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    "total_scripts_audited": 34,
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  "inventory": [
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      "analysis": {
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        "error": "invalid non-printable character U+00A0 (<unknown>, line 1)",
        "line": 1
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      "_source_file": "audit_broky.json"
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            "json",
            "time",
            "subprocess",
            "signal",
            "math",
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            "datetime.datetime",
            "datetime.timezone",
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  "docstring": "None",
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  "line_start": 43
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  "line_start": 46
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  "args": [
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          "docstring": "LI-proxy basado en linealidad temporal:\n- ajusta y = a*t + b\n- devuelve
R^2 como proxy de \"locking lineal\"",
          "line_start": 59
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            "dH_val",
            "LI_val",
            "series",
            "pressure_tail"
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  "CONFIG",
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  "PRESSURE_MEMORY",
  "LAST_TRIGGER_TIME",
  "H_REF",
  "SERIES_BUFFER",
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  "r2",
  "RUNNING",
  "c_hash",
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        "H_REF",
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        "dH",
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        "LI",
        "LI",
        "SERIES_BUFFER",
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        "shuffle_test"
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      "docstring": "None"
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    {
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      "methods": [
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        "analyze_morphology"
      ],
      "docstring": "None"
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      "methods": [
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      "docstring": "None"
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      "complexity": 4,
      "docstring": "Rechaza si hay saturación magnética local (imán, bocina).",
      "line_start": 27
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    {
```

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  "line_start": 38
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  "name": "compute_r2",
  "args": [
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  "complexity": 3,
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  "line_start": 59
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  "args": [
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  "complexity": 1,
  "docstring": "Extrae métricas avanzadas.",
  "line_start": 81
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  "name": "judge",
  "args": [
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  "line_start": 91
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      "x",
      "coeffs",
      "p",
      "y_hat",
      "y_bar",
      "ss_res",
      "ss_tot",
      "r2",
      "pressure",
      "li",
      "dh",
      "reasons",
      "score",
      "li",
      "dh",
      "final_verdict",
      "candidate_path",
      "candidate",
      "mag_dummy",
      "li_pre",
      "defense_report",
      "analysis",
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        "textwrap",
        "sys"
      ],
      "classes": [],
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          "complexity": 1,
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          "line_start": 7
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          "args": [
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          "docstring": "Escribe el contenido en la ruta especificada",
          "line_start": 15
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        {
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          "line_start": 274
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        "base_dir",
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        "code_emotions",
        "code_analyzer",
        "code_memory",
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        "base_dir",
        "src_gov",
        "code_veto",
        "code_io",
        "code_oracle",
        "code_gov_init"
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      "complexity_score": 3
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    "size_bytes": 5492,
    "last_modified": "2025-12-18T17:04:55.079000",
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          "args": [
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```
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          "docstring": "None",
          "line_start": 11
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        "readme_md",
        "tcds_init",
        "core_init",
        "cognitive_init",
        "governance_init",
        "files_to_create"
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      "complexity_score": 3
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        "textwrap"
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        "readme_md",
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        "core_init",
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        "governance_init",
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  "time",
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  "numpy",
  "matplotlib.pyplot",
  "matplotlib.patches"
],
"classes": [
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    "name": "EmotionalDashboard",
    "methods": [
      "plot_emotional_radar",
      "plot_emotional_timeline",
      "generate_emotional_report"
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    "docstring": "Dashboard visual del estado emocional del sistema"
  }
],
"functions": [
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    "name": "save_emotional_state",
    "args": [
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      "memory",
      "narrative"
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    "complexity": 1,
    "docstring": "Guarda estado emocional completo antes de cerrar",
    "line_start": 12
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    "args": [],
    "complexity": 3,
    "docstring": "Carga estado emocional previo",
    "line_start": 34
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  {
    "name": "plot_emotional_radar",
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    "args": [
      "muse",
      "narrative",
      "flow_monitor",
      "output_path"
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    "complexity": 1,
    "docstring": "None",
    "line_start": 51
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  {
    "name": "plot_emotional_timeline",
    "args": [
      "muse",
      "memory",
      "output_path",
      "hours"
    ],
    "complexity": 1,
    "docstring": "None",
    "line_start": 58
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  {
    "name": "generate_emotional_report",
    "args": [
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      "memory",
      "narrative",
      "flow_monitor",
      "personality"
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    "docstring": "None",
    "line_start": 63
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      "memory",
      "narrative",
      "flow_monitor",
      "comm",
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              "CONFIG",
              "s",
              "context",
              "veredicto",
              "confidence",
              "email_body",
              "g_png",
              "p_json",
              "seal_path",
              "lock_xml",
              "arch",
              "recent_decisions"
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            "complexity": 8,
            "docstring": "Función contenedora para la lógica de procesamiento.\nNota: Requiere
que todos los objetos (muse, memory, etc.) sean pasados como argumentos.",
            "line_start": 68
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          "state_path",
          "data",
          "emotional_summary"
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        "complexity_score": 20
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  "numpy",
  "matplotlib.pyplot",
  "matplotlib.patches"
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   "methods": [
    "plot_emotional_radar",
    "plot_emotional_timeline",
    "generate_emotional_report"
   ],
   "docstring": "Dashboard visual del estado emocional del sistema"
  }
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   "args": [
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   "complexity": 1,
   "docstring": "Guarda estado emocional completo antes de cerrar",
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   "args": [],
   "complexity": 3,
   "docstring": "Carga estado emocional previo",
   "line_start": 34
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```
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      "memory",
      "output_path",
      "hours"
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    "docstring": "None",
    "line_start": 58
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    "args": [
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      "memory",
      "narrative",
      "flow_monitor",
      "personality"
    ],
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    "docstring": "None",
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      "memory",
      "narrative",
      "flow_monitor",
      "comm",
      "decision",
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              "s",
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              "veredicto",
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              "p_json",
              "seal_path",
              "lock_xml",
              "arch",
              "recent_decisions"
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que todos los objetos (muse, memory, etc.) sean pasados como argumentos.",
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          "state_path",
          "data",
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    "audit_timestamp": "2025-12-21T19:16:28.665243",
    "analysis": {
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      "error": "invalid decimal literal (<unknown>, line 816)",
      "line": 816
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  {
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"analysis": {
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  "last_modified": "2025-12-18T15:13:44.467000",
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      "Oracle_system.HypercubeEngine",
      "Oracle_system.OracleComms",
      "Brainaldo.EmotionalState",
      "Brainaldo.ReasoningEngine",
      "Brainaldo.LinguisticAnalyzer"
    ],
    "classes": [
      {
        "name": "CognitiveBridge",
        "methods": [
          "__init__",
          "update_perception",
          "process_experience"
        ],
        "docstring": "Conecta el Cuerpo (Oracle) con la Mente (MUSE)"
      }
    ],
    "functions": [
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        "name": "__init__",
        "args": [
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        "complexity": 1,
        "docstring": "None",
        "line_start": 14
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        "name": "update_perception",
        "args": [
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            "soldier_data",
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          "line_start": 23
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          "args": [
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            "event_packet"
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          "complexity": 1,
          "docstring": "MUSE digiere el evento después de la alerta (Thread separado)",
          "line_start": 40
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          "args": [],
          "complexity": 4,
          "docstring": "None",
          "line_start": 54
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          "args": [],
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          "docstring": "None",
          "line_start": 58
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        "threshold_modifier",
        "narrative",
        "reflection",
        "brain",
        "packet",
        "t",
```

```
        "bias",
        "effective_dh_max"
      ],
      "complexity_score": 16
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  },
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},
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    "size_bytes": 0,
    "last_modified": "2025-12-18T15:01:53.015000",
    "logic_analysis": {
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      "classes": [],
      "functions": [],
      "global_assigns": [],
      "complexity_score": 0
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},
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  "analysis": {
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    "error": "invalid character '╔' (U+2554) (<unknown>, line 281)",
    "line": 281
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  "_source_file": "audit_ψBrunilse.json"
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  "analysis": {
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    "error": "invalid character '╔' (U+2554) (<unknown>, line 281)",
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  },
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},
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              "veredicto",
              "confidence",
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              "recent_decisions"
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          "docstring": "None",
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            "lat",
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determinismo, solo correlación estadística",
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O\n  2. Comparten misma falla geológica",
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        "line_start": 412
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    "is_expired"
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   "docstring": "None"
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   "docstring": "None"
  },
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   "methods": [
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        "docstring": "None",
        "line_start": 372
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  "docstring": "None",
  "line_start": 448
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  "args": [
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  "line_start": 451
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  "docstring": "None",
  "line_start": 462
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  "args": [
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  ],
  "complexity": 1,
  "docstring": "None",
  "line_start": 487
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  "docstring": "None",
  "line_start": 499
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    "line_start": 584
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    "complexity": 9,
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    "size_bytes": 28741,
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        "hmac",
        "requests",
        "numpy",
        "pandas",
        "xml.etree.ElementTree",
        "matplotlib.pyplot",
        "datetime.datetime",
        "datetime.timezone",
        "datetime.timedelta",
        "email.mime.multipart.MIMEMultipart",
        "email.mime.text.MIMEText",
        "email.mime.application.MIMEApplication",
        "lxml.etree",
        "ephem"
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          "methods": [
            "__init__",
            "obtener_kp",
            "lunar",
            "validar_consistencia_variedad",
            "leer_lock_xml",
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    "docstring": "None"
  },
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    "methods": [
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      "new_record",
      "is_expired"
    ],
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  },
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    "methods": [
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      "grafica_veredicto"
    ],
    "docstring": "None"
  },
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      "soldier_9",
      "crawler_6",
      "oracle_3"
    ],
    "docstring": "None"
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    "complexity": 1,
    "docstring": "None",
    "line_start": 123
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    "args": [
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    "args": [
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    "complexity": 1,
    "docstring": "None",
    "line_start": 129
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    "docstring": "None",
    "line_start": 139
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    "complexity": 1,
    "docstring": "None",
    "line_start": 142
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      "line_start": 145
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      "complexity": 3,
      "docstring": "None",
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        "default"
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      "complexity": 2,
      "docstring": "None",
      "line_start": 164
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      "args": [
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      "complexity": 3,
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      "line_start": 171
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  "complexity": 2,
  "docstring": "None",
  "line_start": 240
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  "docstring": "None",
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  "args": [],
  "complexity": 1,
  "docstring": "None",
  "line_start": 258
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  "complexity": 2,
  "docstring": "None",
  "line_start": 265
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    "xsd_text"
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  "complexity": 4,
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  "line_start": 286
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  "complexity": 5,
  "docstring": "None",
  "line_start": 304
},
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  "name": "revisar_alertas_diferidas",
  "args": [],
  "complexity": 7,
  "docstring": "None",
  "line_start": 316
},
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  "name": "find_first_lock_xml",
  "args": [
    "folder"
  ],
  "complexity": 4,
  "docstring": "None",
  "line_start": 333
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  "complexity": 5,
  "docstring": "None",
  "line_start": 339
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  "args": [
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  "complexity": 4,
  "docstring": "None",
  "line_start": 348
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  "docstring": "None",
  "line_start": 357
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  "name": "obtener_kp",
  "args": [
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  "docstring": "None",
  "line_start": 360
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```

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          "line_start": 372
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          "name": "validar_consistencia_variedad",
          "args": [
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            "s"
          ],
          "complexity": 7,
          "docstring": "Detecta 'Verdaderas Mentiras'. Verifica si los métricos son\ncoherentes entre sí o si fueron fabricados al azar.",
          "line_start": 387
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          "complexity": 7,
          "docstring": "None",
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          "docstring": "None",
          "line_start": 429
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        {
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          "args": [
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  ],
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  "docstring": "None",
  "line_start": 451
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  "args": [
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    "now_dt"
  ],
  "complexity": 1,
  "docstring": "None",
  "line_start": 457
},
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  "name": "enviar_email",
  "args": [
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    "body",
    "files"
  ],
  "complexity": 6,
  "docstring": "None",
  "line_start": 462
},
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  "name": "grafica_veredicto",
  "args": [
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```
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    "out_png"
   ],
   "complexity": 1,
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   "line_start": 487
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   "docstring": "None",
   "line_start": 499
  },
  {
   "name": "soldier_9",
   "args": [
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   ],
   "complexity": 8,
   "docstring": "None",
   "line_start": 501
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    "history_csv"
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   "docstring": "None",
   "line_start": 513
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   "name": "oracle_3",
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    "s",
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  ],
  "complexity": 1,
  "docstring": "None",
  "line_start": 542
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    "s"
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  "complexity": 3,
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  "line_start": 584
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   "firma_entrante",
   "contenido_crudo",
   "firma_calculada",
   "es_legitimo",
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   "dst",
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},
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    "size_bytes": 7540,
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        "json",
        "glob",
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        "datetime",
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    "methods": [],
    "docstring": "None"
  }
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    "args": [],
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    "docstring": "None",
    "line_start": 41
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    "args": [],
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    "line_start": 44
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    "line_start": 48
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    "args": [
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    ],
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  "docstring": "None",
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  "name": "make_seal_xml",
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   "timestamp_oracle",
   "oracle_decision"
  ],
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  "docstring": "None",
  "line_start": 88
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   "scenario"
  ],
  "complexity": 1,
  "docstring": "None",
  "line_start": 110
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  "args": [
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  ],
  "complexity": 1,
  "docstring": "None",
  "line_start": 119
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  "args": [
   "pattern",
   "t0"
  ],
  "complexity": 5,
  "docstring": "None",
  "line_start": 125
 },
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    "t_inject",
    "timeout_s"
  ],
  "complexity": 4,
  "docstring": "None",
  "line_start": 138
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  "args": [
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  "complexity": 2,
  "docstring": "None",
  "line_start": 149
},
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  "args": [
    "event_id",
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    "oracle_decision"
  ],
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  "docstring": "None",
  "line_start": 157
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  "args": [
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  "line_start": 165
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        "EVETO_DH_MAX",
        "SCENARIOS",
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        "ts",
        "fname",
        "path",
        "xml",
        "t_inject",
        "pj",
        "pc",
        "cand",
        "t0",
        "jpath",
        "cpath",
        "data",
        "fname",
        "path",
        "xml",
        "cycle",
        "scenario",
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  "_source_file": "audit_oracle_tester_loop.json"
},
{
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  "logic_analysis": {
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      "smtplib",
      "requests",
      "numpy",
      "pandas",
      "xml.etree.ElementTree",
      "matplotlib.pyplot",
      "datetime.datetime",
      "datetime.timezone",
      "datetime.timedelta",
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      "email.mime.text.MIMEText",
      "email.mime.application.MIMEApplication",
      "lxml.etree",
      "ephem"
    ],
    "classes": [
      {
        "name": "OmnipresentVeto",
        "methods": [
          "__init__",
          "obtener_kp",
          "lunar",
          "leer_lock_xml",
          "leer_seal_xml"
        ],
        "docstring": "None"
      },
      {
        "name": "CPMCalibrator",
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      "new_record",
      "is_expired"
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    "docstring": "None"
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    "methods": [
      "enviar_email",
      "grafica_veredicto"
    ],
    "docstring": "None"
  },
  {
    "name": "HypercubeEngine",
    "methods": [
      "__init__",
      "soldier_9",
      "crawler_6",
      "oracle_3"
    ],
    "docstring": "None"
  }
],
"functions": [
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    "args": [],
    "complexity": 1,
    "docstring": "None",
    "line_start": 117
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  {
    "name": "iso_z",
    "args": [
      "dt"
    ],
    "complexity": 1,
    "docstring": "None",
    "line_start": 120
  },
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  "args": [
    "d"
  ],
  "complexity": 1,
  "docstring": "None",
  "line_start": 123
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  "name": "atomic_write_text",
  "args": [
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    "text"
  ],
  "complexity": 1,
  "docstring": "None",
  "line_start": 127
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  "name": "atomic_write_json",
  "args": [
    "path",
    "obj"
  ],
  "complexity": 1,
  "docstring": "None",
  "line_start": 133
},
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  "complexity": 1,
  "docstring": "None",
  "line_start": 136
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  "line_start": 139
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  "args": [
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  ],
  "complexity": 3,
  "docstring": "None",
  "line_start": 148
},
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  "args": [
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    "path",
    "default"
  ],
  "complexity": 2,
  "docstring": "None",
  "line_start": 158
},
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  "args": [],
  "complexity": 1,
  "docstring": "None",
  "line_start": 196
},
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  "name": "audit",
  "args": [
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  "complexity": 2,
  "docstring": "None",
  "line_start": 199
},
{
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  "args": [
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  ],
  "complexity": 1,
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  "line_start": 213
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  "args": [],
  "complexity": 1,
  "docstring": "None",
  "line_start": 217
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  "name": "freeze_file",
  "args": [
    "path",
    "reason"
  ],
  "complexity": 2,
  "docstring": "None",
  "line_start": 224
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  "args": [
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  "complexity": 2,
  "docstring": "None",
  "line_start": 235
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  "args": [
    "xml_path",
    "xsd_text"
  ],
  "complexity": 4,
  "docstring": "None",
  "line_start": 245
},
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  "args": [
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  ],
  "complexity": 5,
  "docstring": "None",
  "line_start": 263
},
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  "name": "revisar_alertas_diferidas",
  "args": [],
  "complexity": 7,
  "docstring": "None",
  "line_start": 275
},
{
  "name": "find_first_lock_xml",
  "args": [
    "folder"
  ],
  "complexity": 4,
  "docstring": "None",
  "line_start": 292
},
{
  "name": "wait_second_seal",
  "args": [
    "event_id",
    "folder",
    "timeout_s"
  ],
  "complexity": 5,
  "docstring": "None",
  "line_start": 298
},
{
  "name": "event_key_from",
  "args": [
    "s"
  ],
  "complexity": 4,
  "docstring": "None",
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  "line_start": 307
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  "args": [
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  ],
  "complexity": 1,
  "docstring": "None",
  "line_start": 316
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  "name": "obtener_kp",
  "args": [
    "self"
  ],
  "complexity": 3,
  "docstring": "None",
  "line_start": 319
},
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  "name": "lunar",
  "args": [
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    "lon",
    "t_iso"
  ],
  "complexity": 4,
  "docstring": "None",
  "line_start": 331
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  "name": "leer_lock_xml",
  "args": [
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    "xml_path"
  ],
  "complexity": 6,
  "docstring": "None",
  "line_start": 346
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  "args": [
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    "xml_path"
  ],
  "complexity": 2,
  "docstring": "None",
  "line_start": 367
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  "name": "__init__",
  "args": [
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    "dissipation_minutes"
  ],
  "complexity": 1,
  "docstring": "None",
  "line_start": 386
},
{
  "name": "new_record",
  "args": [
    "self",
    "event_key",
    "now_iso"
  ],
  "complexity": 1,
  "docstring": "None",
  "line_start": 389
},
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  "name": "is_expired",
  "args": [
    "self",
    "record",
    "now_dt"
  ],
  "complexity": 1,
  "docstring": "None",
  "line_start": 395
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  "args": [
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    "body",
    "files"
  ],
  "complexity": 6,
  "docstring": "None",
  "line_start": 400
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  "name": "grafica_veredicto",
  "args": [
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    "d",
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  ],
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  "docstring": "None",
  "line_start": 425
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  "args": [
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  "complexity": 1,
  "docstring": "None",
  "line_start": 437
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  "name": "soldier_9",
  "args": [
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  ],
  "complexity": 8,
  "docstring": "None",
  "line_start": 439
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  "name": "crawler_6",
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  ],
  "complexity": 3,
  "docstring": "None",
  "line_start": 451
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  "name": "oracle_3",
  "args": [
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    "s",
    "veto"
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  "complexity": 4,
  "docstring": "None",
  "line_start": 462
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  "name": "plot_hcp_radar",
  "args": [
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    "ev_id"
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  "docstring": "None",
  "line_start": 480
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  "name": "evaluar_fisica_cpm",
  "args": [
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  "complexity": 2,
  "docstring": "None",
  "line_start": 495
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  "args": [
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    "docstring": "None",
    "line_start": 504
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    "args": [],
    "complexity": 16,
    "docstring": "None",
    "line_start": 522
  },
  {
    "name": "hcp_loop",
    "args": [],
    "complexity": 9,
    "docstring": "None",
    "line_start": 614
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    "args": [],
    "complexity": 2,
    "docstring": "None",
    "line_start": 651
  }
],
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  "SEAL_SCHEMA_XSD",
  "b",
  "tmp",
  "h",
  "node",
  "CONFIG",
  "AUDIT_PATH",
  "STATE_PATH",
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        "comm",
        "eng",
        "inbox",
        "hist",
        "ex",
        "arch",
        "lock_xml",
        "s",
        "c_ok",
        "radar",
        "total",
        "ver",
        "ver",
        "ver",
        "out_csv",
        "mode"
      ],
      "complexity_score": 147
    }
  },
  "_source_file": "audit_Oracle_omnipresent.json"
},
{
  "filename": "gf.py",
  "audit_timestamp": "2025-12-21T19:16:28.943371",
  "analysis": {
    "status": "SUCCESS",
    "file_hash": "f3fce87d74d0b5439f6b2b9e4cdee60a",
    "size_bytes": 1126,
    "last_modified": "2025-12-17T11:06:25.155000",
    "logic_analysis": {
      "imports": [],
      "classes": [
        {
          "name": "CPMCalibrator",
```

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        "methods": [
          "__init__",
          "new_record",
          "is_expired"
        ],
        "docstring": "El calibrador CPM no decide eventos.\nAcumula persistencia física a lo largo de ciclos."
      }
    ],
    "functions": [
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        "name": "__init__",
        "args": [
          "self",
          "cycles_required",
          "dissipation_minutes"
        ],
        "complexity": 1,
        "docstring": "None",
        "line_start": 12
      },
      {
        "name": "new_record",
        "args": [
          "self",
          "event_key",
          "now_iso"
        ],
        "complexity": 1,
        "docstring": "None",
        "line_start": 16
      },
      {
        "name": "is_expired",
        "args": [
          "self",
          "record",
          "now_dt"
        ],
        "complexity": 1,
        "docstring": "None",
        "line_start": 27
      }
```

```
      ],
      "global_assigns": [
        "last"
      ],
      "complexity_score": 8
    }
  },
  "_source_file": "audit_gf.json"
},
{
  "filename": "Oracle_system.py",
  "audit_timestamp": "2025-12-21T19:16:28.991632",
  "analysis": {
    "status": "SUCCESS",
    "file_hash": "5ce5f4b5a2ab545e7c01e4879a923cb2",
    "size_bytes": 32677,
    "last_modified": "2025-12-17T09:06:35.789000",
    "logic_analysis": {
      "imports": [
        "os",
        "time",
        "json",
        "ssl",
        "shutil",
        "hashlib",
        "smtplib",
        "requests",
        "numpy",
        "pandas",
        "xml.etree.ElementTree",
        "matplotlib.pyplot",
        "datetime.datetime",
        "datetime.timezone",
        "datetime.timedelta",
        "email.mime.multipart.MIMEMultipart",
        "email.mime.text.MIMEText",
        "email.mime.application.MIMEApplication",
        "ephem",
        "lxml.etree"
      ],
      "classes": [
        {
          "name": "OmnipresentVeto",
```

```
      "methods": [
        "__init__",
        "obtener_kp",
        "lunar",
        "leer_lock_xml",
        "leer_seal_xml"
      ],
      "docstring": "None"
    },
    {
      "name": "OracleComms",
      "methods": [
        "enviar_email",
        "grafica_veredicto"
      ],
      "docstring": "None"
    },
    {
      "name": "HypercubeEngine",
      "methods": [
        "__init__",
        "soldier_9",
        "crawler_6",
        "oracle_3"
      ],
      "docstring": "None"
    }
  ],
  "functions": [
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      "name": "utc_now",
      "args": [],
      "complexity": 1,
      "docstring": "None",
      "line_start": 128
    },
    {
      "name": "iso_z",
      "args": [
        "dt"
      ],
      "complexity": 1,
      "docstring": "None",
```

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  "line_start": 131
},
{
  "name": "sha256_bytes",
  "args": [
    "b"
  ],
  "complexity": 1,
  "docstring": "None",
  "line_start": 134
},
{
  "name": "sha256_of_dict",
  "args": [
    "d"
  ],
  "complexity": 1,
  "docstring": "None",
  "line_start": 137
},
{
  "name": "file_sha256",
  "args": [
    "path"
  ],
  "complexity": 2,
  "docstring": "None",
  "line_start": 141
},
{
  "name": "safe_mkdir",
  "args": [
    "path"
  ],
  "complexity": 1,
  "docstring": "None",
  "line_start": 148
},
{
  "name": "atomic_write_text",
  "args": [
    "path",
    "text"
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```
    ],
    "complexity": 1,
    "docstring": "None",
    "line_start": 151
  },
  {
    "name": "atomic_write_json",
    "args": [
      "path",
      "obj"
    ],
    "complexity": 1,
    "docstring": "None",
    "line_start": 157
  },
  {
    "name": "load_json",
    "args": [
      "path",
      "default"
    ],
    "complexity": 2,
    "docstring": "None",
    "line_start": 160
  },
  {
    "name": "append_jsonl",
    "args": [
      "path",
      "obj"
    ],
    "complexity": 1,
    "docstring": "None",
    "line_start": 167
  },
  {
    "name": "validar_xsd",
    "args": [
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      "xsd_text"
    ],
    "complexity": 3,
    "docstring": "None",
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  "line_start": 172
},
{
  "name": "save_state",
  "args": [],
  "complexity": 2,
  "docstring": "None",
  "line_start": 238
},
{
  "name": "mark_processed",
  "args": [
    "event_id"
  ],
  "complexity": 2,
  "docstring": "None",
  "line_start": 245
},
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  "name": "already_processed",
  "args": [
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  ],
  "complexity": 1,
  "docstring": "None",
  "line_start": 251
},
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  "name": "email_pass",
  "args": [],
  "complexity": 1,
  "docstring": "None",
  "line_start": 254
},
{
  "name": "build_activacion_diferida",
  "args": [
    "no_antes_de",
    "persistencia_min"
  ],
  "complexity": 1,
  "docstring": "None",
  "line_start": 262
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```
},
{
  "name": "tiempo_causal_alcanzado",
  "args": [
    "act"
  ],
  "complexity": 5,
  "docstring": "None",
  "line_start": 271
},
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  "name": "revisar_alertas_diferidas",
  "args": [],
  "complexity": 8,
  "docstring": "None",
  "line_start": 286
},
{
  "name": "__init__",
  "args": [
    "self"
  ],
  "complexity": 1,
  "docstring": "None",
  "line_start": 314
},
{
  "name": "obtener_kp",
  "args": [
    "self"
  ],
  "complexity": 3,
  "docstring": "None",
  "line_start": 317
},
{
  "name": "lunar",
  "args": [
    "self",
    "lat",
    "lon",
    "t_iso"
  ],
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  "complexity": 4,
  "docstring": "None",
  "line_start": 329
},
{
  "name": "leer_lock_xml",
  "args": [
    "self",
    "xml_path"
  ],
  "complexity": 8,
  "docstring": "None",
  "line_start": 344
},
{
  "name": "get",
  "args": [
    "p"
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  "complexity": 2,
  "docstring": "None",
  "line_start": 347
},
{
  "name": "leer_seal_xml",
  "args": [
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    "xml_path"
  ],
  "complexity": 3,
  "docstring": "None",
  "line_start": 375
},
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  "name": "get",
  "args": [
    "p"
  ],
  "complexity": 2,
  "docstring": "None",
  "line_start": 378
},
{
```

```
  "name": "enviar_email",
  "args": [
    "self",
    "subject",
    "body",
    "files"
  ],
  "complexity": 6,
  "docstring": "None",
  "line_start": 407
},
{
  "name": "grafica_veredicto",
  "args": [
    "self",
    "d",
    "out_png"
  ],
  "complexity": 1,
  "docstring": "None",
  "line_start": 434
},
{
  "name": "find_first_lock_xml",
  "args": [
    "folder"
  ],
  "complexity": 4,
  "docstring": "None",
  "line_start": 450
},
{
  "name": "find_seal_for_event",
  "args": [
    "event_id",
    "folder"
  ],
  "complexity": 4,
  "docstring": "None",
  "line_start": 457
},
{
  "name": "wait_second_seal",
```

```
    "args": [
      "event_id",
      "folder",
      "timeout_s"
    ],
    "complexity": 3,
    "docstring": "None",
    "line_start": 463
  },
  {
    "name": "audit",
    "args": [
      "event"
    ],
    "complexity": 1,
    "docstring": "None",
    "line_start": 477
  },
  {
    "name": "reevaluar_riesgo",
    "args": [
      "veto",
      "s"
    ],
    "complexity": 3,
    "docstring": "None",
    "line_start": 491
  },
  {
    "name": "oracle_core_loop",
    "args": [],
    "complexity": 19,
    "docstring": "None",
    "line_start": 497
  },
  {
    "name": "__init__",
    "args": [
      "self"
    ],
    "complexity": 1,
    "docstring": "None",
    "line_start": 701
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```
},
{
  "name": "soldier_9",
  "args": [
    "self",
    "s"
  ],
  "complexity": 7,
  "docstring": "None",
  "line_start": 704
},
{
  "name": "crawler_6",
  "args": [
    "self",
    "history_csv"
  ],
  "complexity": 3,
  "docstring": "None",
  "line_start": 717
},
{
  "name": "oracle_3",
  "args": [
    "self",
    "s",
    "veto"
  ],
  "complexity": 4,
  "docstring": "None",
  "line_start": 729
},
{
  "name": "plot_hcp_radar",
  "args": [
    "v",
    "ev_id"
  ],
  "complexity": 1,
  "docstring": "None",
  "line_start": 754
},
{
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    "name": "hcp_loop",
    "args": [],
    "complexity": 11,
    "docstring": "None",
    "line_start": 774
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   {
    "name": "main",
    "args": [],
    "complexity": 2,
    "docstring": "None",
    "line_start": 850
   }
  ],
  "global_assigns": [
   "ephem",
   "HAS_LXML",
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   "LOCK_SCHEMA_XSD",
   "SEAL_SCHEMA_XSD",
   "b",
   "h",
   "tmp",
   "line",
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   "schema",
   "parser",
   "CONFIG",
   "STATE",
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   "pid",
   "ahora",
   "t0",
   "armado",
   "folder",
   "path",
   "data",
   "act",
   "r",
   "luna",
   "alt",
   "fase",
   "crit",
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"desc",
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"riesgo",
"veto",
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"s",
"ver",
"ts",

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    "p_csv",
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    "g_png",
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    "seal_hash",
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    "ok_rat",
    "ok_per",
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    "df",
    "rep",
    "vueltas",
    "kp",
    "luna",
    "alt",
    "cats",
    "vals",
    "ang",
    "out",
    "veto",
    "comm",
    "eng",
    "inbox",
    "hist",
    "ex",
    "arch",
    "lock_xml",
    "lock_name",
    "lock_hash",
    "s",
    "c_ok",
    "radar",
    "total",
    "ver",
    "ver",
    "ver",
    "out_csv",
    "mode"
  ],
```

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      "complexity_score": 143
    }
  },
  "_source_file": "audit_Oracle_system.json"
},
{
  "filename": "oracle_eye_system.py",
  "audit_timestamp": "2025-12-21T19:16:29.016903",
  "analysis": {
    "status": "SUCCESS",
    "file_hash": "35cad85e88c8d684e436d0aae11ab4b4",
    "size_bytes": 20446,
    "last_modified": "2025-12-17T08:45:23.537000",
    "logic_analysis": {
      "imports": [
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        "time",
        "json",
        "csv",
        "ssl",
        "shutil",
        "hashlib",
        "smtplib",
        "requests",
        "numpy",
        "pandas",
        "xml.etree.ElementTree",
        "matplotlib.pyplot",
        "datetime.datetime",
        "datetime.timezone",
        "datetime.timedelta",
        "email.mime.multipart.MIMEMultipart",
        "email.mime.text.MIMEText",
        "email.mime.application.MIMEApplication",
        "ephem"
      ],
      "classes": [
        {
          "name": "OmnipresentVeto",
          "methods": [
            "__init__",
            "obtener_kp",
            "lunar",
```

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      "leer_lock_xml"
    ],
    "docstring": "None"
  },
  {
    "name": "OracleComms",
    "methods": [
      "enviar_email",
      "grafica_veredicto"
    ],
    "docstring": "None"
  },
  {
    "name": "HypercubeEngine",
    "methods": [
      "__init__",
      "soldier_9",
      "crawler_6",
      "oracle_3"
    ],
    "docstring": "None"
  }
],
"functions": [
  {
    "name": "utc_now",
    "args": [],
    "complexity": 1,
    "docstring": "None",
    "line_start": 124
  },
  {
    "name": "sha256_of_dict",
    "args": [
      "d"
    ],
    "complexity": 1,
    "docstring": "None",
    "line_start": 127
  },
  {
    "name": "atomic_write_text",
    "args": [
```

```
    "path",
    "text"
  ],
  "complexity": 1,
  "docstring": "None",
  "line_start": 131
},
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  "name": "atomic_write_json",
  "args": [
    "path",
    "obj"
  ],
  "complexity": 1,
  "docstring": "None",
  "line_start": 137
},
{
  "name": "safe_mkdir",
  "args": [
    "p"
  ],
  "complexity": 1,
  "docstring": "None",
  "line_start": 140
},
{
  "name": "email_pass",
  "args": [],
  "complexity": 1,
  "docstring": "None",
  "line_start": 170
},
{
  "name": "tiempo_causal_alcanzado",
  "args": [
    "activacion"
  ],
  "complexity": 5,
  "docstring": "None",
  "line_start": 173
},
{
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  "name": "revisar_alertas_diferidas",
  "args": [],
  "complexity": 6,
  "docstring": "None",
  "line_start": 195
},
{
  "name": "__init__",
  "args": [
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  "complexity": 1,
  "docstring": "None",
  "line_start": 219
},
{
  "name": "obtener_kp",
  "args": [
    "self"
  ],
  "complexity": 3,
  "docstring": "None",
  "line_start": 222
},
{
  "name": "lunar",
  "args": [
    "self",
    "lat",
    "lon",
    "t_iso"
  ],
  "complexity": 4,
  "docstring": "None",
  "line_start": 234
},
{
  "name": "leer_lock_xml",
  "args": [
    "self",
    "xml_path"
  ],
  "complexity": 6,
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  "docstring": "None",
  "line_start": 249
},
{
  "name": "enviar_email",
  "args": [
    "self",
    "subject",
    "body",
    "files"
  ],
  "complexity": 6,
  "docstring": "None",
  "line_start": 270
},
{
  "name": "grafica_veredicto",
  "args": [
    "self",
    "d",
    "out_png"
  ],
  "complexity": 1,
  "docstring": "None",
  "line_start": 299
},
{
  "name": "find_first_lock_xml",
  "args": [
    "folder"
  ],
  "complexity": 4,
  "docstring": "None",
  "line_start": 309
},
{
  "name": "wait_second_seal",
  "args": [
    "event_id",
    "folder",
    "timeout_s"
  ],
  "complexity": 5,
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  "docstring": "None",
  "line_start": 315
},
{
  "name": "oracle_core_loop",
  "args": [],
  "complexity": 11,
  "docstring": "None",
  "line_start": 324
},
{
  "name": "__init__",
  "args": [
    "self"
  ],
  "complexity": 1,
  "docstring": "None",
  "line_start": 405
},
{
  "name": "soldier_9",
  "args": [
    "self",
    "s"
  ],
  "complexity": 8,
  "docstring": "None",
  "line_start": 408
},
{
  "name": "crawler_6",
  "args": [
    "self",
    "history_csv"
  ],
  "complexity": 3,
  "docstring": "None",
  "line_start": 421
},
{
  "name": "oracle_3",
  "args": [
    "self",
```

```
      "s",
      "veto"
    ],
    "complexity": 4,
    "docstring": "None",
    "line_start": 433
  },
  {
    "name": "plot_hcp_radar",
    "args": [
      "v",
      "ev_id"
    ],
    "complexity": 1,
    "docstring": "None",
    "line_start": 456
  },
  {
    "name": "hcp_loop",
    "args": [],
    "complexity": 9,
    "docstring": "None",
    "line_start": 471
  },
  {
    "name": "main",
    "args": [],
    "complexity": 2,
    "docstring": "None",
    "line_start": 516
  }
],
"global_assigns": [
  "LOCK_SCHEMA_XSD",
  "SEAL_SCHEMA_XSD",
  "ORACLE_JSON_SCHEMA",
  "ephem",
  "b",
  "tmp",
  "CONFIG",
  "ahora",
  "t0",
  "armado",
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"delta",
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"r",
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"ver",
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"p_json",

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        "score",
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        "rep",
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        "kp",
        "luna",
        "alt",
        "cats",
        "vals",
        "ang",
        "out",
        "veto",
        "comm",
        "eng",
        "inbox",
        "hist",
        "ex",
        "arch",
        "lock_xml",
        "s",
        "c_ok",
        "radar",
        "total",
        "ver",
        "ver",
        "ver",
        "out_csv",
        "mode"
      ],
      "complexity_score": 101
    }
  },
  "_source_file": "audit_oracle_eye_system.json"
},
{
  "filename": "crawlermaster.py",
  "audit_timestamp": "2025-12-21T19:16:29.059222",
  "analysis": {
    "status": "SUCCESS",
    "file_hash": "7daae7d84877e3416adb2a84a2fe4bc1",
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"size_bytes": 34419,
"last_modified": "2025-12-16T10:14:13.152000",
"logic_analysis": {
  "imports": [
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    "fpdf.FPDF",
    "fpdf.FPDF",
    "json",
    "os",
    "time",
    "math",
    "smtplib",
    "ssl",
    "requests",
    "pandas",
    "numpy",
    "csv",
    "xml.etree.ElementTree",
    "datetime.datetime",
    "datetime.timezone",
    "datetime.timedelta",
    "email.mime.multipart.MIMEMultipart",
    "email.mime.text.MIMEText",
    "email.mime.base.MIMEBase",
    "email.encoders",
    "io.StringIO",
    "google.colab.drive"
  ],
  "classes": [
    {
      "name": "NucleationEvent",
      "methods": [
        "__init__"
      ],
      "docstring": "None"
    },
    {
      "name": "HunterPDF",
      "methods": [
        "header",
        "footer"
      ],
```

```
      "docstring": "None"
     }
    ],
    "functions": [
     {
      "name": "dummy_lunar_index",
      "args": [
       "t"
      ],
      "complexity": 1,
      "docstring": "None",
      "line_start": 65
     },
     {
      "name": "dummy_space_index",
      "args": [
       "t"
      ],
      "complexity": 1,
      "docstring": "None",
      "line_start": 66
     },
     {
      "name": "tcds_verdict_engine",
      "args": [
       "e"
      ],
      "complexity": 14,
      "docstring": "Implementa el Protocolo de Falsación (Ley de Balance
Coherencial).\nRetorna: (score, verdict)",
      "line_start": 71
     },
     {
      "name": "generate_palindromic_synthetic",
      "args": [
       "raw_events",
       "replica_fingerprint",
       "lunar_index_func",
       "space_index_func",
       "t_anchor",
       "horizon_hours",
       "alpha_l",
       "beta_sw"
```

```
  ],
  "complexity": 3,
  "docstring": "None",
  "line_start": 109
},
{
  "name": "evaluate_event_zero",
  "args": [
    "syn_event",
    "raw_event",
    "tolerance"
  ],
  "complexity": 6,
  "docstring": "None",
  "line_start": 148
},
{
  "name": "_safe_read_json",
  "args": [
    "path",
    "default"
  ],
  "complexity": 3,
  "docstring": "None",
  "line_start": 211
},
{
  "name": "_safe_write_json",
  "args": [
    "path",
    "obj"
  ],
  "complexity": 2,
  "docstring": "None",
  "line_start": 220
},
{
  "name": "_state_key_email",
  "args": [
    "alert_state",
    "region_code"
  ],
  "complexity": 1,
```

```
    "docstring": "None",
    "line_start": 238
  },
  {
    "name": "_can_email",
    "args": [
      "state",
      "key",
      "cooldown_min"
    ],
    "complexity": 3,
    "docstring": "None",
    "line_start": 241
  },
  {
    "name": "_parse_t_utc",
    "args": [
      "t_utc_str"
    ],
    "complexity": 2,
    "docstring": "None",
    "line_start": 252
  },
  {
    "name": "validate_event_data",
    "args": [
      "d"
    ],
    "complexity": 5,
    "docstring": "None",
    "line_start": 259
  },
  {
    "name": "apply_control_packet",
    "args": [
      "ctrl",
      "state"
    ],
    "complexity": 7,
    "docstring": "None",
    "line_start": 266
  },
  {
```

```
  "name": "__init__",
  "args": [
    "self",
    "data"
  ],
  "complexity": 5,
  "docstring": "None",
  "line_start": 280
},
{
  "name": "get_region_code",
  "args": [
    "txt"
  ],
  "complexity": 13,
  "docstring": "None",
  "line_start": 309
},
{
  "name": "export_to_jsonld",
  "args": [
    "event_obj",
    "latency",
    "output_dir"
  ],
  "complexity": 2,
  "docstring": "None",
  "line_start": 322
},
{
  "name": "export_to_csv",
  "args": [
    "event_obj",
    "latency",
    "output_dir"
  ],
  "complexity": 3,
  "docstring": "None",
  "line_start": 344
},
{
  "name": "export_to_xml",
  "args": [
```

```
      "event_obj",
      "latency",
      "output_dir"
    ],
    "complexity": 3,
    "docstring": "None",
    "line_start": 368
  },
  {
    "name": "fetch_usgs_baseline",
    "args": [],
    "complexity": 3,
    "docstring": "None",
    "line_start": 391
  },
  {
    "name": "calculate_z_score",
    "args": [
      "region_code",
      "current_count",
      "baseline_df",
      "baseline_days"
    ],
    "complexity": 3,
    "docstring": "None",
    "line_start": 405
  },
  {
    "name": "_bin_id",
    "args": [
      "ts",
      "bin_min"
    ],
    "complexity": 1,
    "docstring": "None",
    "line_start": 420
  },
  {
    "name": "update_precursor_bins",
    "args": [
      "state",
      "events",
      "region_list"
```

```
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