BADAN METEOROLOGI KLIMATOLOGI DAN GEOFISIKA

STASIUN GEOFISIKA KLAS I KAMPUNG BARU - KUPANG



**BMKG**

Alamat : Jl. Cak Doko No. 70, Kupang NTT Telp : 0380-821608 / 0380-826205

**Format Laporan Preventif**

**Stasiun Seismik CTBTO(Ina)**

**Laporan Preventif Maintenance**

**Stasiun Seismik Baumata**

**A. Data Stasiun**

|  |  |
| --- | --- |
| Nama UPT Penanggung Jawab | Stasiun Geofisika Klas I Kampung Baru - Kupang |
| Nama Stasiun Seismik (Remote Site) | Baumata |
| Kode Stasiun Seismik (Remote Site) | BATI |
| Koordinat Stasiun Seismik (Remote Site)  *(Lintang • Bujur • Elevasi )* | -10.2065, 123.663 |
| Alamat Lengkap Stasiun Seismik (Remote Site) |  |
| Kelurahan: Baumata |
| Kecamatan : Taebenu |
| Kota / Kabupaten : Kupang |
| Provinsi: Kupang |
| Nama Kontak Person | Bpk. Melki |
| No. HP Kontak Person | 0857-3951-1506 |
| Tahun Instalasi | None |
| Status Stasiun Seismik | Aktif |
| Aktifitas | Preventif Maintenance |
| Nomor Surat Tugas | 21213313 |
| Teknisi |  |
| Denah Site |  |
| Peta Lokasi dan Akses Perjalanan | Kesana Kesini |

**B. Data Alat**

**Seismometer**

|  |  |
| --- | --- |
| Factory | Nanometrics |
| Tipe / Model | Trillium-120P |
| S/N | 1085 |

**Accelerometer**

|  |  |
| --- | --- |
| Factory |  |
| Tipe / Model |  |
| S/N |  |

**Digitizer**

|  |  |
| --- | --- |
| Factory |  |
| Tipe / Model |  |
| S/N |  |

**Modem Transceiver**

|  |  |
| --- | --- |
| Factory | Nanometrics |
| Tipe / Model | CYGNUS 205 |
| S/N | 1013 |

**Low Noise Block**

|  |  |
| --- | --- |
| Factory | Norsat |
| Tipe | 3525-PLL-LNB |
| S/N | 5YN10110382 |

**Solid State Power Block (SSPB/BUC)**

|  |  |
| --- | --- |
| Factory | New Japan Radio |
| Tipe | NJT-5667-2W |
| S/N | A03216E2Z |

**GPS Receiver**

|  |  |
| --- | --- |
| Factory | Trimble |
| Tipe / Model | Bullet-GPS-Antenna-3V |
| S/N | 06460027 |

**Feed Horn**

|  |  |
| --- | --- |
| Factory | Prodelin |
| Tipe / Model | WR137 C-Band X-Pol |

**Dish Vsat Antenna**

|  |  |
| --- | --- |
| Factory | Prodelin |
| Tipe | WR137 C-Band X-Pol |

**Solar Panel**

|  |  |
| --- | --- |
| Factory | BP Solar |
| Tipe | BP-350J |
| S/N | C1051029 4434087, C1051029 4434088, C1051029 4434086, C1051029 4434099, C1051029 4434424, C1051029 4434022 |

**Battery**

|  |  |
| --- | --- |
| Factory | Haze |
| Tipe | SL1270 |
| S/N | SL12700345, SL12700408, SL12700172, SL12700163, SL12700161, SL12700170 |

**Low Noise Charger**

|  |  |
| --- | --- |
| Factory | Nanometrics |
| Tipe | SolarRegulator |
| S/N | 596 |

**C. Maintenance Checklist**

**1**. **Bangunan & Lingkungan Sekitar**

|  |  |  |
| --- | --- | --- |
| **DESKRIPSI** | | **CATATAN** |
| **Kondisi Pagar & Bangunan** | | |
| Pagar  *(Lakukan pengecekan kondisi pagar)*  *Parameter pagar yang layak:*  *- Menutup seluruh bangunan shelter/bunker*  *- Terbuat dari bahan permanen* | |  |  |  | | --- | --- | --- | |  | Sebelum | Sesudah | | Pagar |  |  | | Kunci Pagar |  |  | | Karat/Korosi |  |  | | Kelayakan |  |  | |  |
| Ruangan Seismik | |  |  |  |  | | --- | --- | --- | --- | |  | Shelter | **🗸** | Bunker | |  |
| **Bunker** | | |
| Pintu I (Pintu Utama) | |  |  |  | | --- | --- | --- | |  | Sebelum | Sesudah | | Daun Pintu |  |  | | Kunci Pintu |  |  | | Engsel Pintu |  |  | | Kusen Pintu |  |  | |  |
| Pintu II (Pintu Ruang Aki & Regulator) | |  |  |  | | --- | --- | --- | |  | Sebelum | Sesudah | | Daun Pintu |  |  | | Kunci Pintu |  |  | | Engsel Pintu |  |  | | Kusen Pintu |  |  | |  |
| Pintu III (Pintu Ruang Peralatan Seismik) | |  |  |  | | --- | --- | --- | |  | Sebelum | Sesudah | | Daun Pintu |  |  | | Kunci Pintu |  |  | | Engsel Pintu |  |  | | Kusen Pintu |  |  | |  |
| Tangga | |  |  |  | | --- | --- | --- | |  | Sebelum | Sesudah | | Tangga |  |  | |  |
| Lantai | |  |  |  | | --- | --- | --- | |  | Sebelum | Sesudah | | Lantai |  |  | |  |
| Meja Baterai | |  |  |  | | --- | --- | --- | |  | Sebelum | Sesudah | | Meja Baterai |  |  | |  |
| Meja Peer (Tempat dudukan sensor) | |  |  |  | | --- | --- | --- | |  | Sebelum | Sesudah | | Meja Peer |  |  | |  |
| Kebocoran | |  |  |  | | --- | --- | --- | |  | Sebelum | Sesudah | | Kebocoran |  |  | |  |
| Kebersihan | |  |  |  | | --- | --- | --- | |  | Sebelum | Sesudah | | Kebersihan |  |  | |  |
| **Papan Nama Remote Site** | | |
| Papan nama | |  |  |  | | --- | --- | --- | |  | Sebelum | Sesudah | | Papan Nama |  |  | |  |
| **Lingkungan Sekitar** | | |
| Rumput | |  |  |  | | --- | --- | --- | |  | Sebelum | Sesudah | | Rumput |  |  | |  |
| Pepohonan | |  |  |  | | --- | --- | --- | |  | Sebelum | Sesudah | | Pepohonan |  |  | |  |
| Tingkat Keramaian | |  |  |  | | --- | --- | --- | |  | Sebelum | Sesudah | | Tingkat Keramaian |  |  | |  |
| Kondisi Keamanan | |  |  |  | | --- | --- | --- | |  | Sebelum | Sesudah | | Kondisi Keamanan |  |  | |  |
| Kebersihan  *(Lakukan pengecekan dan perawatan terhadap kondisi kebersihan di lingkungan sekitar)* | |  |  |  | | --- | --- | --- | |  | Sebelum | Sesudah | | Kebersihan |  |  | |  |
| **Lokasi Stasiun Seismik** | | |
| Lokasi Stasiun Seismik | |  |  |  |  | | --- | --- | --- | --- | |  | di Stasiun |  | di Luar | |  |

**2**. **Peralatan Komunikasi**

|  |  |  |
| --- | --- | --- |
| **DESKRIPSI** | | **CATATAN** |
| **Antenna & Peralatannya** | | |
| Antenna | |  |  |  | | --- | --- | --- | |  | Sebelum | Sesudah | | Kondisi |  |  | | Kebersihan |  |  | |  |
| Kondisi Feedhorn | |  |  |  | | --- | --- | --- | |  | Sebelum | Sesudah | | Membran |  |  | | Air Embun |  |  | |  |
| Led SSPB | |  |  |  | | --- | --- | --- | |  | Sebelum | Sesudah | | Led SSPB |  |  | |  |
| **Kabel - Kabel** | | |
| Kabel Kabel | |  |  |  | | --- | --- | --- | |  | Sebelum | Sesudah | | Kabel SSPB ke Modem |  |  | | Kabel LNB ke Modem |  |  | | Kabel Temperature SSPB |  |  | | Kabel GPS ke Modem |  |  | |  |
| **Modem** |  |  |
| **iDirect** Evolution X3 | |  |  |  |  | | --- | --- | --- | --- | |  | RUSAK |  | BAIK |   **Sebelum:**   |  |  |  |  |  | | --- | --- | --- | --- | --- | | Status | Tx | Rx | Net | Power | |  |  |  |  |  |   **Sesudah:**   |  |  |  |  |  | | --- | --- | --- | --- | --- | | Status | Tx | Rx | Net | Power | |  |  |  |  |  | |  |

**3**. **Power Supply**

|  |  |  |
| --- | --- | --- |
| **DESKRIPSI** | | **CATATAN** |
| **Mounting Solar Panel** | | |
| Kondisi  *(Lakukan pengecekan terhadap kondisi fisik Mounting/dudukan Solar Panel)* | |  |
| Mounting | |  |  |  | | --- | --- | --- | |  | Sebelum | Sesudah | | Mounting 1 |  |  | | Mounting 2 |  |  | | Mounting 3 |  |  | | Mounting 4 |  |  | | Mounting 5 |  |  | | Mounting 6 |  |  | | Mounting 7 |  |  | | Mounting 8 |  |  | | Mounting 9 |  |  | | Mounting 10 |  |  | |  |
| **Solar Panel** | | |
| Kondisi  *(Lakukan pengecekan terhadap kondisi fisik Solar Panel)* | |  |
| Solar Panel | |  |  |  | | --- | --- | --- | |  | Sebelum | Sesudah | | Solar Panel 1 |  |  | | Solar Panel 2 |  |  | | Solar Panel 3 |  |  | | Solar Panel 4 |  |  | | Solar Panel 5 |  |  | | Solar Panel 6 |  |  | | Solar Panel 7 |  |  | | Solar Panel 8 |  |  | | Solar Panel 9 |  |  | | Solar Panel 10 |  |  | |  |
| Kebersihan | |  |  |  | | --- | --- | --- | |  | Sebelum | Sesudah | | Kebersihan |  |  | |  |
| **Baterai** | | |
| Kondisi | |  |  |  | | --- | --- | --- | |  | Sebelum | Sesudah | | Kondisi |  |  | |  |
| Kebersihan | |  |  |  | | --- | --- | --- | |  | Sebelum | Sesudah | | Kebersihan |  |  | |  |
| Pengukuran tegangan baterai  *(Lakukan pengukuran tegangan Baterai (*dengan melepas rangkaian kabel baterai*). Pengukuran normal baterai 12 - 13 Volt DC, diluar hasil pengukuran tersebut dianggap NOK)* | |  |
| Baterai 1 |  |  |
| Baterai 2 |  |  |
| Baterai 3 |  |  |
| Baterai 4 |  |  |
| Baterai 5 |  |  |
| Baterai 6 |  |  |
| Baterai 7 |  |  |
| Baterai 8 |  |  |
| Baterai 9 |  |  |
| Baterai 10 |  |  |
| **Regulator** | | |
| Kondisi | |  |  |  | | --- | --- | --- | |  | Sebelum | Sesudah | | Kondisi |  |  | |  |
| Kebersihan | |  |  |  | | --- | --- | --- | |  | Sebelum | Sesudah | | Kebersihan |  |  | |  |
| Lampu LED Charging | |  |  |  | | --- | --- | --- | |  | Sebelum | Sesudah | | Lampu LED Charging |  |  | |  |
| Lampu LED Baterai | |  |  |  | | --- | --- | --- | |  | Sebelum | Sesudah | | Lampu LED Baterai |  |  | |  |
| Pengukuran Tegangan Input Solar Panel  *(Lakukan pengukuran tegangan di regulator antara pukul 10 - 12 pagi dengan kondisi cerah)*  *Parameter Kondisi Normal:*   * *Input Solar Panel Full Charge (Normal : 12 - 20 VDC)* * *Input Solar Panel Charging (Normal : 17 – 20 VDC)* * *Input Baterai (Normal : 12 - 14 VDC)* * *Output Beban (Normal : 12 - 14 VDC)* | |  |
| Regulator 1 |  |  |
| Regulator 2 |  |  |
| Regulator 3 |  |  |
| Regulator 4 |  |  |
| Regulator 5 |  |  |
| Regulator 6 |  |  |
| Regulator 7 |  |  |
| Regulator 8 |  |  |
| Regulator 9 |  |  |
| Regulator 10 |  |  |
| Pengukuran Tegangan Input Baterai  *(Lakukan pengukuran tegangan di regulator antara pukul 10 - 12 pagi dengan kondisi cerah)*  *Parameter Kondisi Normal:*   * *Input Solar Panel Full Charge (Normal : 12 - 20 VDC)* * *Input Solar Panel Charging (Normal : 17 – 20 VDC)* * *Input Baterai (Normal : 12 - 14 VDC)*   *Output Beban (Normal : 12 - 14 VDC)* | |  |
| Regulator 1 |  |  |
| Regulator 2 |  |  |
| Regulator 3 |  |  |
| Regulator 4 |  |  |
| Regulator 5 |  |  |
| Regulator 6 |  |  |
| Regulator 7 |  |  |
| Regulator 8 |  |  |
| Regulator 9 |  |  |
| Regulator 10 |  |  |
| Pengukuran Tegangan Output Beban Regulator  *(Lakukan pengukuran tegangan di regulator antara pukul 10 - 12 pagi dengan kondisi cerah)*  *Parameter Kondisi Normal:*   * *Input Solar Panel Full Charge (Normal : 12 - 20 VDC)* * *Input Solar Panel Charging (Normal : 17 – 20 VDC)* * *Input Baterai (Normal : 12 - 14 VDC)*   *Output Beban (Normal : 12 - 14 VDC)* | |  |
| Regulator 1 |  |  |
| Regulator 2 |  |  |
| Regulator 3 |  |  |
| Regulator 4 |  |  |
| Regulator 5 |  |  |
| Regulator 6 |  |  |
| Regulator 7 |  |  |
| Regulator 8 |  |  |
| Regulator 9 |  |  |
| Regulator 10 |  |  |
| **Kabel – Kabel** | | |
| Kabel-Kabel | |  |  |  | | --- | --- | --- | |  | Sebelum | Sesudah | | Kabel Jumper Solar Panel |  |  | | Kabel Solar Panel ke Regulator |  |  | | Kabel Jumper Baterai |  |  | | Kabel Baterai ke Regulator |  |  | | Kabel Power Cygnus |  |  | | Kabel Power Taurus |  |  | |  |

**4**. **Peralatan Seismik**

|  |  |  |
| --- | --- | --- |
| **DESKRIPSI** | | **CATATAN** |
| **Broadband Seismometer** | | |
| Seismometer | |  |  |  | | --- | --- | --- | |  | Sebelum | Sesudah | | Kebersihan |  |  | | Tutup Sensor |  |  | |  |
| **Accelerometer** | | |
| Accelerometer | |  |  |  | | --- | --- | --- | |  | Sebelum | Sesudah | | Kebersihan |  |  | | Diikat |  |  | |  |
| **Digitizer** | | |
| Kebersihan | |  |  |  | | --- | --- | --- | |  | Sebelum | Sesudah | | Quantera Broadband Seismometer |  |  | | Quantera Accelerometer |  |  | | Taurus Broadband Seismometer |  |  | | Accelerometer |  |  | |  |
| **Kabel – Kabel** | | |
| Kabel-Kabel | |  |  |  | | --- | --- | --- | |  | Sebelum | Sesudah | | Broadband Seismometer ke Digitizer |  |  | | Accelerometer ke Digitizer |  |  | | Jumper NMX |  |  | | NMX 35 Meter (Trident ke Modem) |  |  | | Digitizer ke Modem |  |  | |  |

**F. Dokumentasi Foto (Sebelum dan Sesudah Maintenance)**

|  |  |  |  |
| --- | --- | --- | --- |
| No. | Deskripsi | Gambar | Keterangan |
| 1. | Papan Nama |  |  |
| 2. | Kondisi Lingkungan Sekitar |  |  |
| 3. | Akselerometer dan Seismometer |  |  |
| 4. | Antenna (disc antenna, LNB, BUC, mounting antenna) |  |  |
| 5. | Feedhorn |  |  |
| 6. | Solar Panel |  |  |
| 7. | Regulator |  |  |
| 8. | Baterai |  |  |
| 9. | Modem IDirect |  |  |
| 10. | Digitizer |  |  |
| 11 | Priocomp |  |  |
| 12 | BGAN |  |  |
| 13 | Kamera |  |  |

**G. Rekomendasi & Saran**

|  |
| --- |
|  |

**H. Riwayat Pemeliharaan**

|  |  |  |  |
| --- | --- | --- | --- |
| **TANGGAL** | **KEGIATAN** | **TEKNISI** | **KETERANGAN** |
| 06 December 2021 |  |  |  |