

Dropsonde Scientist

Flight ID 2021082841 Storm Ida Mission ID 1009A

Dropsonde Scientists Jun Zhang

AVAPS Operators Mlu

The Lead Project Scientist (LPS) on the P3 is responsible for determining the distribution patterns for dropwindsonde releases. Predetermined desired data collection patterns are illustrated on the flight patterns. However, these patterns are often altered because of clearance problems, etc. Operational procedures are contained in the operator's manual. On the G-IV the sole HRD person is designated the LPS. The following list contains more general supplementary procedures to be followed. (Check off or initial.)

Preflight

- 1. Determine the status of the AVAPS and workstation. Report results to the LPS.
- 2. Confirm the mission and pattern selection with the LPS and assure that enough dropsondes are on board the aircraft.
- 3. Modify the flight pattern or drop locations if requested by AOC to accommodate changes in storm location or closeness to land.
- 4. Complete the appropriate preflight set-up and checklists.

In-Flight

- 1. Operate the system as specified in the operator's manual.
- 2. Ensure the AOC flight director is aware of upcoming drops.
- 3. Ensure the AVAPS operator has determined that the dropsonde is (or is not) transmitting a good signal. Recommend if a backup dropsonde should be launched in case of failure.
- 4. Report the transmission of each drop and fill in the Dropwindsonde Scientist Log.

Post flight

- 1. Complete Dropwindsonde Scientist Log.
- 2. Download all raw and processed AVAPS files to thumbdrive
- 3. Brief the LPS on equipment status and turn in completed forms and thumbdrive.
- 4. Debrief at the base of operations.
- 5. Determine the status of future missions and notify Field Program Director as to where you can be contacted.

NOAA P-3 GPS Dropwindsonde Scientist Log (revised March 2019)

Storm *Isla*

Flight ID *20210828H*

Dropsonde Scientist *J Zhang*
Dropsonde Scientist

AVAPS Operator *Mac*
AVAPS Operator

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Mission ID *10001* (exp. 0213A)

Drop #	Sonde ID	Time UTC	Lat (°N/S)	Long (°E/W)	Sfc Pressure (mb)	Wind closest to		SST (C)	Eye/Eyewall, Rainband, etc,	Ob #
						Dir/Spd (deg/kt)	Hgt (m)			
✓ 1	<i>50885</i>	<i>2054</i>	<i>27.52</i>	<i>85.78</i>	<i>1009.8</i>	<i>100/42</i>	<i>6</i>	<i>29.8</i>		
Comments	<i>Combo IP</i>									
✓ 2	<i>08021</i>	<i>2057</i>	<i>26.85</i>	<i>86.32</i>	<i>1002.2</i>	<i>110/57</i>		<i>29.5</i>		
Comments	<i>comb. drop 1.5E mid P</i>									
3	<i>30607</i>	<i>2104</i>	<i>26.45</i>	<i>86.64</i>	<i>993.1</i>	<i>115/71</i>				
Comments	<i>Rain 1</i>									
✓ 4	<i>50885</i>	<i>2106</i>	<i>26.37</i>	<i>86.70</i>	<i>991.5</i>	<i>110/79</i>				
Comments	<i>Rain 2 Combo</i>									
5	<i>60653</i>	<i>2108</i>	<i>25.279</i>	<i>86.77</i>	<i>985.6</i>	<i>115/72</i>				
Comments	<i>Rain 3</i>									
✓ 6	<i>50314</i>	<i>2113</i>	<i>26.13</i>	<i>87.08</i>	<i>974</i>	<i>225/60</i>		<i>29.5</i>		
Comments	<i>Center</i>									
7	<i>40667</i>	<i>2117</i>	<i>25.9</i>	<i>87.28</i>	<i>984.8</i>	<i>275/6</i>				
Comments	<i>Rain 1 out</i>									
✓ 8	<i>50357</i>	<i>2118</i>	<i>25.65</i>	<i>87.32</i>	<i>984.5</i>	<i>270/52</i>				
Comments	<i>Rain 2 Combo</i>									
9	<i>11940</i>	<i>2119</i>	<i>25.74</i>	<i>87.367</i>	<i>992.5</i>	<i>275/52</i>				
Comments	<i>Rain 3</i>									
✓ 10	<i>7007</i>	<i>2127</i>	<i>25.39</i>	<i>87.689</i>	<i>1001.4</i>	<i>275/42</i>		<i>29.3</i>		
Comments	<i>Int MID out SW Combo</i>									

NOAA P-3 GPS Dropwindsonde Scientist Log (revised March 2019)

Storm *Iola*

Flight ID *20210828H1*
(exp. 0213A)

Dropsonde Scientist *J Zhang*
Dropsonde Scientist

AVAPS Operator
AVAPS Operator

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Mission ID

Drop #	Sonde ID	Time UTC	Lat (°N/S)	Long (°E/W)	Sfc Pressure (mb)	Wind direction to		SST (C)	Eye/Eyewall, Rainband, etc.	Obs #
						Dir/Spd (deg/kt)	Hgt (m)			
<i>✓11</i>	<i>40040</i>	<i>2139</i>	<i>24.35</i>	<i>81.28</i>	<i>1008.</i>	<i>275</i>	<i>17</i>			
Comments	<i>1st End PT SW</i>									
<i>✓12</i>	<i>30740</i>	<i>2209</i>	<i>25.13</i>	<i>86.15</i>	<i>1007.1</i>	<i>205</i>	<i>34</i>			
Comments	<i>1st S</i>									
<i>✓13</i>	<i>50345</i>	<i>2219</i>	<i>25.70</i>	<i>86.58</i>	<i>1003.7</i>	<i>190</i>	<i>52</i>	<i>29.6</i>		
Comments	<i>2nd R/W S Combo</i>									
<i>✓14</i>	<i>40093</i>	<i>2228</i>	<i>26.25</i>	<i>87.08</i>	<i>981</i>	<i>180</i>	<i>55</i>	<i>29.8</i>		
Comments	<i>2nd R/W in S Combo</i>									
<i>✓15</i>	<i>50372</i>	<i>2232</i>	<i>26.42</i>	<i>87.32</i>	<i>970.8</i>	<i>145</i>	<i>74</i>			
Comments	<i>2nd CTR</i>									
<i>✓16</i>	<i>60010</i>	<i>2235</i>	<i>26.61</i>	<i>87.43</i>	<i>961.3</i>	<i>020</i>	<i>75</i>	<i>29.9</i>		
Comments	<i>3rd R/W over S Combo</i>									
<i>✓17</i>	<i>50343</i>	<i>2240</i>	<i>27.30</i>	<i>87.73</i>	<i>1000.0</i>	<i>050</i>	<i>57</i>	<i>29.0</i>		
Comments	<i>2nd R/W over N Combo</i>									
<i>18</i>	<i>40021</i>	<i>2259</i>	<i>28.21</i>	<i>87.82</i>	<i>1008.1</i>	<i>085</i>	<i>32</i>	<i>30.3</i>		
Comments	<i>2nd End - Comb N</i>									
<i>19</i>		<i>2327</i>								
Comments	<i>dead - not working</i>									
<i>20</i>	<i>40094</i>	<i>2328</i>	<i>27.48</i>	<i>88.64</i>	<i>1004.1</i>	<i>030</i>	<i>36</i>			
Comments	<i>spread Bin include.</i>									

NOAA P-3 GPS Dropwindsonde Scientist Log (revised March 2019)

Storm *Ida*
Mission ID

Flight ID *20210828H1*
(exp. 0213A)

Dropsonde Scientist *J Zhang*
Dropsonde Scientist

AVAPS Operator
AVAPS Operator

19 - Base
10 - ops
1 - NWS
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Drop #	Sonde ID	Time UTC	Lat (°N/S)	Long (°E/W)	Sfc Pressure (mb)	Wind closest to		SST (°C)	Eye/Eyewall, Rainband, etc.	Obs #
						Dir/Spd (deg/kt)	Hgt (m)			
<i>21</i>	<i>35316</i>	<i>2353</i>	<i>27.83</i>	<i>89.16</i>	<i>1009.8</i>	<i>035/26</i>	<i>10</i>		<i>29.9</i>	
✓ Comments	<i>Log 2-3 reps mid PT combo</i>									
<i>22</i>	<i>10095</i>	<i>0006</i>	<i>27.08</i>	<i>89.70</i>	<i>1008.4</i>	<i>035/26</i>	<i>10</i>		<i>29.6</i>	
✓ Comments	<i>3rd SW W combo</i>									
<i>23</i>	<i>60612</i>	<i>0017</i>	<i>27.017</i>	<i>89.88</i>	<i>1008.1</i>	<i>335/4</i>	<i>10</i>			
Comments	<i>3rd mid W combo</i>									
<i>24</i>	<i>10499</i>	<i>0028</i>	<i>26.885</i>	<i>88.133</i>	<i>996.9</i>	<i>330/4</i>	<i>10</i>			
Comments	<i>RMW #1</i>									
<i>25</i>	<i>50018</i>	<i>0033</i>	<i>26.82</i>	<i>87.82</i>	<i>999.1</i>	<i>335/8</i>				
Comments	<i>RMW #2</i>									
<i>26</i>	<i>21172</i>	<i>0034</i>	<i>26.73</i>	<i>87.73</i>	<i>967.2</i>	<i>130/10</i>	<i>10</i>			
Comments	<i>center</i>									
<i>27</i>	<i>30197</i>	<i>0040</i>	<i>26.93</i>	<i>87.62</i>	<i>983.5</i>	<i>095/10</i>				
Comments	<i>3rd eyewall out</i>									
<i>28</i>		<i>0044</i>								
Comments	<i>no launch detected</i>									
<i>29</i>	<i>40097</i>	<i>0049</i>	<i>27.38</i>	<i>86.92</i>	<i>999.7</i>	<i>115/5</i>				
Comments	<i>Deployed by previous one mid over combo</i>									
<i>30</i>	<i>60013</i>	<i>0101</i>			<i>1011.0</i>	<i>130/8</i>				
Comments	<i>3rd SW over combo Low report</i>									