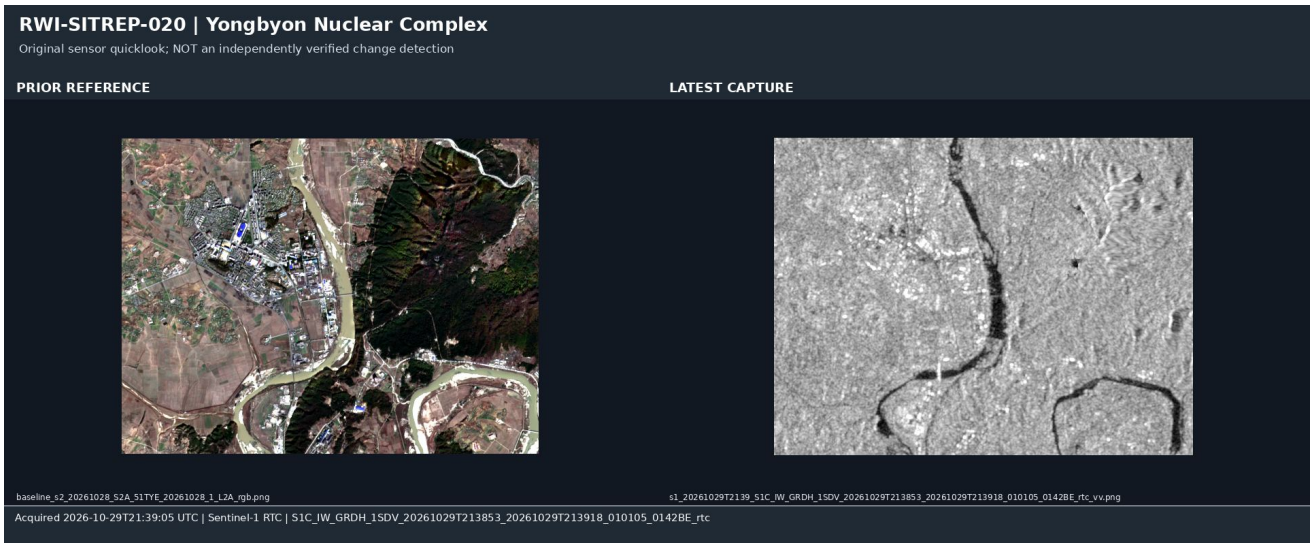
P014: Abqaiq oil processing — Source S2C_39RUJ_20261030_0_L2A; most recent available selected by quality. No visual event finding asserted.



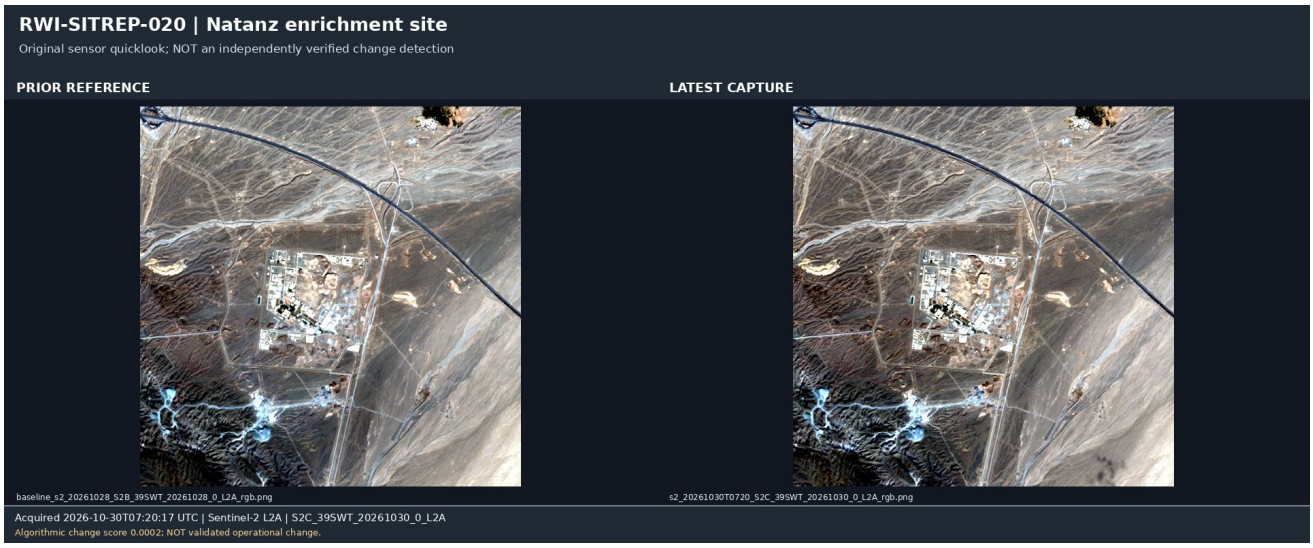
P015: Kharg Island oil terminal — Source S1C_IW_GRDH_1SDV_20261030T023803_20261030T023833_010108_0142D0_rtc; most recent available selected by quality. No visual event finding asserted.



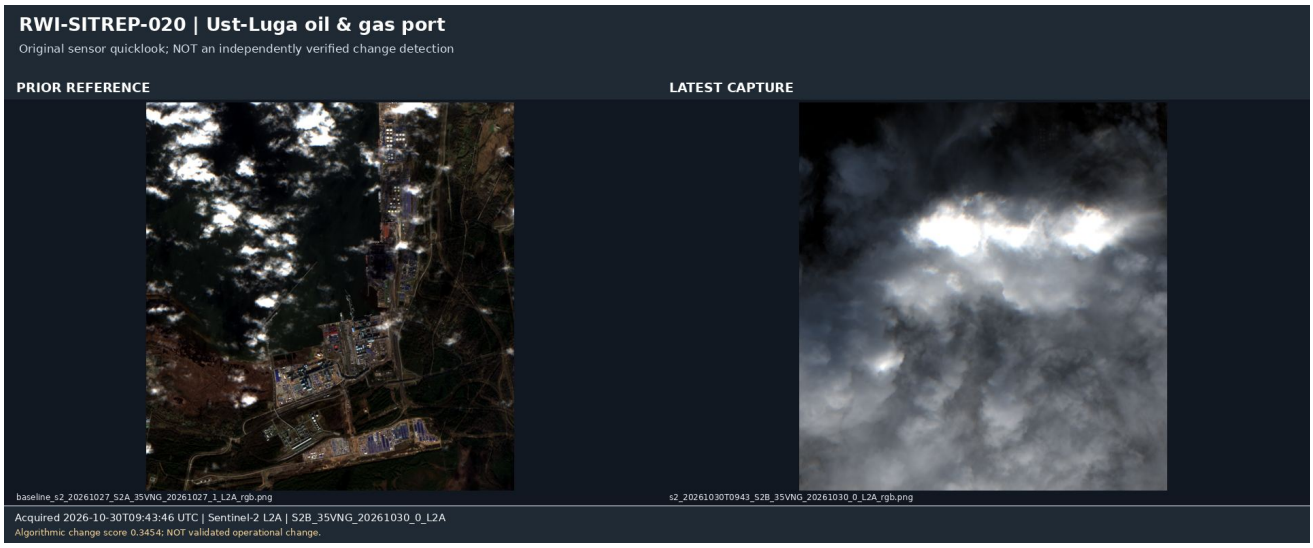
P016: Ras Laffan LNG — Source S2C_39RWJ_20261030_0_L2A; most recent available selected by quality. No visual event finding asserted.



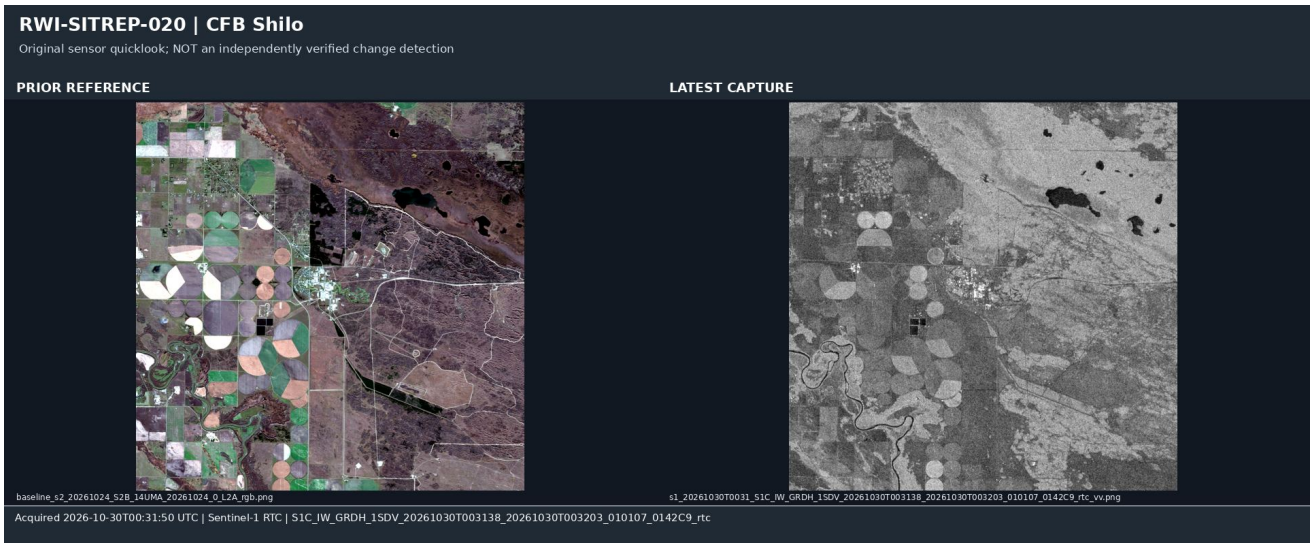
P017: Yongbyon Nuclear Complex — Source S1C_IW_GRDH_1SDV_20261029T213853_20261029T213918_010105_0142BE_rtc; most recent available selected by quality. No visual event finding asserted.



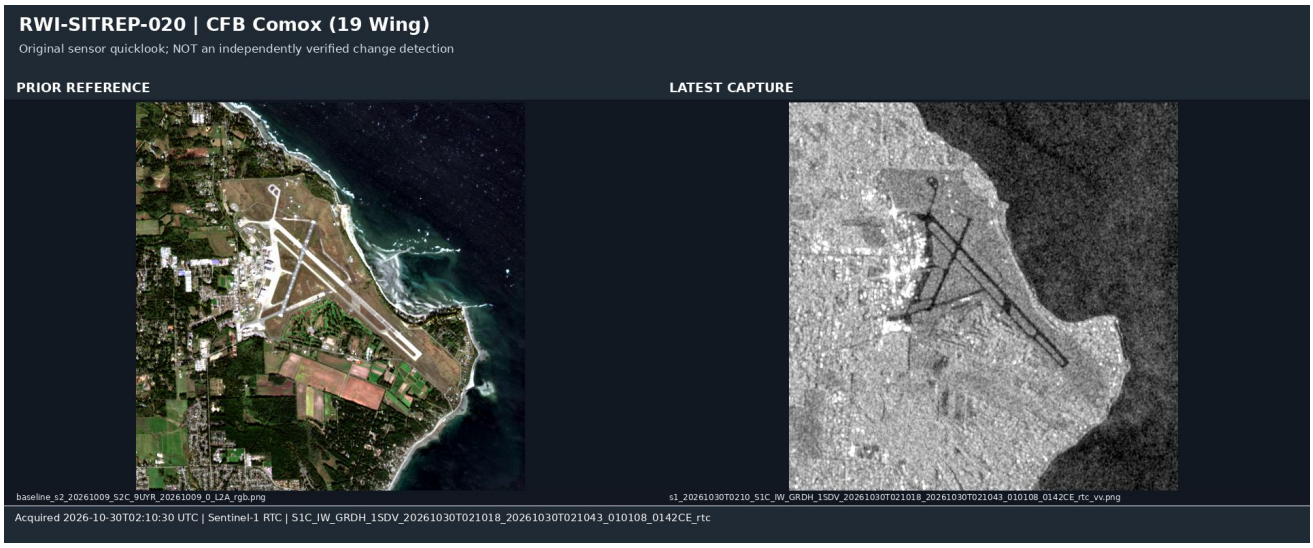
P018: Natanz enrichment site — Source S2C_39SWT_20261030_0_L2A; most recent available selected by quality. No visual event finding asserted.



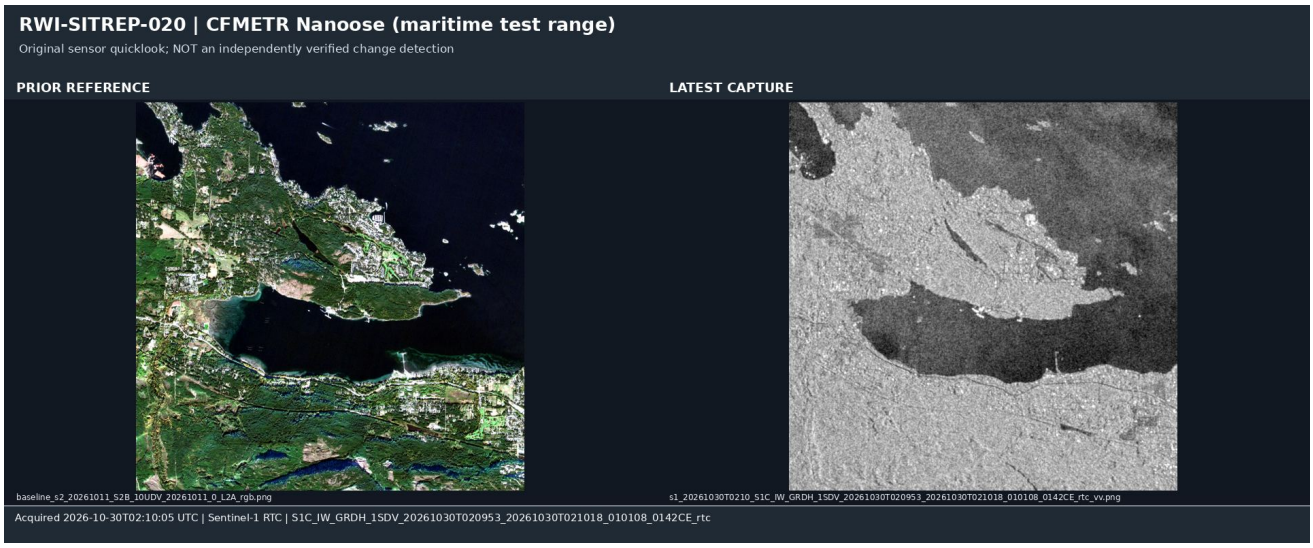
P019: Ust-Luga oil & gas port — Source S2B_35VNG_20261030_0_L2A; most recent available selected by quality. No visual event finding asserted.



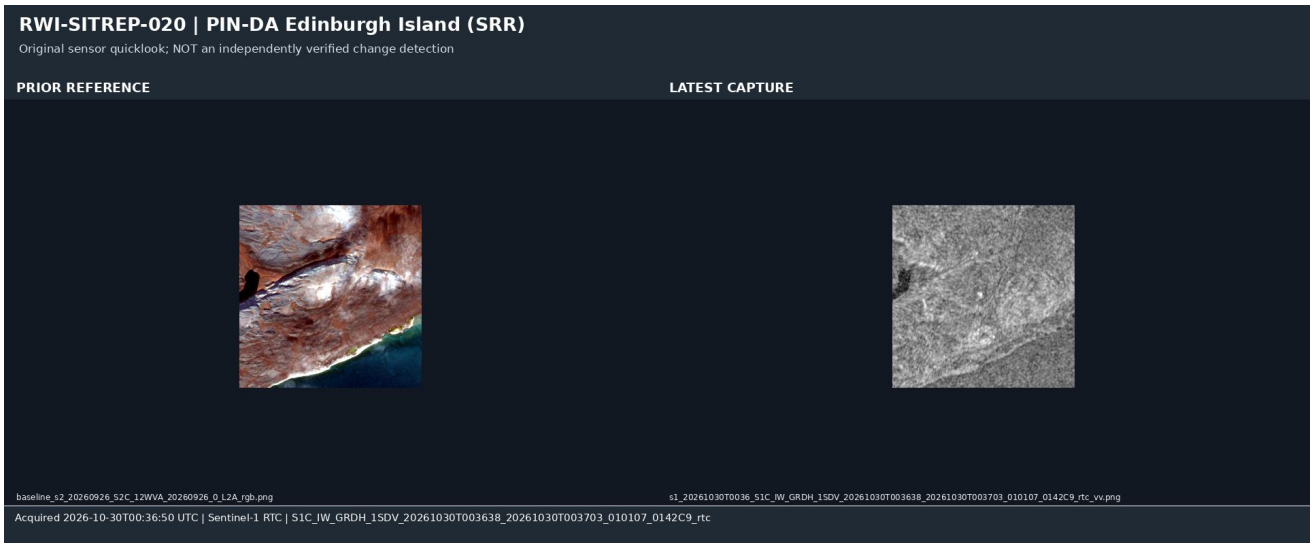
P020: CFB Shilo — Source S1C_IW_GRDH_1SDV_20261030T003138_20261030T003203_010107_0142C9_rtc; most recent available selected by quality. No visual event finding asserted.



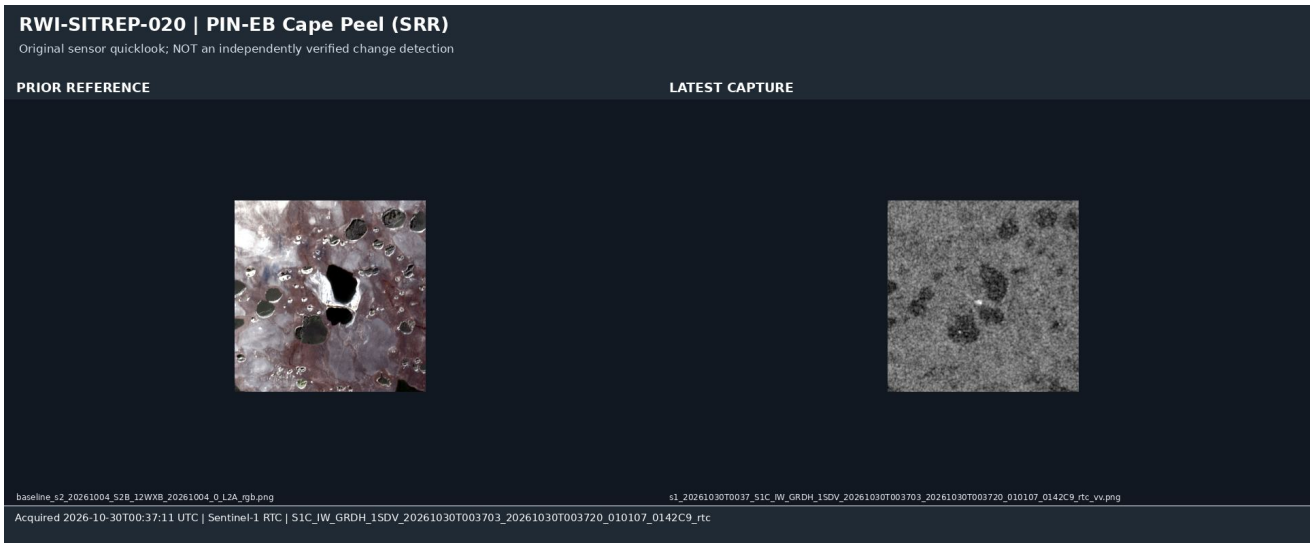
P021: CFB Comox (19 Wing) — Source S1C_IW_GRDH_1SDV_20261030T021018_20261030T021043_010108_0142CE_rtc; most recent available selected by quality. No visual event finding asserted.



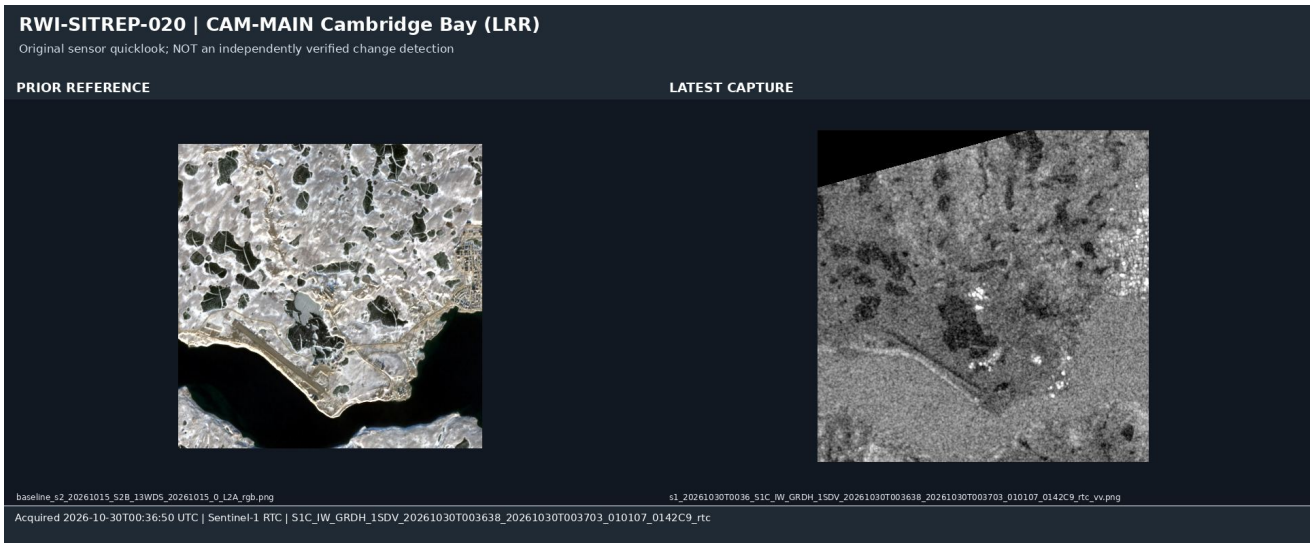
P022: CFMETR Nanoose (maritime test range) — Source S1C_IW_GRDH_1SDV_20261030T020953_20261030T021018_010108_0142CE_rtc; most recent available selected by quality. No visual event finding asserted.



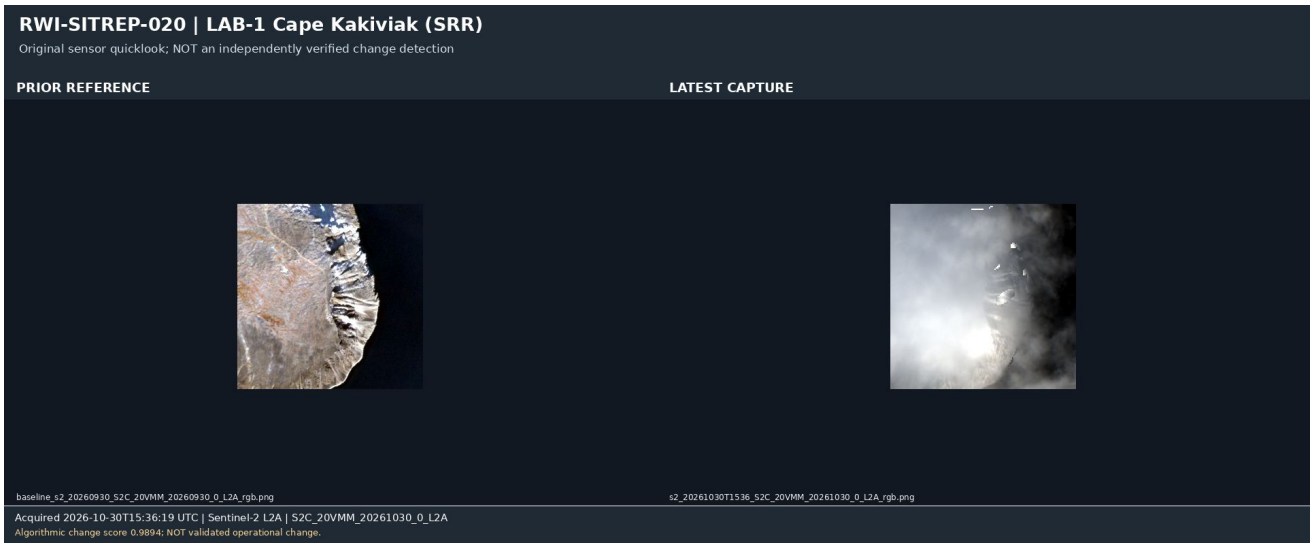
P023: PIN-DA Edinburgh Island (SRR) — Source S1C_IW_GRDH_1SDV_20261030T003638_20261030T003703_010107_0142C9_rtc; most recent available selected by quality. No visual event finding asserted.



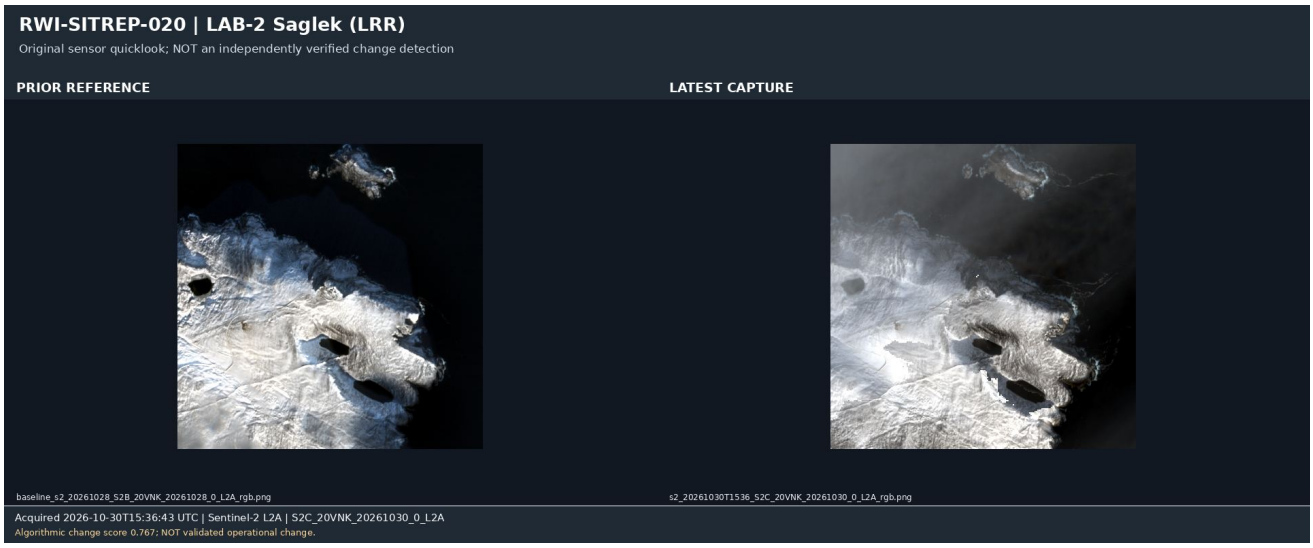
P024: PIN-EB Cape Peel (SRR) — Source S1C_IW_GRDH_1SDV_20261030T003703_20261030T003720_010107_0142C9_rtc; most recent available selected by quality. No visual event finding asserted.



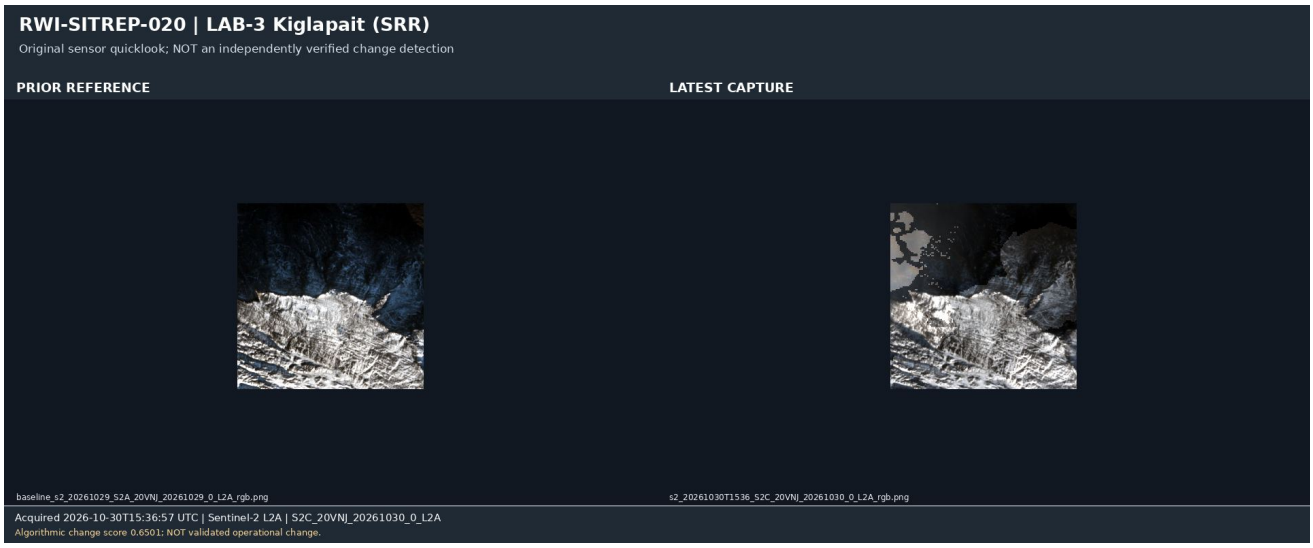
P025: CAM-MAIN Cambridge Bay (LRR) — Source S1C_IW_GRDH_1SDV_20261030T003638_20261030T003703_010107_0142C9_rtc; most recent available selected by quality. No visual event finding asserted.



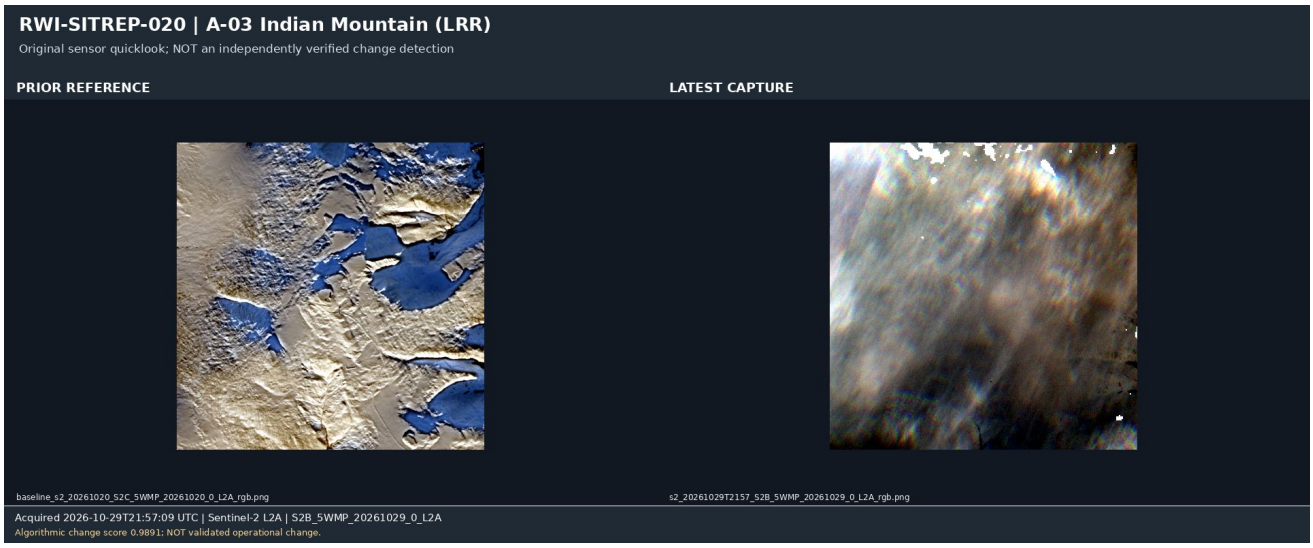
P026: LAB-1 Cape Kakiviak (SRR) — Source S2C_20VMM_20261030_0_L2A; most recent available selected by quality. No visual event finding asserted.



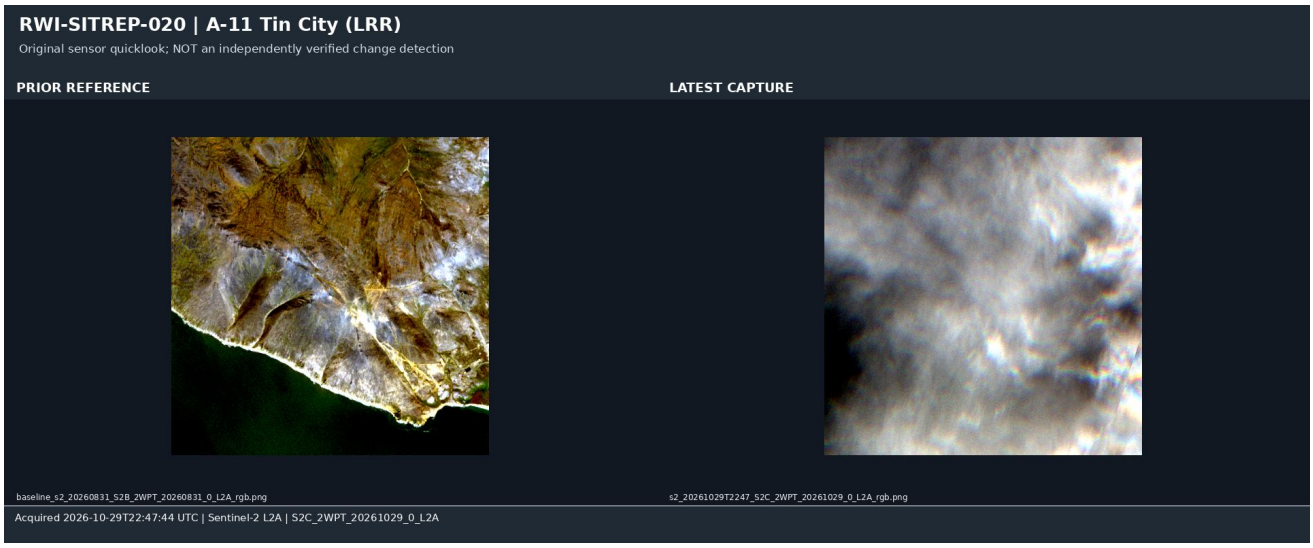
P027: LAB-2 Saglek (LRR) — Source S2C_20VNK_20261030_0_L2A; most recent available selected by quality. No visual event finding asserted.



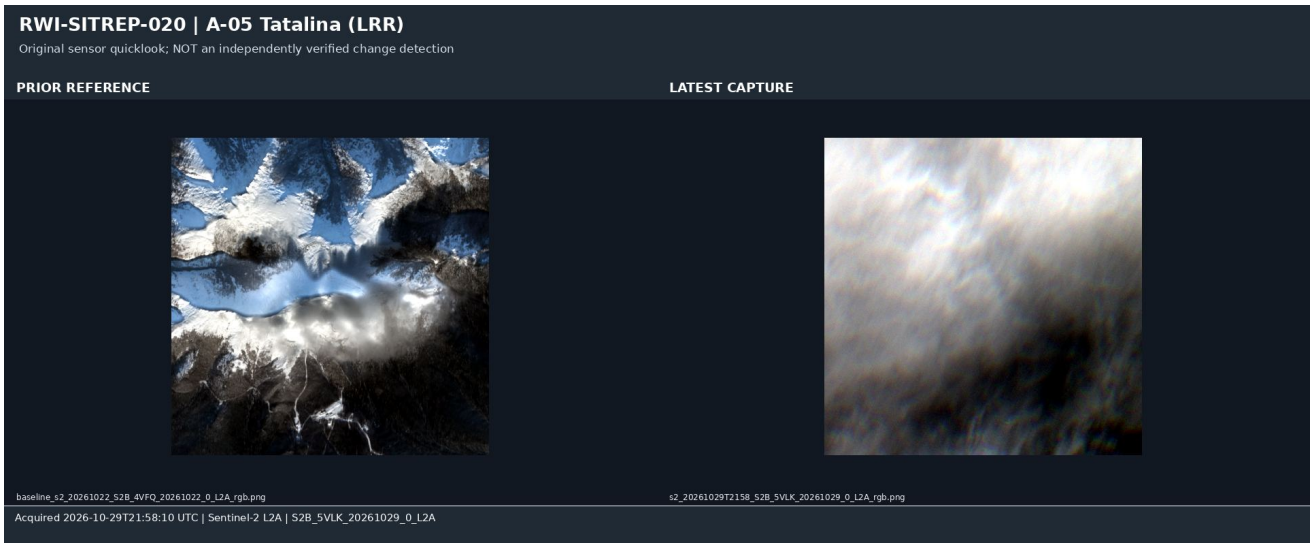
P028: LAB-3 Kiglapait (SRR) — Source S2C_20VNJ_20261030_0_L2A; most recent available selected by quality. No visual event finding asserted.



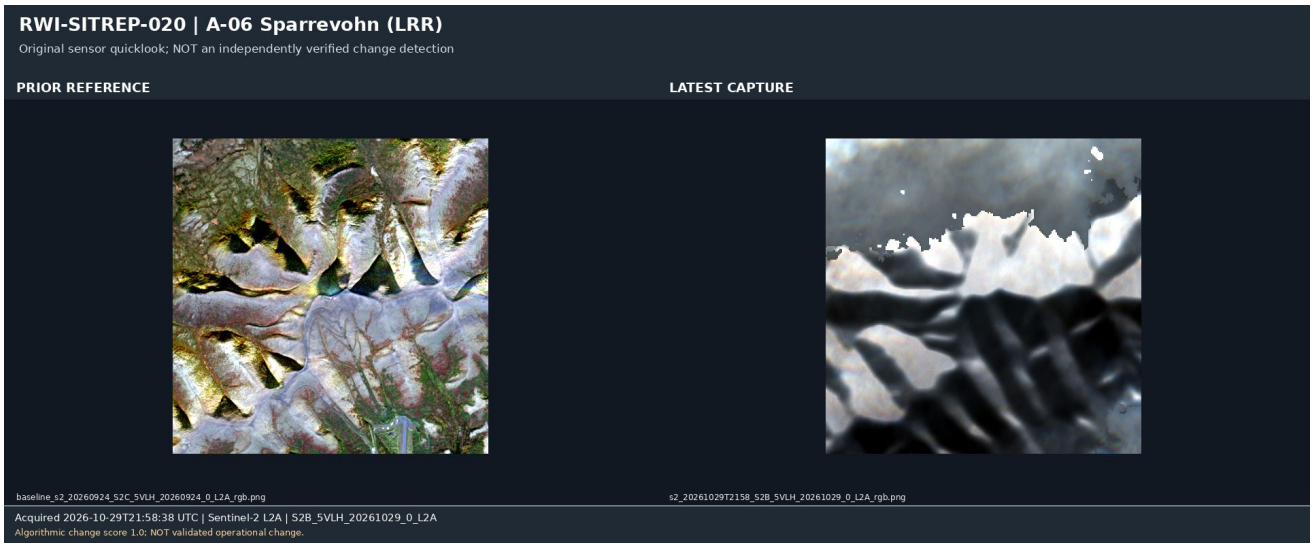
P029: A-03 Indian Mountain (LRR) — Source S2B_5WMP_20261029_0_L2A; most recent available selected by quality. No visual event finding asserted.



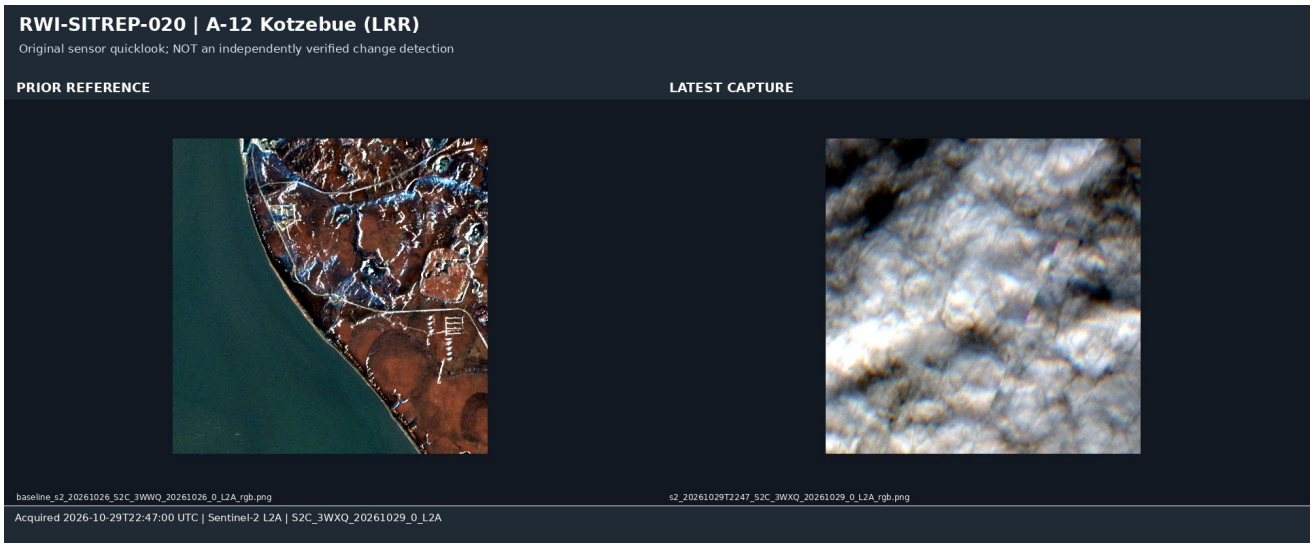
P030: A-11 Tin City (LRR) — Source S2C_2WPT_20261029_0_L2A; most recent available selected by quality. No visual event finding asserted.



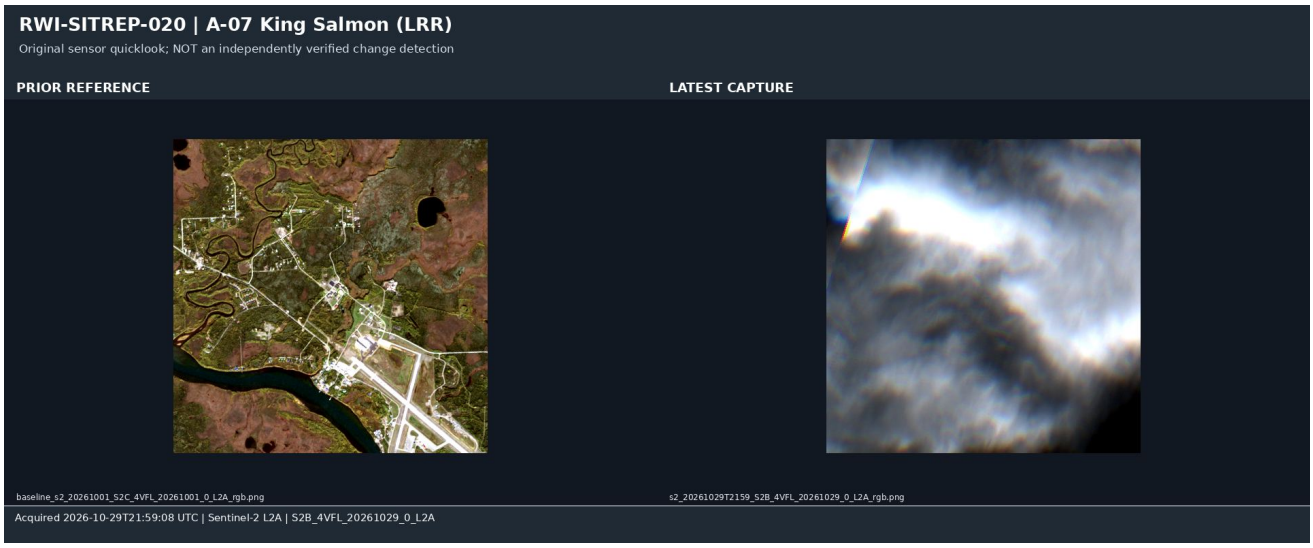
P031: A-05 Tatalina (LRR) — Source S2B_5VLK_20261029_0_L2A; most recent available selected by quality. No visual event finding asserted.



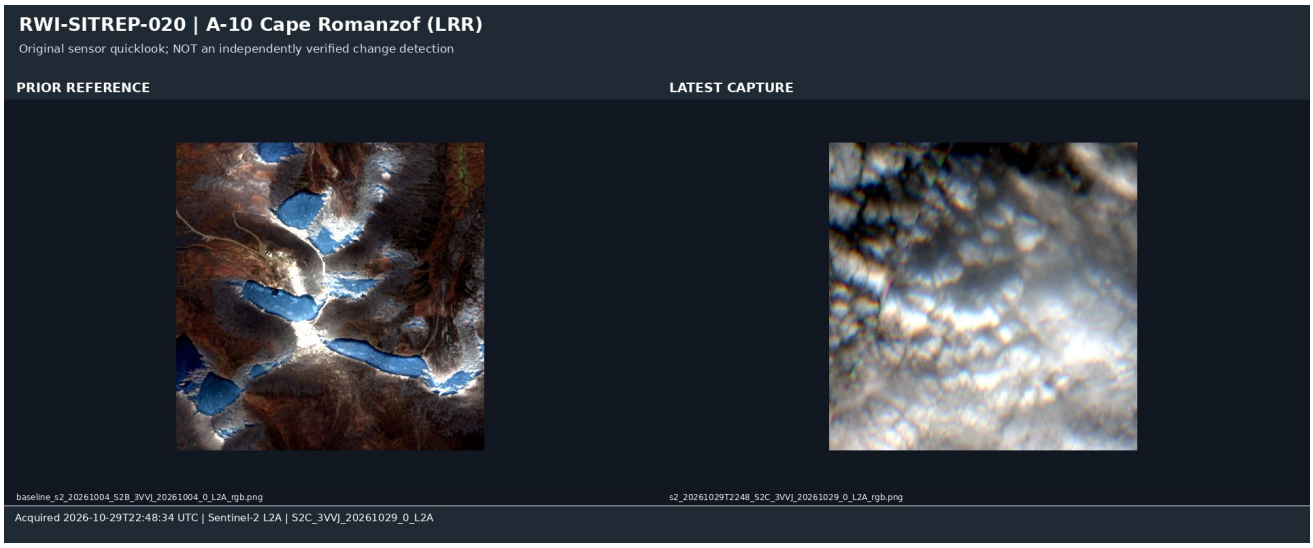
P032: A-06 Sparrevohn (LRR) — Source S2B_5VLH_20261029_0_L2A; most recent available selected by quality. No visual event finding asserted.



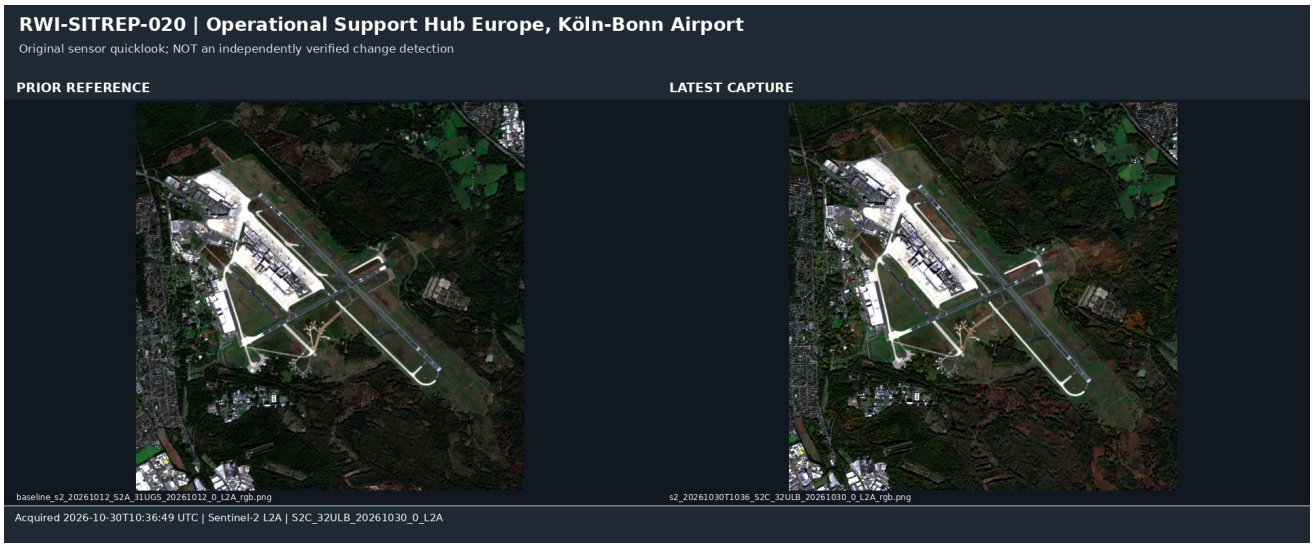
P033: A-12 Kotzebue (LRR) — Source S2C_3WXQ_20261029_0_L2A; most recent available selected by quality. No visual event finding asserted.



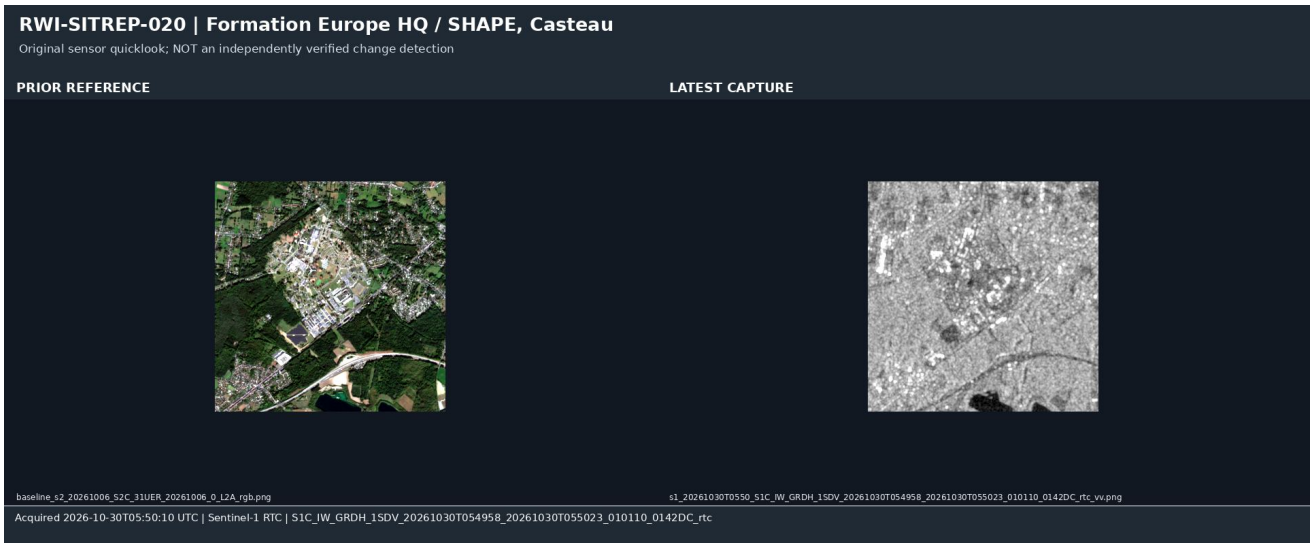
P034: A-07 King Salmon (LRR) — Source S2B_4VFL_20261029_0_L2A; most recent available selected by quality. No visual event finding asserted.



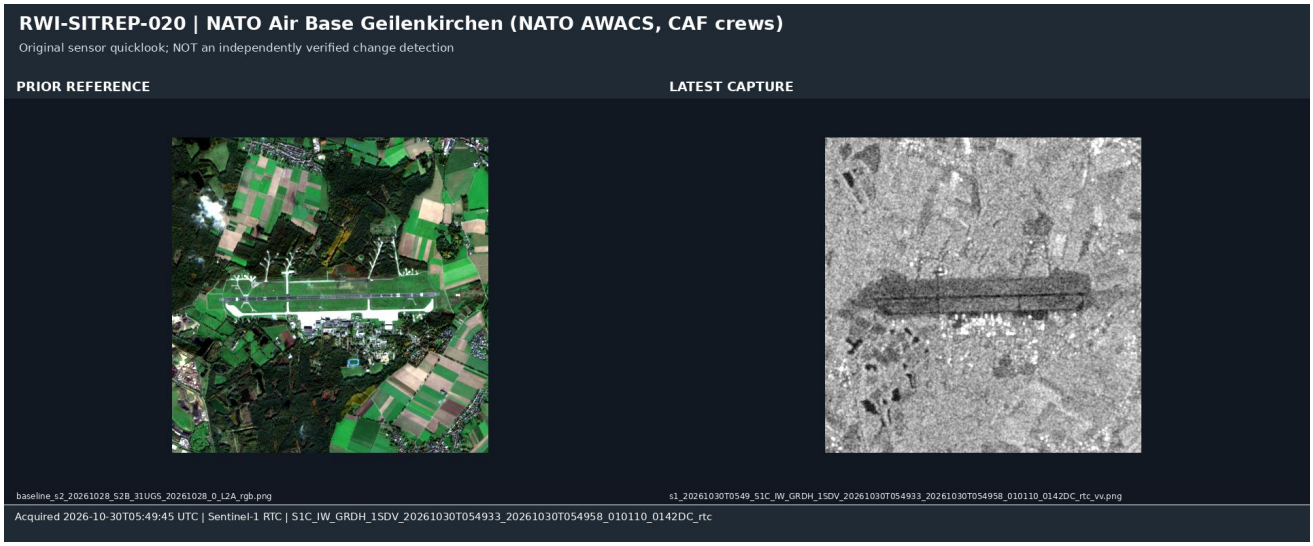
P035: A-10 Cape Romanzof (LRR) — Source S2C_3VVJ_20261029_0_L2A; most recent available selected by quality. No visual event finding asserted.



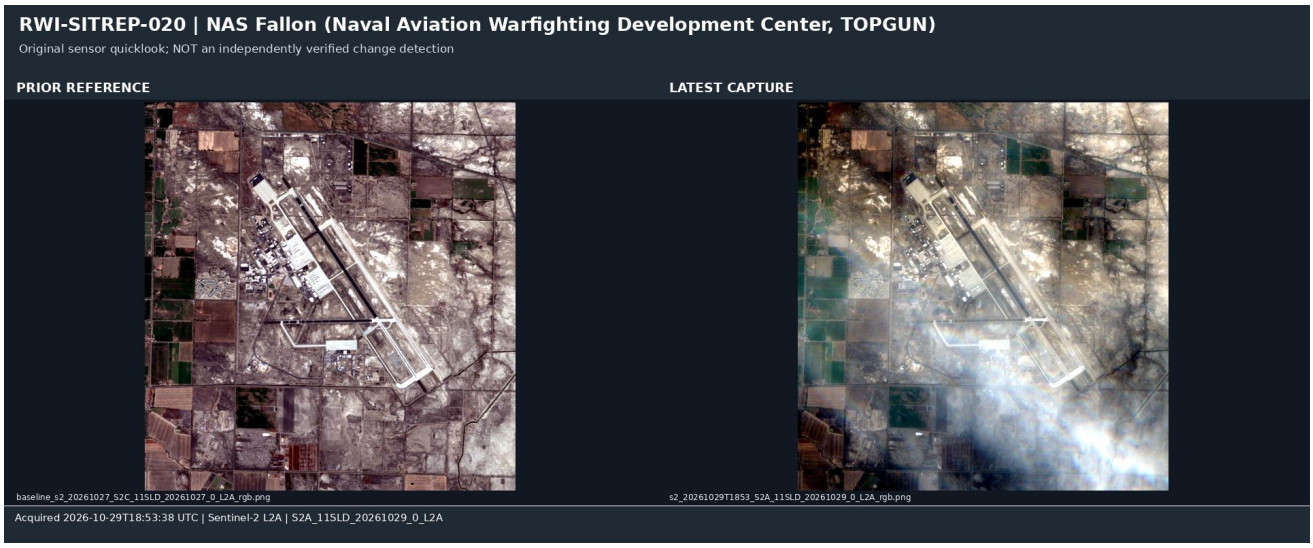
P036: Operational Support Hub Europe, Köln-Bonn Airport — Source S2C_32ULB_20261030_0_L2A; most recent available selected by quality. No visual event finding asserted.



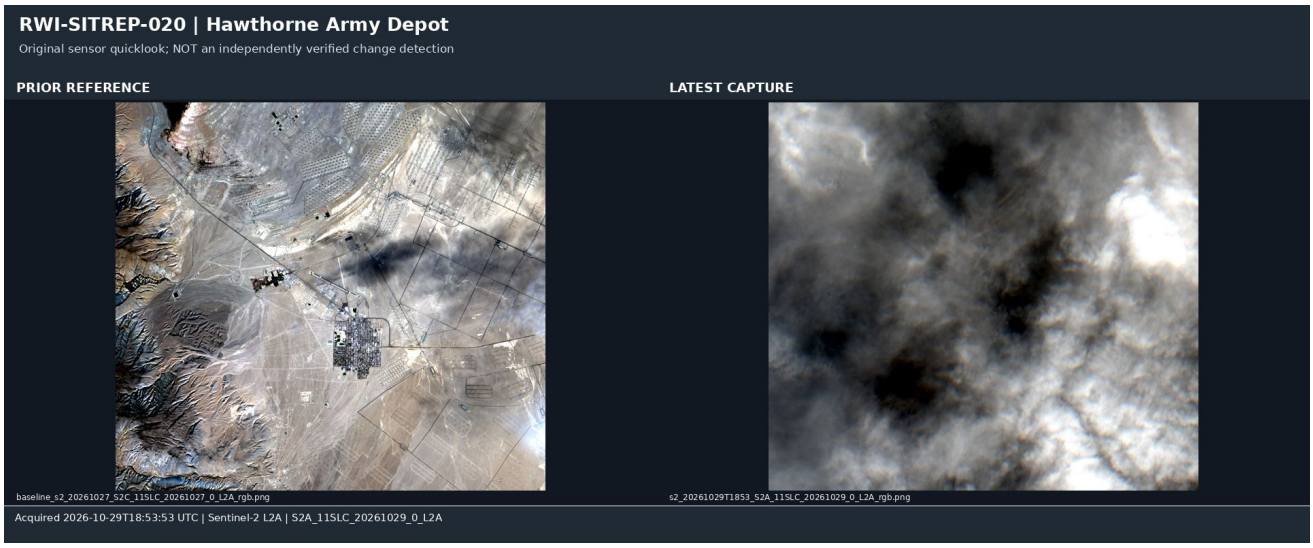
P037: Formation Europe HQ / SHAPE, Casteau — Source S1C_IW_GRDH_1SDV_20261030T054958_20261030T055023_010110_0142DC_rtc; most recent available selected by quality. No visual event finding asserted.



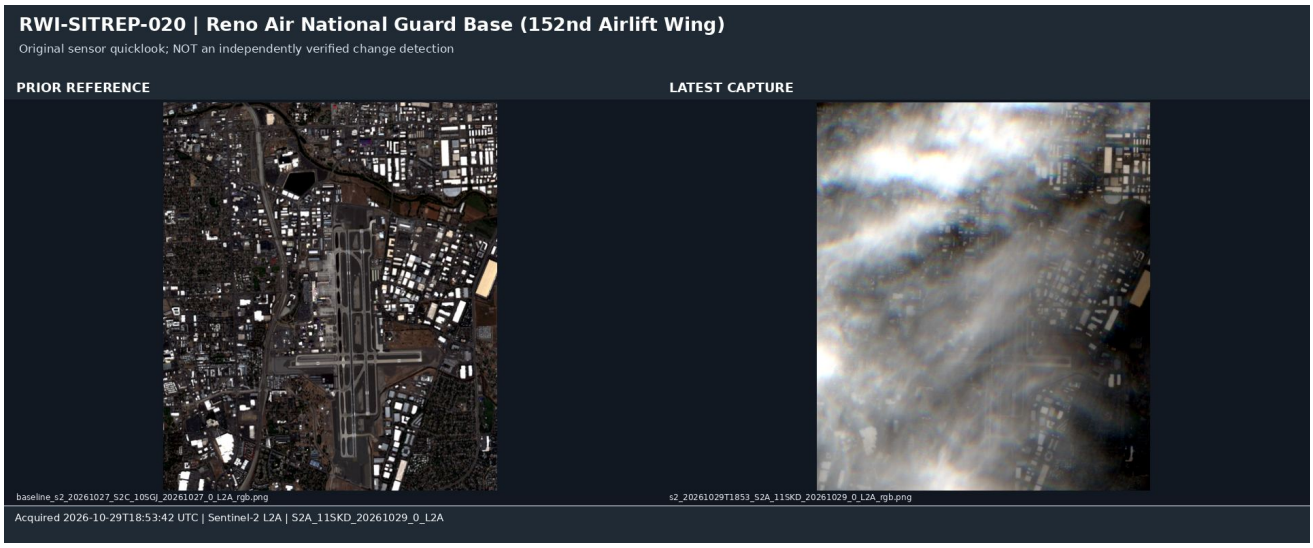
P038: NATO Air Base Geilenkirchen (NATO AWACS, CAF crews) — Source S1C_IW_GRDH_1SDV_20261030T054933_20261030T054958_010110_0142DC_rtc; most recent available selected by quality. No visual event finding asserted.



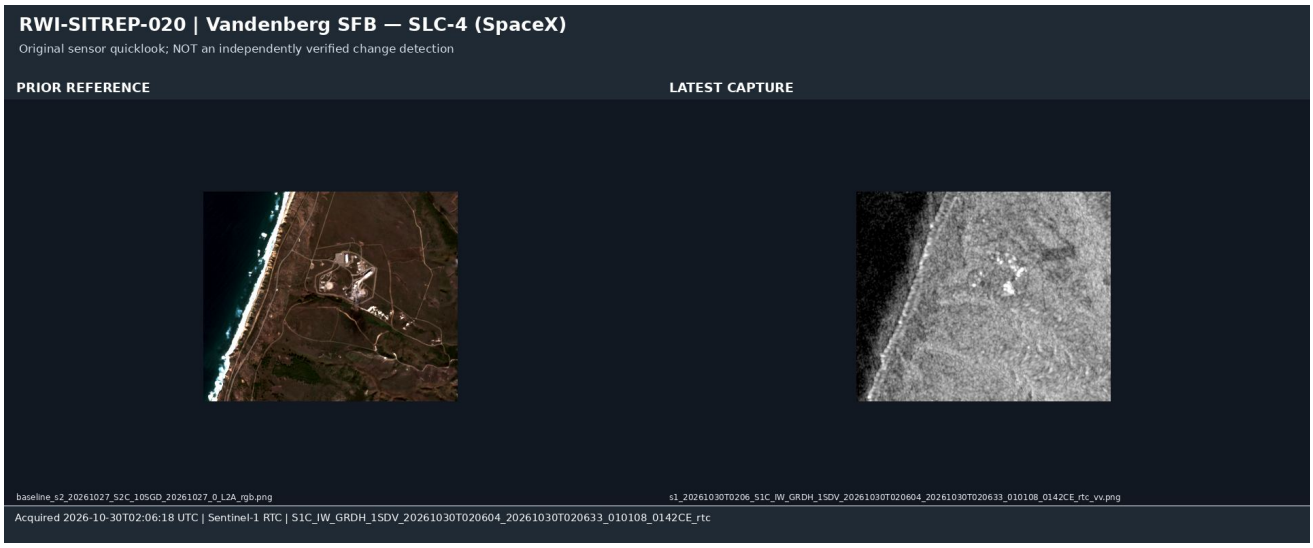
P039: NAS Fallon (Naval Aviation Warfighting Development Center, TOPGUN) — Source S2A_11SLD_20261029_0_L2A; most recent available selected by quality. No visual event finding asserted.



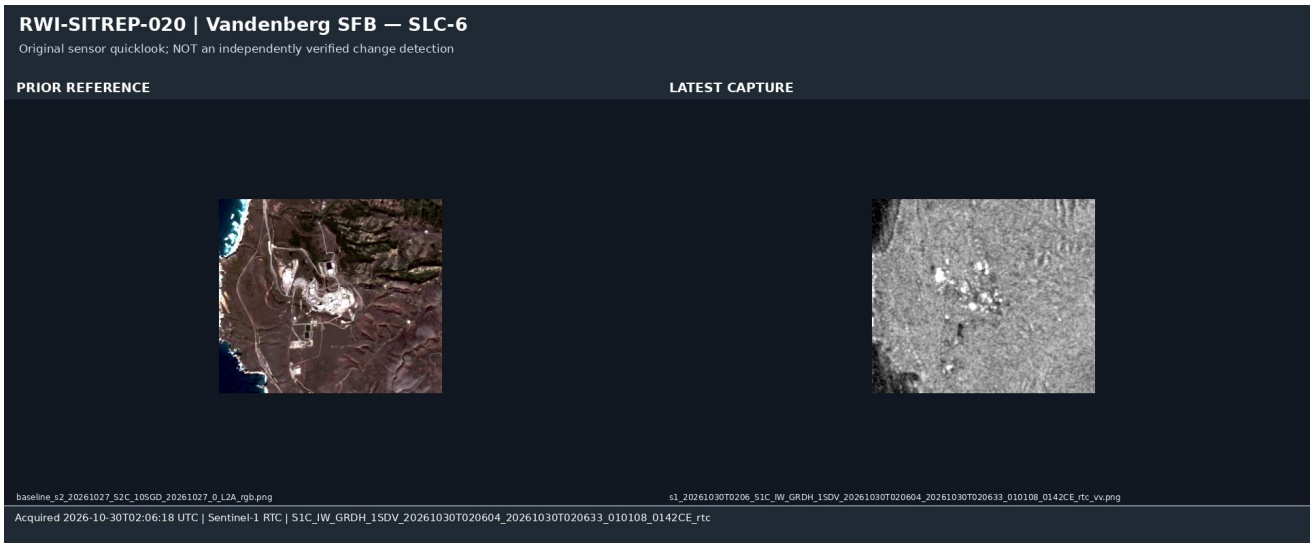
P040: Hawthorne Army Depot — Source S2A_11SLC_20261029_0_L2A; most recent available selected by quality. No visual event finding asserted.



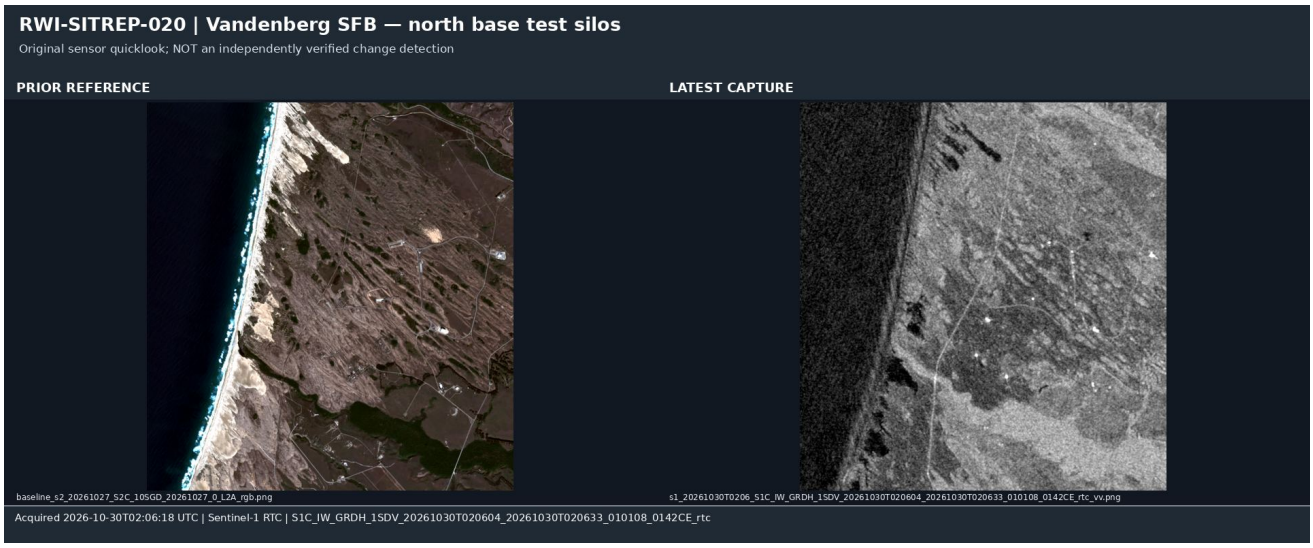
P041: Reno Air National Guard Base (152nd Airlift Wing) — Source S2A_11SKD_20261029_0_L2A; most recent available selected by quality. No visual event finding asserted.



P042: Vandenberg SFB — SLC-4 (SpaceX) — Source S1C_IW_GRDH_1SDV_20261030T020604_20261030T020633_010108_0142CE_rtc; most recent available selected by quality. No visual event finding asserted.



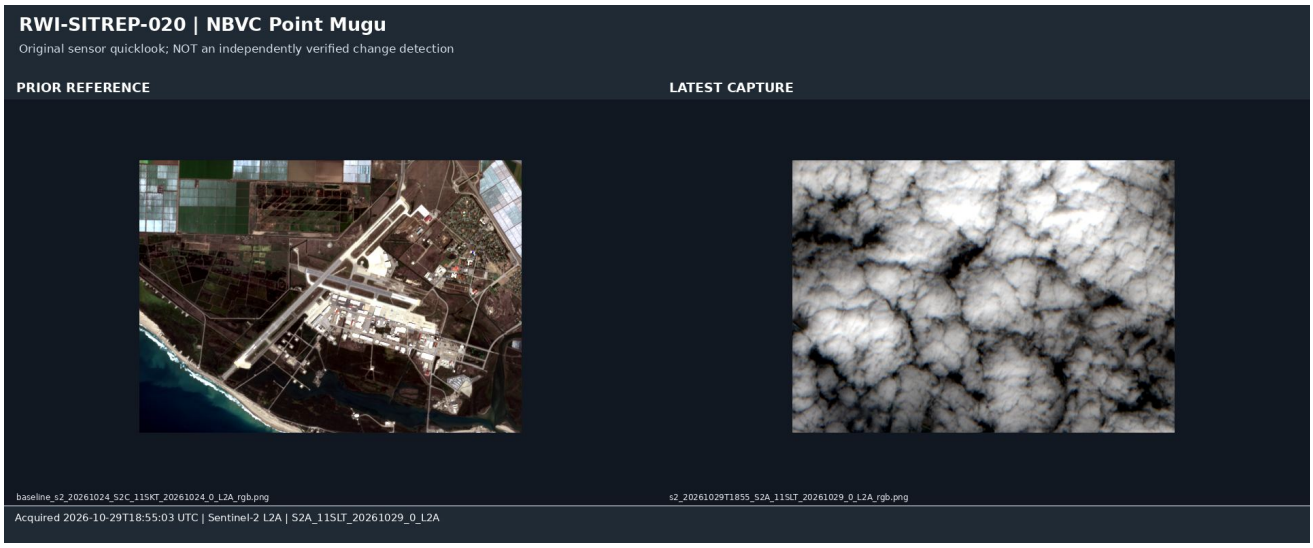
P043: Vandenberg SFB — SLC-6 — Source S1C_IW_GRDH_1SDV_20261030T020604_20261030T020633_010108_0142CE_rtc; most recent available selected by quality. No visual event finding asserted.



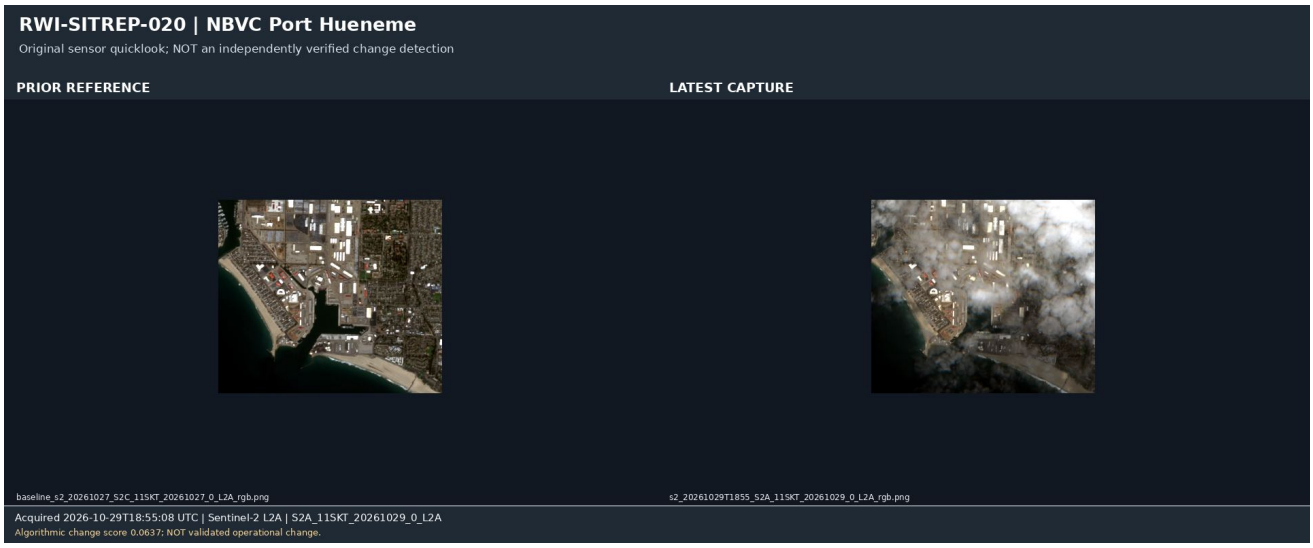
P044: Vandenberg SFB — north base test silos — Source S1C_IW_GRDH_1SDV_20261030T020604_20261030T020633_010108_0142CE_rtc; most recent available selected by quality. No visual event finding asserted.



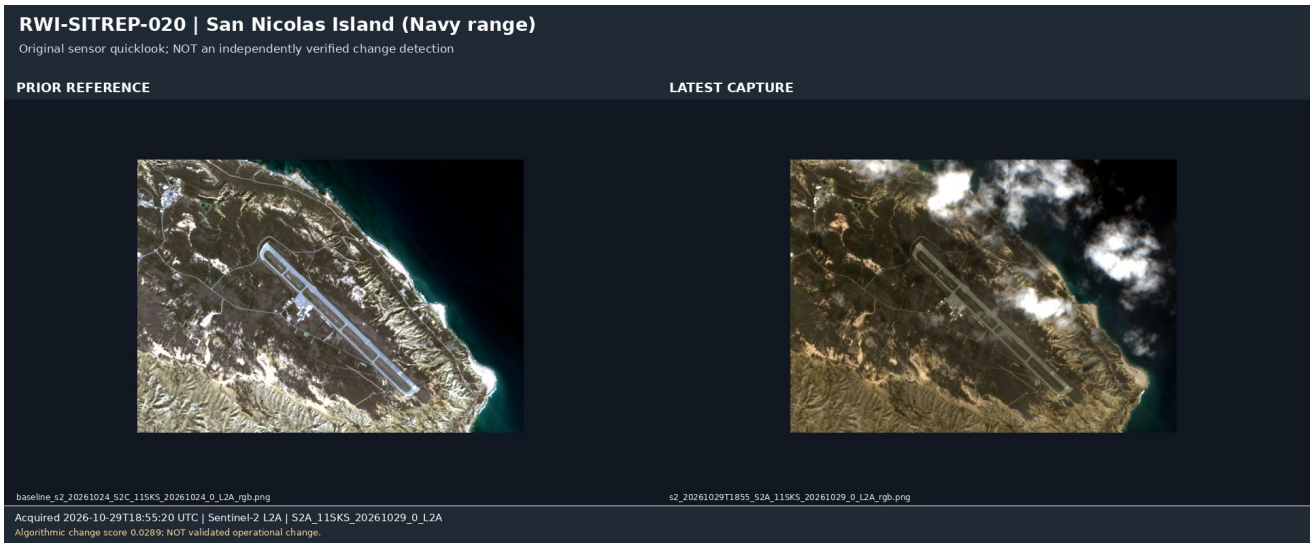
P045: Vandenberg SFB airfield — Source S1C_IW_GRDH_1SDV_20261030T020604_20261030T020633_010108_0142CE_rtc; most recent available selected by quality. No visual event finding asserted.



P046: NBVC Point Mugu — Source S2A_11SLT_20261029_0_L2A; most recent available selected by quality. No visual event finding asserted.



P047: NBVC Port Hueneme — Source S2A_11SKT_20261029_0_L2A; most recent available selected by quality. No visual event finding asserted.



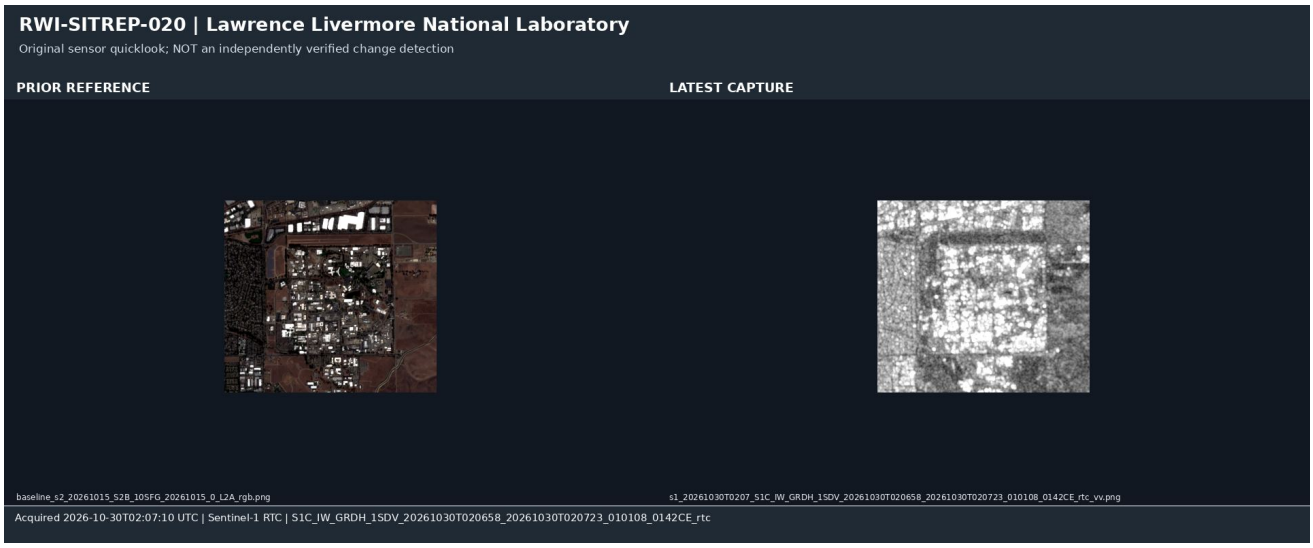
P048: San Nicolas Island (Navy range) — Source S2A_11SKS_20261029_0_L2A; most recent available selected by quality. No visual event finding asserted.



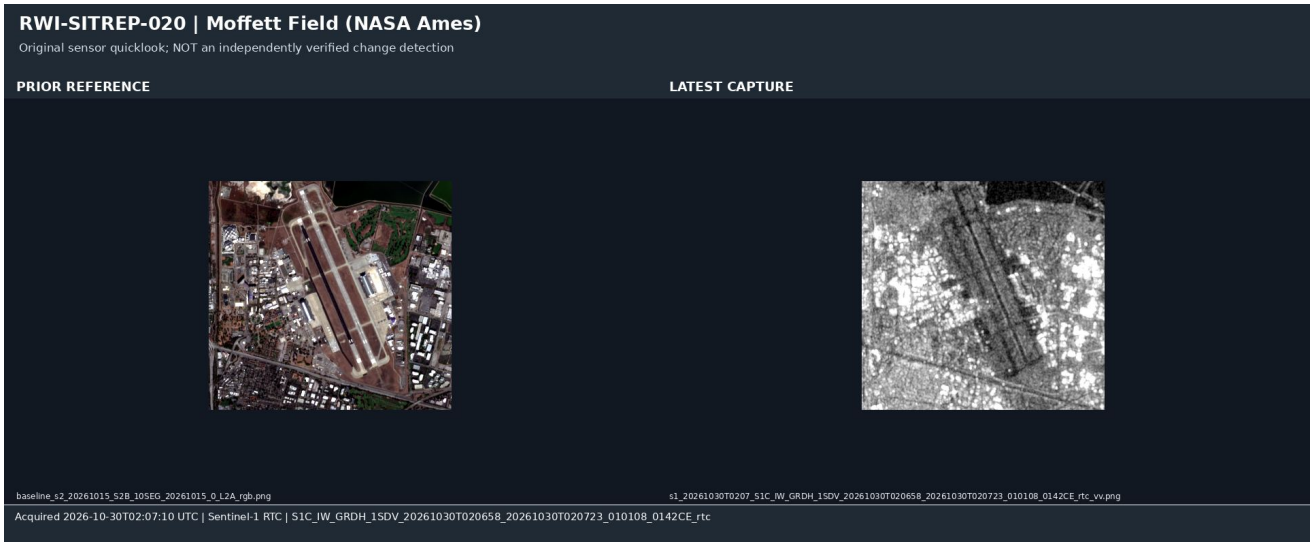
P049: Travis AFB — Source S1C_IW_GRDH_1SDV_20261030T020658_20261030T020723_010108_0142CE_rtc; most recent available selected by quality. No visual event finding asserted.



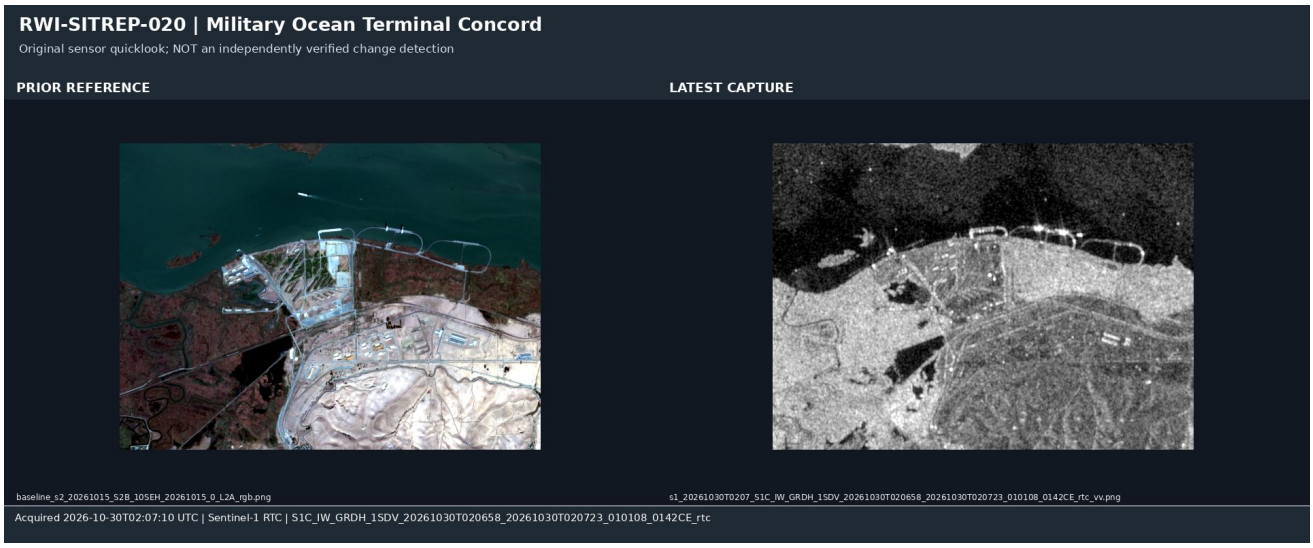
P050: Beale AFB — Source S1C_IW_GRDH_1SDV_20261030T020723_20261030T020748_010108_0142CE_rtc; most recent available selected by quality. No visual event finding asserted.



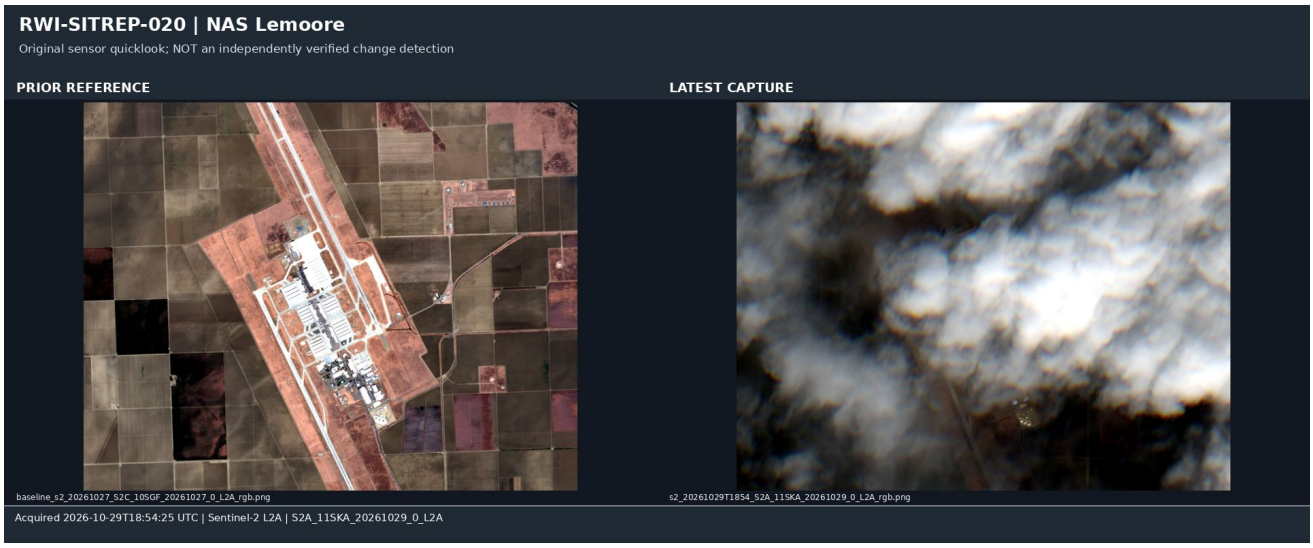
P051: Lawrence Livermore National Laboratory — Source S1C_IW_GRDH_1SDV_20261030T020658_20261030T020723_010108_0142CE_rtc; most recent available selected by quality. No visual event finding asserted.



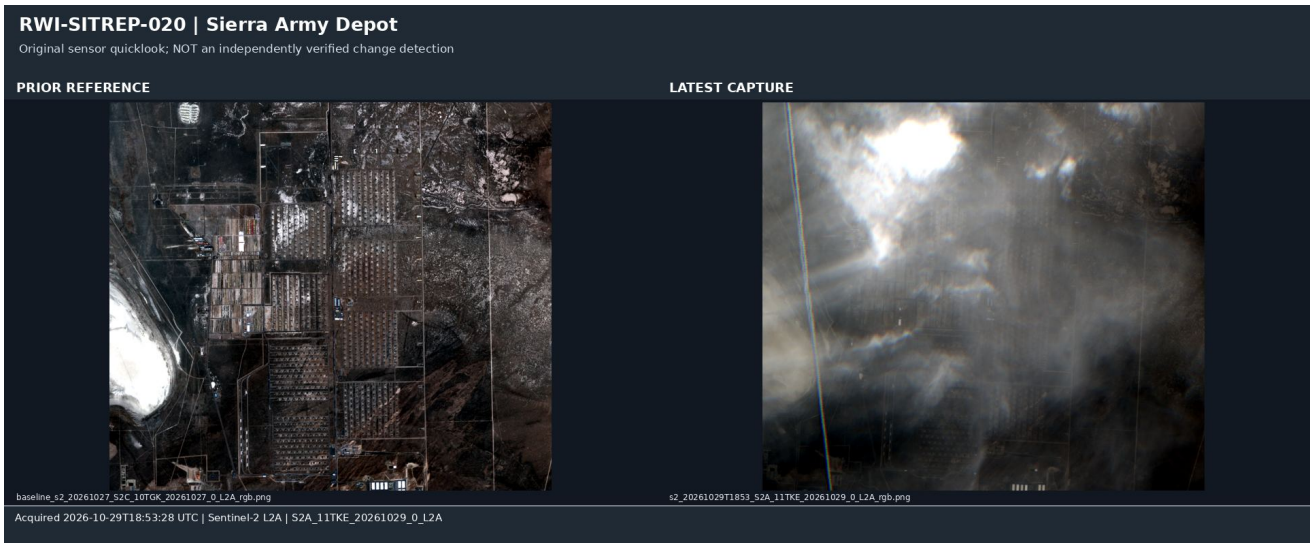
P052: Moffett Field (NASA Ames) — Source S1C_IW_GRDH_1SDV_20261030T020658_20261030T020723_010108_0142CE_rtc; most recent available selected by quality. No visual event finding asserted.



P053: Military Ocean Terminal Concord — Source S1C_IW_GRDH_1SDV_20261030T020658_20261030T020723_010108_0142CE_rtc; most recent available selected by quality. No visual event finding asserted.



P054: NAS Lemoore — Source S2A_11SKA_20261029_0_L2A; most recent available selected by quality. No visual event finding asserted.



P055: Sierra Army Depot — Source S2A_11TKE_20261029_0_L2A; most recent available selected by quality. No visual event finding asserted.